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# ATLANTIC SHORES OFFSHORE WIND PROJECT 2, LLC

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Response to New York State Energy Research and Development  
Authority Request for Proposals ORECRFP18-1

PROPOSAL NARRATIVE  
REQUIRED BASE PROPOSAL

■ MEGAWATT TOTAL INSTALLED  
CAPACITY



February 14, 2019

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**Exhibit A: Table of Attachments**

1           ***1. Executive Summary.***

2           This proposal narrative dated February 14, 2019 (the “Proposal Narrative”) is hereby  
3 submitted in response to Request for Proposals ORECRFP18-1 (including all relevant  
4 appendixes, the “RFP”), to the New York State Energy and Research Development Authority  
5 (“NYSERDA”) by Atlantic Shores Offshore Wind Project 2, LLC (“Atlantic Shores” or the  
6 “Company”), and provides information to satisfy all requirements set forth in the RFP (this  
7 Proposal Narrative, together with all other responsive information, including, but not limited to,  
8 any and all Attachments submitted herewith, provided by Atlantic Shores to NYSERDA in  
9 response to the RFP, the “RFP Response”). Atlantic Shores is a project specific, single purpose  
10 entity whose single member is Atlantic Shores Offshore Wind, LLC (“ASOW”). ASOW is a  
11 joint venture entity comprised of two members: EDF-RE Offshore Development, LLC (“EDFR  
12 Offshore”) and Shell New Energies US, LLC (“Shell New Energies”). EDFR Offshore is  
13 indirectly owned by EDF Renewables, Inc. (“EDFR”) and supported by the EDF Renewables  
14 Group (as hereinafter defined) and Shell New Energies is indirectly owned by Royal Dutch Shell  
15 plc (“Royal Dutch Shell”) and supported by the Shell Group (as hereinafter defined). Atlantic  
16 Shores is seeking an award of offshore wind renewable energy certificates (“ORECs”) from  
17 NYSERDA pursuant to the terms set forth in the RFP and in this RFP Response. This Proposal  
18 Narrative is provided in connection with Atlantic Shores’ Required Base Proposal,<sup>1</sup> which  
19 includes a [REDACTED] megawatt (MW)  
20 offshore wind project, to consist of [REDACTED]  
21 [REDACTED] wind turbines, and to be constructed in Bureau  
22 of Ocean Energy Management (“BOEM”) lease area OCS-A 0499 (the “Required Base Proposal  
23 Project” or the “Project”).

24           The contents and organization of this Proposal Narrative comport with Section 6.4 of the  
25 RFP, and include the following sections: (i) Executive Summary; (ii) Proposer Experience; (iii)  
26 Project Description and Site Control; (iv) Energy Resource Assessment and Plan; (v) Operational  
27 Parameters; (vi) Business Entity and Financing Plan; (vii) Interconnection and Deliverability;  
28 (viii) Environmental Assessment and Permit Acquisition Plan; (ix) Engineering and Technology;  
29 (x) Project Schedule; (xi) Construction and Logistics; (xii) Fisheries Mitigation Plan; (xiii)

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<sup>1</sup> All capitalized terms not defined herein shall be ascribed the meaning given to such term in the RFP.

1 Environmental Mitigation Plan; (xiv) Community Outreach Plan; (xv) Visibility and Viewshed  
2 Impacts; and (xvi) Economic Benefits Plan.

3 Pursuant to the RFP, this Executive Summary shall document “the eligibility of the  
4 proposed Offshore Wind Generation Facility, the proposed Contract Tenor, the overall Project  
5 schedule including expected Commercial Operation Date, any contingencies specific to the  
6 Proposal or to the other Proposals, and other factors Proposers deem to be important.” This  
7 Executive Summary is structured to address each of these requirements in sequence.

8 1.1. Eligibility.

9 Pursuant to the RFP, the Executive Summary shall “document the eligibility of the  
10 proposed Offshore Wind Generation Facility.” The eligibility requirements are enumerated in  
11 Section 2.1.1 through 2.1.6 of the RFP, and this Eligibility Section of the Executive Summary is  
12 organized in that order.

13 **1.1.1. ORECs Offered – RFP, Section 2.1.1. NYSERDA is seeking to procure**  
14 **ORECs produced from one or more Offshore Wind Generation**  
15 **Facilities located in the ocean waters of the United States that become**  
16 **operational on or after January 1, 2015 and with approximately 800**  
17 **MW of total installed capacity. NYSERDA may award contracts for**  
18 **ORECs from less than 800 MW or more than 800 MW of total**  
19 **installed capacity if submitted Proposals justify the larger quantity.**

20 **The OREC production from the Offshore Wind Generation Facility**  
21 **offered to NYSERDA through this RFP, up to the Annual OREC**  
22 **Cap, may not be contractually committed to any other entity over the**  
23 **proposed Contract Delivery Term. Awardee will retain ownership**  
24 **and all rights to ORECs that exceed the Annual OREC Cap.**

25 The Required Base Proposal Project will be located in the federal ocean waters of the  
26 United States in BOEM lease area OCS-A 0499. It also meets the requirement that projects  
27 become operational on or after January 1, 2015, in that its proposed Commercial Operation date  
28 is [REDACTED] The proposed  
29 installed capacity of the Required Base Proposal Project is [REDACTED]  
30 [REDACTED] MW, consistent with NYSERDA’s intention to award contracts for  
31 ORECs for approximately 800 MW of total installed capacity.

32 Atlantic Shores acknowledges and agrees that the OREC production from the Required  
33 Base Proposal Project offered to NYSERDA through this RFP Response, up to the Annual

1 OREC Cap, will not be contractually committed to any other entity over the proposed Contract  
2 Delivery Term. Atlantic Shores further acknowledges that it shall retain ownership and all rights  
3 to ORECs that exceed the Annual OREC Cap.

4 *1.1.2. Required and Alternate Proposals - RFP, Section 2.1.2. All Proposers*  
5 **must submit a Required Base Proposal and a Required Transmission**  
6 **Proposal but may also submit Alternate Proposals with varied**  
7 **parameters as described below.**

- 8 • **A Required Base Proposal must be for ORECs delivered from an**  
9 **approximately 400 MW Offshore Wind Generation Facility for a 25-**  
10 **year Contract Tenor. The Required Base Proposal must include both**  
11 **Fixed OREC and Index OREC pricing expressed as a constant**  
12 **nominal strike price over the Contract Tenor.**
- 13 • **A Required Transmission Proposal must be for ORECs associated**  
14 **with energy delivered through a direct marine cable interconnection**  
15 **from the Offshore Wind Generation Facility to a point in NYISO**  
16 **Zone J or Zone K. The Required Transmission Proposal may be**  
17 **included as part of the Required Base Proposal but is not a**  
18 **mandatory component of the Required Base Proposal and may**  
19 **instead be submitted as a second required Proposal. If the Required**  
20 **Transmission Proposal is part of the Required Base Proposal, it must**  
21 **meet all the requirements of the Required Base Proposal. Otherwise, a**  
22 **separate Required Transmission Proposal does not need to be for an**  
23 **approximate 400 MW Offshore Wind Generation Facility but must**  
24 **include both Fixed OREC and Index OREC pricing over the Contract**  
25 **Tenor. A separate Required Transmission Proposal may be for either**  
26 **a 20-year or 25-year Contract Tenor and may offer constant nominal**  
27 **or non-decreasing nominal Fixed OREC and Index OREC Strike**  
28 **Prices as described in Section 2.1.3.**
- 29 • **Alternate Proposals may be for ORECs delivered from Offshore**  
30 **Wind Generation Facilities of other technical configurations or**  
31 **interconnection points, other installed capacity, or other expected**  
32 **Commercial Operation Dates. However, Proposals for less than 200**  
33 **MW will not be eligible. Alternate Proposals may be for either a 20-**  
34 **year or 25-year Contract Tenor and may offer constant nominal or**  
35 **non-decreasing nominal Fixed OREC and Index OREC Strike Prices**  
36 **as described in Section 2.1.3.**
- 37 • **A Proposer may condition the acceptance of one Proposal based on**  
38 **the withdrawal or acceptance of other Proposals. Project eligibility**  
39 **requirements do not preclude the option to propose multiple**  
40 **interconnection points in NYCA as may be necessary to reasonably**  
41 **minimize interconnection costs.**  
42



1 This Proposal Narrative is submitted by Atlantic Shores to satisfy the requirement to  
2 submit a Required Base Proposal. The Required Base Proposal Project is for ORECs to be  
3 delivered from a [REDACTED] MW project  
4 (i.e., approximately 400 MW as required by the RFP), for a 25-year Contract Tenor. This  
5 Required Base Proposal Project also includes both a Fixed OREC and Index OREC pricing  
6 option, expressed as a constant nominal strike price over the Contract Tenor, all in accordance  
7 with Section 2.1.3 of the RFP. The Fixed OREC and Index OREC pricing for the Project are  
8 detailed in the Offer Data Form labeled  
9 AtlanticShores\_ASOWRequiredBase\_OfferDataForm and included with the RFP  
10 Response. [REDACTED]

11 [REDACTED]  
12 [REDACTED]  
13 [REDACTED]  
14 [REDACTED]  
15 [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]  
16 [REDACTED]  
17 [REDACTED]  
18 [REDACTED]  
19 [REDACTED]  
20 [REDACTED]

21 **1.1.3. Pricing - RFP, Section 2.1.3. Each Proposal must include firm offer**  
22 **prices in two different forms: Fixed OREC pricing and Index OREC**  
23 **pricing. Offer prices for each Proposal, including for the Required**  
24 **Transmission Proposal, are all-inclusive; that is, for all components of**  
25 **the Project. Under Fixed OREC pricing, the OREC price is equal to**  
26 **the corresponding Contract Year's Fixed OREC Strike Price in the**  
27 **offer price schedule. Under Index OREC pricing, the OREC price**  
28 **varies monthly, and is equal to the corresponding Contract Year's**  
29 **Index OREC Strike Price minus the monthly Reference Energy Price**  
30 **and the monthly Reference Capacity Price, as further described in**  
31 **Section 4.1.2. For both forms of pricing, and consistent with the**  
32 **conditions described in Section 2.1.2, only constant nominal pricing or**  
33 **pricing that increases nominally by Contract Year, subject to a**  
34 **maximum of 2.0% annual nominal escalation, will be accepted.**

1 The Required Base Proposal Project includes firm offer prices in both Fixed OREC  
2 pricing and Index OREC pricing. The offer prices for the Required Base Proposal Project are all  
3 inclusive. The Fixed OREC pricing and the Index OREC pricing are as stated in the relevant  
4 Offer Data Form included in Atlantic Shores' RFP Response  
5 (AtlanticShores\_ASOWRequiredBase\_OfferDataForm).

6 *1.1.4. Site Control - RFP, Section 2.1.4. Proposer must hold an irrevocable*  
7 **right or option to develop the entire Offshore Wind Generation**  
8 **Facility site footprint within a federal Bureau of Ocean Energy**  
9 **Management (BOEM) commercial wind energy lease area.**

10 **Proposers must identify the proposed interconnection point(s),**  
11 **describe what rights Proposer has to the interconnection point(s), and**  
12 **provide a detailed plan and timeline for the acquisition of any**  
13 **additional rights necessary for the interconnection(s) and for the**  
14 **right-of-way for transmission radial line to the interconnection**  
15 **point(s). Such rights may be held by Proposer directly or indirectly**  
16 **via partnership with a transmission developer. Proposers may enter**  
17 **into contract arrangements with a transmission developer to support**  
18 **evidence of site control, which NYSERDA may consider in its**  
19 **determination of project viability.**

20 An affiliate of Atlantic Shores (EDF Renewables Development, Inc.) has a right to  
21 develop the entire Required Based Proposal Project within BOEM commercial wind energy lease  
22 area OCS-A 0499. BOEM approved the assignment of the lease for OCS-A 0499 to EDF  
23 Renewables Development, Inc. on December 4, 2018, and the Required Base Proposal Project  
24 will be developed in this lease area. EDF Renewables Development, Inc. is in the process of  
25 assigning this lease to ASOW. It is anticipated that this process will be completed by [REDACTED]

26 [REDACTED] Furthermore, at a later date,  
27 ASOW intends to assign the portion of the lease area applicable to the Project to Atlantic Shores.

28 Atlantic Shores filed for interconnection rights at the [REDACTED]  
29 [REDACTED] to serve as the likely project  
30 Point of Interconnection (POI). The Right of Way (ROW) to reach [REDACTED]

31 [REDACTED]  
32 [REDACTED]  
33 [REDACTED]  
34 [REDACTED]

1 [REDACTED]

2 [REDACTED]

3 *1.1.5. Interconnection and Delivery - RFP, Section 2.1.5. Proposers must*  
4 **demonstrate that energy generated by the Offshore Wind Generation**  
5 **Facility can be delivered into the NYCA. An Offshore Wind**  
6 **Generation Facility may interconnect in an adjacent Control Area**  
7 **(except in the case of the Required Transmission Proposal); such**  
8 **Proposals must address how Proposers intend to fulfill the Electricity**  
9 **Delivery Requirements contained in Article III of the Agreement. For**  
10 **the Required Transmission Proposal or for any Proposal including a**  
11 **direct interconnection to the NYCA, Proposers must have submitted a**  
12 **valid Large Facility Interconnection Request with NYISO. For**  
13 **Offshore Wind Generation Facility Proposals that would interconnect**  
14 **in an adjacent Control Area, Proposers must have submitted a similar**  
15 **interconnection request to ISO New England or PJM, as applicable.**

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 *1.1.6. Conformance with NYGATS Operating Rules - RFP, Section 2.1.5.1. If*  
20 **awarded a contract, Proposers must obtain a valid NYGATS ID for**  
21 **the Offshore Wind Generation Facility and operate in conformance**  
22 **with the NYGATS Operating Rules. Delivery of electricity during the**  
23 **Contract Delivery Term that complies with the Electricity Delivery**  
24 **Requirement contained in Article III of the Agreement will be**  
25 **sufficient to support the creation of ORECs by NYGATS and the**  
26 **implementation of the Forward Certificate Transfer of ORECs, up to**  
27 **the Annual OREC Cap, into NYSERDA's NYGATS Account.**  
28 **NYSERDA will make payment for ORECs from the Offshore Wind**  
29 **Generation Facility delivered to NYSERDA's NYGATS account.**

30 Atlantic Shores acknowledges that, if awarded a contract, it will obtain a valid NYGATS  
31 ID for the Required Base Proposal Project and will operate in conformance with the NYGATS  
32 Operating Rules. Atlantic Shores further acknowledges that delivery of electricity during the  
33 Contract Delivery Term that complies with the Electricity Delivery Requirement contained in  
34 Article III of the Agreement will be sufficient to support the creation of ORECs by NYGATS  
35 and the implementation of the Forward Certificate Transfer of ORECs, up to the Annual OREC  
36 Cap, into NYSERDA's NYGATS Account. Atlantic Shores further acknowledges that

1 NYSERDA will make payment for ORECs from the Required Base Proposal Project delivered to  
2 NYSDERA's NYGATS account.

3 **1.1.7. Contract Delivery Term - RFP, Section 2.1.6. Each Proposal must**  
4 **specify an expected Commercial Operation Date. For a multi-phase**  
5 **installation, the Commercial Operation Date will be the date of**  
6 **operation of the first phase of installed capacity.**

7 **The Contract Delivery Term will commence on the first day of the**  
8 **month after the actual Commercial Operation Date and end after the**  
9 **term of the Contract Tenor or at the Outer Limit Date, whichever**  
10 **occurs first. If less than twenty-five percent (25%) of the Project has**  
11 **commenced Commercial Operation (as determined on an installed**  
12 **capacity basis as compared to the Offer Capacity), Seller may elect to**  
13 **delay the commencement of the Contract Delivery Term for a period**  
14 **not to exceed one year after any portion of the Project has achieved**  
15 **Commercial Operation.**

16 **The OREC production from the Offshore Wind Generation Facility**  
17 **offered to NYSERDA through this RFP, up to the Annual OREC**  
18 **Cap, may not be contractually committed to any other entity over the**  
19 **Contract Delivery Term.**

20 The expected Commercial Operation Date for the Required Base Proposal Project is

21  Atlantic Shores

22 acknowledges that the Contract Delivery term will commence on the first day of the month after  
23 the actual Commercial Operation Date and end after the term of the Contract Tenor or at the  
24 Outer Limit Date, whichever occurs first. Atlantic Shores acknowledges that, if selected, and if  
25 less than twenty-five percent (25%) of the Required Base Proposal Project has commenced  
26 Commercial Operation, it may elect to delay the commencement of the Contract Delivery Term  
27 for a period not to exceed one year after any portion of the Project has achieved Commercial  
28 Operation.

29 Atlantic Shores acknowledges that the OREC production from the Required Base  
30 Proposal Project offered to NYSERDA through this RFP Response, up to the Annual OREC  
31 Cap, will not be contractually committed to any other entity over the Contract delivery Term.

32 1.2. Proposed Contract Tenor.

33 The proposed Contract Tenor for the Required Base Proposal Project is twenty-five (25)  
34 years, compliant with the RFP.

1 1.3. Overall Project Schedule, Including Expected Commercial Operation Date.

2 A detailed Project schedule is provided in Section 10 of this Proposal Narrative. An  
3 outline of the key milestones, including the expected Commercial Operations Date, is as follows:

4 [REDACTED]

- 5 [REDACTED]
- 6 [REDACTED]
- 7 [REDACTED]
- 8 [REDACTED]
- 9 [REDACTED]

10 1.4. Contingencies Specific to the Proposal or to the other Proposals.

11 None.

12 1.5. Other Factors Proposers Deem to be Important.

13 Atlantic Shores is founded and supported by two world-class energy businesses (the EDF  
14 Renewables Group and Shell Group, respectively), with extensive expertise and financial  
15 capabilities, and a demonstrated track record of financing, constructing, and operating large scale  
16 (offshore) utility projects.

17 The EDF Renewables Group, consisting of EDF Renouvelables and certain of its  
18 subsidiaries, including North American arm EDFR, is a group of entities which constitutes a  
19 world class energy company with significant resources and extensive experience in developing  
20 renewable energy projects both domestically and internationally (including, without limitation,  
21 onshore and offshore wind projects). EDFR's direct parent company, EDF Renouvelables  
22 specifically, has more than 12 GW of installed wind and solar gross capacity in twenty-two (22)  
23 countries, is supported by 3,500 employees, and is planning or constructing more than 3,000  
24 MW of offshore wind projects in Europe for large national utilities. The ultimate parent of the  
25 entities within the EDF Renewables Group is the EDF Group, a global leader in low-carbon  
26 energy with annual revenue of nearly €70B and over 152,000 employees worldwide.  
27 Furthermore, EDFR has been in business in North America for over thirty (30) years, employs  
28 more than 1,200 people, and has historically developed approximately \$1 billion of wind and  
29 solar projects annually. Between 2017 and 2020, EDFR expects to bring [REDACTED] of wind and

1 solar in service and continues to be one of the most successful renewable energy development  
2 companies in North America.

3 Shell New Energies is a subsidiary of Royal Dutch Shell, with over a decade of  
4 experience in wind power, including involvement in nine (9) onshore and offshore wind  
5 projects in North America and Europe, with approximately 900 MW of capacity. Royal Dutch  
6 Shell is a major world oil and gas leader with close to 90,000 employees worldwide, a \$13.4  
7 billion annual income and \$24 billion in capital investment in 2017. Royal Dutch Shell has ten  
8 (10) decades of experience in developing, constructing, and operating large-scale offshore  
9 energy projects in the United States. For over six (6) decades, Royal Dutch Shell has been a  
10 leading proponent of supply chain development in the Gulf of Mexico oil and gas industry. In  
11 2017, in the United States only, Royal Dutch Shell has spent over \$9.2 billion in capital,  
12 including \$8 billion spent with close to 5,000 U.S.-based suppliers, more than 800 of them  
13 small-women-minority business enterprises. In that same year, Royal Dutch Shell's portfolio  
14 has contributed \$4.7 billion in taxes, royalties and other fees to the U.S. Government, and the  
15 company has invested close to \$40 million both in Education and Conservation.

16 Royal Dutch Shell has the financial strength, resources, and organization to support  
17 capital and other commitments in offshore wind. Royal Dutch Shell recently announced to  
18 shareholders that, as part of its 2050-carbon footprint reduction strategy, it would increase  
19 capital allocated to clean technologies to 1-2 billion US dollars per year through 2020, including  
20 new investments in renewable power from solar and wind. Shell New Energies is seeking to  
21 leverage the Shell Group's strengths in fast-growing and commercial parts of the energy  
22 industry, such as offshore wind. In the U.S., Shell New Energies' participation in Atlantic  
23 Shores is a decisive step in Royal Dutch Shell's abovementioned strategy.

24 **2. *Proposer Experience* Proposers are required to demonstrate project experience**  
25 **and management capability to successfully develop and operate the Project**  
26 **proposed. NYSERDA is interested in project teams that have demonstrated**  
27 **success in developing generating facilities of similar size and complexity and can**  
28 **demonstrate an ability to work together effectively to bring the Project to**  
29 **commercial operation in a timely fashion.**

30 2.1. Organization Chart - RFP, Section 6.4.2. **Organization Chart for the Project**  
31 **that lists the Project participants and identifies the corporate structure,**  
32 **including general and limited partners.**

1 An organization chart for the Project that lists the Project participants and identifies the  
2 corporate structure is attached hereto as **Attachment 1**.<sup>2</sup> All entities included in the organization  
3 chart affiliated with EDF Renouvelables may be referred to collectively as the “EDF Renewables  
4 Group” and all entities included in the organization chart affiliated with Royal Dutch Shell (as  
5 hereinafter defined) may be referred to collectively as the “Shell Group.” Note that none of  
6 Atlantic Shores nor any of its affiliates identified on the organization chart have general or  
7 limited partners.

8 The relationship between EDFR and Shell New Energies is strong, as evidenced by:

[REDACTED]

25 2.2. Proposer Experience and Project Participants - RFP, Section 6.4.2. **Statements**  
26 **that list the specific experience of Proposers and each of the Project**  
27 **participants (including, when applicable, Proposers, partners, and**  
28 **proposed contractors), in developing, financing, owning, and operating**  
29 **generating and transmission facilities, other projects of similar type, size**  
30 **and technology, and any evidence that the Project participants have**  
31 **worked jointly on other projects.**

<sup>2</sup> Attached hereto as Exhibit A is a Table delineating all attachments attached hereto.

1           The Project is being developed by Atlantic Shores. Atlantic Shores is a single purpose  
2 entity comprised of a single member: ASOW.<sup>3</sup> ASOW is a joint venture entity comprised of two  
3 members: EDFR Offshore<sup>4</sup> and Shell New Energies<sup>5</sup> (each of EDFR Offshore and Shell New  
4 Energies, a “Sponsor,” and collectively the “Sponsors”) EDFR Offshore is indirectly owned by  
5 EDFR<sup>6</sup> and supported by the EDF Renewables Group and Shell New Energies is indirectly  
6 owned by Royal Dutch Shell<sup>7</sup> and supported by the Shell Group. As described below, the EDF  
7 Renewables Group and the Shell Group, each of which support Atlantic Shores, as well as its  
8 prospective contractors, have substantial experience in developing, financing, owning, and  
9 operating generating and transmission facilities, and other projects of similar type, size, and  
10 technology to the Project.

### 11 **Project Sponsors Experience**

12           As detailed below, the EDF Renewables Group and the Shell Group are two world-class  
13 energy businesses, with extensive expertise and financial capabilities, with a demonstrated track  
14 record of financing, constructing, and operating large scale utility projects. Both groups’  
15 expertise and track records are illustrated in **Attachments 2** to **5**, as well as the listing of projects  
16 of similar size and scope developed by the Sponsors attached as **Attachment 6**.

#### 17 **EDF Renewables Group**

18           The EDF Renewables Group, consisting of EDF Renouvelables S.A., a *société anonyme*,  
19 duly organized and validly existing under the laws of France (“EDF Renouvelables”)<sup>8</sup> and  
20 certain of its subsidiaries, including its North American arm EDFR, is a group of entities which  
21 constitutes a world class energy company with significant resources and extensive experience in  
22 developing renewable energy projects both domestically and internationally (including, without  
23 limitation, onshore and offshore wind projects). EDF Renouvelables specifically, has more than  
24 12 GW of installed wind and solar gross capacity in twenty-two (22) countries, is supported by  
25 3,500 employees, and is planning or constructing more than 3,000 MW of offshore wind projects

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<sup>3</sup> Atlantic Shores Offshore Wind, LLC

<sup>4</sup> EDF-RE Offshore Development, LLC

<sup>5</sup> Shell New Energies US, LLC

<sup>6</sup> EDF Renewables, Inc.

<sup>7</sup> Royal Dutch Shell plc

<sup>8</sup> Formerly known as EDF Energies Nouvelles, S.A.



1 in Europe for large national utilities. EDF Renewables’ offshore portfolio includes the  
2 recently completed Blyth 42 MW project located 5.7 km off the coast of Blyth, Northumberland  
3 County, United Kingdom; the Neart na Gaoithe (NnG) 432 MW project situated 5km East of  
4 Fife Ness, Scotland, planned to start construction in 2019 and start operations in 2022; the  
5 Fécamp 498 MW project, Calvados 450 MW project and St-Nazaire 480 MW project currently  
6 being developed 10 km off the northwest coast of France; as well as the PGL 24 MW pilot  
7 project with floating foundations currently under development and located 17 km off the coast of  
8 France, in the Mediterranean Sea.

9 The ultimate parent of the entities within the EDF Renewables Group is the EDF Group,  
10 a global leader in low-carbon energy with annual revenue of nearly €70B and over 152,000  
11 employees worldwide. Furthermore, EDFR has been in business in North America for over thirty  
12 (30) years, employs more than 1,200 people, and has historically developed approximately \$1  
13 billion of wind and solar projects annually. Between 2017 and 2020, EDFR expects to bring over  
14 [REDACTED] GW of wind and solar in service  
15 and continues to be one of the most successful renewable energy development companies in  
16 North America.

17 Additionally, EDFR’s asset optimization team is the largest provider of third-party O&M  
18 services in North America. The O&M team services over 5,230 wind turbines, 45+ different  
19 equipment types, and almost 1,970 solar inverters, which generate over 10 GW of electricity.  
20 EDFR’s full range of services begins prior to commissioning and goes through  
21 decommissioning. During the warranty period, EDFR provides scheduled and unscheduled  
22 maintenance options such as balance-of-plant management, remote monitoring, and OEM  
23 oversight. EDFR provides critical 24/7/365 remote monitoring and diagnostics from its United  
24 States based state-of-the-art, NERC compliant Operations Control Center (OCC), increasing  
25 equipment availability, reducing downtime and its associated operational and maintenance costs.

26 The EDF Renewables Group key personnel have overseen the various stages of the  
27 development, planning, financing, construction, and operations of over fifty (50) large scale  
28 renewable energy projects in North America, totaling over 16 GW placed in service over thirty  
29 (30) years, as well as a substantial offshore wind portfolio in Europe.

30 The EDF Renewables Group’s portfolio of North American onshore wind and solar  
31 projects is spread across five (5) Canadian Provinces, California ISO, Southwest Power Pool,

1 Midwest ISO, Electric Reliability Council of Texas, PJM, Bonneville Power Administration, and  
 2 two (2) states in Mexico, and consists of several large wind projects which involved state and  
 3 federal permitting, complex construction plans, and incurred capital costs in excess of \$200  
 4 million per project. In the State of New York, EDFR has successfully navigated the permitting  
 5 process and implemented 8 projects, including the 80 MW Copenhagen wind project in Denmark  
 6 County as well as the Lamphear Road Solar Project, Town of Ontario Solar Project, Mohawk  
 7 Valley Community College Solar Project and Eastern Long Island Solar Project. EDFR was also  
 8 recently awarded a REC contract by NYSERDA for the 170 MWA/C Morris Ridge Solar Project  
 9 and is currently exploring a portfolio of [REDACTED]  
 10 [REDACTED] MW of solar, wind and storage projects in the state.

11 The EDF Renewables Group’s portfolio of European offshore wind projects, developed  
 12 by its French and UK subsidiaries, is detailed in **Table 1** and below. EDFR is developing the  
 13 Project leveraging their expertise, particularly as it pertains to foundation and cabling  
 14 engineering, O&M and procurement.

15 ***Table 1: EDF Renewables Group Portfolio of European Offshore Wind Projects***

Project	Size (MW)	COD	Turbines	Foundation	Depth (m)	Distance to Shore
Thornton Bank (Belgium)	30 MW	2009	6 x Senvion-5 MW	GBS	20-28	27 km
	185 MW	2013	30 x Senvion-6.2 MW -126	Jacket	12-25	27 km
	111 MW	2013	18 x Senvion-6.2 MW -126	Jacket	12-25	25 km
Teesside (UK)	62.1 MW	2013	27 x Siemens 2.3 MW	Monopile	7-15	1.5 km
Blyth (UK)	40 MW	2017	5 x MHI-VOW 8 MW	GBS	35- 40	6 km
NnG (UK)	450 MW	2022	54 x Under negotiation	Jacket	45- 55	16 km
Fécamp (France)	498 MW	2022	83 x GE-6 MW	GBS	25- 30	13 km
Calvados	450 MW	2022	75 x GE-	Monopile	20- 30	11 km

(France)			6 MW			
Saint-Nazaire (France)	480 MW	2022	80 x GE- 6 MW	Monopile	12m - 23m	12 km
PGL (France)	24 MW	2020	3 x Siemens - 8.0 MW	Floating - TLP	90m - 100m	17 km

1  
2       **Thornton Bank:** a 326 MW project built in three phases between 2009 and 2013. The  
3 project consisted of a 30 MW Phase 1 (5 turbines), a 185 MW Phase 2 (30 turbines) and a 111  
4 MW Phase 3 (4 turbines) located about 30 km offshore from the Belgian Coast. The turbines,  
5 manufactured by Repower (now Senvion) are located in a 12-27.5m water depth on a mix of  
6 jacket and gravity-based foundations and are exporting electricity to the mainland via two  
7 submarine cables (150 kV) buried in the sea bed over 40km. Additional information regarding  
8 the Thornton Bank projects can be found at the following web address: [http://www.c-](http://www.c-power.be/index.php/general-info/windfarm-layout-specifications)  
9 [power.be/index.php/general-info/windfarm-layout-specifications](http://www.c-power.be/index.php/general-info/windfarm-layout-specifications).

10       **Teesside:** a 62 MW project completed in 2013, consisting of 27 Siemens 2.3 MW  
11 turbines. The Teesside project provided EDF's Operations & Maintenance group highly valuable  
12 insights into the operational nuances of offshore wind projects. The project employed over 350  
13 construction workers at peak activity, created 950 jobs (directly and indirectly) during  
14 construction, of which about 35 per cent were from North East England. Twenty-two (22) local  
15 companies were involved in the project and around 1.4 million man hours were required in total  
16 to bring the project to commercial operation. A dedicated supply base supporting the  
17 construction of the wind farm was established at the Port of Hartlepool. From there, specialist  
18 vessels transported all materials and construction staff to the offshore site over an 18-month  
19 period. The Port of Hartlepool is also the base for the dedicated team of 16 permanent employees  
20 in charge of the ongoing operation and maintenance of the wind farm. Additional information  
21 regarding the Teesside project can be found at the following web addresses:  
22 <https://www.edf.fr/sites/default/files/contrib/groupe-edf/espaces-dedies/espace->  
23 [medias/dp/dp\\_edf-teesside-offshore-wind-farm.pdf](https://www.edf.fr/sites/default/files/contrib/groupe-edf/espaces-dedies/espace-medias/dp/dp_edf-teesside-offshore-wind-farm.pdf) and <https://www.edf-re.uk/our-sites/teesside>.

24       **Blyth:** a recently completed 42 MW project located 5.7 km off the coast of Blyth,  
25 Northumberland County, United Kingdom. The facility features 5 x 8.3 MW turbines with a  
26 turbine tip height of 191.5 meters above OD, and totals 41.5 MW. The facility is equipped with  
27 60-meter-high concrete gravity base foundations each weighing 15,000 tons, and export

1 electricity to the mainland at 66 kV. The main contractors utilized for the Blyth project were:  
2 Balfour Beatty (construction of onshore substation and associated electrical works); MHI Vestas  
3 Offshore Wind (supply, installation and maintenance of the offshore wind turbines); BAM  
4 Nuttall (design, fabrication and installation of the gravity-based foundations); and VBMS  
5 (supply and installation of offshore export and array cable; cable is produced by Nexans).  
6 Additional information regarding the Blythe project can be found at the following web address:  
7 <https://www.edf-re.uk/our-sites/blyth>.

8 **Neart na Gaoithe (NnG):** a 432 MW offshore project situated 5km East of Fife Ness,  
9 Scotland, United Kingdom. The project is planned to start construction in 2019 and start  
10 operations in 2022. The project is composed of 54 x 8 MW turbines with a minimum 118.5m  
11 hub height and 3-legged jacket foundations, design to fit the complex ground conditions in deep  
12 waters (45m to 55m). EDF Renouvelables has built a project team with a vast amount of  
13 experience on similar projects; this includes resources from the Beatrice Offshore Wind Farm,  
14 the Gemini Wind Farm as well as the Blyth Offshore Demonstrator project recently delivered. In  
15 addition to addressing technical challenges, the NnG team has demonstrated its expertise and  
16 flexibility by redesigning the project in consideration of changing regulatory requirements and  
17 stakeholder consultation, which reduced the size of the consented area and type of foundations.  
18 Additional information regarding the NnG project can be found at the following web address:  
19 <https://nngoffshorewind.com/>.

20 **Fécamp:** a 498 MW offshore wind project currently being developed 13-22 km off the  
21 northwest coast of France, composed of 83 x 6 MW turbines on gravity-based foundations. The  
22 turbine, manufactured by GE, will be fabricated in the nearby port of Cherbourg of St-Nazaire.  
23 The project is scheduled to start construction in 2020 and reach commercial operation in 2022.  
24 Additional information regarding the Fécamp project can be found at the following web address:  
25 <http://parc-eolien-en-mer-de-fecamp.fr/> (French only).

26 **Calvados:** a 450 MW offshore wind project currently being developed 10 km off the  
27 northwest coast of France, composed of 75 x 6 MW turbines on monopile foundations. The  
28 turbine, manufactured by GE, will be fabricated in the nearby port of Cherbourg of St-Nazaire.  
29 The project is scheduled to start construction in 2020 and reach commercial operation in 2022.  
30 Additional information regarding the Calvados project can be found at the following web  
31 address: <http://www.parc-eolien-en-mer-du-calvados.fr/> (French only).

1           **St-Nazaire:** a 480 MW offshore wind project currently being developed 12-20 km off the  
2 northwest coast of France, composed of 80 x 6 MW turbines on monopile foundations. The  
3 turbine, manufactured by GE, will be fabricated in the nearby port of Cherbourg of St-Nazaire.  
4 The project is scheduled to start construction in 2020 and reach commercial operation in 2022.  
5 Additional information regarding the St-Nazaire project can be found at the following web  
6 address: <http://parc-eolien-en-mer-de-saint-nazaire.fr/> (French only).

7           **PGL:** a 24 MW pilot project composed of 3 x 8 MW offshore wind turbines on floating  
8 foundations located 17km off the coast of France, in the Mediterranean Sea. The project is  
9 expected to be operational in 2020 and allows the EDF Renouvelables Group to test floating  
10 foundations in a site with a seabed at 100m below sea level. Additional information regarding the  
11 PGL (Provence Grand Large) project can be found at the following web address:  
12 [https://www.provencegrandlarge.fr/sites/default/files/edf\\_en\\_docp.pdf](https://www.provencegrandlarge.fr/sites/default/files/edf_en_docp.pdf) (French only).

13           Some of the EDF Renewables Group key personnel for the Project have also acquired  
14 significant experience with other key players of the offshore industry, including: planning and  
15 monitoring construction of an offshore self-installing gas platform; overseeing of engineering,  
16 procurement and scheduling of several bids for offshore oil and gas projects; development of a 6-  
17 year, \$500M US Offshore Industry National Program, including National and International  
18 outreach and relationship-building, recruiting and motivating a high-performing, matrixed team,  
19 and managing a complex portfolio; leading siting and permitting, as well as environmental  
20 review and community outreach for several offshore wind or transmission projects off the U.S.  
21 coast (Massachusetts, Georgia, Rhode Island, Maine, Delaware, New Jersey, Florida); and  
22 planning and implementation of several regional studies for developing offshore programs,  
23 including in Eastern Canada, the Gulf of Mexico and West Africa.

#### 24           *Shell Group Experience*

25           Shell New Energies is a subsidiary of Royal Dutch Shell, with over a decade of  
26 experience in wind power, including involvement in nine (9) onshore and offshore wind projects  
27 in North America and Europe, with approximately 900 MW of capacity. Royal Dutch Shell is a  
28 major world oil & gas leader with close to 90,000 employees worldwide, including 17,900 in the  
29 U.S. Royal Dutch Shell has ten (10) decades of experience in developing, constructing, and  
30 operating large-scale offshore energy projects in the United States. For over six (6) decades,  
31 Royal Dutch Shell has been a leading proponent of supply chain development in the Gulf of

1 Mexico oil and gas industry. Royal Dutch Shell has the financial strength, resources, and  
2 organization to support capital and other commitments in offshore wind. In 2017, in the United  
3 States only, Royal Dutch Shell has spent over \$9.2 billion in capital, including \$8 billion spent  
4 with close to 5,000 U.S.-based suppliers, more than 800 of them small-women-minority business  
5 enterprises. In that same year, Royal Dutch Shell's portfolio has contributed \$4.7 billion in taxes,  
6 royalties and other fees to the U.S. Government, and the company has invested close to \$40  
7 million both in Education and Conservation.

8 The Shell Group, composed of Shell New Energies and its affiliates, owns a portfolio of  
9 wind farms including multiple joint venture interests spanning five (5) operating wind projects in  
10 the U.S; a **#BEGIN CONFIDENTIAL# 50% #END CONFIDENTIAL#** interest in one (1)  
11 offshore wind farm, NoordZee Wind, in the North Sea that has been successfully operating since  
12 2007; and a **#BEGIN CONFIDENTIAL# 20% #END CONFIDENTIAL#** interest in the  
13 Blauwwind consortium that will build and operate the Borssele 3 and 4 wind farms off the Dutch  
14 coast. The Borssele 3 and 4 wind farms are designed to have a total installed capacity of 731.5  
15 MW, enough to power around 825,000 Dutch households and has recently entered the  
16 construction phase of the offshore project. In addition, Shell New Energies, as a **#BEGIN**  
17 **CONFIDENTIAL# 50% #END CONFIDENTIAL#** partner in Mayflower Wind Energy, LLC,  
18 was recently one (1) of three (3) provisional winners in a Federal commercial wind energy  
19 auction on the outer continental shelf off the coast of Massachusetts.

20 Royal Dutch Shell aims to make electricity a significant part of its business, from  
21 generation to buying, selling and supplying electricity directly to customers. Royal Dutch Shell  
22 has recently announced an ambition to reduce the net footprint of their energy products  
23 (expressed in grams of CO<sup>2</sup> equivalent per Megajoule consumed) by approximately 50% by  
24 2050 in order to meet goals of the Paris Climate Change Agreement. As an interim goal, Royal  
25 Dutch Shell aims to reduce its net footprint by approximately 20% by 2035, including emissions  
26 direct from Royal Dutch Shell operations, emissions caused by third parties who supply energy  
27 for that production, and emissions caused by the use of Royal Dutch Shell's products by  
28 consumers, as well as activities that reduce or offset CO<sup>2</sup> emissions. Royal Dutch Shell also  
29 recently announced to shareholders that it would increase capital allocated to clean technologies  
30 to 1-2 billion US dollars per year through 2020, with investments aimed at providing lower-  
31 carbon fuels like biofuels and hydrogen to customers, in addition to generating renewable power

1 from solar and wind; driving demand for battery electric vehicles by growing the number of  
 2 charging points and developing gas markets for power and transport. Shell New Energies is  
 3 seeking to leverage the Shell Group’s strengths in fast-growing and commercial parts of the  
 4 energy industry, such as offshore wind in the U.S. Shell New Energies’ participation in Atlantic  
 5 Shores is a decisive step in Royal Dutch Shell’s strategy described above.

6 The Shell Group key personnel for the Project have overseen the various stages of the  
 7 development, planning, financing, construction, and operations of Shell renewable energy and  
 8 offshore projects. Specific to Shell New Energies within the U.S., this includes five (5) existing  
 9 joint venture interests spanning eight operating wind projects, and future projects in U.S.  
 10 offshore (i.e. Mayflower Wind Energy, LLC). These projects have involved government  
 11 permitting and complex constructions plans in different countries. Royal Dutch Shell’s share of  
 12 the energy capacity from its U.S. projects is about 450 MW, with U.S. onshore located in Texas,  
 13 Colorado, West Virginia, California and Wyoming. Shell also maintains a [REDACTED]  
 14 [REDACTED] interest in one offshore wind park,  
 15 NoordZee Wind, in the North Sea and was recently involved in the 730 MW Borssele 3 & 4  
 16 wind projects offshore Holland. The Shell Group’s experience in onshore and offshore wind is  
 17 summarized in **Table 2** below.

18 ***Table 2: Shell Group Onshore and Offshore Wind Experience***

Name	Location	Size (MW)	COD	Turbines	Type
Brazos	US (Texas)	160	2004	Mitsubishi	Onshore
Mt Storm	US (Virginia)	264	2008	Gamesa	Onshore
Whitewater Hill	US (California)	61.5	2002	GE	Onshore
Cabazon	US (California)	40.92	2002	Vestas	Onshore
Rock Rover	US (Wyoming)	50	2001	Mitsubishi	Onshore
NoordZee Wind	North Sea (Holland)	108	2007	Vestas	Offshore
Borssele 3&4	North Sea	731.5	2021	MHI Vestas	Offshore

	(Holland)				
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1           Some of the Shell Group key personnel for the Project have also acquired significant  
2 experience in the offshore industry, including: planning and monitoring construction of offshore  
3 oil and gas platforms; overseeing of engineering, procurement and scheduling of several bids for  
4 global offshore oil and gas projects; development of a National Offshore Wind Research and  
5 Development Consortium with U.S. wind developers; and planning and implementation of  
6 several regional studies for developing offshore energy programs, particularly in U.S. Gulf of  
7 Mexico.

8   **Project Participants Experience**

█ [Redacted]

█ [Redacted]

█ [Redacted]

█ [Redacted]

█ [Redacted]

█ [Redacted]

█ [Redacted]

█ [Redacted]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

31 [REDACTED]

1 2.3. List and Resumes of Key Personnel - RFP, Section 6.4.2 **A management chart**  
2 **that lists the key personnel dedicated to this Project and resumes of the**  
3 **key personnel. Key personnel of Proposer’s development team having**  
4 **substantial Project management responsibilities must have: (i) successfully**  
5 **developed and/or operated one or more projects of similar size or**  
6 **complexity or requiring similar skill sets; and (ii) experience in financing**  
7 **power generation projects (or have the financial means to finance the**  
8 **Project on Proposer’s balance sheet).**

9 **List of Key Personnel**

10 Atlantic Shores’ sole member (ASOW) is a joint venture entity whose members are each  
11 indirectly owned by EDF Renouvelables and Royal Dutch Shell, respectively. As such, the  
12 following key personnel listed are employees of the EDF Renewables Group and the Shell  
13 Group, respectively. A management chart that list the key personnel dedicated to the Project is  
14 attached hereto as **Attachment 24**. Information regarding the key personnel for the Project is  
15 provided herein, demonstrating their extensive experience, including that members of Atlantic  
16 Shores’ development team with substantial project management responsibilities have: (i)  
17 successfully developed and/or operated one or more projects of similar size or complexity or  
18 requiring similar skills sets; and (ii) experience in financing power generation projects.

19 **EDF Renewables Group Key Personnel**

20 EDF Renewables Group key personnel for the Project includes: Cliff Graham, EDFR,  
21 Vice President, U.S. Development; Benoît Rigal, EDFR, Vice President, Engineering and  
22 Construction, North America-Development; Christopher Hart, EDFR, Head, US Offshore Wind  
23 Development Grid Scale Power [REDACTED]; Michael  
24 Wheeler, EDFR, Director, Project Finance; Rick Miller, EDFR, Director, Wind Business  
25 Development; Doug Copeland, EDFR, Senior Manager, Offshore Wind Development; Elisabeth  
26 Duranteau, EDFR, Offshore Engineering Coordinator; Erik Hale, EDFR, Director, Wind  
27 Assessment; Antoine Cognard, EDFR Director, Implementation; Alexis Billet, EDFR, Offshore  
28 Wind O&M Manager; Jennifer Daniels, EDFR, Director, US Offshore Wind Permitting [REDACTED]  
29 [REDACTED]; Julia Pettit, EDFR, Senior Counsel [REDACTED]  
30 [REDACTED]; and Chris Burch, EDFR, Senior Manager, O&M Customer Accounts.

31 **Cliff Graham**, EDFR, Vice President, U.S. Development: Cliff Graham joined EDFR in  
32 2015 as Vice President of the West Region, and has since been promoted to Vice President of  
33 U.S. Development of EDFR Grid Scale Power. In this role, Mr. Graham is responsible for

1 leading the company's U.S. grid scale power development efforts across all technologies  
2 including wind (offshore as well as onshore), solar, and storage.

3 Mr. Graham is an accomplished business professional with 11 plus years of experience in  
4 the energy market, where he brings substantial expertise in the areas of business planning,  
5 project management, competitor modeling, and in leading complex transactions. Mr. Graham  
6 served as a Major, Chief Pilot in the United States Air Force. He holds a Bachelor of Science  
7 degree from Ohio University and a Master of Business Administration from Touro University.

8 **Benoît Rigal**, EDFR, Vice President, Engineering and Construction, North America-  
9 Development, EDFR Grid Scale Power: Benoît Rigal leads the engineering, construction, and  
10 program management departments in North America for EDFR. He is responsible for managing  
11 the implementation teams, including the coordination of project management, engineering,  
12 transportation, construction and commissioning of all renewable energy projects, representing a  
13 current pipeline of 1,900+ MW.

14 With over 15 years of experience in the management and control of major industrial EPC  
15 (Engineering, Procurement, Construction) projects, Mr. Rigal's international experience includes  
16 working with Technip; British Petroleum; and other major oil and gas players. During his time at  
17 the aforementioned oil and gas players, Mr. Rigal gained extensive experience working with  
18 offshore platform construction and implementation, which has rendered him a natural fit for the  
19 construction and implementation aspects of EDFR's offshore wind program in the U.S.

20 Mr. Rigal joined EDFR in 2006 as Deputy Construction Manager for the French  
21 subsidiary; and became a part of the Canadian subsidiary in 2009 to lead the implementation of  
22 1,000 MW of wind projects for Hydro-Quebec. Responsible for monitoring the implementation  
23 of wind and solar projects under construction, he has managed 1,300 MW over eight sites in  
24 Canada, 300 MW over ten sites in France, and more than 400 MW in Greece, Italy and the  
25 United Kingdom. Mr. Rigal holds a Bachelor of Engineering degree from ECAM Lyon, and a  
26 Master's degree in Technology and Innovation Management from EM Lyon Business School.

27 **Christopher Hart**, EDFR, Head, U.S. Offshore Wind Development, Grid Scale Power /  
28 [REDACTED] Christopher Hart joined EDFR in 2018 with a mission  
29 to enhance the development of EDFR's U.S. offshore business, leveraging his considerable  
30 experience, his EDFR team's large expertise and the offshore experience of EDF Renouvelables

1 in Europe, with +1800 MW at various stages of development and operation. [REDACTED]

2 [REDACTED]

3 Mr. Hart brings over 22 years of offshore experience ranging from service as a Special  
4 Operations Officer in the U.S. Navy, to leading the U.S. Department of Energy's effort to  
5 develop and implement a 6-year, \$500M National Offshore Wind Strategy, to mega-project  
6 management in the offshore oil & gas industry, as well as independent consulting for major  
7 European and U.S. offshore wind developers, states and universities.

8 Mr. Hart has a Bachelor of Science in Naval Architecture, Ocean and Marine  
9 Engineering from the United States Naval Academy, an MSE and a PhD in Naval Architecture  
10 and Marine Engineering as well as an MBA in Entrepreneurial Studies from the University of  
11 Michigan.

12 **Michael Wheeler**, EDFR, Director, Project Finance: Michael Wheeler joined EDFR in  
13 2005. Michael is responsible for EDFR's financing activities across North America, and has  
14 raised nearly \$6 billion in debt and tax equity facilities across nearly 20 separate transactions  
15 totaling 1.8 GW or renewable energy since 2009. Mr. Wheeler manages the full spectrum of the  
16 financing process from sourcing investors/lenders, soliciting and evaluating bids, negotiating  
17 term sheets and formal transaction documentation, leading internal and external due diligence  
18 efforts, closing/funding, and post-closing transaction support for EDFR's asset management  
19 team.

20 Mr. Wheeler has completed transactions with 20+ US and European commercial banks  
21 for tax equity and debt financing, including JP Morgan, Bank of America, GE Energy Financial  
22 Services, MUFG Union Bank, MetLife, Allianz and others. He maintains strong relationships  
23 with leading tax equity investors and lenders in the market, including those who financed the  
24 very first offshore wind transaction in the United States.

25 Prior to EDFR, Mr. Wheeler worked for H Power, a hydrogen fuel cell company  
26 headquartered in Belleville, New Jersey, where he managed the day-to-day relationship with its  
27 largest client, a consortium of more than 100 rural electric cooperatives. Before H Power,  
28 Michael managed several military R&D contracts for Analytic Power, another hydrogen fuel cell  
29 startup. Mr. Wheeler earned his B.S. in Materials Science and Engineering at Virginia Tech, and  
30 an MBA from the Tuck School of Business at Dartmouth.

1           **Rick Miller**, EDFR, Director, Wind Business Development: Rick Miller joined EDFR in  
2 September 2009, as the Permitting Manager for the Southwest Region. As Permitting Manager,  
3 he oversaw the environmental permitting and planning activities for renewable power generation  
4 and/or electrical power transmission and distribution projects. Mr. Miller worked on both solar  
5 and wind project development, managed projects on both public and private lands, and worked  
6 directly with municipal governments and resource agencies to secure permits for utility scale  
7 renewable energy development. He holds a Bachelor of Science in Natural Resources Planning  
8 from Humboldt State University. Mr. Miller holds a professional certification from the American  
9 Planning Association (AICP) as well as a specialty certification as a Certified Environmental  
10 Planner (CEP).

11           In December 2012, Mr. Miller was promoted to Director, Wind Business Development,  
12 where he is directly responsible for the planning, leadership, management and oversight of all  
13 permitting, engineering, procurement, and pre-construction activities for wind development  
14 projects and contracts for the West Region.

15           Prior to joining EDFR, Mr. Miller spent ten years as a county land use planner in  
16 Mendocino County, California. He managed the Coastal Planning and Building Department  
17 office in Fort Bragg, California. In this role he oversaw the implementation of the County's  
18 Coastal Plan and was the main liaison between the County and the State Coastal Commission. In  
19 his role as Supervising Planning, he managed Coastal Development Permits, environmental  
20 review and implementation of County CEQA processes for the Coastal Zone and the Mendocino  
21 Town Plan and Historical District.

22           **Doug Copeland**, EDFR, Senior Manager, Offshore Wind Development: Doug Copeland  
23 has been a part of the US offshore wind industry since 2008. He served on the board of both the  
24 U.S. Offshore Wind Development Coalition (now under AWEA) and the AWEA Offshore Wind  
25 Steering Committee and was selected to participate in offshore wind market advisory groups in  
26 NY, NJ, and MD. He has spoken at over a dozen offshore wind conferences, including  
27 facilitating sessions at two AWEA offshore events. Mr. Copeland's expertise includes an  
28 extensive understanding of the Bureau of Ocean Energy Management ("BOEM") and federal  
29 offshore leasing regulations, processes, and development implications.

1 In addition to the above, Mr. Copeland’s work in the offshore wind industry has included  
2 giving public testimony in Maryland during multiple legislative sessions and acting as an  
3 informal advisor to multiple public entities and officials crafting offshore wind policy.

4 He has worked in the renewable energy industry for 12 years, leading efforts in onshore  
5 wind, solar, energy storage and offshore wind. Prior to his career in the renewable energy  
6 industry, Mr. Copeland ran a nationally recognized economic development program. Mr.  
7 Copeland earned his undergraduate degree from Villanova University and a Master’s degree  
8 from Boston College.

9 **Elisabeth Duranteau**, EDFR, Offshore Engineering Coordinator: As Offshore  
10 Engineering Coordinator for EDFR, Ms. Duranteau oversees the coordination of technical  
11 activities for offshore wind, from engineering to pre-construction assessment.

12 Prior to joining the U.S. team in 2017, she was part of the internal research and  
13 development department of EDF Renouvelables in Paris. Ms. Duranteau coordinated for several  
14 years EDFR’s research and development efforts with respect to civil engineering for offshore  
15 wind; the team included ten researchers from various research teams in France and in the United  
16 Kingdom. Her expertise included various fields such as hydrodynamics loading, corrosion and  
17 lifetime assessment, and geotechnical analyses. Additionally, Ms. Duranteau took an active part  
18 in the call for tender of the floating project that EDFR won in 2017 and was also part of the  
19 technical review of foundation designs for three (3) projects currently under development in  
20 France. Ms. Duranteau lead the development of an innovative methodology to improve the  
21 modelling of wave loads of gravity-based foundations.

22 Currently part of the U.S. team at EDFR, she has been applying her expertise/experience  
23 gained in the European offshore wind market to the U.S. offshore wind market. Ms. Duranteau  
24 graduated with a Master of Science and Engineering in Sustainable Energy Futures from the  
25 Imperial college of London, UK, and an Engineering Degree from Ecole Polytechnique of Paris,  
26 France, one of the country’s leading schools of science and engineering.

27 **Erik Hale**, EDFR, Director, Wind Assessment: Erik Hale leads a team that is responsible  
28 for all wind energy estimates, turbine layout design, and power curve testing for projects across  
29 North America at EDFR. Prior to joining EDFR, Mr. Hale worked as a meteorologist at AWS  
30 Truepower where he evaluated over 100 wind projects across the world.



1 While at AWS, Mr. Hale authored a study published in the Wind Energy Journal  
2 detailing a proposed analytical correction to treat NRG #40 data affected by dry friction whip.  
3 Mr. Hale was the program co-chair for the AWEA Wind Resource & Project Energy Assessment  
4 Seminar in 2014 and 2015, and is a US delegate for the IEC 61400-15 working group on Wind  
5 Resource Assessment. In 2017, AWEA awarded him the Outstanding Industry Contribution  
6 award for his work on reducing uncertainty and error in energy production estimates.

7 **Antoine Cognard**, EDFR, Director, Implementation: Antoine Cognard joined EDFR in  
8 2012 as Program Manager, to lead the implementation of the Massif du Sud wind farm (150  
9 MW) in Quebec, Canada. Following that, he took charge of the largest onshore wind farm in  
10 Western Canada: Blackspring Ridge (300 MW), built in a 12-month record time. He was then  
11 promoted to Director, Implementation in 2014, where he oversees the implementation and  
12 commissioning of the Canadian and Northeast US onshore wind and solar portfolio, managing  
13 projects under construction, in their entirety, until transition to the production team. He also  
14 supports procurement efforts in multiple provinces and states, including call for tenders and  
15 project acquisitions.

16 Mr. Cognard joined the EDFR U.S. offshore team in 2018 and has the overall  
17 responsibility to manage and direct all aspects of Program Management of EDFR's offshore  
18 renewable energy projects from hand-over from development to hand-over to generation.

19 Mr. Cognard previously worked with EDFR in Paris, France, where he lead the  
20 implementation of the EDFR Group's largest solar plant in Europe, the 115 MWp Toul-Rosières  
21 Solar Farm. Mr. Cognard holds a Master's Degree in Energy Systems Engineering from les  
22 Mines de Nantes.

23 **Alexis Billet**, EDF Renewables, Offshore Wind O&M Manager: Alexis Billet joined  
24 the EDF Renewables Group in 2012 as Offshore Wind O&M Manager. Based with EDFR's  
25 parent company in Paris, France, Alexis lends his considerable experience in the Offshore Wind  
26 sector to support the EDFR US team in designing its US offshore wind portfolio. As Offshore  
27 Wind O&M Manager, Alexis is responsible for setting up the organization required to operate  
28 and maintain the 1.5 GW of offshore wind energy to be built by EDF Renewables in Europe.

29 Mr. Billet performed for the past 30 years in various positions in the offshore sector,  
30 serving first in the French Navy on several nuclear submarines as a Mechanical Engineer and  
31 Maintenance Manager and Health & Safety Manager, then as Asset Manager for the 25 MW

1 Arklow Wind Farm in the Irish Sea, and lately as an independent consultant providing O&M  
2 support for EDFR's Teesside offshore wind farm, as well as for the European offshore wind  
3 industry at large. Throughout these years, Mr. Billet has accumulated tremendous expertise in  
4 Offshore Wind, from turbine foundations design, construction and installation including Gravity  
5 Base Foundation and Twisted Jacket, to turbine installation, commissioning and maintenance,  
6 crew transfer vessels, Turbine Access System, as well as Balance of Plant – BOP: Sea cables,  
7 substation, and scour protection.

8 Mr. Billet has received his education with the French Military, including a  
9 Mechanical/Electrical Degree in Engineering Science, as well as a Higher Diploma in Economic  
10 Sciences from NUIG Galway. While in the French Navy, Mr. Billet has also received Fire-  
11 fighting and Fire Safety Training.

12 **Jennifer Daniels**, EDFR, Director, U.S. Offshore Wind, Permitting and Regulatory /  
13 [REDACTED]: Jennifer Daniels joined EDFR in January 2019 [REDACTED]  
14 [REDACTED].

15 Prior to joining EDFR, Ms. Daniels was responsible for managing the environmental  
16 team that supported the successful evaluation and permitting of the Block Island Wind Farm,  
17 America's first offshore wind farm. She has over 18 years of professional experience including  
18 more than 16 years managing multidisciplinary environmental teams in support of siting,  
19 permitting, and/or evaluating the environmental effects of large scale on- and offshore energy  
20 generating facilities. During her career she established working relationships with Federal as  
21 well as State regulatory agencies along the Atlantic Coast of the U.S.

22 Ms. Daniels has a Bachelor's Degree in Marine Resource Development and Aquatic  
23 Technologies from the University of Rhode Island and a Master's Degree in Business  
24 Administration from the University of Massachusetts.

25 **Julia Pettit**, EDFR, Senior Counsel / [REDACTED] Julia Pettit joined the Legal  
26 Department at EDFR in 2015 as Senior Counsel. As part of the legal team at EDFR, Ms. Pettit is  
27 regularly engaged in a broad range of legal matters related to EDFR's business, including project  
28 development, tax equity finance, M&A, key project agreements relating to utility scale wind and  
29 solar energy projects, offtake agreements (including PPAs, hedge agreements and corporate  
30 PPAs) and general corporate matters.

1 Ms. Pettit has been engaged in the practice of law for 28 years. Prior to joining EDFR,  
2 Ms. Pettit's practice for the past 15 years has been largely focused on renewable energy project  
3 finance (both debt and tax equity) and M&A where she regularly represented independent power  
4 producers and sponsors developing utility scale wind and solar energy projects. In addition, over  
5 the course of her legal career, Ms. Pettit also gained industry expertise in connection with  
6 biofuels and waste-to-energy projects and has additional experience in representing creditors,  
7 debtors and other parties-in-interest in general corporate restructuring and insolvency-related  
8 matters and complex commercial litigation.

9 Ms. Pettit has a Bachelor's degree in Economics from the University of Utah and a Juris  
10 Doctorate degree (cum laude) from Suffolk University Law School.

11 **Chris Burch**, EDFR, Senior Manager, O&M Customer Accounts: Chris Burch joined the  
12 EDFR Asset Optimization - O&M team in 2003 on the first EDFR wind project in the U.S. to  
13 utilize megawatt-plus machines, and has since been promoted to Senior Manager, O&M  
14 Customer Accounts. In this role, Mr. Burch is responsible for maintaining EDFR's external  
15 O&M contracts, approximating 3.4 GW.

16 Mr. Burch brings 15 years of O&M experience in North America, including operations  
17 management, supply chain management, and business development. He holds a Bachelor of  
18 Science, Business Administration degree from Southwest State University and a Master of  
19 Business Administration degree from the University of North Dakota.

20 Shell Group Key Personnel

21 Shell Group's key personnel for the Project include: Joris Veldhoven, Contracting &  
22 Procurement Manager New Energies Wind, Shell, [REDACTED]  
23 [REDACTED]; James Cotter, Project and Asset Manager, Shell [REDACTED]; Ruth  
24 L. Perry, Marine Scientist & Regulatory Policy Specialist, Government Relations, Shell; Linda  
25 Rotasperti, Valuation Lead, Shell; Costanza Dingemans Cappello, Supply Chain Lead Offshore  
26 Wind, Shell; Cristina C. Zwissler, Wind Resource Analyst, Shell; Koen C. Bröker,  
27 Environmental scientist and advocacy advisor, Shell; Bouke Feenstra, Finance Manager,  
28 Offshore Wind Development, Shell; Bernardo Franco, America's Structured Finance Lead,  
29 Shell; and Brian Murdock, Legal Counsel, Shell New Energies.

30 **Joris Veldhoven**, Shell, Contracting & Procurement Manager New Energies Wind,  
31 [REDACTED]: Mr. Veldhoven is currently the global wind

1 supply chain manager on behalf of Shell New Energies Wind. [REDACTED]

2 [REDACTED]

3 Mr. Veldhoven joined Shell in 2007 and has worked in various commercial roles, based  
4 in The Netherlands, Norway and the United Arab Emirates. During these 12 years Mr.  
5 Veldhoven has built up deep experience in deal-making, portfolio management, planning and  
6 supply chain management – often in difficult external settings.

7 Mr. Veldhoven relocated back to the Royal Dutch Shell headquarters in 2016 where he is  
8 exercising a global role covering Shell’s relationships with all major supply chain partners in the  
9 wind industry (turbines, balance of plant, electrical, operations contractors, etc.).

10 Over the years Mr. Veldhoven has been involved in various successful wind business  
11 development projects – enabling Shell New Energies to build-up a portfolio of wind projects. He  
12 leads a global team of wind supply chain specialists who are directly responsible for the set-up of  
13 supply chains ranging from early project development to operations – including the five (5)  
14 existing Shell onshore wind farms in the US.

15 Mr. Veldhoven holds a Bachelor and Master’s degree (cum laude) in Industrial  
16 Engineering and Management Science from Eindhoven University of Technology.

17 **James Cotter**, Shell, Project and Asset Manager; [REDACTED]: As a  
18 Senior Manager with experience in delivering and operating complex projects within the  
19 renewable industry, Mr. Cotter has used his skills in operational management, project  
20 management & delivery, supplier & contract management / negotiations and HSE/CDM  
21 regulation compliance to add significant value to a number of high profile energy generation  
22 projects and companies. [REDACTED]

23 [REDACTED]

24 Mr. Cotter worked at all levels from investors and board to site, in organizations that are  
25 either 100% owned or joint ventures (JVs). Mr. Cotter built upon his core skills to successfully  
26 define and implement business strategy combining commercial, operational and project  
27 experience to ensure value is both understood and delivered to the business over the full asset  
28 life.

29 Mr. Cotter worked in both the project and operations phases including managing long  
30 term operations of onshore and offshore wind assets, the delivery and commissioning of assets  
31 from construction into to full commercial O&M, shaping projects from pre-consent and design to

1 ensure maximum asset benefit against the full lifecycle. This makes him equally capable of  
2 managing all stages of an asset from design through the execution and ongoing commercial  
3 operations and most recently winning a CfD for Triton Knoll offshore wind farm that is both  
4 deliverable and fully backed by the supply chain. Mr. Cotter’s skills and expertise made him a  
5 prime candidate as proxy Technical Director.

6 Mr. Cotter has a Bachelor of Science from the University of York and has completed  
7 several management, technical and HSE courses.

8 **Ruth L. Perry**, Shell, Marine Scientist and Regulatory Policy Specialist: Dr. Ruth Perry  
9 joined Shell Oil Company as a Marine Scientist and Regulatory Policy Specialist in 2014. She  
10 integrates marine science and ocean technology into regulatory policy advocacy and decision-  
11 making in the areas of marine sound, marine spatial planning, renewable offshore energies,  
12 ocean observing, and marine mammal and life science in the Americas. She also advises offshore  
13 project leadership on permitting and government advocacy strategies. Dr. Perry has nearly 15  
14 years of ocean technology research and system implementation, field experience, and ocean  
15 policy and regulatory analysis and advocacy. She earned a doctorate in Oceanography and a  
16 Master’s and Bachelor of Science degree in Biology from Texas A&M University.

17 Dr. Perry’s expertise includes an extensive understanding of federal offshore leasing  
18 regulations, processes and federal and regional ocean policy for management decision-making.  
19 Part of her current role includes building public-private collaborations between offshore industry  
20 and stakeholders to address science and building sustained data programs to manage and resolve  
21 ocean use co-existence issues. In addition to the above, Dr. Perry’s work in offshore energy  
22 industry has included public and Congressional briefings and presentations on activities (i.e.  
23 geophysics, protected species mitigations) related to energy development and acting as official  
24 advisor to multiple government agencies, public entities and officials involved in offshore energy  
25 policy. Dr. Perry has authored many peer-reviewed publications analyzing environmental data  
26 collected during offshore energy development. She serves on numerous program boards and  
27 committees for large research and ocean data monitoring programs for government and NGOs,  
28 including Northeast offshore wind related science and government programs (NYSERDA  
29 Fisheries Working Group). Recently she has been appointed to the National Academy of  
30 Sciences Ocean Studies Board and the National Oceanic and Atmospheric Administration’s  
31 (“NOAA”) Integrated Ocean Observing Advisory Council and Scientific Advisory Board which

1 each advise the Assistant Secretary of Commerce for Oceans and Atmosphere within the U.S.  
2 Department of Commerce.

3 **Linda Rotasperti**, Shell, Valuation Lead: Ms Rotasperti is currently a Valuation Lead  
4 for the Offshore Wind Business Development within Shell's New Energies division. She is  
5 responsible for the valuation of offshore wind projects, in Europe and in the United States. She  
6 works very closely with the wider wind team in order to capture all the relevant inputs for a  
7 competitive economic valuation, with a focus on optimizing the main value driver of projects.

8 Prior to joining Shell Ms. Rotasperti worked for UK based onshore wind developers,  
9 where she acquired extensive knowledge of the different wind development phases, from initial  
10 viability assessments to the sale of operational wind farms.

11 Ms. Rotasperti holds a Bachelor of Science in physics. Her prior experience includes one  
12 year as a wind analyst for the UK affiliate of Engie and three years on the commercial team at  
13 RES ltd as a financial and commercial analyst, where she followed the valuation of a  
14 development portfolio of more than 200 MW of onshore wind and played a key role on the sale  
15 of a portfolio of more than 100MW of onshore wind.

16 **Costanza Dingemans Cappello**, Shell, Supply Chain Lead Offshore Wind: Costanza  
17 Dingemans Cappello joined Shell New Energies in early 2017 to support the development of  
18 supply chains for the offshore wind division of Shell. In this role, Mrs. Dingemans Cappello is  
19 responsible for supporting offshore wind projects at varying maturity levels with both  
20 contracting and supplier engagement strategies.

21 Mrs. Dingemans Cappello has 8 years' experience in supply chain strategy and  
22 contracting, including negotiating long term framework agreements for Shell in main equipment  
23 categories and offshore floating structures. Before joining Shell, Mrs. Dingemans Cappello was a  
24 Manager in the Accenture Strategy practice, focused on Energy Supply Chains, where she  
25 worked on multiple missions for the Shell Account.

26 Mrs. Dingemans Cappello graduated from the University of Edimburgh in 2008, and also  
27 studied at the Sorbonne Paris IV University in Paris, France.

28 **Cristina C. Zwissler**, Shell, Offshore Wind Resource Analyst: Ms. Zwissler has almost  
29 10 years of experience in operational meteorology, including project resource assessment and  
30 developing meteorological observational campaigns.

1 Ms. Zwissler has worked for Shell as a Meteocean Engineer for Shell Projects and  
2 Technology Company where she performed market evaluations of the U.S. offshore wind  
3 industry and served as primary point of contact for assessing wind turbine technology and  
4 building relationships with offshore wind turbine manufacturers. She also served as a wind and  
5 solar resourcing expert tasked with developing financially suitable integration projects for wind  
6 and solar into existing Shell assets. In 2016, Ms. Zwissler joined the Shell New Energies team as  
7 an Offshore Wind Resource Analyst. In this capacity, she is responsible for leading due diligence  
8 campaigns for potential offshore acquisitions, including greenfield and brownfield developments  
9 in the global offshore. She coordinates meteorological observation campaigns and market  
10 research for Shell New Energy projects and is responsible for all data analysis and processing for  
11 Shell's wind farm assets.

12 Prior to Shell, Ms. Zwissler worked as a Renewable Energy Forecast Analyst for 3TIER  
13 in Seattle, Washington in which she was the technical lead for forecasting support to 3TIER's  
14 wind clients. Ms. Zwissler holds a Bachelor's and Master's degree in Meteorology from Florida  
15 State University.

16 **Koen C. Bröker:** Shell, Environmental scientist and advocacy advisor: Mr. Bröker is an  
17 environmental scientist, with over 20 years of experience in international environmental  
18 management and research. Mr. Bröker joined Shell in 2010 as senior environmental scientist,  
19 after working since 2006 as biodiversity manager for Sakhalin Energy, a Shell subsidiary in  
20 Russia. He is one of Shell's authorized subject matter expert in Biodiversity and Ecosystem  
21 Services, as well as in Impact Assessment. He has supported numerous international exploration  
22 and production and renewable energy projects, and has demonstrated success in applying  
23 expertise in marine biology, environmental science and ecology to environmental risk  
24 management.

25 His main fields of expertise are associated with environmental risk management,  
26 development and implementation of biodiversity conservation and monitoring and mitigation  
27 plans, underwater acoustics, sound and marine life management, marine mammal ecology,  
28 stakeholder engagement and management of research programs. He led the IOGP Joint Industry  
29 Program Sound and Marine Life, a USD 55 million research program focused on increasing the  
30 understanding of impacts of sound and marine life and improved mitigation of effects from  
31 2014-2018. In 2018 he joined Shell Offshore Wind Development team and provides support and

1 guidance to Shell’s global offshore wind business on broad ecological and environmental risks  
2 and opportunities. He is involved in numerous environmental offshore wind related joint industry  
3 programs, working groups and research initiatives, including the NYSERDA Technical Working  
4 Group.

5 Mr. Bröker holds a Masters in Ecology and is lead-author and co-author of over 20-peer  
6 reviewed scientific publications related to monitoring and mitigation of impacts on marine life.

7 **Bouke Feenstra**, Shell, Finance Manager, Offshore Wind Development: Mr. Feenstra is  
8 currently the Finance Manager for Shell’s Offshore Wind Development activities and  
9 responsible for providing finance advice for organic (auctions), and early stage inorganic  
10 (M&A), global growth opportunities in offshore wind. In this role he is responsible for the  
11 integration of valuation, modelling, regulatory, structuring and financing aspects towards a bid  
12 mandate. Mr. Feenstra joined Shell in 2004 and held various finance and investment positions  
13 throughout Shell’s businesses, ranging from Retail, Exploration, Corporate Venturing and  
14 Offshore Wind, providing considerable international experience, including activities in Europe,  
15 the US, Algeria and China. Mr. Feenstra has been part of Shell’s New Energies division since  
16 inception and participated in tender preparations for Shell’s re-entry into offshore wind in 2016.

17 Mr. Feenstra holds a Master’s in Business Administration from Maastricht University,  
18 and an Executive Master in Finance and Control from University of Amsterdam. He has  
19 extensive experience in syndicated equity and debt funded investments in the energy sector,  
20 ranging from VC backed start-ups to non-recourse debt financed offshore wind projects. In 2018  
21 he secured Shell’s mandate for the final investment decision for the 730 MW Borssele 3&4 wind  
22 farm in the Netherlands, closely aligned to the parallel financial close and dilution workstreams.  
23 At the end of 2018 he was leading the finance activities in relation to Shell’s acquisition of a  
24 50% of share in the OCS-0499 offshore wind lease.

25 **Bernardo Franco**, Shell, America’s Structured Finance Lead: Mr. Franco is currently the  
26 regional head of Structured Finance for Shell. His remit includes all M&A activity with external  
27 financing requirements across the Americas (Canada to Argentina) and across all businesses in  
28 Shell. Structured Finance is the “center of excellence” and expertise for all structured finance,  
29 including Project Financing. Mr. Franco is also responsible for providing support for business  
30 development using structured and project financing, particularly in Shell’s renewables (New  
31 Energies). He is also the group’s leasing SME. His accountability is to lead structured/project



1 financing and M&A projects, including commercial negotiations with banks and external  
2 counterparties. Example recent transactions includes restructuring of circa USD \$2.5bn financing  
3 in Canadian LNG project, leading project financing of double-cycle power plant in Brazil (capex  
4 circa USD\$ 500mln) and restructuring/acquiring multiples assets in Peru related to gas  
5 (USD2bn+). Prior to his current role, Mr. Franco spent three years in London working on M&A  
6 transactions in the Downstream and Renewables space and prior to Shell, he worked at  
7 JPMorgan in the Investment Banking Division. Mr. Franco holds an engineering degree from  
8 the Georgia Institute of Technology and an MBA from the London Business School.

9 **Brian M. Murdock**, Shell, Legal Counsel, New Energies: As Legal Counsel, New  
10 Energies, Brian Murdock is responsible for all legal matters for Shell's U.S. onshore and  
11 offshore wind portfolio and development. His ambit includes M&A, operations, project  
12 development, investments, real estate and finance. Mr. Murdock has several years of in-house  
13 energy experience including the management of over 30 natural gas fired power plants with  
14 generation capacity in excess of 20,000 MW.

15 Previously he spent four years as an associate at an international law-firm practicing  
16 M&A. Brian received his undergraduate degree in finance from the University of Texas at  
17 Austin and his J.D. from Stanford Law School.

#### 18 **Resumes – EDF Renewables Group**

19 The resumes of the following EDF Renewables Group employees, each of whom has an  
20 identifiable track record in construction and operation of power plants of similar size and scope,  
21 are attached hereto in **Attachments 25** through **35**, respectively: Cliff Graham, Benoit Rigal,  
22 Christopher Hart, Michael Wheeler, Rick Miller, Doug Copeland, Elisabeth Duranteau, Alexis  
23 Billet, Jennifer Daniels, Julia Pettit and Chris Burch.

#### 24 **Resumes – Shell Group**

25 The resumes of the following Shell Group employees, each of which has an identifiable  
26 track record in the construction and operation of power plants of similar size and scope, are  
27 attached hereto in **Attachments 36** through **45**, respectively: Joris Veldhoven, James Cotter, Dr.  
28 Ruth L. Perry, Linda Rotasperti, Costanza Dingemans Cappello, Christina Zwissler, Koen  
29 Bröker, Bouke Feenstra, Bernardo Franco, and Brian M. Murdock.

1 To implement the Project, the EDF Renewables Group and the Shell Group have  
2 assembled a team comprised of company leaders in the key areas needed to bring the Project  
3 forward. Moreover, Atlantic Shores will be contracting with contractors, a turbine manufacturer,  
4 and maintenance providers with significant experience in ocean-based energy projects.

5 **Key Personnel Information – EDF Renewables Group**

6 The EDF Renewables Group key personnel identified above have overseen the various  
7 stages of the development, planning, financing, construction, and operations of over fifty (50)  
8 large scale renewable energy projects in North America, including several with capital costs in  
9 excess of \$200 million per project. The EDFR portfolio includes projects in five (5) Canadian  
10 Provinces, California ISO, Southwest Power Pool, Midwest ISO, Electric Reliability Council of  
11 Texas, PJM, Bonneville Power Administration, and two (2) states in Mexico. These projects  
12 have involved state and federal permitting and complex construction plans. In the State of New  
13 York, EDFR has successfully navigated the permitting process and implemented eight (8)  
14 projects, including the 80 MW Copenhagen wind project in Denmark County as well as the  
15 Lamphear Road Solar Project, Town of Ontario Solar Project, Mohawk Valley Community  
16 College Solar Project and Eastern Long Island Solar Project. EDFR was also recently awarded a  
17 REC contract by NYSERDA for the 170 MWac Morris Ridge Solar Project and is currently  
18 exploring a portfolio of **#BEGIN CONFIDENTIAL# +600 #END CONFIDENTIAL#** MW of  
19 solar, wind and storage projects in the state.

20 Some of the EDF Renewables Group key personnel identified above were/are also  
21 directly involved in the implementation of the EDF Renewables Group offshore portfolio in  
22 Europe, and are actively leveraging this experience to contribute to the Project.

23 Most of the EDF Renewables Group key personnel identified above have also acquired  
24 significant experience with other key players of the offshore industry, including: planning and  
25 monitoring construction of an offshore self-installing gas platform; overseeing of engineering,  
26 procurement and scheduling of several bids for offshore oil and gas projects; development of a 6-  
27 year, \$500M US Offshore Industry National Program, including National and International  
28 outreach and relationship-building, recruiting and motivating a high-performing, matrixed team,  
29 and managing a complex portfolio; leading siting and permitting, as well as environmental  
30 review and community outreach for several offshore wind or transmission projects off the U.S.  
31 coast (Massachusetts, Georgia, Rhode Island, Maine, Delaware, New Jersey, Florida); and

1 planning and implementation of several regional studies for developing offshore programs,  
2 including in Eastern Canada, the Gulf of Mexico and West Africa.

3 Michael Wheeler, EDFR's Director of Project Finance, is EDFR's key personnel for  
4 purposes of demonstrating experience in financing power generation projects. As noted above,  
5 Mr. Wheeler is responsible for EDFR's financing activities across North America, and has raised  
6 nearly \$6 billion in debt and tax equity facilities across nearly 20 separate transactions since  
7 2009. Mr. Wheeler maintains strong relationships with leading tax equity investors and lenders  
8 in the market, including those who financed the very first offshore wind transaction in the United  
9 States. Please refer to Mr. Wheeler's resume provided as **Attachment 28**, which includes a  
10 representative list of large energy projects which financing was facilitated by Mr. Wheeler. In  
11 addition to Mr. Wheeler's specific experience, EDFR and affiliates have extensive experience in  
12 securing financing for projects of similar size and technology, as illustrated in the chart attached  
13 hereto as **Attachment 46**.

#### 14 **Key Personnel Information – Shell Group**

15 The Shell Group key personnel identified above have overseen the various stages of the  
16 development, planning, financing, construction, and operations of Shell renewable energy and  
17 offshore projects. Specific to Shell New Energies, this includes existing five (5) joint venture  
18 interests spanning eight operating wind projects, and future projects in U.S. offshore (i.e.  
19 Mayflower Wind Energy, LLC). These projects have involved government permitting and  
20 complex constructions plans in different countries.

21 Some of the Shell Group key personnel identified above have also acquired significant  
22 experience in the offshore industry, including: planning and monitoring construction of an  
23 offshore oil and gas platforms; overseeing of engineering, procurement and scheduling of several  
24 bids for global offshore oil and gas projects; development of a National Offshore Wind Research  
25 and Development Consortium with U.S. wind developers; and planning and implementation of  
26 several regional studies for developing offshore energy programs, particularly in U.S. Gulf of  
27 Mexico.

28 Shell Key personnel include finance specialists with considerable and successful  
29 expertise, notably Bouke Feenstra and Bernardo Franco, who have participated recently in  
30 several transactions such as restructuring of circa USD \$2.5bn financing in Canadian LNG  
31 project, leading project financing of double-cycle power plant in Brazil (capex circa USD\$

1 500mln) and restructuring/acquiring multiples assets in Peru related to gas (USD2bn+). Please  
2 refer to **Attachment 46** for a representative list of large energy projects which financing was  
3 managed by the Shell team.

4 2.4. List of Developed Projects - RFP, Section 6.4.2. **A listing of projects the  
5 Project sponsor has successfully developed or that are currently under  
6 construction. Provide the following information for each project as part of  
7 the response: (i) name of the project; (ii) location of the project; (iii)  
8 project type, size and technology; (iv) commercial operation date; (iv)  
9 estimated and actual capacity factor of the project for the past three  
10 years; (v) availability factor of the project for the past three years; and (vi)  
11 references, including the names and current addresses and telephone  
12 numbers of individuals to contact for each reference.**

13 A listing of projects that the Project Sponsors have successfully developed or that are  
14 currently under construction is attached hereto as **Attachment 6.**

15 2.5. Project Team - RFP, Section 6.4.2. **With regard to Proposer’s Project team,  
16 identify and describe the entity responsible for the following, as  
17 applicable: (i) Construction Period Lender, if any; (ii) Operating Period  
18 Lender and/or Tax Equity Provider, as applicable; (iii) Financial Advisor;  
19 (iv) Environmental Consultant; (v) Facility Operator and Manager; (vi)  
20 Owner’s Engineer; (vii) EPC Contractor (if selected); (viii) Transmission  
21 Consultant; and (ix) Legal Counsel.**

22 (i) *Construction Period Lender.*

[Redacted content]

[REDACTED]

4 [REDACTED]

5 (ii) *Operating Period Lender and/or Tax Equity Provider.*

6 **Tax Equity**

[REDACTED]

[REDACTED]

16 [REDACTED]

17 **Operating Period Lender**

[REDACTED]

21 [REDACTED]

22 (iii) *Financial Advisor.*

[REDACTED]

27 [REDACTED]

28 (iv) *Environmental Consultant.*

[REDACTED]

[REDACTED]

23 [REDACTED]

24 (v) *Facility Operator and Manager.*

[REDACTED]

31 [REDACTED]

[REDACTED]

8 (vi) *Owner's Engineer.*

[REDACTED]

13 (vii) *EPC Contractor (if selected).*

[REDACTED]

30 [REDACTED]



1 [REDACTED]  
2 [REDACTED]

3 (viii) *Transmission Consultant.*

4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]

9 (ix) *Legal Counsel.*

10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED]  
13 [REDACTED]  
14 [REDACTED]  
15 [REDACTED]  
16 [REDACTED]  
17 [REDACTED]  
18 [REDACTED]

19 2.6. Details of Proposer’s experience in NYISO markets - RFP, Section 6.4.2. **With**  
20 **regard to Proposer’s experience with NYISO markets, please indicate the**  
21 **entity that will assume the duties of Market Participant for your proposed**  
22 **Offshore Wind Generating Facility. Please provide a summary of**  
23 **Proposer’s or Market Participant’s experience with the wholesale market**  
24 **administered by NYISO as well as transmission services performed by**  
25 **Con Edison, NYPA, and PSEG-LI/LIPA.**

26 [REDACTED]  
27 [REDACTED]  
28 [REDACTED]  
29 [REDACTED]  
30 [REDACTED]  
31 [REDACTED]  
32 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

18

19

**3. Project Description and Site Control**

20

3.1. BOEM Wind Energy Area – RFP, Section 6.4.3. **Identify the BOEM wind energy area where the proposed Offshore Wind Generation Facility will be located.**

21

22

23

BOEM approved the assignment of the lease for OCS-A 0499 to EDF Renewables Development, Inc. on December 4, 2018, and the Project will be developed in this lease area, which is identified on the map attached hereto as Attachment 60.

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26

3.2. Lease or Irrevocable Lease Option – RFP, Section 6.4.3. **Provide documentation that Proposer has a valid lease or irrevocable lease option to develop the leased area within this wind energy area over the entire Contract Tenor.**

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The original executed lease for the lease area, along with the “Assignment of Lease Approved,” dated December 4, 2018, assigning the lease to EDF Renewables Development, Inc., is attached hereto as Attachments 61 through 63. EDF Renewables Development, Inc. is in the

31

32

1 process of assigning this lease to ASOW. It is anticipated that this process will be completed by  
2 [REDACTED] Furthermore, at a  
3 later date, ASOW intends to assign the portion of the lease area applicable to the Project to  
4 Atlantic Shores.

5 3.3. Site Plan(s) – RFP, Section 6.4.3. **Provide a site plan (or plans) including a**  
6 **map (or maps) that clearly identifies the location of the proposed Offshore**  
7 **Wind Generation Facility, collection facilities, offshore and onshore route**  
8 **of the generator lead line to the interconnection point, converter station(s),**  
9 **and the assumed right-of-way width. Identify the anticipated**  
10 **interconnection point, support facilities, and the relationship of the**  
11 **interconnection point to other local infrastructure, including transmission**  
12 **facilities, roadways, and waterways.**

13 Site plans that clearly identify the location of the proposed Project, collection facilities,  
14 offshore and onshore route of the generator lead line to the interconnection point, converter  
15 station(s) and the assumed right of way width is attached hereto as Attachments 64 and 65.

[REDACTED]

26 3.4. Interconnection Point/Right of Way Rights – RFP, Section 6.4.3. **Identify any**  
27 **rights that Proposer or its development partner has at the interconnection**  
28 **point and for the generator lead line right of way**

[REDACTED]

32 3.5. Plan and Timeline – RFP, Section 6.4.3. **Provide a detailed plan and timeline**  
33 **for the acquisition of any additional rights necessary for interconnection**  
34 **and for the generator lead line right-of-way (plans and timeline to be**

1 included in the overall Project schedule in Section 6.4.10 of the  
2 Solicitation].

3 [REDACTED]  
4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED]

7 3.6. Site Layout Plan – RFP, Section 6.4.3. Provide a site layout plan that  
8 illustrates the location of all on-shore and offshore equipment and  
9 facilities and clearly delineates the perimeter of the area in which offshore  
10 wind turbines will be placed.

11 Site layout plans that illustrate the location of all on-shore and offshore equipment and  
12 facilities and clearly delineates the perimeter of the area in which the offshore wind turbines will  
13 be placed are attached hereto as Attachments 64 and 65. [REDACTED]  
14 [REDACTED]  
15 [REDACTED]

16 3.7. Miles to Shoreline – RFP, Section 6.4.3. Identify the distance in statute miles  
17 between the nearest shoreline point and the nearest Offshore Wind  
18 Generation Facility turbines.

19 The distance in statute miles between the nearest shoreline point and the nearest offshore  
20 wind generation facility turbine is approximately 8 miles. The closest distance to the nearest  
21 large city, Atlantic City, is 25.78 miles.

22 **4. Energy Resource Assessment and Plan**

23 4.1. Summary of Wind Data – RFP, Section 6.4.4. Provide a summary of all  
24 collected wind data for the proposed Offshore Wind Generation Facility  
25 site.

26 [REDACTED]  
27 [REDACTED]  
28 [REDACTED]  
29 [REDACTED]  
30 [REDACTED]  
31 [REDACTED]  
32 [REDACTED]

[REDACTED]

3  
4 (i) *Identify when and how (e.g., meteorological mast or LiDAR – for “Light Detection and*  
5 *Ranging”) the data was collected and by whom.*

[REDACTED]

11  
12 (ii) *Indicate where the data was collected and its proximity to the proposed Offshore Wind*  
13 *Generation Facility site, including an identification of the location and height for the*  
14 *anemometers and/or “range gate” heights for sensing by LiDAR that were used to arrive*  
15 *at an assessment of the site generation capability.*

[REDACTED]

19  
20 (iii) *Describe any additional wind data collection efforts that are planned or ongoing.*

[REDACTED]

27  
28 (iv) *Provide at least one year of hourly wind resource data (Data collected from the site is*  
29 *preferred, though projected data is permissible).*

[REDACTED]

[REDACTED]

6 (v) *Include the method of data collection.*

[REDACTED]

28 [REDACTED]

[REDACTED]



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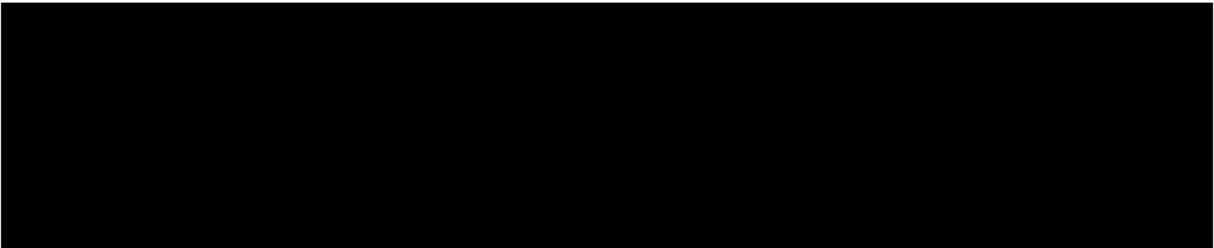


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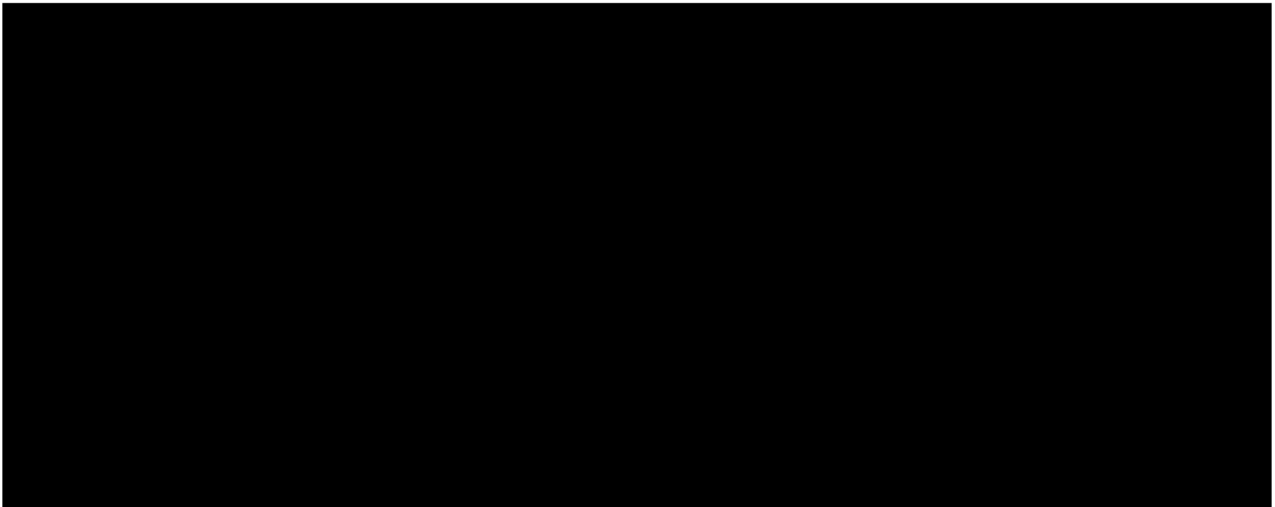


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4.2. Wind Resource Assessment Report – RFP, Section 6.4.4. **Provide a wind resource assessment report for the Proposed Offshore Wind Generation Facility site.**

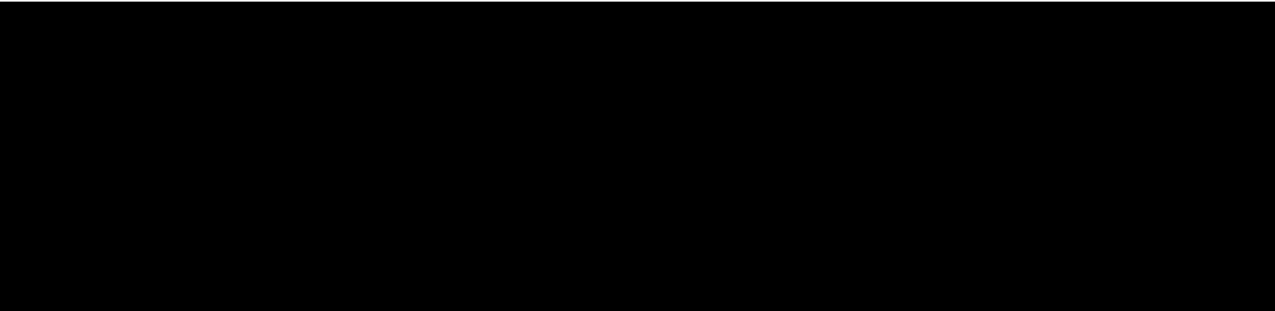
A Wind Resource Assessment report for the proposed offshore wind generation facility site is attached hereto as **Attachment 68**.

(i) *Include an analysis of the available wind data which addresses the relationship between wind conditions and electrical output.*

This analysis is included in Section 5.2.3 of the Wind Resource Assessment Report included herein as **Attachment 68**.

(ii) *Provide a site-adjusted power curve, with each curve listing the elevation, temperature and air density used.*

The turbine power curve can be found in Table 5 of the Wind Resource Assessment Report, included herein as **Attachment 68**. Section 5.2.1 of the Wind Resource Assessment Report describes the adjustments made to the manufacturer supplied power curve to account for site conditions.



[REDACTED]

14

15 **5. Operational Parameters**

16 5.1. Planned Outage – RFP, Section 6.4.5. **Provide partial and complete planned**  
17 **outage requirements in weeks or days for the Offshore Wind Generation**  
18 **Facility.**

[REDACTED]

30

[REDACTED]

19 [REDACTED]

20 5.2. Overhaul Cycles – RFP, Section 6.4.5. List the number of months required  
21 for the cycle to repeat (e.g., list time interval of minor and major  
22 overhauls, and the duration of overhauls).

[REDACTED]

30 [REDACTED]

[REDACTED]

21

22  
23  
24  
25

5.3. Operating Constraints and Operational Restriction – RFP, Section 6.4.5.  
**Provide all the expected operating constraints and operational restrictions for the Project, the reason for the limitation, and characterize any applicable range of uncertainty**

[REDACTED]

31

[REDACTED]

[REDACTED]

24

25

26

**6. Business Entity and Financing Plan** Proposers are required to demonstrate the financial viability of their proposed Project.

27

28

29

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31

6.1. Prospective Financing – RFP, Section 6.4.6. **Submit information and documentation that demonstrates that a long-term contract resulting from this Solicitation process would either permit Proposers to finance Proposals that would otherwise not be financeable or assist Proposers in obtaining financing of its Proposal.**

[REDACTED]

15  
16           **6.2. Business Entity Structure – RFP, Section 6.4.6. Describe the business entity**  
17           **structure of Proposers’ organization from a financial and legal**  
18           **perspective, including all general and limited partners, officers, directors,**  
19           **managers, members and shareholders, and involvement of any**  
20           **subsidiaries supporting the Project.**

21           Atlantic Shores<sup>11</sup> is a single purpose entity comprised of a single member: ASOW.<sup>12</sup>  
22           ASOW is a joint venture entity comprised of two members: EDFR Offshore<sup>13</sup> and Shell New  
23           Energies.<sup>14</sup> EDFR Offshore is indirectly owned by EDFR<sup>15</sup> and supported by the EDF  
24           Renewables Group and Shell New Energies is indirectly owned by Royal Dutch Shell<sup>16</sup> and  
25           supported by the Shell Group. None of Atlantic Shores nor any of its affiliates identified on the  
26           organization chart attached as **Attachment 1** have general or limited partners.

<sup>11</sup> Atlantic Shores Offshore Wind Project 2, LLC  
<sup>12</sup> Atlantic Shores Offshore Wind, LLC  
<sup>13</sup> EDF-RE Offshore Development, LLC  
<sup>14</sup> Shell New Energies US, LLC  
<sup>15</sup> EDF Renewables, Inc.  
<sup>16</sup> Royal Dutch Shell plc

1           The joint venture is governed by a six-member Board of Directors and led by a four-  
2 member Management Team. The Board of Directors has three members from EDFR and three  
3 members from Royal Dutch Shell. The Management Team is comprised of a Managing Director  
4 and Development Director from EDFR, and a Technical Director and Commercial Director, from  
5 Royal Dutch Shell. At a future time, to be determined by the Board of Directors, two additional  
6 members of the Management Team will be created, namely a Delivery Director and a Finance  
7 Director. All Management Team members serve a three-year term at the pleasure of the Board of  
8 Directors.

9           The joint venture is structured in order to efficiently develop, construct and operate a  
10 portfolio of projects up to 2.5 GW in OCS-A 0499. The specific positions on the Management  
11 Team are defined as follows:

12           **Managing Director** – The Managing Director is accountable for delivering the Joint  
13 Venture activities as set out by the Board, envisaged as a portfolio of complete offshore wind  
14 farms, safely and according to the life cycle business case (including on time, on budget and to  
15 the required specifications and quality standards). He/she takes an integrated view of the  
16 portfolio and forges strong links between all internal and external stakeholders to ensure a  
17 consistent and coordinated approach at every stage of each project. The Managing Director is  
18 also responsible for leading a cooperative, motivated and successful management team,  
19 consisting, at steady state, of Technical Director, Delivery Director, Development Director,  
20 Commercial Director and Financial Director and ensuring that the portfolio is effectively  
21 resourced, and resources are allocated and utilized in an efficient manner. He/she is responsible  
22 to coordinate resources to mitigate all risks from the beginning of Development until the end of  
23 project life.

24           **Development Director** – The primary accountability of the Development Director is to  
25 identify the development objectives of the Joint Venture and to ensure that they are met  
26 according to the approved life-cycle business case focusing on value creation and any relevant  
27 plan and budget. Additionally, the Development Director will ensure that the environmental  
28 permitting and compliance process is aligned with and can support the commercial development  
29 strategy and provides that ability of delivering a project with a competitive Levelized Cost of



1 Energy<sup>17</sup> that provides a return to the investors. This role will require careful and thoughtful  
2 coordination and cooperation with the other Directors within the Joint Venture, as well as the  
3 global offshore wind team to not only ensure that US requirements are met but that the US  
4 projects can capitalize on the lessons learned, practical experience and data from partners'  
5 portfolio of successful European offshore projects.

6 **Technical Director** – The Technical Director is responsible for all project delivery and  
7 technical aspects of the Joint Venture to deliver a portfolio of complete offshore wind farms  
8 safely, on time, on budget and to the required specifications and quality standards focusing on  
9 maximizing the safe efficient revenue from the asset over the life of the project. He/she takes an  
10 integrated view of the portfolio and forges strong links between all internal and external  
11 technical stakeholders to ensure a consistent and coordinated approach at every stage of each  
12 project. The Technical Director is also responsible for leading a cooperative, motivated and  
13 successful team of managers and ensuring that the portfolio is effectively resourced, and  
14 resources are allocated and utilized in an efficient manner. He/she is responsible to coordinate  
15 technical resources to mitigate all risks from the beginning of Development to FID.

16 **Commercial Director** – The Commercial Director manages all commercial and finance  
17 aspects of the Joint Venture and is accountable for leading the JV through the wider Commercial  
18 landscape. This includes Commercial (revenues), Finance, Competitive Intelligence, Contracting  
19 & Procurement and Strategy (incl. framing bid strategy on behalf of the JV).

20 Each member of the management team has selected positions that will report to them in  
21 order to deliver the portfolio of projects, and final positions will be defined and recruited upon  
22 successful offtake.

23 An organization chart for the Project that lists the Project participants and identifies the  
24 corporate structure, is attached hereto as **Attachment 1**. A management chart that lists all  
25 officers, directors, managers, members and shareholders, is attached hereto as **Attachment 24**.

26 **6.2.1. Organization Chart – RFP, Section 6.4.6. Provide an organization chart**  
27 **showing the relationship among the different Project participants.**

---

<sup>17</sup> The LCOE is defined as the energy price (\$ per unit of energy output) for which the Net Present Value of the investment is zero. The LCOE is thus the average revenue per unit of energy output (\$/MWh) over a project's lifetime such that the plant breaks even. (<https://www.e-education.psu.edu/eme801/node/560>)

1 An organization chart for the Project that lists the Project participants and identifies the  
2 corporate structure, is attached hereto as **Attachment 1**.

3 **6.2.2. Joint Ventures – RFP, Section 6.4.6. For joint ventures, identify all**  
4 **owners and their respective interests, and document Proposers’ right**  
5 **to submit a binding Proposal.**

6 Atlantic Shores is a joint venture entity comprised of two members: EDFR Offshore and  
7 Shell New Energies. EDFR Offshore is indirectly owned by EDFR and supported by the EDF  
8 Renewables Group and Shell New Energies is indirectly owned by Royal Dutch Shell and  
9 supported by the Shell Group. An organization chart showing the complete corporate structure of  
10 the Project, including all owners and their respective ownership interests, is attached hereto as  
11 **Attachment 1**.

12 Attached hereto as **Attachment 70** is a unanimous written consent of ASOW in its  
13 capacity as the sole member and manager of Atlantic Shores evidencing that Atlantic Shores is  
14 duly authorized to submit a binding a proposal to NYSERDA.

15 **6.3. Financing Plan – RFP, Section 6.4.6. Provide a description of the financing**  
16 **plan for the Project, including construction and term financing,**  
17 **addressing the following:**

18 **(i) Who will finance the Project (or are being considered to finance the**  
19 **Project) and the related financing mechanism or mechanisms that will be**  
20 **used (i.e., convertible debenture, equity or other) including repayment**  
21 **schedules and conversion features;**

22 **(ii) The Project’s existing initial financial structure and projected financial**  
23 **structure;**

24 **(iii) Expected sources of debt and equity financing;**

25 **(iv) Describe how any such agreements would differ, contingency on**  
26 **NYERDA’s selecting either the Fixed OREC or Index OREC form of**  
27 **pricing;**

28 **(v) Estimated construction costs;**

29 **(vi) The projected capital structure; and**

30 **(vii) Describe any agreements, both pre and post Commercial Operation**  
31 **Date, entered into with respect to equity ownership in the proposed**  
32 **Project and any other financing arrangement.**

33 **Financing Plan - Overview of Financial Plan**

[REDACTED]

25 [REDACTED]

26 (i) Who will finance the Project (or are being considered to finance the Project) and the  
27 related financing mechanism or mechanisms that will be used (i.e., convertible  
28 debenture, equity or other) including repayment schedules and conversion features.

[REDACTED]

32 [REDACTED]

[REDACTED]



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]

11 [REDACTED]

12 (ii) *The Project's existing initial financial structure and projected financial structure.*

[REDACTED]

24 [REDACTED]

---

18 [REDACTED]

1 [REDACTED]  
2 [REDACTED]

3 (iii) *Expected sources of debt and equity financing.*

4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]  
10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED]  
13 [REDACTED]

14 (iv) *Describe how any such agreements would differ, contingency on NYSERDA's selecting*  
15 *either the Fixed OREC or Index OREC form of pricing.*

16 [REDACTED]  
17 [REDACTED]  
18 [REDACTED]  
19 [REDACTED]  
20 [REDACTED]  
21 [REDACTED]  
22 [REDACTED]  
23 [REDACTED]  
24 [REDACTED]  
25 [REDACTED]  
26 [REDACTED]  
27 [REDACTED]  
28 [REDACTED]  
29 [REDACTED]  
30 [REDACTED]  
31 [REDACTED]



[REDACTED]

12 [REDACTED]

13 (v) *Estimated construction costs.*

[REDACTED] Construction of the Project is anticipated to have a total capital requirement of [REDACTED]  
15 [REDACTED]

16 (vi) *The projected capital structure.*

[REDACTED]

29 [REDACTED]

[REDACTED]

[REDACTED]

11 [REDACTED]

12 (vii) Describe any agreements, both pre and post Commercial Operation Date, entered into  
13 with respect to equity ownership in the proposed Project and any other financing  
14 arrangement.

[REDACTED]

25 [REDACTED]

1 6.4. Experience in Securing Financing – RFP, Section 6.4.6. **Provide**  
2 **documentation illustrating the experience of Proposer in securing**  
3 **financing for projects of similar size and technology, providing the**  
4 **following information for each project previously financed:**

- 5 **a. Project name and location;**
- 6 **b. Project type and size;**
- 7 **c. Date of construction and permanent financing;**
- 8 **d. Form of debt and equity financing; and**
- 9 **e. Current status of the project.**

10 A listing of Projects of similar size and technology, previously financed by the Sponsors,  
11 is attached hereto as **Attachment 46.** [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 6.5. Evidence of Financial Strength – RFP, Section 6.4.6. **Provide evidence that**  
15 **Proposer has the financial resources and financial strength to complete**  
16 **and operate the Project as planned.**

17 The Project is being developed by Atlantic Shores. Atlantic Shores is a single purpose  
18 entity comprised of a single member: ASOW. ASOW is a joint venture entity comprised of two  
19 members: EDFR Offshore and Shell New Energies. EDFR Offshore is indirectly owned by  
20 EDFR and supported by the EDF Renewables Group and Shell New Energies is indirectly owned  
21 by Royal Dutch Shell and supported by the Shell Group.

22 The EDF Renewables Group, consisting of EDF Renouvelables and certain of its  
23 subsidiaries, including North American arm EDFR, is a group of entities which constitutes a  
24 world class energy company with significant resources and extensive experience in developing  
25 renewable energy projects both domestically and internationally (including, without limitation,  
26 onshore and offshore wind projects). EDF Renouvelables specifically, has more than 12 GW of  
27 installed wind and solar gross capacity in twenty-two (22) countries, is supported by 3,500  
28 employees, and is planning or constructing more than 3,000 MW of offshore wind projects in  
29 Europe for large national utilities. The ultimate parent of the entities within the EDF Renewables  
30 Group is the EDF Group, a global leader in low-carbon energy with annual revenue of nearly  
31 €70B and over 152,000 employees worldwide. Furthermore, EDFR has been in business in North  
32 America for over thirty (30) years, employs more than 1,200 people, and has historically

1 developed approximately \$1 billion of wind and solar projects annually. Between 2017 and  
2 2020, EDFR expects to bring ██████████ of wind and solar in service and continues to be one of  
3 the most successful renewable energy development companies in North America.

4 Additionally, EDFR's asset optimization team is the largest provider of third-party O&M  
5 services in North America. The O&M team services over 5,230 wind turbines, 45+ different  
6 equipment types, and almost 1,970 solar inverters, which generate over 10 GW of electricity.  
7 EDFR's full range of services begins prior to commissioning and goes through  
8 decommissioning. During the warranty period, EDFR provides scheduled and unscheduled  
9 maintenance options such as balance-of-plant management, remote monitoring, and OEM  
10 oversight. EDFR provides critical 24/7/365 remote monitoring and diagnostics from its United  
11 States based state-of-the-art NERC compliant Operations Control Center (OCC), increasing  
12 equipment availability, reducing downtime and its associated operational and maintenance costs.

13 An overview of EDFR's financial capabilities, lengthy history and successful project  
14 development list, and other pertinent information demonstrating the financial wealth and  
15 integrity of EDFR and its affiliates, including Atlantic Shores, can be found at [https://www.edfr-](https://www.edfr-re.com)  
16 [re.com](https://www.edfr-re.com).

17 Shell New Energies is a subsidiary of Royal Dutch Shell, with over a decade of  
18 experience in wind power, including involvement in nine (9) onshore and offshore wind projects  
19 in North America and Europe, with approximately 900 MW of capacity. Royal Dutch Shell is a  
20 major world oil and gas leader with close to 90,000 employees worldwide, a \$13.4 billion annual  
21 income and \$24 billion in capital investment in 2017. Royal Dutch Shell has ten (10) decades of  
22 experience in developing, constructing, and operating large-scale offshore energy projects in the  
23 United States. For over six (6) decades, Royal Dutch Shell has been a leading proponent of  
24 supply chain development in the Gulf of Mexico oil and gas industry. Royal Dutch Shell has the  
25 financial strength, resources, and organization to support capital and other commitments in  
26 offshore wind.

27 In the U.S. Shell New Energies' wind portfolio includes five (5) joint venture interests  
28 spanning eight (8) operating wind projects. Shell WindEnergy Netherlands B.V. also maintains a  
29 ██████████ interest in one (1) offshore wind  
30 ██████████ farm, NoordZee Wind, in the North Sea, and a ██████████  
31 ██████████ interest in the Blauwwind consortium that will build and operate the

1 Borssele 3 and 4 wind farms off the Dutch coast. The wind farms are designed to have a total  
2 installed capacity of 731.5 MW, enough to power around 825,000 Dutch households. In addition,  
3 Shell New Energies, as a [REDACTED]  
4 partner in Mayflower Wind Energy, LLC, was recently one (1) of three (3) provisional winners  
5 in a Federal commercial wind energy auction on the outer continental shelf off the coast of  
6 Massachusetts.

7 Accordingly, Atlantic Shores is ultimately built from two world-class energy businesses,  
8 with extensive expertise and financial capabilities, with a demonstrated track record of financing,  
9 constructing, and operating large scale utility projects, and therefore unequivocally demonstrates  
10 the required financial strength to construct and operate the Project as planned.

[REDACTED]

---

19 [REDACTED]

1  
2  
3 Furthermore, as part of this Application Atlantic Shores has provided the financial  
4 statements of EDFR (f/k/a EDF Renewable Energy Inc.) for the years ending December 31,  
5 2015, December 31, 2016, and December 31, 2017, the audited financial statements of EDF  
6 Renouvelables (f/k/a EDF Energies Nouvelles or EDF EN) for the years ending December 31,  
7 2015, December 31, 2016, and December 31, 2017, and the audited financial statements of  
8 Royal Dutch Shell for the years ending December 31, 2015, December 31, 2016 and December  
9 31, 2017. These financial statements demonstrate Atlantic Shores' substantial financial backing.

10 6.6. Federal PTC or ITC – RFP, Section 6.4.6. **Describe the role of the Federal**  
11 **Production Tax Credit or Investment Tax Credit (or other incentives) on**  
12 **the financing of the Project, including presumed qualification year and**  
13 **percentage (The Proposal may not be contingent on receipt of the**  
14 **Production Tax Credit or Investment Tax Credit).**

15  
16  
17  
18  
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21  
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23  
24 The Proposal is expressly not contingent on receipt of the PTC or the ITC.

25 6.7. Audited Financial Statements and Annual Reports – RFP, Section 6.4.6.  
26 **Provide complete copies of the most recent audited financial statement**  
27 **and annual report for each Proposer for each of the past three years;**  
28 **including affiliates of Proposer (if audited statements are not available,**  
29 **reviewed or compiled statements are to be provided).**

30 Atlantic Shores is a special purpose entity formed in 2018 and therefore has no financial  
31 statements. Likewise, ASOW was formed in 2018 and has no financial statements. Accordingly,  
32 Atlantic Shores is providing the financial statements for certain of its affiliated entities as stated  
33 herein. Attached hereto as **Attachments 71** through **73** are the most recent three (3) years of

1 consolidated audited financial statements of EDF Renouvelables (f/k/a EDF Energies Nouvelles,  
2 or EDF EN) for the years ending December 31, 2015, December 31, 2016, and December 31,  
3 2017, respectively, including an opinion from KPMG, that the consolidated financial statements  
4 give a true and fair view of the assets and liabilities and financial position of EDF  
5 Renouvelables, in accordance with International Financial Reporting Standards. Also attached  
6 hereto as **Attachments 74** through **76** are three (3) years of unaudited financial statements of  
7 EDFR (f/k/a EDF Renewable Energy, Inc.), a wholly owned subsidiary of EDF Renouvelables,  
8 for the years ending December 31, 2015, December 31, 2016, and December 31, 2017,  
9 respectively.

10 Attached hereto as **Attachments 77** through **79** are three (3) years of audited financial  
11 statements of Royal Dutch Shell for the years ending December 31, 2015, December 31, 2016,  
12 and December 31, 2017, respectively, including an opinion from KPMG, included therein, that  
13 the audited financial statements give a true and fair view of the assets and liabilities and financial  
14 position of Royal Dutch Shell, in accordance with International Financial Reporting Standards.  
15 Also attached hereto as **Attachments 80** through **82** are Royal Dutch Shell's Sustainability  
16 Reports for years 2015, 2016 and 2017.

17 6.8. Credit Ratings – RFP, Section 6.4.6. **Provide the credit ratings from**  
18 **Standard & Poor's and Moody's (the senior unsecured long-term debt**  
19 **rating or if not available, the corporate rating) of Proposer and any**  
20 **affiliates and partners.**

21 None of Atlantic Shores, ASOW, EDFR, or Shell New Energies are publicly traded  
22 companies or have a credit rating. Shell New Energies ultimate parent, Royal Dutch Shell, is  
23 publicly traded with a Standard & Poor's long term rating of A-1+ and Moody's long-term rating  
24 of Aa2.

25 EDF Renouvelables, EDFR's corporate parent, is a publicly traded company with  
26 Standard & Poor's A- and Moody's A3 long-term credit ratings.

27 6.9. Board of Directors, Officers and Trustees – RFP, Section 6.4.6. **List the board**  
28 **of directors, officers and trustees for the past three years and any persons**  
29 **who Proposer knows will become officers, board members or trustees.**

30 ASOW is the sole member and manager of Atlantic Shores. Currently, no officers have  
31 been appointed for Atlantic Shores, thus all action that will be taken on behalf of Atlantic Shores

1 will be by ASOW in its capacity as Manager. The current board of directors and officers for  
2 ASOW are listed below:

3 [REDACTED]  
4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]  
10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED]  
13 [REDACTED]  
14 [REDACTED]

15 ASOW does not have any trustees appointed nor is it anticipated that a trustee will be  
16 appointed. In addition, because ASOW has not been in existence for three (3) years, also listed  
17 below are the board of directors and officers for EDFR and Shell New Energies for the past three  
18 (3) years:

19 [REDACTED]  
20 [REDACTED]  
21 [REDACTED]  
22 [REDACTED]  
23 [REDACTED]  
24 [REDACTED]  
25 [REDACTED]  
26 [REDACTED]  
27 [REDACTED]  
28 [REDACTED]  
29 [REDACTED]  
30 [REDACTED]  
31 [REDACTED]  
32 [REDACTED]  
33 [REDACTED]  
34 [REDACTED]  
35 [REDACTED]  
36 [REDACTED]  
37 [REDACTED]  
38 [REDACTED]  
39 [REDACTED]  
40 [REDACTED]



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

34

35 Atlantic Shores does not currently anticipate any changes to the Board of Directors or  
36 Officers listed above.

37 6.10. Ability to Provide Security – RFP, Section 6.4.6. **Demonstrate**  
38 **Proposer’s ability (and/or the ability of its credit support provider) to**  
39 **provide the required security, including its plan for doing so.**

40 Atlantic Shores intends to provide a clean, unconditional, and irrevocable standby letter  
41 of credit in favor of NYSERDA as beneficiary, issued for direct payment by a bank that is a

1 member of the New York Clearinghouse Association, substantially in the form of the letter of  
2 credit attached to the form of the Offshore Wind Renewable Energy Certificate Standard Form  
3 Purchase and Sale Agreement as Exhibit B, in a face amount equal to the applicable contract  
4 security amount.

5 Shell's New Energies' financial strength is demonstrated in the financial statements of  
6 Royal Dutch Shell attached as Attachments 77 through 79. In particular, as a [REDACTED]  
7 [REDACTED] % owner in the consortium awarded a lease  
8 and contract for the Dutch Borssele 3&4 offshore farm, Shell Overseas Investments B.V., part of  
9 the Shell Group, provided bid bonds of €20 MM in 2016, escalated to €70 MM 1 year after lease  
10 award (December 2017). The bid bonds were provided through a bank guarantee with parent  
11 company counter indemnities, offering attractive pricing.

12 EDFR's financial strength is demonstrated in the financial statements of EDFR and EDF  
13 Renouvelables attached as Attachments 71 through 76. EDFR has \$650 MM in corporate credit  
14 facilities from three different banks which EDFR uses for early stage development and  
15 operational project security requirements. EDFR corporate needs are reviewed quarterly and  
16 additional credit lines are available to EDFR as needed.

17 Atlantic Shores will therefore provide required security from parent credit facilities  
18 outlined above or via a non-recourse project facility from project finance lenders.

19 6.11. Recent Credit Issues – RFP, Section 6.4.6. **Provide a description of any**  
20 **current or recent credit issues/ credit rating downgrade events**  
21 **regarding Proposer or affiliate entities raised by rating agencies,**  
22 **banks, or accounting firms.**

23 No entities within either the EDF Renewables Group or the Shell Group have any recent  
24 credit issues or credit downgrade events by rating agencies, banks, or accounting firms. Royal  
25 Dutch Shell, Shell New Energies' ultimate parent, upgraded its credit rating to (S&P) A-1+ from  
26 (S&P) A, given its progress on the \$30bn divestment program following BG acquisition in 2016  
27 and a strong financial framework.

28 6.12. Litigation or Disputes Relating to Projects – RFP, Section 6.4.6. **Disclose**  
29 **any pending (currently or in the past three years) litigation or**  
30 **disputes related to projects planned, developed, owned or managed by**  
31 **Proposer or any of its affiliates in the United States, or related to any**  
32 **energy product sale agreement.**

1 Please refer to **Attachments 83** and **84**, disclosing pending litigation or disputes related  
2 to project planned developed, owned or managed by EDFR and affiliates and Shell New  
3 Energies and affiliates, respectively. Note that the litigations listed are considered litigation in  
4 the ordinary course of business, none of which individually or in the aggregate would have a  
5 material impact on Atlantic Shores' ability to develop, finance, construct, operate, and ultimately  
6 decommission the Project.

7 6.13. Expected Operating Life – RFP, Section 6.4.6. **Provide the expected**  
8 **operating life of the proposed Project and the depreciation period for**  
9 **all substantial physical aspects of the offer, including generation**  
10 **facilities, generator lead lines to move power to the grid, and**  
11 **transmission system upgrades.**

12 The expected operating life of the proposed Project is [REDACTED]  
13 [REDACTED] years from commencement of commercial operations.

14 The depreciation period [REDACTED]  
15 [REDACTED]  
16 [REDACTED]  
17 [REDACTED]

18 6.14. Affiliated Entities and Joint Ventures – RFP, Section 6.4.6. **List all of**  
19 **Proposers' affiliated entities and joint ventures transacting business in**  
20 **the energy sector.**

21 Please refer to **Attachments 85** and **86**, respectively, for a listing of all of EDFR's and  
22 Shell New Energies' affiliated entities and joint ventures transacting business in the energy  
23 sector.

24 6.15. Litigation or Disputes Relating to Energy – RFP, Section 6.4.6. **Describe**  
25 **any litigation, disputes, claims or complaints, or events of default or**  
26 **other failure to satisfy contract obligations, or failure to deliver**  
27 **products, involving Proposer or an affiliate, and relating to the**  
28 **purchase or sale of energy, capacity or RECs or other electricity**  
29 **products.**

30 Please refer to **Attachments 83** and **84**, describing any litigation, disputes, claims or  
31 complaints, or events of default or other failure to satisfy contract obligations, or failure to  
32 deliver products, involving EDFR and affiliates and Shell New Energies and affiliates,  
33 respectively, and relating to the purchase or sale of energy, capacity, or RECs or other electricity

1 products. Note that the litigations listed are considered litigation in the ordinary course of  
2 business, none of which individually or in the aggregate would have a material impact on  
3 Atlantic Shores' ability to develop, finance, construct and operate the Project.

4 6.16. Investigation by Governmental Agency – RFP, Section 6.4.6. **Confirm**  
5 **that Proposer, and the directors, employees and agents of Proposer**  
6 **and any affiliate of Proposer are not currently under investigation by**  
7 **any governmental agency and have not in the last four years been**  
8 **convicted or found liable for any act prohibited by State or Federal**  
9 **law in any jurisdiction involving conspiracy, collusion or other**  
10 **impropriety with respect to offering on any contract, or have been the**  
11 **subject of any debarment action (detail any exceptions).**

12 To our knowledge, none of Atlantic Shores, nor any directors, employees, or agents of  
13 Atlantic Shores or any affiliate of Atlantic Shores are currently under investigation by any  
14 governmental agency, or have in the last four (4) years been convicted or found liable for any act  
15 prohibited by State or Federal law in any jurisdiction involving conspiracy, collusion, or other  
16 impropriety with respect to offering any contract, or have been the subject of debarment action.

17 **7. *Interconnection and Deliverability* Proposers are required to demonstrate the**  
18 **Offshore Wind Generation Facility's interconnection status and deliverability**  
19 **capabilities.**

20 7.1. Interconnection Request – RFP, Section 6.4.7. **Provide documentation to**  
21 **show evidence of the interconnection request to NYISO or any**  
22 **neighboring control areas for Capacity Resource Interconnection Service**  
23 **(CRIS) or for Energy Resource Interconnection Service, or similar**  
24 **interconnection standards in neighboring control areas.**

25 As shown in Attachment 89, a NYISO interconnection request was submitted with the  
26 intent to interconnect to the NYCA. The preferred point of interconnection is [REDACTED]

27 [REDACTED]

28 [REDACTED]

29 7.1.1. Proposals where Capacity is to be Delivered to NYCA – RFP, Section  
30 6.4.7. **Proposers should describe any required transmission system**  
31 **upgrades and provide an estimate of the required transmission system**  
32 **upgrade costs under NYISO CRIS to meet deliverability requirements**  
33 **in NYISO. Evidence that Proposer has a pending, valid**  
34 **interconnection request is sufficient.**

35 The interconnection studies are being performed by NYISO in accordance with the Open  
36 Access Transmission Tariff (OATT) processes. NYISO will conduct a System Reliability Impact

1 Study (SRIS) and Atlantic Shores is confident that they will be studied as part of the Class Year  
2 Interconnection Facilities Study of 2020. Through the interconnection process, Atlantic Shores  
3 will work with NYISO and the Connection Transmission Owner (CTO) to ensure deliverability  
4 of the Project's output to the transmission system. As shown in Attachment 89, a NYISO  
5 interconnection request was submitted with the intent to interconnect to the NYCA.  
6 Confirmation of receipt of the interconnection request is attached hereto as Attachments 90  
7 through 92.

8                    ***7.1.2. Status of Planned Interconnection – RFP, Section 6.4.7. Describe the***  
9                    ***status of any planned interconnection to the grid.***

[Redacted content block]

[REDACTED]

4 [REDACTED]

[REDACTED]

6 [REDACTED]

7 **7.1.3. Interconnection Studies – RFP, Section 6.4.7. Provide any**  
8 **interconnection studies undertaken by the applicable control area or**  
9 **third parties on behalf of Proposer.**

10 In accordance with the Tariff rules, ASOW has engaged a Transmission Consultant  
11 [REDACTED] who performed  
12 interconnection studies to identify the required system upgrades to deliver the energy to the  
13 Gowanus substation. The studies have indicated that no new thermal violations were identified in  
14 the studied N-0 and N-1 conditions. As a result, no new major reinforcements were required. The  
15 interconnection studies report is included in **Attachment 93.**

16 **7.2. Diagram of Interconnection Facilities – RFP, Section 6.4.7. Provide a copy of**  
17 **an electrical one-line diagram showing the interconnection facilities and**  
18 **the relevant facilities of the transmission provider.**

19 The electrical one-line diagram showing the interconnection facilities and the relevant  
20 upgrades on the existing electrical grid is included in **Attachment 94.**

21 **7.3. Cost Estimate of Interconnection and Transmission Upgrades – RFP, Section**  
22 **6.4.7. Identify and provide an estimate of cost, supported by an**  
23 **independent third party, for all proposed or anticipated interconnection**  
24 **and transmission upgrades, including any transmission upgrades beyond**

[REDACTED]

1 the point of interconnection that are needed to ensure delivery of energy  
2 from the Offshore Wind Generation Facility into NYCA.

3 [REDACTED]  
4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]  
10 [REDACTED]  
11 [REDACTED]

12  
13 7.3.1. *Measures to Identify and Control Risks – RFP, Section 6.4.7. Describe*  
14 **measures to identify and control the regulatory and operational risks**  
15 **related to the delivery of energy from the Offshore Wind Generation**  
16 **Facility.**

17 [REDACTED]  
18 [REDACTED]  
19 [REDACTED]  
20 [REDACTED]  
21 [REDACTED]  
22 [REDACTED]

23 7.4. Ability to Delivery Energy to NYCA – RFP, Section 6.4.7. **Demonstrate that**  
24 **energy and associated ORECs generated by the facility can be delivered**  
25 **into the NYCA.**

26 As identified in the interconnection studies performed by the Transmission Consultant,  
27 all energy produced by the Project can be delivered into the NYCA.

28 7.4.1. *Offshore Wind Generation Facility Interconnecting in an Adjacent*  
29 *Control Area – RFP, Section 6.4.7. Describe how Proposer intends to*  
30 **fulfill the External Project Delivery Requirement.**

31 [REDACTED]  
32 [REDACTED]

33 7.5. Available Capacity – RFP, Section 6.4.7. **Provide detail regarding the**  
34 **available capacity, at the time of submission, of the proposed Injection**  
35 **Point.**

1 The Project's planned nameplate output is [REDACTED]  
2 [REDACTED] MW. NYISO applies a capacity factor of 40% to offshore wind resulting in  
3 a net available capacity of [REDACTED]  
4 MW.

5 **8. Environmental Assessment and Permit Acquisition Plan**

6 8.1. List of Permits, Licenses, and Environmental Assessments/Impact Statements –  
7 RFP, Section 6.4.8. **Provide a comprehensive list of all the permits, licenses,**  
8 **and environmental assessments and/or environmental impact statements**  
9 **required to construct and operate the Project.**

10 Please see **Attachment 95** attached hereto for a chart detailing all applicable permits,  
11 licenses, and environmental assessments and/or environmental impacts statements required to  
12 construct and operate the Project, the anticipated timeline for seeking and receiving same, and  
13 identifying the government agencies that are responsible for issuing the approval of all such  
14 permits, licenses, and environmental assessments and/or environmental impact statements.

15 8.1.1. *Responsible Government Agencies – RFP, Section 6.4.8. Identify the*  
16 **governmental agencies that are responsible for issuing approval of all**  
17 **the permits, licenses, and environmental assessments and/or**  
18 **environmental impact statements.**

19 Please see **Attachment 95** attached hereto for a chart detailing all applicable permits,  
20 licenses, and environmental assessments and/or environmental impacts statements required to  
21 construct and operate the Project, the anticipated timeline for seeking and receiving same, and  
22 identifying the government agencies that are responsible for issuing the approval of all such  
23 permits, licenses, and environmental assessments and/or environmental impact statements.

24 8.1.2. *Secured Permits – RFP, Section 6.4.8. If a Proposer has secured any*  
25 **permit or has applied for a permit, please indicate this in the**  
26 **response.**

27 [REDACTED]

28 [REDACTED]

29 8.2. Timeline for Seeking and Receiving Permits, Etc. – RFP, Section 6.4.8  
30 **Provide the anticipated timeline for seeking and receiving the required**  
31 **permits, licenses, and environmental assessments and/or environmental**  
32 **impact statements, including a Project approval assessment which**  
33 **describes, in narrative form, each segment of the process, the required**  
34 **permit or approval, the status of the request or application and the basis**



1 **for projection of success by the milestone date (All requirements should be**  
2 **included on the Project schedule in as described in Section 6.4.10).**

3 Please see **Attachment 95** attached hereto for a chart detailing all applicable permits,  
4 licenses, and environmental assessments and/or environmental impacts statements required to  
5 construct and operate the Project, the anticipated timeline for seeking and receiving same, and  
6 identifying the government agencies that are responsible for issuing the approval of all such  
7 permits, licenses, and environmental assessments and/or environmental impact statements.

[REDACTED]

31

[REDACTED]

8 [REDACTED]

9 The above demonstrates Atlantic Shores' complete, credible, and achievable plan for  
10 successfully obtaining necessary permits within the proposed Project milestones.

11 8.3. SAP and COP – RFP, Section 6.4.8. **Provide the SAP and COP, if**  
12 **completed. If the SAP and/or COP are not completed, provide the status**  
13 **of development of these plans and a proposed plan and timeline for**  
14 **completion.**

[REDACTED]

21 [REDACTED]

22 **9. Engineering and Technology**

23 9.1. Technology or Equipment Viability – RFP, Section 6.4.9. **Provide**  
24 **information about the specific technology or equipment including the**  
25 **track record of the technology and equipment and other information as**  
26 **necessary to demonstrate that the technology is viable.**

27 **Turbines**

[REDACTED]

32 [REDACTED]

[REDACTED]

16 [REDACTED]

17 **Foundations**

[REDACTED]

31 [REDACTED]

[REDACTED]

18 [REDACTED]

19 Electrical

[REDACTED]

31 [REDACTED]

[Redacted]

4 [Redacted]

5 9.2. Engineering Plan – RFP, Section 6.4.9. Provide a preliminary engineering  
6 plan which includes at least the following enumerated information (if  
7 specific information is not known, identify manufacturers, vendors, and  
8 equipment that will be considered):

- 9 (i) Type of foundation, Offer Capacity, and generator lead line transmission  
10 technology;
- 11 (ii) Major equipment components to be used, including nacelle, hub, blade,  
12 tower, foundation, transmission structures and platforms, electrical  
13 equipment and cable);
- 14 (iii) Manufacturer of each of the equipment components as well as the location  
15 of where each component will be manufactured;
- 16 (iv) Status of acquisition of the equipment components;
- 17 (v) Status of any contracts for the equipment Proposer has or Proposer’s plan  
18 for securing equipment and the status of any pertinent commercial  
19 arrangements;
- 20 (vi) Equipment vendors selected/considered;
- 21 (vii) Track record of equipment operations;
- 22 (viii) Design considerations (technology selection, layout) for climate  
23 adaptation and resiliency such as sea level rise, potential impacts from  
24 increased frequency and severity of storms (i.e. superstorms, hurricanes),  
25 seismic activity, etc.; and
- 26 (ix) In the event the equipment manufacturer has not yet been selected,  
27 identify in the equipment procurement strategy the factors under  
28 consideration for selecting the preferred equipment as well as the  
29 anticipated timing associated with the selection of the equipment  
30 manufacturer, including the timing for binding commercial agreement(s).

31  
32 (i) *Type of foundation, Offer Capacity, and Generator Lead Line Transmission Technology.*

33 **Foundations**

[Redacted]

[REDACTED]

17 [REDACTED]

26 [REDACTED]

27 **Offer Capacity**

The offer capacity for the Project is [REDACTED]

30 **Generator Lead Transmission Line Technology**

[REDACTED]

[REDACTED]

14 [REDACTED]

15 (ii) Major equipment components to be used, including nacelle, hub, blade, tower,  
16 foundation, transmission structures and platforms, electrical equipment and cable).

17 **Wind Turbine Description**

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

28 [REDACTED]

[Redacted text block]

9 [Redacted text block]

10 Foundations

[Redacted text block]

14 [Redacted text block]

[Large redacted text block]

15



[Redacted text block]

20

21 **Transmission Structure**

[Redacted text block]

25

26 **Onshore Substation**

[Redacted text block]

30

█ [REDACTED]  
█ [REDACTED]  
3 [REDACTED]

4 **Offshore Substation**

█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
16 [REDACTED]

17 **Reactive Power Compensation Substation**

█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
25 [REDACTED]

26 **Subsea Cables**

█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
30 [REDACTED]

[REDACTED]

10 [REDACTED]

11 (iii) *Manufacturer of each of the equipment components as well as the location of where each*  
12 *component will be manufactured.*

[REDACTED]

31 [REDACTED]

1 (iv) *Status of acquisition of the equipment components.*

[REDACTED]

22 [REDACTED]

23 (v) *Status of any contracts for the equipment Proposer has or Proposer's plan for securing*  
24 *equipment and the status of any pertinent commercial arrangements.*

[REDACTED]

31 [REDACTED]

[REDACTED]

13 [REDACTED]

14 (vi) *Equipment vendors selected/considered.*

[REDACTED]

30 [REDACTED]

1 [REDACTED]

2 [REDACTED]

3 (vii) *Track record of equipment operations*

4 **Turbine**

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 **Foundations**

25 [REDACTED]

26 [REDACTED]

27 [REDACTED]

28 [REDACTED]

29 [REDACTED]

[REDACTED]

7 **Electrical Equipment**

[REDACTED]

12 (viii) *Design considerations (technology selection, layout) for climate adaptation and*  
13 *resiliency such as sea level rise, potential impacts from increased frequency and severity*  
14 *of storms (i.e. superstorms, hurricanes), seismic activity, etc.*

[REDACTED]

23 [REDACTED]

24 (ix) *In the event the equipment manufacturer has not yet been selected, identify in the*  
25 *equipment procurement strategy the factors under consideration for selecting the*  
26 *preferred equipment as well as the anticipated timing associated with the selection of the*  
27 *equipment manufacturer, including the timing for binding commercial agreement(s).*

[REDACTED]

[REDACTED]

11 9.3. Lighting Controls – RFP, Section 6.4.9. **Describe the lighting controls that**  
12 **will be utilized on the Offshore Wind Generation Facility and explain how**  
13 **these controls comply with the minimum contract standards and the**  
14 **Offshore Wind Order.**

15 To meet the obstruction lighting requirements of the Federal Aviation Administration  
16 (FAA) while minimizing visual and avian impacts, the Project can incorporate an aircraft  
17 detection lighting system (ADLS). Such FAA-approved lighting systems utilize radar to ensure  
18 that obstruction lights are only turned on when necessary, due to the presence of nearby aircraft.  
19 FAA-approved examples include Terma’s Obstruction Light Control (OLC), DeTect’s  
20 HARRIER ADLS, and Vestas’ Intelilight. In its efforts to continuously explore and advance the  
21 best light mitigation solutions, EDFR has also piloted FAA obstruction lighting utilizing  
22 Technostrobe’s lighting intensity dimming solution (LIDS) at one of its onshore wind projects,  
23 where it is currently working with the FAA to get this technology approved. Such lighting  
24 incorporates visibility measuring devices to tailor the intensity level of lights in accordance with  
25 the surrounding weather/visibility. This could also be explored for application at the Project.

26 ***10. Project Schedule***

27 10.1. Acquisition of Financing – RFP, Section 6.4.10. **Provide sufficient**  
28 **information and documentation showing that Proposer’s resources,**  
29 **process, and schedule are adequate for the acquisition of all rights,**  
30 **permits, and approvals for the financing of the Project consistent with**  
31 **the proposed milestone dates that support the proposed Commercial**  
32 **Operation Date.**



1 Atlantic Shores is ultimately built from two world-class energy businesses, with  
2 extensive expertise and financial capabilities, with a demonstrated track record of financing,  
3 constructing, and operating large scale utility projects, and therefore is uniquely qualified to  
4 develop and execute a realistic plan to entitle, finance, and construct the Project so as to bring it  
5 to commercial operation in a timely fashion.

6 The EDF Renewables Group, consisting of EDF Renouvelables and certain of its  
7 subsidiaries, including North American arm EDFR, is a group of entities which constitutes a  
8 world class energy company with significant resources and extensive experience in developing  
9 renewable energy projects both domestically and internationally (including, without limitation,  
10 onshore and offshore wind projects). EDF Renouvelables specifically, has more than 12 GW of  
11 installed wind and solar gross capacity in twenty-two (22) countries, is supported by 3,500  
12 employees, and is planning or constructing more than 3,000 MW of offshore wind projects in  
13 Europe for large national utilities. The ultimate parent of the entities within the EDF Renewables  
14 Group is the EDF Group, a global leader in low-carbon energy with annual revenue of nearly  
15 €70B and over 152,000 employees worldwide. Furthermore, EDFR has been in business in North  
16 America for over thirty (30) years, employs more than 1,200 people, and has historically  
17 developed approximately \$1 billion of wind and solar projects annually. Between 2017 and  
18 2020, EDFR expects to bring over 4 GW of wind and solar in service and continues to be one of  
19 the most successful renewable energy development companies in North America.

20 Additionally, EDFR's asset optimization team is the largest provider of third-party O&M  
21 services in North America. The O&M team services over 5,230 wind turbines, 45+ different  
22 equipment types, and almost 1,970 solar inverters, which generate over 10 GW of electricity.  
23 EDFR's full range of services begins prior to commissioning and goes through  
24 decommissioning. During the warranty period, EDFR provides scheduled and unscheduled  
25 maintenance options such as balance-of-plant management, remote monitoring, and OEM  
26 oversight. EDFR provides critical 24/7/365 remote monitoring and diagnostics from its United  
27 States based state-of-the-art NERC compliant Operations Control Center (OCC), increasing  
28 equipment availability, reducing downtime and its associated operational and maintenance costs.

29 An overview of EDFR's financial capabilities, lengthy history and successful project  
30 development list, and other pertinent information demonstrating the financial wealth and

1 integrity of EDFR and its affiliates, including Atlantic Shores, can be found at <https://www.edf->  
2 re.com.

3 Shell New Energies is a subsidiary of Royal Dutch Shell, with over a decade of  
4 experience in wind power, including involvement in nine (9) onshore and offshore wind projects  
5 in North America and Europe, with approximately 900 MW of capacity. Royal Dutch Shell is a  
6 major world oil and gas leader with close to 90,000 employees worldwide, a \$13.4 billion annual  
7 income and \$24 billion in capital investment in 2017. Royal Dutch Shell has ten (10) decades of  
8 experience in developing, constructing, and operating large-scale offshore energy projects in the  
9 United States. For over six (6) decades, Royal Dutch Shell has been a leading proponent of  
10 supply chain development in the Gulf of Mexico oil and gas industry. Royal Dutch Shell has the  
11 financial strength, resources, and organization to support capital and other commitments in  
12 offshore wind.

13 In the U.S. Shell New Energies' wind portfolio includes five (5) joint venture interests  
14 spanning eight (8) operating wind projects. Shell WindEnergy Netherlands B.V. also maintains a  
15 [REDACTED] % interest in one (1) offshore  
16 [REDACTED] wind farm, NoordZee Wind, in the North Sea, and a [REDACTED]  
17 [REDACTED] % interest in the Blauwwind consortium that will build and operate the  
18 Borssele 3 and 4 wind farms off the Dutch coast. The wind farms are designed to have a total  
19 installed capacity of 731.5 MW, enough to power around 825,000 Dutch households. In addition,  
20 Shell New Energies, as a [REDACTED] %  
21 partner in Mayflower Wind Energy, LLC, was recently one (1) of three (3) provisional winners  
22 in a Federal commercial wind energy auction on the outer continental shelf off the coast of  
23 Massachusetts.

24 The track record of Atlantic Shores' member's in developing other significant renewable  
25 energy projects speaks for itself, and demonstrates their world class technical and financial  
26 capabilities. An illustrative list of other projects financed by Atlantic Shores' members is  
27 attached hereto as **Attachment 46**.

28 [REDACTED]  
29 [REDACTED]  
30 [REDACTED]  
31 [REDACTED]

[REDACTED]

21 [REDACTED]

26 [REDACTED]

27 The above demonstrates Atlantic Shores’ complete, credible, and achievable plan for

28 successfully obtaining necessary permits within the proposed Project milestones.

29 10.2. Critical Path Schedule – RFP, Section 6.4.10. **Provide a complete critical**

30 **path schedule for the Project from the notice of award to the start of**

31 **commercial operations for the elements listed below, providing start**

32 **and end dates for each:**

1 (i) *Identify the elements on the critical path, including, at a minimum, preliminary*  
2 *engineering, financing, acquisition of real property rights, Federal, state and/or local*  
3 *permits, licenses, environmental assessments and/or environmental impact statements*  
4 *(including anticipated permit submittal and approval dates), completion of*  
5 *interconnection studies and approvals culminating in the execution of the Interconnection*  
6 *Service Agreement, financial close, engineer/procure/construct contracts, start of*  
7 *construction, construction schedule, and any other requirements that could influence the*  
8 *Project schedule.*

9 The below **Table 6** gives an overview of the main milestones to be considered regarding  
10 development and execution phases of the Project. All constraints regarding permitting,  
11 engineering, financing, contracting, supply chain, construction and other elements impacting the  
12 critical path of the Project are integrated in the detailed schedule attached hereto as **Attachment**  
13 **101**, including a complete critical path schedule for the Project from the notice of award to the  
14 start of commercial operations.

15 **Table 6: Schedule Milestones** 



1 [REDACTED]

2 (ii) Describe the anticipated permissible offshore construction windows, and how the  
3 construction milestones will be accommodated within these windows.

4 The construction milestones for the Project consider different constraints related to the  
5 component supply, delivery, transport and installation schedule as well as parameters specific to  
6 the Project location, such as environmental constraints, weather, distance to shore, harbor and  
7 other logistics constraints.

8 **Environmental Constraints**

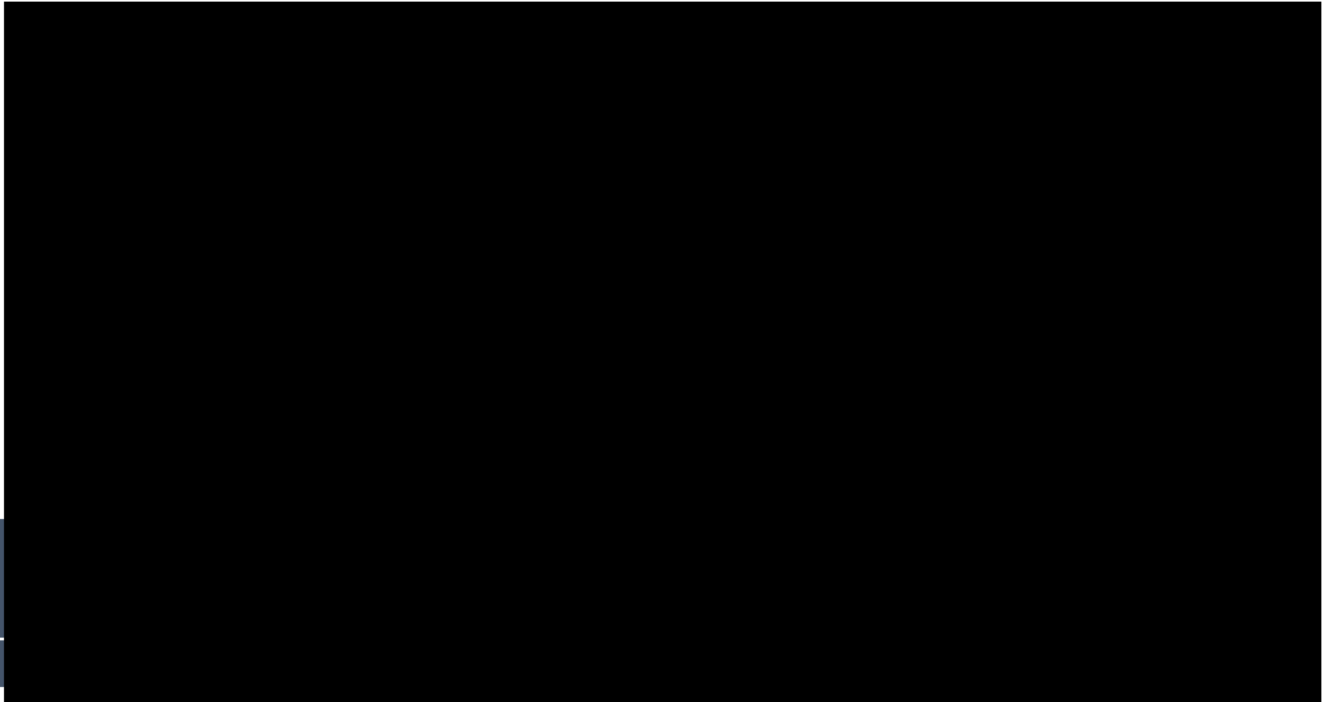
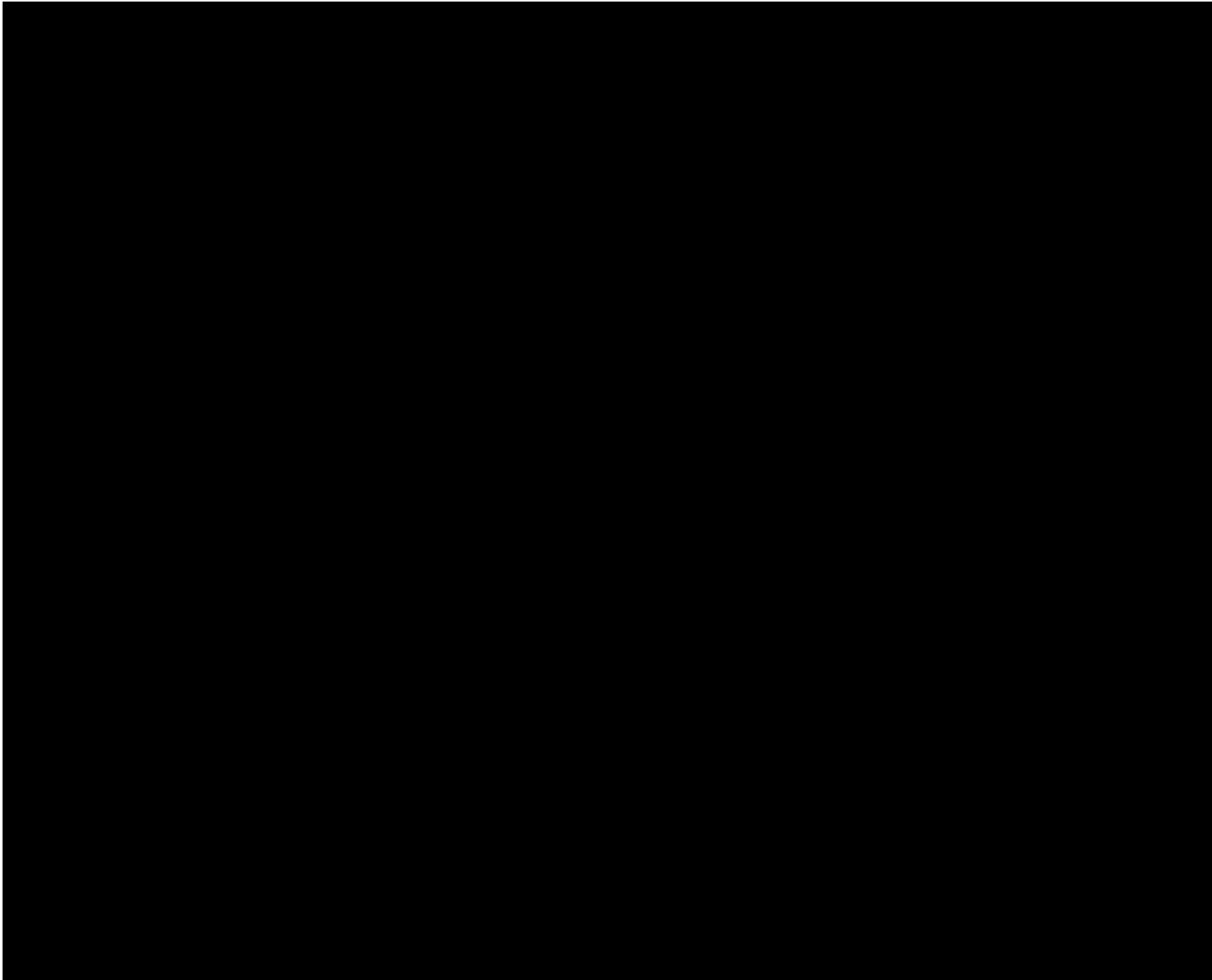
9 [REDACTED]  
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13 [REDACTED]

14 **Site Specific Weather Restrictions**

15 [REDACTED]  
16 [REDACTED]  
17 [REDACTED]  
18 [REDACTED]  
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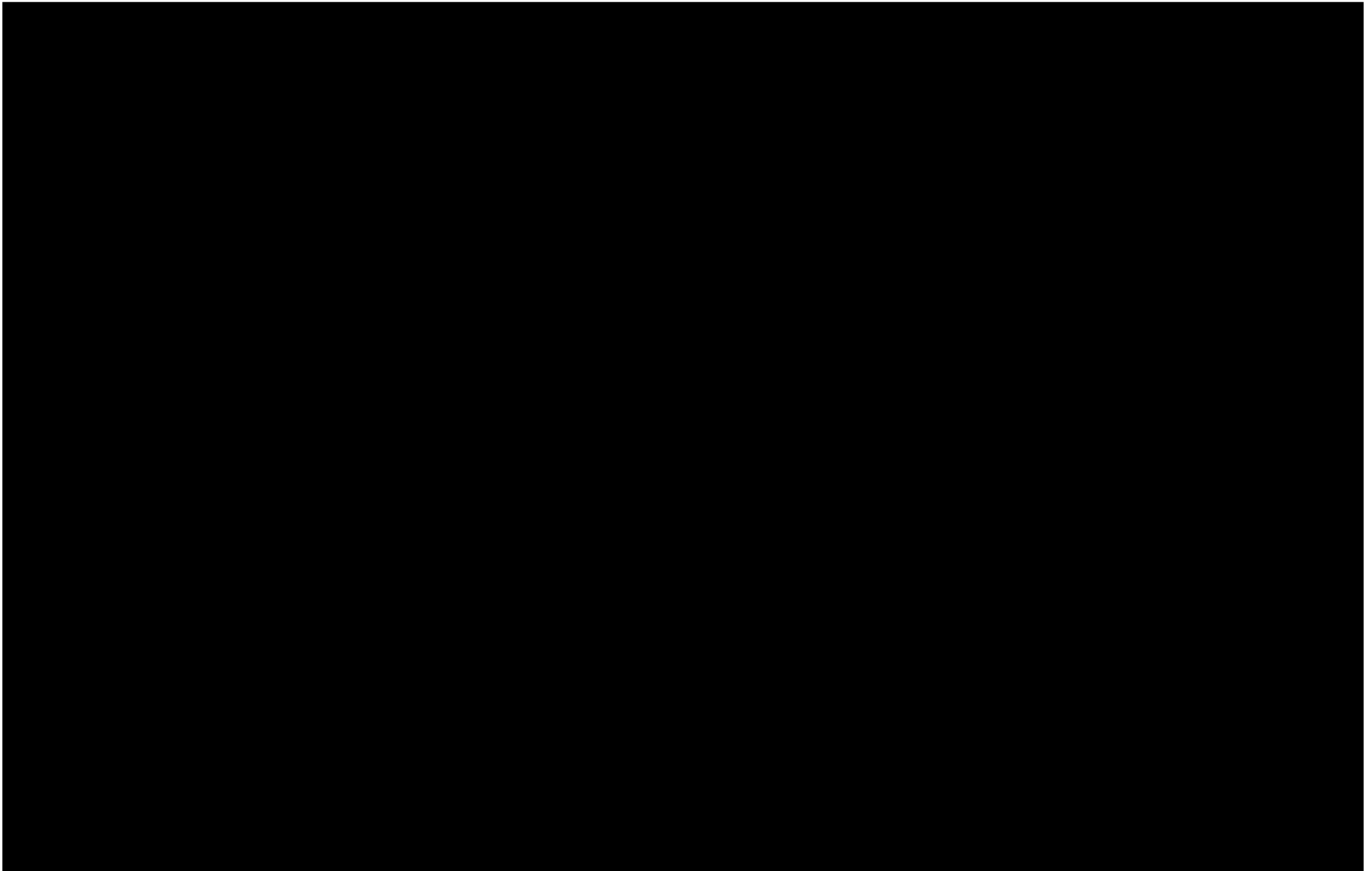
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4 **Transatlantic Transit Study:**

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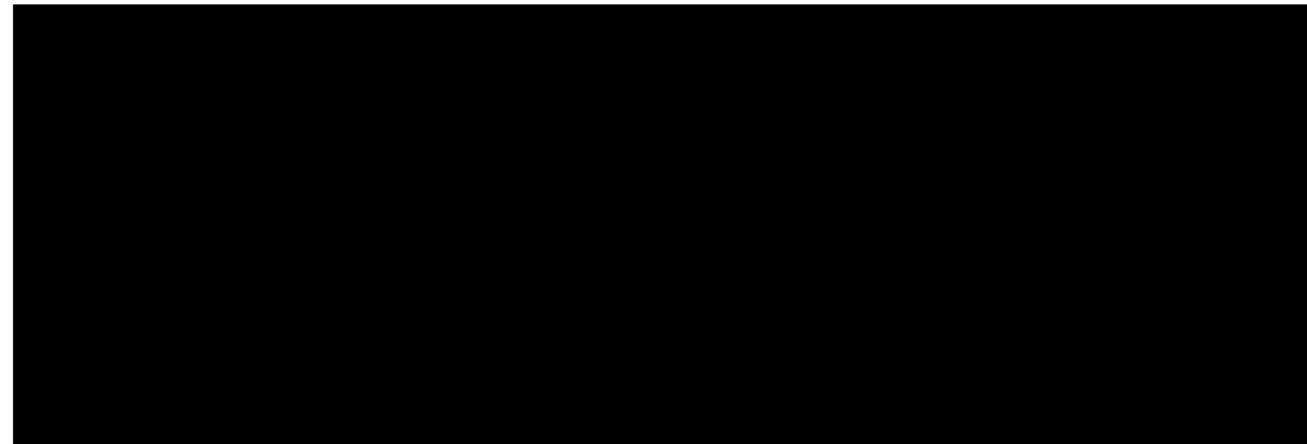
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13 *(iii) Detail the status of all critical path items, such as receipt of all necessary siting,*  
14 *environmental, and NYISO approvals.*

15 A detailed list of all siting, environmental, and NYISO approvals are included in the  
16 Environmental Mitigation Plan included herein as **Attachment 106** and Project schedule  
17 included herein as **Attachment 101**.

1 **11. Construction and Logistics**

2 11.1. Construction and Logistics Plan – RFP, Section 6.4.11. **Provide a**  
3 **construction and logistics plan that captures the following objectives:**

4 **(i) List the major tasks or steps associated with deployment of the**  
5 **proposed Project and the necessary specialized equipment (e.g.,**  
6 **vessels, cranes).**

7 **(ii) Identify the marine terminals and other waterfront facilities that will**  
8 **be used to stage, assemble, and deploy the Project for each stage of**  
9 **construction.**

10 **i. If available, evidence that Proposer or the equipment/service**  
11 **provider have right(s) to use a marine terminal and/or**  
12 **waterfront facility for construction of the Project (e.g., by**  
13 **virtue of ownership or land development rights obtained from**  
14 **the owner).**

15 **ii. If not available, describe the status of acquisition of real**  
16 **property rights for necessary marine terminal and/or**  
17 **waterfront facilities, any options in place for the exercise of**  
18 **these rights and describe the plan for securing the necessary**  
19 **real property rights, including the proposed timeline. Include**  
20 **these plans and the timeline in the overall Project schedule in**  
21 **Section 6.4.10.**

22 **iii. Identify any joint use of existing or proposed real property**  
23 **rights for marine terminal or waterfront facilities.**

24  
25 **(iii) Describe the proposed approach for staging and deployment of major**  
26 **Project components to the Project site. Include a description and**  
27 **discussion of the laydown facility/facilities to be used for construction,**  
28 **assembly, staging, storage, and deployment.**

29 **(iv) Indicate the number, type and size of vessels that will be used, their**  
30 **respective uses, and how vessels will be secured for the required**  
31 **construction period. Explain how Proposer’s deployment strategy will**  
32 **conform to requirements of the Merchant Marine Act of 1920 (the**  
33 **Jones Act).**

34 **(v) List the party or parties responsible for each deployment activity and**  
35 **describe the role of each party. Describe the status of Proposer’s**  
36 **contractual agreements with third-party equipment/service providers.**

37 **(i) List the major tasks or steps associated with deployment of the proposed Project and the**  
38 **necessary specialized equipment (e.g., vessels, cranes).**





[Redacted text block]

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[Redacted text block]

28 **Inter-Array and Export Cable Installation**

█ [REDACTED]

█ [REDACTED]

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14 **Offshore Substation (OSS) for the Offshore Compensation Platform**

█ [REDACTED]

█ [REDACTED]

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28 [REDACTED]

[REDACTED]

27 [REDACTED]

28 Wind Turbine Installation

[REDACTED]

25 [REDACTED]

26 (ii) *Identify the marine terminals and other waterfront facilities that will be used to stage,*  
27 *assemble, and deploy the Project for each stage of construction.*

[REDACTED]

30 [REDACTED]

[REDACTED]

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[REDACTED]

13 [REDACTED]

14 i. *If available, evidence that Proposer or the equipment/service provider have*  
15 *right(s) to use a marine terminal and/or waterfront facility for construction of the*  
16 *Project (e.g., by virtue of ownership or land development rights obtained from the*  
17 *owner).*

[REDACTED]

21 [REDACTED]

22 ii. *If not available, describe the status of acquisition of real property rights for*  
23 *necessary marine terminal and/or waterfront facilities, any options in place for*  
24 *the exercise of these rights and describe the plan for securing the necessary real*  
25 *property rights, including the proposed timeline. Include these plans and the*  
26 *timeline in the overall Project schedule in Section 6.4.10.*

[REDACTED]

32 [REDACTED]



[REDACTED]

9 iii. *Identify any joint use of existing or proposed real property rights for marine*  
10 *terminal or waterfront facilities.*

[REDACTED]

15 (iii) *Describe the proposed approach for staging and deployment of major Project*  
16 *components to the Project site. Include a description and discussion of the laydown*  
17 *facility/facilities to be used for construction, assembly, staging, storage, and deployment.*

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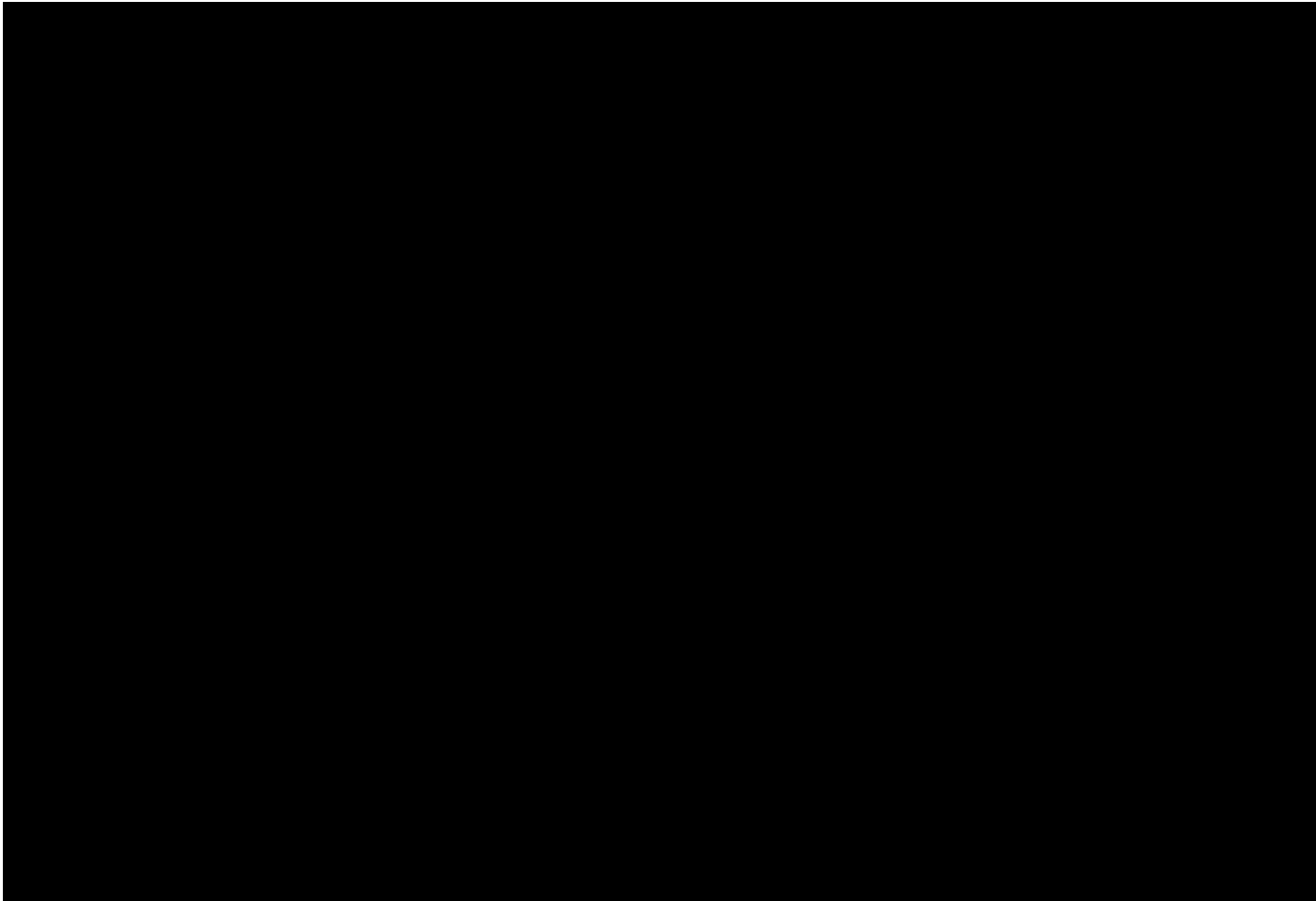
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8 (iv) *Indicate the number, type and size of vessels that will be used, their respective uses, and*  
 9 *how vessels will be secured for the required construction period. Explain how Proposer's*  
 10 *deployment strategy will conform to requirements of the Merchant Marine Act of 1920*  
 11 *(the Jones Act).*

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6  
7 (v) List the party or parties responsible for each deployment activity and describe the role of  
8 each party. Describe the status of Proposer's contractual agreements with third-party  
9 equipment/service providers.

[REDACTED]

[REDACTED]

23 [REDACTED]

24 **12. Fisheries Mitigation Plan**



1 12.1. Fisheries Mitigation Plan – RFP, Section 6.4.12. **A Fisheries Mitigation**  
2 **Plan in as much detail as possible that describes how Proposer will**  
3 **mitigate adverse impacts on the commercial fishing industry that may**  
4 **be caused by the Project.**

5 The Fisheries Mitigation Plan is attached hereto as **Attachment 105**. The Fisheries  
6 Mitigation Plan, among other things, demonstrates that the Project as proposed can be developed  
7 in a manner which is sensitive to ocean users and coastal communities.

8 ***13. Environmental Mitigation Plan***

9 13.1. Environmental Mitigation Plan – RFP, Section 6.4.13. **A detailed**  
10 **Environmental Mitigation Plan that describes how Proposer will**  
11 **mitigate adverse environmental impacts that may be caused by the**  
12 **Project.**

13 The Environmental Mitigation Plan is attached hereto as **Attachment 106**.

14 ***14. Community Outreach Plan***

15 14.1. Community Outreach Plan – RFP, Section 6.4.14. **A Community**  
16 **Outreach Plan that identifies proposed stakeholder engagement**  
17 **activities during construction and operation of the Project.**

18 The Community Outreach Plan is attached hereto as **Attachment 107**.

19 14.2. Agreements with Communities or Constituencies – RFP, Section 6.4.14.  
20 **Provide copies of any agreements with communities and other**  
21 **constituencies impacted by the Project, not already covered in the**  
22 **Fisheries Mitigation Plan or the Environmental Mitigation Plan.**

23 [REDACTED]

26 14.3. Status of Implementation – RFP, Section 6.4.14. **Discuss the status of**  
27 **implementing the community outreach plan.**

28 The status of implementing the Community Outreach Plan for New York is as stated in  
29 the Community Outreach Plan. In New Jersey, efforts to implement the Community Outreach  
30 Plan will begin in late Q1 and the Atlantic Shores team is working on key contacts, strategy, and  
31 schedules over the next 45 days.

32 14.4. Documentation of Public Support – RFP, Section 6.4.14. **Provide**  
33 **documentation identifying the level of public support for the Project**  
34 **including letters from public officials, newspaper articles, etc.,**

1 **including information on specific localized support and/or opposition**  
2 **to the Project of which Proposer is aware.**

3 Given the nascent status of the Project (ASOW having only received the rights to the  
4 lease area in December 2018), no documentation of public support in the form of letters from  
5 public officials, newspaper articles, or otherwise, is yet available. There is, however, extensive  
6 support for the Project from the supply chain, as outlined in the letters of support attached hereto  
7 as **Attachments 7** to **23**.

### 8 ***15. Visibility and Viewshed Impacts***

9 15.1. Project Visibility – RFP, Section 6.4.15. **Proposers must address a**  
10 **Project’s visibility from shore.**

11 ***15.1.1. Project Proposed to Include Turbines Less than 20 Miles from the Nearest***  
12 ***Shoreline – RFP, Section 6.4.15. If a Project is proposed to include***  
13 ***turbines less than 20 statute miles from the nearest shoreline point of***  
14 ***any state, Proposers must explain (i) how the Project will minimize***  
15 ***adverse impacts related to visibility of turbines, including potential***  
16 ***impacts on the local and state economy and historic and visual***  
17 ***resources, such as publicly-accessible viewsheds, and (ii) how***  
18 ***consideration of economic and environmental concerns contributed to***  
19 ***the proposed distance from shore.***

20 The Visibility and Impacts Plan is attached hereto as **Attachment 108**. This plan  
21 demonstrates, among other things, that the Project as proposed can be developed in a manner  
22 which is sensitive to ocean users and coastal communities.

23 ***15.1.2. Visibility Study – RFP, Section 6.4.15. All Proposals, regardless of***  
24 ***distance from the nearest shoreline, must include a visibility study***  
25 ***that presents visual simulations of the proposed Offshore Wind***  
26 ***Generation Facility.***

27 A Visibility Study including the required photo simulations are attached hereto as  
28 **Attachment 109**.

### 29 ***16. New York Economic Benefits***

30 16.1. Economic Benefits Plan – RFP, Section 6.4.16.1. **(i) Proposers must**  
31 **submit their claimed Incremental Economic Benefits and Contingent**  
32 **Economic Benefits by category using the Offer Data Form and**  
33 **support these claims by submitting an Economic Benefits Plan with**  
34 **all claimed expenditures and investments in real dollars (U.S.); (ii) the**  
35 **Economics Benefits Plan must include descriptions and supporting**  
36 **documentation for their Incremental Economic Benefits and**

1                    **Contingent Economic Benefits claims, as described below, not**  
2                    **including the prorated portion of investments in oversized**  
3                    **transmission and interconnection facilities not needed to support the**  
4                    **Offshore Wind Generation Facility; (iii) describe the manner in which**  
5                    **Proposer will comply with the New York State Supplier Opportunity**  
6                    **requirement described in Section 2.2.9 of the Solicitation.**

7                    The Economic Benefits Plan is attached hereto as **Attachment 110**.

PRELIMINARY PUBLIC COPY

**EXHIBIT A: TABLE OF ATTACHMENTS**

<b>ATTACHMENT</b>	<b>DOCUMENT</b>
Attachment 1	Organizational Chart for the Project
Attachment 2	EDFR Capabilities Brochure
Attachment 3	EDFR Offshore Brochure
Attachment 4	EDFR Asset Optimization Brochure
Attachment 5	Shell Fact Sheet
Attachment 6	Atlantic Shores Project Experience
Attachment 7	[REDACTED] Letter of Support and Qualifications
Attachment 8	[REDACTED] Letter of Support and Qualifications
Attachment 9	[REDACTED] Letter of Support and Qualifications
Attachment 10	[REDACTED] Letter of Support and Qualifications
Attachment 11	[REDACTED] Letter of Support and Qualifications
Attachment 12	[REDACTED] Letter of Support and Qualifications
Attachment 13	[REDACTED] Letter of Support and Qualifications
Attachment 14	[REDACTED] Letter of Support and Qualifications
Attachment 15	[REDACTED] Letter of Support and Qualifications
Attachment 16	[REDACTED] Letter of Support and Qualifications
Attachment 17	[REDACTED] Letter of Support and Qualifications
Attachment 18	[REDACTED] Letter of Support and Qualifications
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Attachment 20	[REDACTED] Letter of Support and Qualifications
Attachment 21	[REDACTED] Letter of Support and Qualifications
Attachment 22	[REDACTED] Letter of Support and Qualifications
Attachment 23	[REDACTED] Letter of Support and Qualifications
Attachment 24	Atlantic Shores Management Chart
Attachment 25	Resume of Cliff Graham
Attachment 26	Resume of Benoit Rigal
Attachment 27	Resume of Christopher Hart
Attachment 28	Resume of Michael Wheeler
Attachment 29	Resume of Rick Miller
Attachment 30	Resume of Doug Copeland
Attachment 31	Resume of Elisabeth Duranteau
Attachment 32	Resume of Alexis Billet
Attachment 33	Resume of Jennifer Daniels
Attachment 34	Resume of Julia Pettit
Attachment 35	Resume of Chris Burch
Attachment 36	Resume of Joris Veldhoven
Attachment 37	Resume of James Cotter
Attachment 38	Resume of Dr. Ruth L. Perry,
Attachment 39	Resume of Linda Rotasperti
Attachment 40	Resume of Costanza Dingemans Cappello
Attachment 41	Resume of Christina Zwissler
Attachment 42	Resume of Koen Bröker

PRELIMINARY PUBLIC COPY

Attachment 43	Resume of Bouke Feenstra
Attachment 44	Resume of Bernardo Franco
Attachment 45	Resume of Brian M. Murdock
Attachment 46	EDFR Financing Experience
Attachment 47	Letter of Support from [REDACTED]
Attachment 48	Letter of Support from [REDACTED]
Attachment 49	Letter of Support from [REDACTED]
Attachment 50	Letter of Support from [REDACTED]
Attachment 51	Letter of Support from [REDACTED]
Attachment 52	Letter of Support from [REDACTED]
Attachment 53	Letter of Support from [REDACTED]
Attachment 54	Letter of Support from [REDACTED]
Attachment 55	Letter of Support from [REDACTED]
Attachment 56	Letter of Support from [REDACTED]
Attachment 57	Letter of Support from [REDACTED]
Attachment 58	Letter of Support from [REDACTED]
Attachment 59	O&M Plan
Attachment 60	Map of Lease Area
Attachment 61	Original Executed Lease for the Lease Area
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Attachment 72	EDF Renewables Consolidated Audited Financial Statement, year ending December 31, 2016
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Attachment 74	EDFR Consolidated Unaudited Financial Statement, year ending December 31, 2015
Attachment 75	EDFR Consolidated Unaudited Financial Statement, year ending December 31, 2016
Attachment 76	EDFR Consolidated Unaudited Financial Statement, year ending December 31, 2017
Attachment 77	Royal Dutch Shell Audited Financial Statement, year ending December 31, 2015
Attachment 78	Royal Dutch Shell Audited Financial Statement, year ending December 31,

PRELIMINARY PUBLIC COPY

	2016
Attachment 79	Royal Dutch Shell Audited Financial Statement, year ending December 31, 2017
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Attachment 101	Detailed Project Schedule
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Attachment 103	Transatlantic Transit Study
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Attachment 107	Community Outreach Plan
Attachment 108	Visibility and Viewshed Impacts Plan
Attachment 109	Visibility Study Simulations
Attachment 110	Economic Benefits Plan
	- Economic Benefits Plan Tables (Excel)
	- Emissions Model Tables (Excel)

# ATTACHMENT 1

# Preliminary Public Copy

## Legend:




 Proposer

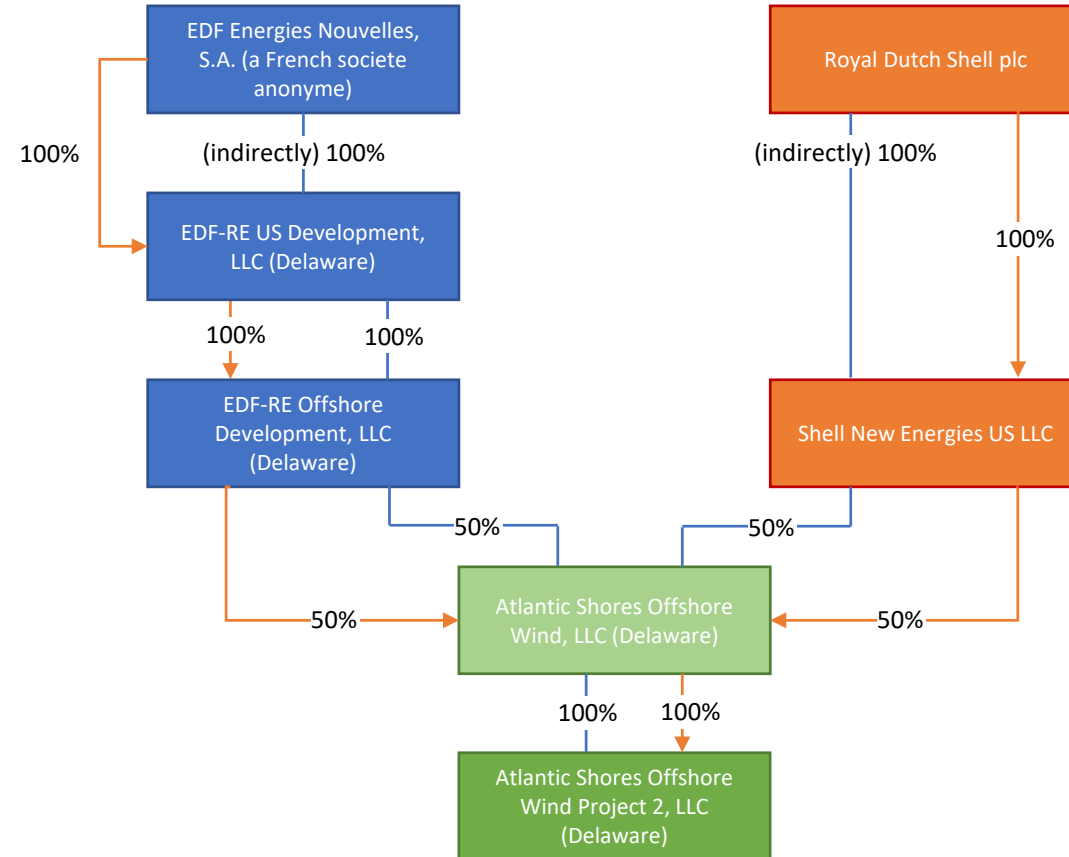
 Ownership links





Legend:

-  Proposer
-  Ownership links
-  Project funding links (Capital Contributions – Development and Construction phase-absent Project Finance)



# ATTACHMENT 2

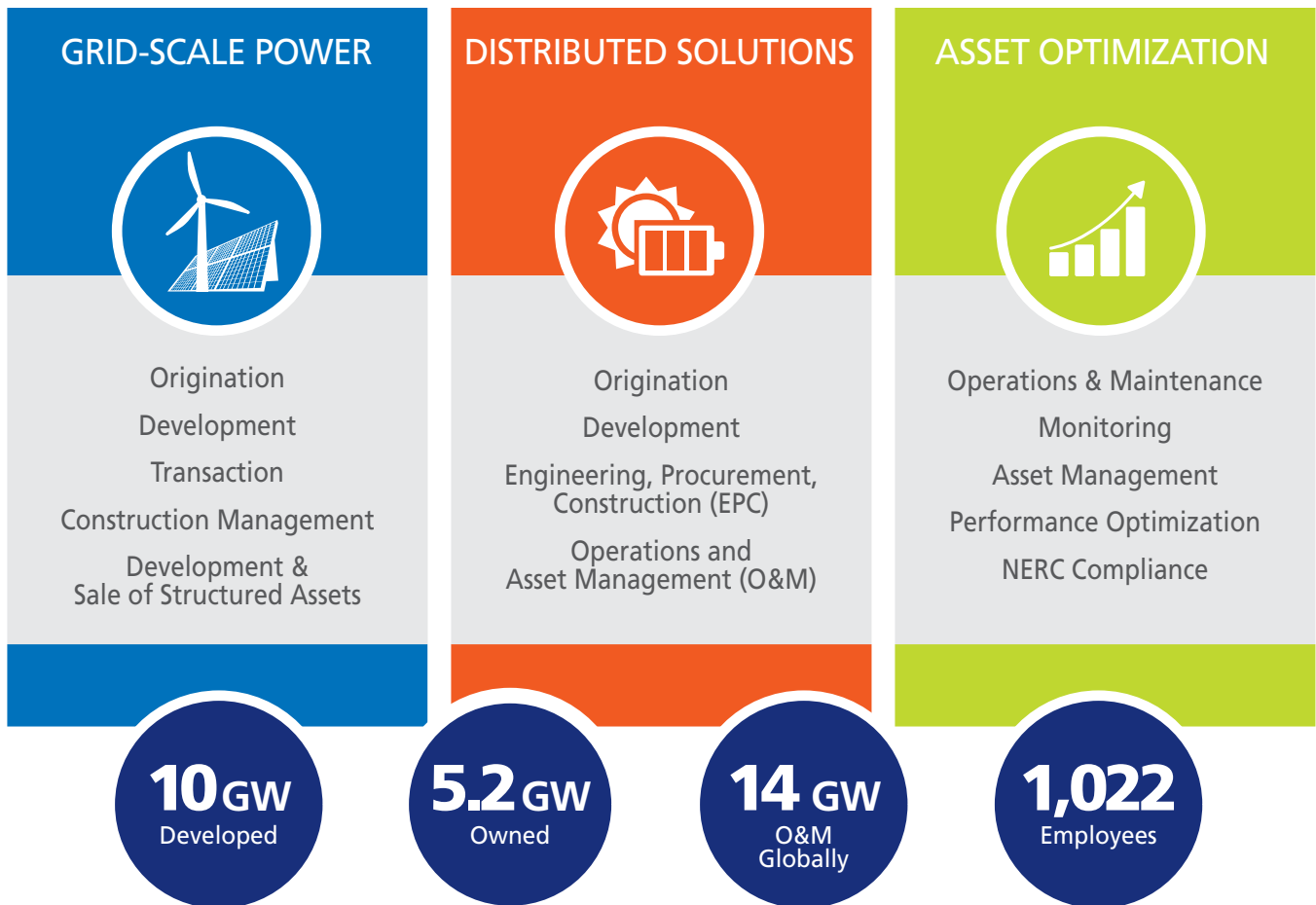


# POWERING PROGRESS

EXPERTISE | COMMITMENT | INNOVATION

# OUR MISSION

Turning innovative renewable energy ideas and long-term relationships into ethical, high-value sustainable business.



# INNOVATION STARTS HERE

## CLEAN ENERGY FOR A BETTER FUTURE

For over 30 years, EDF Renewables has dedicated its efforts to creating a green energy economy through the deployment of renewable energy resources.





We are experts in all areas of project development, operations, and management including:

- wind energy
- solar energy
- hydro
- battery storage
- distributed energy
- resource assessment
- project design
- interconnection
- procurement of equipment
- financing
- permitting
- construction
- long-term management
- operations and maintenance
- project de-commissioning
- repowering

# GRID-SCALE POWER

EDF Renewables provides large scale wind and solar power generation across North America to create a cleaner energy future.

EDF Renewables is a leading independent power producer with 10 GW of renewable projects developed in North America.

USA		8,422 MW
7.7 GW		
CANADA		1,367 MW
1.4 GW		
MEXICO		91 MW
.8 GW		
		20 MW

## CREATING VALUE

EDF Renewables is involved in every phase of the project, ensuring the quality of our installations and guaranteeing a high level of reliability and performance.



### ORIGINATION

Comprehensive **analysis, identification and evaluation** of prospective sites and matching those sites with our customers' needs.



### DEVELOPMENT

Resource **assessment, permitting, site design, interconnection rights** and technology selections.

## Solutions tailor made for corporate purchasers

With projects sized from 100 kW to over 300 MW, EDF Renewables delivers power to corporations large and small with contract structures to meet each customer's specific business needs.



31 December 2017



### TRANSACTION

Securitization of energy offtake and financing.



### CONSTRUCTION

Implementation of all aspects of the system design, installation, and construction to ensure a quality build.



### OPTIMIZATION

Operations and maintenance, asset management, monitoring and maintenance to ensure profitable and optimal performance of facility.

# EXPERTISE BUILDING OFFSHORE INSTALLATIONS

## DESIGNING SUCCESSFUL RENEWABLE ENERGY PROJECTS

We have proven our **technical skills in marine engineering** through successfully installing fixed-bottom, monopile, jacket, and gravity based foundations on off-shore wind projects.

Designed, built and maintained by EDF Energy Renewables, jointly owned by EDF Energy and EDF Energies Nouvelles, the Teesside offshore wind project, located off the coast of North East England, comprises 27 turbines, each with a capacity of 2.3 MW for a total of 62 MW installed capacity. It was commissioned in 2013.



## CREATING ECONOMIC OPPORTUNITIES

Before construction, we engage with local economic stakeholders to identify workers with the relevant skills and qualifications by activating a network of subject matter experts and large companies.

- During the construction phase, we recruit for workers near our projects, and the jobs created in this sector increase the knowledge and skills of the local workforce.
- While planning for the operational phase, we establish training programs relevant to the fields in which we and our subcontractors work to create permanent skilled positions.

## CARING FOR THE ENVIRONMENT

All of our projects are developed with a thorough consideration of environmental issues, relying on numerous studies carried out over several years.

- A comprehensive environmental analysis is carried out on marine mammals, birds, fishing resources, water quality, currents, etc. by recognized experts, in collaboration with local groups such as environmental organizations, fishing associations, and research laboratories.
- We incorporate the many activities in each project area and adapt the wind turbine layout to minimize impacts.

## OFFSHORE PROJECTS IN EUROPE

### France

- Three offshore wind projects being developed (Fécamp, Courseulles-sur-Mer and Saint-Nazaire), with a total power of 1,428 MW
- A floating wind pilot project under development off the coast of Fos-sur-Mer

### Belgium

- C-Power offshore wind project (325 MW) in operation since 2009

### UK

- Teesside offshore wind project (62 MW) in operation since 2013
- Blyth offshore wind project (41 MW) in operation since 2017

### Germany

- Maintenance of a 400 MW offshore wind project

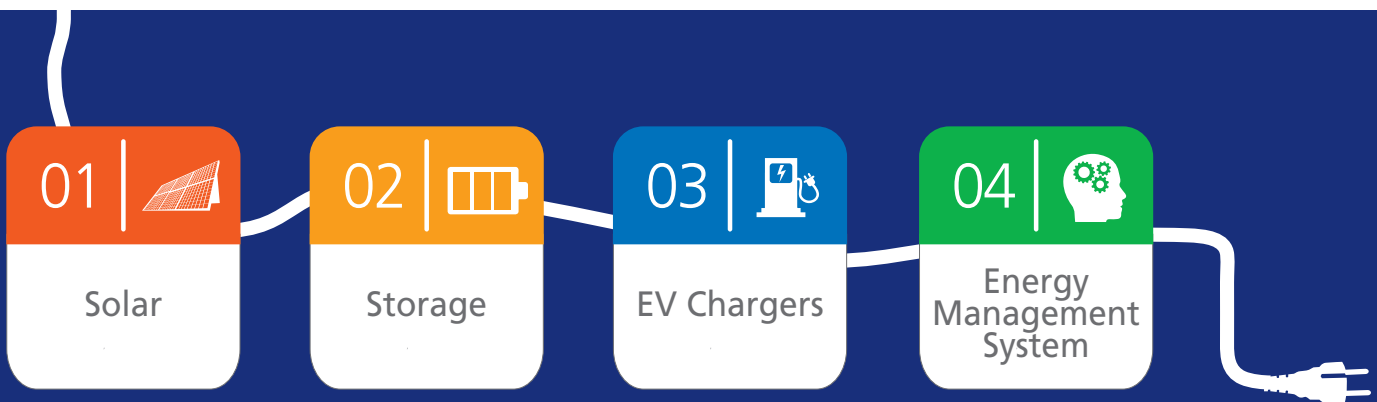


# DISTRIBUTED SOLUTIONS

EDF Renewables provides a fully integrated bundle for onsite energy projects. Designing and building the future of distributed generation with an integrated solar, solar+storage, and electric vehicle charging solution.

We partner with you to provide industry-leading design, engineering, construction, and operation of onsite renewable energy projects.

Our dedicated team of developers, engineers, construction managers, O&M, finance, and legal professionals is focused on making distributed generation easy, accessible, and responsive to the needs of our clients and the communities in which they operate.





# ASSET OPTIMIZATION

Maximizing performance and profitability throughout the project lifecycle

**14 GW**  
OPERATIONS &  
MAINTENANCE

**8.5 GW**  
UNDER OCC  
MONITORING

**6.9 GW**  
ASSET  
MANAGEMENT



## Asset Management / Asset Administration



- Manage Cash and Debt Equity
- Ensure Contractual Compliance
- Monitor and Limit Market Risk
- Manage Power Purchase Agreements
- Identify and Remedy Underperforming Assets

## 24/7/365 Remote Monitoring



- 24/7/365 Remote Monitoring
- Performance Reporting
- Fault Reset and Notification
- Curtailment
- SCADA and NERC Compliance Support

## Blade Services and Enhancement



- Blade Inspections
- Blade Repairs
- 3M Vortex Generators
- Leading Edge Protection

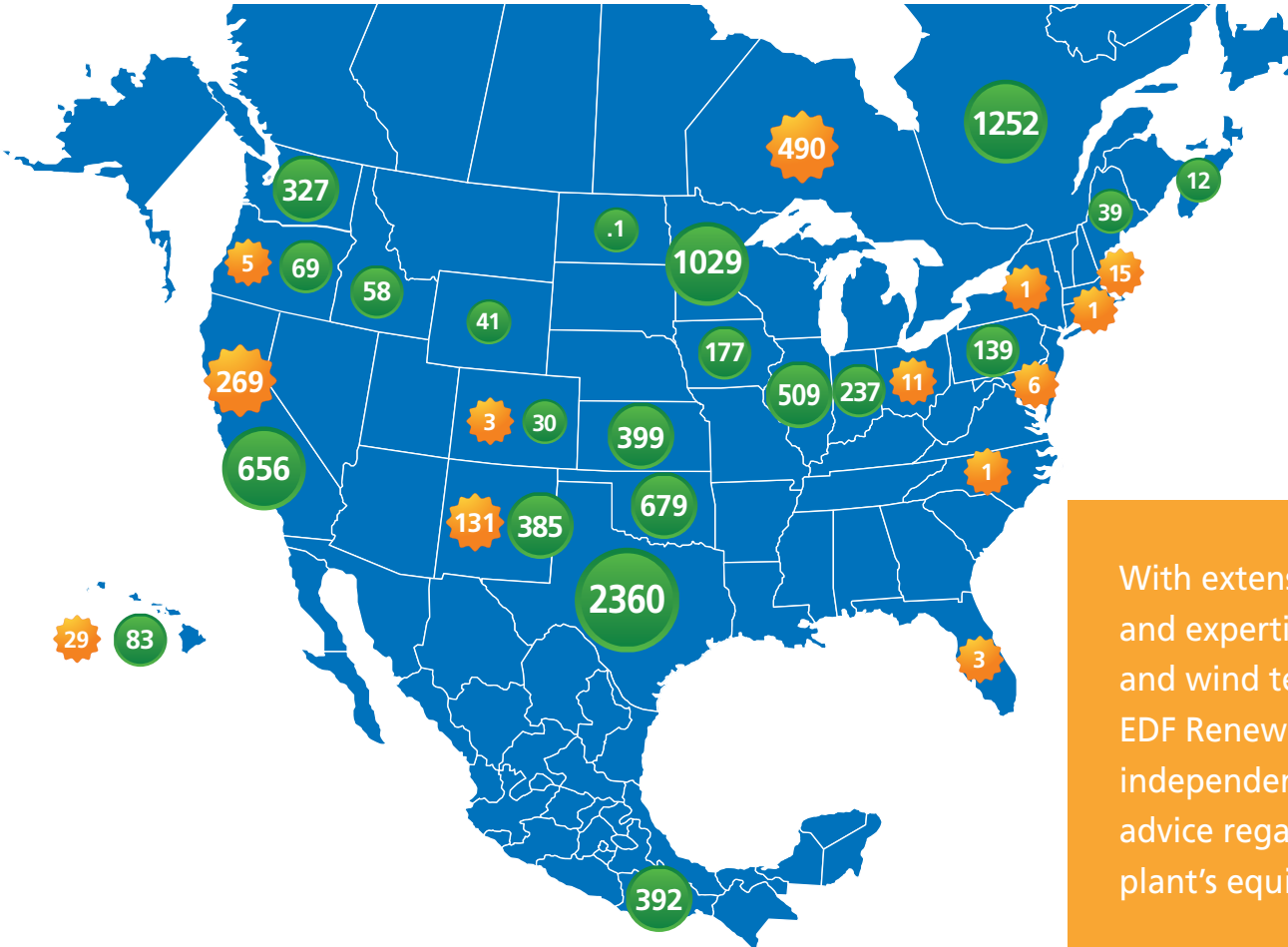
## Operations and Maintenance



- Onsite Preventative Maintenance
- Balance of Plant (BOP) Management
- Major Component Repair and Replacement
- Unscheduled Maintenance
- Diagnose Underperforming Assets

# WIND AND SOLAR MEGAWATTS UNDER O&M CONTRACT

By state/province ● Wind MW ☀ Solar MW



With extensive experience and expertise across solar and wind technologies, EDF Renewables provides independent, objective advice regarding your plant's equipment.

## TURBINE MANUFACTURERS we service today



# OPERATIONAL TECHNOLOGIES

Integrating monitoring and control with innovative service offerings

## OPERATIONS CONTROL CENTER

During onboarding, EDF Renewables designs an exceptions-based interface with alarms to alert our trained operators whenever your plant experiences operating conditions or events outside of your guidelines.

### OCC Services



- 24/7/365 remote monitoring
- Fault notification & remote resets
- Technician/EMS dispatch notification
- Curtailment management
- Plant level monitoring
- Voltage management
- Performance monitoring

### NERC Compliance Services



- Development and implementation assistance for robust and sustainable compliance programs
- Complete documentation development
- Training on NERC procedures to support consistent performance
- Audit preparation support including documentation evaluation, GAP analysis and mock audits
- Design and implementation of programs to achieve, monitor and document CIP compliance
- NERC and GADS Compliance Support

### SCADA Support



- OEM SCADA support and maintenance
- Pre-COD SCADA services
- Customer application development
- Meteorological tower data interfacing
- Interface and data infrastructure creation
- AGC and AVR control logic implementation
- Virtualization



EDF Renewables' \$4M state-of-the-art NERC compliant medium-impact Operations Control Center.

# BLADE OPTIMIZATION AND EFFICIENCY SOLUTIONS

Minimize downtime, maximize power production

Taking good care of your blades goes a long way towards maintaining the optimum performance of your turbines. With an owner-operator perspective, EDF Renewables works within your budget to design a blade maintenance program that includes inspections and repairs, adding protection to prevent damage, and upgrades like vortex generators to increase Annual Energy Production (AEP).

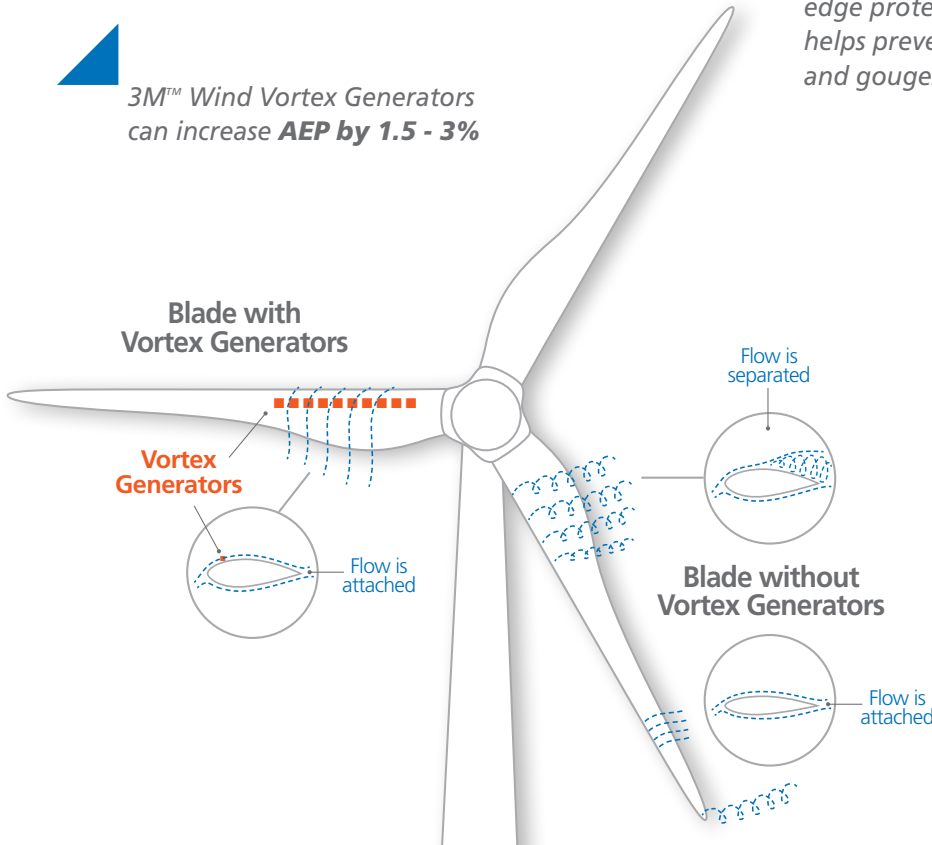


EDF Renewables' advanced blade inspection processes use state-of-the-art technology. Our technicians inspect and grade each blade then formulate a plan to remedy problems.

Repairing leading edge damage can **increase AEP by as much as 20%**.

Installing leading edge protection helps prevent pits and gouges.

3M™ Wind Vortex Generators can increase **AEP by 1.5 - 3%**





The EDF Group is a global leader in low-carbon energy with activities ranging from power generation to transmission and distribution to trading and retail.

EDF Energies Nouvelles is the global renewable energy affiliate of the EDF Group. Present in 20+ countries, under the brand EDF Renewables, the company develops, builds and operates renewable power plants.

EDF Renewables North America is a market leading independent power producer and service provider with over 30 years of experience. The Company delivers grid-scale power: wind (onshore and offshore), solar photovoltaic, and storage projects; distributed solutions: solar, solar+storage, EV charging and energy management; and asset optimization: technical, operational, and commercial skills to maximize performance of generating projects.





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503.219.3166

### NORTH - DENVER

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Denver, CO 80202  
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Brooklyn, NY 11201  
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Philadelphia, PA 19118  
215.381.2940

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### EAST - WEST LEBANON

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W Lebanon, NH 03784  
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209.855.8955

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Photo credits: Mark LaBoyteaux, Frederic Neema, Daniel Peters, Joan Sullivan, Laurent Critot, Jakob Lerche



# ATTACHMENT 3



# POWERING PROGRESS

## Offshore Wind



# OUR MISSION



Turning innovative renewable energy ideas  
and long-term relationships into ethical,  
high value sustainable business.

# INNOVATION STARTS HERE

## CLEAN ENERGY FOR A BETTER FUTURE

For over 30 years, EDF Renewables has dedicated its efforts to creating a green energy economy through the deployment of renewable energy resources.

We are experts in all areas of project development, operations, and management including:

- wind energy
- solar energy
- hydro
- battery storage
- distributed energy
- resource assessment
- project design
- interconnection
- procurement of equipment
- financing
- permitting
- construction
- long-term management
- operations and maintenance
- project de-commissioning
- repowering

# EXPERTISE BUILDING LARGE-SCALE INSTALLATIONS

## DESIGNING SUCCESSFUL RENEWABLE ENERGY PROJECTS

We are involved in **every phase of the project**, from development and engineering to construction, production and operations and maintenance. In this way, we ensure the quality of our installations and guarantee a high level of reliability and performance.

We have proven our **technical skills in marine engineering** through successfully installing fixed-bottom, monopile, jacket, and gravity based foundations on offshore wind projects.

*Designed, built and maintained by EDF Energy Renewables, jointly owned by EDF Energy and EDF Energies Nouvelles, the Teesside offshore wind project, located off the coast of North East England, comprises 27 turbines, each with a capacity of 2.3 MW for a total of 62 MW installed capacity. It was commissioned in 2013.*



*The General Electric factory in Saint-Nazaire, France, inaugurated in December 2014, will provide generators and nacelles for Haliade offshore wind turbines.*



## **PARTNERING TO DEVELOP AN INDUSTRIAL SECTOR**

Fixed-bottom offshore wind power: General Electric is our partner for producing wind turbines for our three projects in France. The industrial plan for the projects includes the creation of 7,000 jobs.

## **MANAGING OPERATIONS AND MAINTENANCE AT SEA**

We are also taking advantage of our many years experience from onshore projects in order to guarantee an optimal level of operation for our offshore facilities.

Since April 2015, we have provided the operations and maintenance service for a 400 MW offshore wind project in German waters through our subsidiaries REETEC and Offshore Wind Solutions GmbH (OWS). REETEC and OWS have more than 350 experts specializing in both on and offshore wind operations and maintenance. The Operations Control Center for offshore wind is located in Emden, Germany, in direct proximity to numerous North Sea offshore wind farms.

## **FIXED-BOTTOM WIND TURBINES**

As a fully established technology, offshore wind turbines that are fixed to the seabed allow large-scale projects to take advantage of strong, consistent winds.





# SUPPORT

Developing exemplary projects, for the future of local communities

## RESPONDING TO LOCAL ISSUES

Our goal is to understand local issues and to design projects that are suitable, well organized and respectful of the many uses of the marine environment.

- Our projects are designed around shared use, the result of several years of in-depth technical and socioeconomic studies and dialogue with all local stakeholders and sea users.
- Going beyond legal requirements, we engage in large consultations, bringing together the general public and all stakeholders in a constructive listening process.



*Working groups and informational meetings enable everyone to communicate directly with the teams in charge of the projects.*



## CREATING ECONOMIC OPPORTUNITIES

Before construction, we engage with local economic stakeholders to identify local workers with the relevant skills and qualifications by activating a network of subject matter experts and large companies.

- During the construction phase, we recruit for workers near our projects, and the jobs created in this sector increase the knowledge and skills of the local workforce.
- While planning for the operational phase, we establish training programs relevant to the fields in which we and our subcontractors work to create permanent skilled positions.

## CARING FOR THE ENVIRONMENT

All of our projects are developed with a thorough consideration of environmental issues, relying on numerous studies carried out over several years.

- A comprehensive environmental analysis is carried out on marine mammals, birds, fishing resources, water quality, currents, etc. by recognized experts, in collaboration with local groups such as environmental organizations, fishing associations, and research laboratories.
- We incorporate the many activities in each project area and adapt the wind turbine layout to minimize impacts.



# PROGRESS

## Innovations in marine energy: our concrete answers

### MEETING THE CHALLENGES IN MARINE RENEWABLE ENERGY

Producing electricity in the marine environment with complex conditions is a new industrial and technological challenge. While developing our projects, we test and establish solutions that improve these large-scale projects and reduce costs:

- Working with digital measuring and modeling tools during the development phase enables us to better understand the specific nature of each site.
- Reducing costs of marine operations by using innovative solutions such as crane-free gravity based foundations.

### FLEXIBLE, COMPETITIVE SOLUTIONS

We identify the concerns linked to the development of renewable marine energy sources in order to offer more flexible and competitive solutions.



*The floating Lidar (bottom right) is a simple, flexible solution that improves our knowledge of wind resources in project areas.*



## CRANE-FREE GRAVITY BASED FOUNDATION

### REDUCING THE INSTALLATION COST OF A HEAVY STRUCTURE

Unlike traditional gravity based foundations (GBFs), whose transportation and installation require significant marine equipment (barge or ship equipped with specific high capacity cranes), the five GBFs were installed at the Blythe Offshore Wind Project using a new “float and submerge” process – the first time this method has been used for offshore wind turbines.

Designed and built by Royal BAM Group in the Neptune dry dock on the Tyne, the GBFs were floated into position off the coast of Northumberland and submerged onto the seabed and further ballasted to provide the support structures that act as the foundations for the turbines. This is a major innovation, facilitating installation and reducing associated costs.

### FLOATING WIND TURBINES

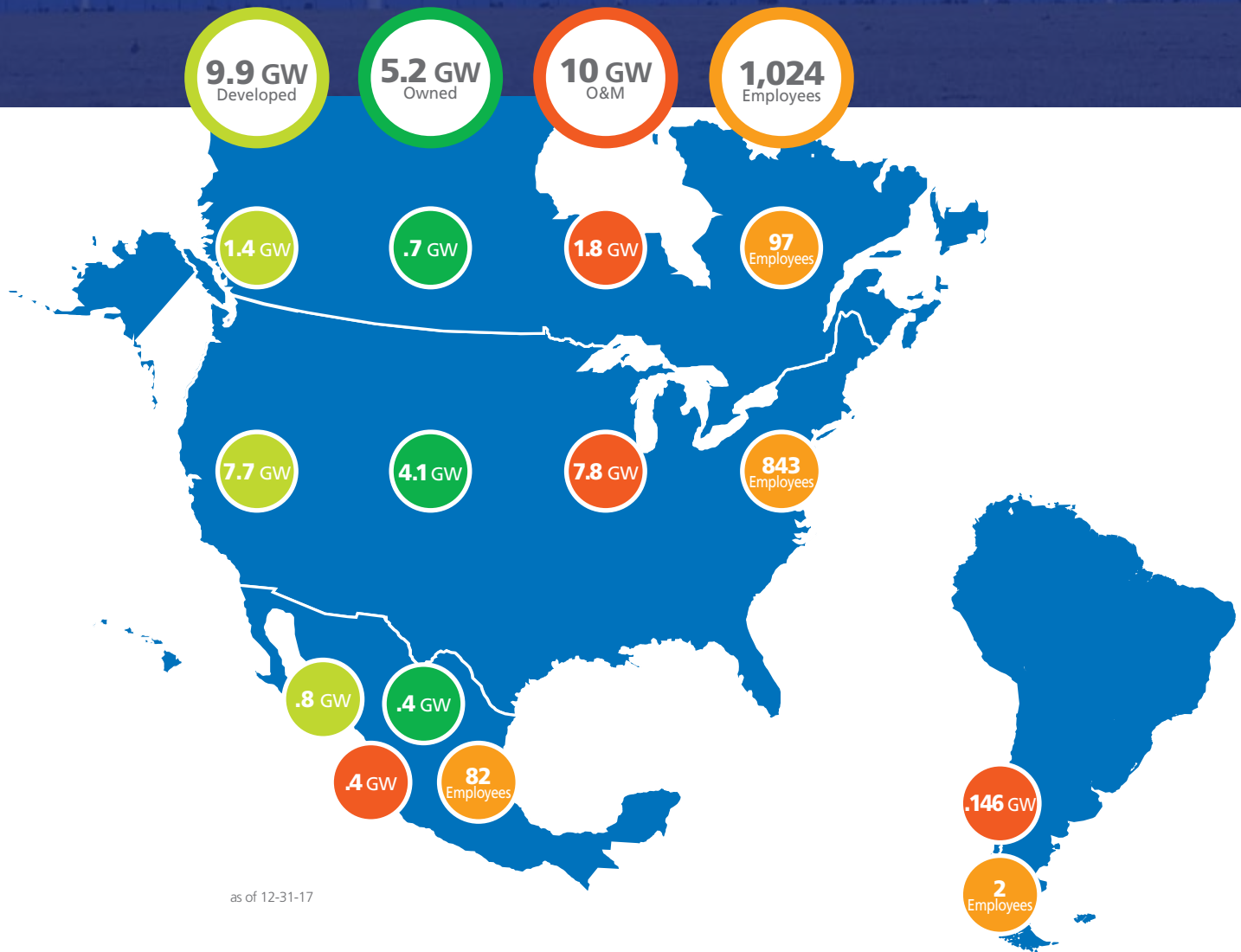
#### New Horizons for Offshore Wind Power

Floating offshore wind turbines are one of the most promising innovations that will increase the potential to harness offshore wind. For several years now, we have supported the development of this technology with the Provence Grand Large project, a pilot project in the Mediterranean Sea.



**Using floats specifically designed to withstand sea conditions, we can develop projects at sites where the water is too deep to install fixed-bottom foundations.**

# ONSHORE PRESENCE IN THE AMERICAS



## CREATING VALUE

from Origination through Commercial Operation



### ORIGINATION

Comprehensive analysis, identification and evaluation of prospective sites and matching those sites with our customers' needs.

### DEVELOPMENT

Resource assessment, permitting, site design, interconnection rights and technology selections.

# A LEADER IN MARINE RENEWABLE ENERGY

## OFFSHORE PROJECTS IN EUROPE

### France

- Three offshore wind projects being developed (Fécamp, Courseulles-sur-Mer and Saint-Nazaire), with a total power of 1,428 MW
- A floating wind pilot project under development off the coast of Fos-sur-Mer

### Belgium

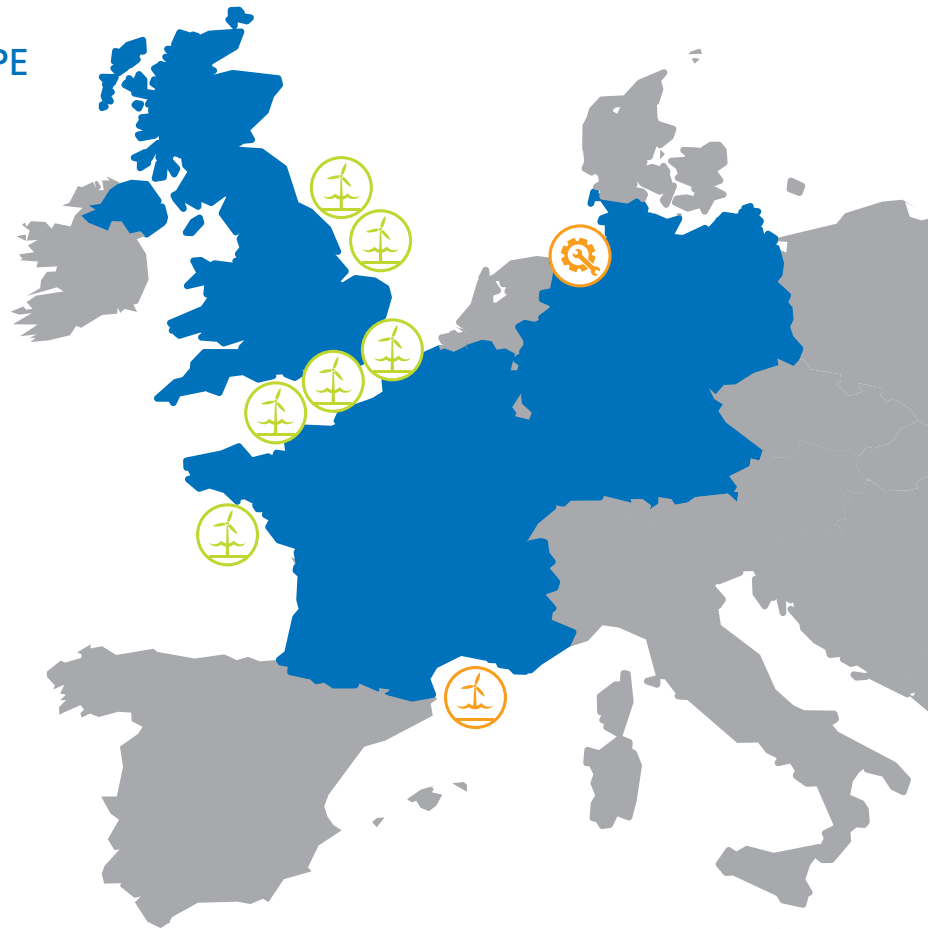
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### UK

- Teesside offshore wind project (62 MW) in operation since 2013
- Blyth offshore wind project (41 MW) in operation since 2017

### Germany

- Maintenance of a 400 MW offshore wind project



## TRANSACTION

Securitization of **energy** **offtake** and **financing**.

## CONSTRUCTION

Implementation of all aspects of the **system design**, **installation**, and **construction** to ensure a quality build.

## OPERATIONS & MAINTENANCE

Asset management, monitoring and maintenance to **ensure profitable and optimal performance** of facility.



The EDF Group is a global leader in low carbon energy with activities ranging from power generation to transmission and distribution to trading and retail.

EDF Renouvelables is the global renewable energy affiliate of the EDF Group. Present in 20+ countries, under the brand EDF Renewables, the company develops, builds and operates renewable power plants.

EDF Renewables North America is a market leading independent power producer and service provider with over 30 years of experience. The Company delivers **gridscale power**: wind (onshore and offshore), solar photovoltaic, and storage projects; **distributed solutions**: solar, solar+storage, EV charging and energy management; and **asset optimization**: technical, operational, and commercial skills to maximize performance of generating projects.



CORPORATE HEADQUARTERS  
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# ATTACHMENT 4





# THE POWER OF OUR EXPERIENCE

Asset Optimization



# OUR MISSION

Turning innovative renewable energy ideas and long-term relationships into ethical, high-value, sustainable business.

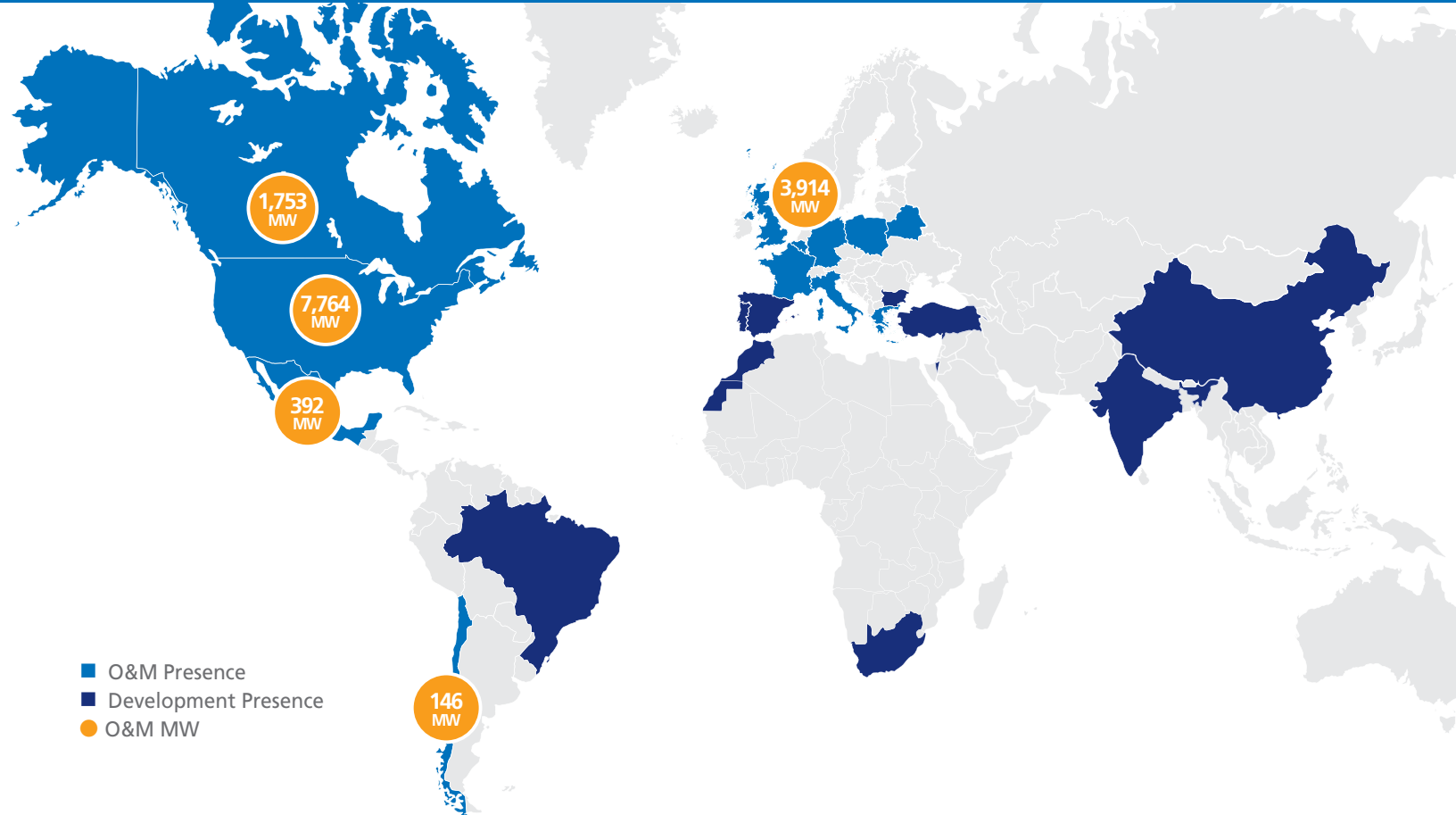


**14 GW**  
OPERATIONS &  
MAINTENANCE

**8.5 GW**  
OCC  
MONITORING

**6.9 GW**  
ASSET  
MANAGEMENT

A trusted partner to maximize the financial and operational performance of your asset.






EDF Renewables brings a global presence, strong balance sheet and an owner's perspective.



# SETTING THE STANDARD

with world-class safety and quality

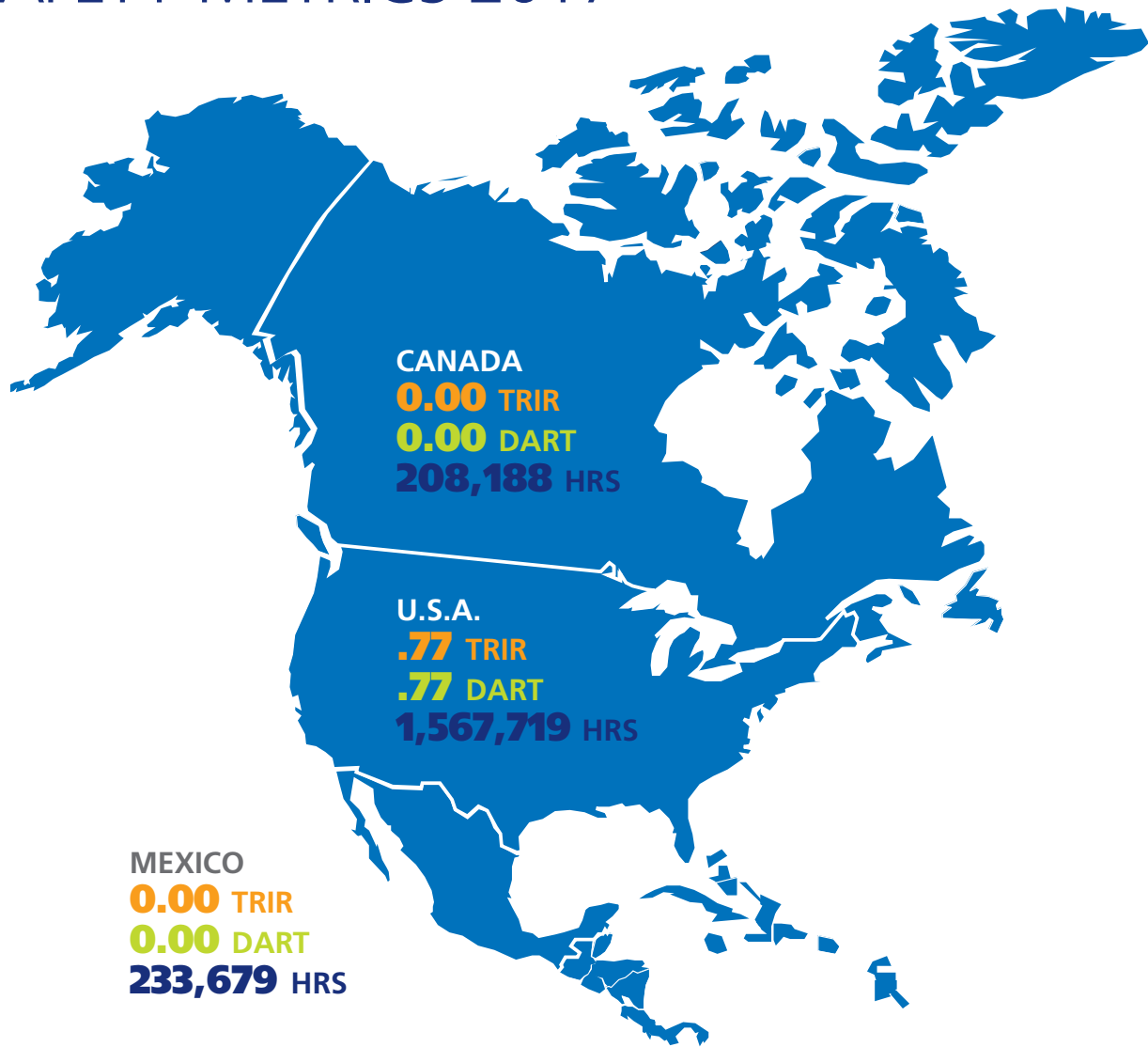
EDF Renewables is committed to the health and safety of all of our employees as well as the communities we serve. As a leader in renewable energy, we continually strive to improve safety performance in the workplace, apply sound environmental principles, encourage employee participation in the safety process, and reward individual safety excellence.

<p><b>SAFETY</b></p> 	<p><b>QUALITY</b></p> 	<p><b>IMPROVED FINANCIAL PERFORMANCE</b></p> 
<p>Our people are our greatest asset. Their safety is our top priority and is crucial to the success of any site we operate. Safety is a 24/7/365 commitment and is at the forefront of everything we do.</p>	<p>The quality of our work sets EDF Renewables apart. We continually strive to ensure our performance is at the highest levels and our customers receive the best care.</p>	<p>When we focus on the safety of our people and the quality of our work, we deliver the highest value to our project owners.</p>

In 2017, EDF Renewables implemented **SafeStart®** – the most successful safety training process in the world. It was developed by investigating real injuries of more than 20,000 people over the course of two decades. The program emphasizes being aware of simple risk factors and reminds employees to think about each job and their mindset before they begin work.

We also implemented the **Operational Excellence Management System (OEMS)** in 2017. Operational Excellence is the philosophy that helps guide how we manage our projects. OEMS is the documents, procedures and methods we use to ensure we do the right thing, the first time, every time.

# SAFETY METRICS 2017



■ **TRIR** Total Recordable Incident Rate    ■ **DART** Days Away, Restricted, or Transferred    ■ **Hours Worked**

## NORTH AMERICA COMBINED METRICS

YEAR END 2014

**TRIR** 1.08  
**DART** 0.72

YEAR END 2015

**TRIR** 1.10  
**DART** 0.73

YEAR END 2016

**TRIR** 1.47  
**DART** 0.92

YEAR END 2017

**TRIR** 0.60  
**DART** 0.32

# OPERATIONS AND MAINTENANCE

maximizing performance and profitability throughout the project lifecycle



## CONSTRUCTION SUPPORT

Pre-commissioning support including functional tests, inspections, operating plans and budgets.



## WARRANTY PERIOD O&M

Management of the balance-of-plant, remote monitoring and end of warranty inspections.



## POST WARRANTY O&M

Management of the balance-of-plant, generator maintenance, remote monitoring, supply chain and engineering support.



## END OF LIFE

Decommissioning and repowering support for aging assets.

## WIND

- Scheduled and unscheduled maintenance
- Major component repair and replacement
- Blade inspection, repairs, protection and upgrades
- Blade condition monitoring
- Performance reporting
- Remote monitoring
- Winergy authorized service provider



## SOLAR

- Maintenance and repair of inverters, trackers, modules, and combiner boxes
- Functional checks, testing, and maintenance of balance of plant and energy storage systems
- Collection of oil samples from medium voltage transformers
- Infrared scans on collection components
- IV Curve tracing
- Performance reporting
- Remote monitoring



## SUBSTATION

- Management of BOP civil, collector system, and interconnection facility scheduled and unscheduled maintenance
- Medium/high voltage switching
- Transformer oil sampling and analysis
- Warranty Support
- Remote Monitoring
- Performance Reporting



## STORAGE

- Enclosure structure maintenance
- Inspection of AC service panels and 24Vdc power system
- Inspection of DC panels and DC switches
- Remote monitoring
- HVAC maintenance
- Fire suppression system inspections
- Energy management and control systems



# OPERATIONAL TECHNOLOGIES

Integrating monitoring and control with innovative service offerings

## OPERATIONS CONTROL CENTER

During onboarding, EDF Renewables designs an exceptions-based interface with alarms to alert our trained operators whenever your plant experiences operating conditions or events outside of your guidelines.

### OCC Services



- 24/7/365 remote monitoring
- Fault notification & remote resets
- Technician/EMS dispatch notification
- Curtailment management
- Plant level monitoring
- Voltage management
- Performance monitoring

### SCADA Support

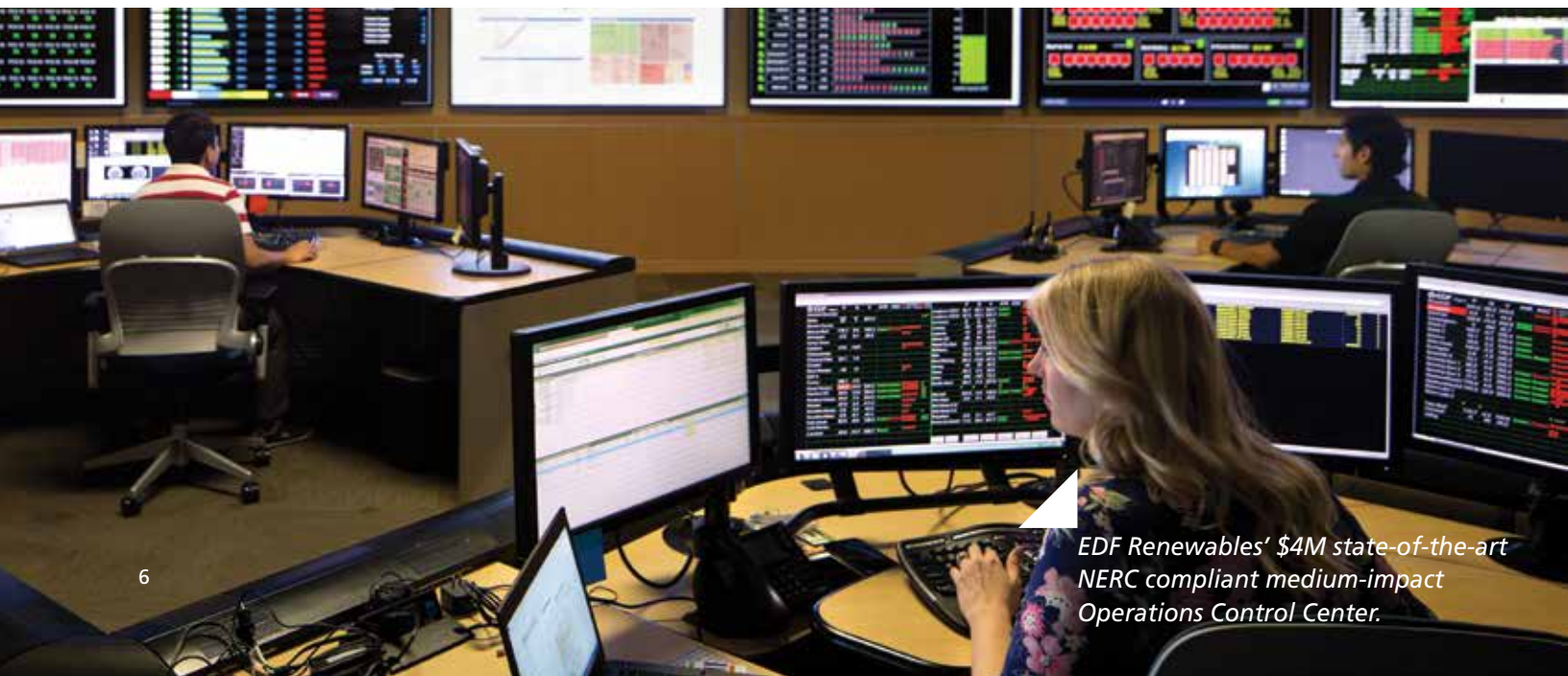


- OEM SCADA support and maintenance
- Pre-COD SCADA services
- Customer application development
- Meteorological tower data interfacing
- Interface and data infrastructure creation
- AGC and AVR control logic implementation
- Virtualization

### NERC Compliance Services



- Development and implementation assistance for robust and sustainable compliance programs
- Complete documentation development
- Training on NERC procedures to support consistent performance
- Audit preparation support including documentation evaluation, GAP analysis and mock audits
- Design and implementation of programs to achieve, monitor and document CIP compliance
- NERC and GADS Compliance Support



EDF Renewables' \$4M state-of-the-art NERC compliant medium-impact Operations Control Center.



# PERFORMANCE AND RELIABILITY ENGINEERING

providing advanced data collection and actionable reporting

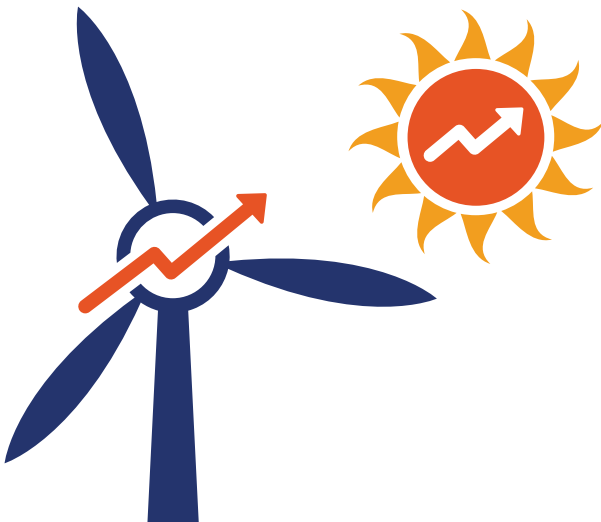
## IT ALL STARTS WITH DATA

The engineers in our Performance and Reliability Engineering (PRE) department ensure the highest levels of plant performance and availability. Our staff includes fleet experts on Vestas, GE, Siemens, Senvion, Gamesa, and Mitsubishi turbines and experts on PV performance monitoring and reporting.

We help our customers make better, faster decisions to optimize their asset performance.

## TRUanalytics

The renewable asset intelligence platform



## MONITOR



- Proactively monitor performance and reliability
- Create tools and engineering models to measure key plant performance metrics
- Prepare routine performance and reliability reports
- Quantify monthly curtailment (MWh)

## SOLVE



- Use root cause analysis for failures or underperformance
- Identify and quantify causes of lost production
- Develop and manage corrective actions
- Identify components that need inspection/repair
- Support warranty claim negotiations

## IMPROVE



- Prepare detailed operational assessment reports
- Identify retrofit and performance enhancement solutions
- Analyze performance of new or emerging technologies
- Optimize powerplant control system

# BLADE OPTIMIZATION AND EFFICIENCY SOLUTIONS

Minimize downtime, maximize power production



EDF Renewables' advanced blade inspection processes use state-of-the-art technology. Our technicians inspect and grade each blade then formulate a plan to remedy problems. EDF has over 20 years of experience in wind turbine blade inspections and repairs.



# Preliminary Public Copy

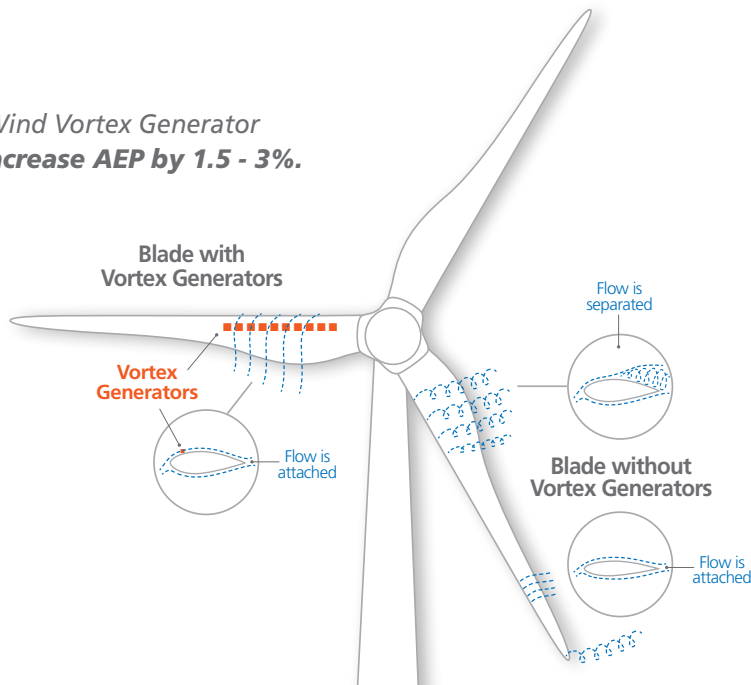
Taking good care of your blades goes a long way towards maintaining the optimum performance of your turbines. With an owner-operator perspective, EDF Renewables works within your budget to design a blade maintenance program that includes inspections and repairs, adding protection to prevent damage, and upgrades like vortex generators to increase AEP.



Installing leading edge protection helps prevent pits and gouges.



3M™ Wind Vortex Generator can **increase AEP by 1.5 - 3%**.



Repairing leading edge damage can **increase AEP by as much as 20%**.

# ASSET MANAGEMENT EXPERTISE

driving financial performance improvement

Management of physical assets is essential to long-term operational performance. Our Asset Management Group delivers the expertise that owners need to make value-driven decisions that optimize performance and profitability throughout the project lifecycle.

As an owner's representative, we understand that our job is to maximize returns on your investment. Our commercial management expertise is the key to successfully reaching your goals.

We manage all aspects of your project leaving you free to concentrate on more critical matters. Our Asset Management Group optimizes returns and minimizes downtime with access to the full resources of the global EDF team.

Our Asset Managers bring you the same innovative solutions that maximize the performance of our own 5.2 GW of installed projects. Because we're not an equipment manufacturer, our recommendations are transparent and data-driven.



01	<b>COMMERCIAL MANAGEMENT</b> Managing power purchase agreements, hedges, REC sales, and other commercial and energy sale agreements. Negotiating favorable financial terms and sales in the merchant market. Keeping an expert eye on forecasting and day ahead pricing.
02	<b>FINANCIAL MANAGEMENT</b> Actively managing cash equity, tax equity, and debt transactions while continuously seeking opportunities to reduce overall debt requirements and to increase cash flow.
03	<b>CONTRACTUAL MANAGEMENT</b> Ensuring contractual compliance across all project agreements and obligations.
04	<b>RISK MANAGEMENT</b> Monitoring and limiting market risk; identifying insurance needs and savings opportunities; overseeing coverage; and filing, monitoring, and negotiating claims.
05	<b>RELATIONSHIP MANAGEMENT</b> Serving as a single point of contact. Maintaining professional relationships with stakeholders and project participants, including offtakers, investors, contractors, contractual counterparts, and project landowners.
06	<b>PERFORMANCE MANAGEMENT</b> Proactively deploying operational resources to ensure long-term health of physical project assets and to reduce equipment downtime. Identifying under-performing assets, investigating underlying causes, and implementing solutions and innovations to optimize power curve performance and maximize energy capture.
07	<b>ENVIRONMENTAL MANAGEMENT</b> Operational monitoring, maintenance, and mitigation in line with industry best practices to ensure your project's presence as a good environmental citizen. Local, state, and federal permit compliance.

# CUSTOMER-DRIVEN SERVICE OFFERINGS

options to meet every level of need

## STANDARD

- Services to keep a renewable plant in **good** working condition
- Labor and materials for scheduled maintenance and labor for unscheduled maintenance for the wind or solar generators
- Management of BOP civil, collection system and inter-connection facility scheduled and unscheduled maintenance
- 24/7/365 real-time remote monitoring and standard SCADA support
- Time-based or performance-based availability guarantee

## ENHANCED

- Services to keep a renewable plant in **optimal** working condition
- Scheduled maintenance labor and parts for the wind or solar generators
- Unscheduled maintenance labor and replacement of failed parts and wear items excluding major components (for parts not under OEM warranty)
- 24/7/365 real-time remote monitoring and standard SCADA support
- Engineering support to the project, including TRUalytics™ reporting and a monthly call with one of our lead fleet engineers
- Identify areas of underperformance and the actions we are taking to correct performance
- Time-based or performance-based availability guarantee

## FULL SERVICE

- Services and guarantee included in the Enhanced package, plus:
- Major component repair and replacement is included within the fixed fee
- Inventory management and parts replacement, including major components (for parts not under OEM warranty)
- Enhanced SCADA support

## GUARANTEE SITE PRODUCTION

### 01 | TIME

Guarantee based on the actual hours a site is online vs. the expected hours online

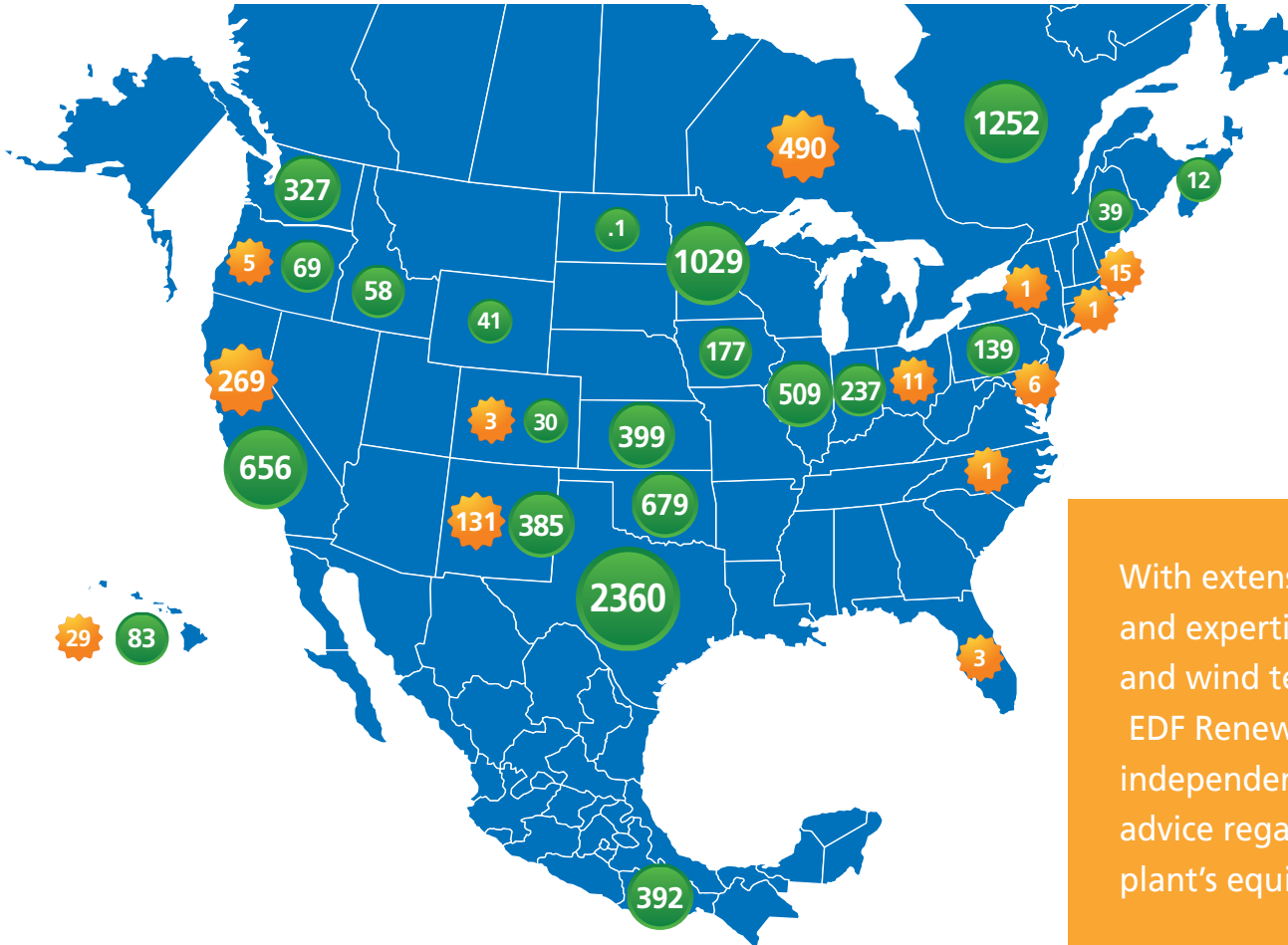


### 02 | PERFORMANCE

Guarantee based on the actual performance of the site compared to the expected performance adjusted for weather

# WIND AND SOLAR MEGAWATTS UNDER O&M CONTRACT

By state/province ● Wind MW ☀ Solar MW



With extensive experience and expertise across solar and wind technologies, EDF Renewables provides independent, objective advice regarding your plant's equipment.

## TURBINE MANUFACTURERS we service today



# LEVERAGING THE EXPERTISE OF A GLOBAL ORGANIZATION

## OPERATIONS TECHNOLOGY

Operations Control Centers in both the USA and Europe share best practices for providing a wide range of services for all types of generating plants around the world.

## BATTERY STORAGE AND CONTROL

The EDF Group operates in excess of 330 MW - 824 MWh of battery storage worldwide in frequency regulation markets, islanded power systems, renewables integration, smart grids, and UPS at bulk generation power plants.

EDF Store and Forecast provides smart energy management systems world-wide to forecast, plan, and enhance real-time control of the battery system.

## INNOVATION LABS

More than 2,000 employees and 134 postgraduate students conduct energy-related research at ten international R&D locations in Europe, Asia, and North America. Their priorities include affordable low-carbon energy, smart and resilient electrical systems and grids, and new energy services. The group fosters collaborative partnerships with universities, scientific institutions, and utilities.

## RENEWABLE ENERGY DIGITAL

EDF Renewables is developing a common digital platform that will allow us to efficiently access vast sources of information and generate data driven approaches that create value for our customers.

## EDF ENERGY SERVICES

EDF Energy Services is the largest provider of generation services for power generators in the USA and Canada, managing around 29 GW of capacity in North America. Generation services include dispatch, scheduling, origination, fuel supply, demand response and hedging products in all of the wholesale energy markets.





## **MANAGING OPERATIONS AND MAINTENANCE AT SEA**

Since April 2015, EDF Renewables has provided the operations and maintenance service for a 400 MW offshore wind project in German waters through our REETEC subsidiary. REETEC has more than 350 experts specializing in both on and offshore wind operations and maintenance. The Operations Control Center for offshore wind is located in Emden, Germany, in direct proximity to numerous North Sea offshore wind farms.





The EDF Group is a global leader in low-carbon energy with activities ranging from power generation to transmission and distribution to trading and retail.

EDF Energies Nouvelles is the global renewable energy affiliate of the EDF Group. Present in 20+ countries, under the brand EDF Renewables, the company develops, builds and operates renewable power plants.

EDF Renewables North America is a market leading independent power producer and service provider with over 30 years of experience. The Company delivers grid-scale power: wind (onshore and offshore), solar photovoltaic, and storage projects; distributed solutions: solar, solar+storage, EV charging and energy management; and asset optimization: technical, operational, and commercial skills to maximize performance of generating projects.





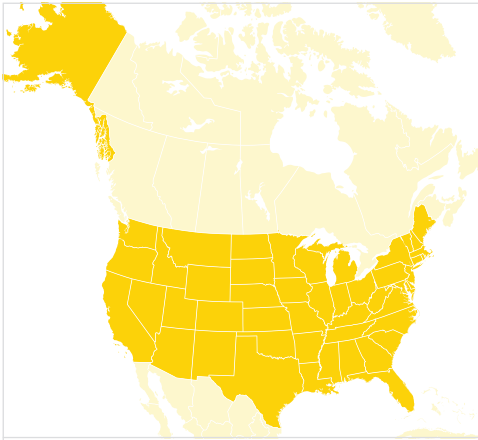


EDF Renewables  
15445 Innovation Drive  
San Diego, CA 92128  
[www.edf-re.com/ao](http://www.edf-re.com/ao)

Photo credits: Mark LaBoyteaux, Daniel Peters, Frederic Neema, Eaton Photography, Daniel Peters,  
Joan Sullivan, Laurent Critot, Jakob Lerche



# ATTACHMENT 5



2017 FACTSHEET

**SHELL IN UNITED STATES**



**SHELL'S PRESENCE IN THE UNITED STATES BEGAN MORE THAN A HUNDRED YEARS AGO AS A GASOLINE MARKETER ON THE PACIFIC COAST AND AN OIL PRODUCER IN THE MIDWEST**

Today, Shell is one of America's leading energy, petrochemicals and refined products companies, with interests in 50 states employing more than 17,900 people. Shell, with its consolidated companies and share in equity companies, is one of America's foremost producers and marketers of oil, natural gas, petrochemicals, gasoline, lubricants and other refined products.

Shell is a prominent oil and gas producer in the deepwater Gulf of Mexico and a recognized pioneer in oil and gas exploration and production technology. Subsidiaries of Royal Dutch Shell constitute a global group of energy and petrochemical companies operating in more than 70 countries and territories, employing over 86,000 people.

**SOCIAL INVESTMENT**

**2015-2017**

Social Investment	\$75.1 million
Education	\$19.3 million
Conservation	\$19.8 million

**TAXES, ROYALTIES AND FEES**

**2017**

Paid to governments in U.S.\* \$4.7 billion

**STAFF COUNTS**

**2017**

Employees	17,900
Pensioners	29,300

**105 YEARS**  
IN THE U.S.

**\$4.7 BILLION**  
TAXES, ROYALTIES,  
OTHER FEES

**4.8 MILLION**  
STUDENTS SUPPORTED  
2015-2017

**13 MILLION ACRES**  
PROTECTED  
SINCE 1999

**318,000**  
TEACHERS TRAINED  
2015-2017

**14,500 SHELL-BRANDED**  
RETAIL STATIONS

**1.5 BILLION BARRELS**  
OF OIL/CHEMICAL  
PRODUCTS TRANSPORTED  
IN SHELL PIPELINES

**11% OF U.S.**  
LUBRICANTS  
VOLUME PRODUCED

**900,000**  
BARRELS/DAY  
REFINING CAPACITY

**\$9.2**  
BILLION  
CAPITAL SPEND

**1/3** OF  
SHELL INVESTORS  
U.S.-BASED

**\$740 MILLION**  
FUEL REWARDS®  
MEMBER SAVINGS

**20 BILLION POUNDS**  
OF CHEMICALS  
PRODUCED ANNUALLY

**426,000**  
BARRELS OF OIL/  
EQUIVALENT PRODUCTION  
PER DAY

**58,000** HOURS GIVEN BY  
**12,000**  
VOLUNTEERS

**#1 IN TOTAL GALLONS**  
SOLD/PREMIUM  
GASOLINE PREFERRED

**7 BILLION**  
CUBIC FEET/DAY  
NATURAL GAS SOLD

**\$8 BILLION**  
SPENT WITH  
U.S.-BASED SUPPLIERS†

**\$75 MILLION**  
SOCIAL INVESTMENT  
BETWEEN 2015-2017

### UPSTREAM

- 426,000 barrels of oil/equivalent produced per day
- 899 million barrels of proved oil and natural gas liquids, synthetic crude oil and bitumen reserves
- 2,569 billion cubic feet of proved natural gas reserves
- 2 million developed oil and gas acreage
- 4.1 million undeveloped oil and gas acreage
- 15,000 productive oil wells
- 3,000 productive gas wells
- Key areas:
  - Pennsylvania, West Virginia – Marcellus and Utica shale gas formations
  - West Texas – Permian Basin shale oil
  - Gulf of Mexico – Offshore deep water oil
- New energies:
  - Eight wind projects co-owned (Shell 50% interest) – 722 turbines  
Total capacity – 900 MW
  - Trading and marketing renewable wholesale and retail power through Shell Energy North America
  - Acquired minority interest in Silicon Ranch Corporation, leading U.S. developer, owner and operator of solar assets, including approx. 900 megawatts of operational or contracted projects

### DOWNSTREAM

#### Retail

- 14,500+ Shell-branded retail stations:
- Fuel Rewards® program
  - More than \$740 million consumer savings to date

#### Jiffy Lube®

- 2,000+ locations
- 21 million customers annually

#### Refining

- Five refineries:
  - Deer Park Refinery (50-50 joint venture with Pemex) – Deer Park, TX
  - Martinez Refinery – Martinez, CA
  - Puget Sound Refinery – Anacortes, WA
  - Port Arthur Refinery – Port Arthur, TX\*\*
  - Convent Refinery – St. James Parish, LA\*\*
  - Norco Manufacturing Complex – St. Charles Parish, LA\*\*

#### Lubricants

- Five lube oil blending and packaging plants:
  - Newell, WV
  - Galena Park, TX
  - Wilmington, CA
  - Portland, OR
  - River Rouge, MI
- Three regional distribution centers:
  - Houston, TX
  - Vernon, CA
  - Columbus, OH
- Nine distribution centers throughout U.S.

#### Chemicals

- Six chemical manufacturing facilities:
  - Mobile Plant – Mobile, AL
  - Norco Manufacturing Complex – St. Charles Parish, LA
  - Geismar Plant – Ascension Parish, LA

- Deer Park Plant – Deer Park, TX
- Martinez Refinery – Martinez, CA
- Puget Sound Refinery – Anacortes, WA

#### Trading

- Shell Trading (U.S.) Company:
  - Acquisition, sales and trades of domestic crude oil and products; crude oil lease acquisition; marketing and transport; marine chartering; risk management services.
  - Five+ million barrels of hydrocarbons bought and sold per day
- Shell Energy North America:
  - Trades and markets natural gas, wholesale and retail power, and environmental and risk management products
  - Natural gas sales volume of 7 billion cubic ft/day
  - 270 million megawatt hours sold annually
  - 9,500+ megawatts of generation capacity, with one-third coming from renewable sources

#### Supply

- Pipeline:
  - 75 product terminals
  - 1,120 storage tanks with more than 50 million barrels capacity
  - Own/operate 3,800 miles of pipeline
  - Partial ownership 8,000 miles of pipeline
  - More than 1.5 billion barrels transported in pipelines annually

#### New Energies

- Two hydrogen fueling stations: Newport Beach, CA; Torrance, CA
- Collaborating with Honda, Toyota and the California Energy Commission to expand hydrogen network
- Carson Distribution Facility, Carson, CA, the largest ethanol hub on West Coast

### RESEARCH AND DEVELOPMENT



2017

Universities and other research partners \$57 million

### PROCUREMENT



2017

Procurement Spend \$8.03 billion  
– SWMBE\* \$640.9 million

\*Small-Women-Minority Business Enterprises

### 4,594 U.S.-BASED SUPPLIERS†

858 SMALL-WOMEN-MINORITY BUSINESS ENTERPRISES



100 Suppliers

INTERESTS IN   
**50 STATES**  
EMPLOYING MORE THAN  
**17,900 PEOPLE**

OPERATING IN MORE THAN  
**70 COUNTRIES & TERRITORIES**  
EMPLOYING OVER   
**86,000 PEOPLE**

### SOCIAL INVESTMENT HIGHLIGHT

#### Make the Future Detroit, featuring Shell Eco-marathon Americas

Festival of innovation and collaboration in Detroit focused on global energy challenges, featuring an annual student competition to design, build and drive smarter, more energy-efficient vehicles.

2017:

- Thousands of visitors, including 10,000 Detroit Public Schools students
- More than 100 teams, 1,200 participants
- Winning car achieved 2,713.1 mpg in gasoline-powered prototype

More information at:  
[www.shell.com/semamericas](http://www.shell.com/semamericas)



Headquartered in Houston, Texas, Jiffy Lube® International, Inc. is a wholly owned, indirect subsidiary of Shell Oil Company.

The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate entities. In this brochure, "Shell", "Shell group" and "Royal Dutch Shell" are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. Likewise, the words "we", "us" and "our" are also used to refer to subsidiaries in general or to those who work for them. These expressions are also used where no useful purpose is served by identifying the particular company or companies.

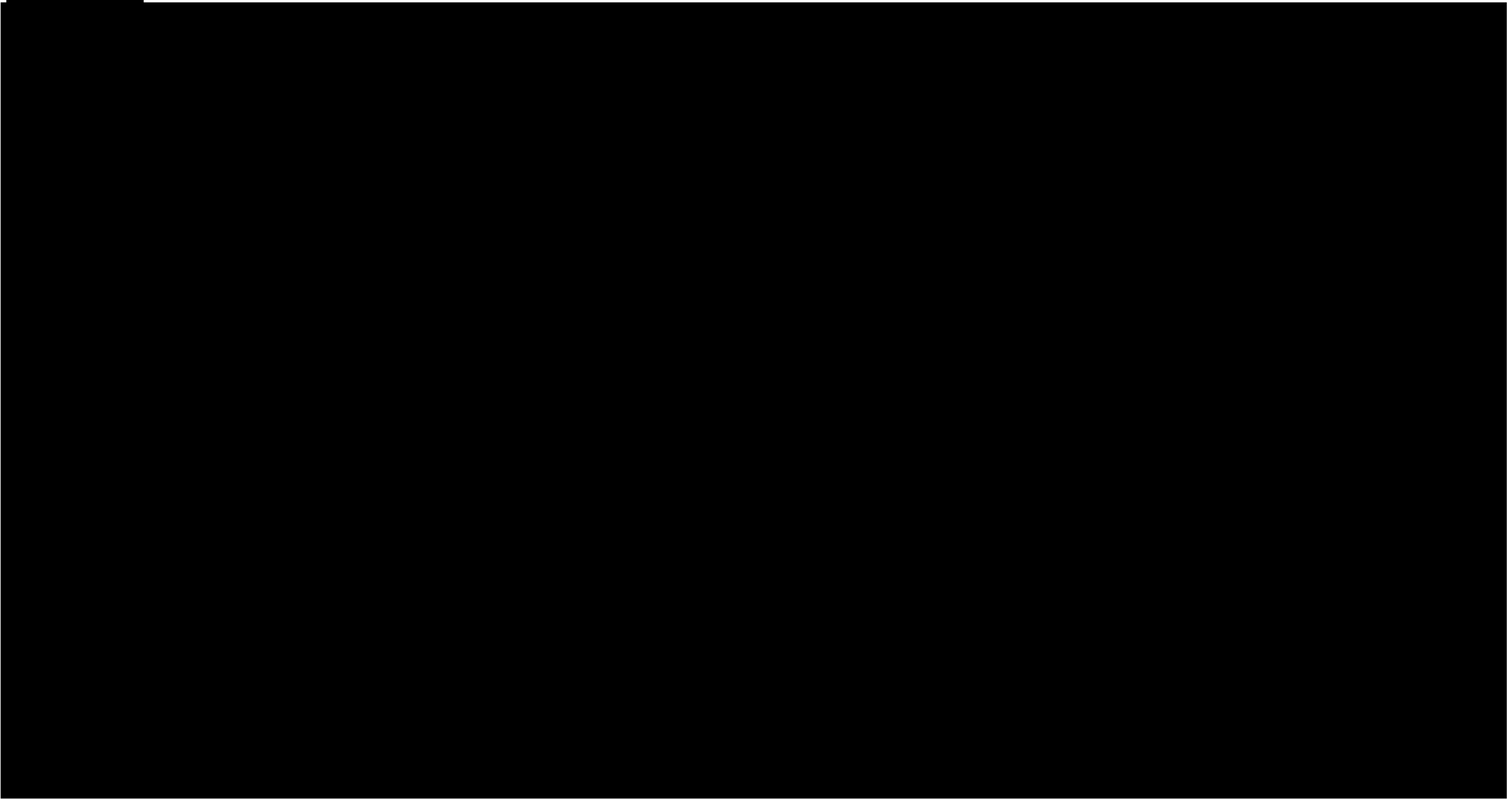
\*Subsidiaries, "Shell subsidiaries" and "Shell companies" as used in this document refer to companies over which Royal Dutch Shell plc either directly or indirectly has control.

†Most information contained in this information sheet is current as of December 2017. Certain numbers have been updated as of 2016 or early 2018. Certain numbers in this material are rounded.

\*Includes state income tax numbers for 2016. Motor Fuels and Sales and Use Taxes are paid or collected for states.

# ATTACHMENT 6





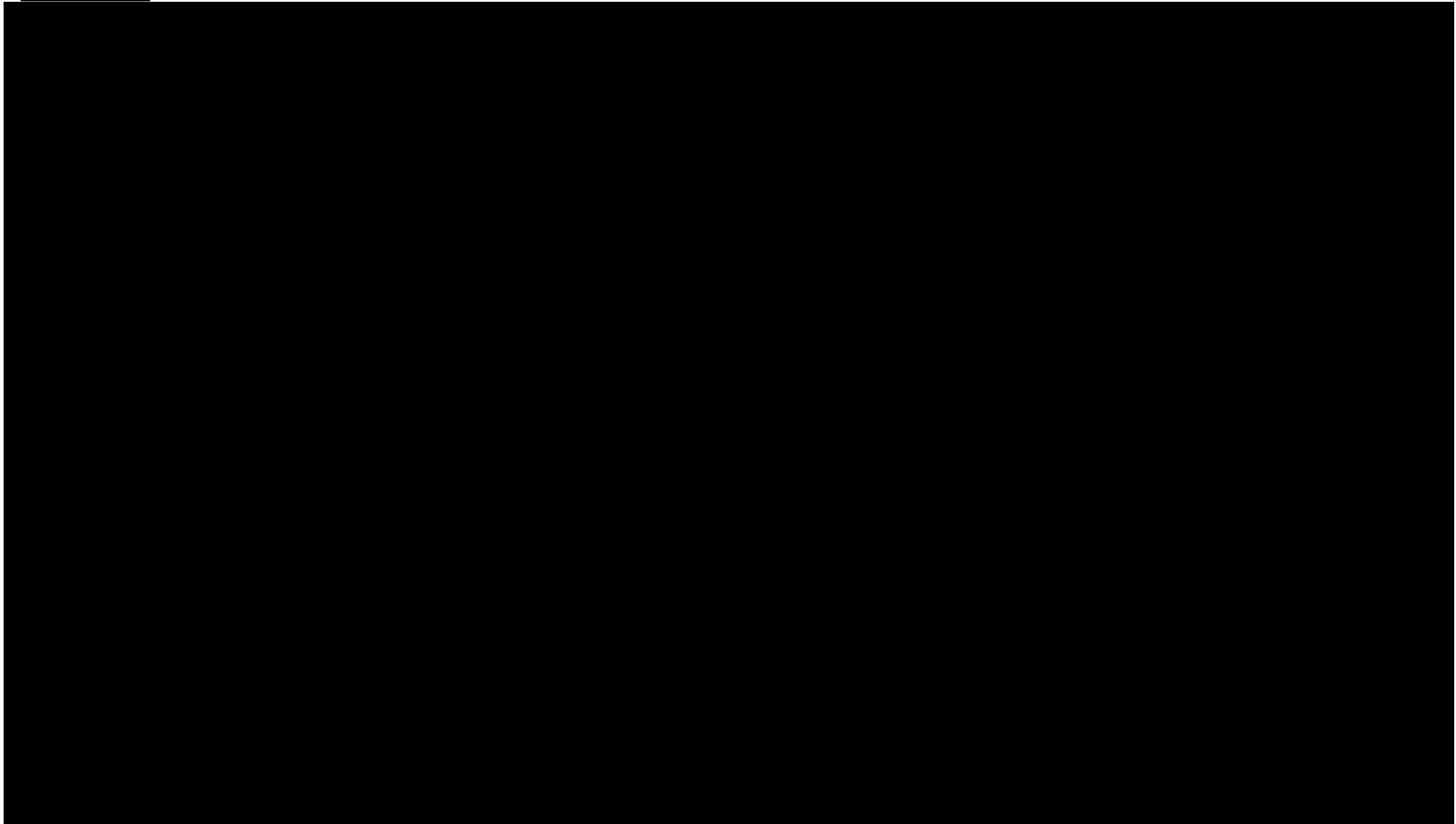








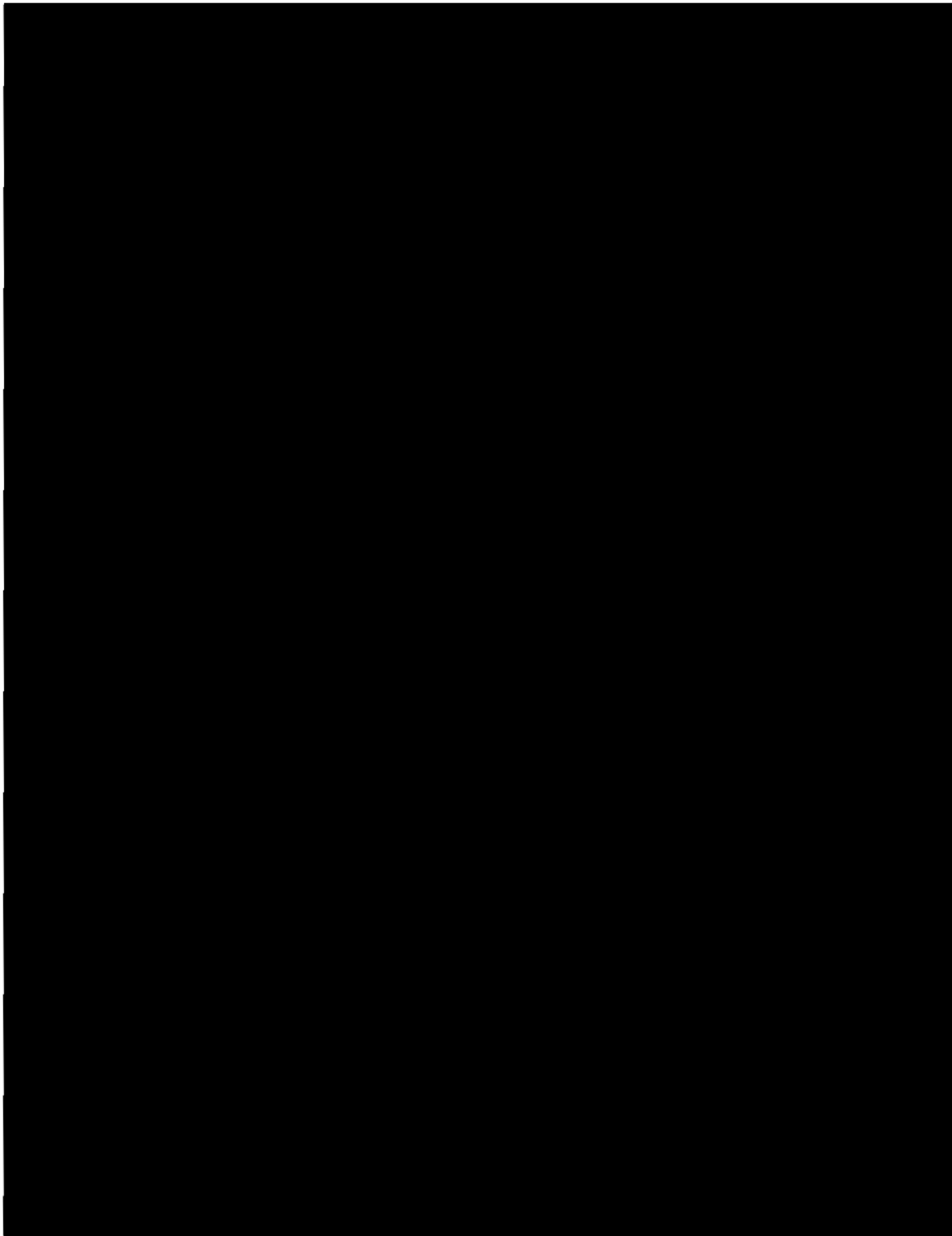


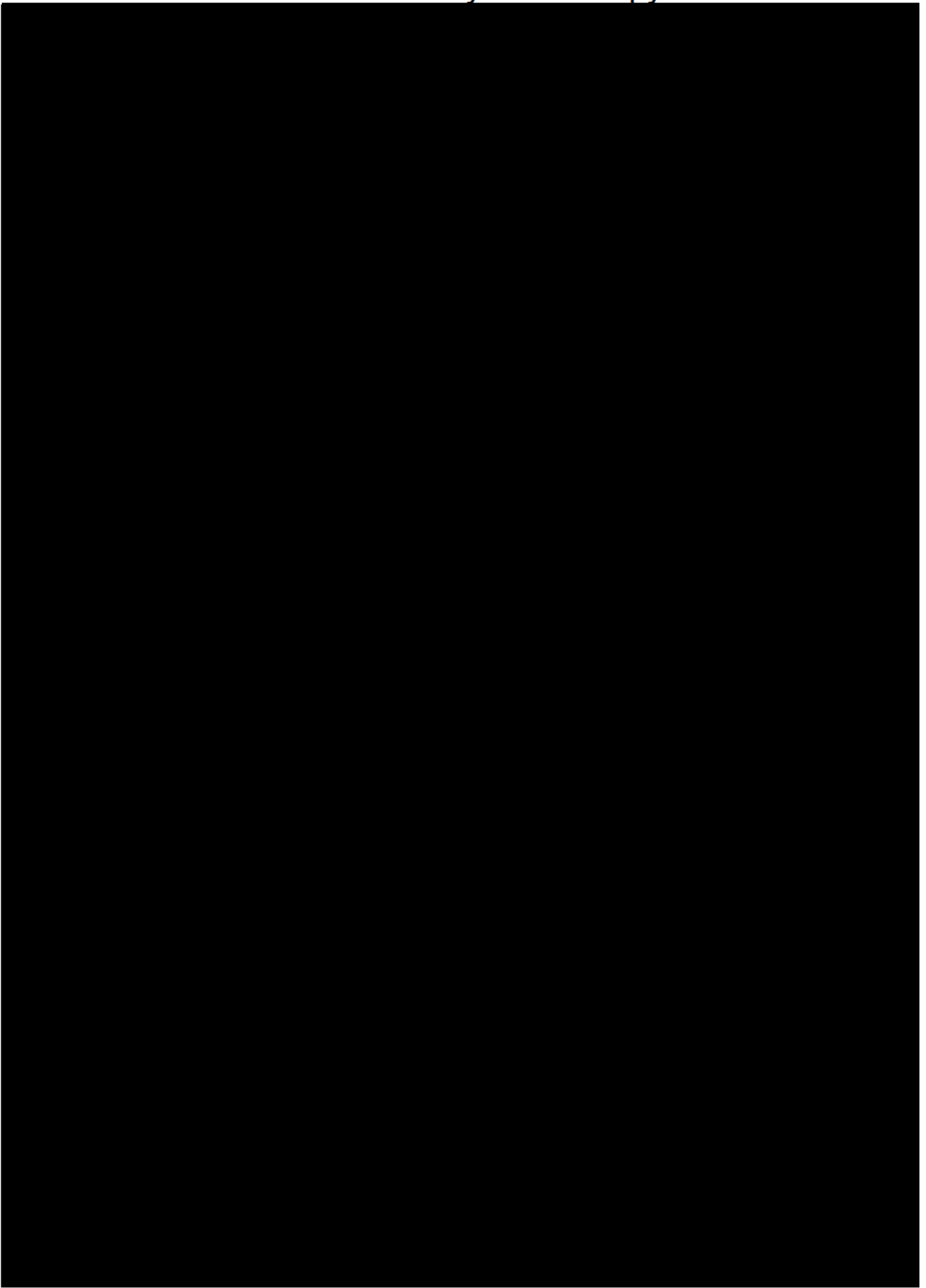


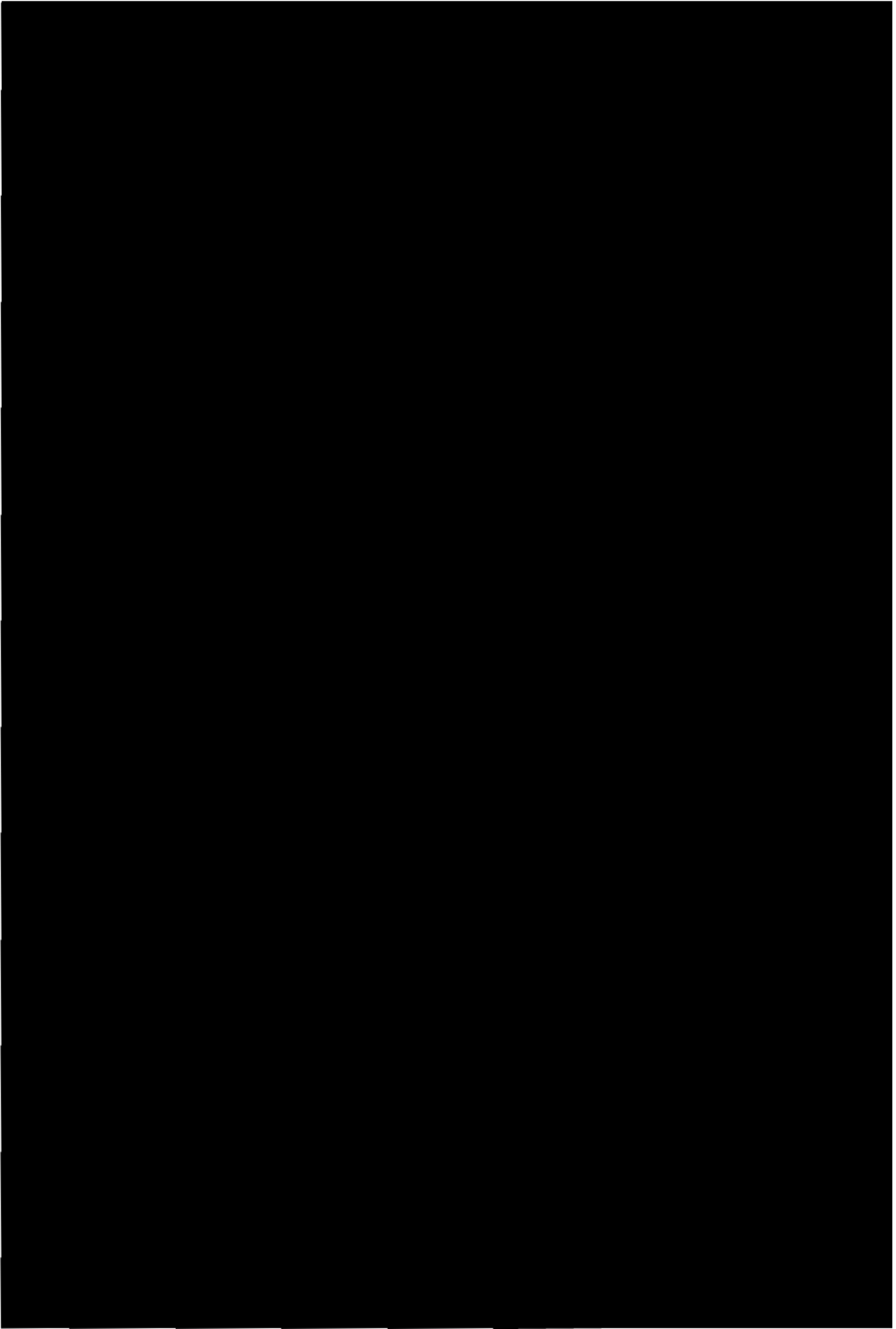


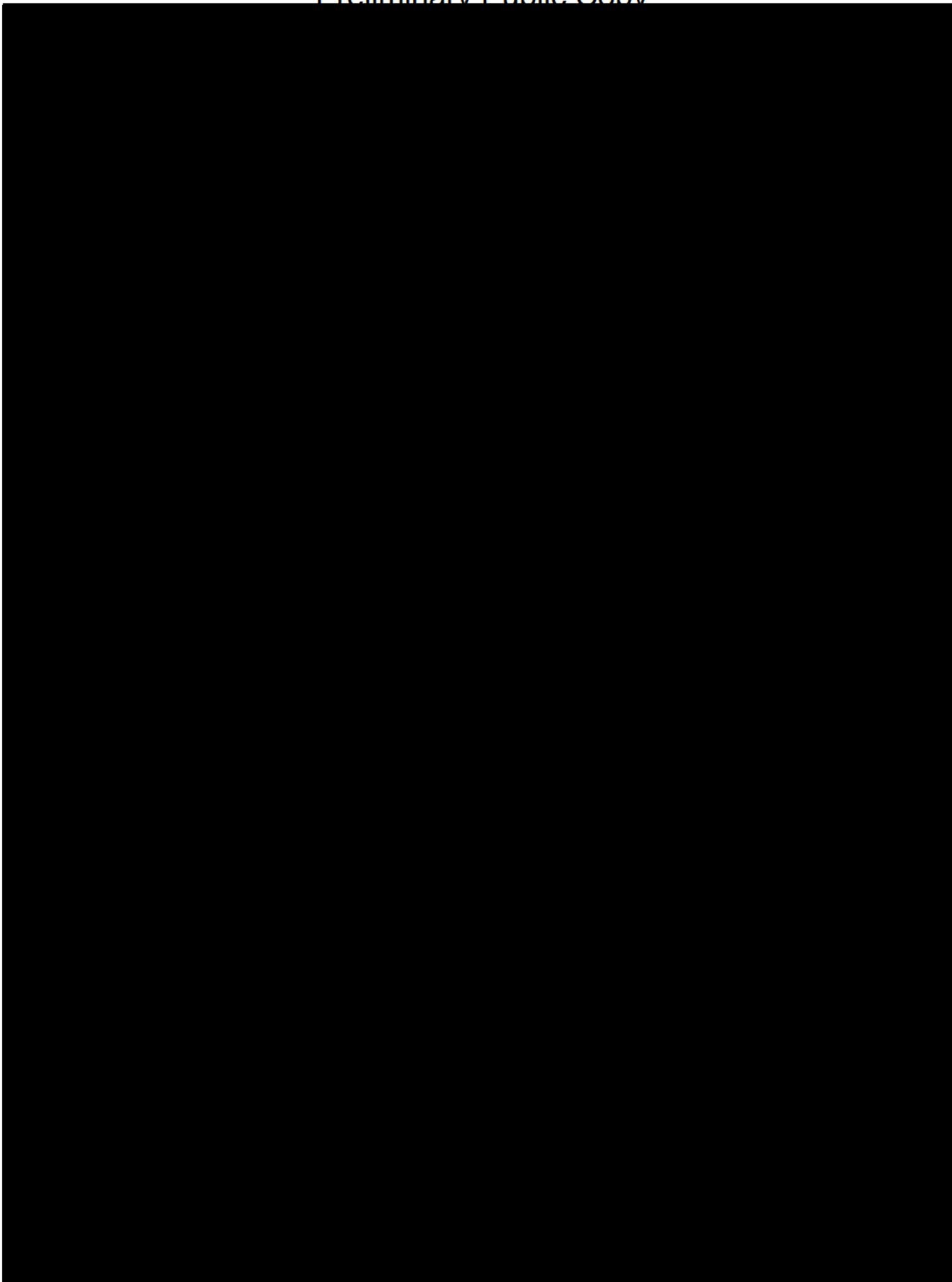


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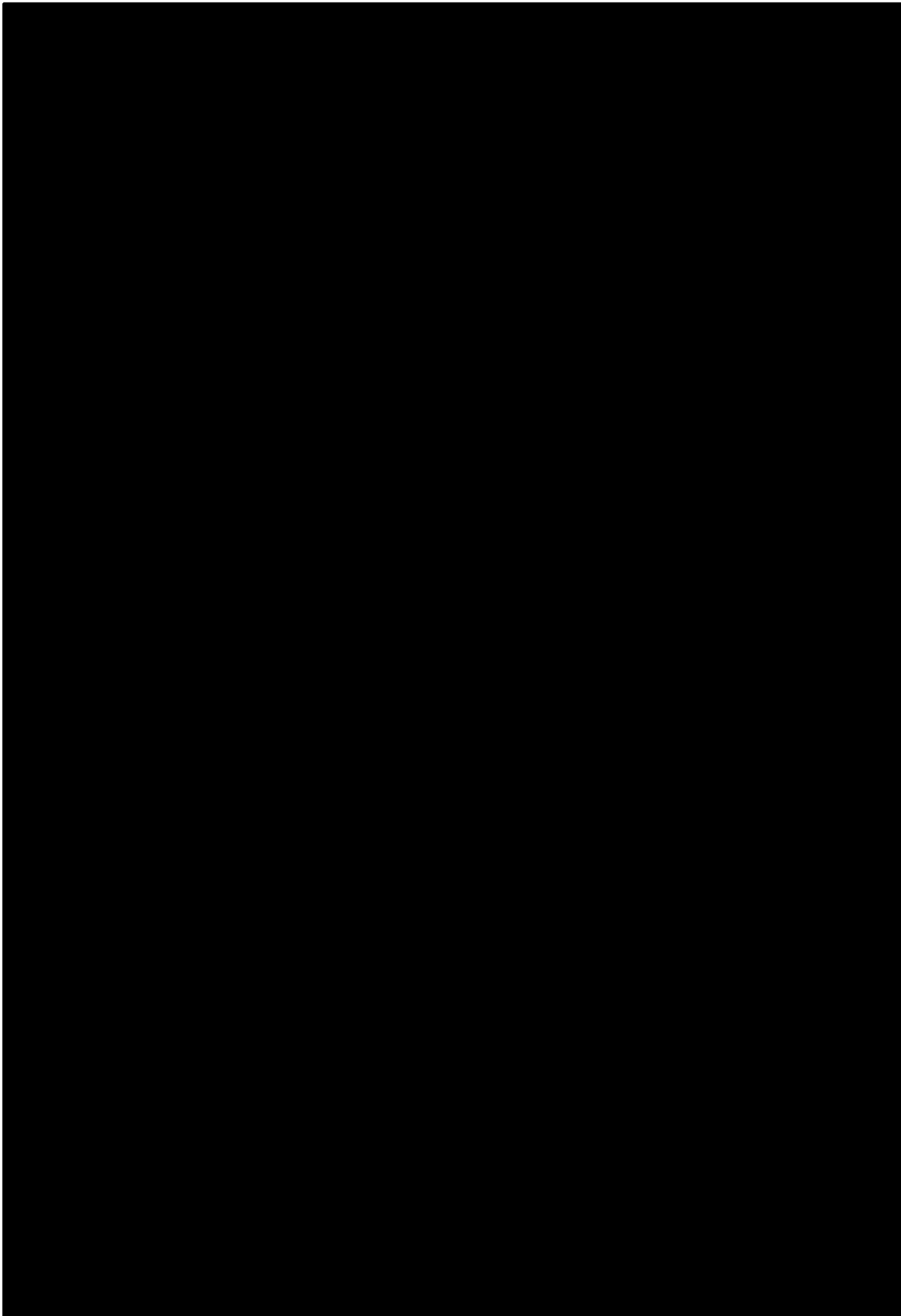


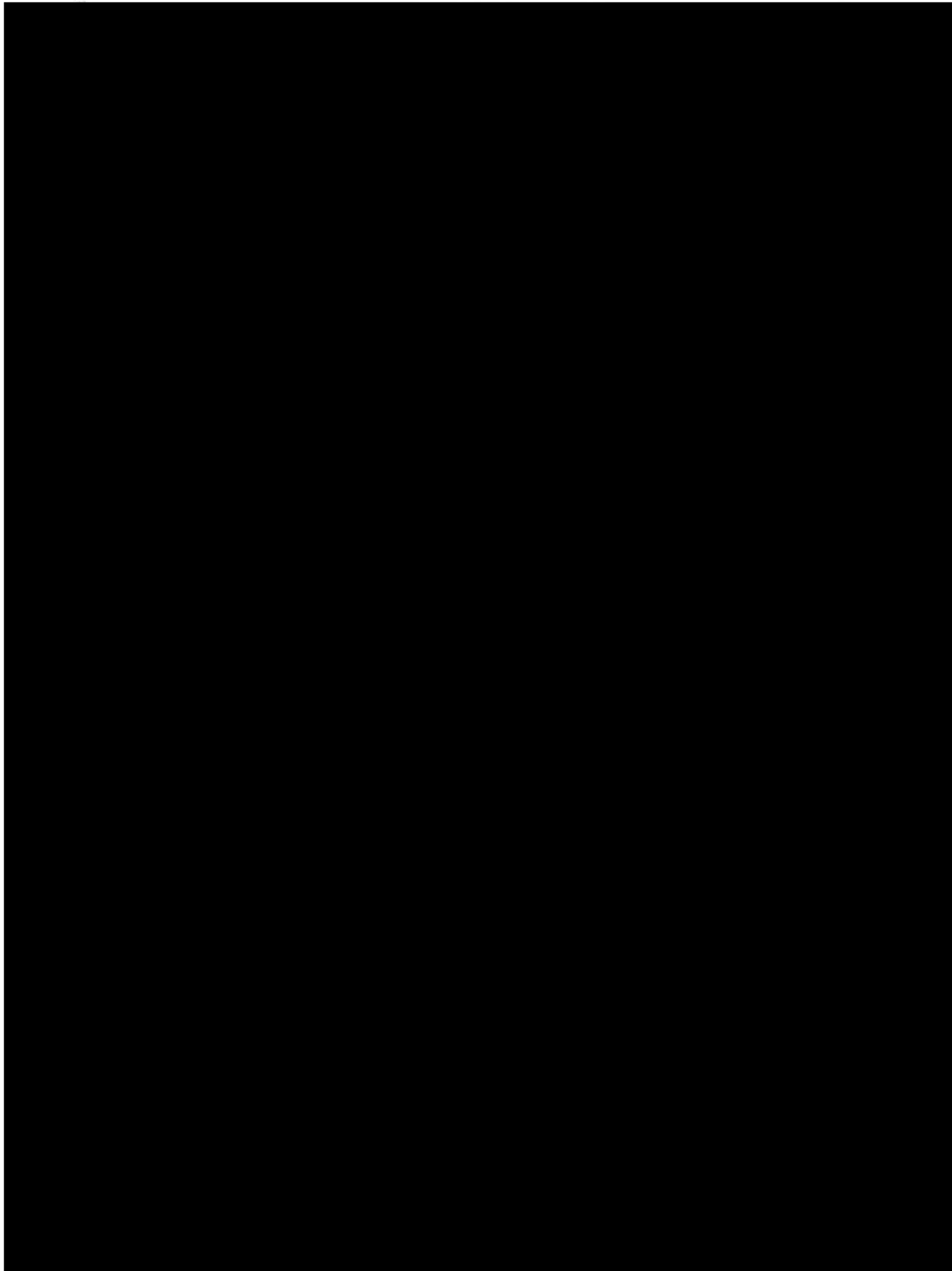






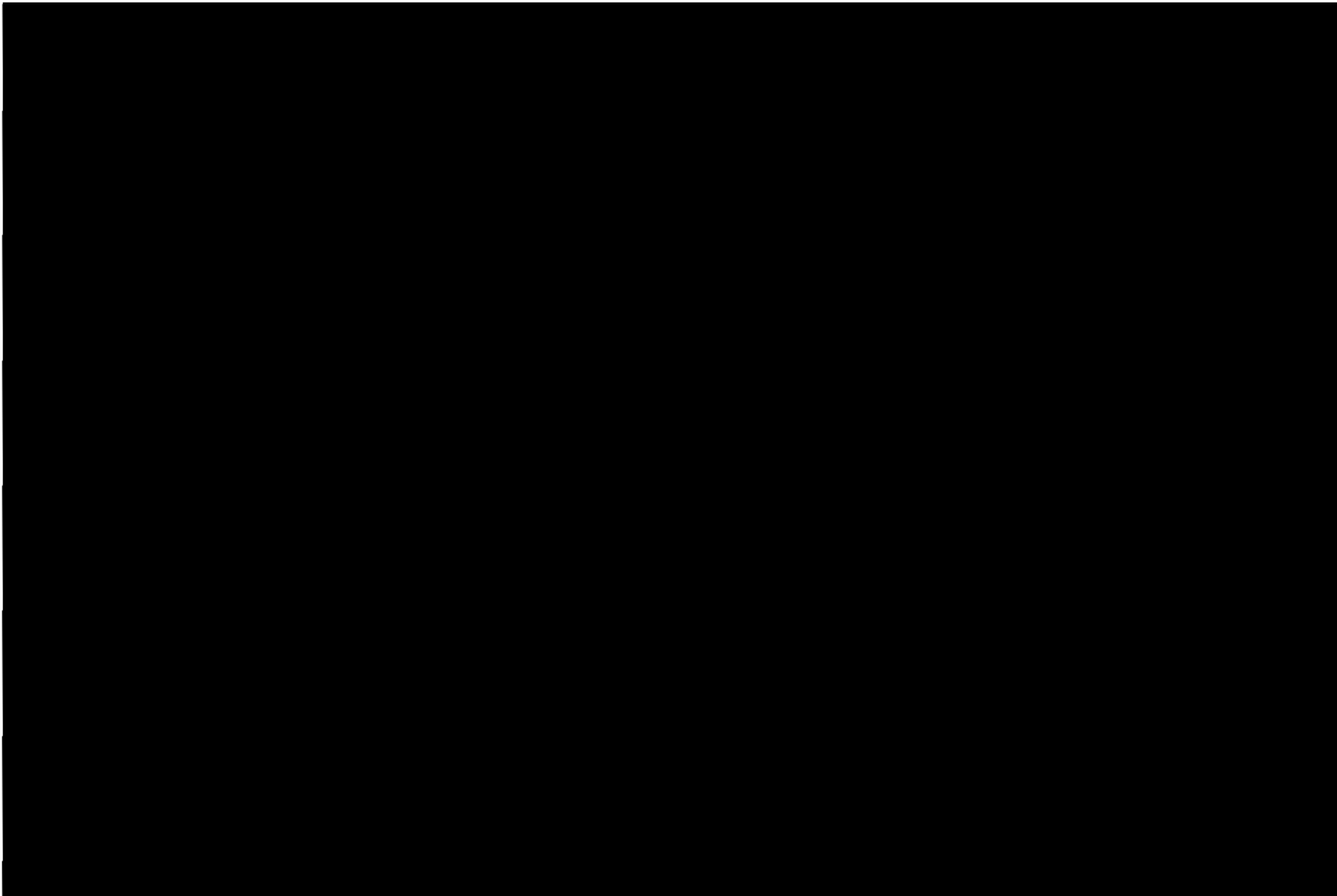
ANNEX A

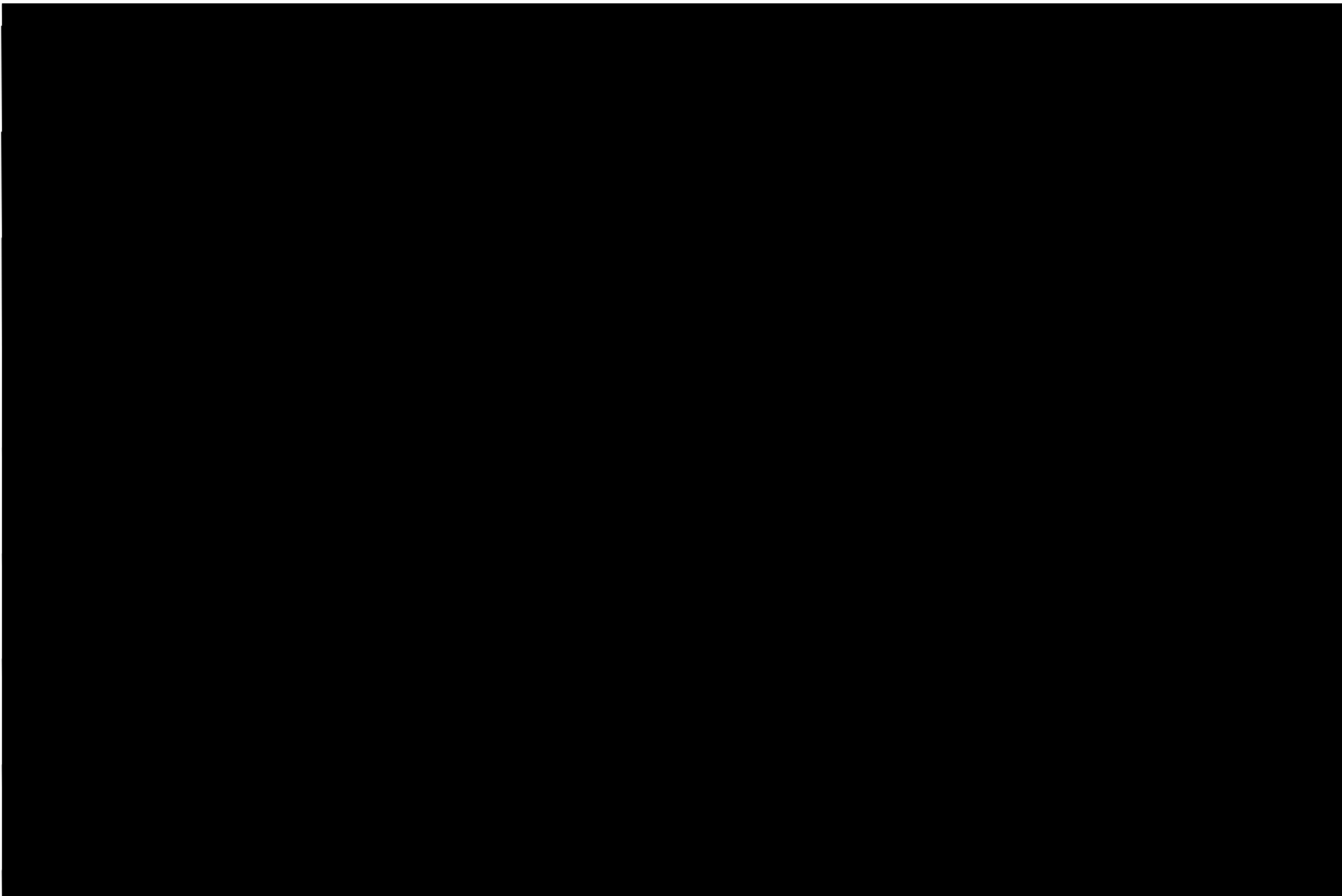


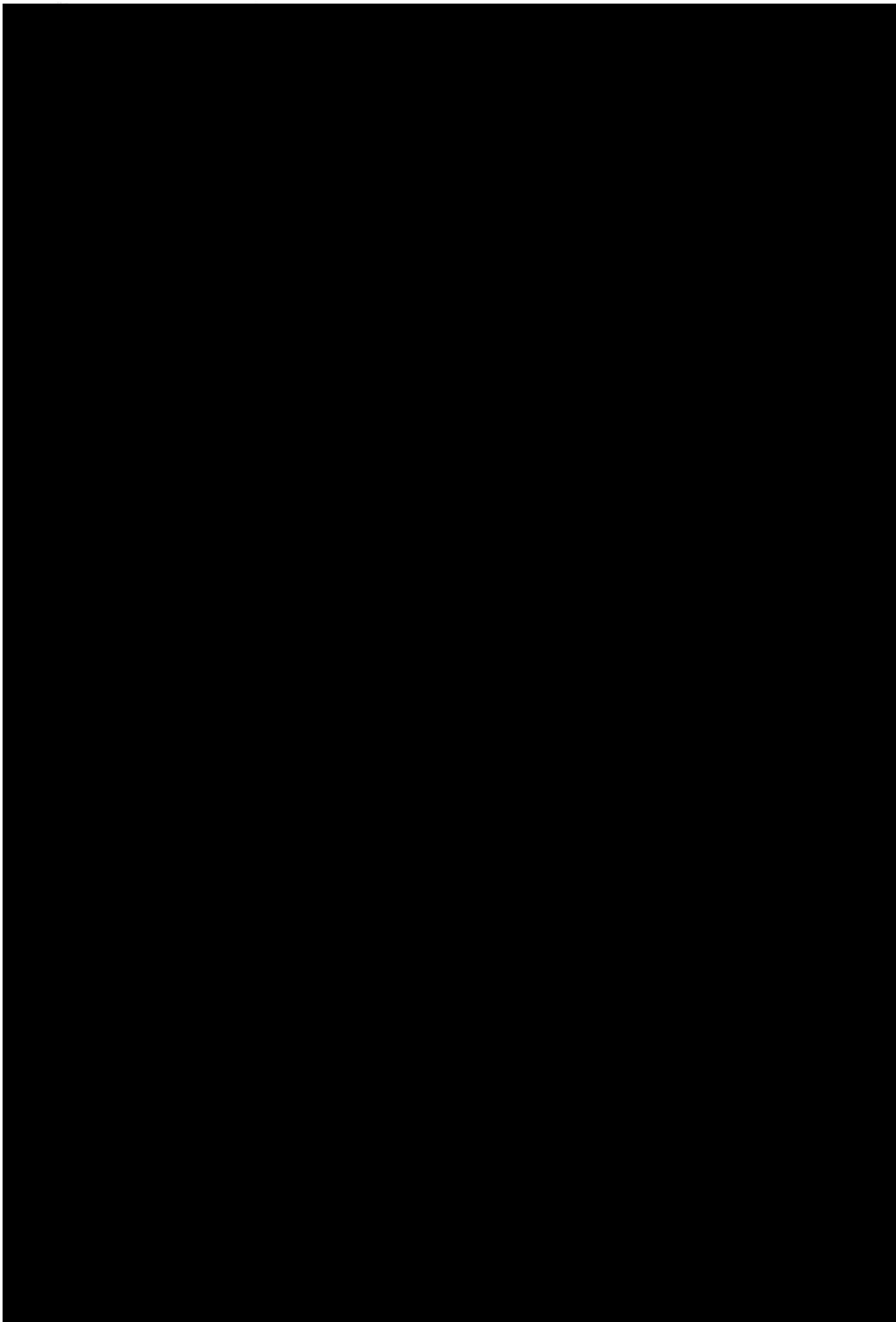


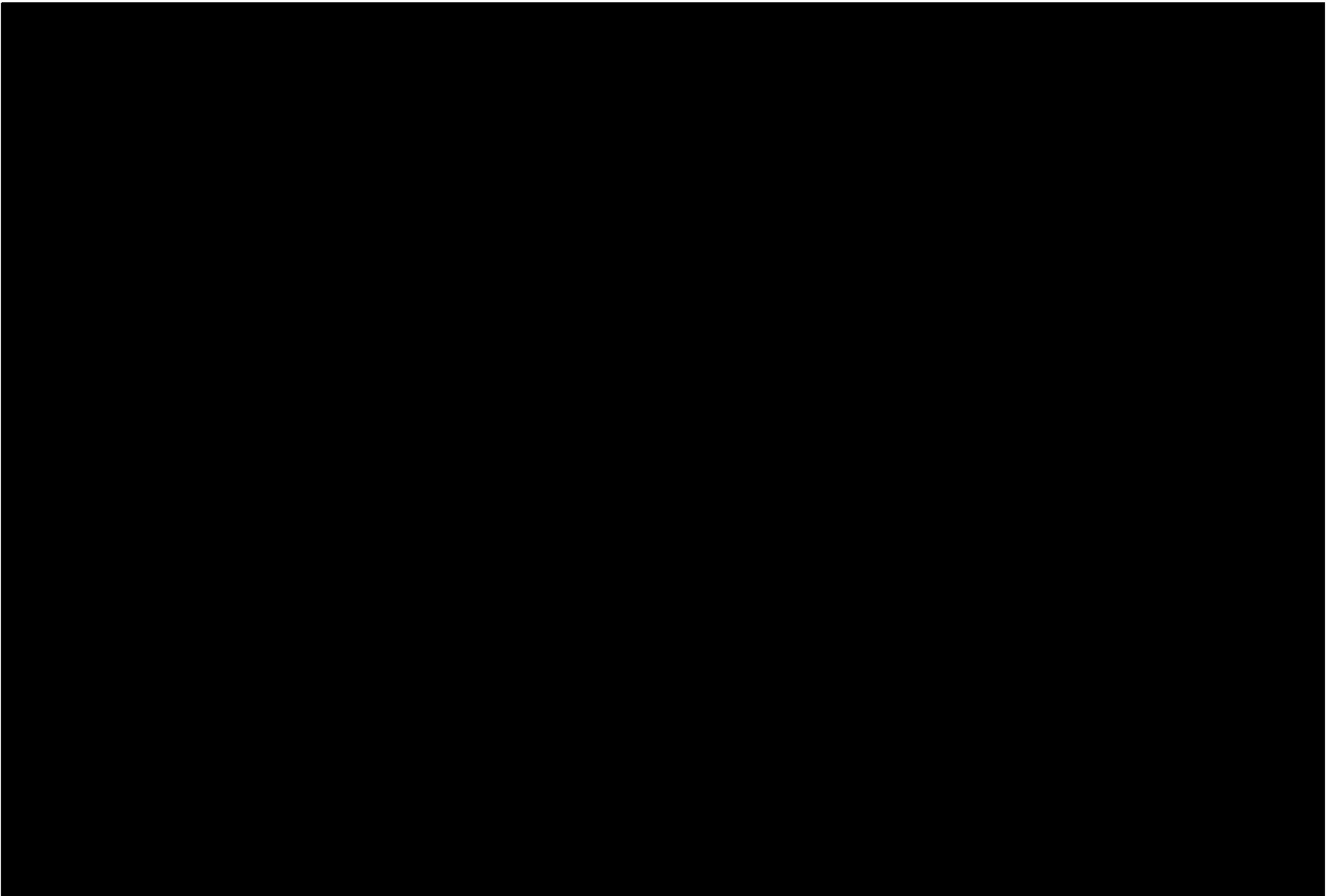


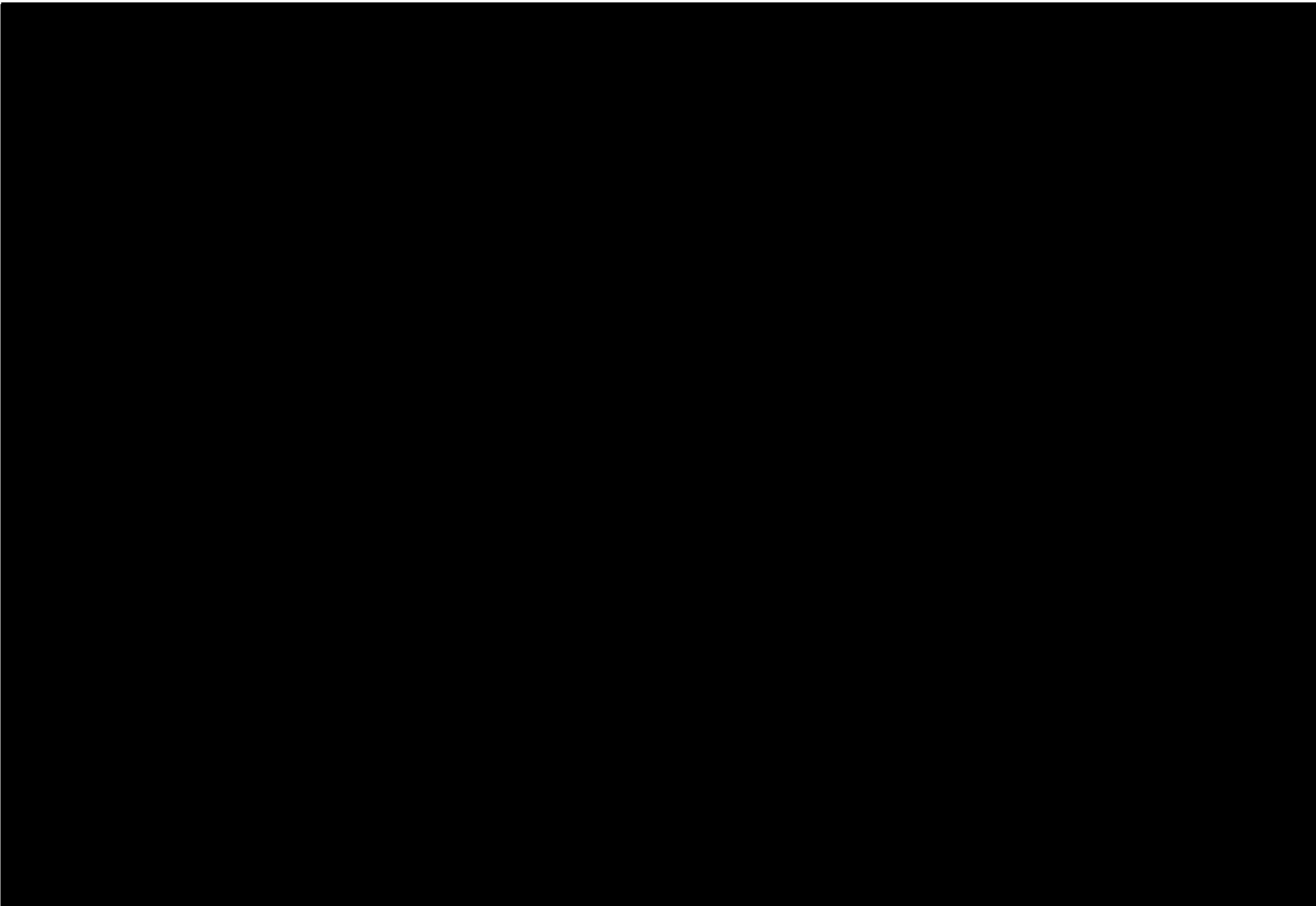


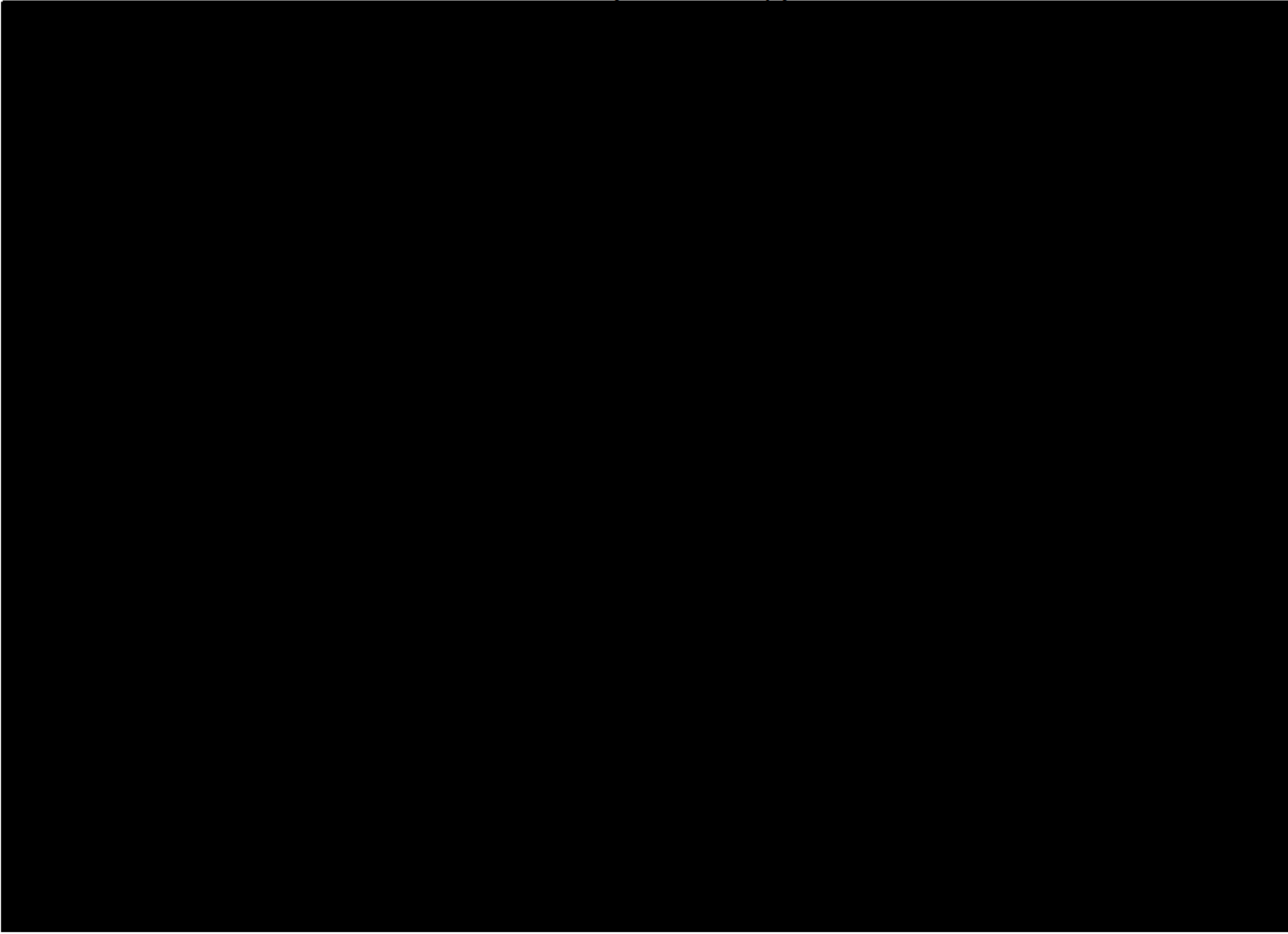


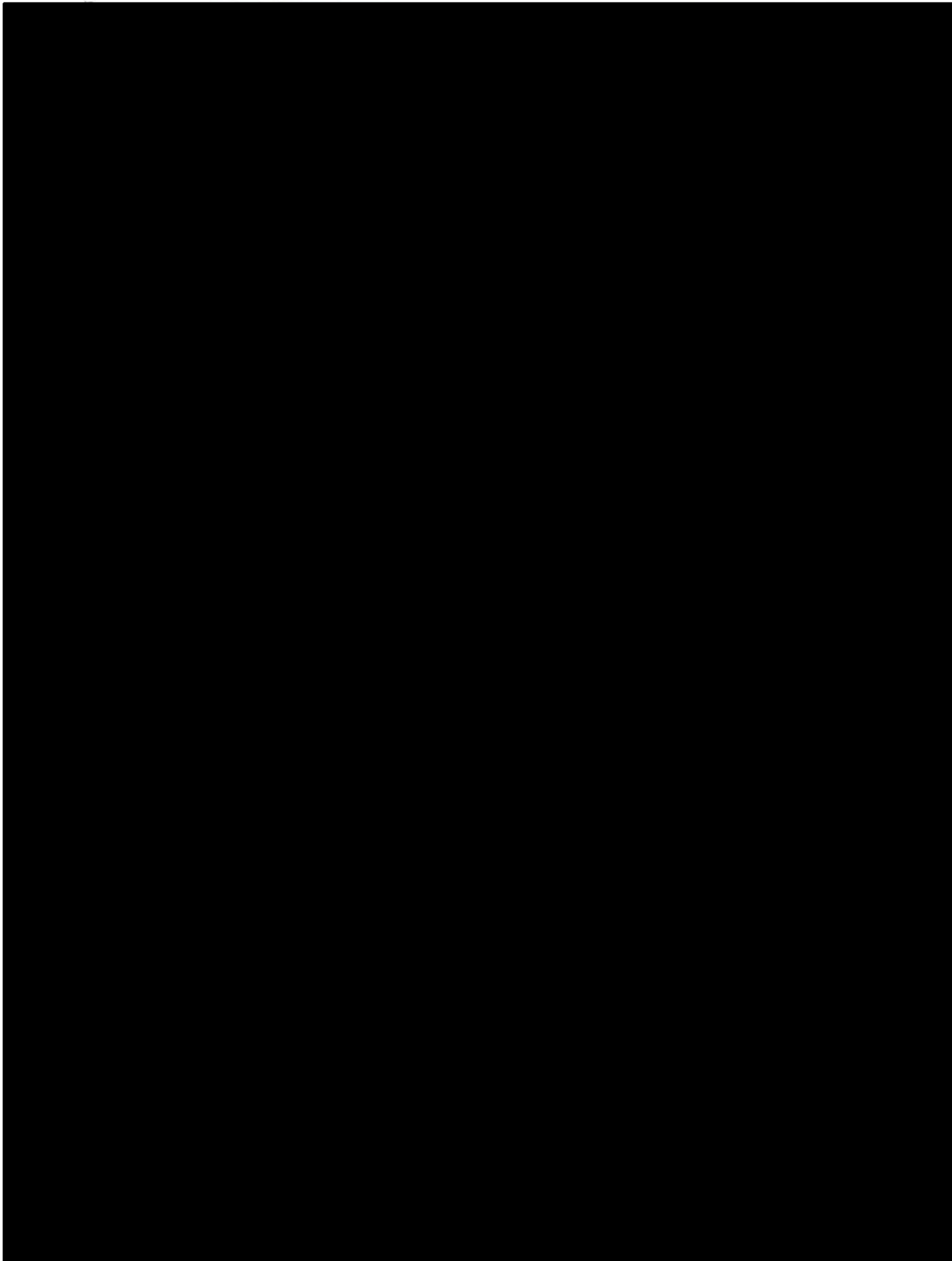






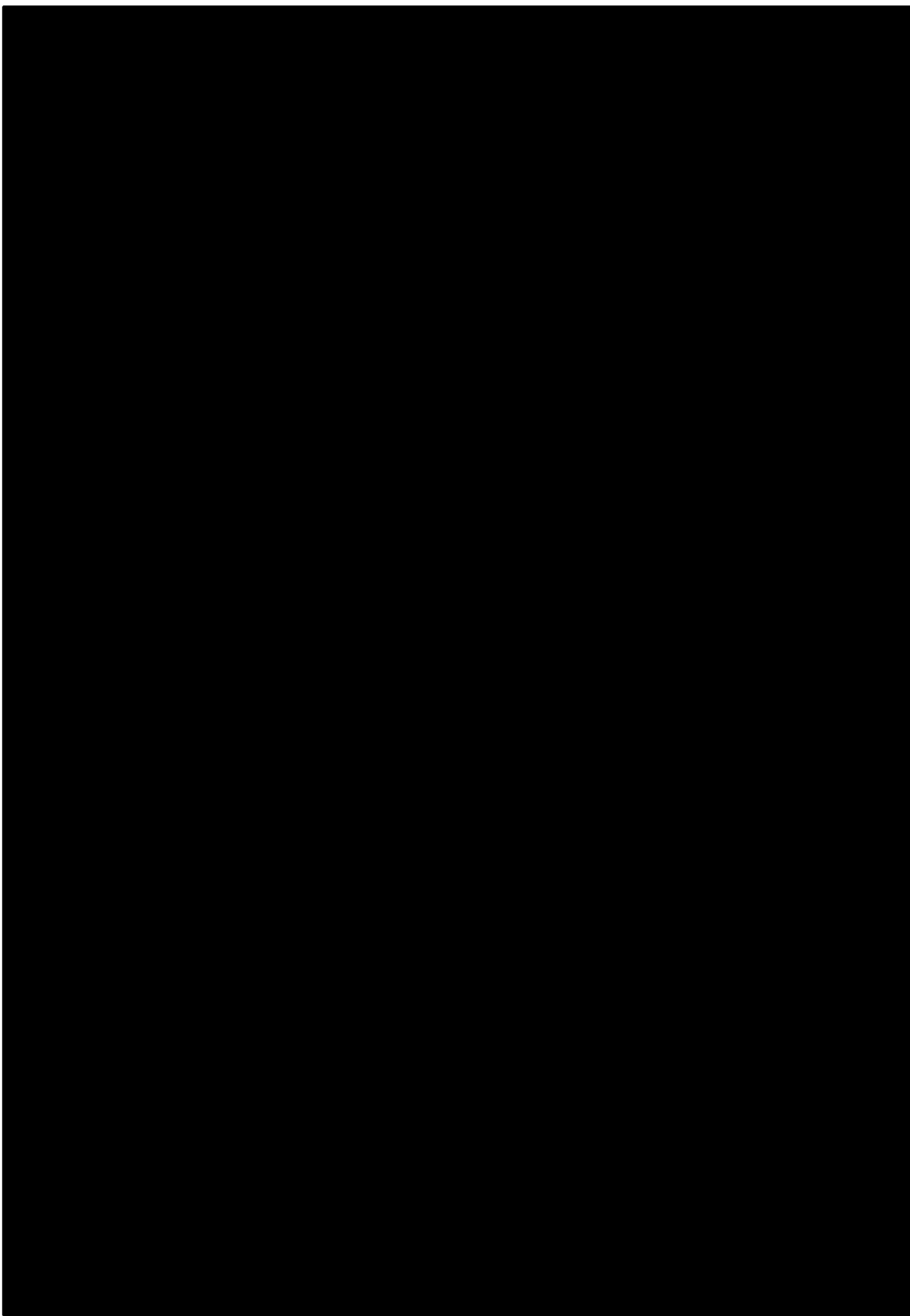


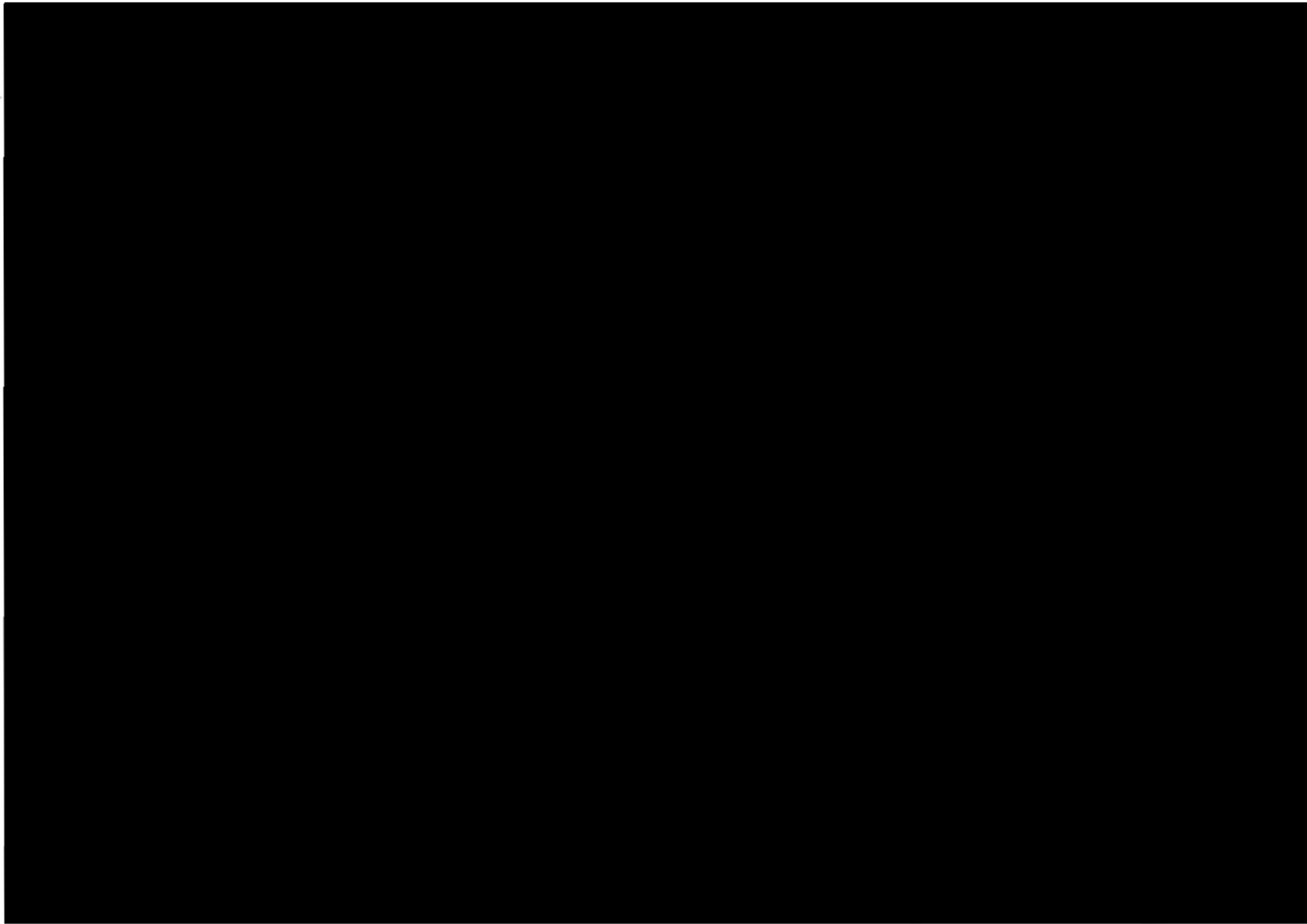


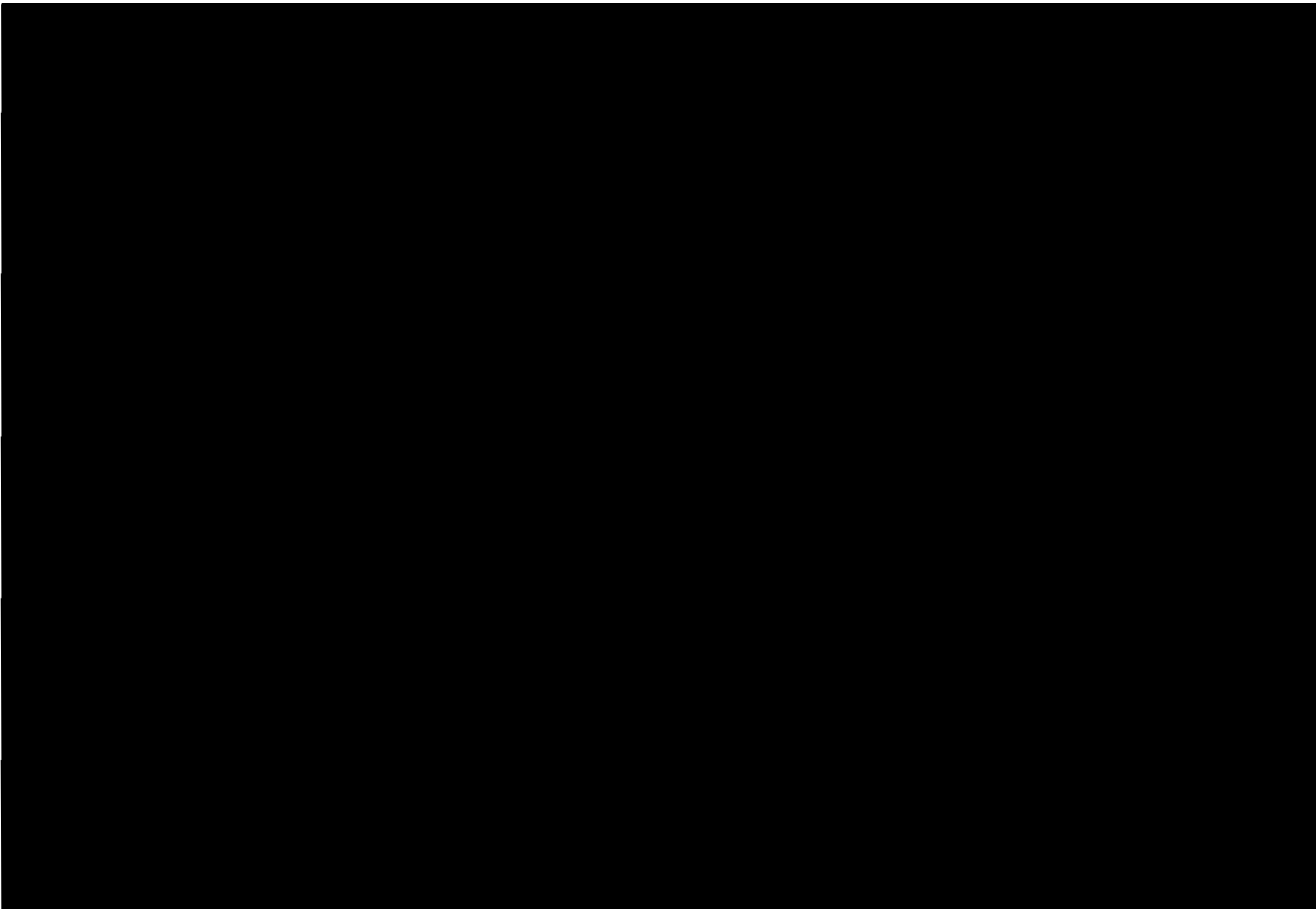


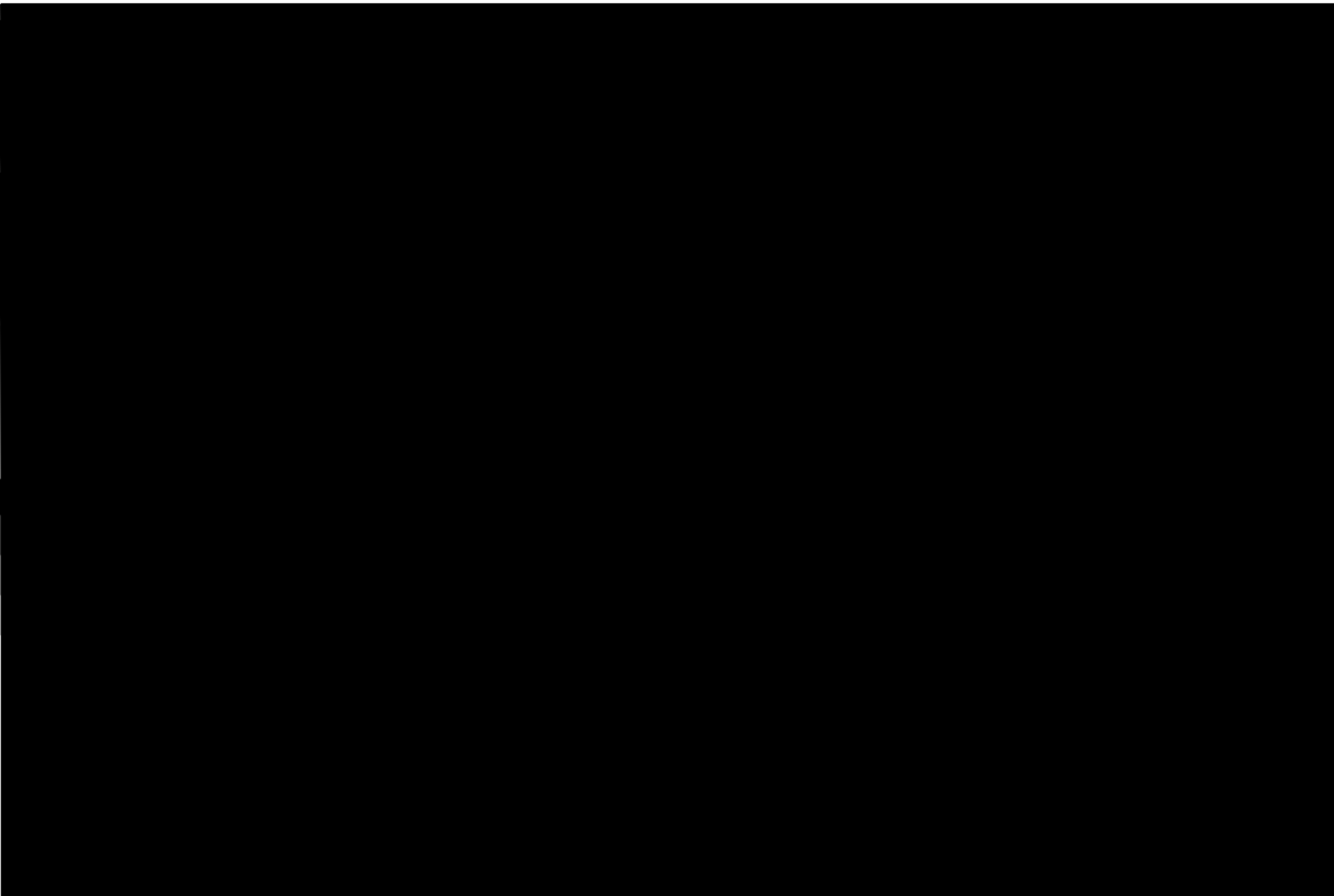


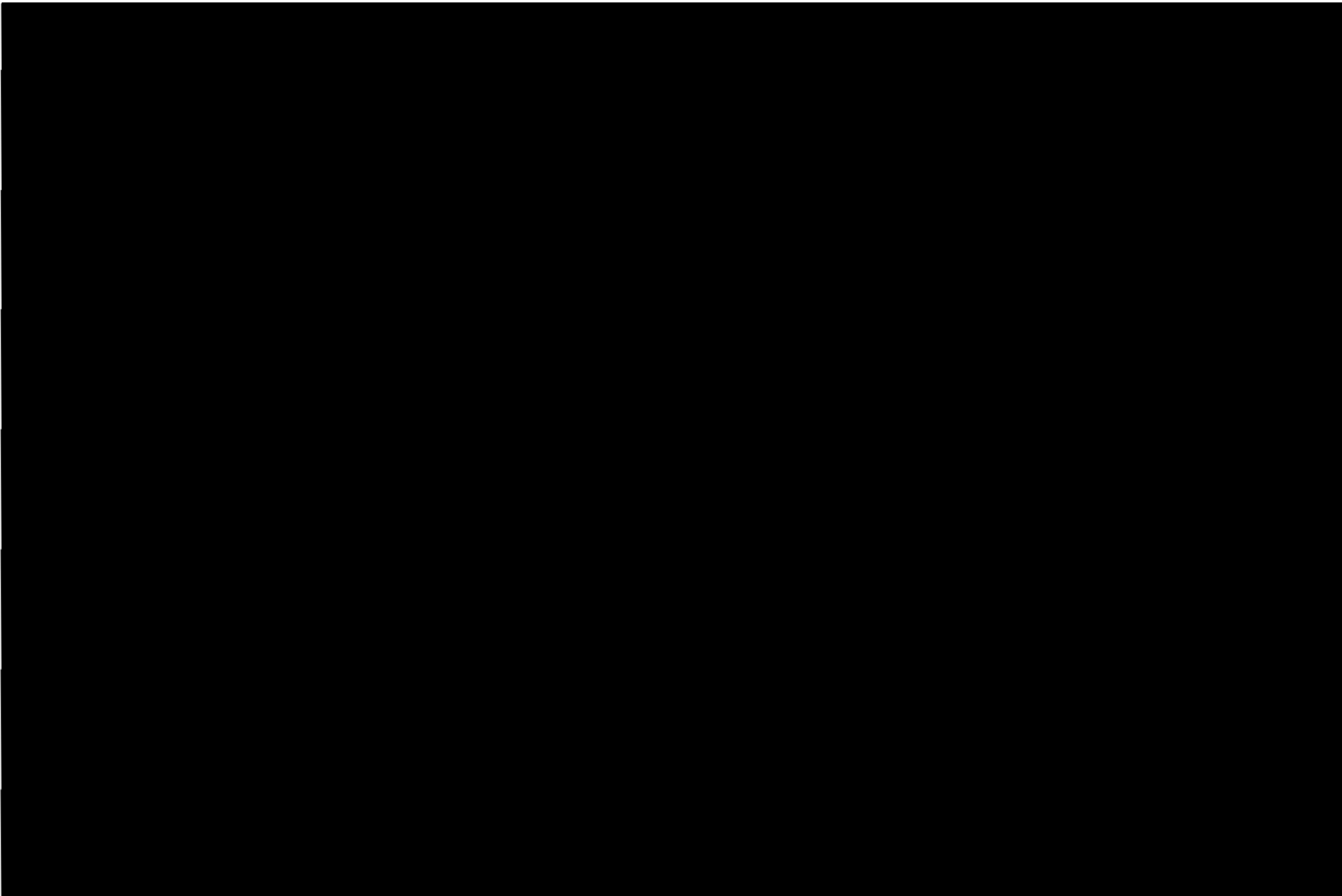


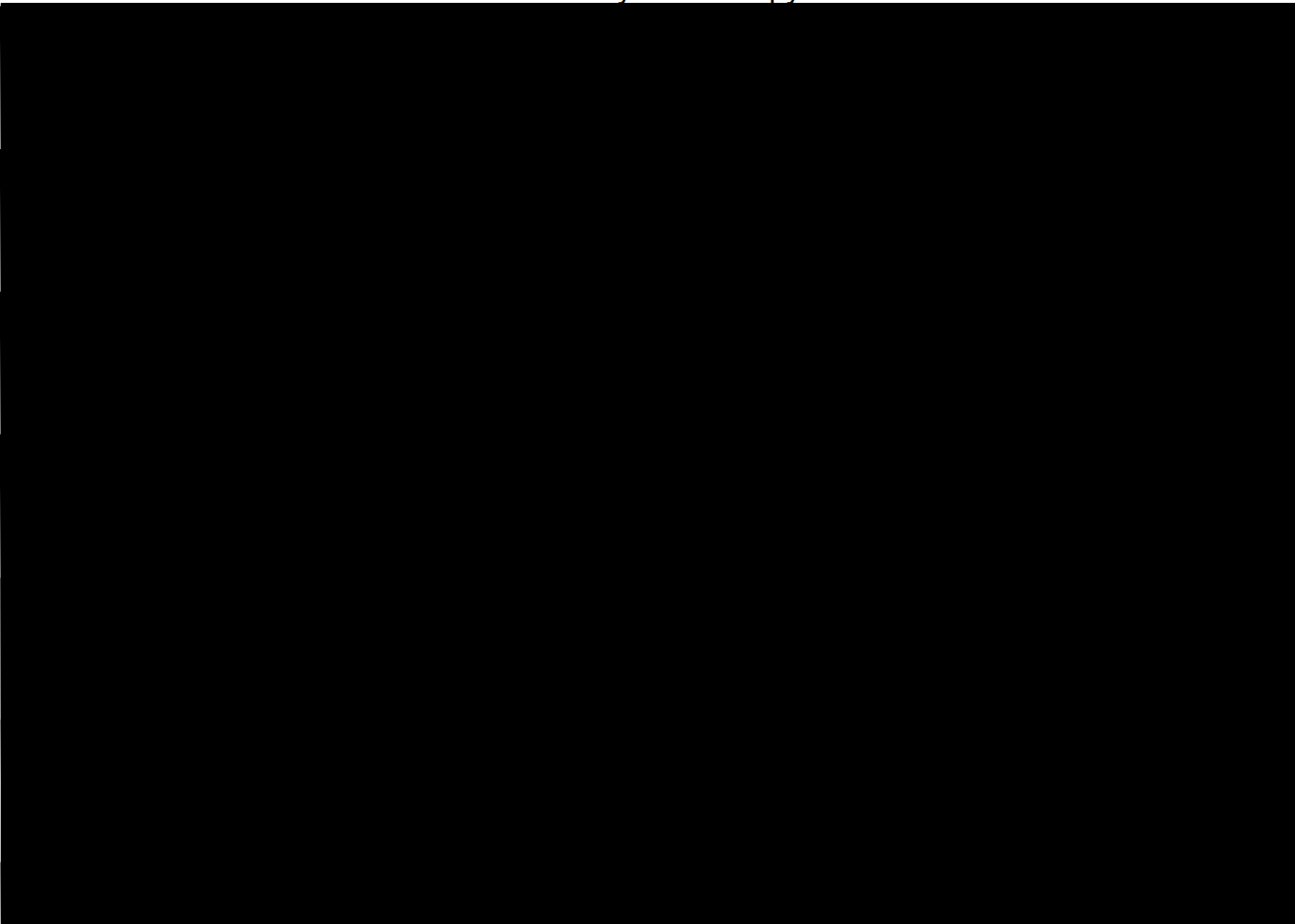


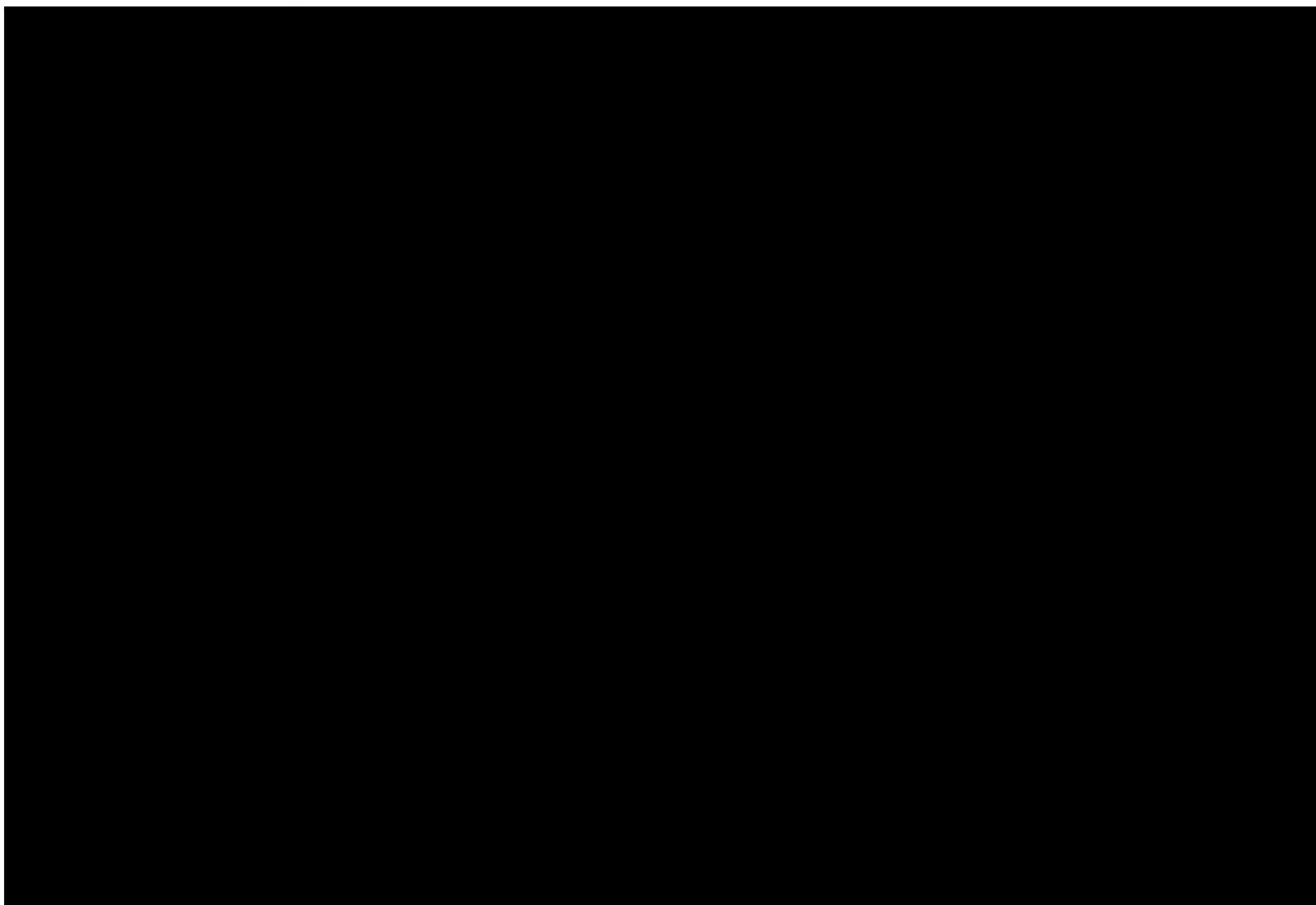






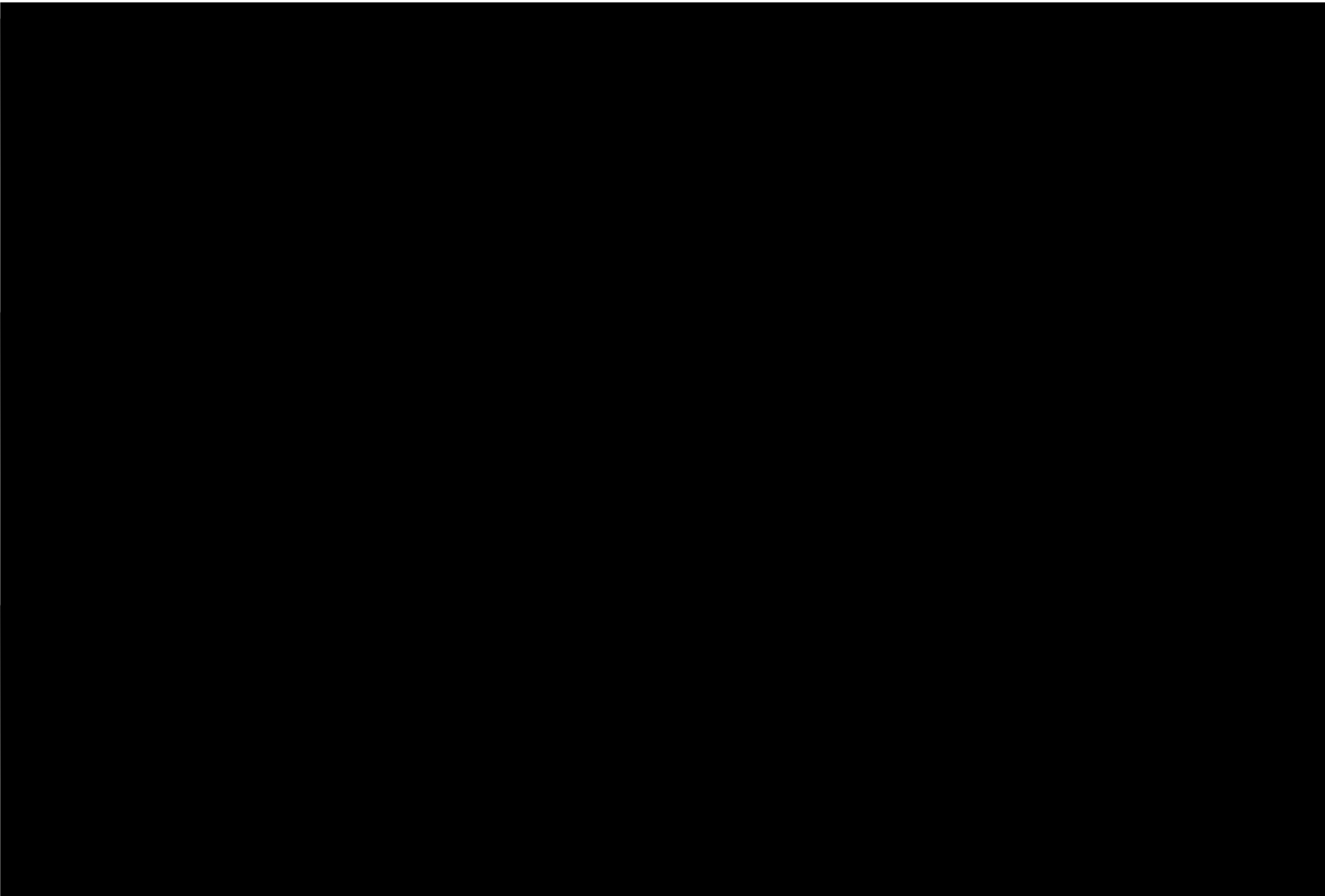


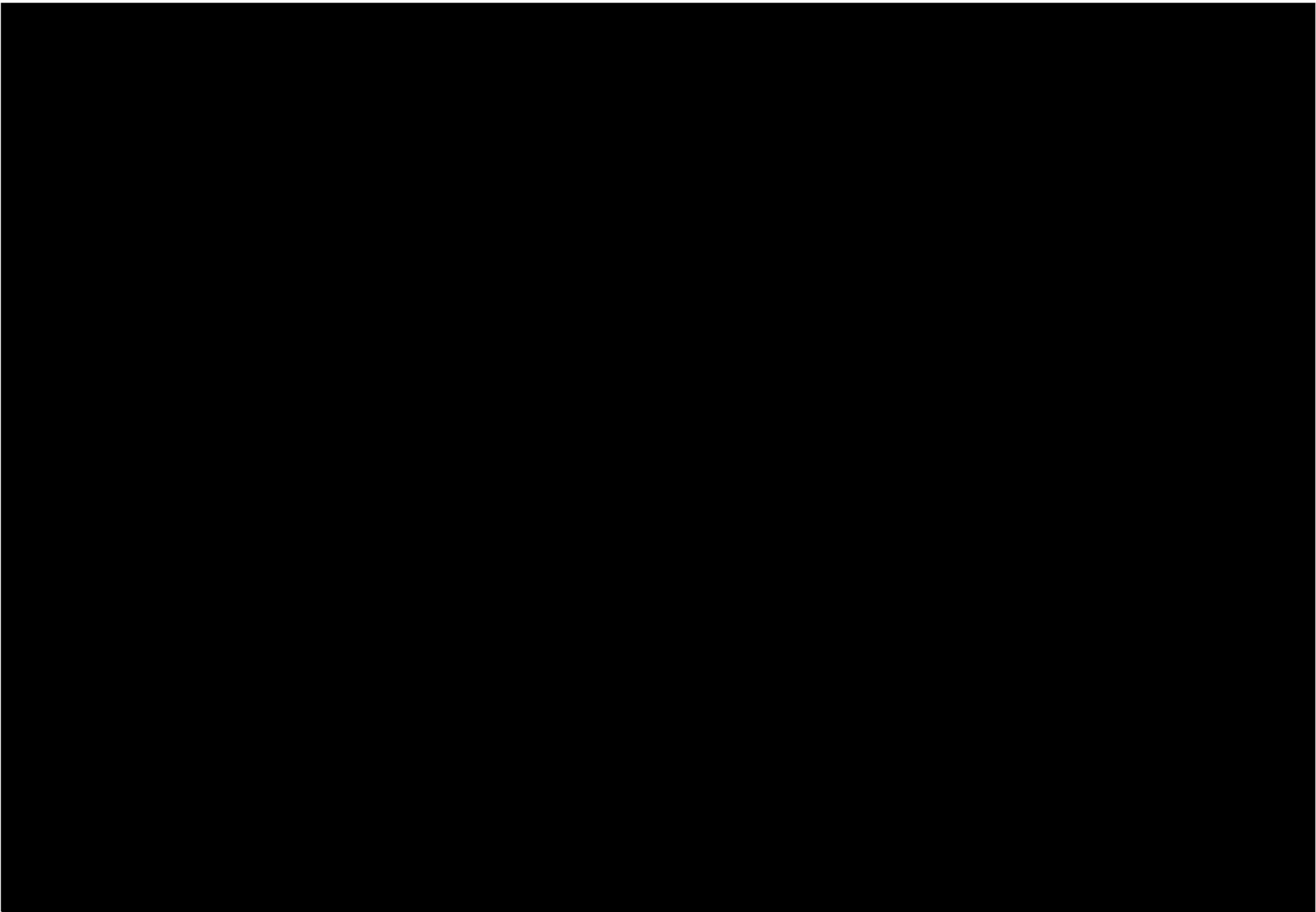




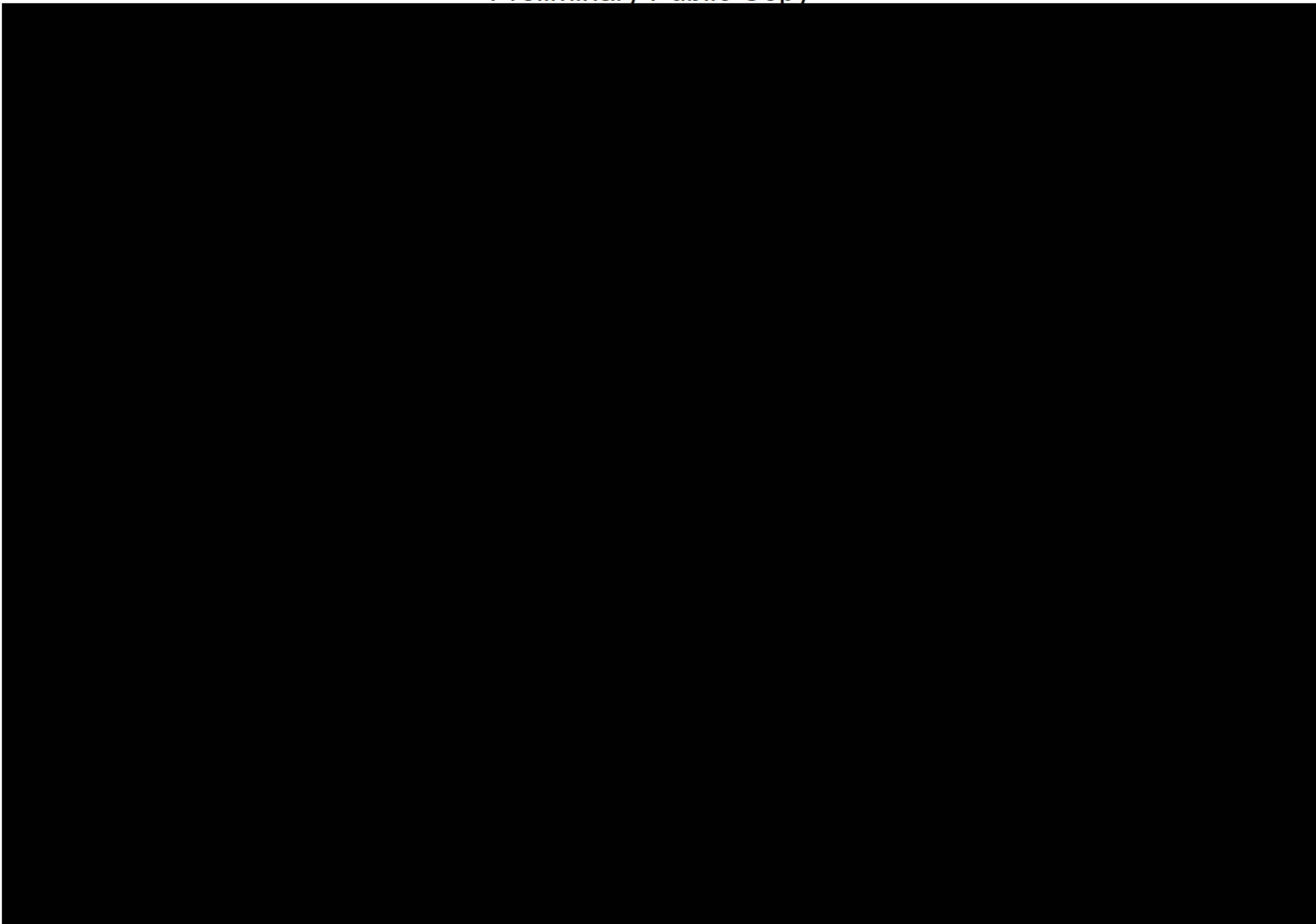


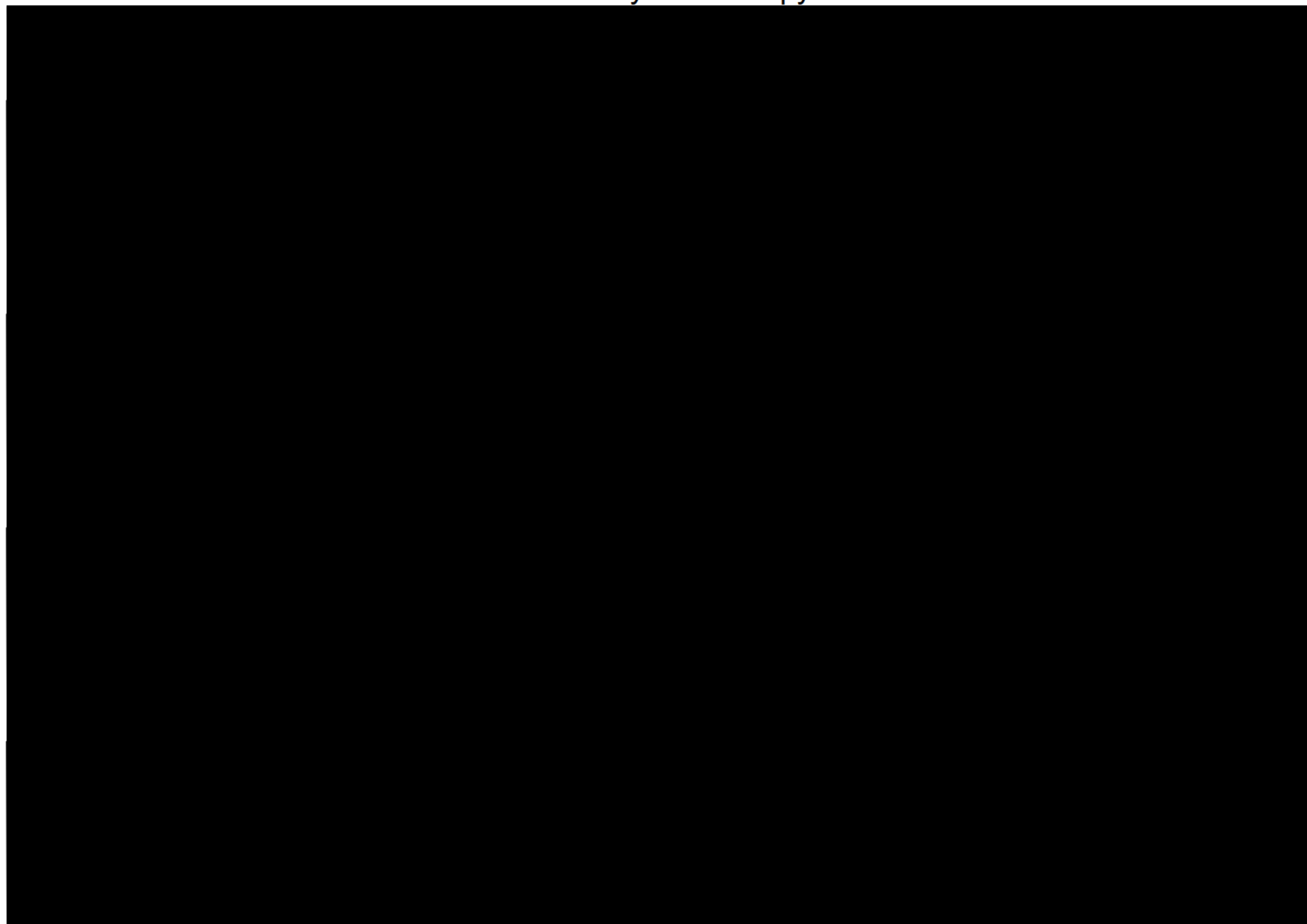


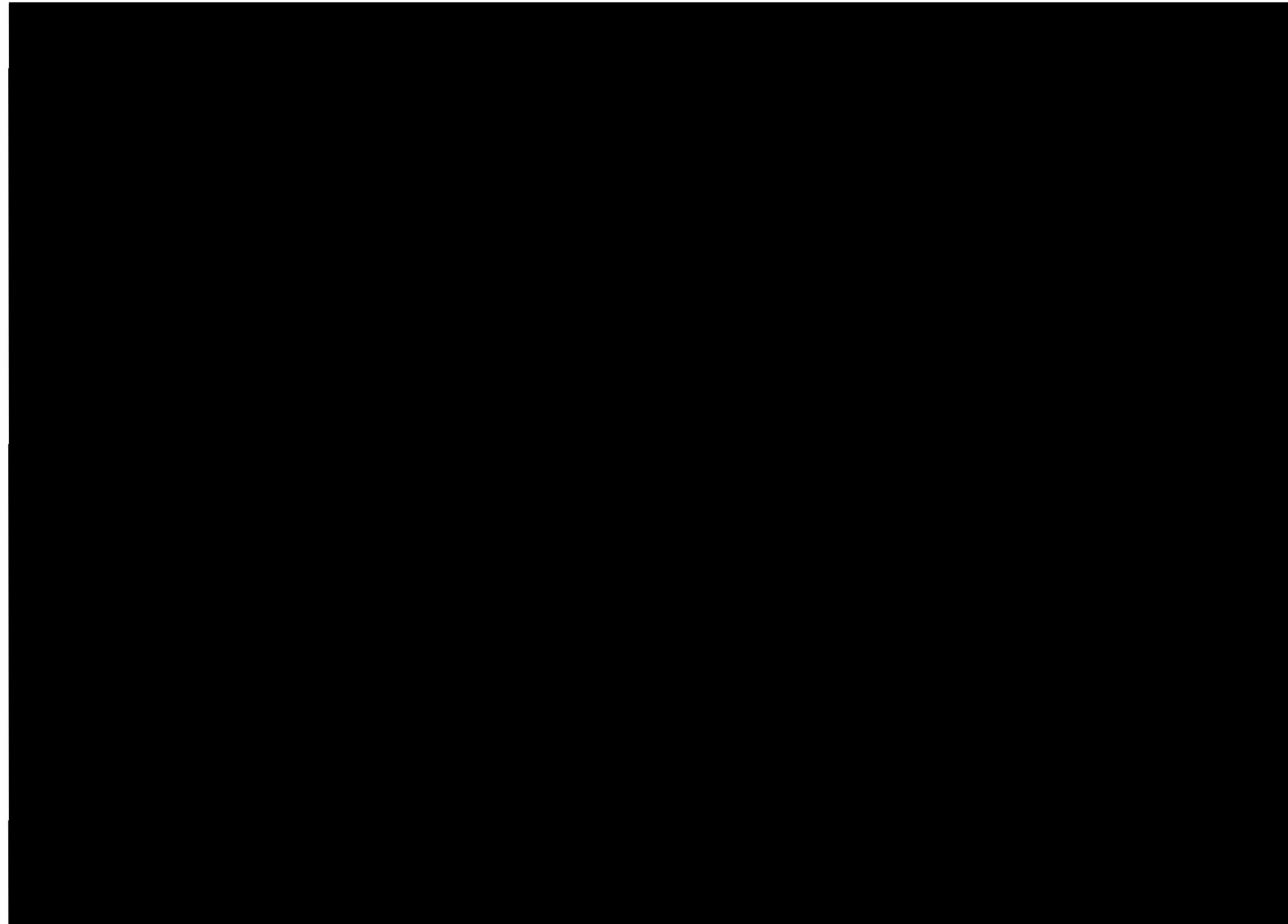


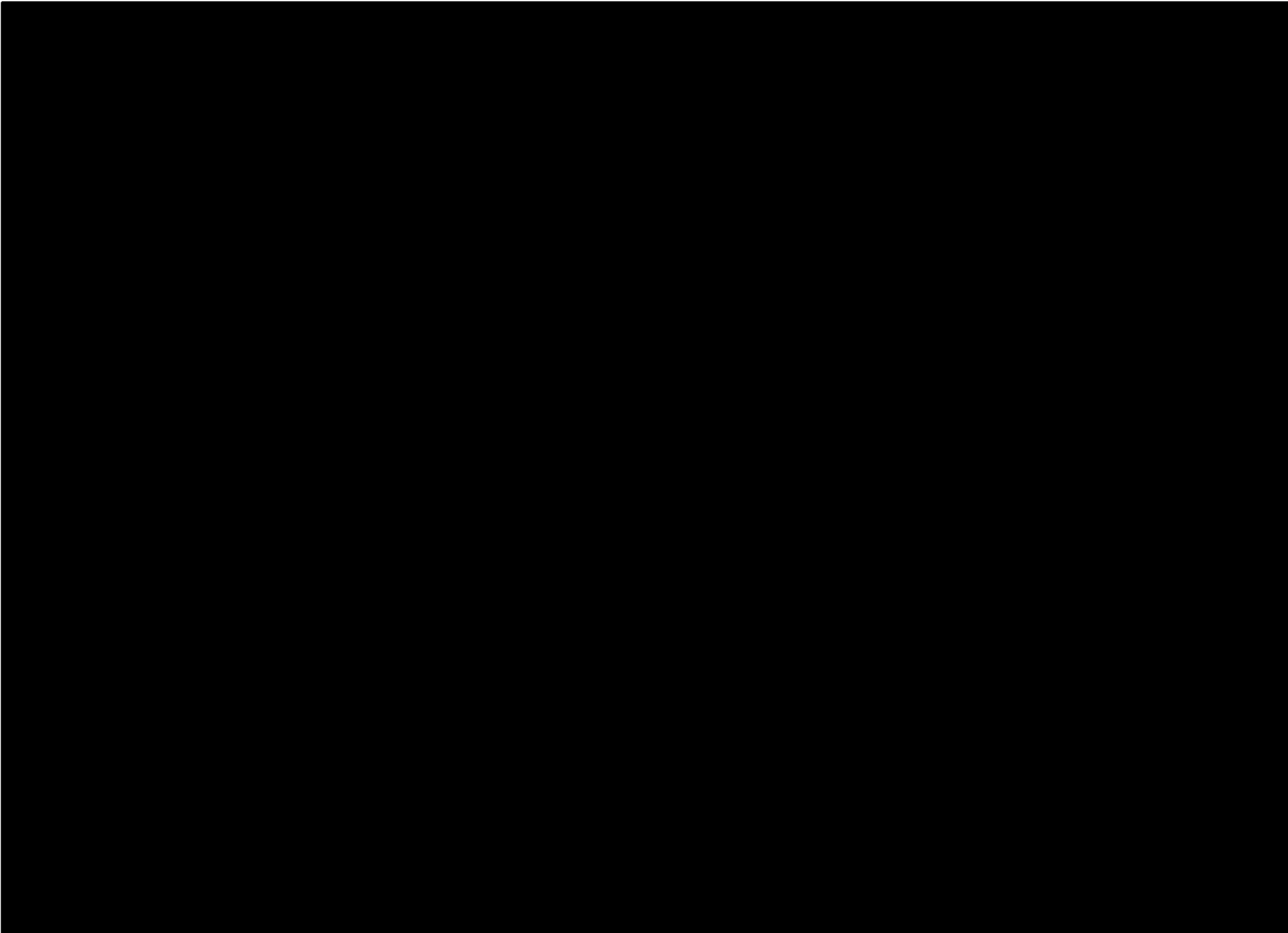




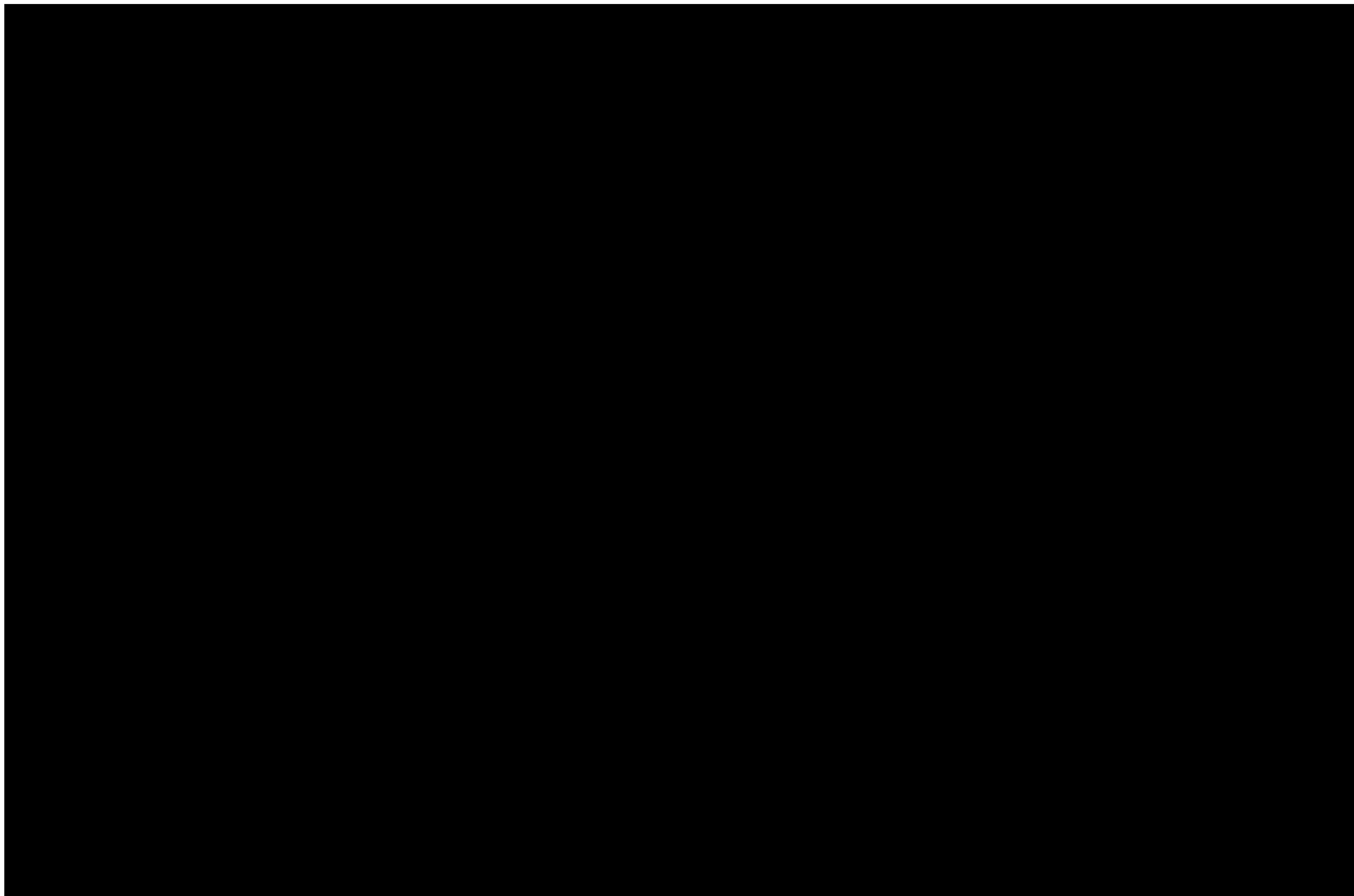


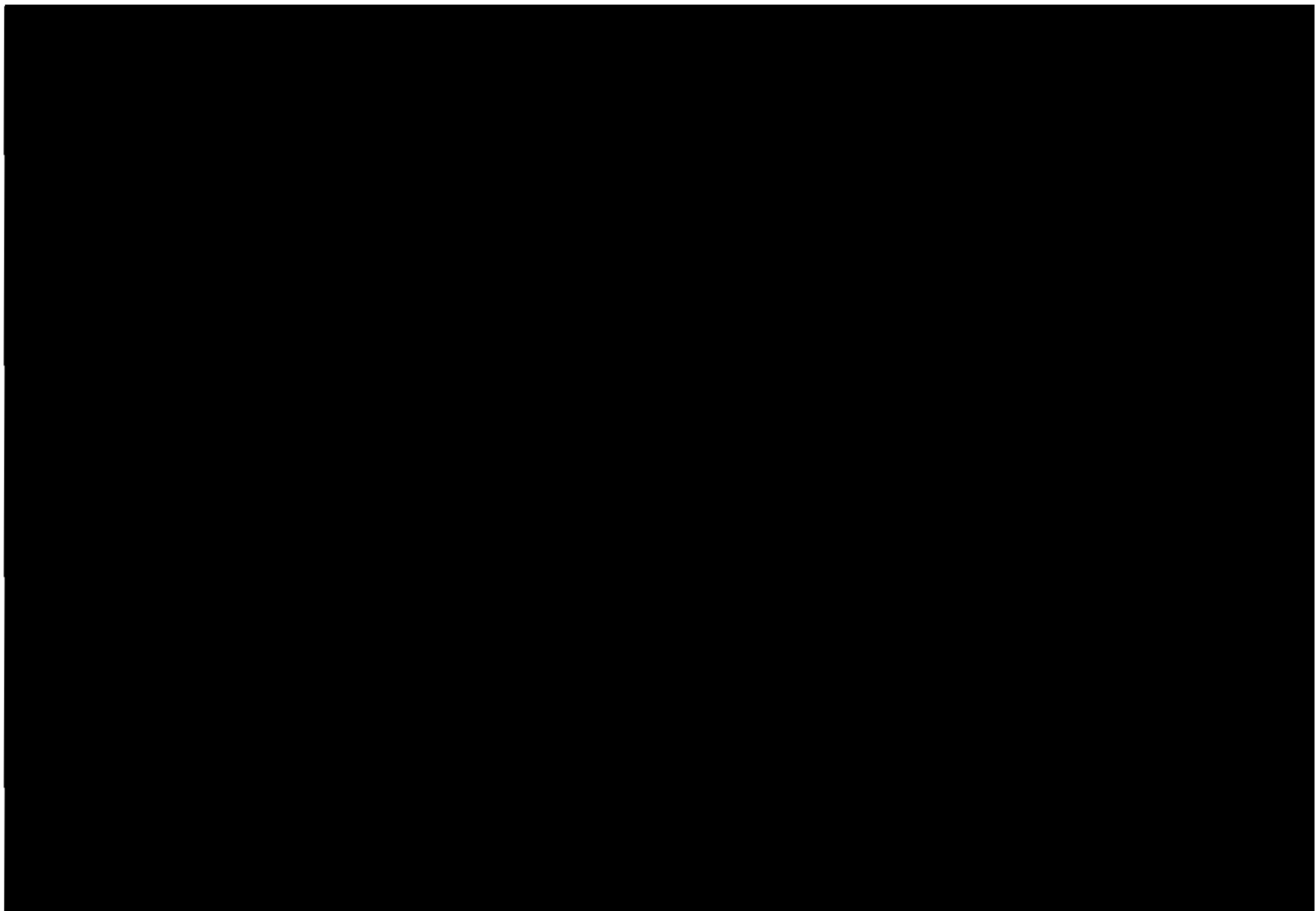


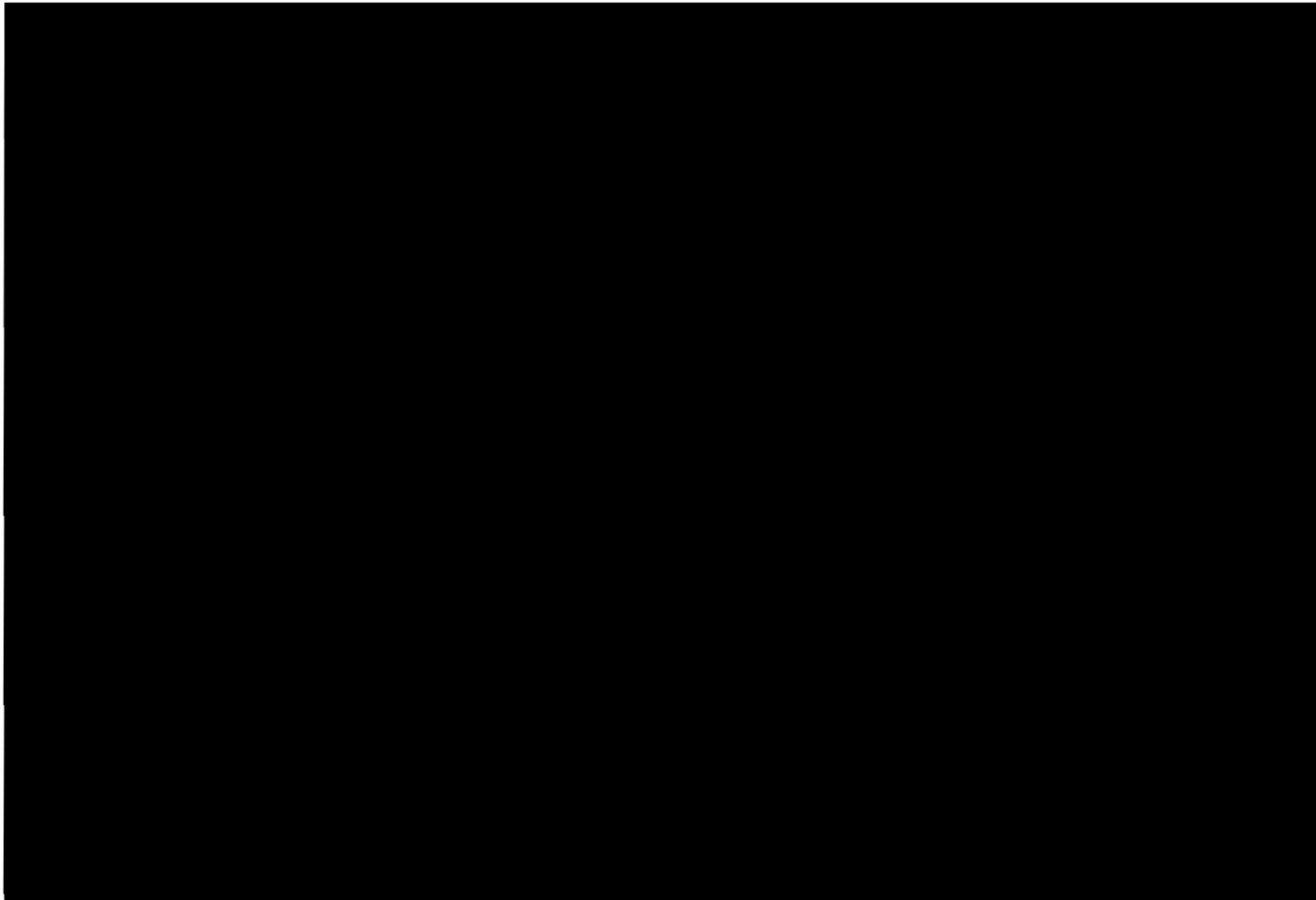


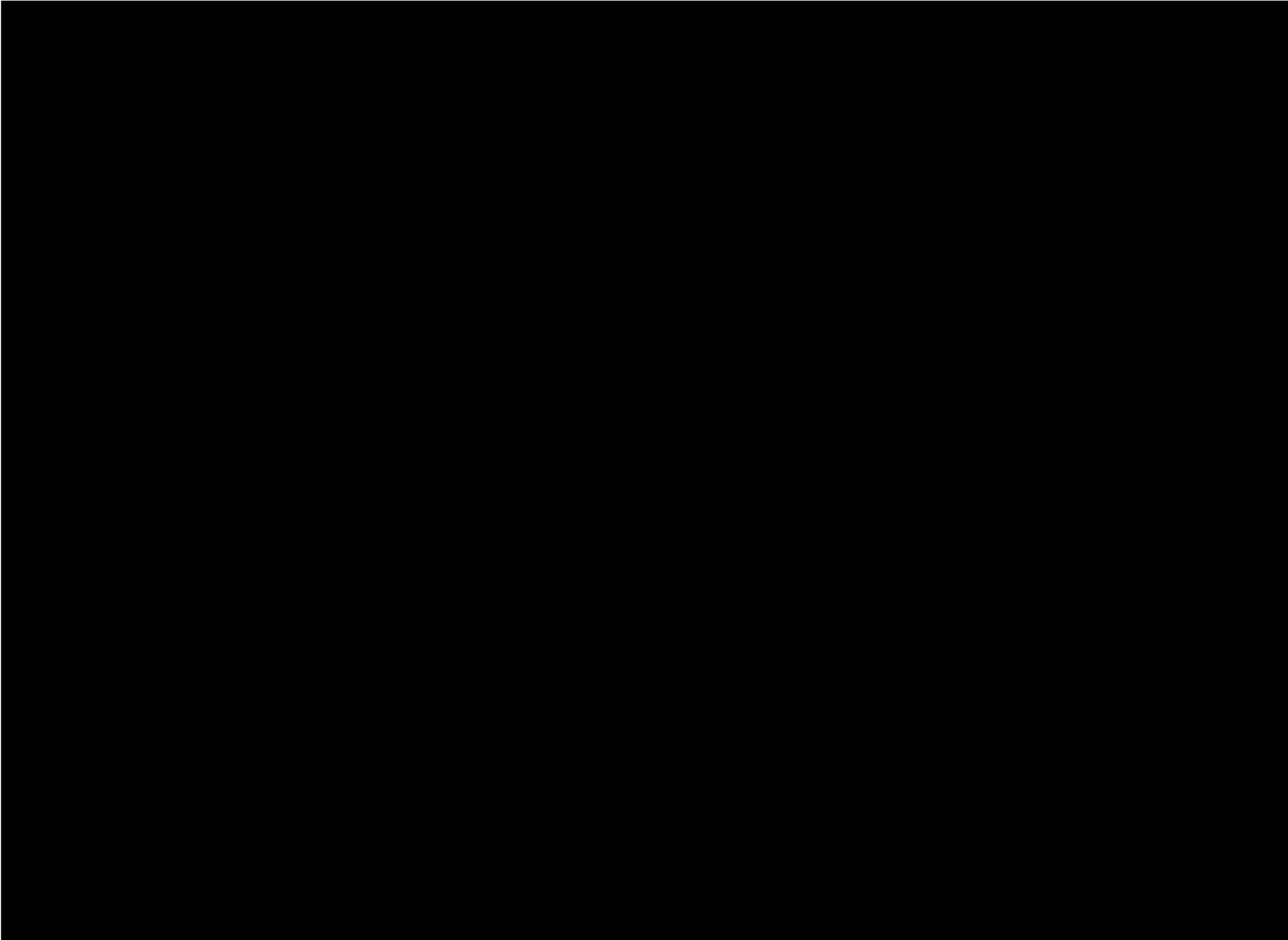


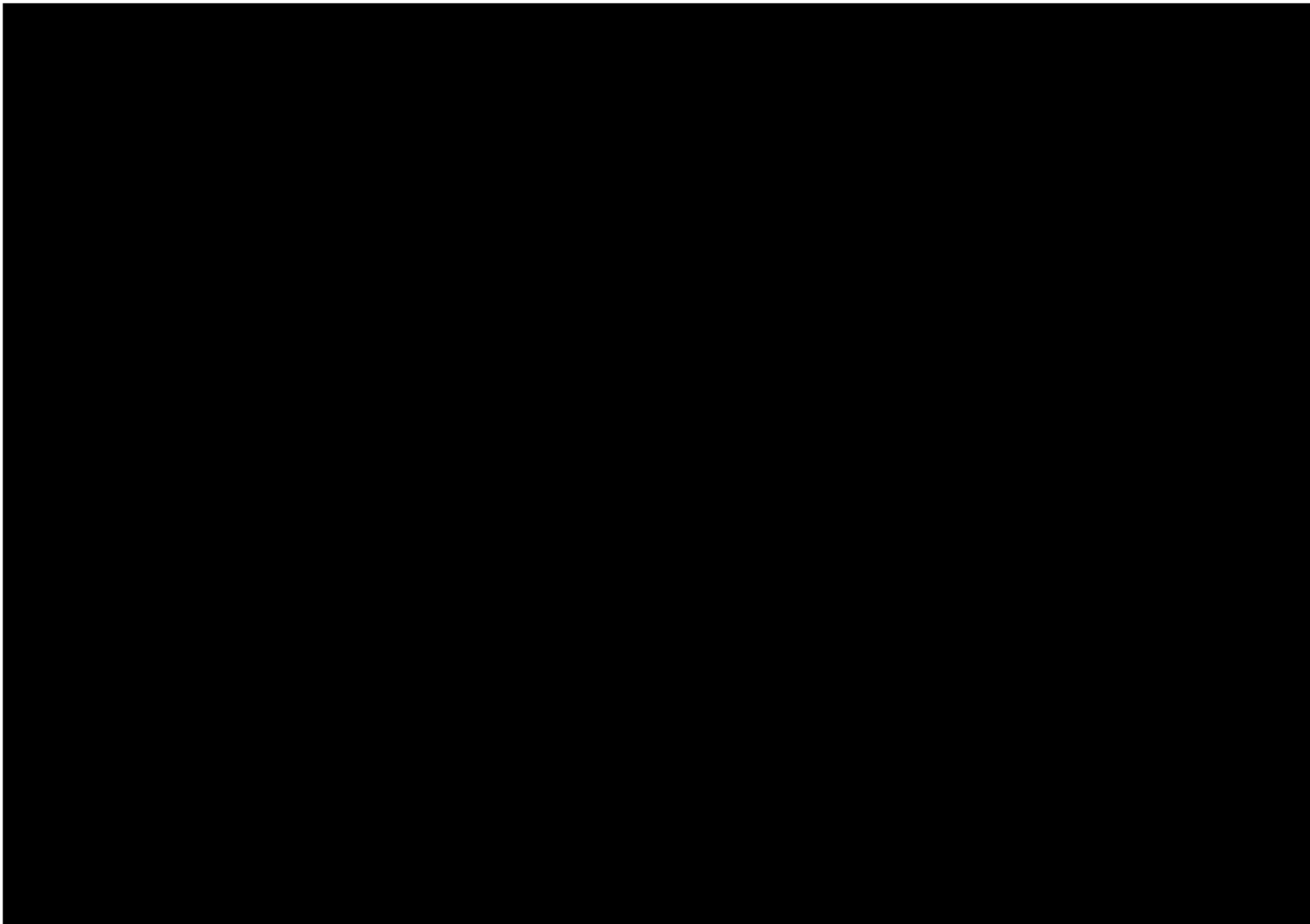


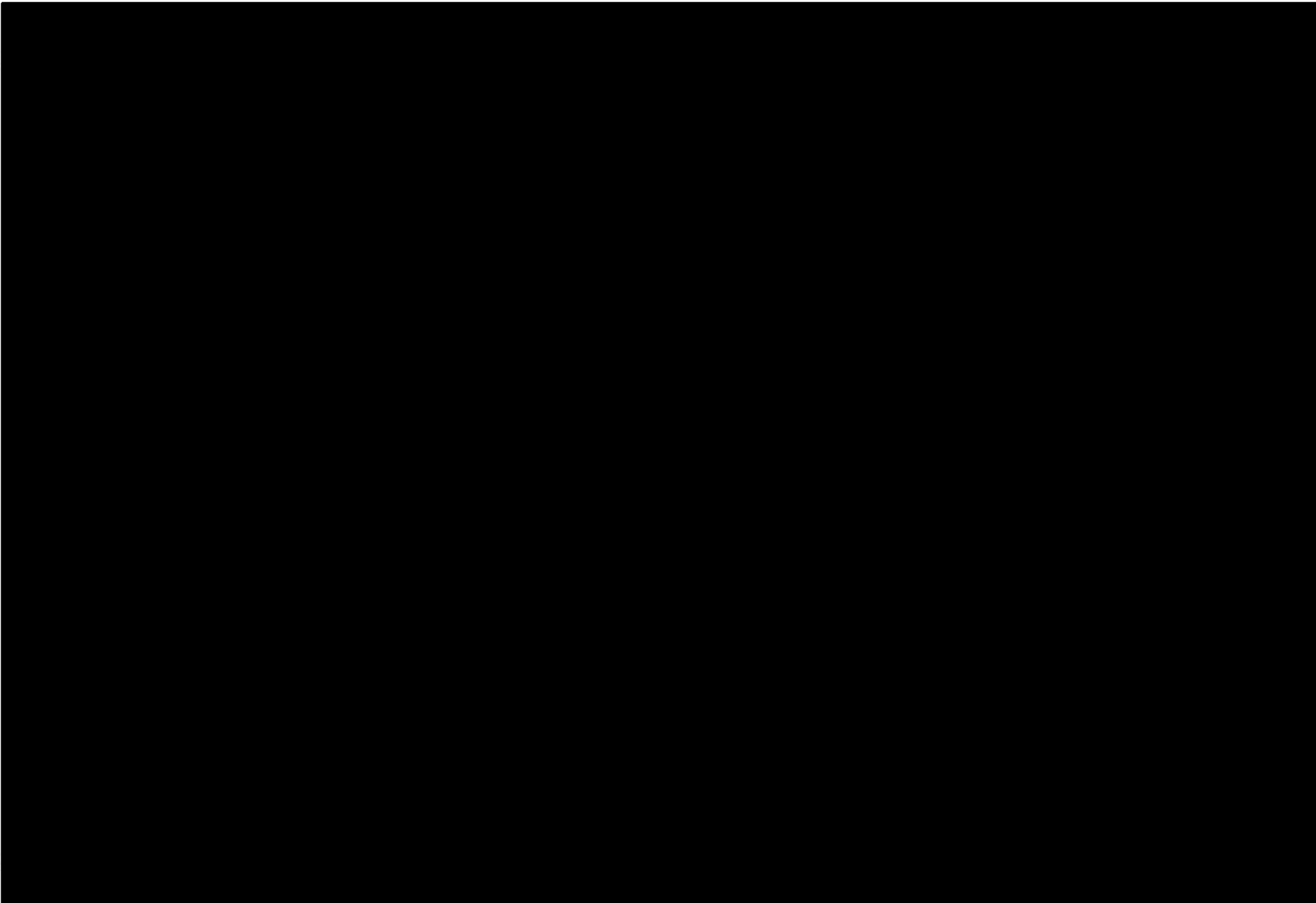


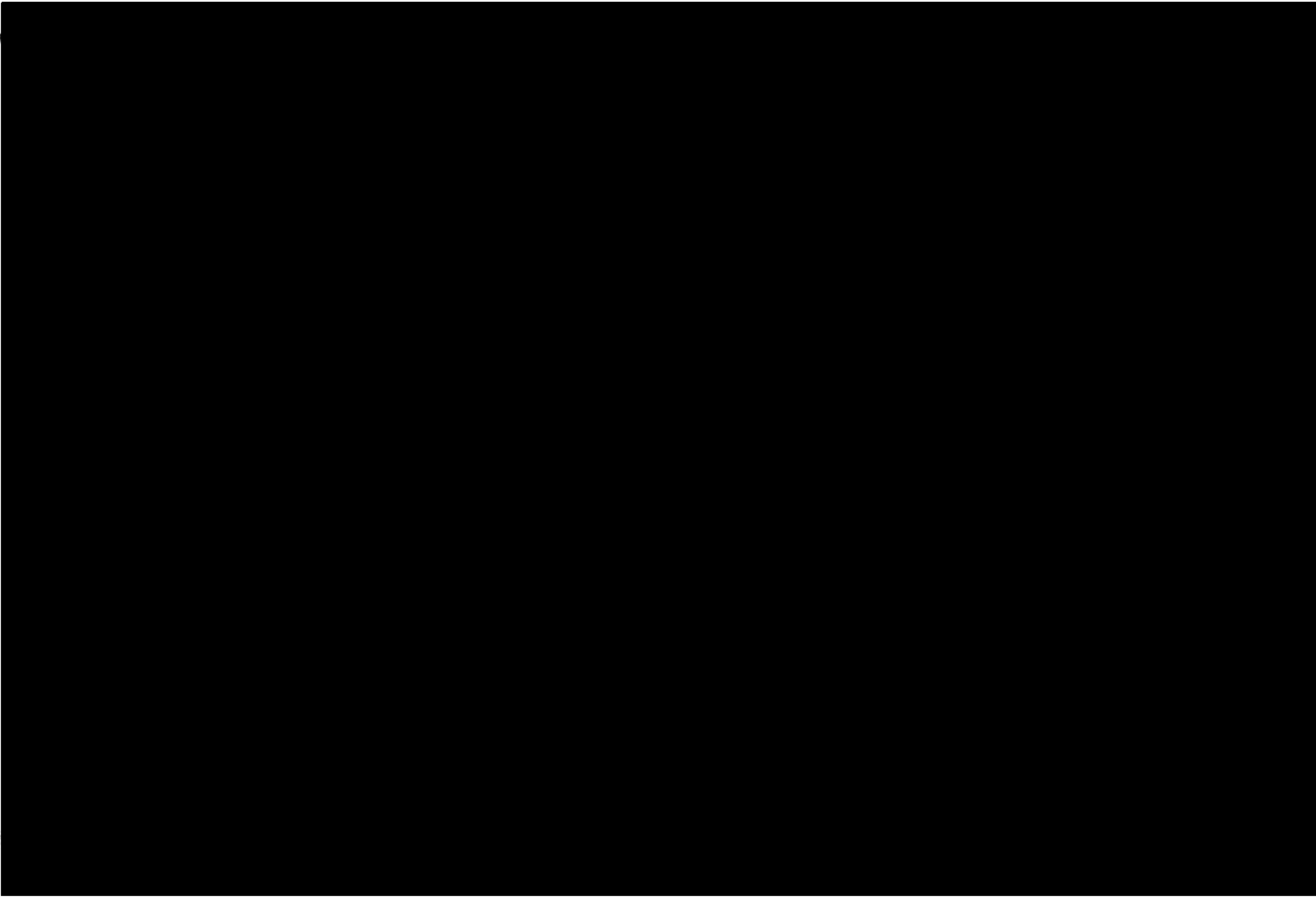


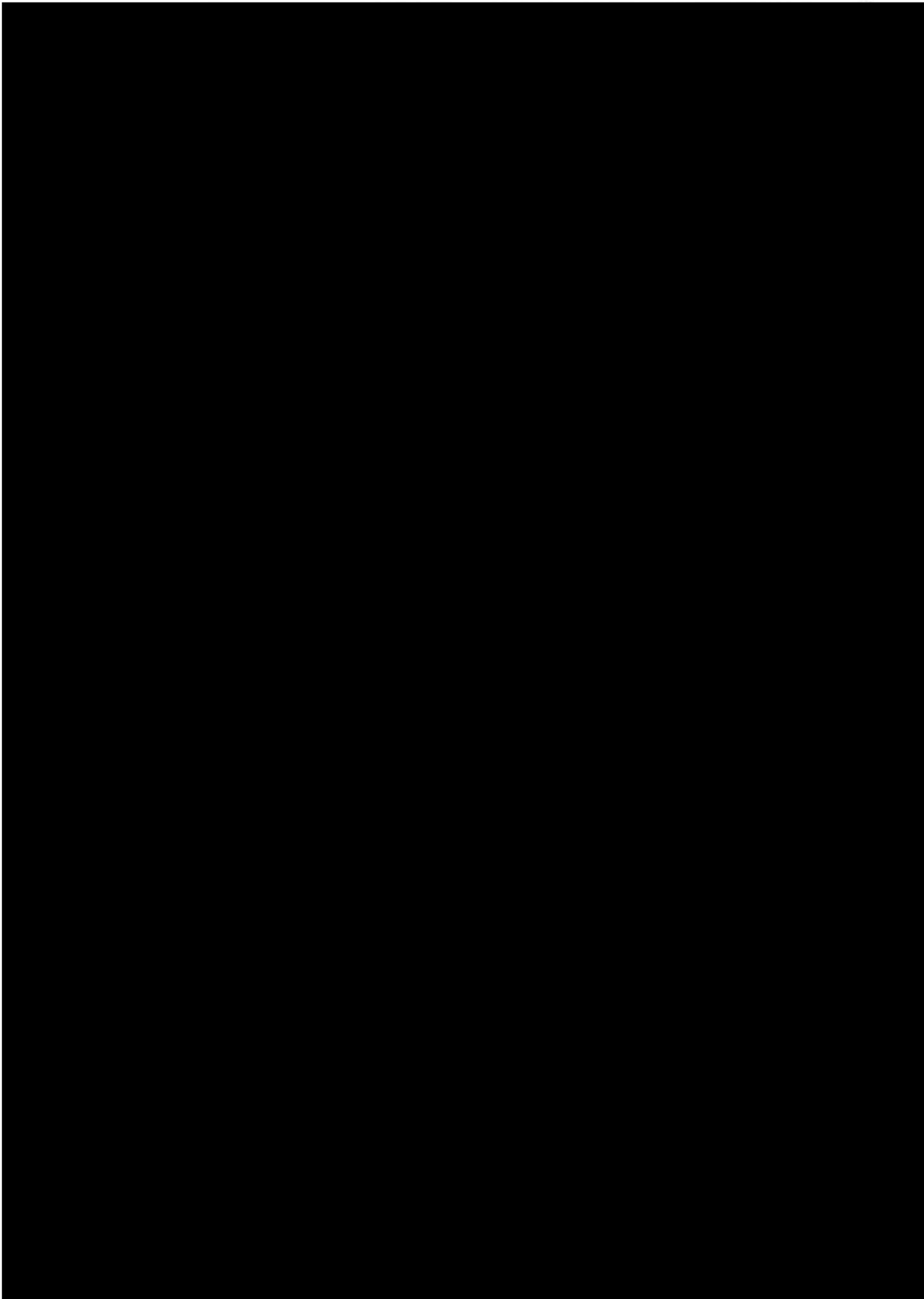




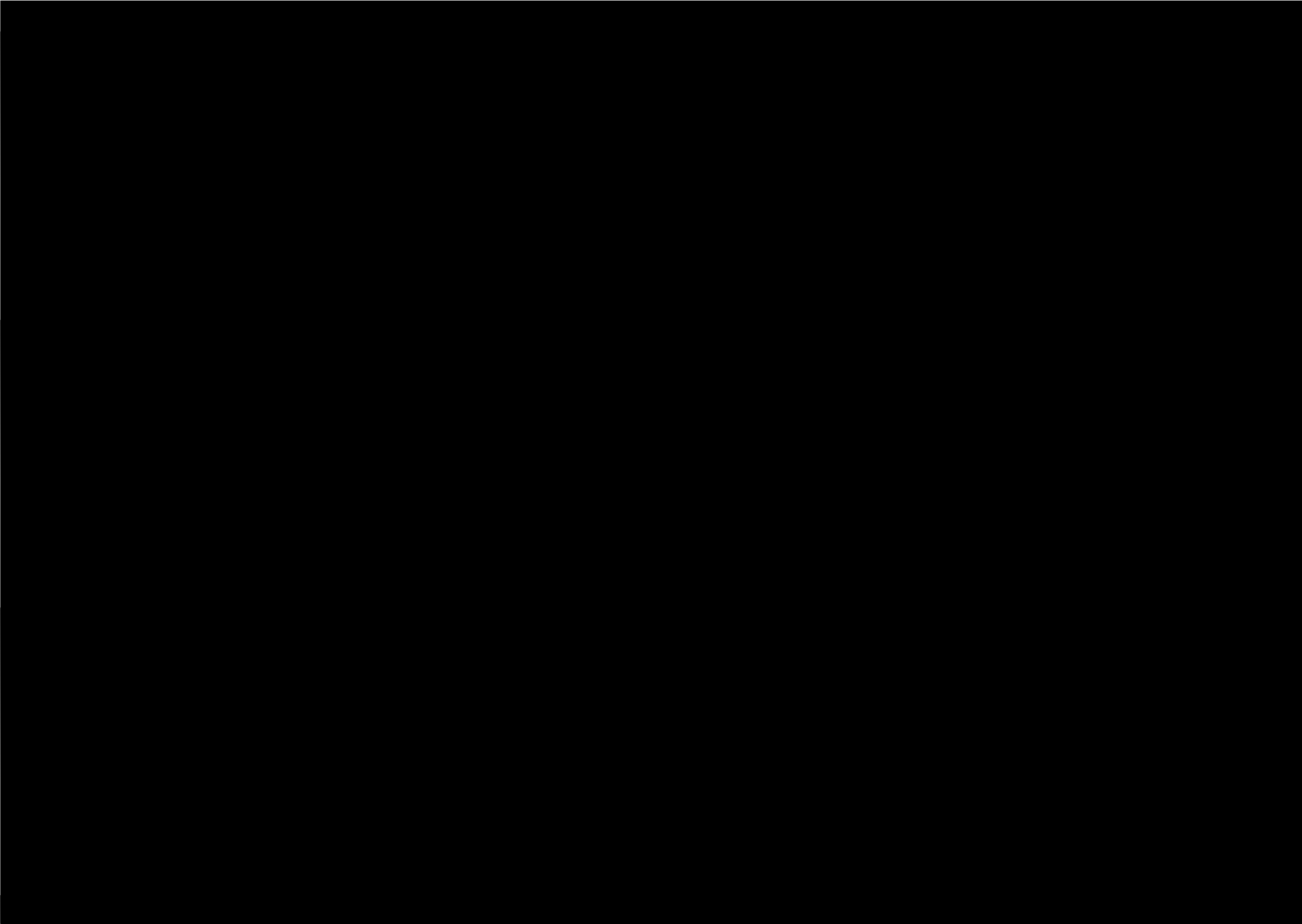


















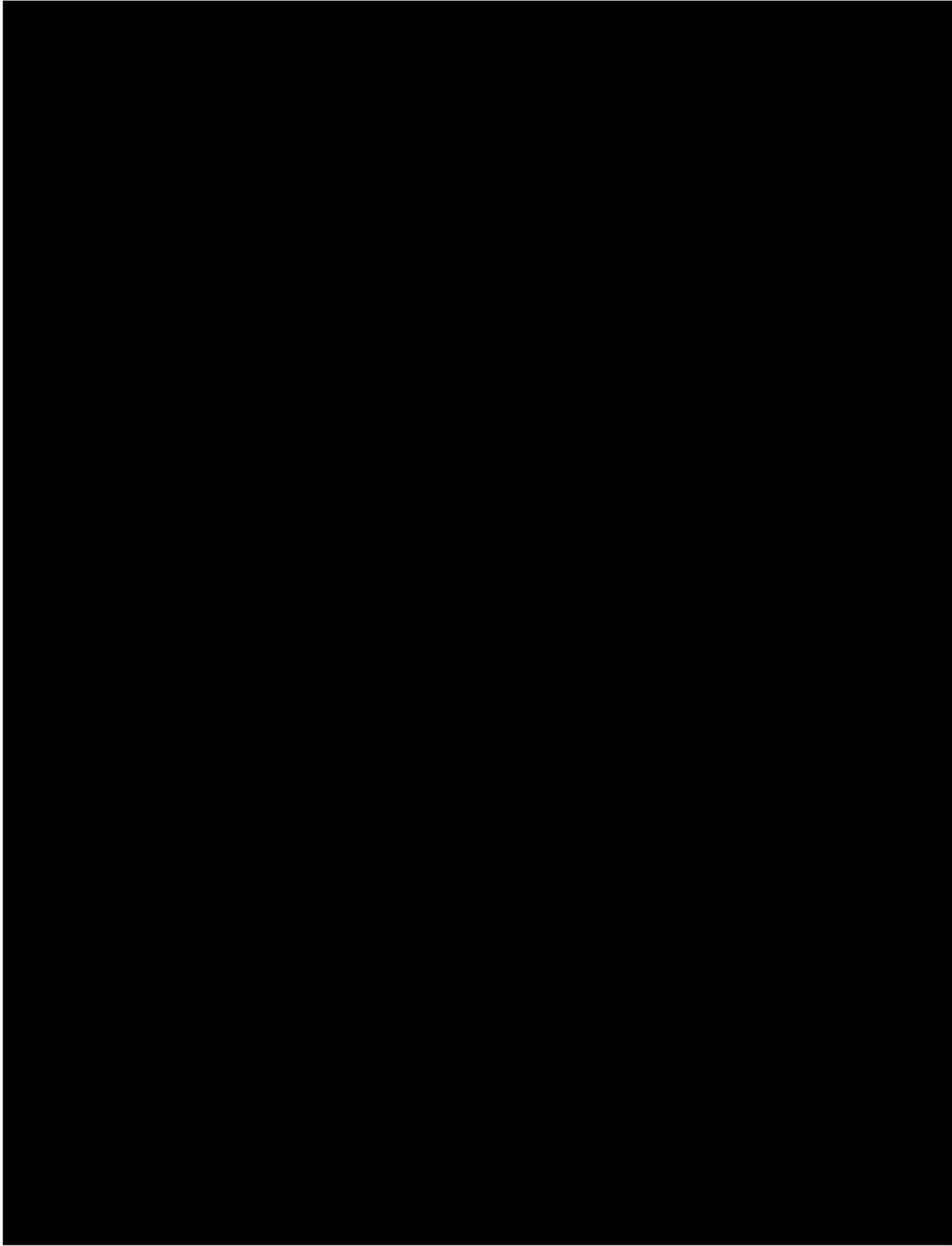
ANNEX B

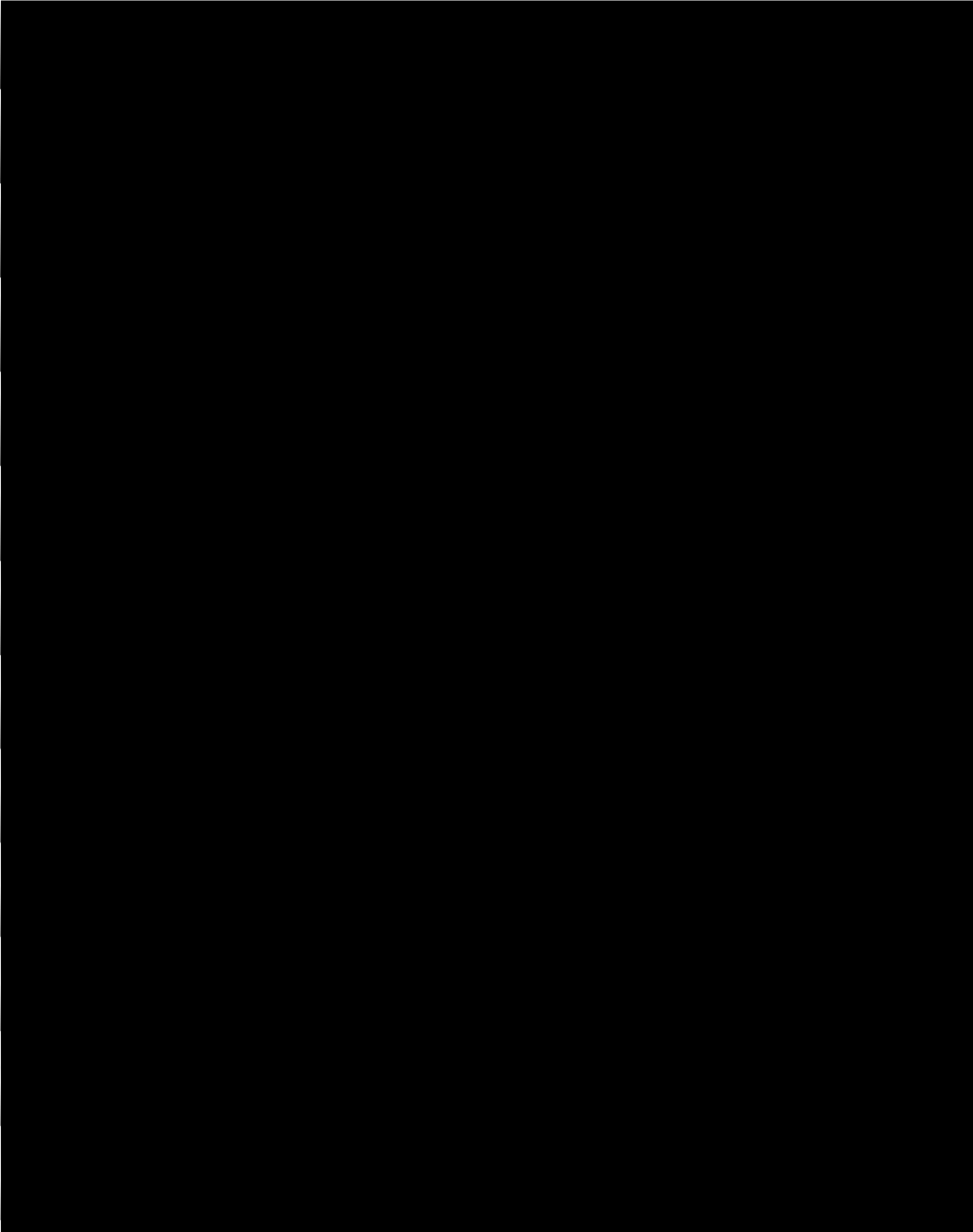
The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial statements. This includes not only sales and purchases but also expenses, income, and transfers between accounts.

Next, the document outlines the process of reconciling bank statements with the company's records. This involves comparing the bank's record of transactions with the company's ledger to identify any discrepancies. Common reasons for discrepancies include timing differences, such as deposits in transit or outstanding checks, and errors in recording or bank statements.

The document then provides a detailed explanation of the accounting cycle, which consists of eight steps: 1) identifying and recording transactions, 2) journalizing, 3) posting to the ledger, 4) determining account balances, 5) preparing a trial balance, 6) adjusting entries, 7) preparing financial statements, and 8) closing the books. Each step is described in detail, including the necessary journal entries and ledger postings.

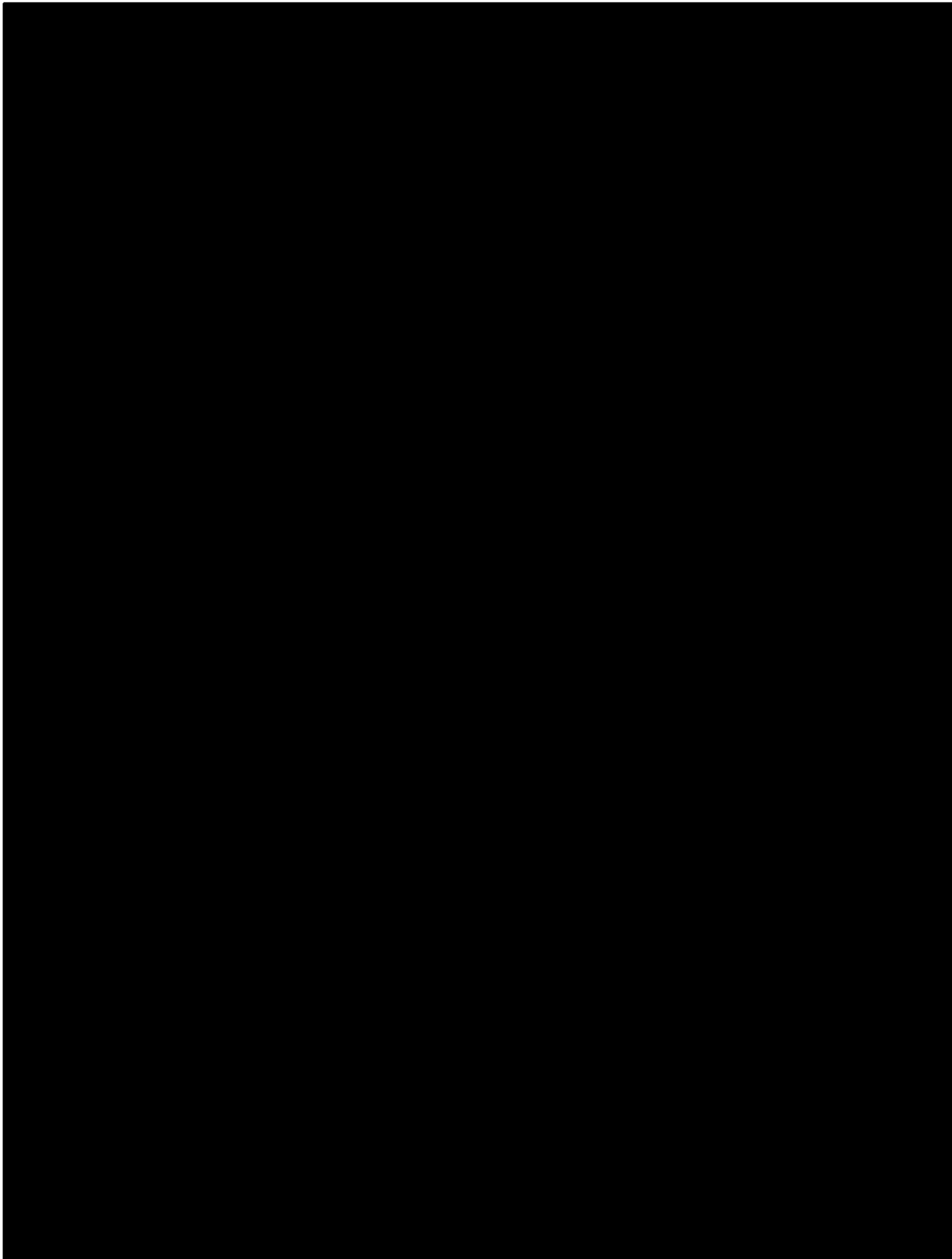
Finally, the document discusses the preparation of financial statements, including the balance sheet, income statement, and statement of cash flows. It explains how these statements are derived from the adjusted ledger accounts and provides examples of how to format and present them. The document also includes a section on the importance of internal controls and the role of the auditor in ensuring the accuracy and reliability of the financial information.

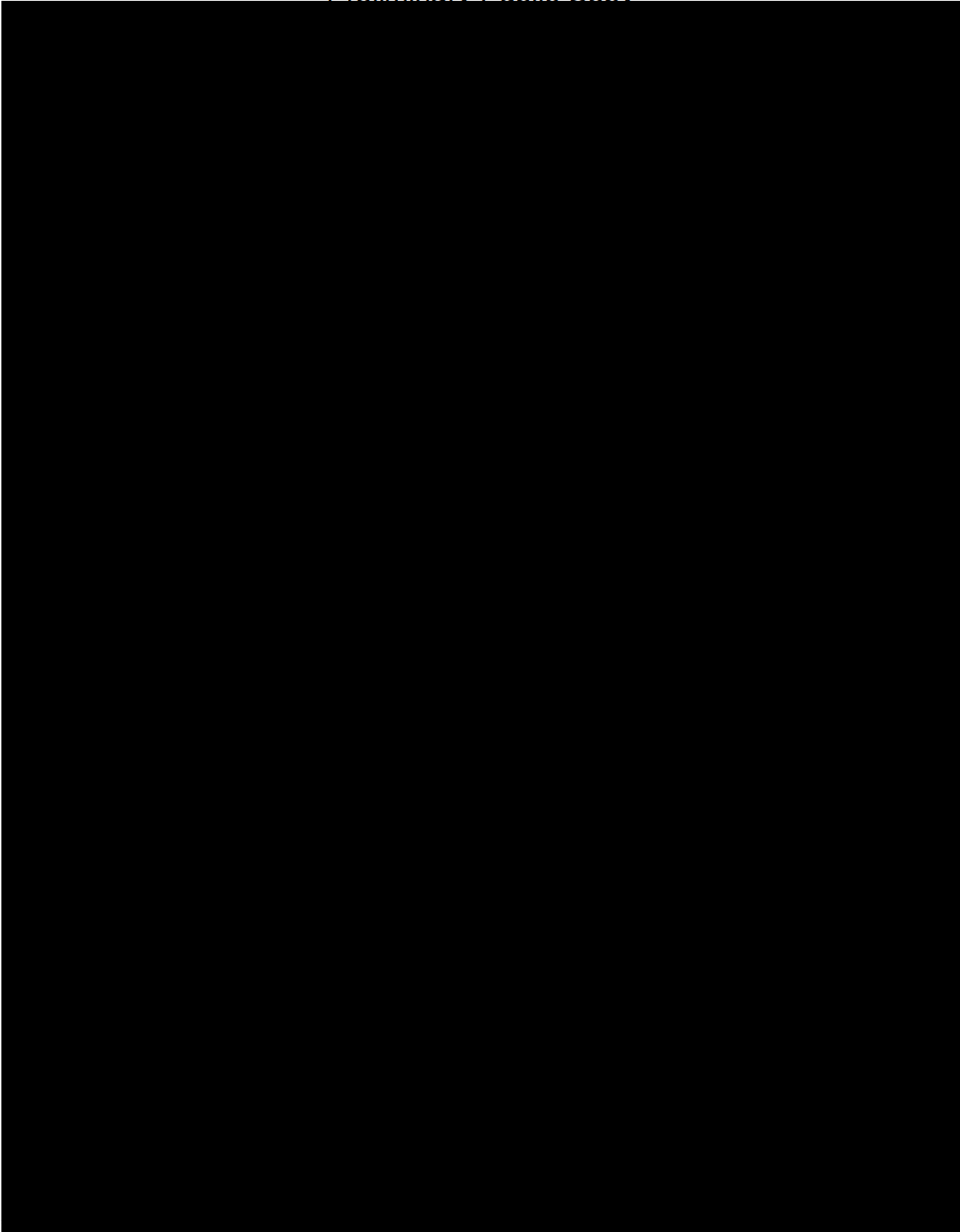


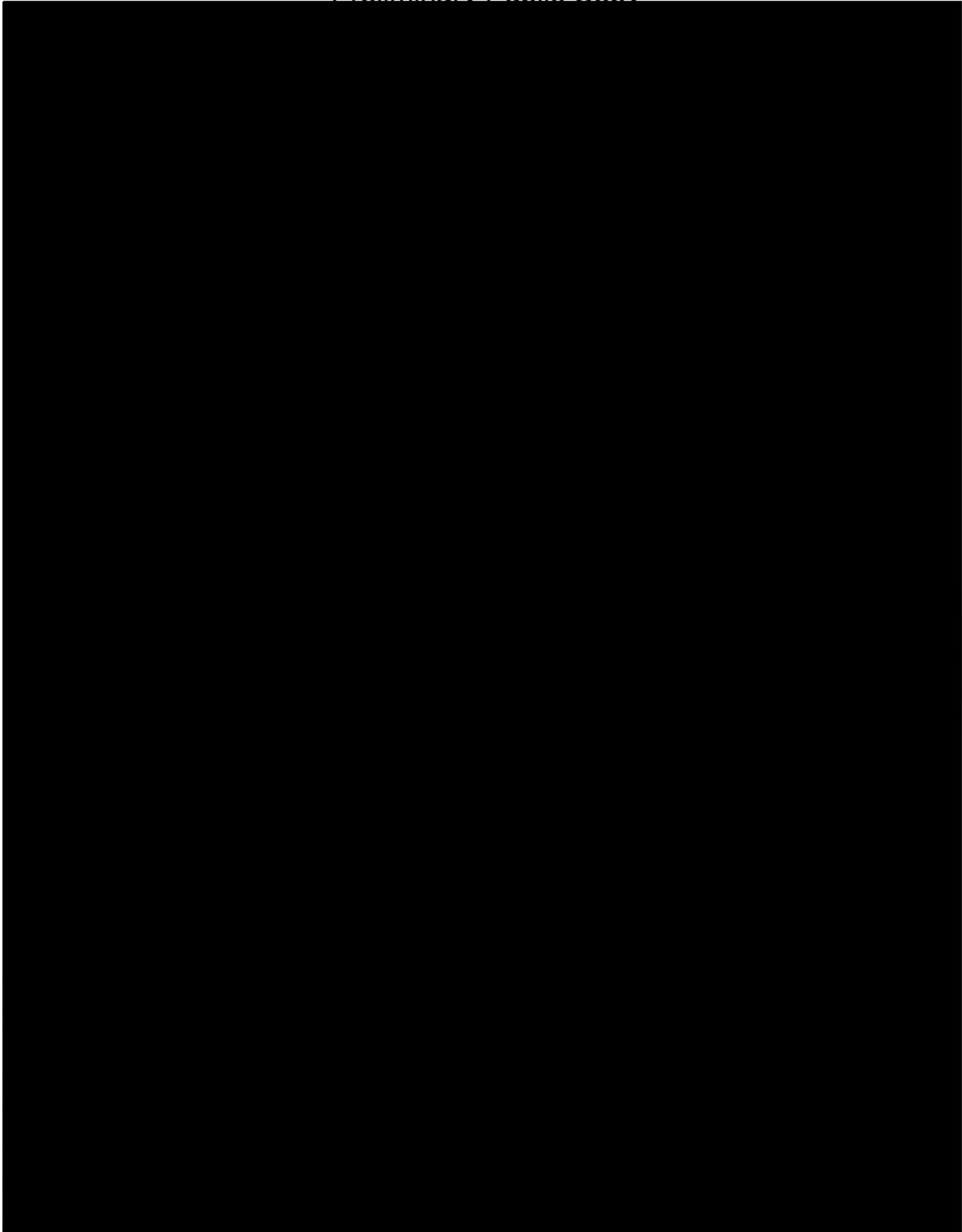


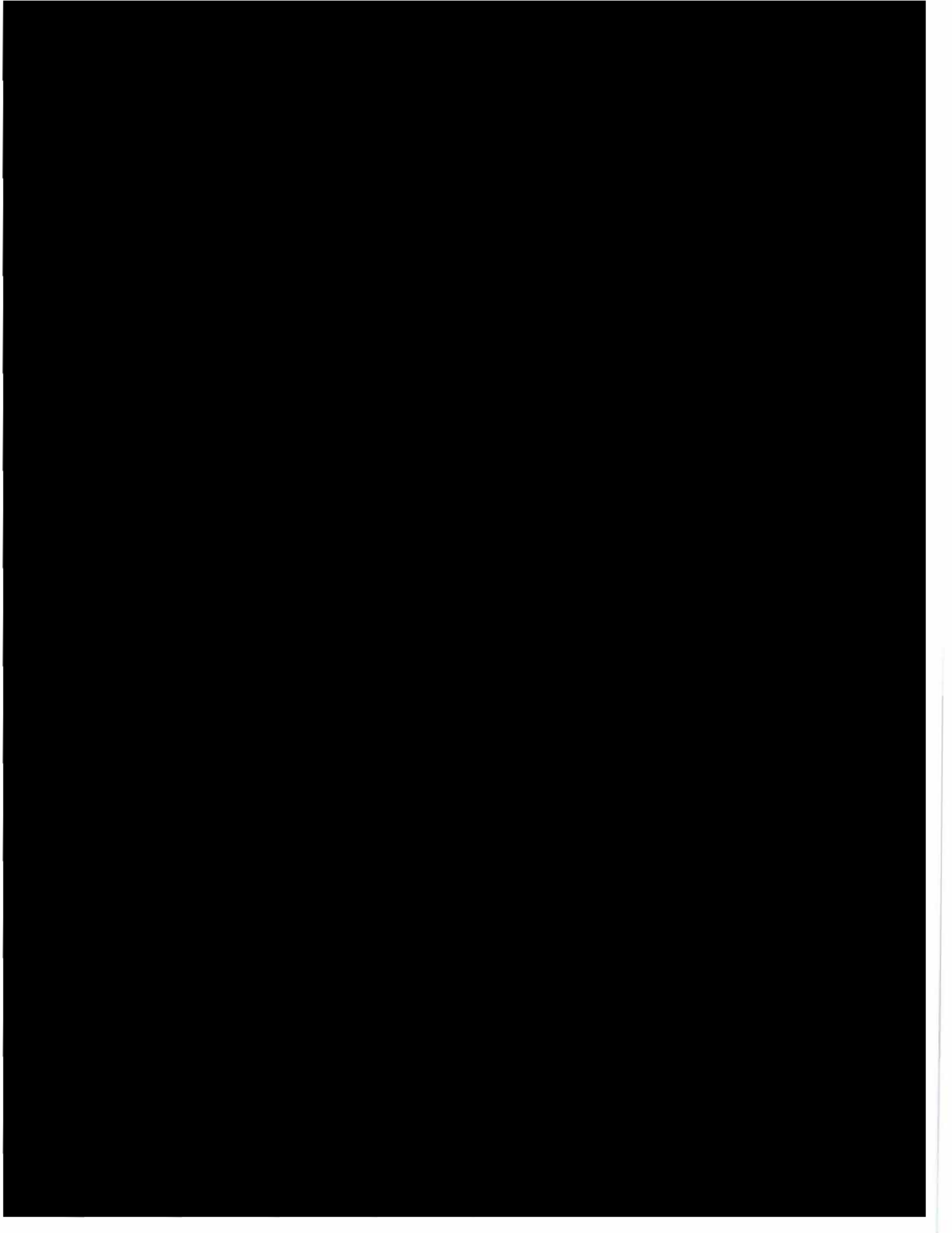


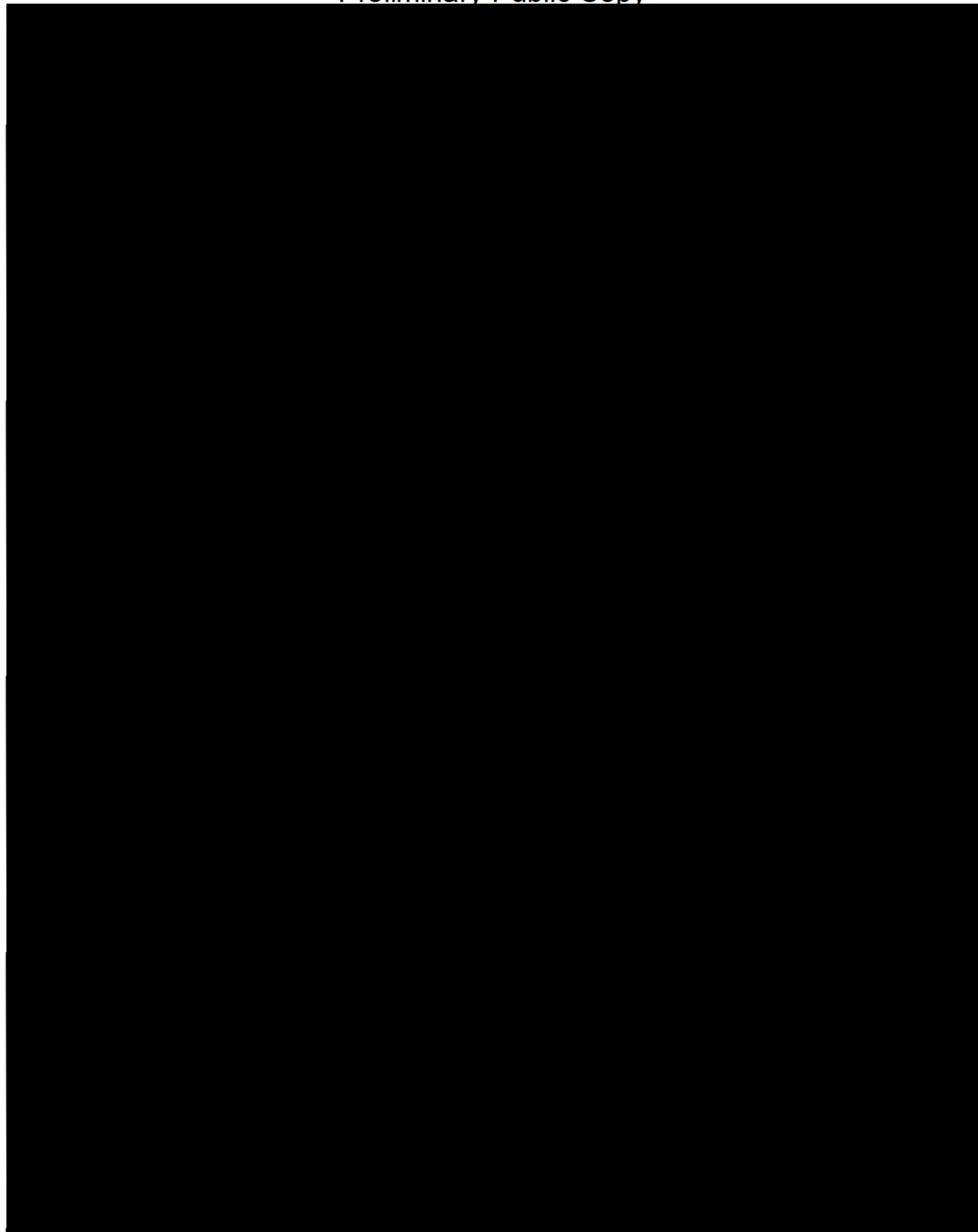












The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial statements. This includes not only sales and purchases but also expenses, income, and transfers between accounts.

Next, the document outlines the process of reconciling bank statements with the company's records. It stresses the need to identify and explain any discrepancies, such as outstanding checks or bank errors, to ensure that the books are in balance. Regular reconciliation is presented as a key practice for preventing errors and detecting fraud.

The document then moves on to discuss the preparation of financial statements. It details the steps involved in calculating net income, determining the cost of goods sold, and preparing the income statement, balance sheet, and statement of cash flows. It also touches upon the importance of providing clear and concise explanations for significant items in the statements.

Finally, the document concludes with a section on internal controls. It describes various measures that can be implemented to reduce the risk of errors and misstatements, such as segregation of duties, regular audits, and the use of standardized procedures. The goal is to create a robust system that ensures the reliability and accuracy of the financial reporting process.

...the first of these is the fact that the ...

...the second of these is the fact that the ...

...the third of these is the fact that the ...

...the fourth of these is the fact that the ...

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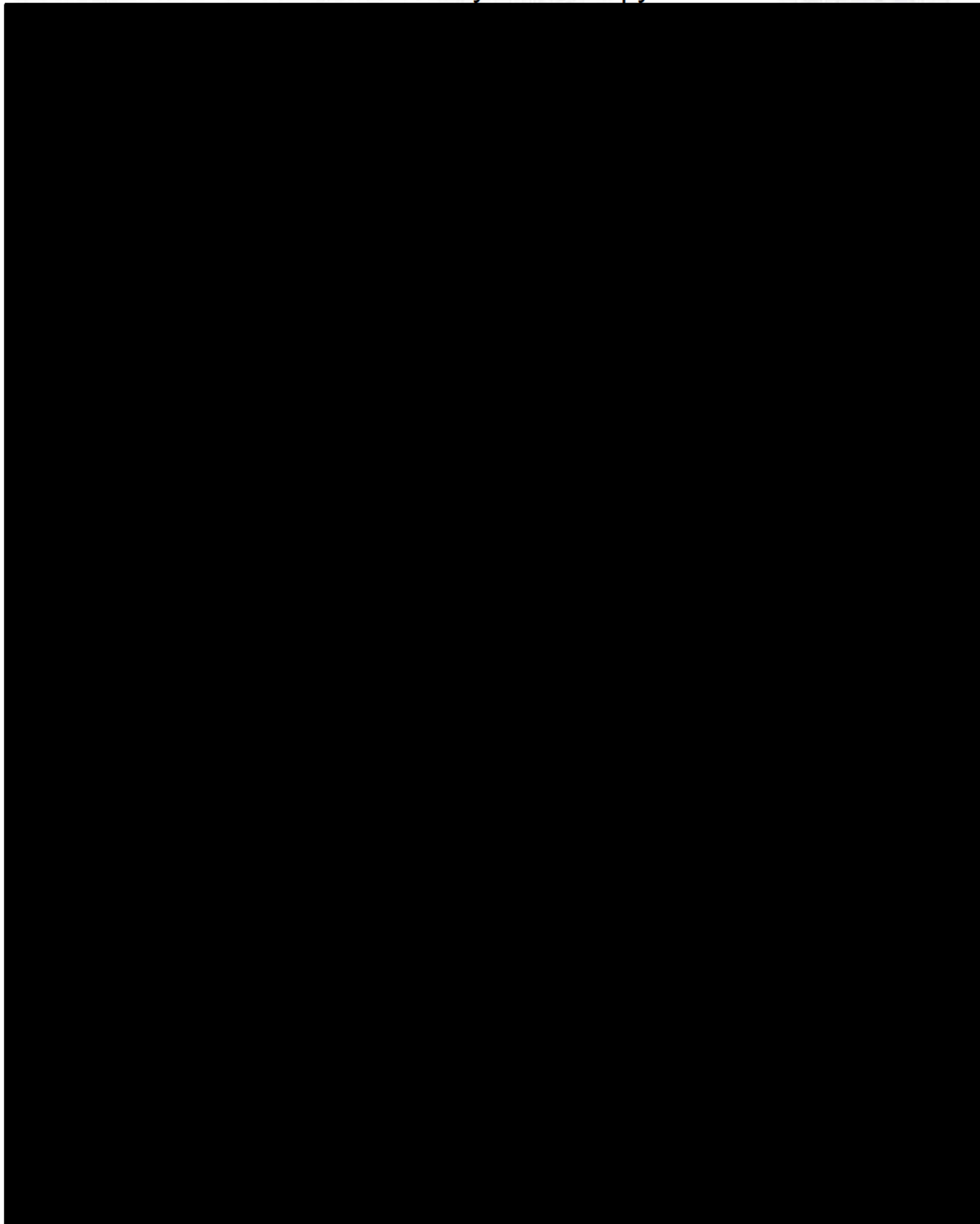
...the fifteenth of these is the fact that the ...

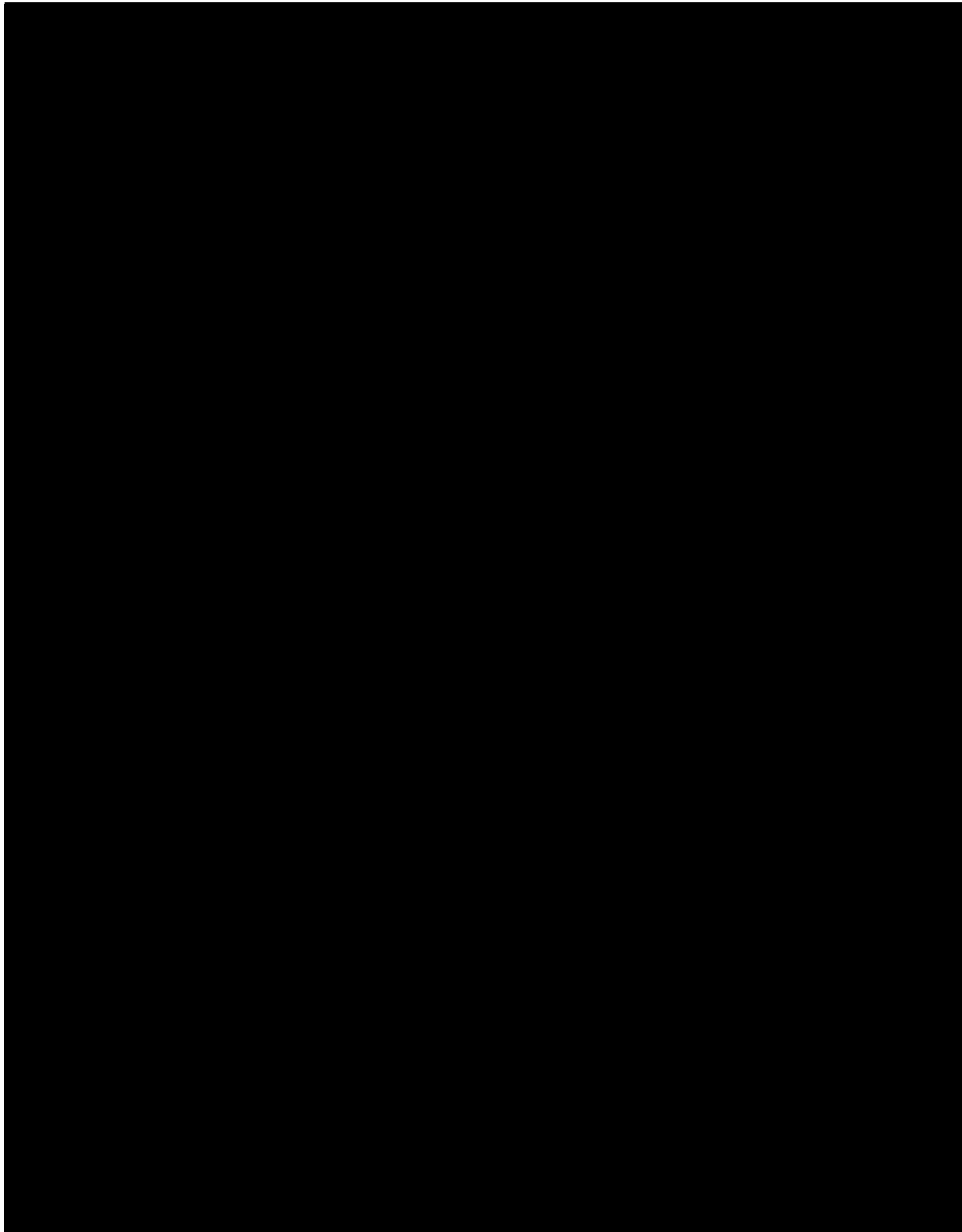
...the sixteenth of these is the fact that the ...

...the seventeenth of these is the fact that the ...

...the eighteenth of these is the fact that the ...







[The following text is completely obscured by a large black redaction box.]



























































































































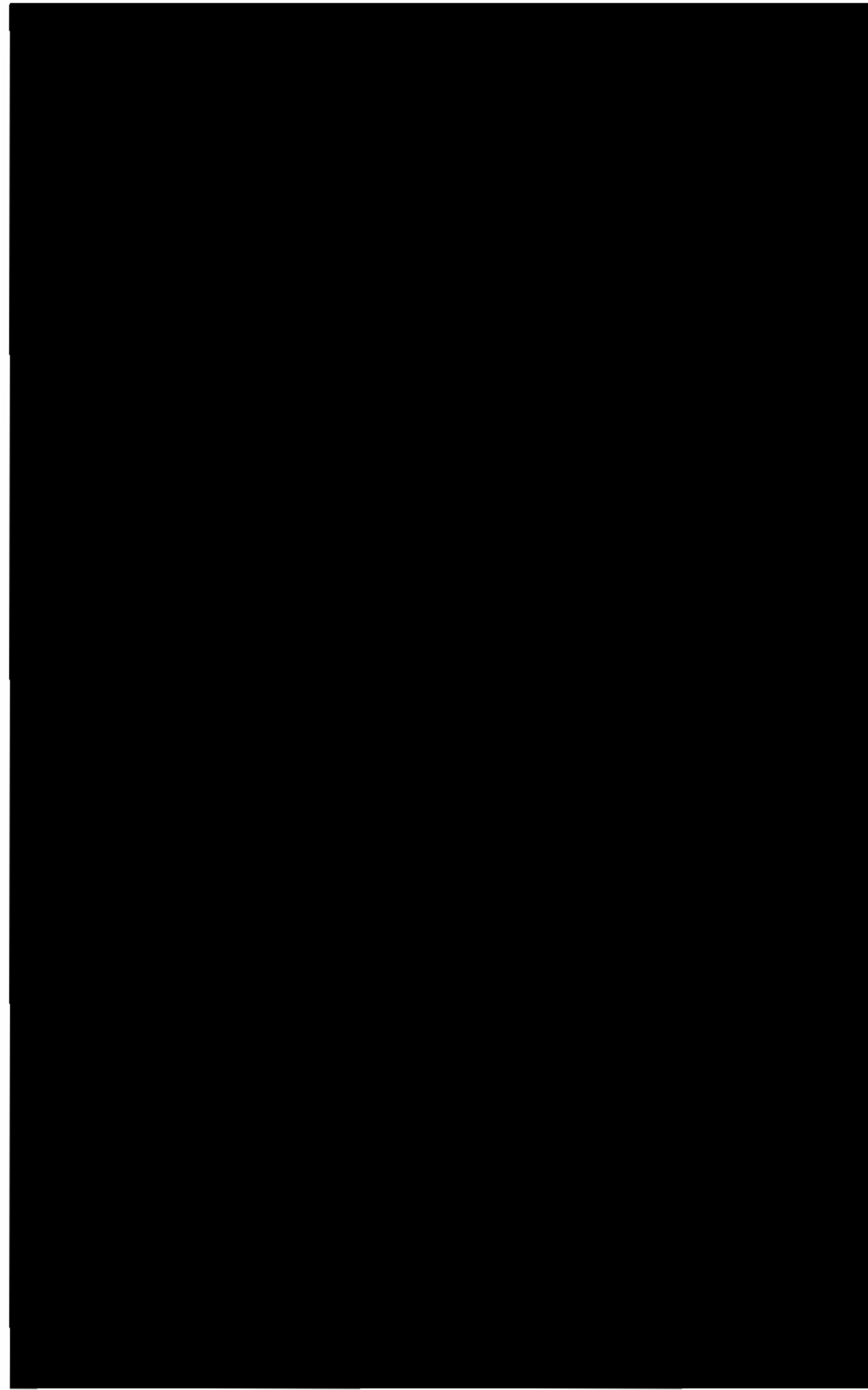


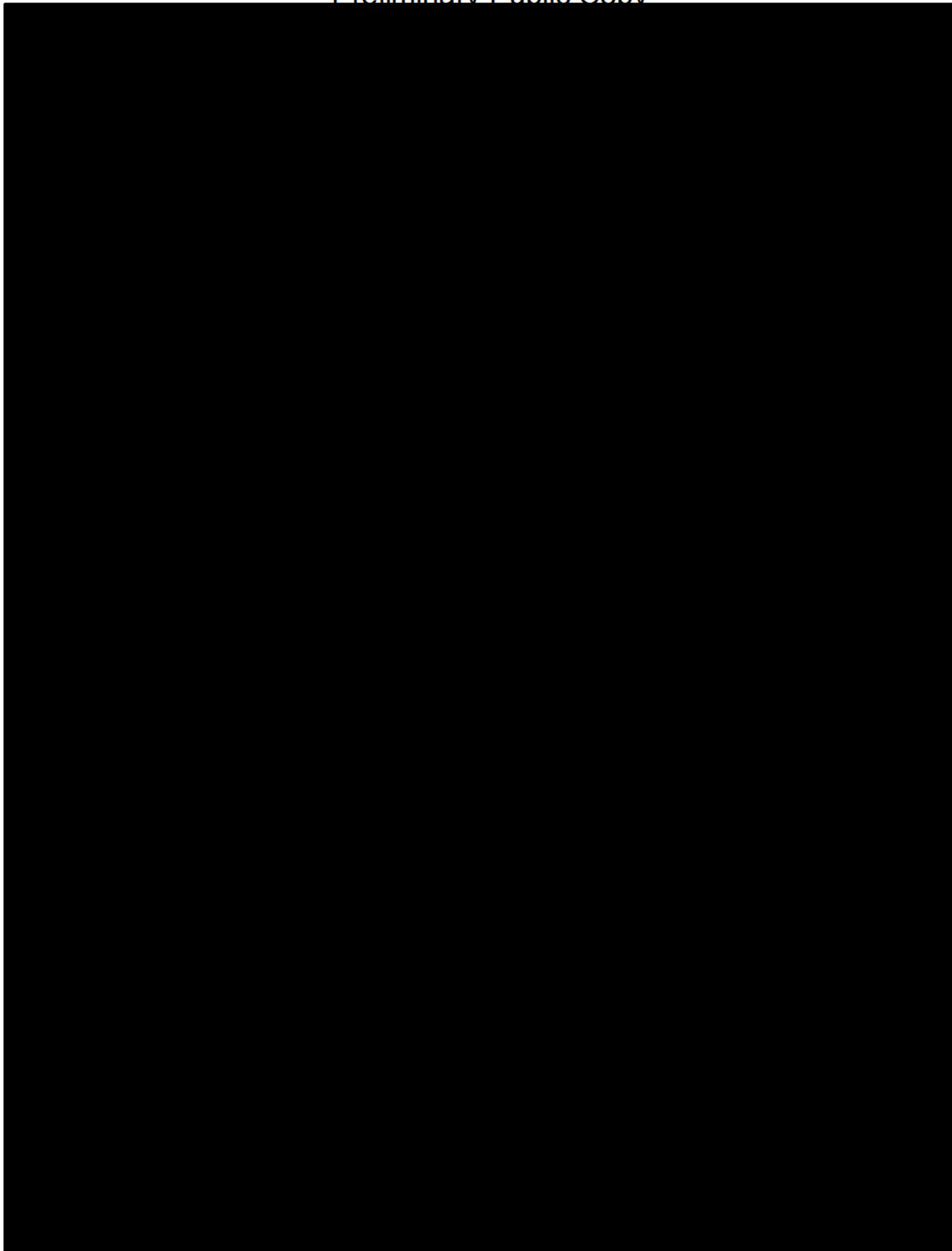




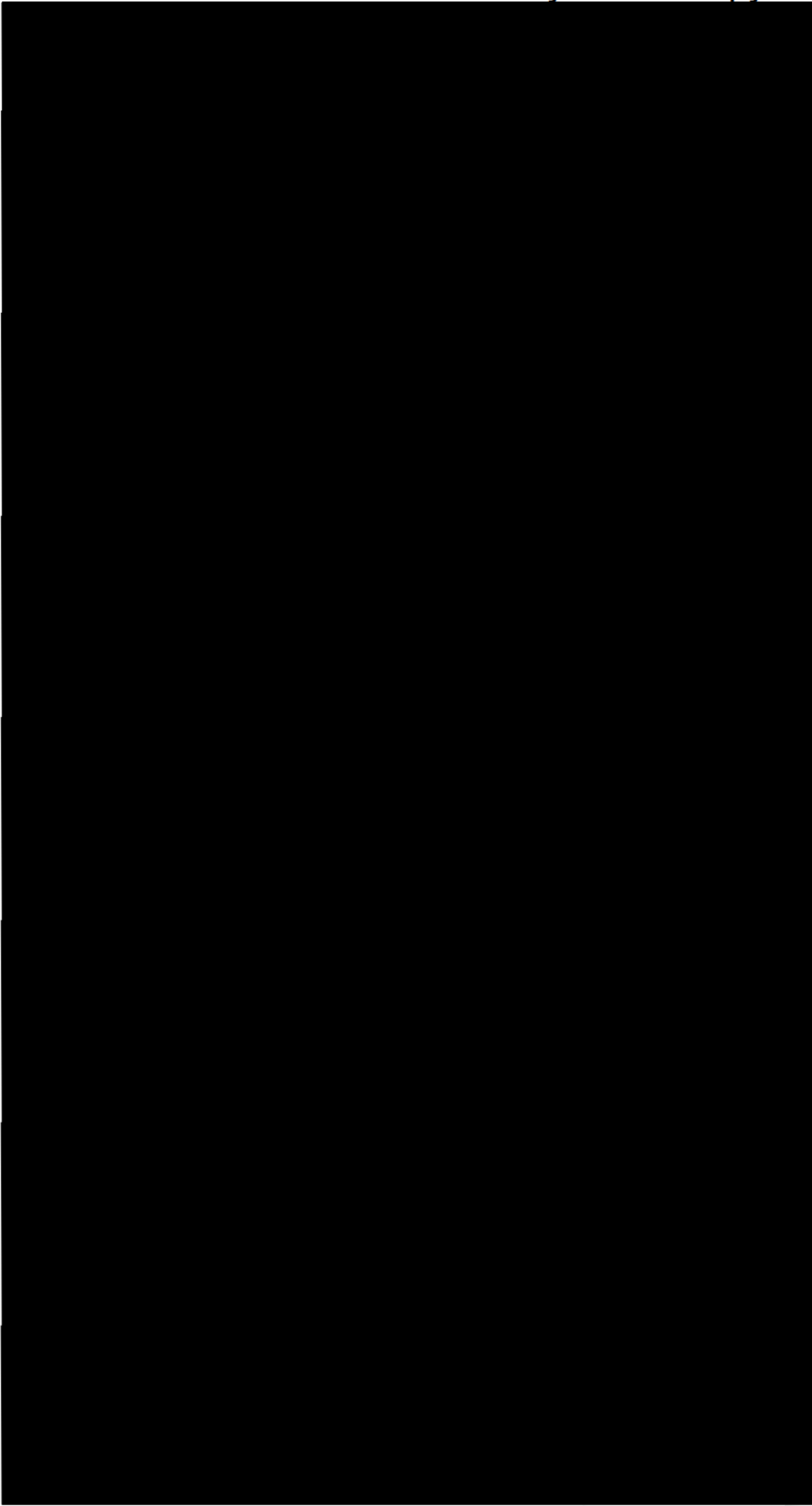






































































































































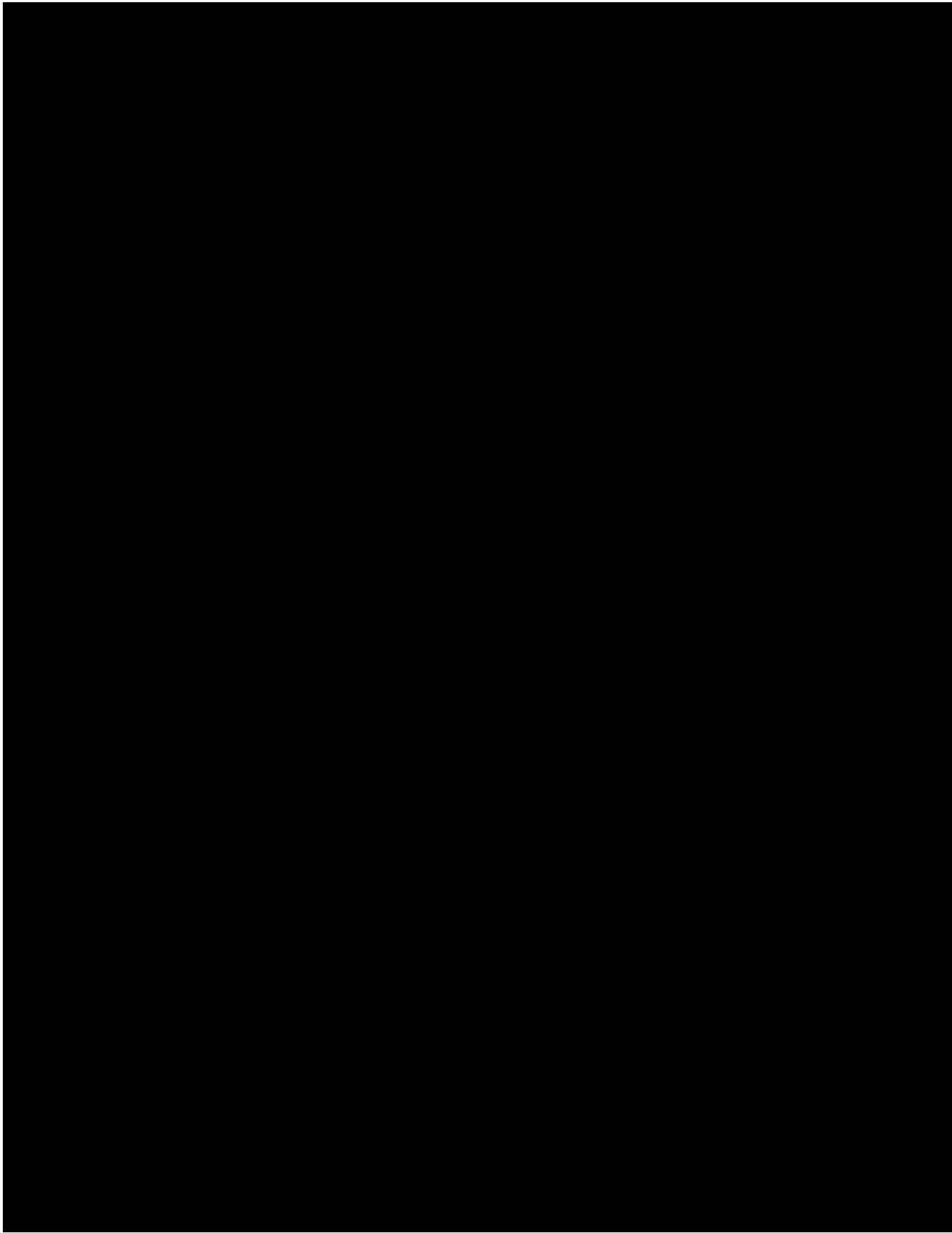




































































the 1990s, the number of people in the UK who are employed in the public sector has increased from 10.5 million to 12.5 million (12.5% of the population).

There are a number of reasons for this increase. One is that the public sector has become a more important part of the economy. Another is that the public sector has become more efficient. A third is that the public sector has become more attractive to workers. A fourth is that the public sector has become more diverse.

The public sector has become a more important part of the economy. This is because the public sector has become more efficient.

The public sector has become more attractive to workers. This is because the public sector has become more diverse.

The public sector has become more diverse. This is because the public sector has become more efficient.

The public sector has become more efficient. This is because the public sector has become more attractive to workers.

The public sector has become more attractive to workers. This is because the public sector has become more diverse.

The public sector has become more diverse. This is because the public sector has become more efficient.

The public sector has become more efficient. This is because the public sector has become more attractive to workers.

The public sector has become more attractive to workers. This is because the public sector has become more diverse.

The public sector has become more diverse. This is because the public sector has become more efficient.

The public sector has become more efficient. This is because the public sector has become more attractive to workers.

The public sector has become more attractive to workers. This is because the public sector has become more diverse.

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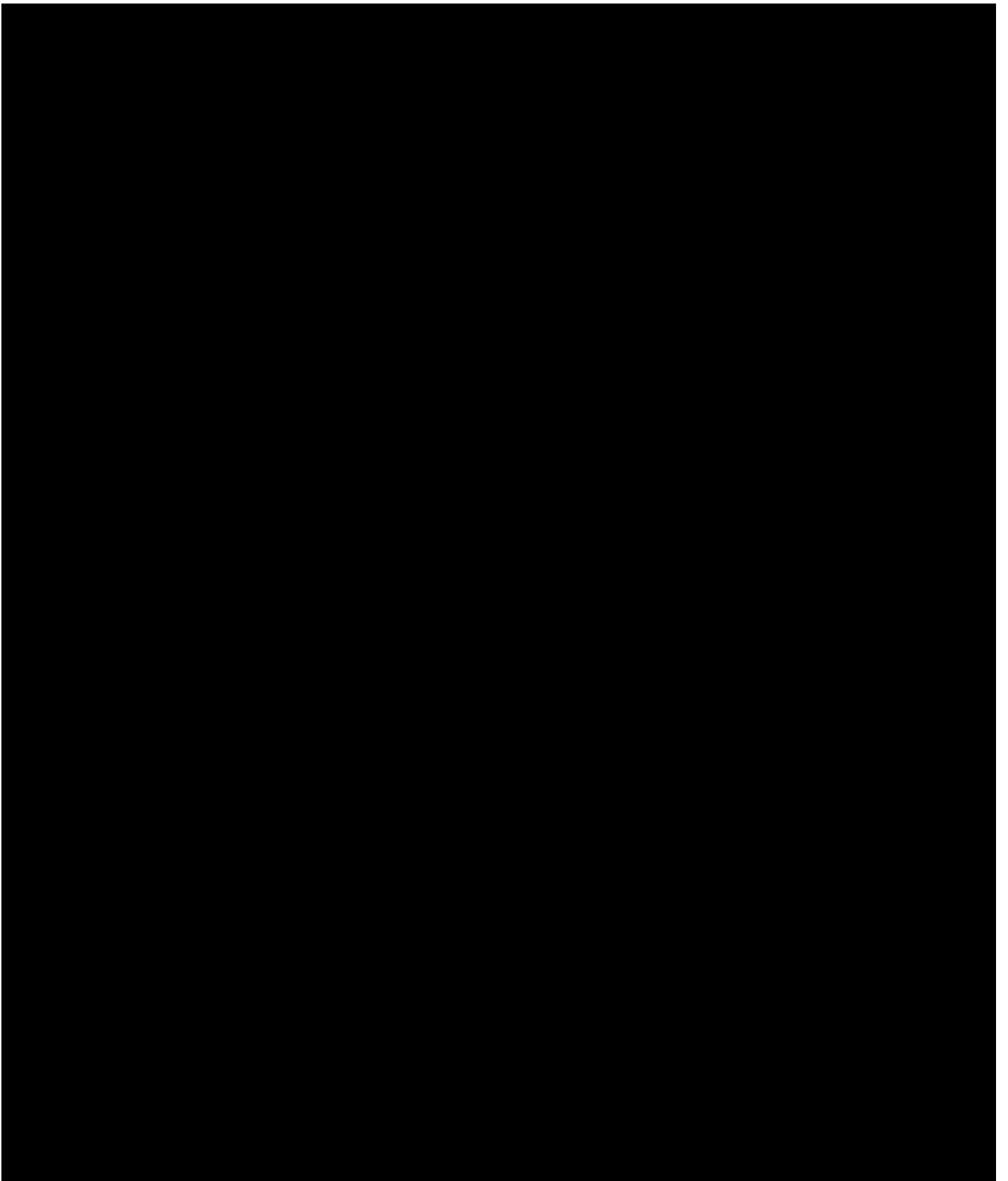
The public sector has become more attractive to workers. This is because the public sector has become more diverse.

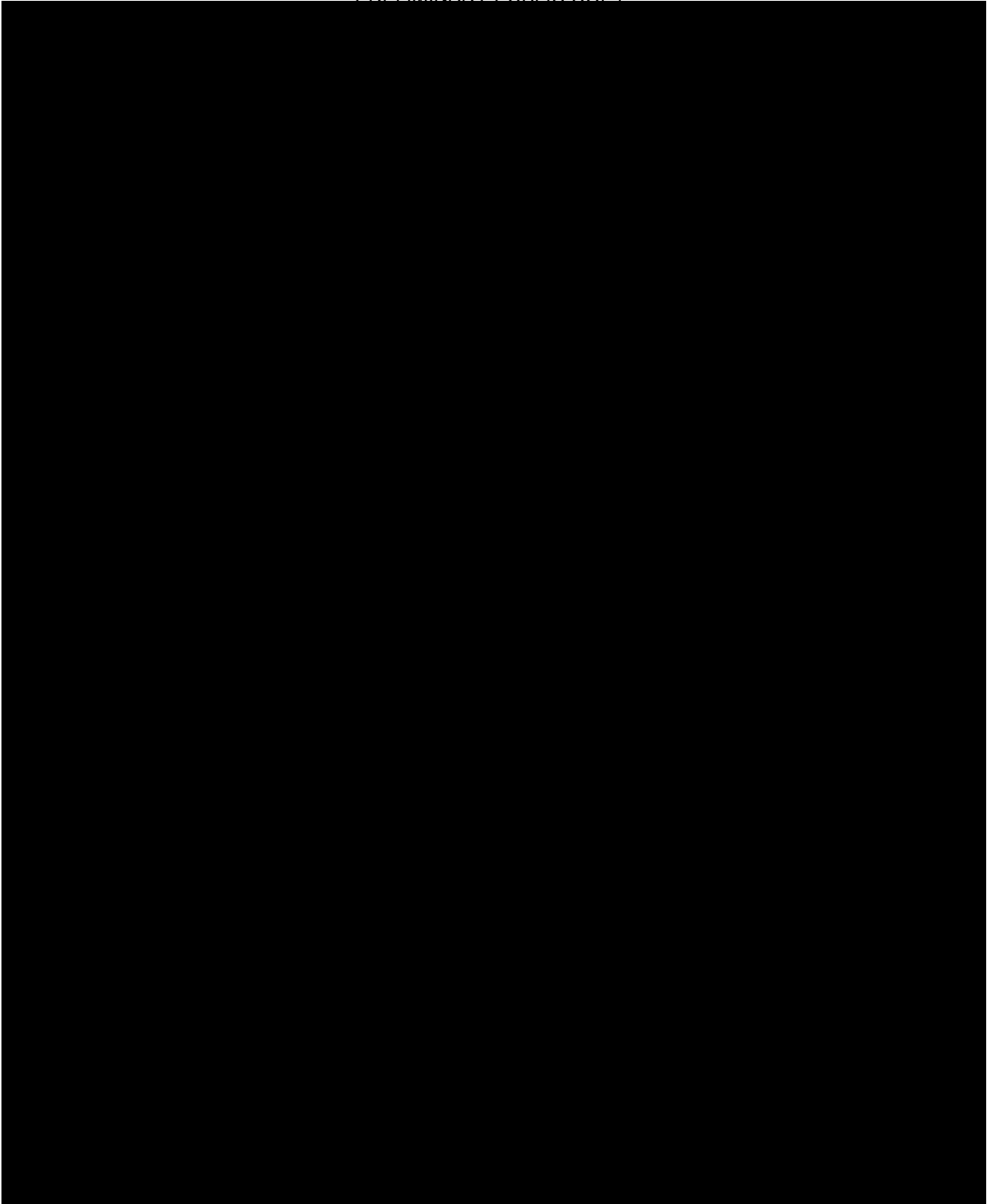
The public sector has become more diverse. This is because the public sector has become more efficient.

The public sector has become more efficient. This is because the public sector has become more attractive to workers.

# ATTACHMENT 8







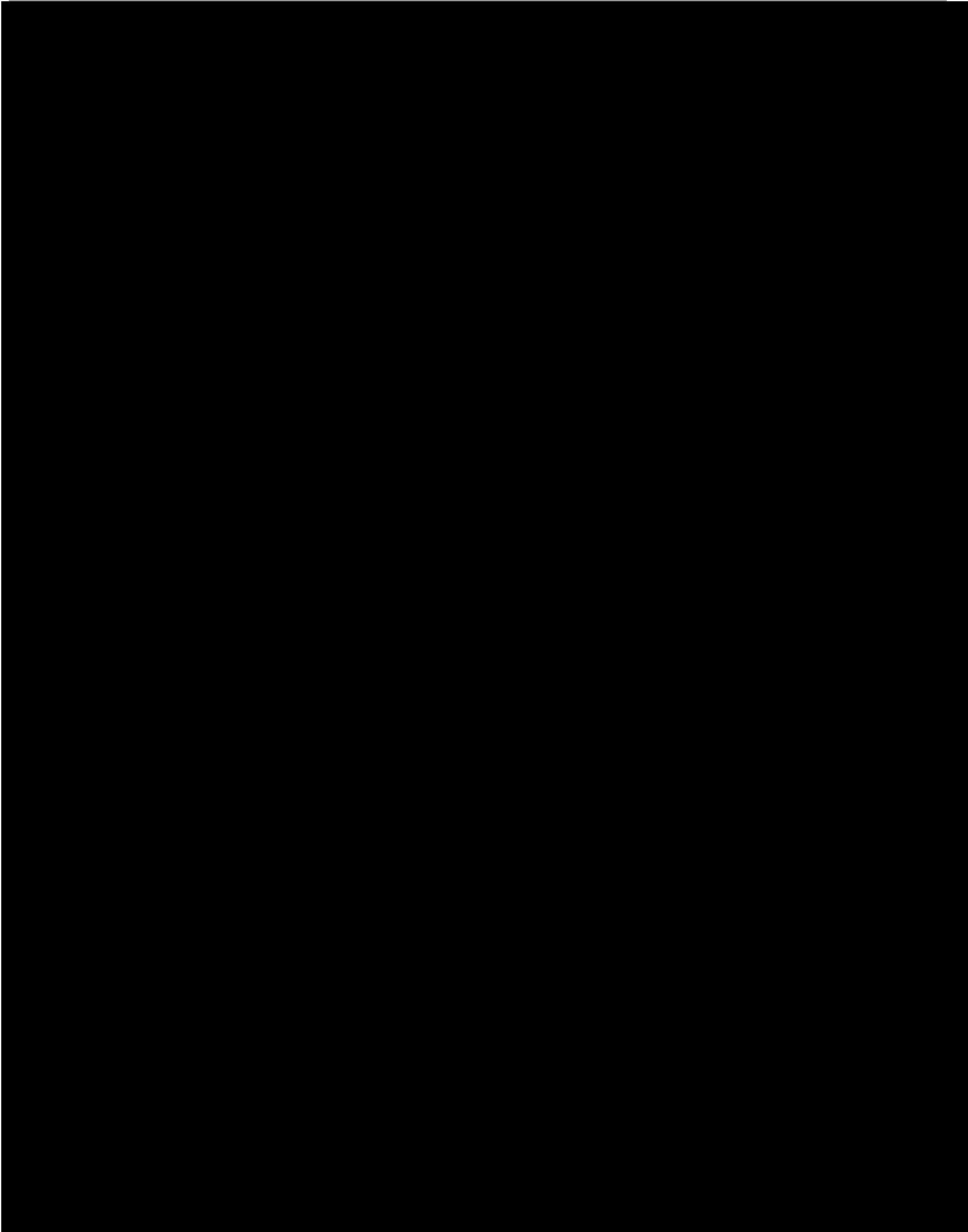
ANNEX A



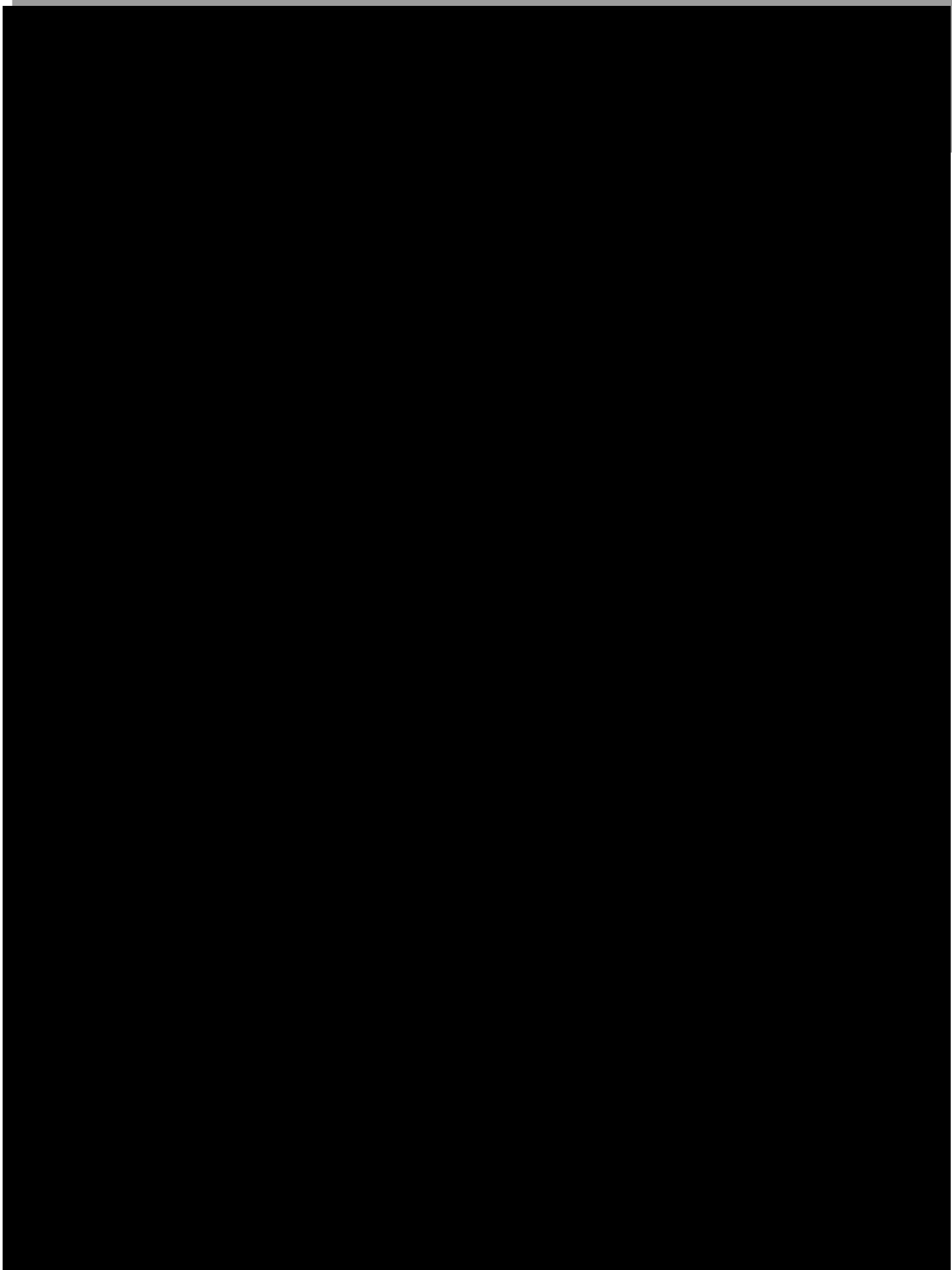


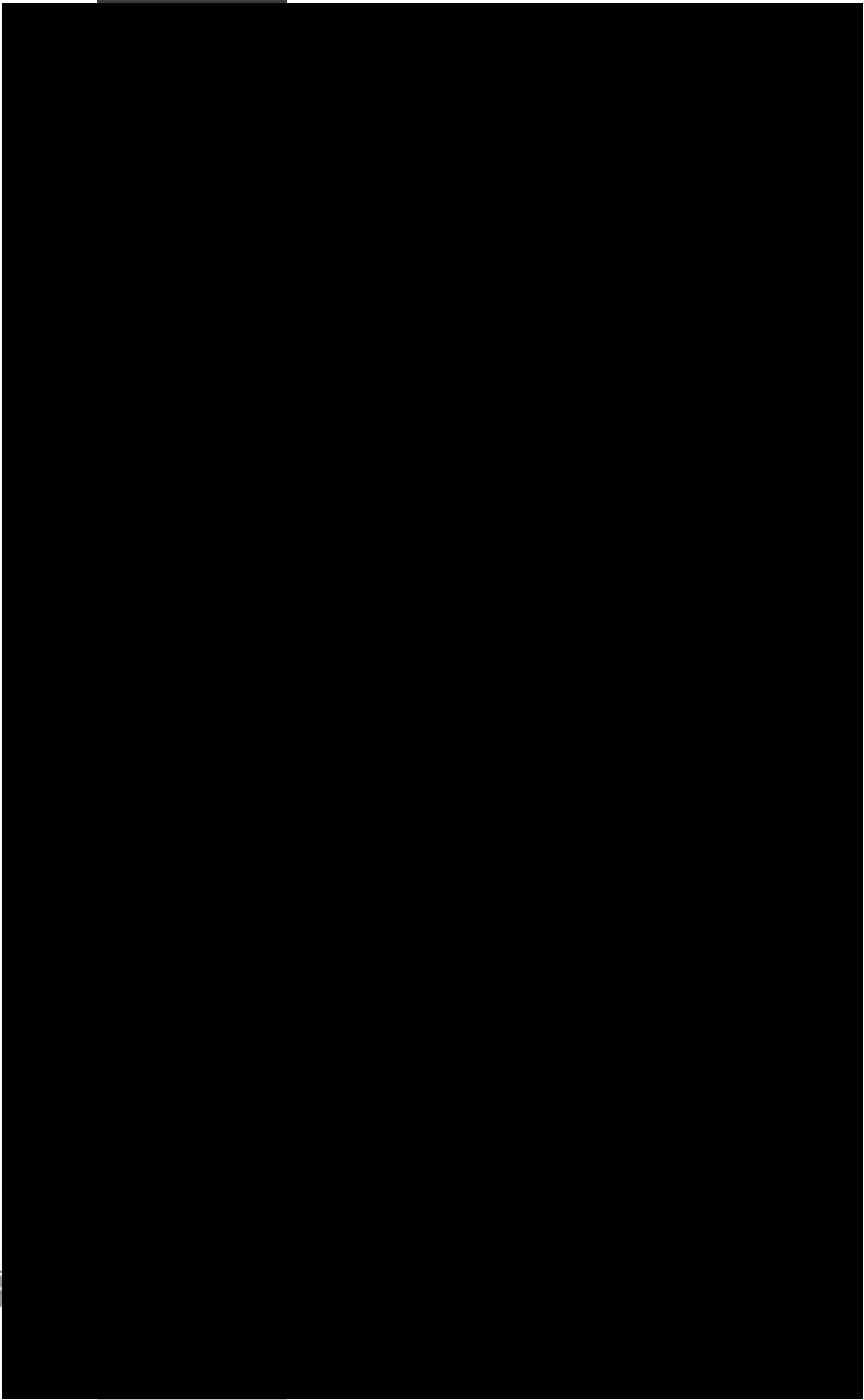


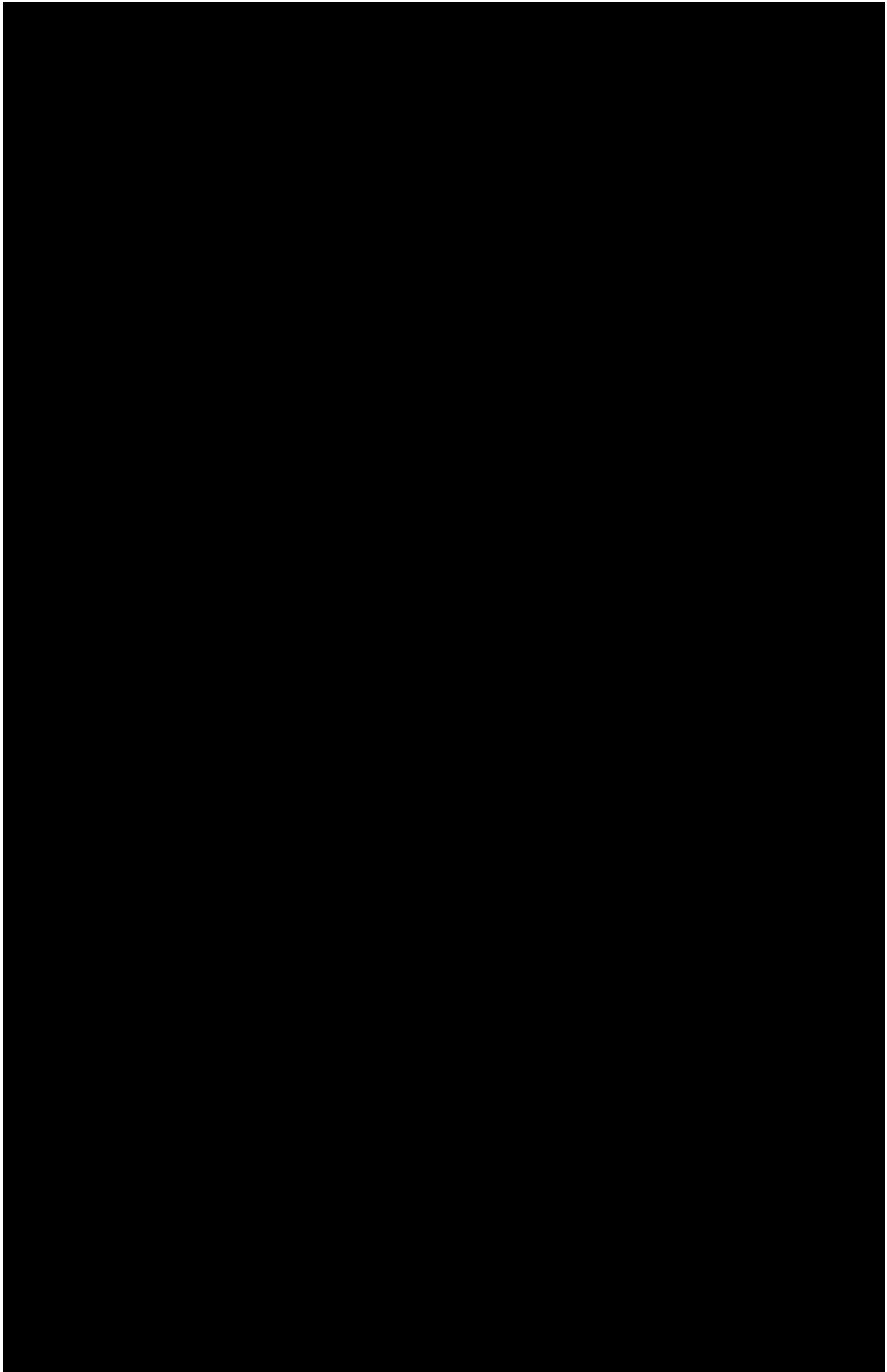


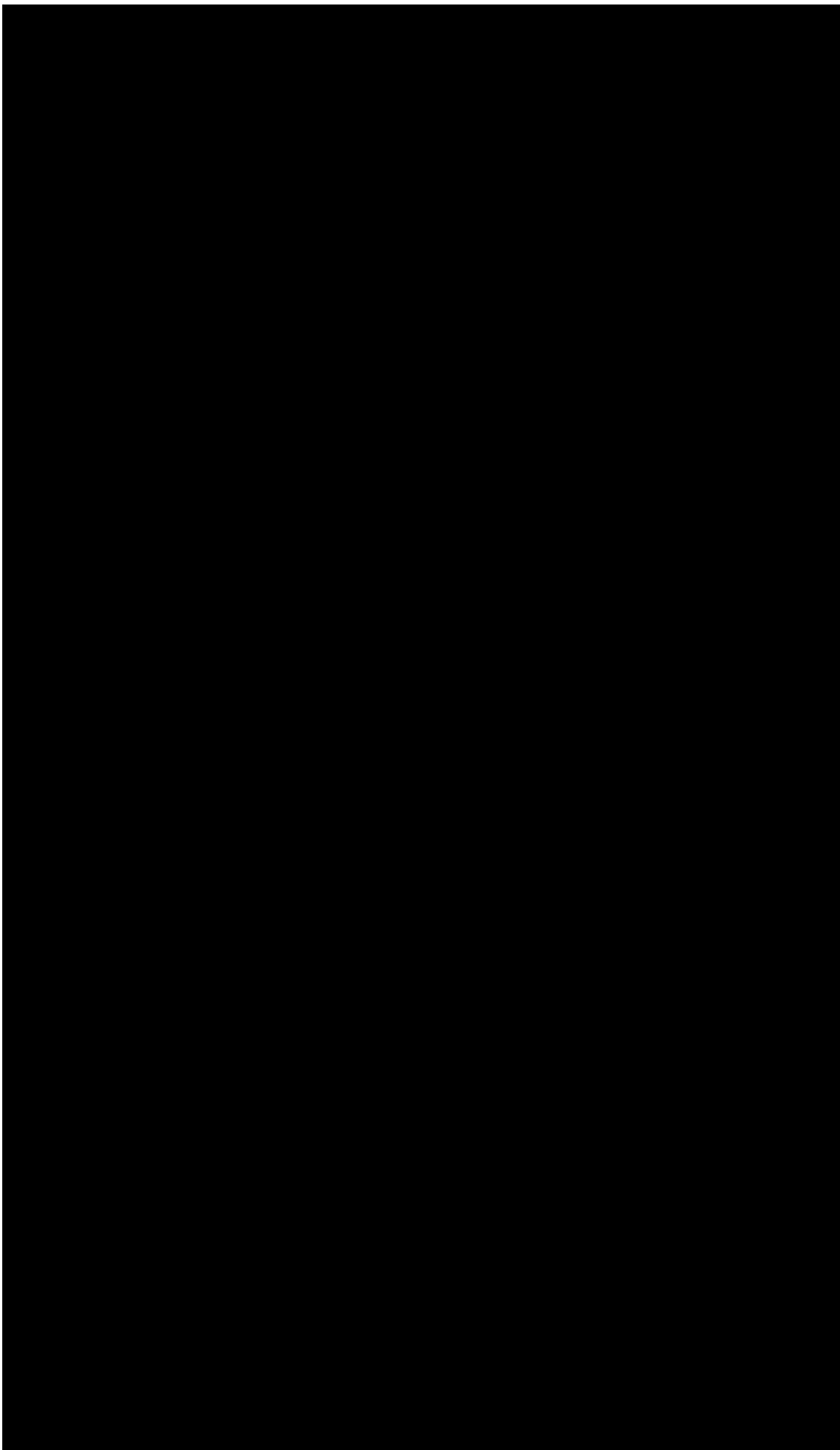


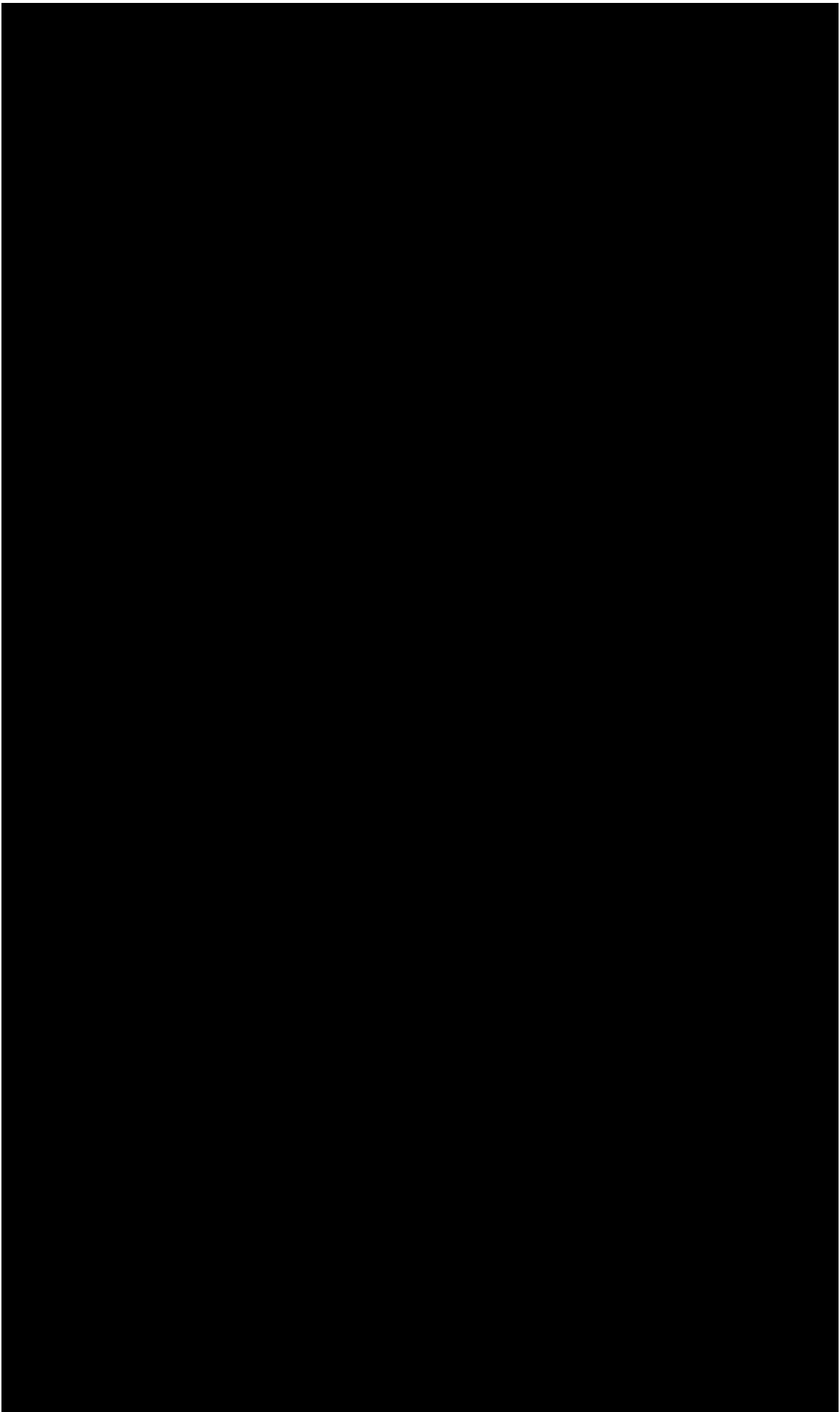


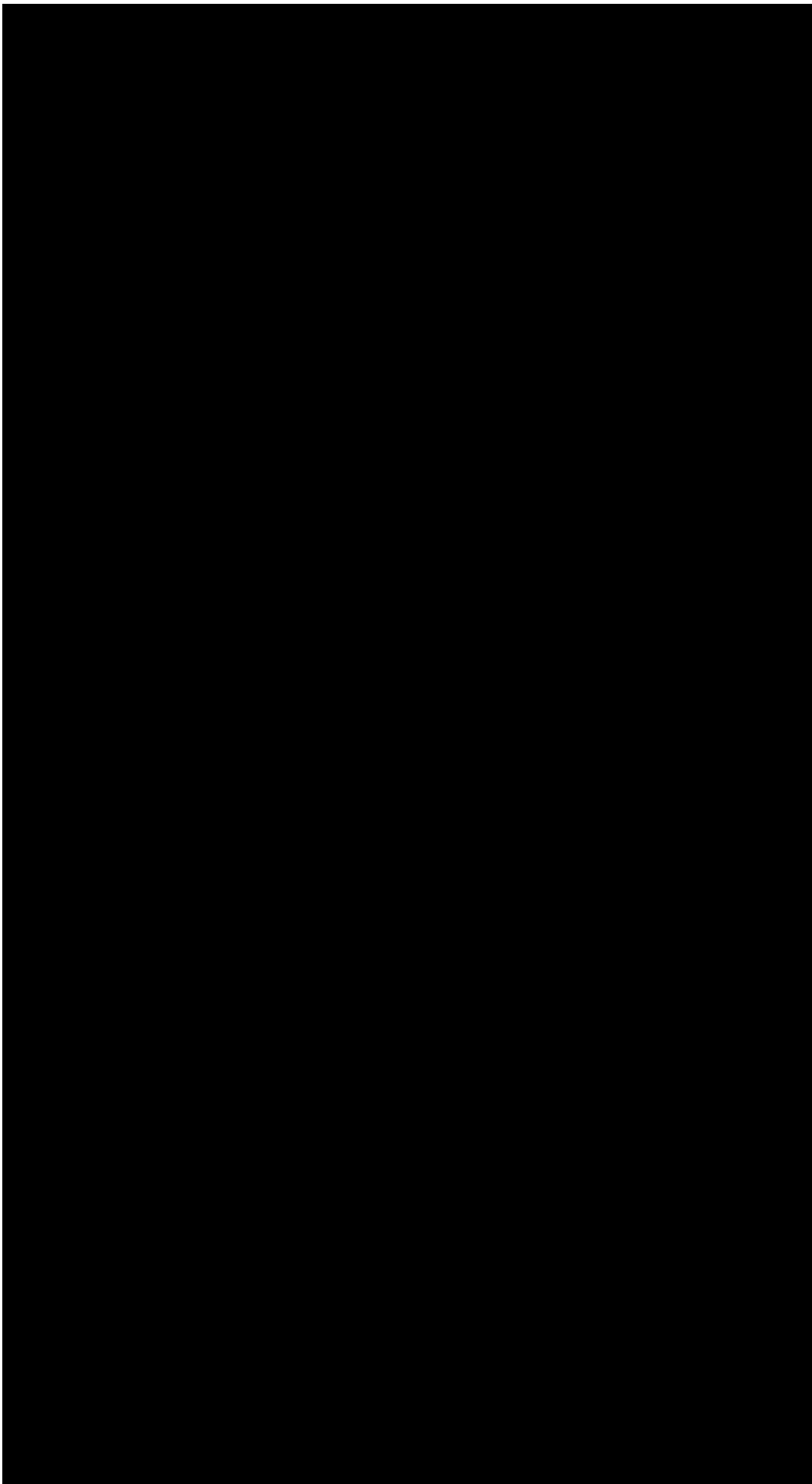


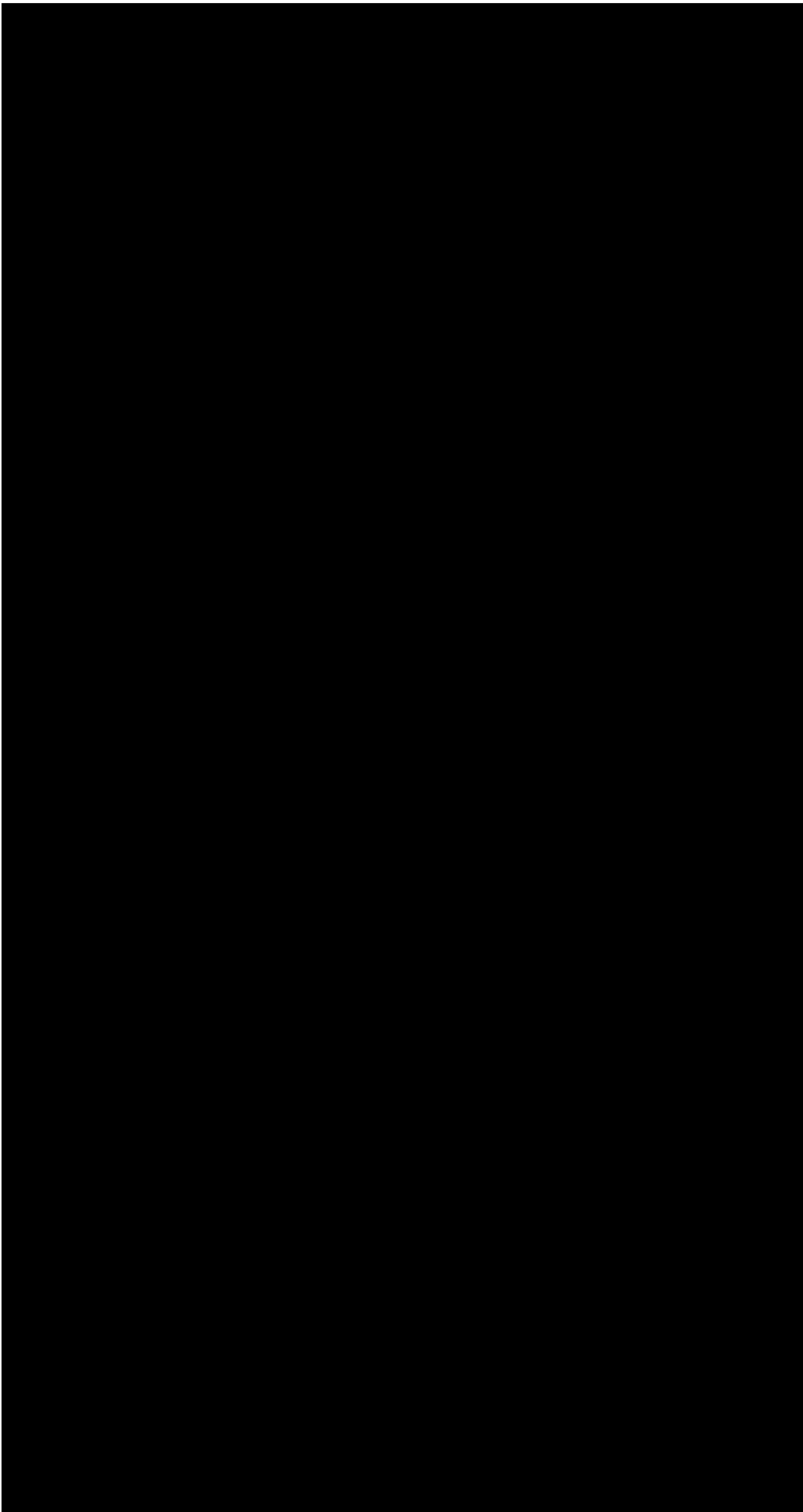


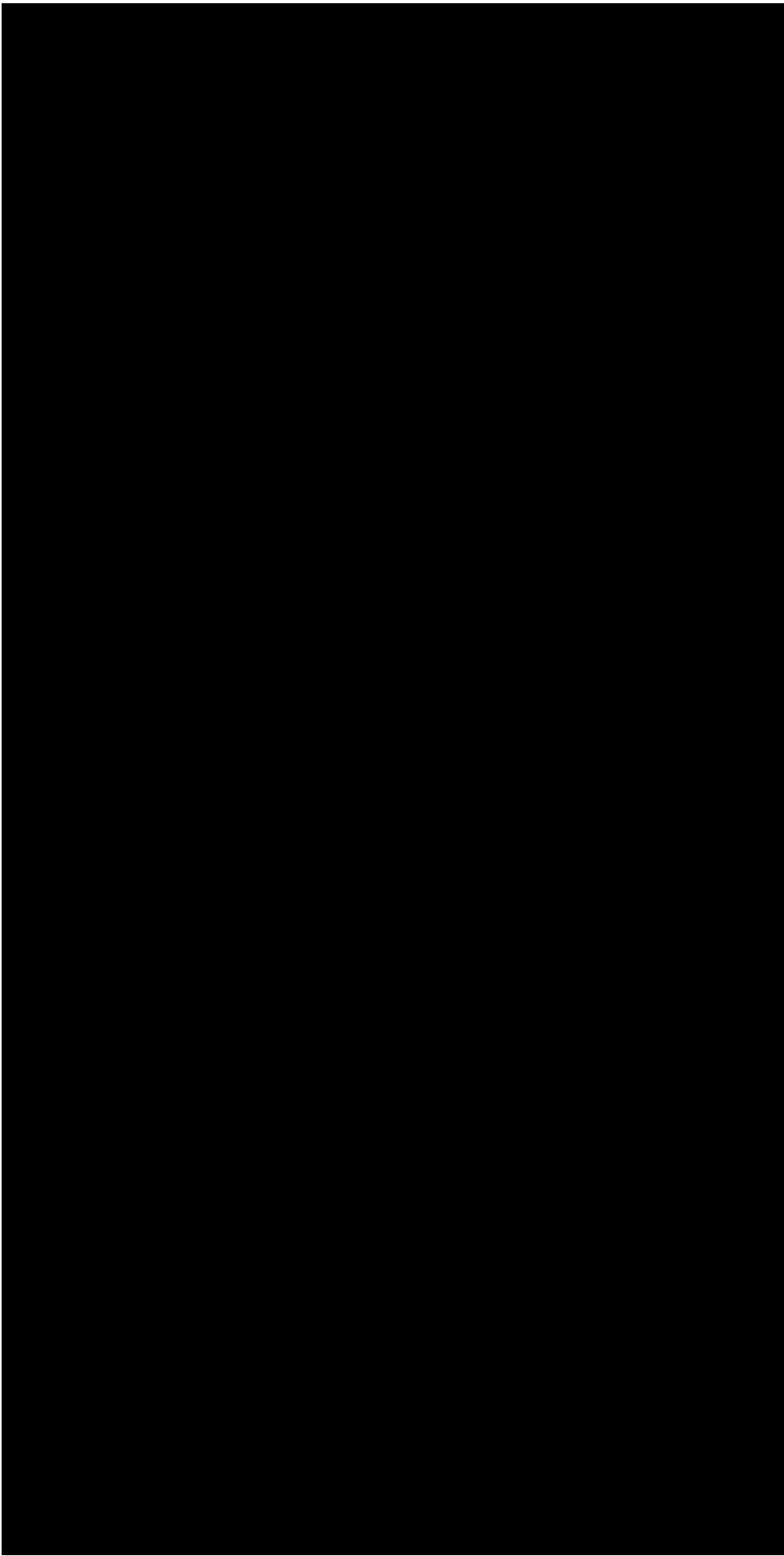




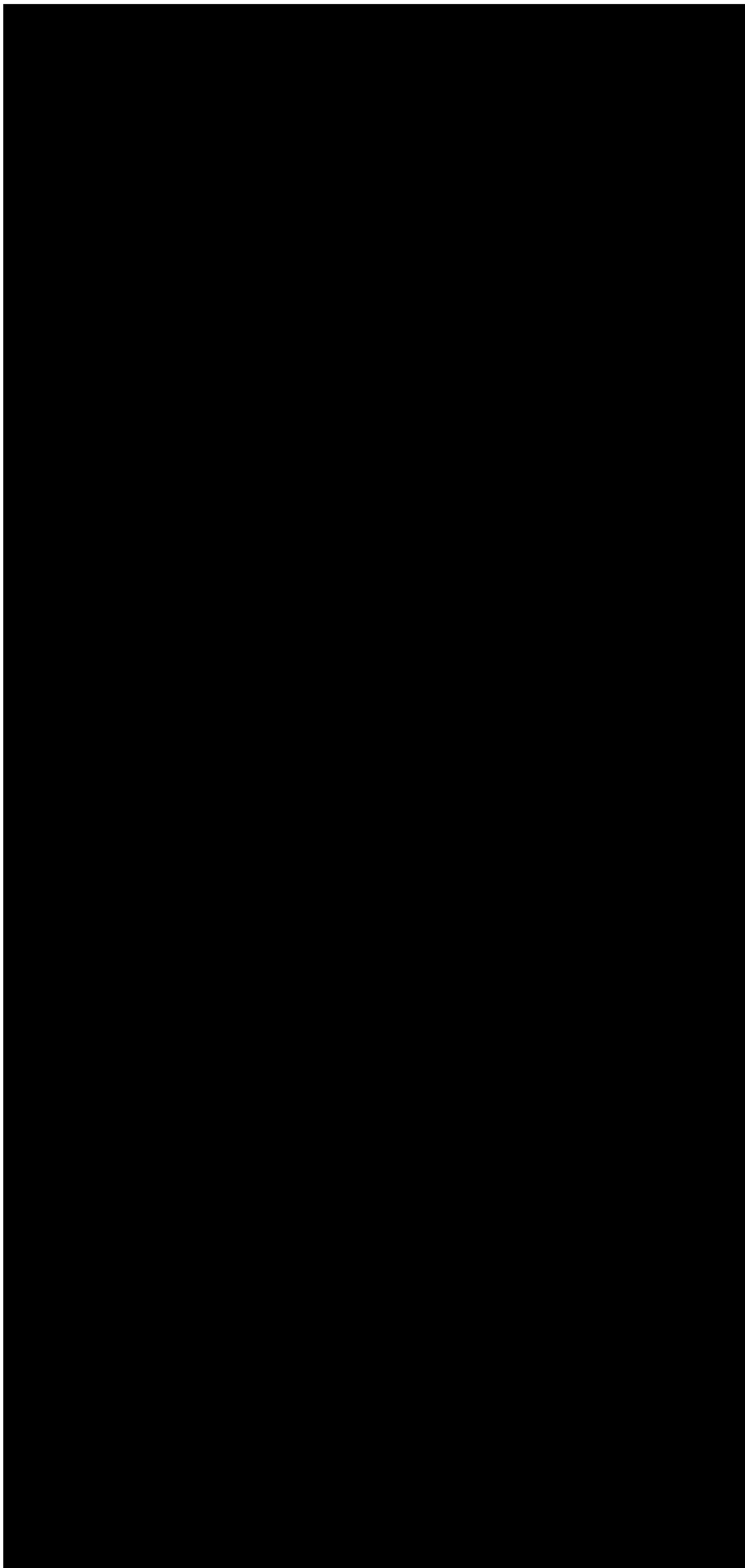


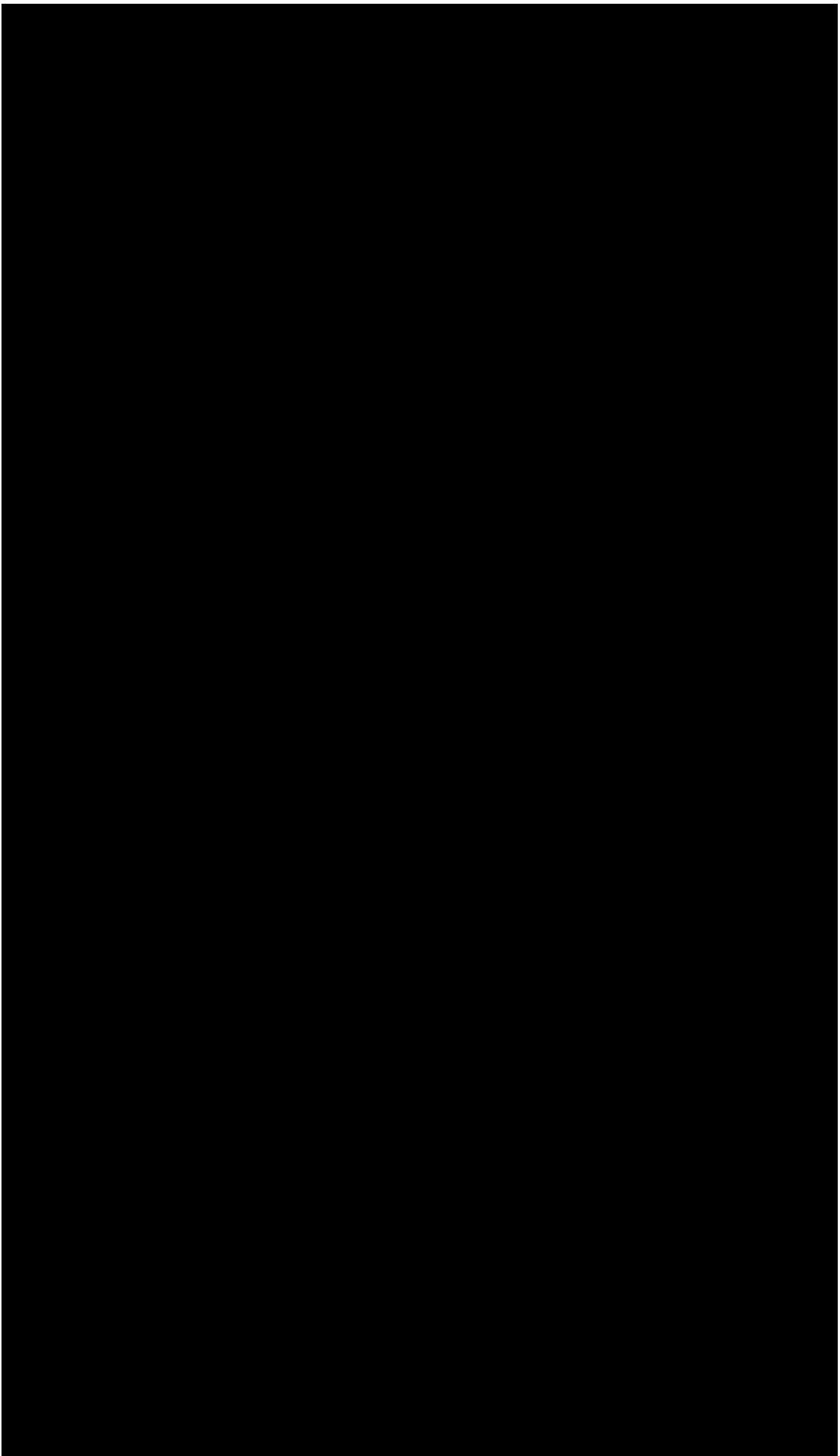


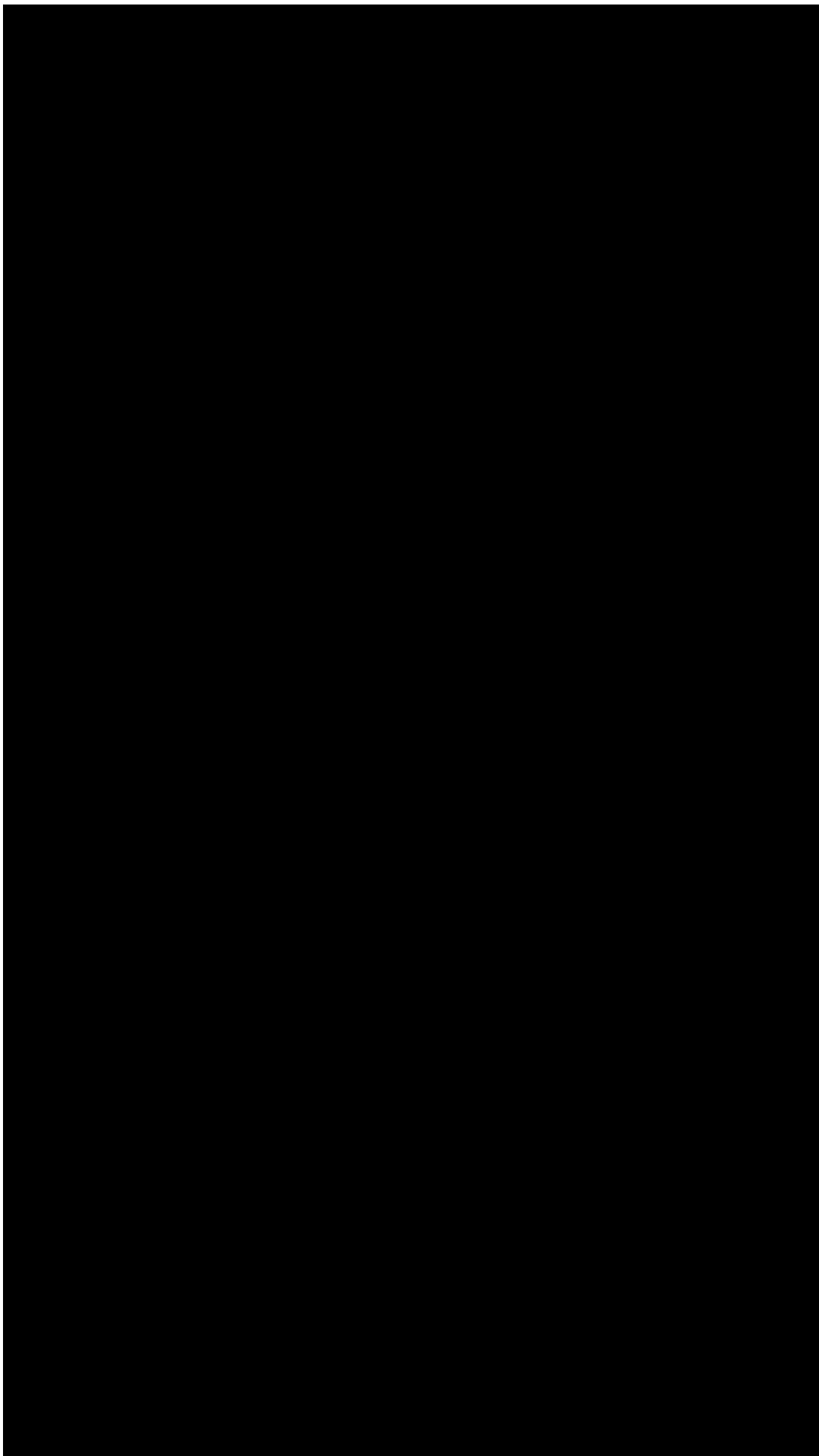






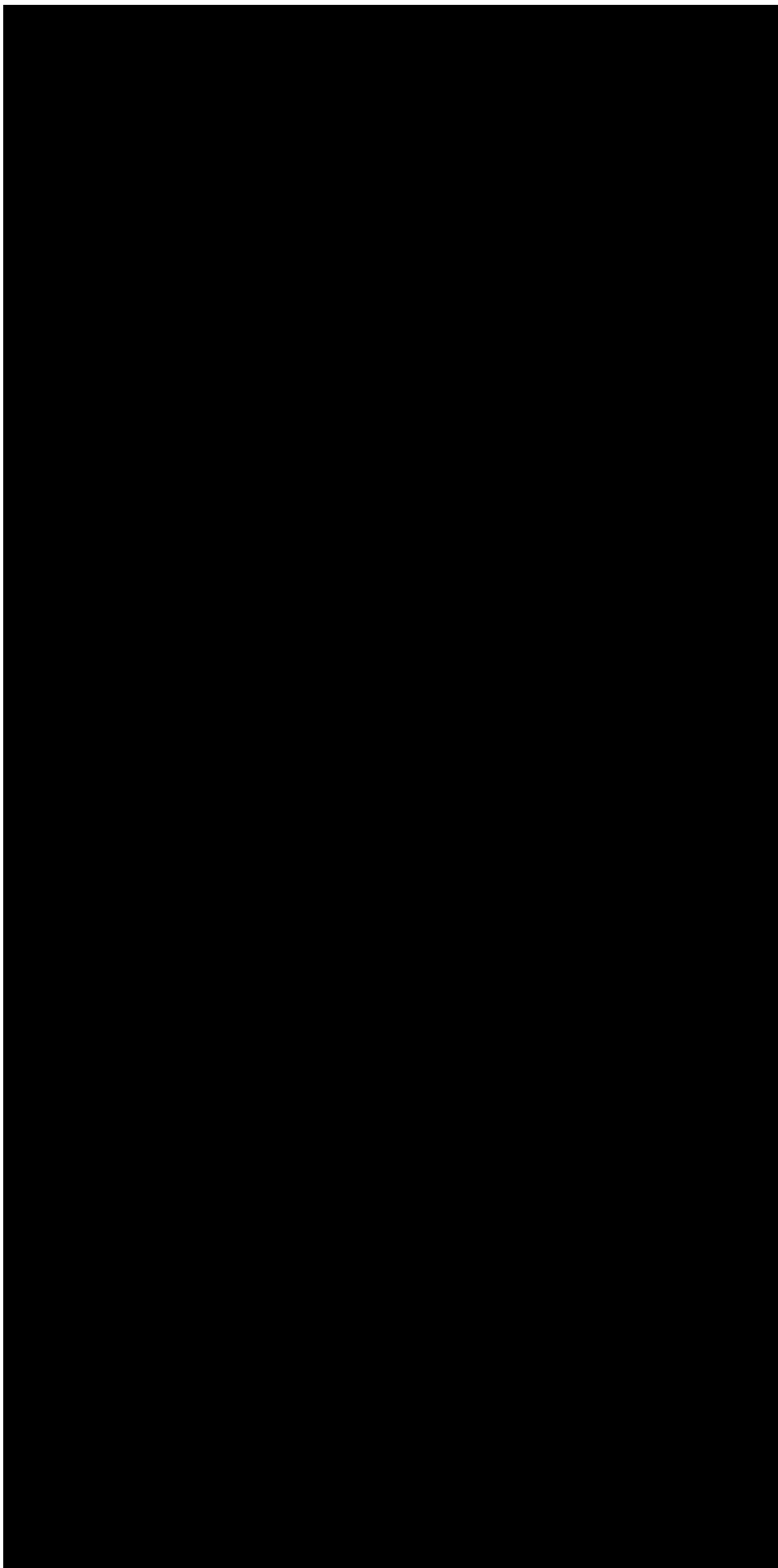


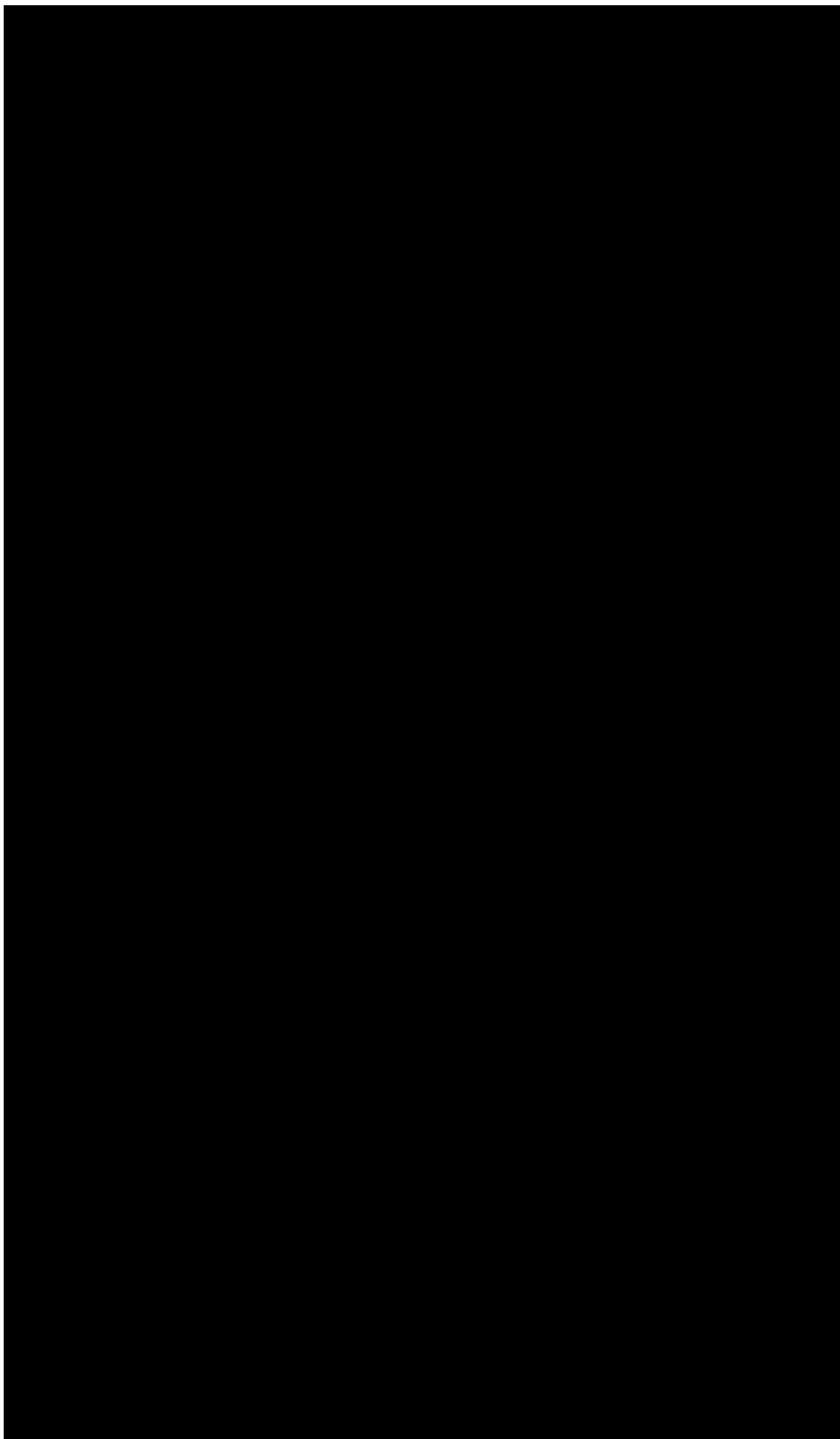


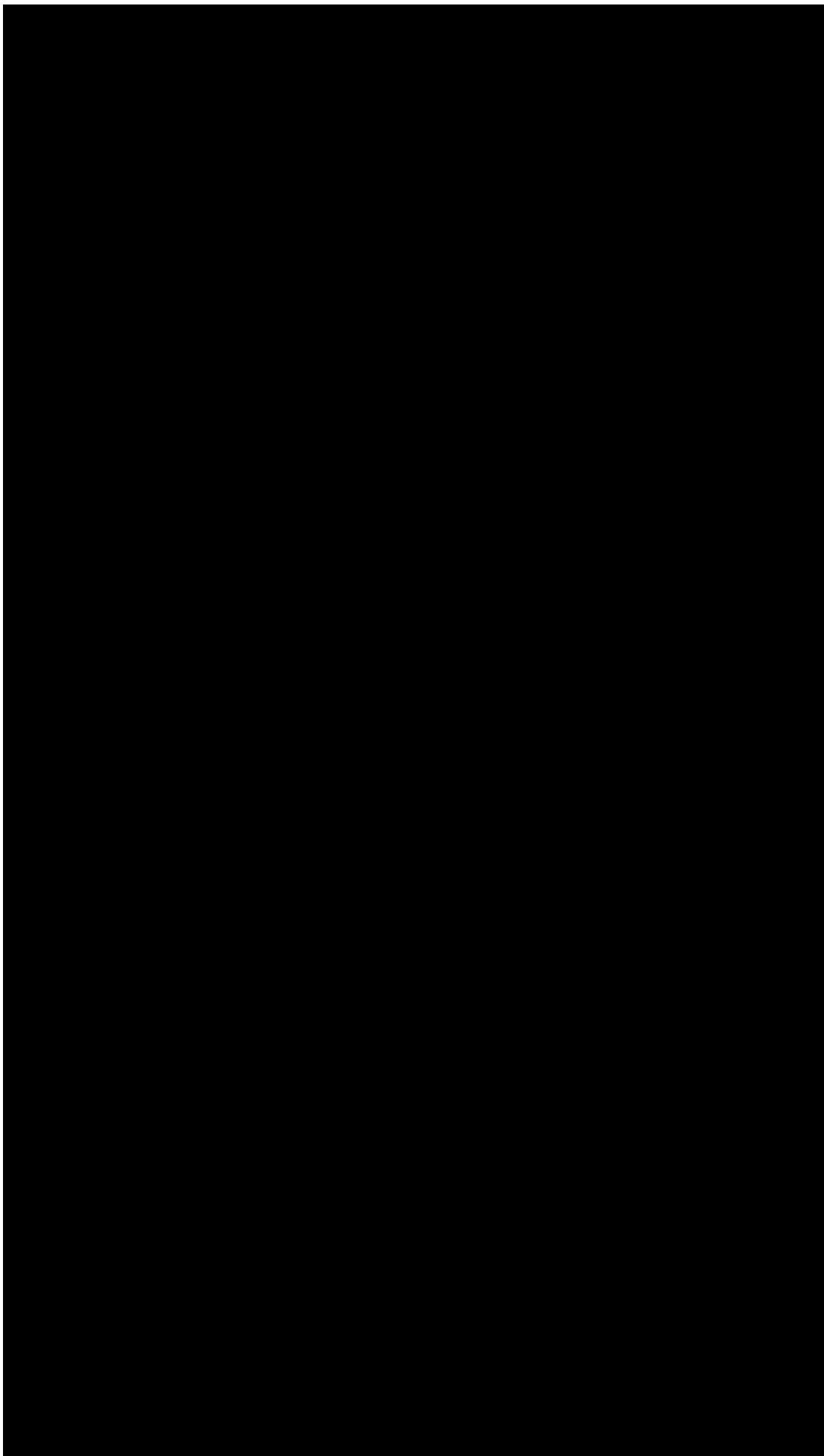


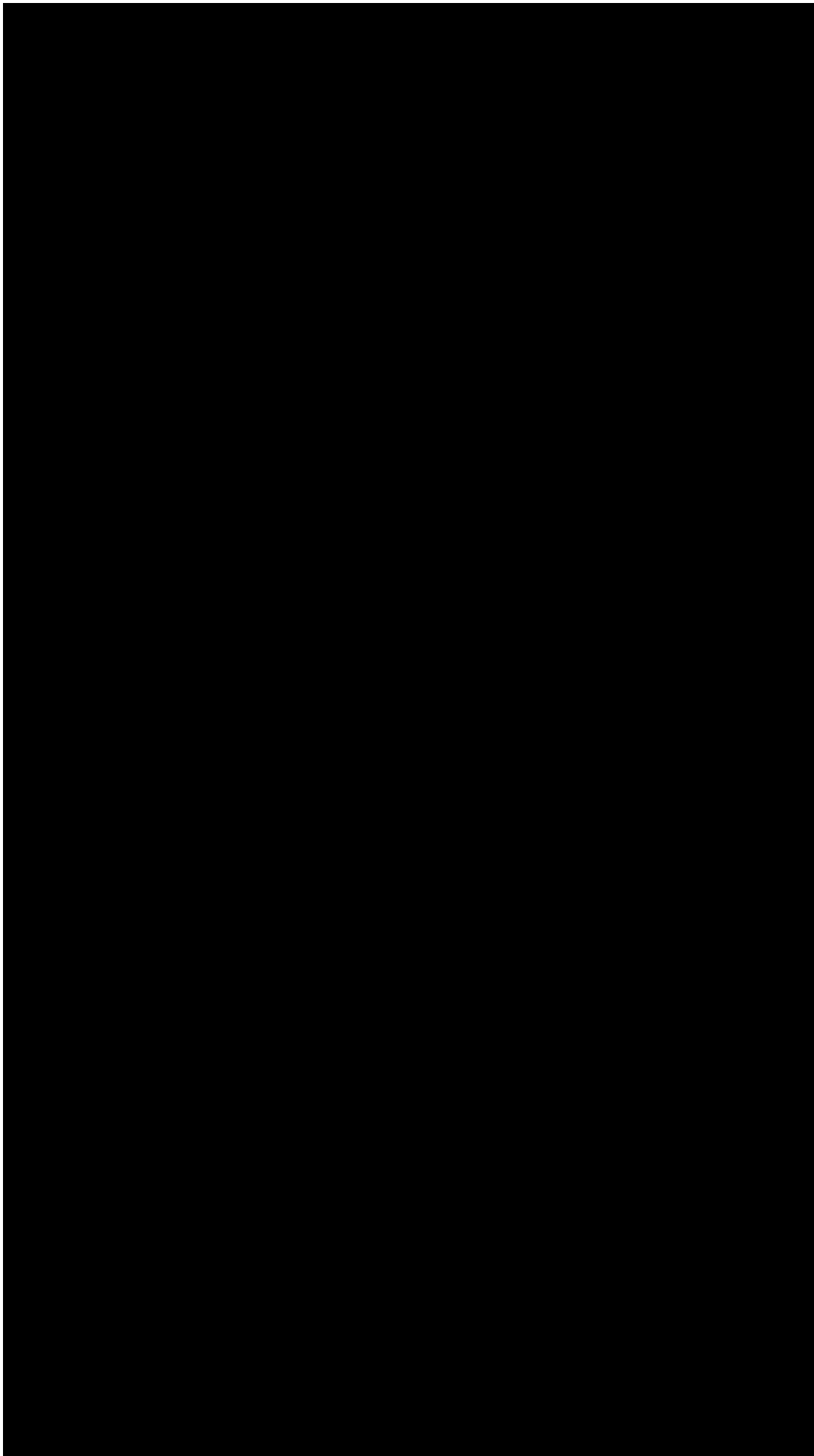
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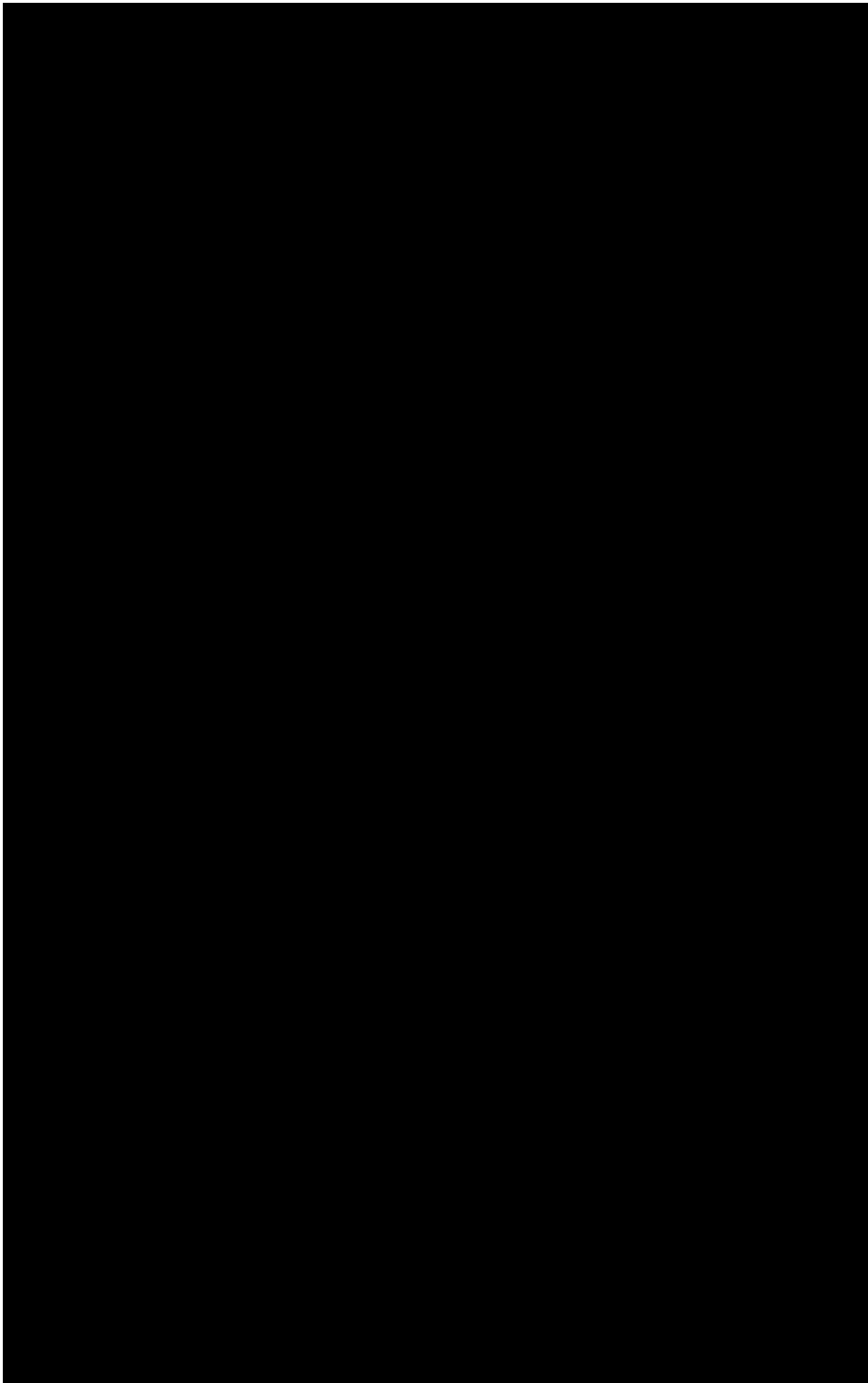
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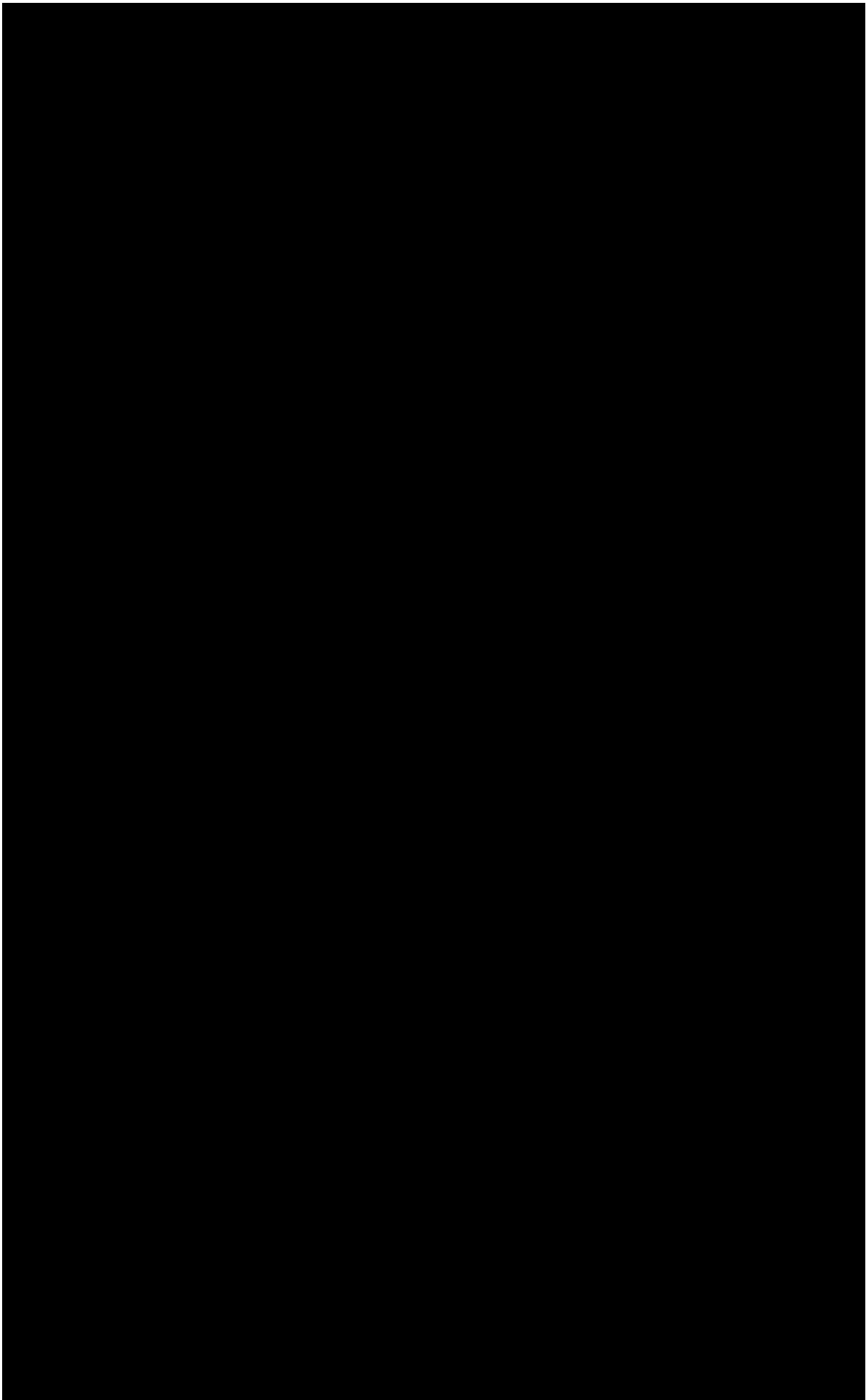




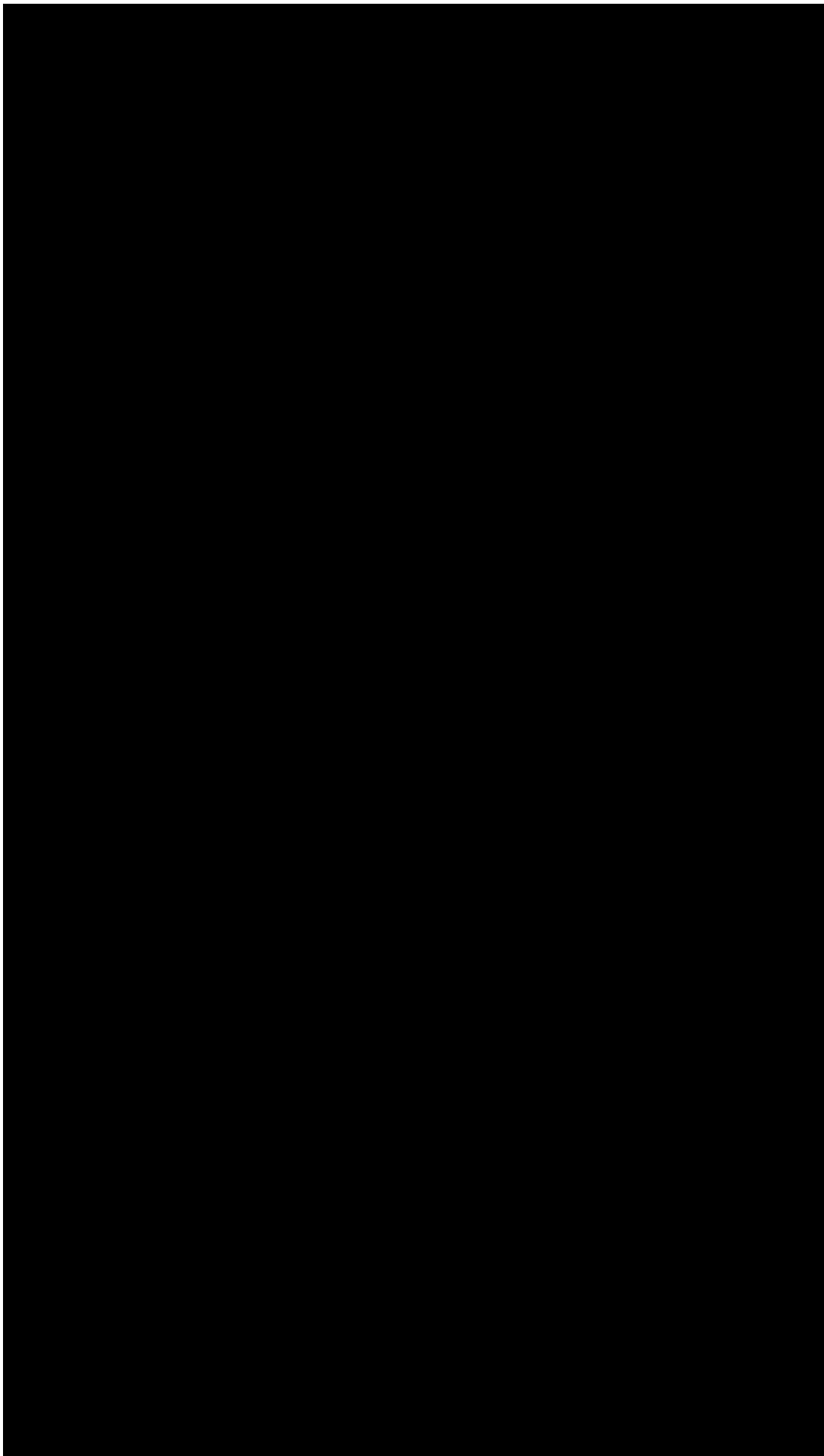


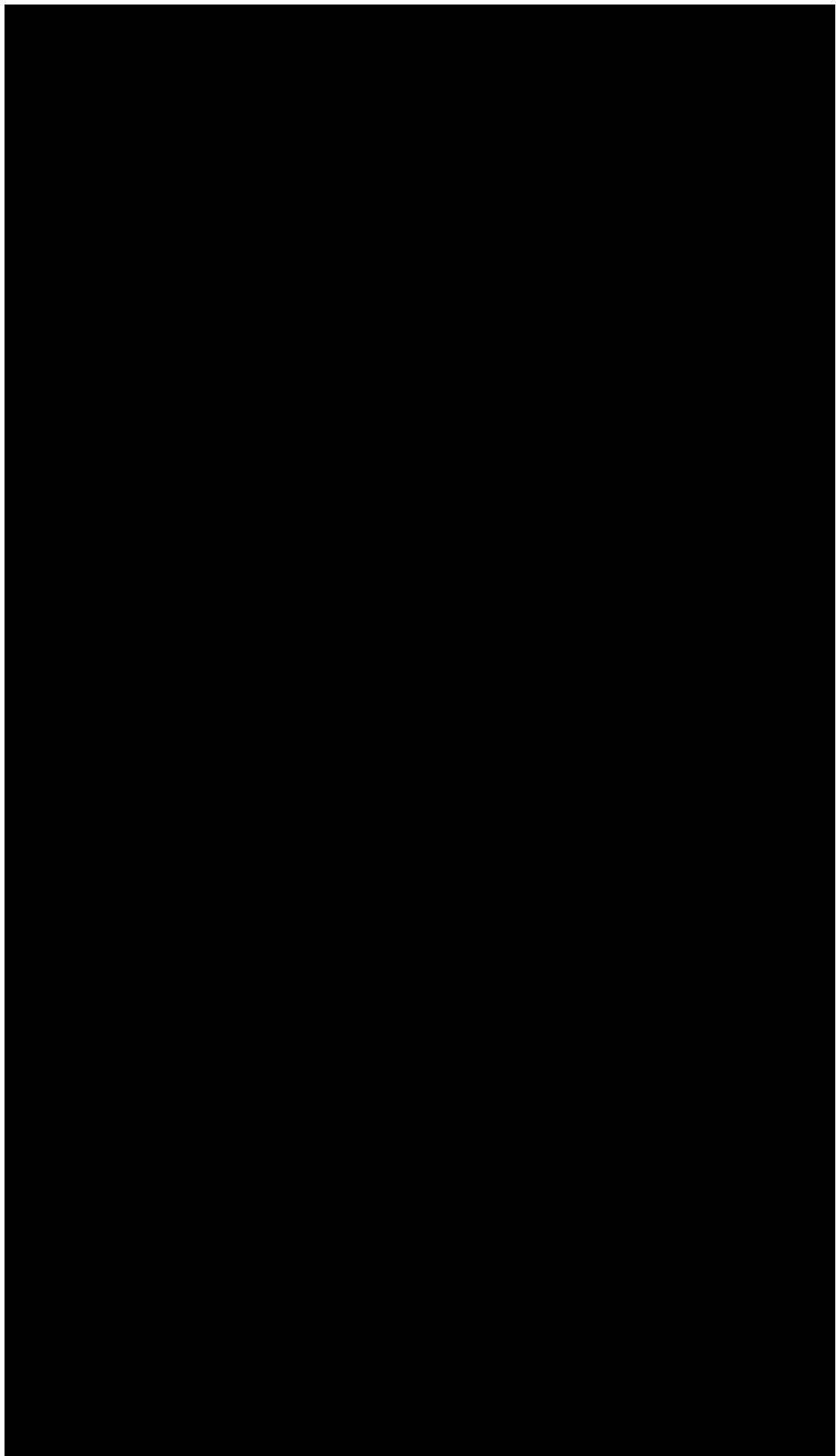


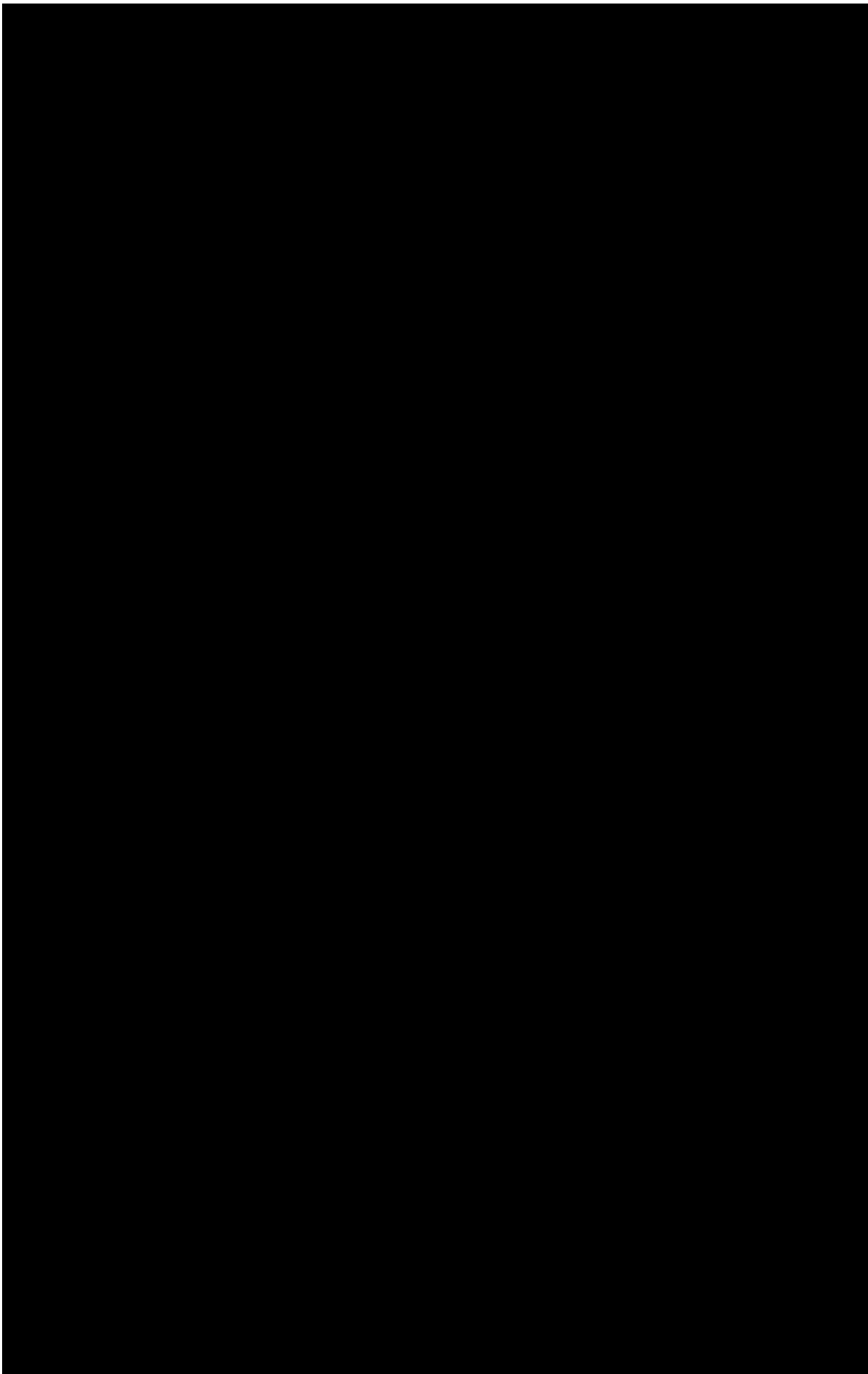


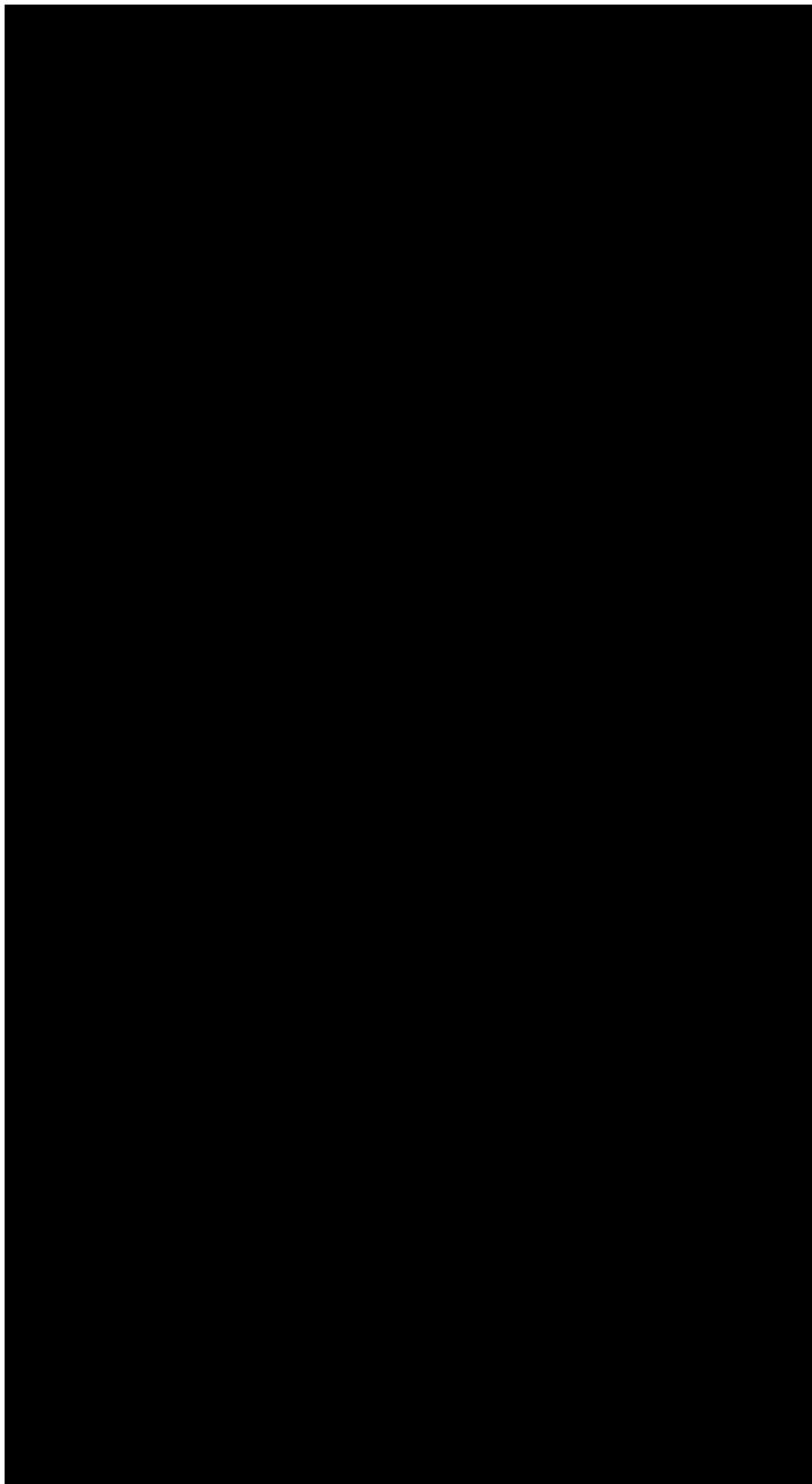


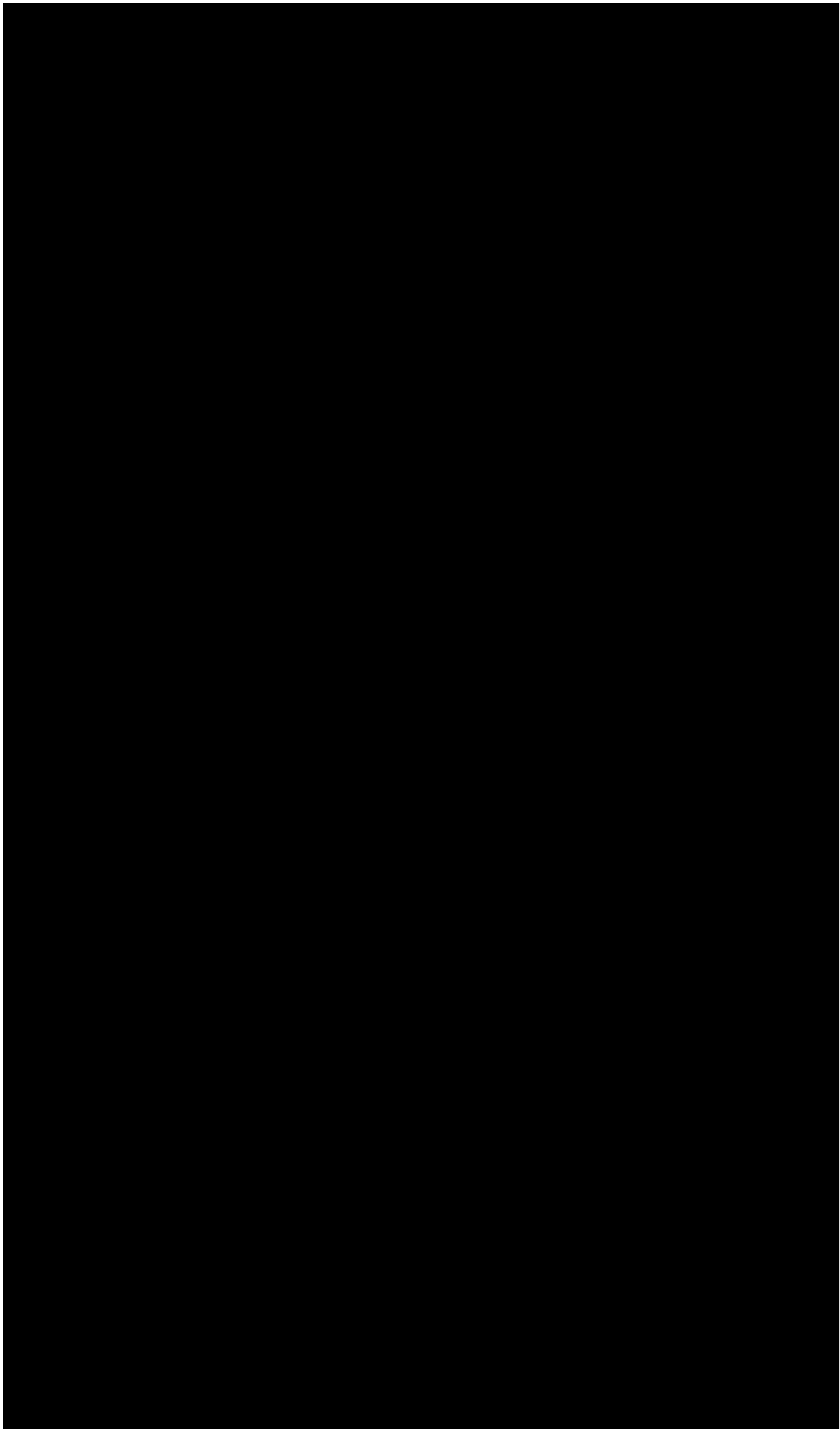


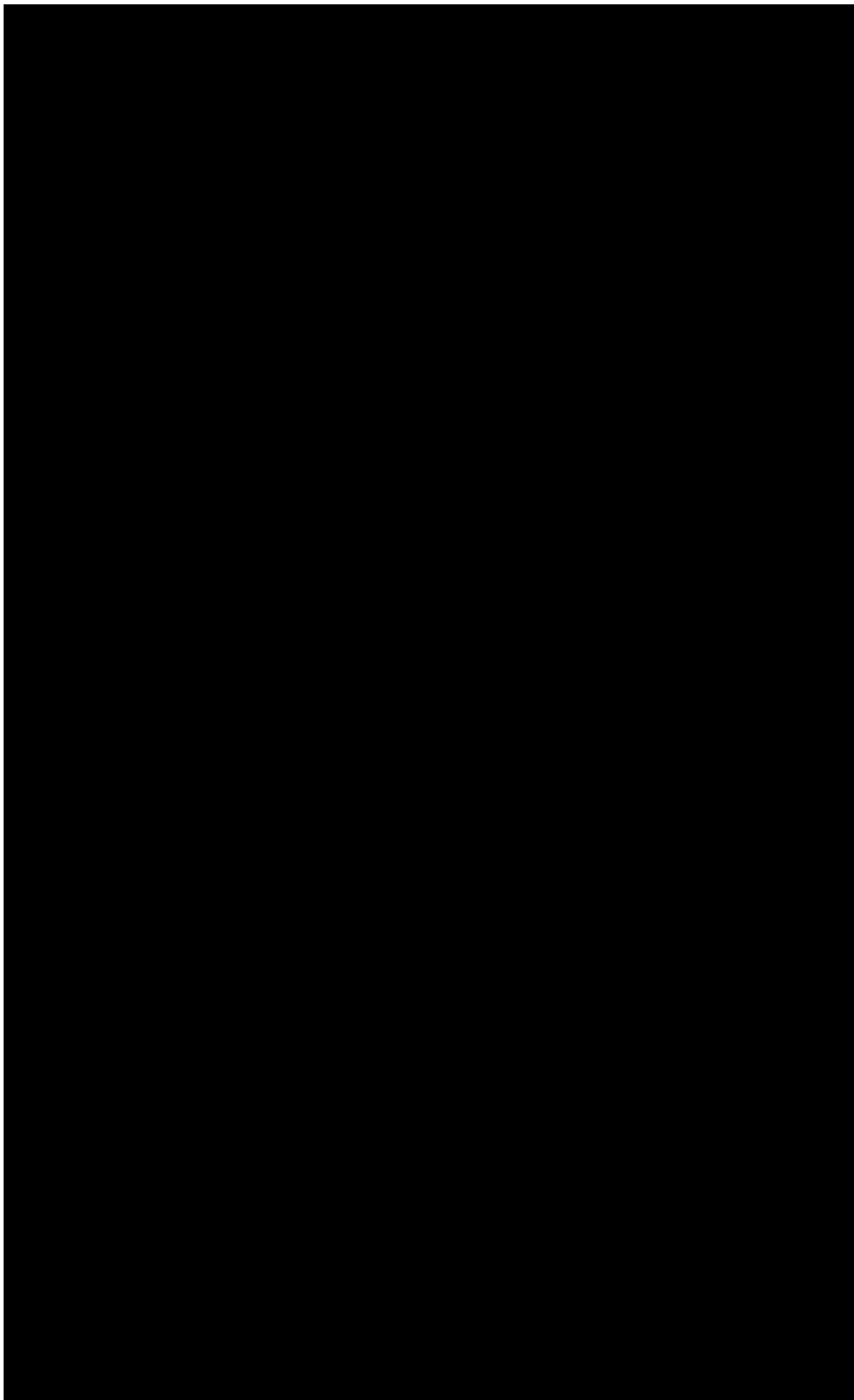




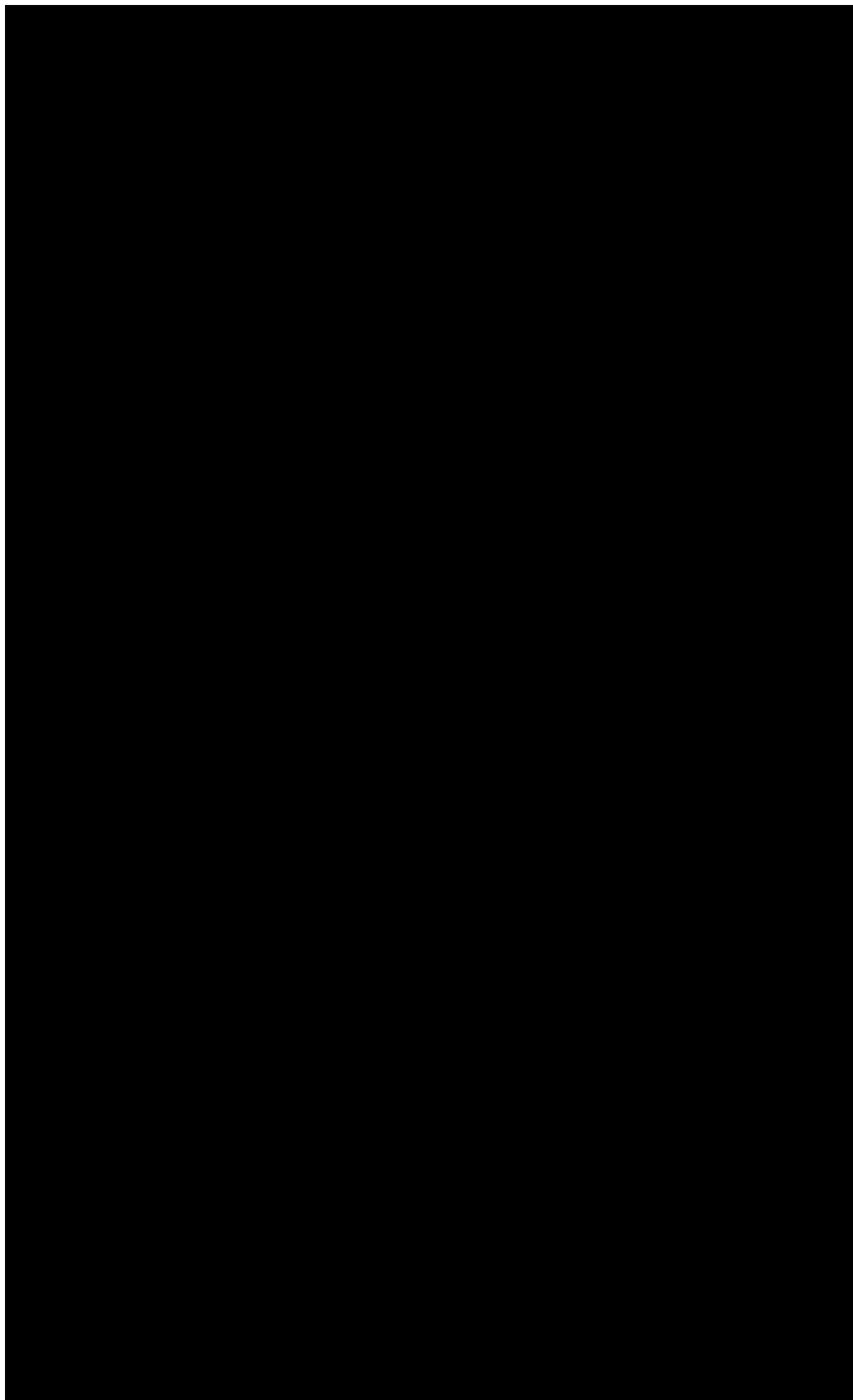


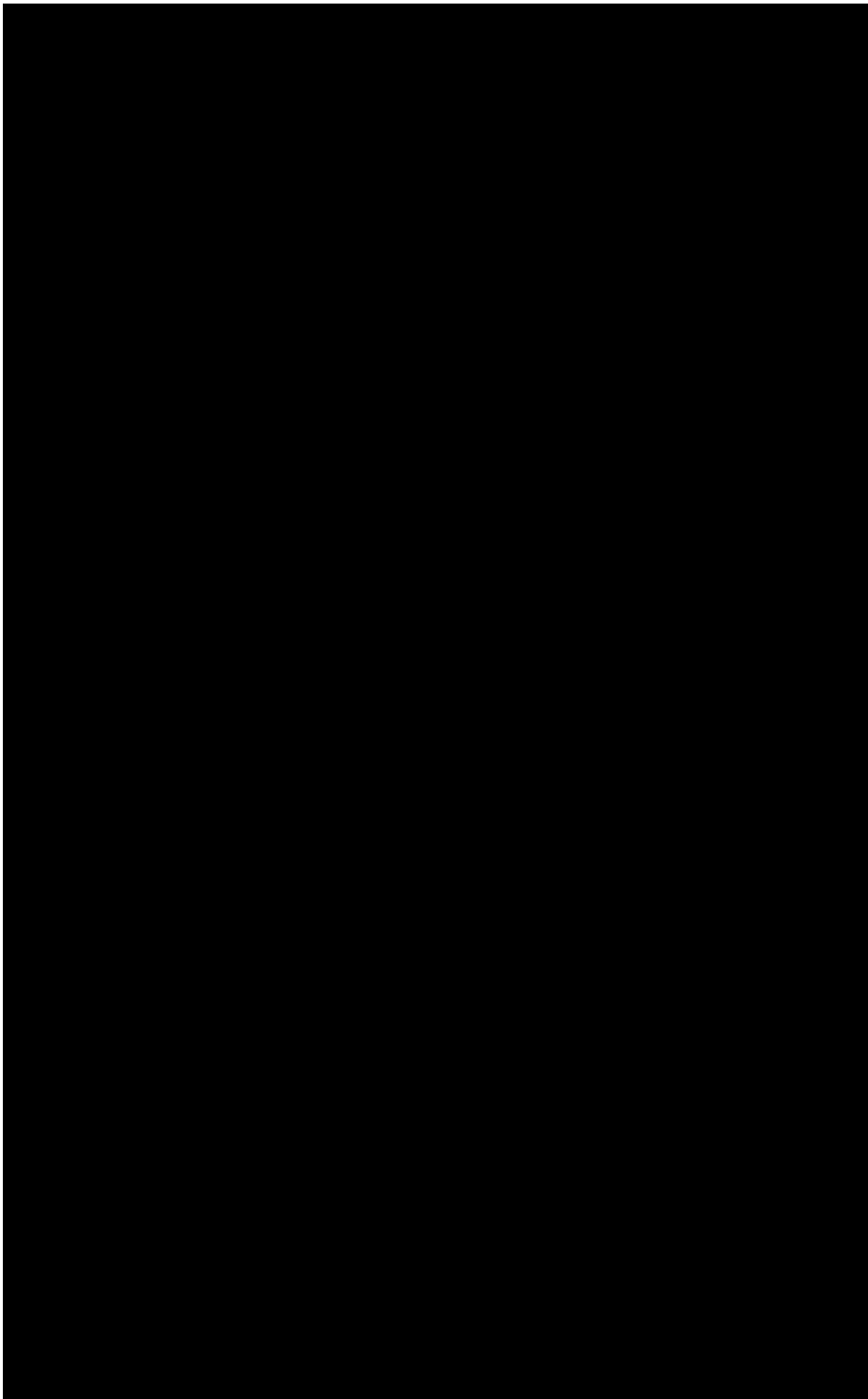


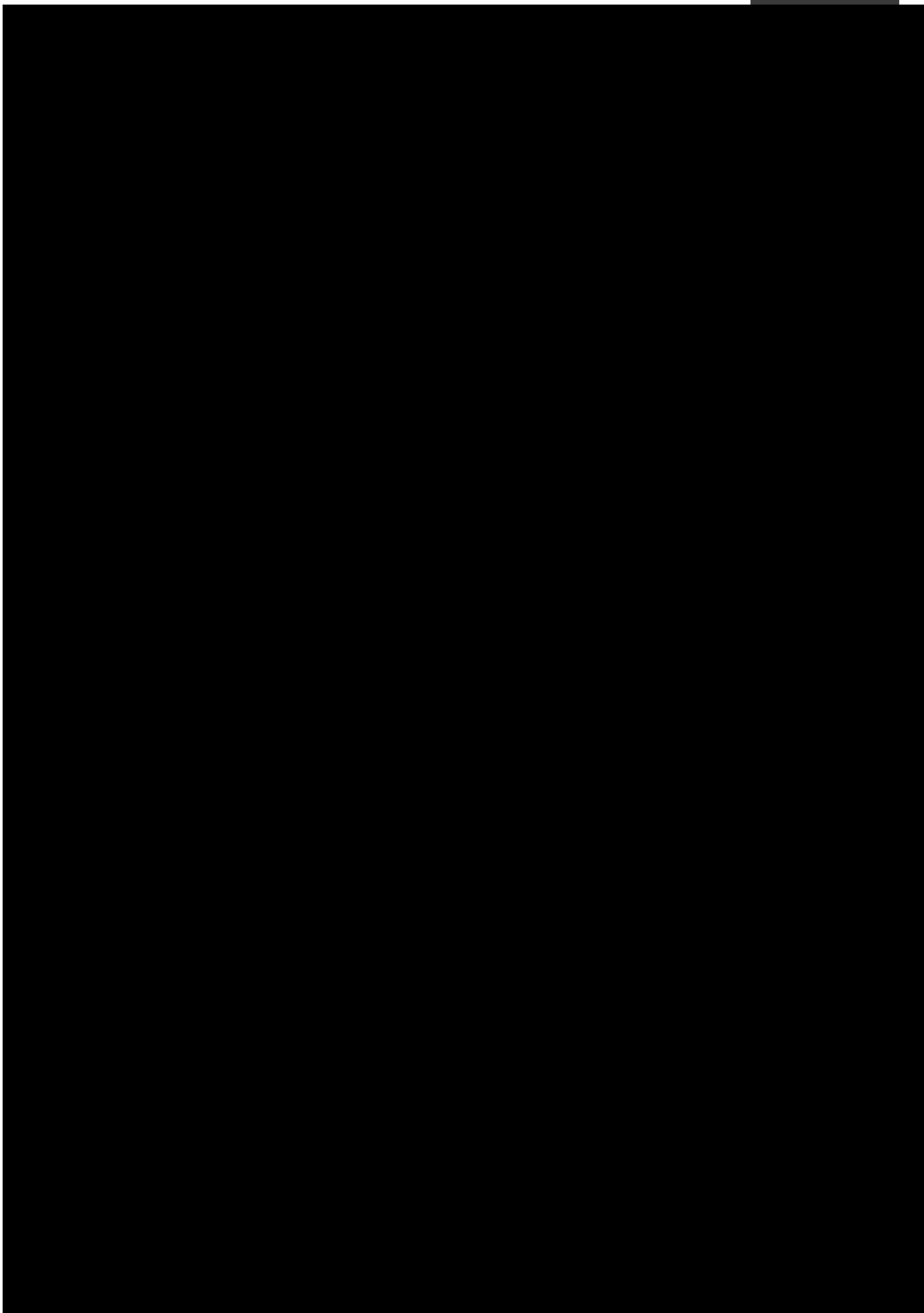




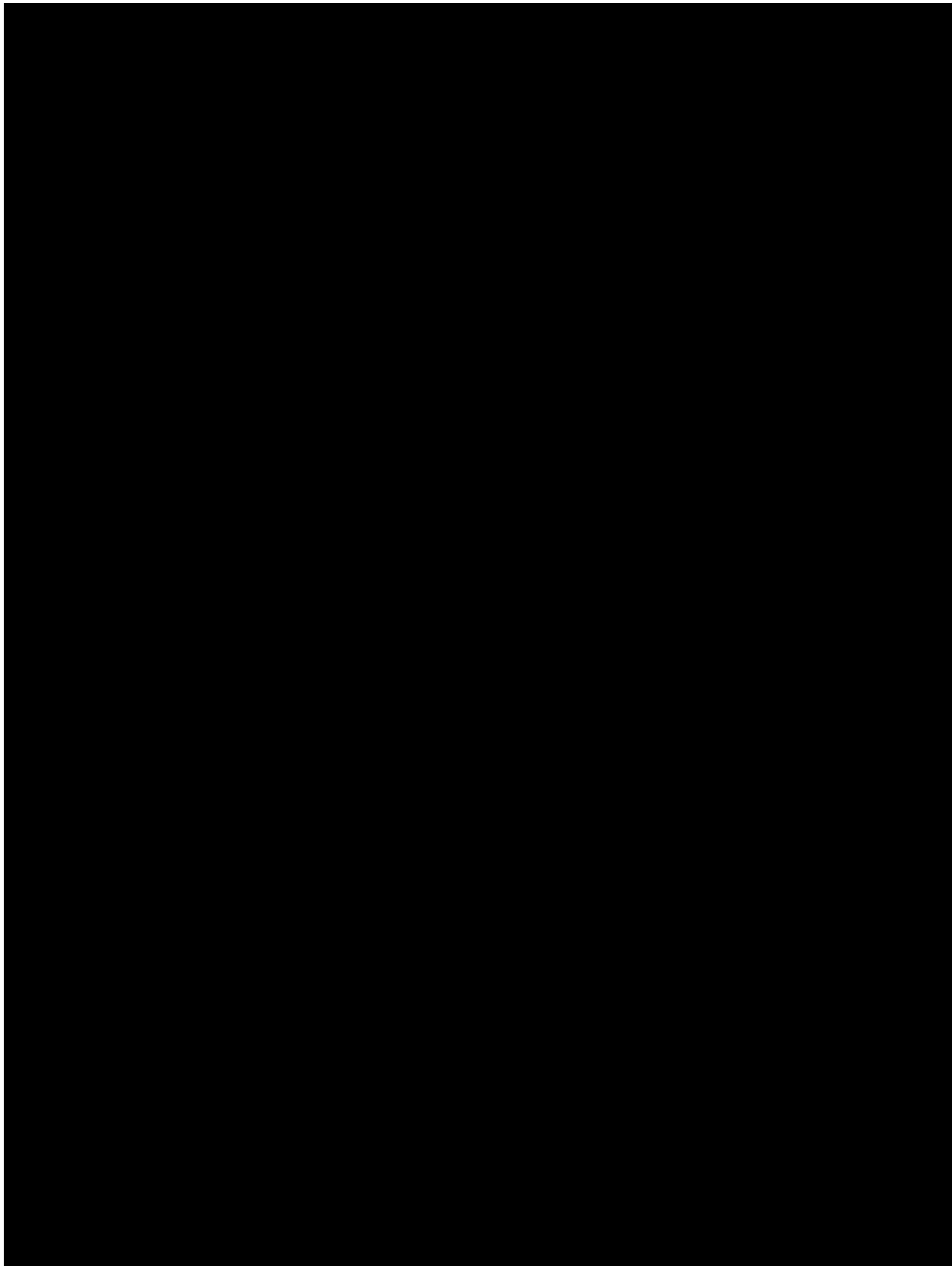


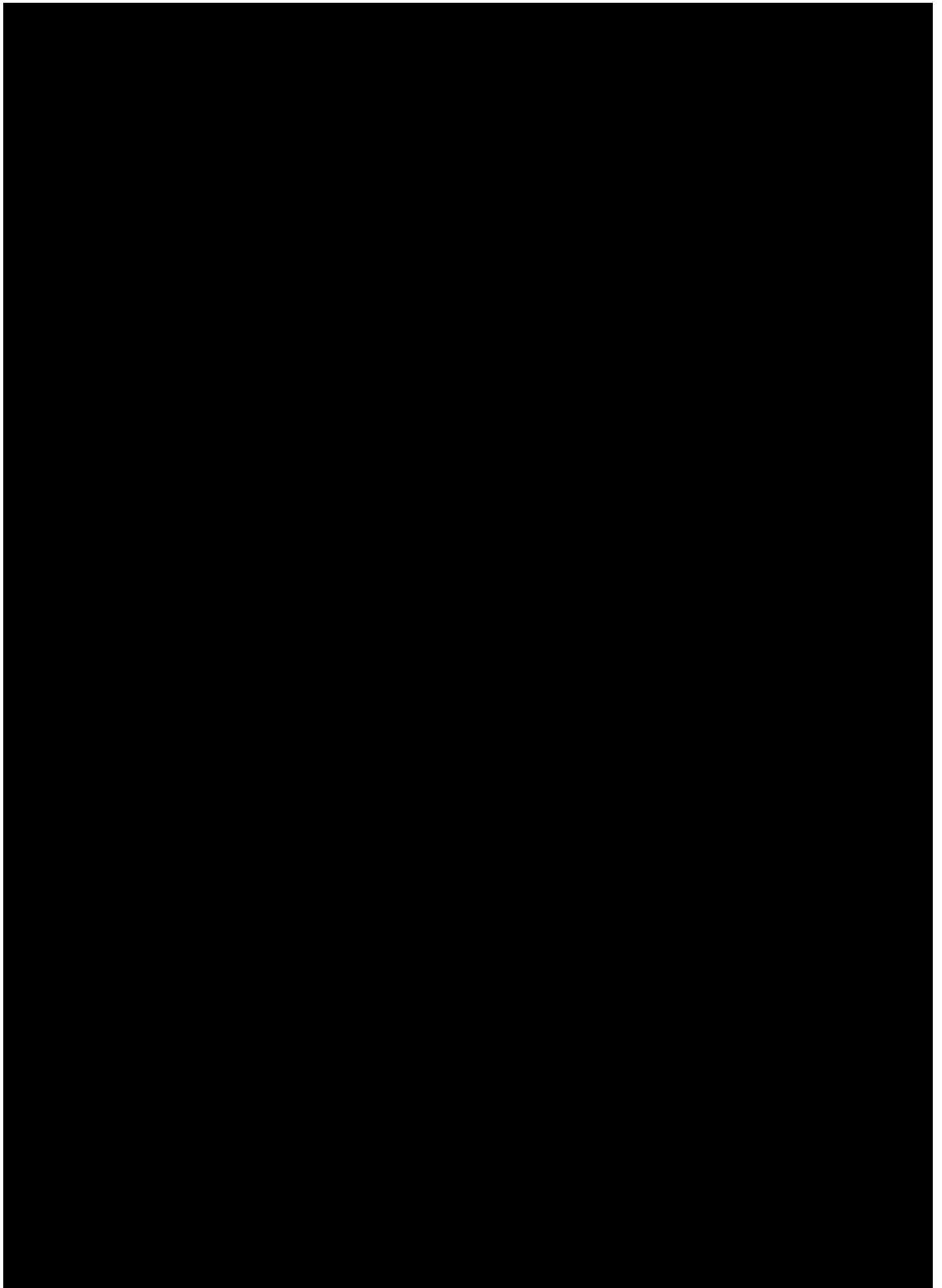


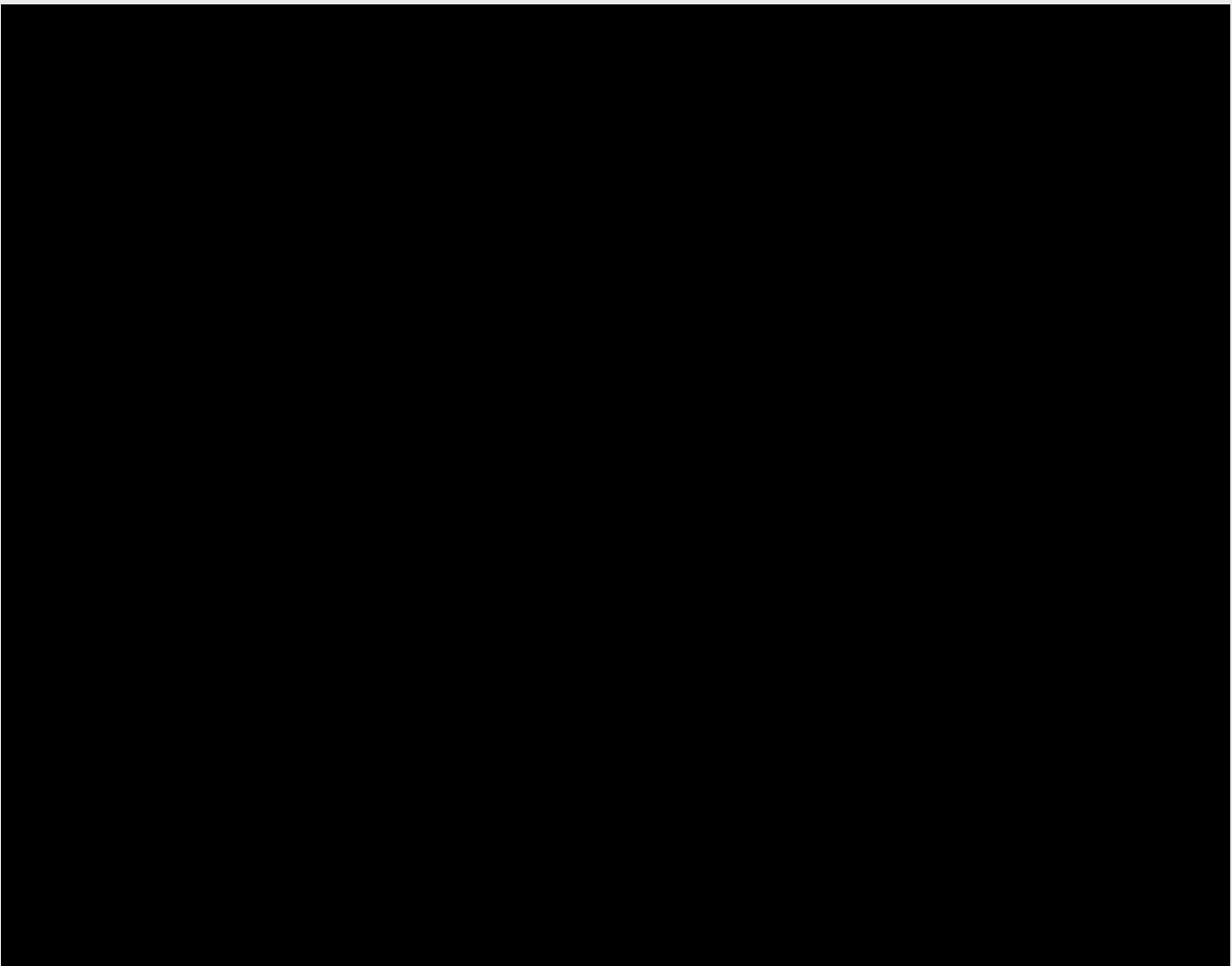




ANNEX B

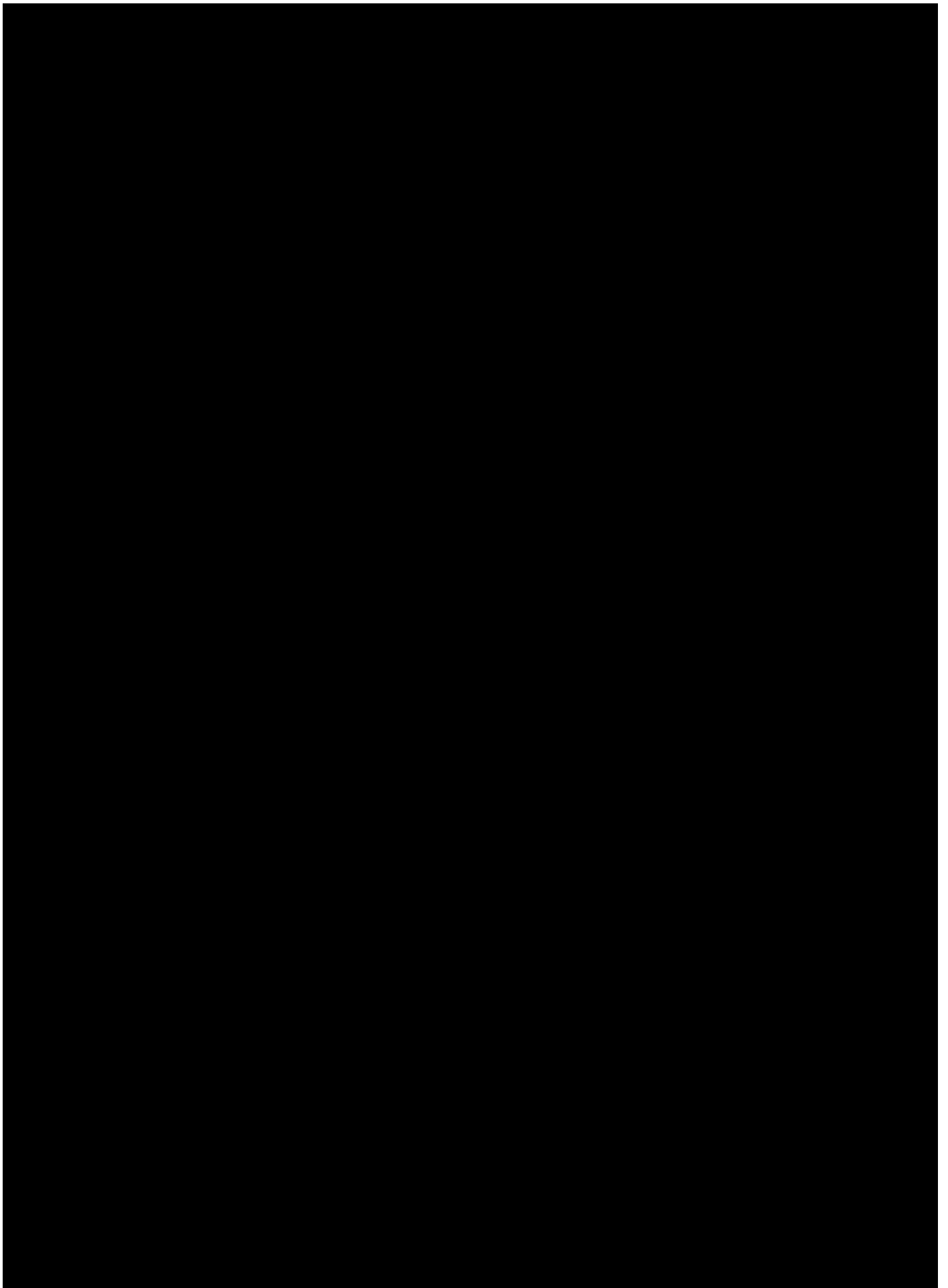




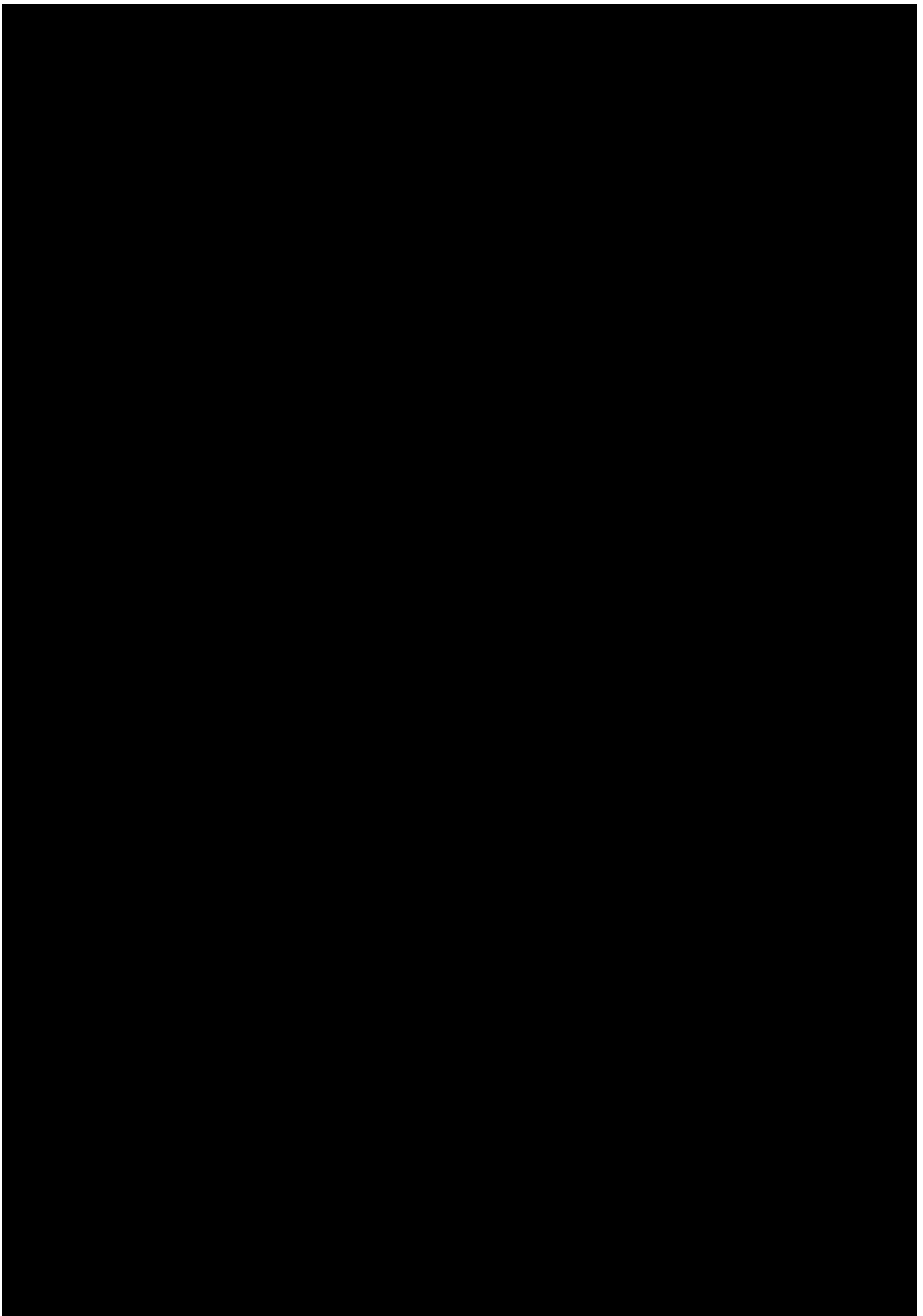


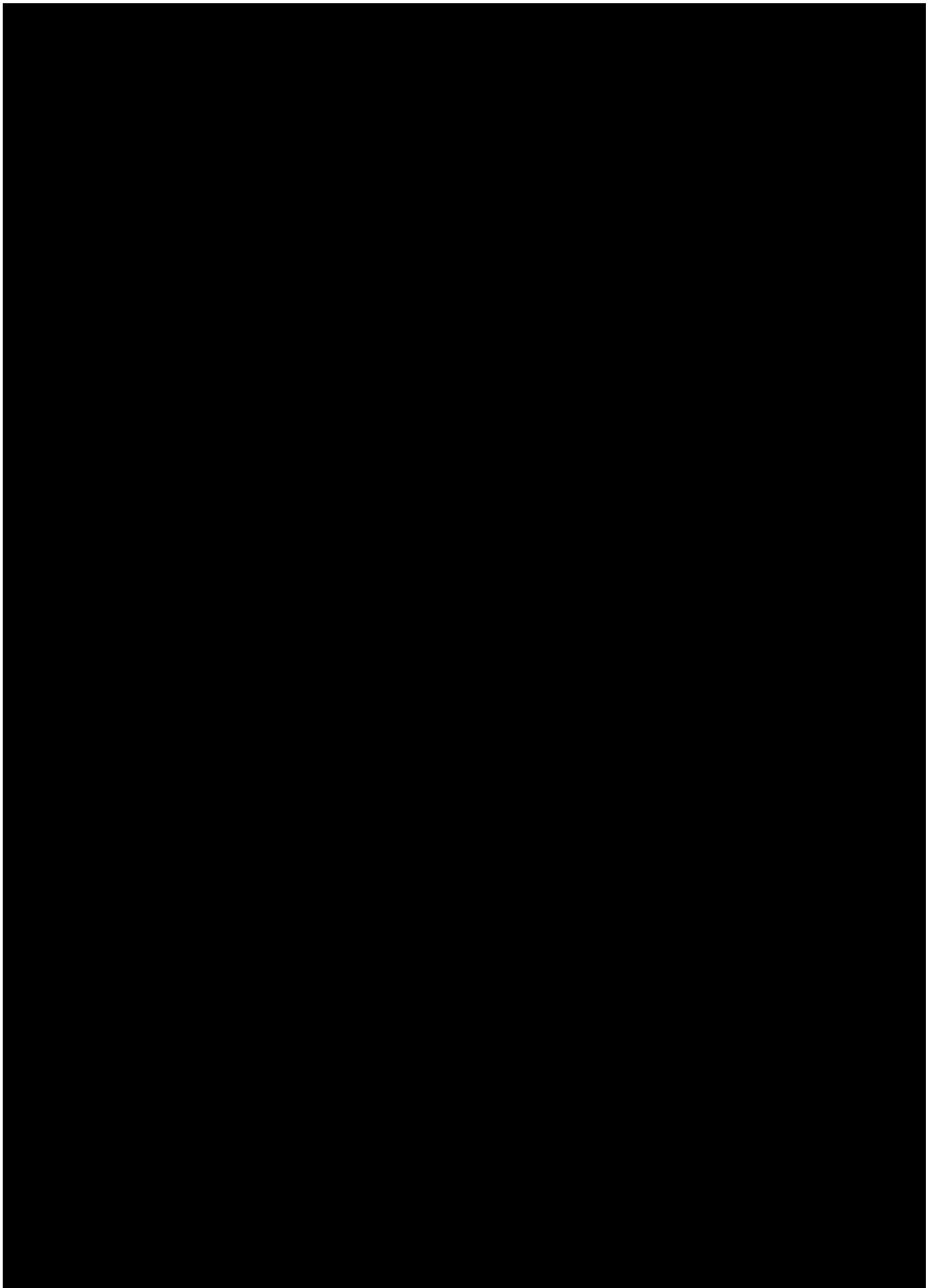
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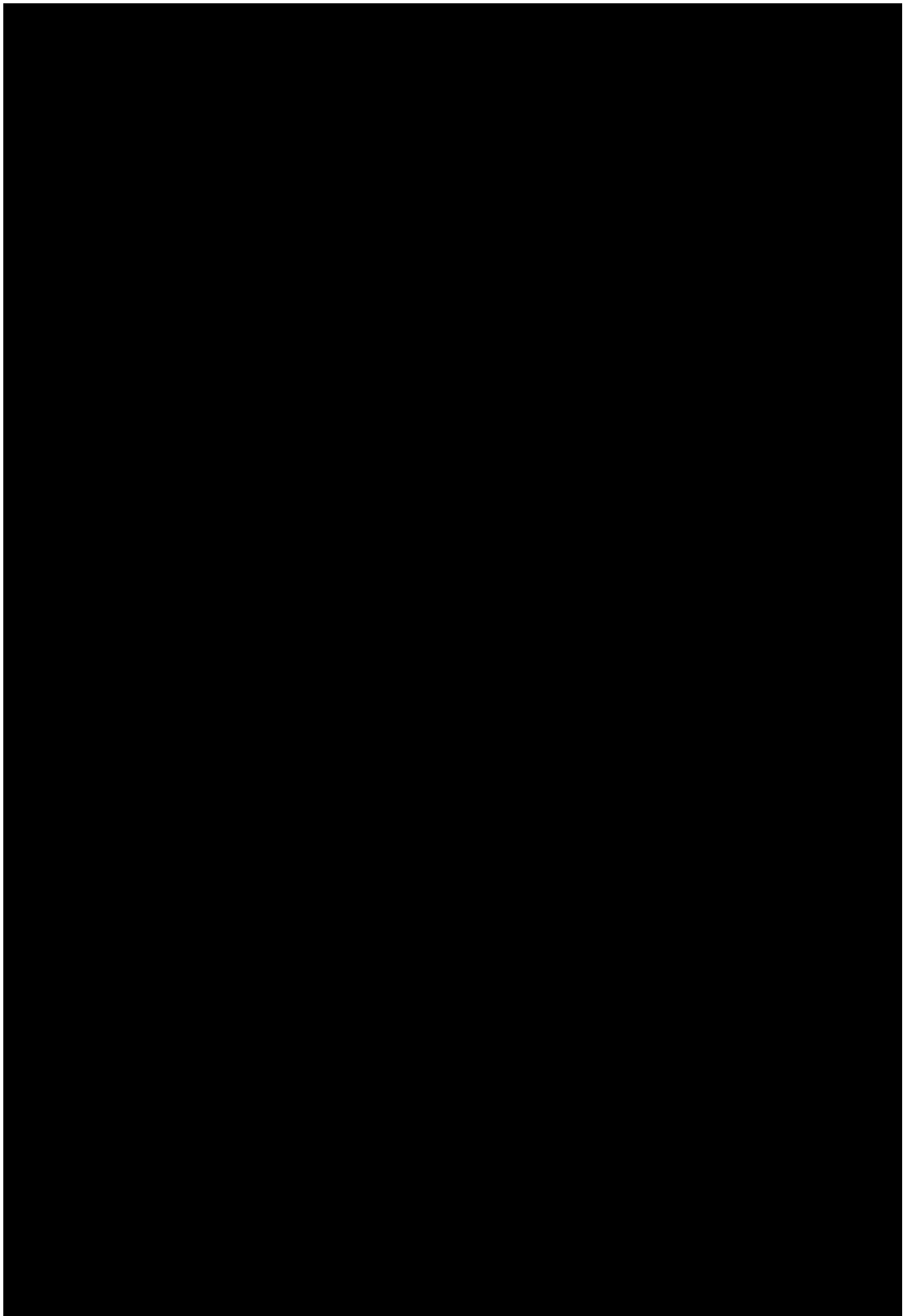


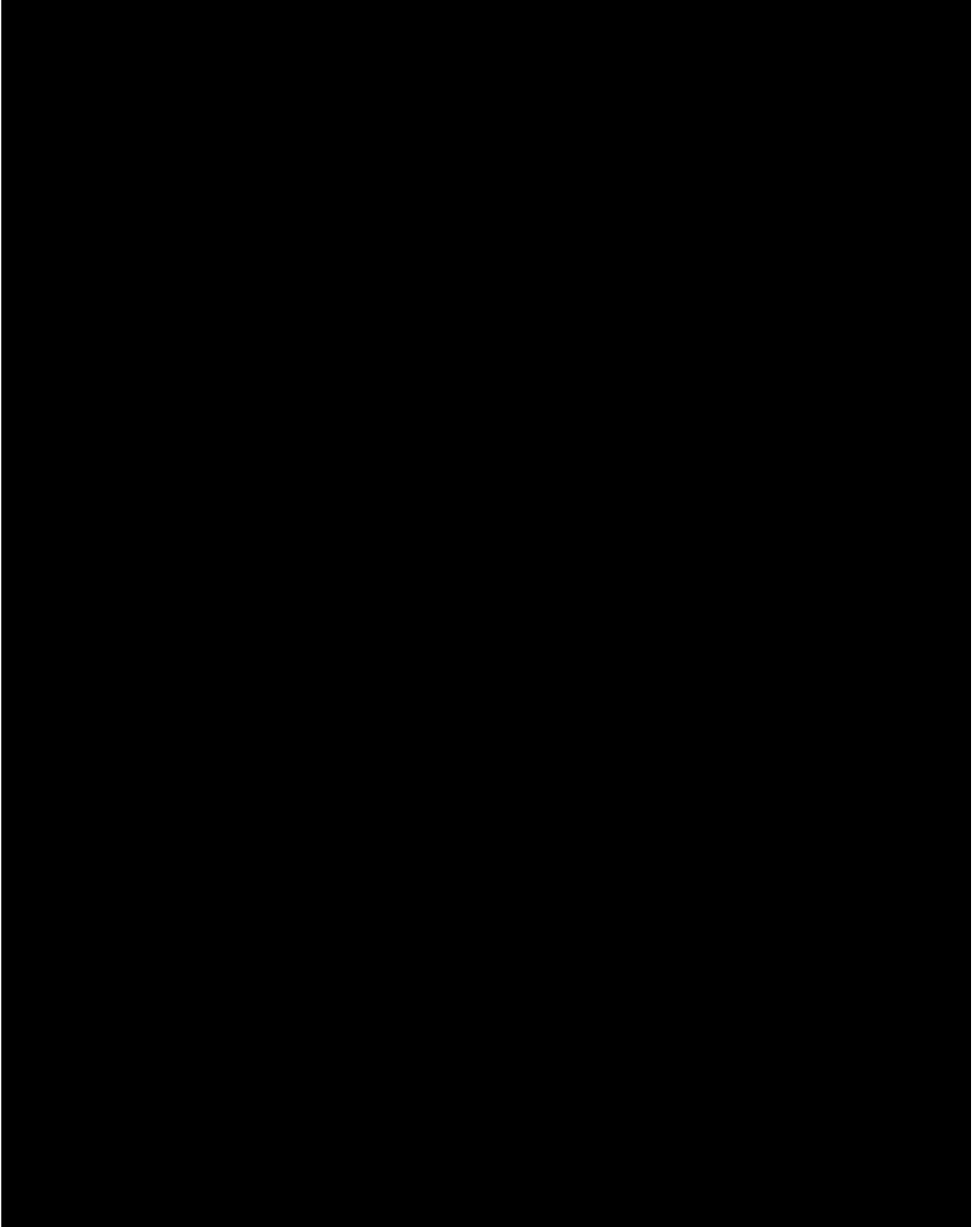


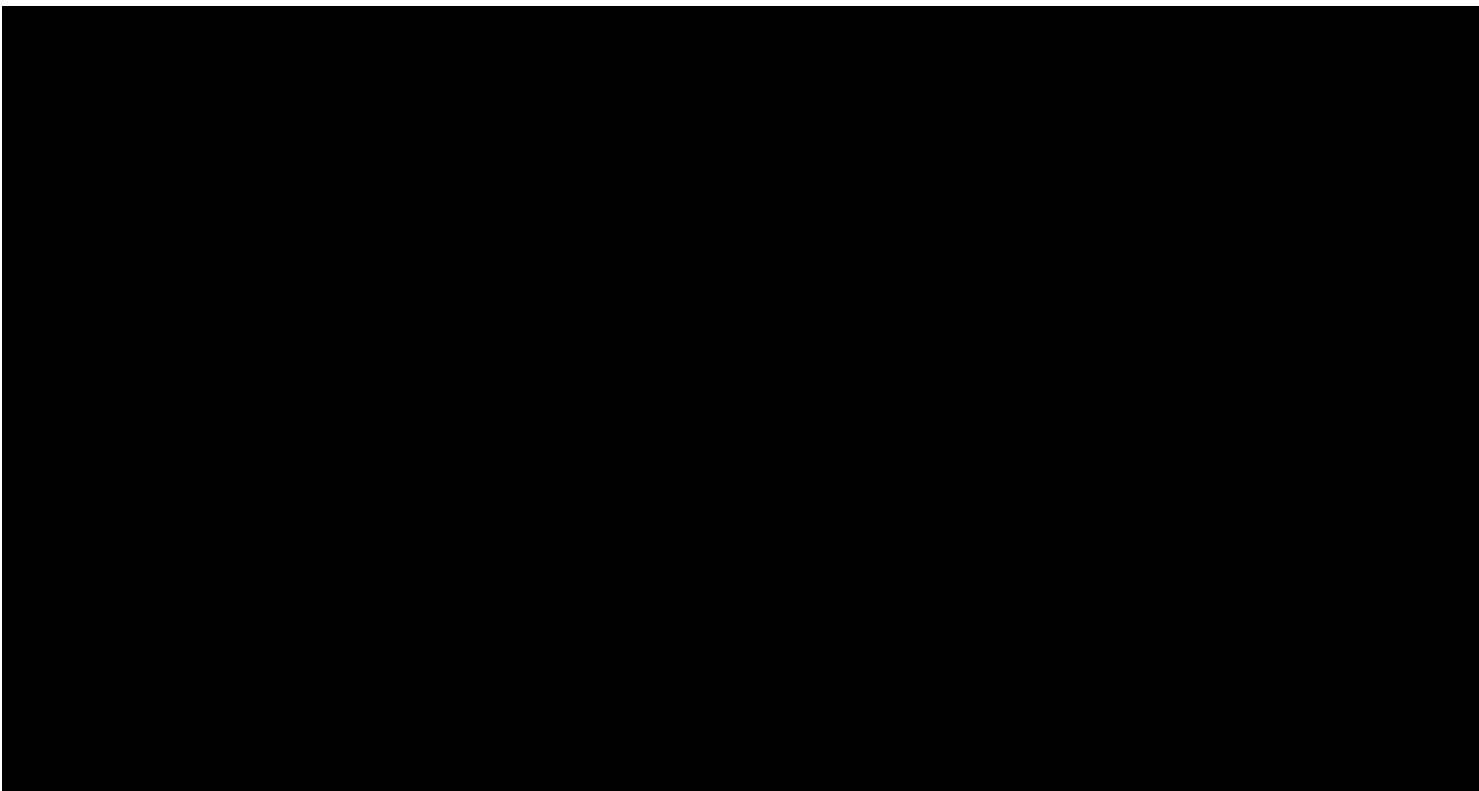
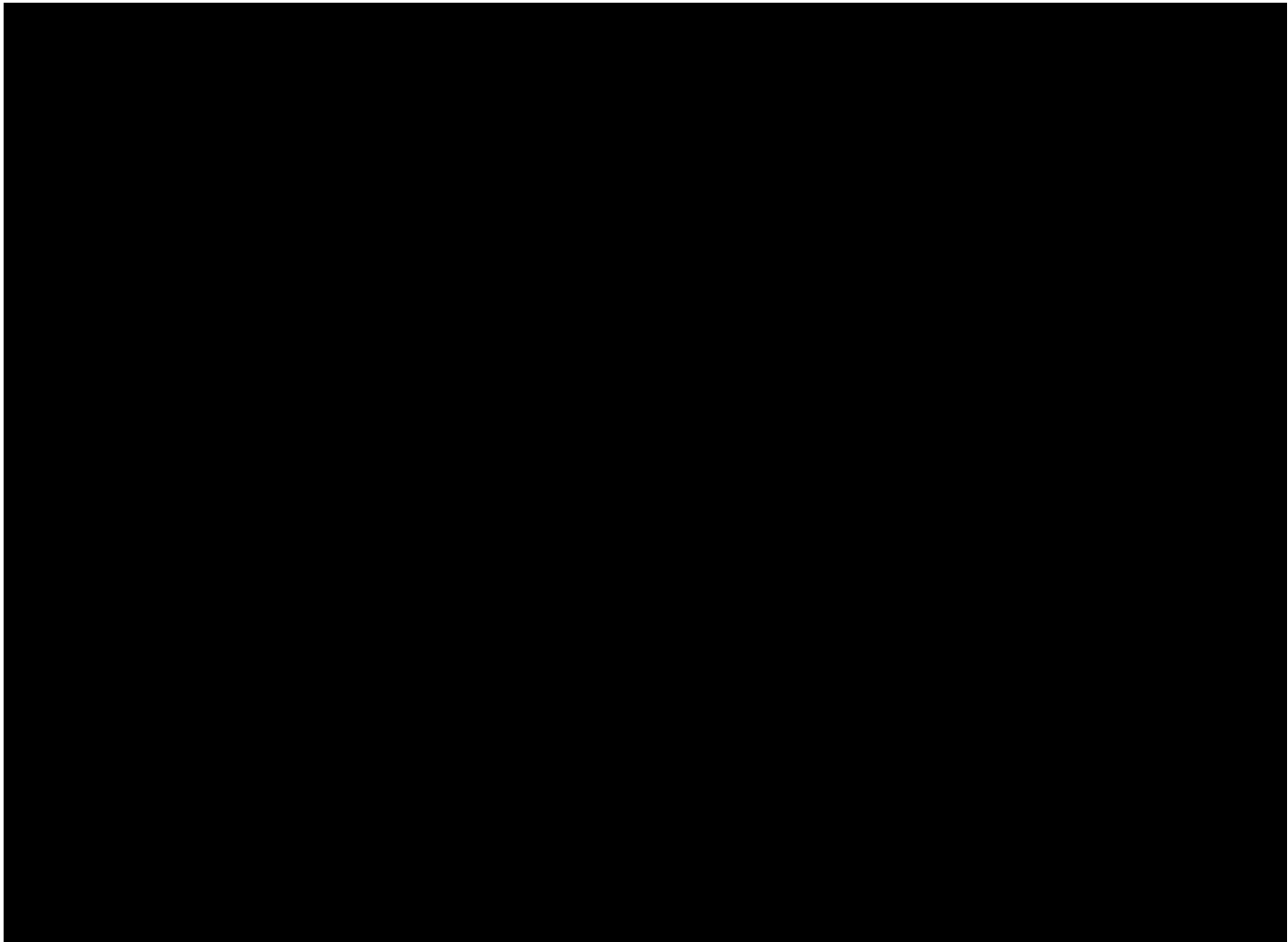


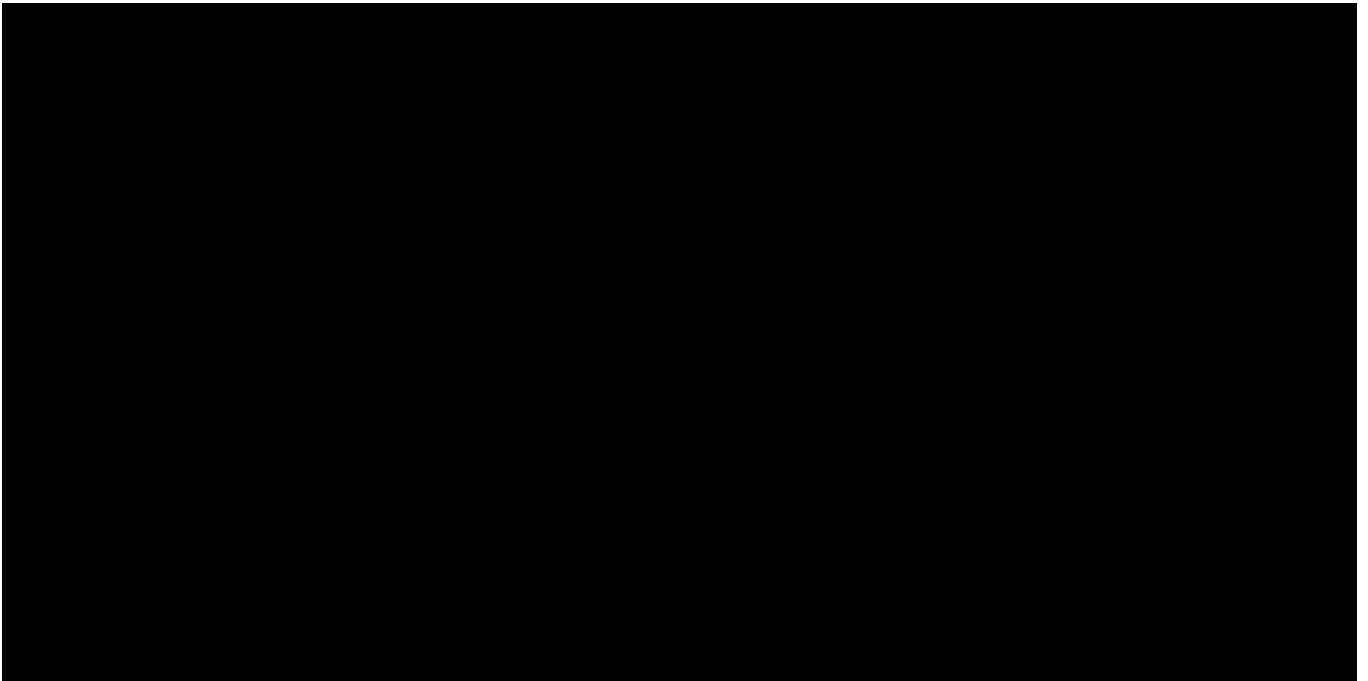
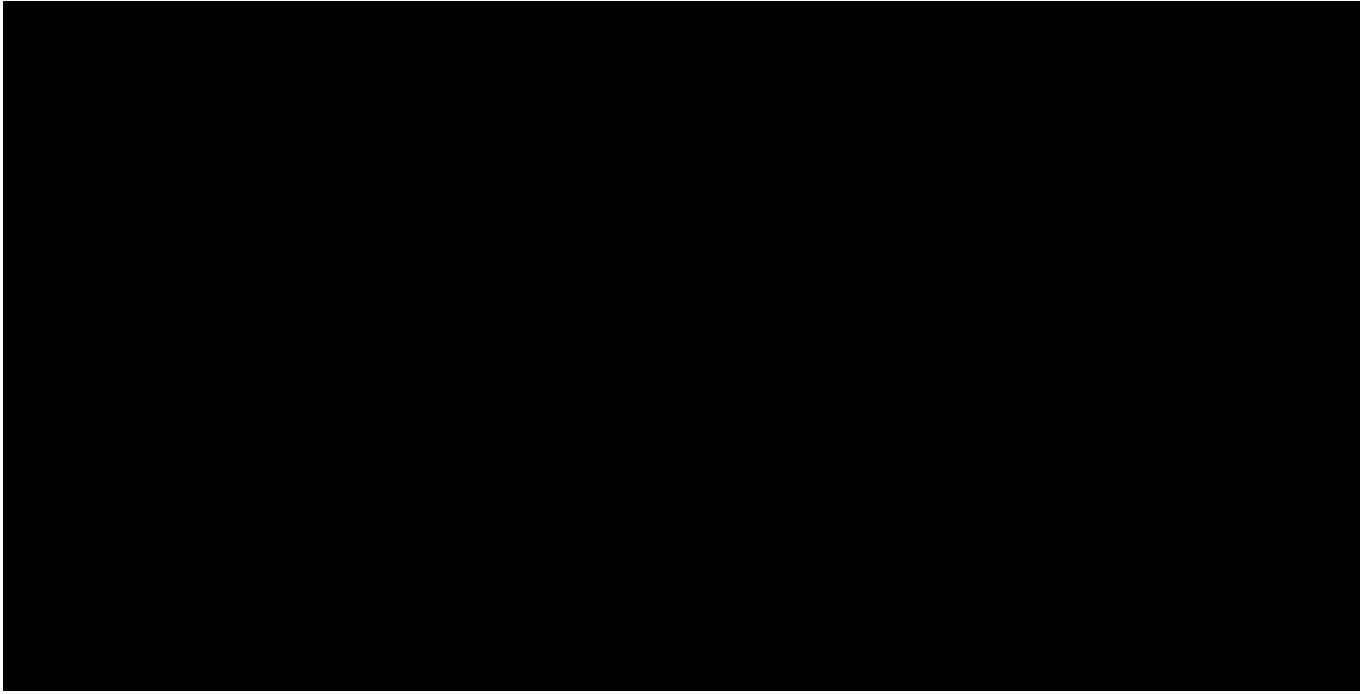


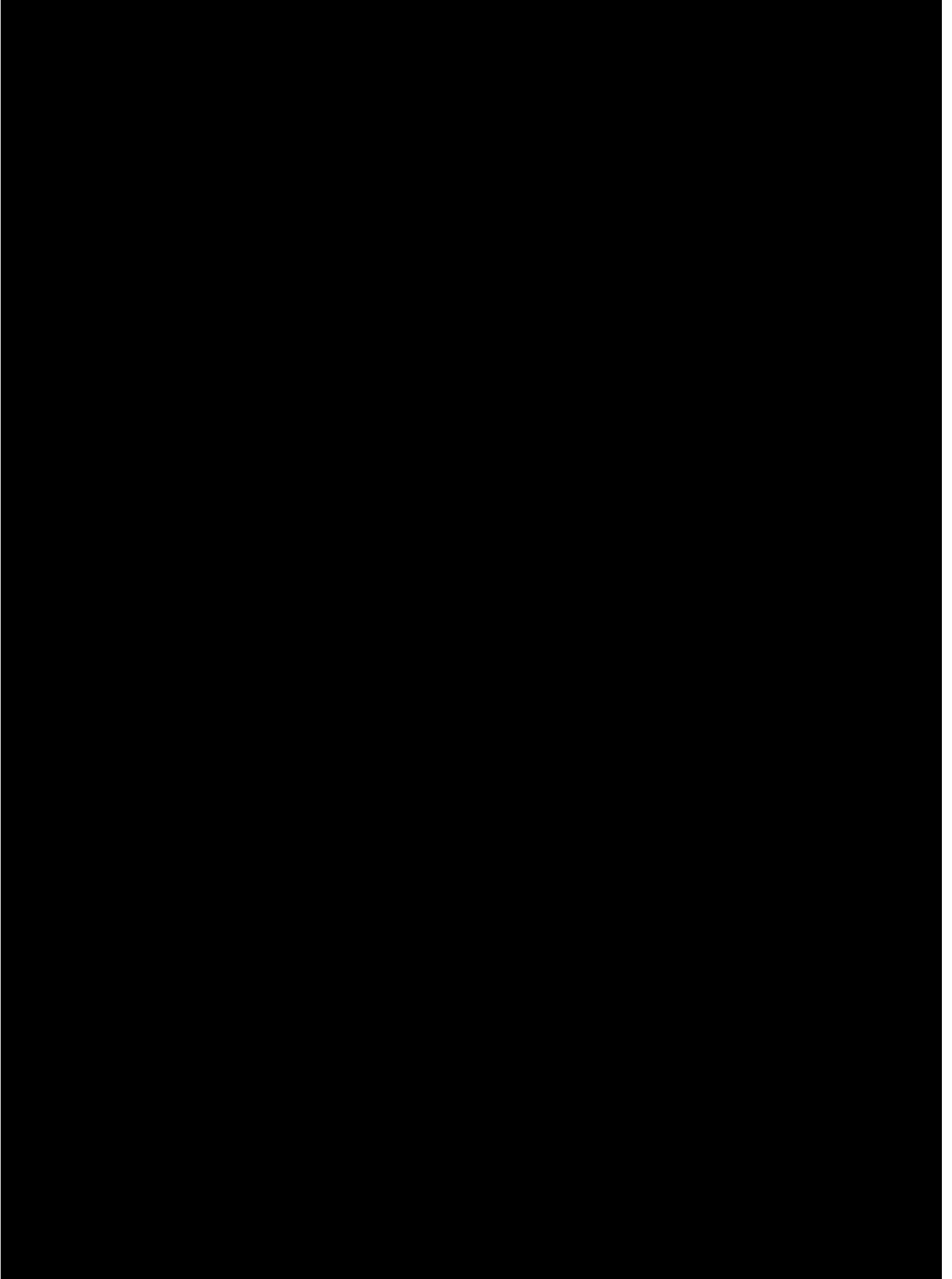


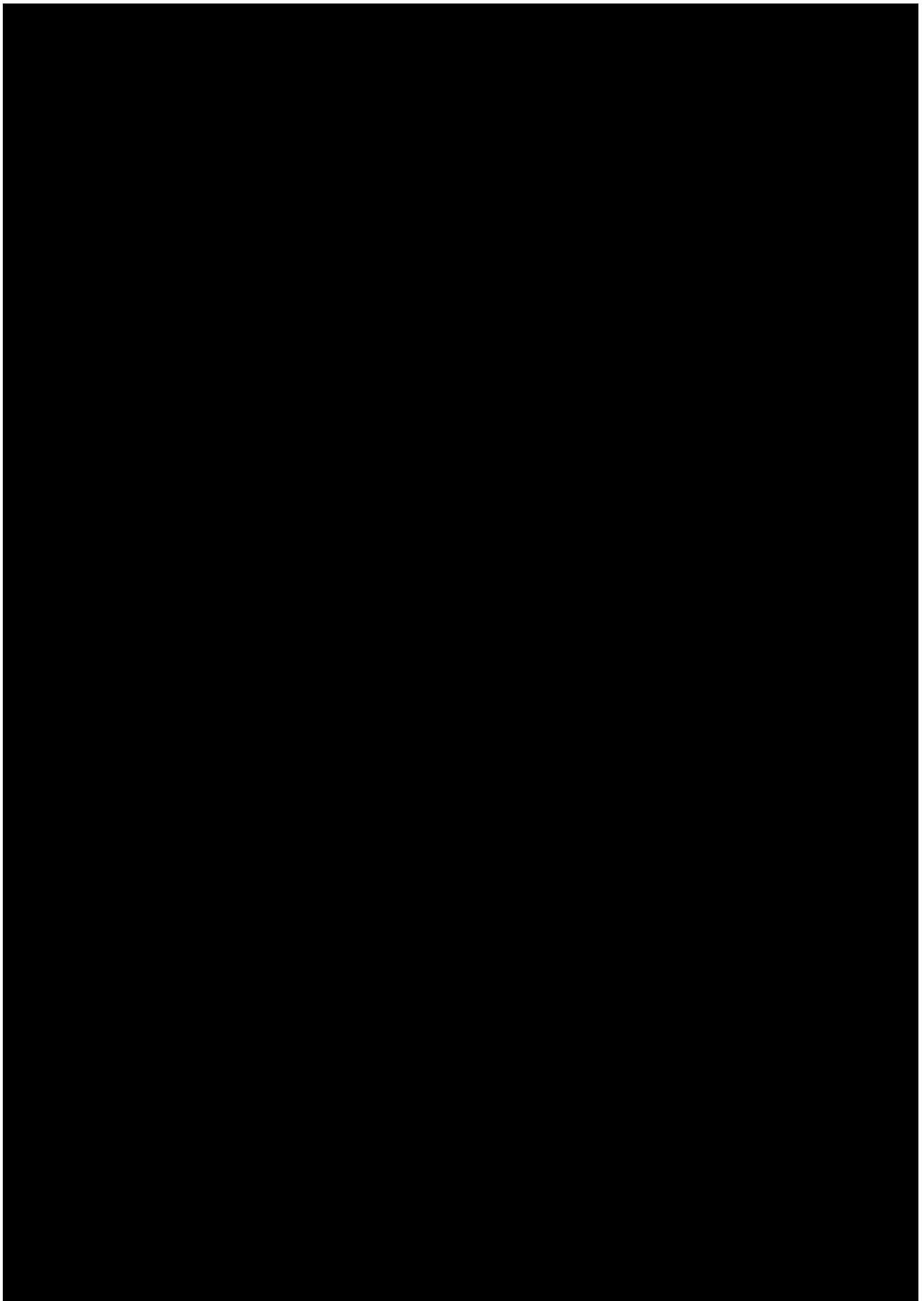




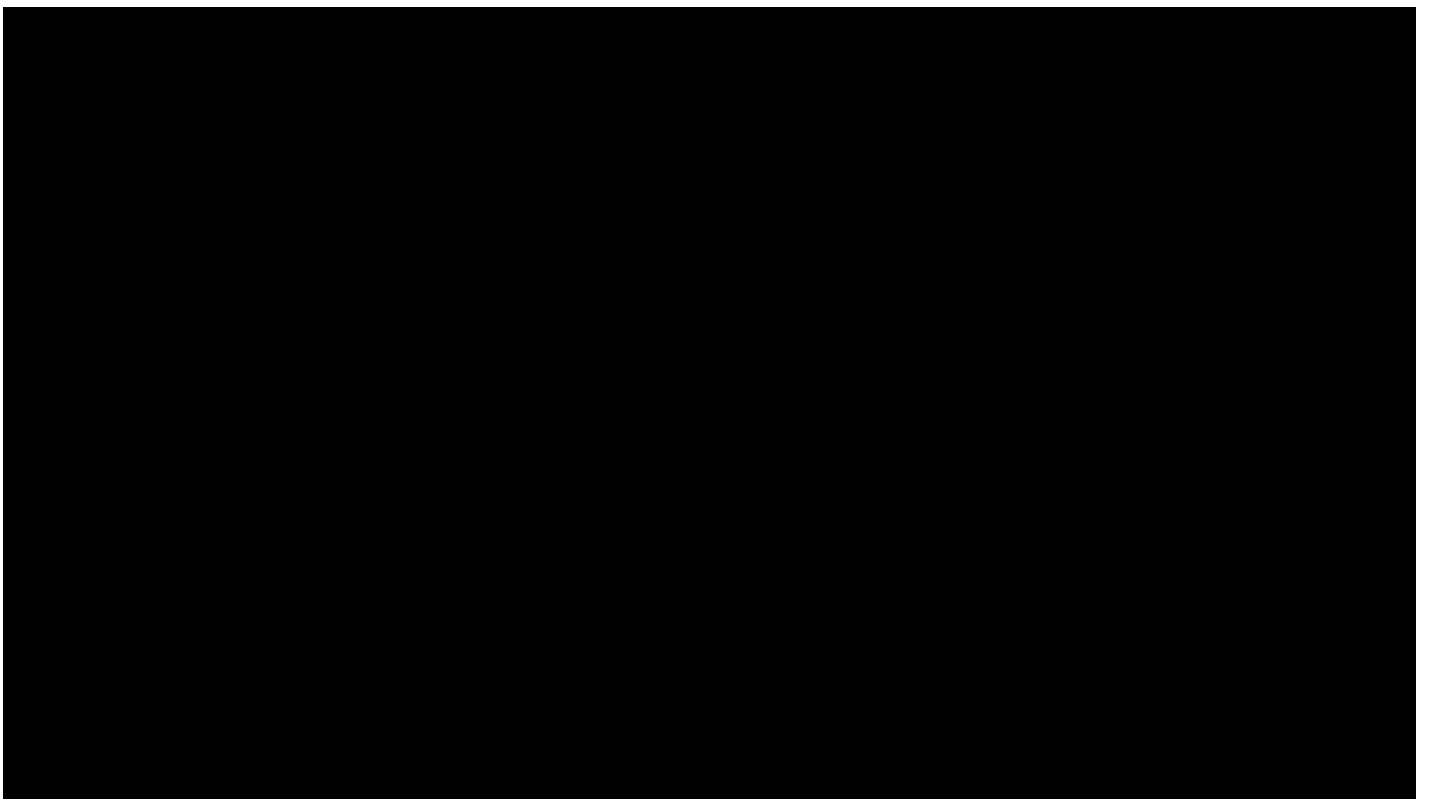
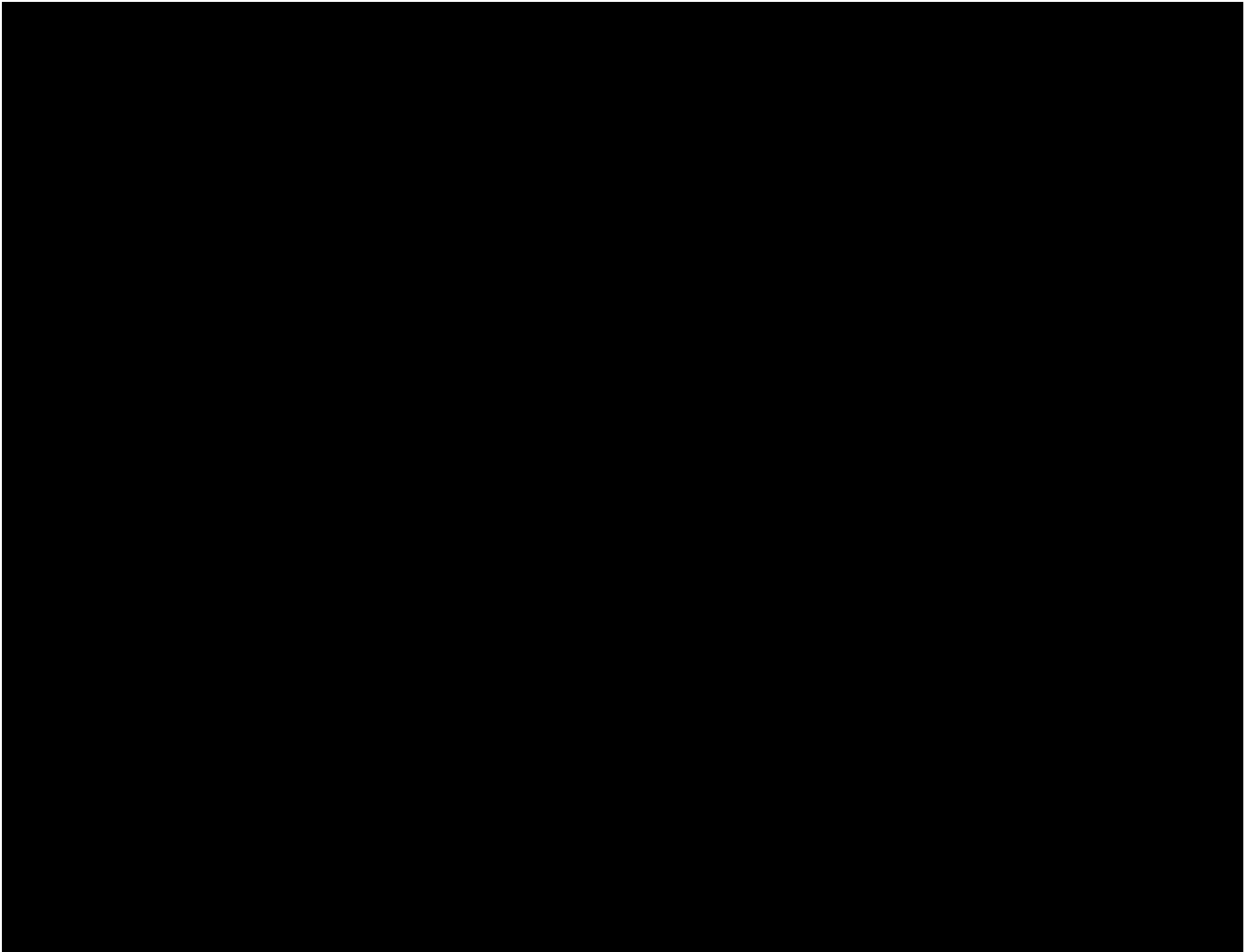


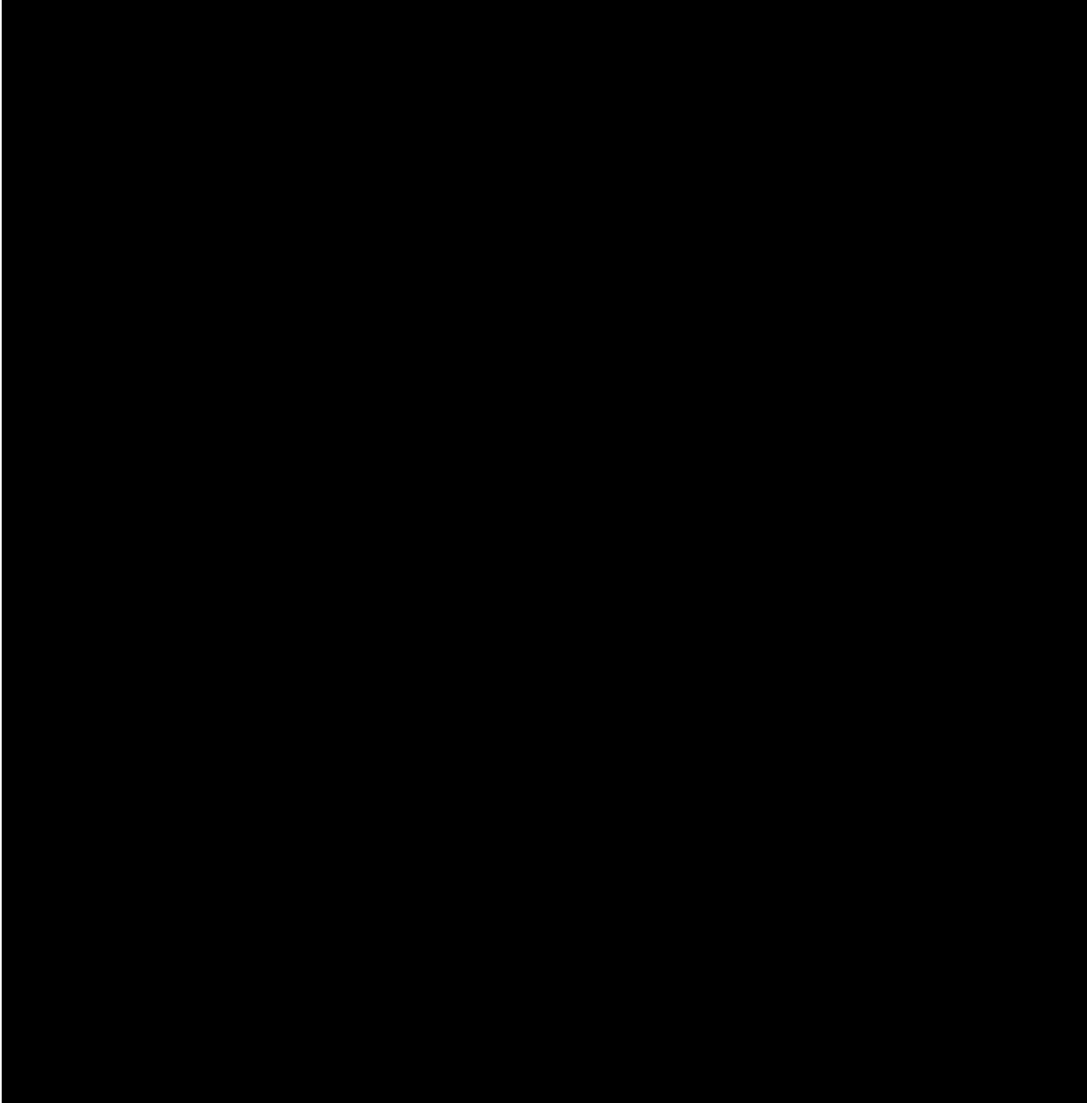


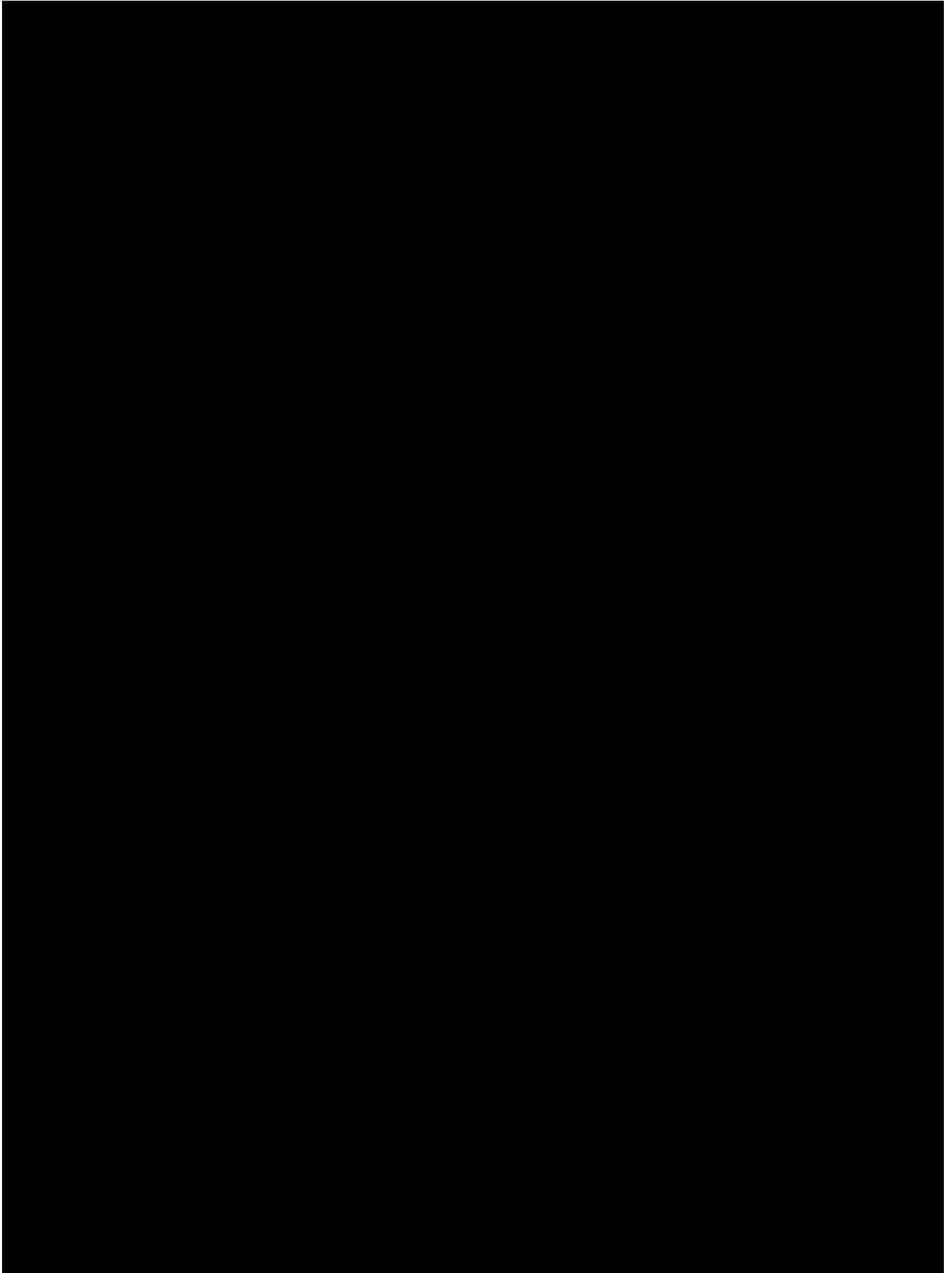


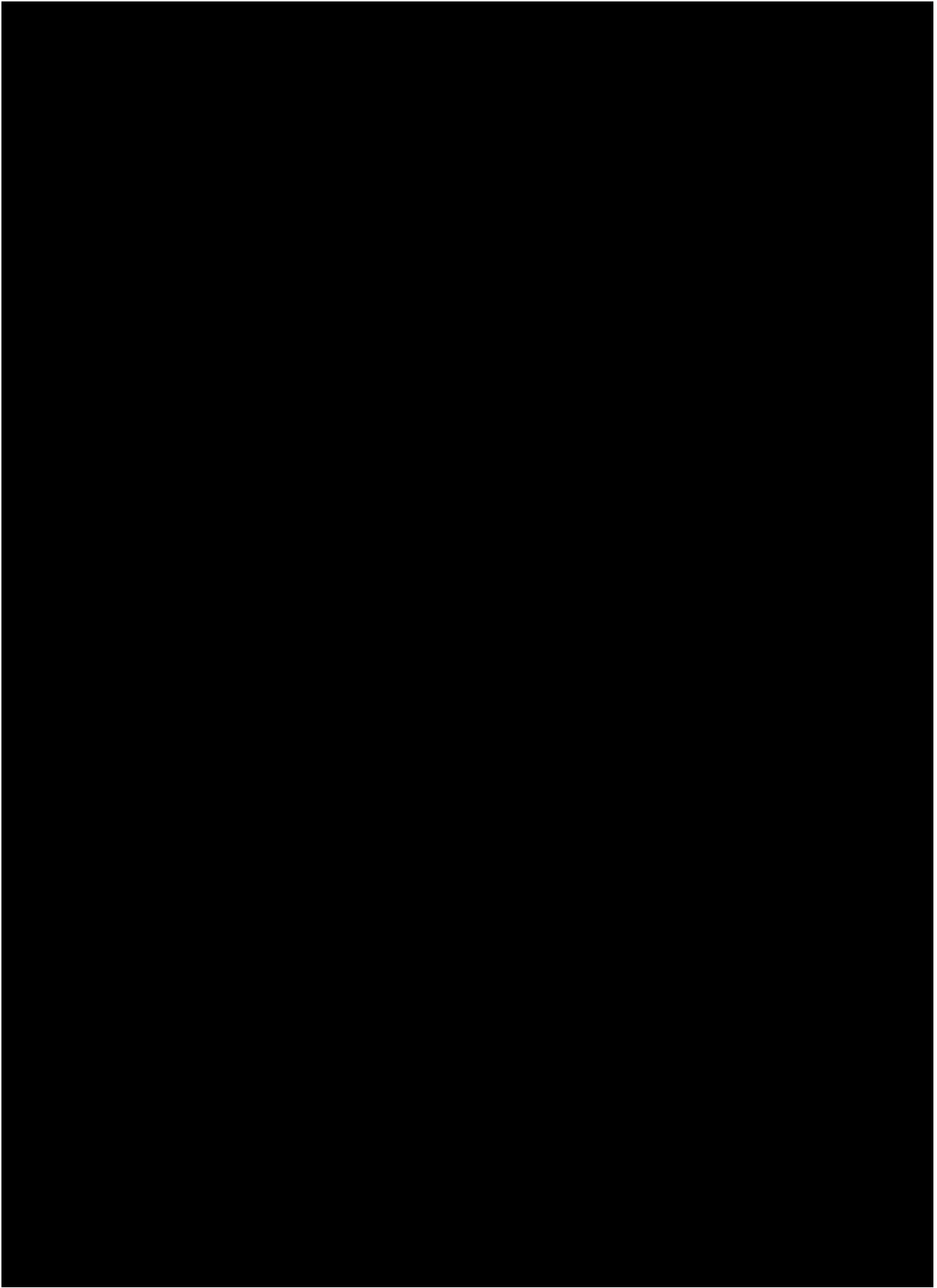


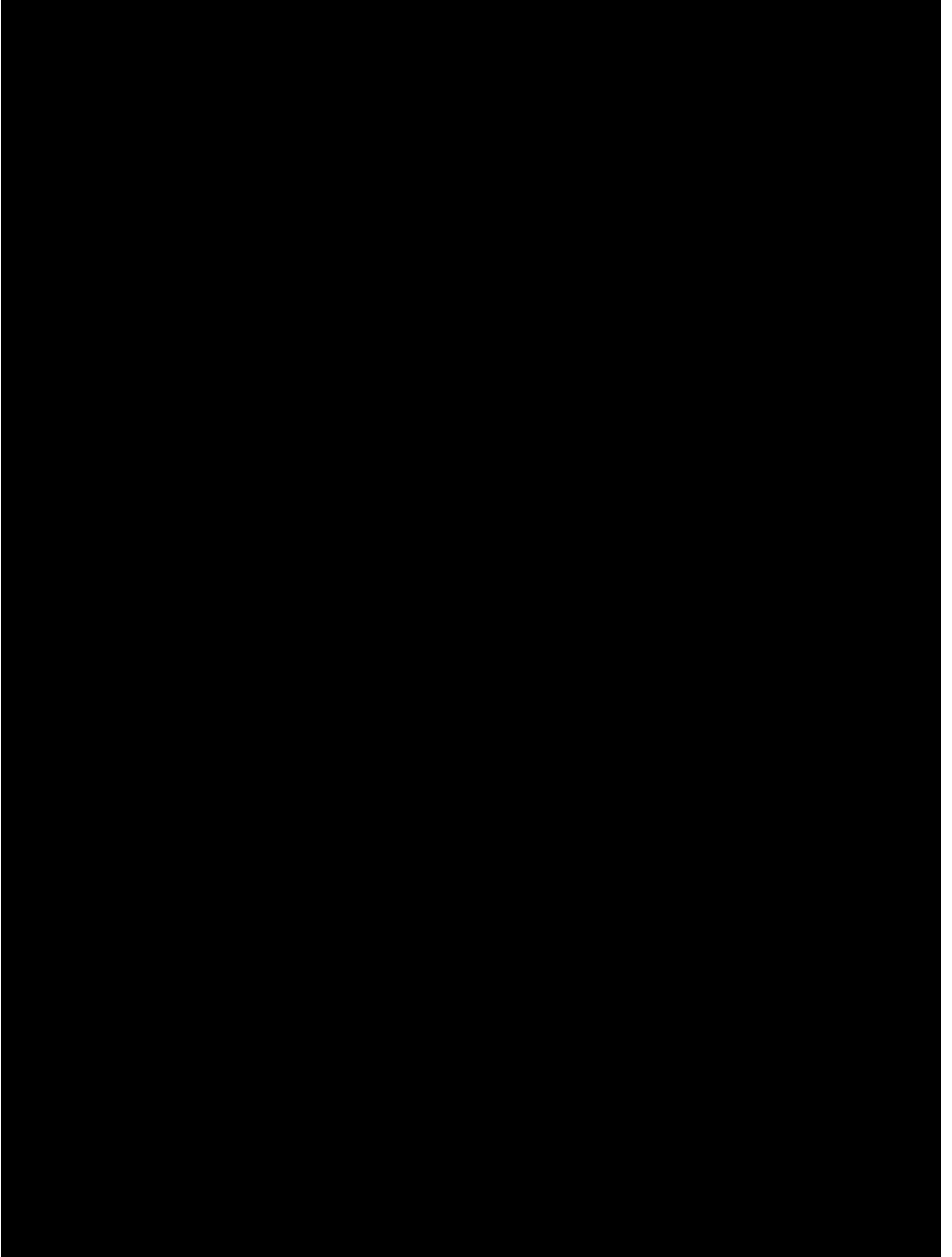


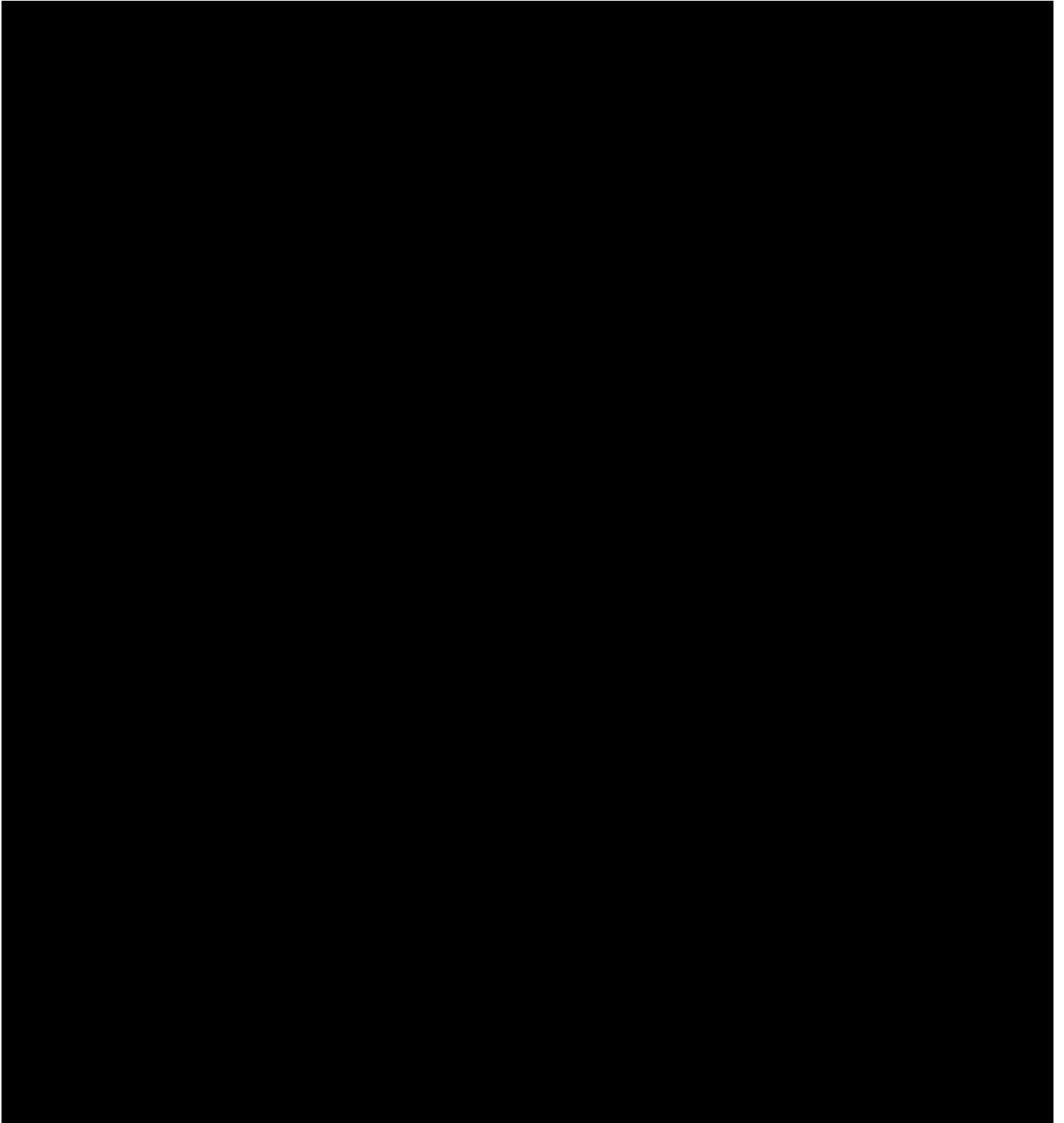




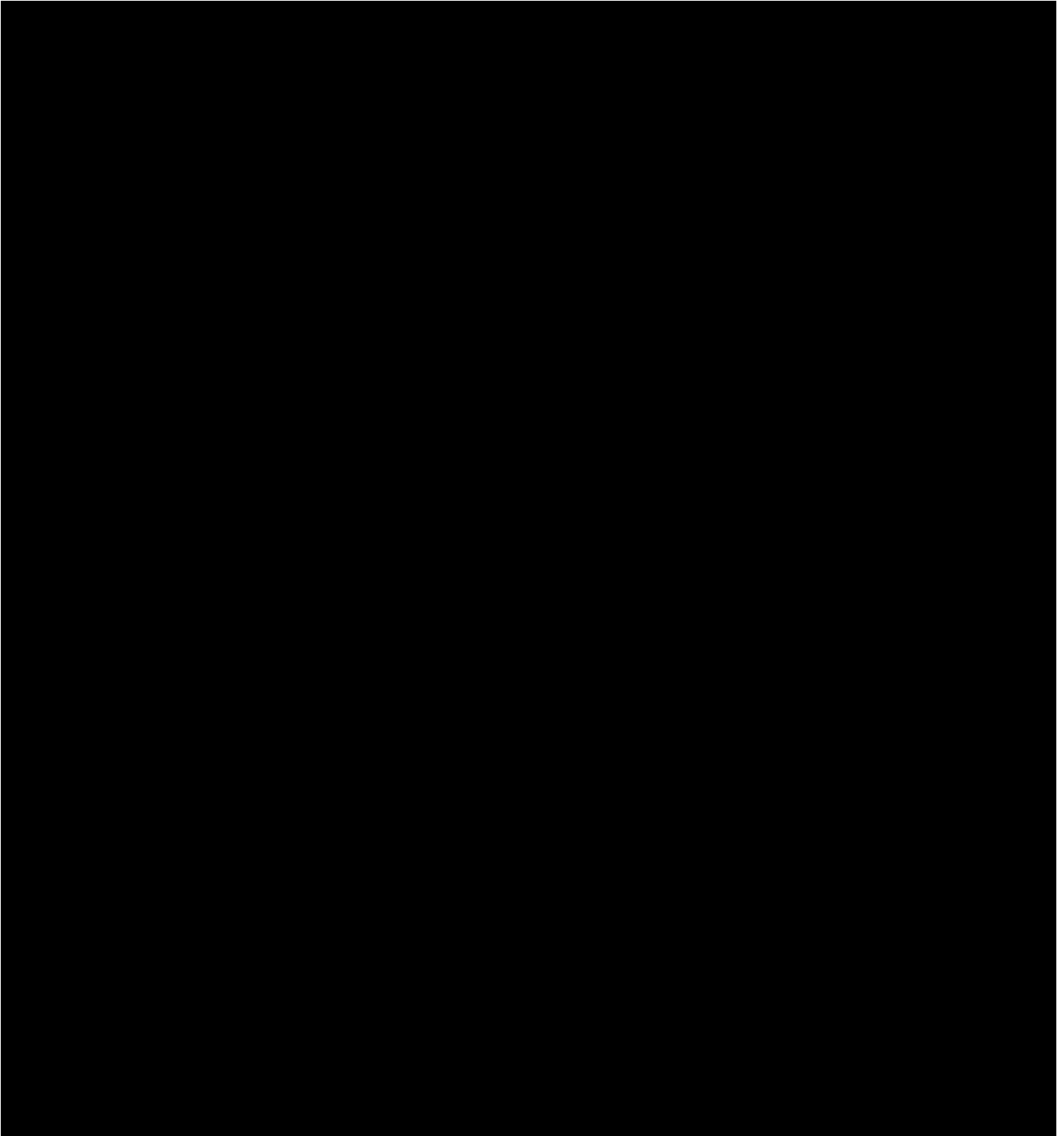




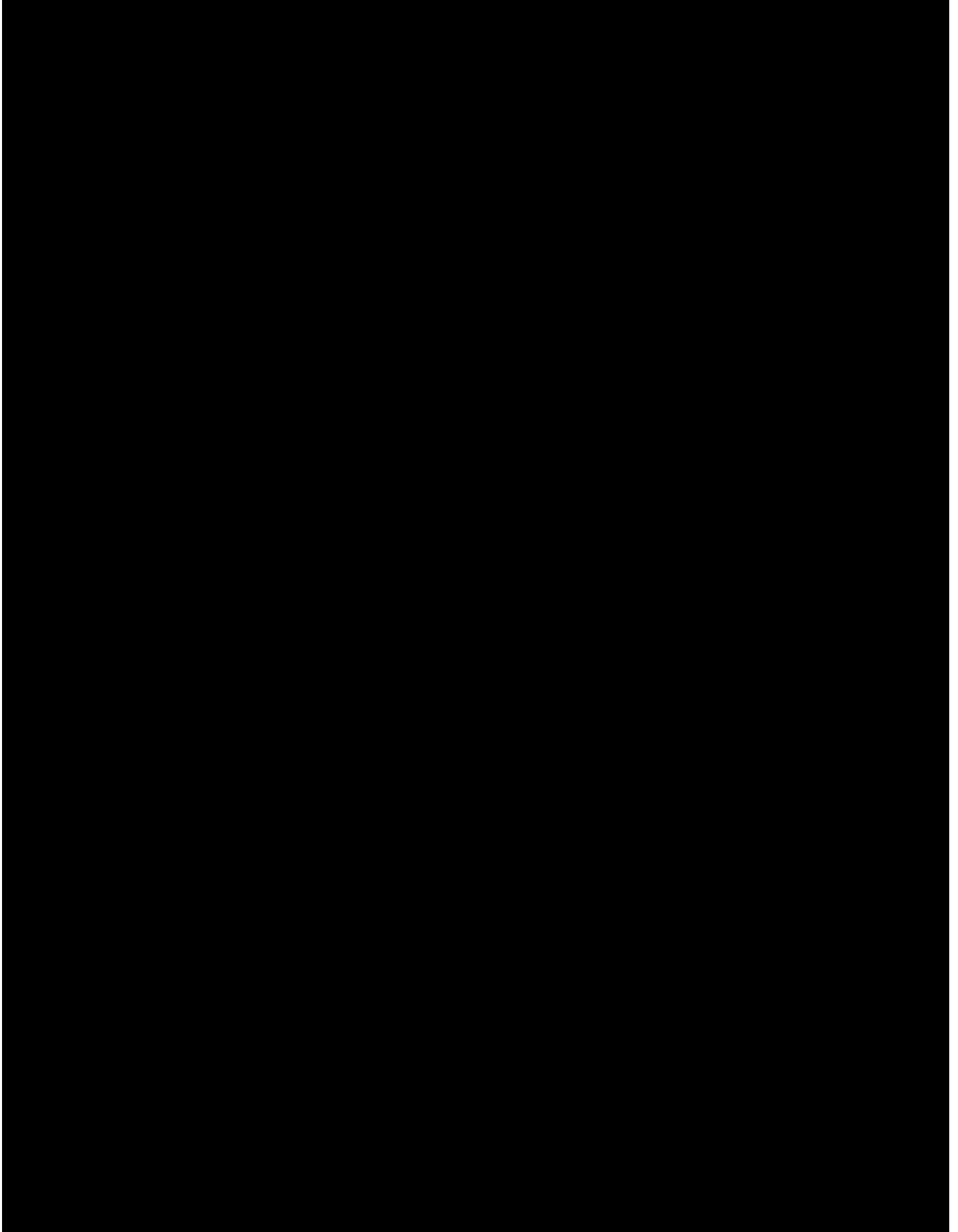


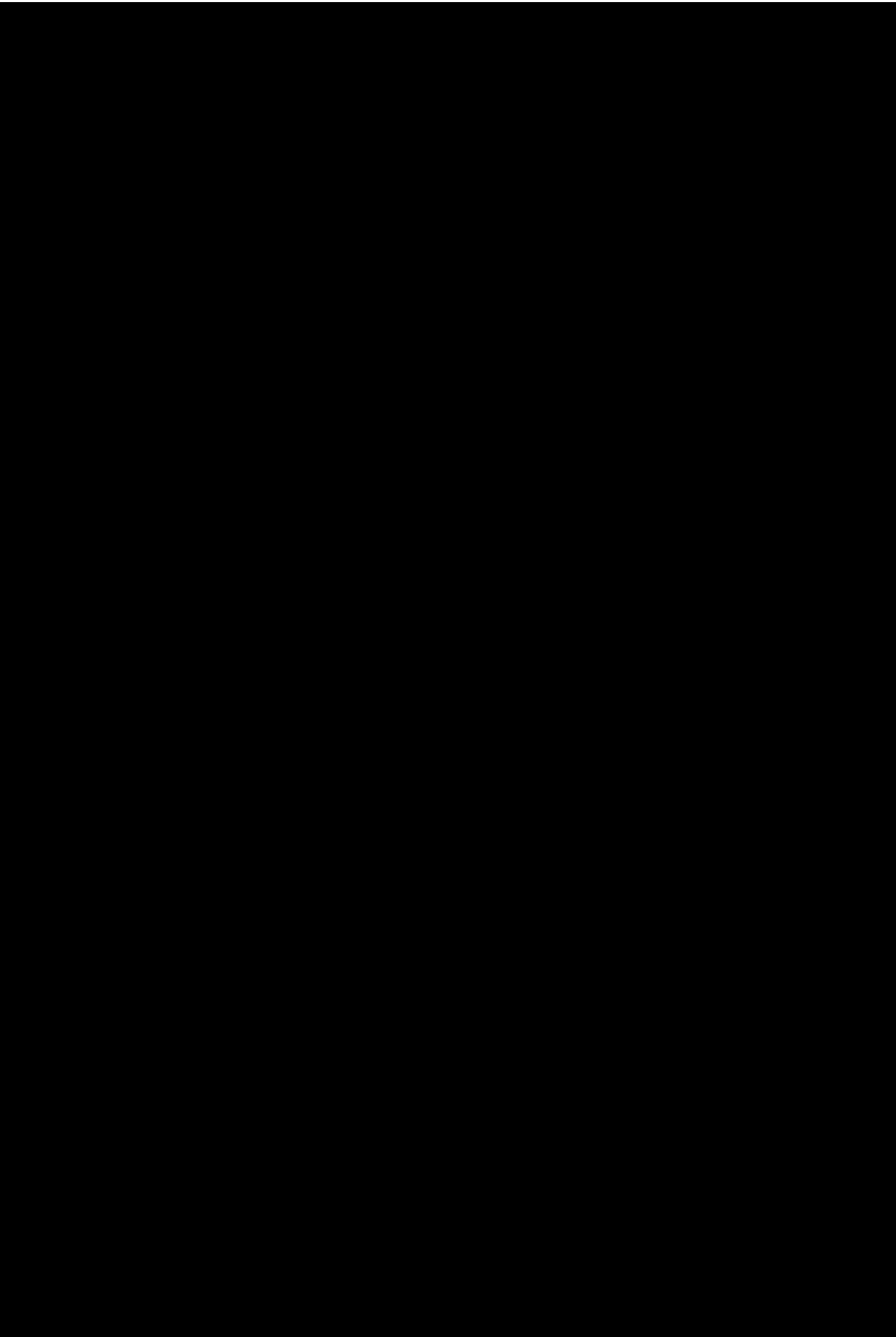


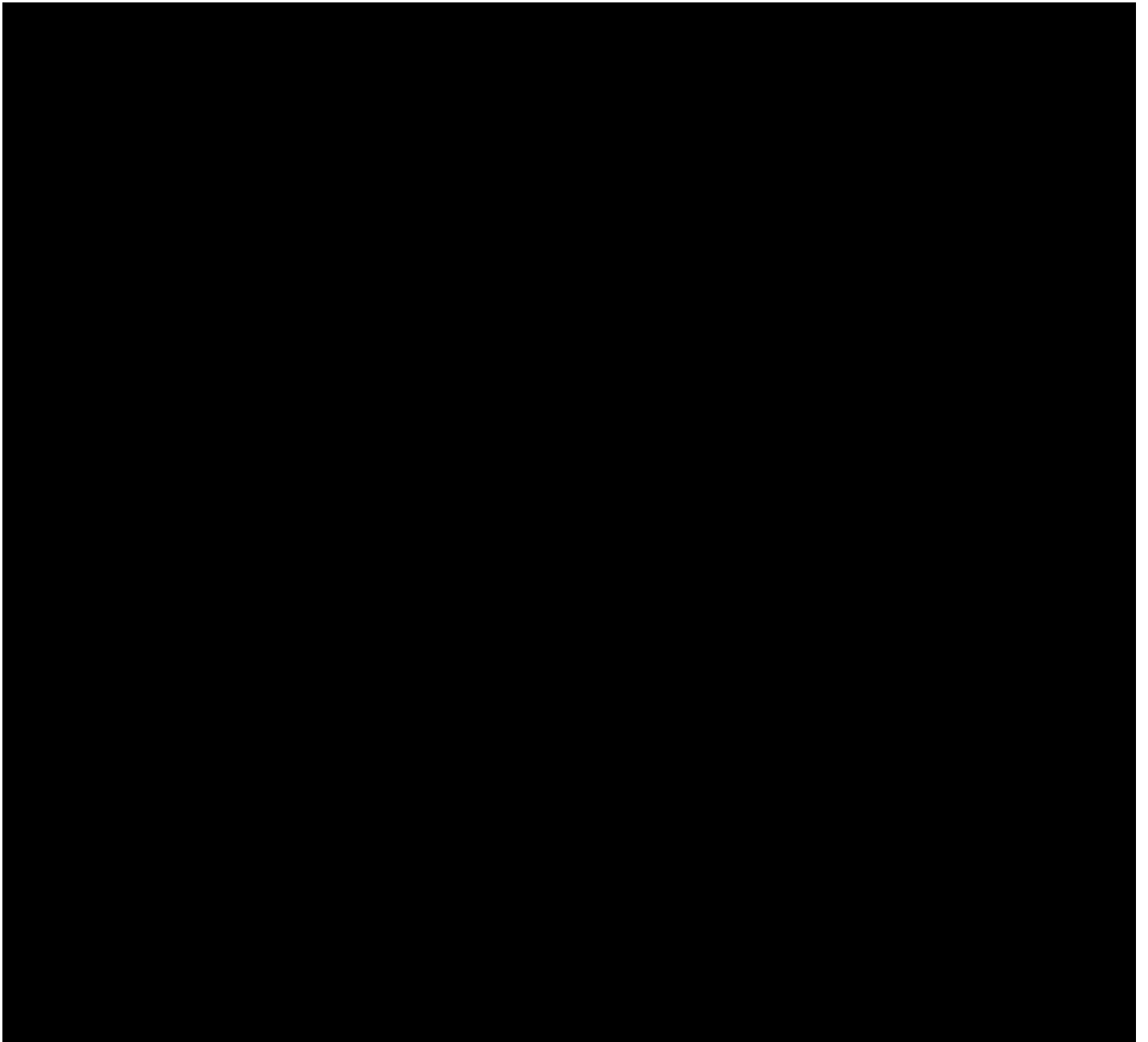
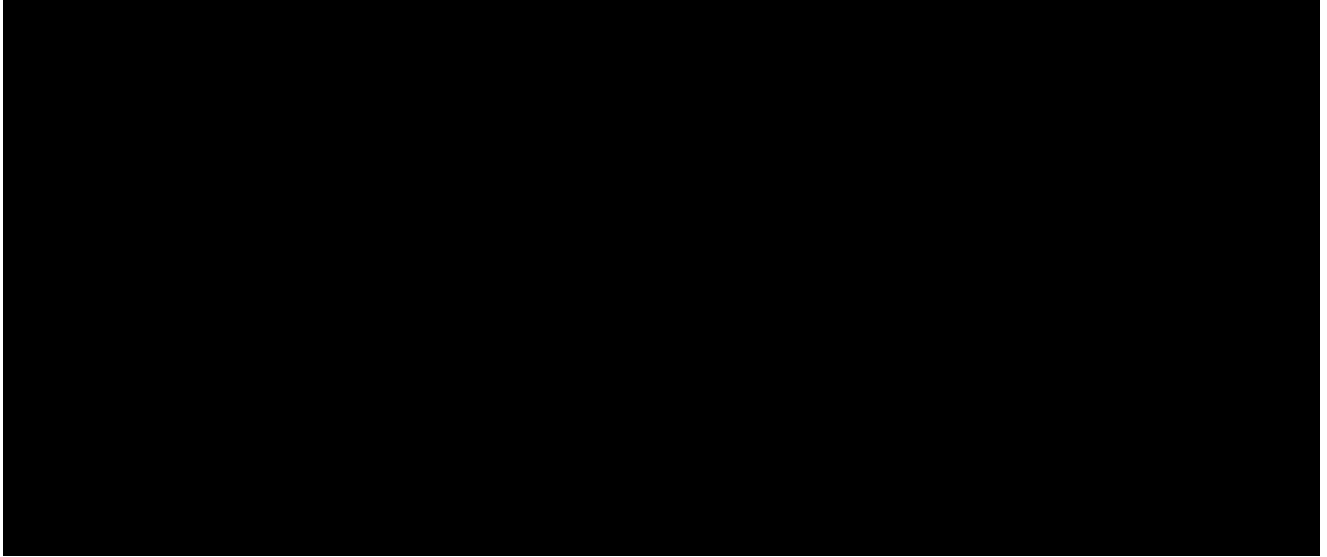


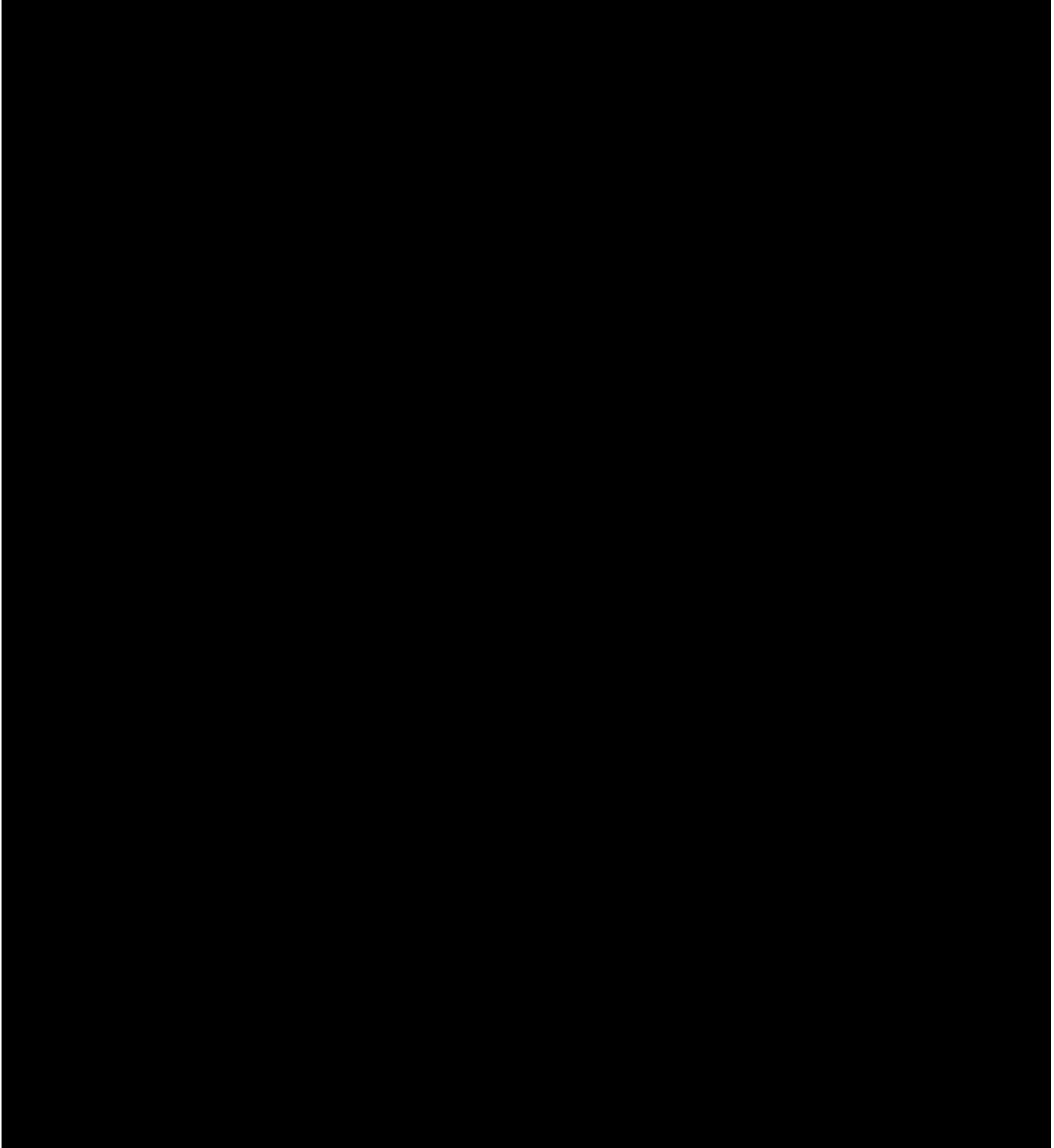


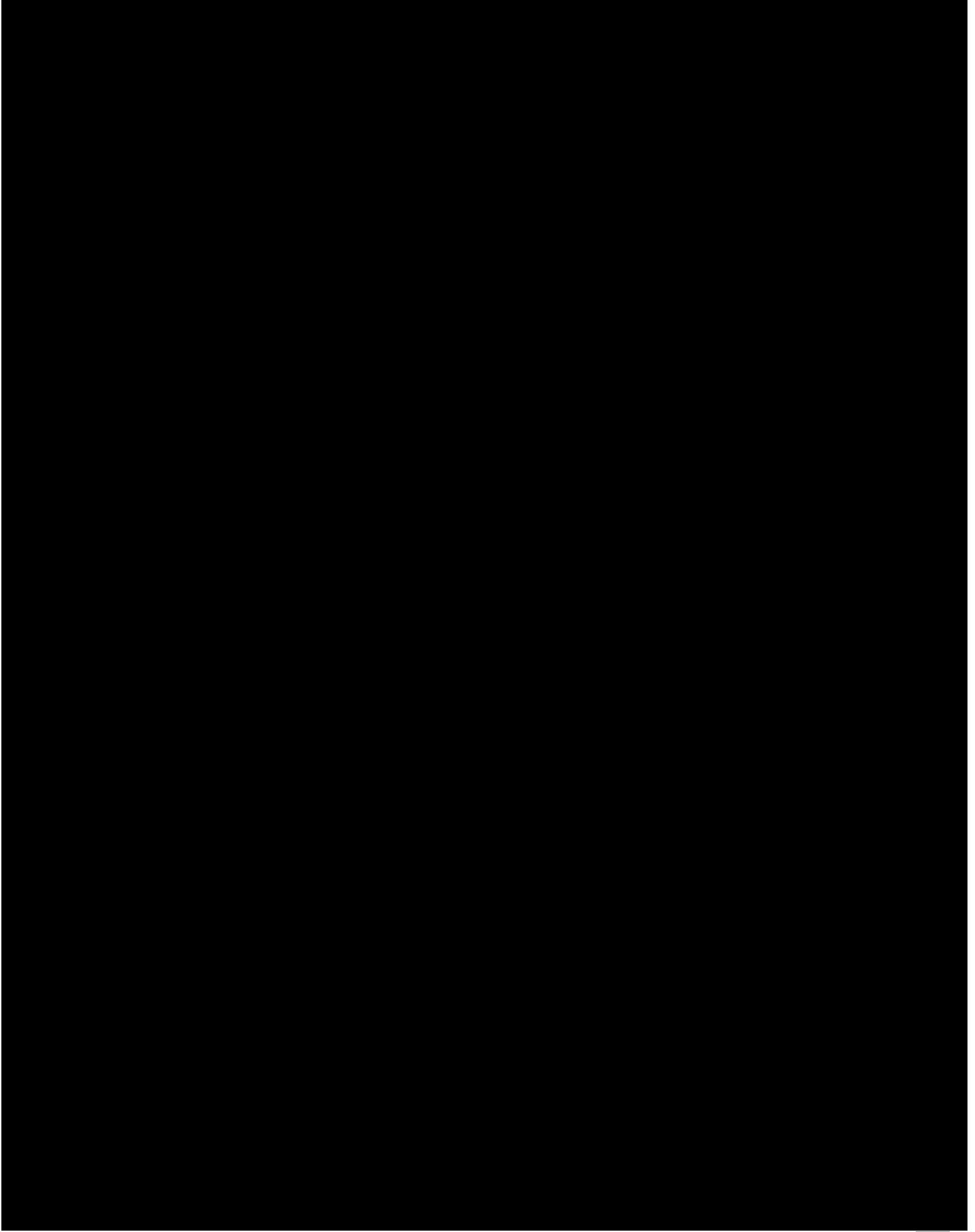


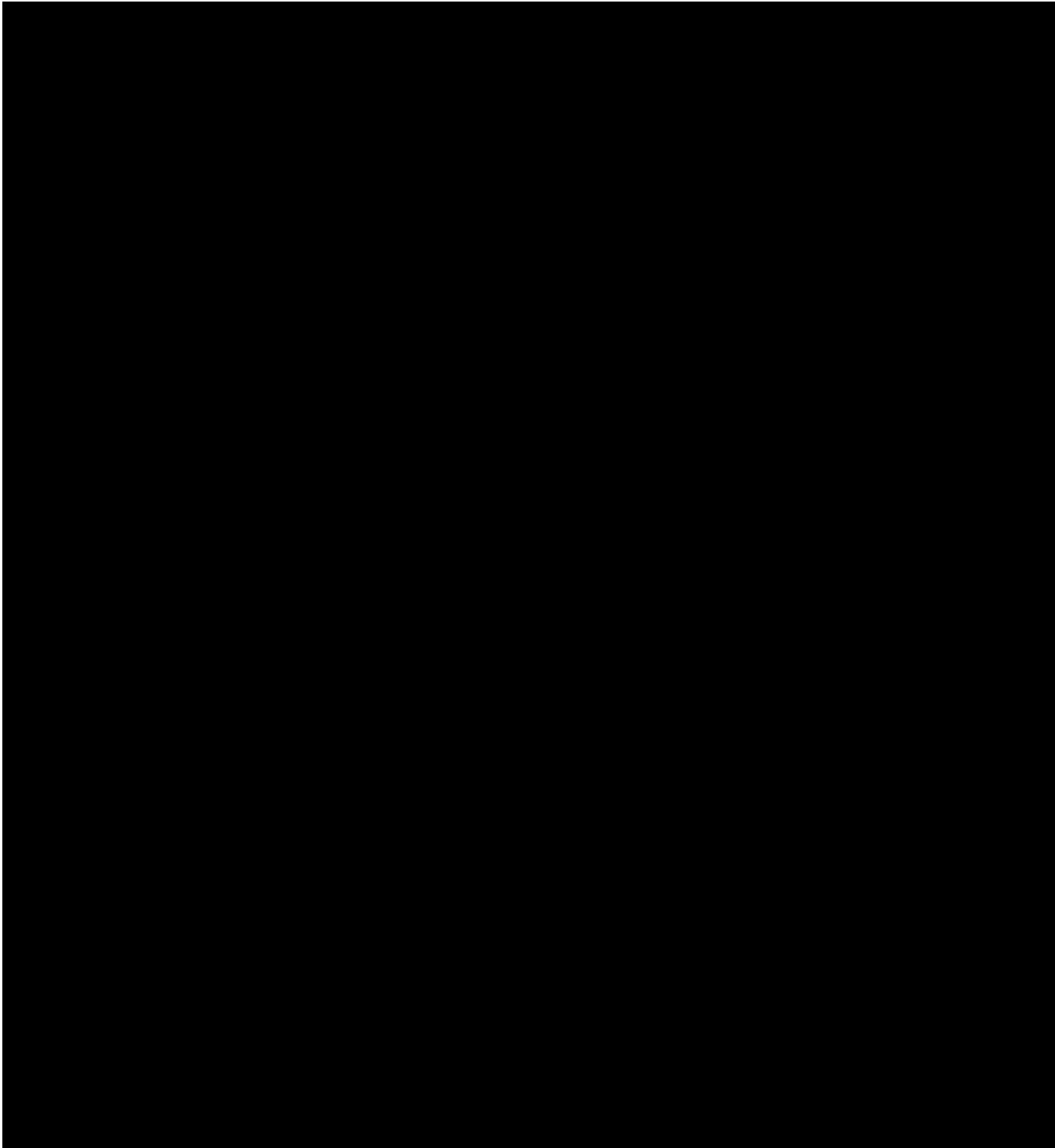


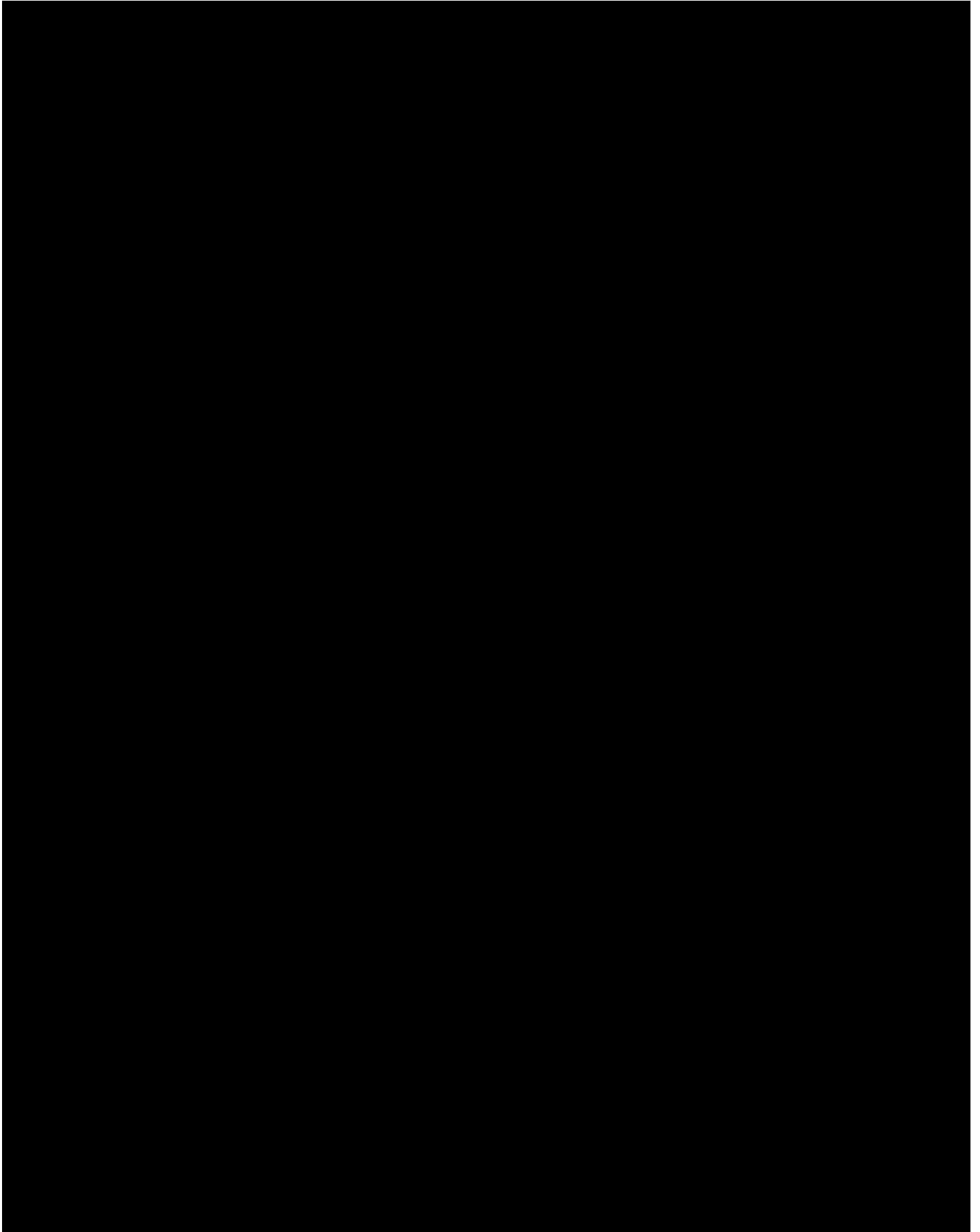


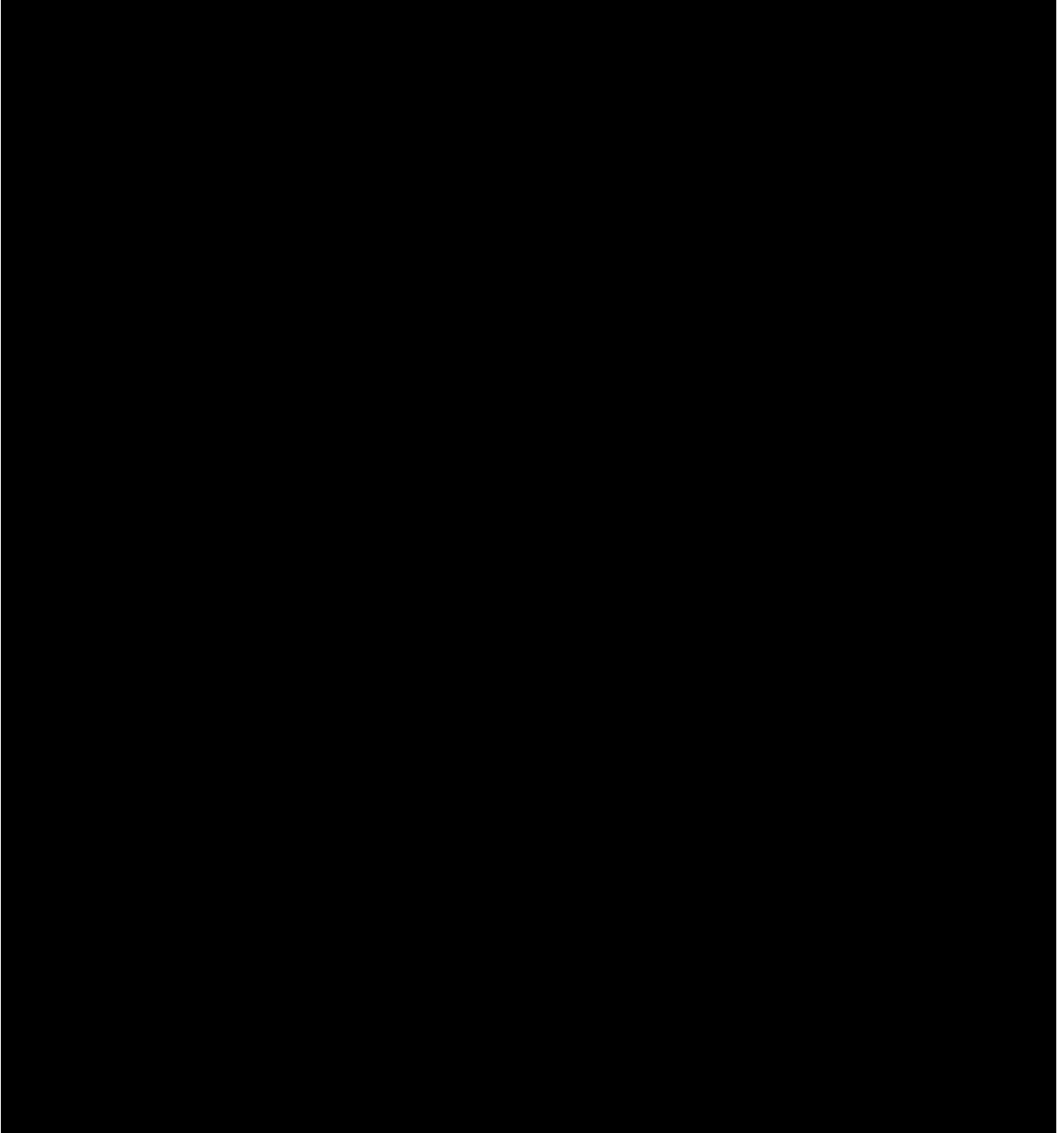




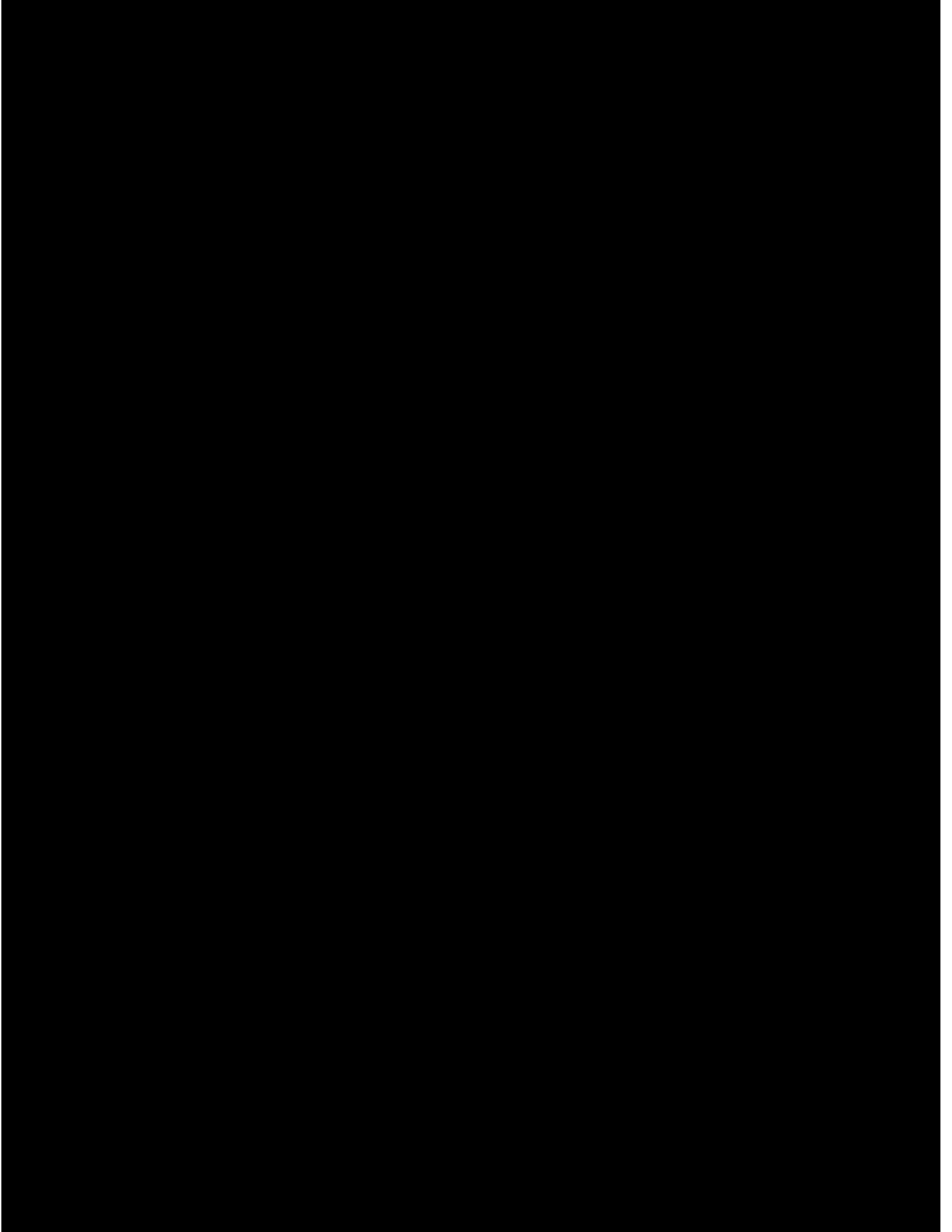


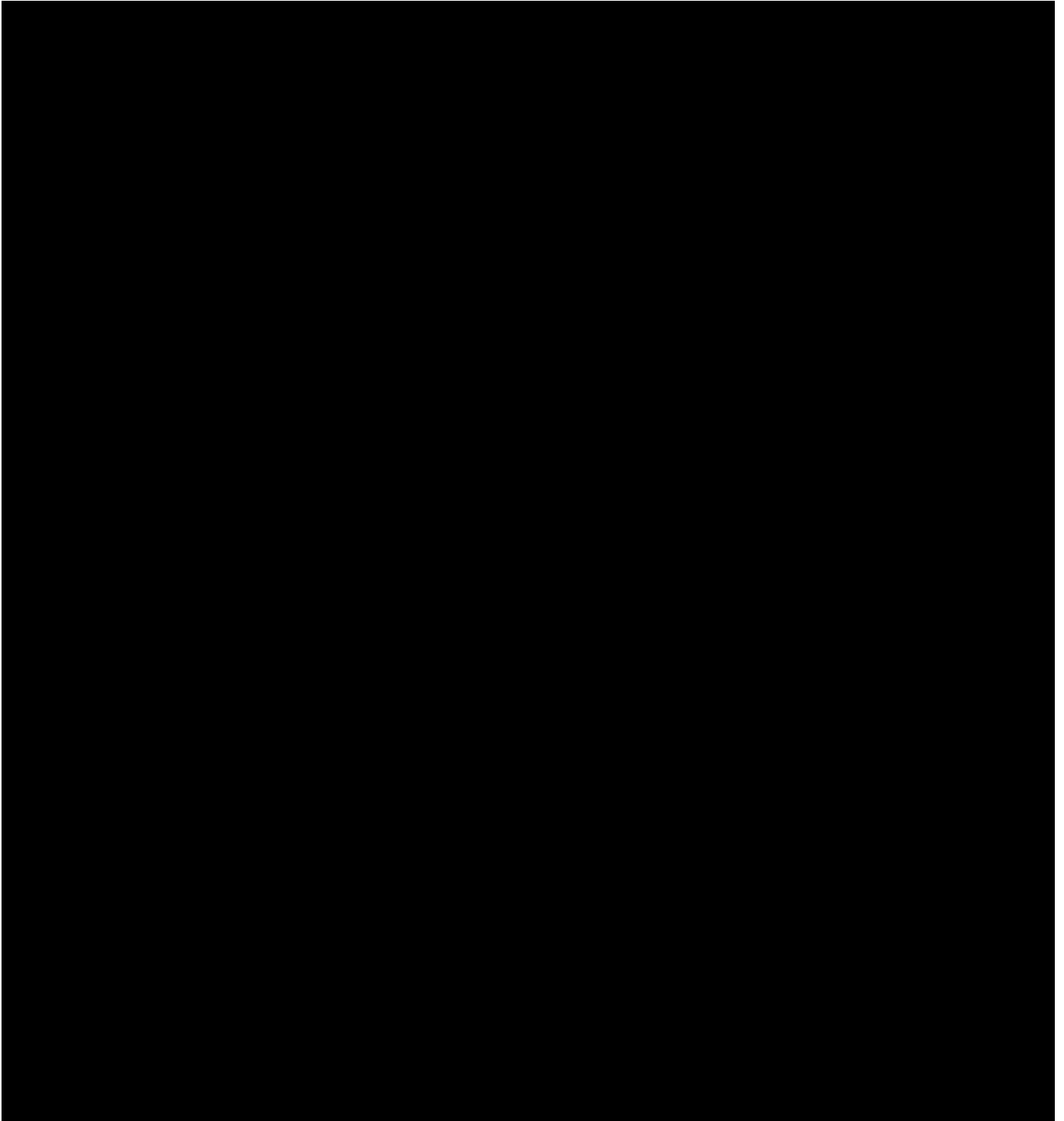


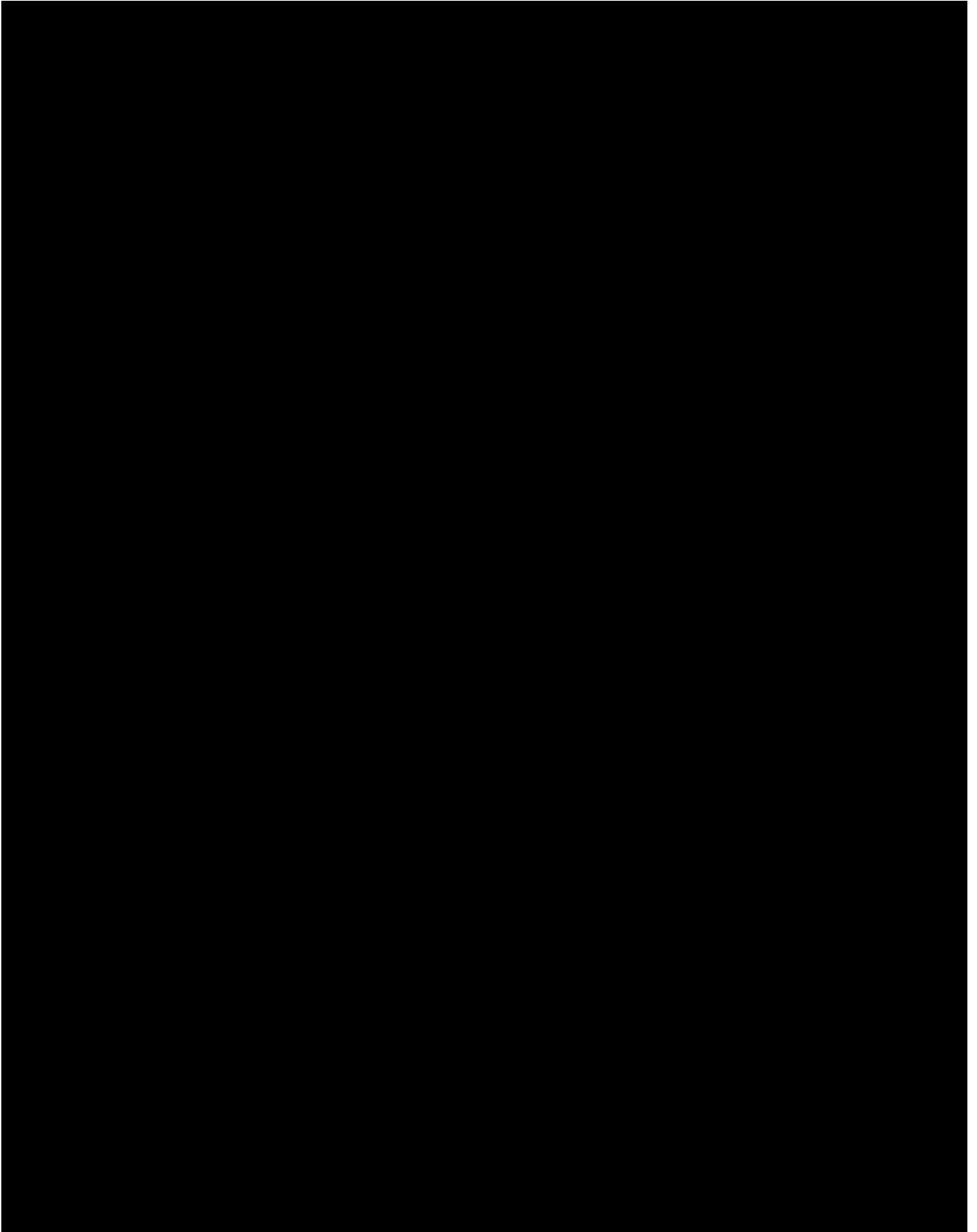


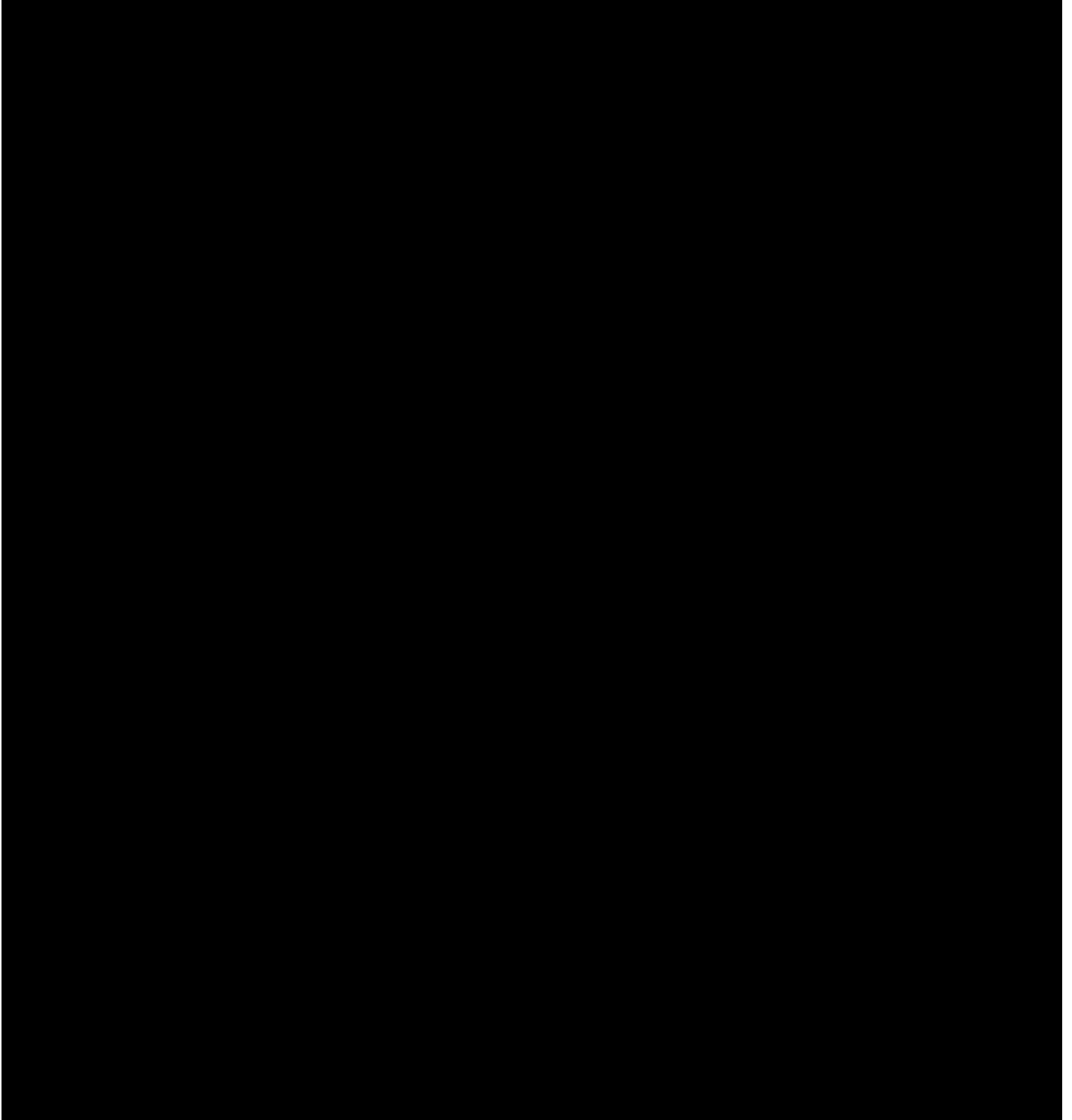


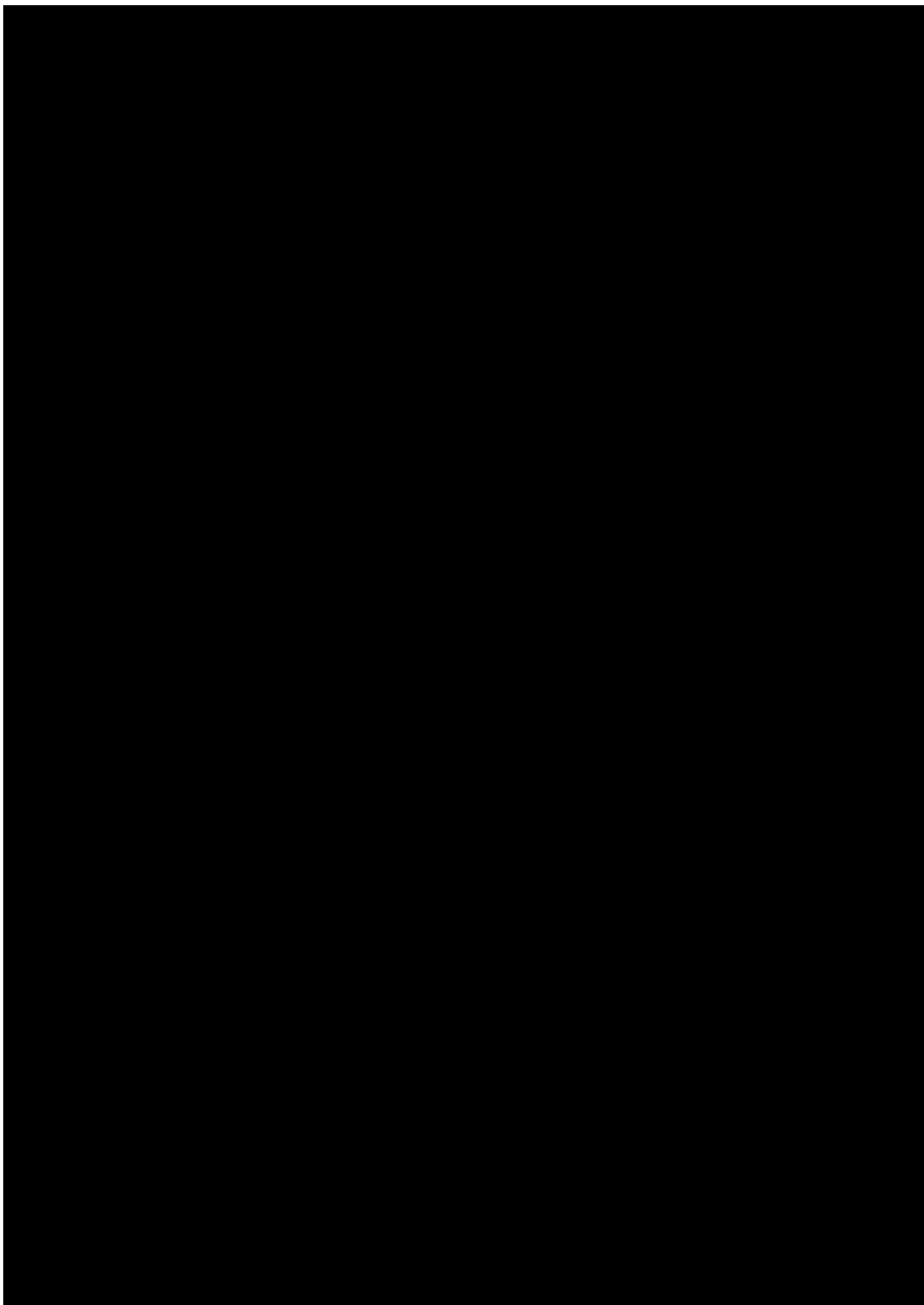


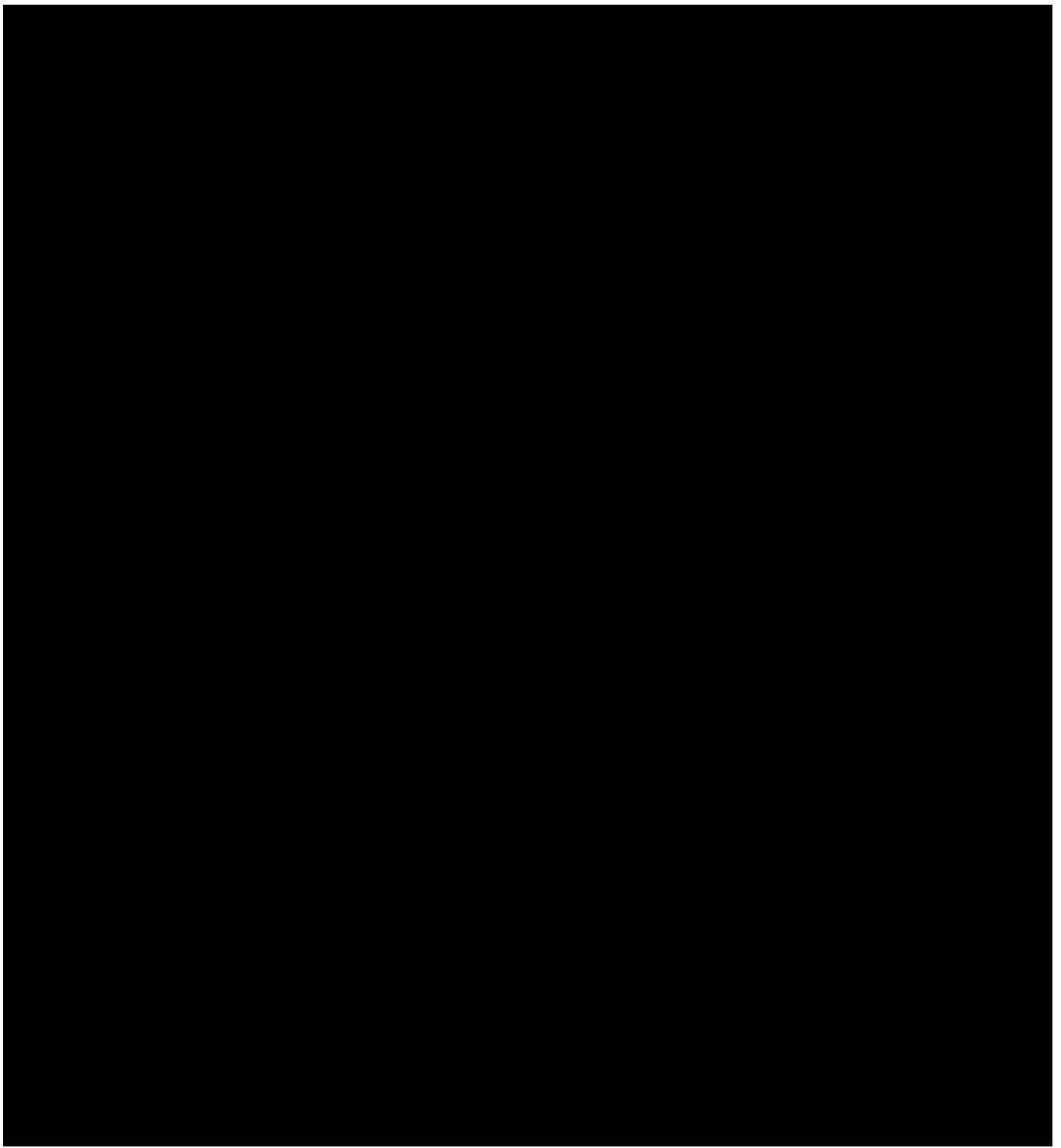


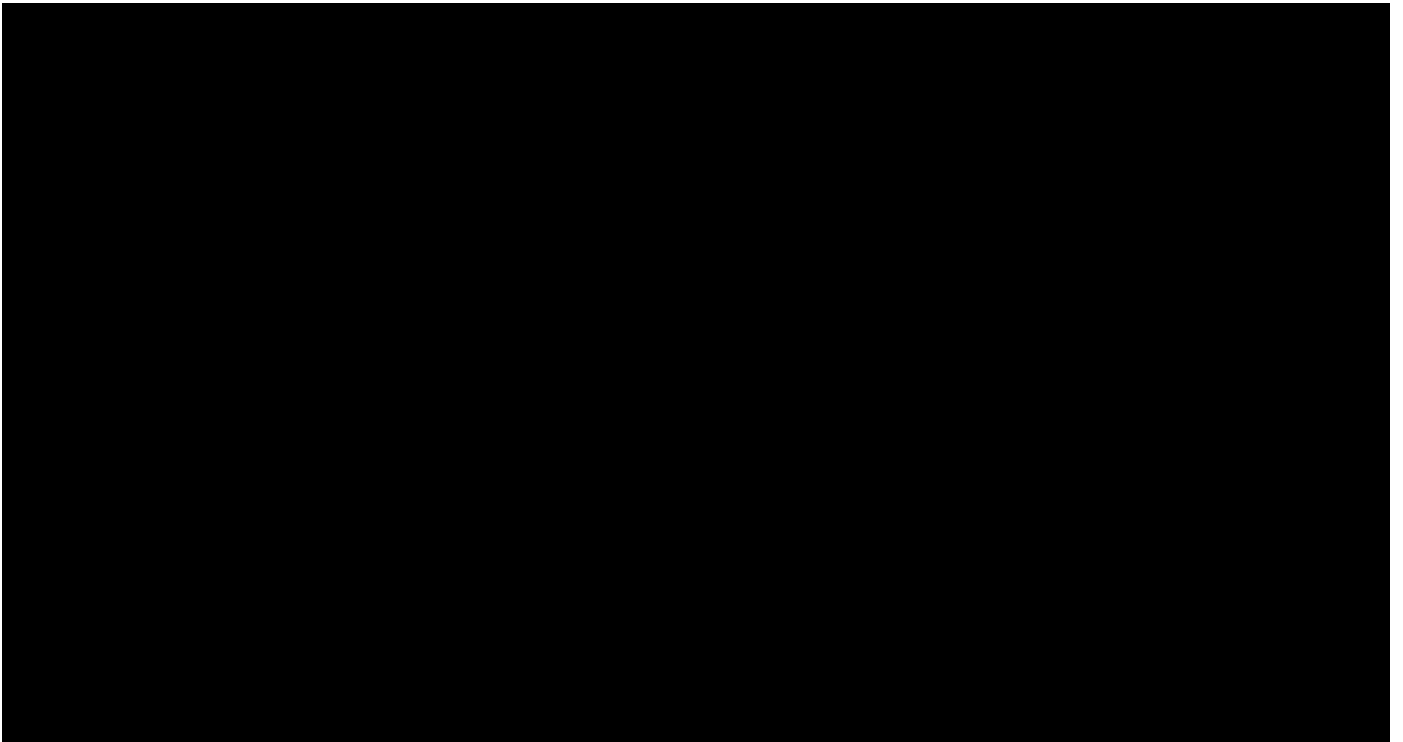
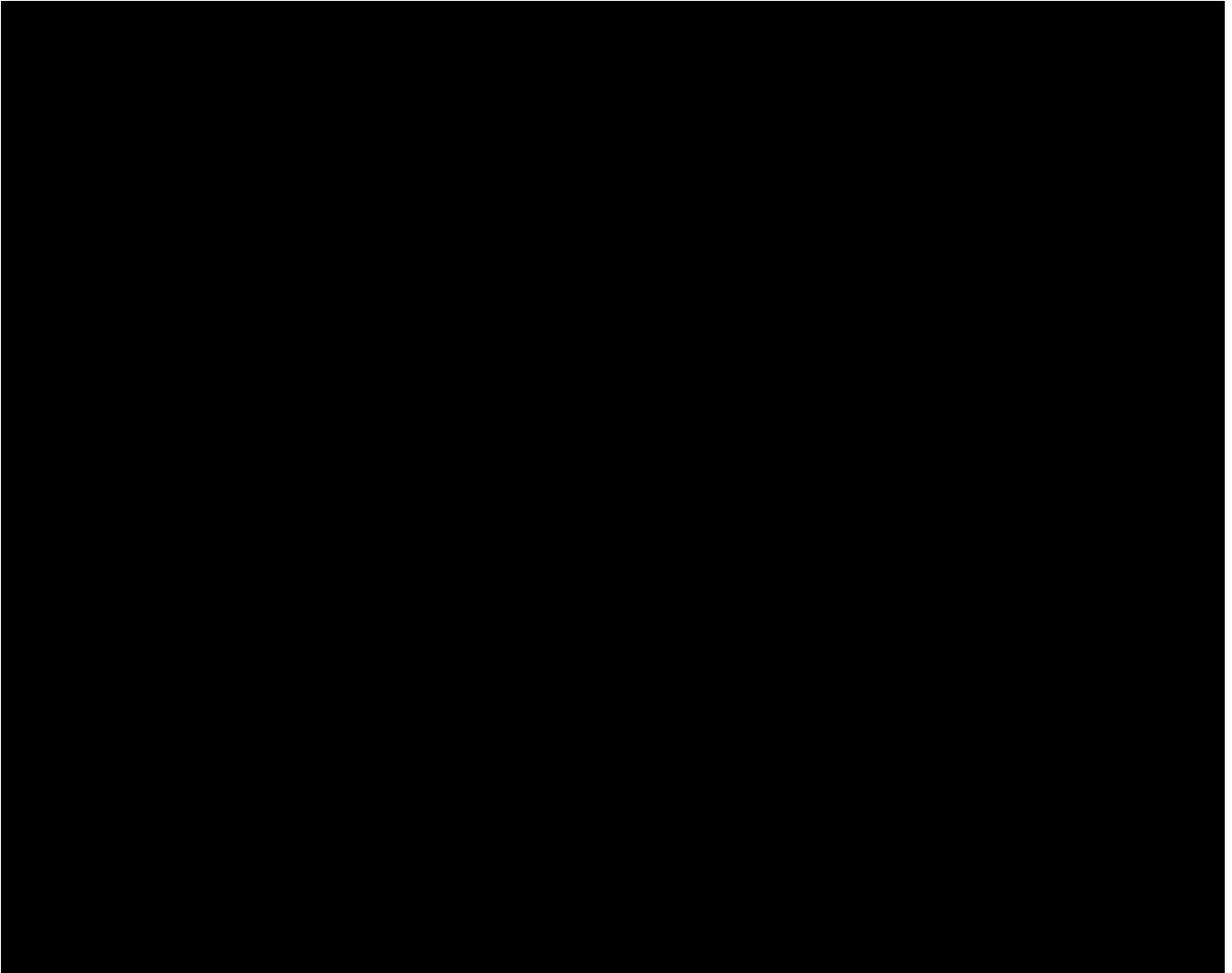


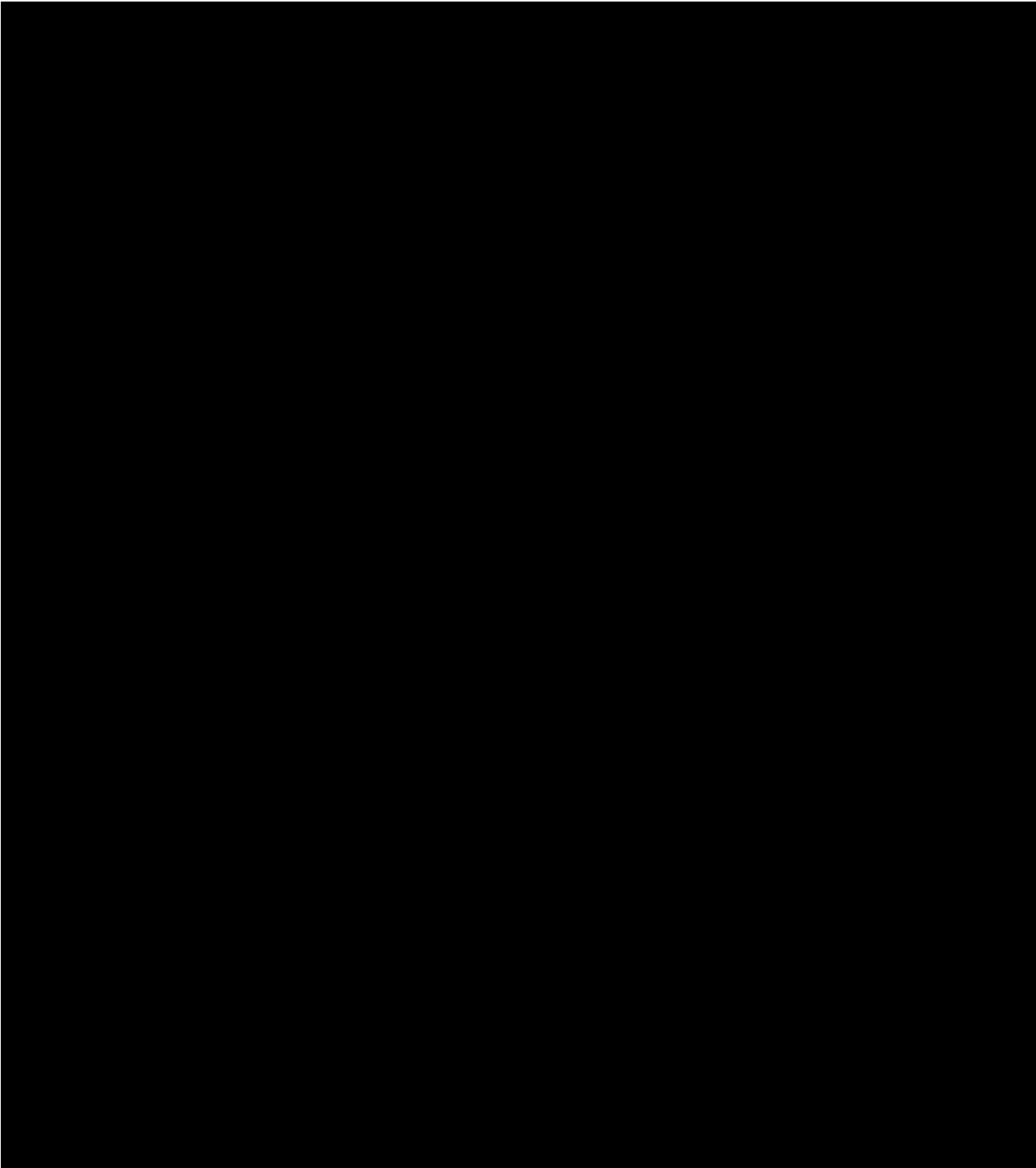




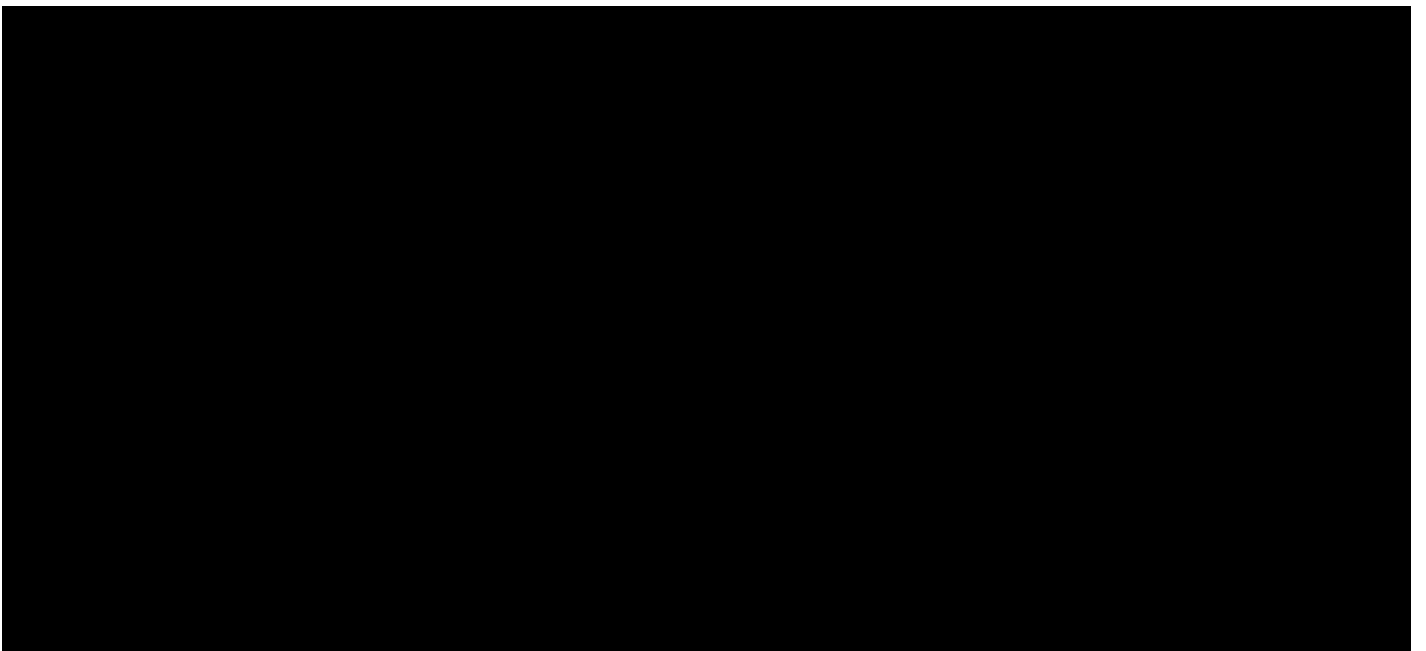
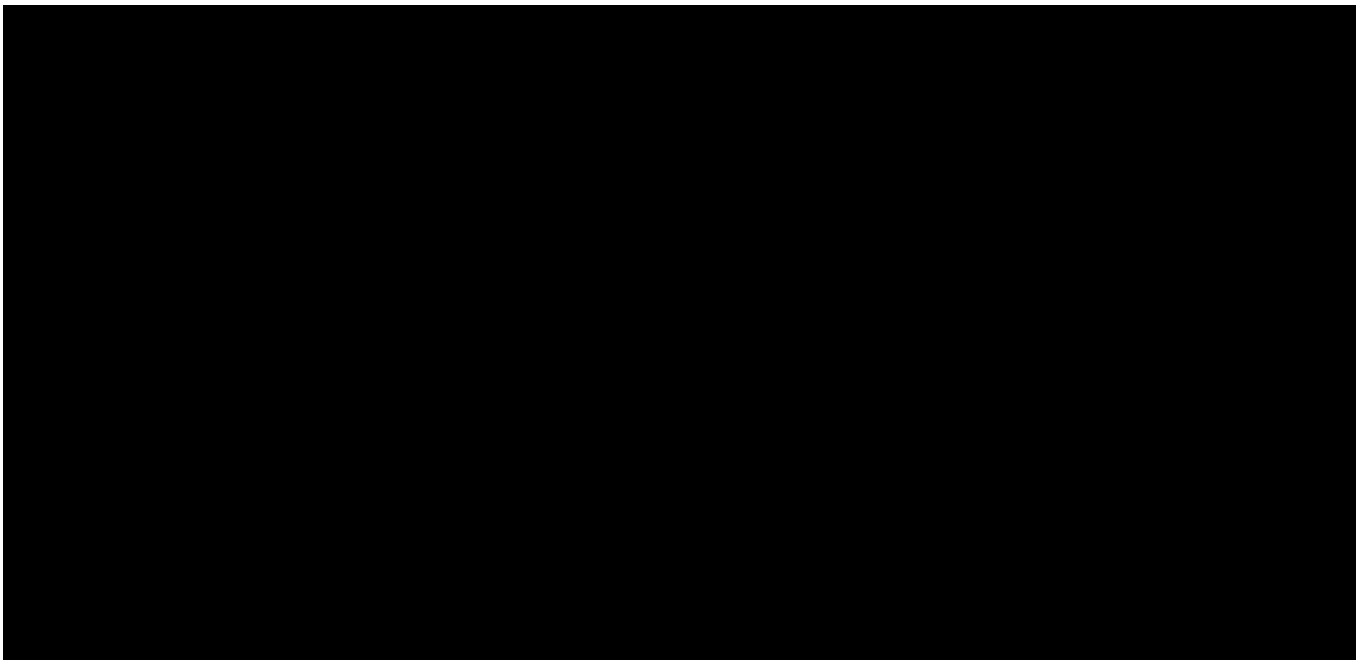


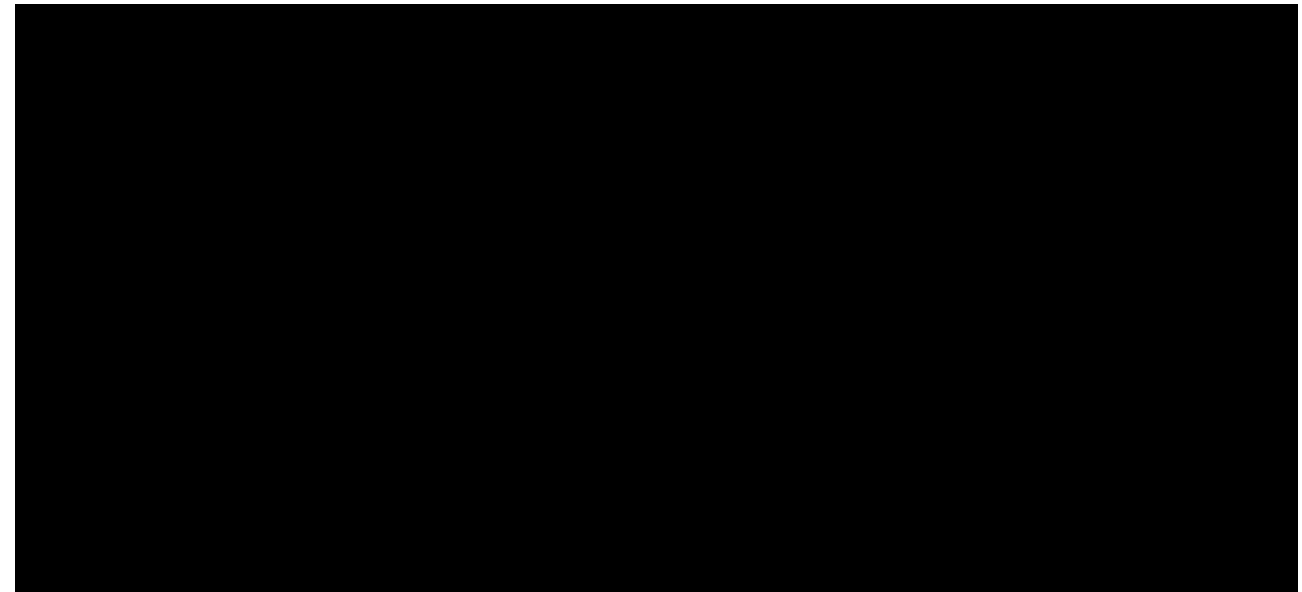
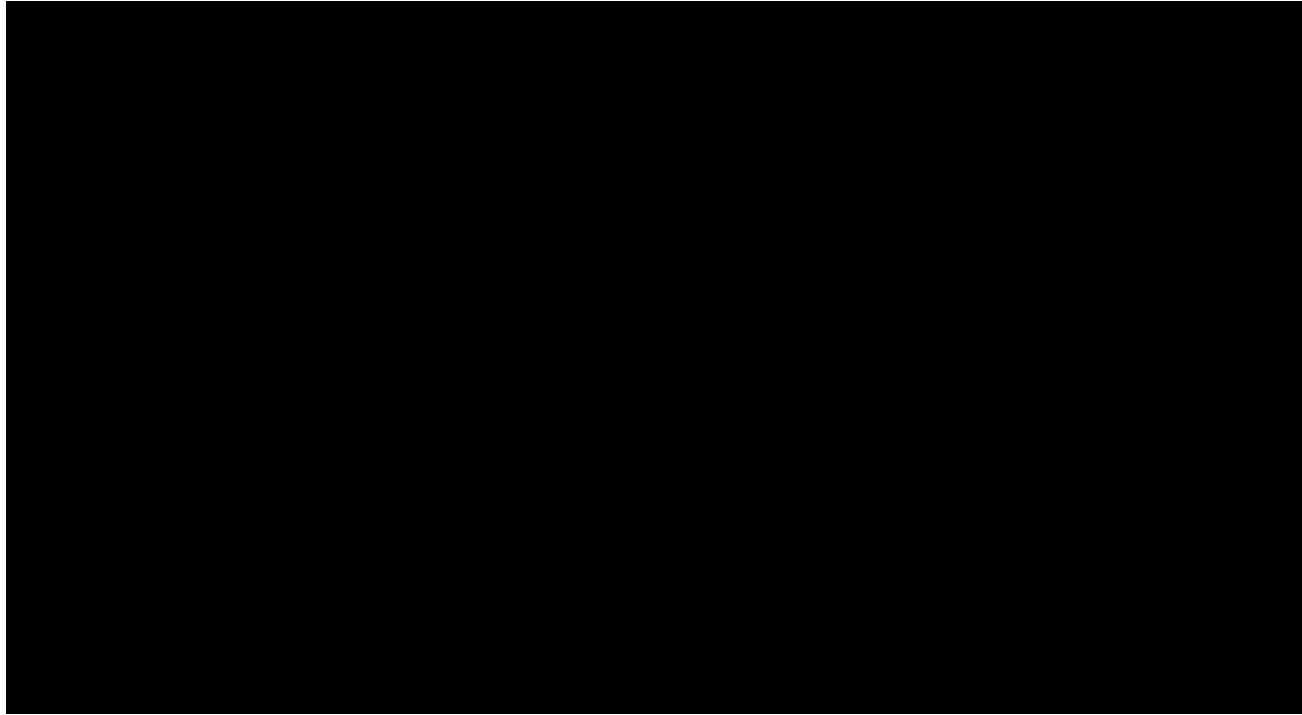


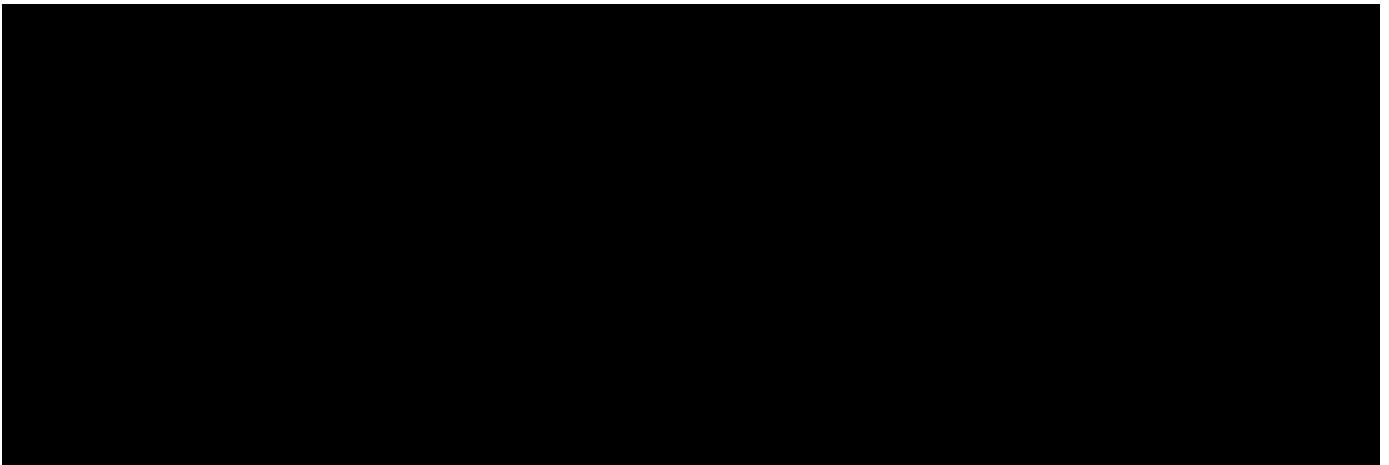
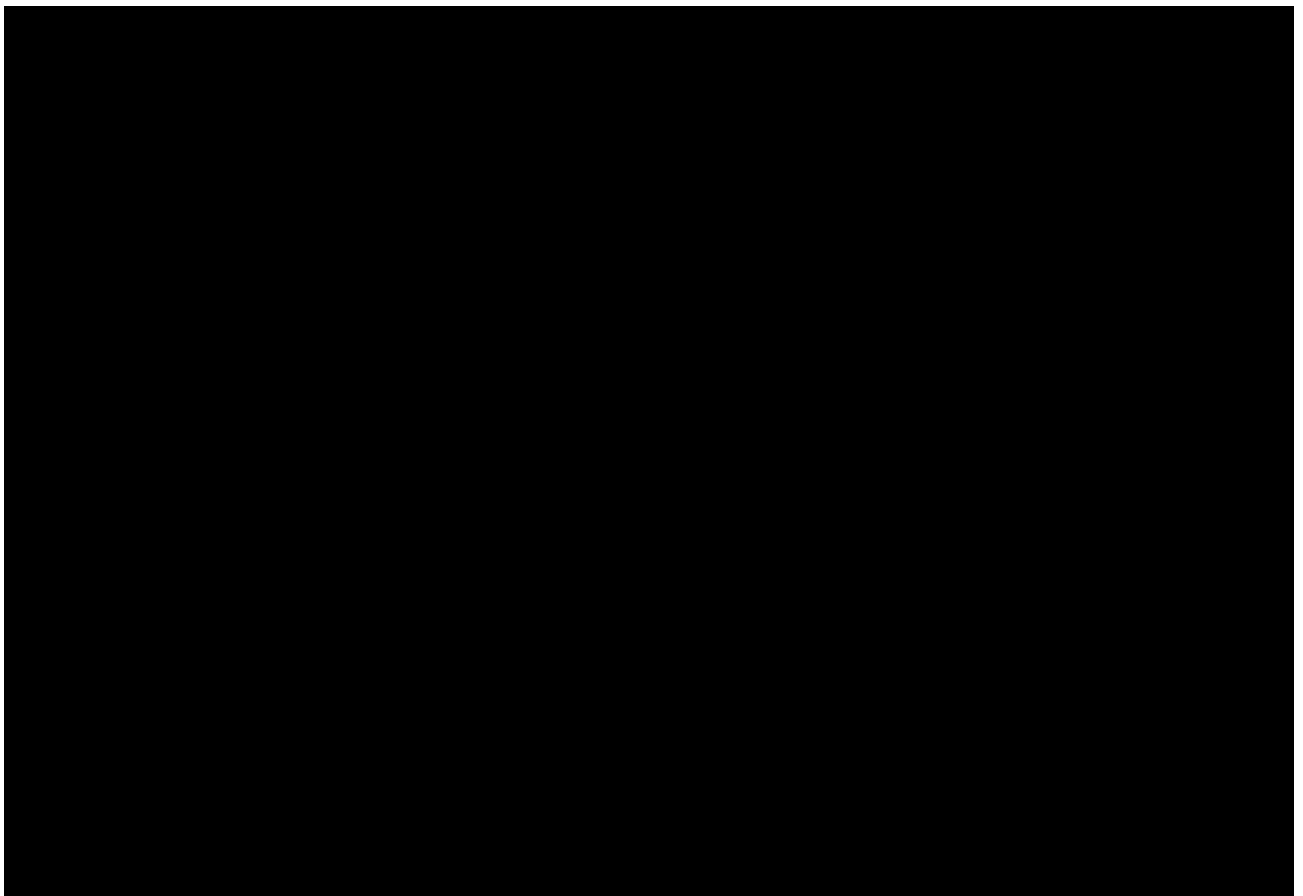


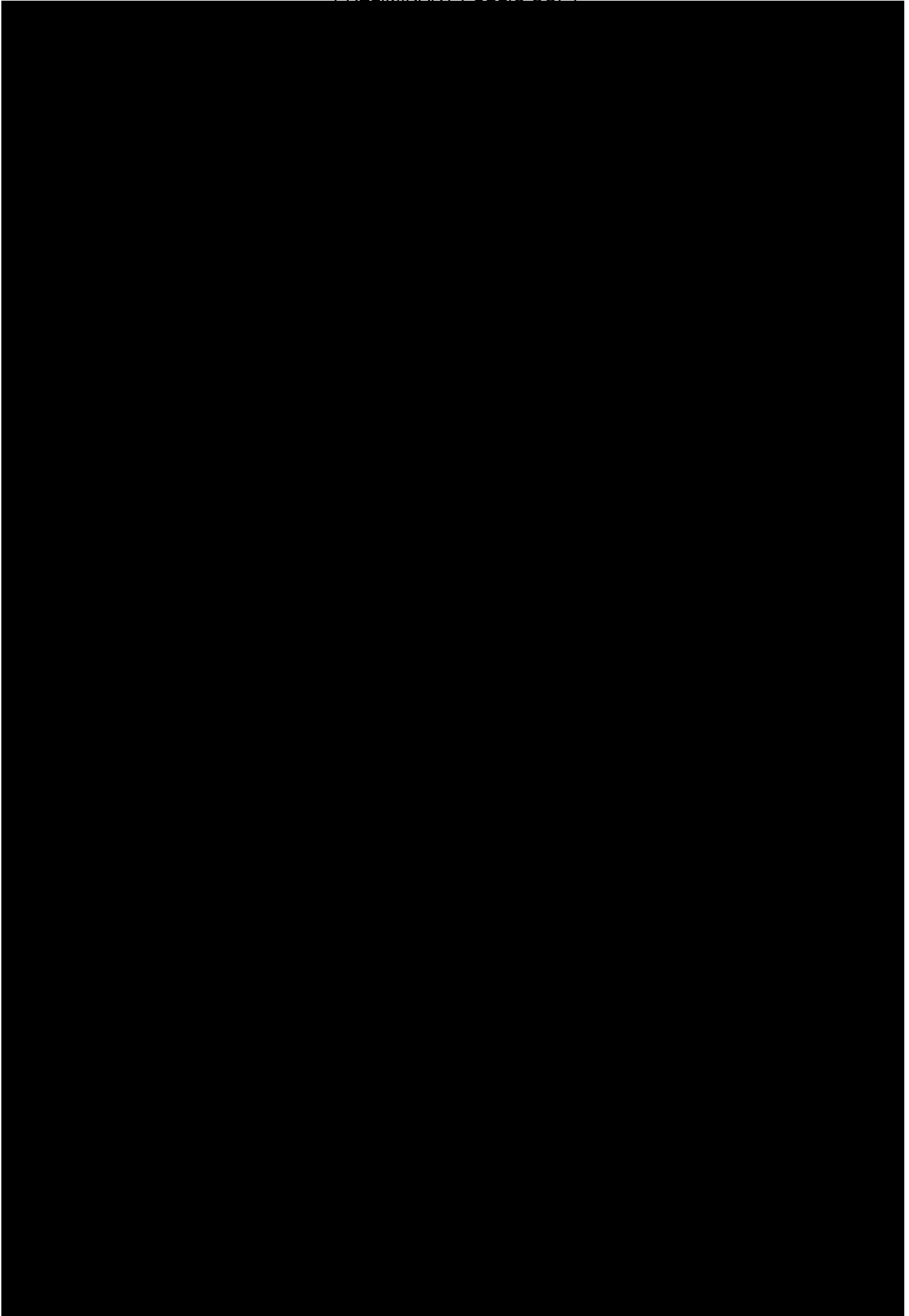


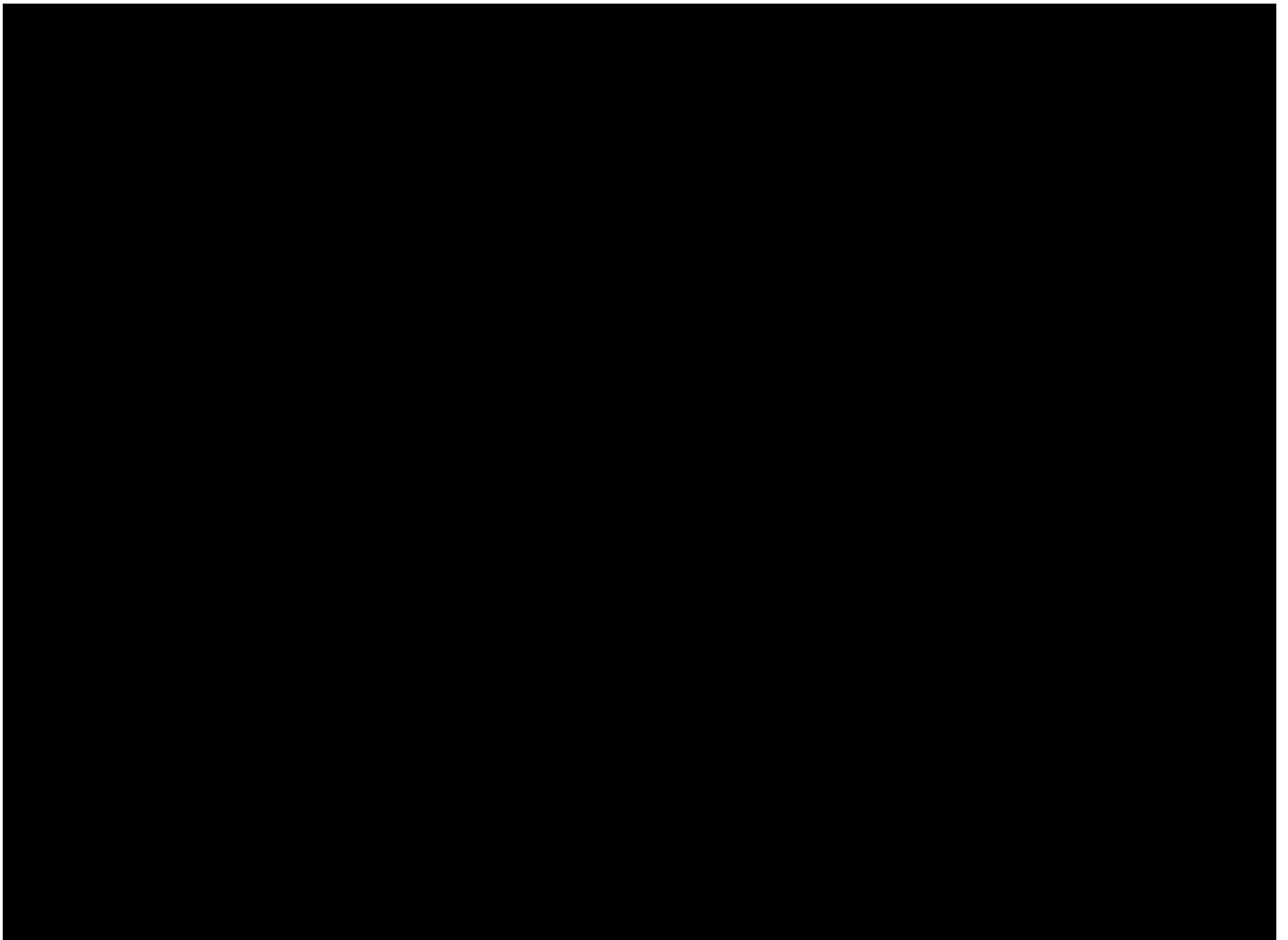
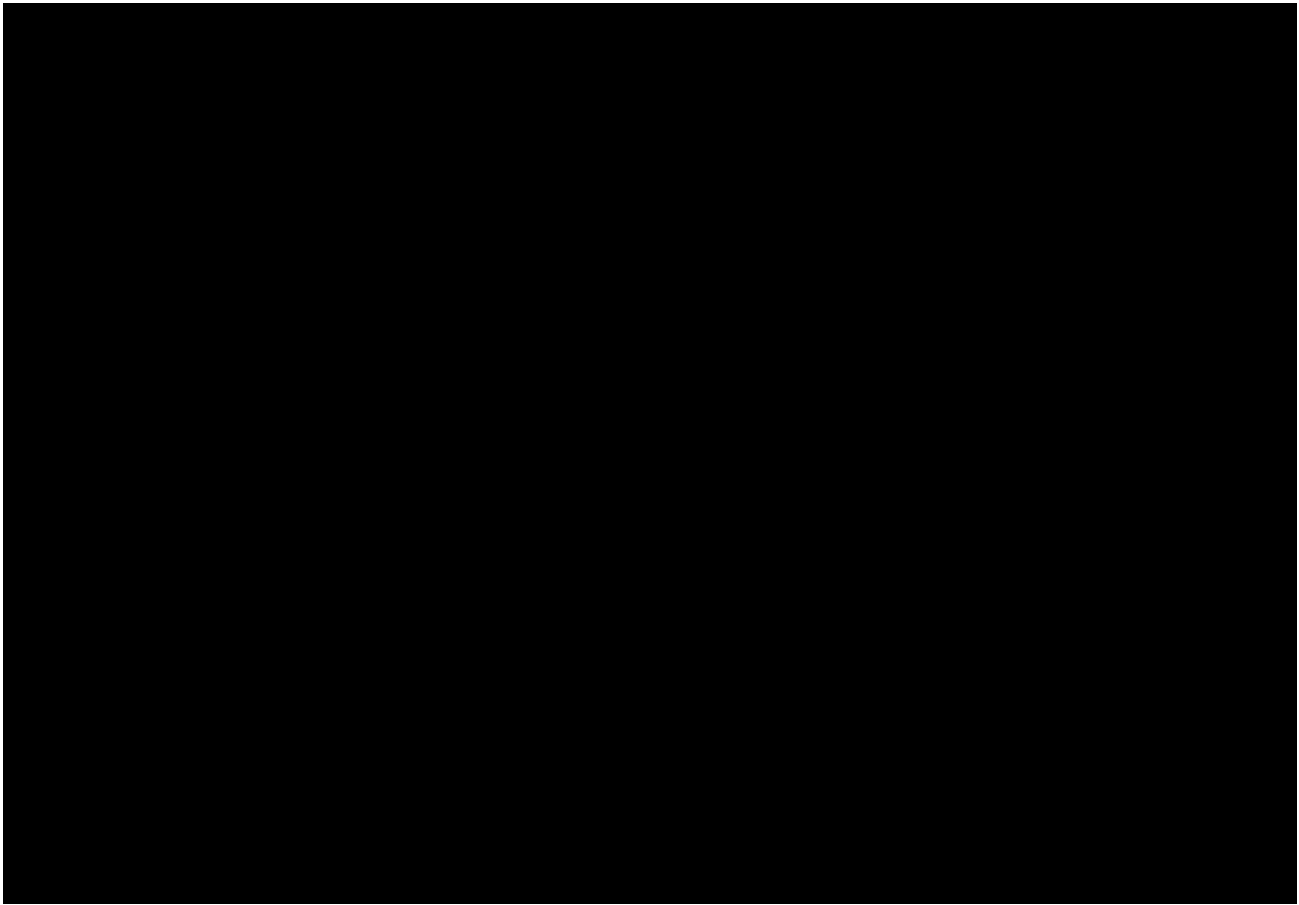


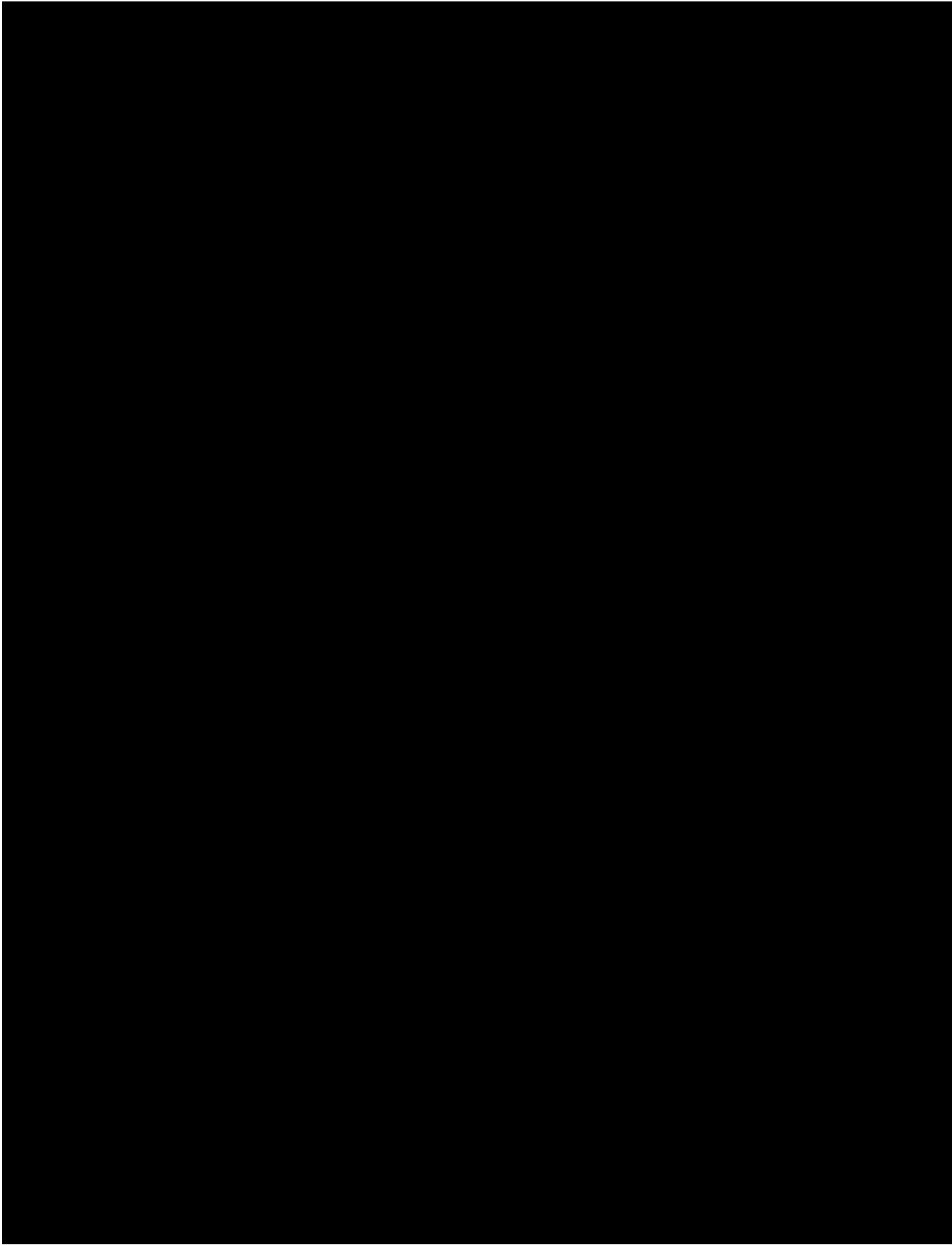


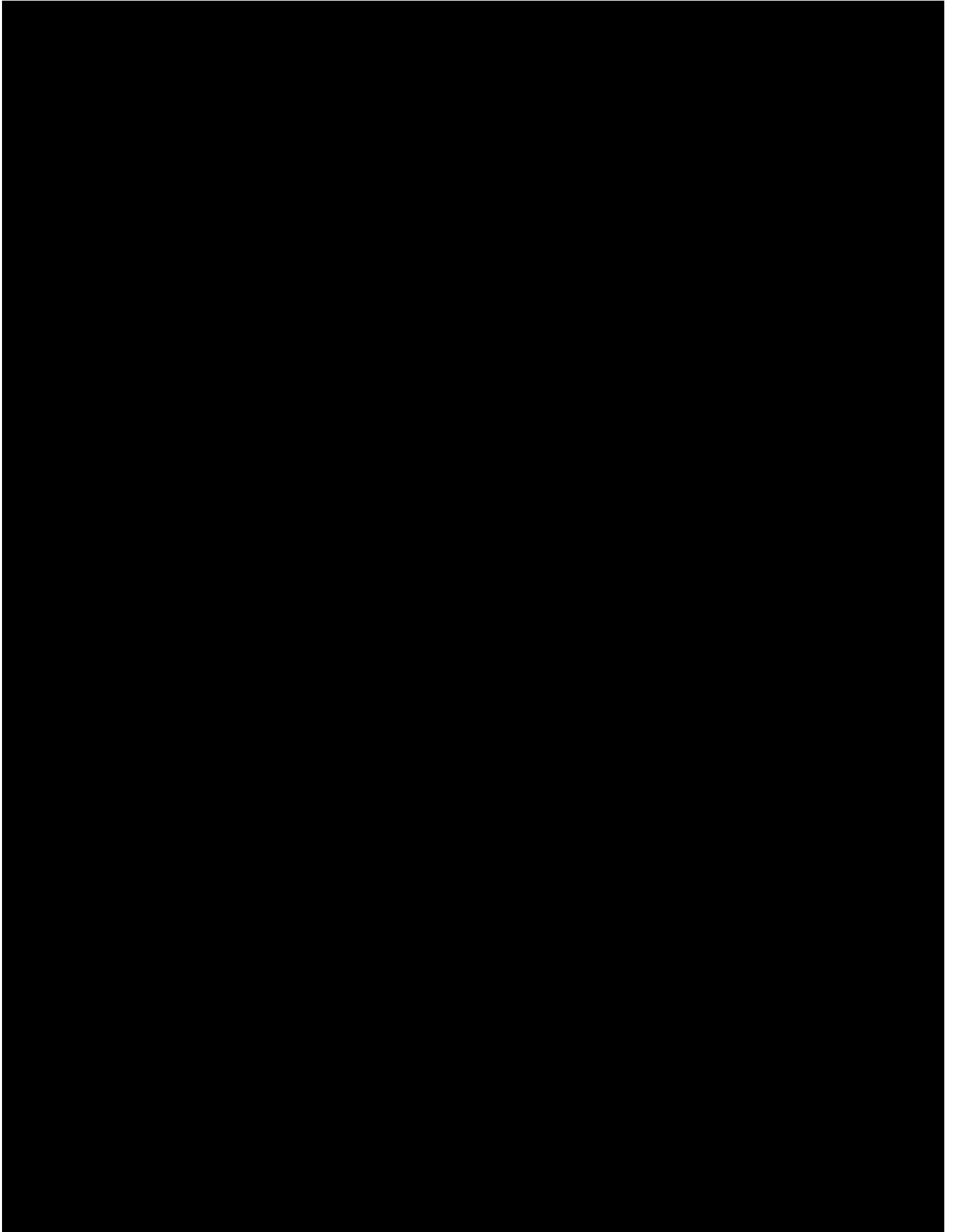


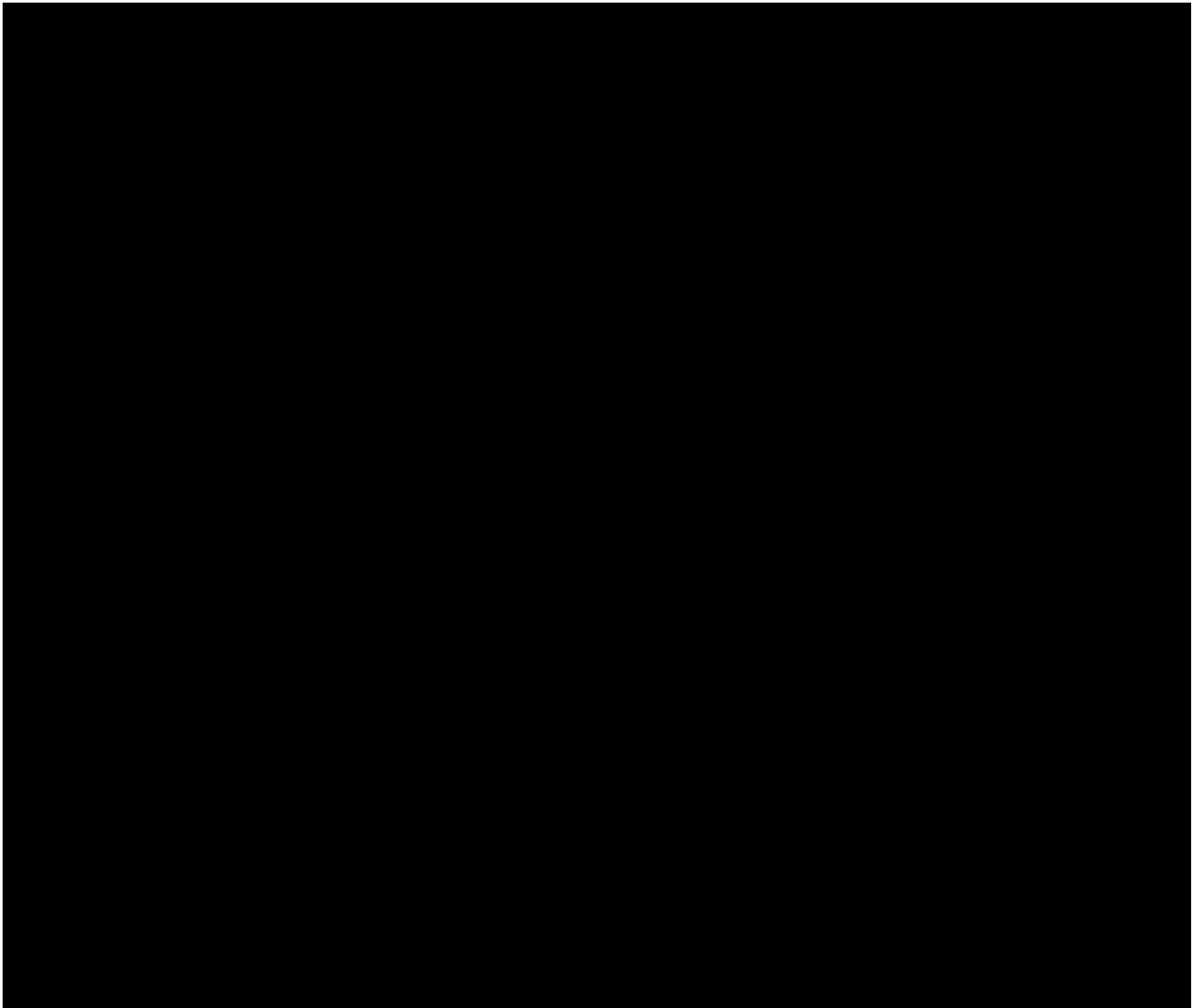
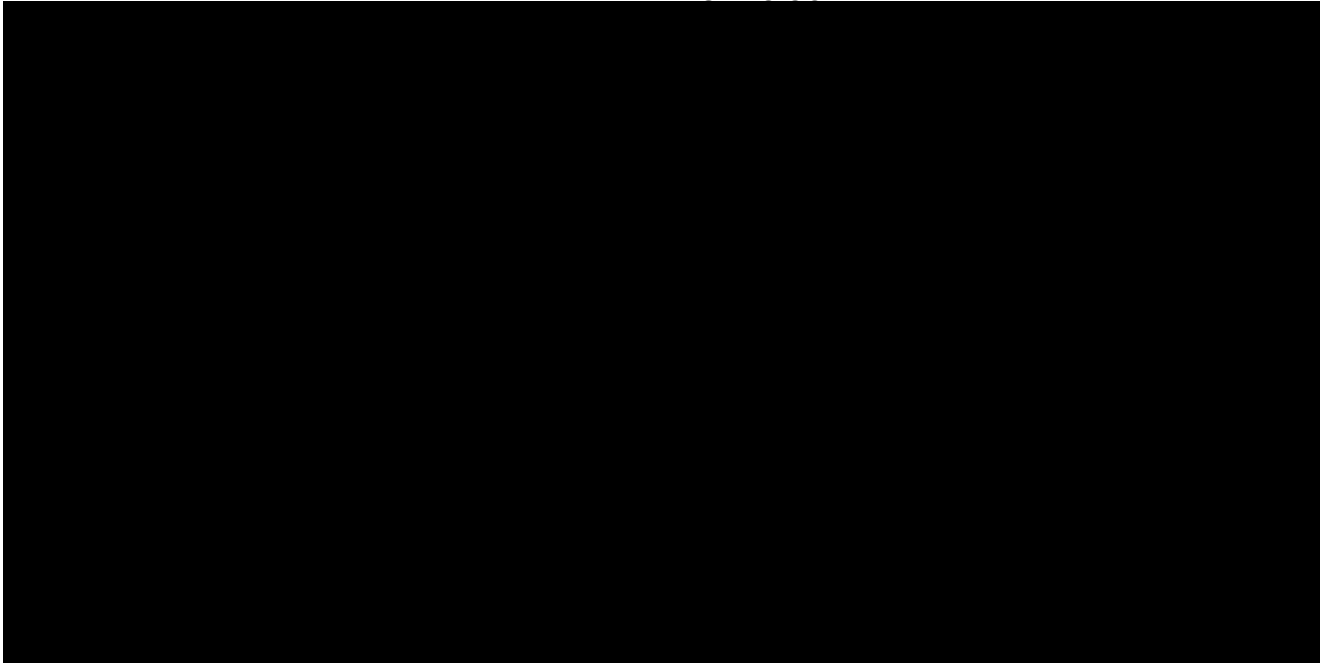




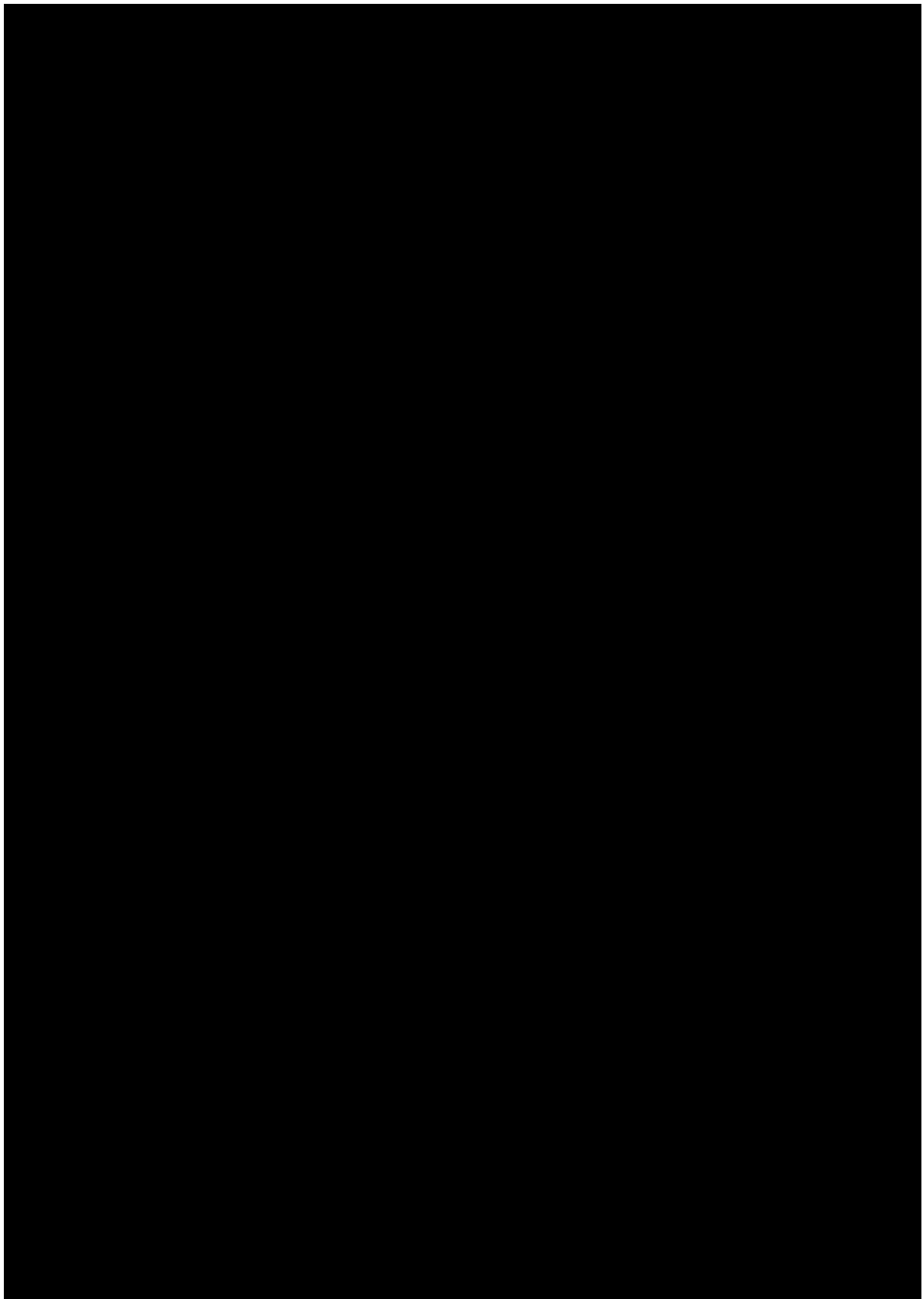


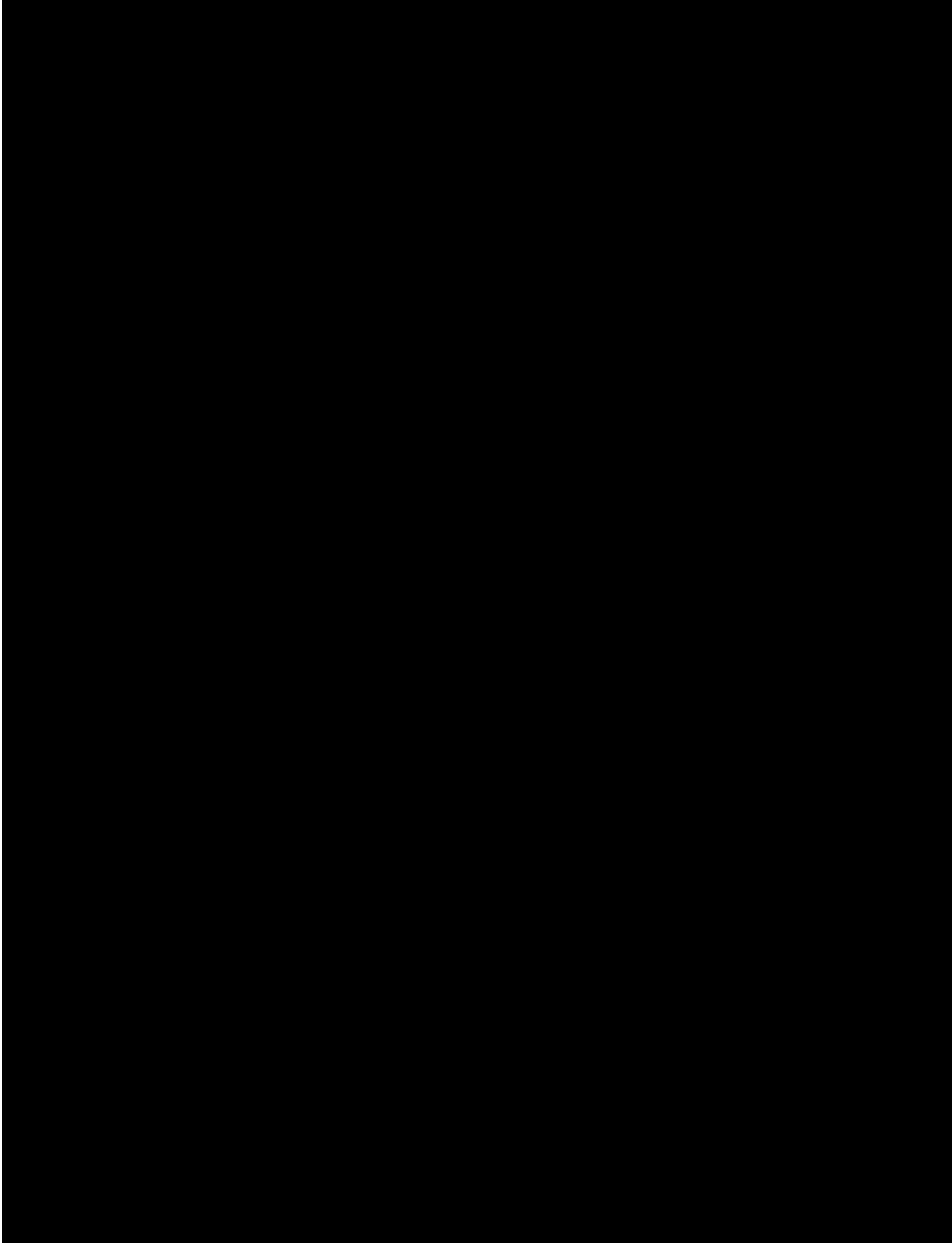


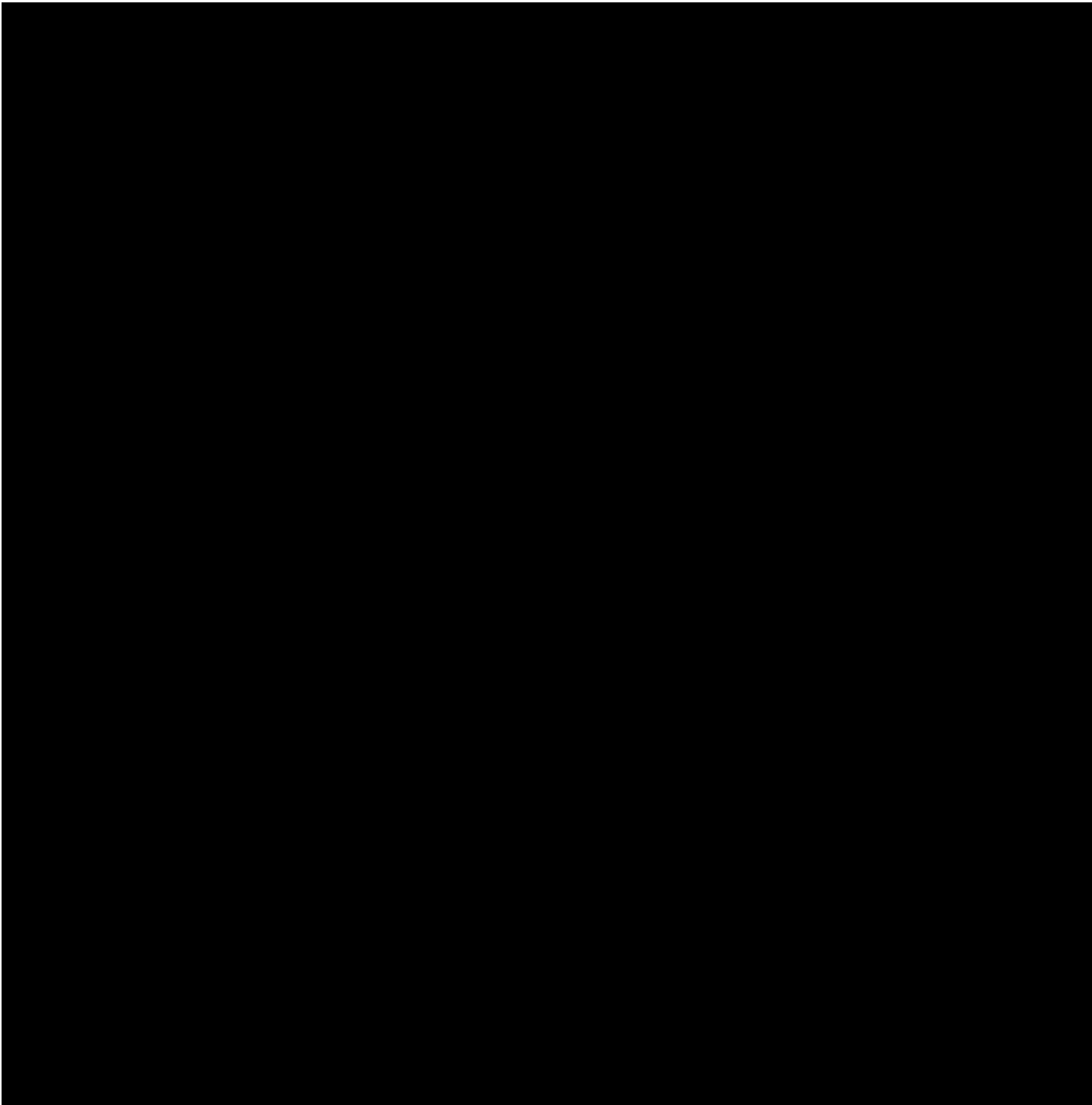
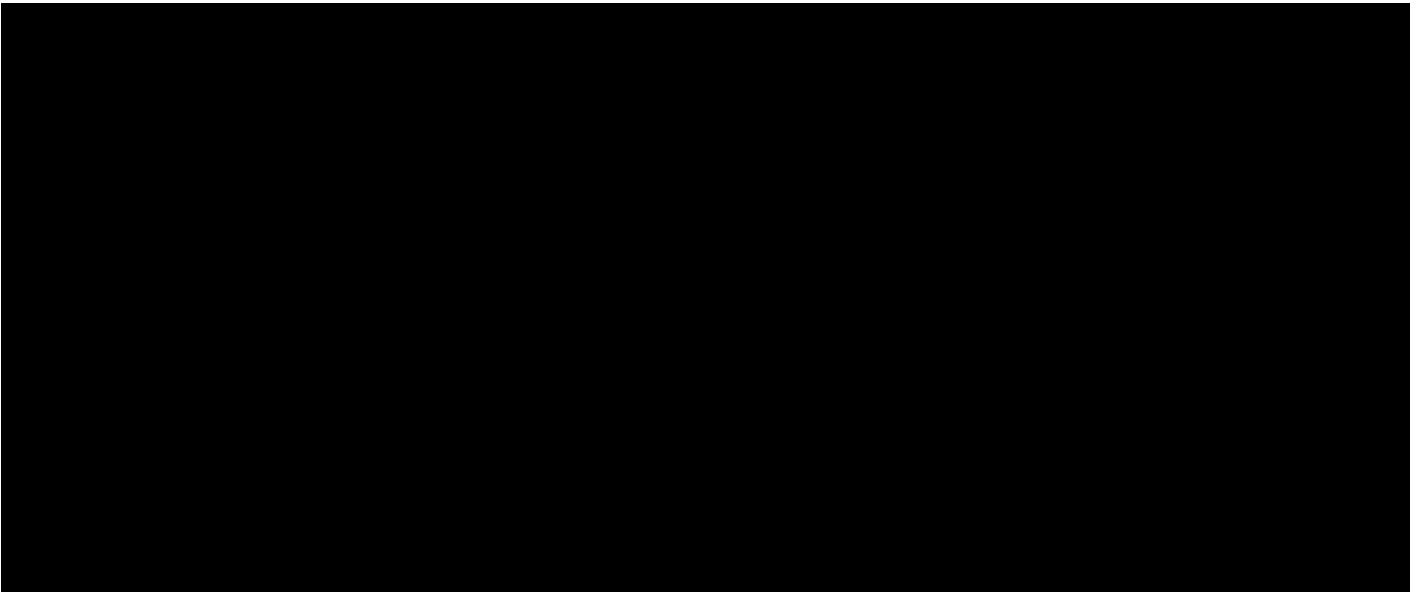


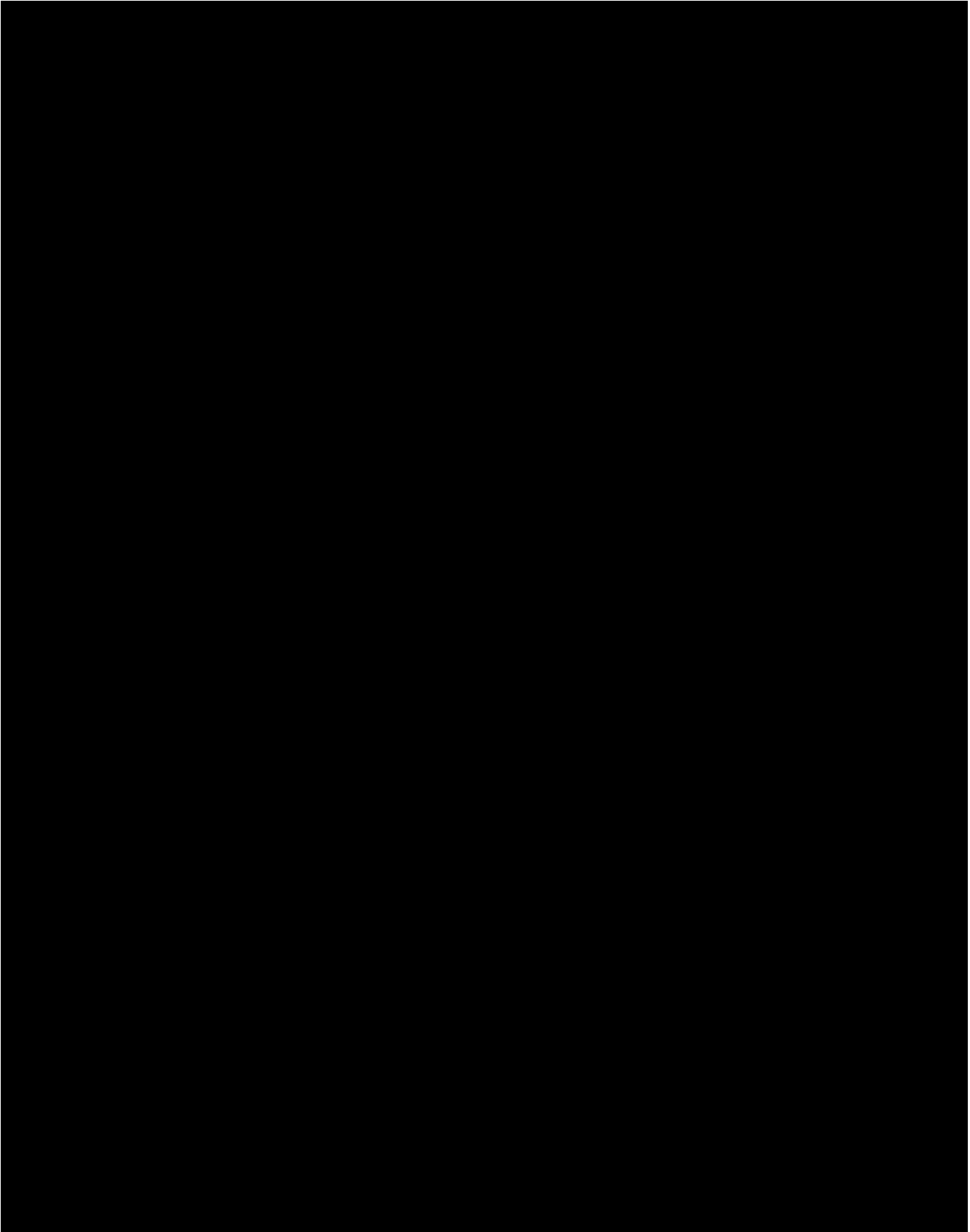


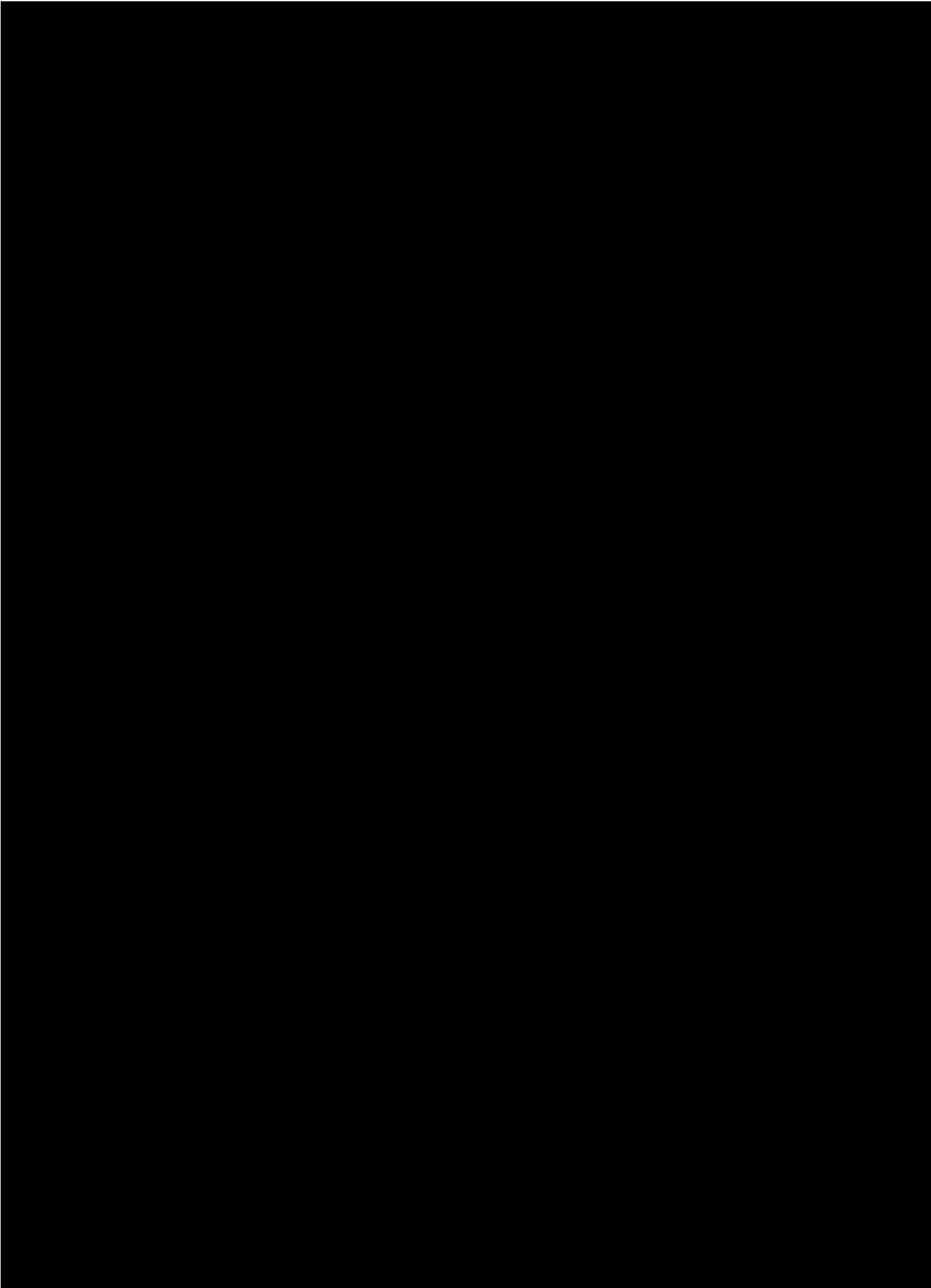


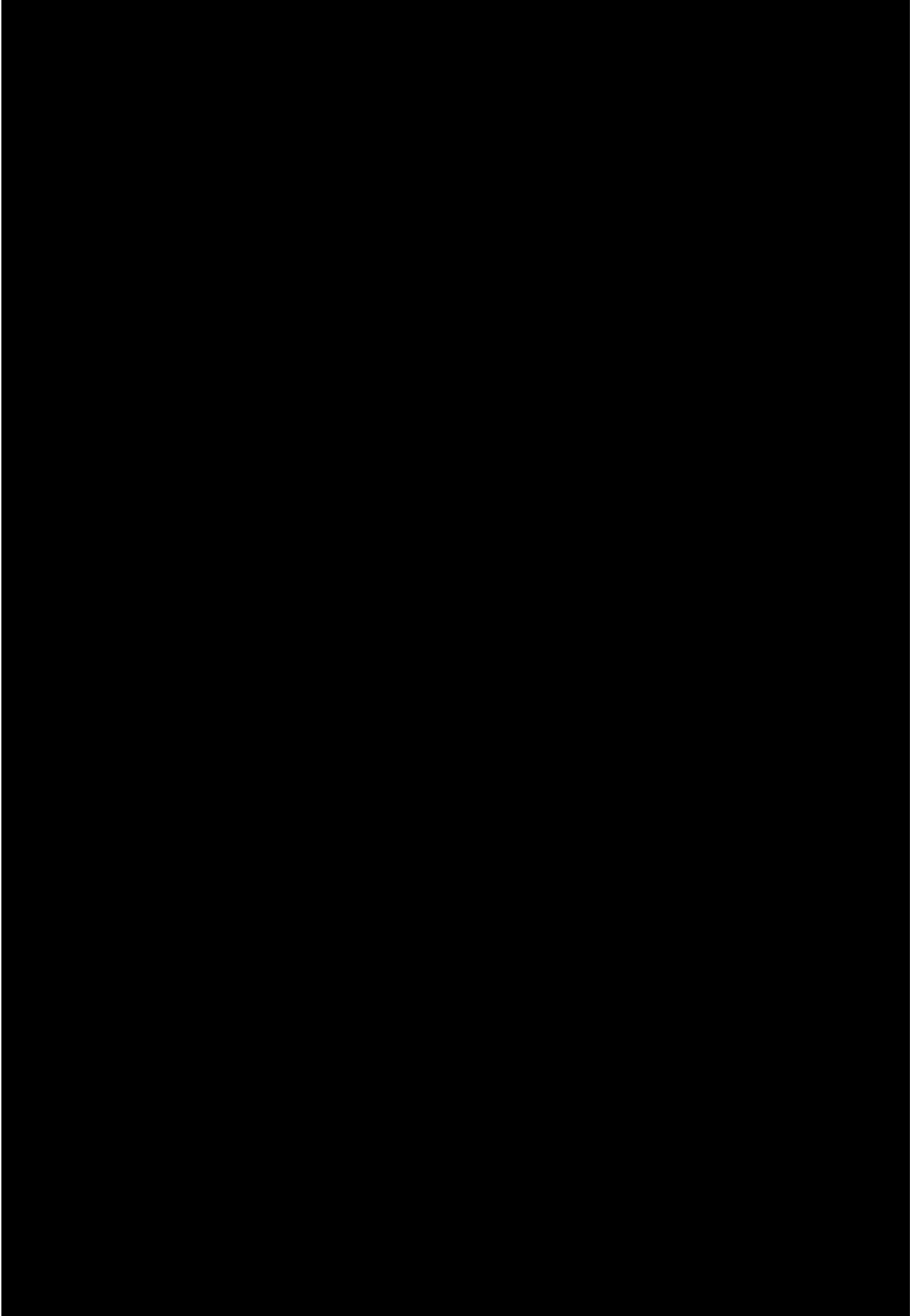


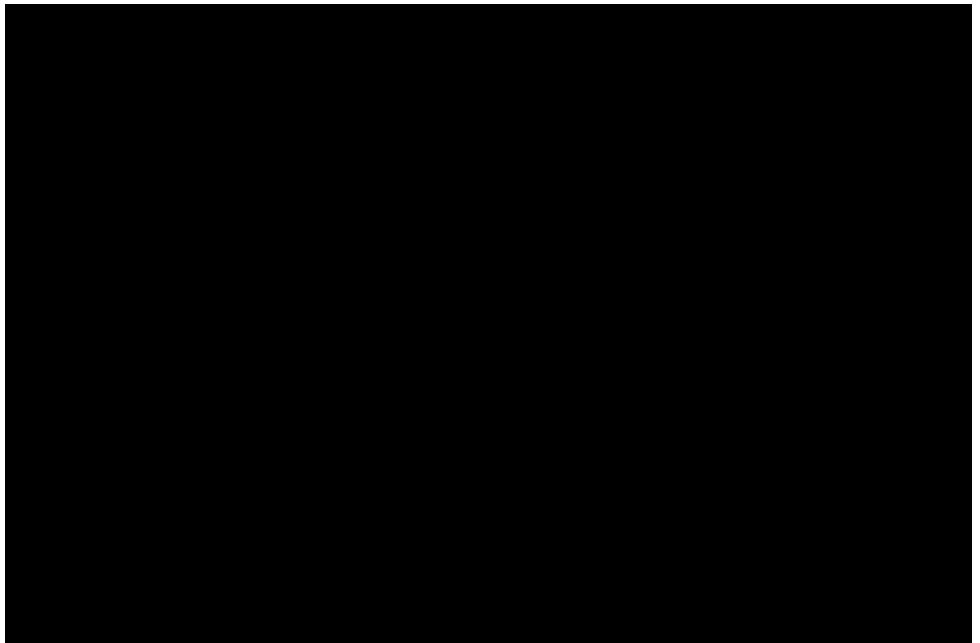


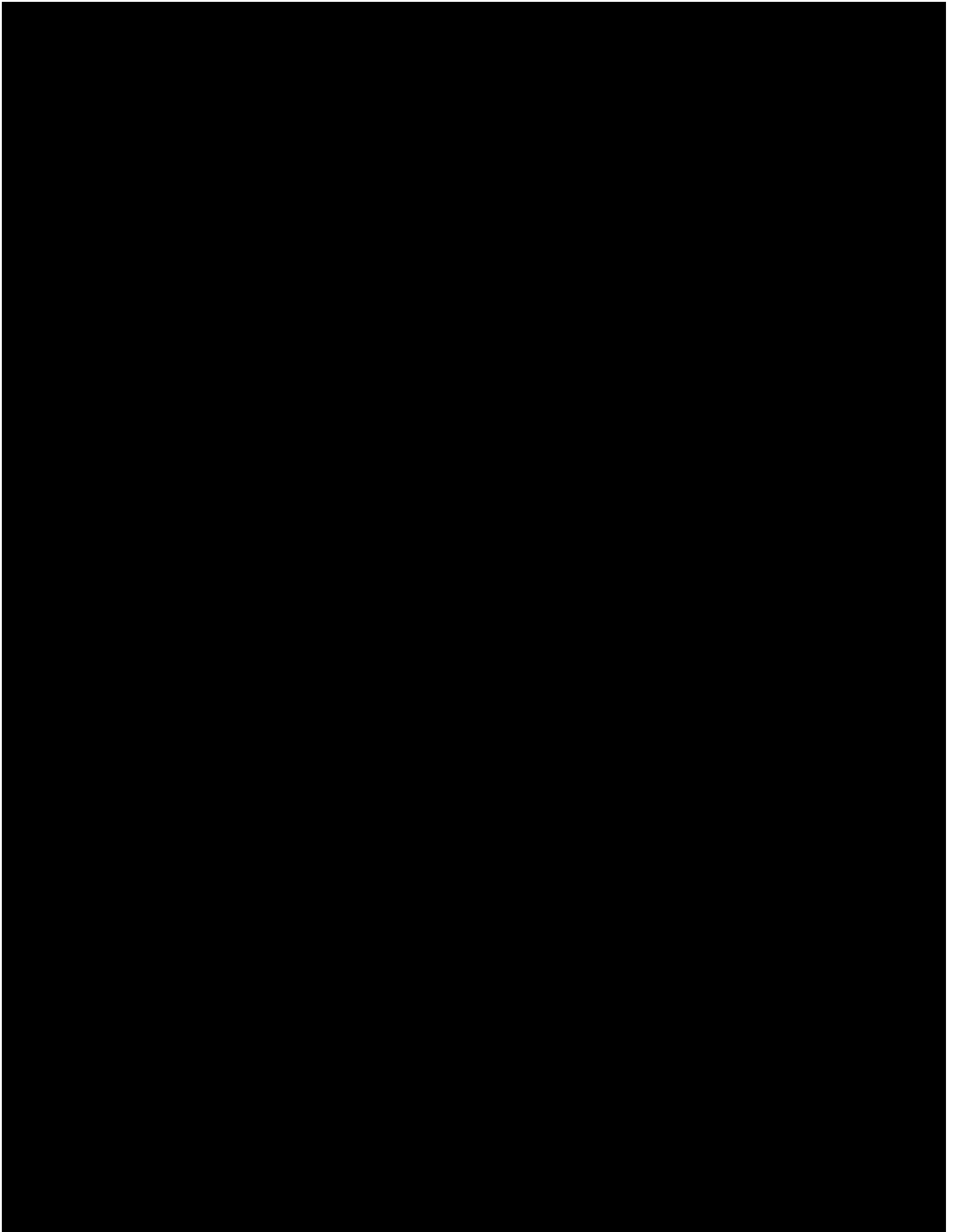






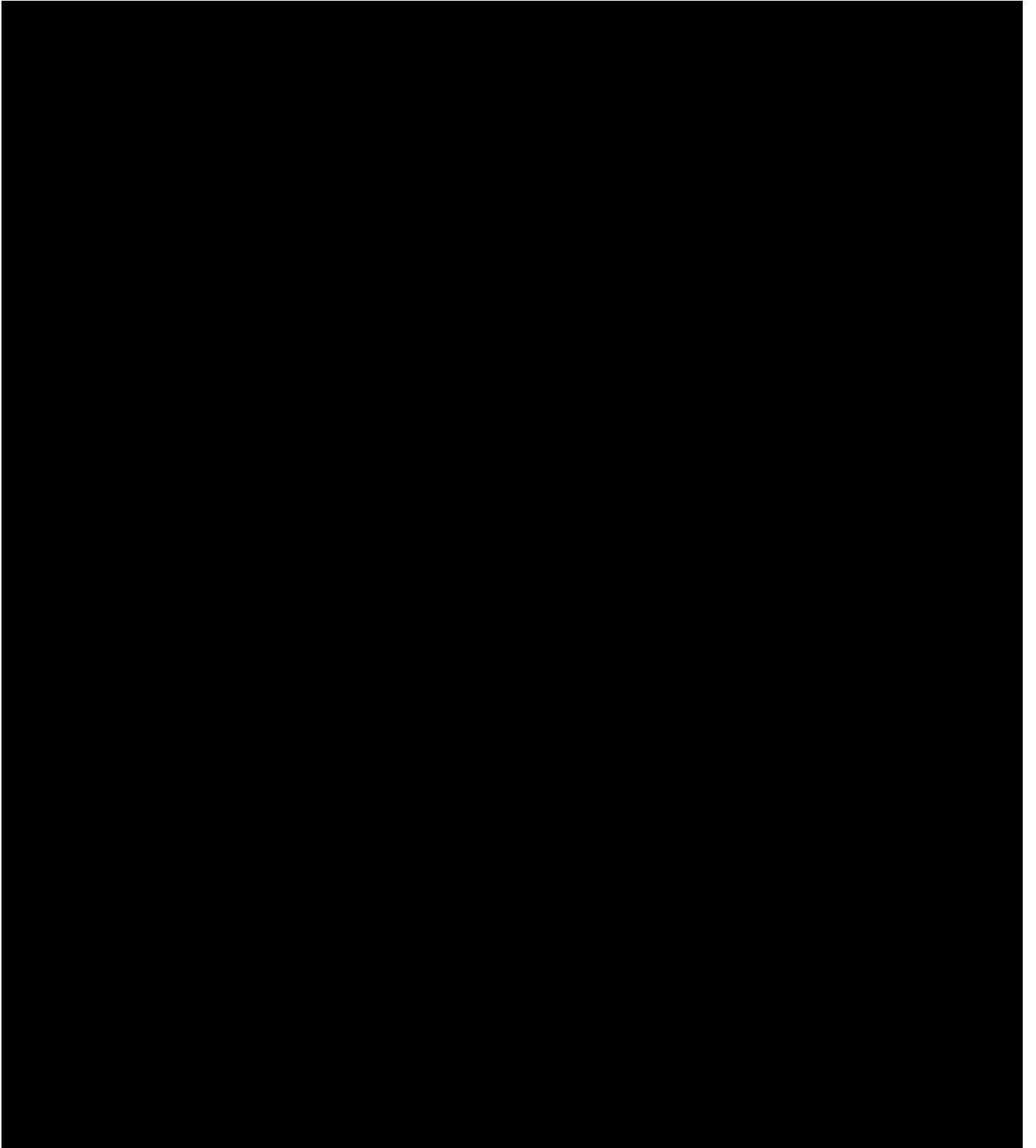




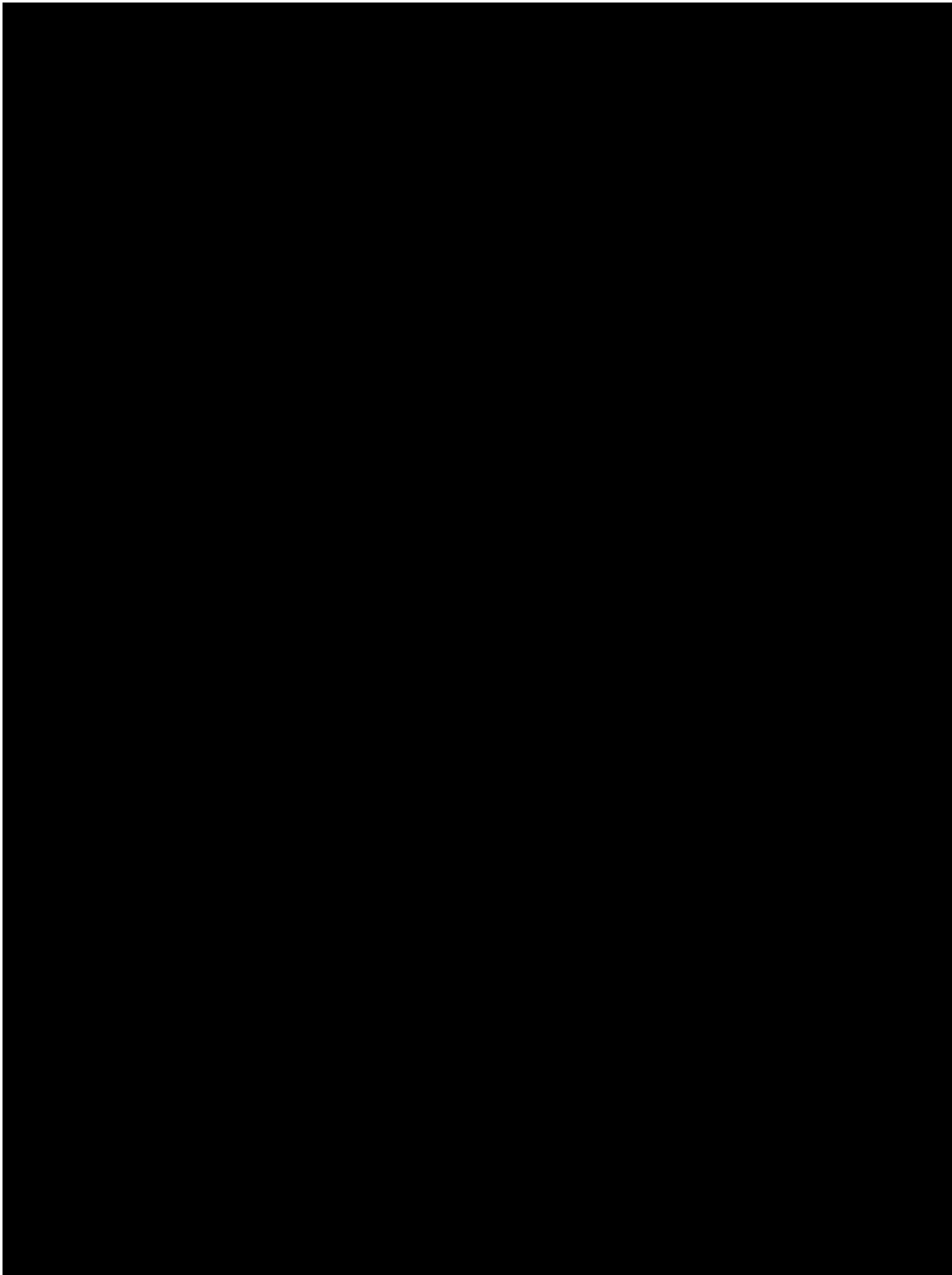




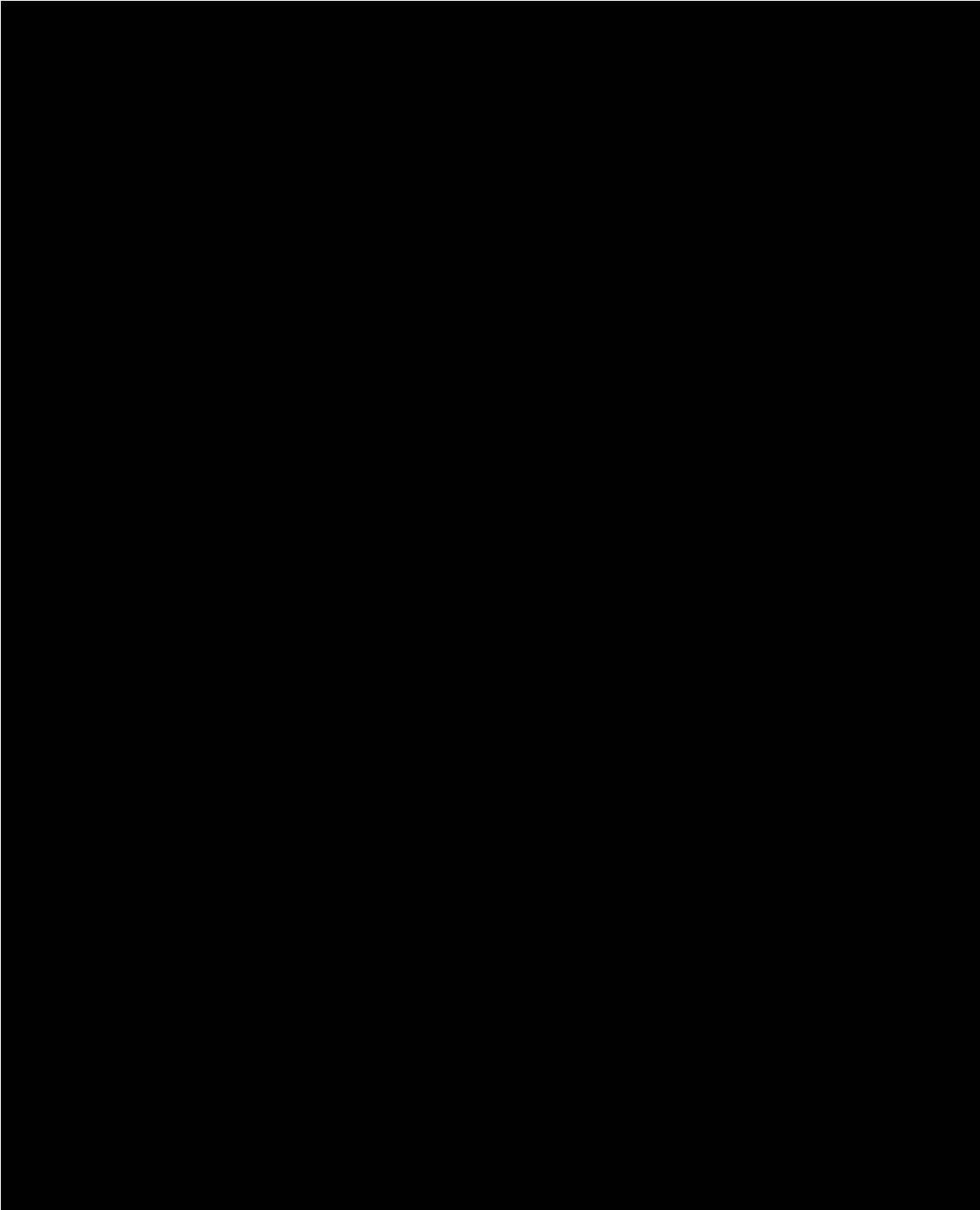
ANNEX C

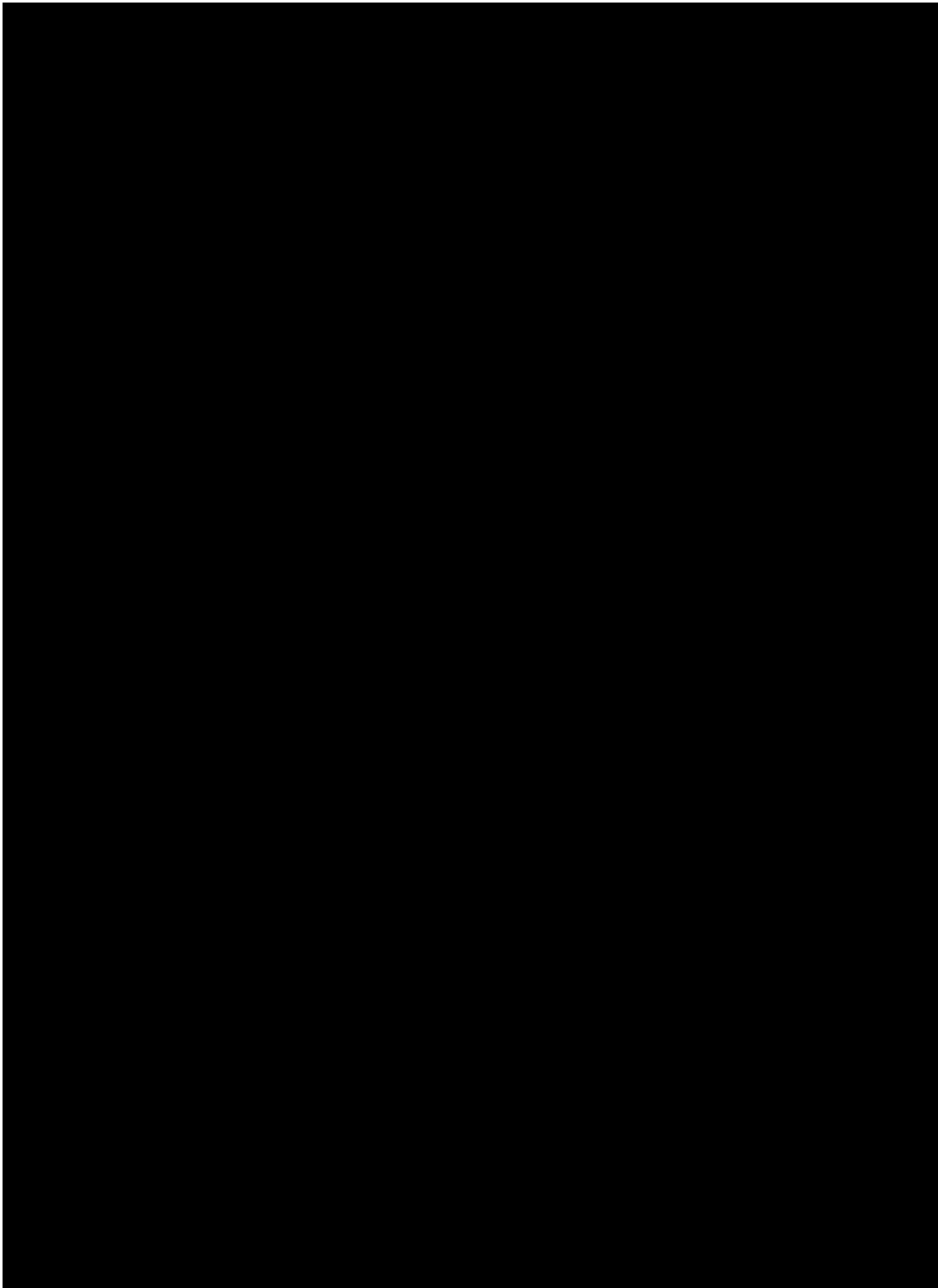


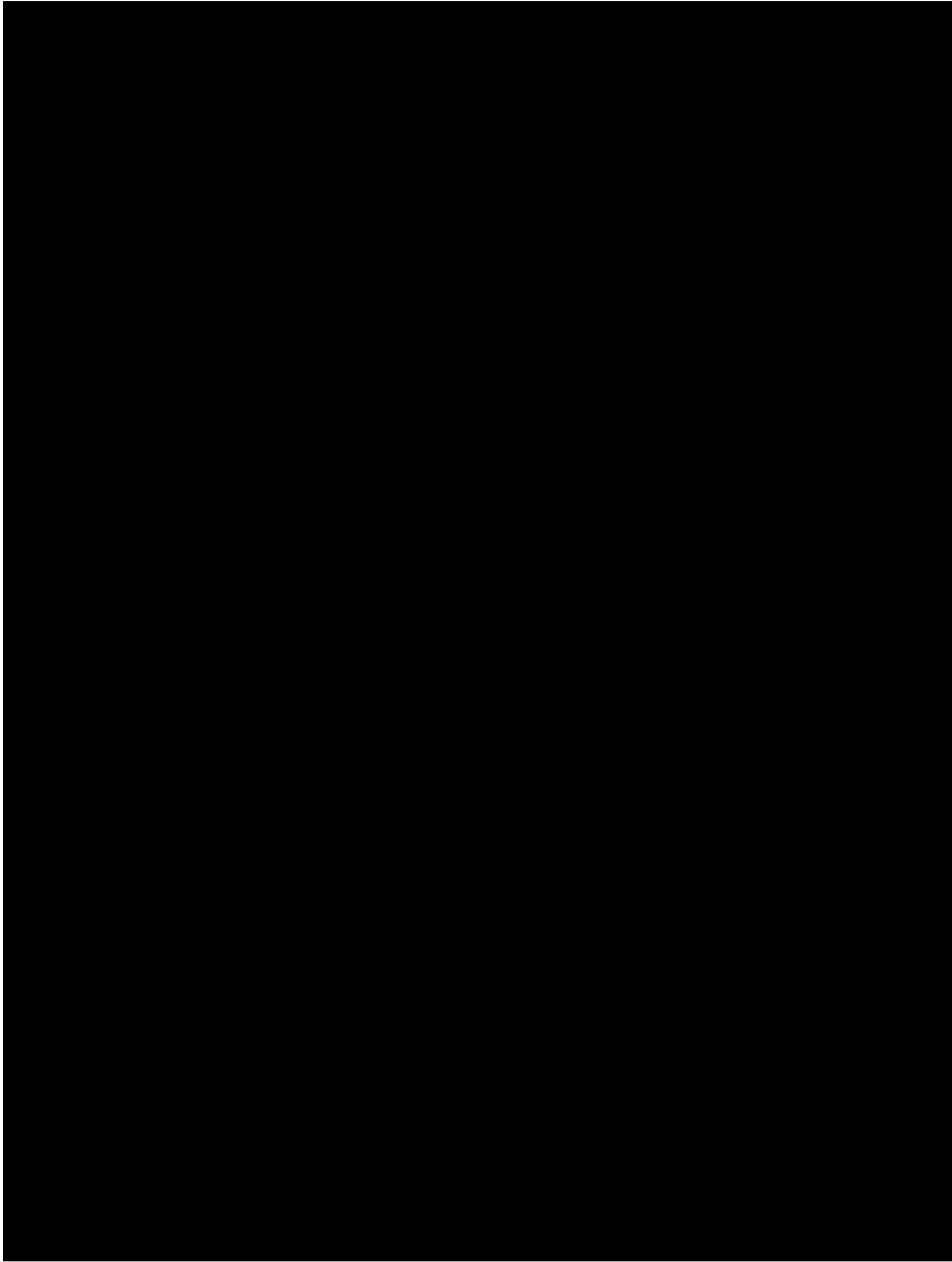
ANNEX D



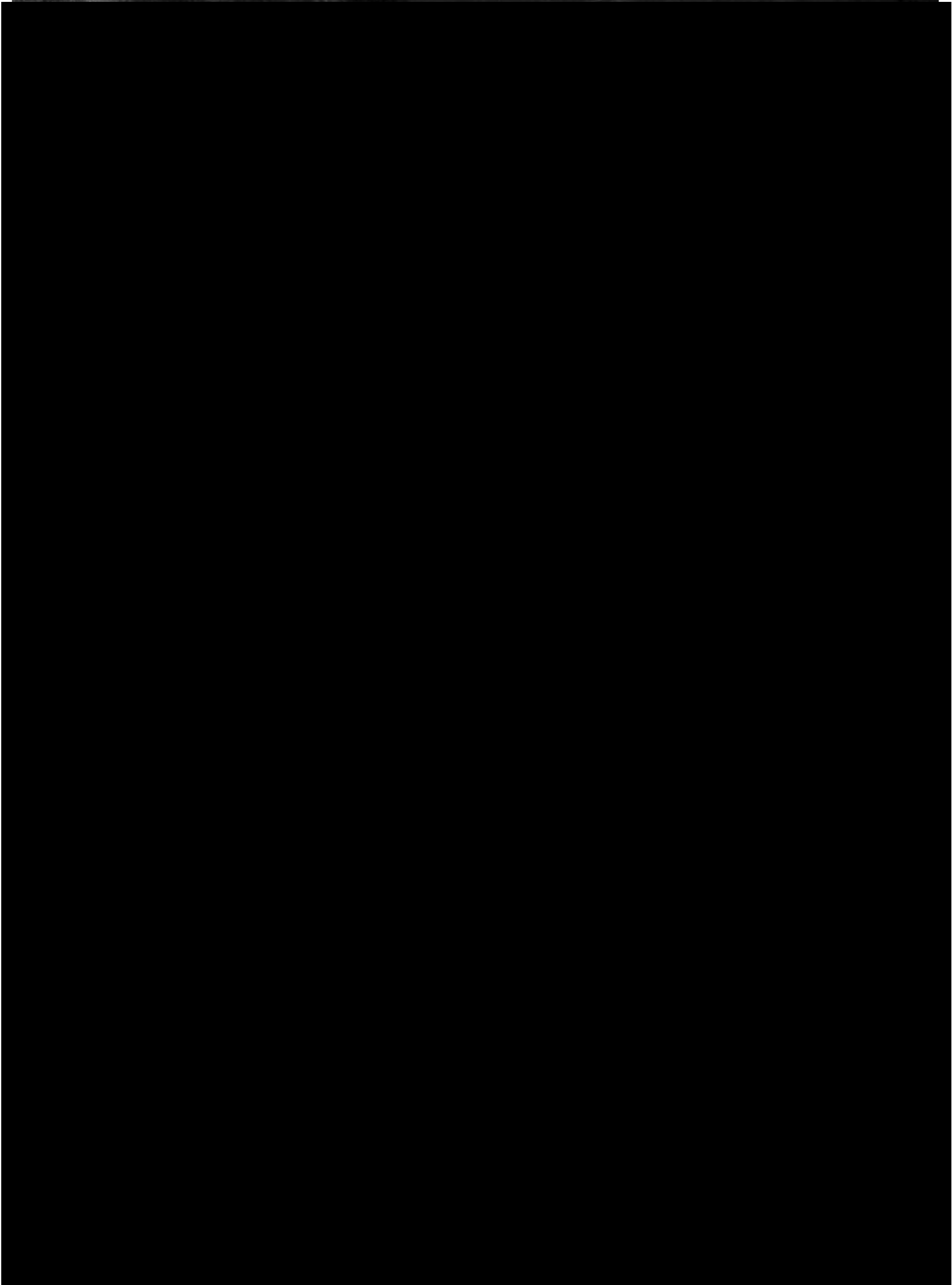


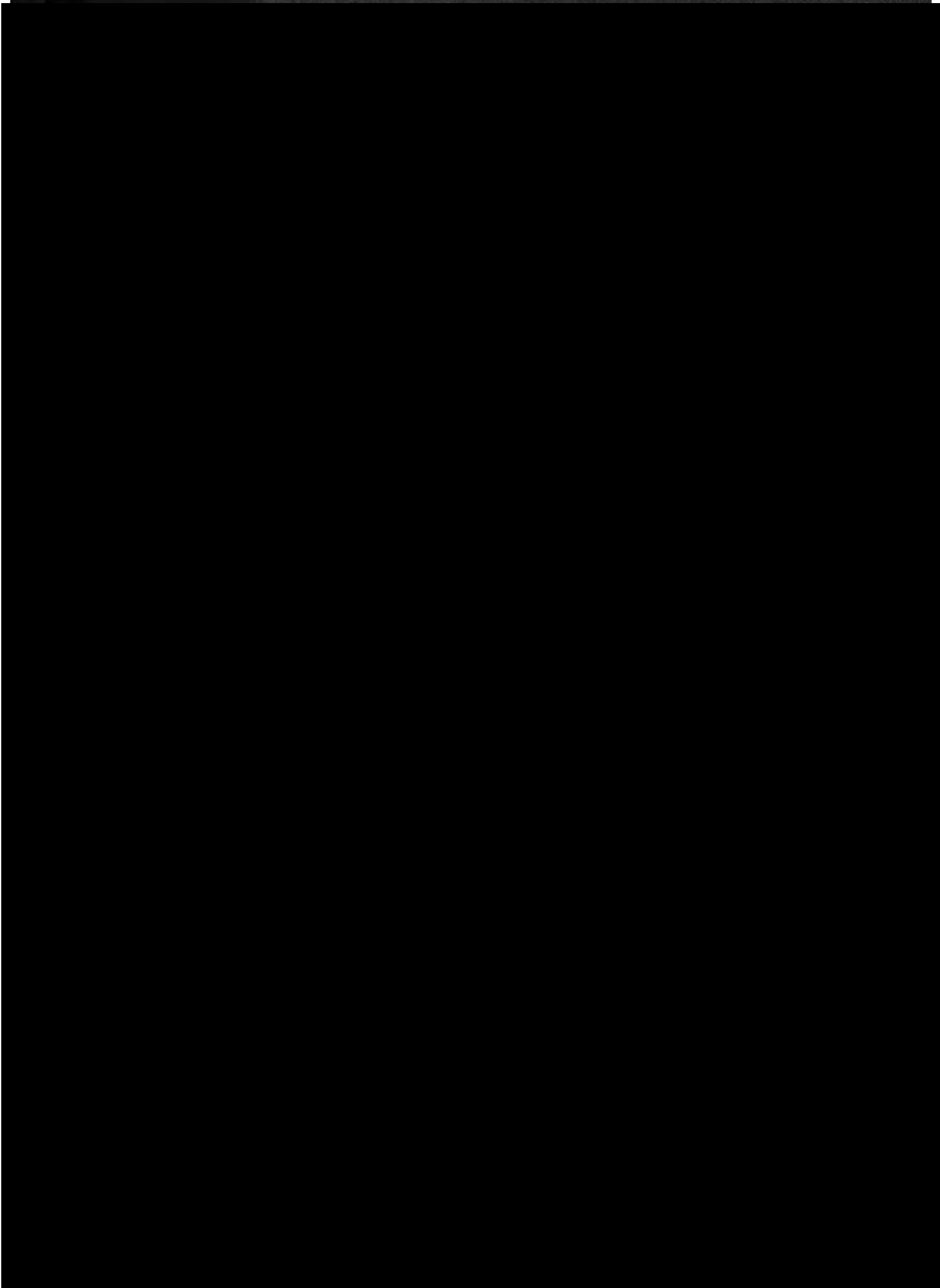


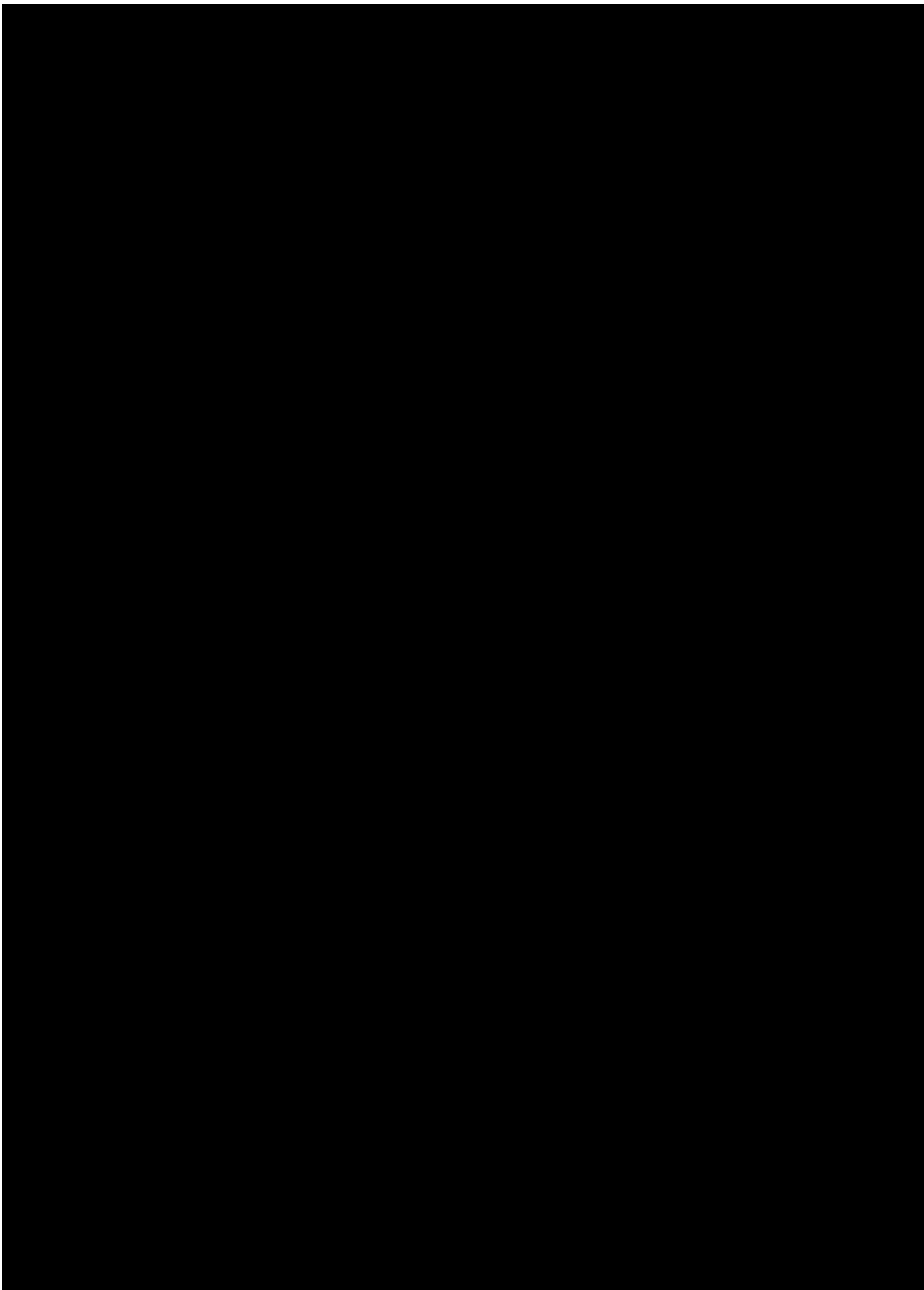


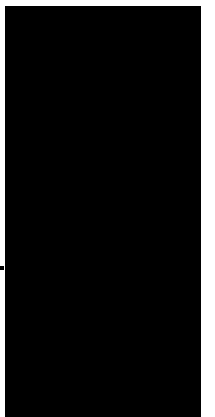
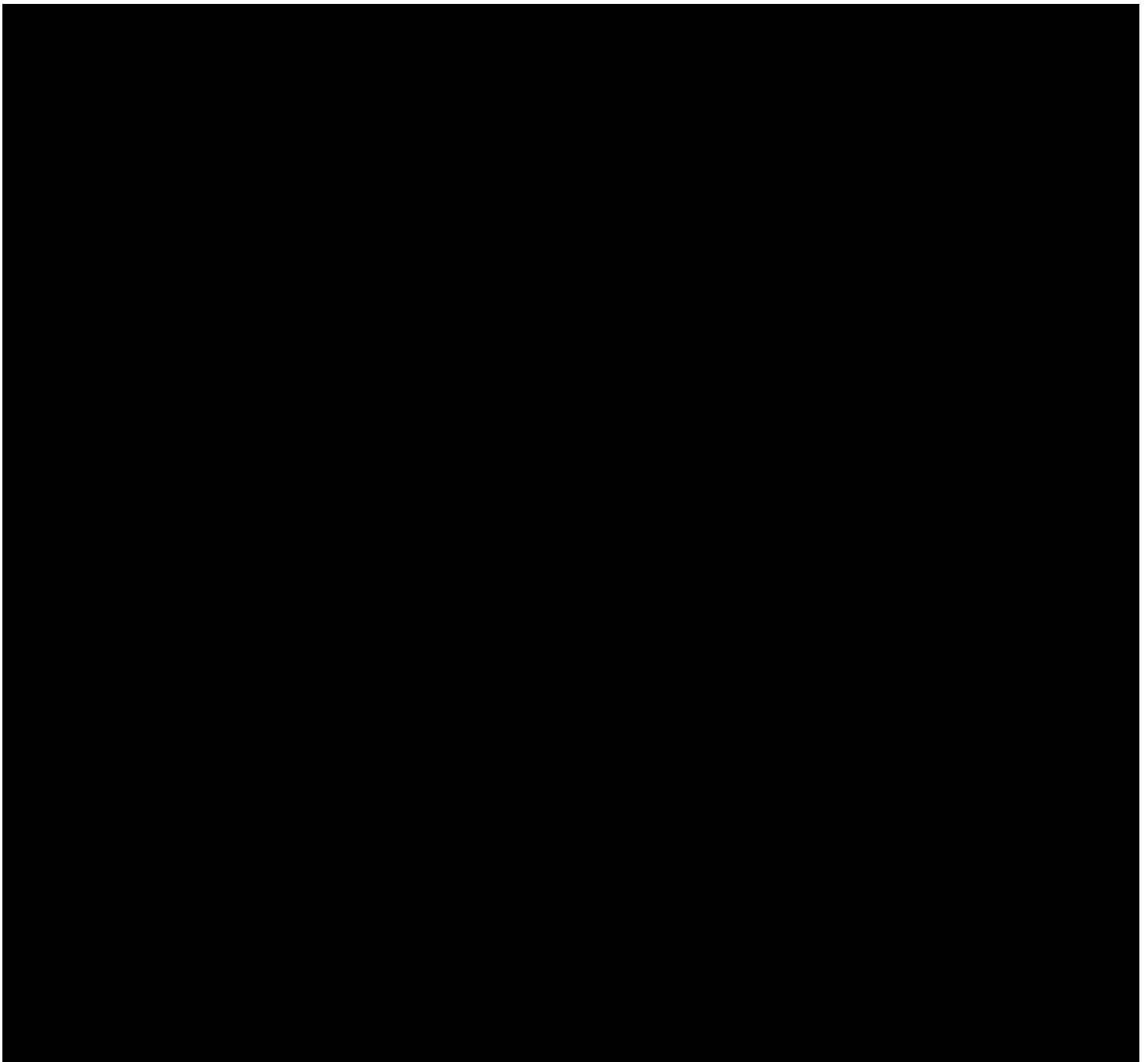


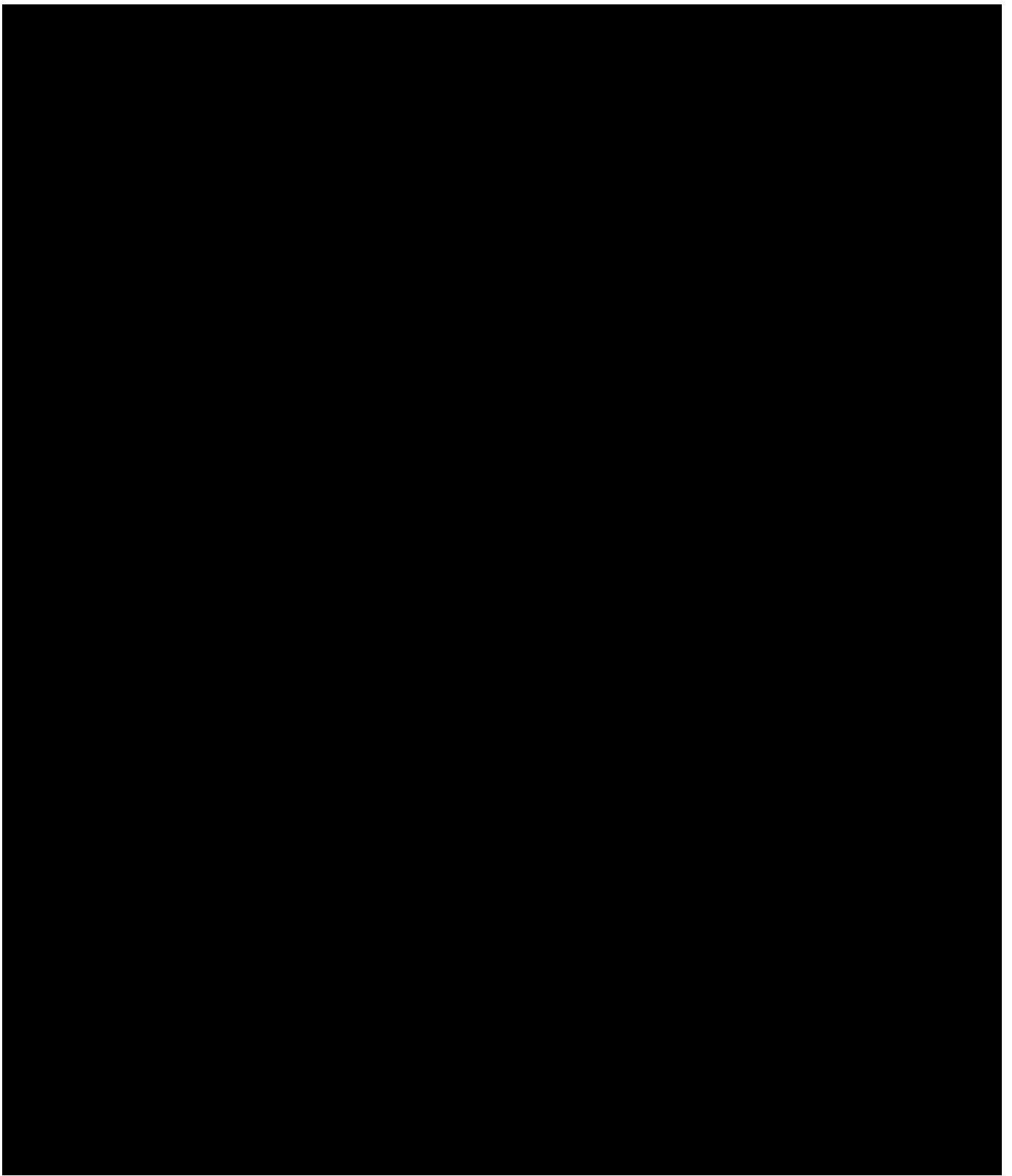


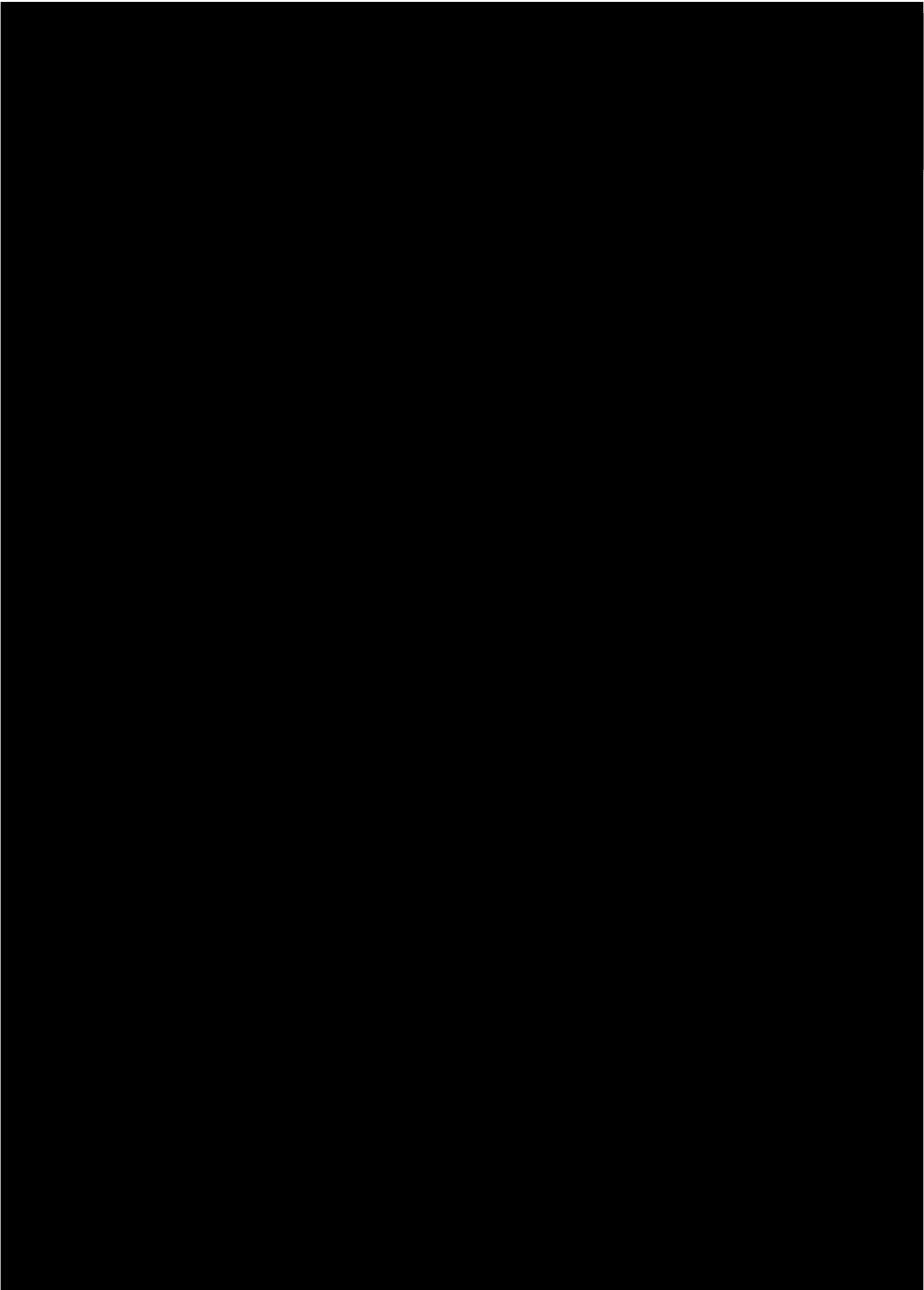


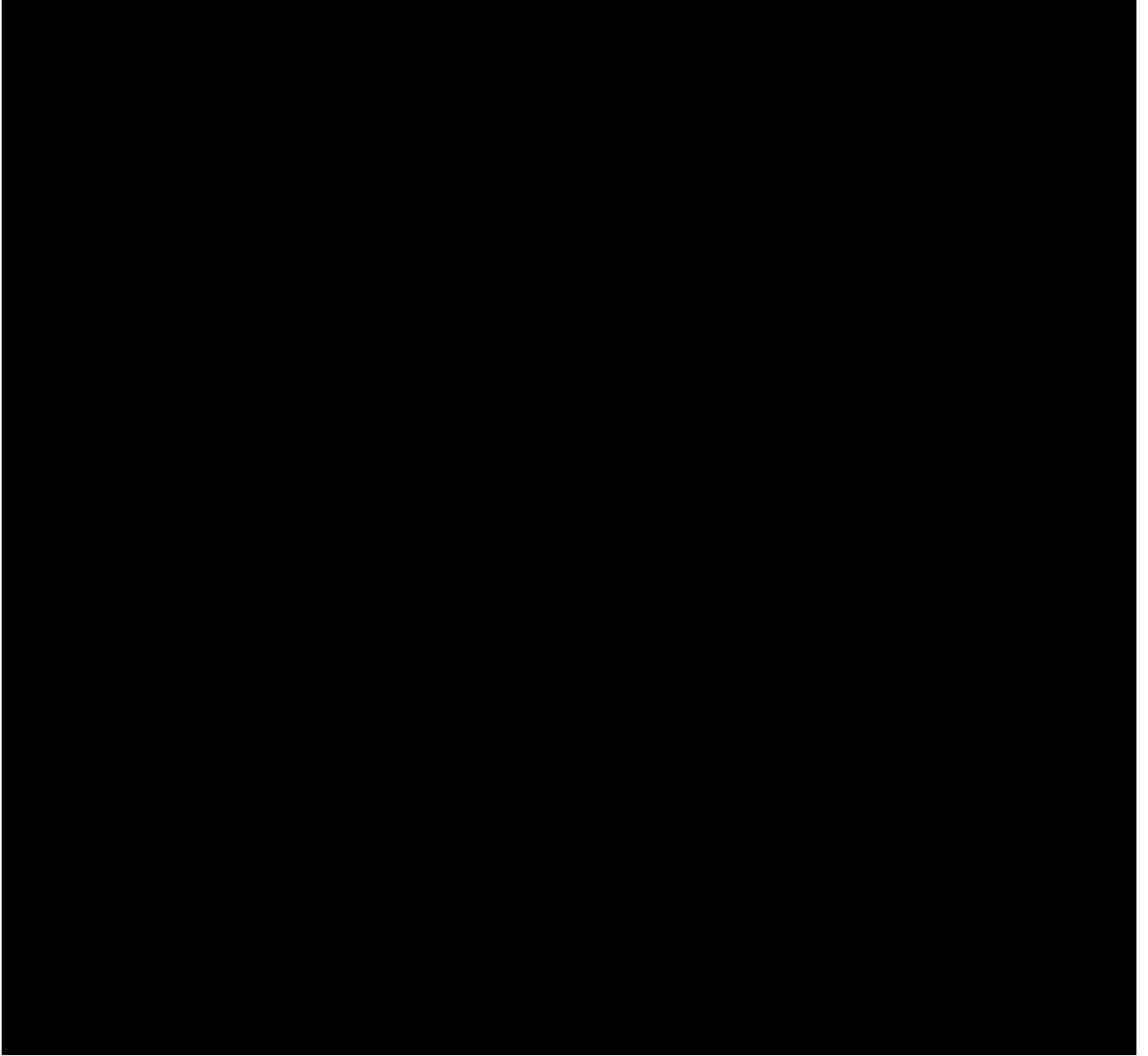


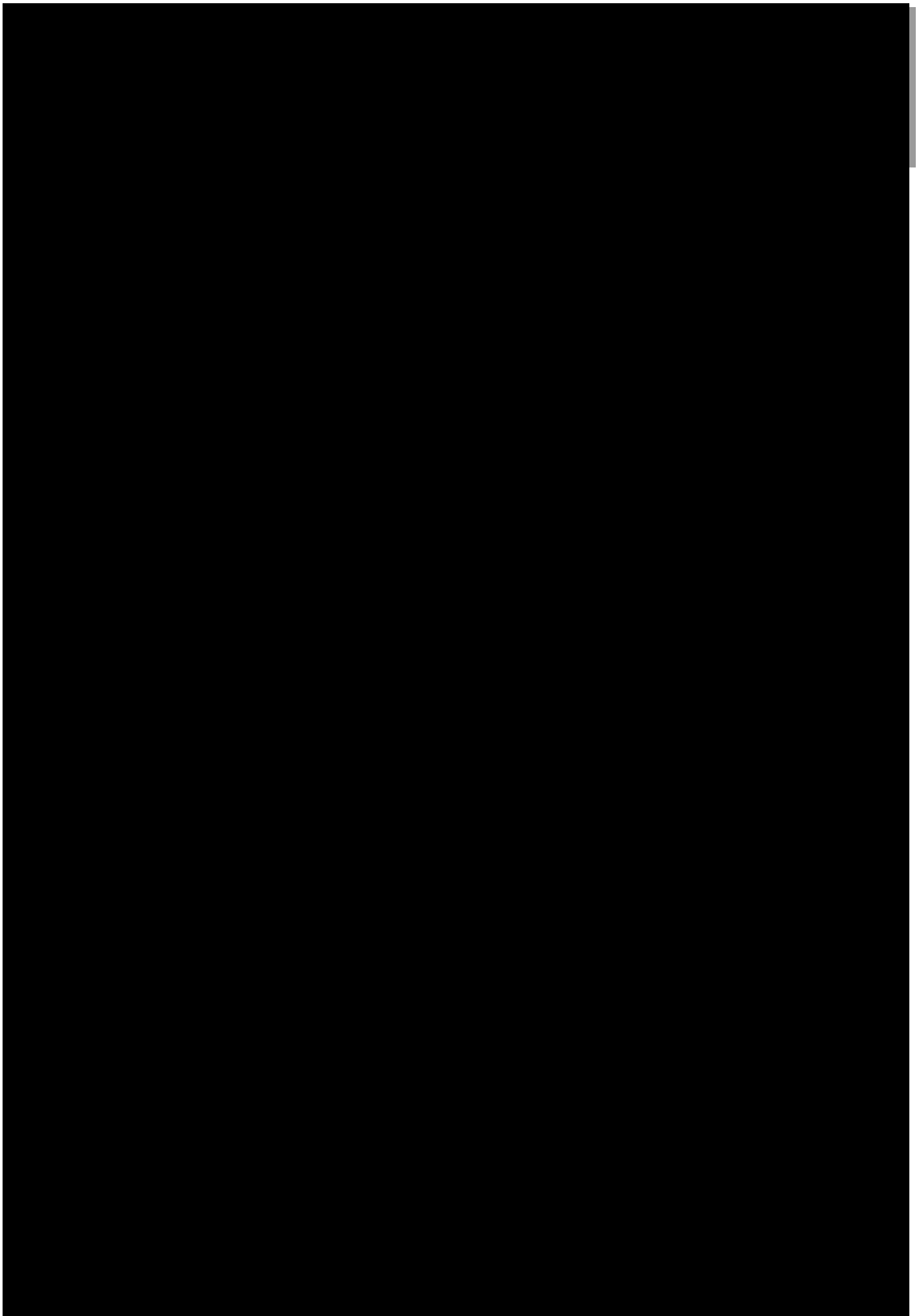




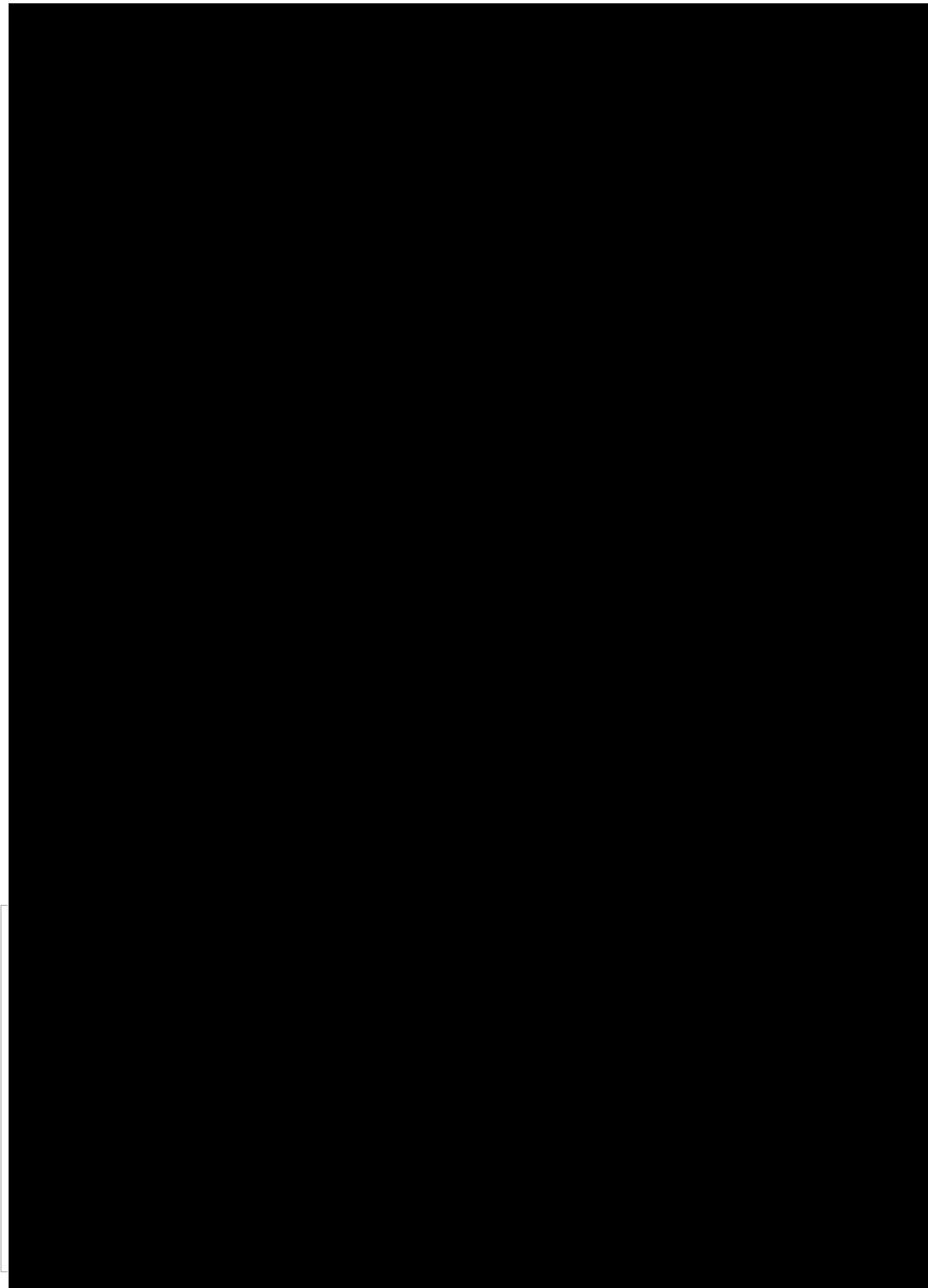


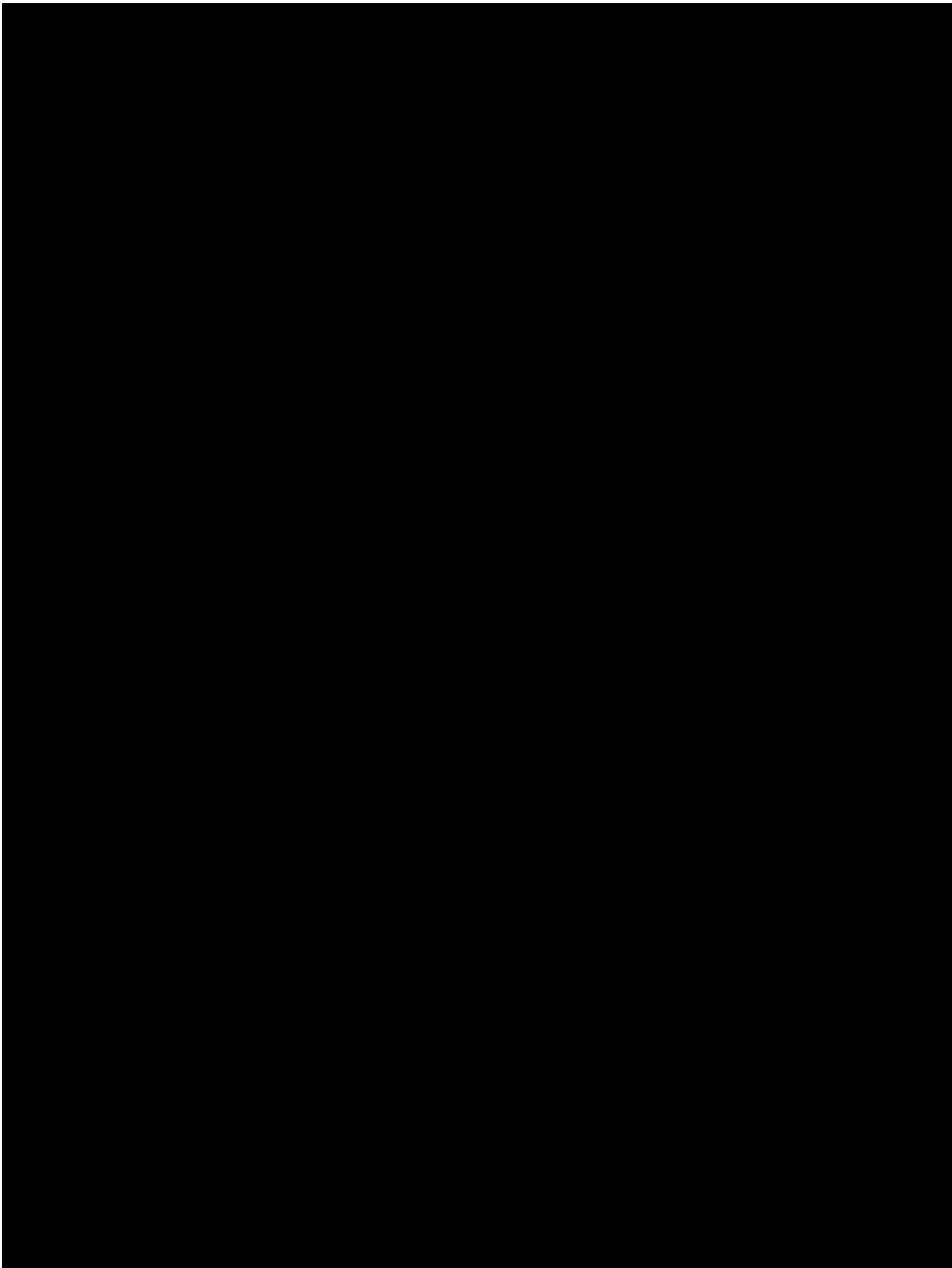


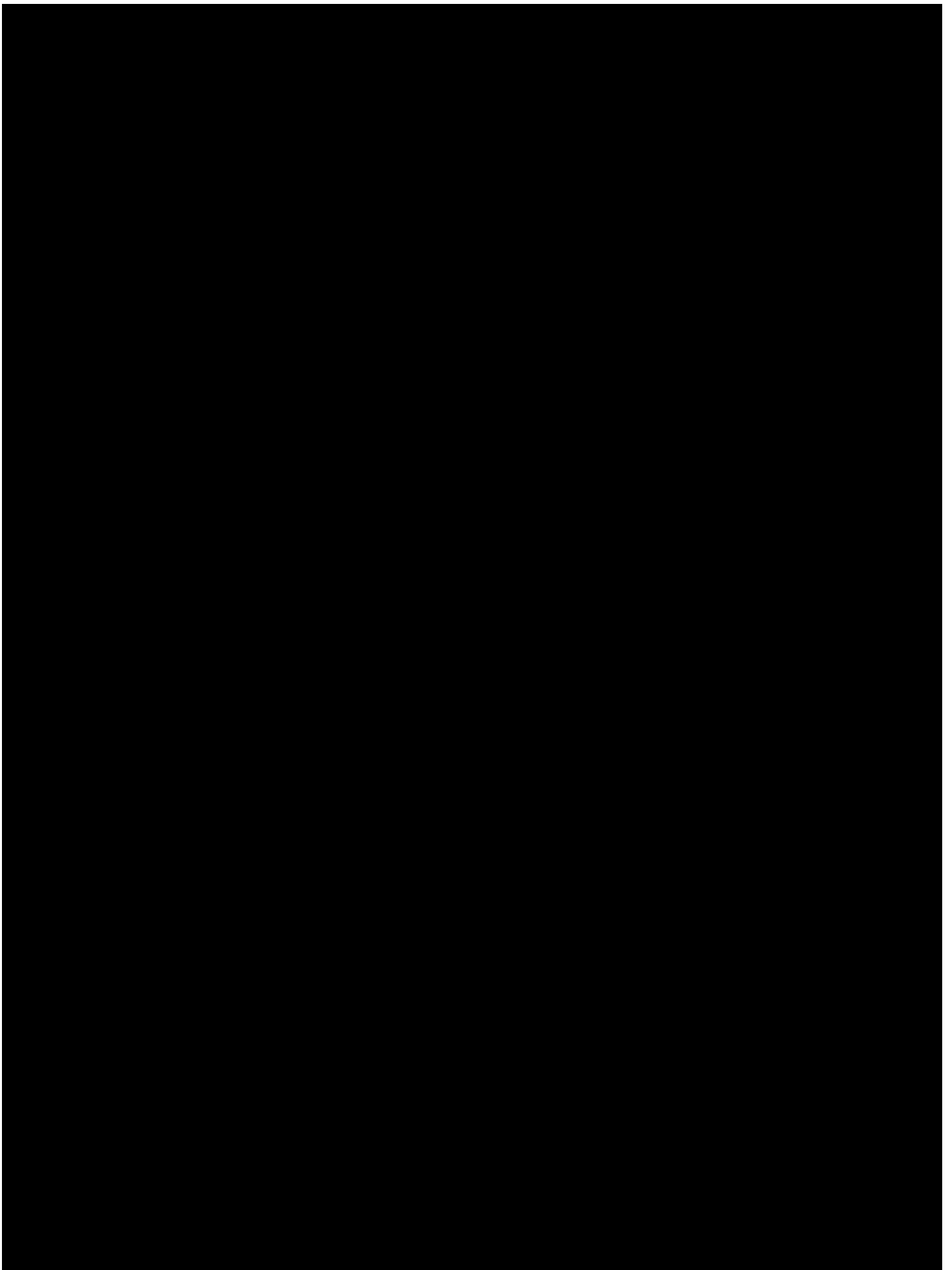


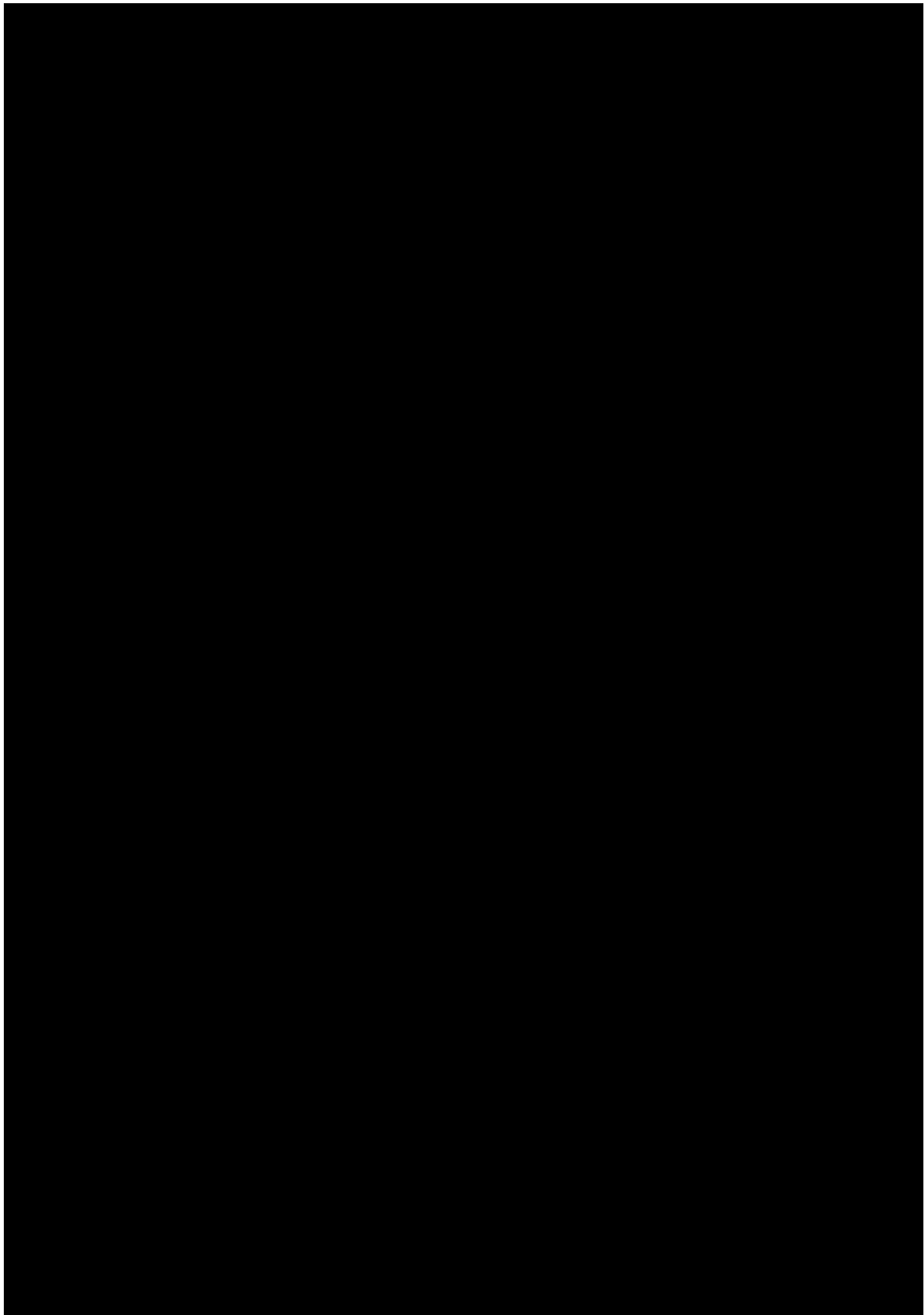


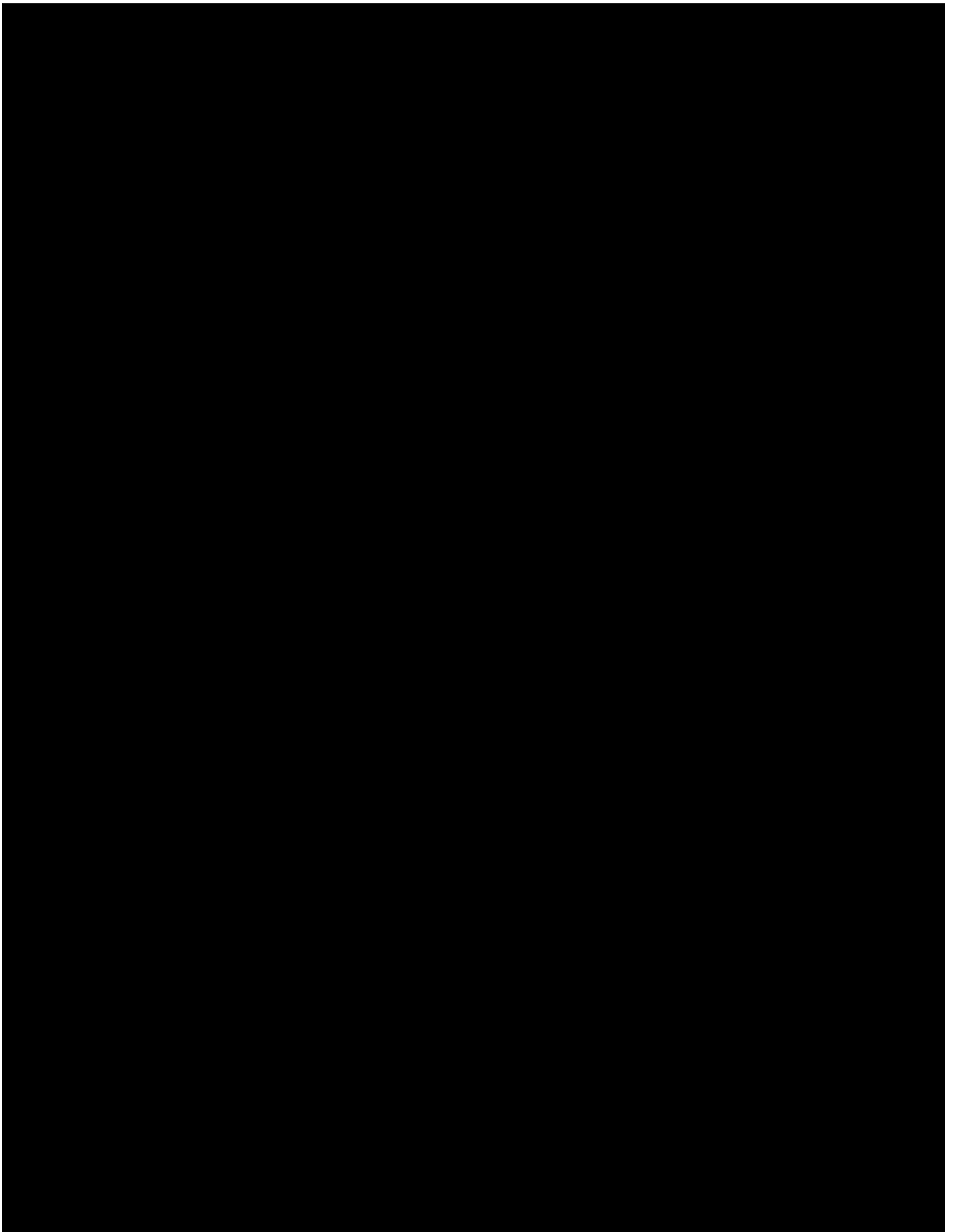


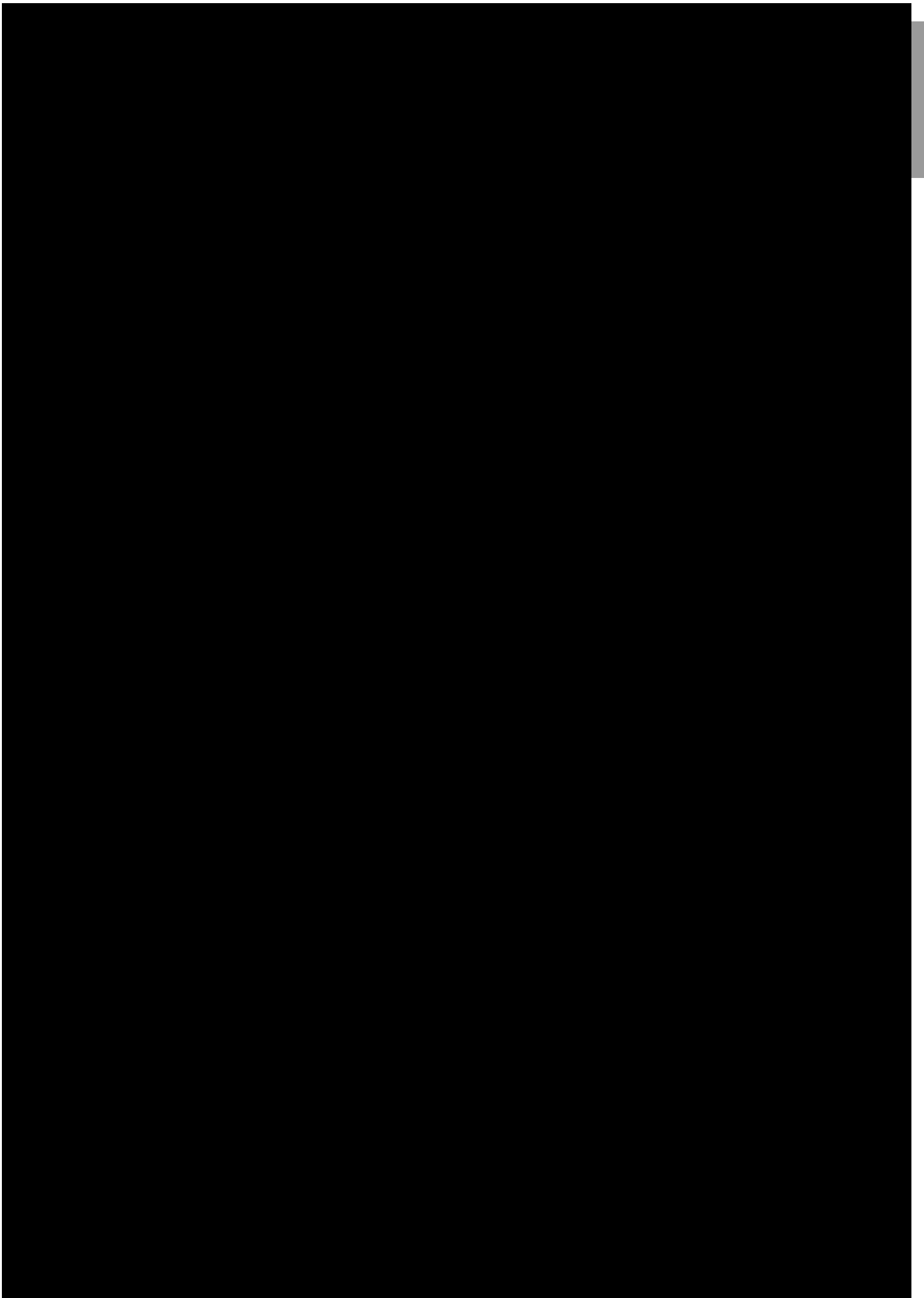


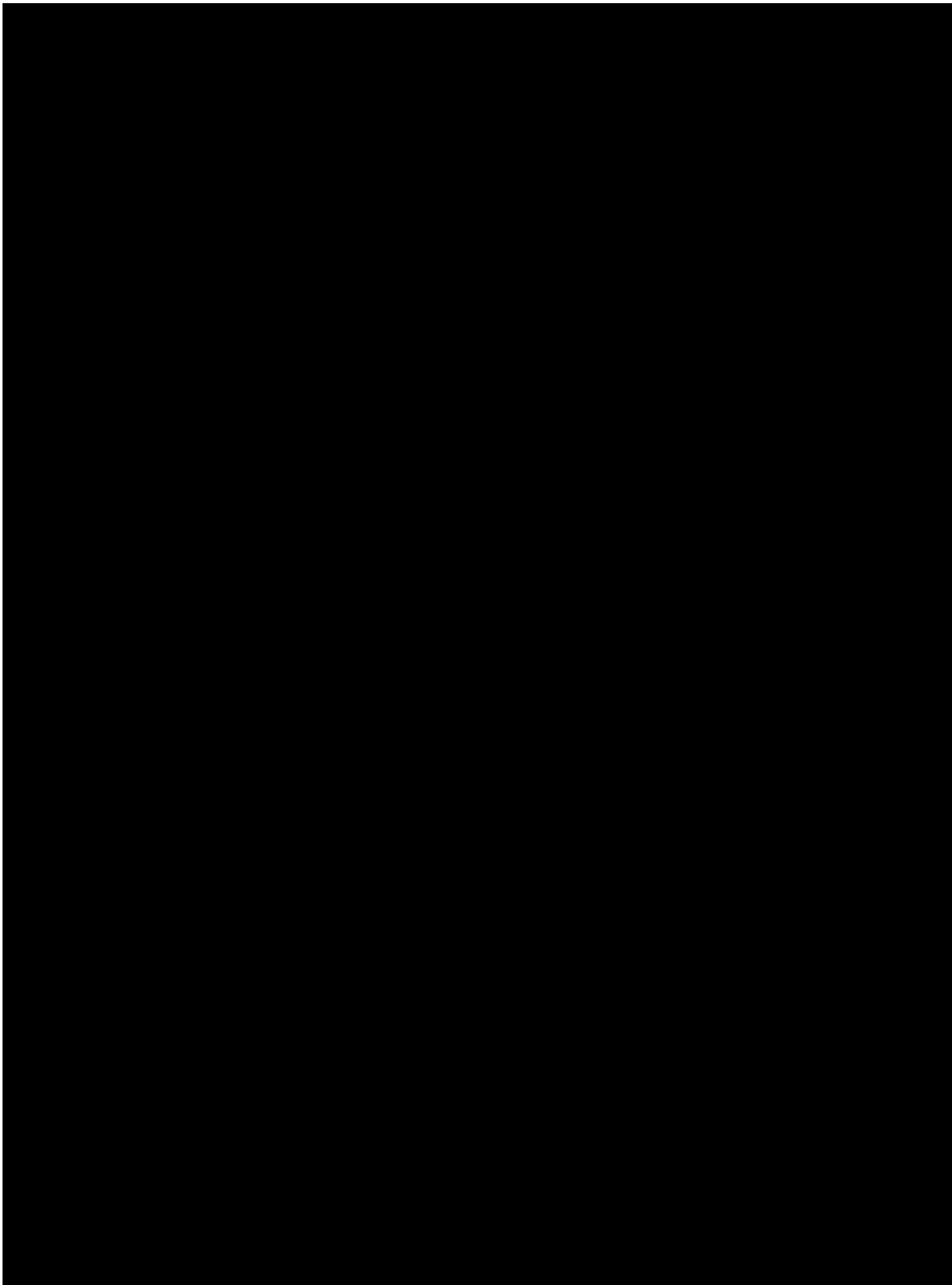


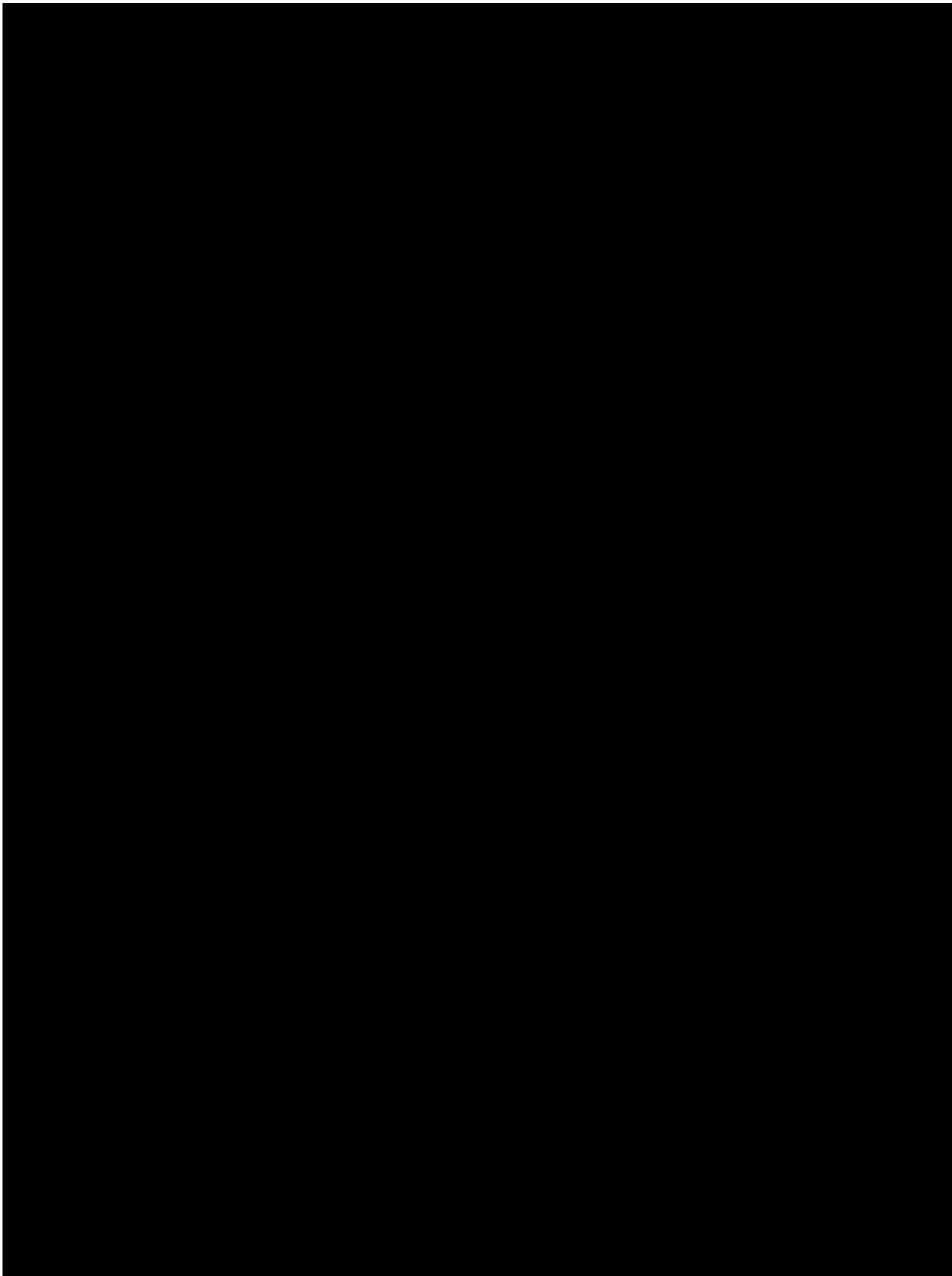




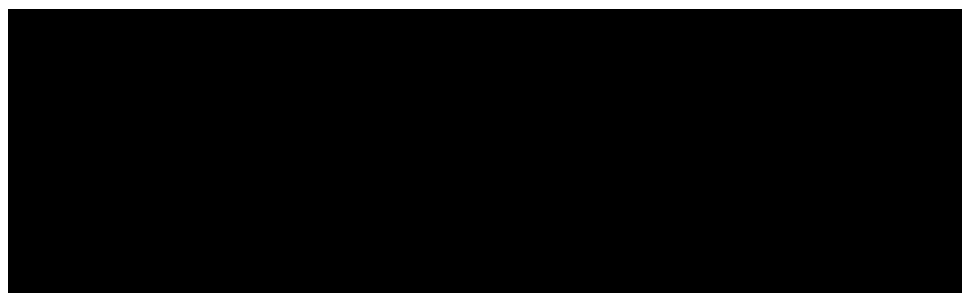
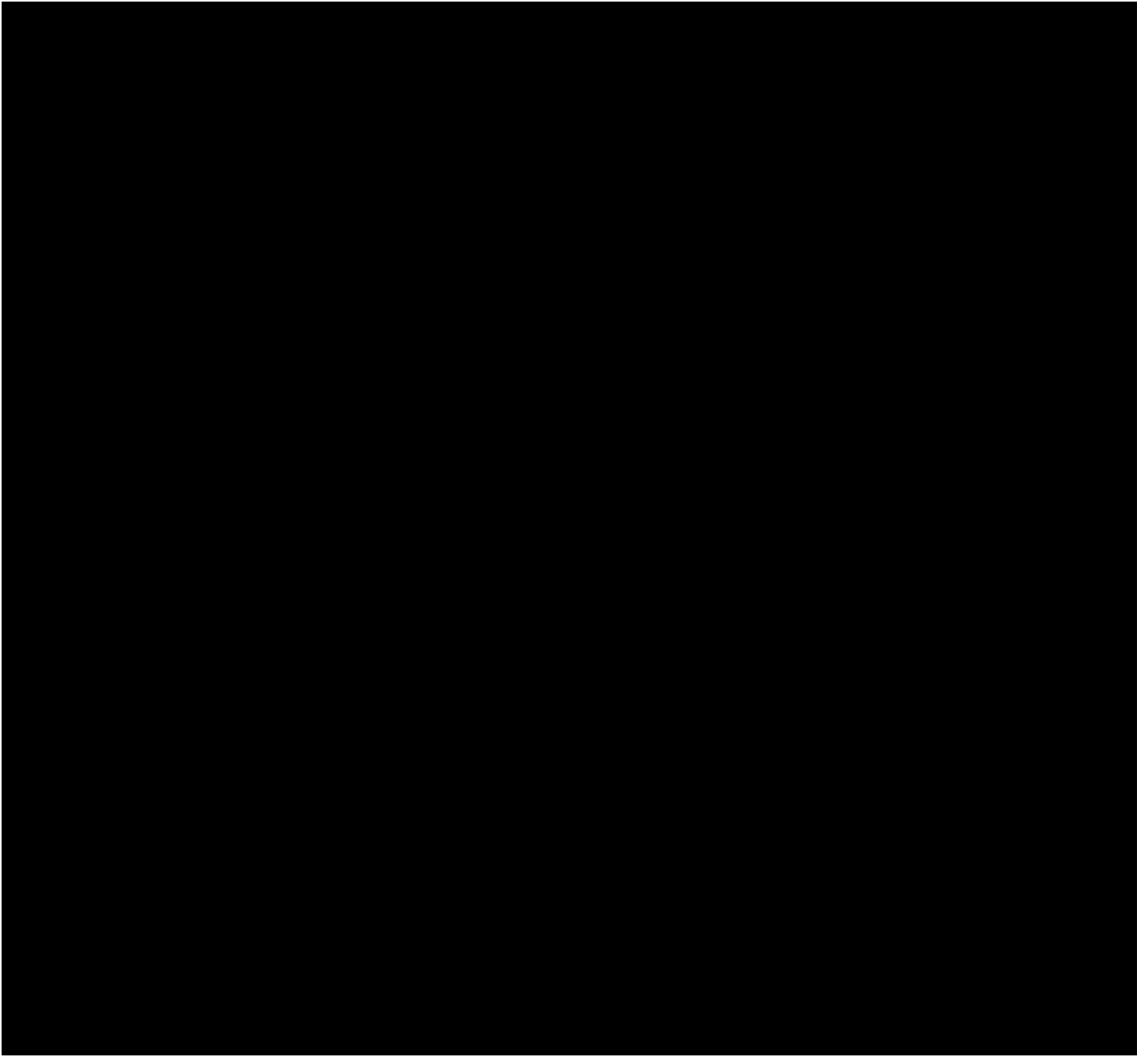


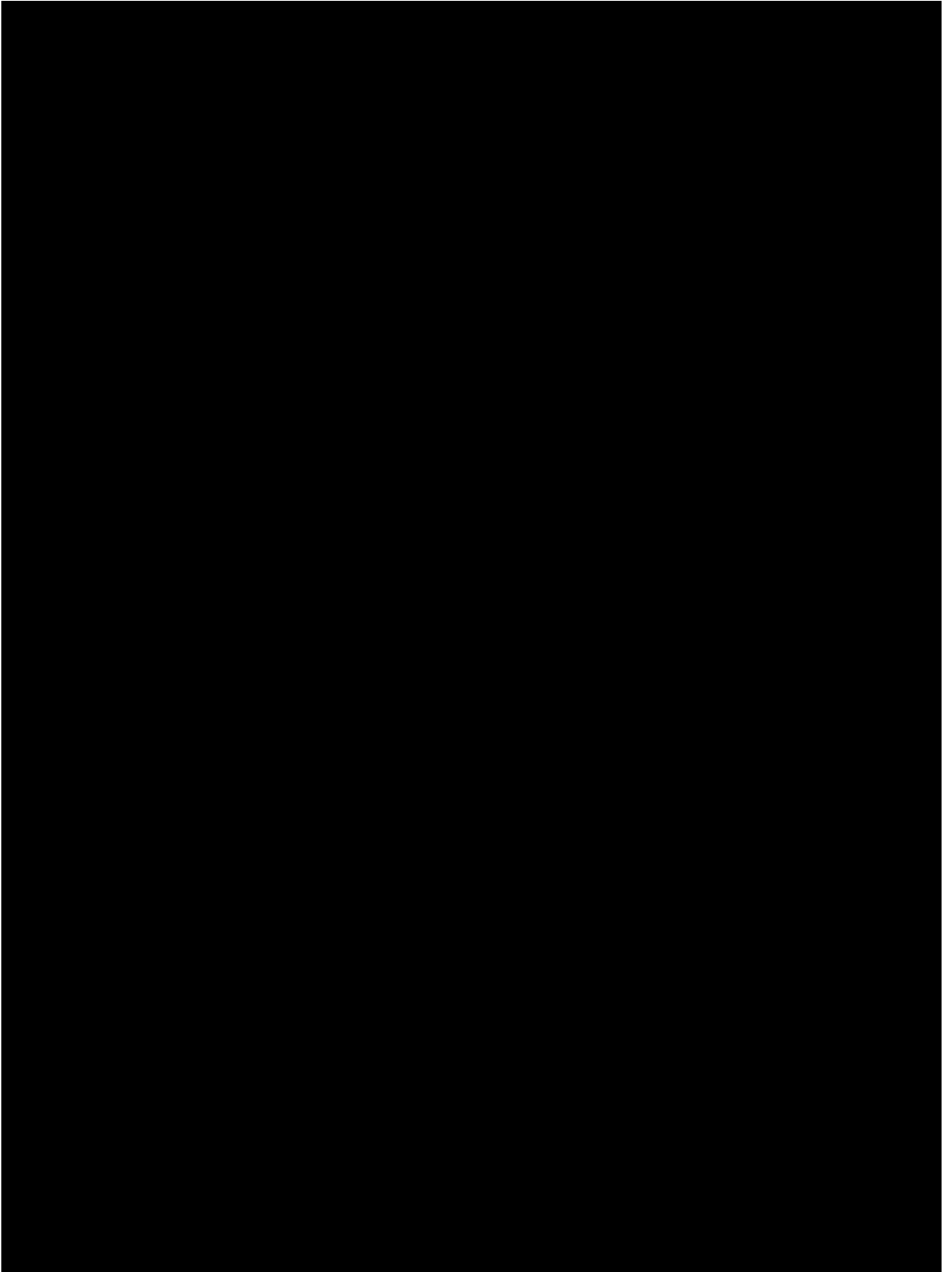


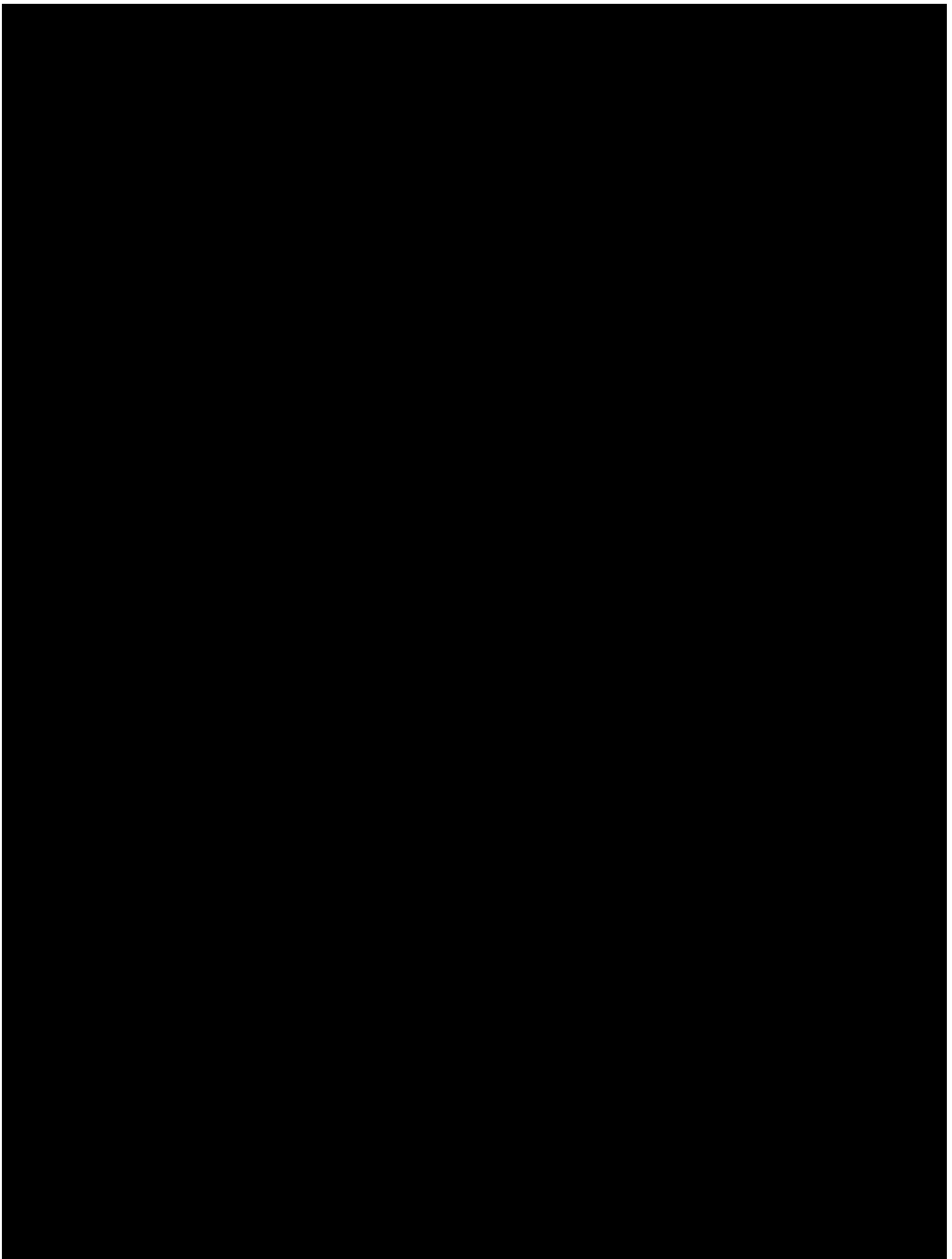


































































































































































































































































































ANNEX E-1









ANNEX E-2



ANNEX F











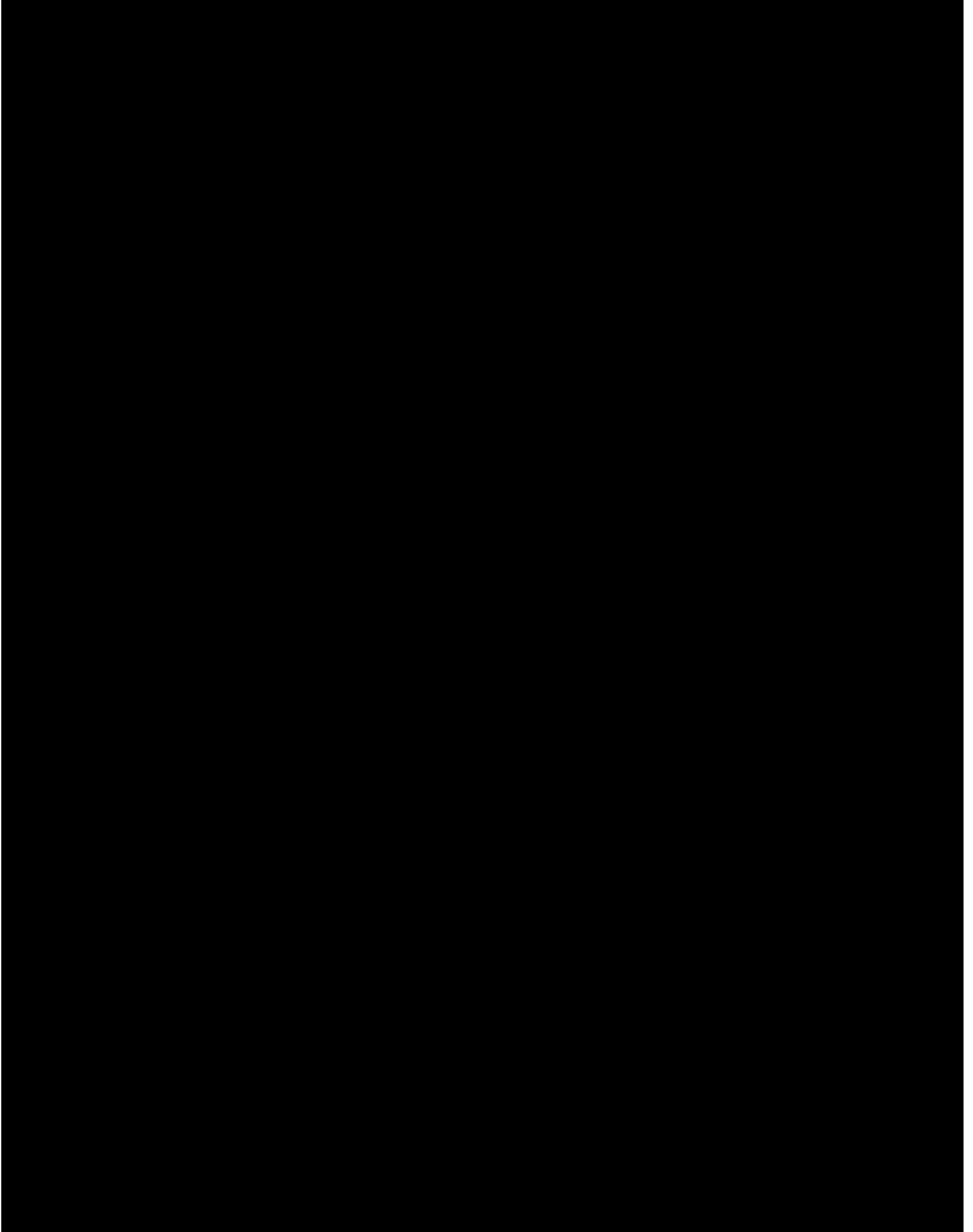


ANNEX G

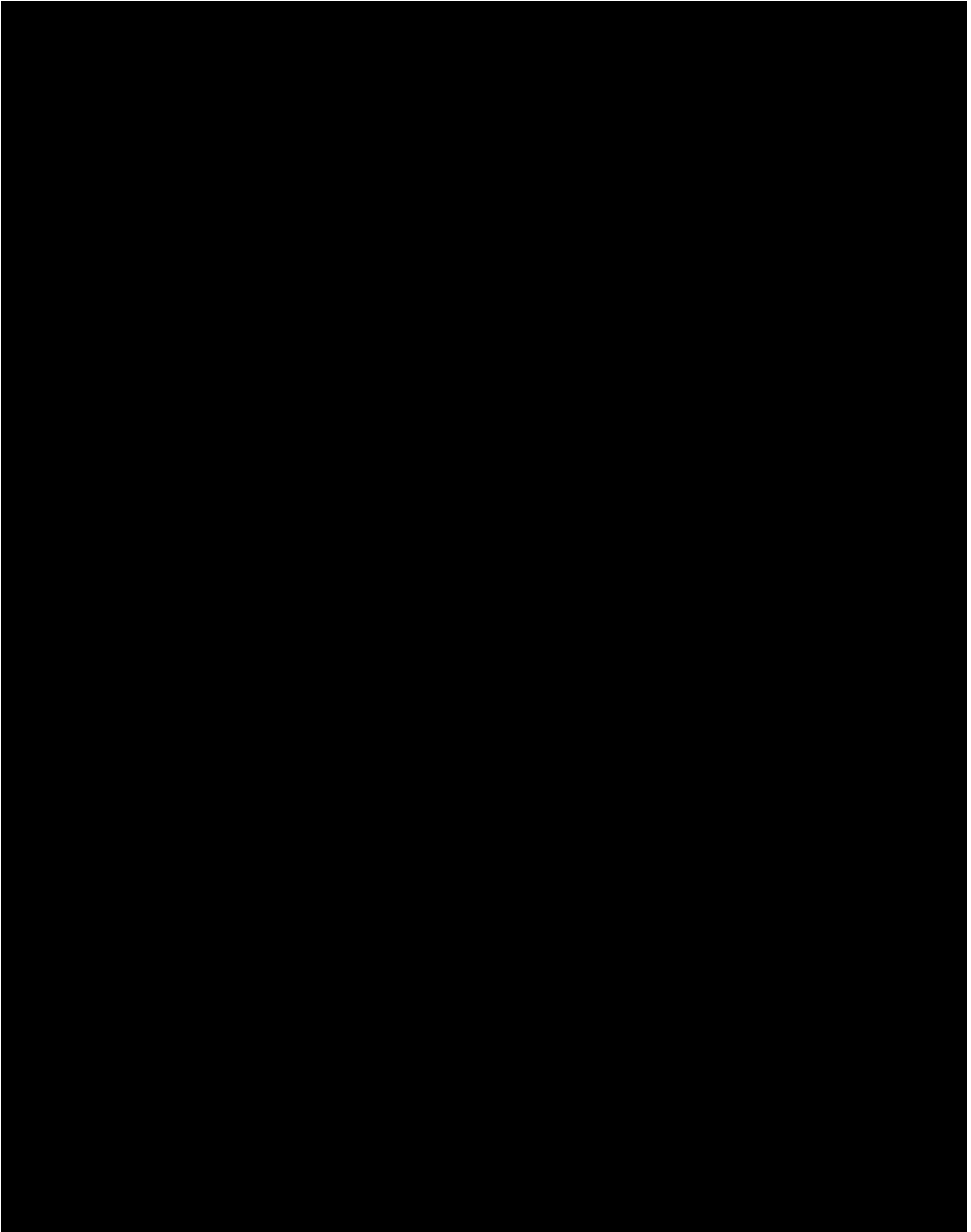




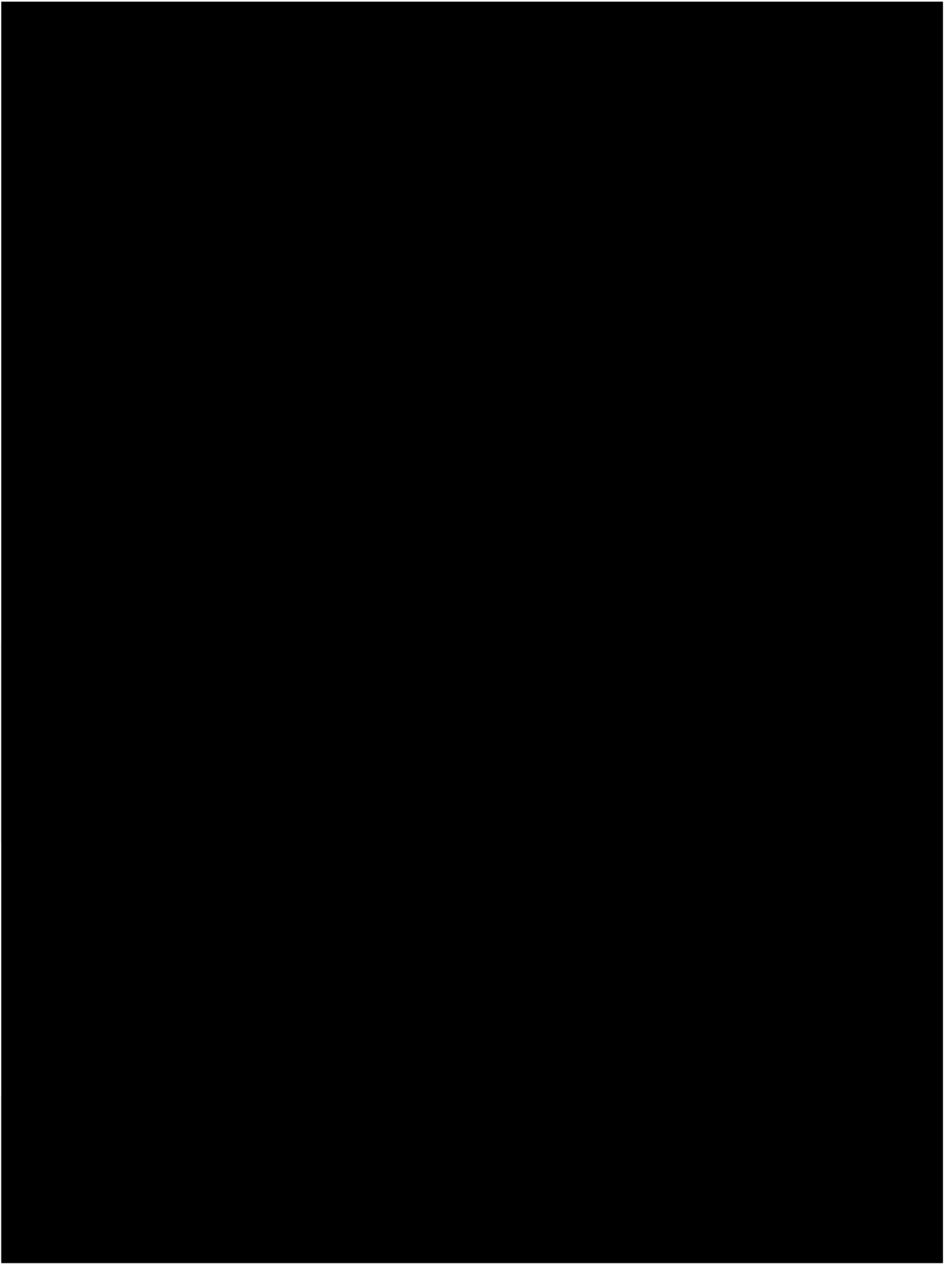
# ATTACHMENT 9





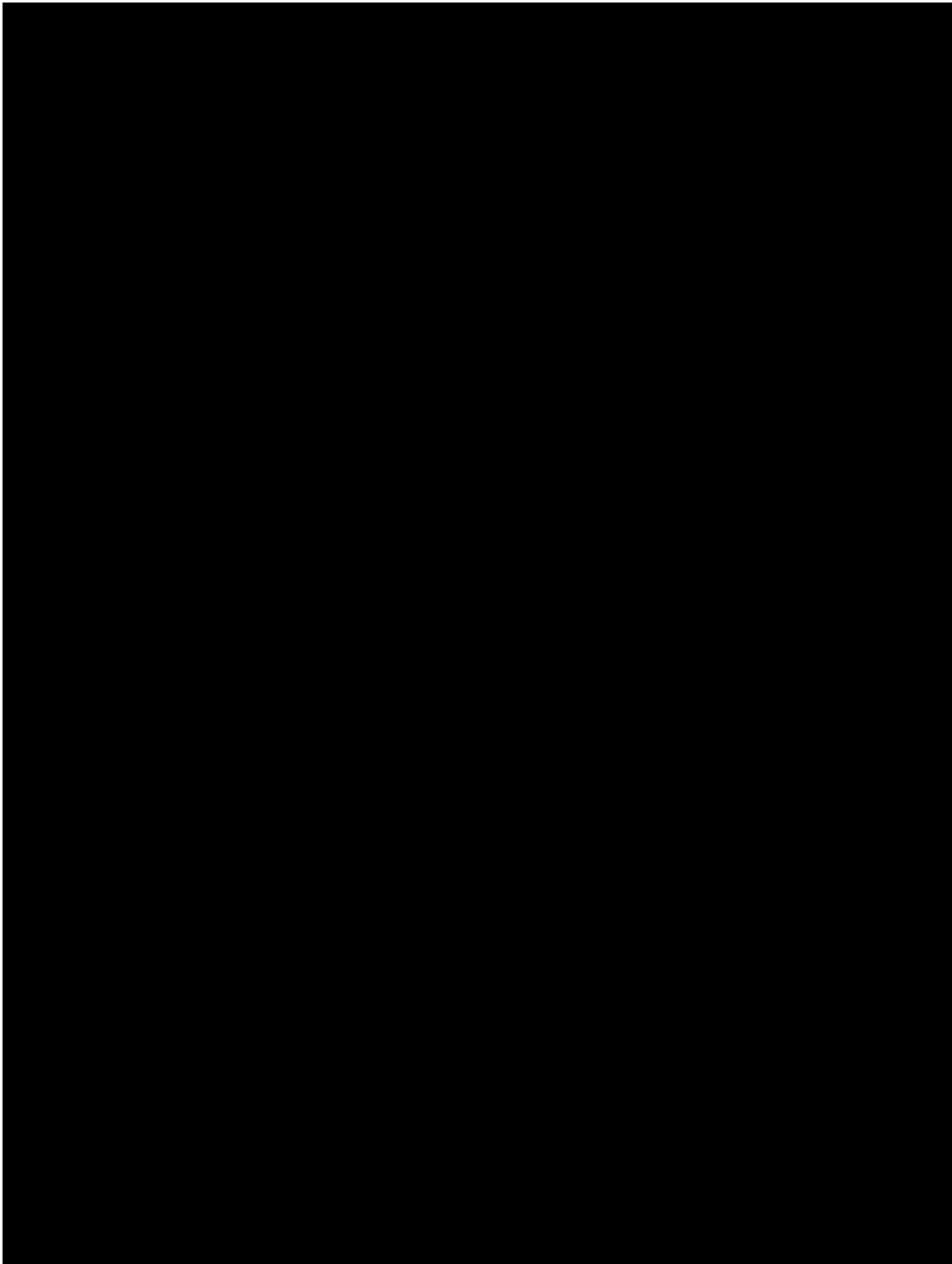


ANNEX A

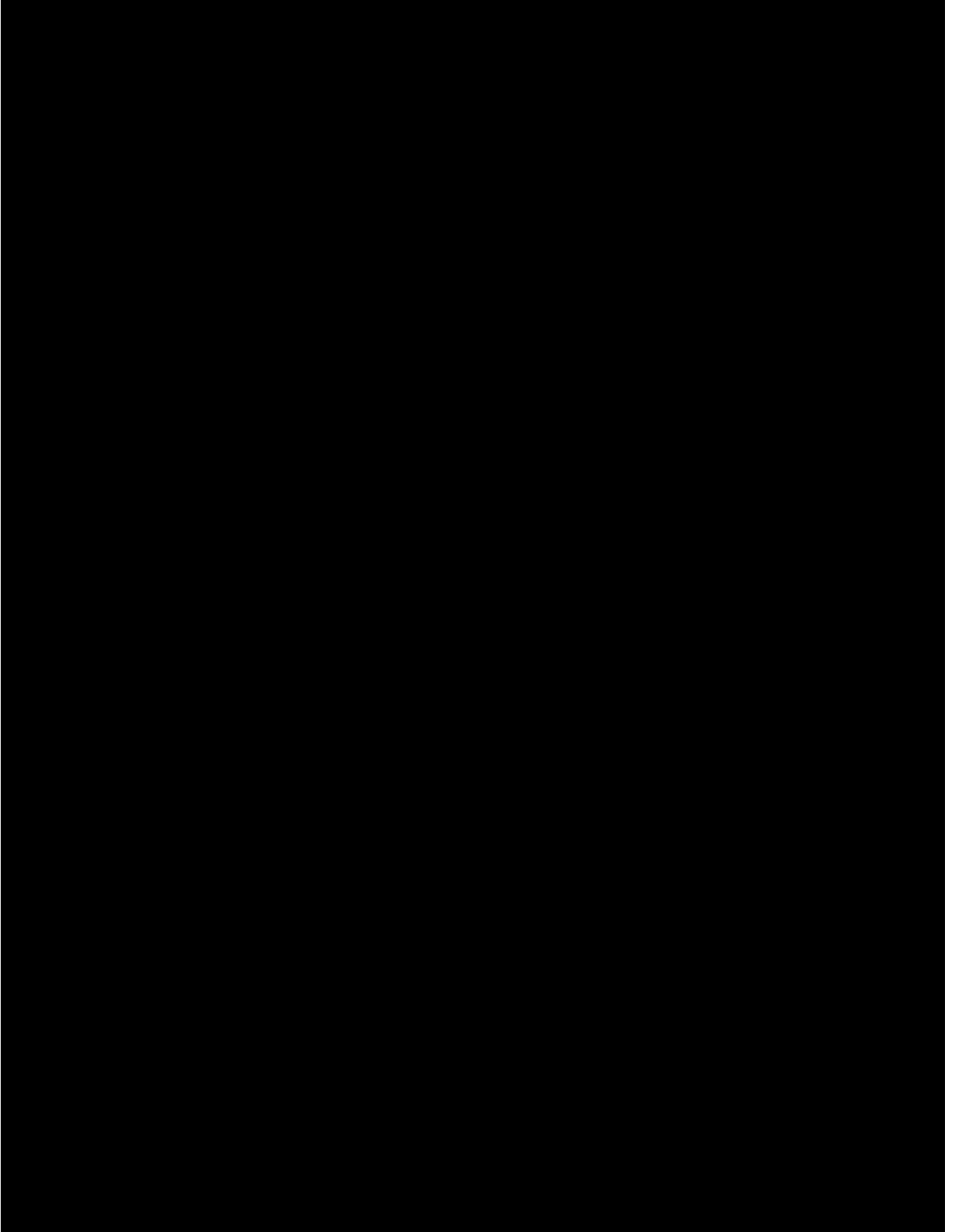




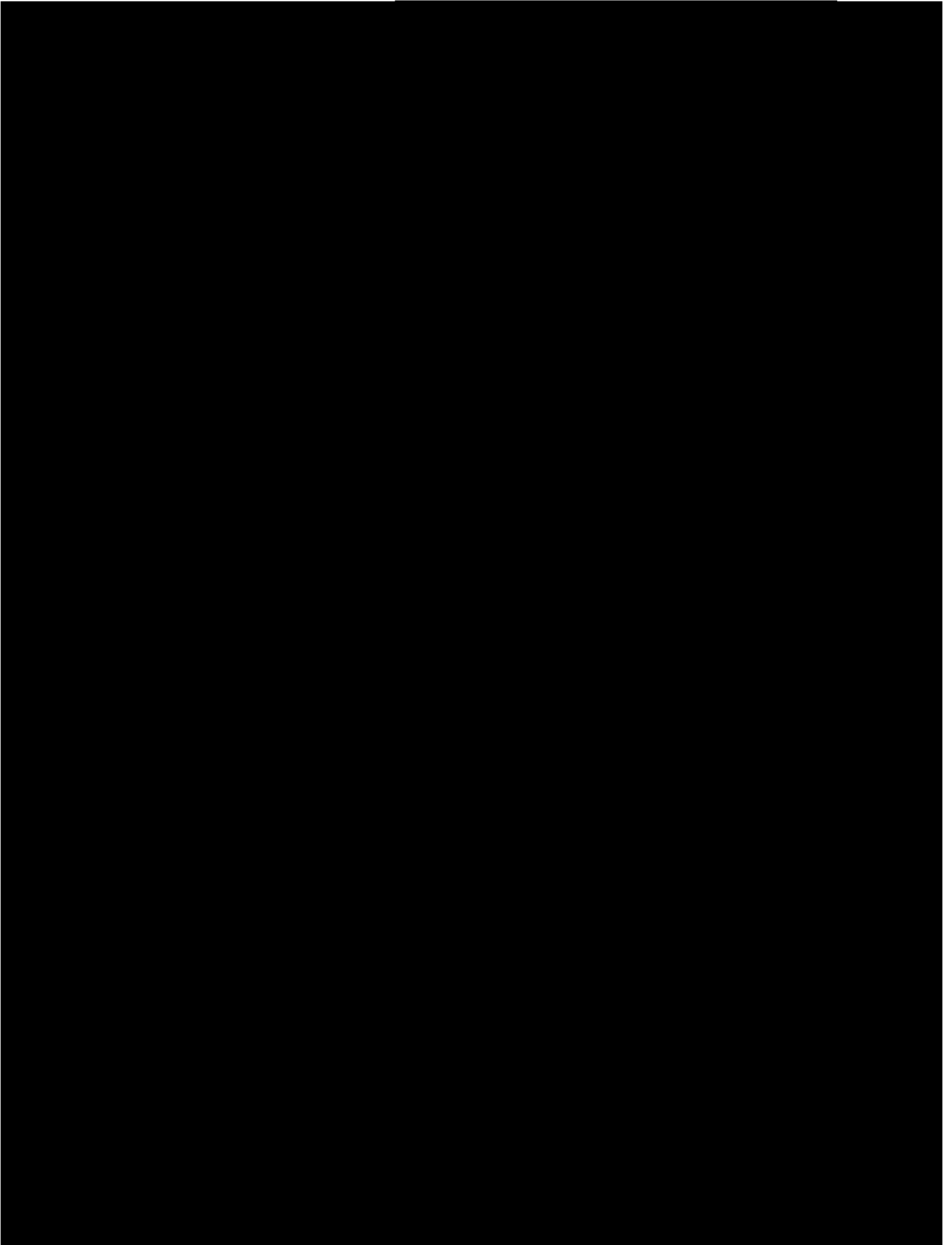
# ATTACHMENT 10

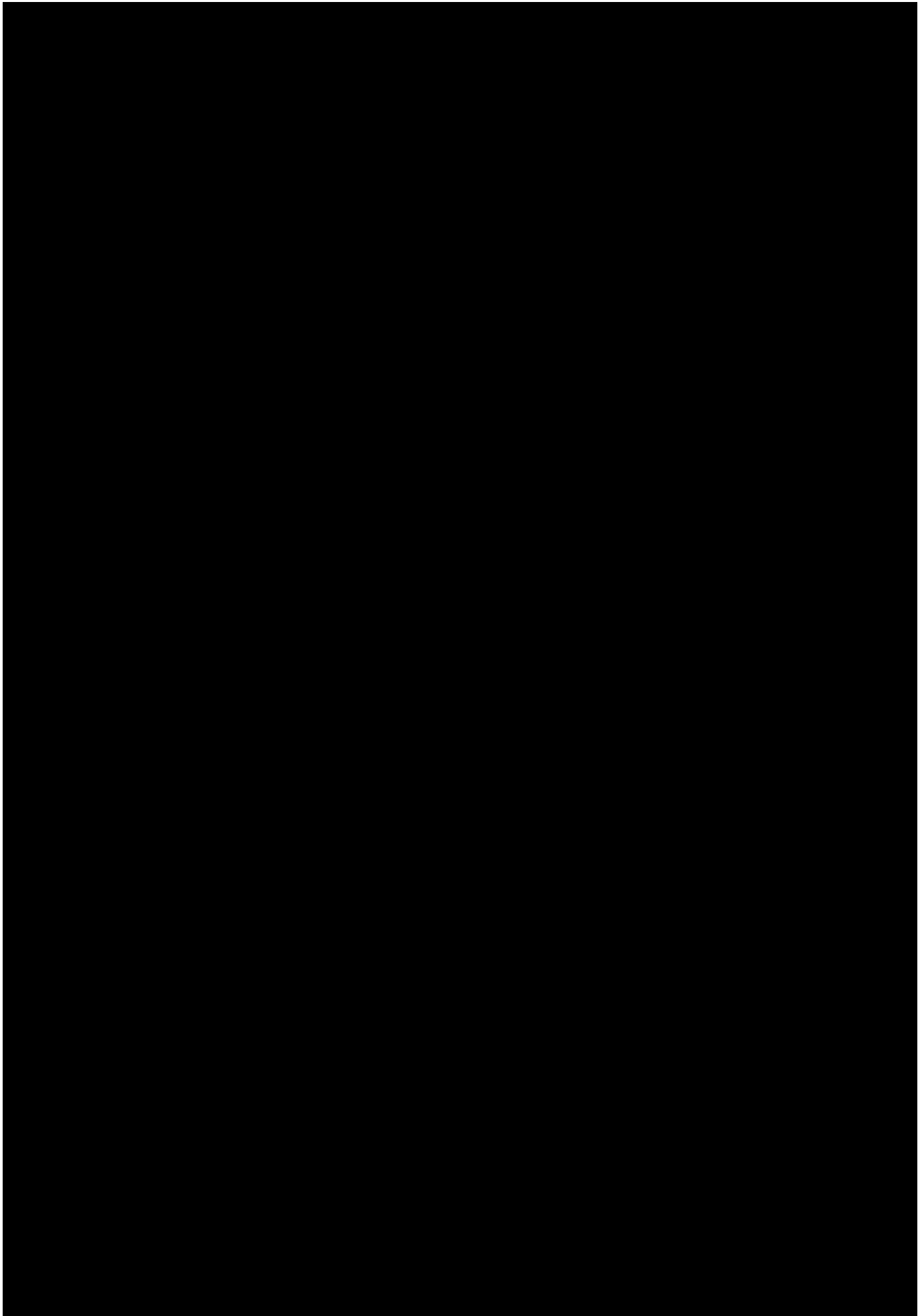


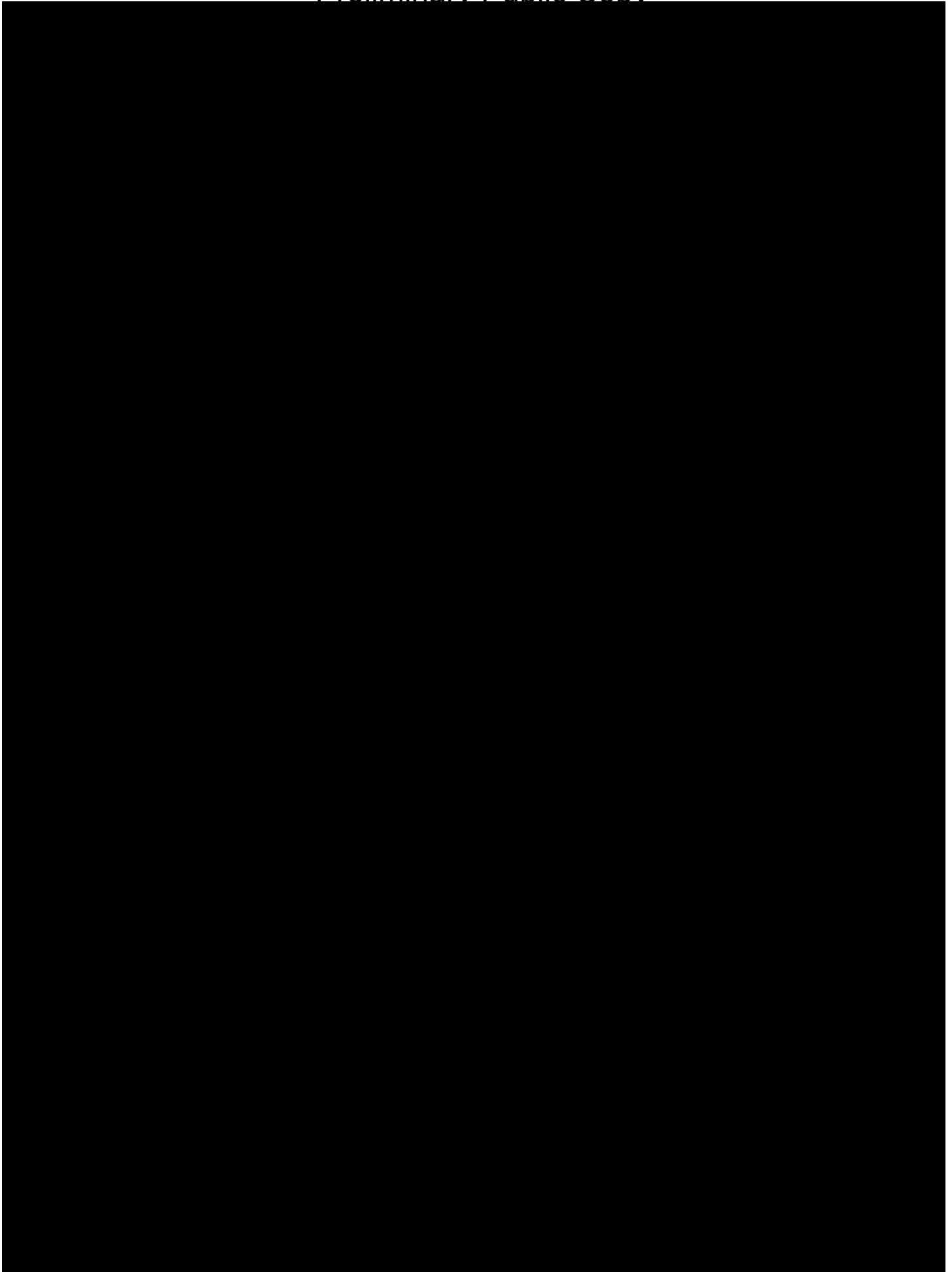
# ATTACHMENT 11

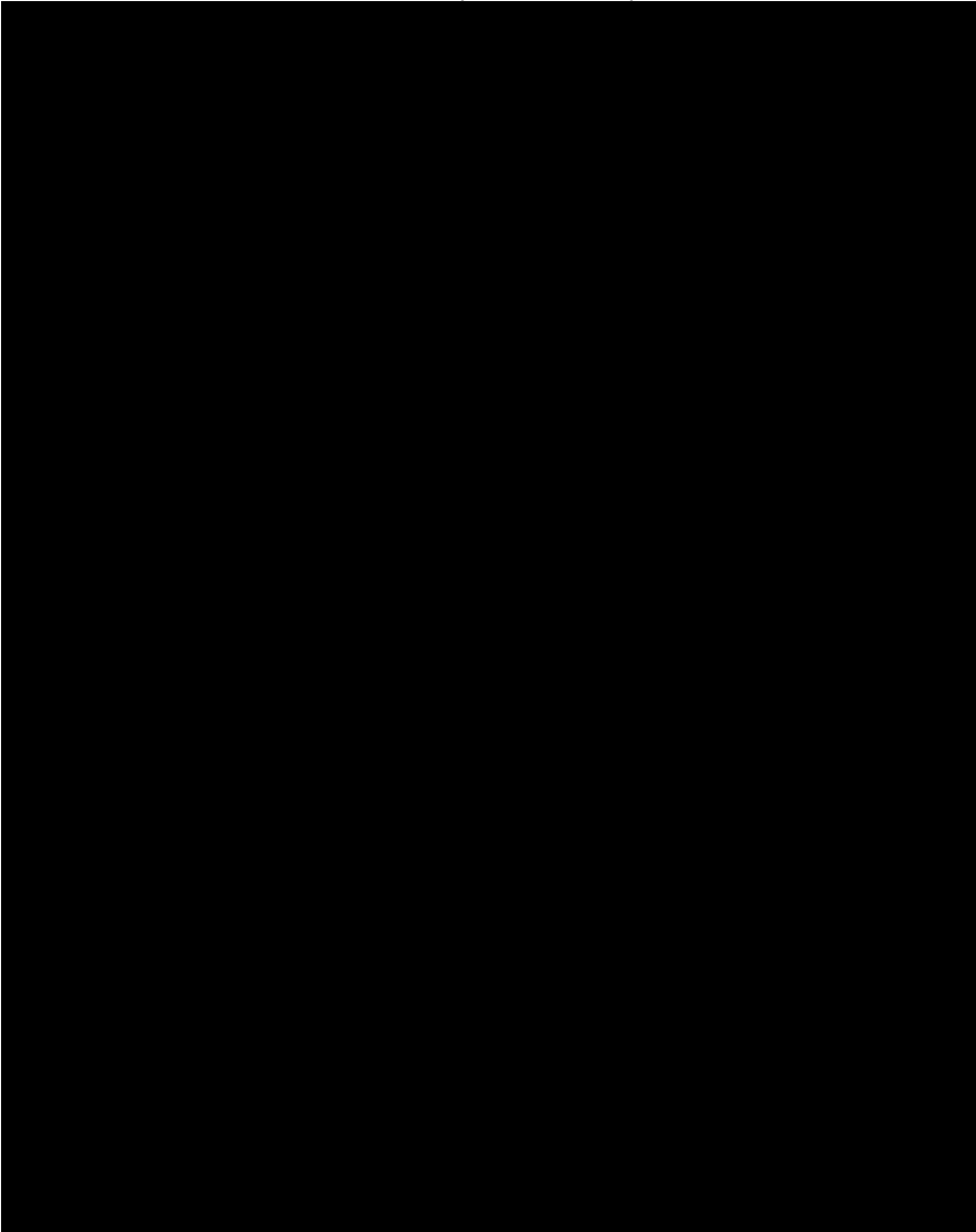


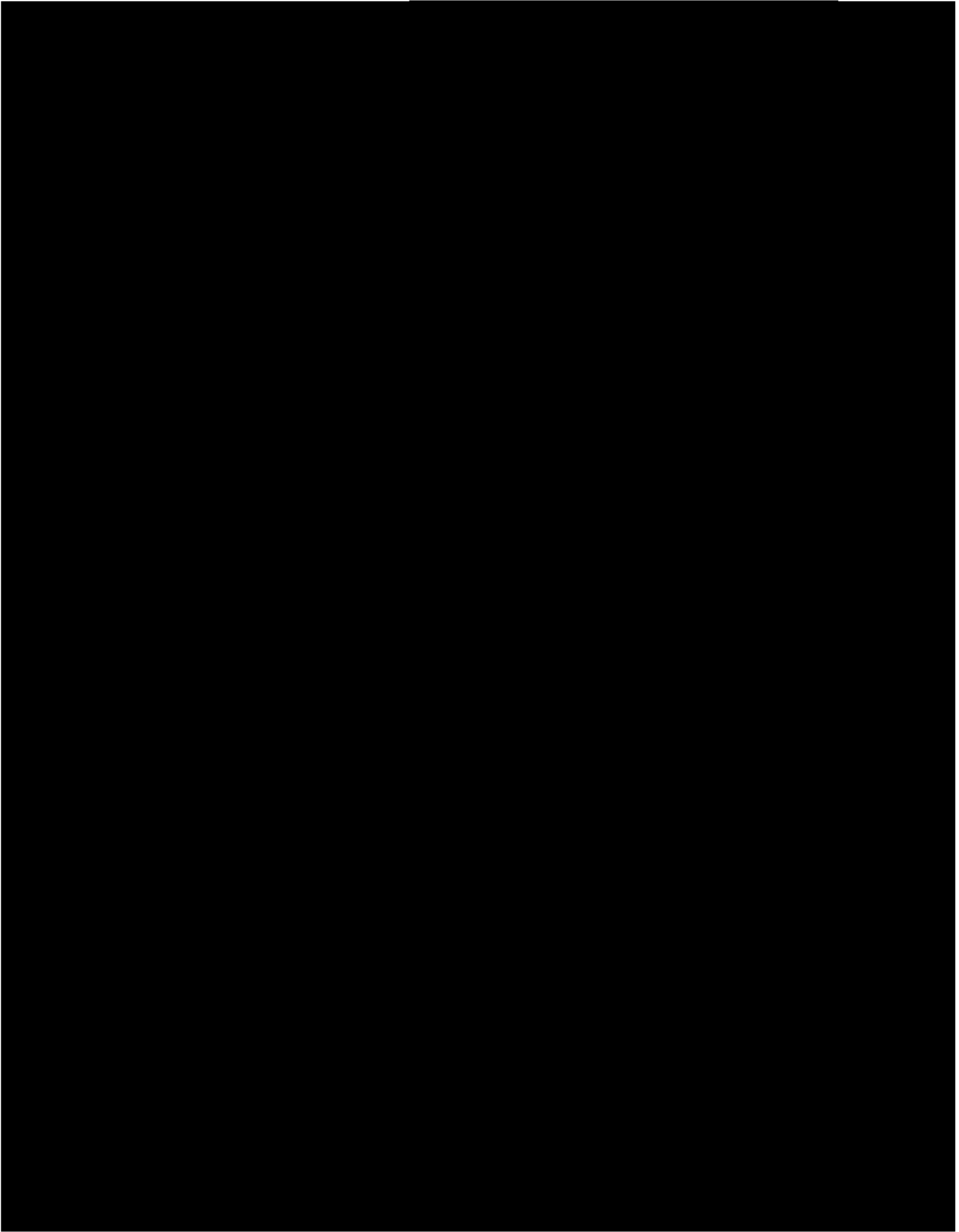




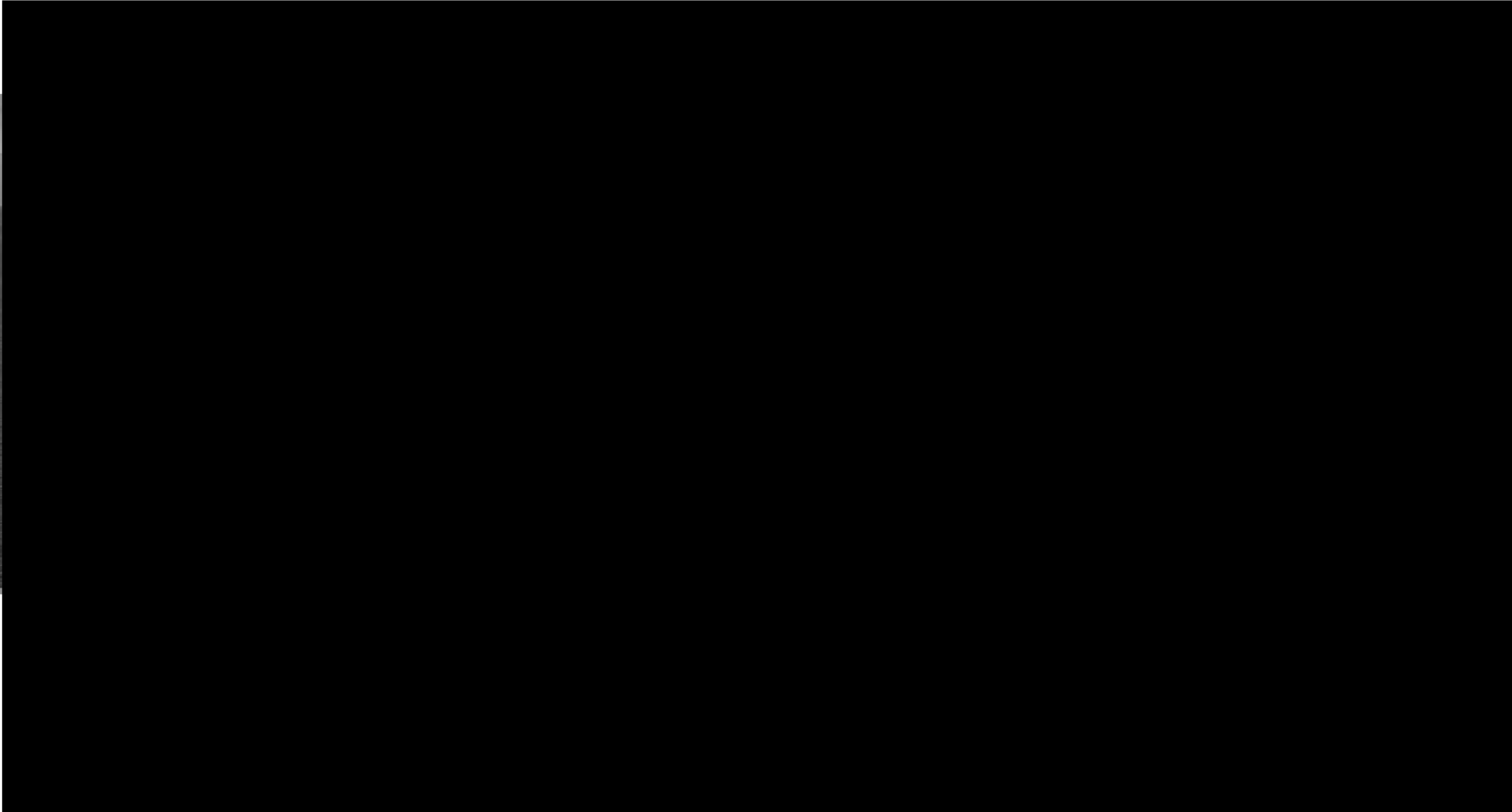


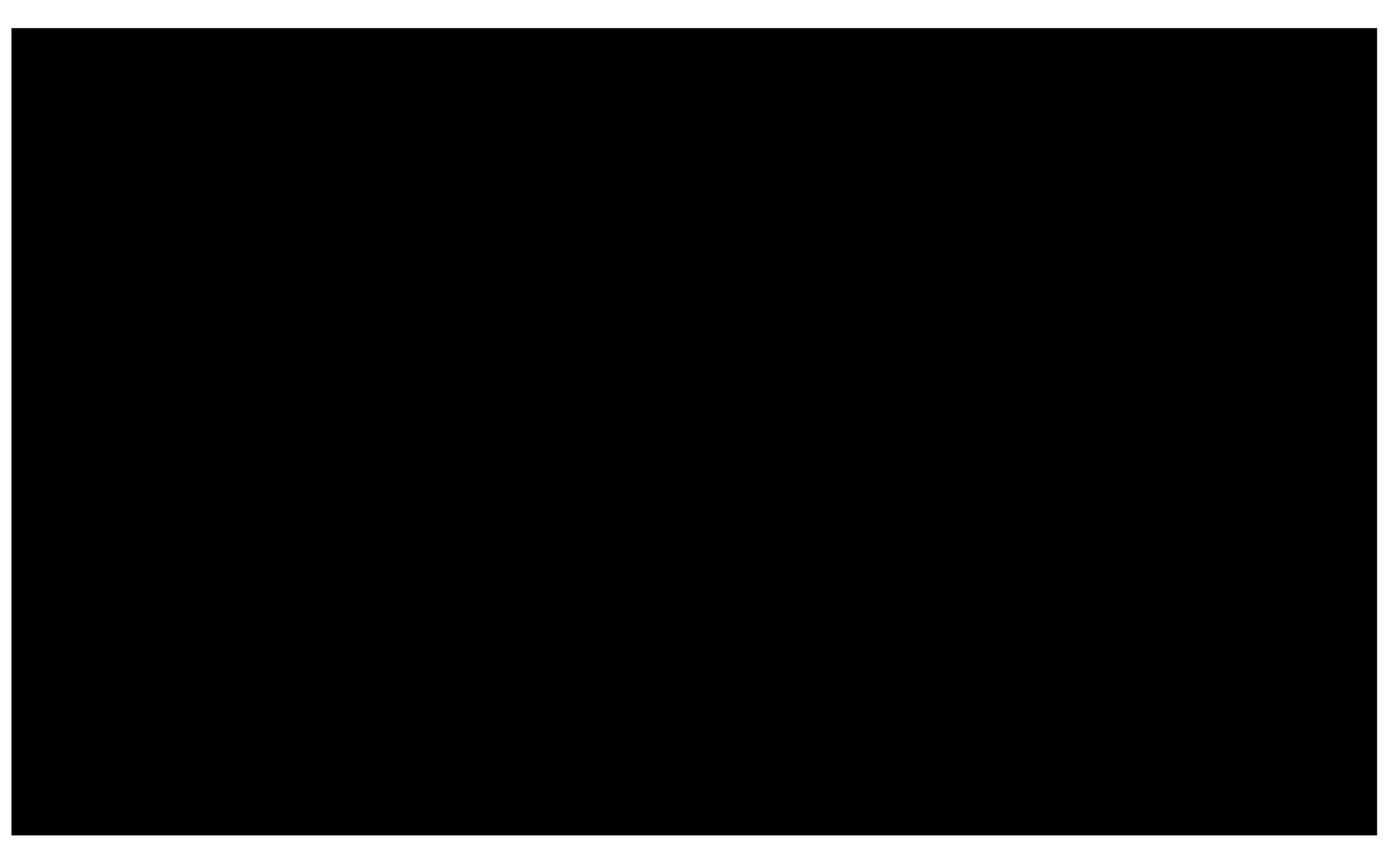




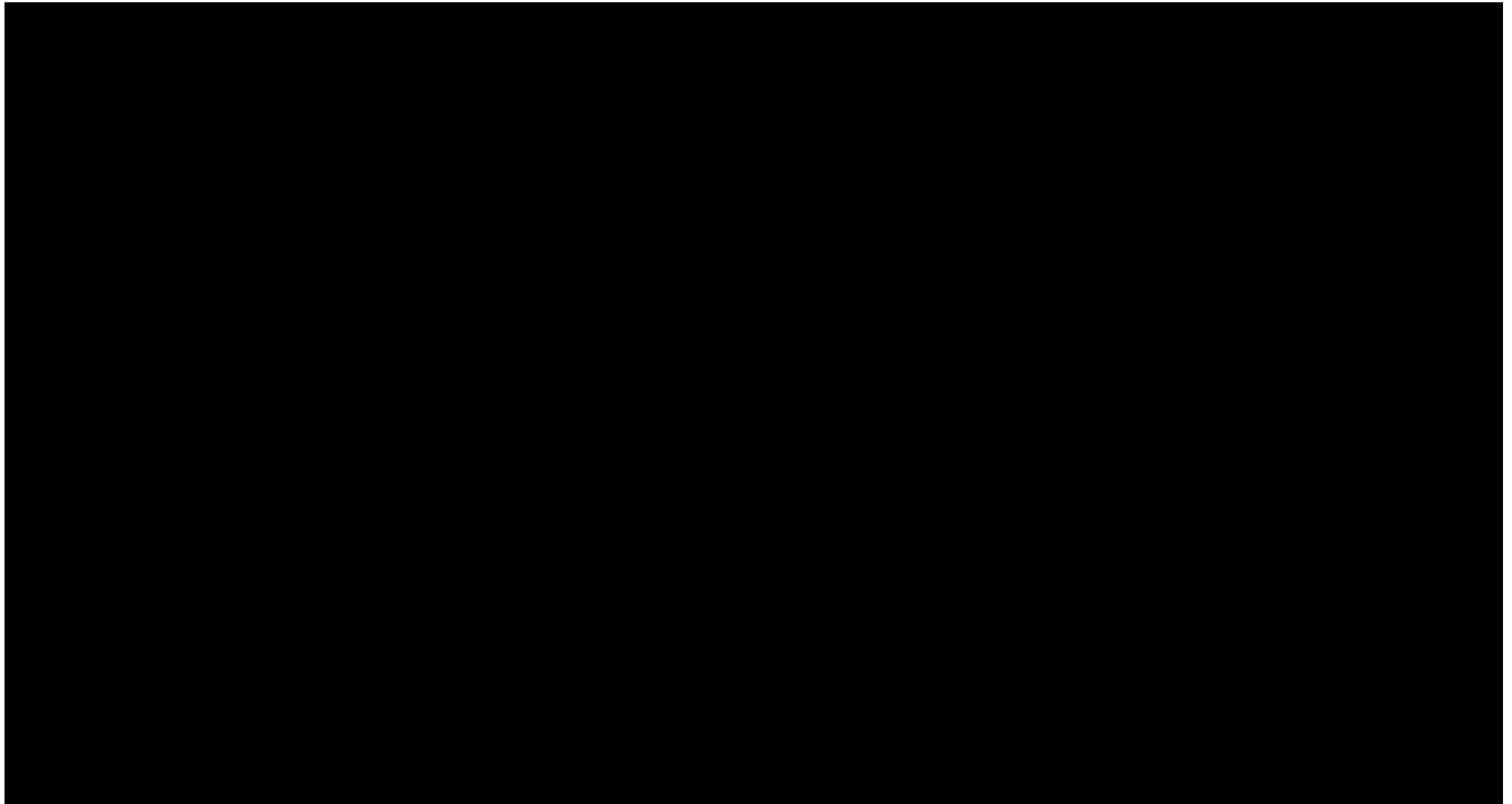


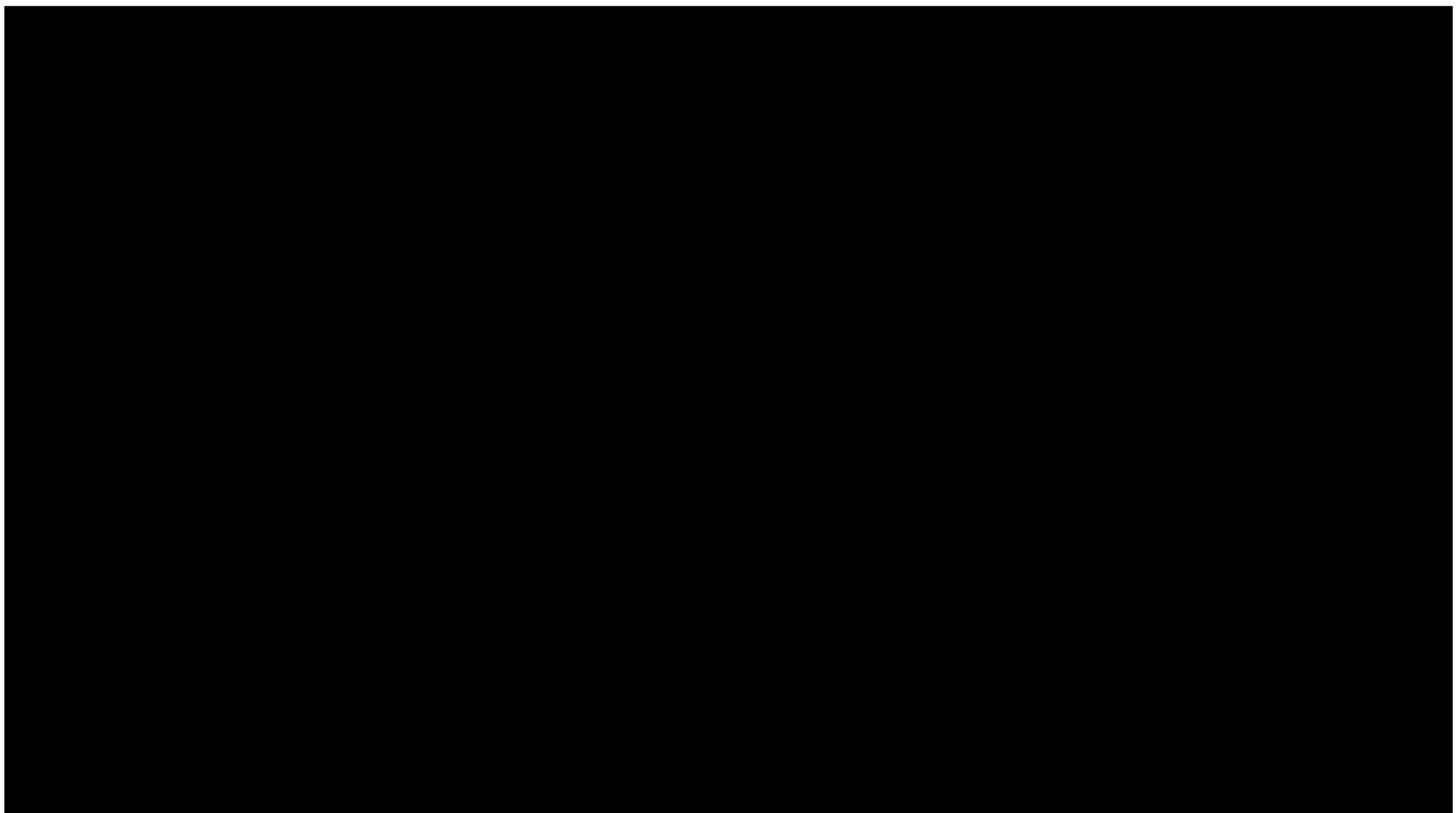
ANNEX A

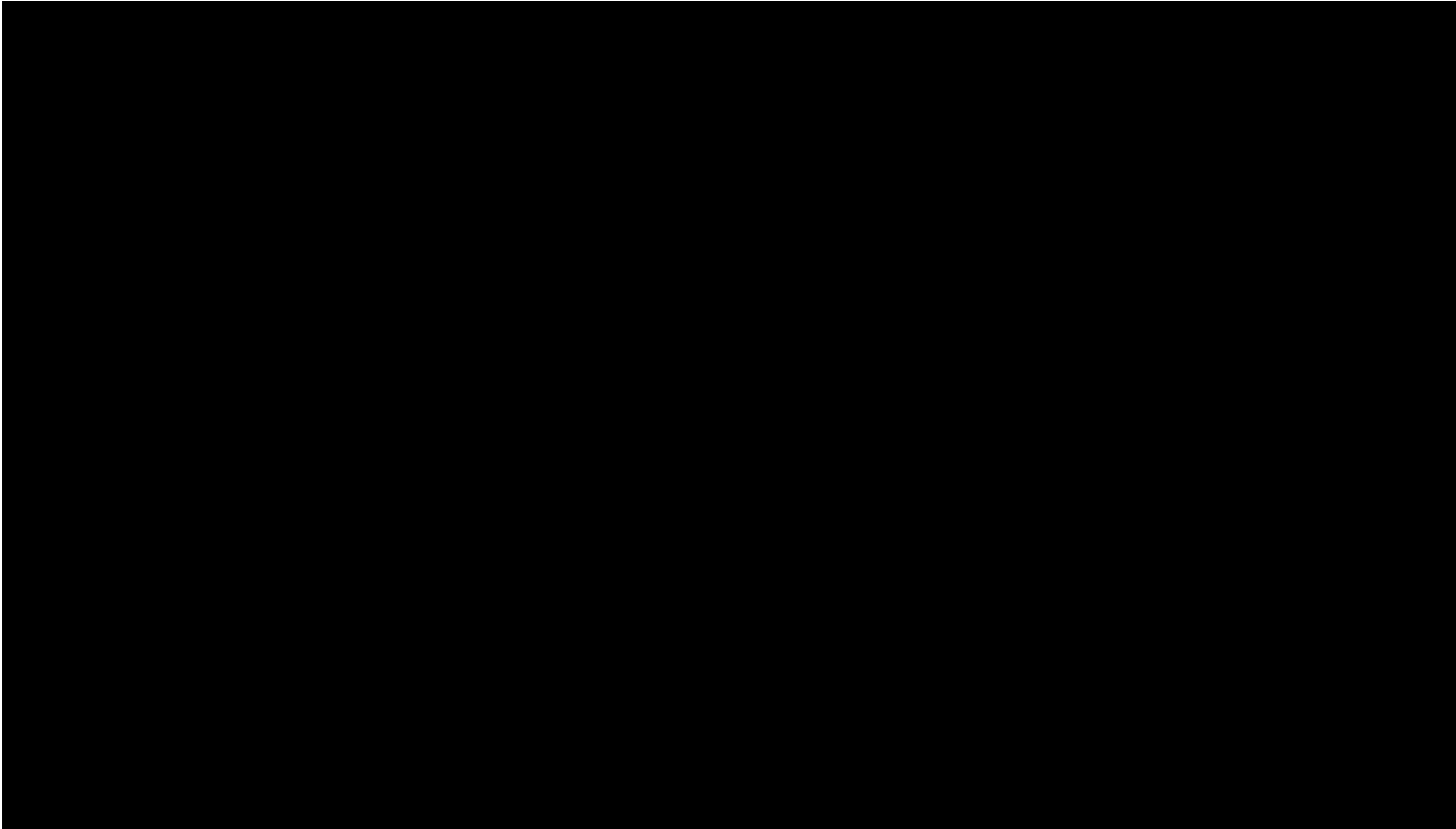


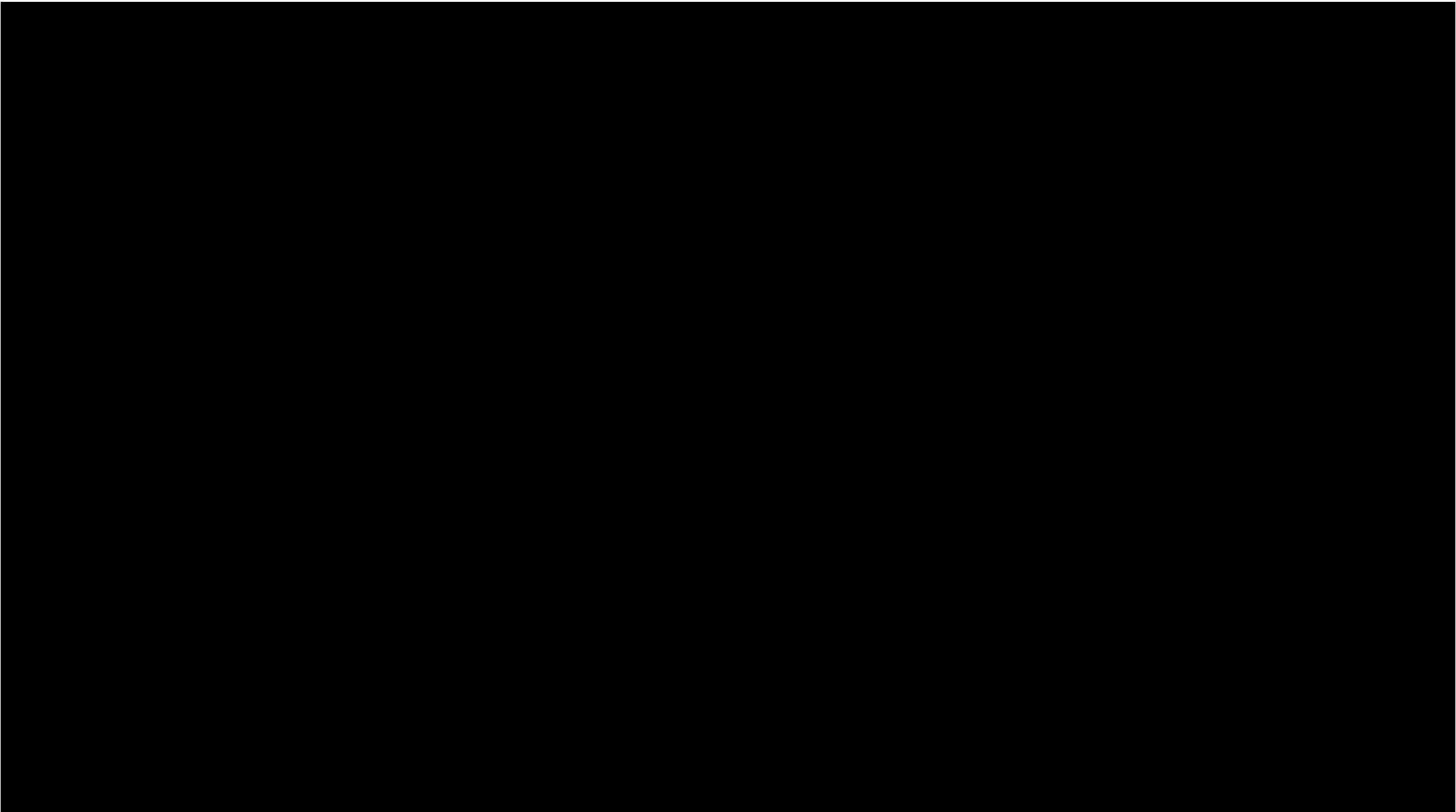




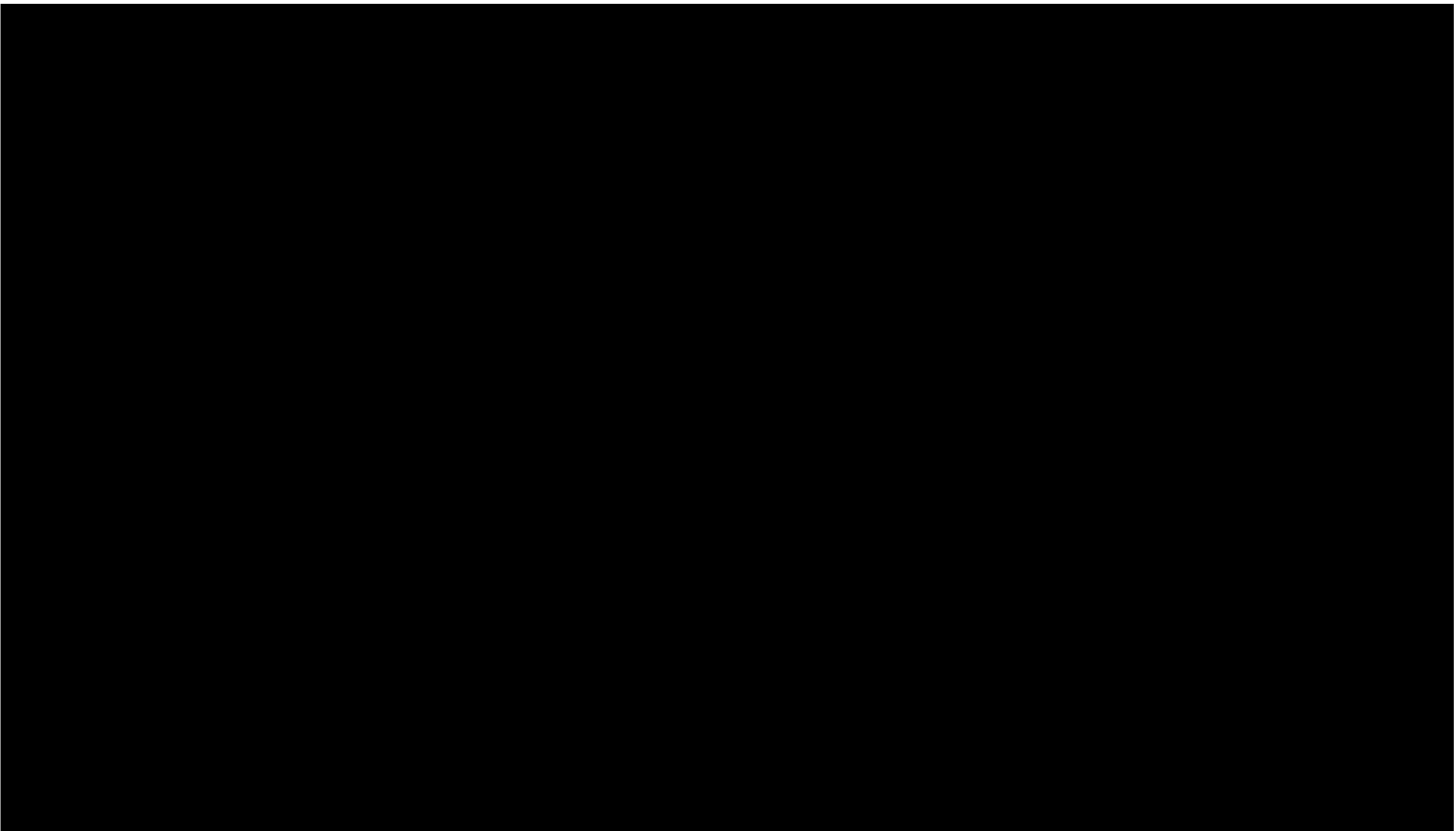


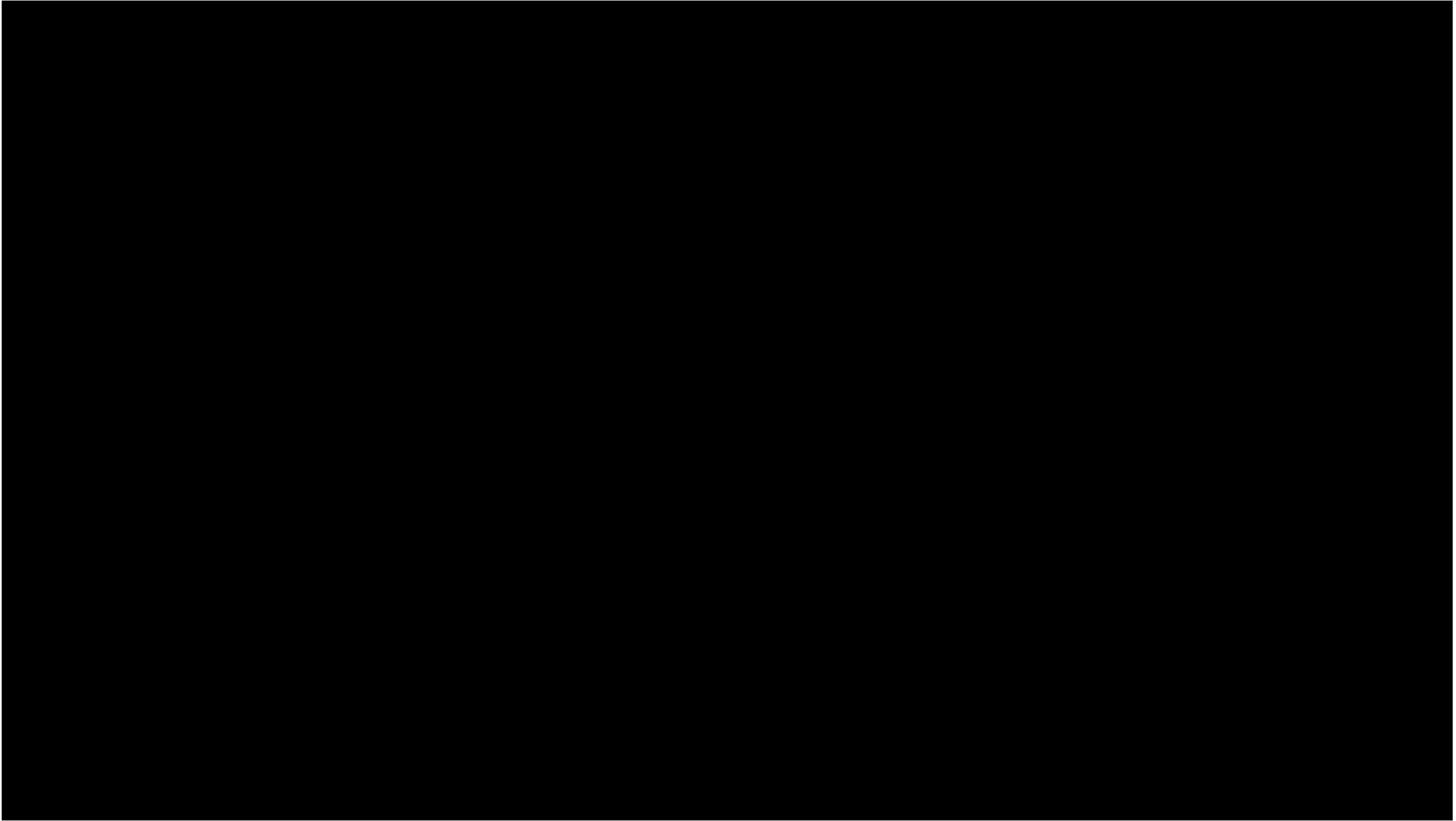


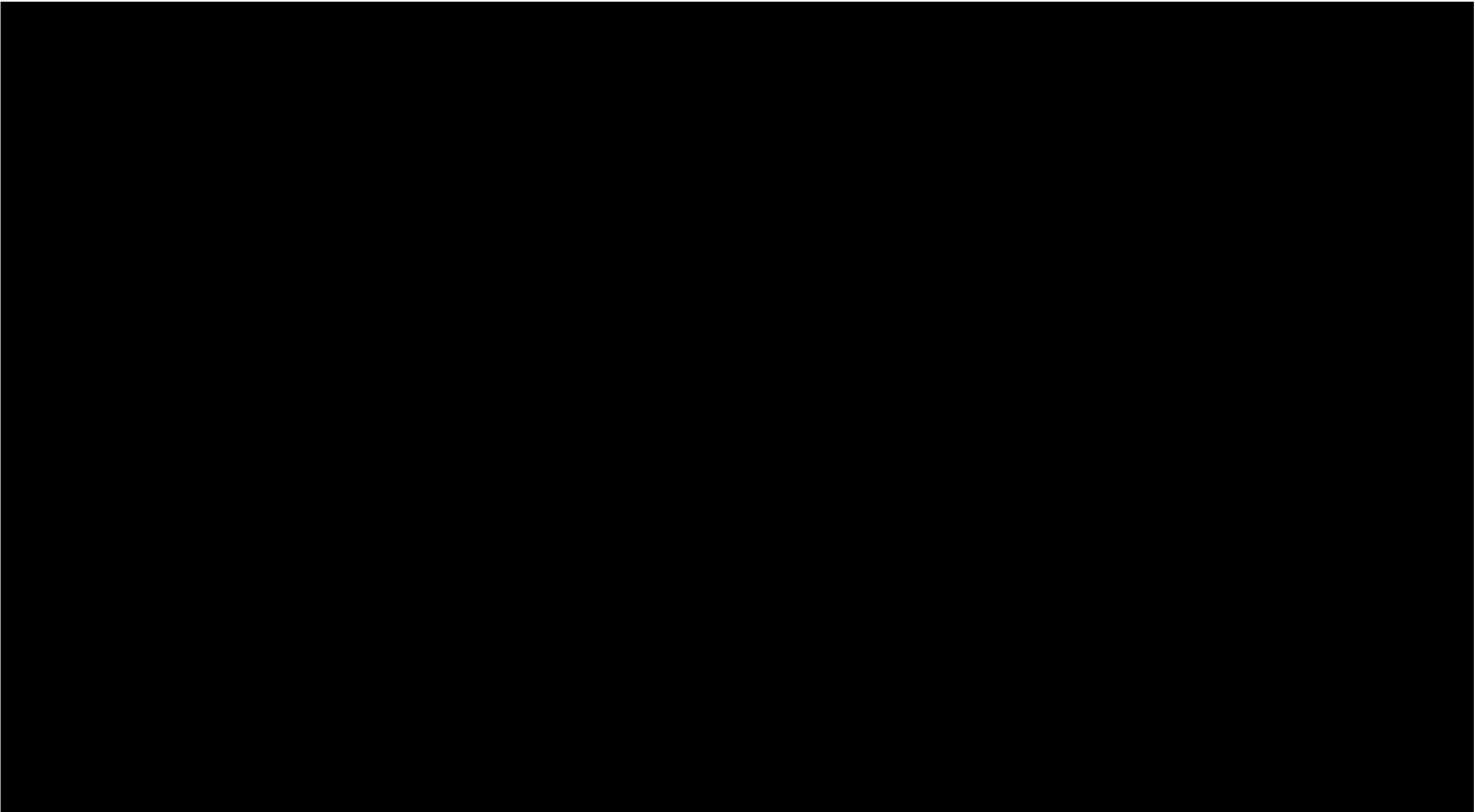




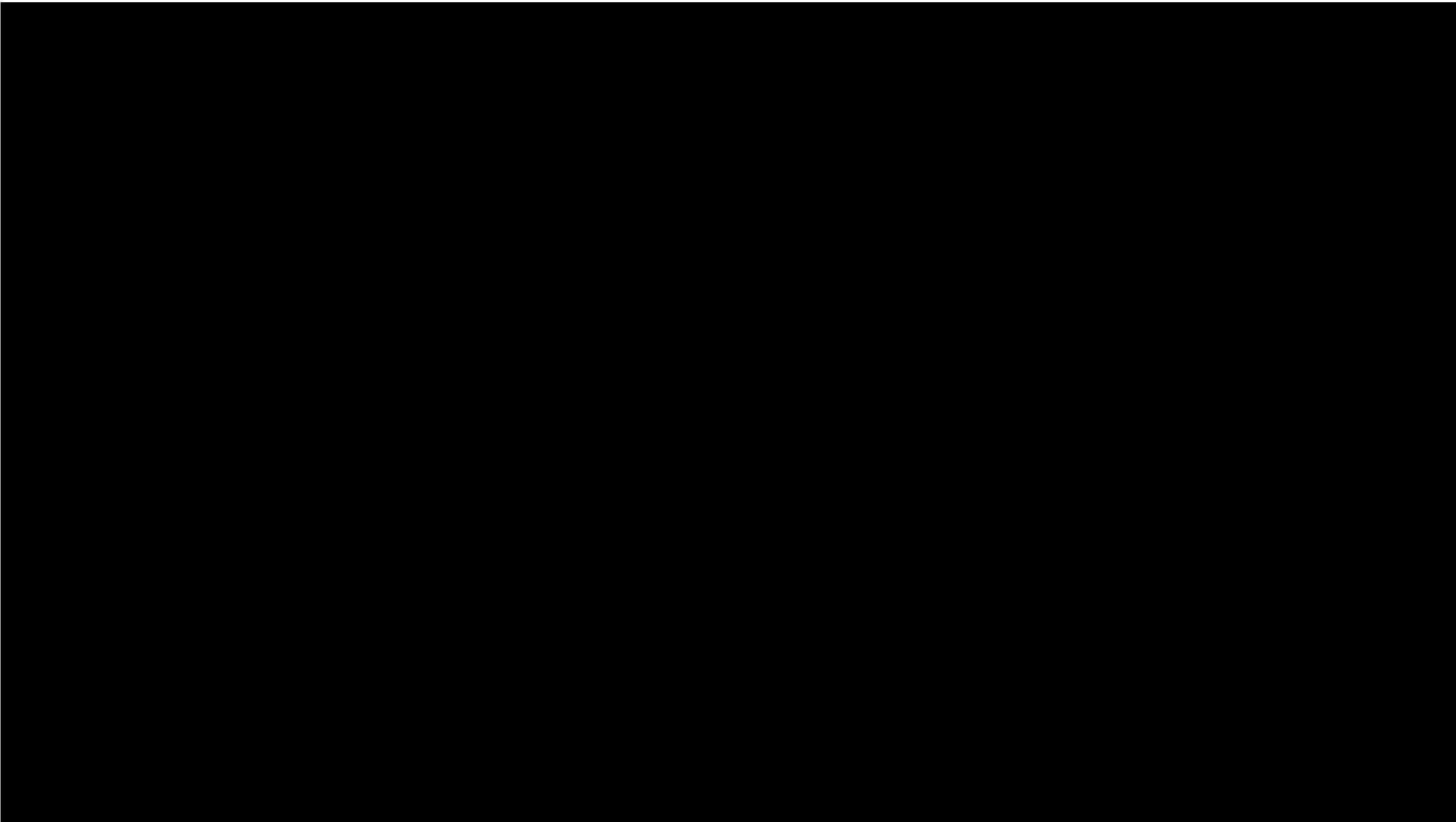


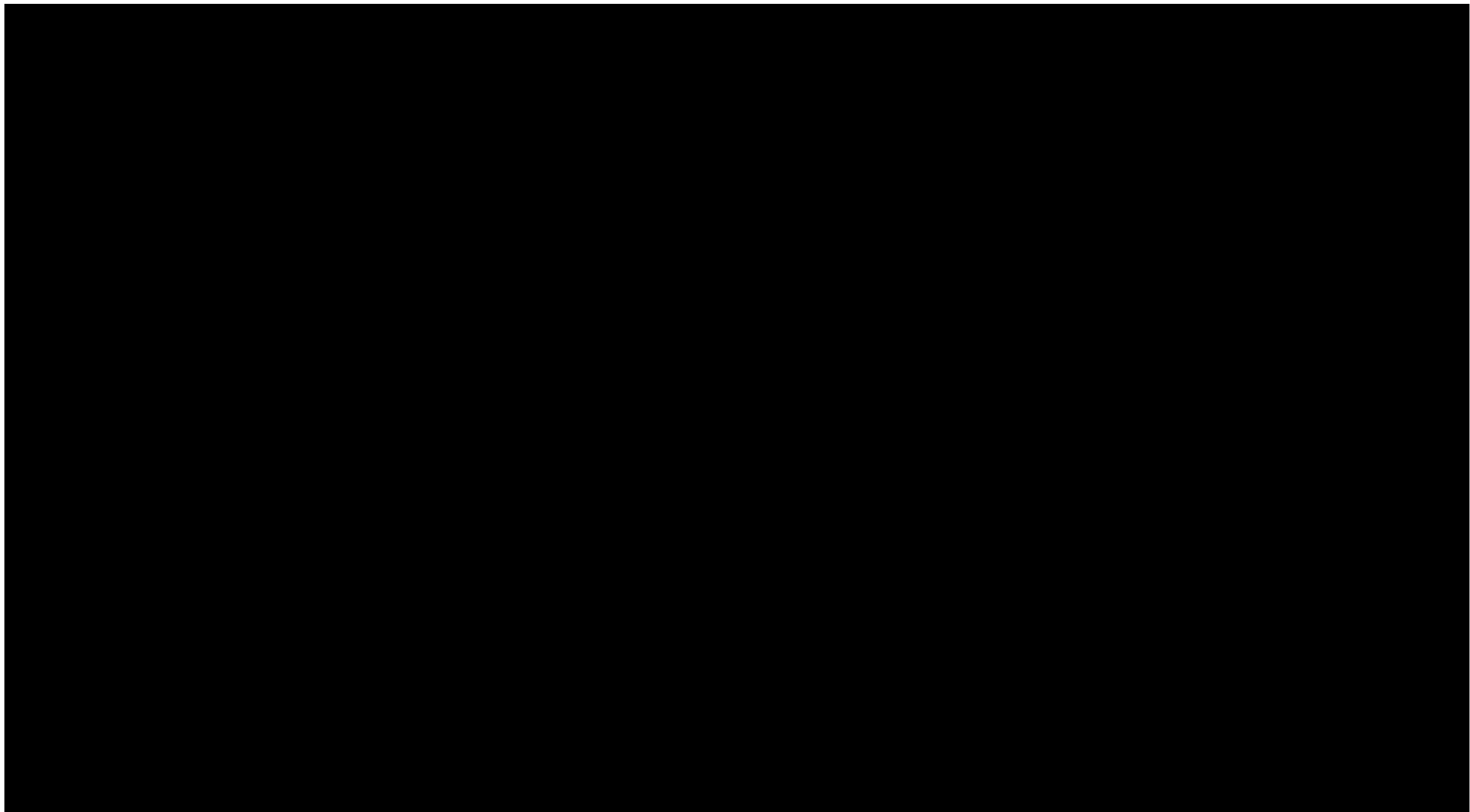


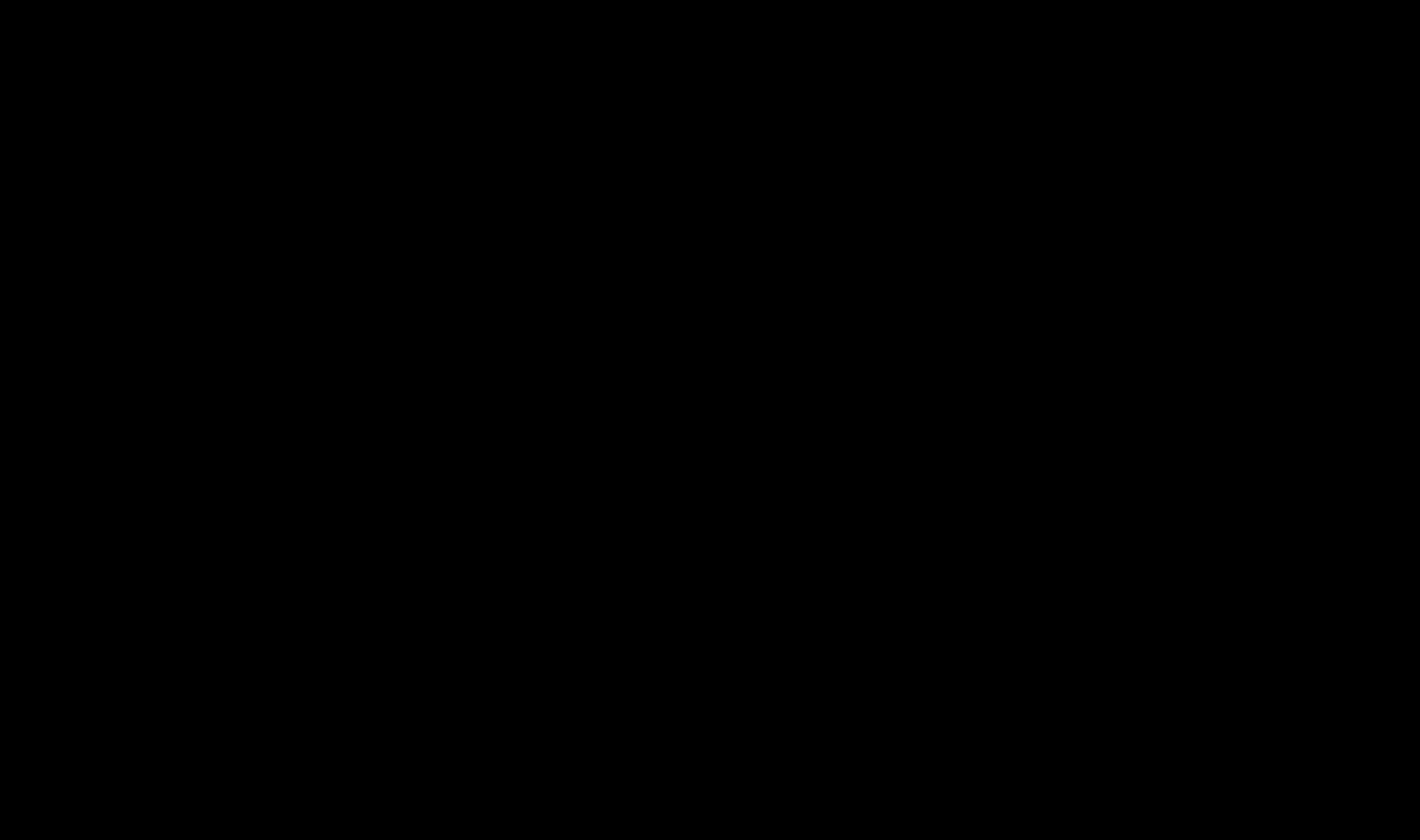


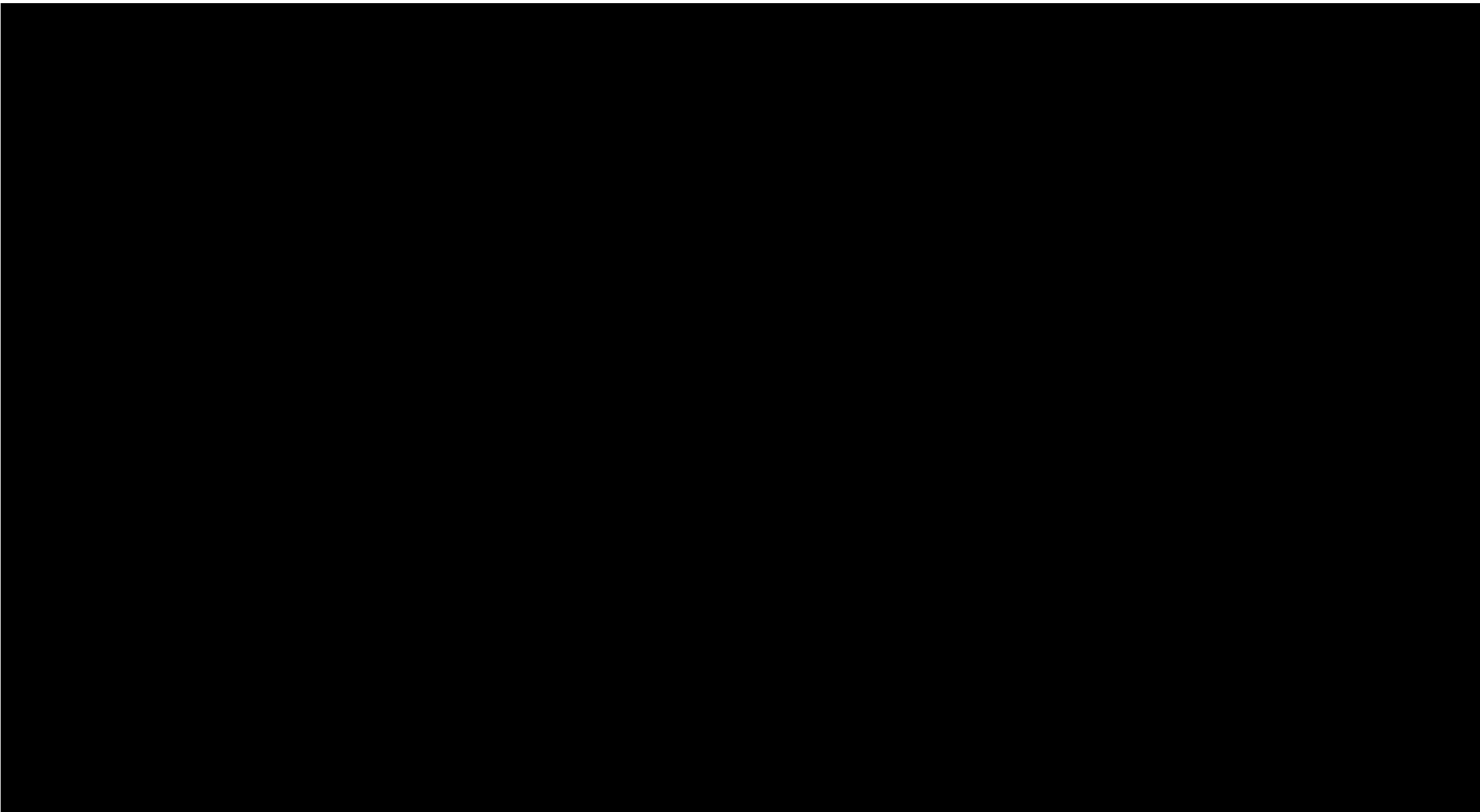


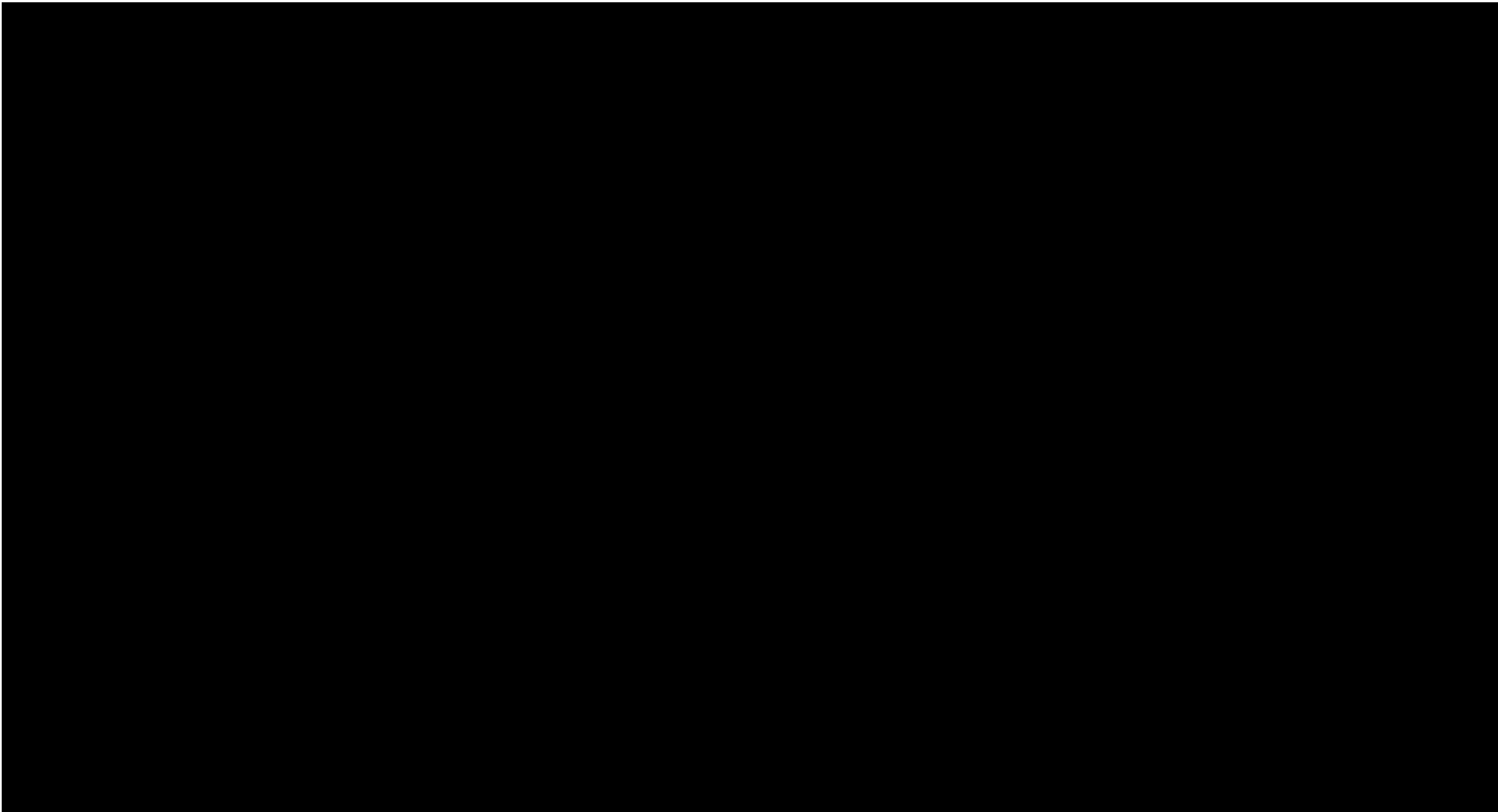


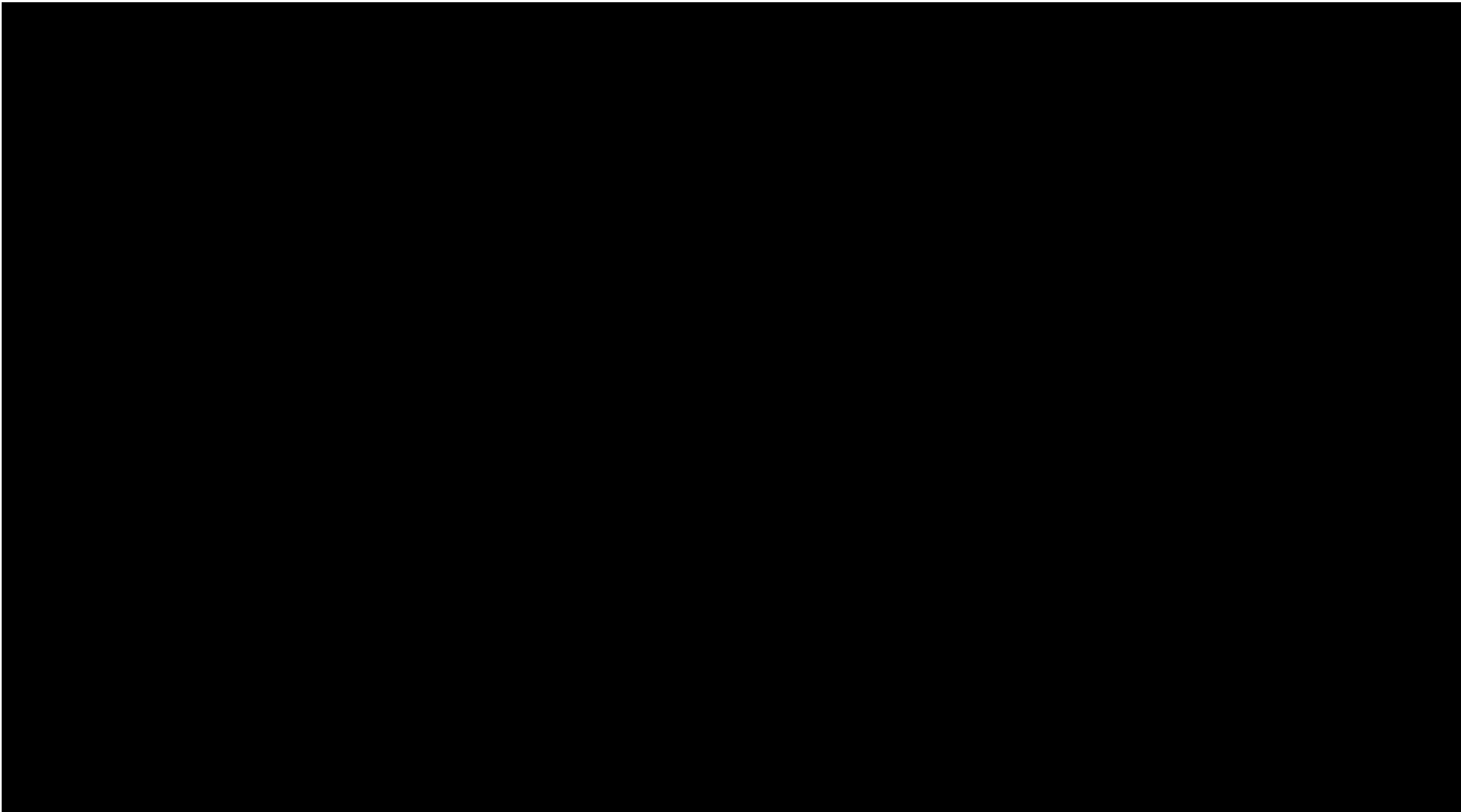


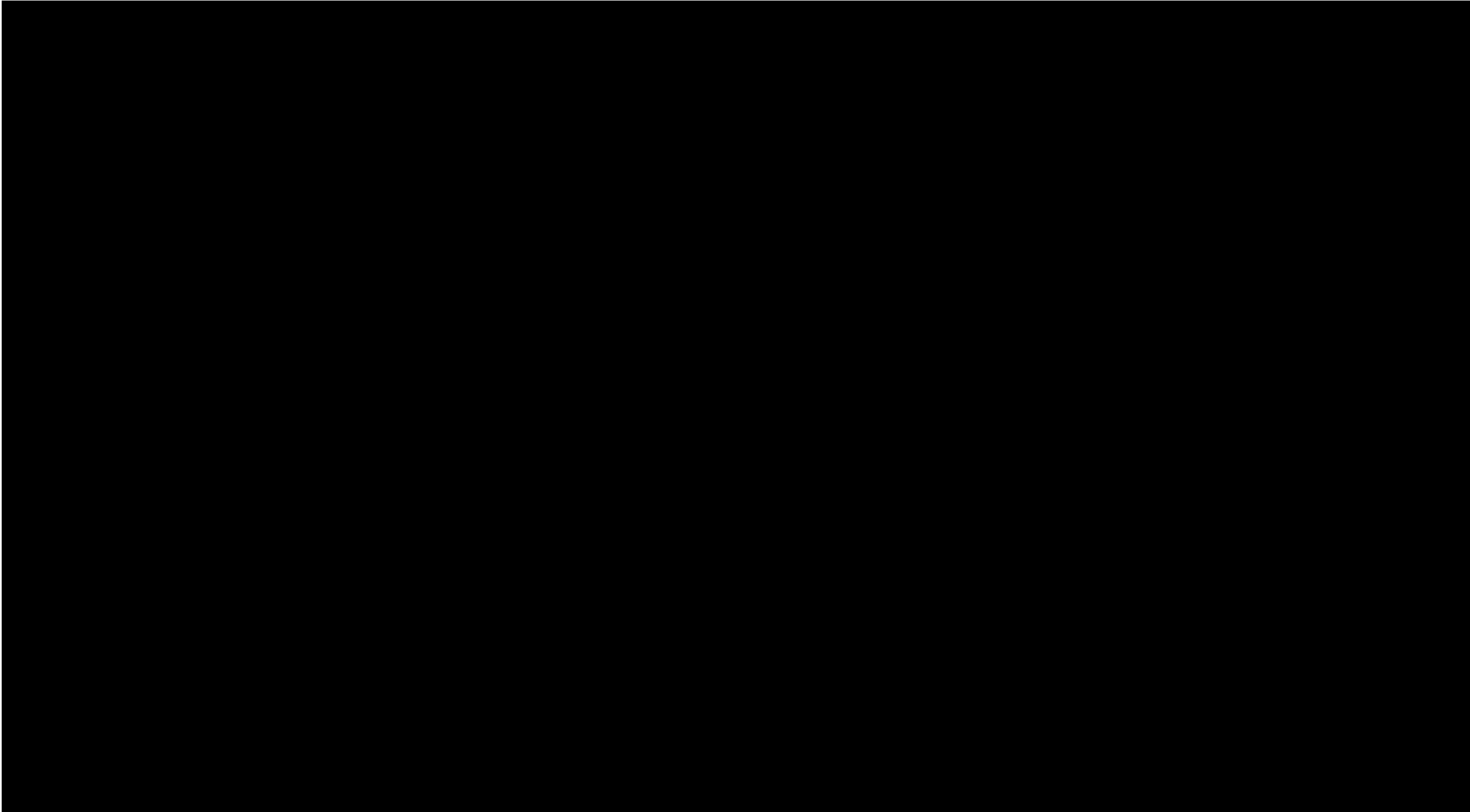


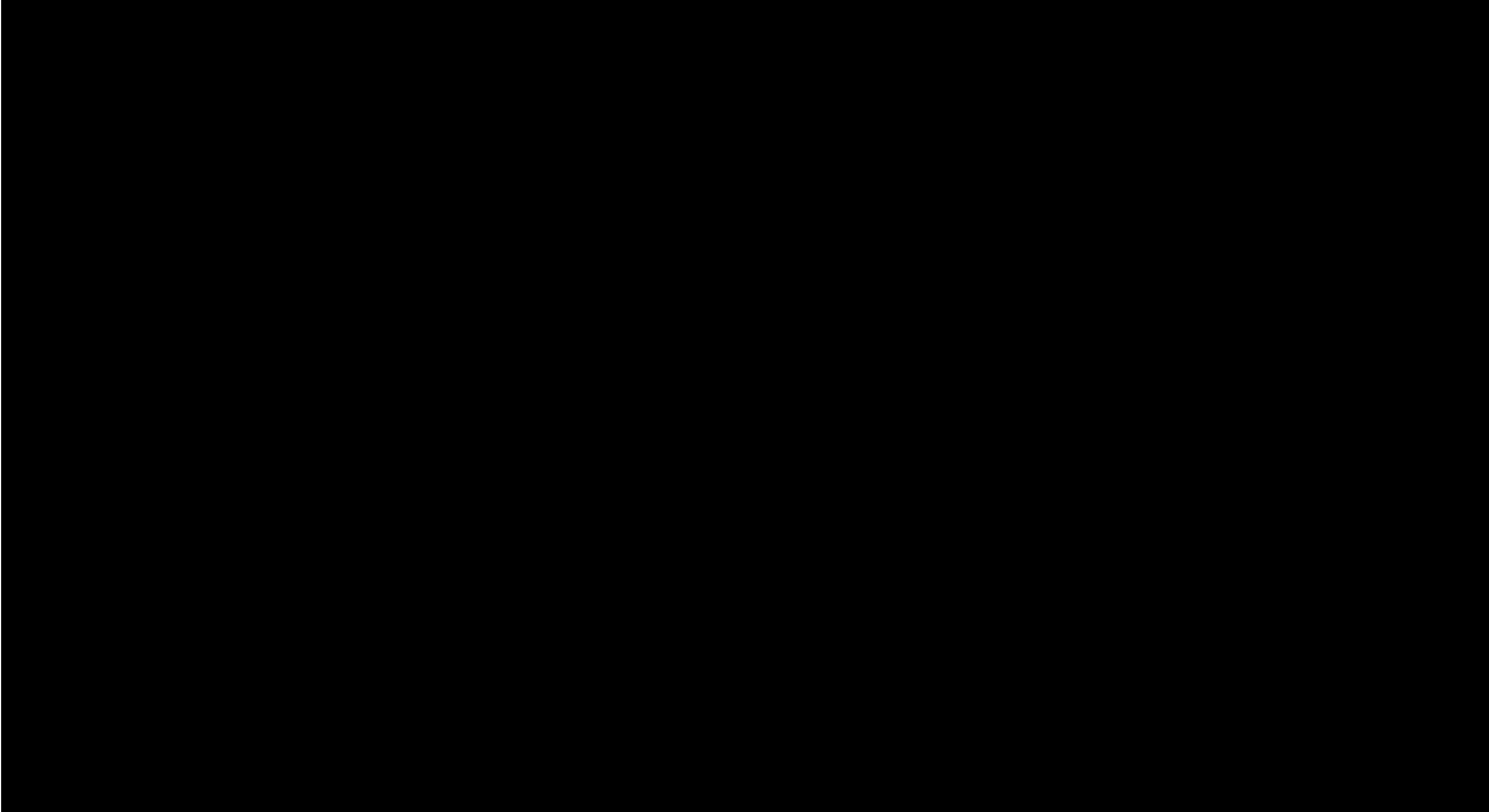




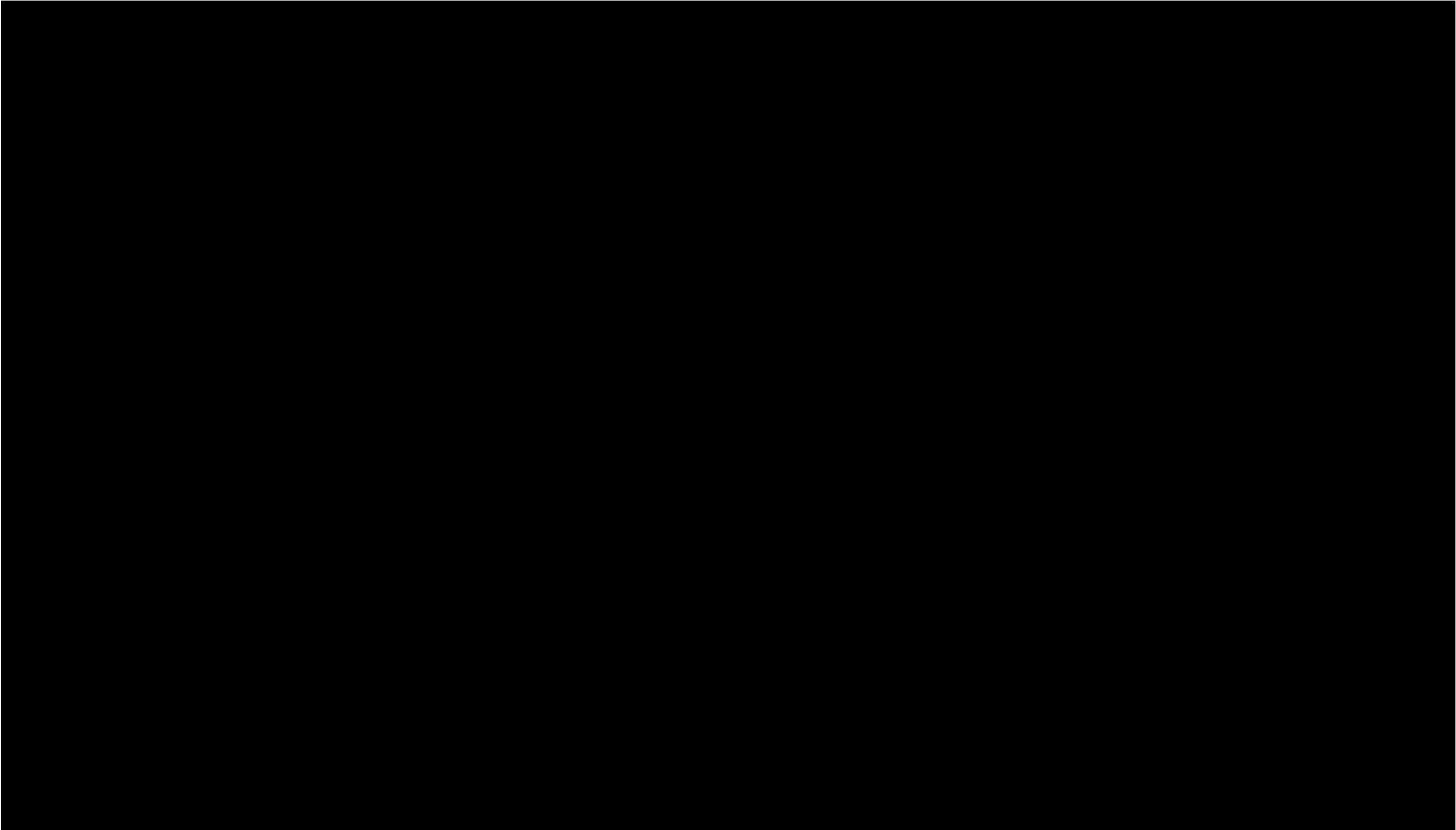


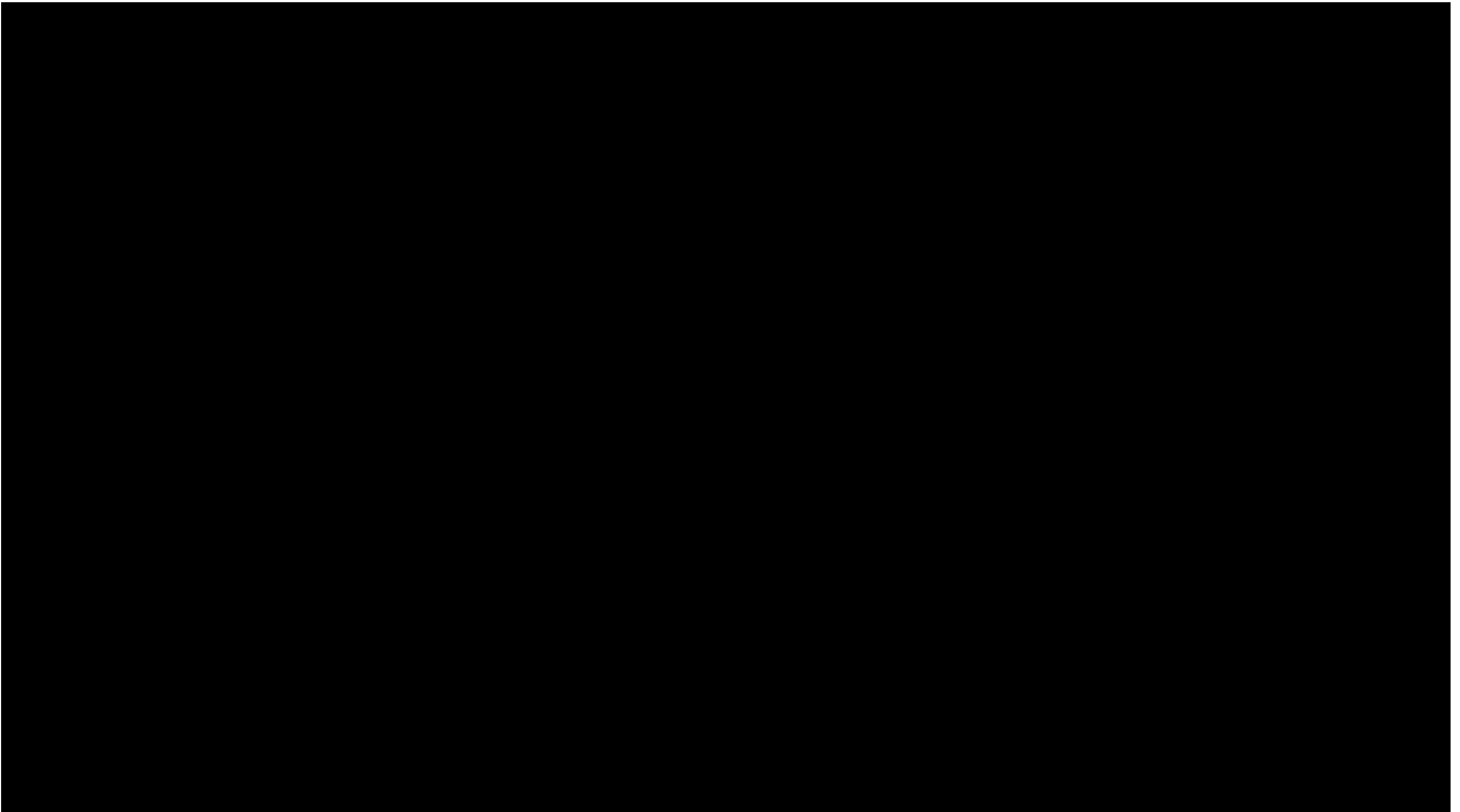


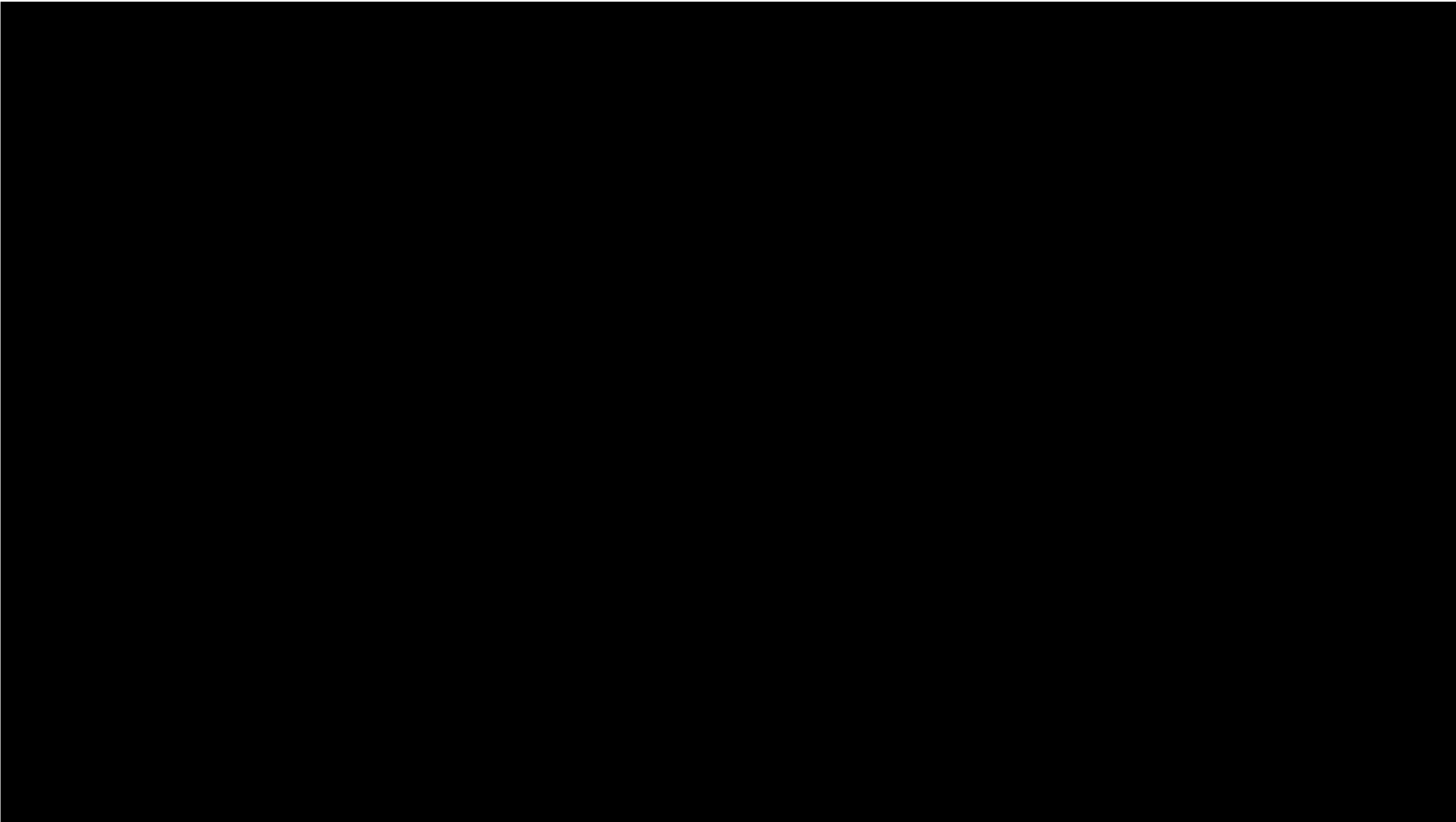


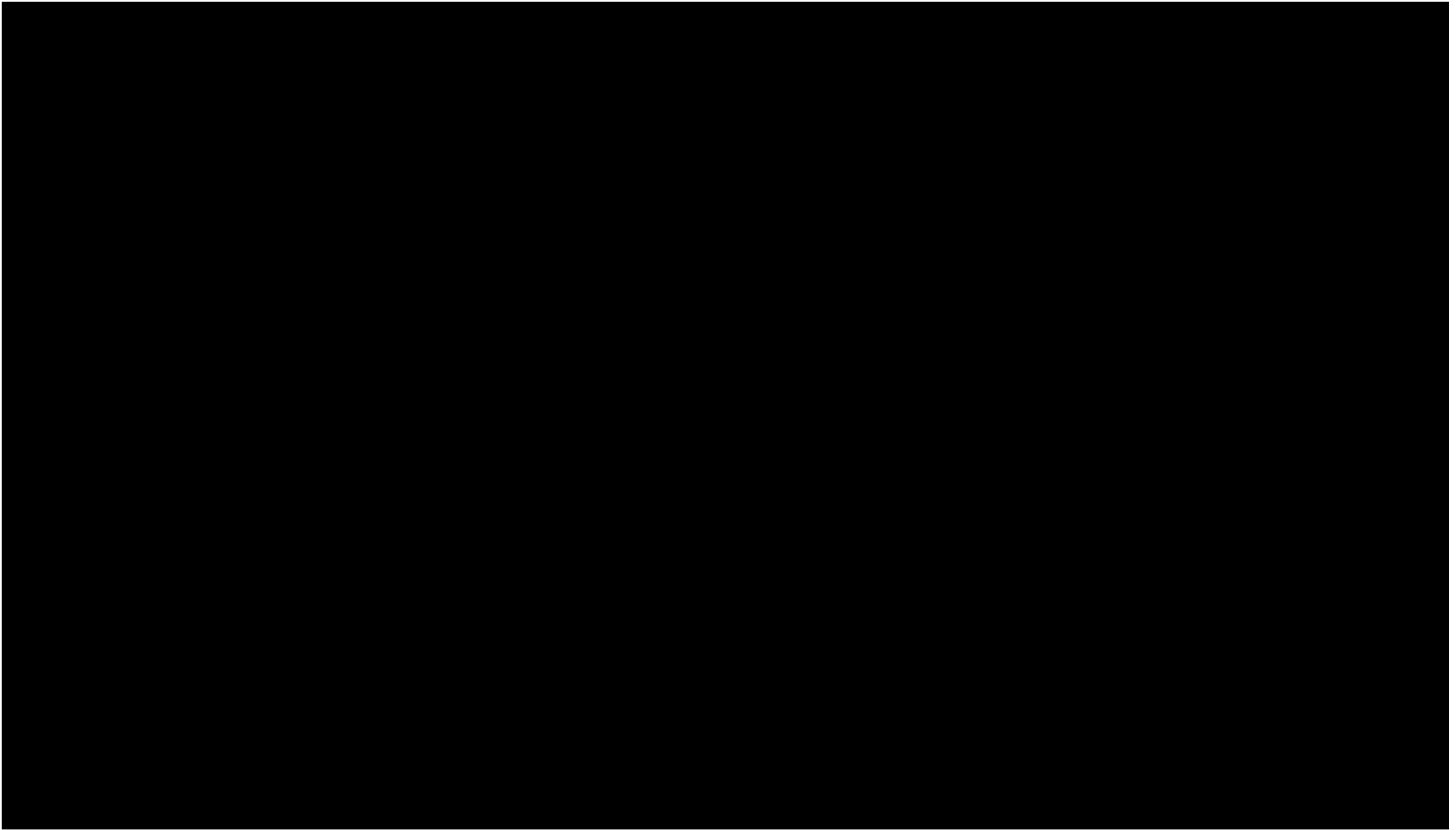


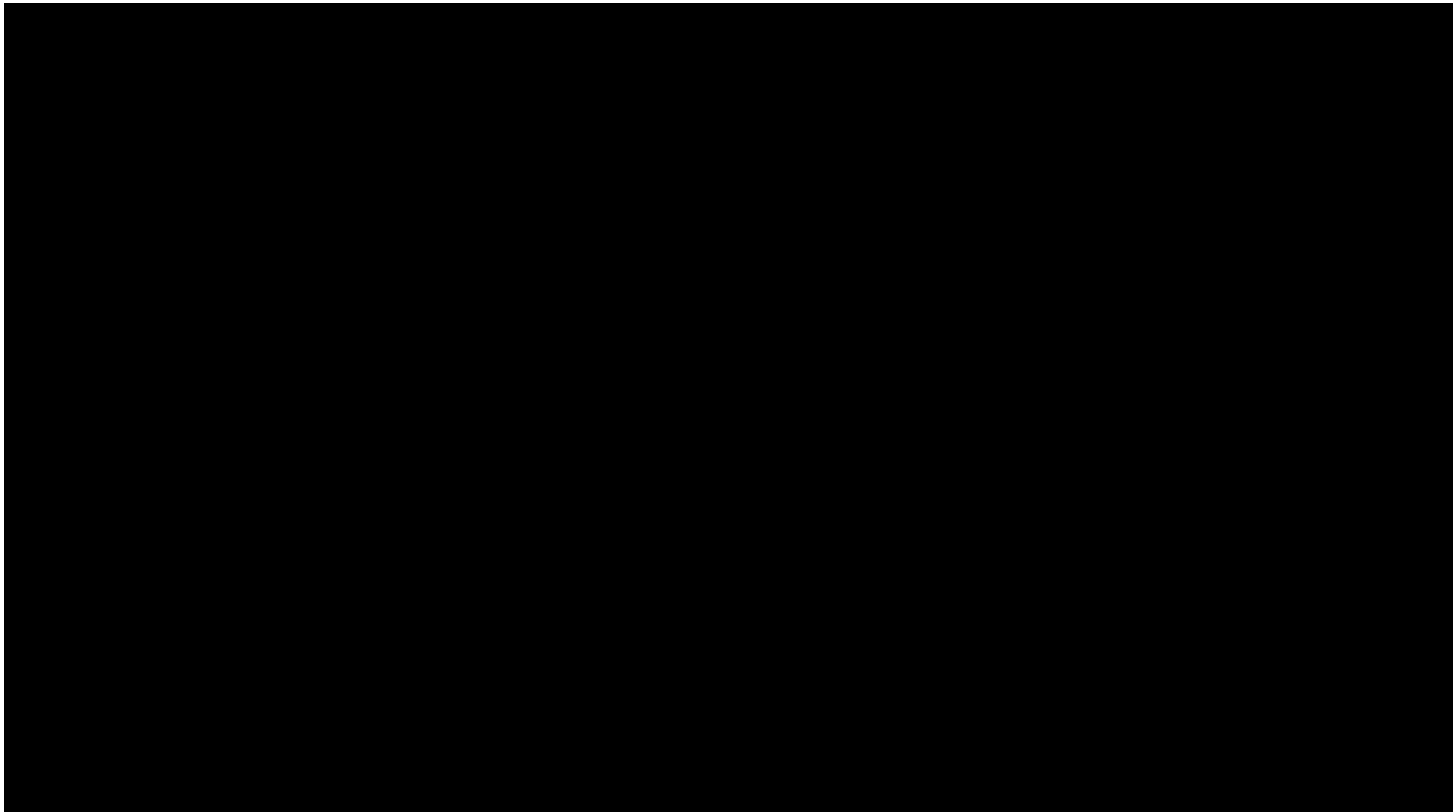


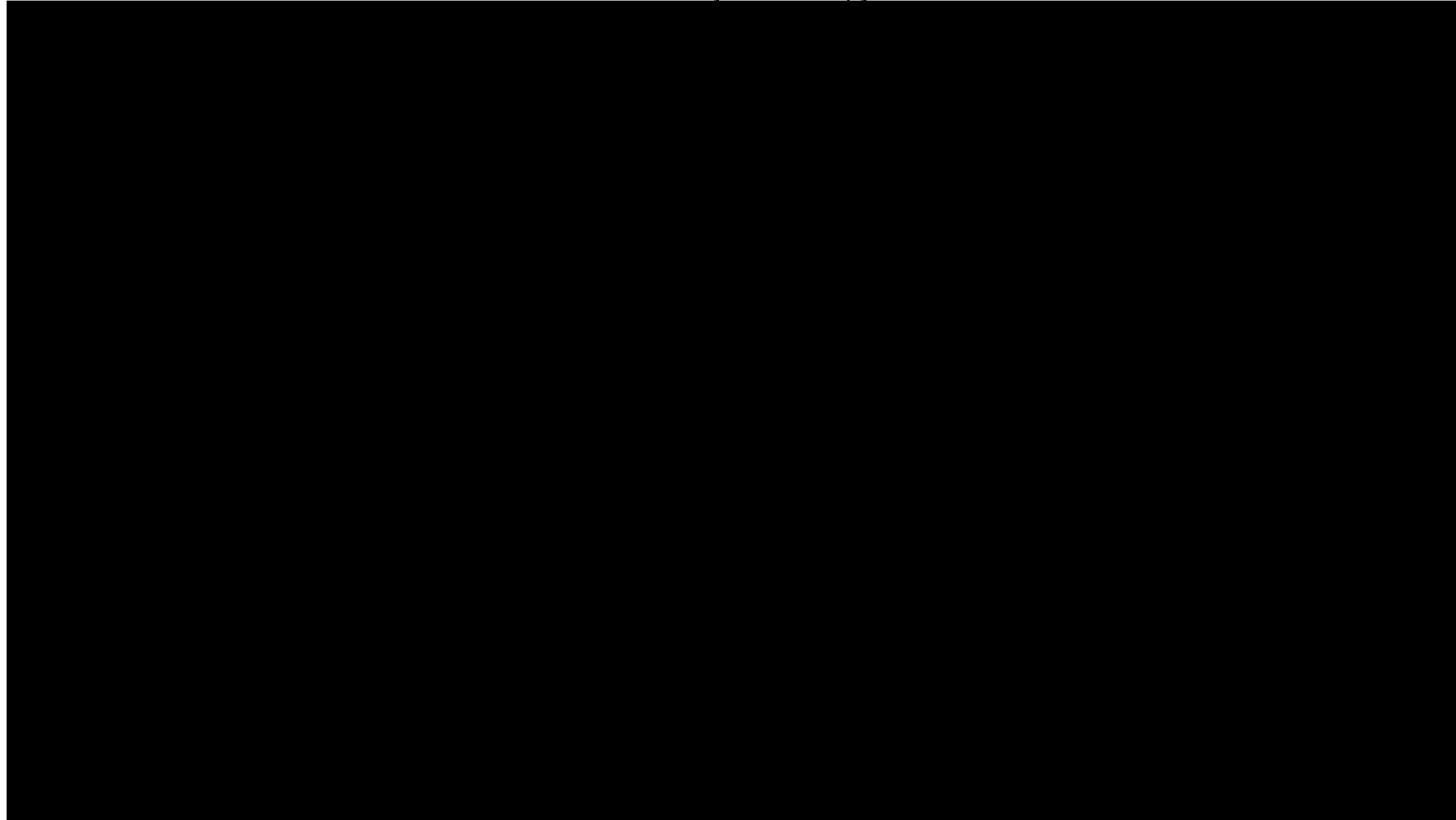


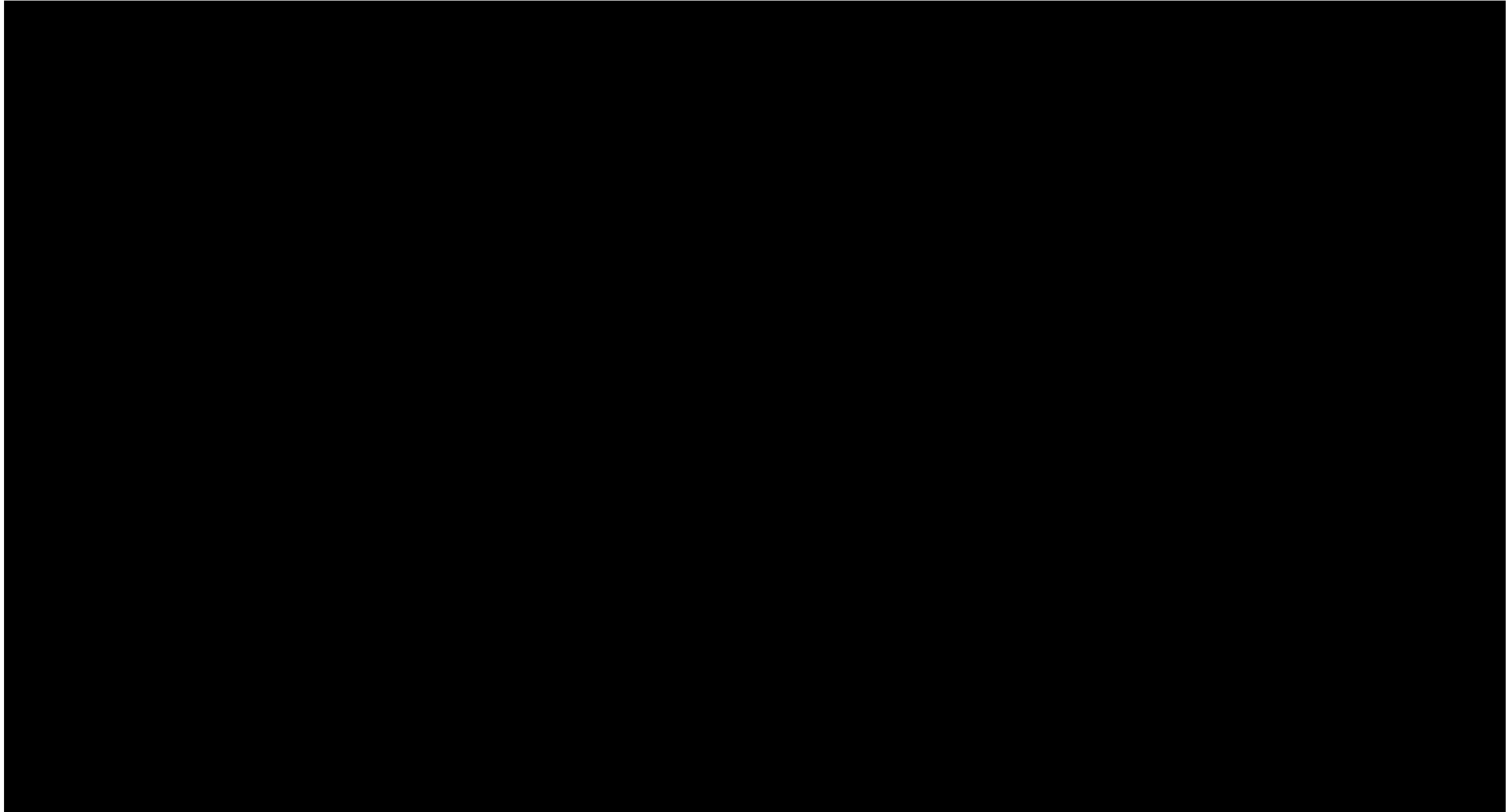


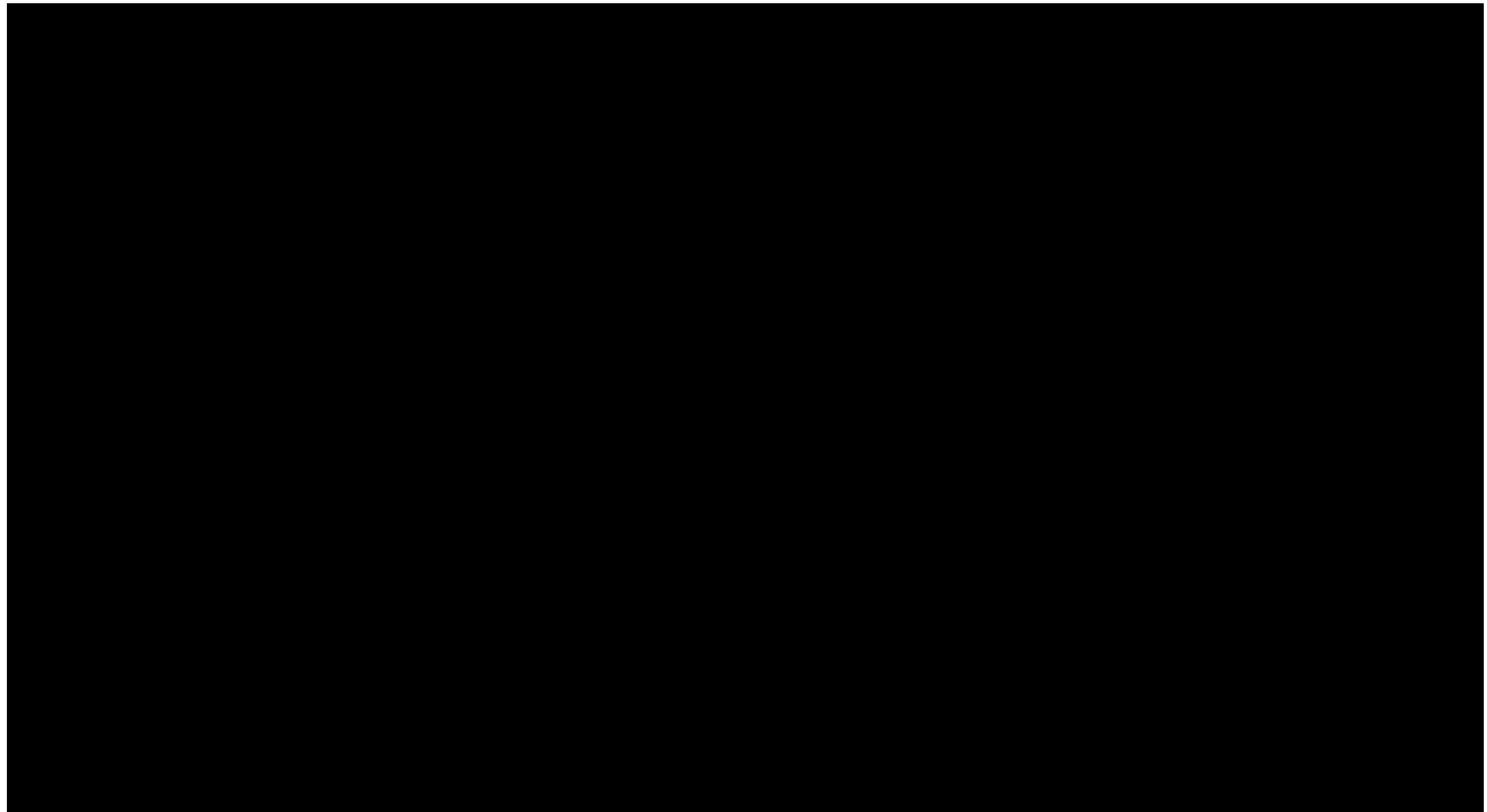




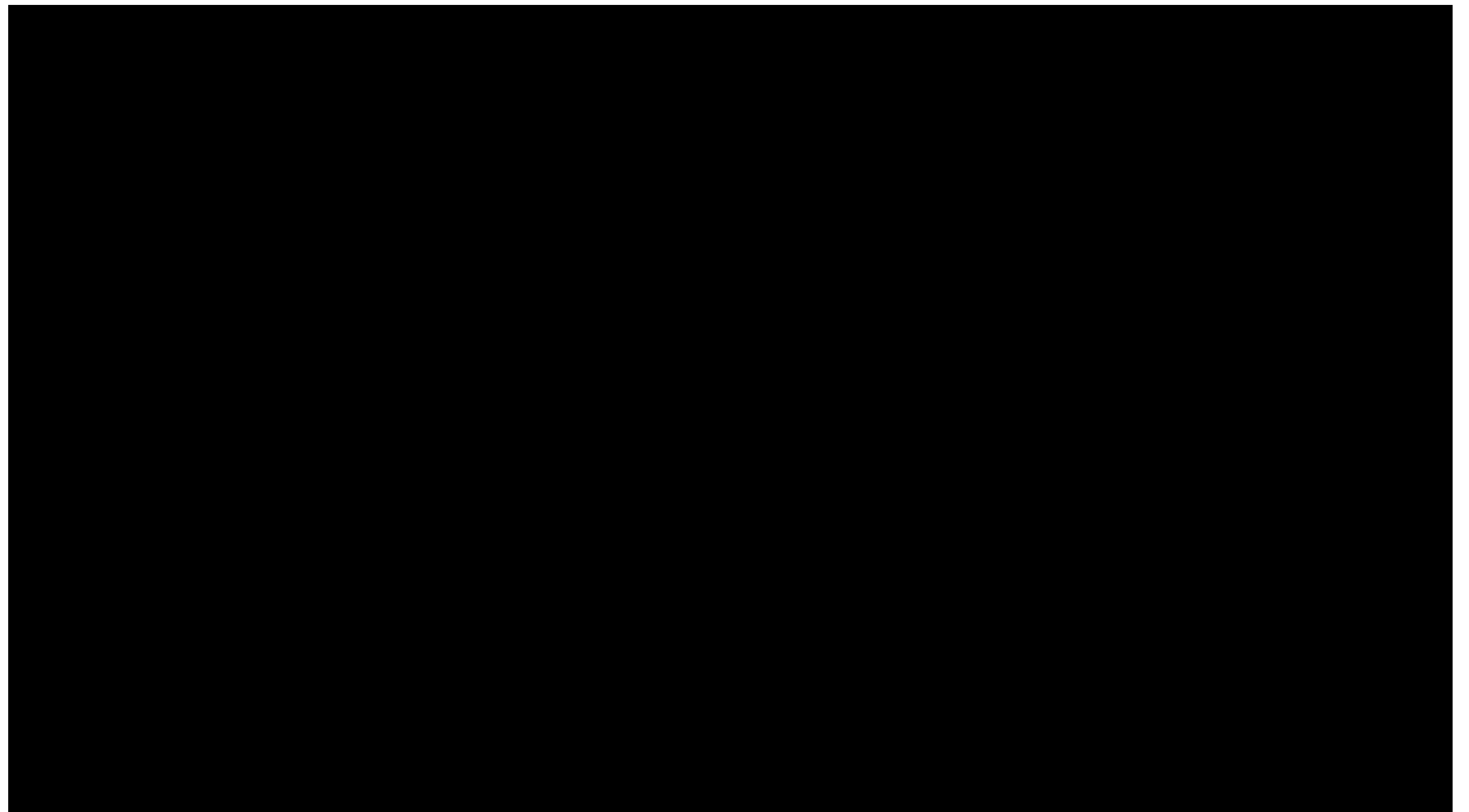


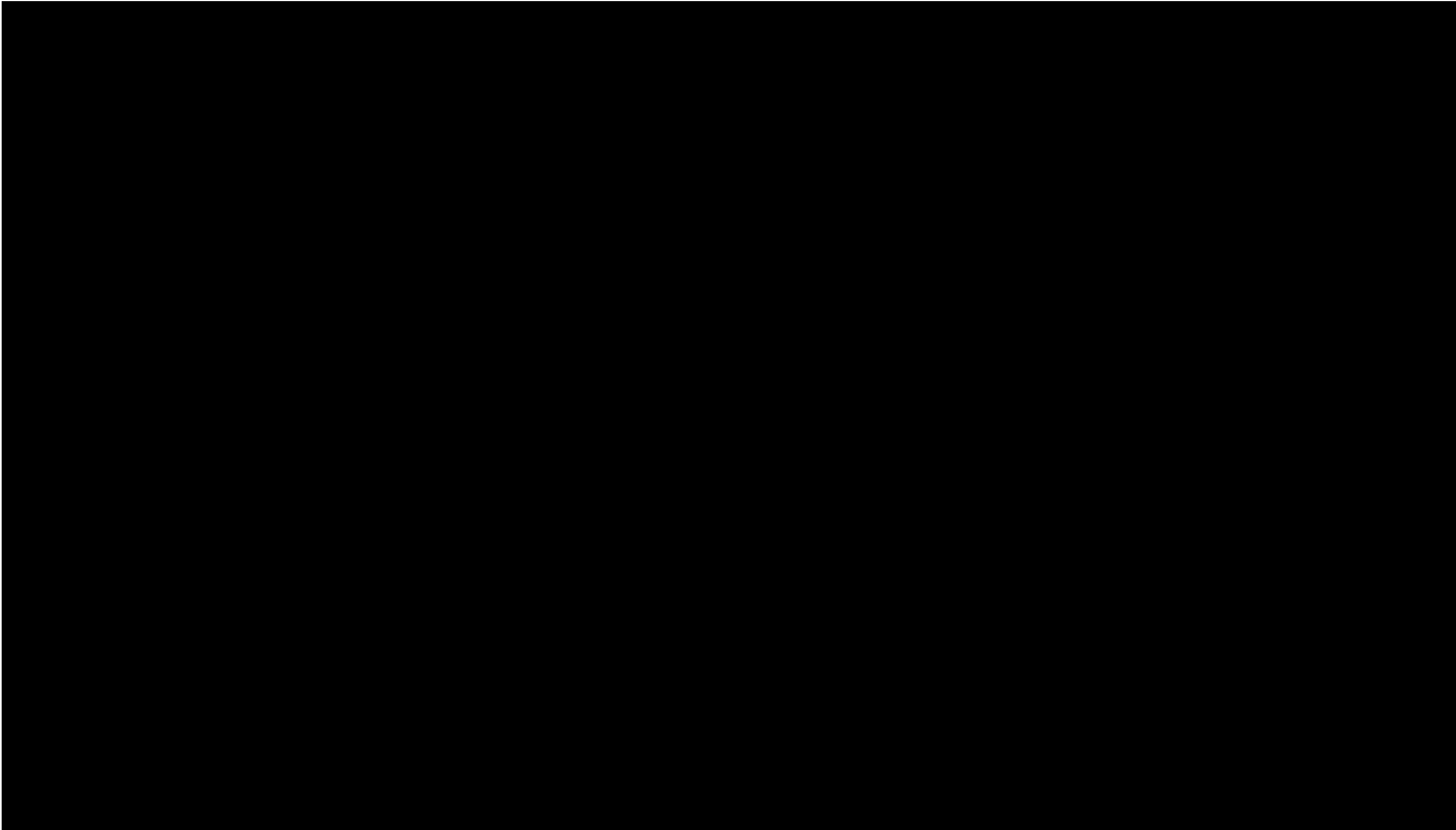


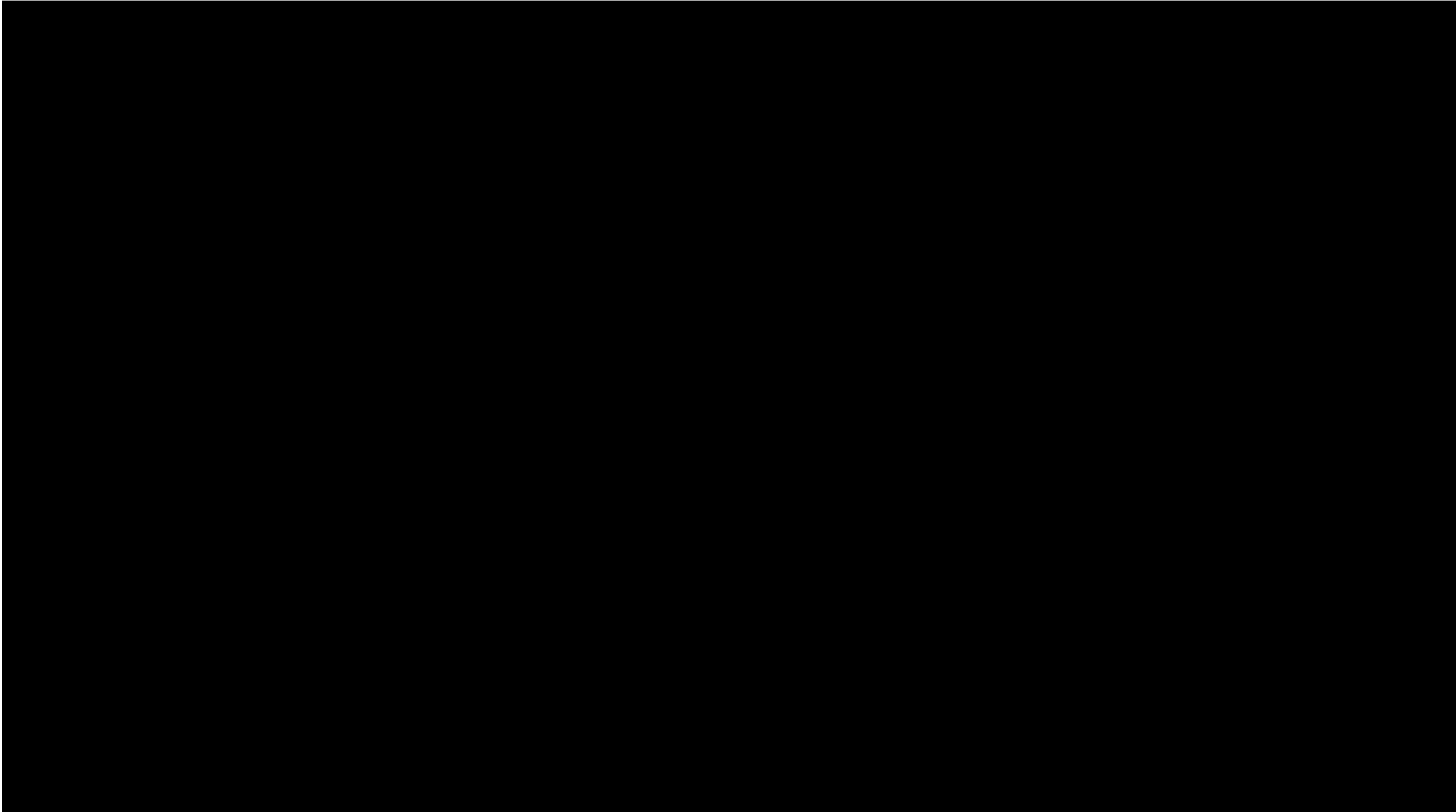


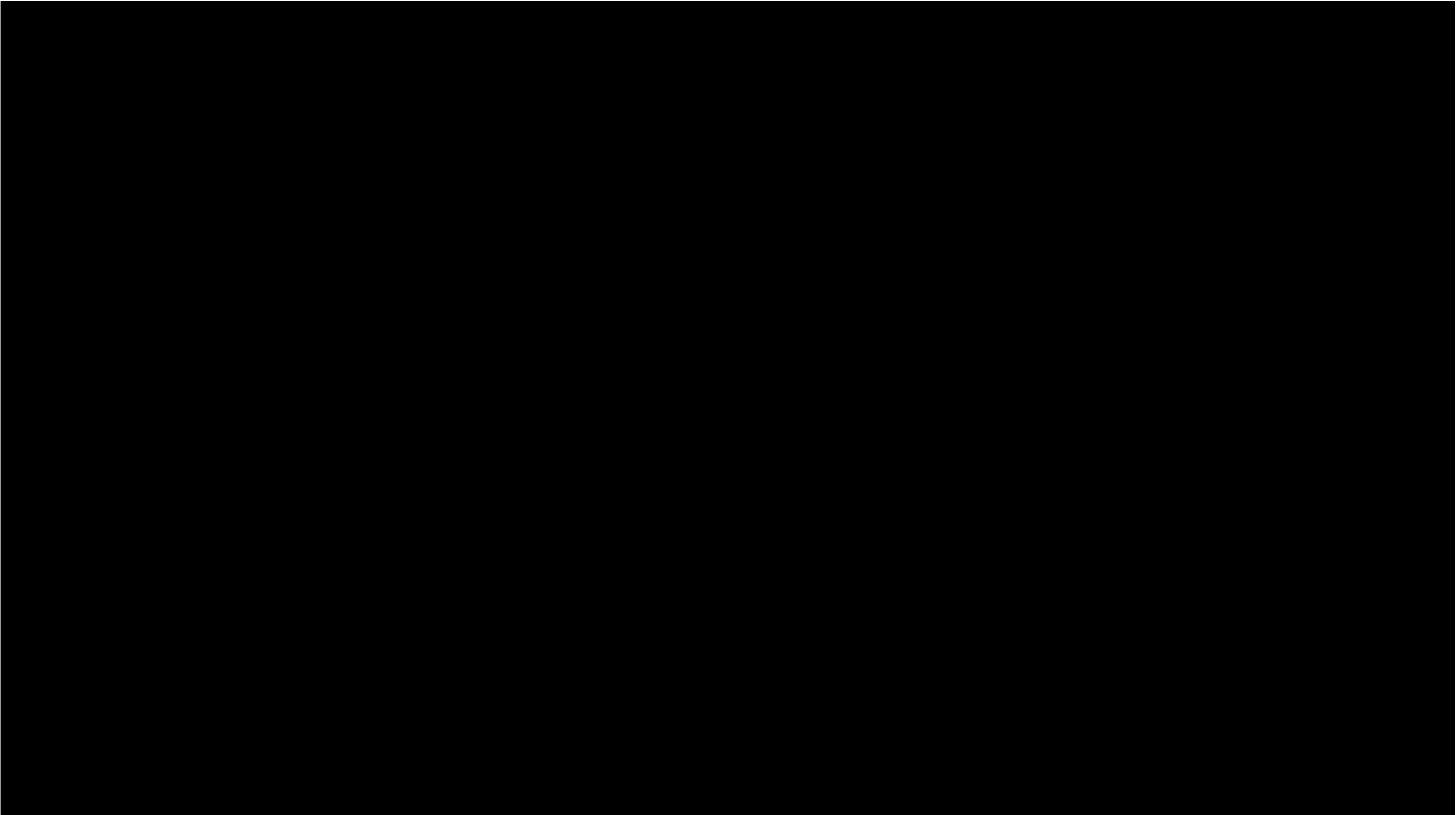


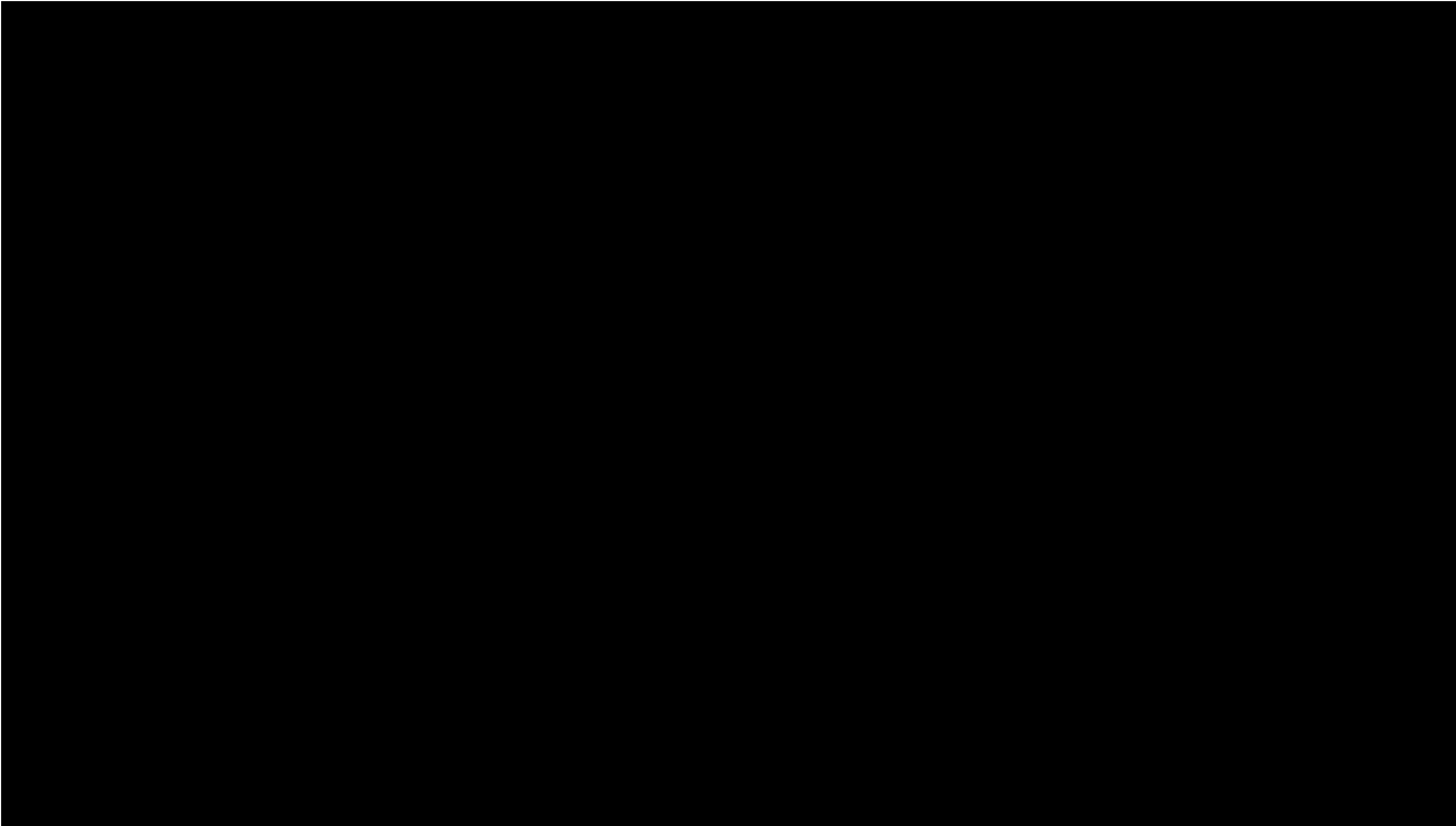




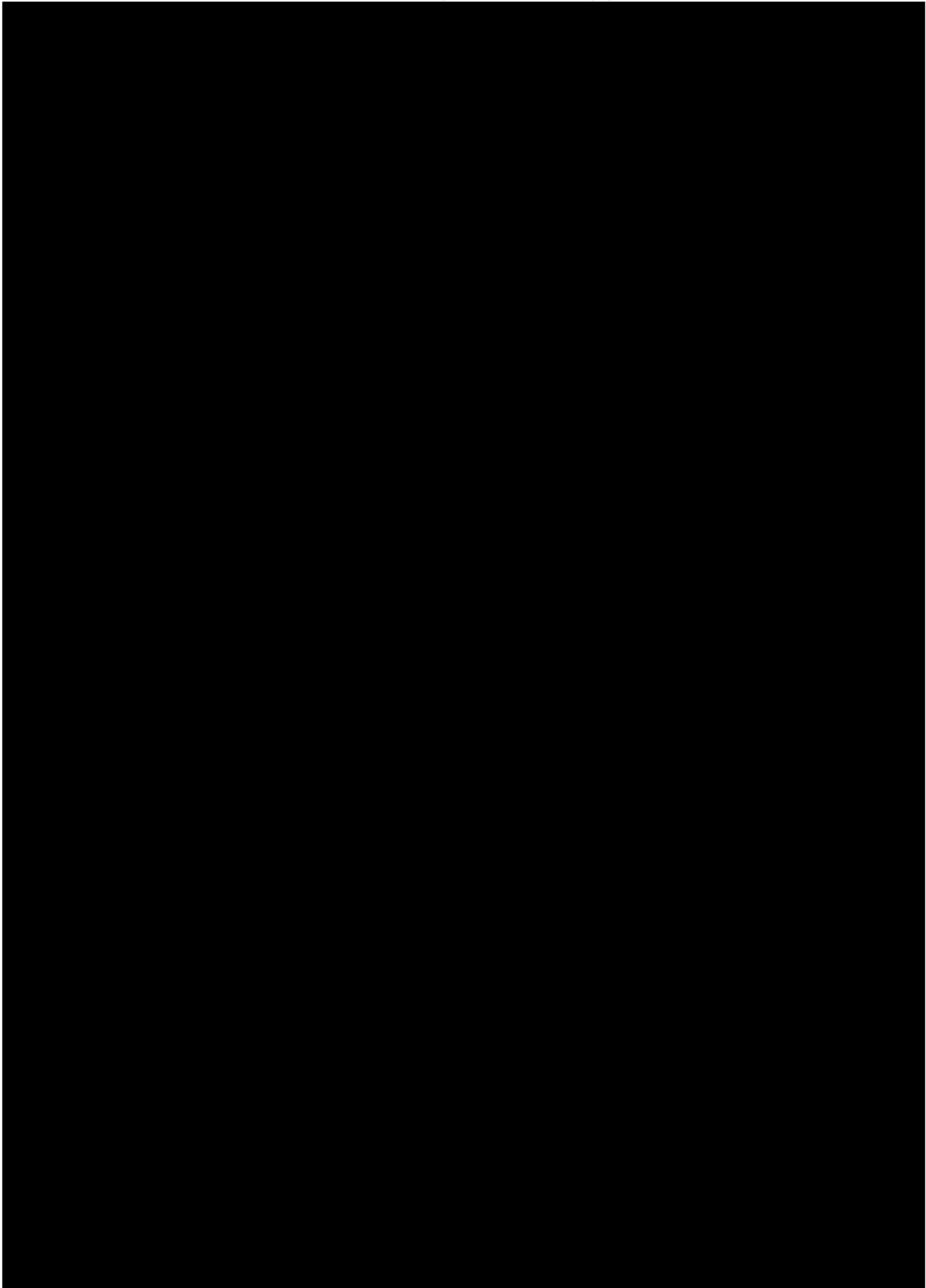


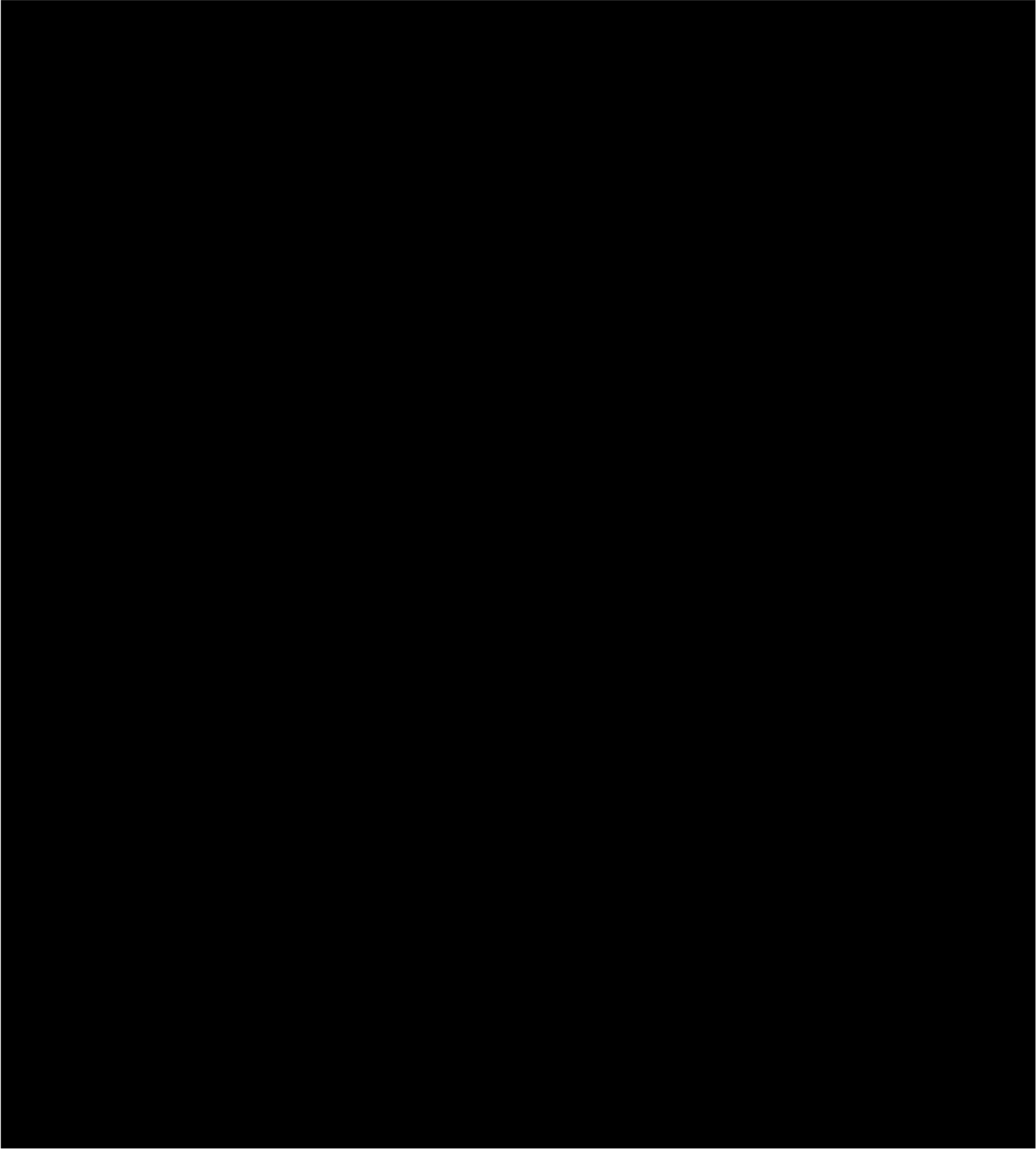




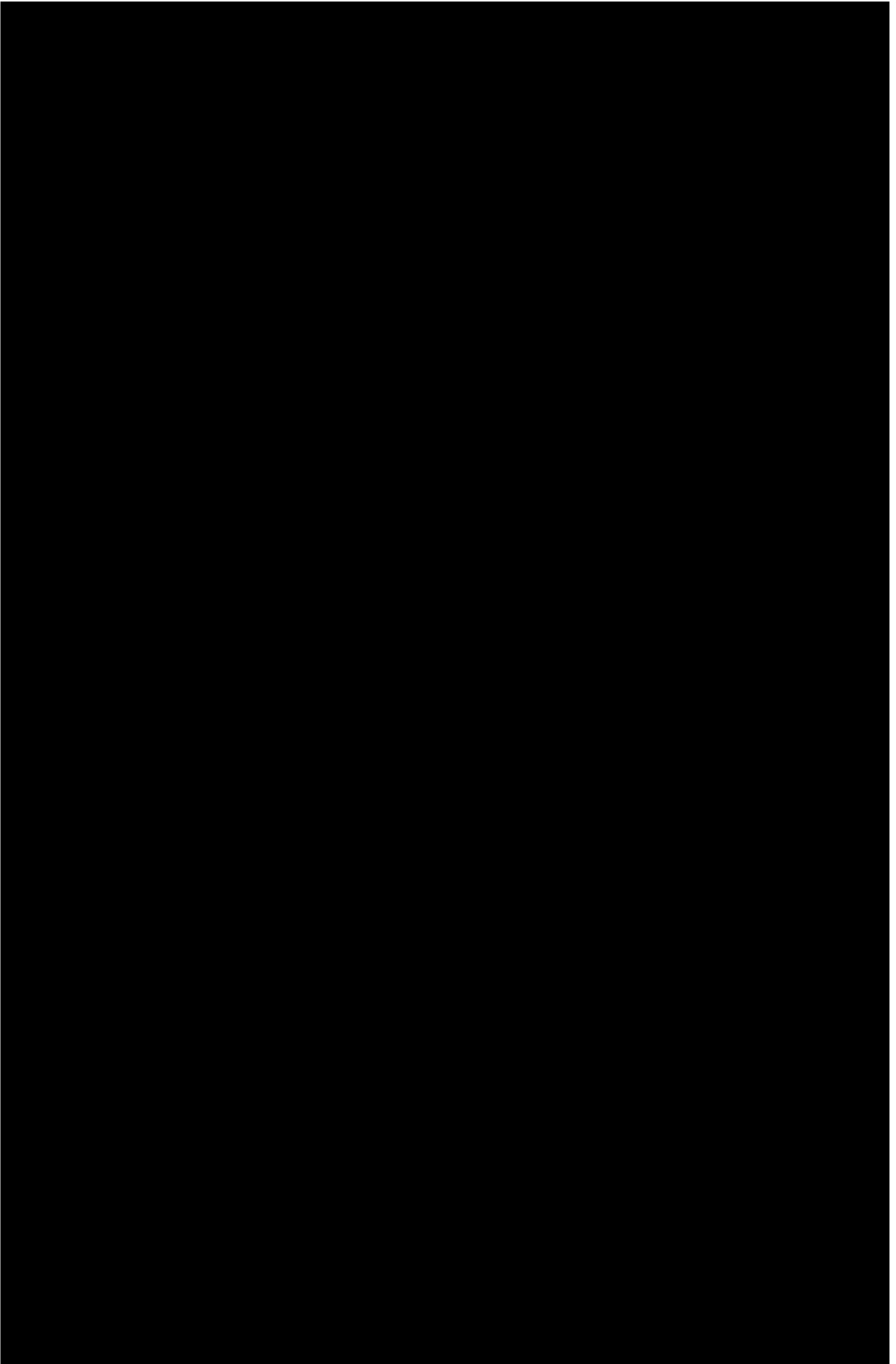


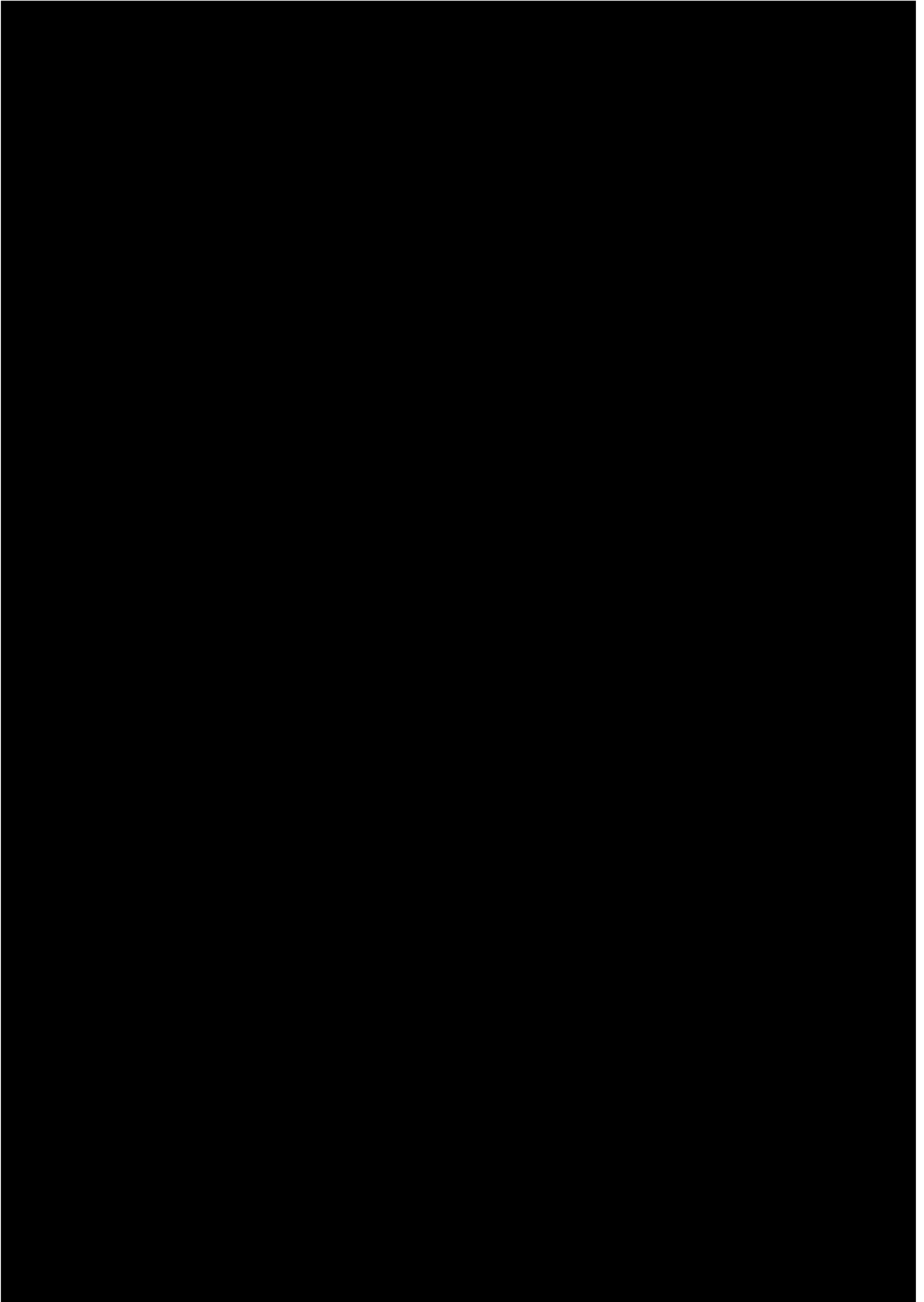
ANNEX B

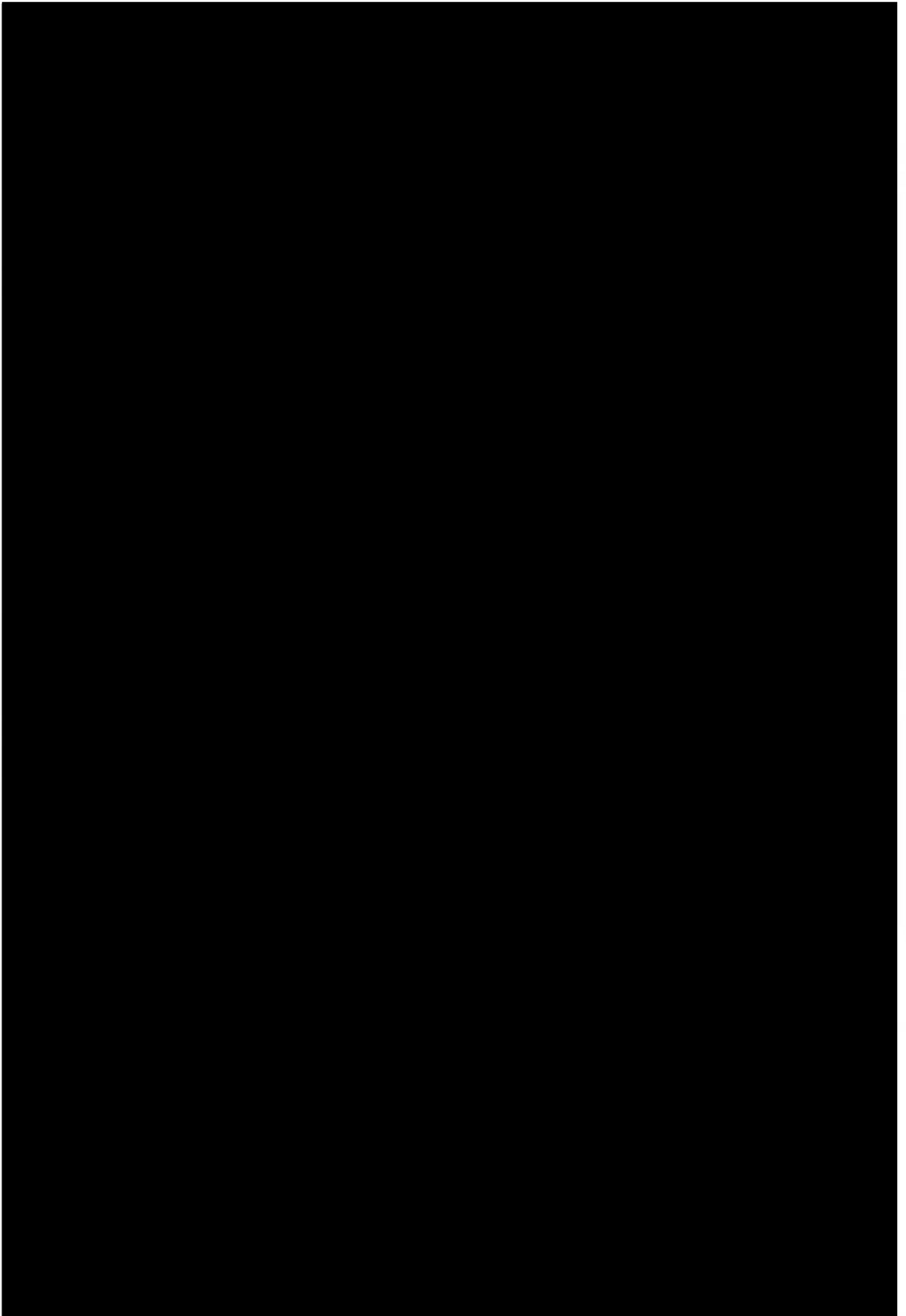


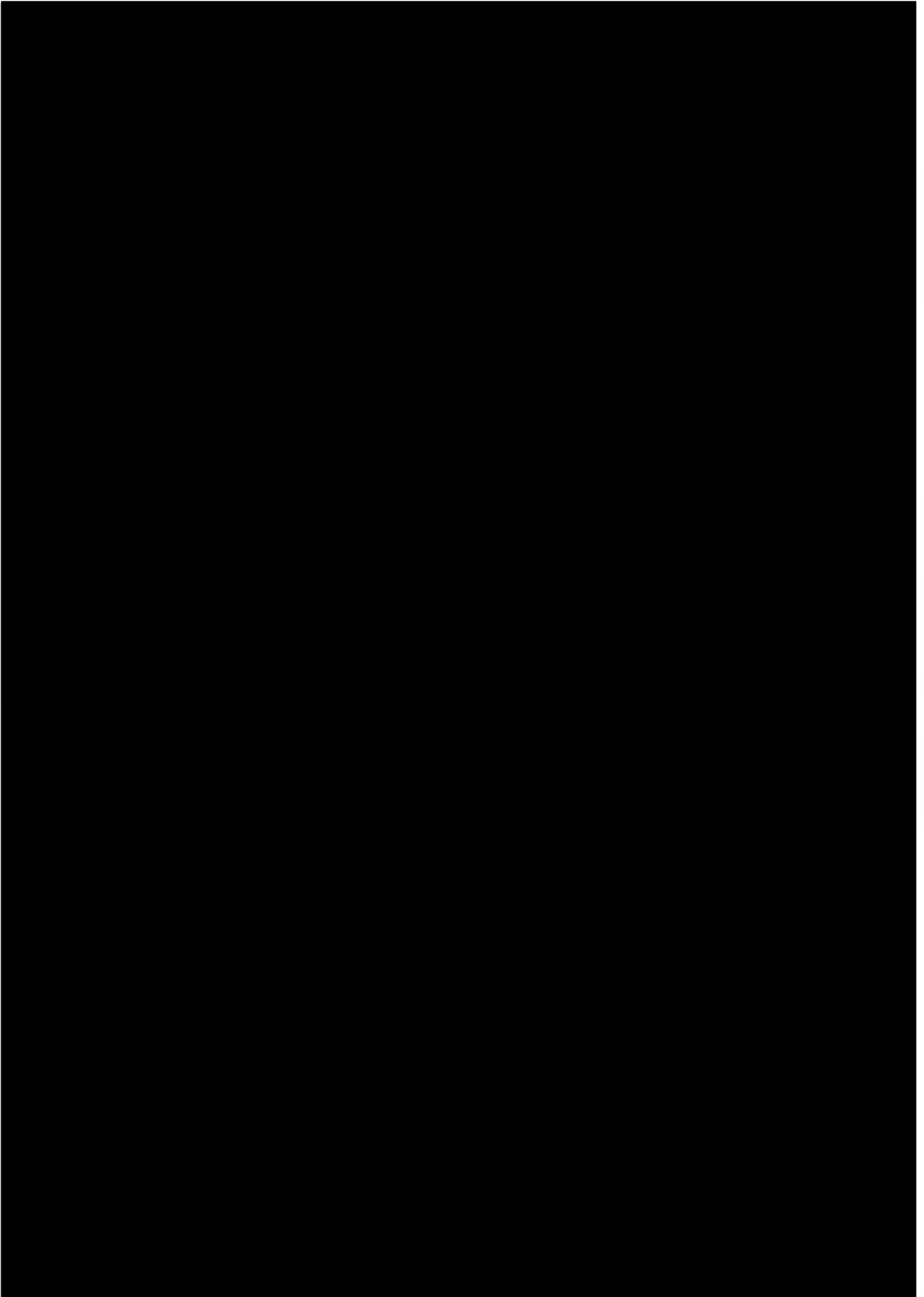


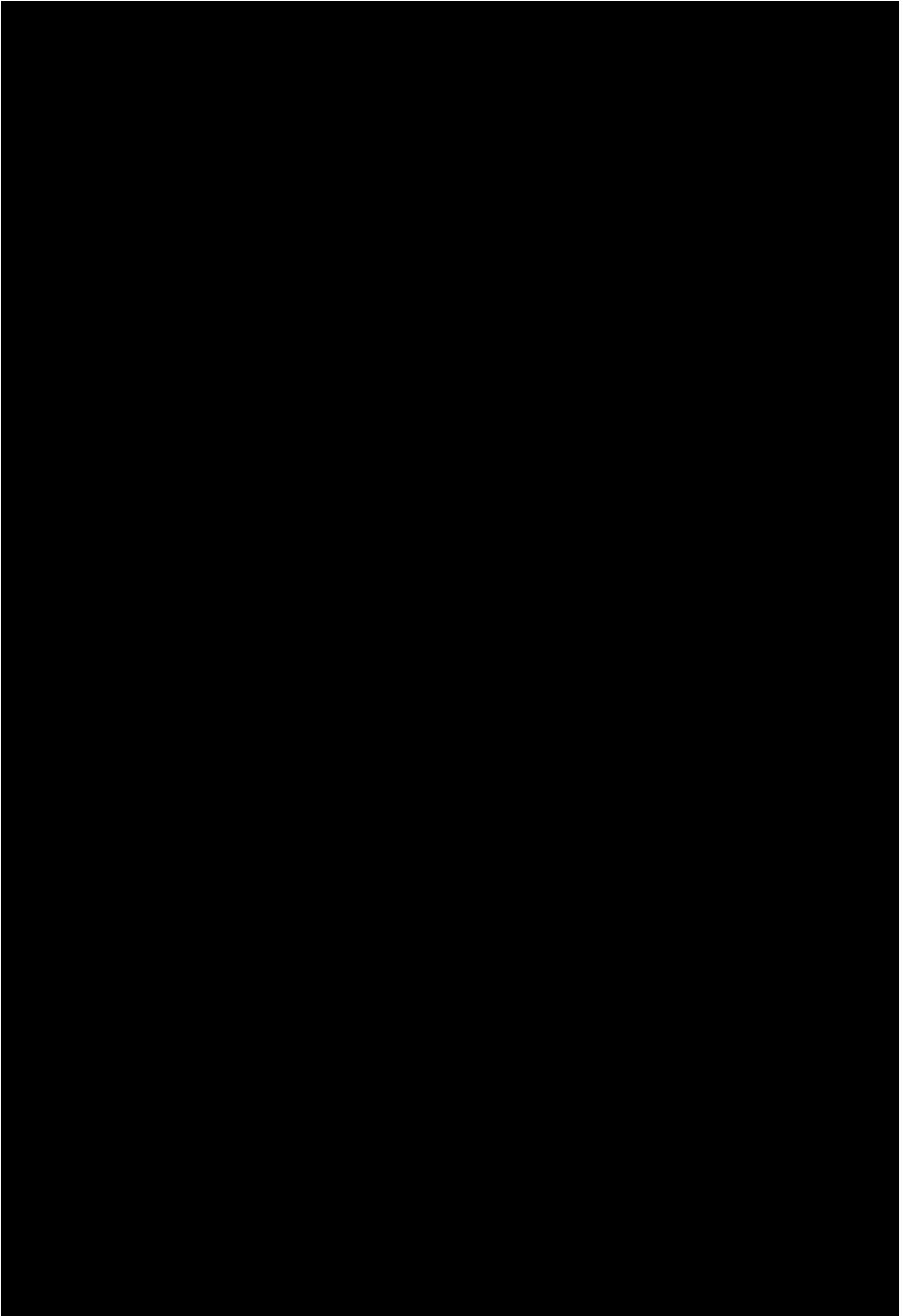


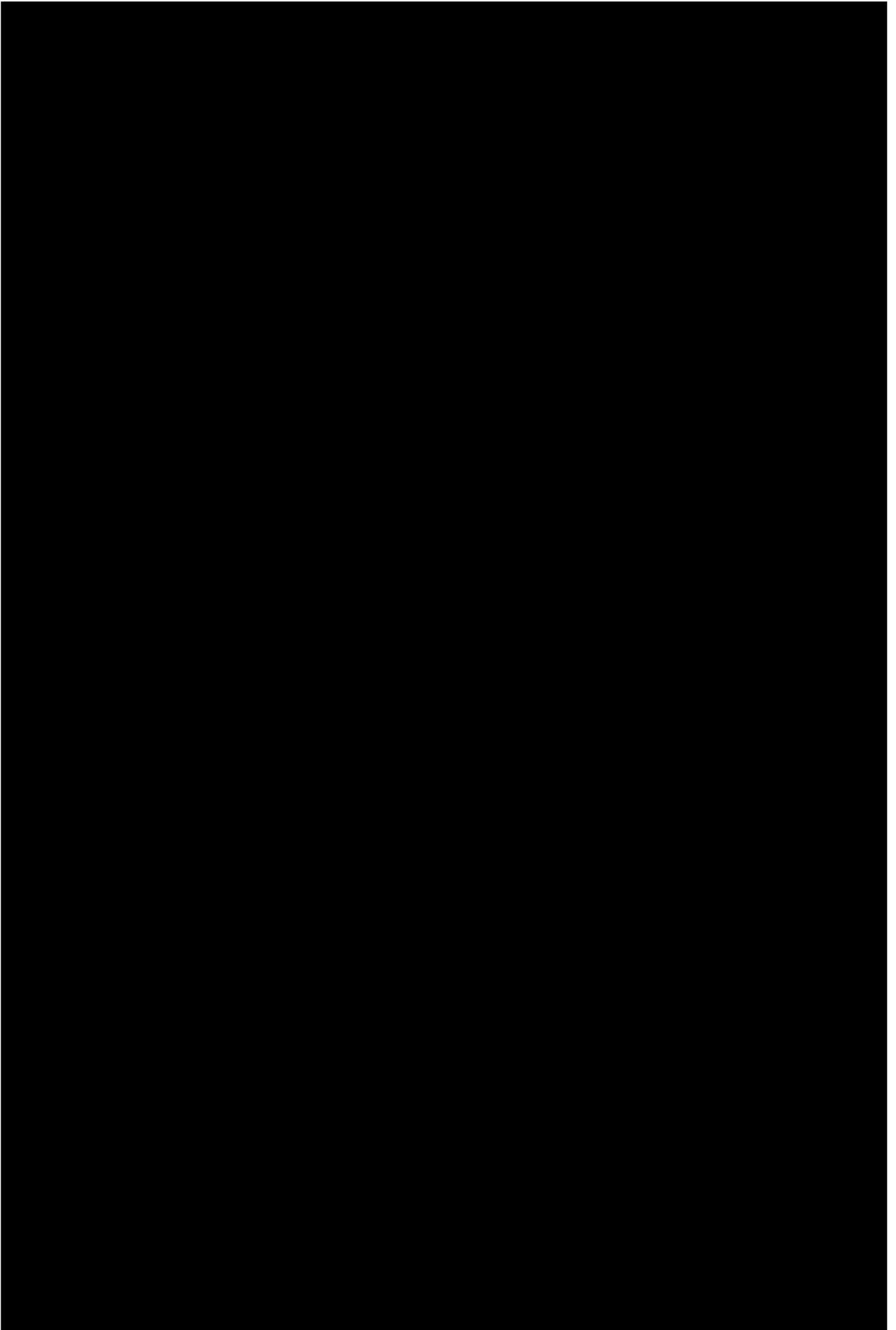


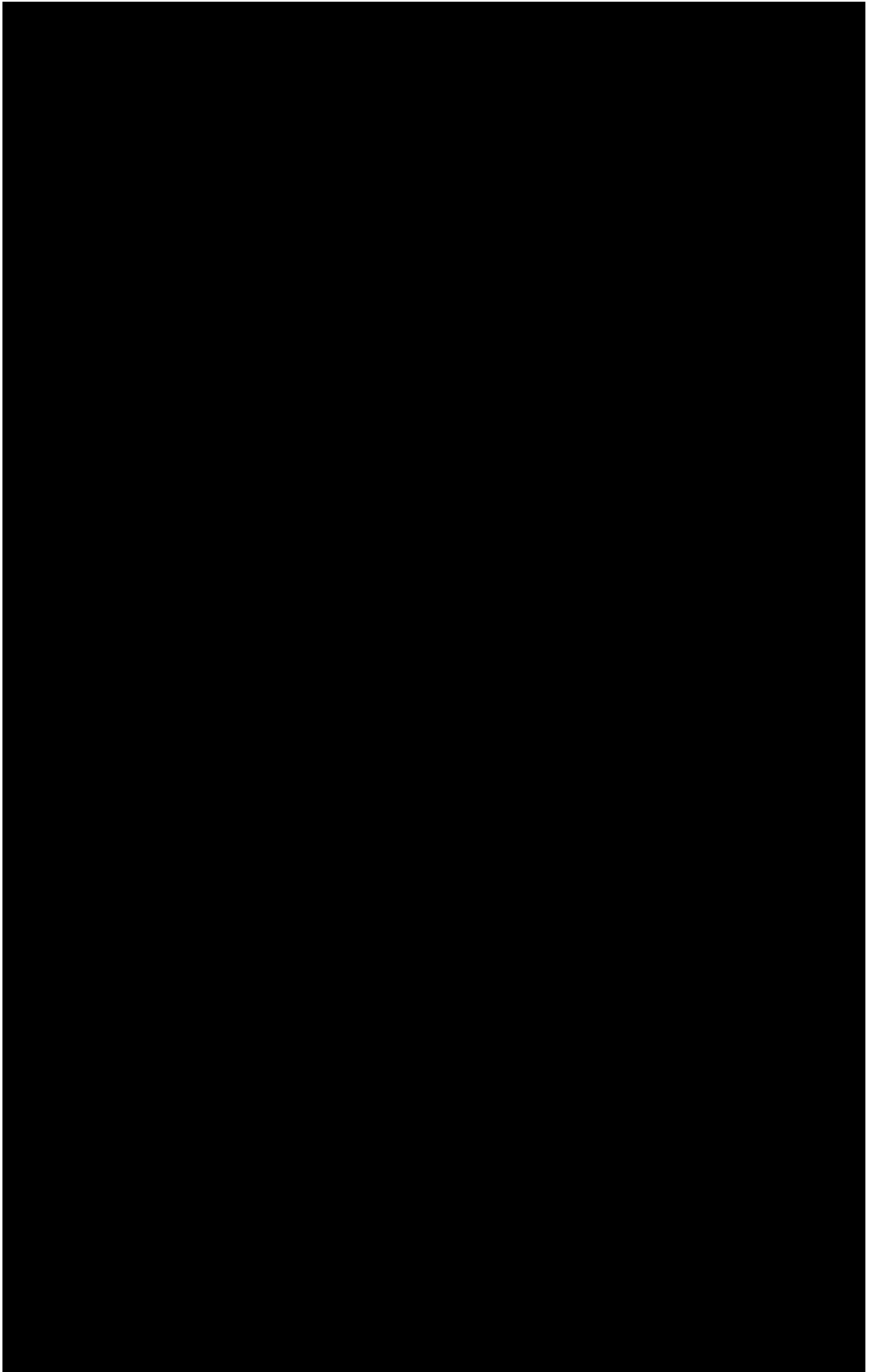


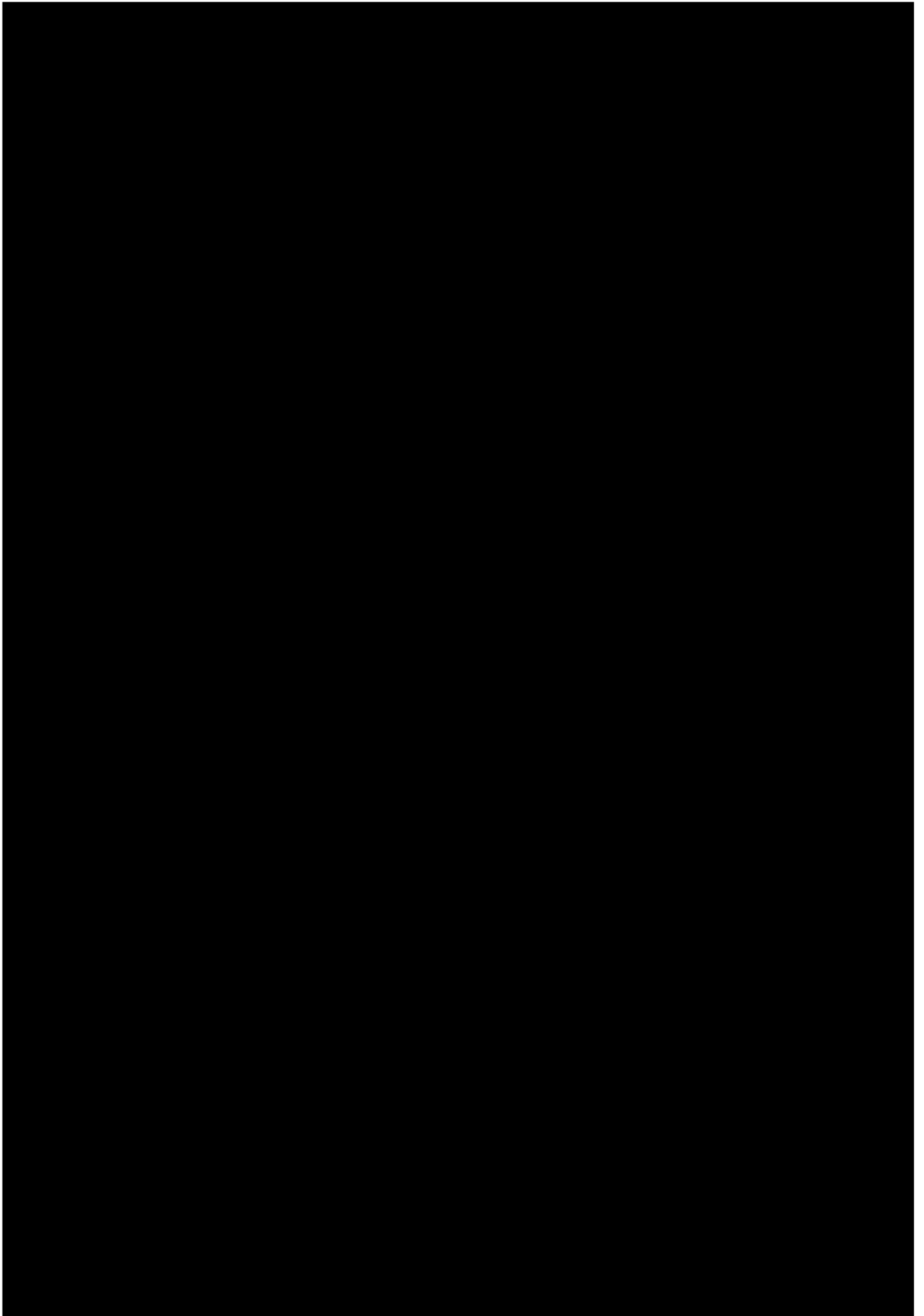




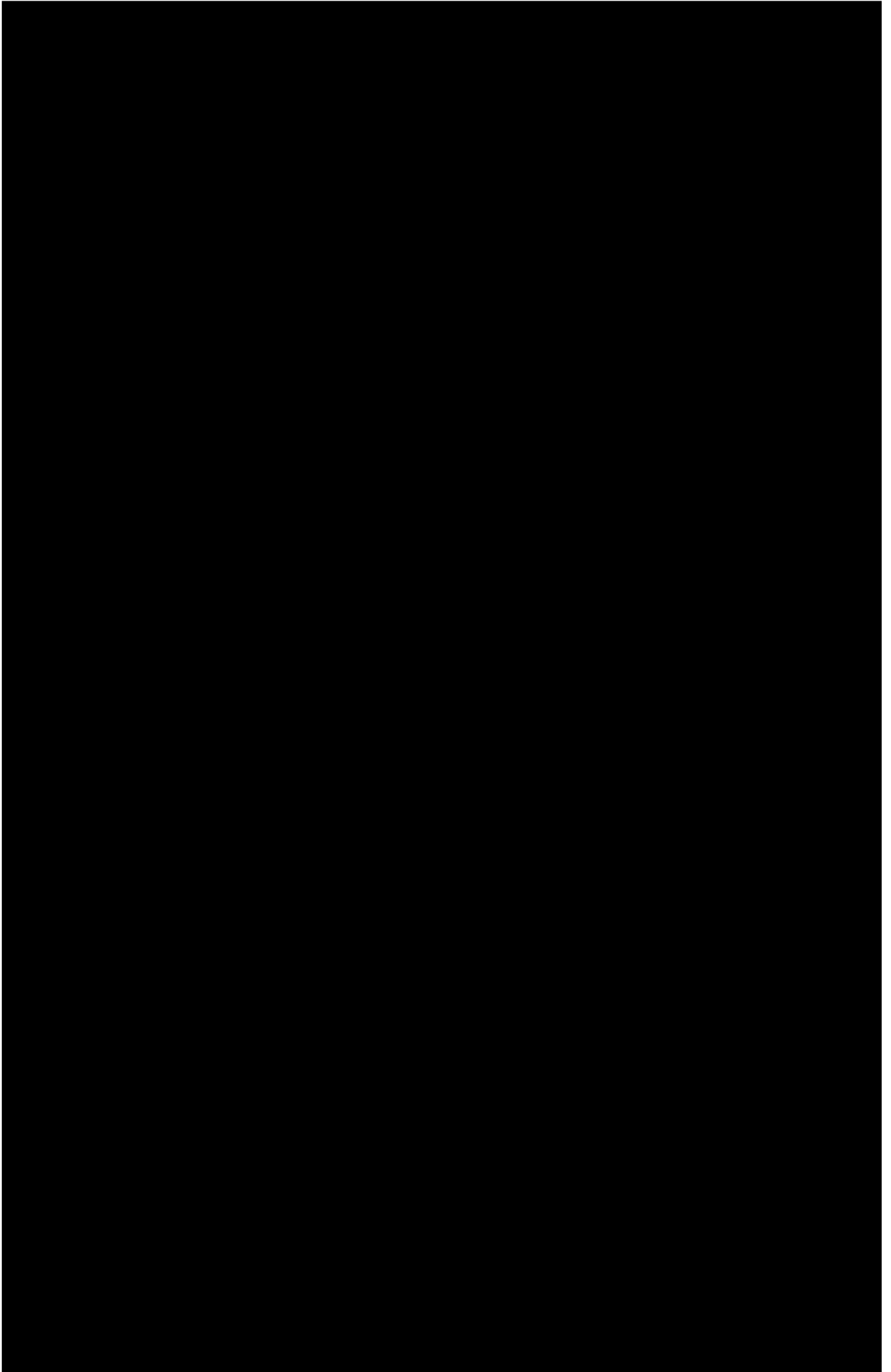


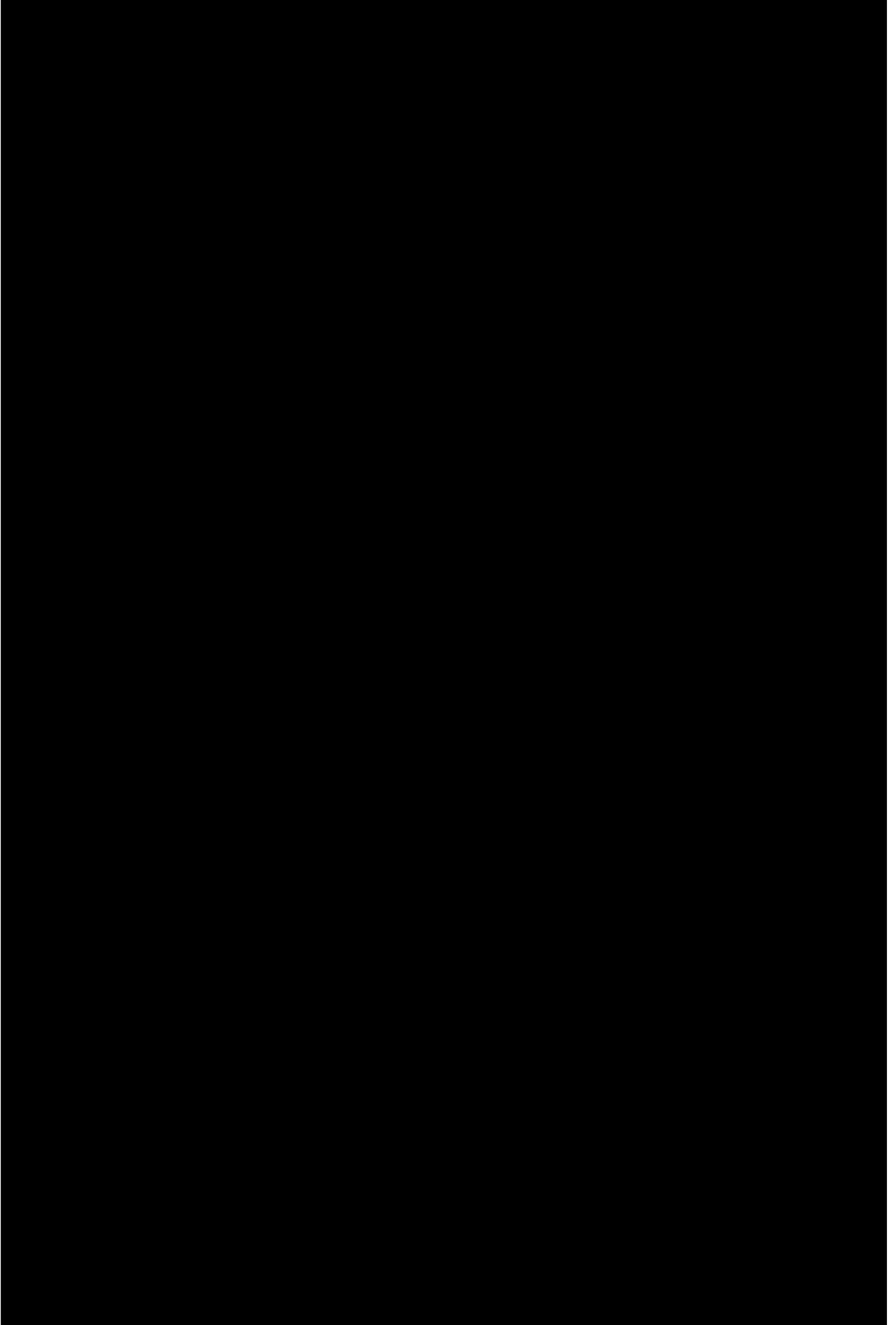


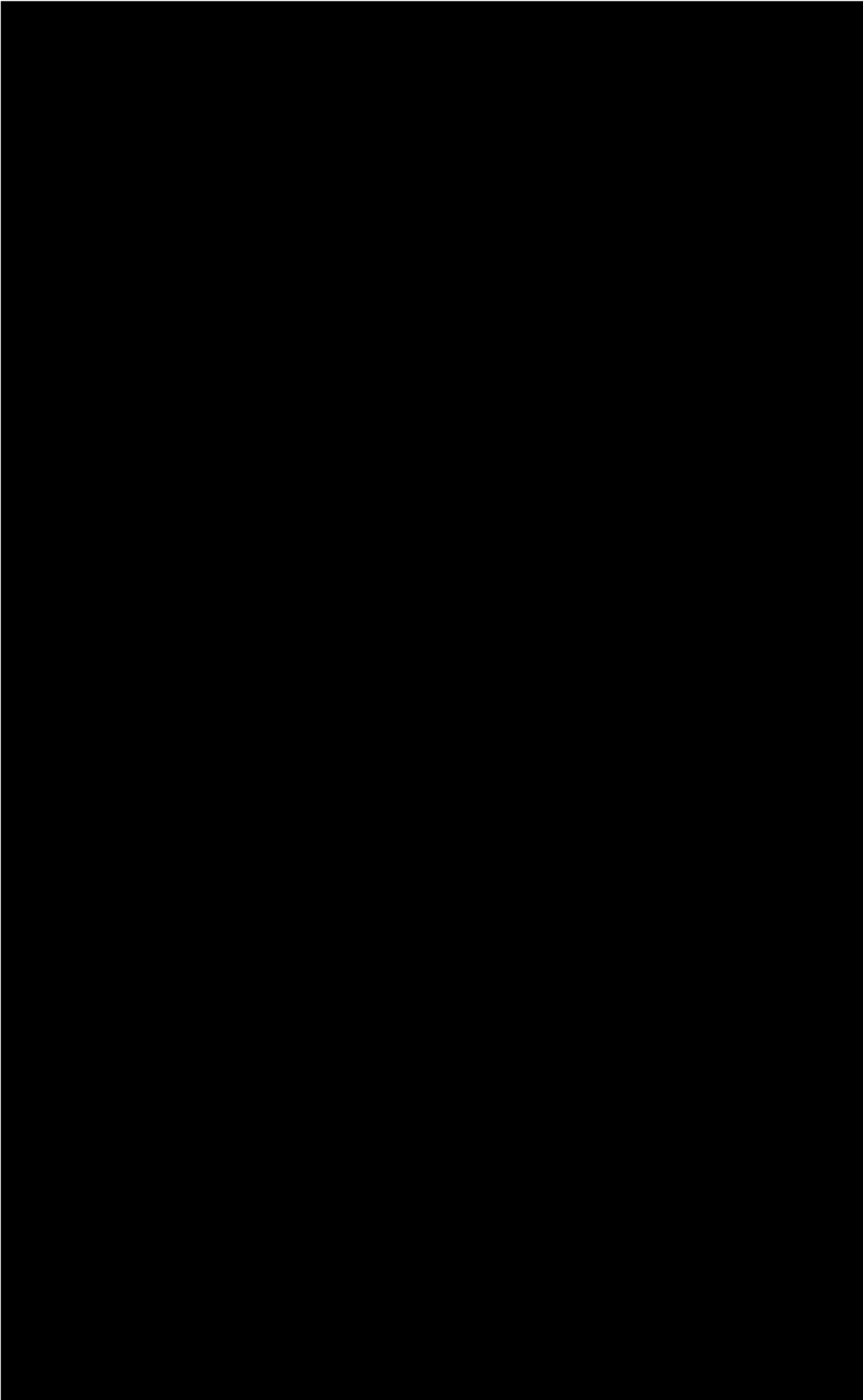


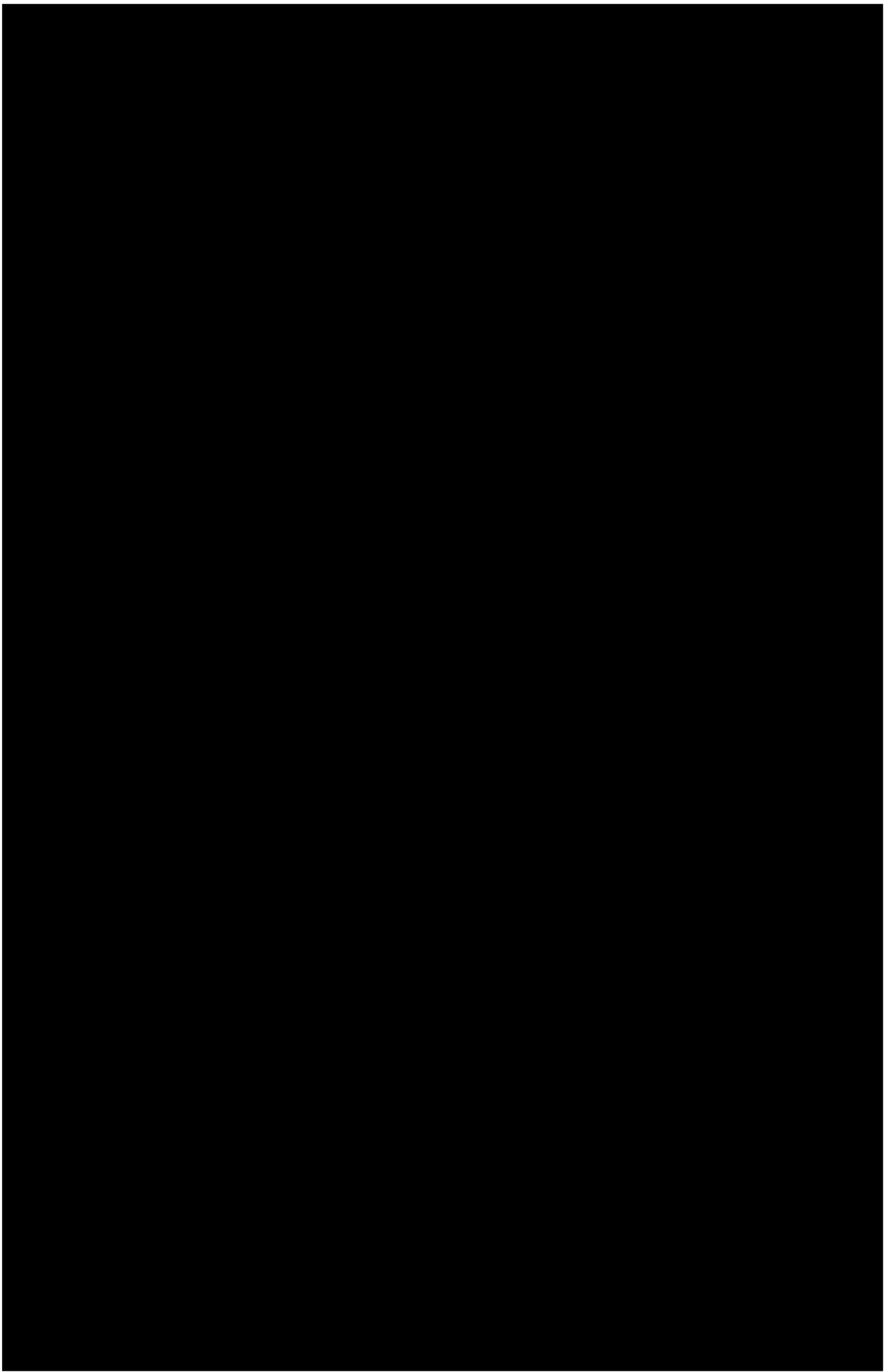


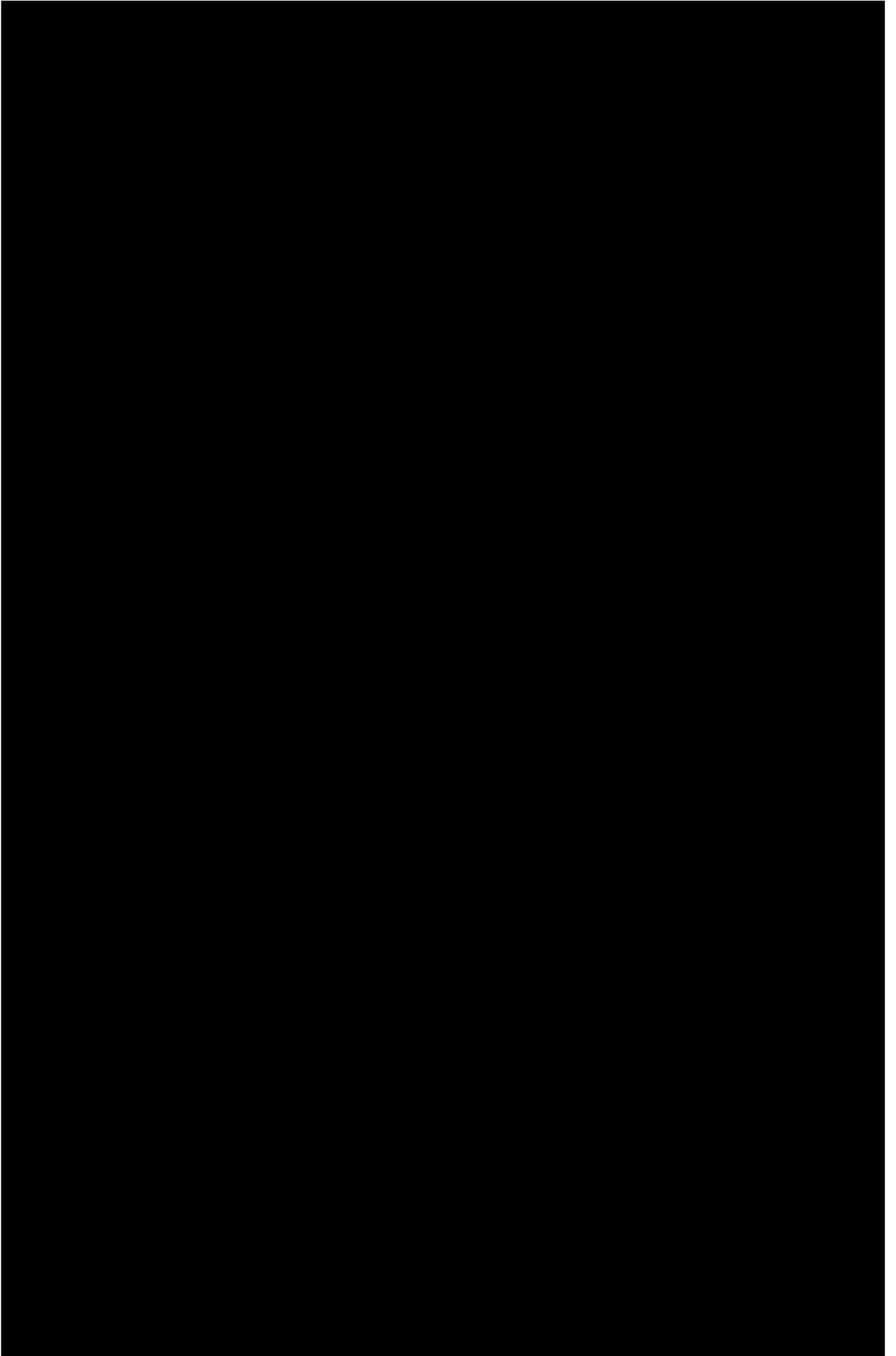


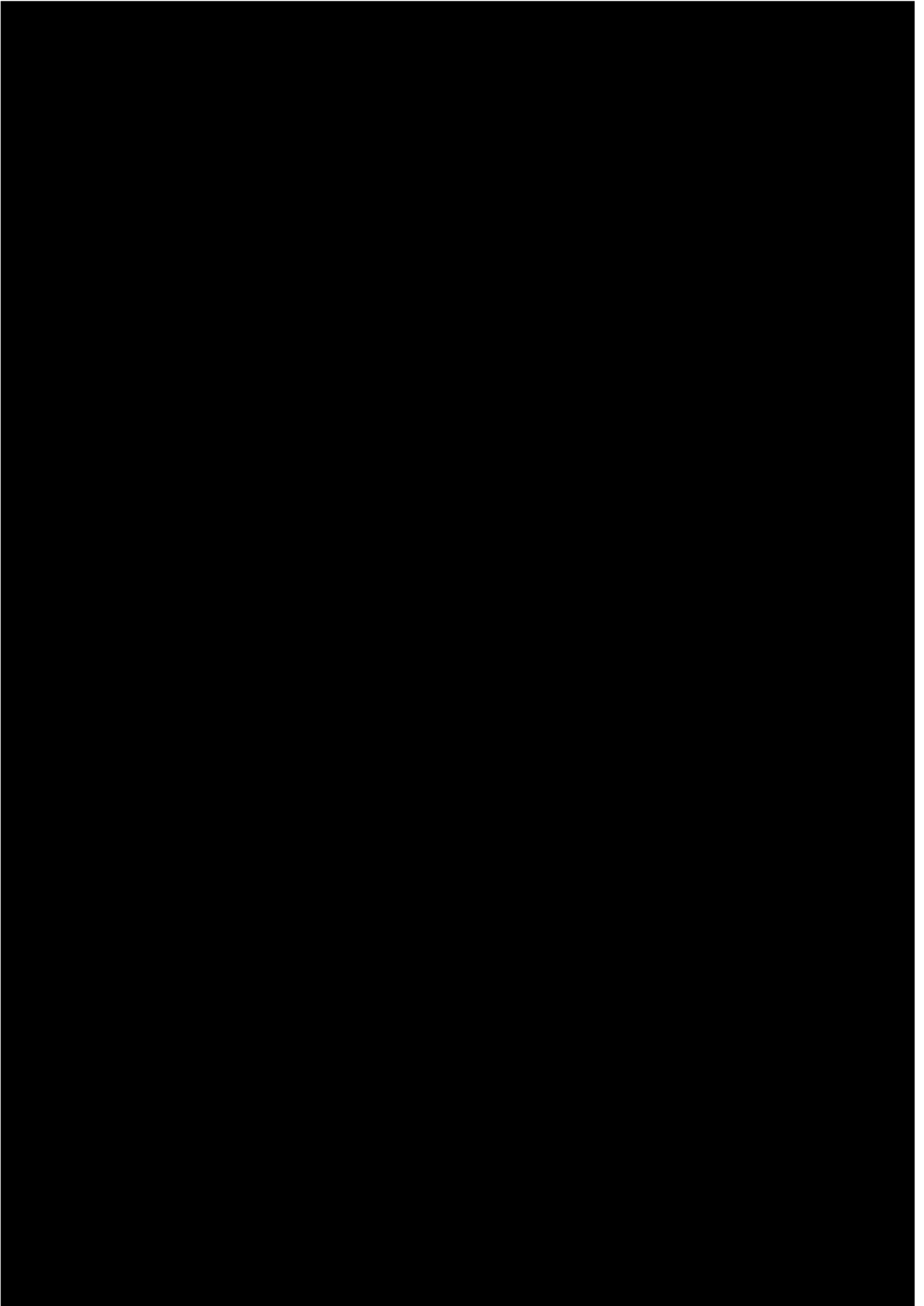


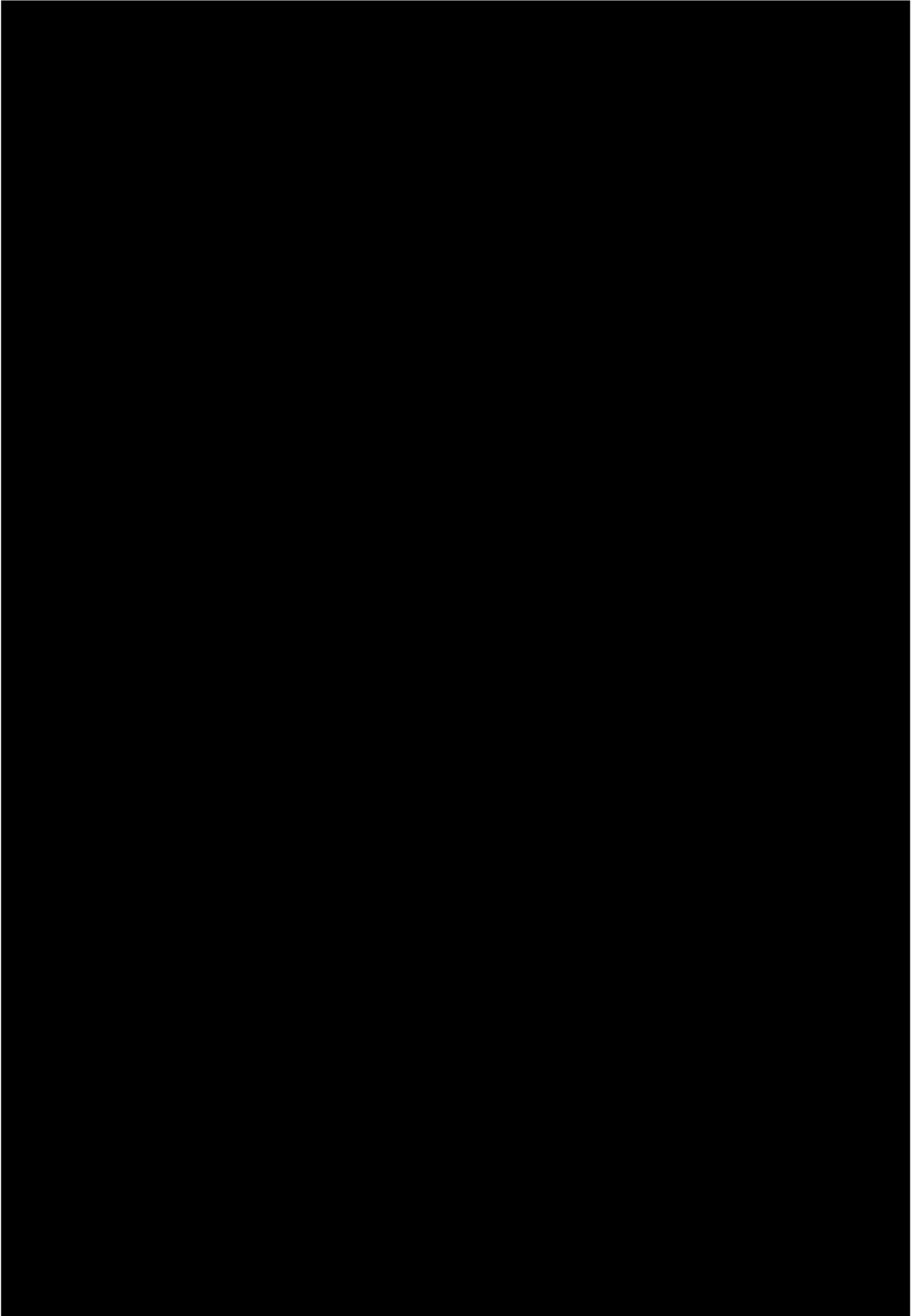


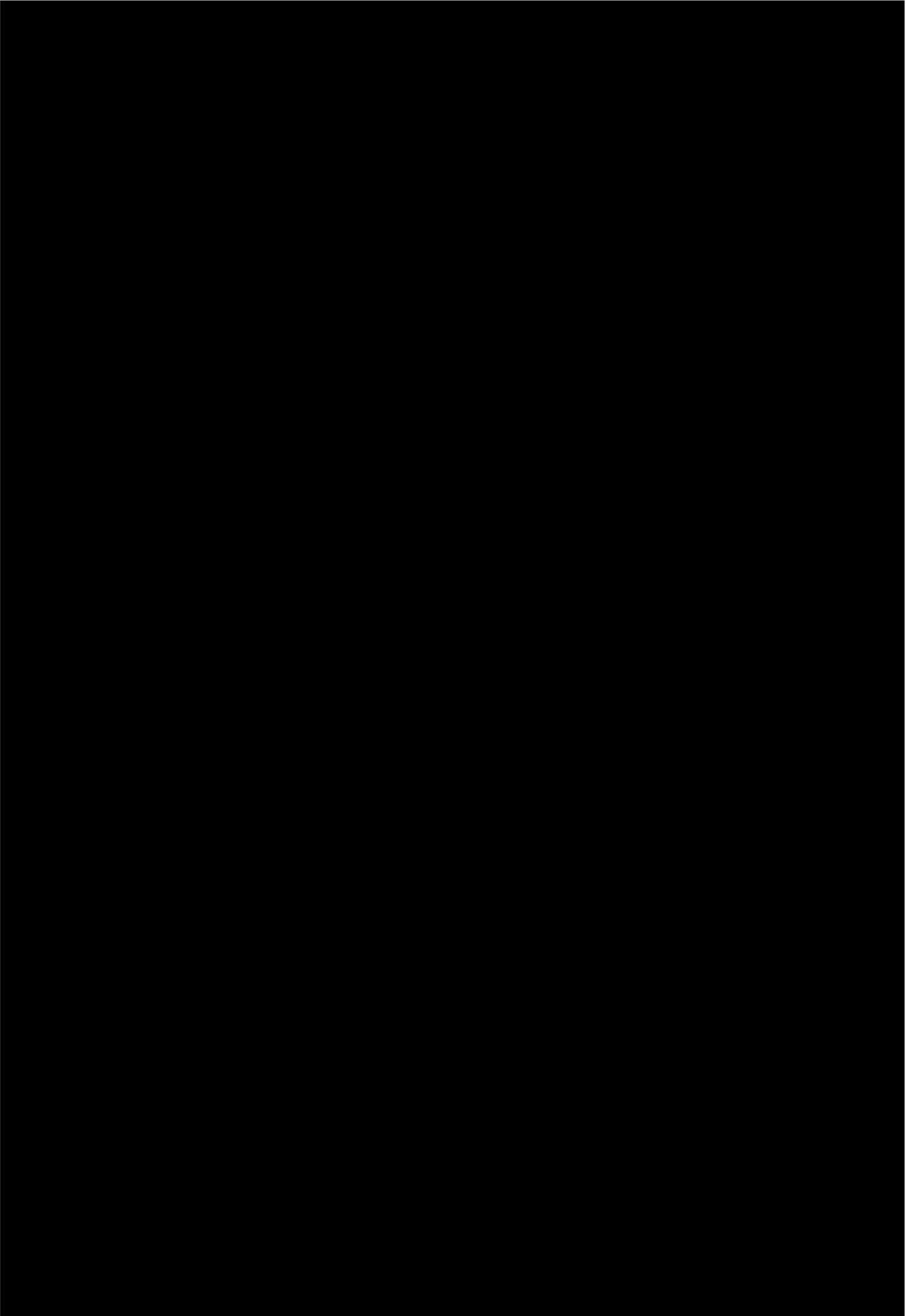




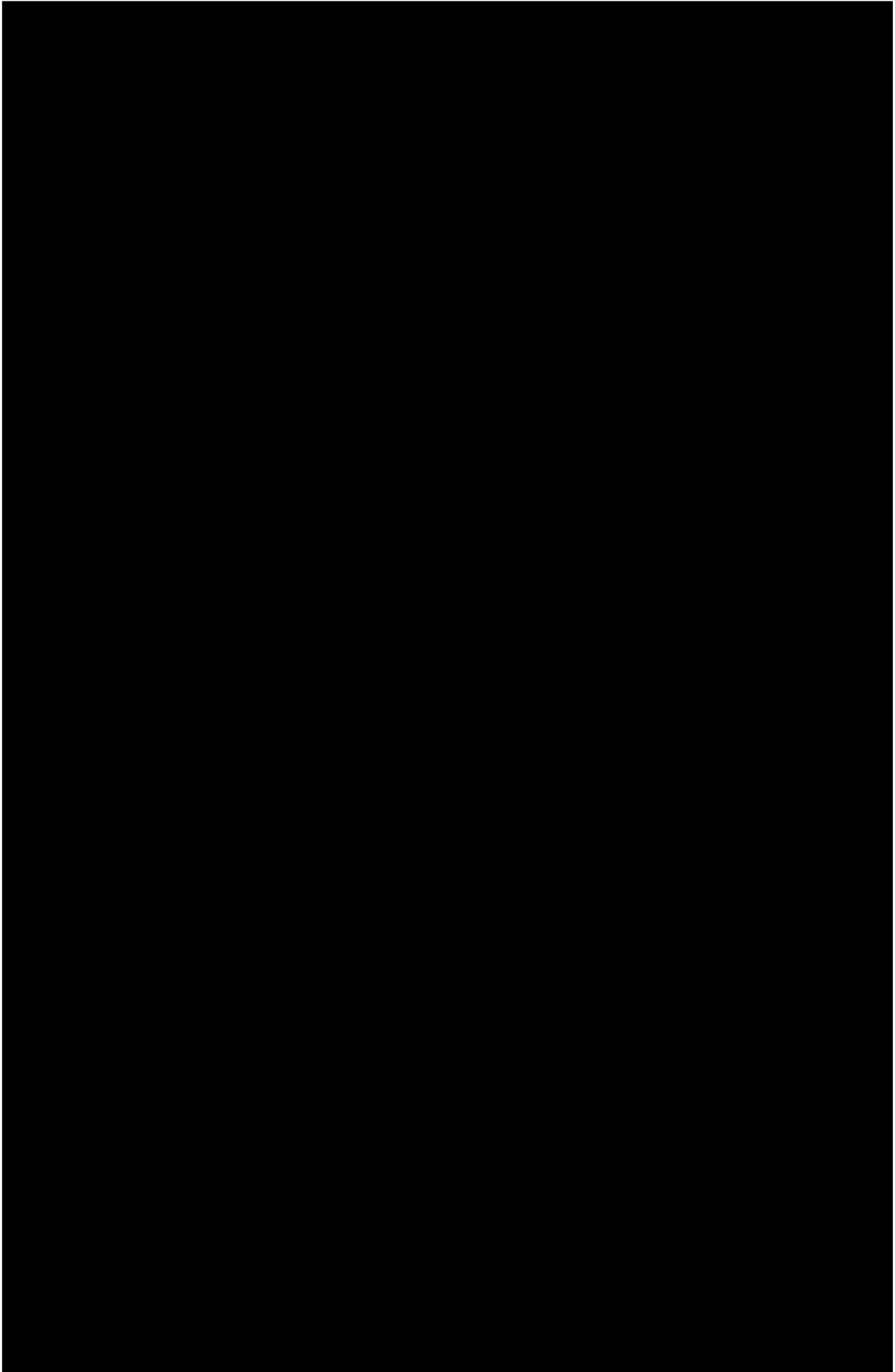


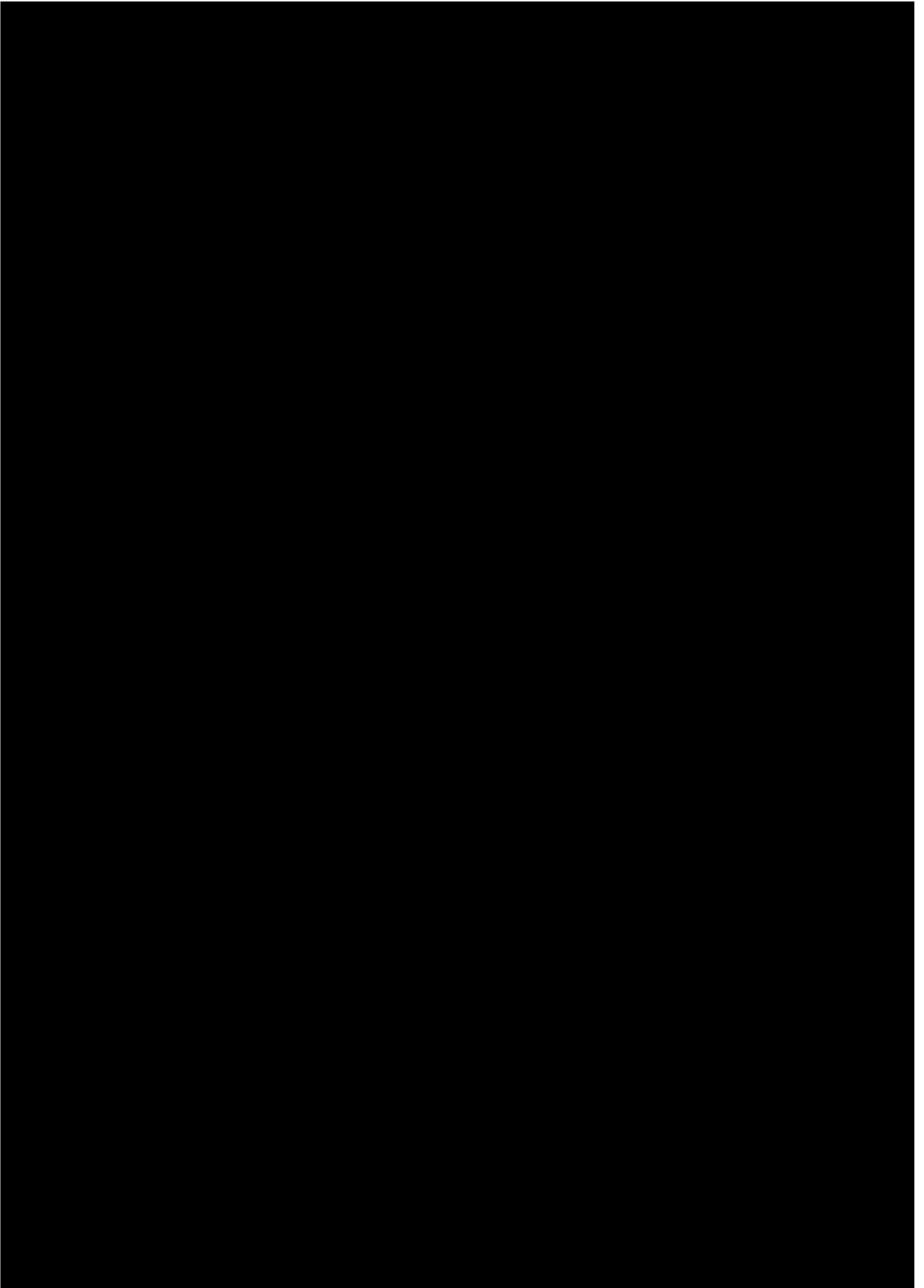


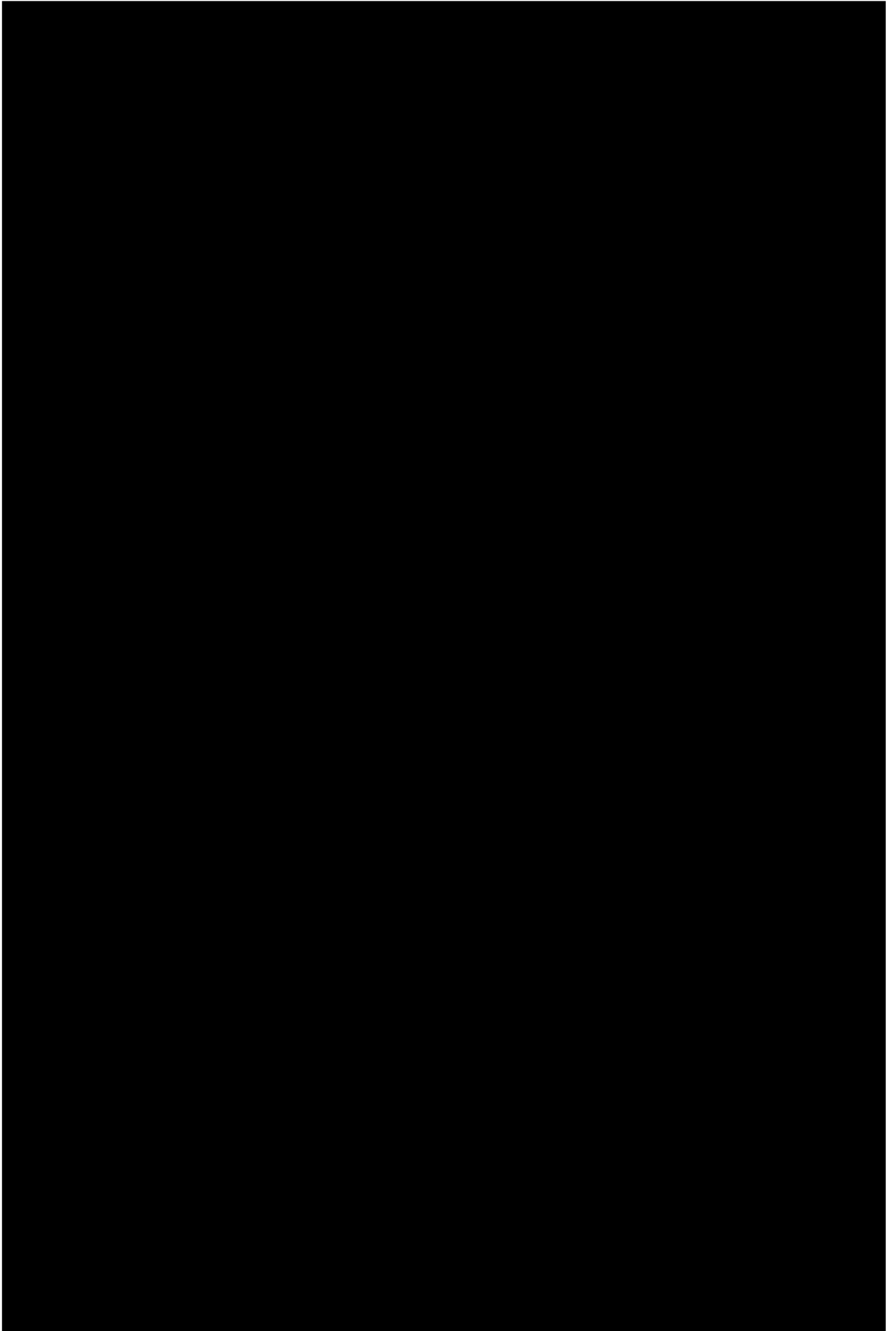


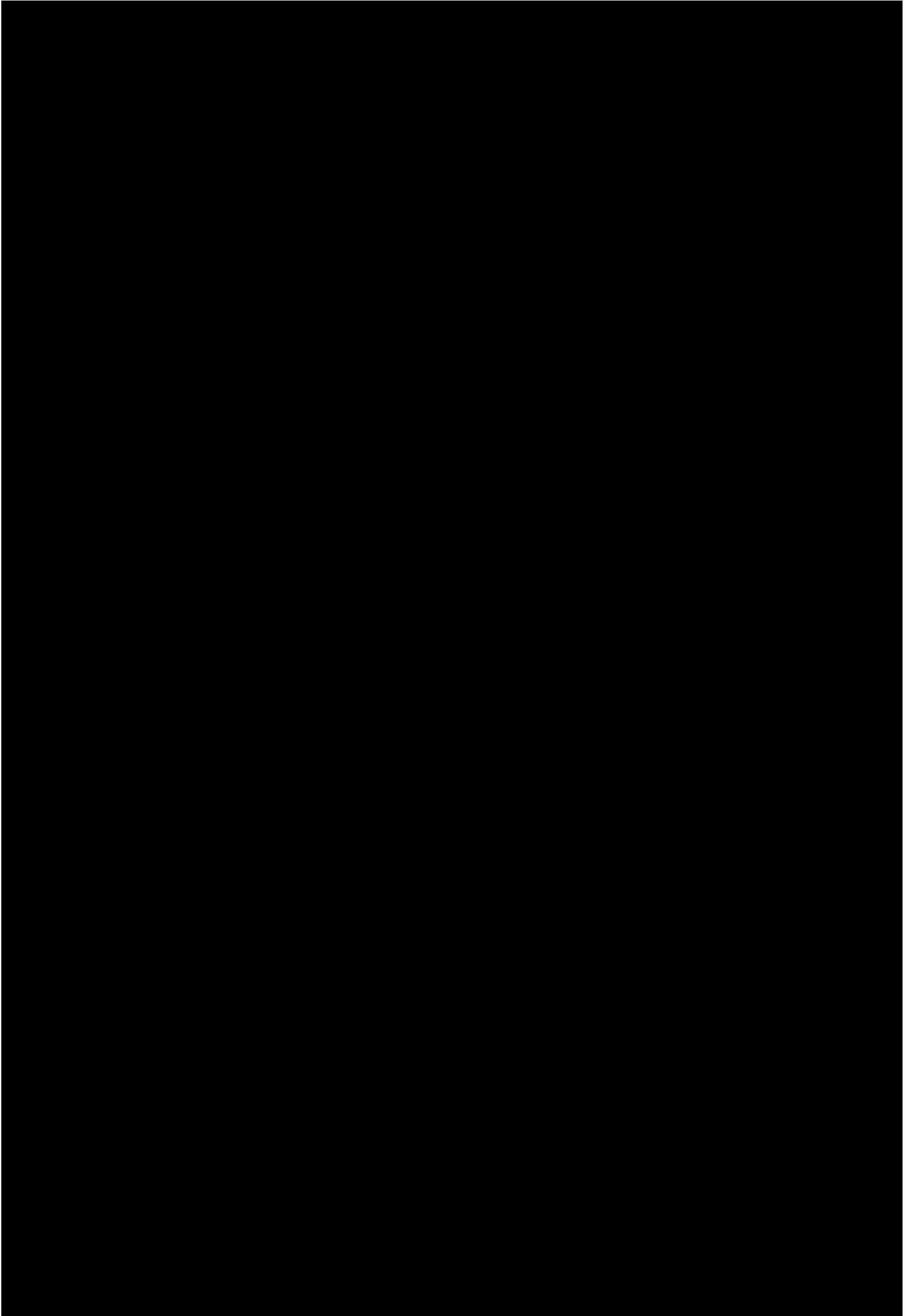


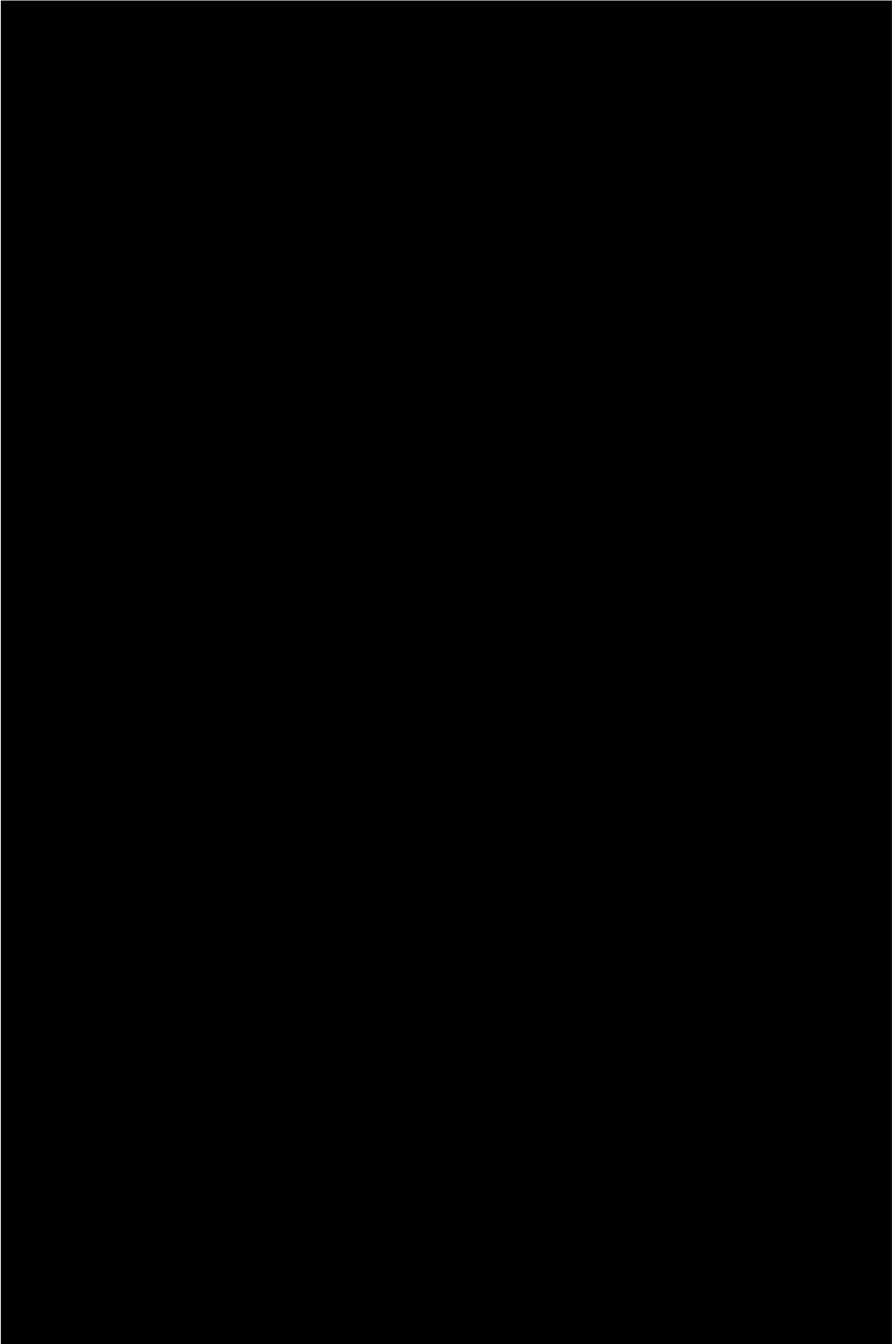


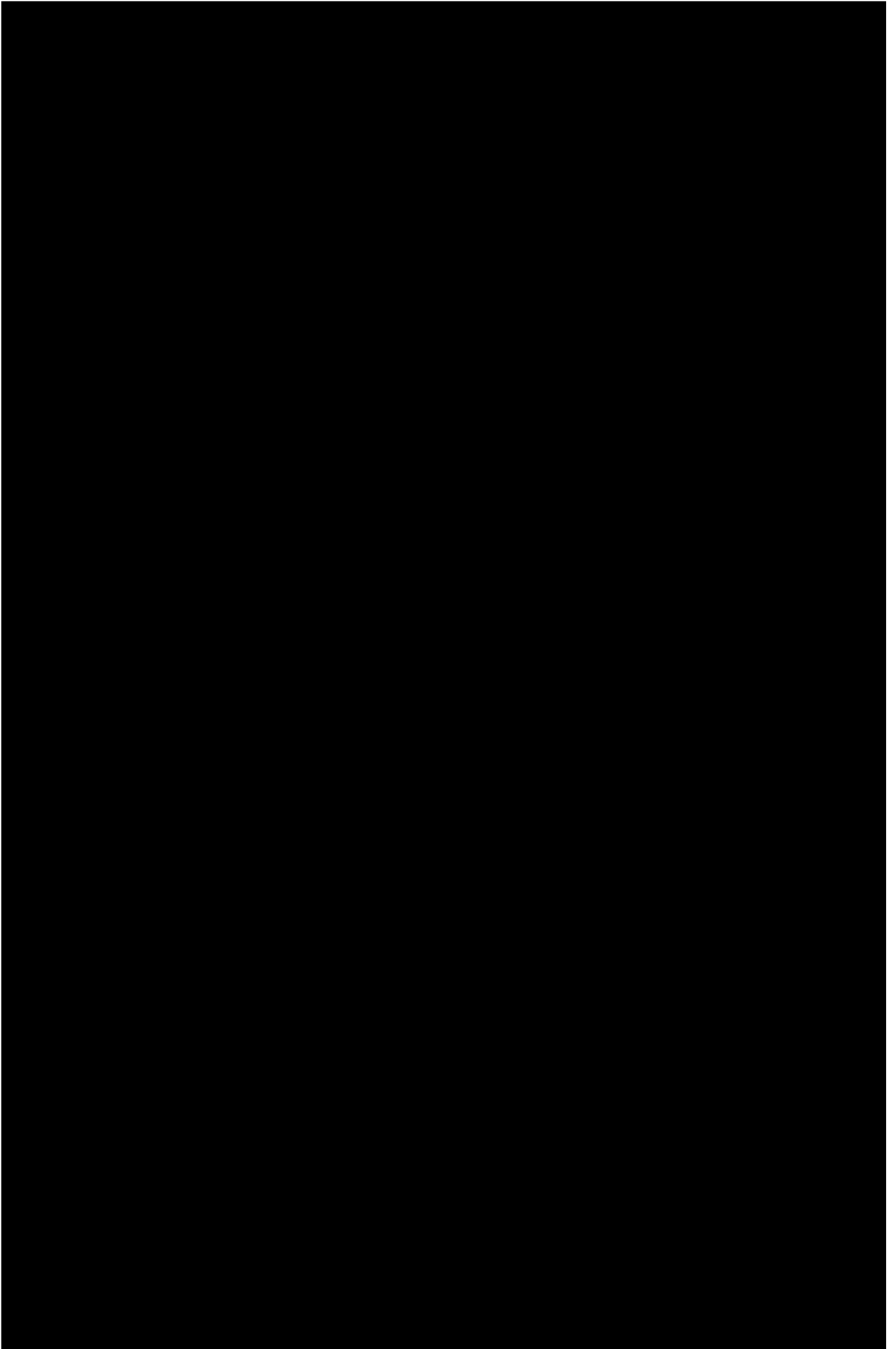


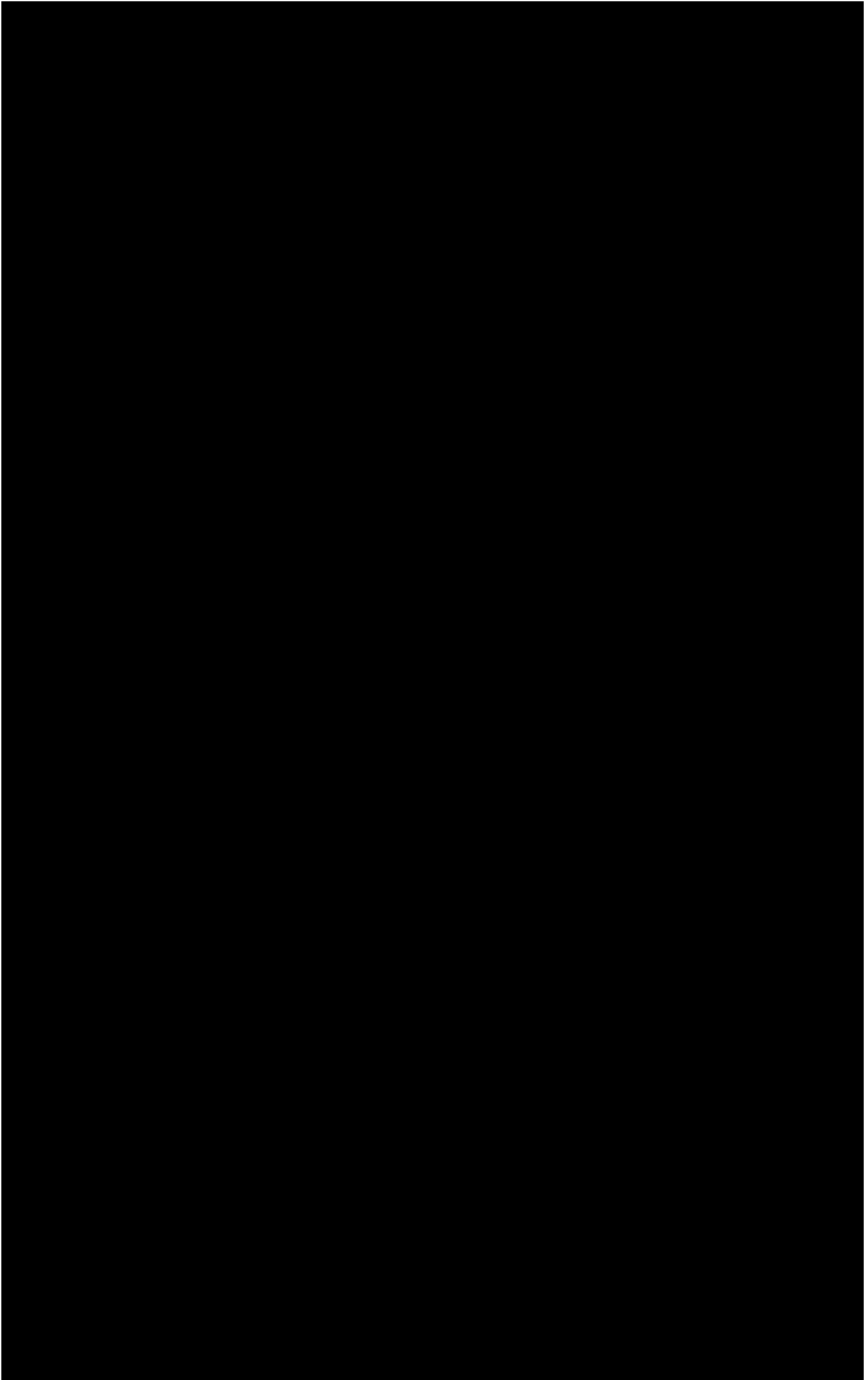


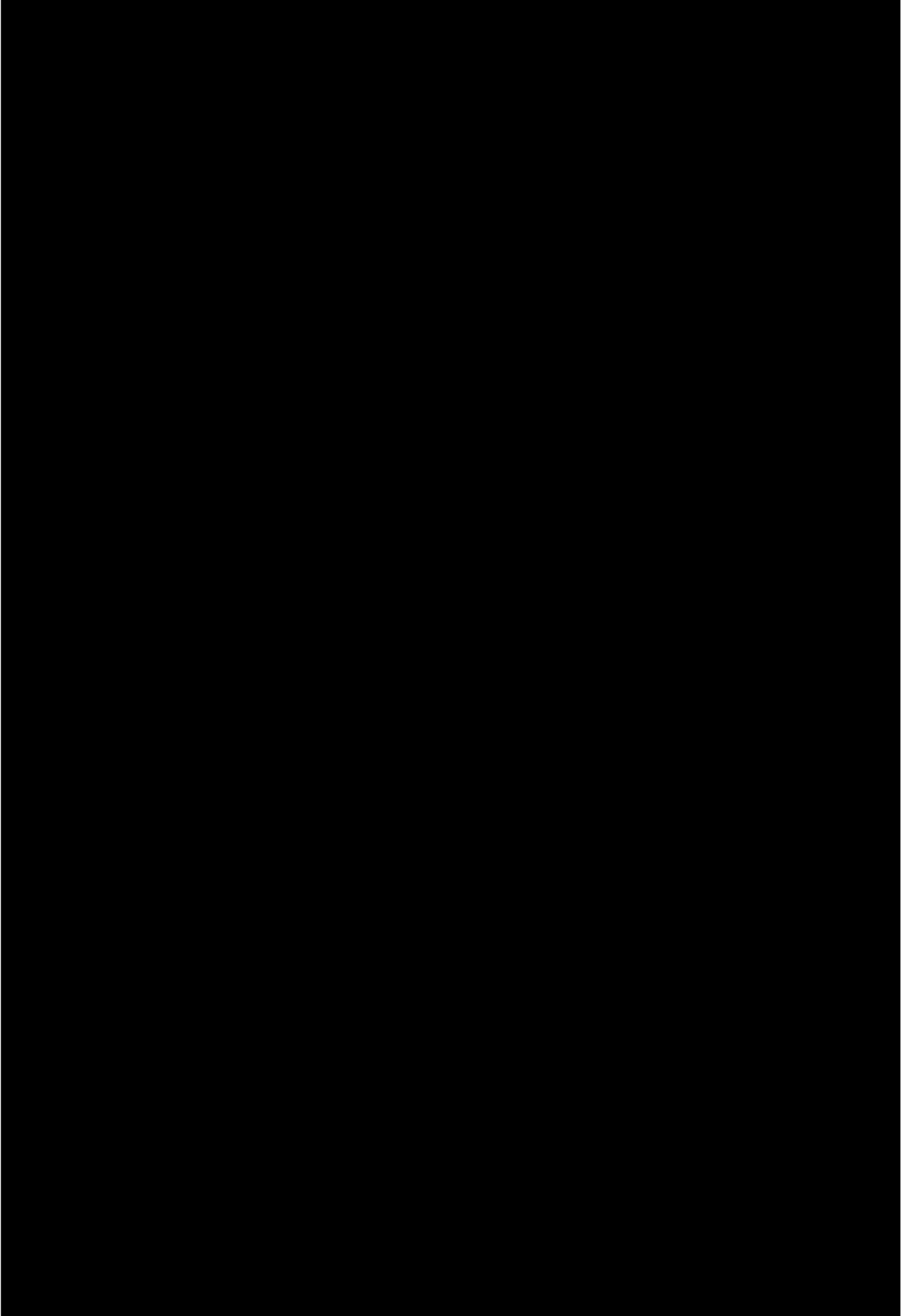




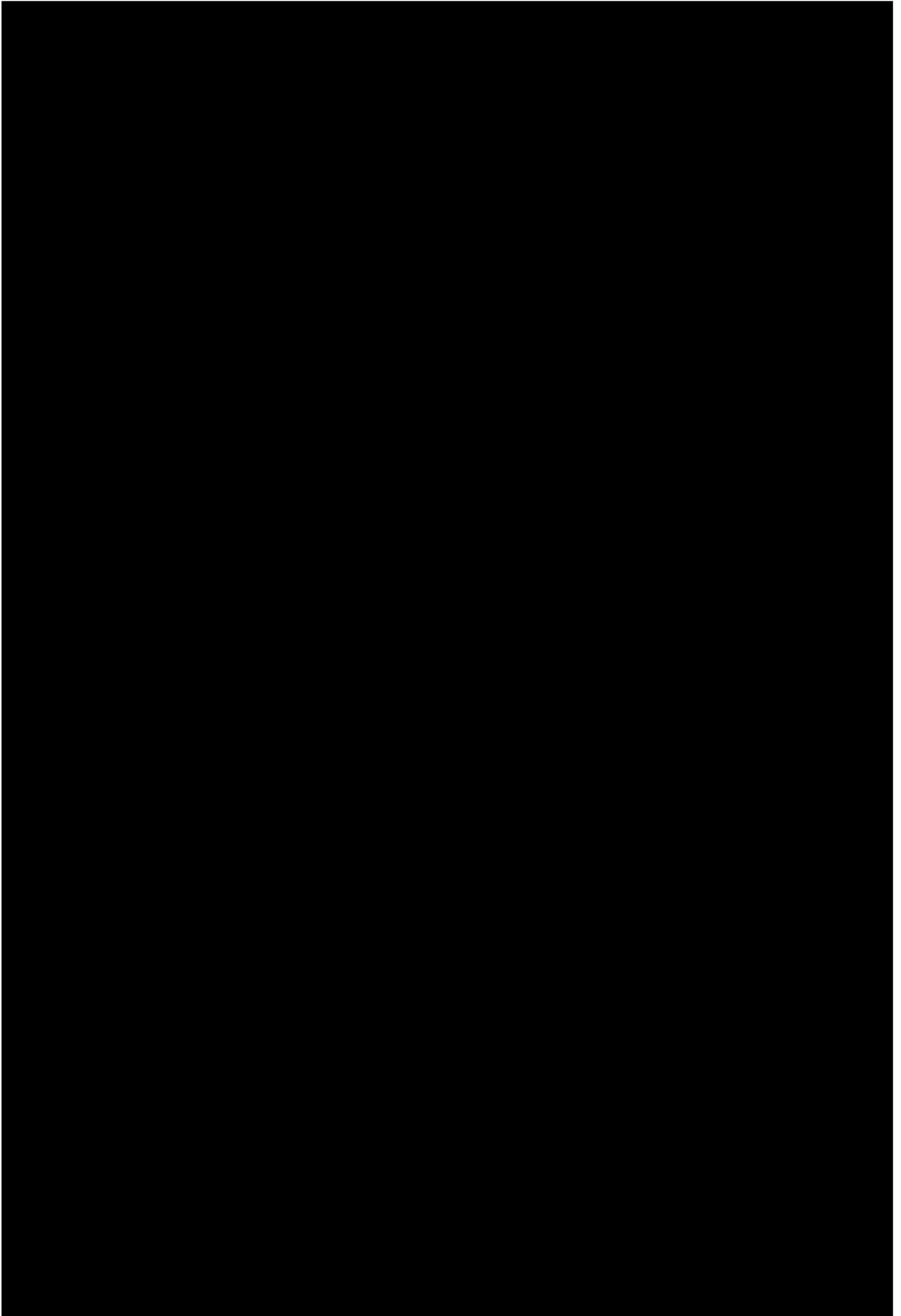


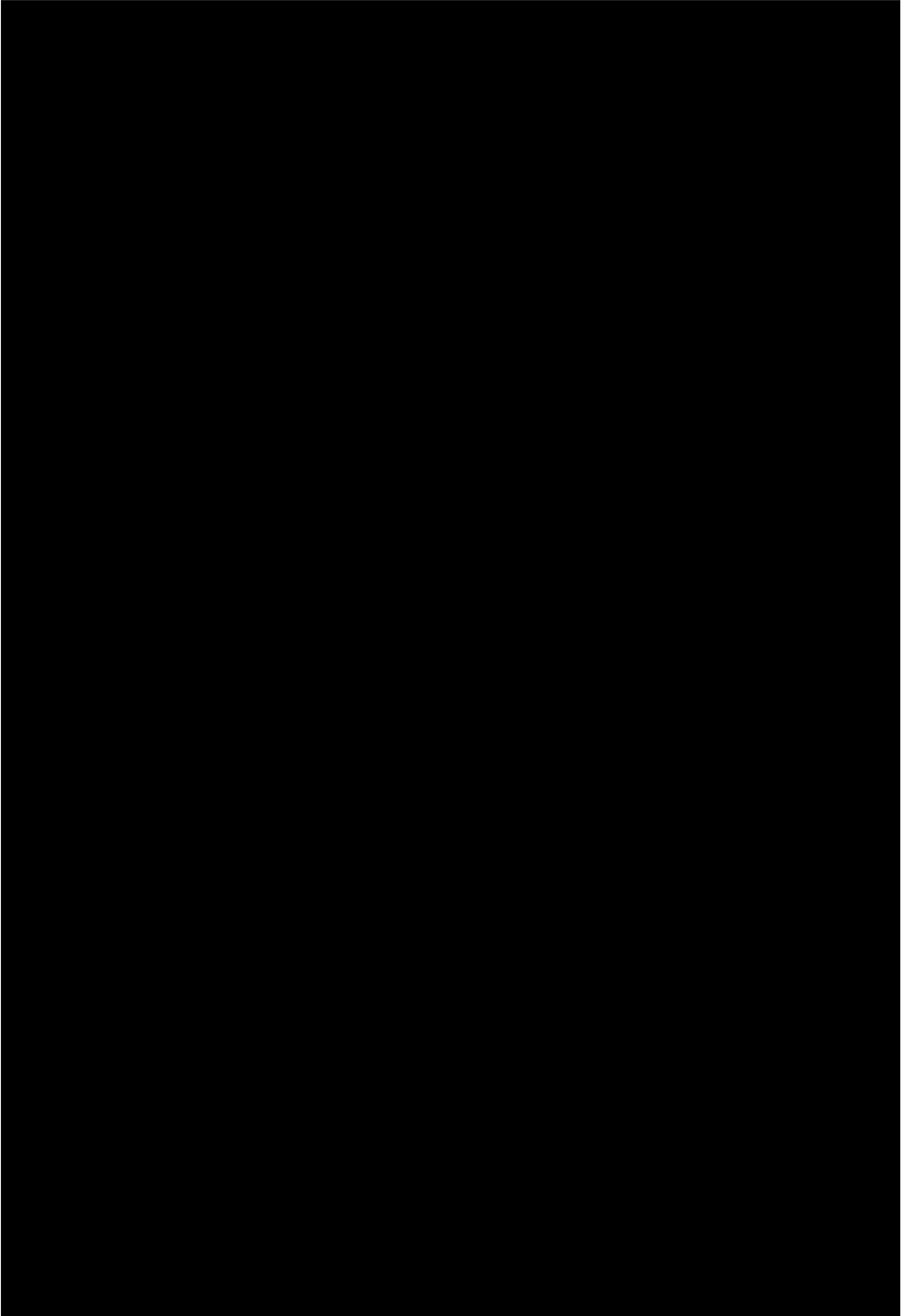


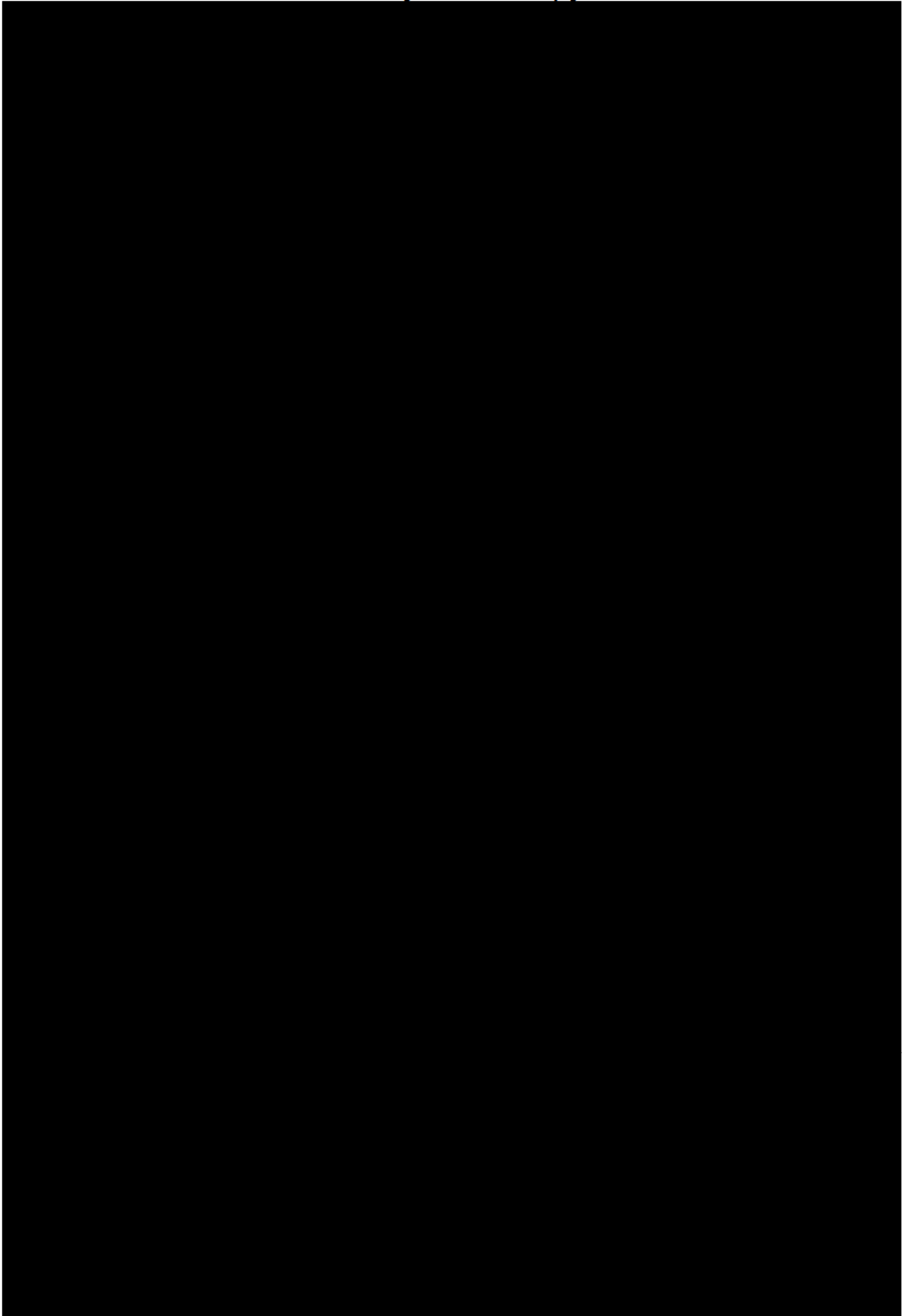


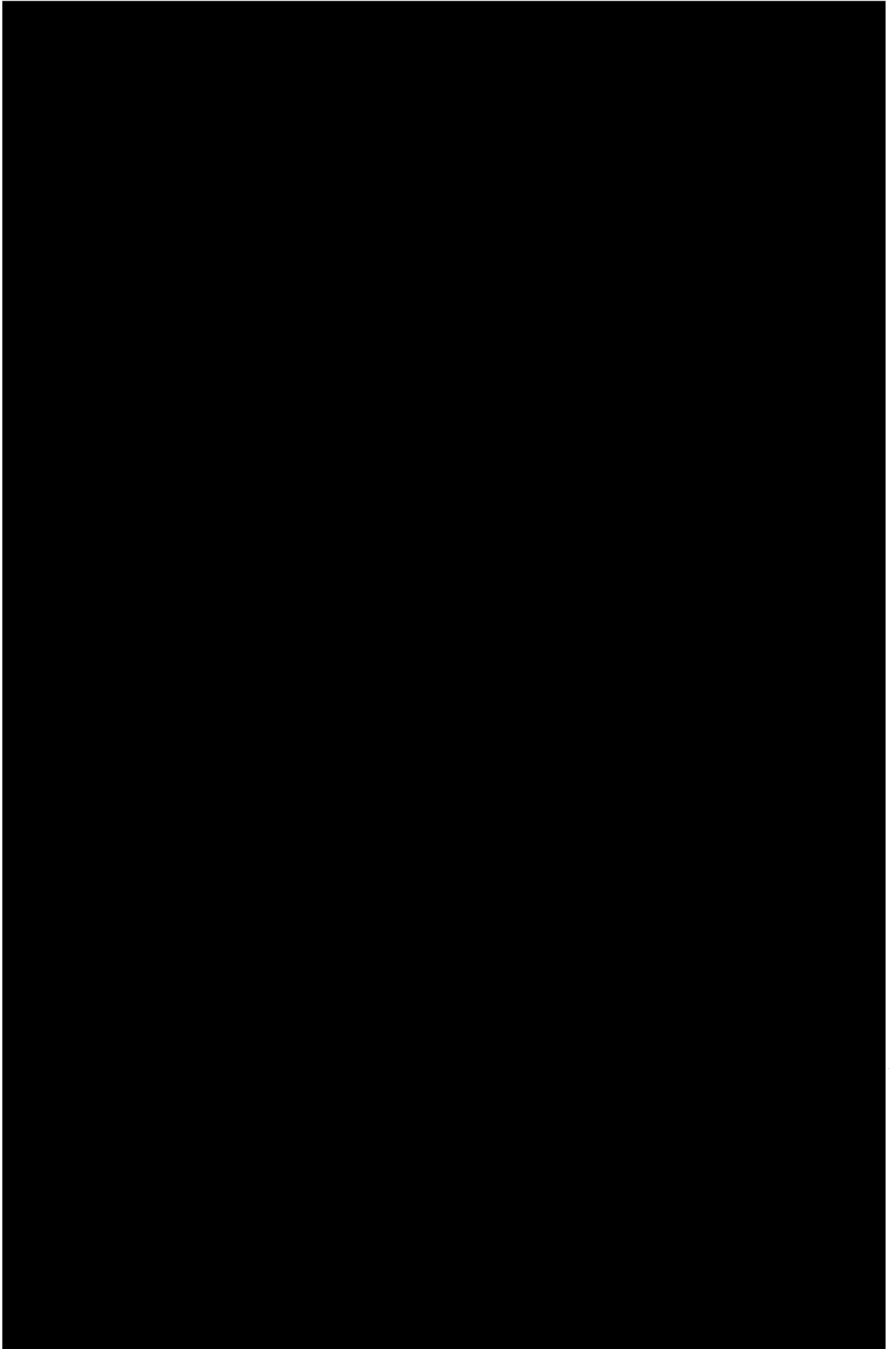


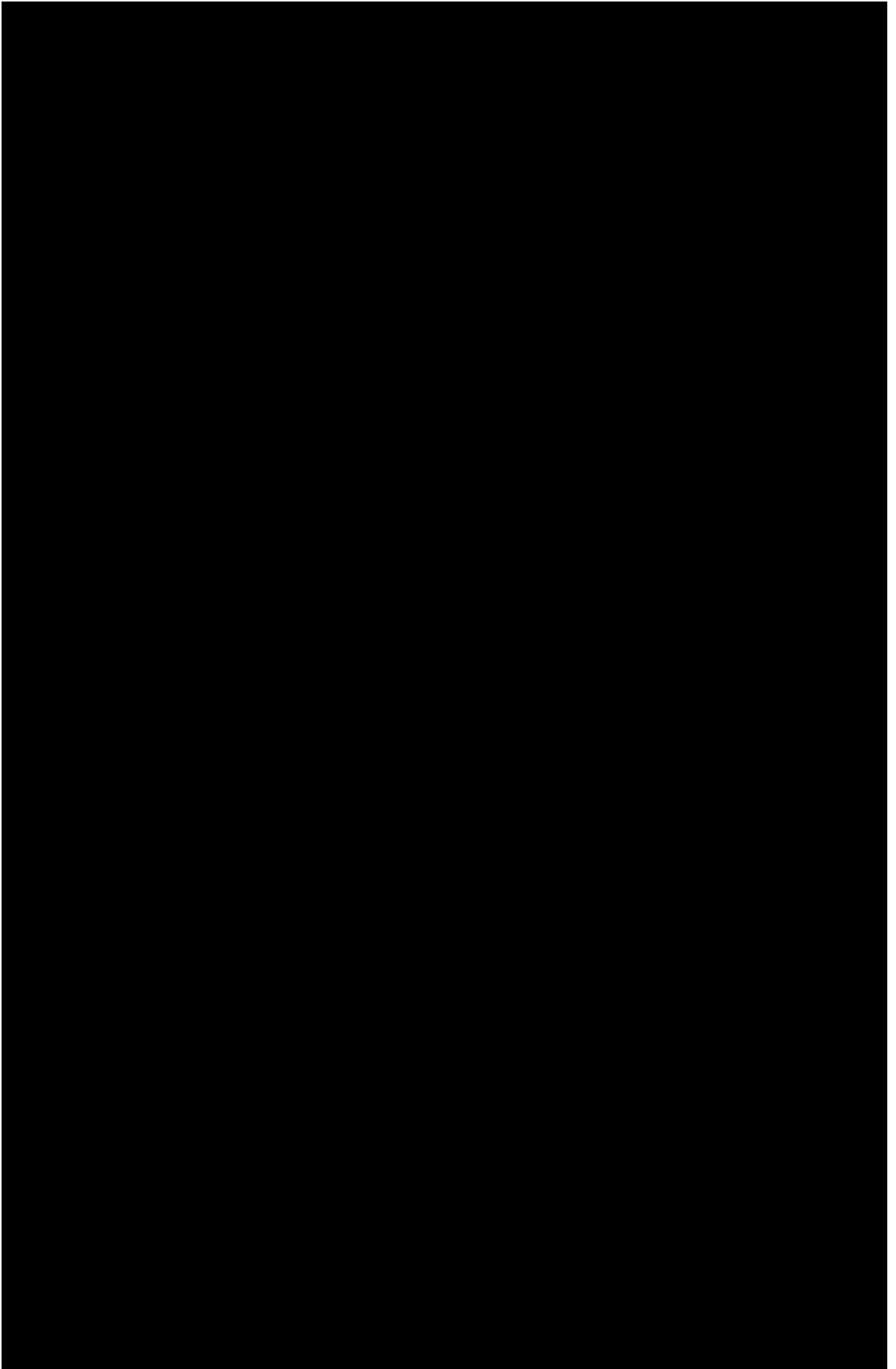


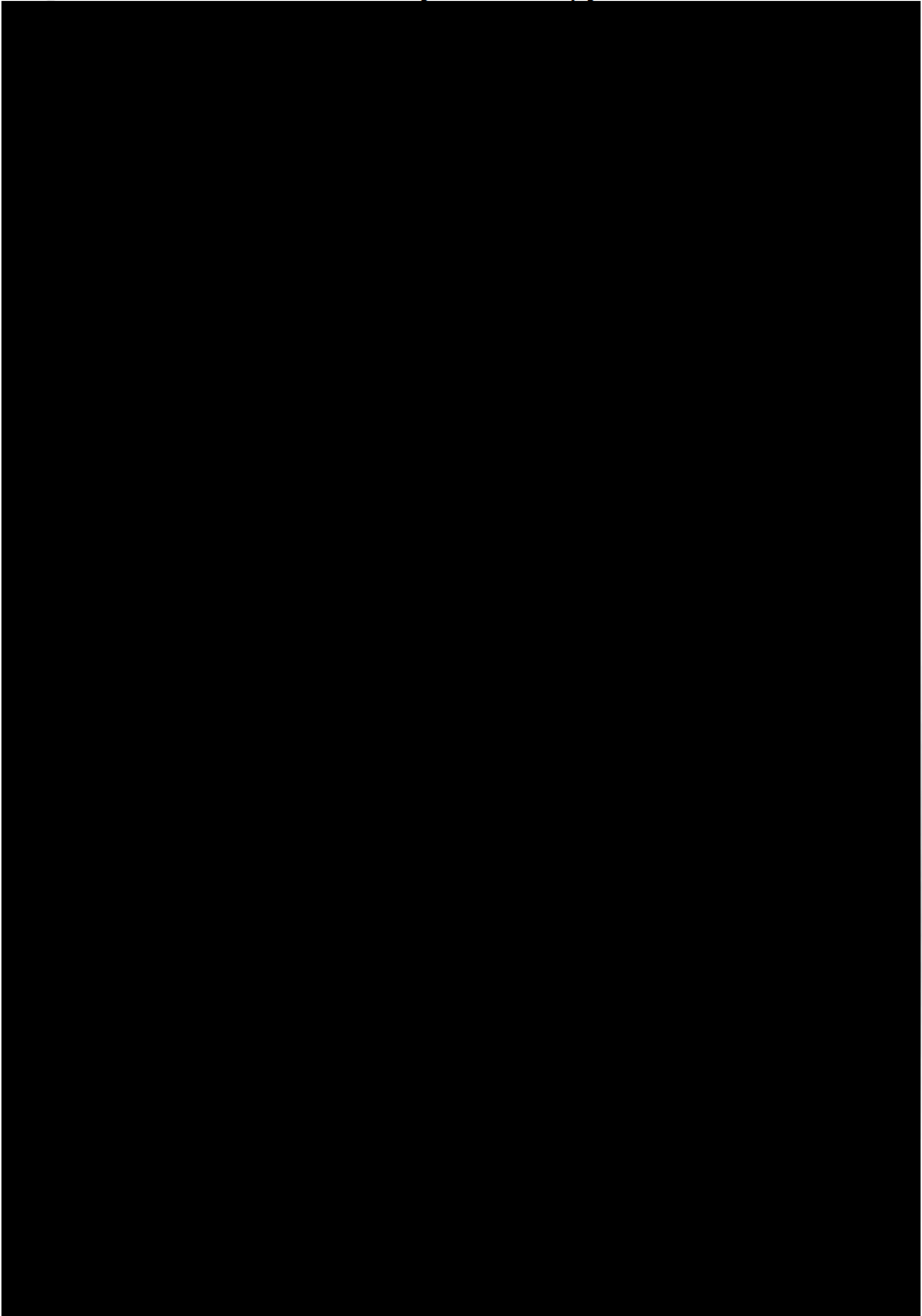


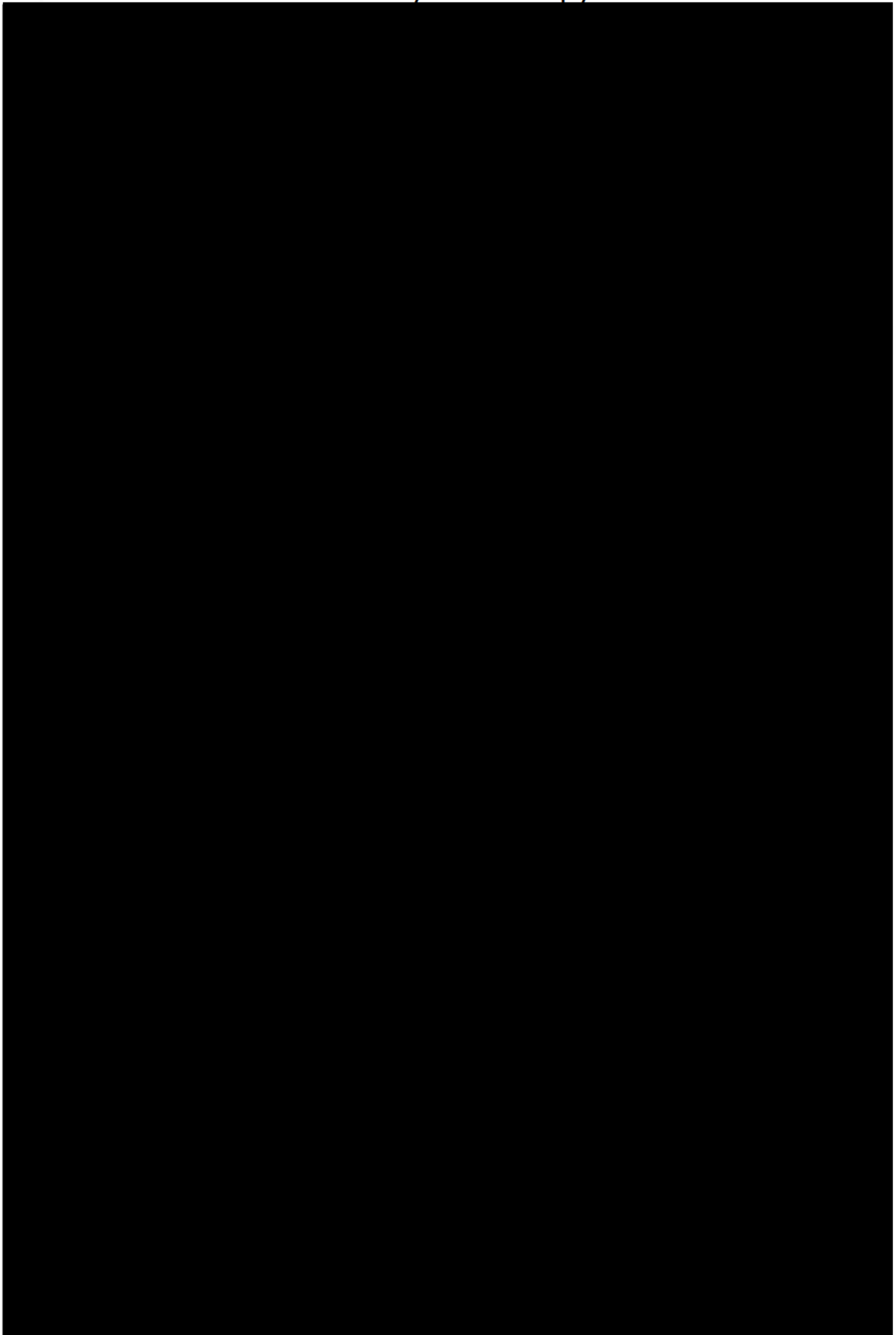


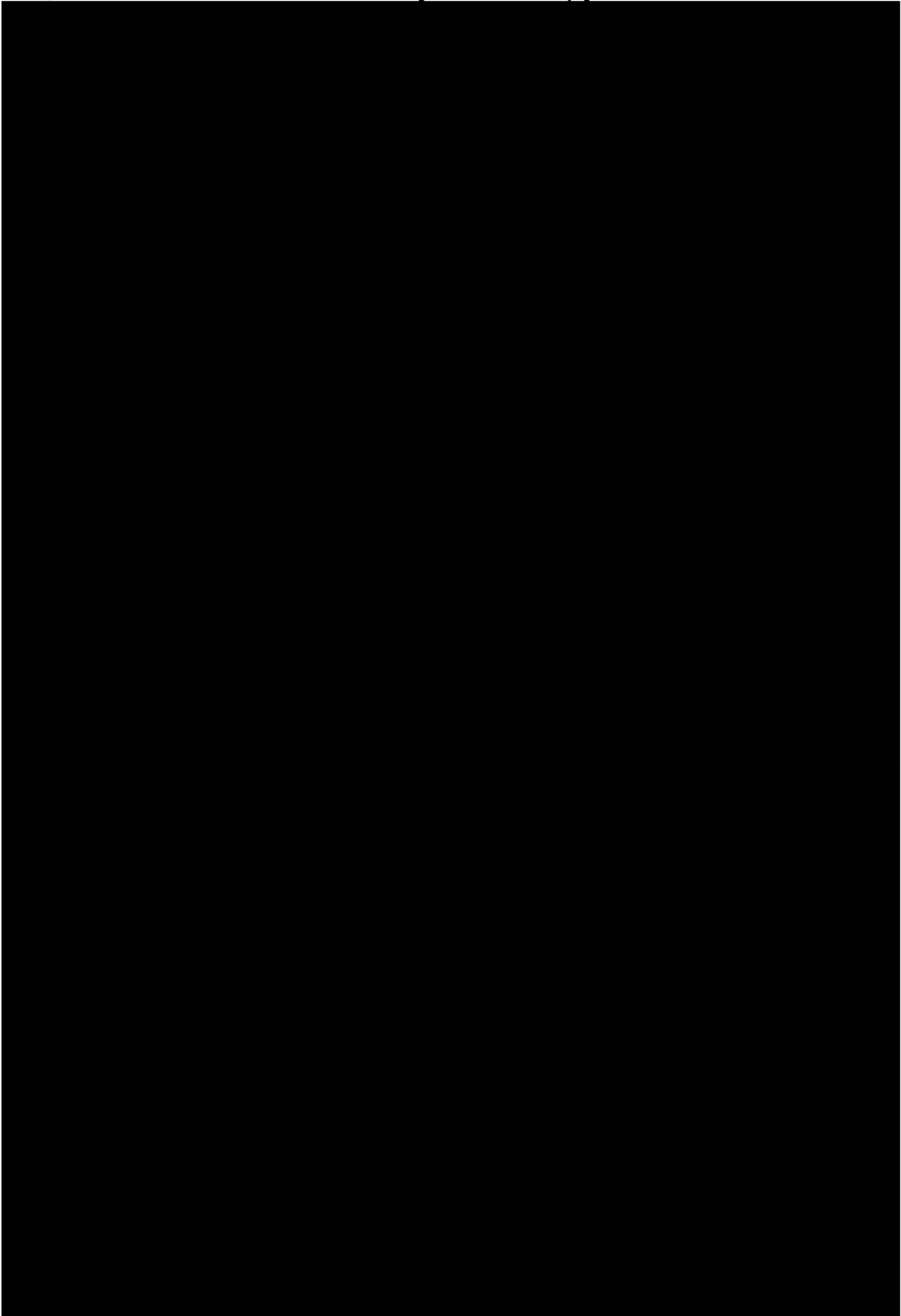




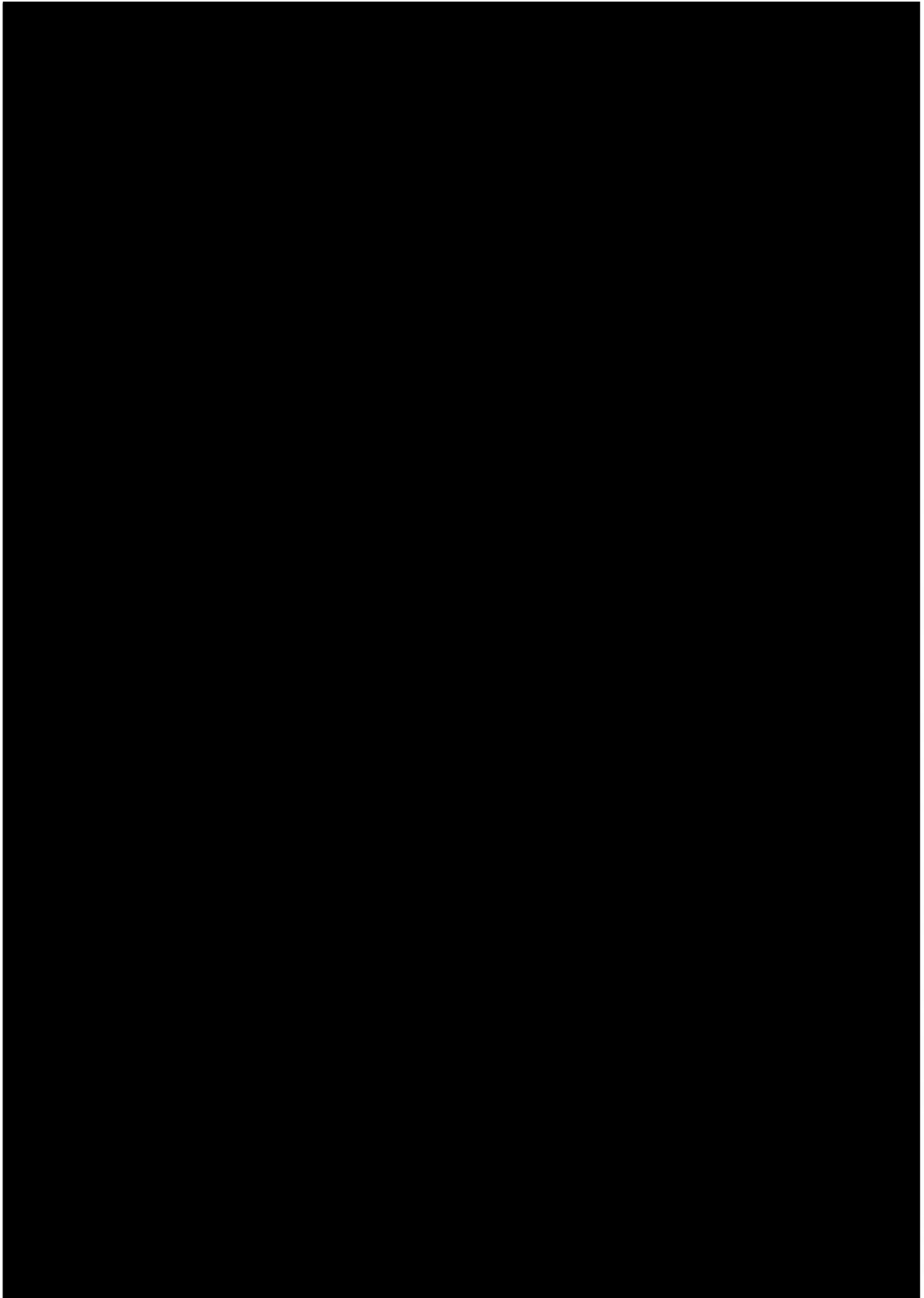


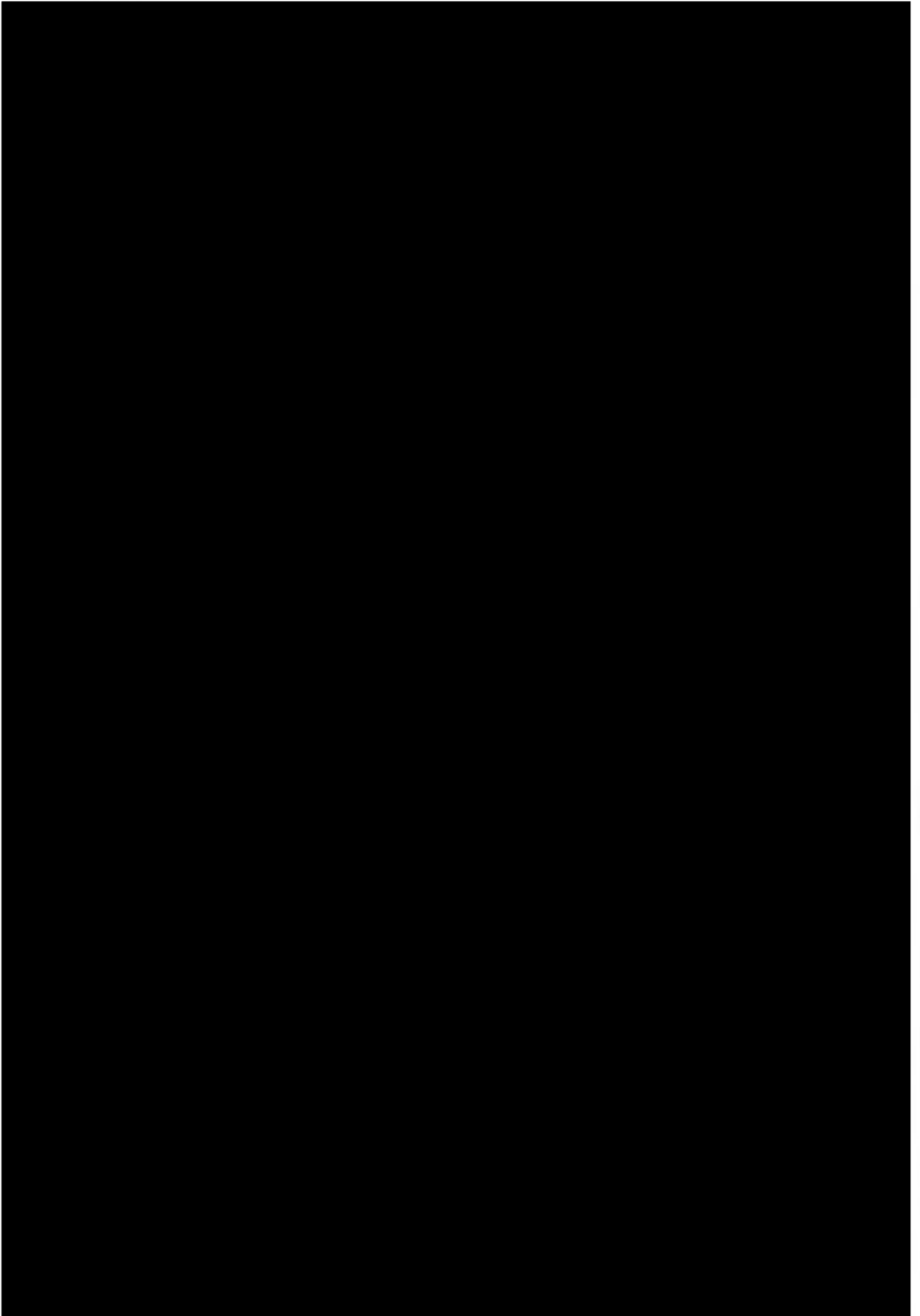


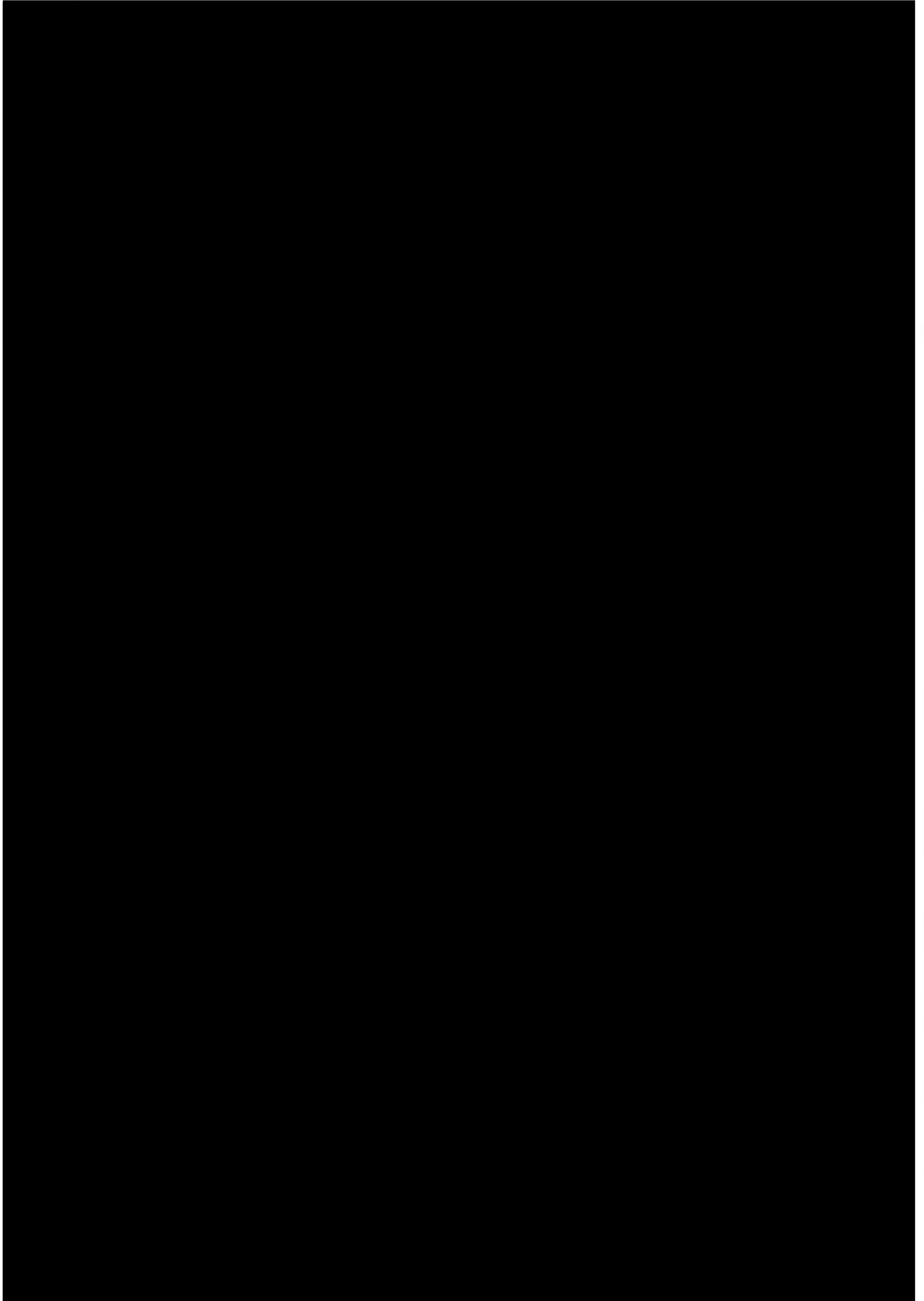












ANNEX C













































































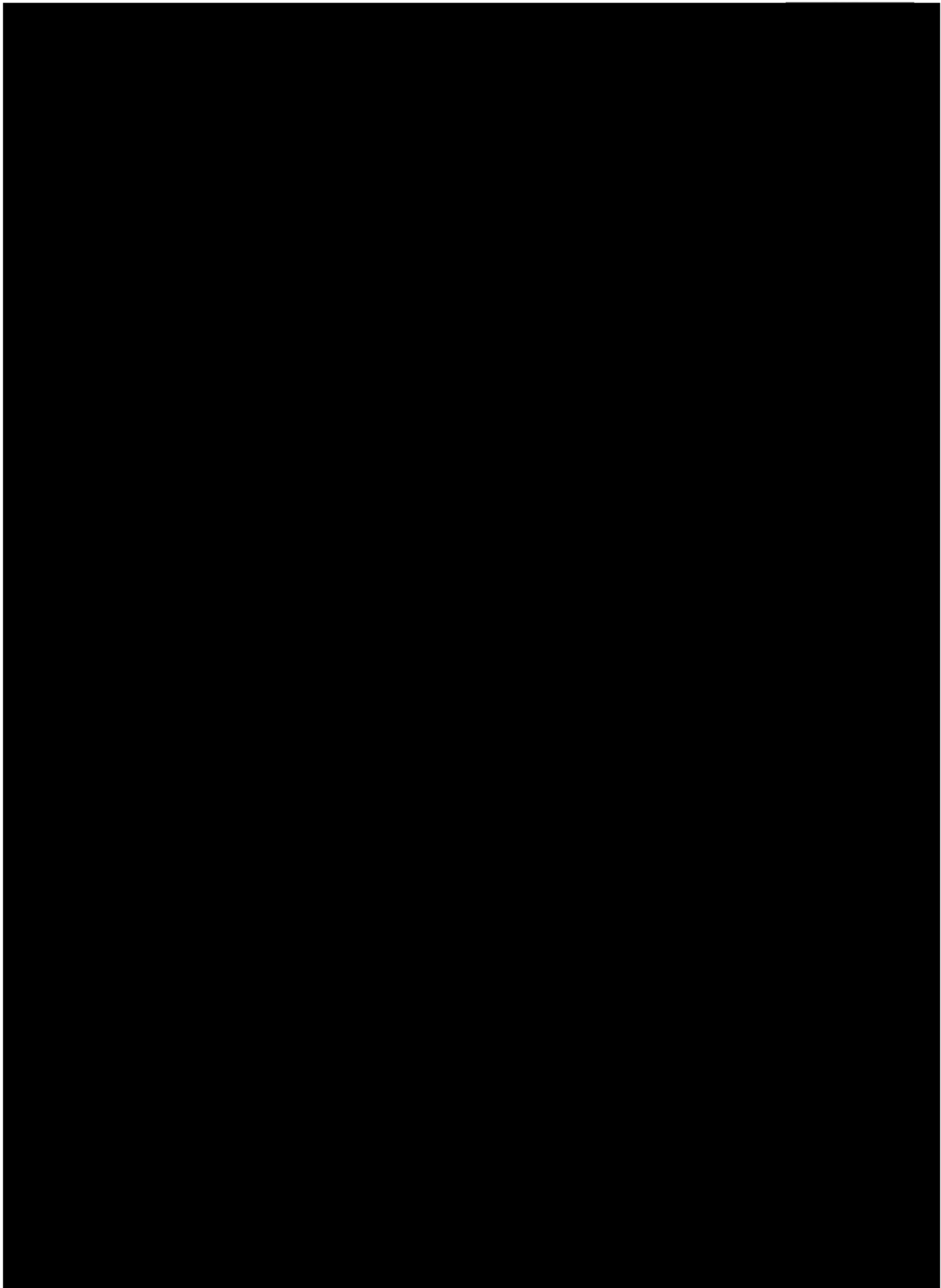


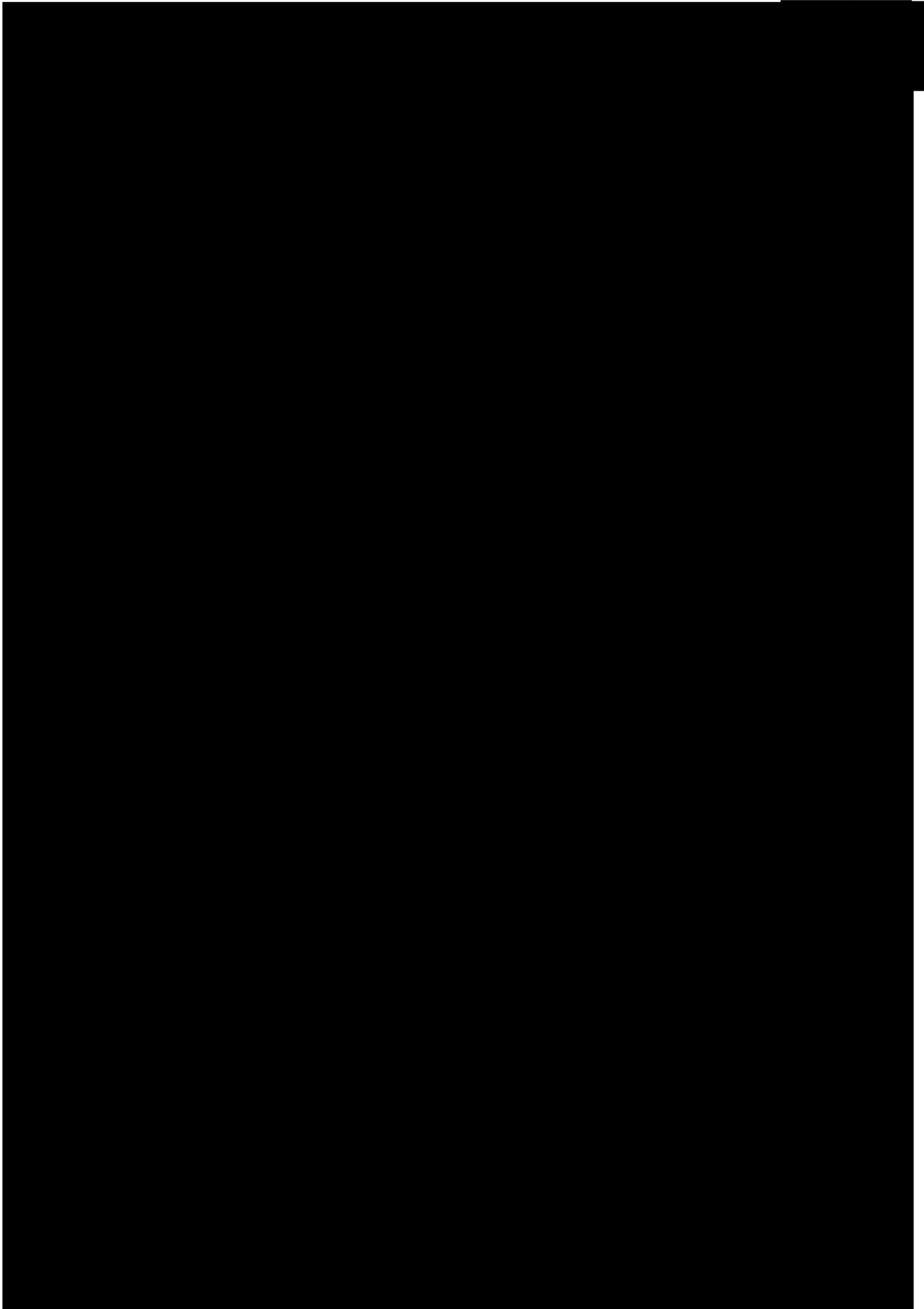


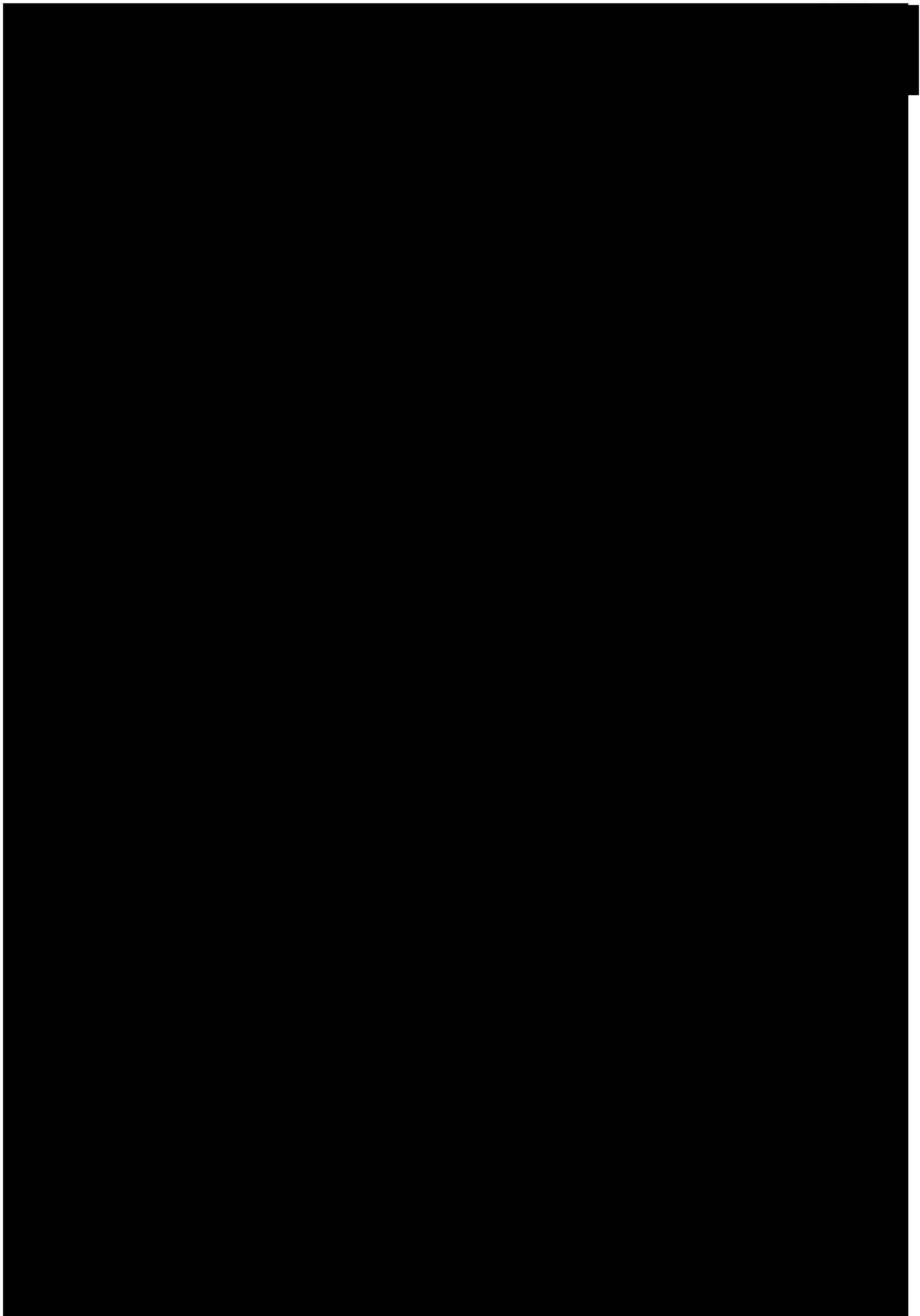


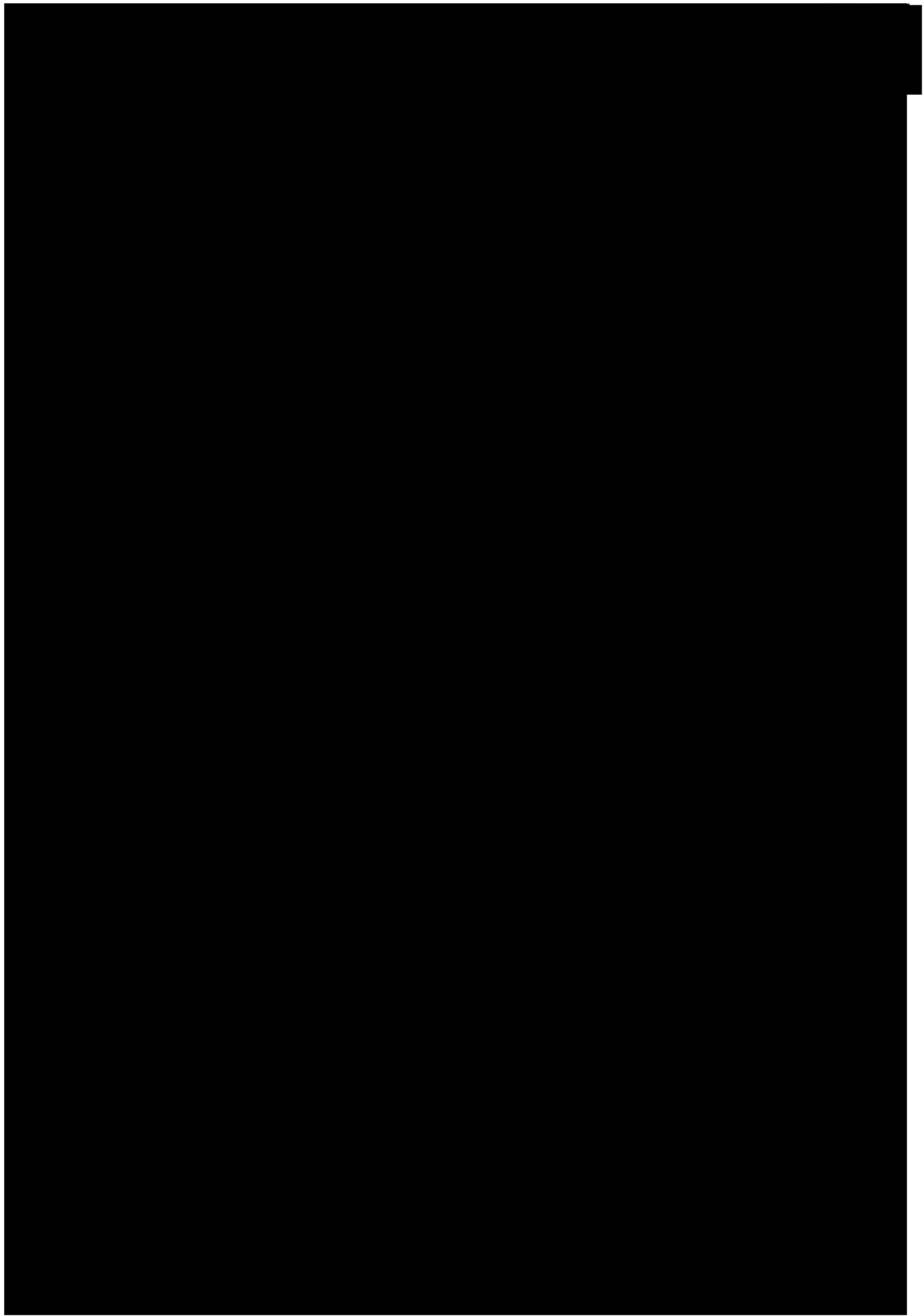


# ATTACHMENT 12

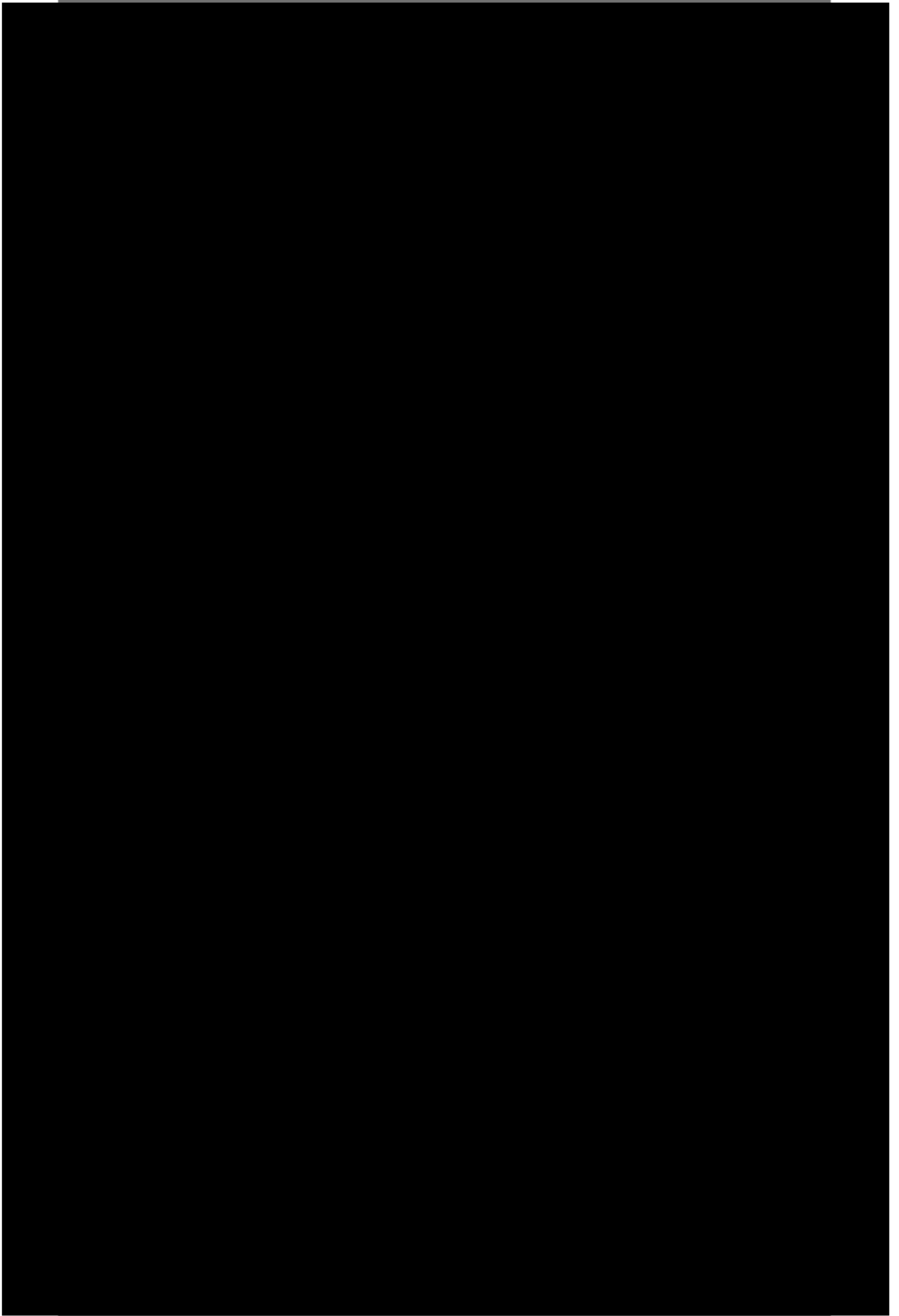




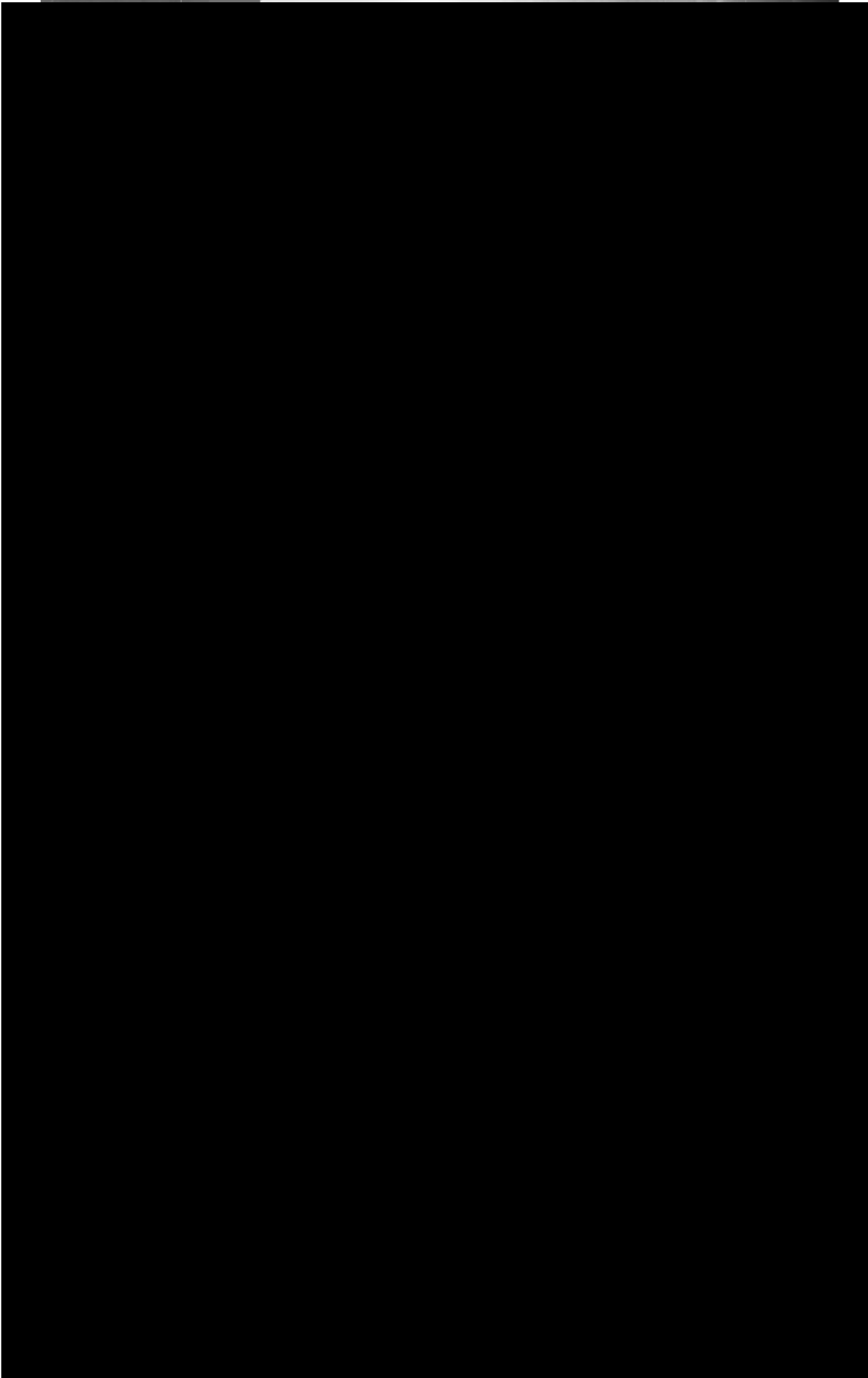


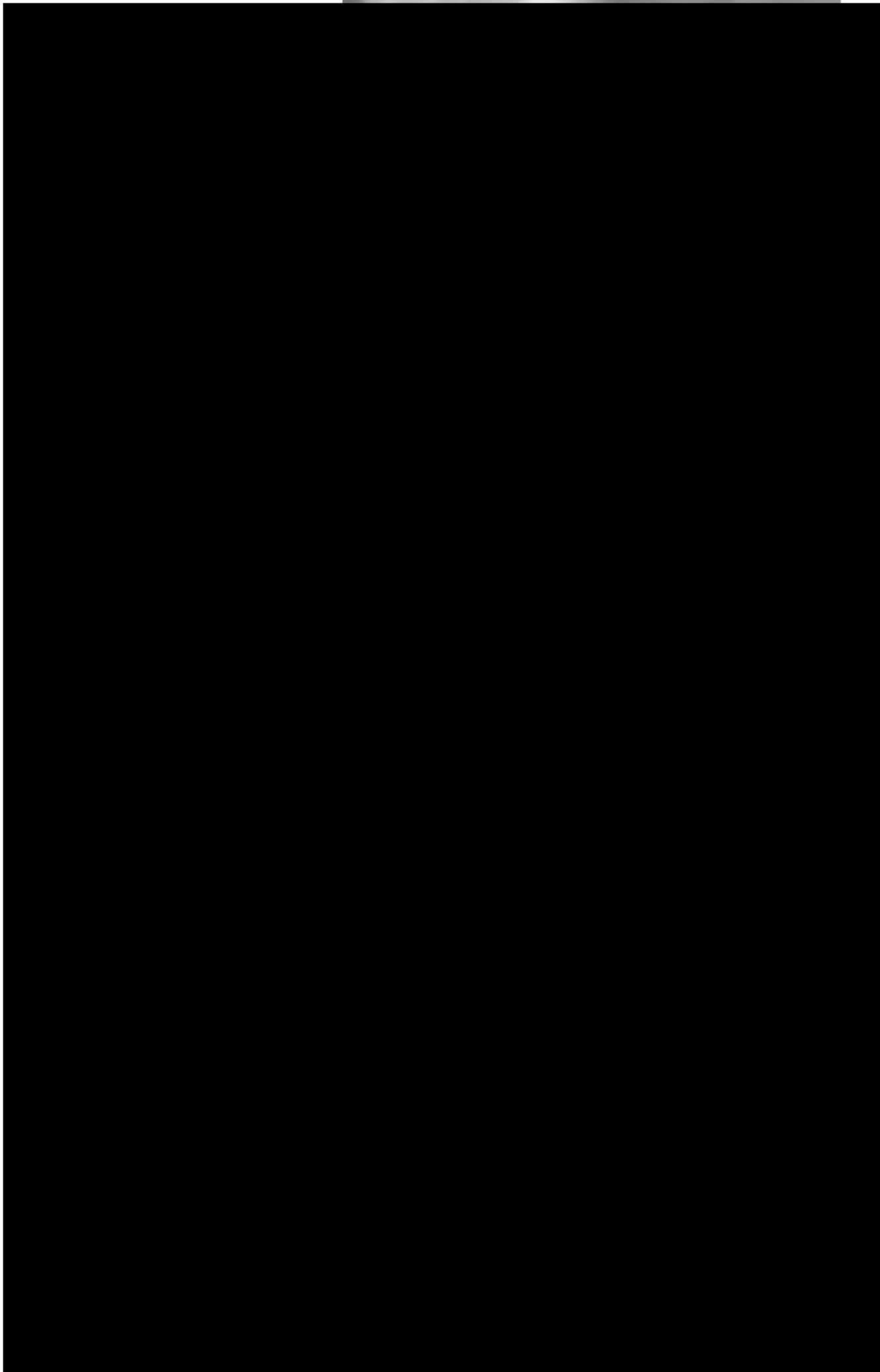


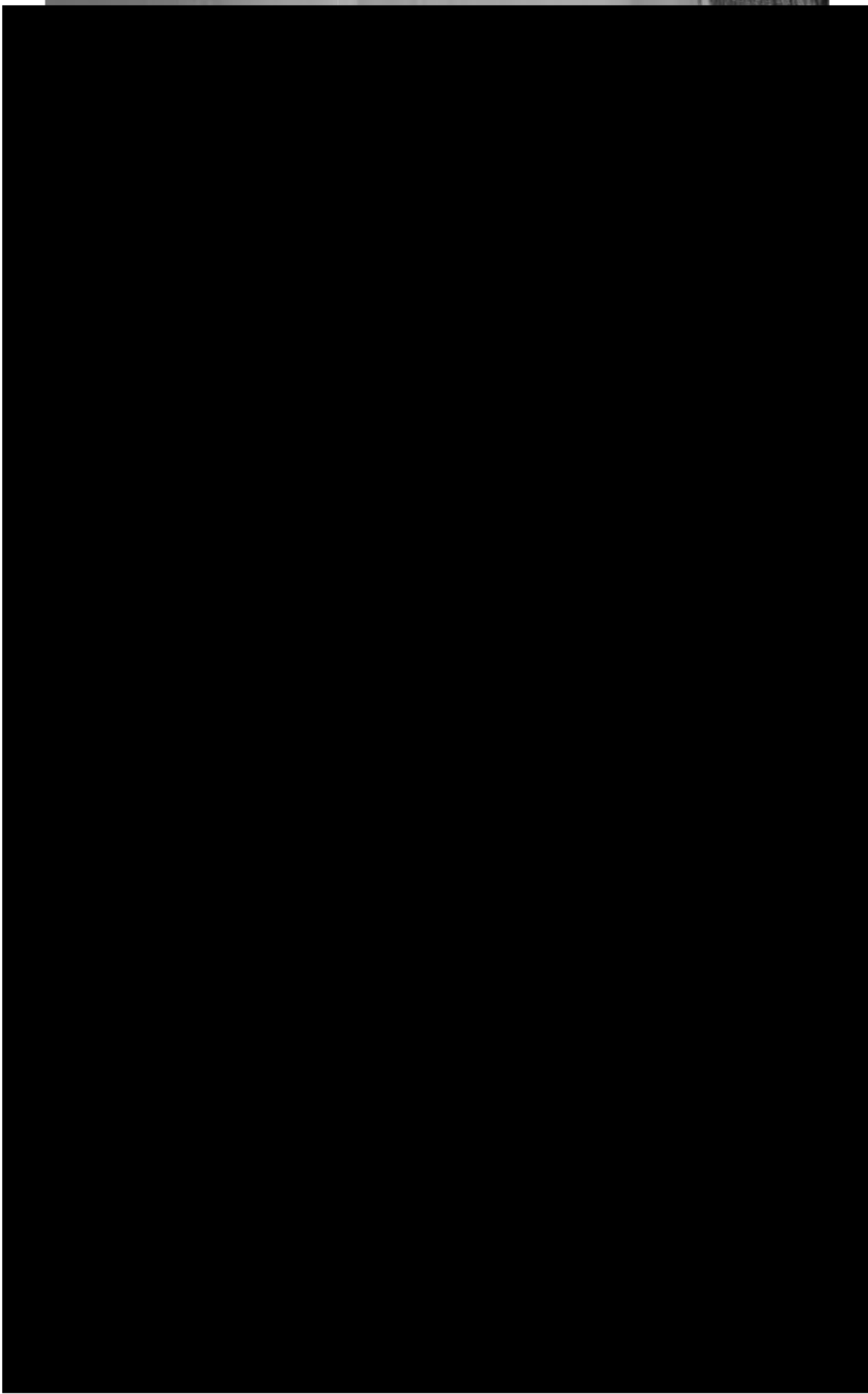
# ANNEX A

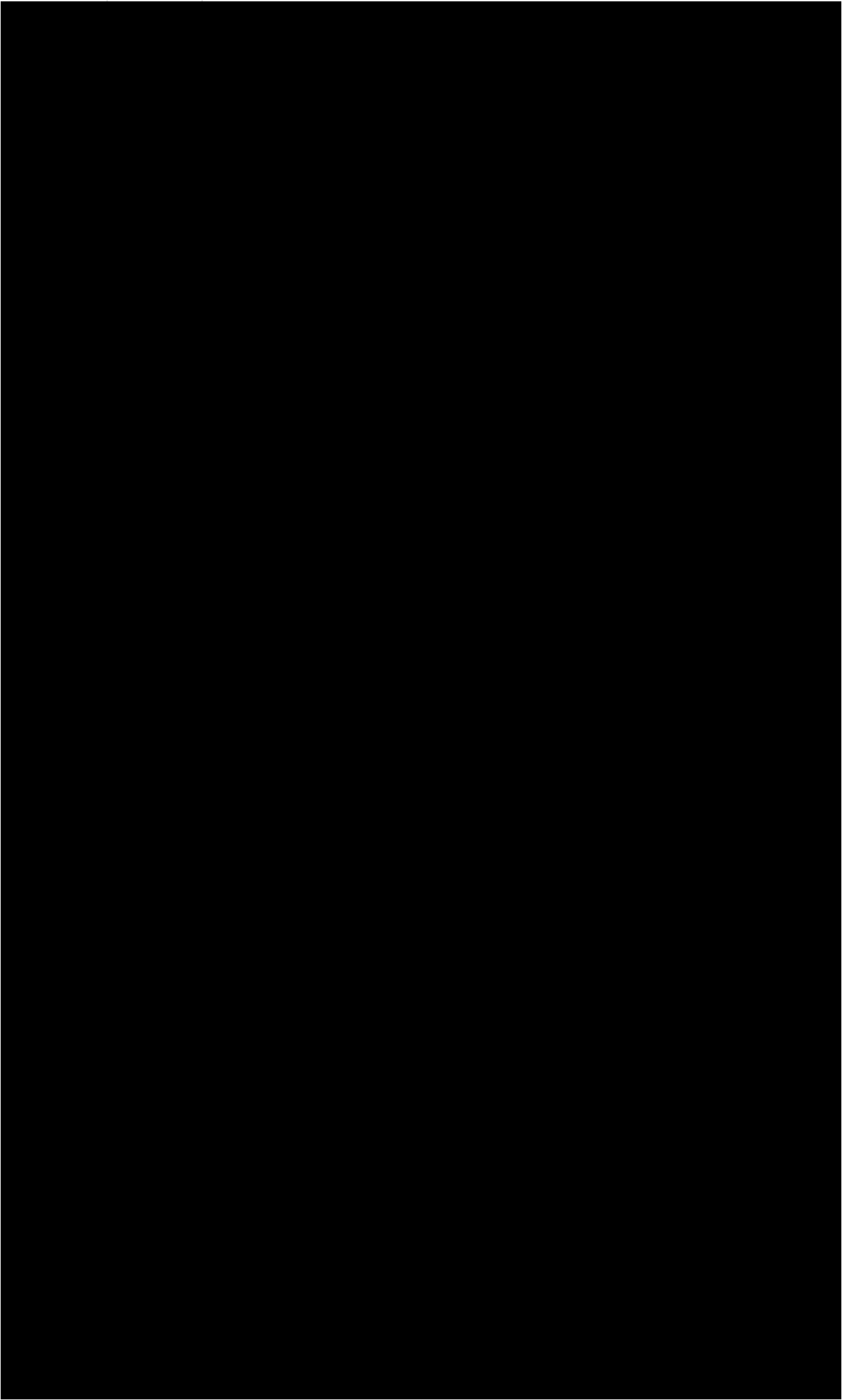


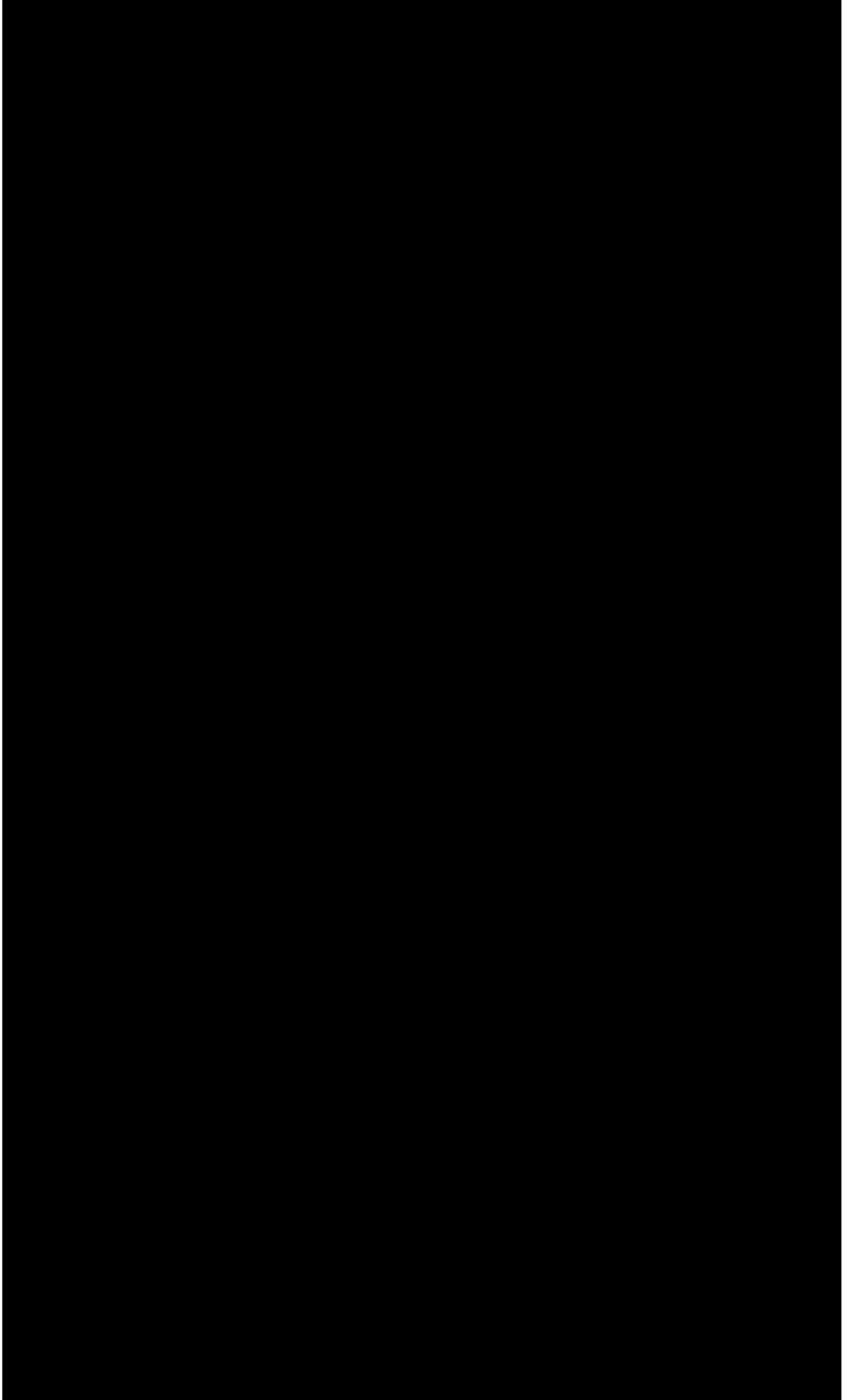


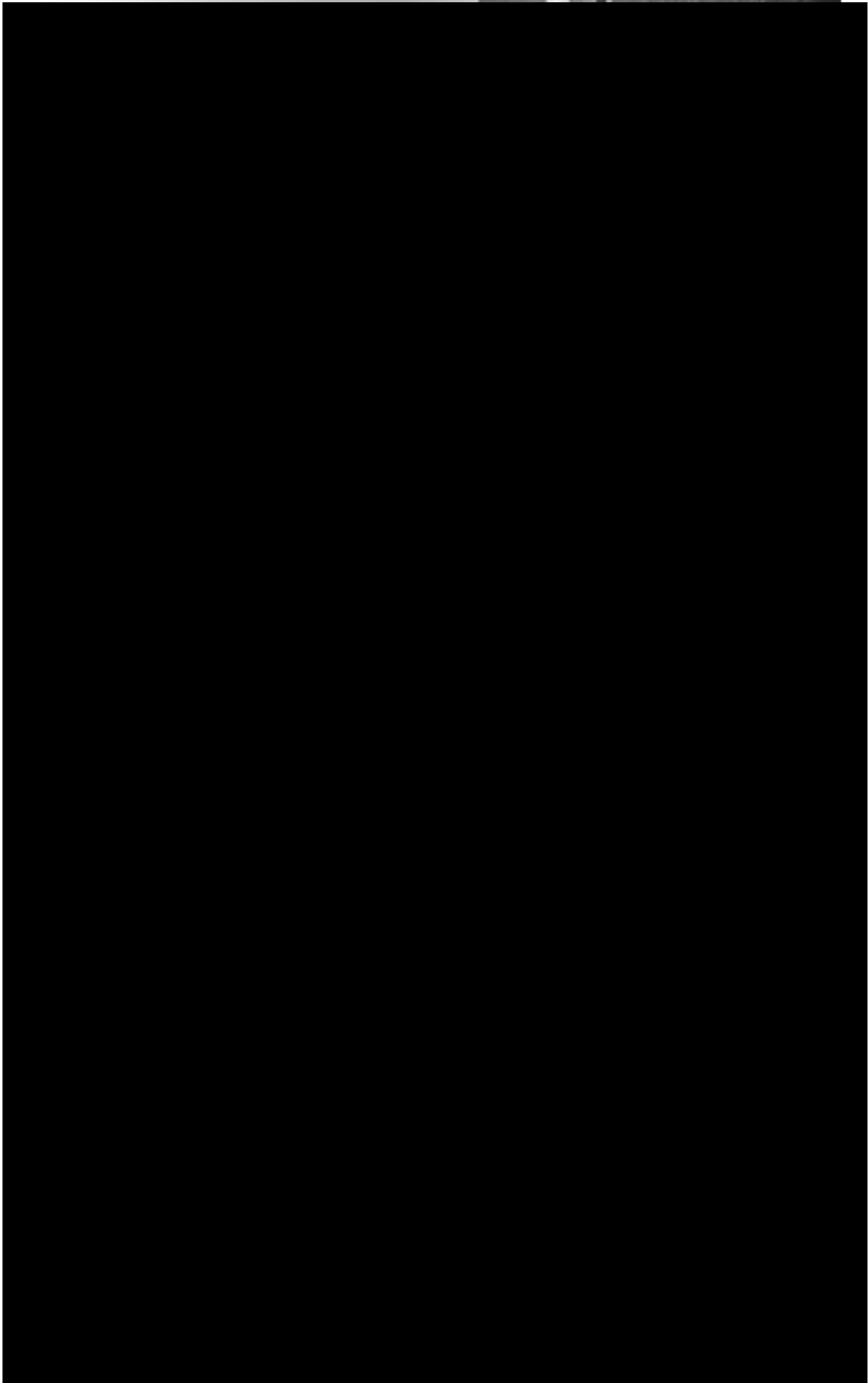


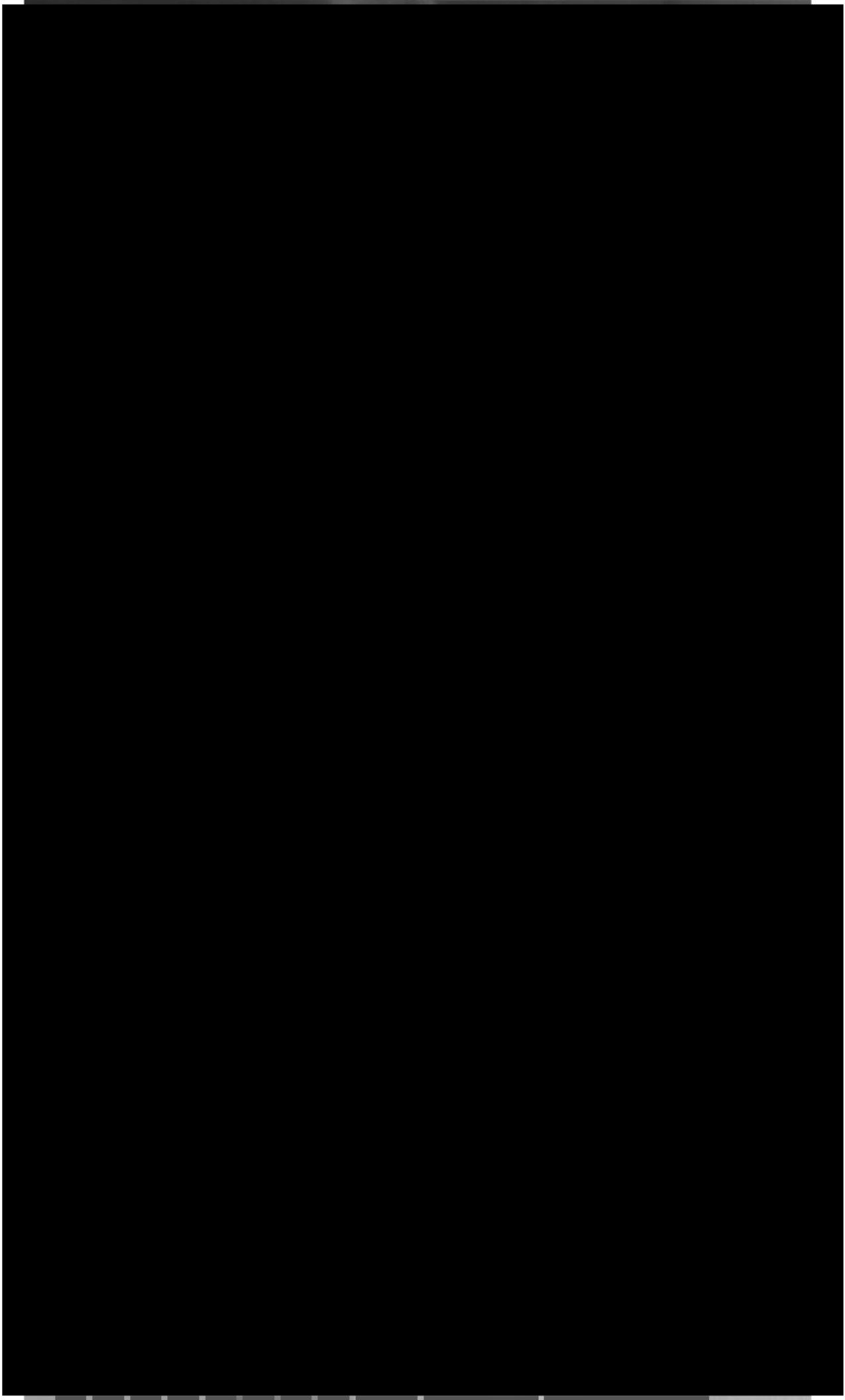


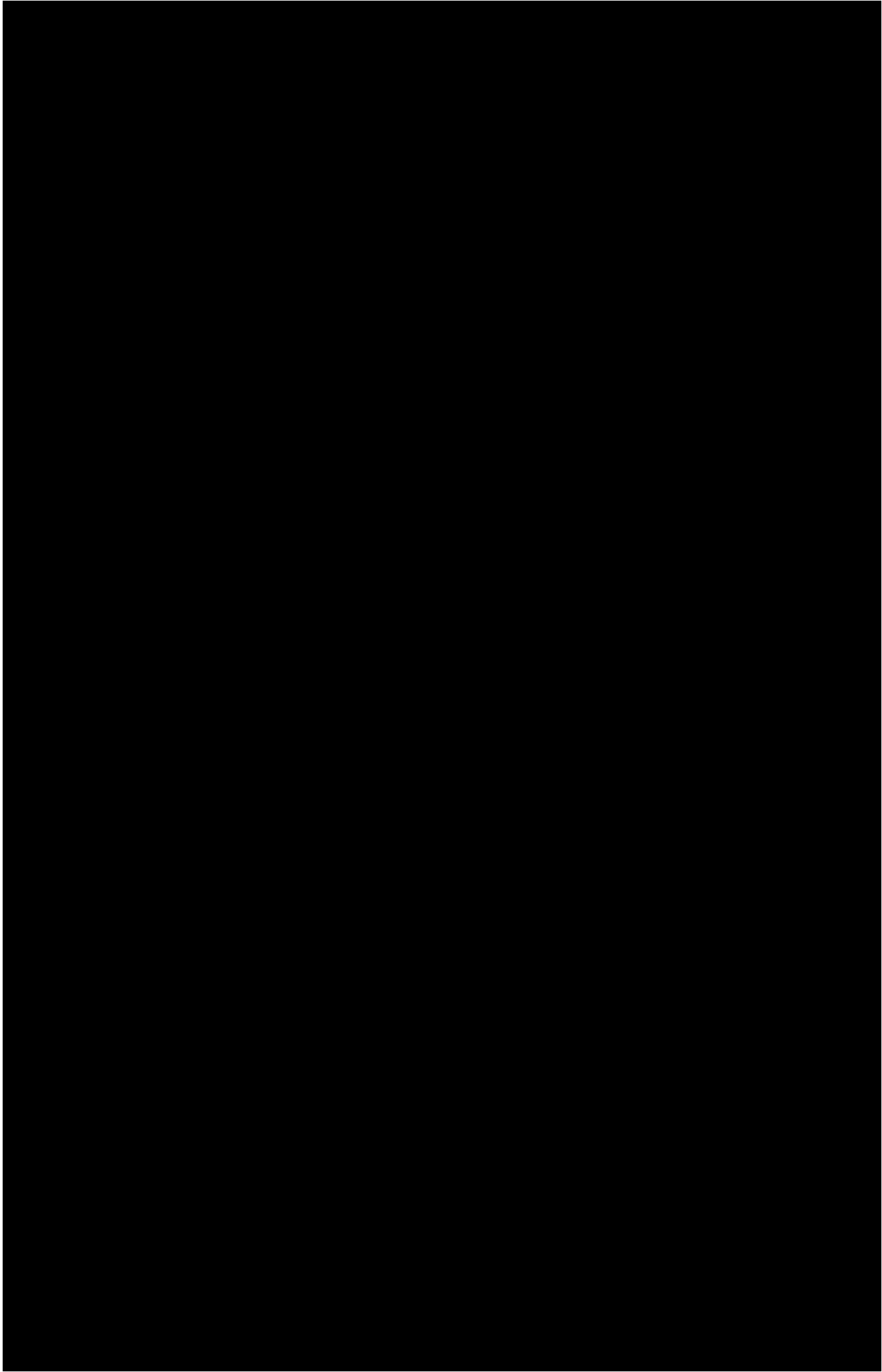




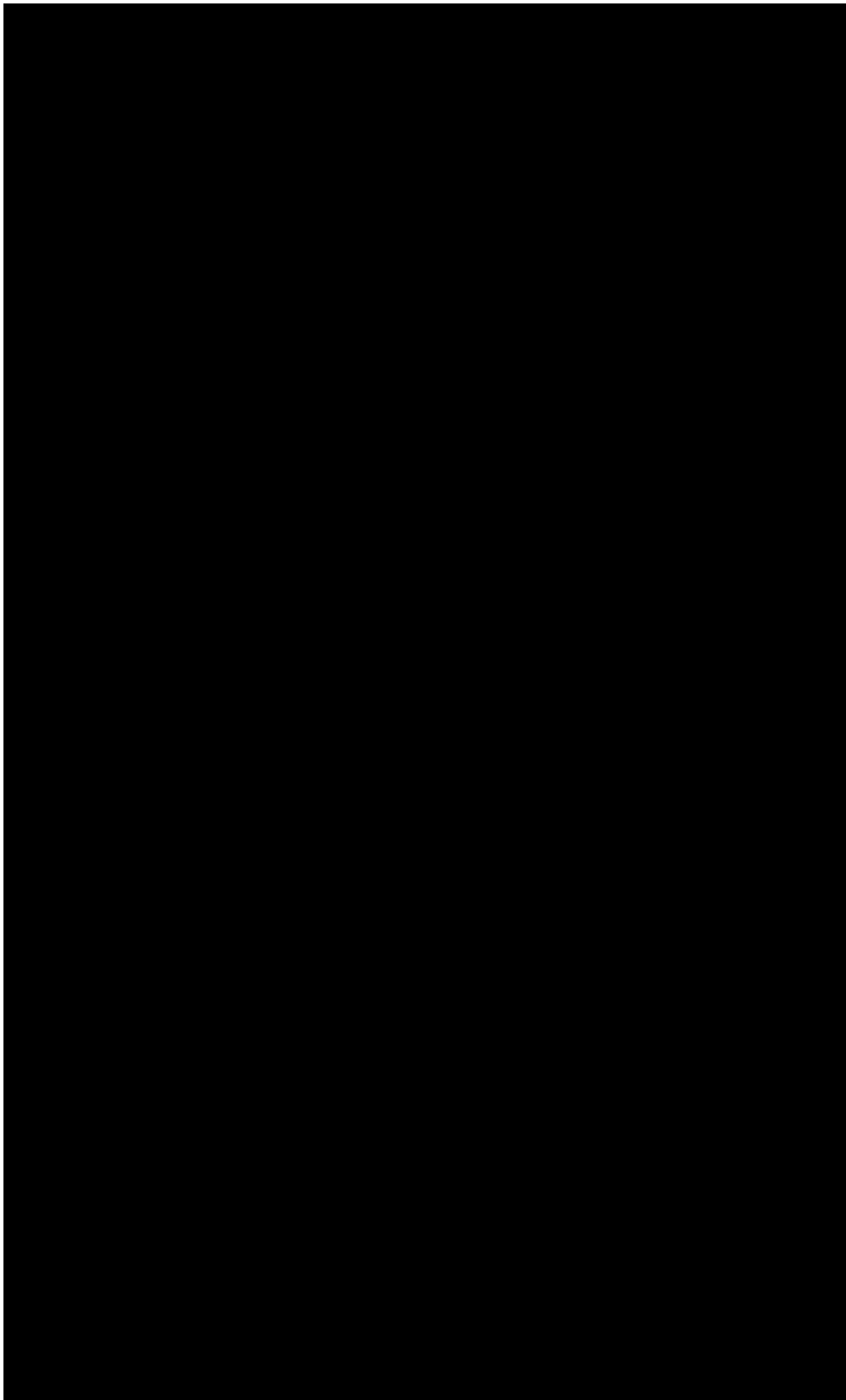


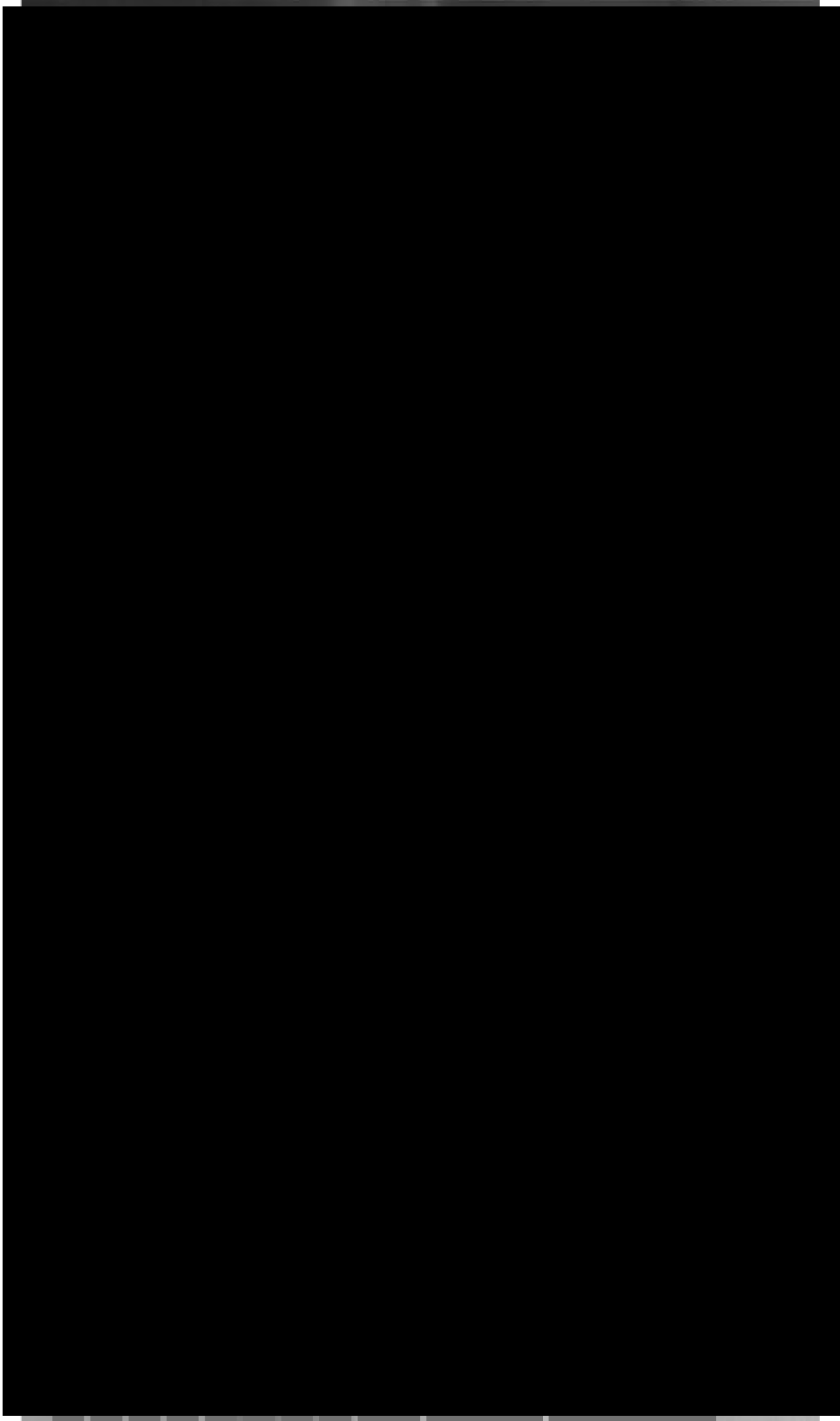


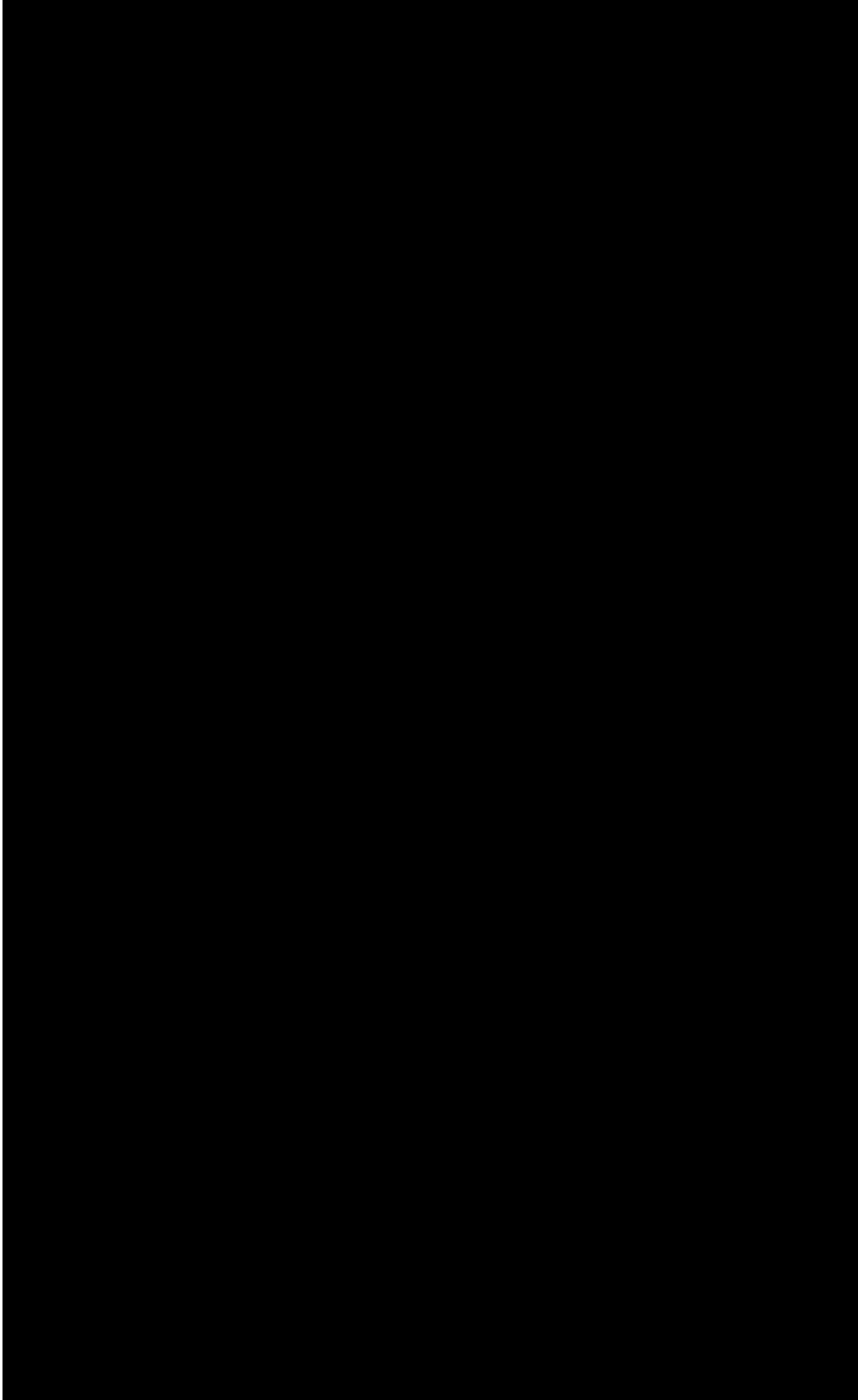


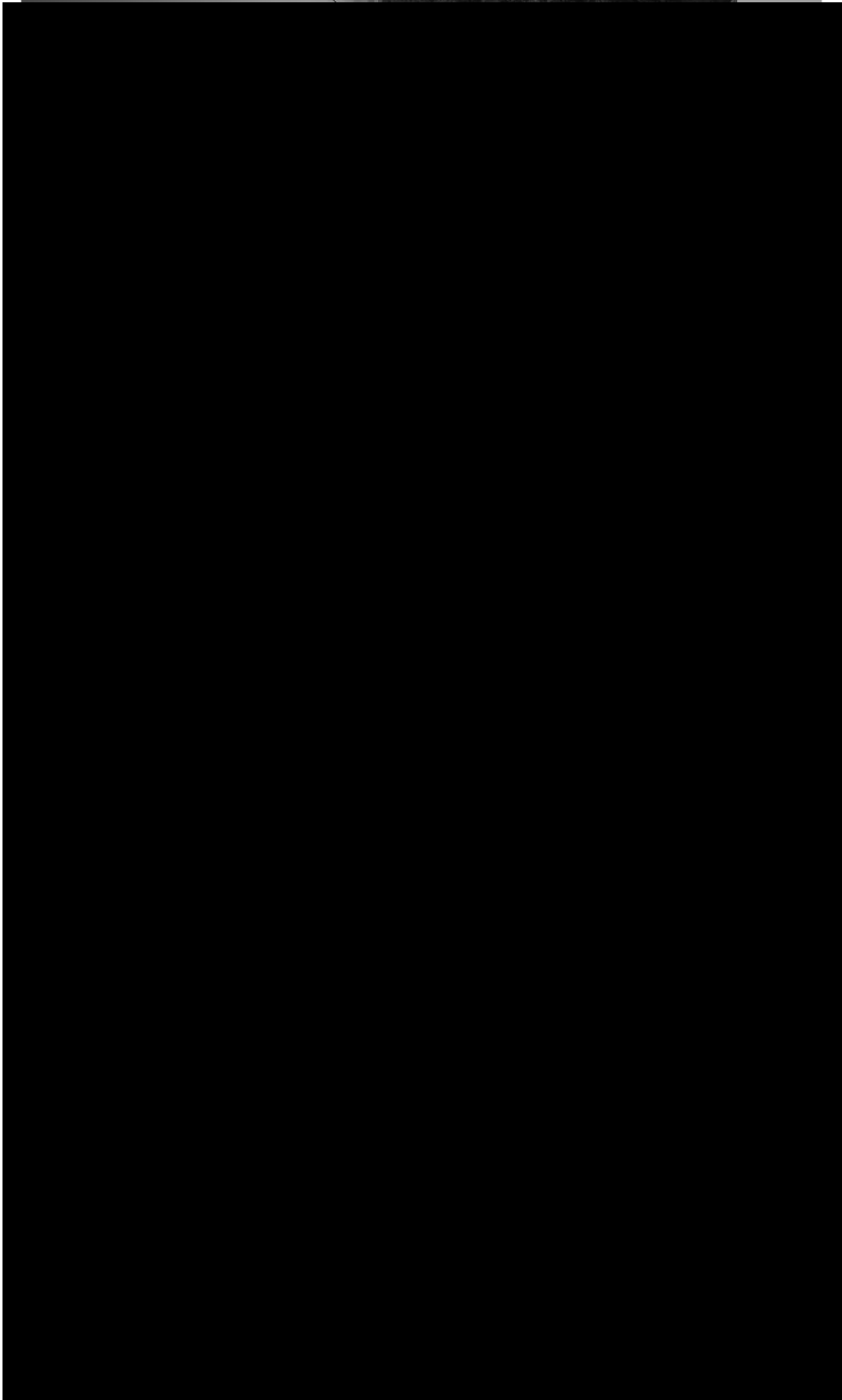


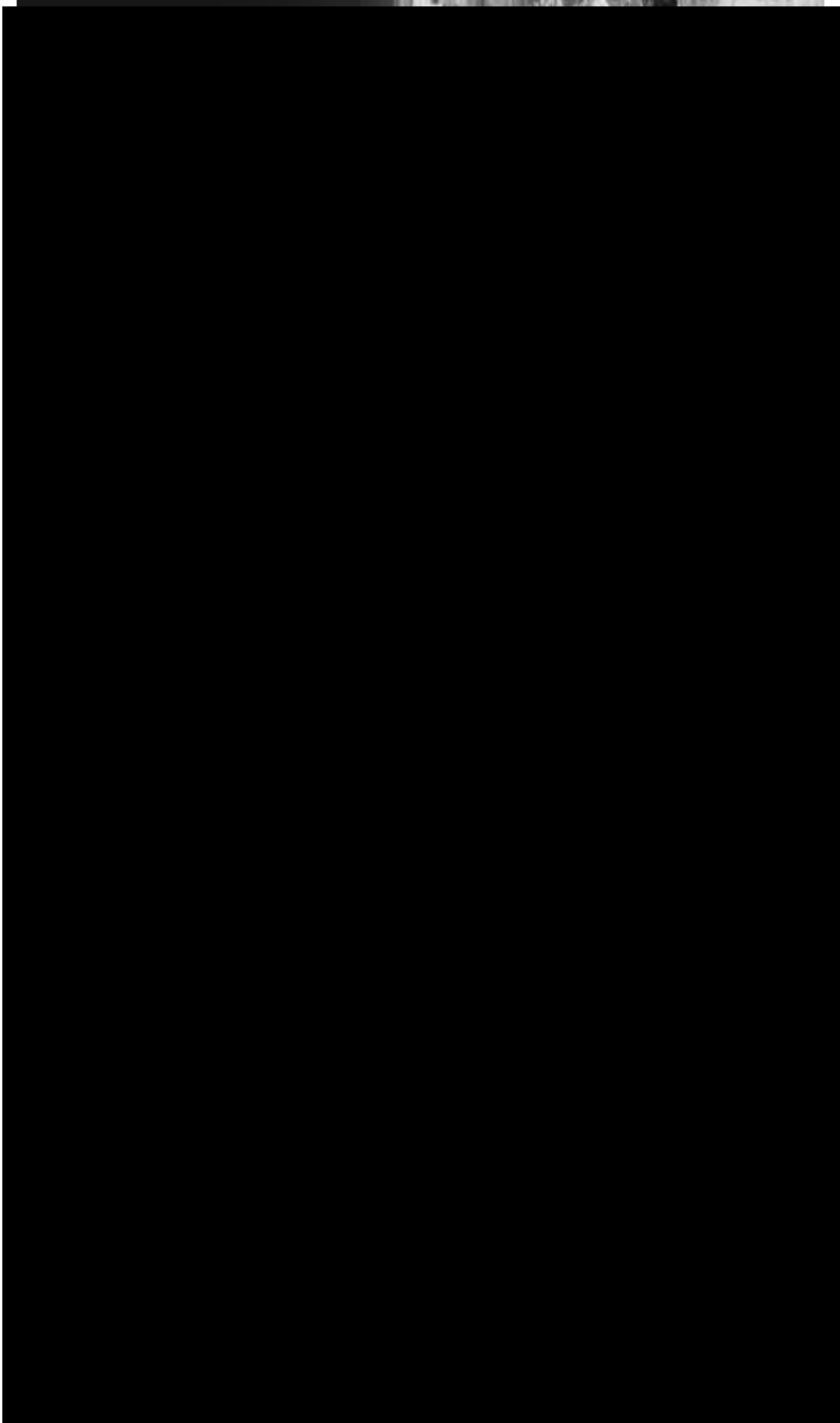


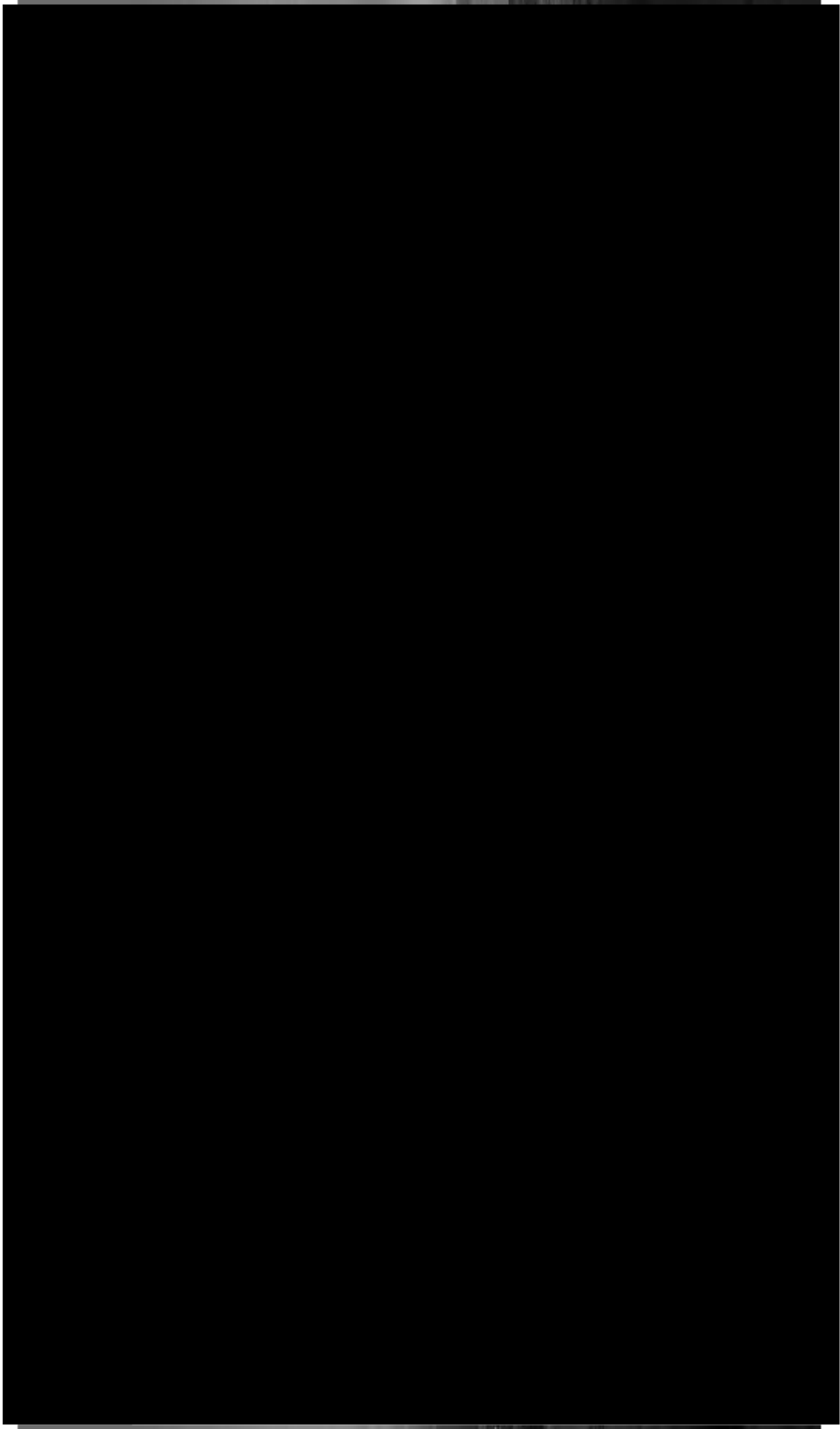


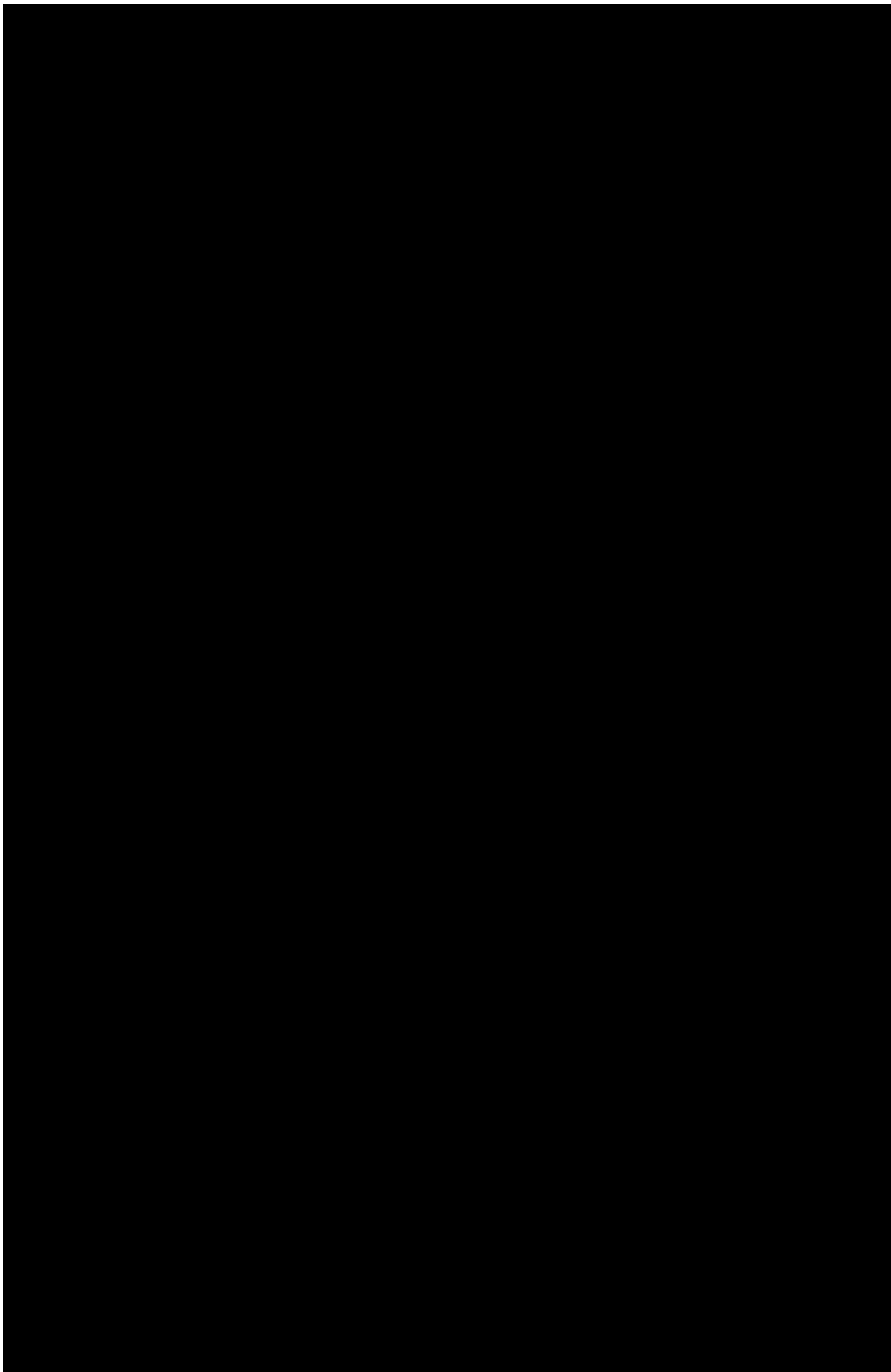


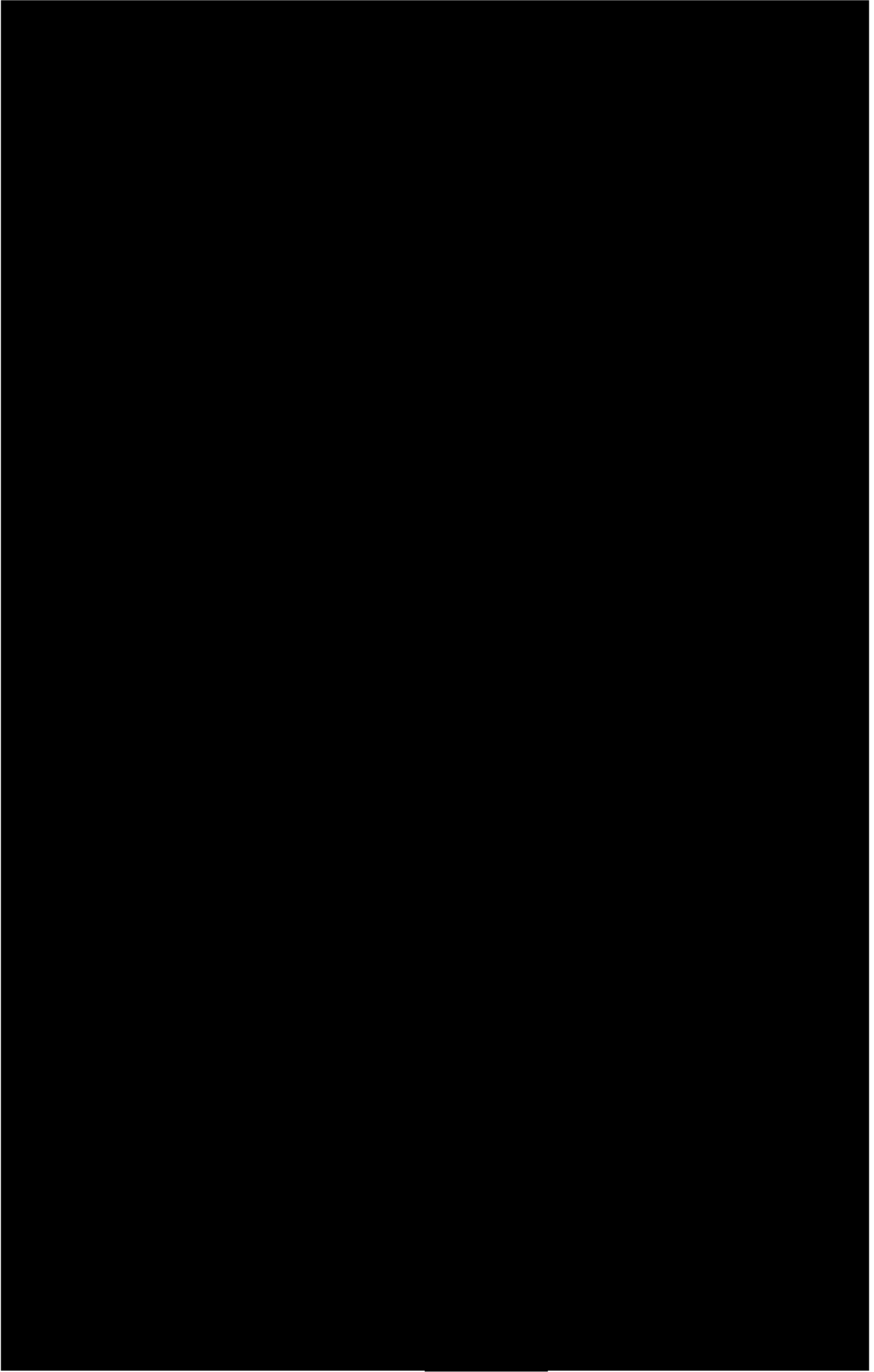




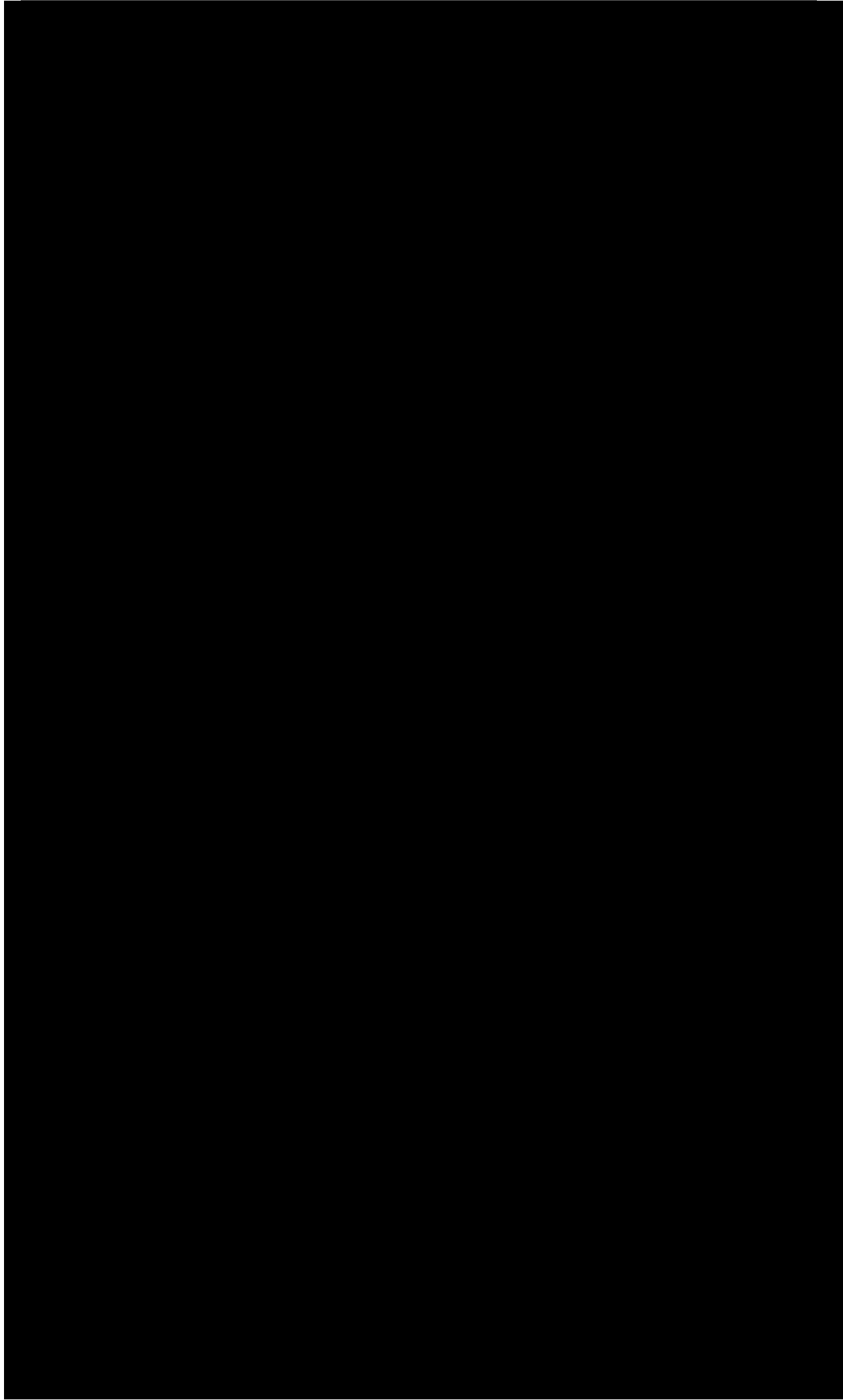












# ATTACHMENT 13







ANNEX A























































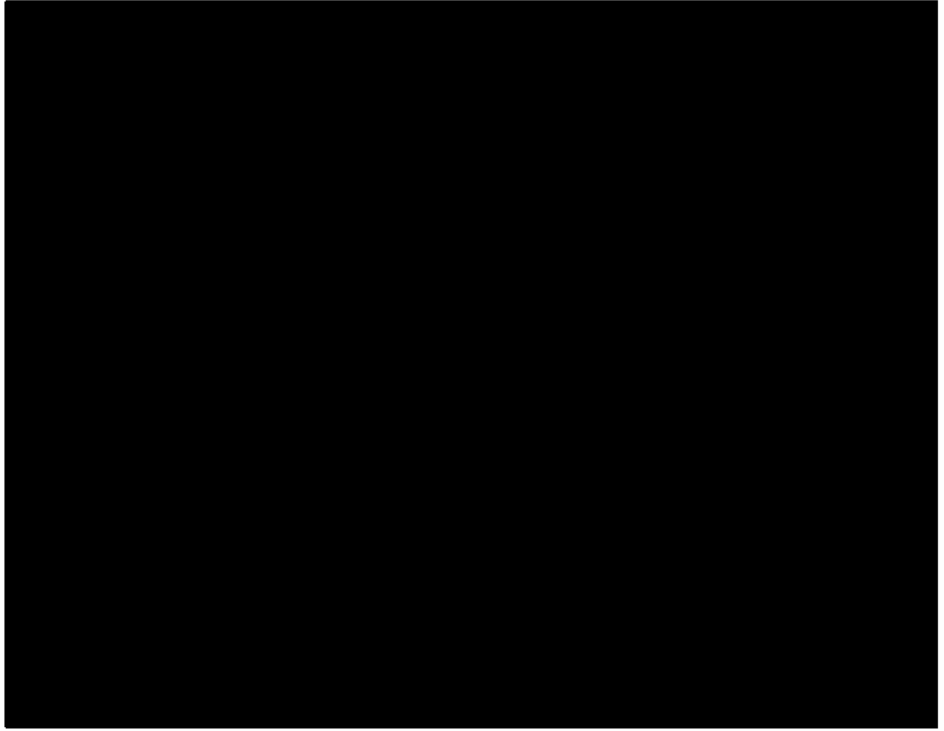








ANNEX B









































































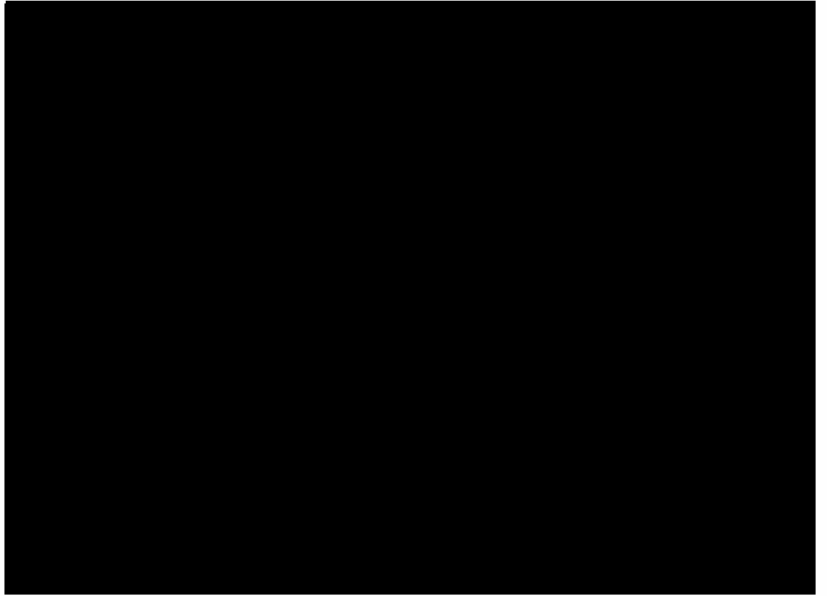




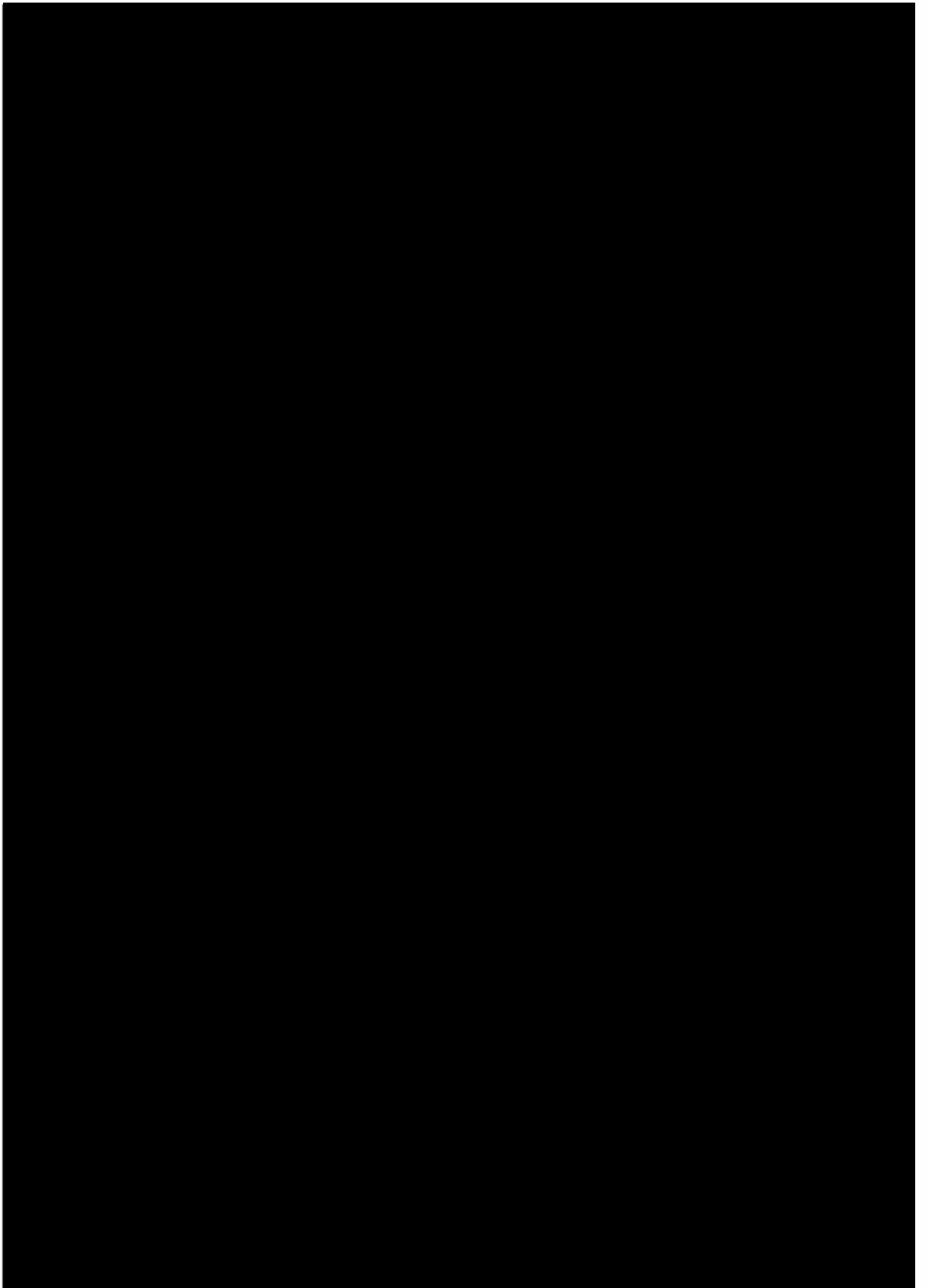




ANNEX C









































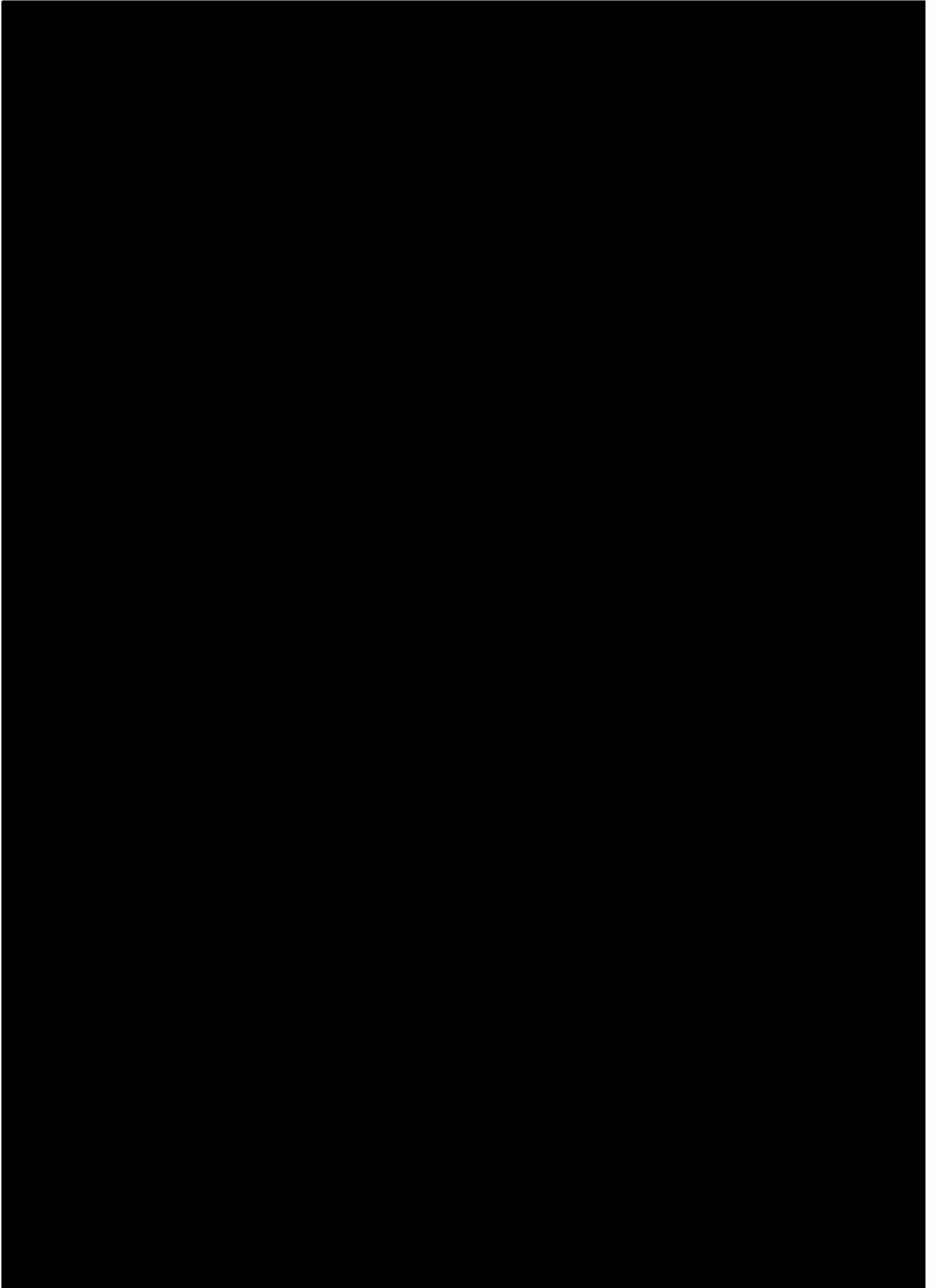


































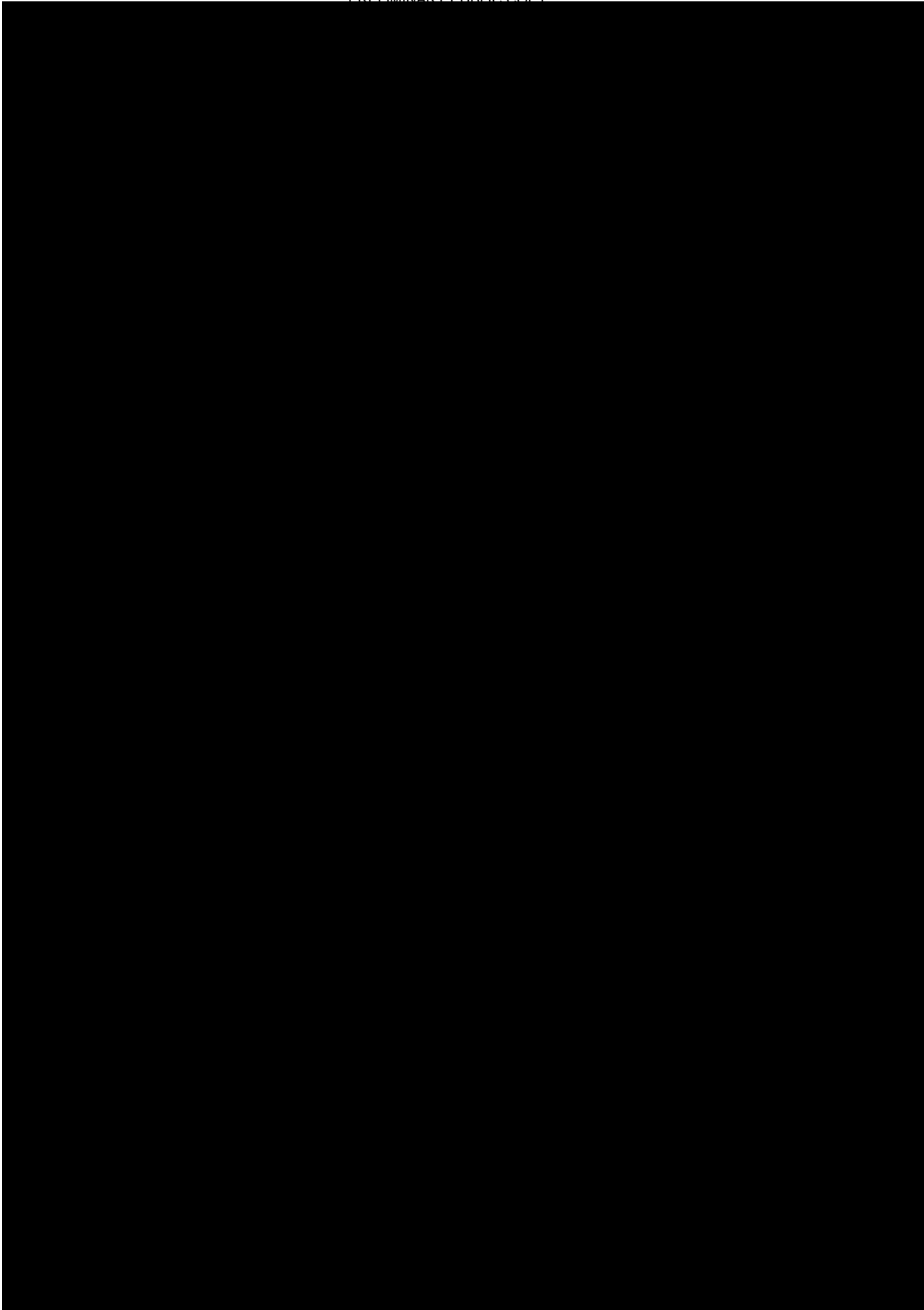


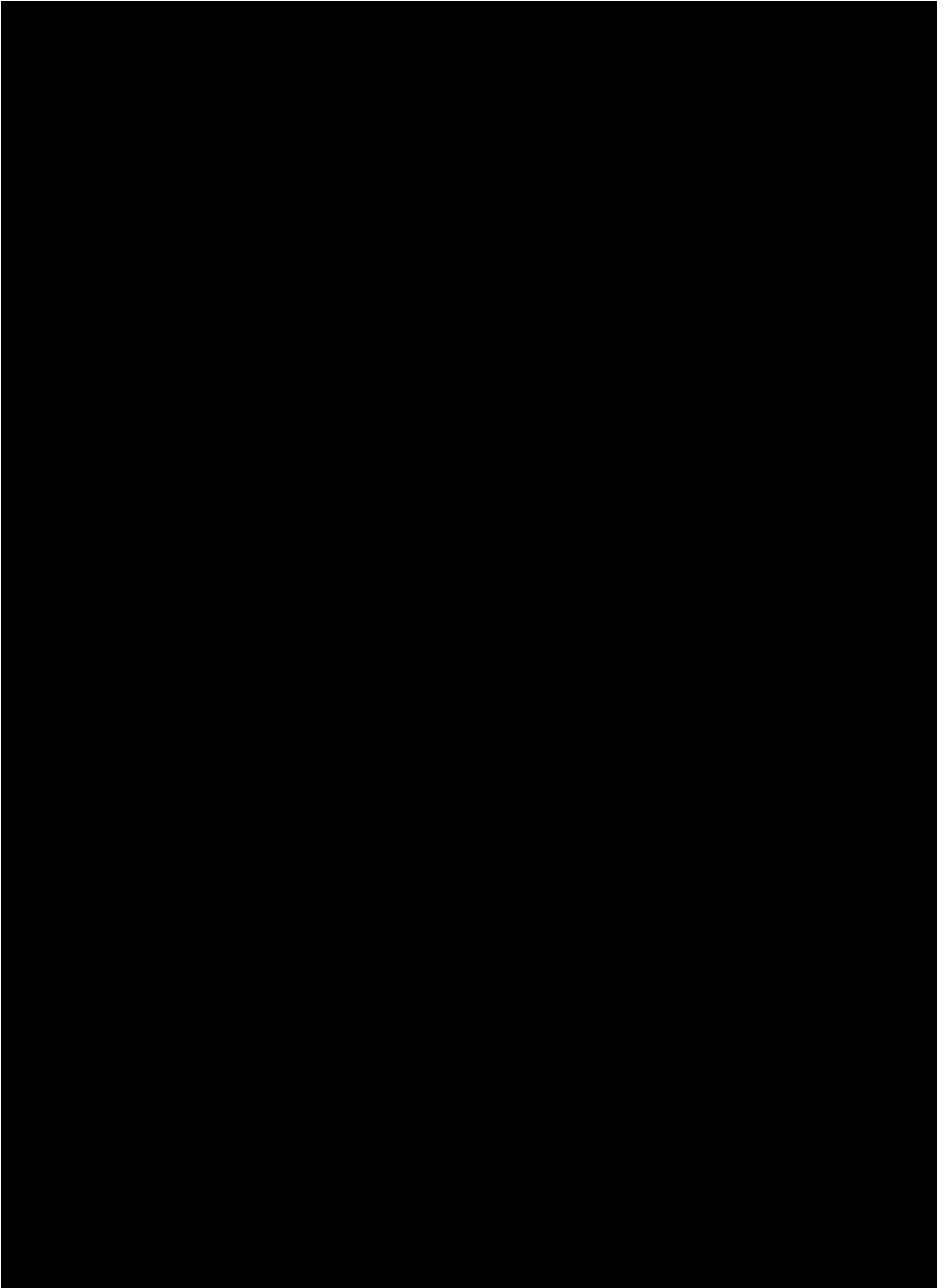


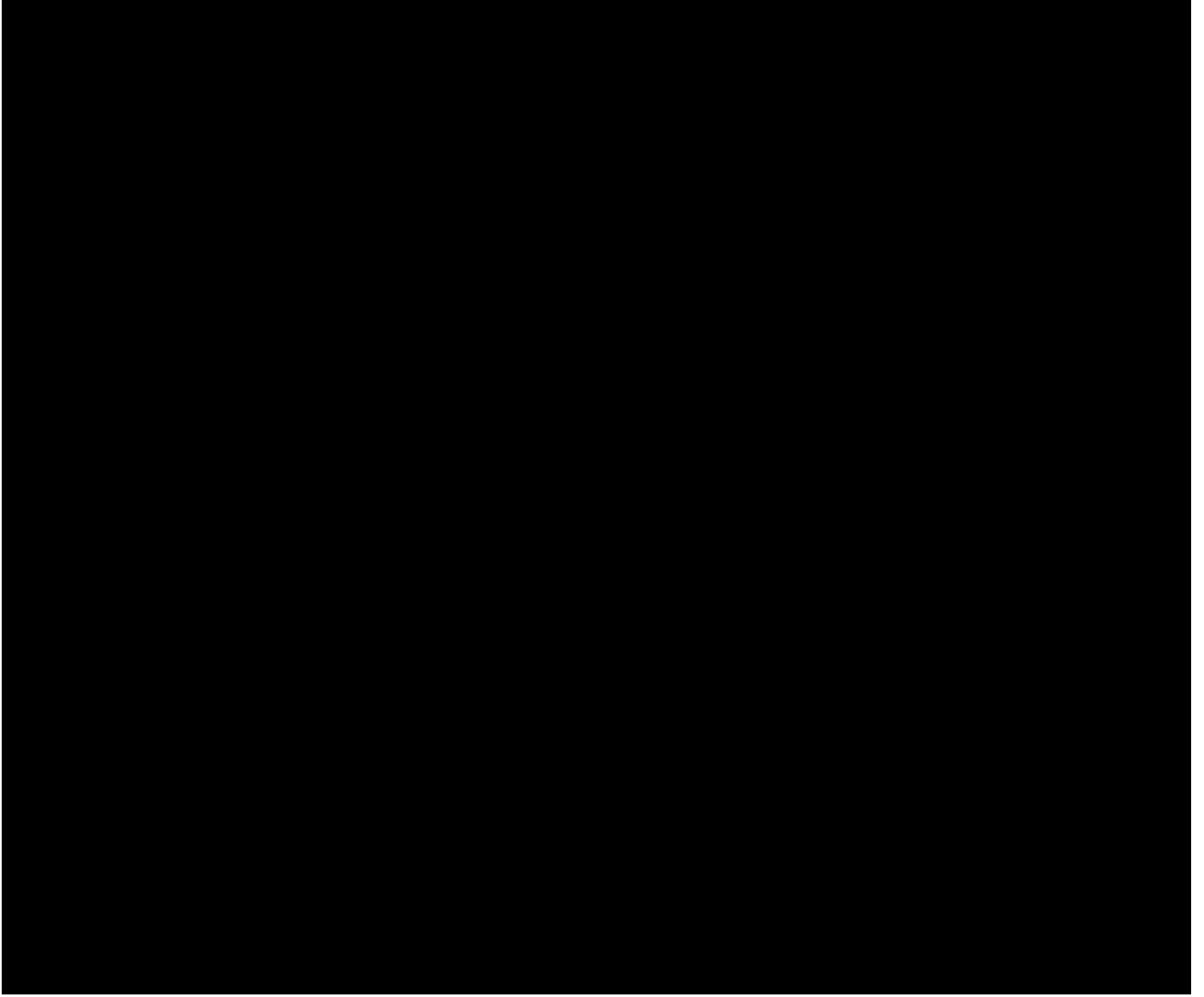




# ATTACHMENT 14







# ANNEX A



































































































































# ANNEX B



























































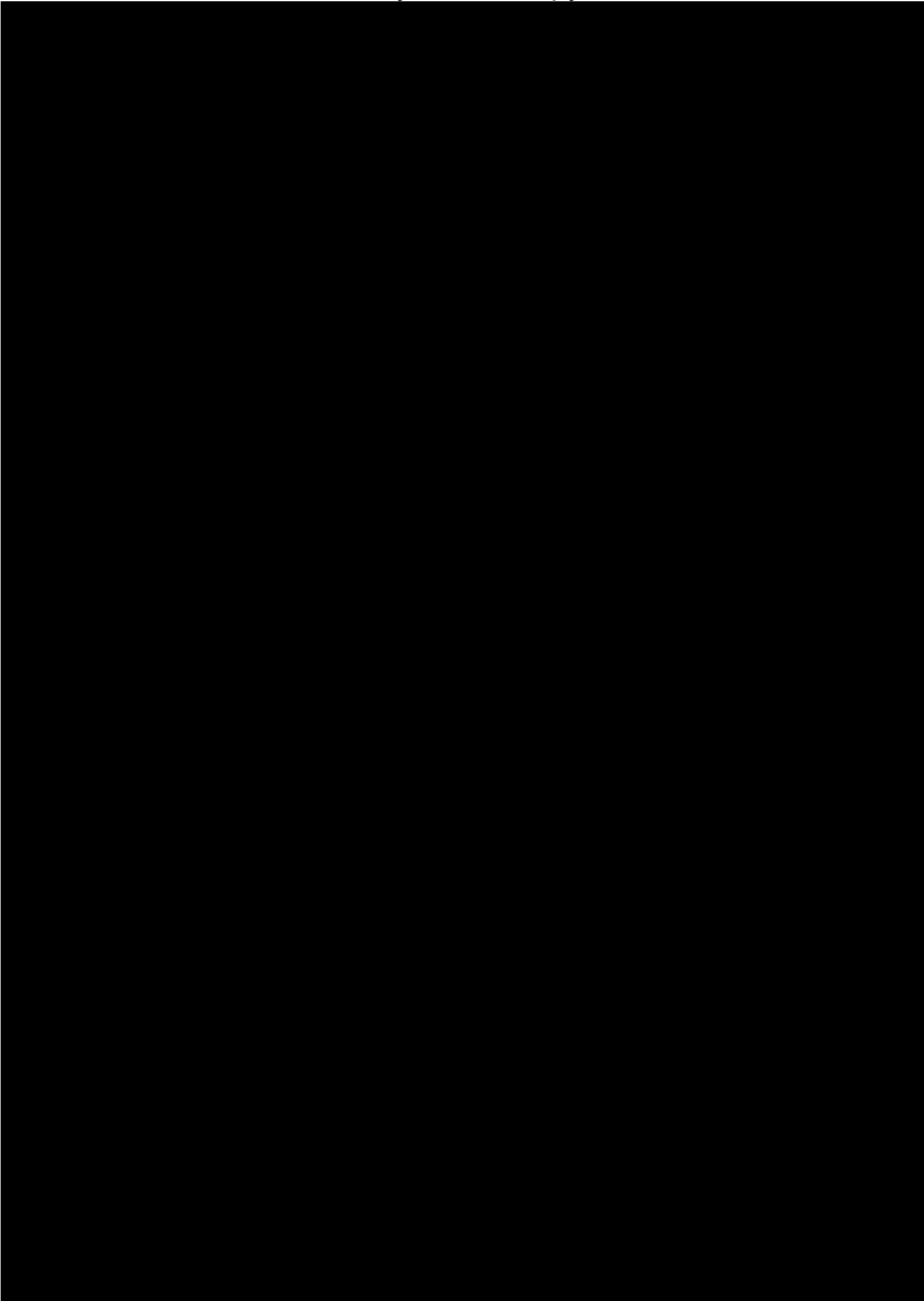


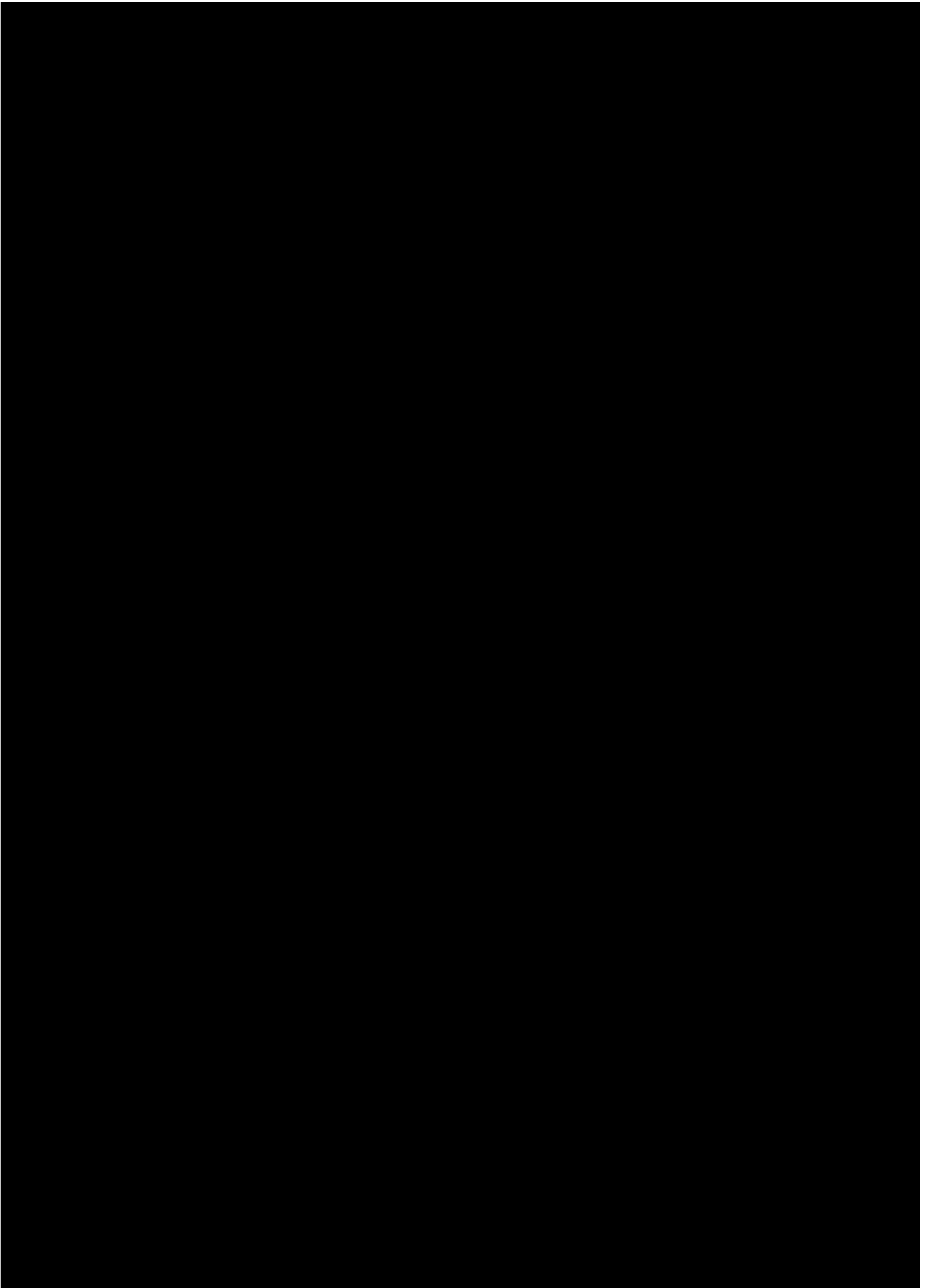




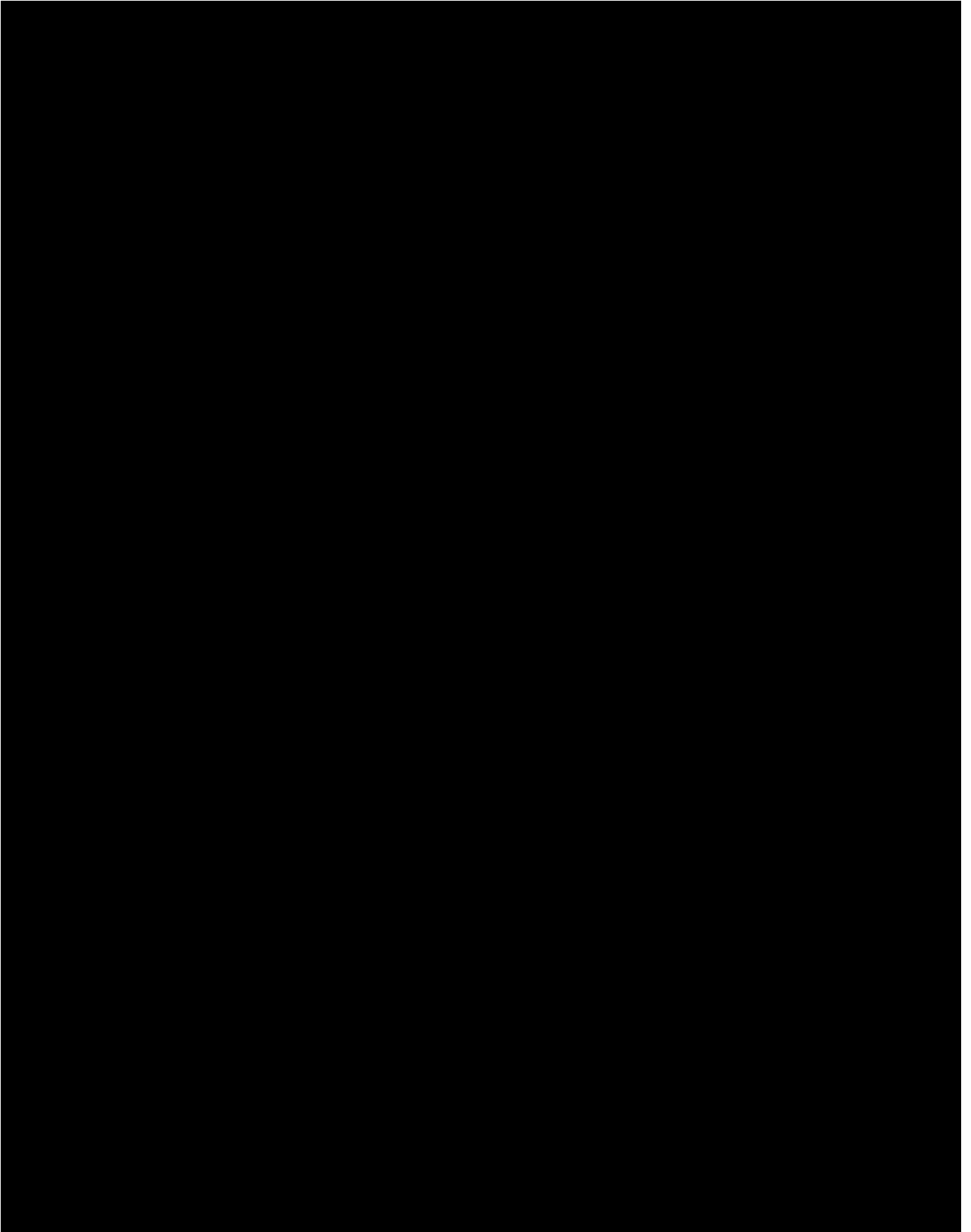
# ATTACHMENT 15







# ATTACHMENT 16



# ANNEX A

























































































































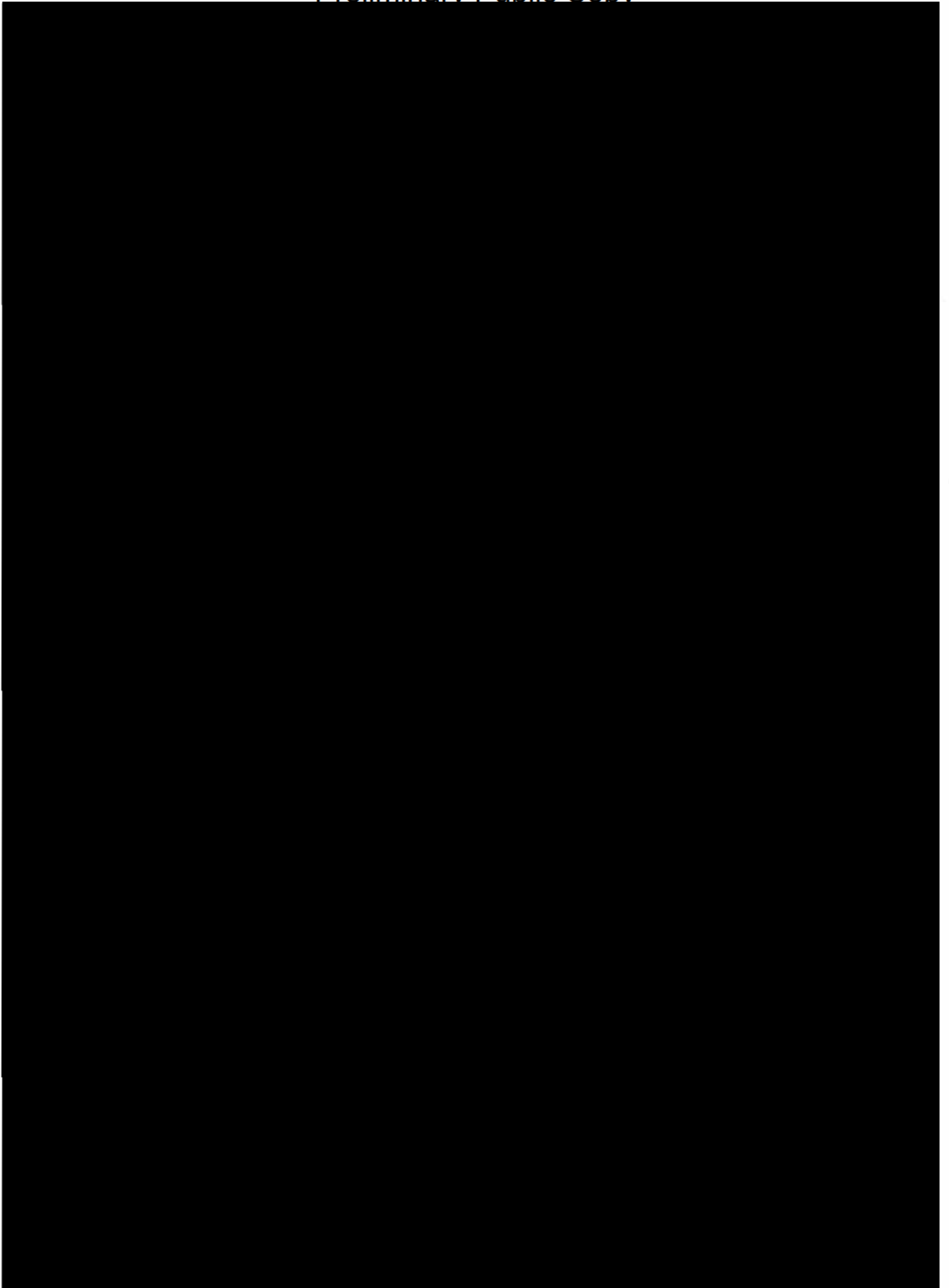








# ATTACHMENT 17





ANNEX A



























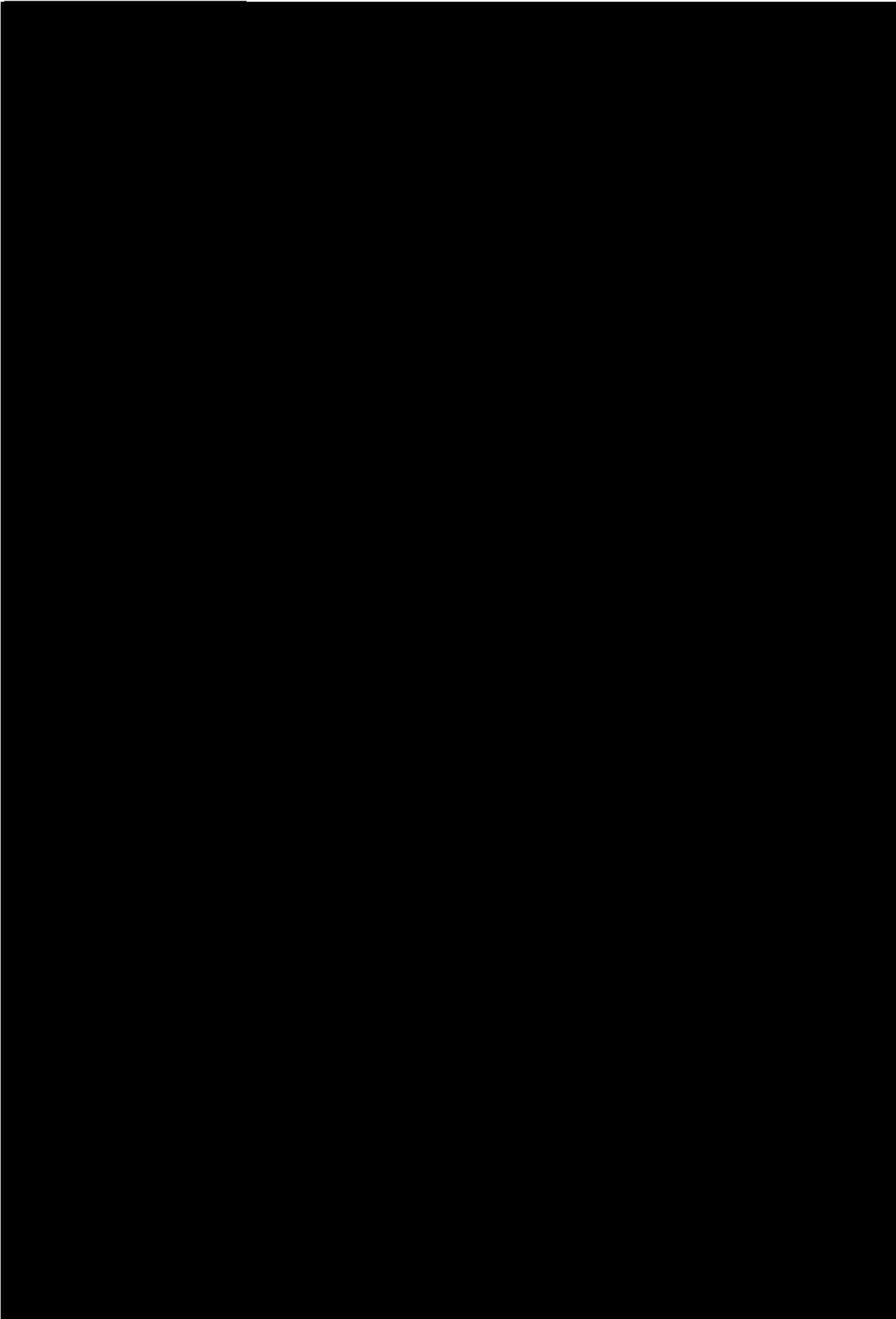


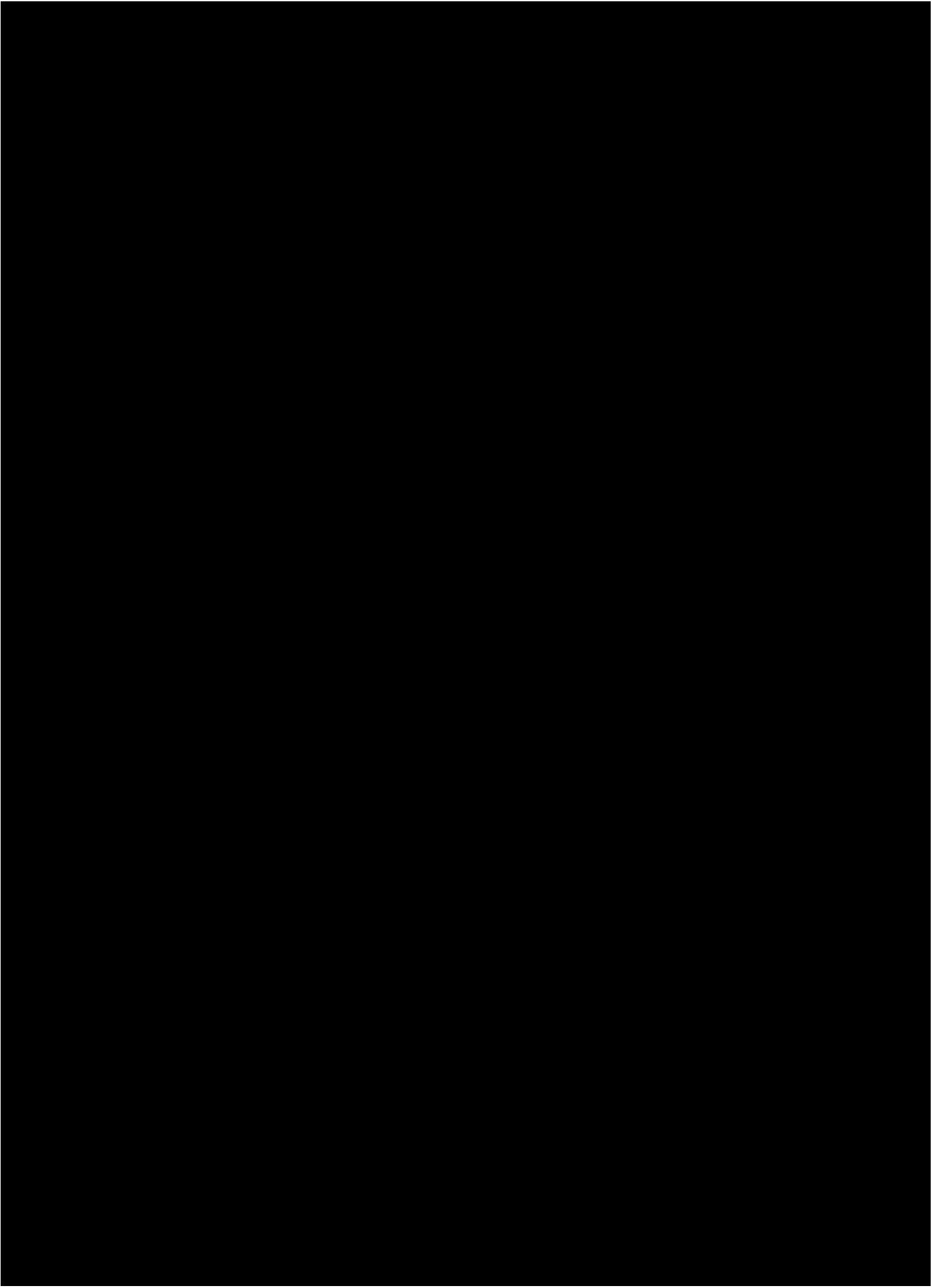






# ATTACHMENT 18





# ANNEX A

















































































































## ANNEX B



























# ANNEX C









































































































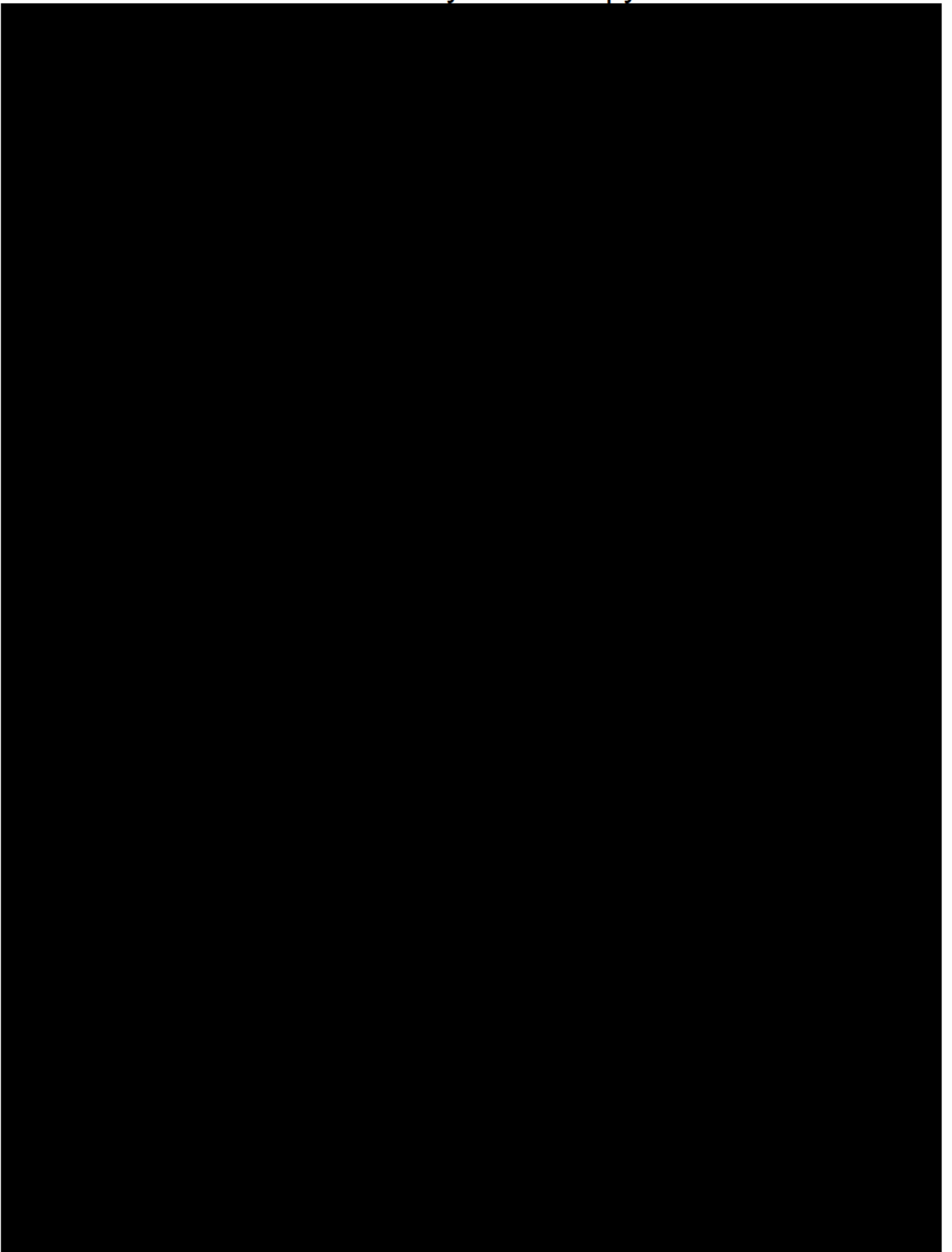


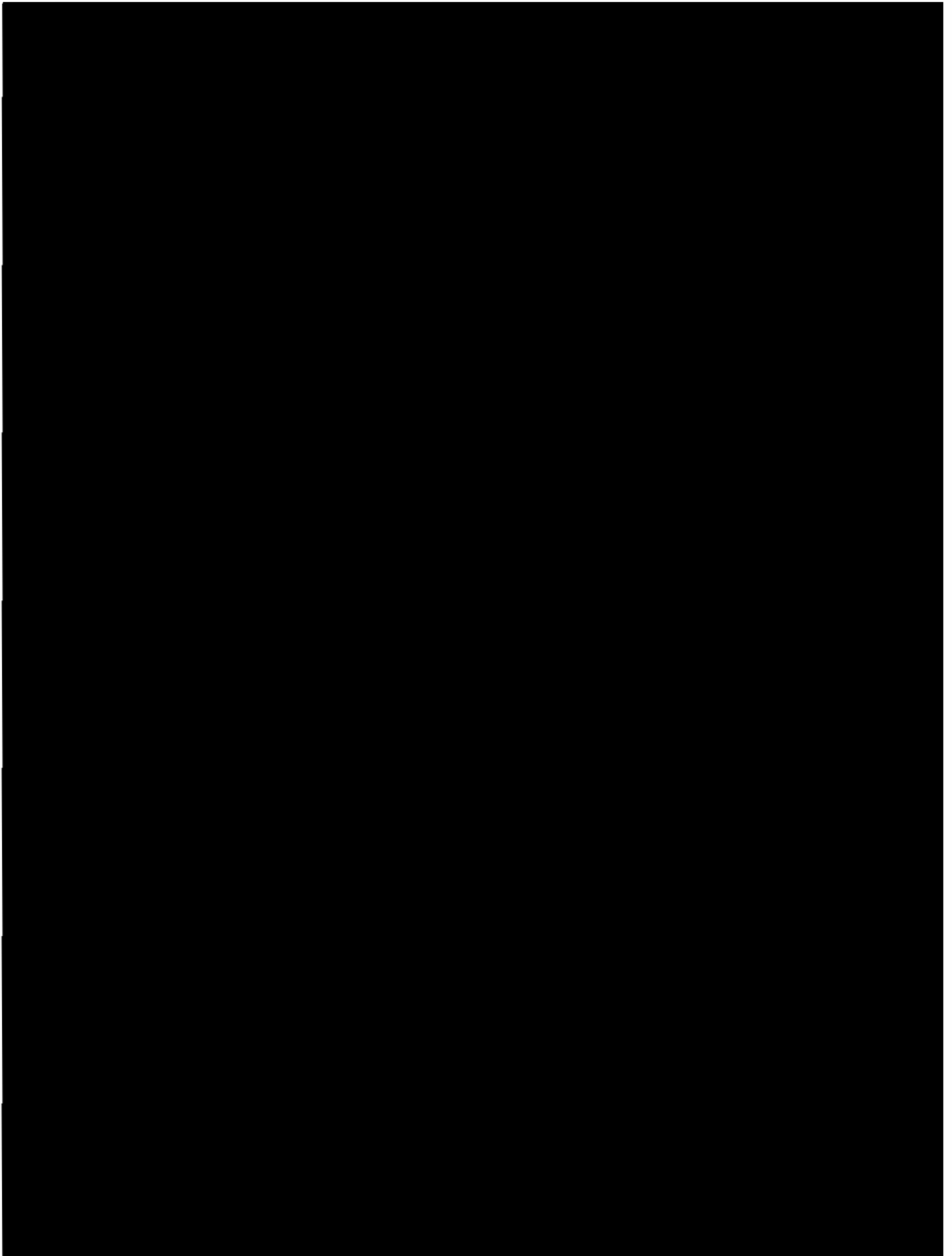






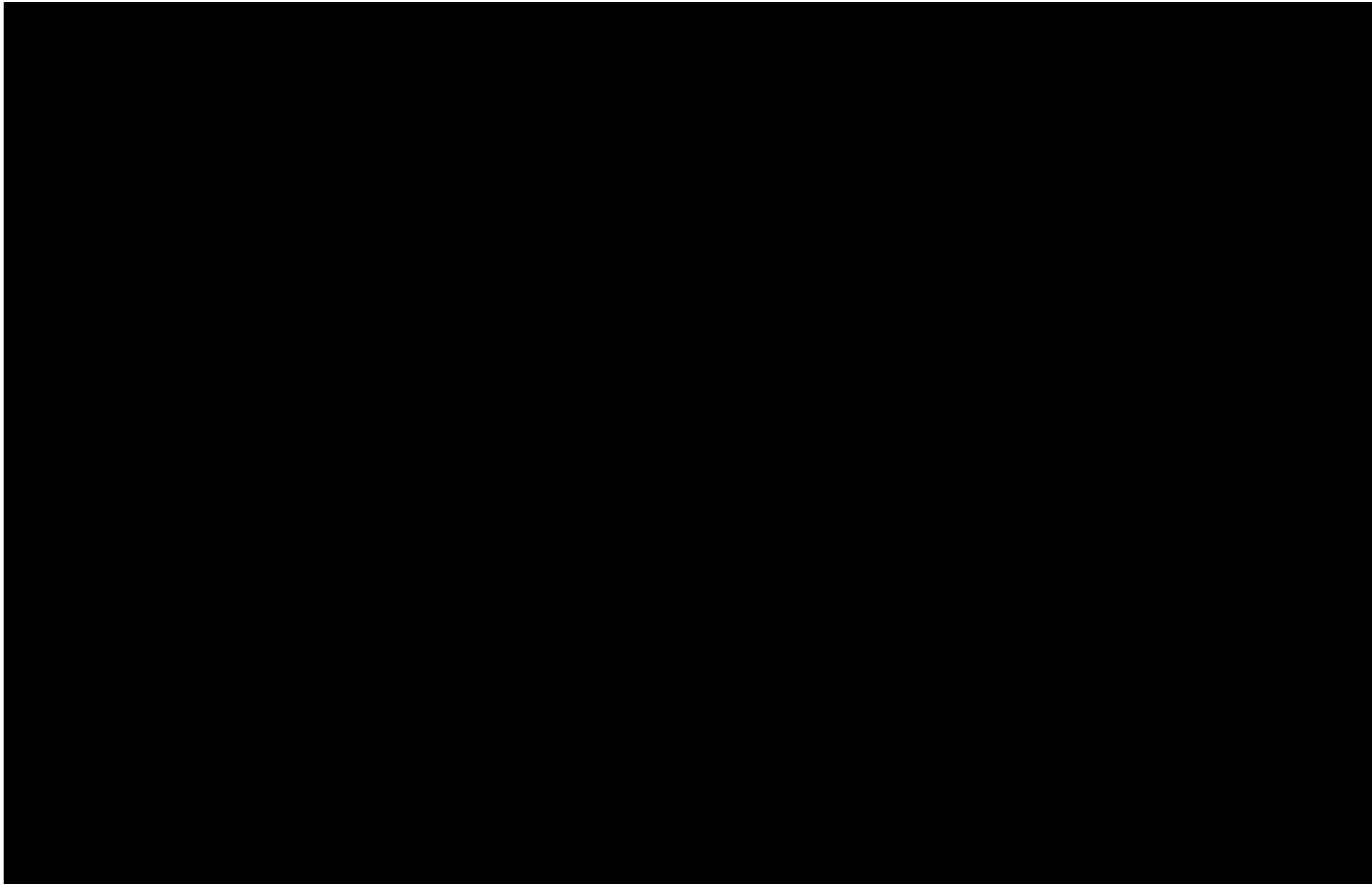
# ATTACHMENT 19



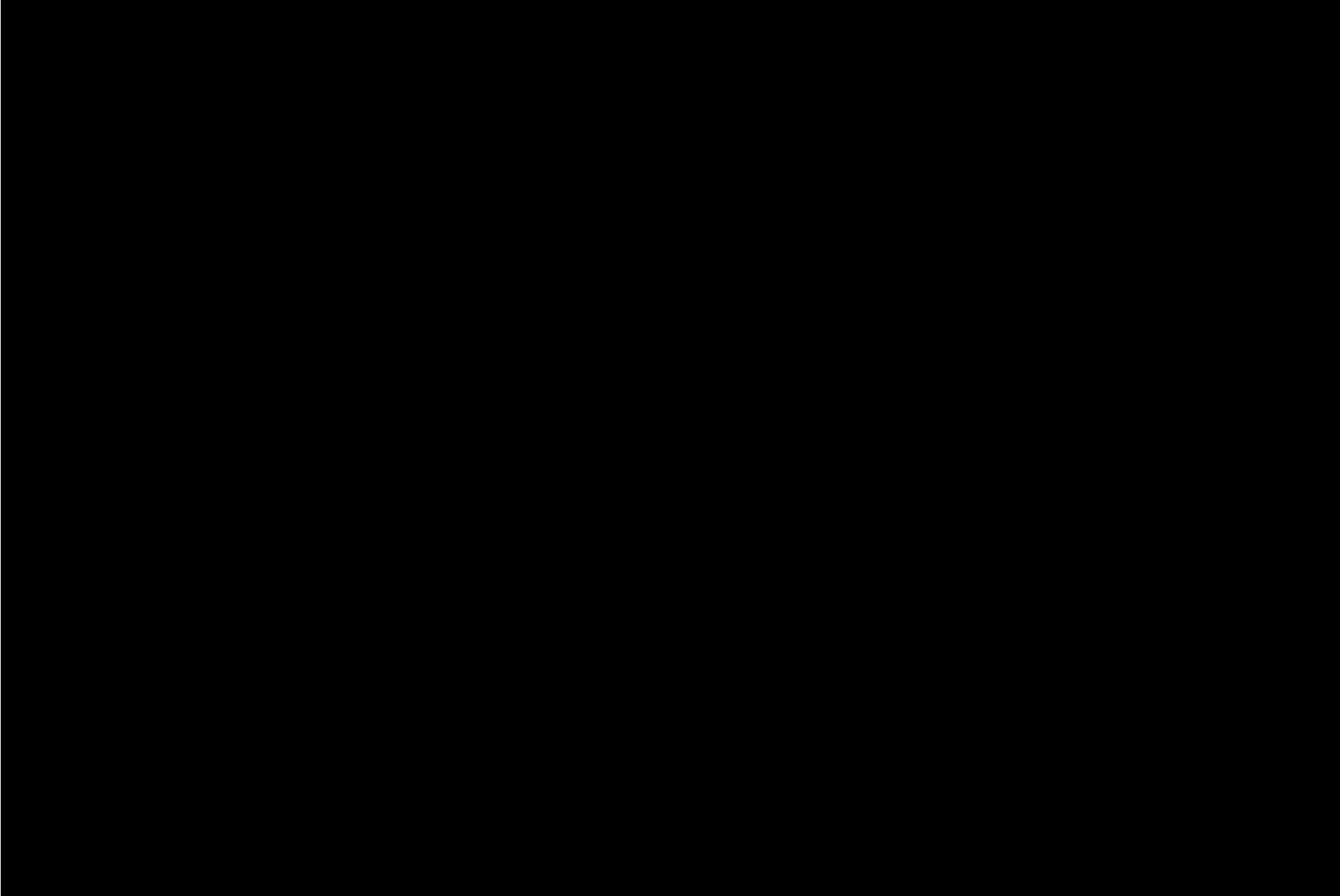


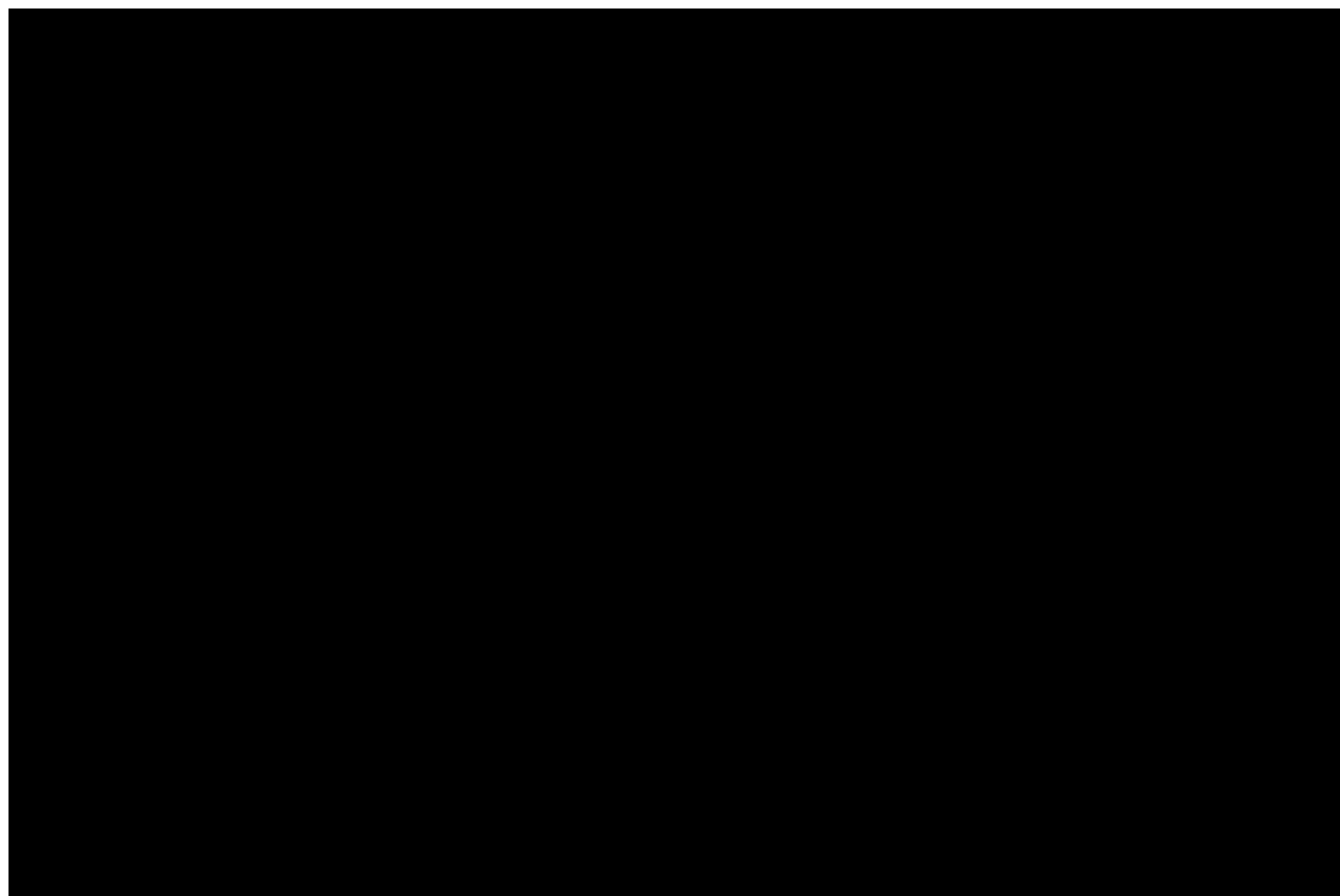


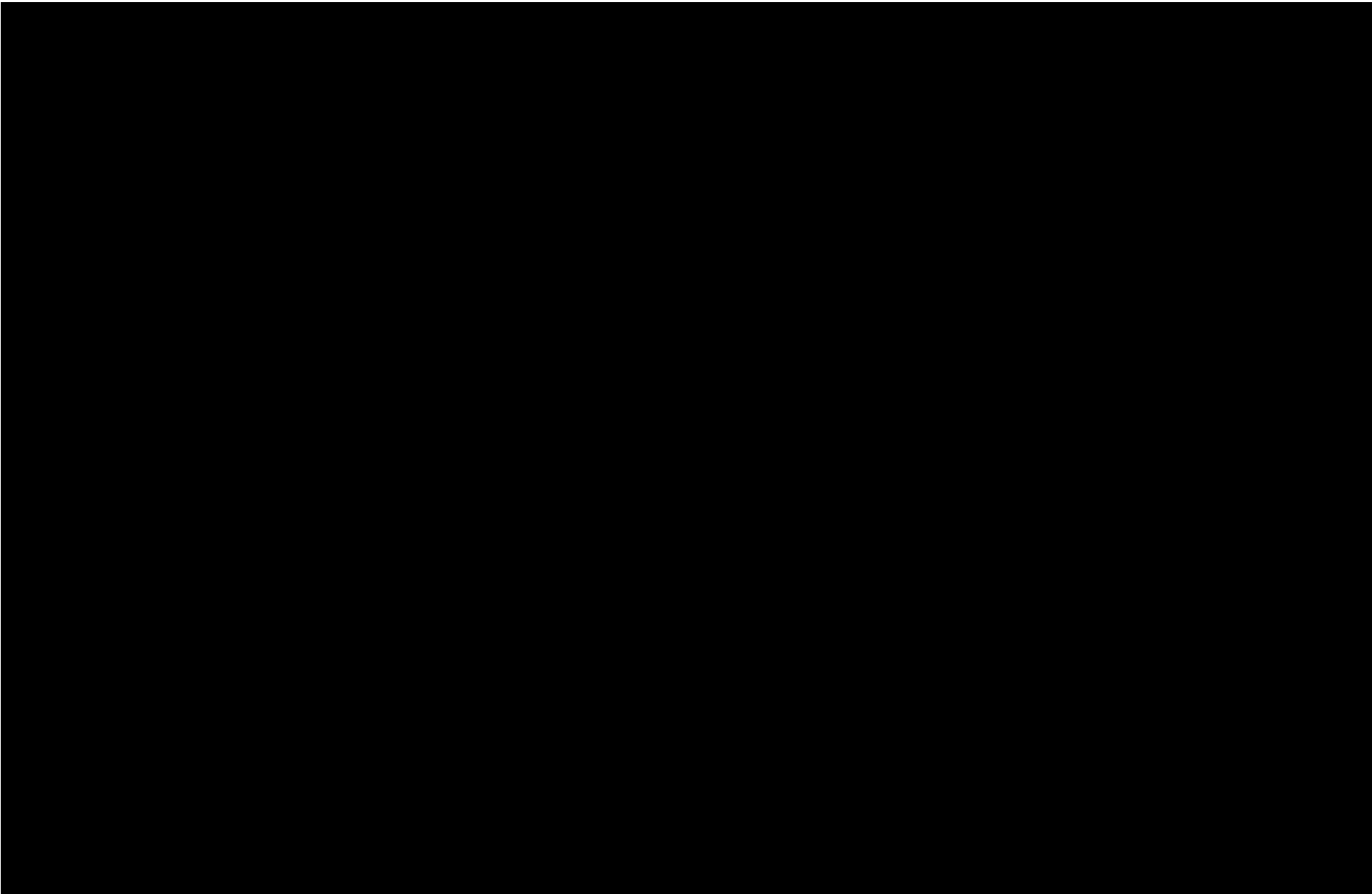
ANNEX A

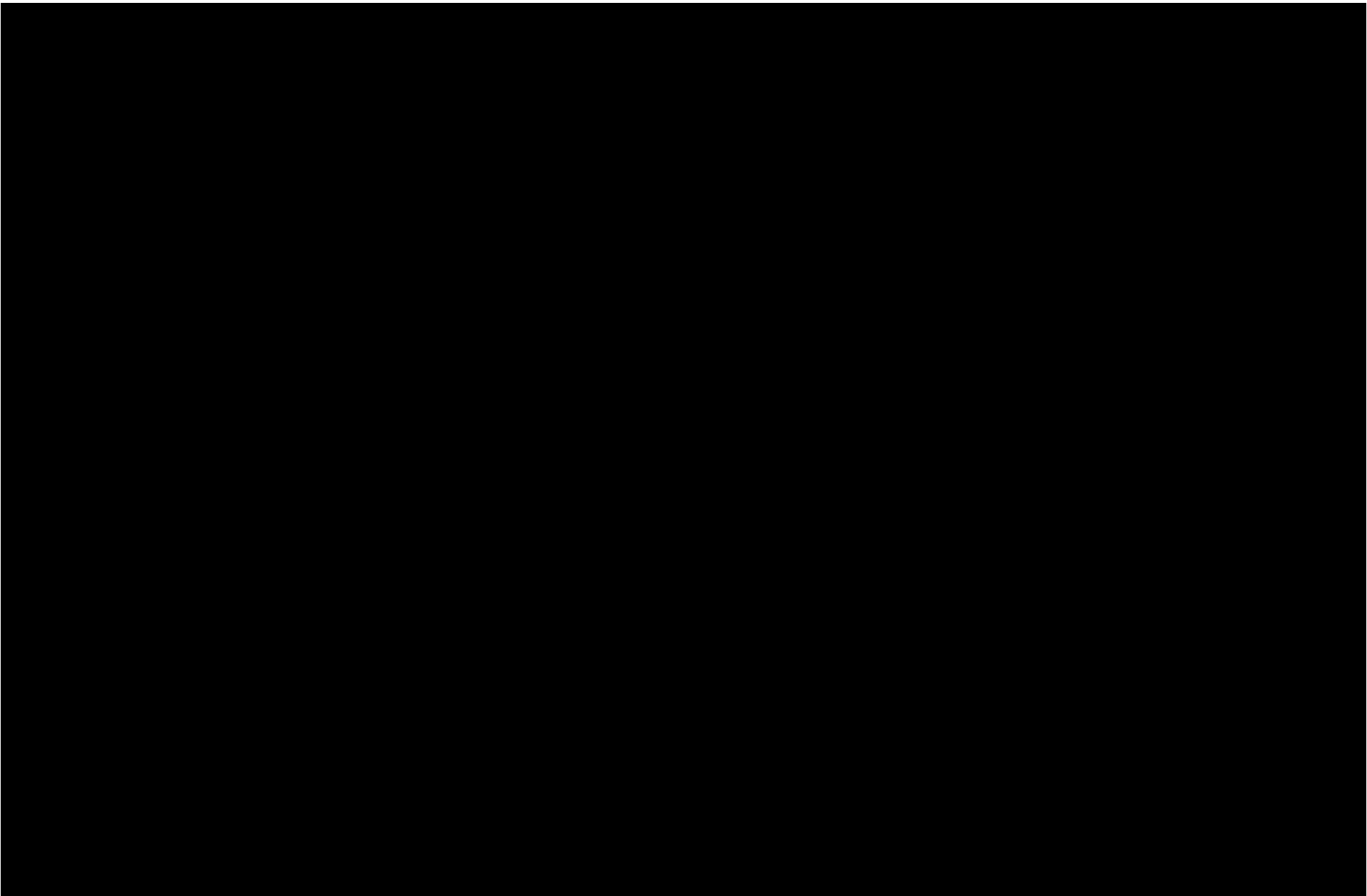


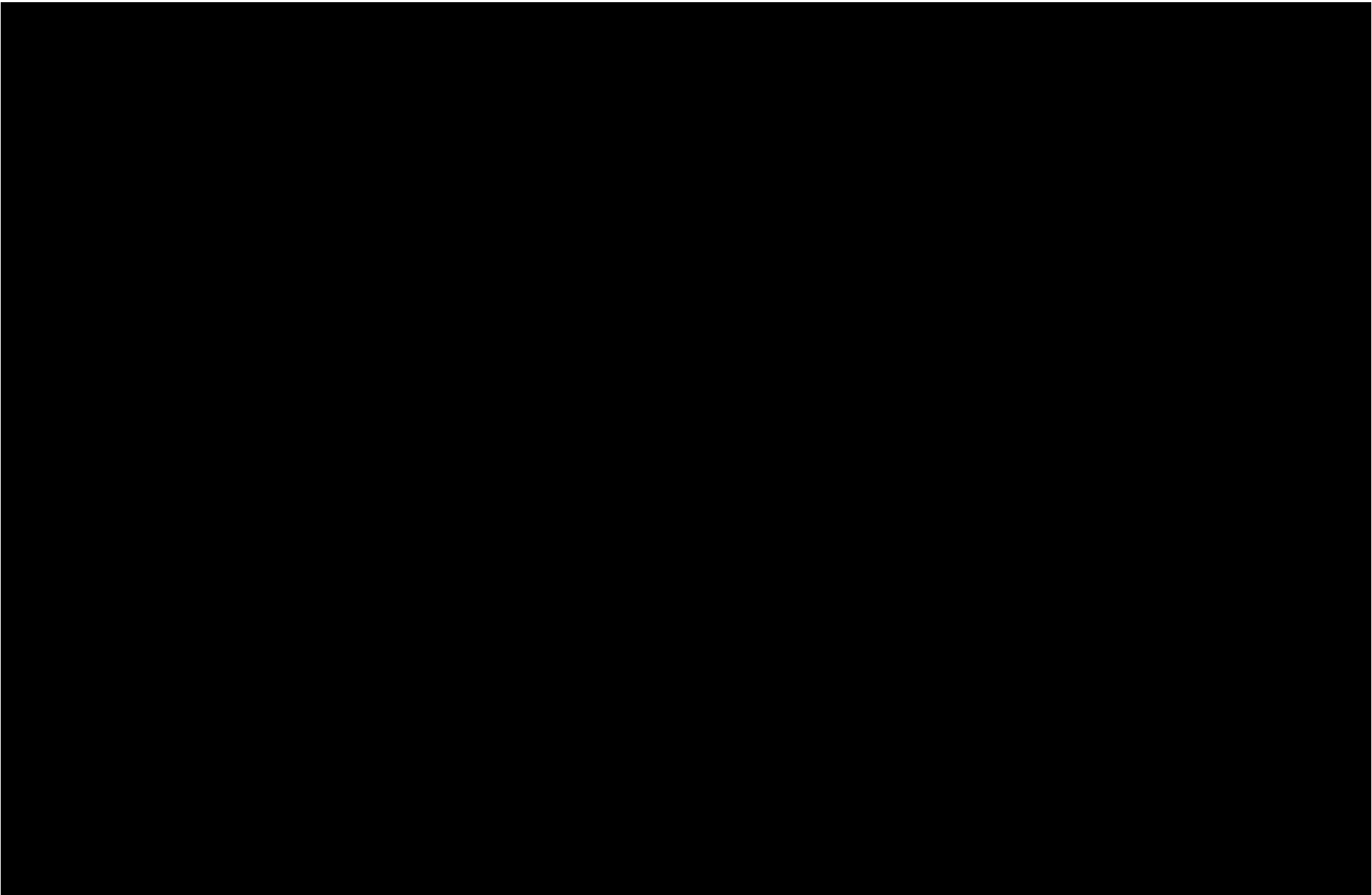




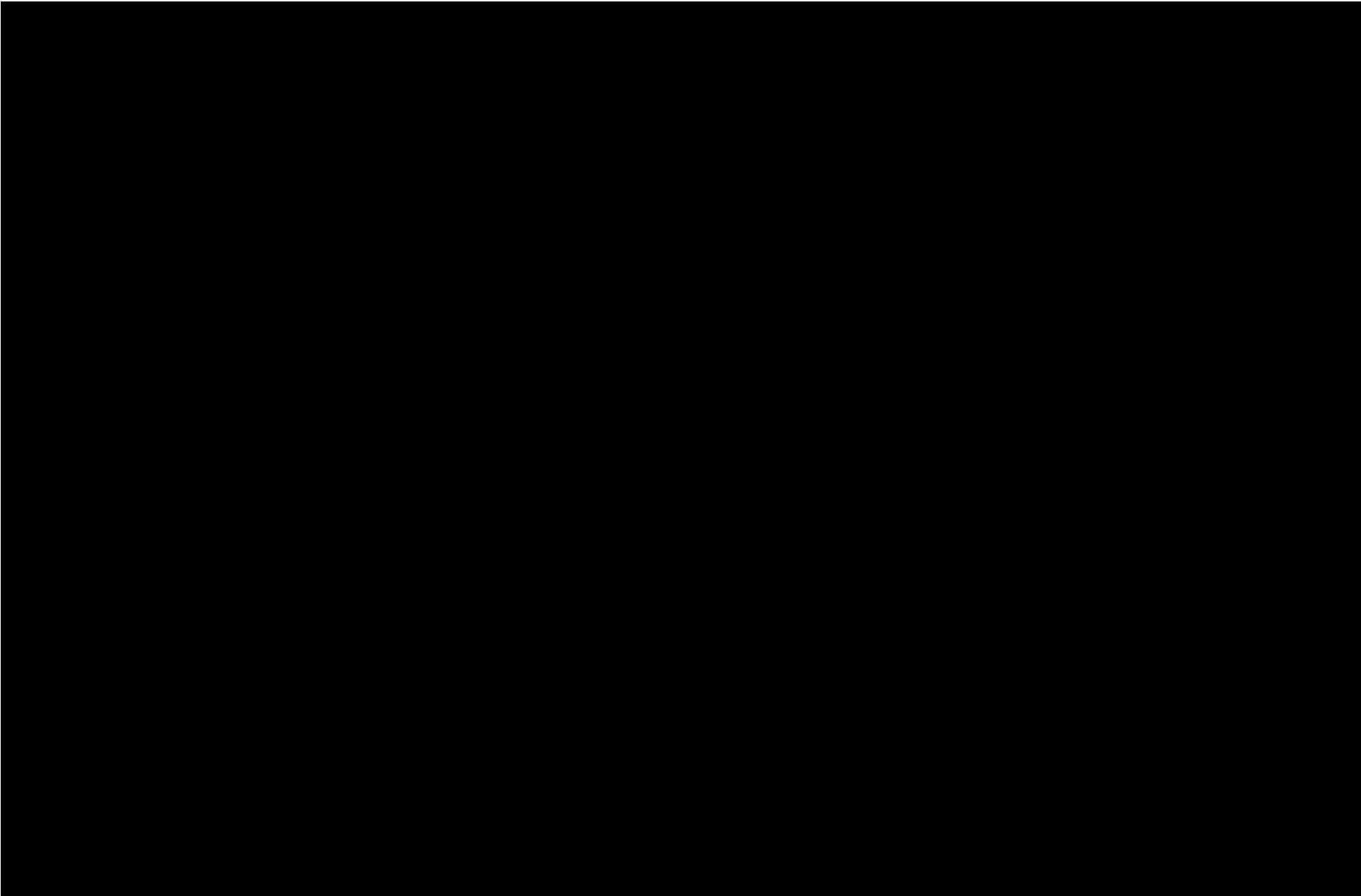


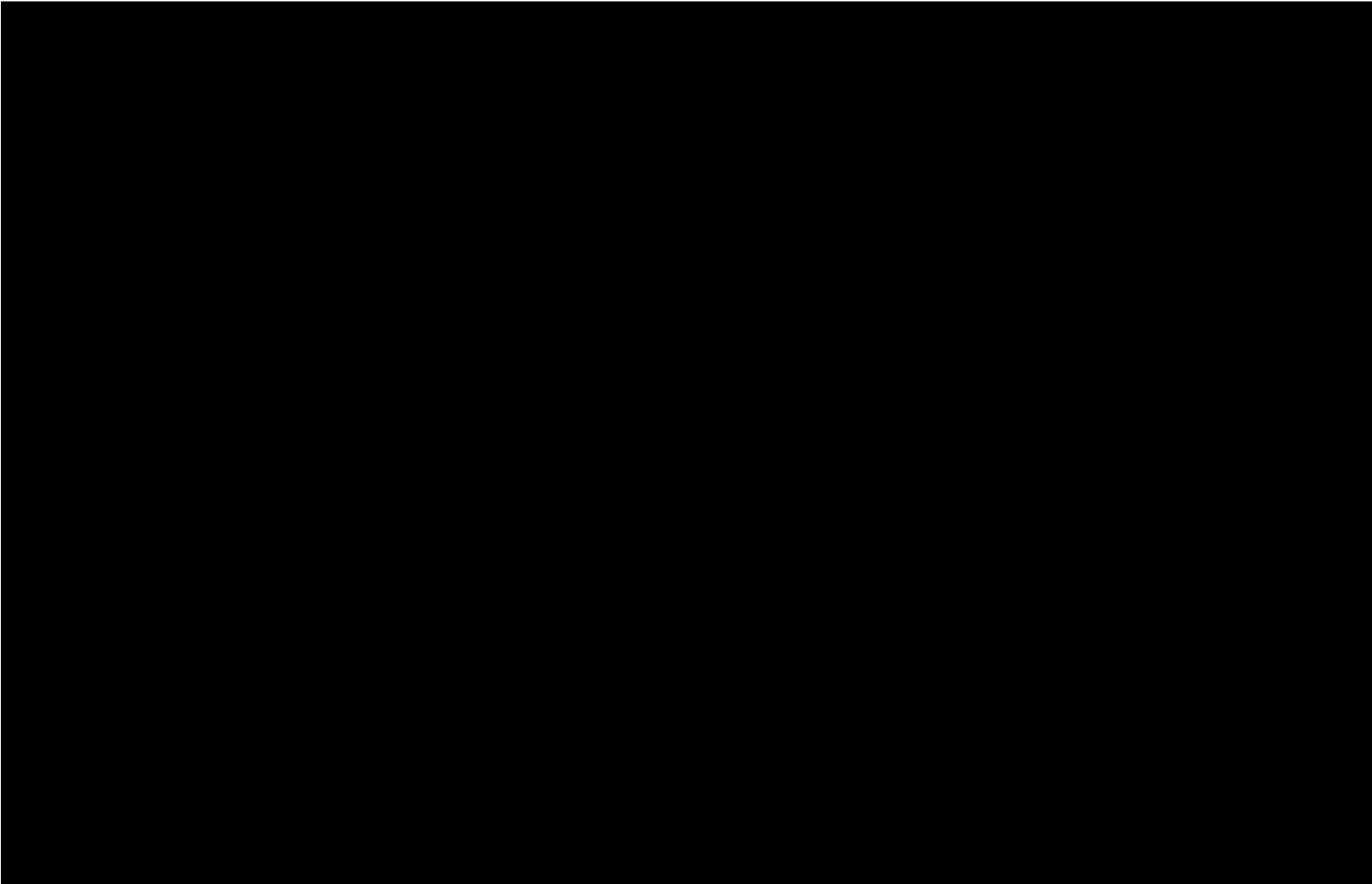


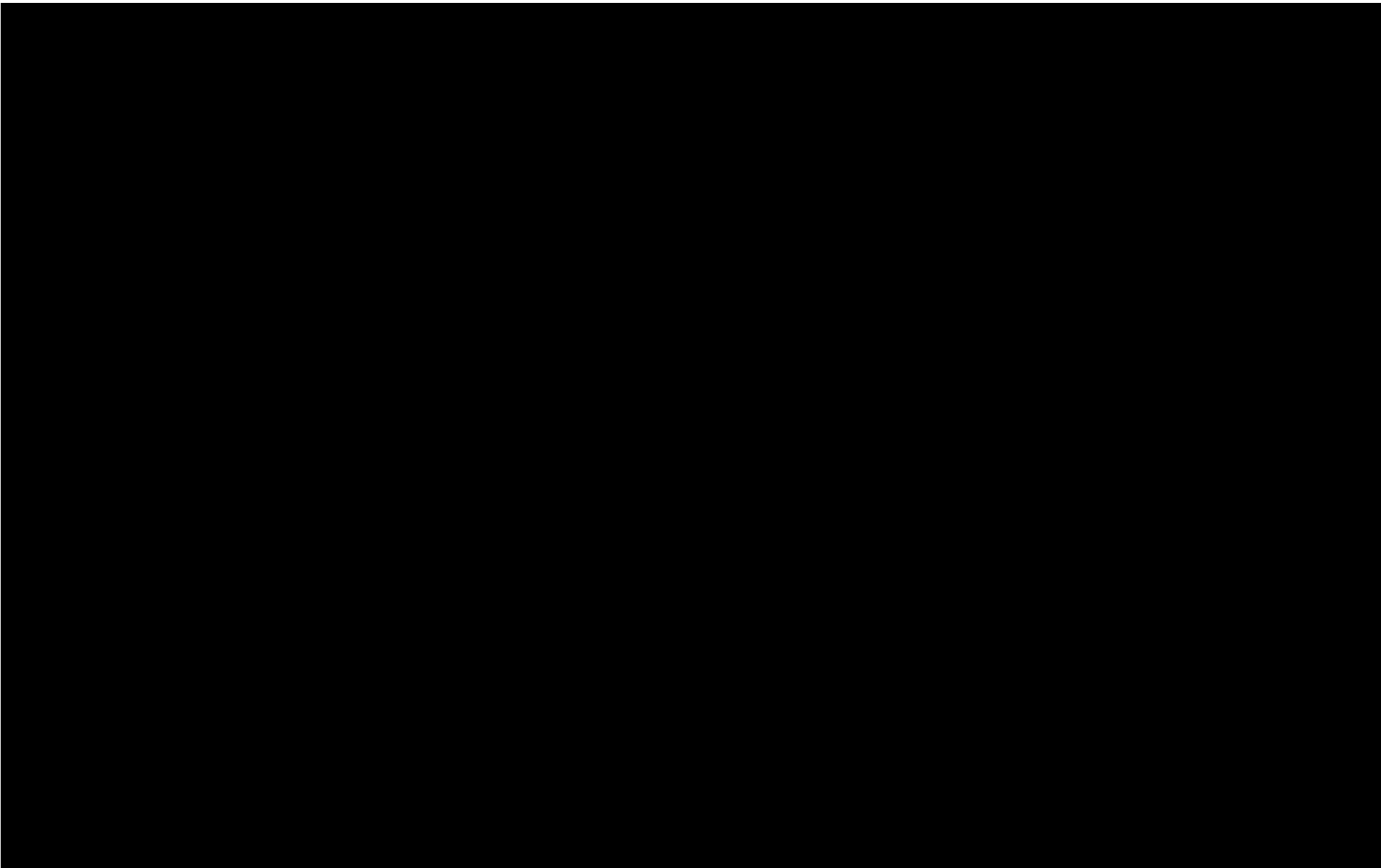


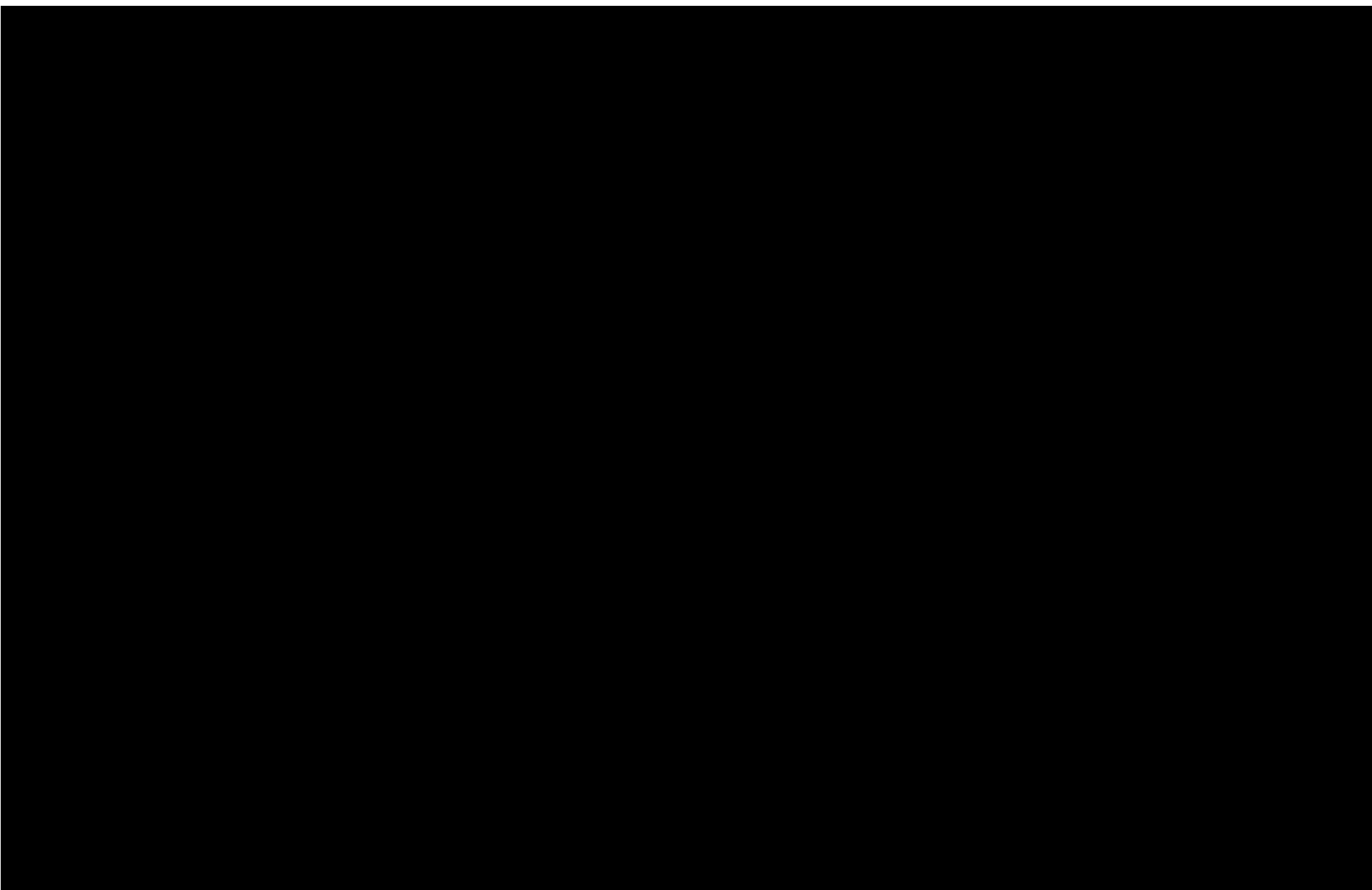


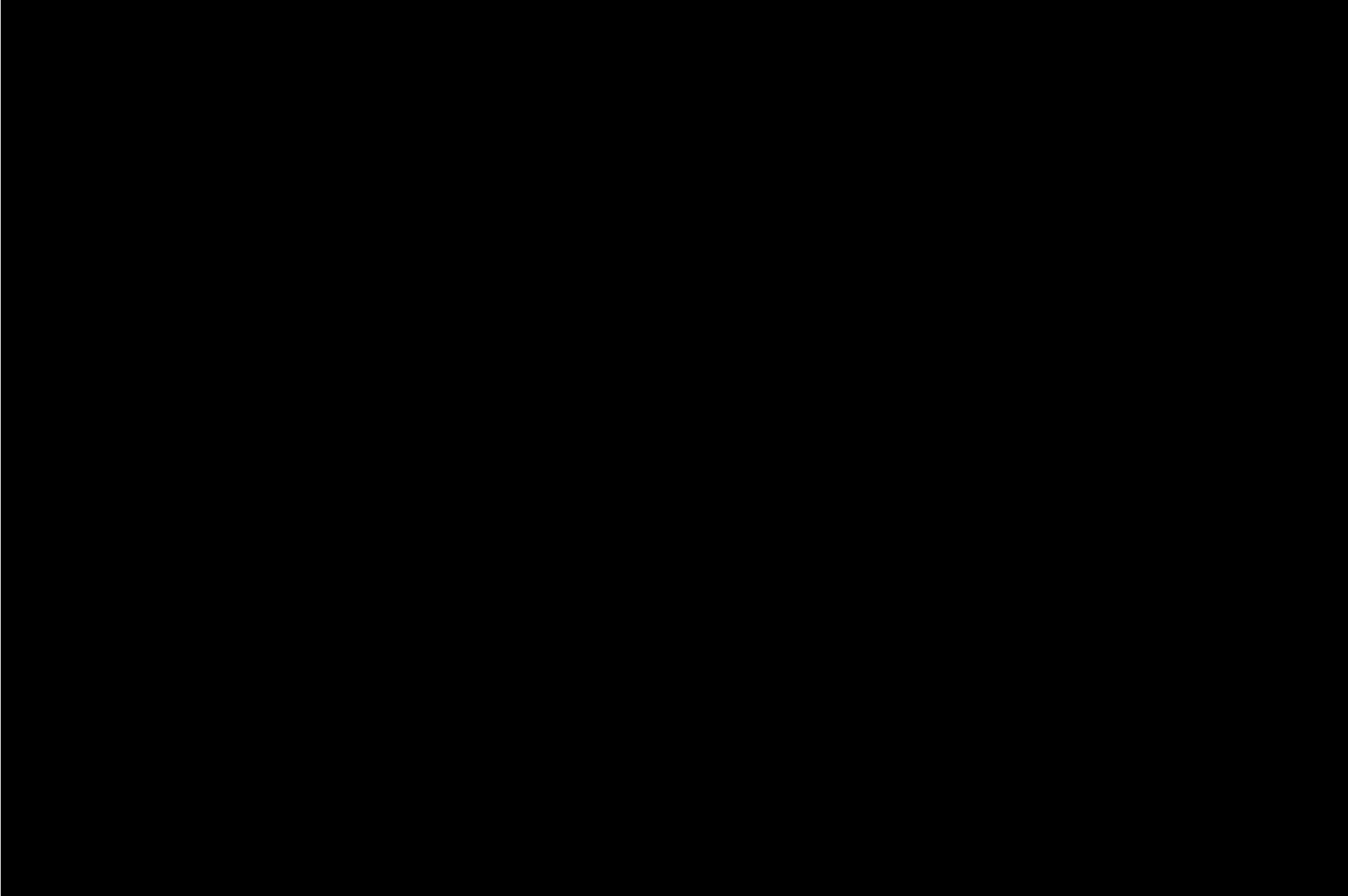




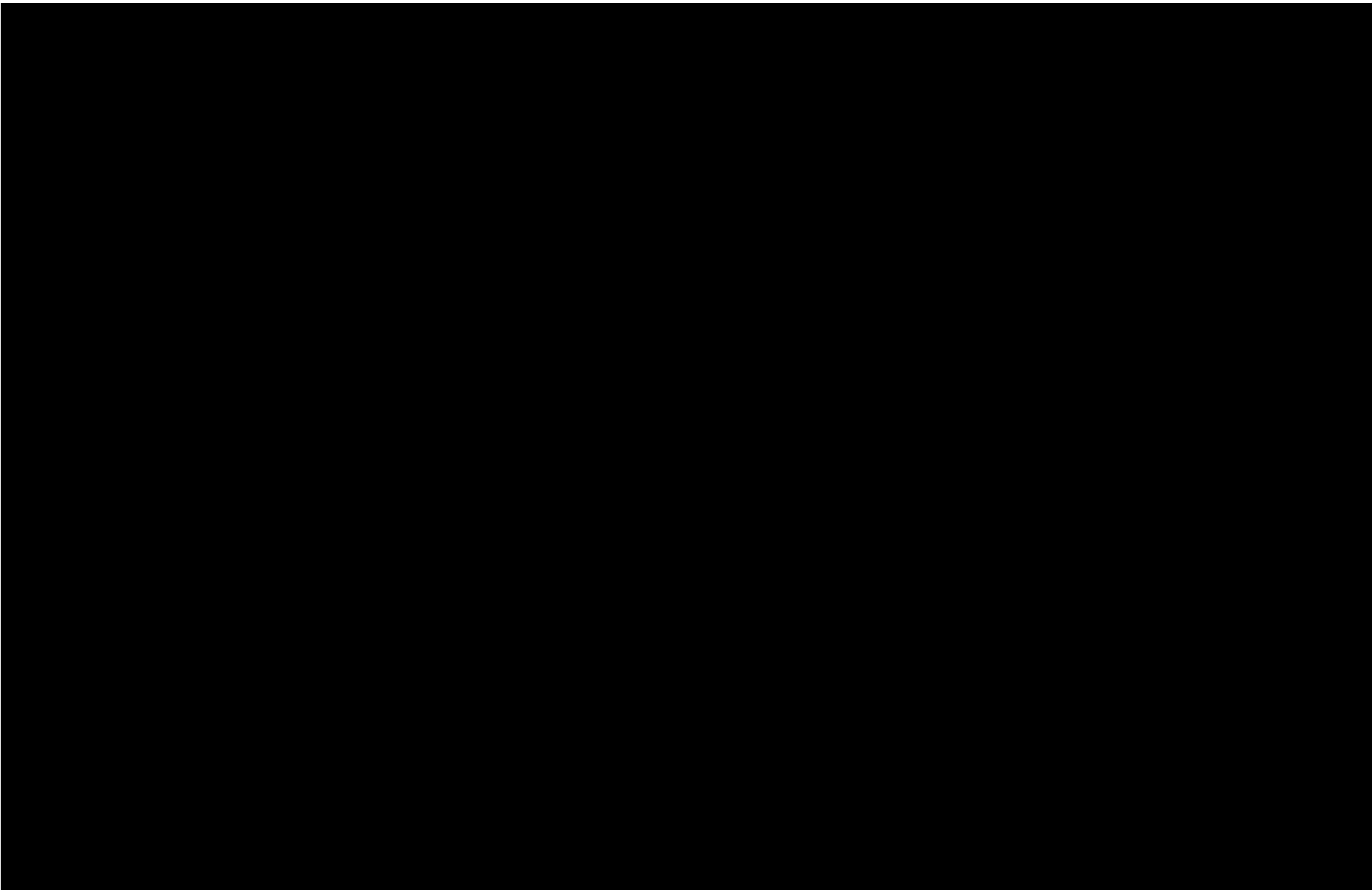






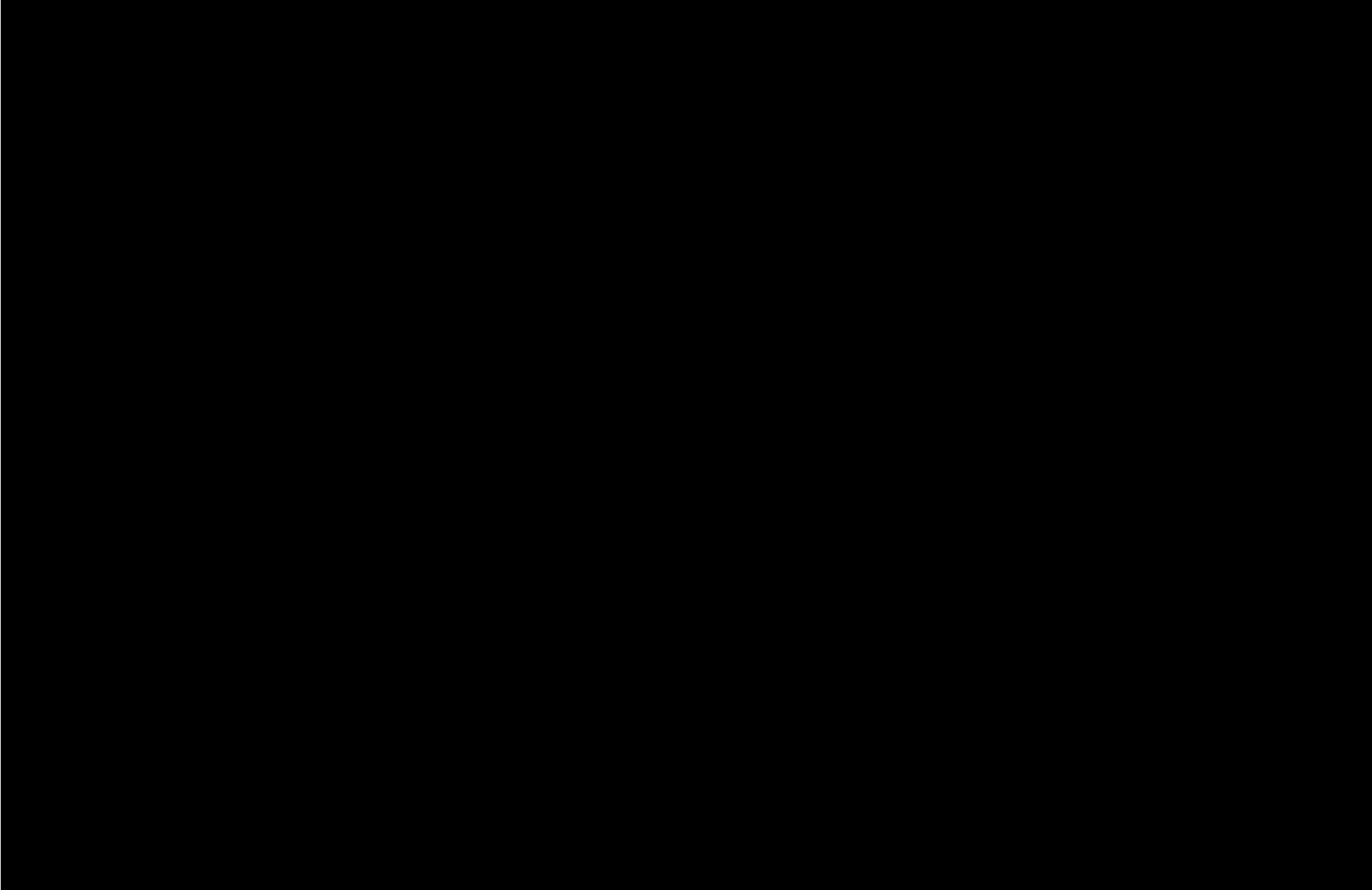


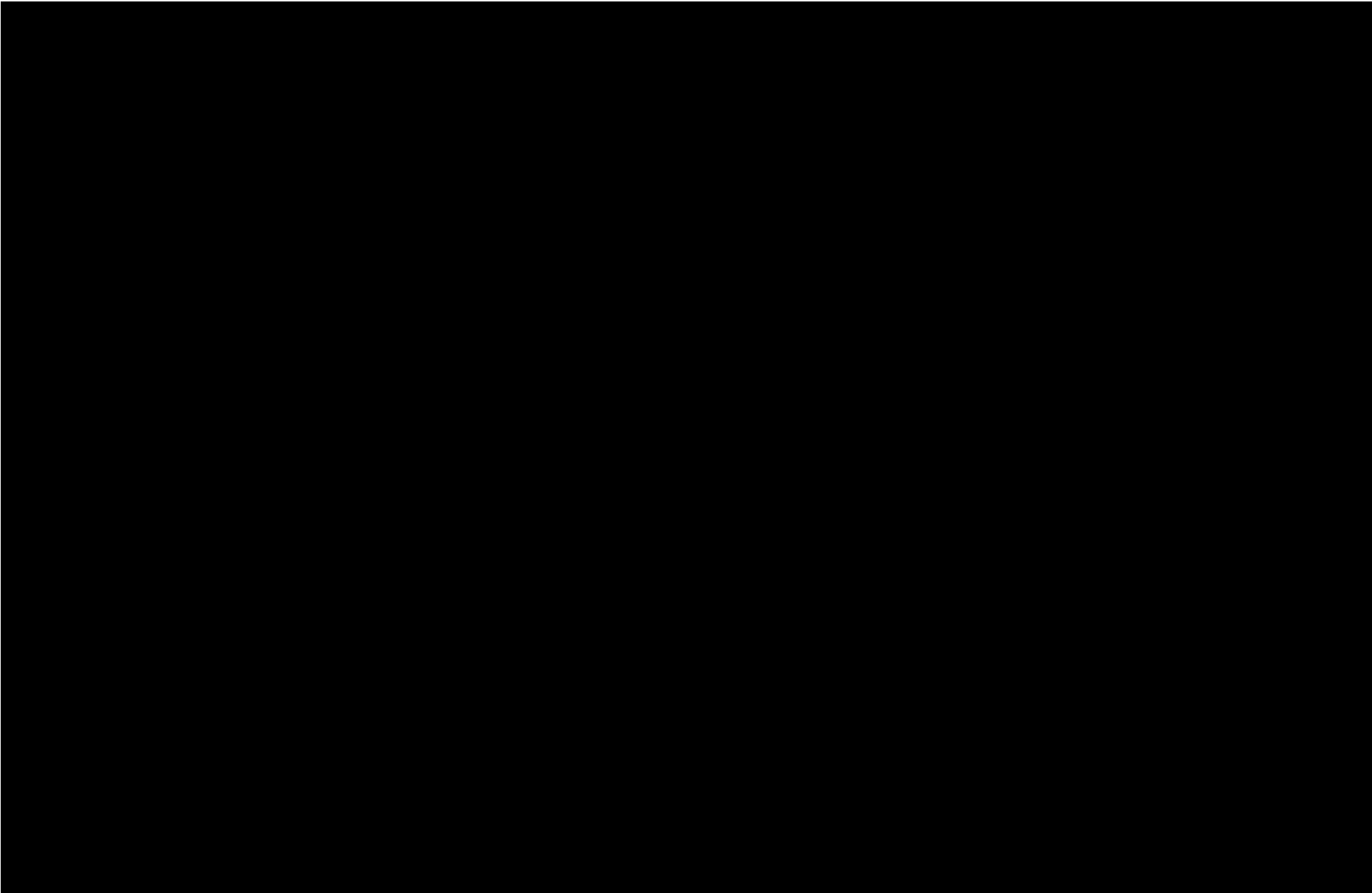


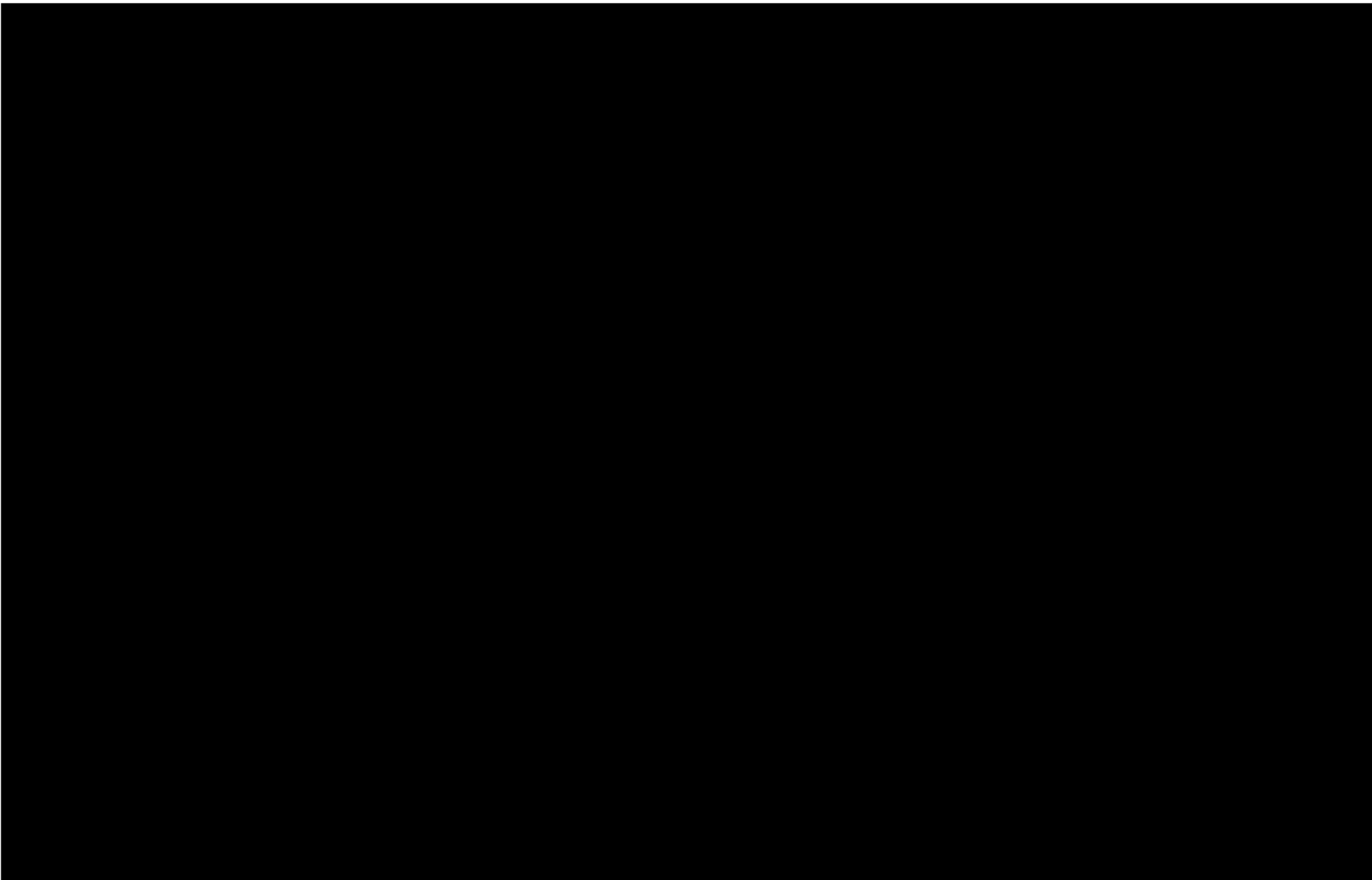


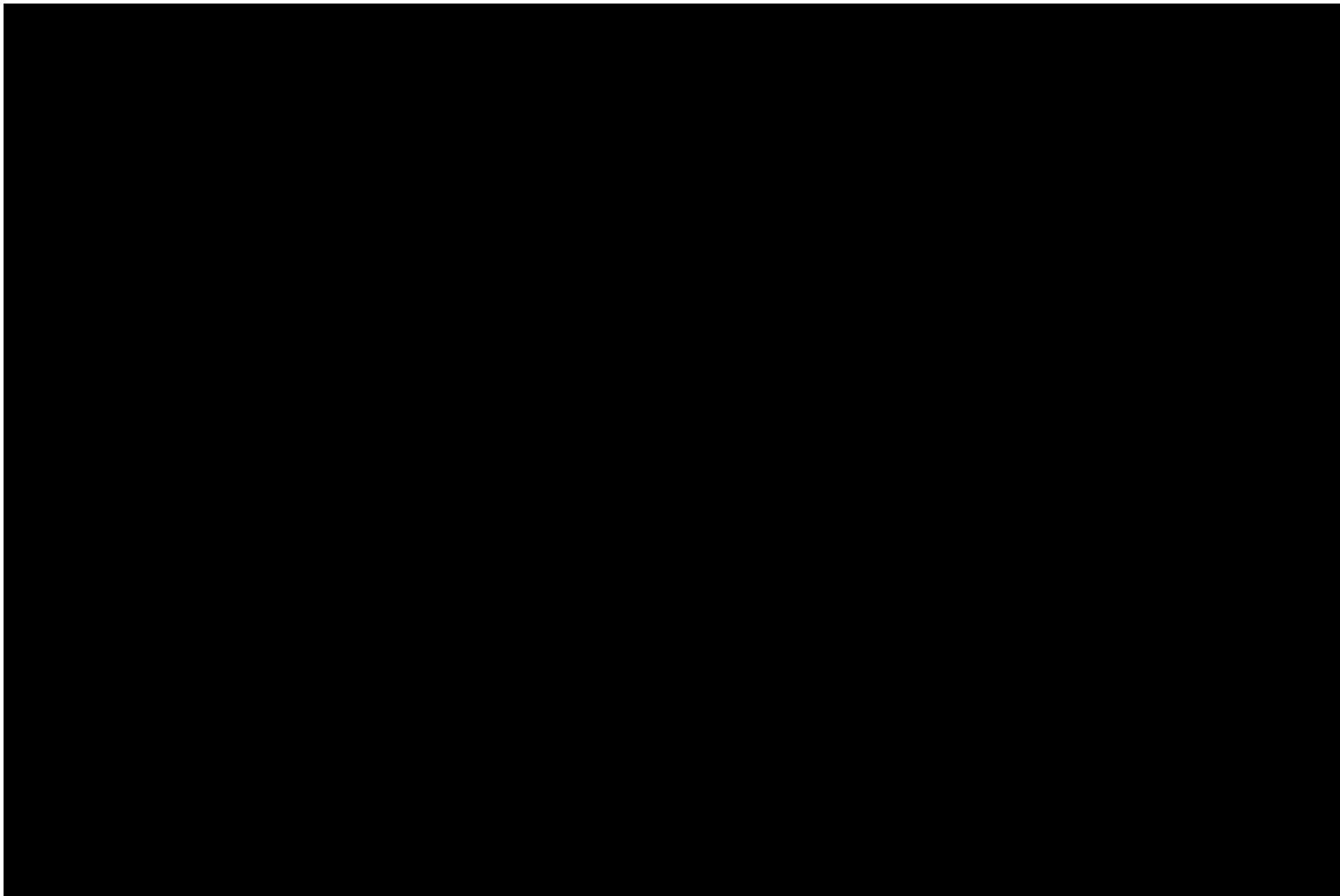


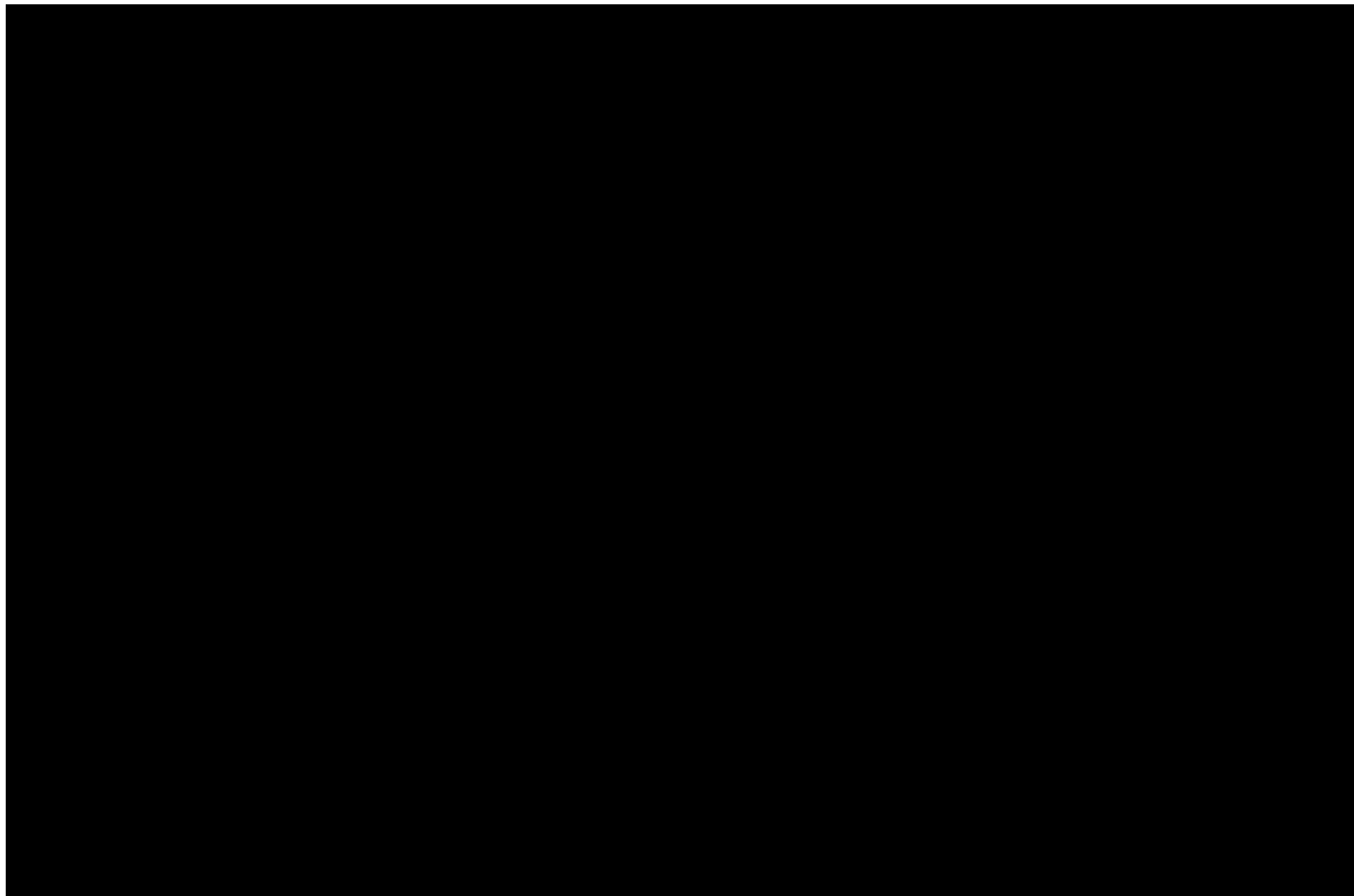


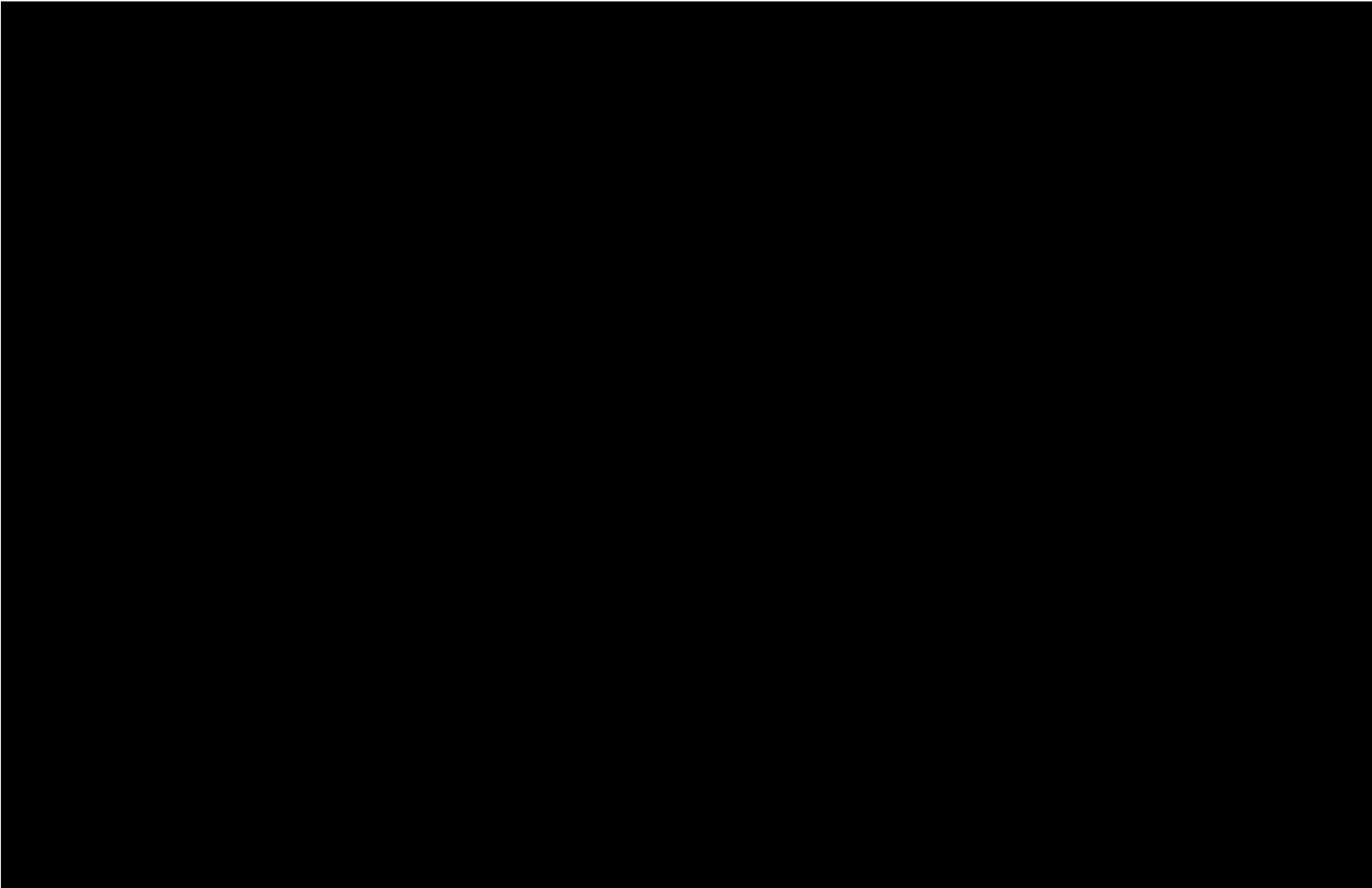


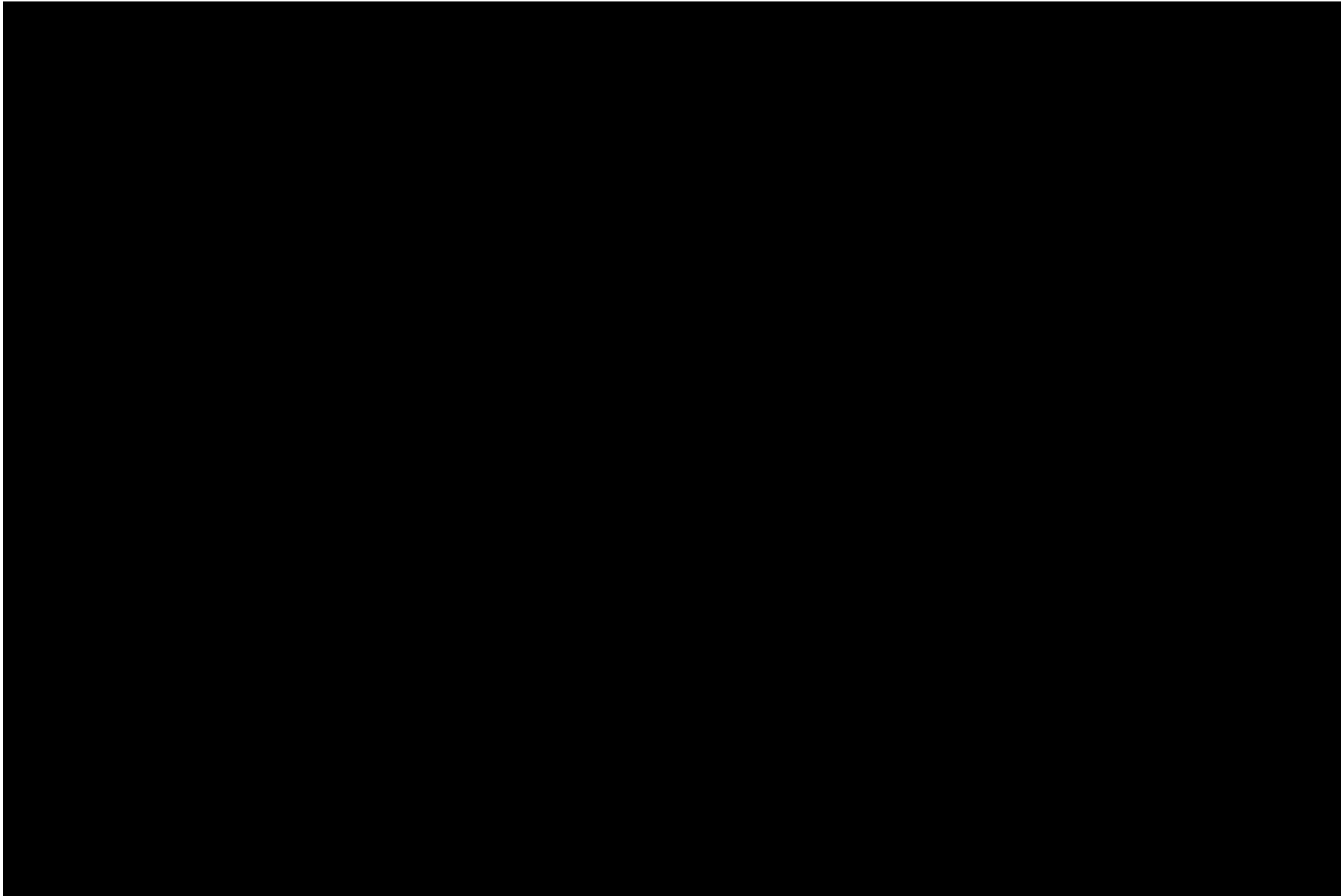


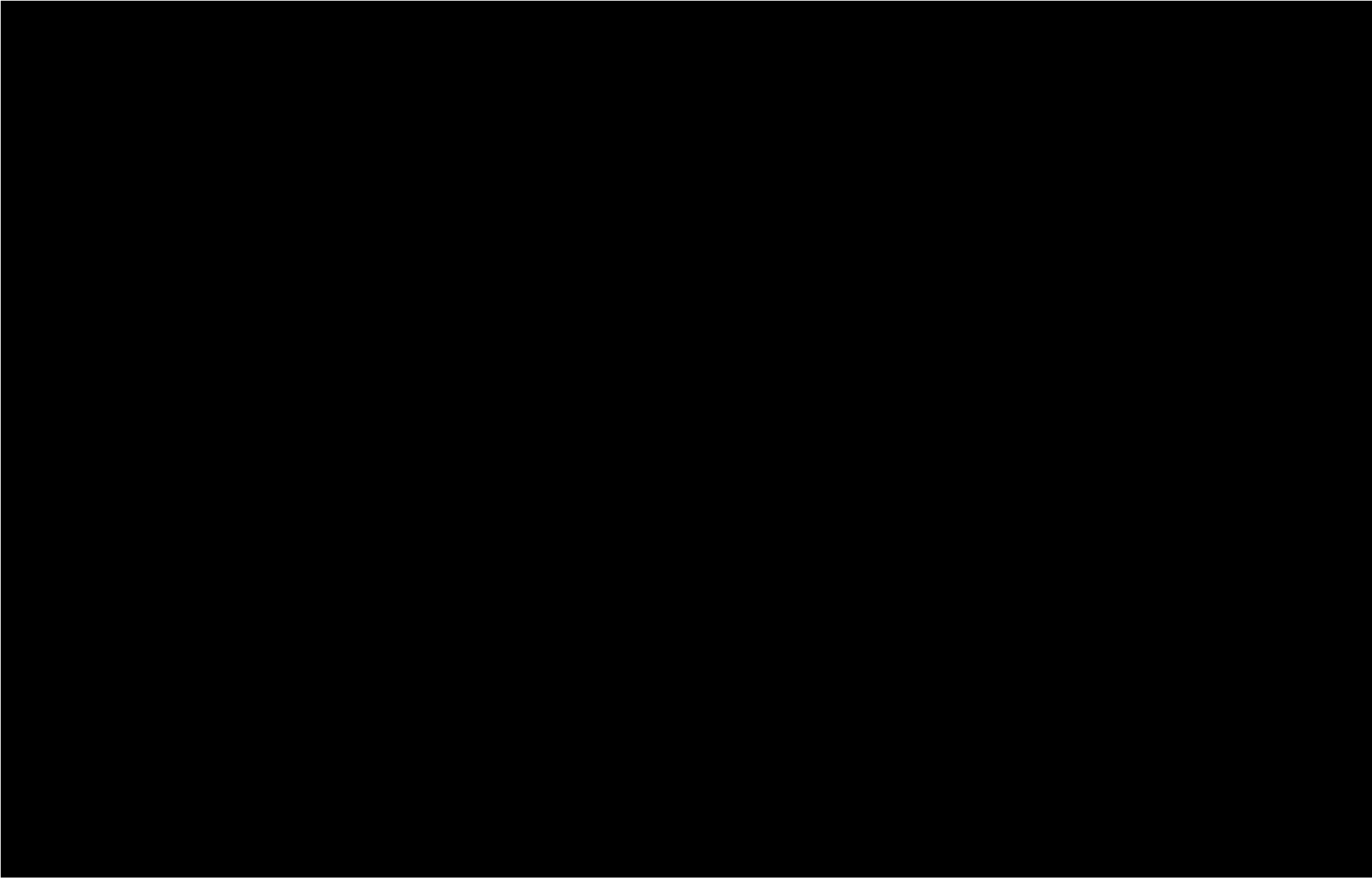




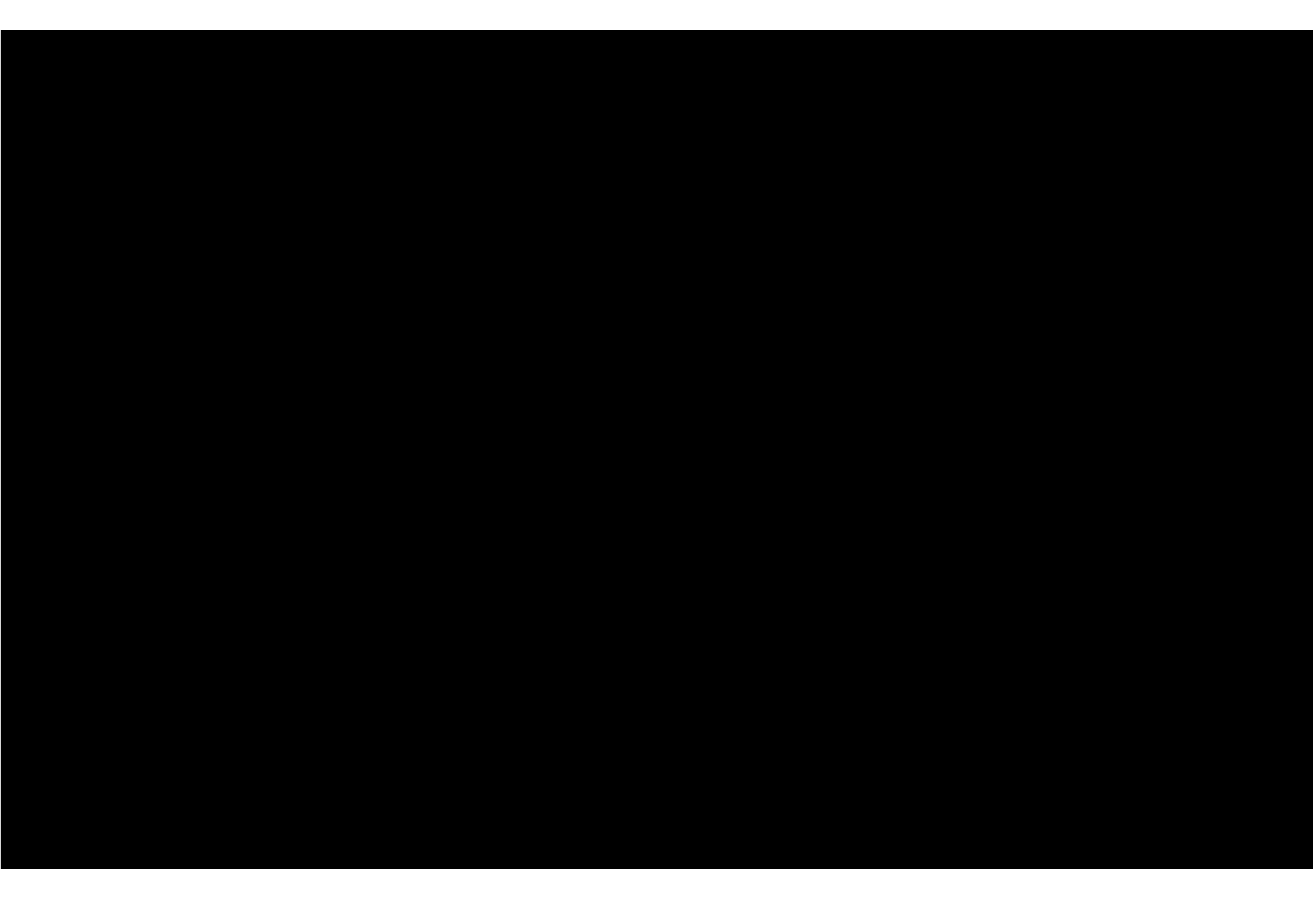


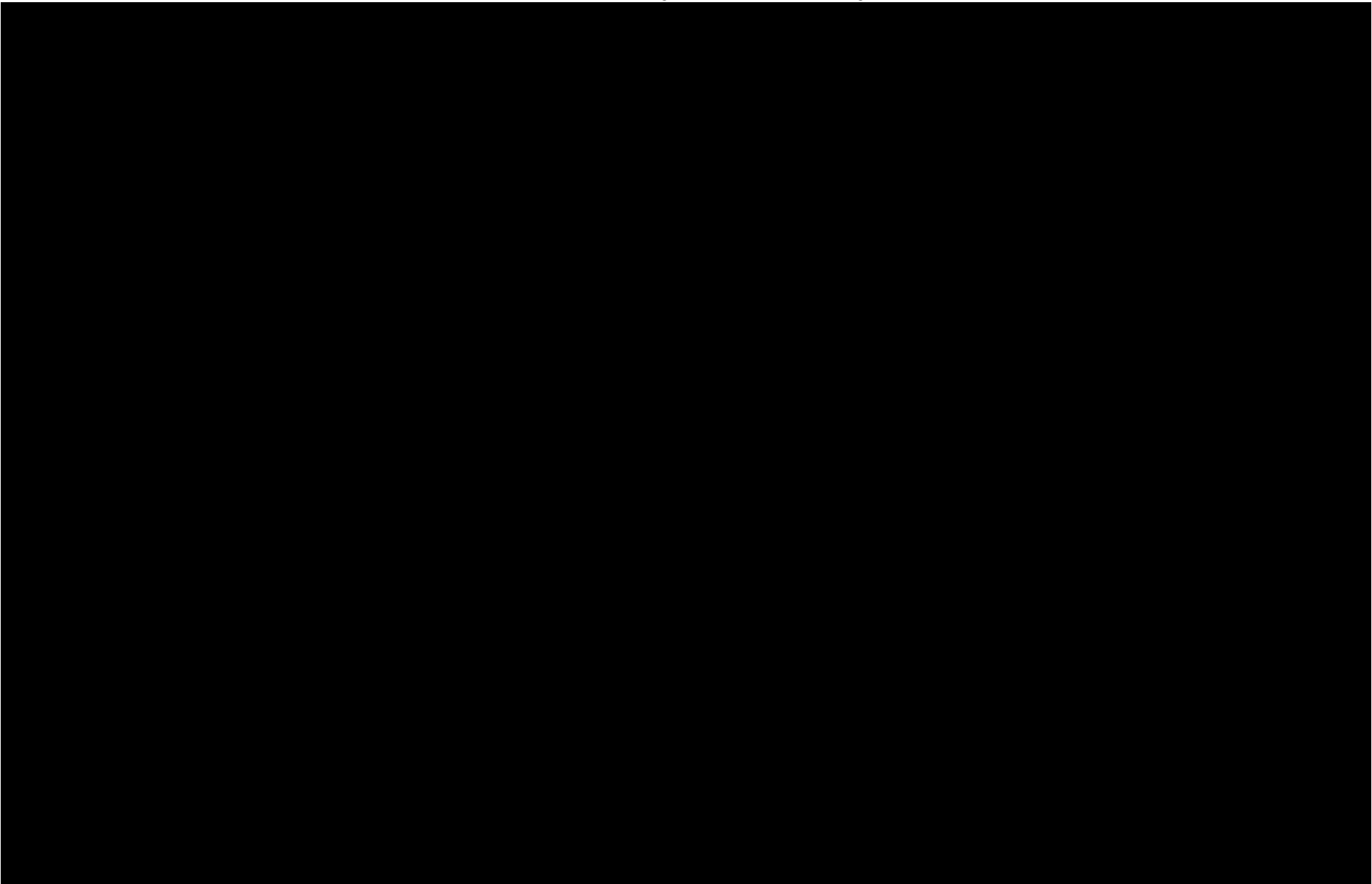


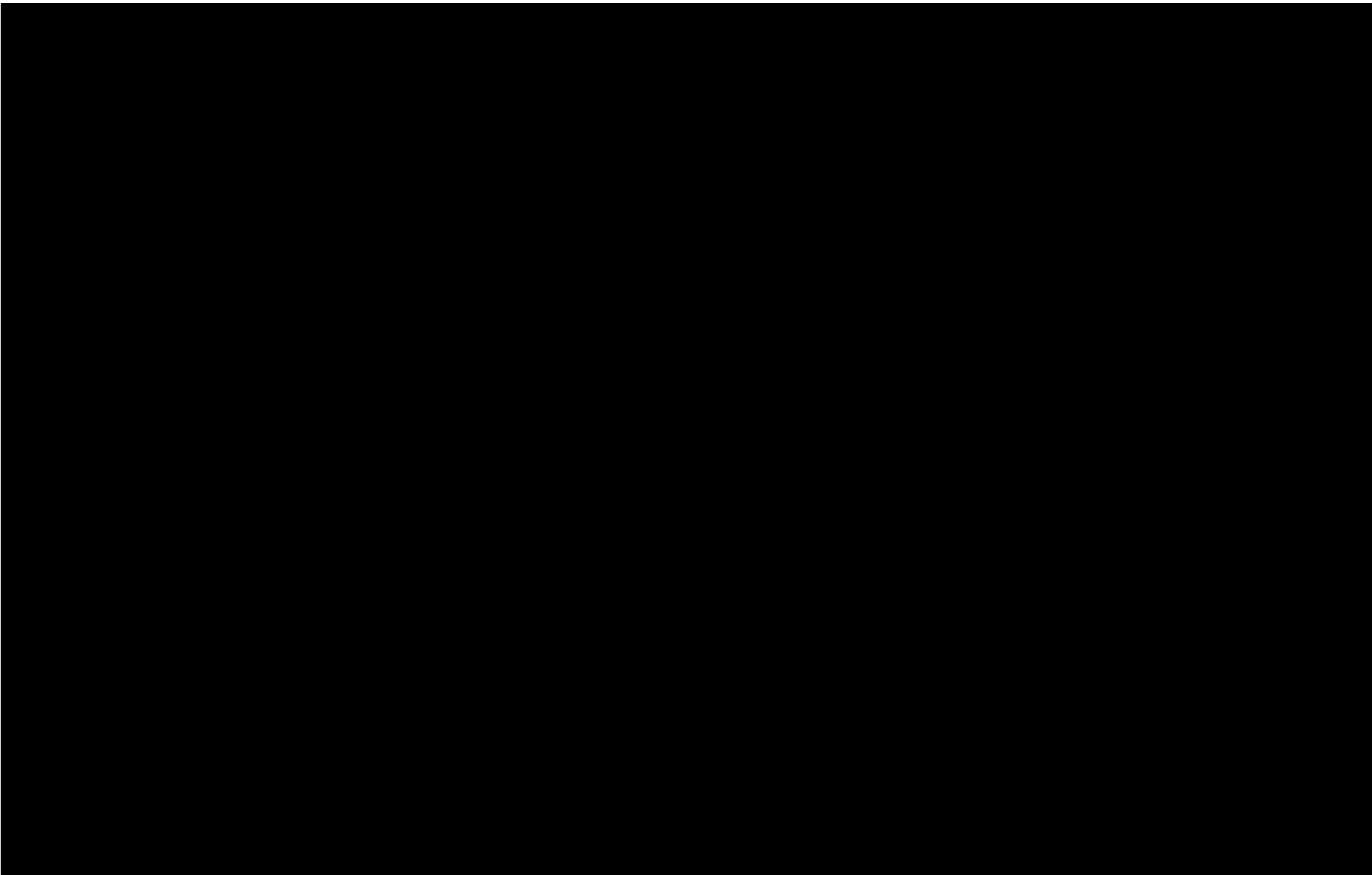




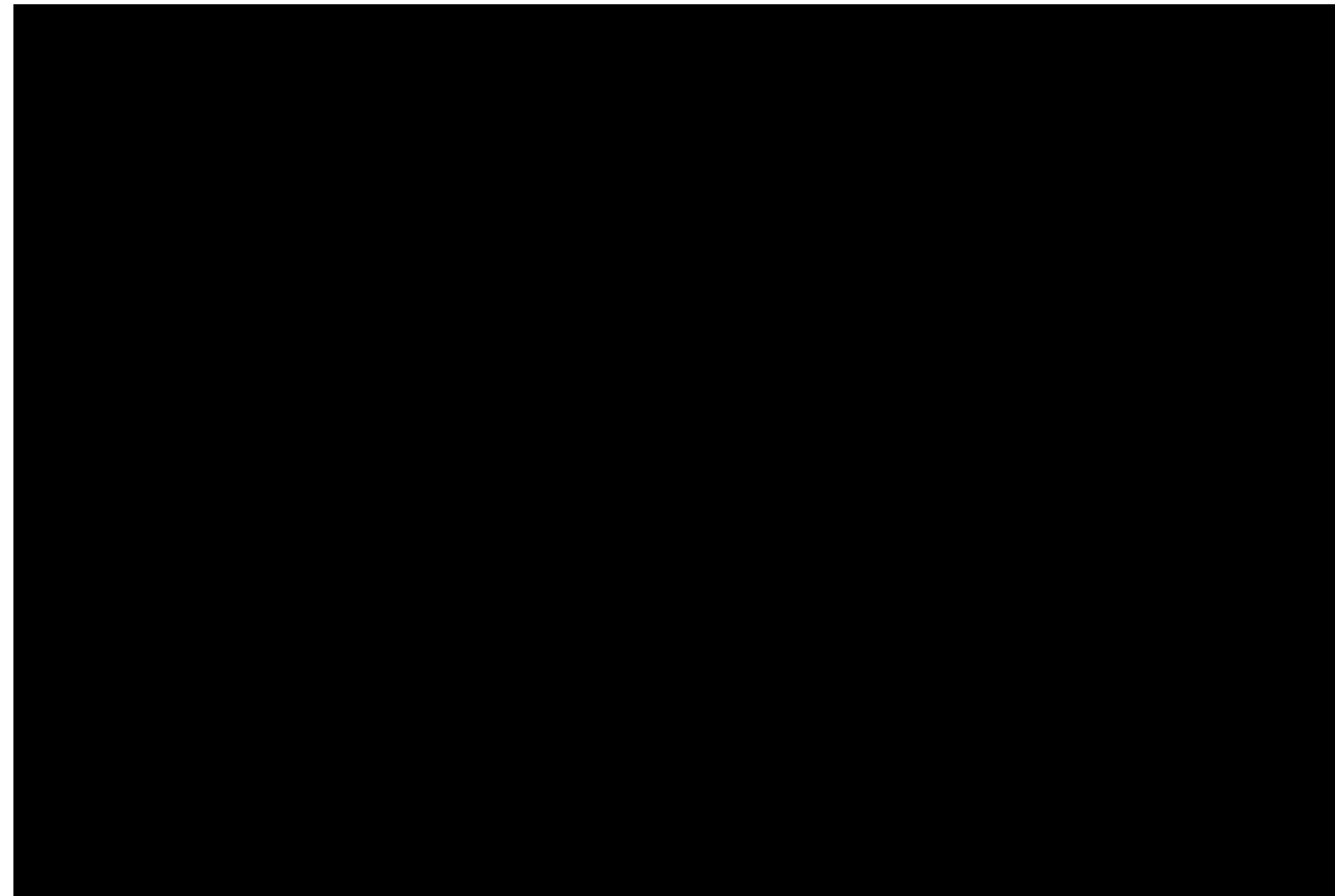


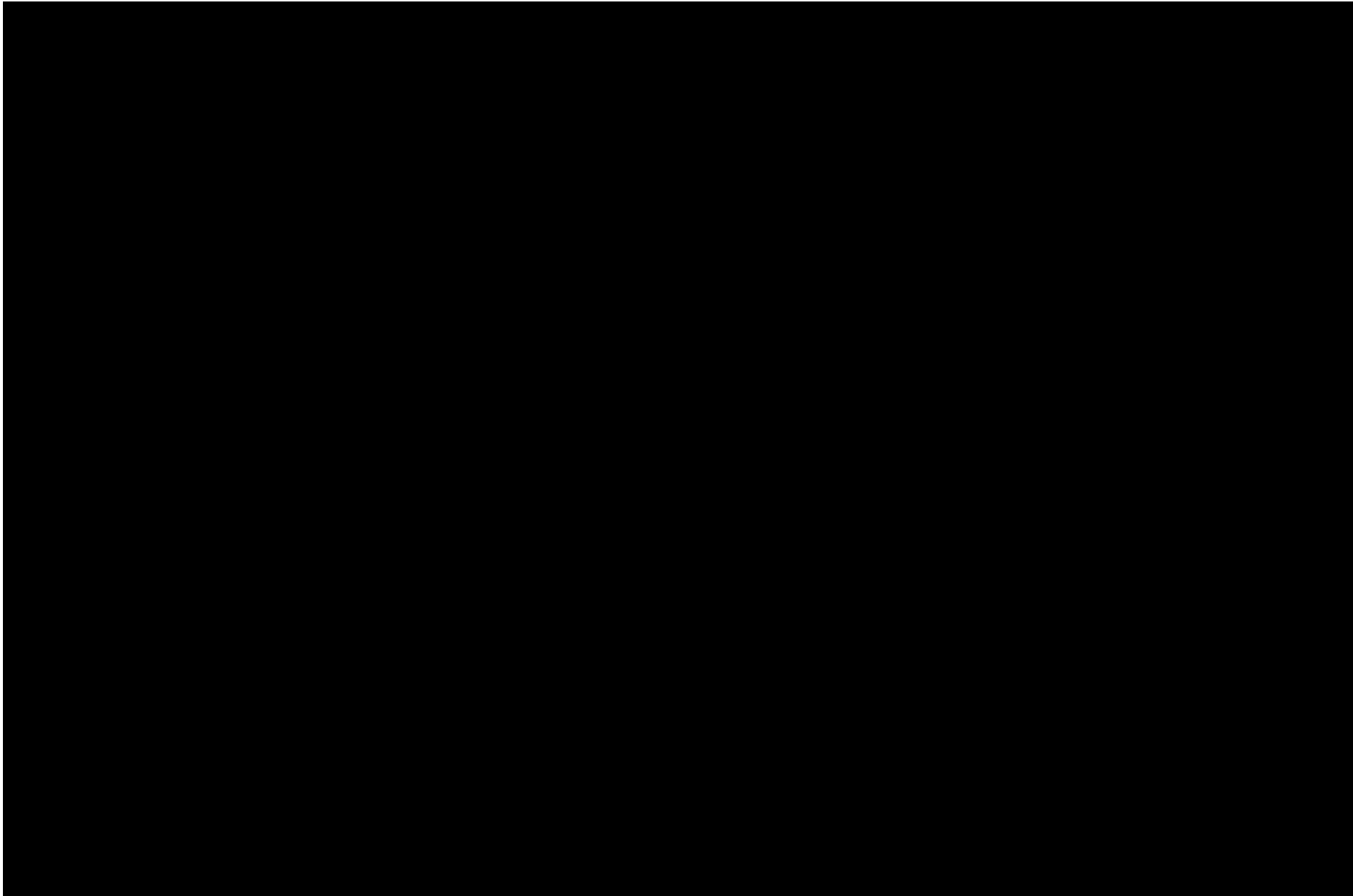


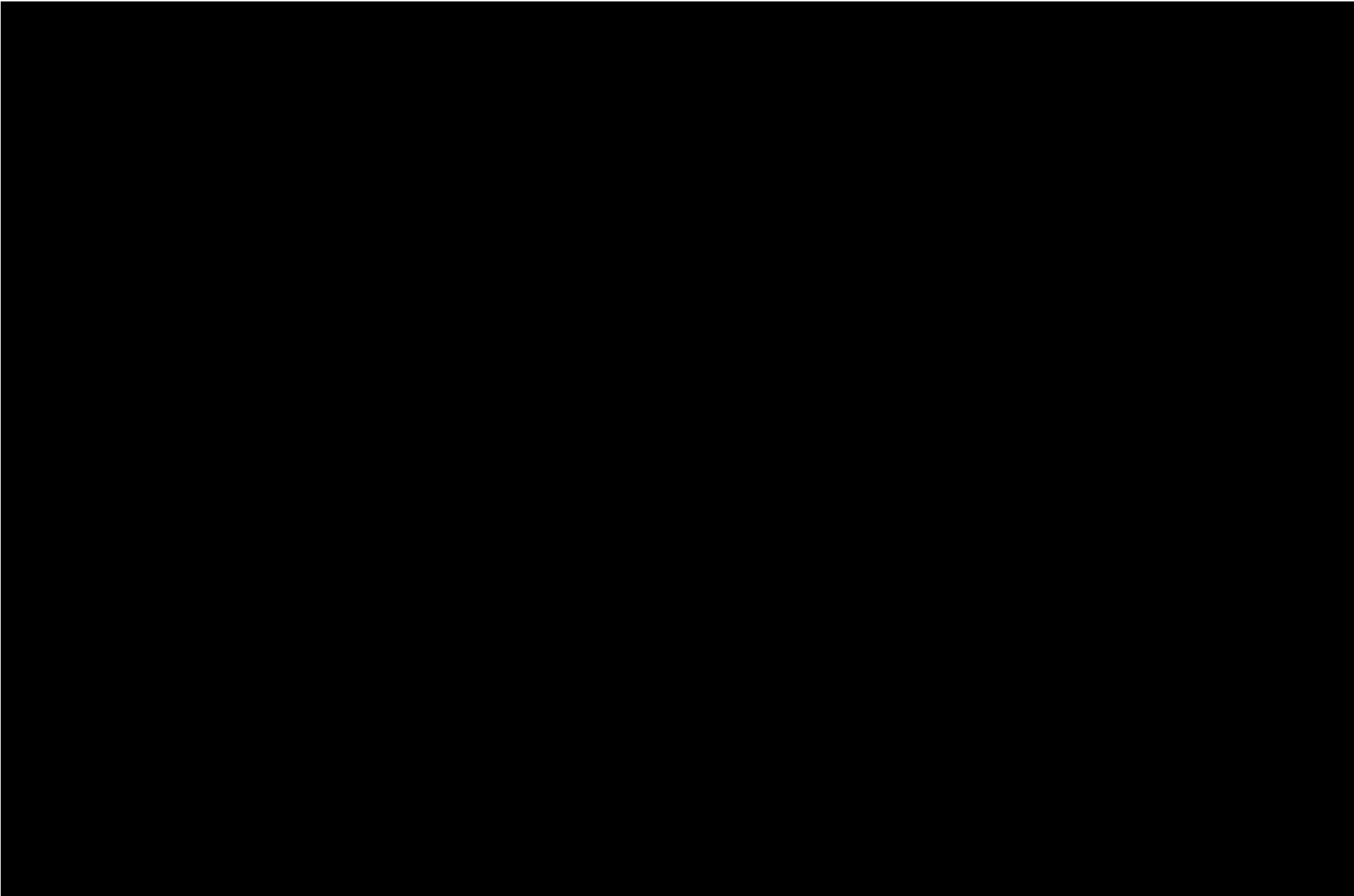












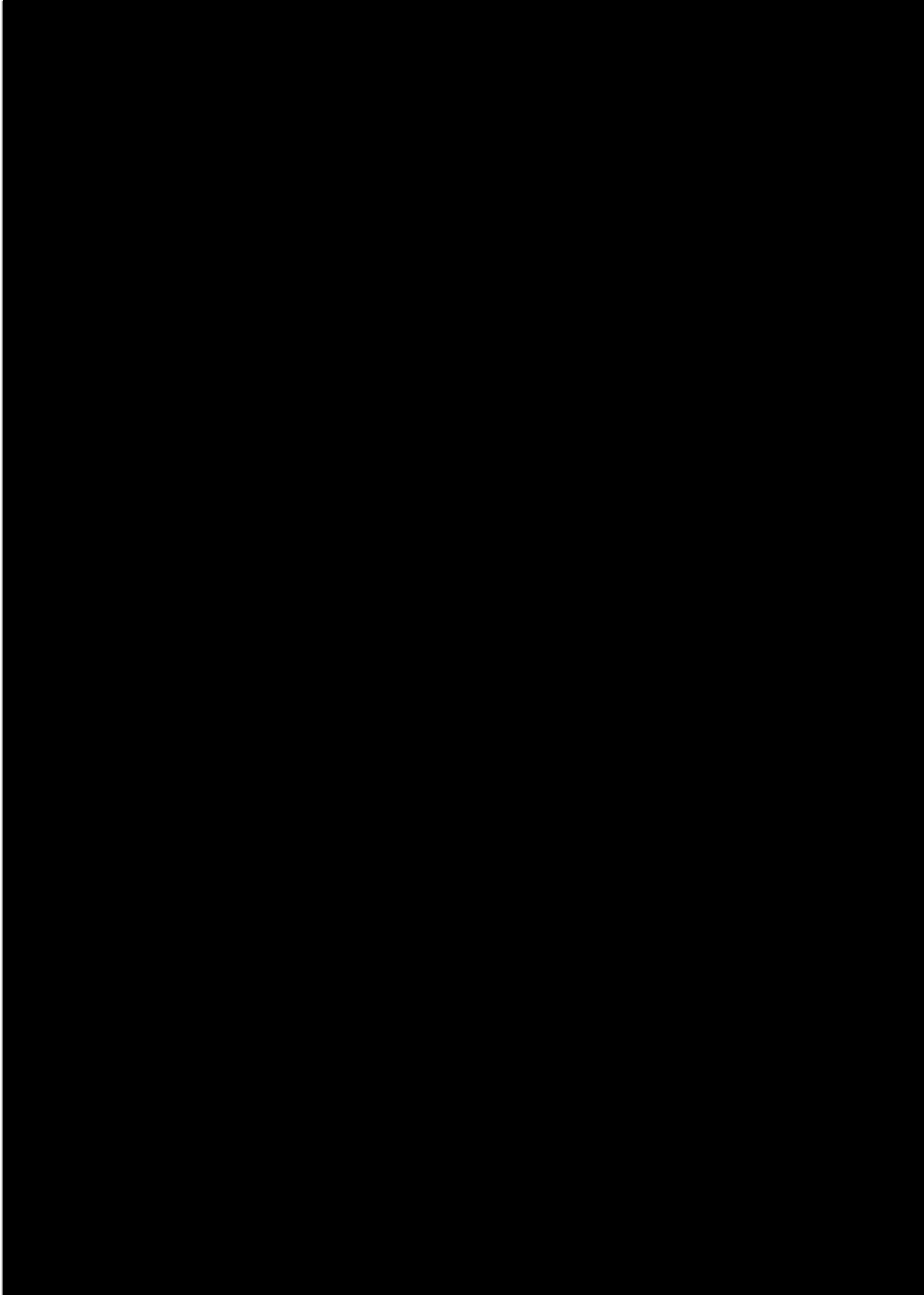


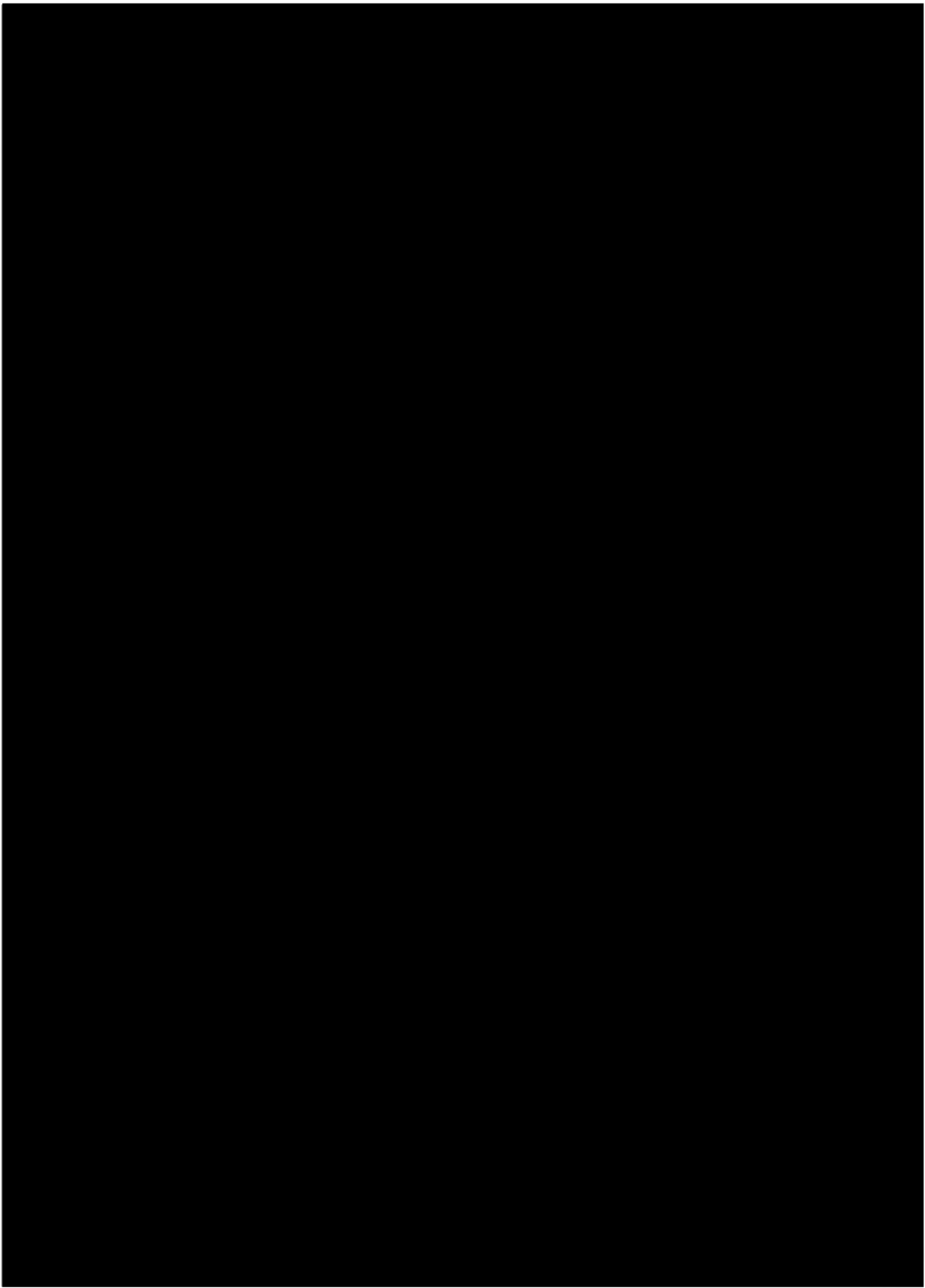






# ATTACHMENT 20





ANNEX A























































































# ATTACHMENT 21





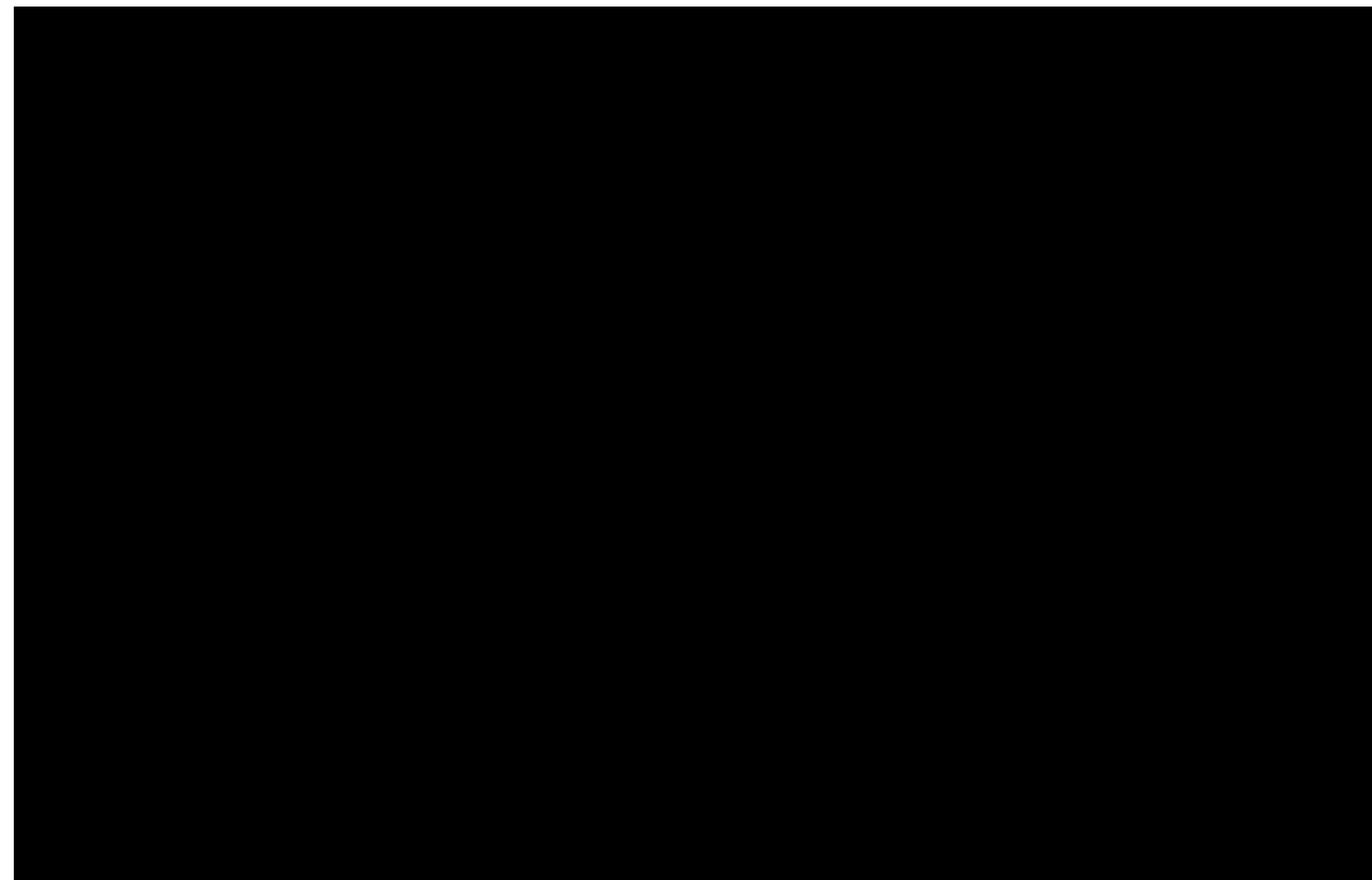






ANNEX A

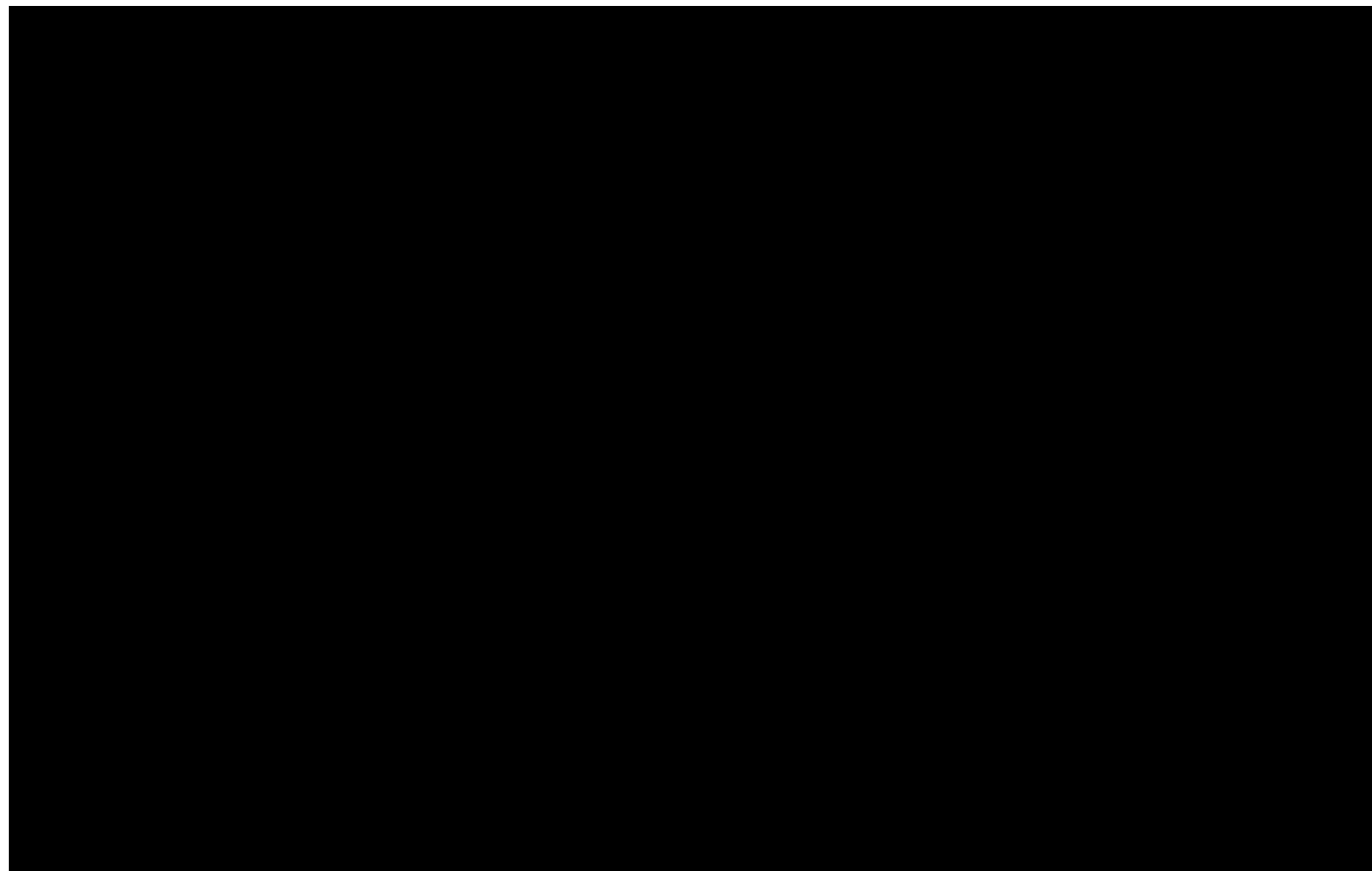
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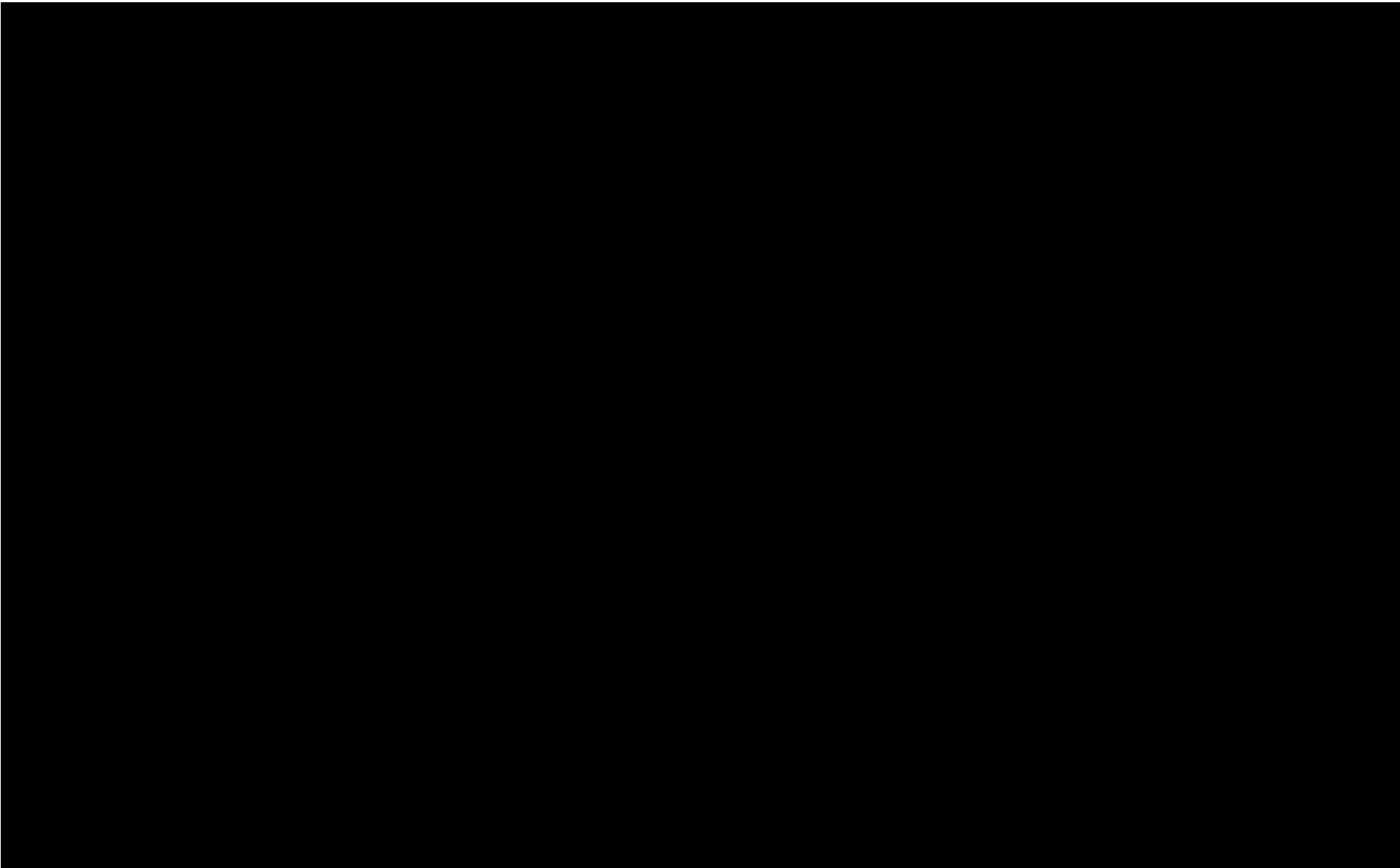
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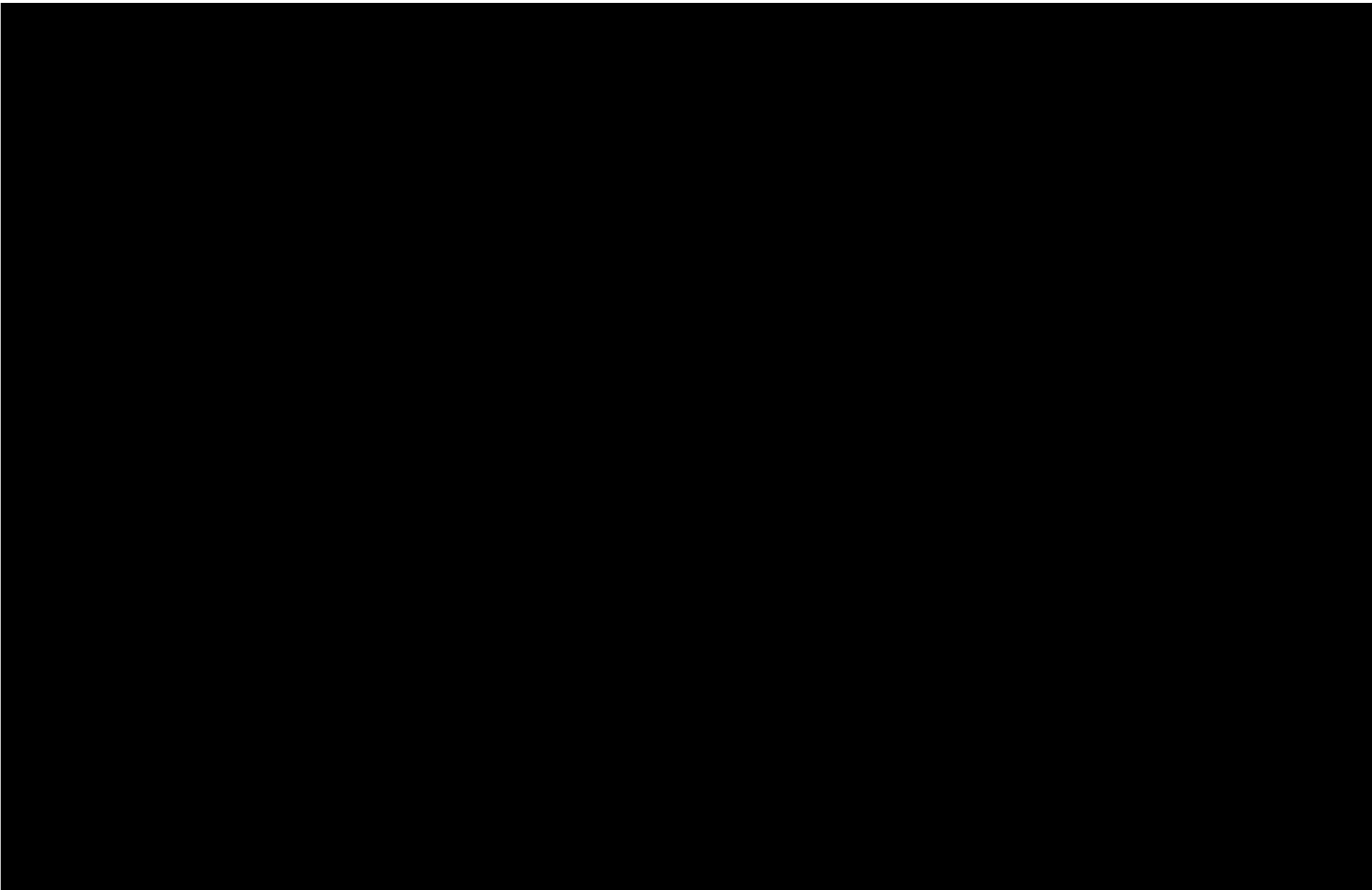
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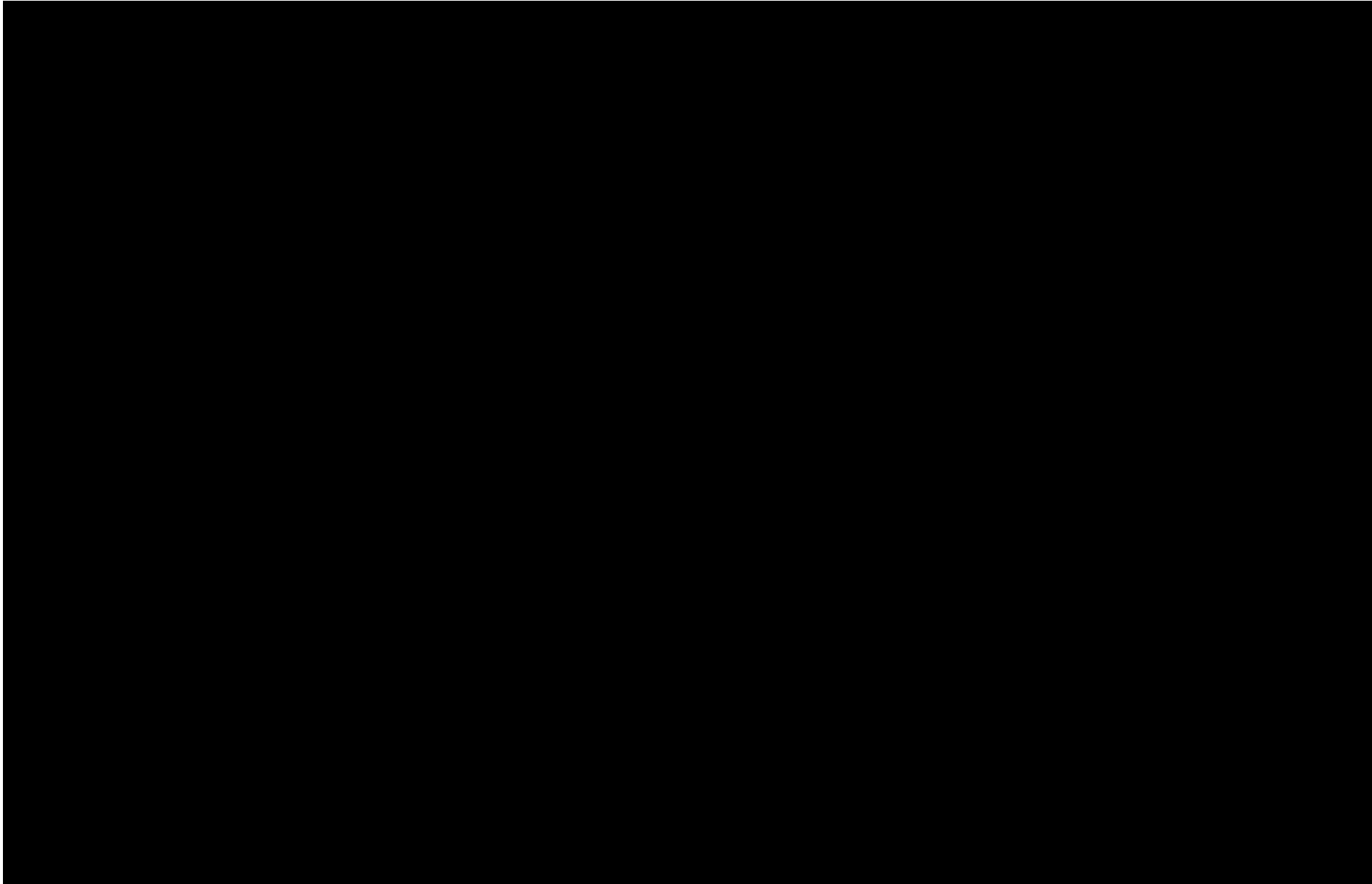
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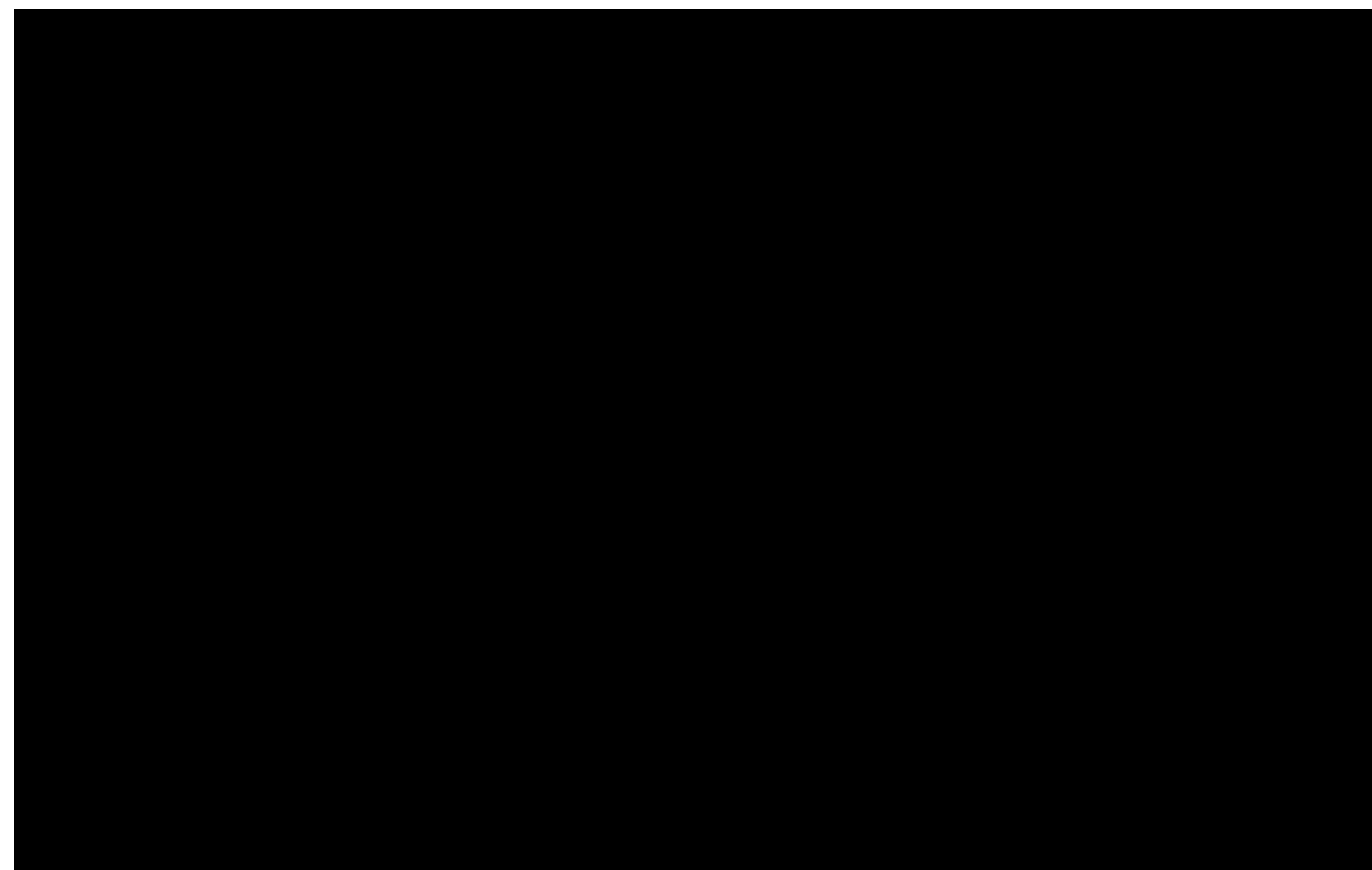
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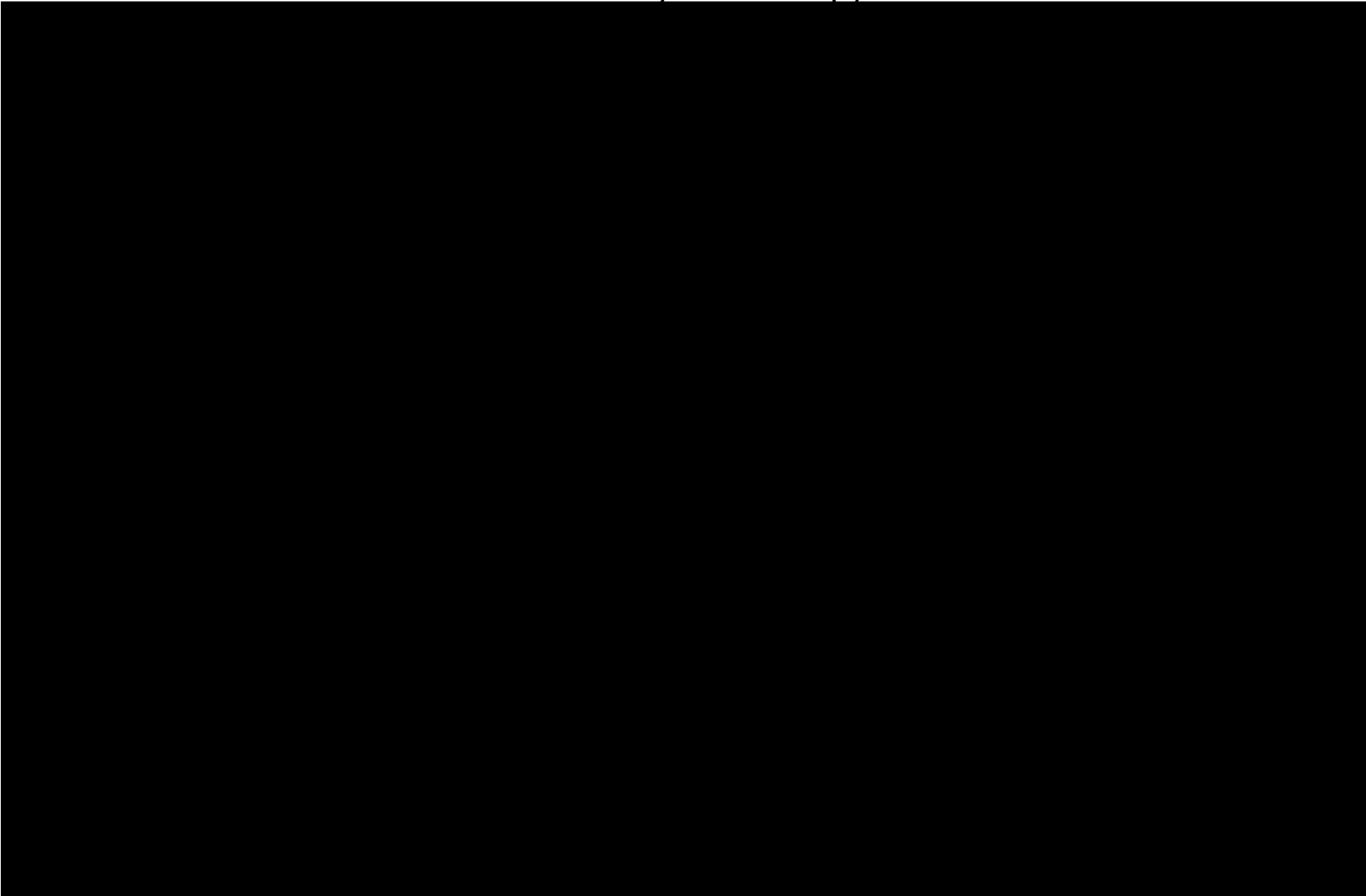
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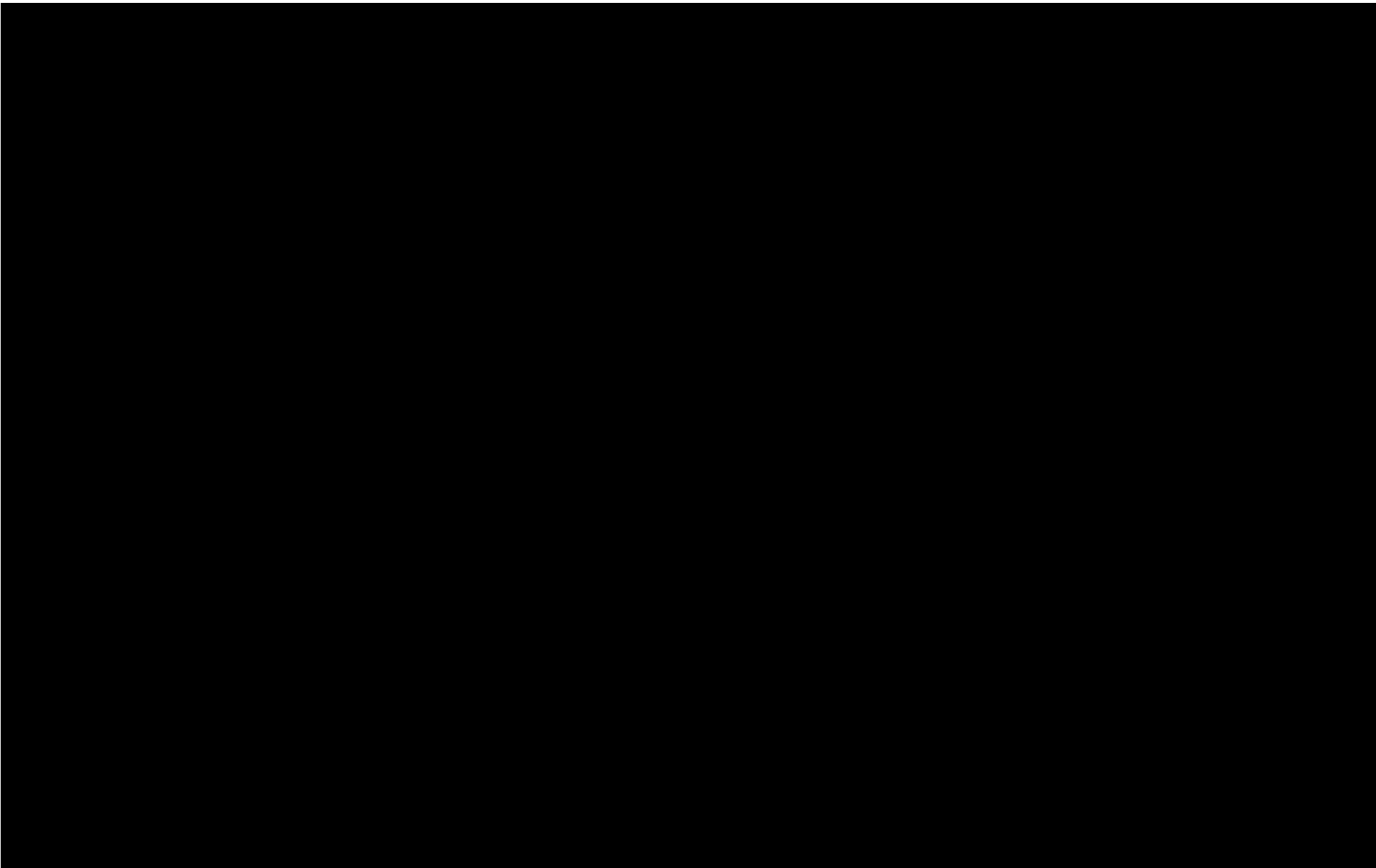
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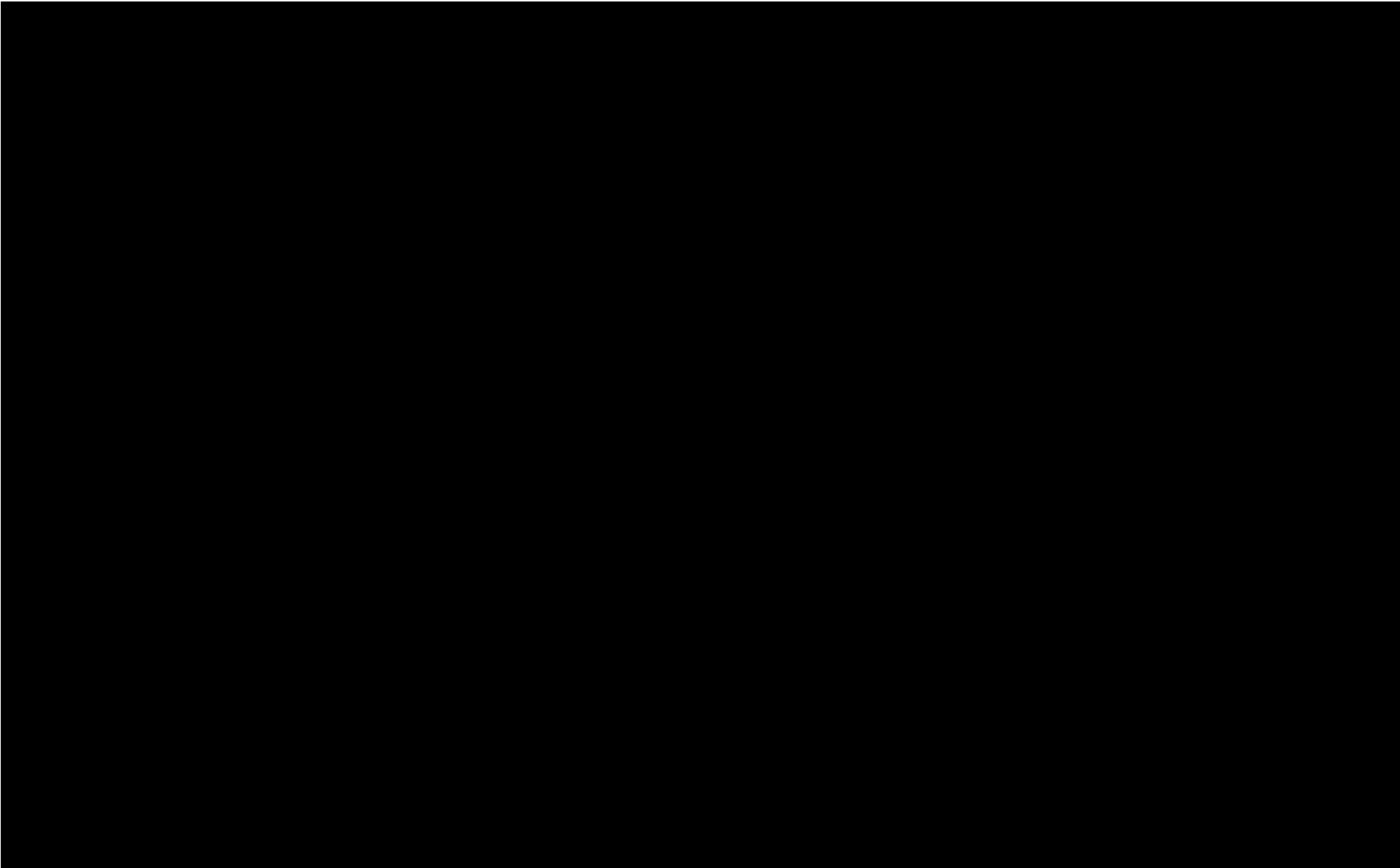




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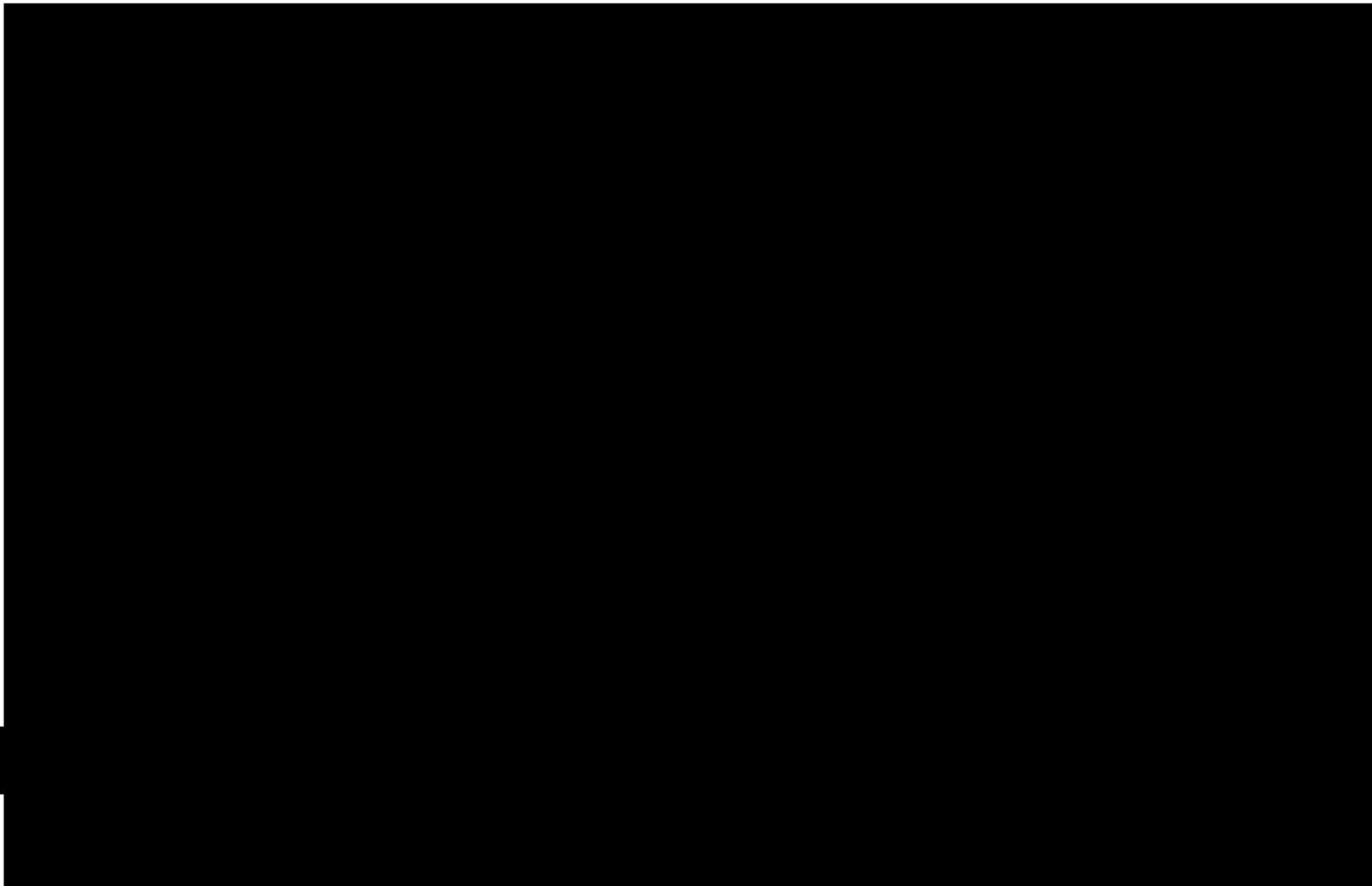
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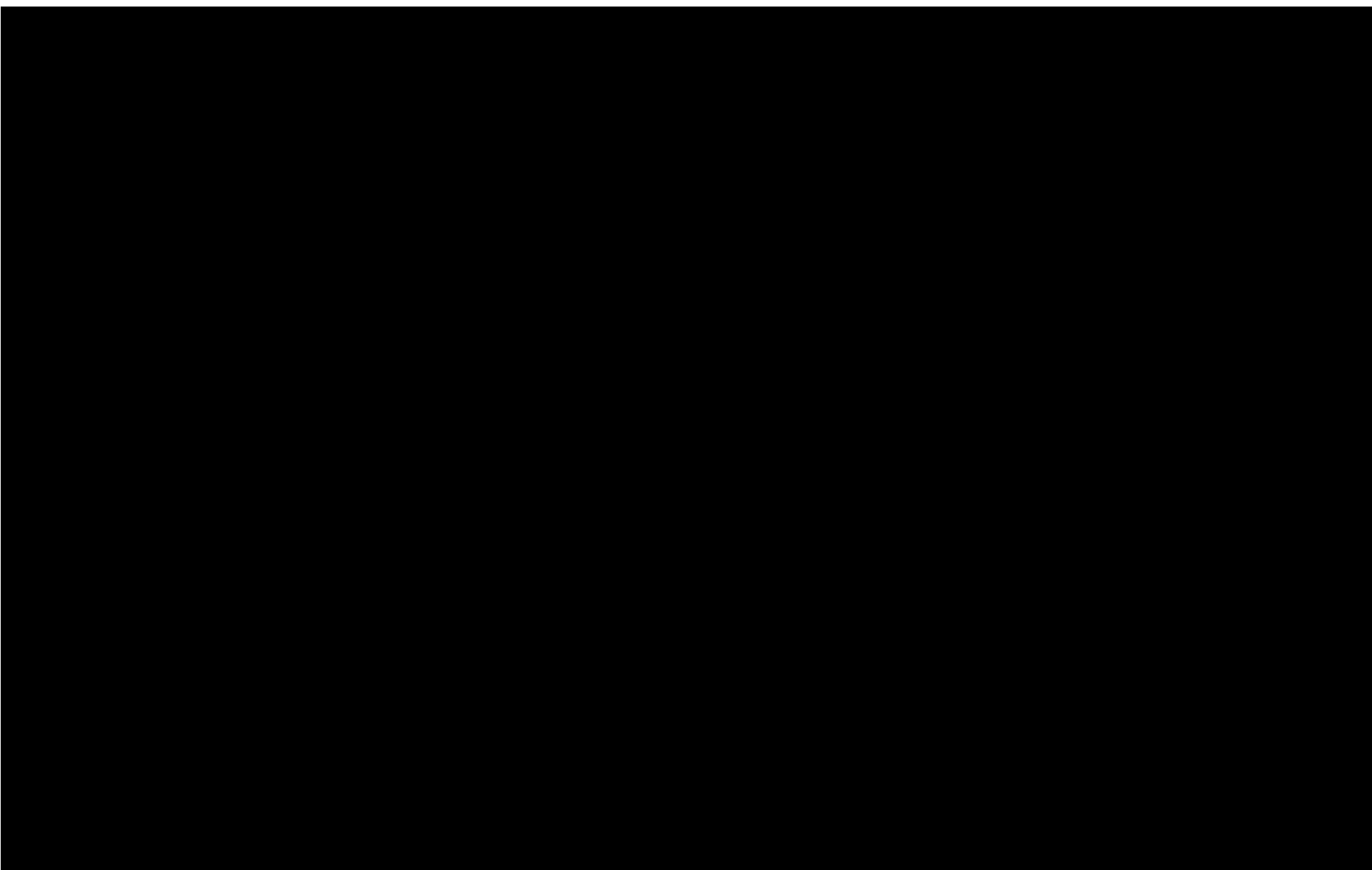
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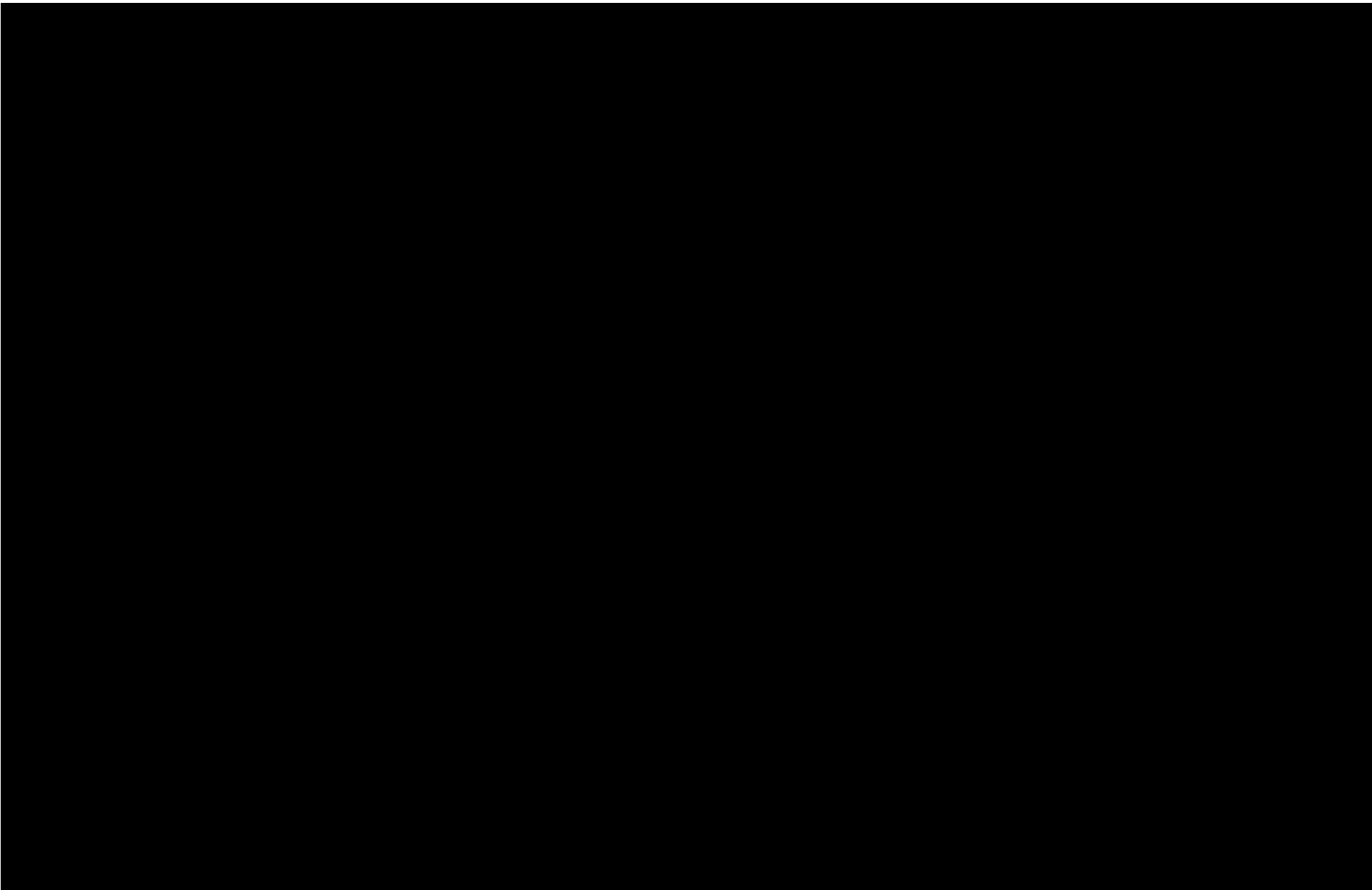




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ANNEX B











ANNEX C







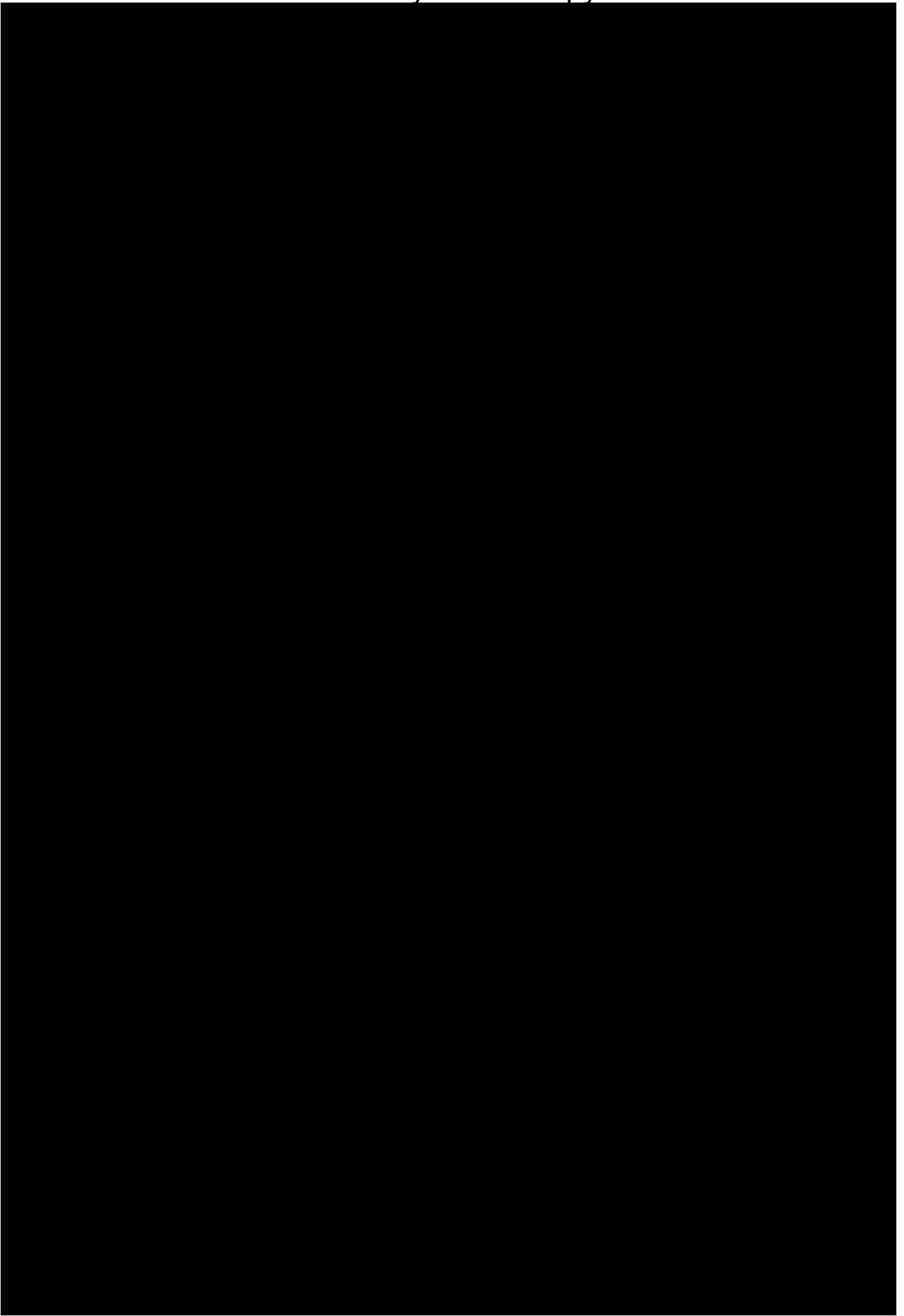








# ATTACHMENT 22







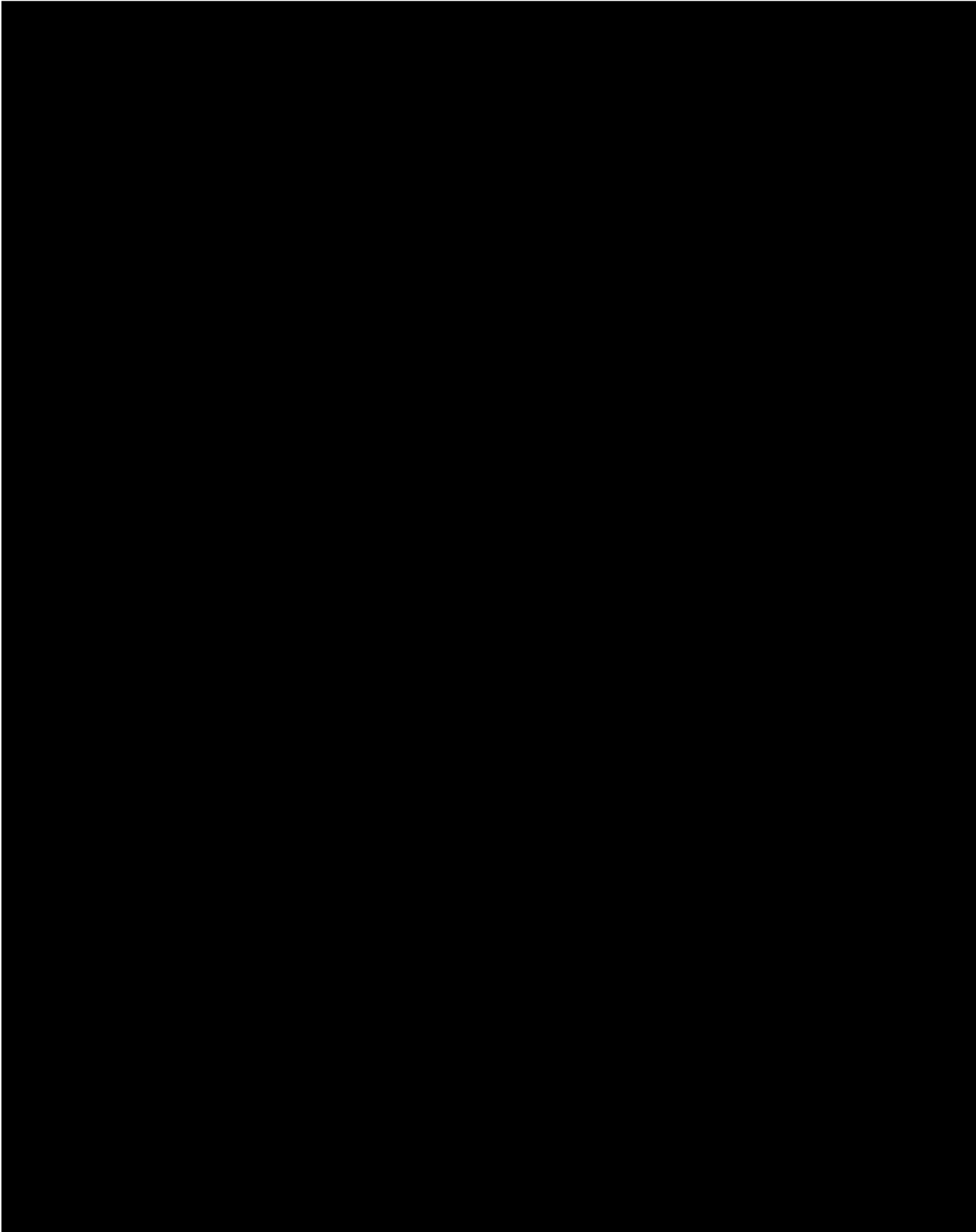
ANNEX A

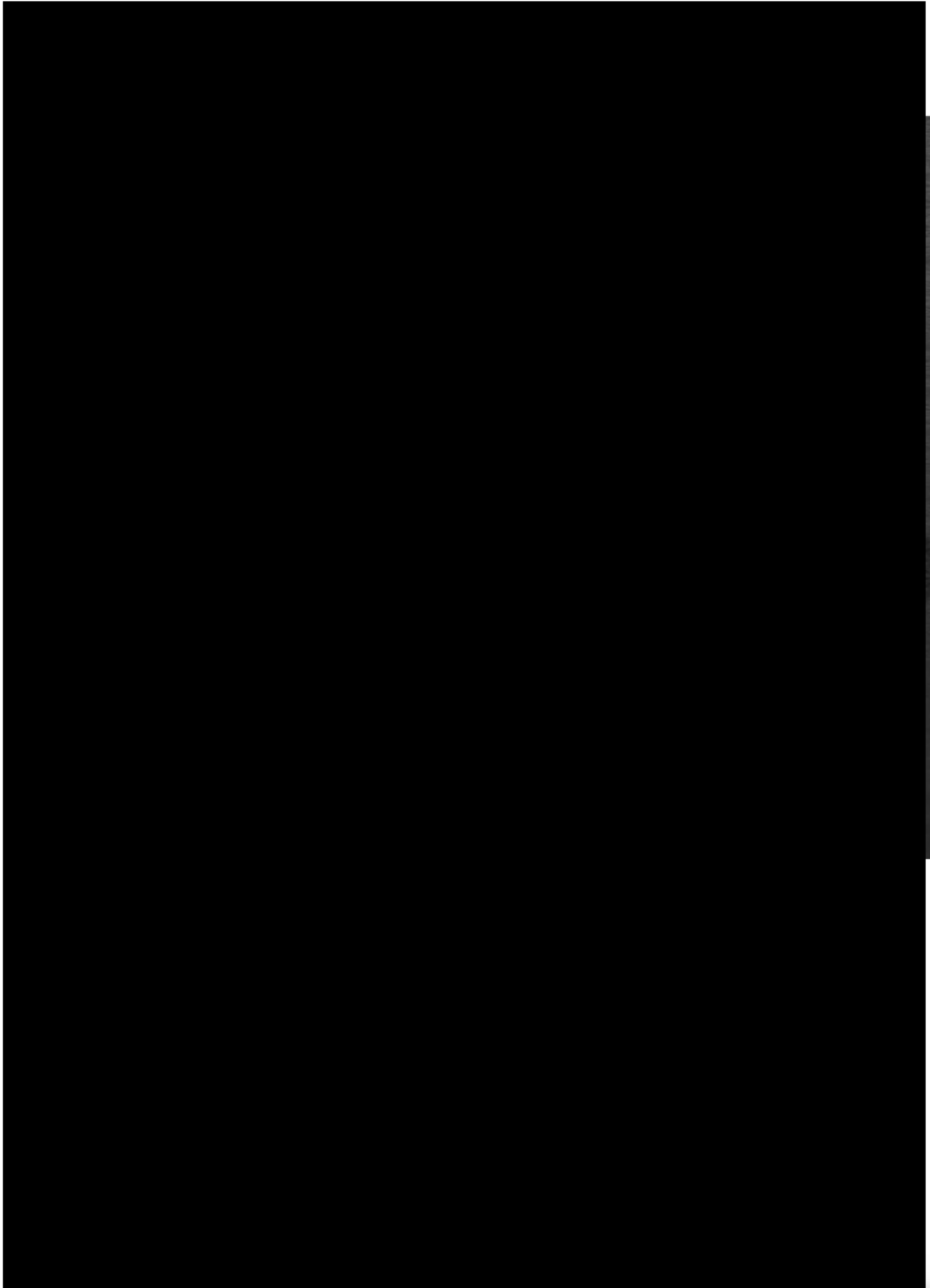
The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every receipt, invoice, and bill should be properly filed and indexed for easy retrieval. This is particularly crucial for businesses that operate in highly regulated industries where compliance is a top priority.

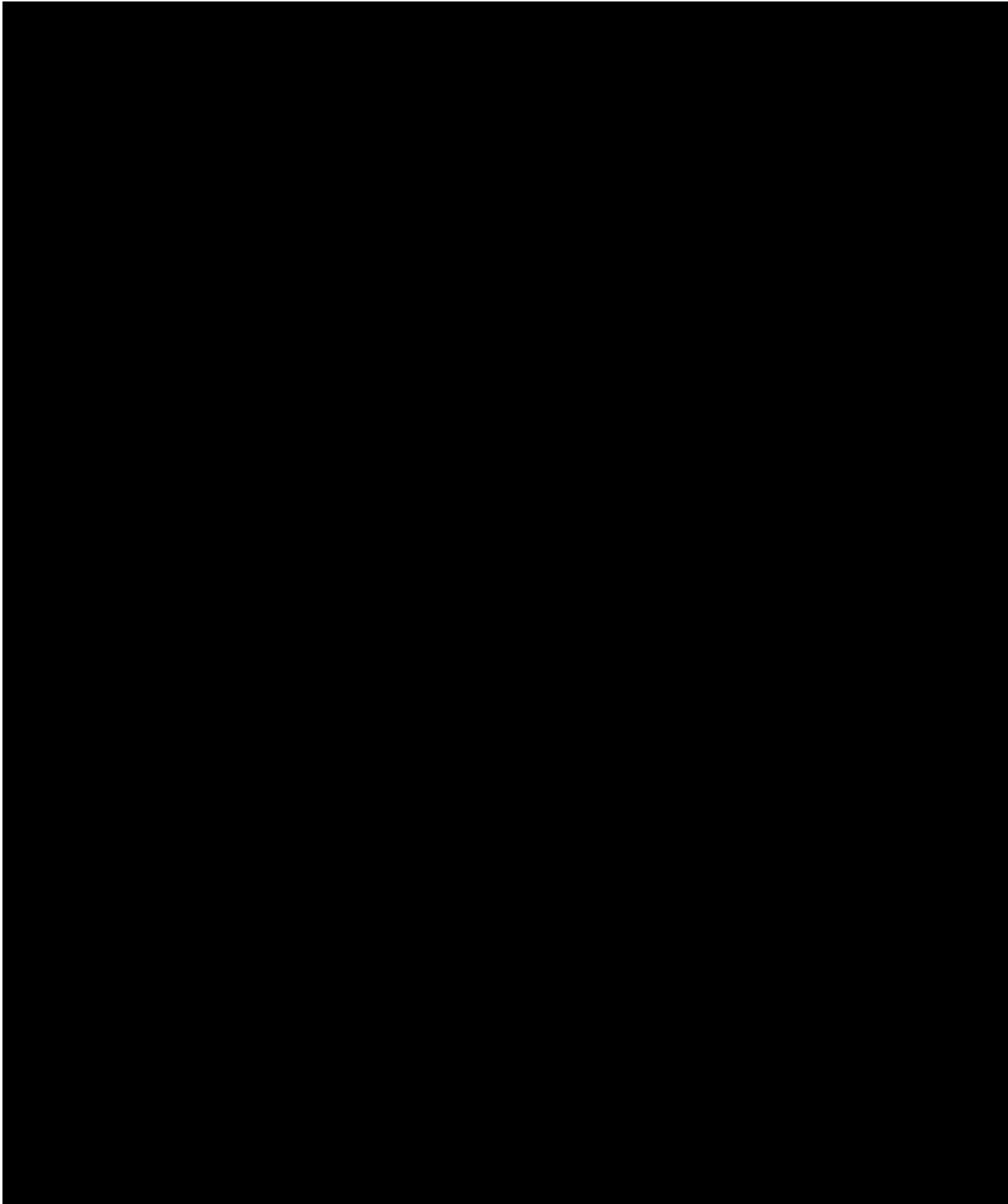
Next, the document addresses the issue of data security. In an era where cyber threats are becoming increasingly sophisticated, it is essential to implement robust security measures to protect sensitive financial information. This includes using secure communication channels, encrypting data, and regularly updating software to patch vulnerabilities.

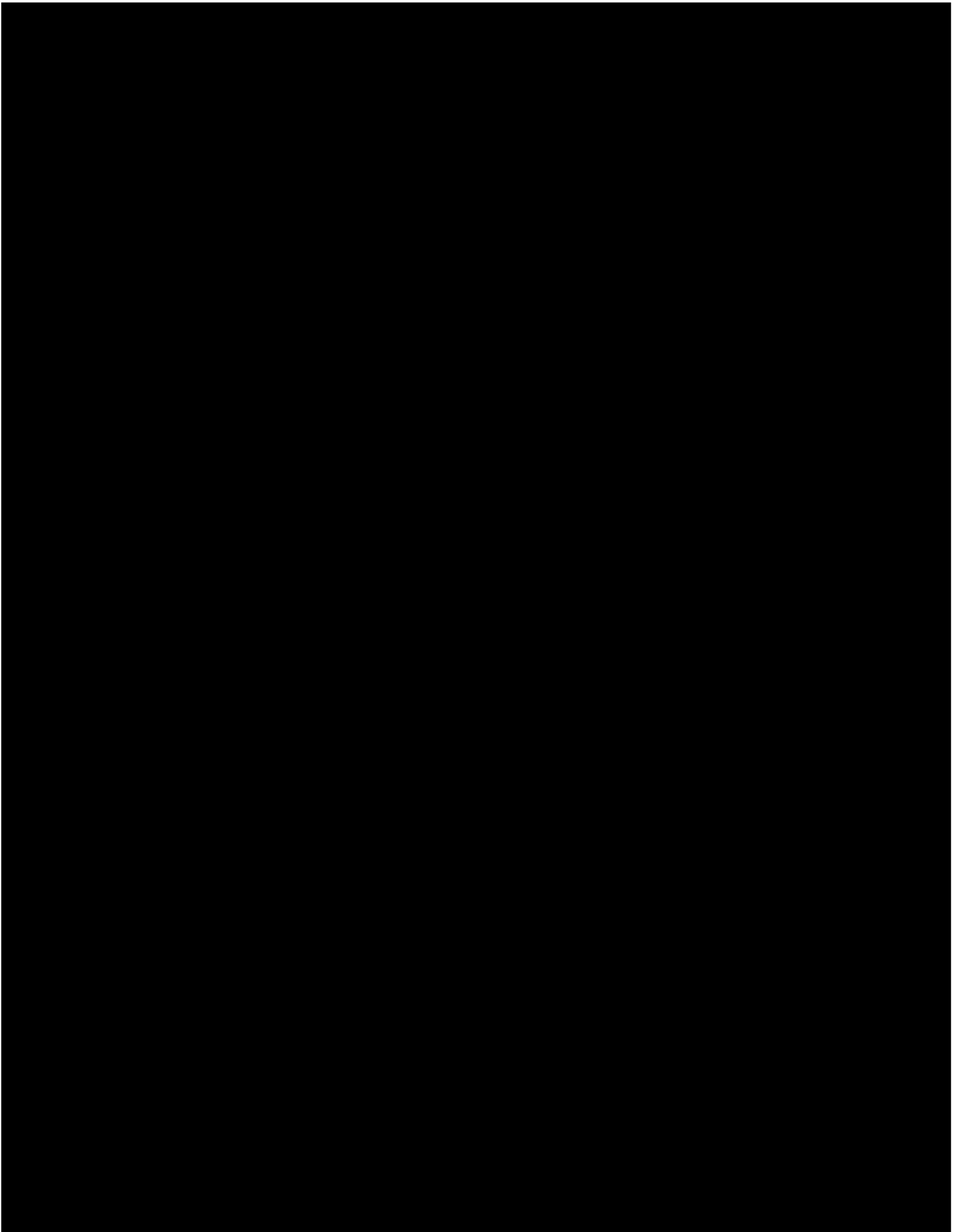
The document also highlights the need for transparency and accountability in financial reporting. Stakeholders, including investors and regulators, expect clear and concise information about a company's financial health. Providing regular updates and being open to audits can help build trust and credibility.

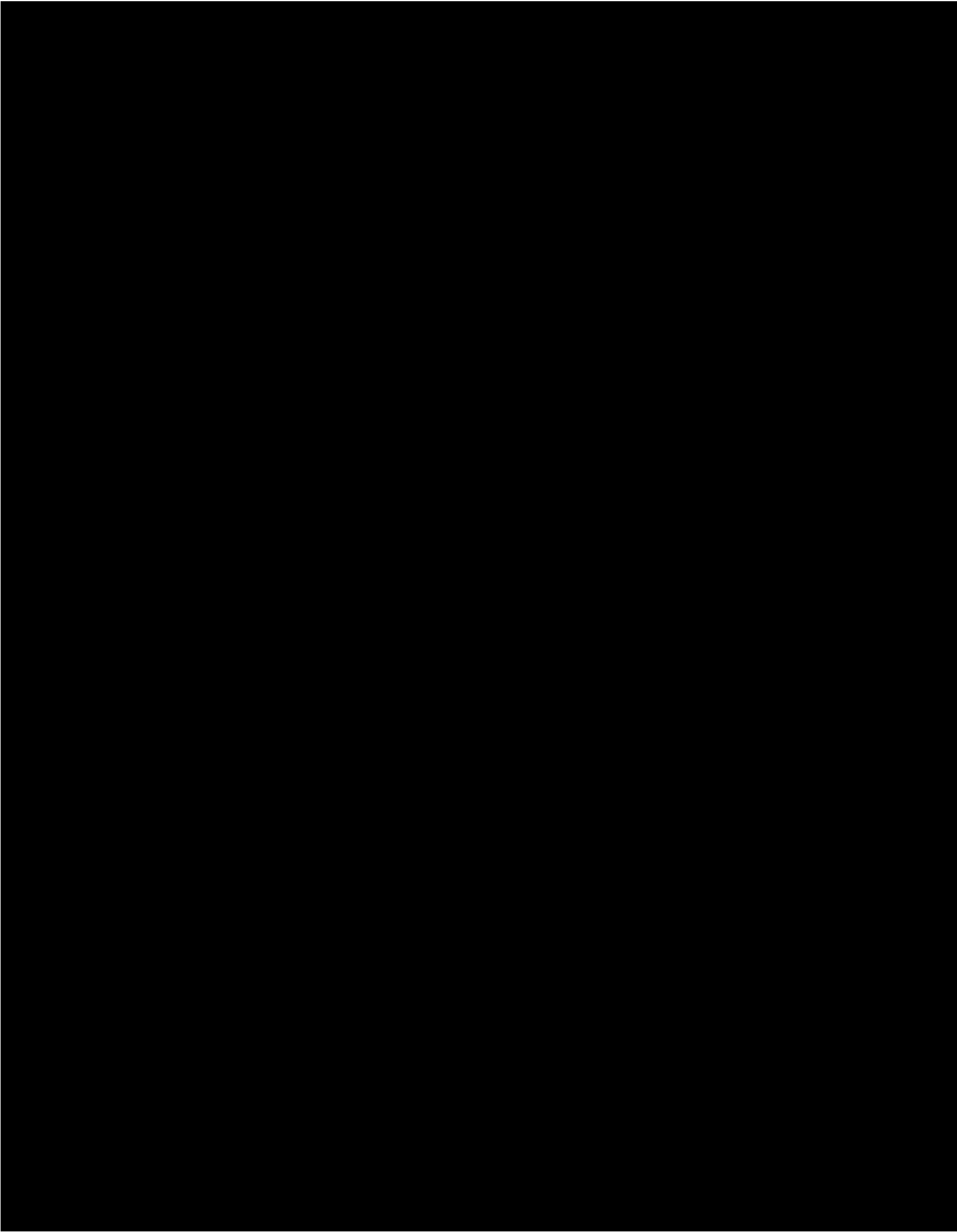
Finally, the document concludes by stressing the importance of staying up-to-date with the latest financial regulations and tax laws. The financial landscape is constantly evolving, and businesses must adapt to these changes to avoid penalties and ensure long-term success.





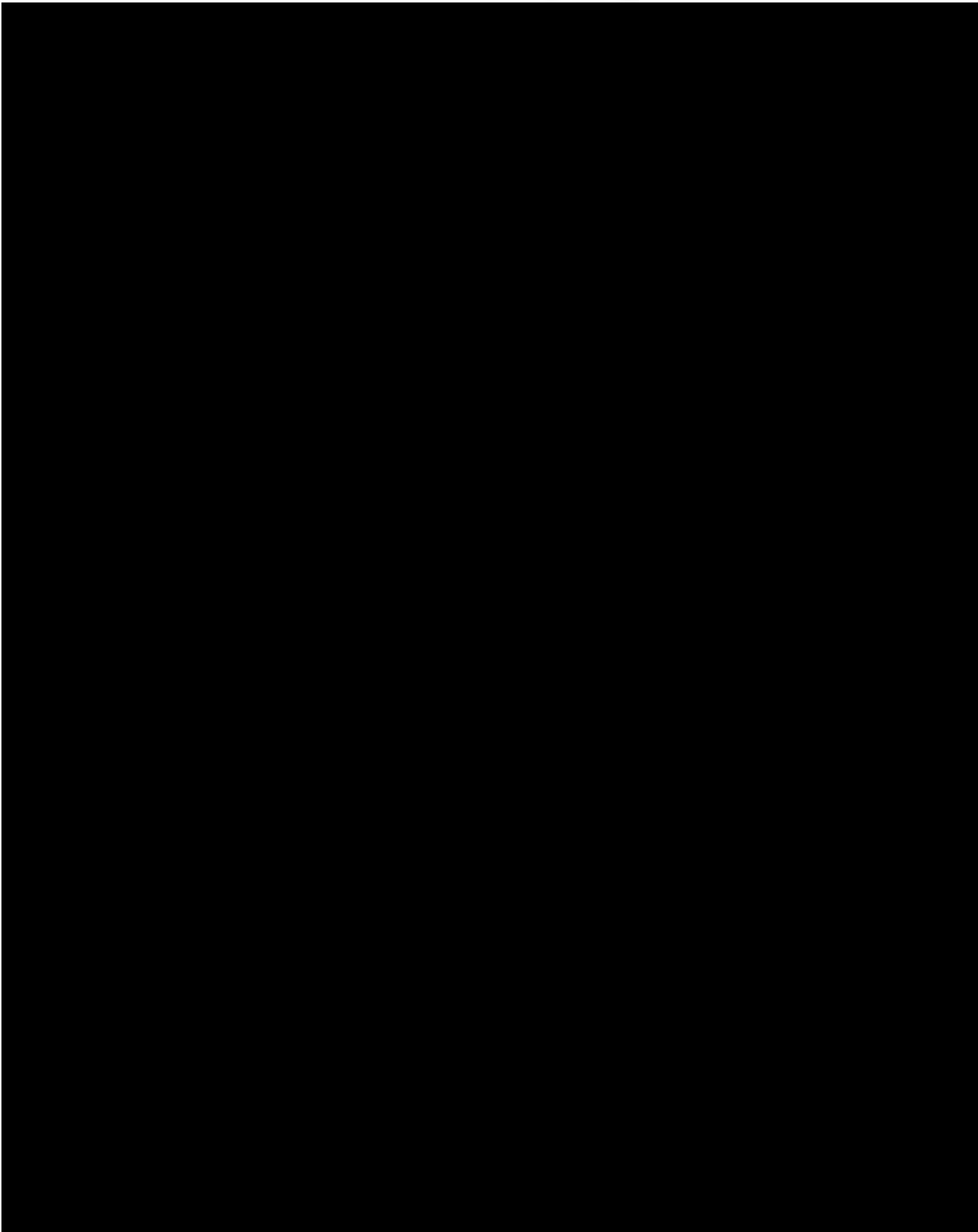


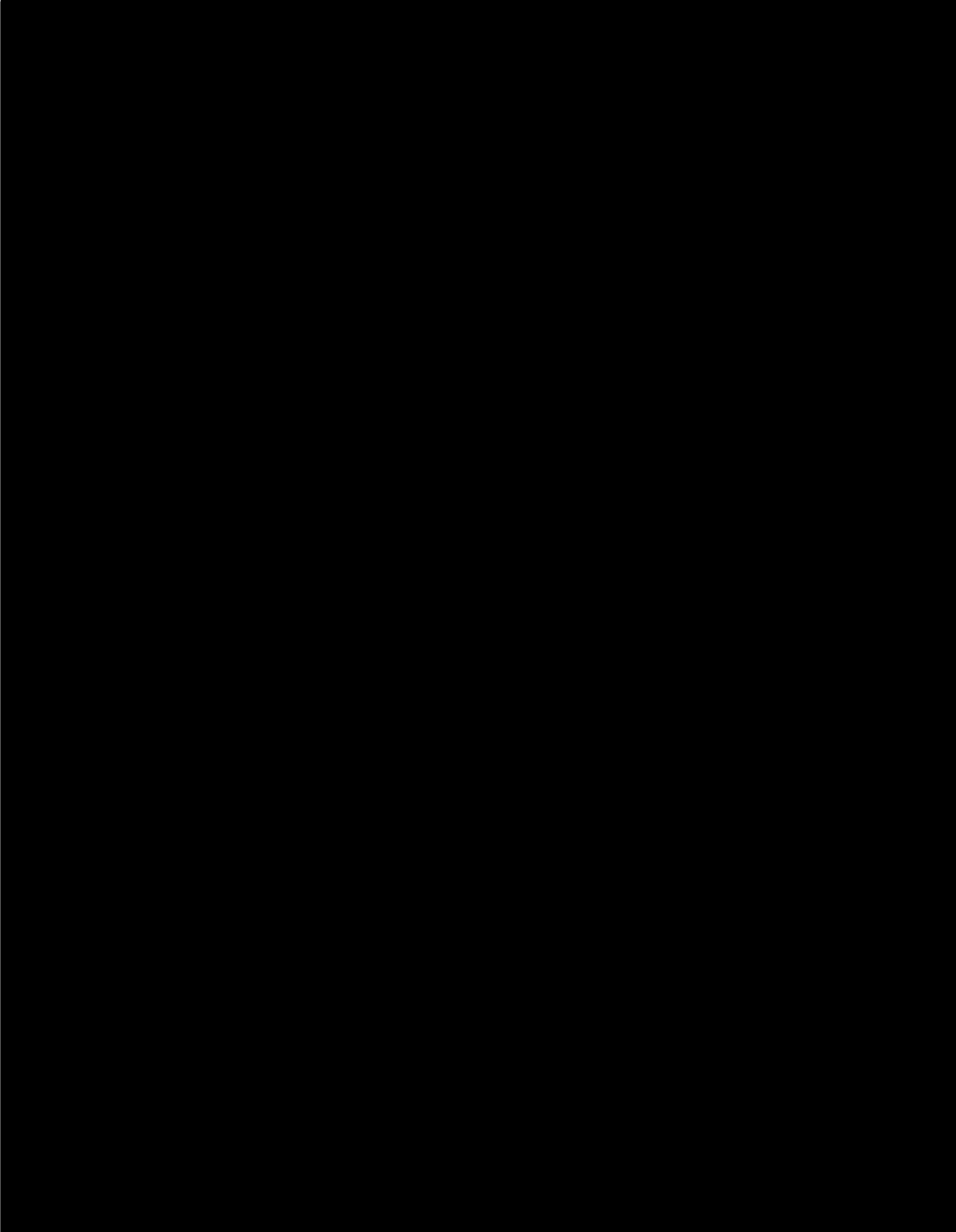


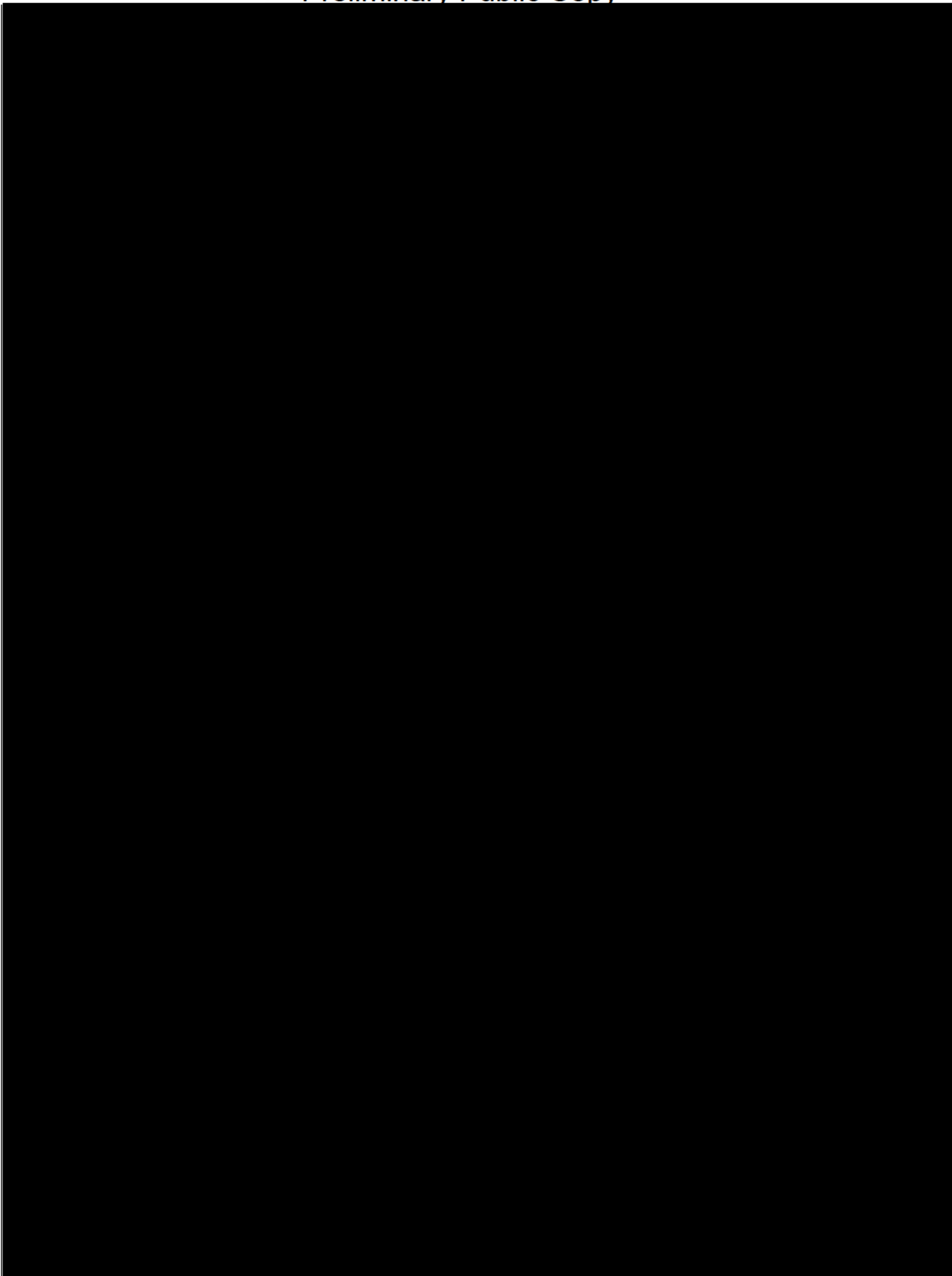


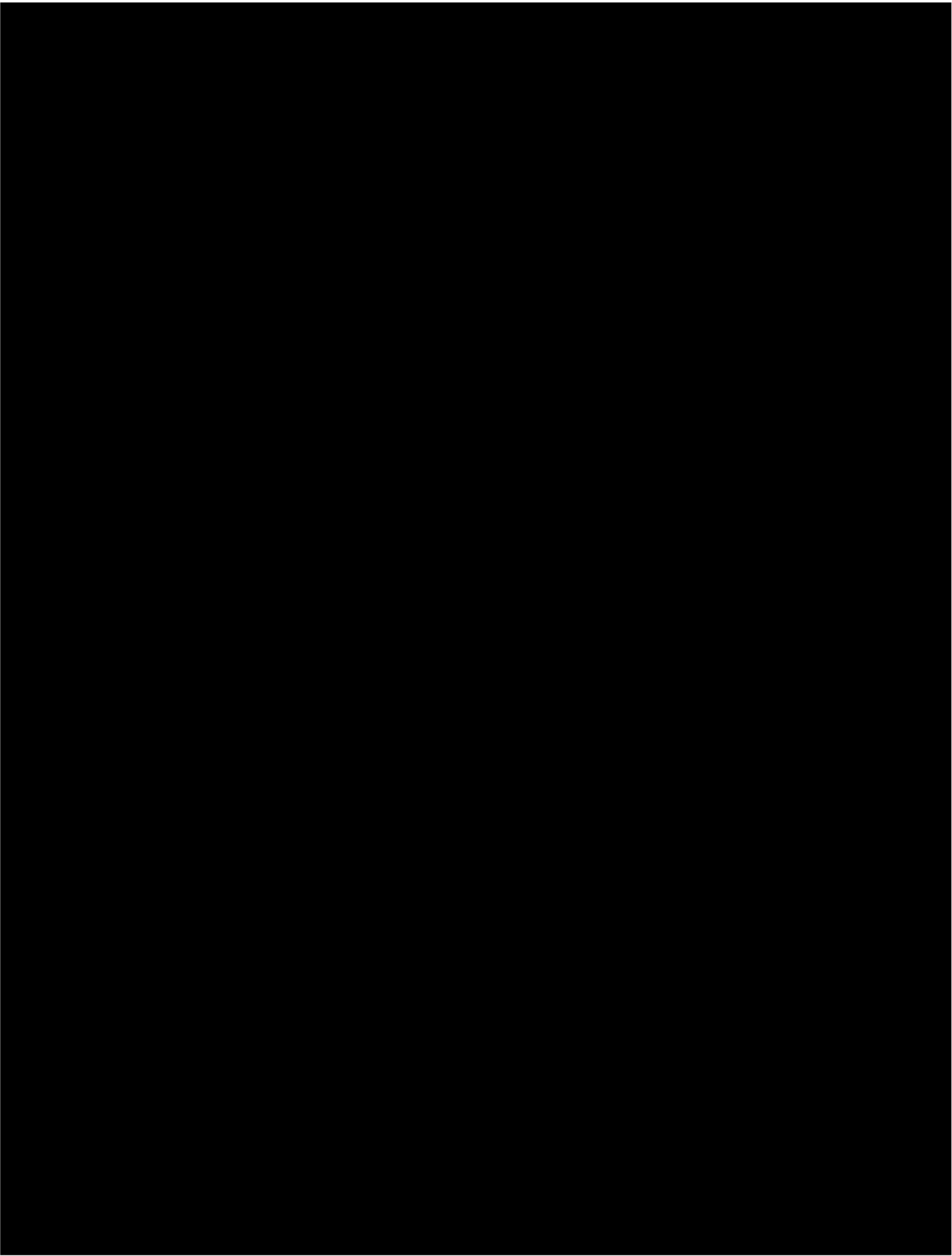
ANNEX B

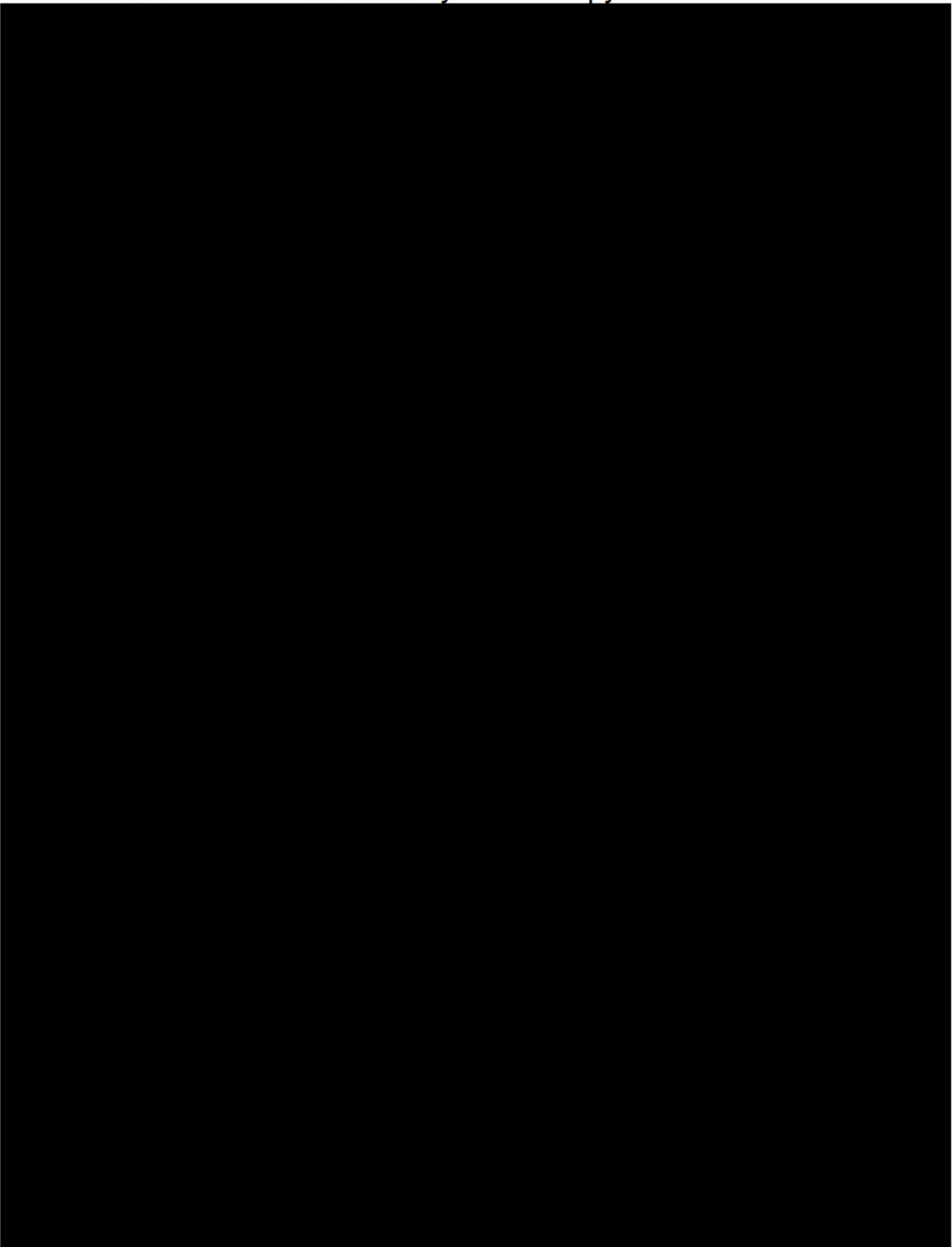


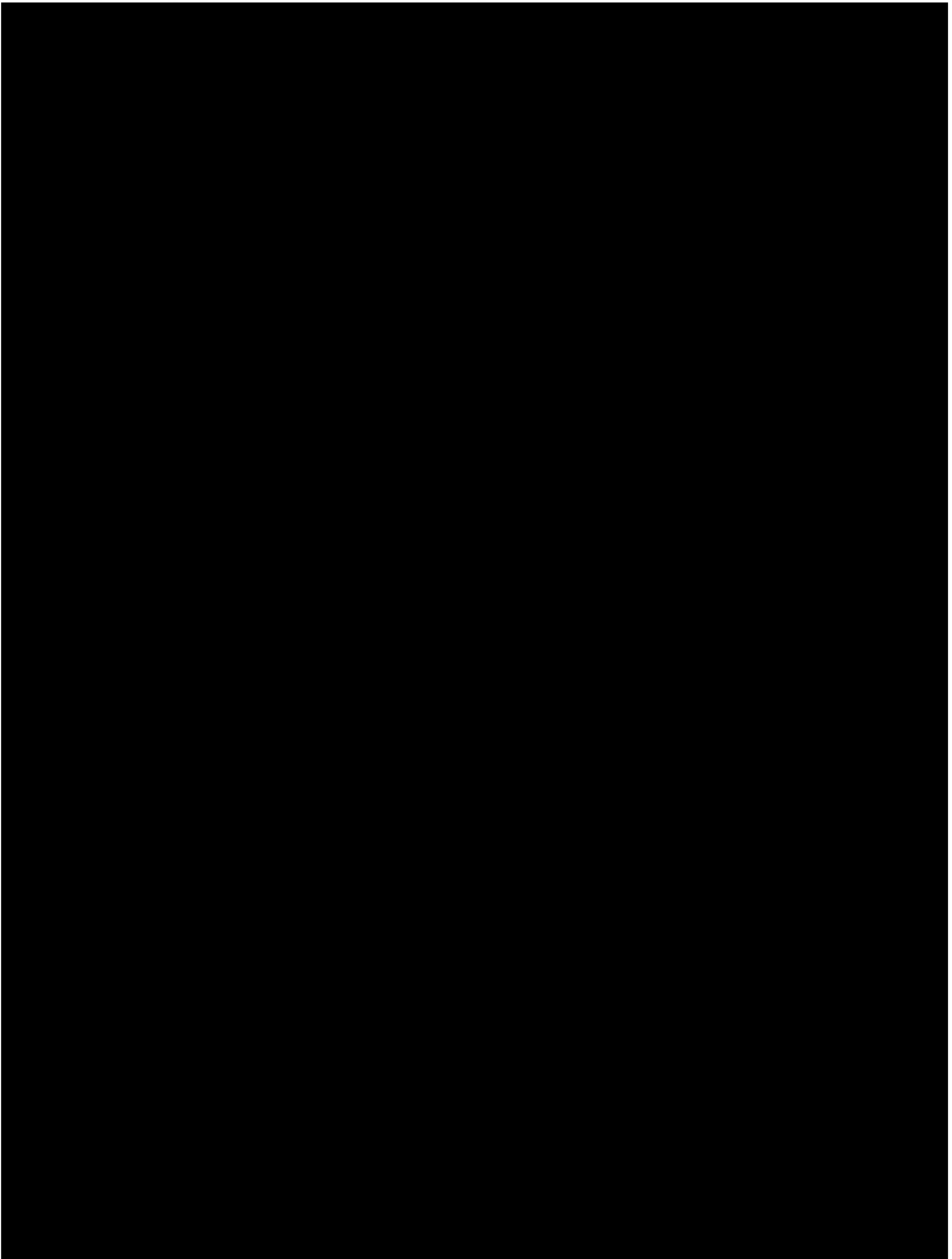


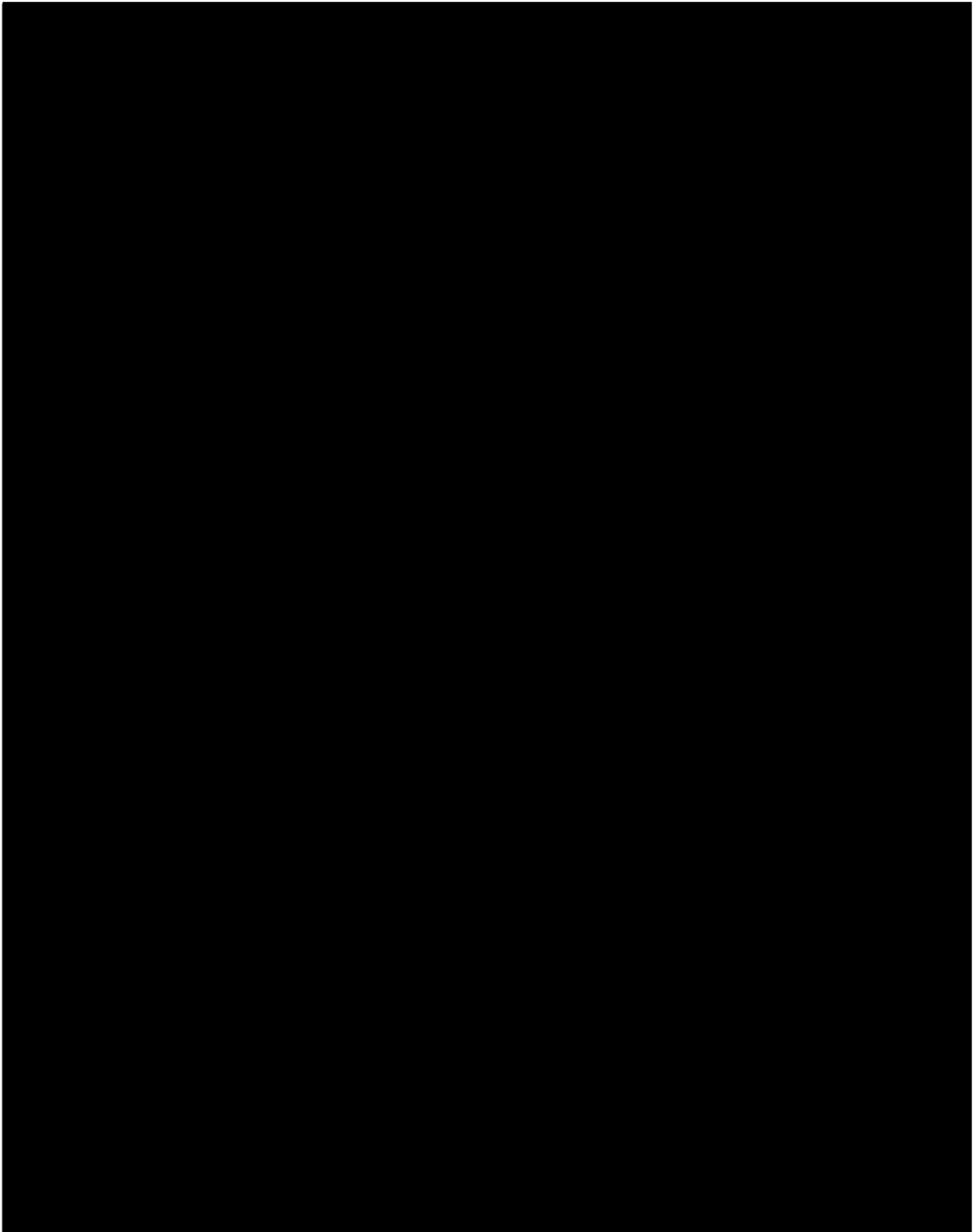


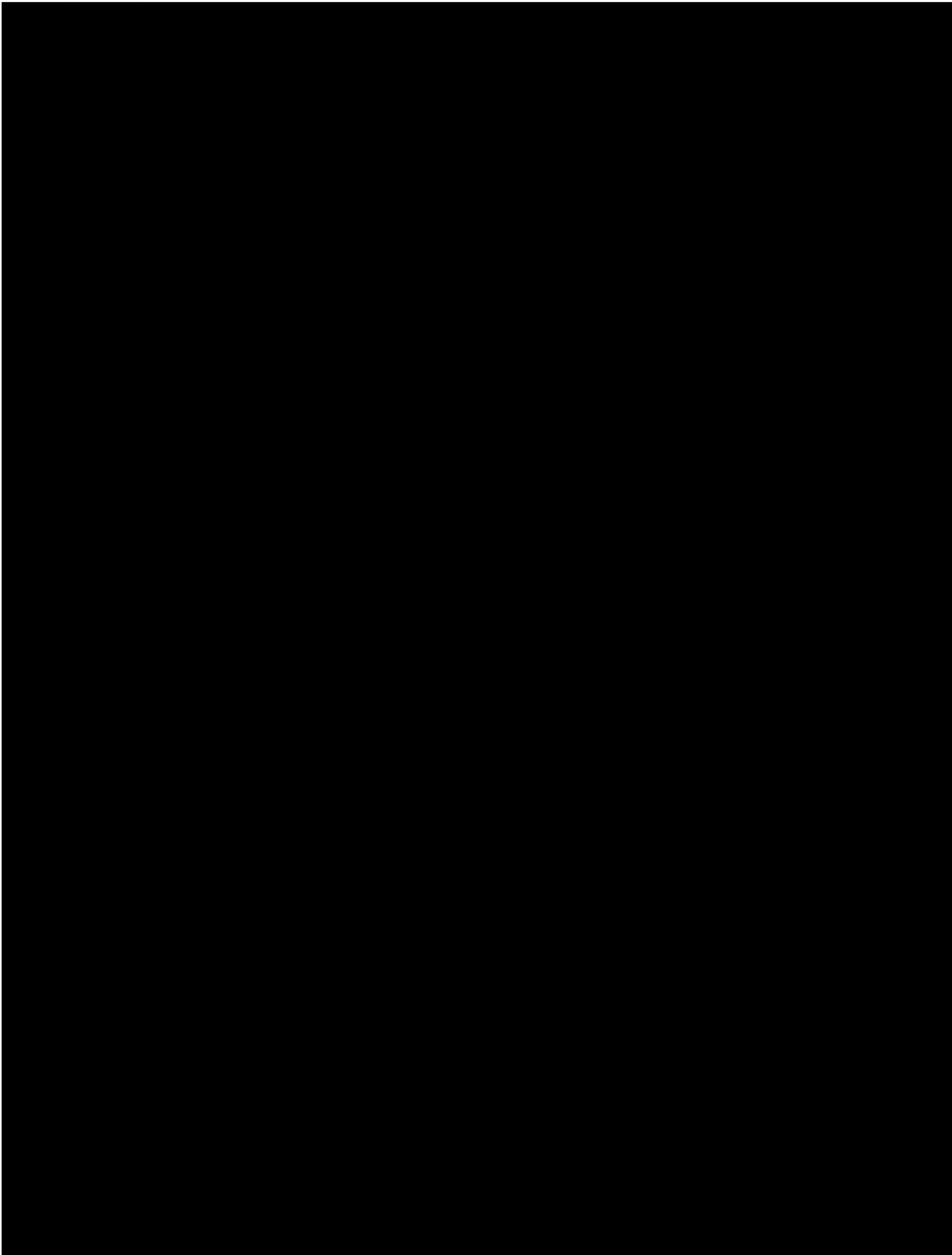




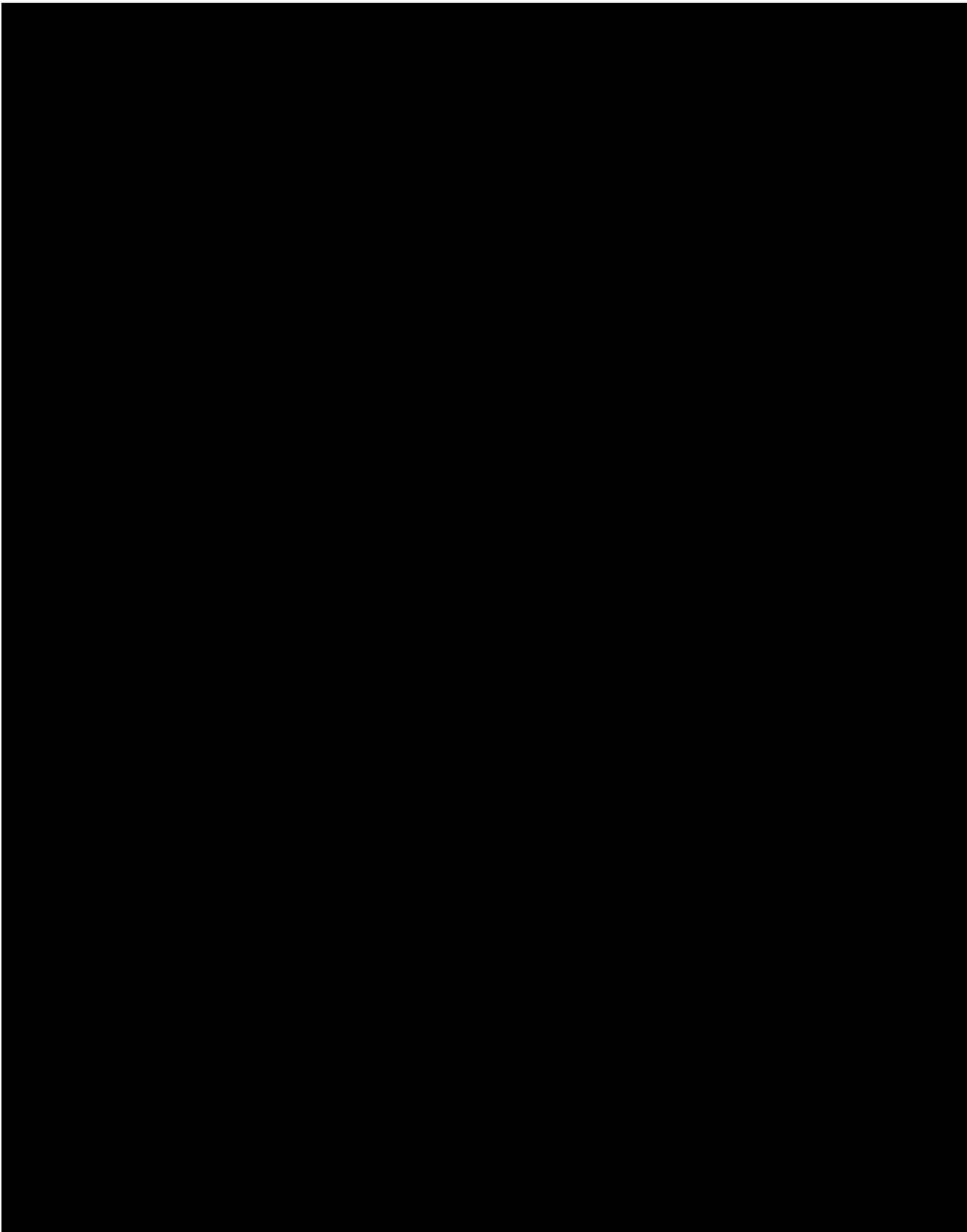


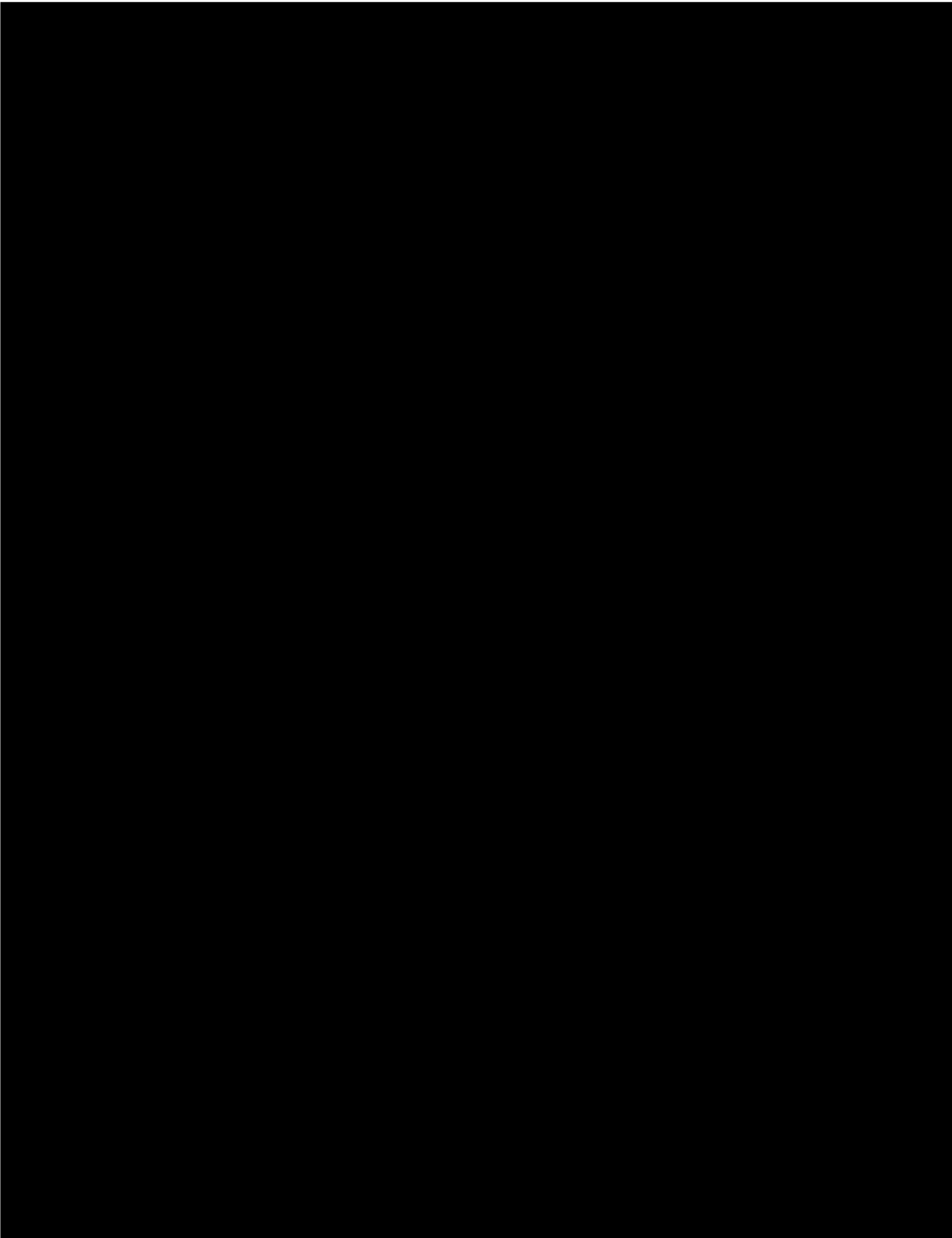


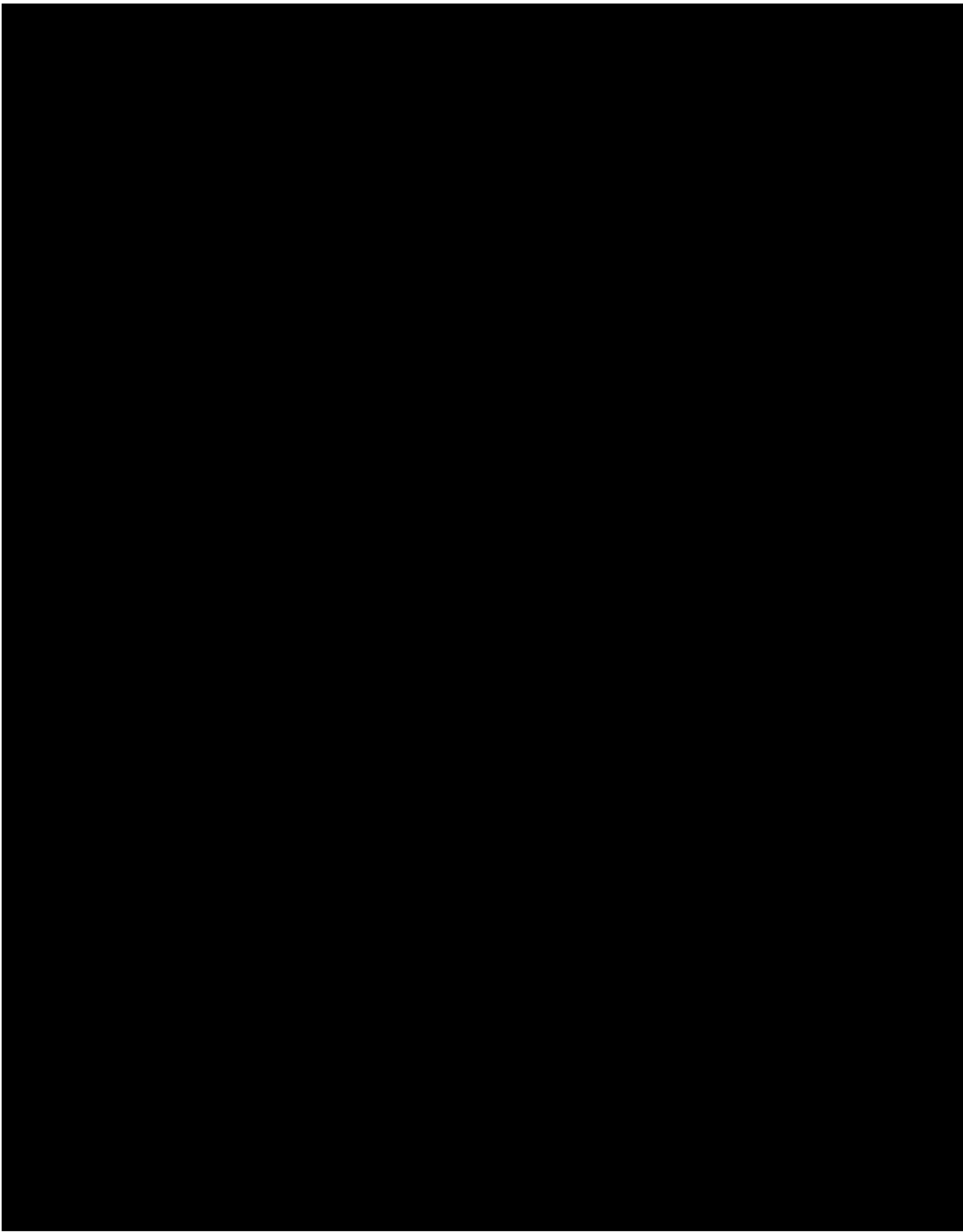


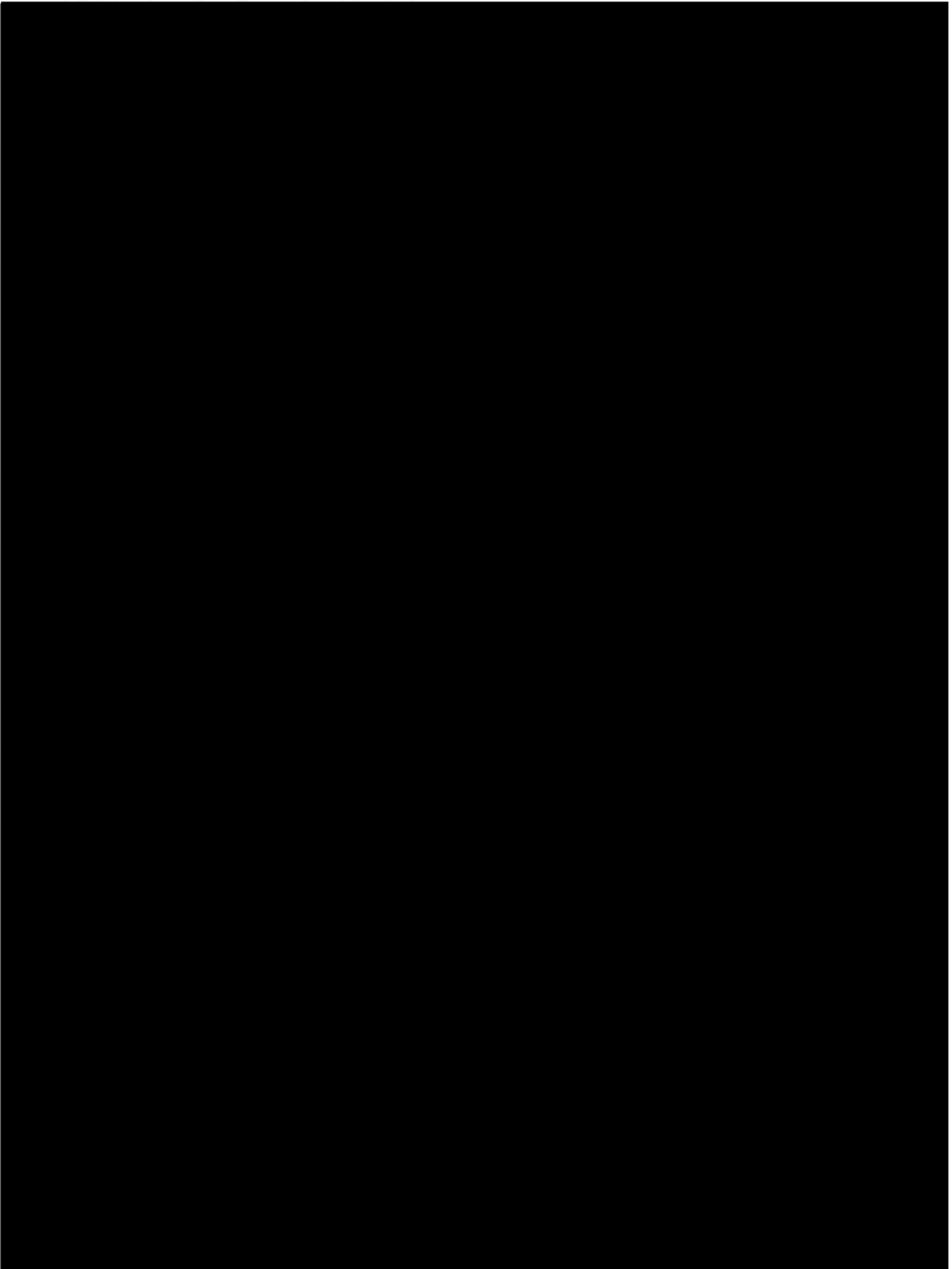




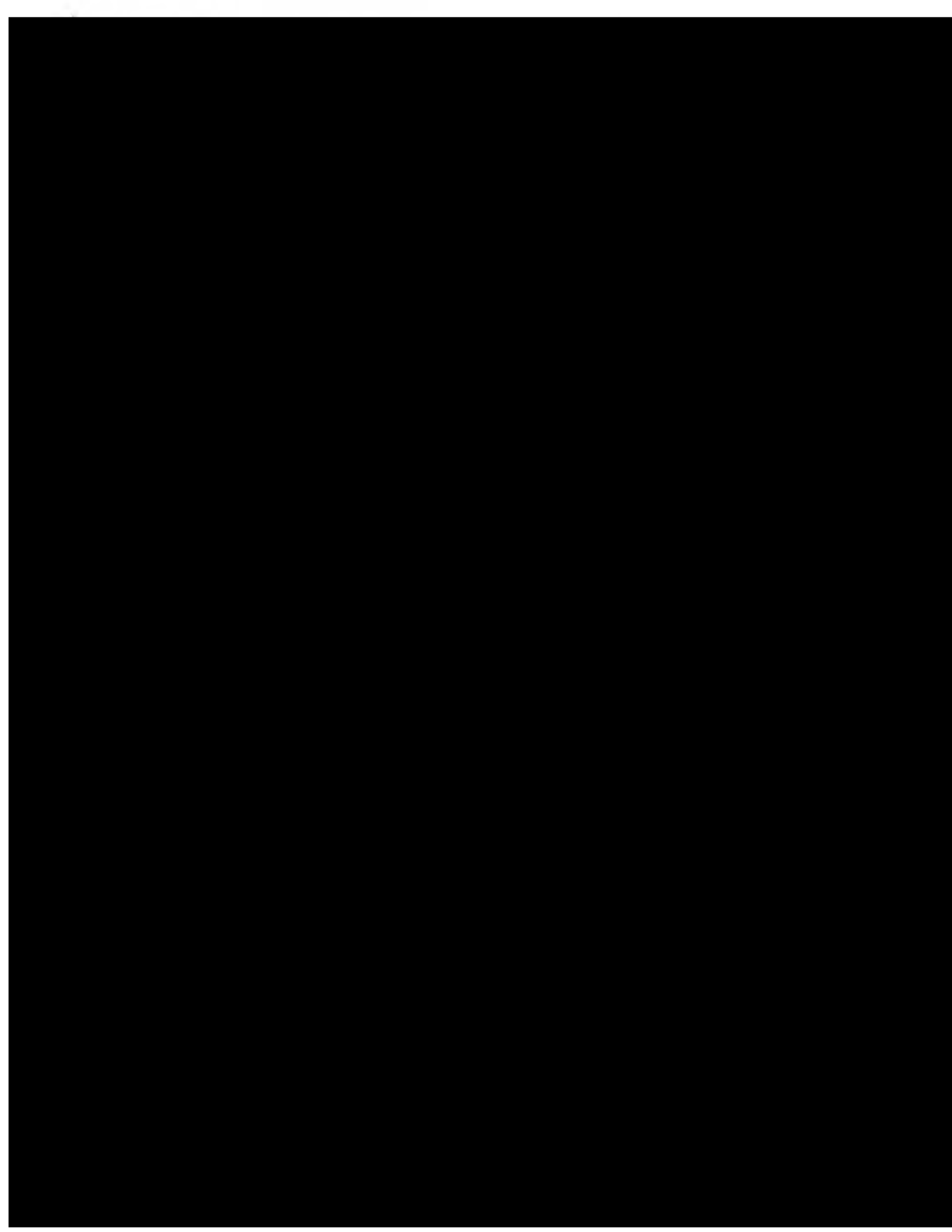


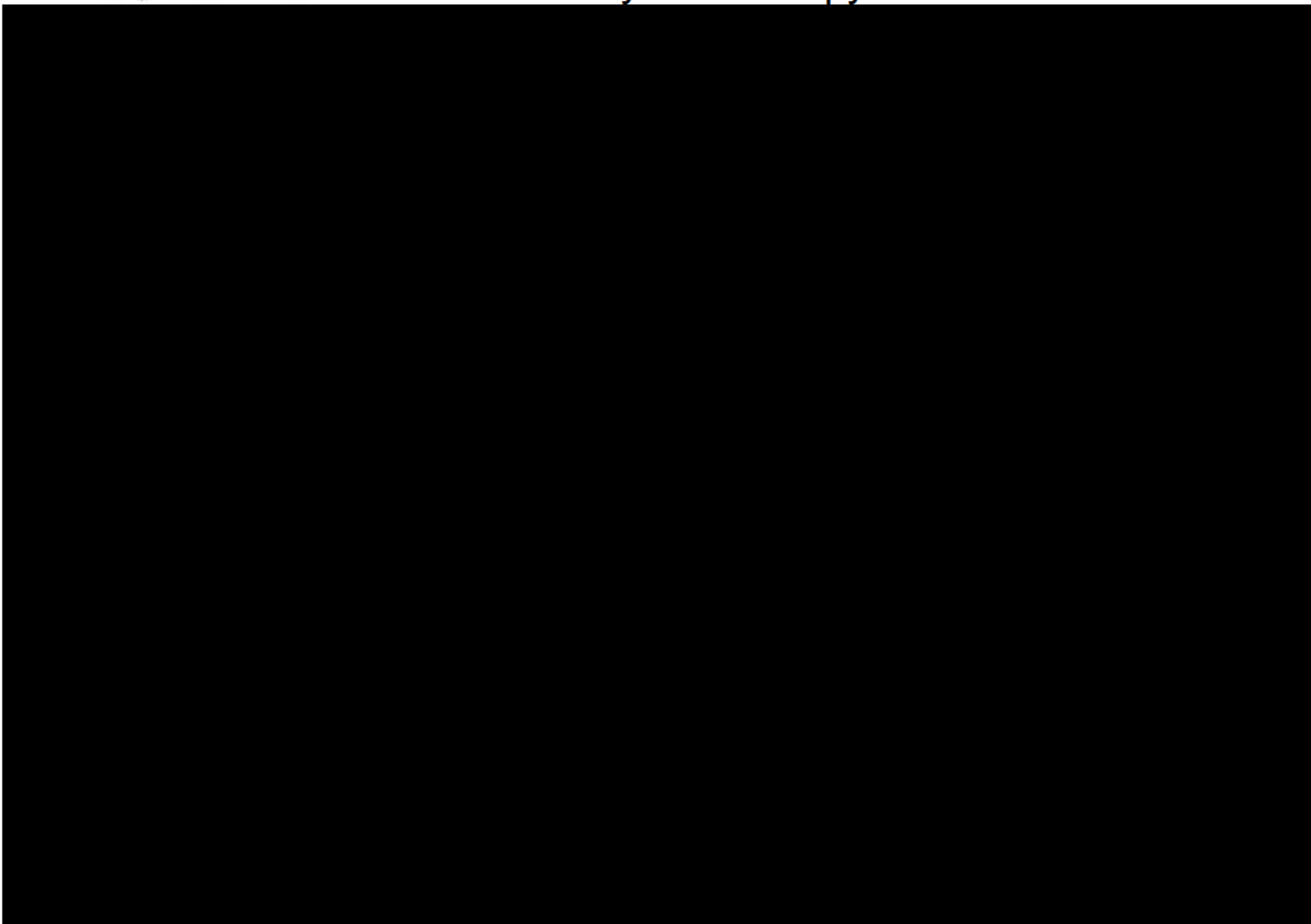






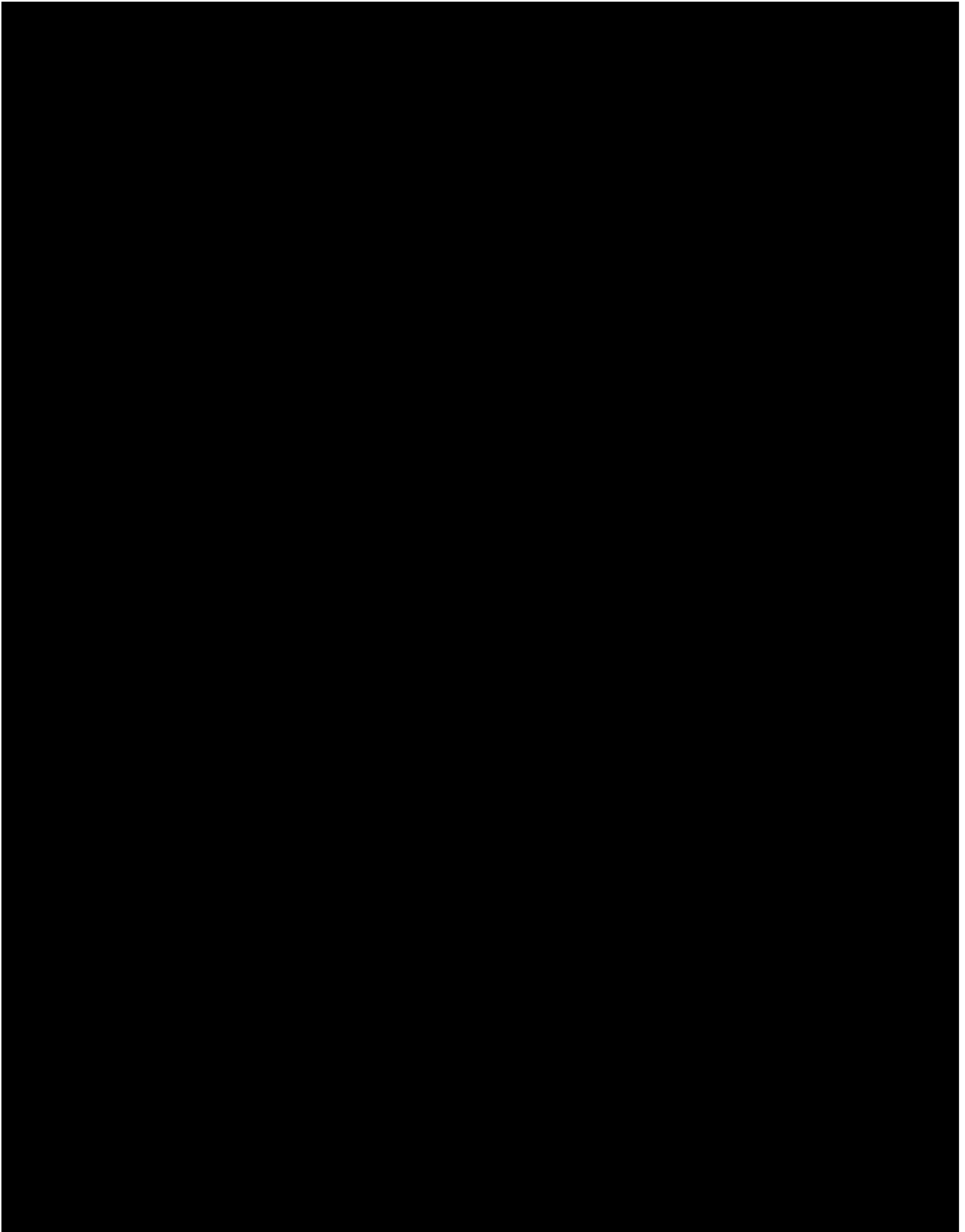


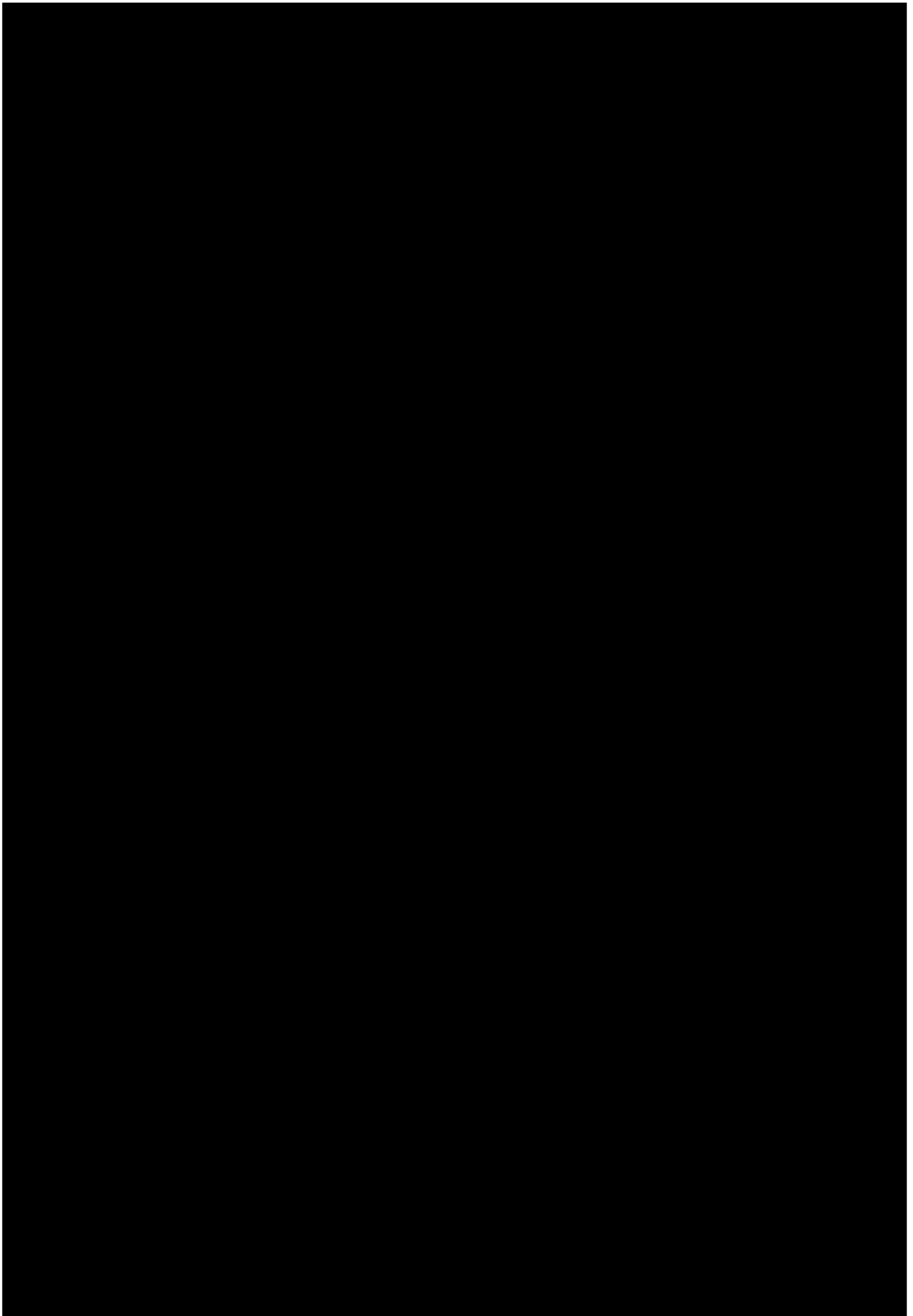


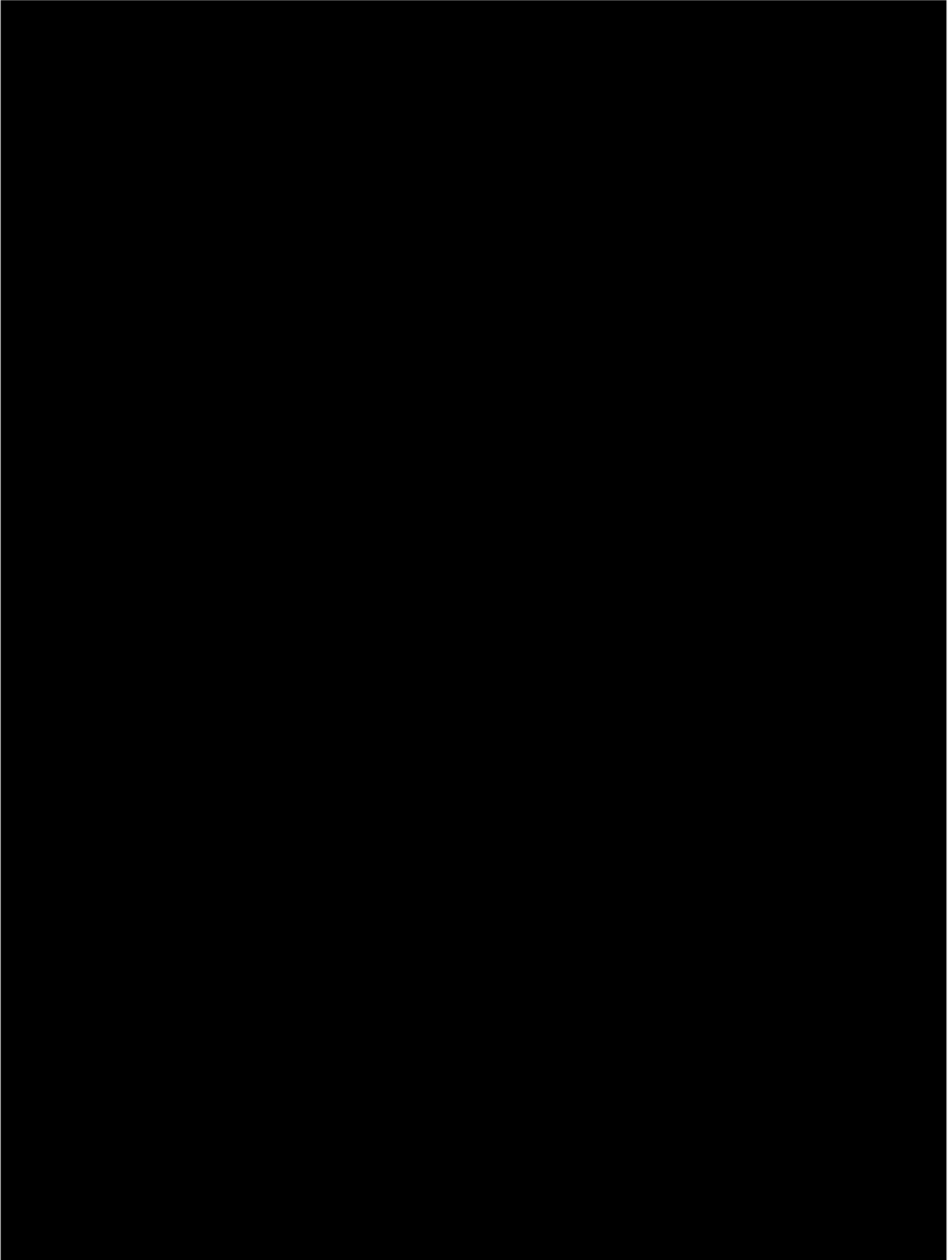


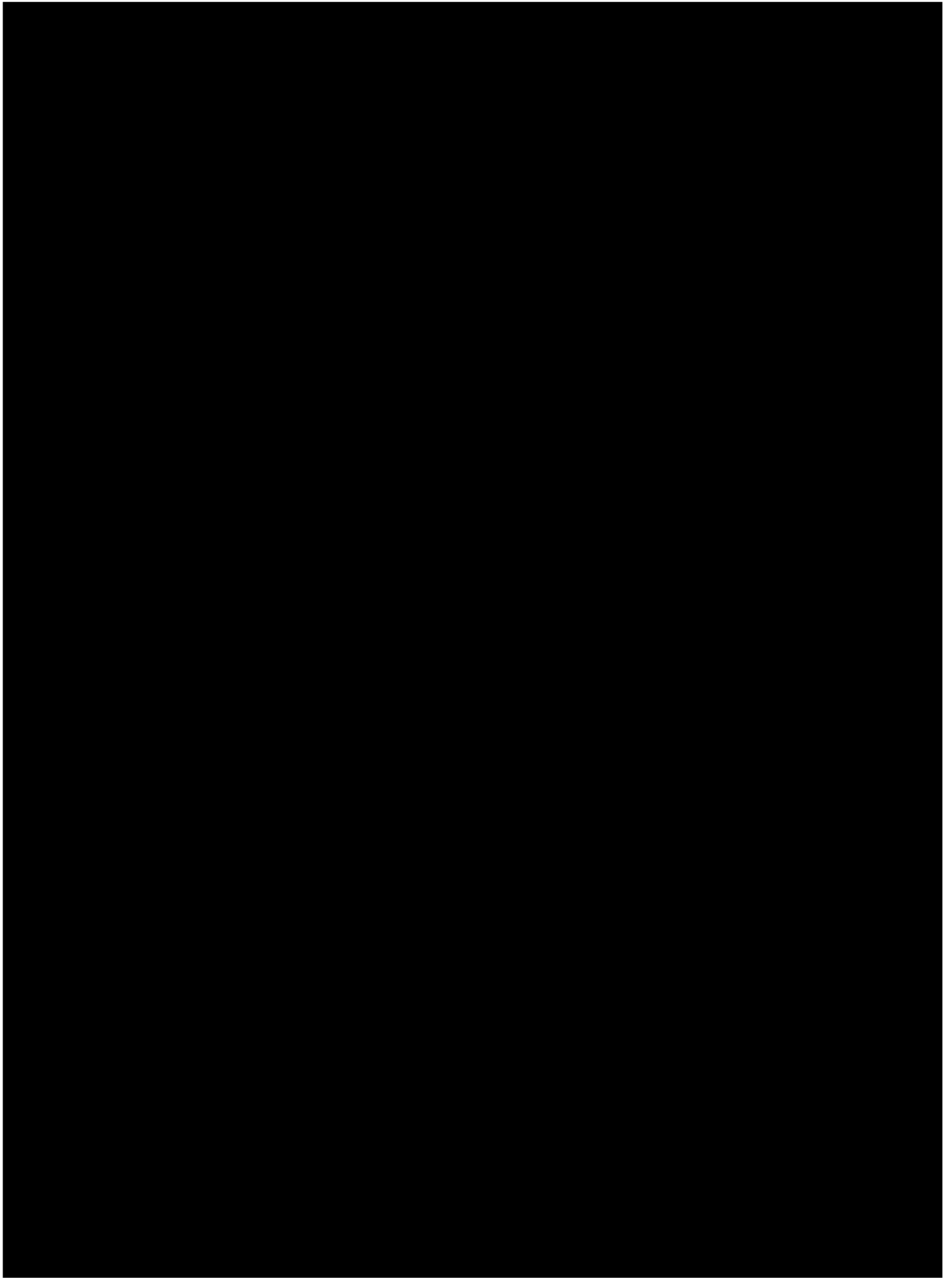
ANNEX C

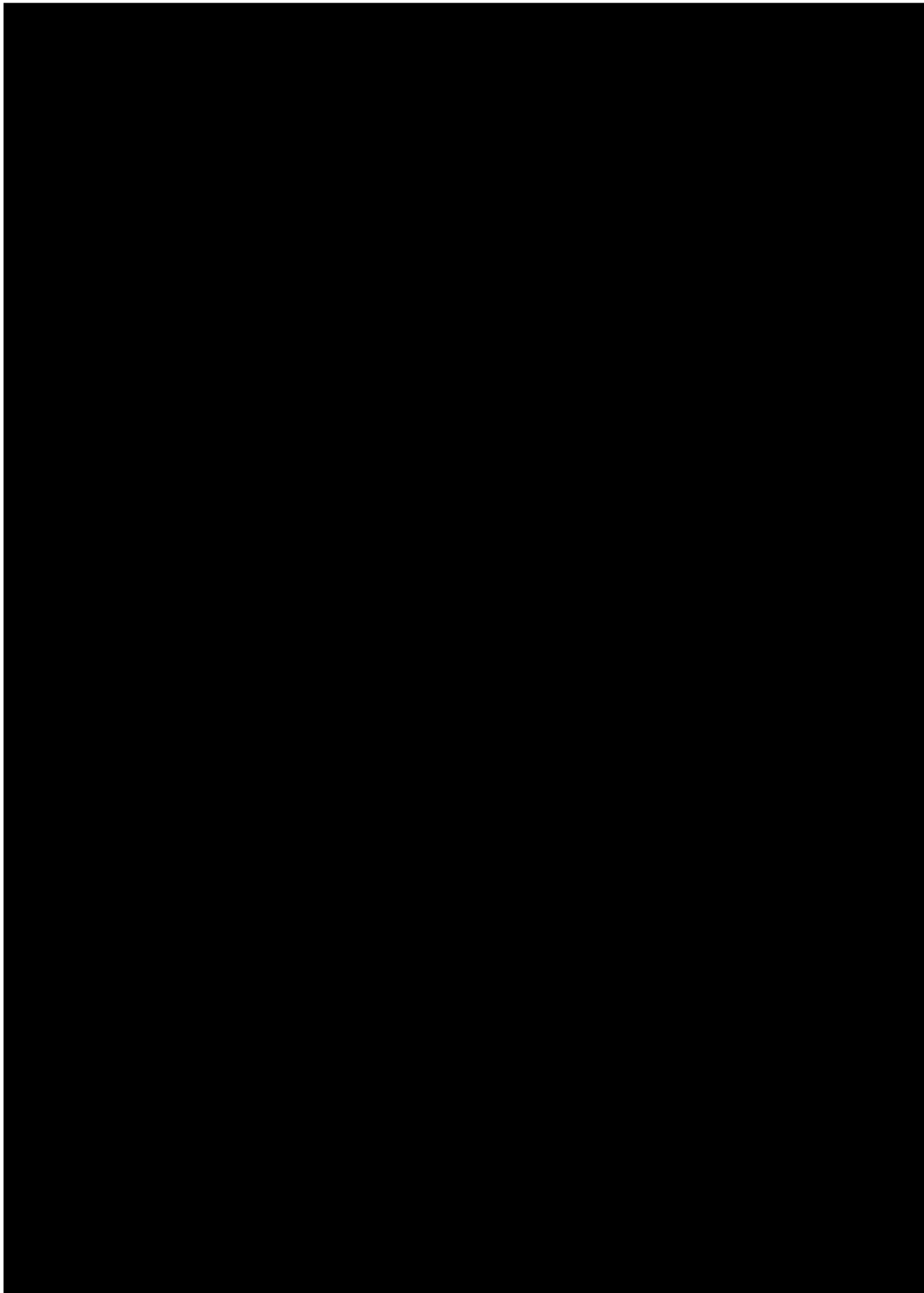


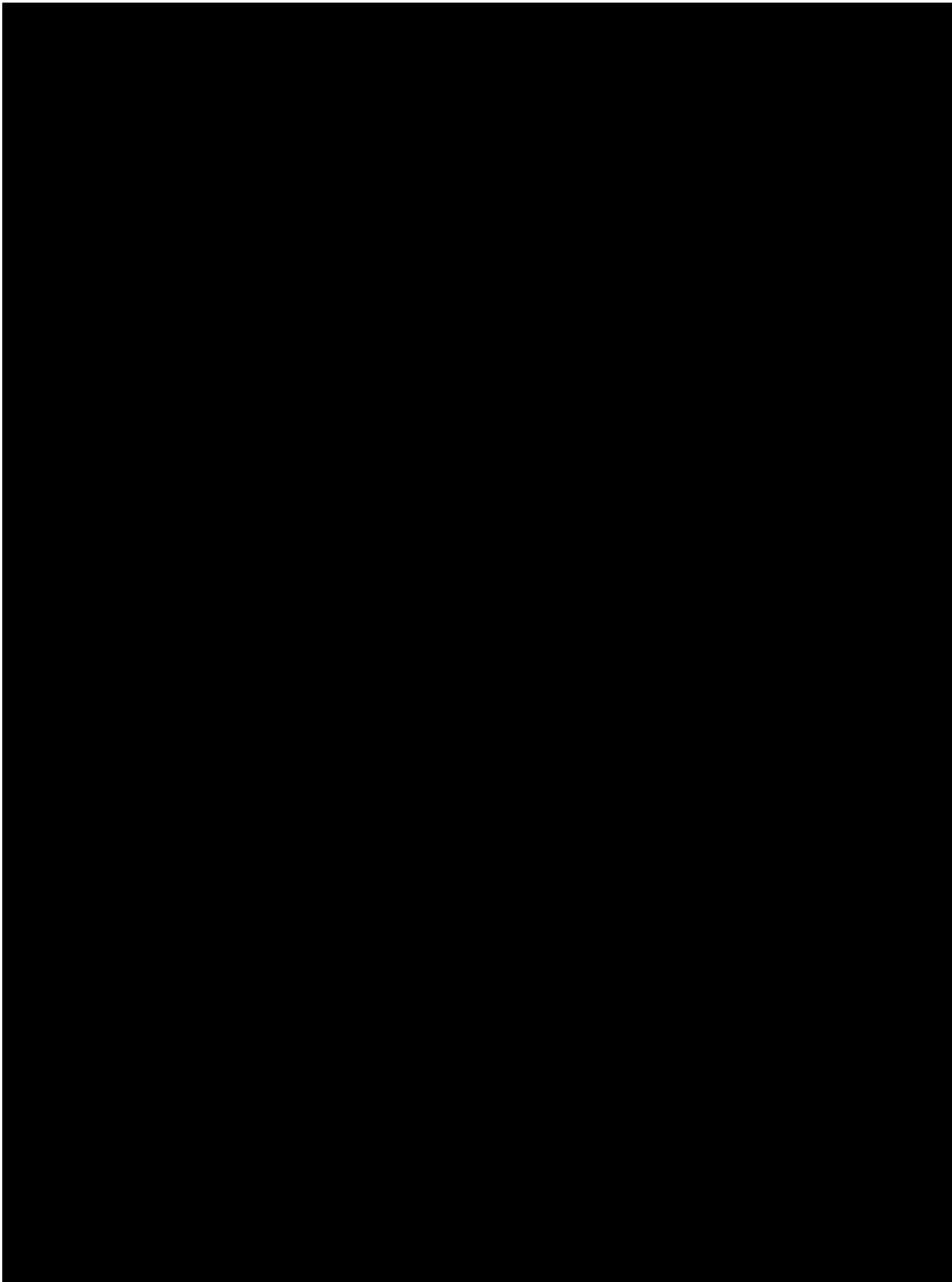


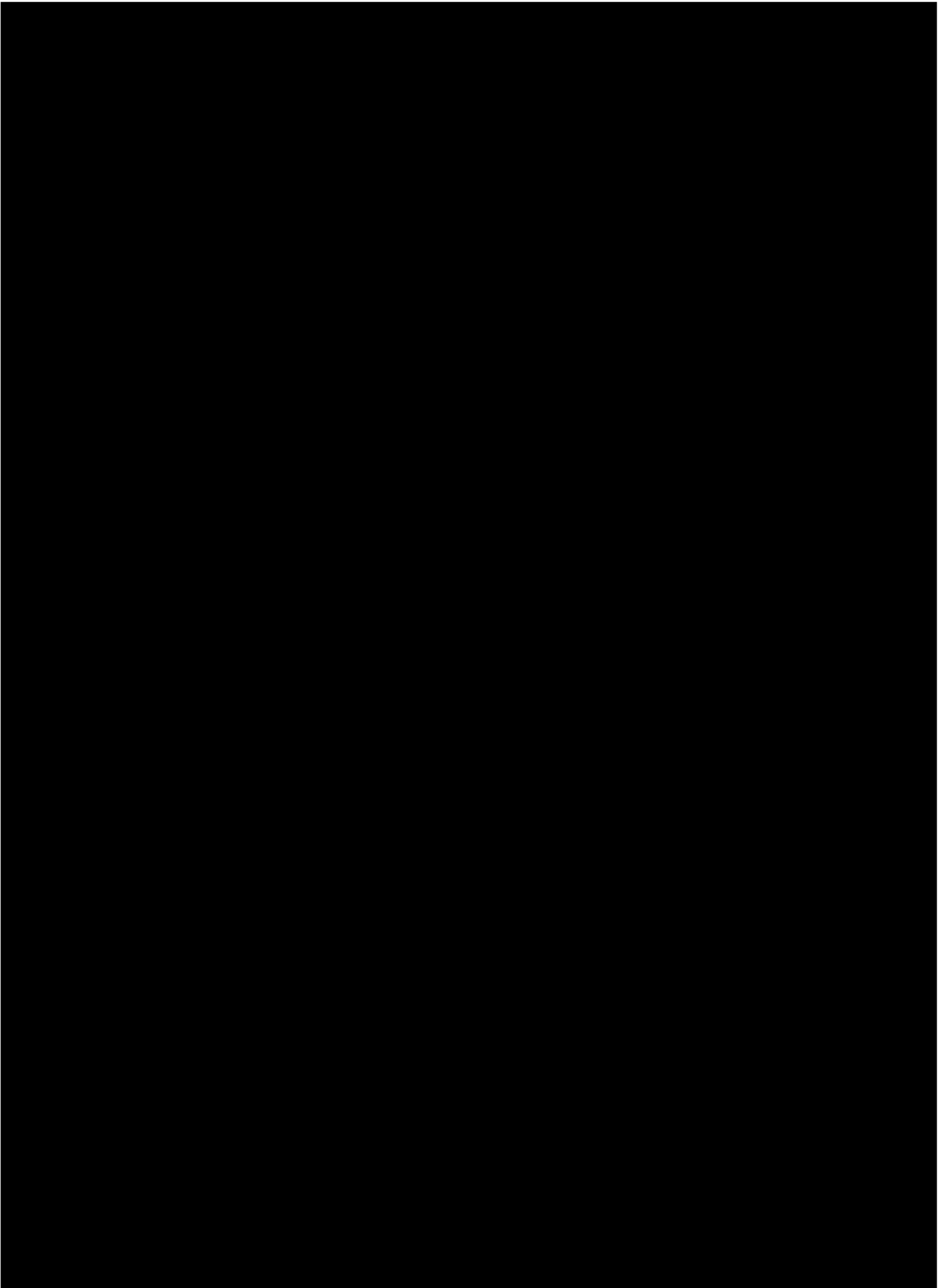


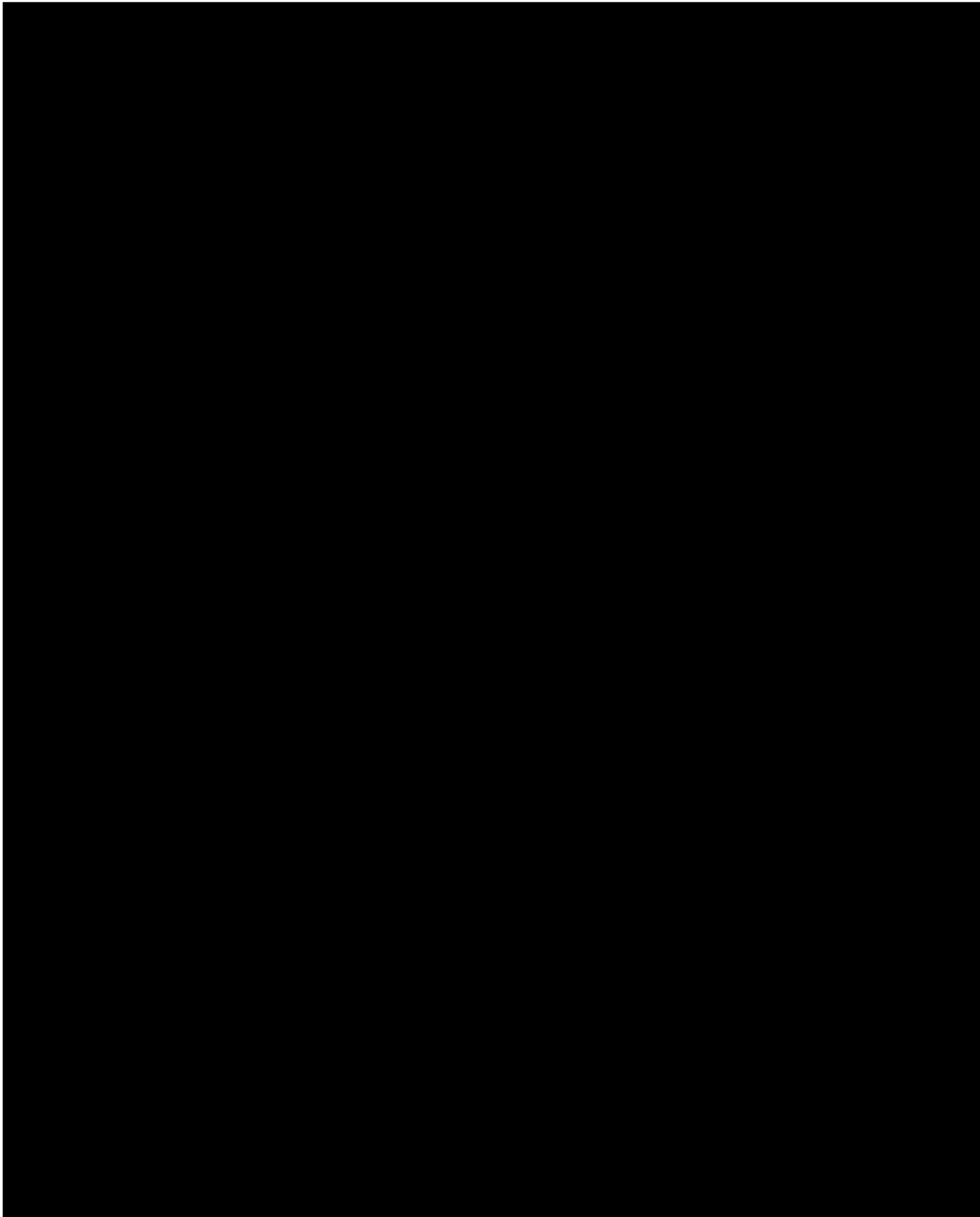




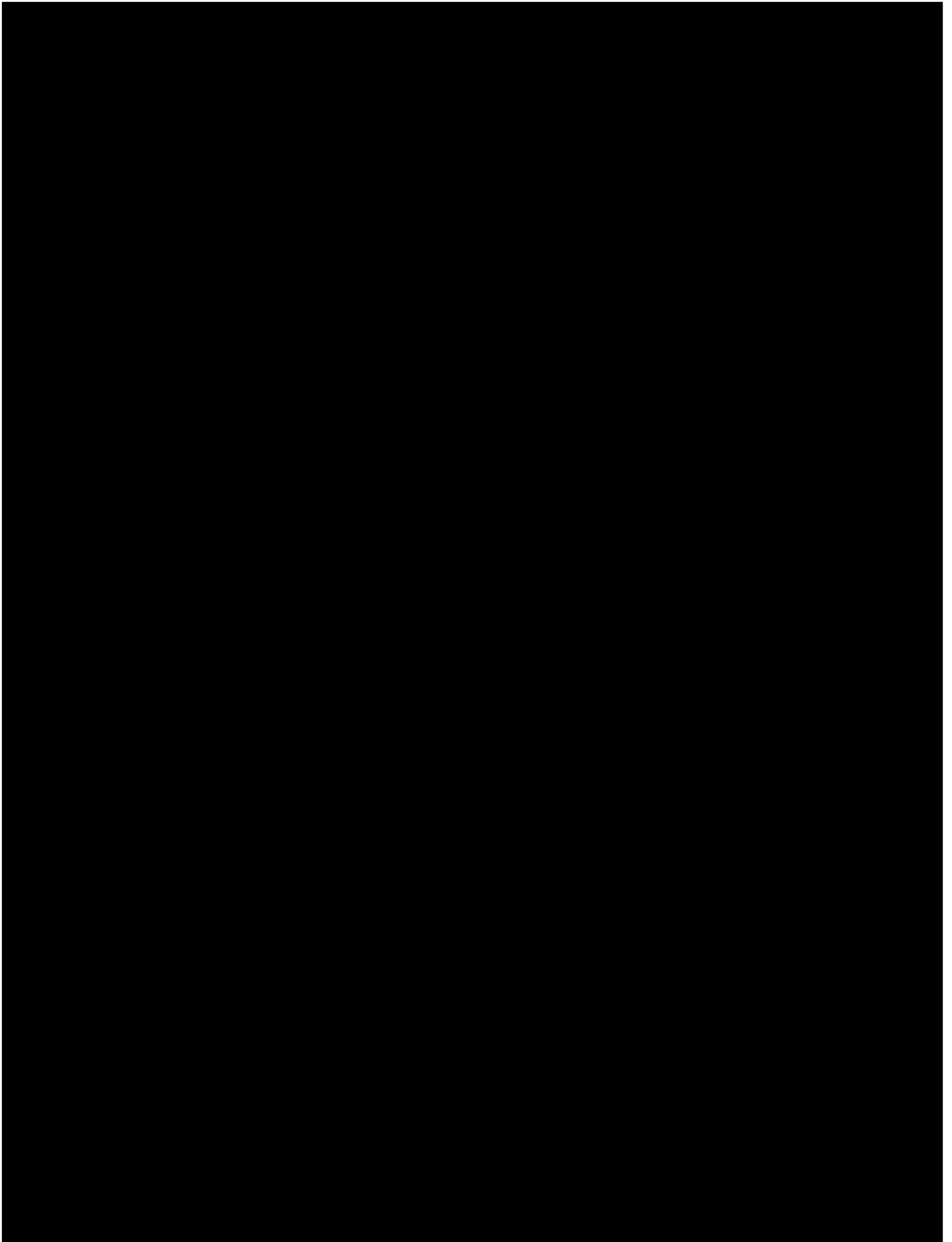


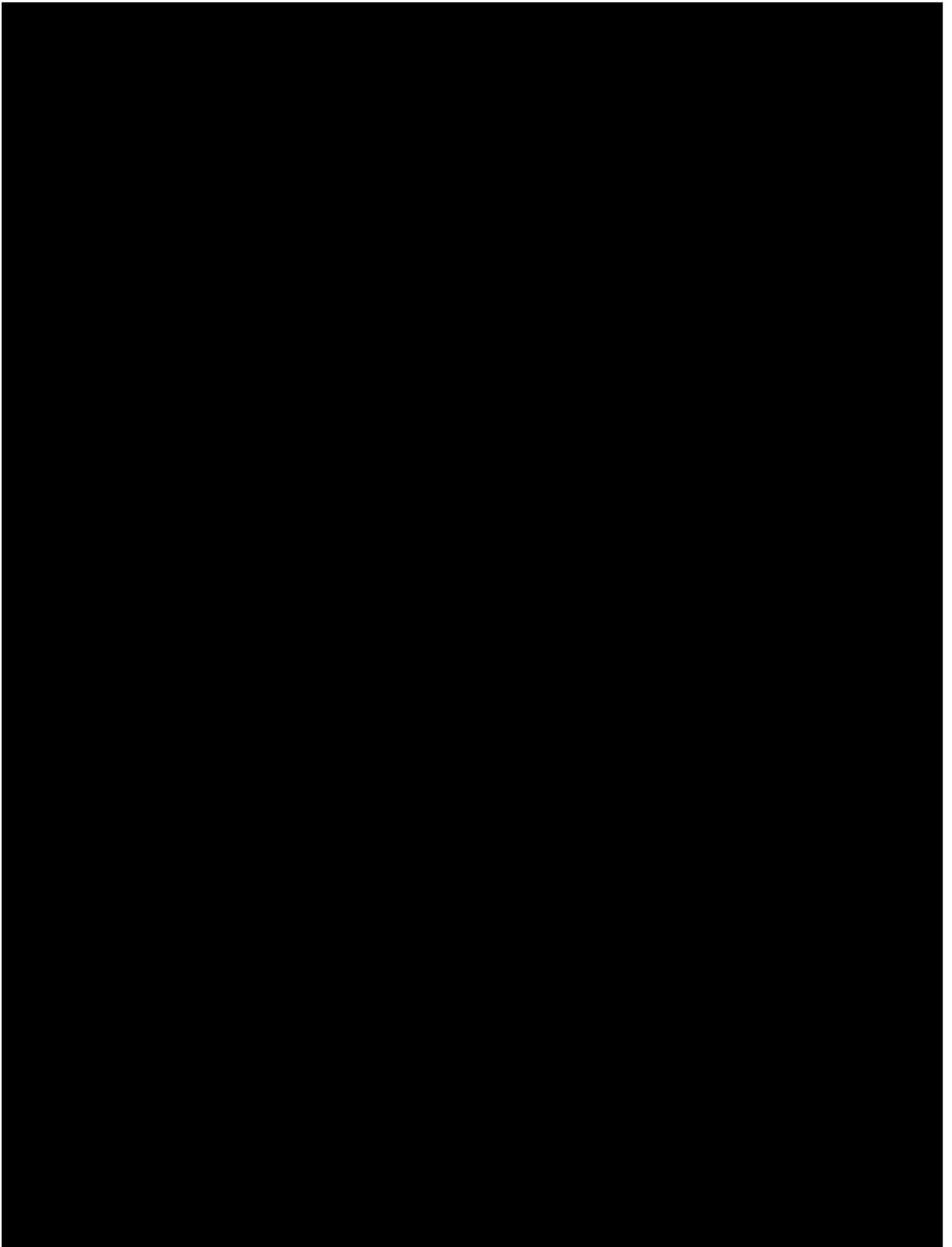


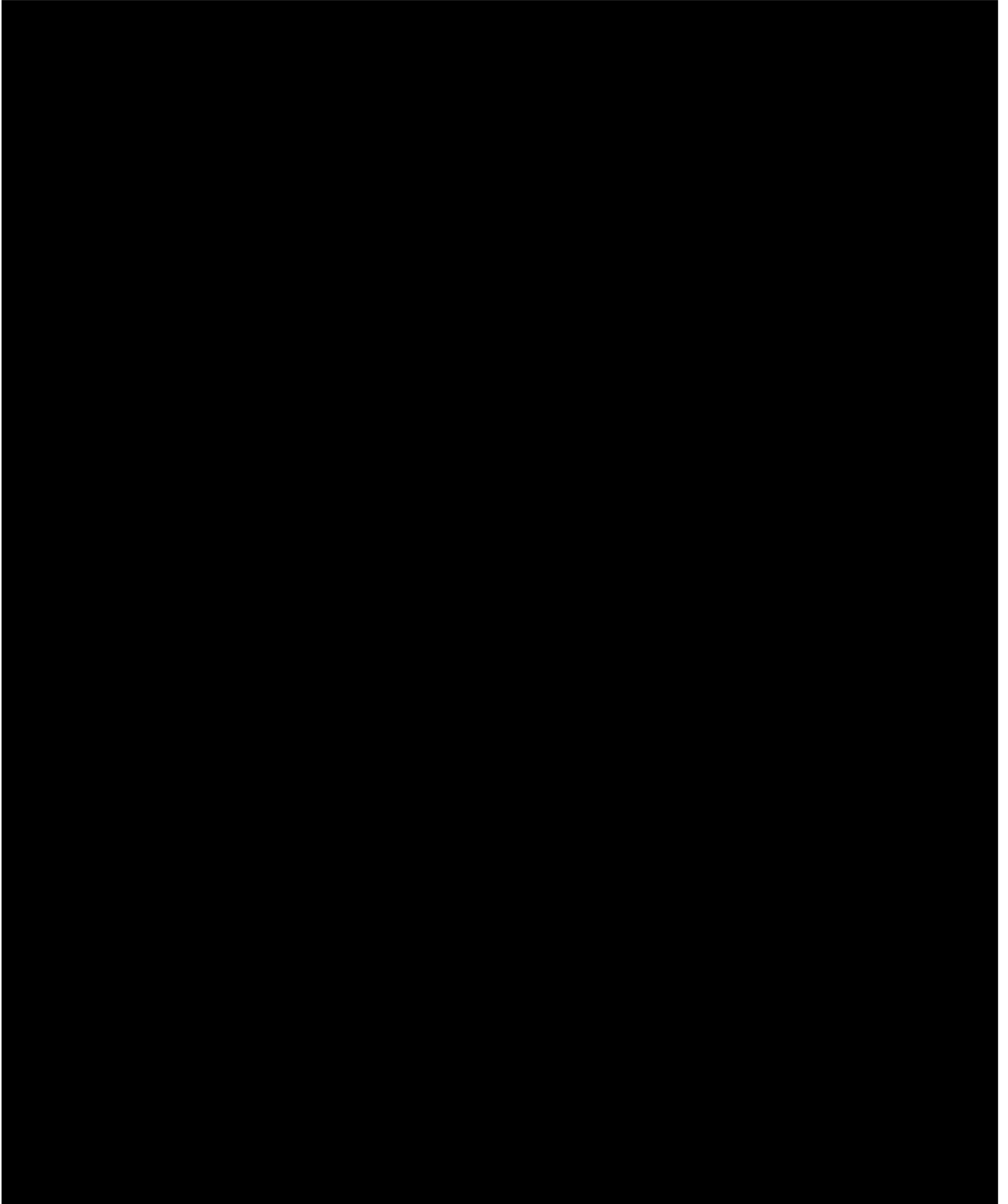


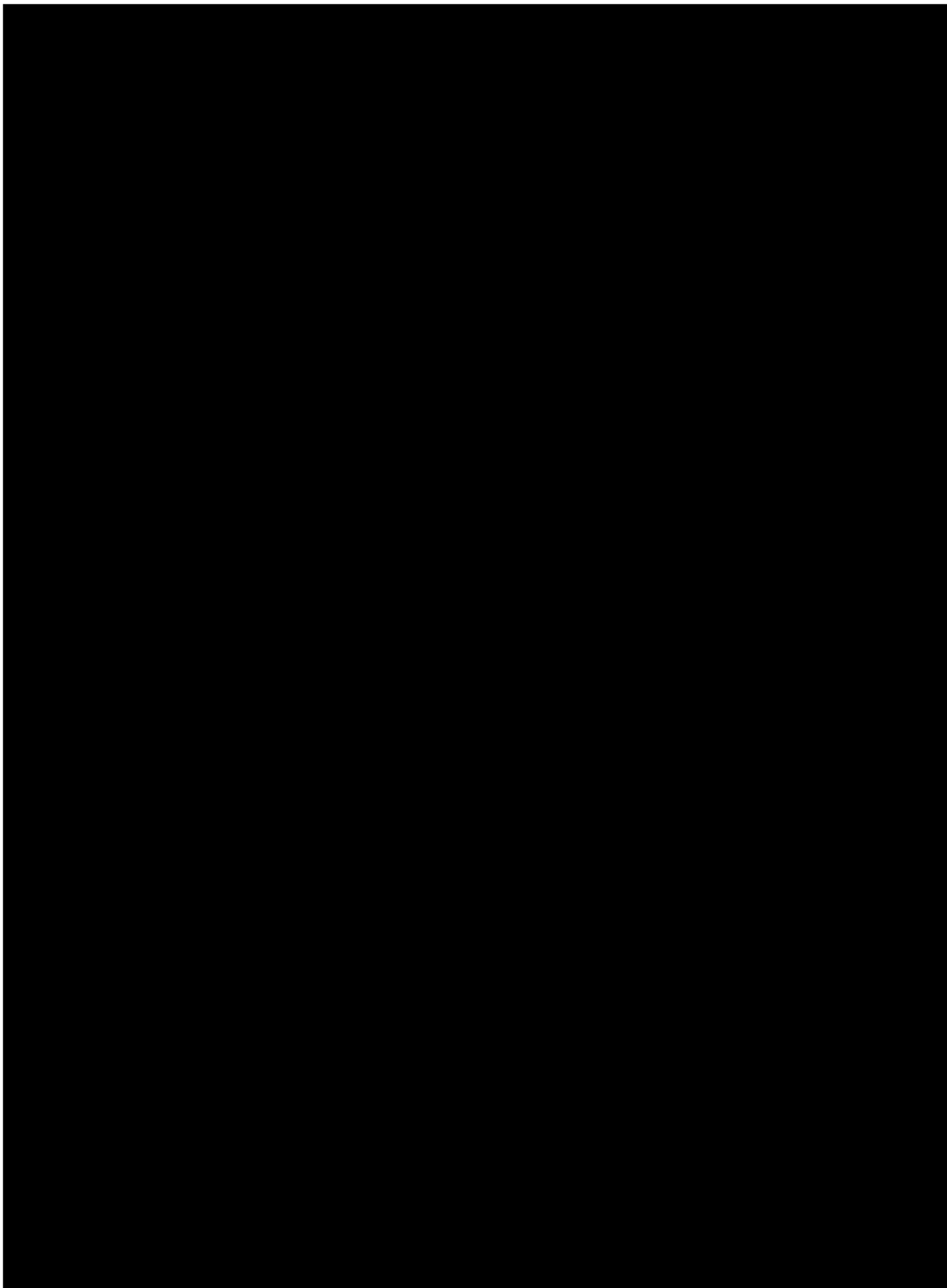


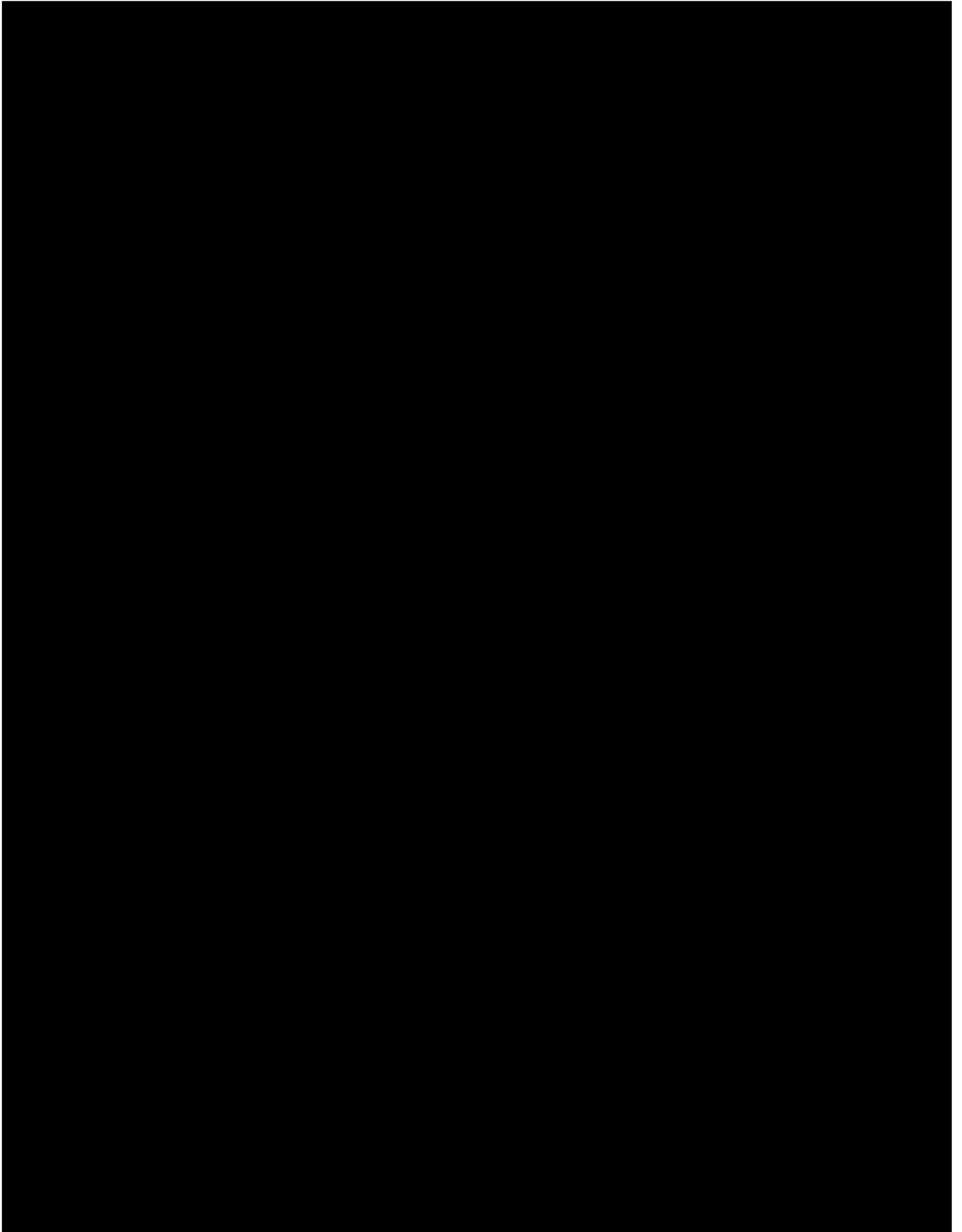


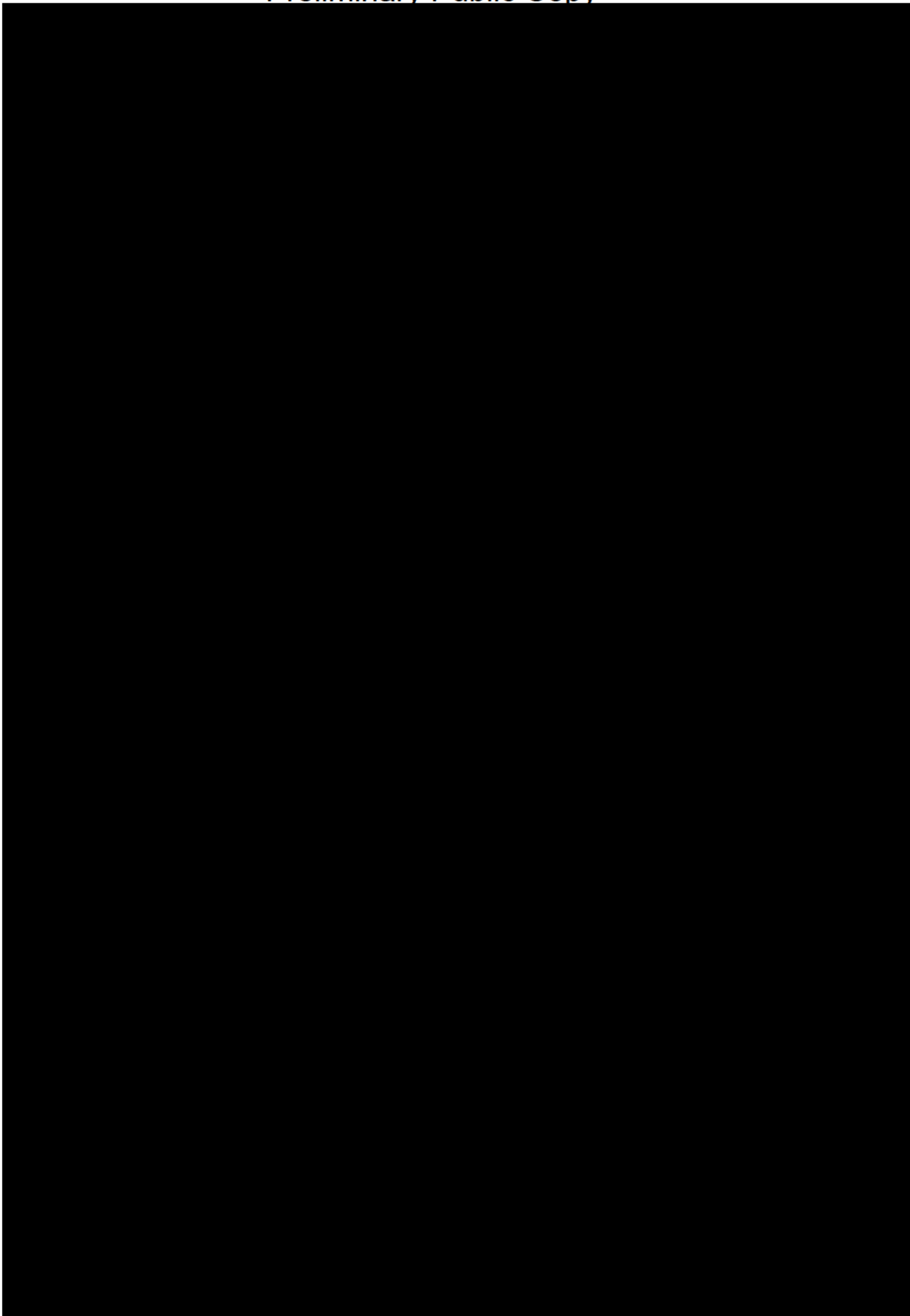


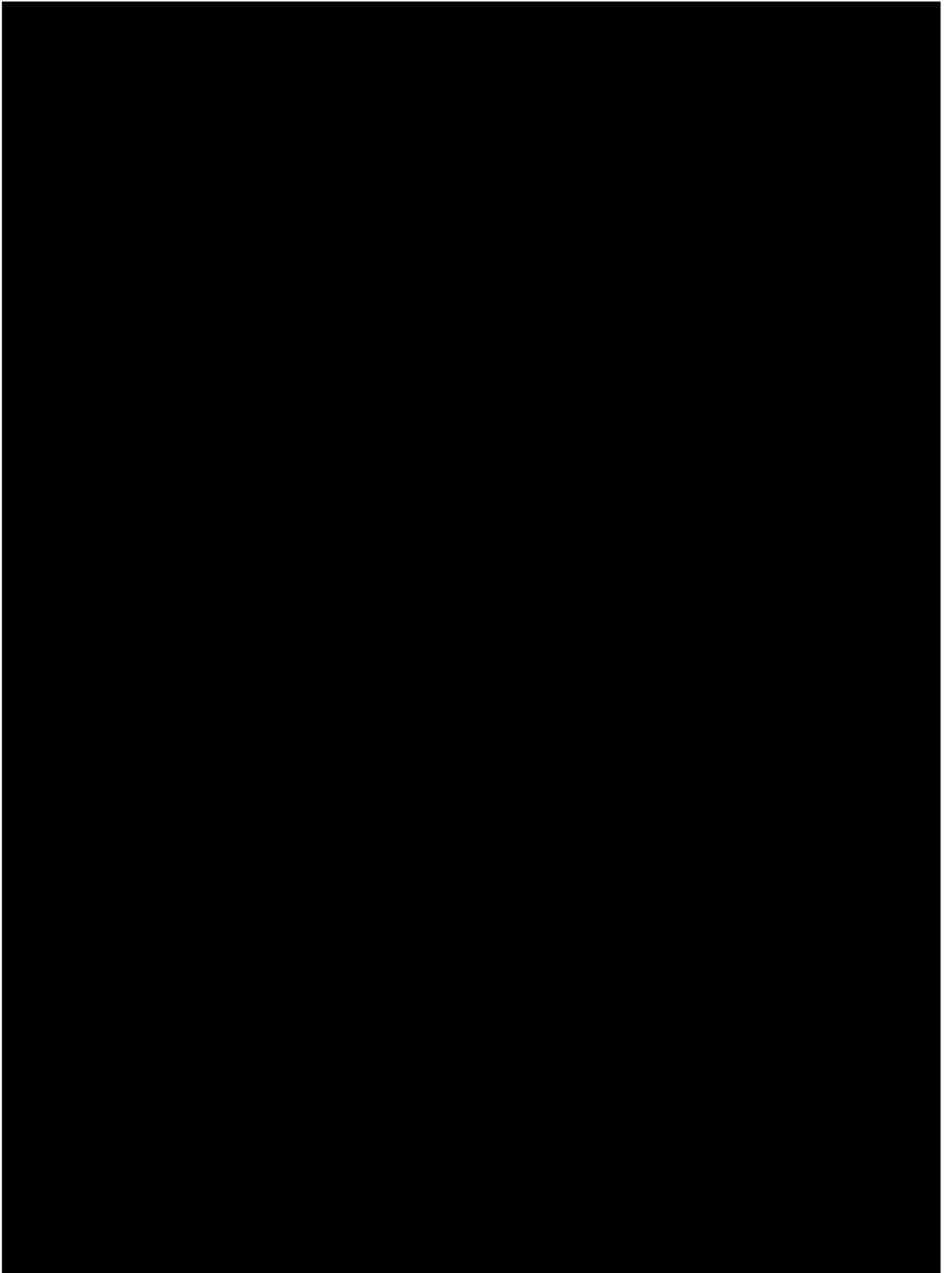


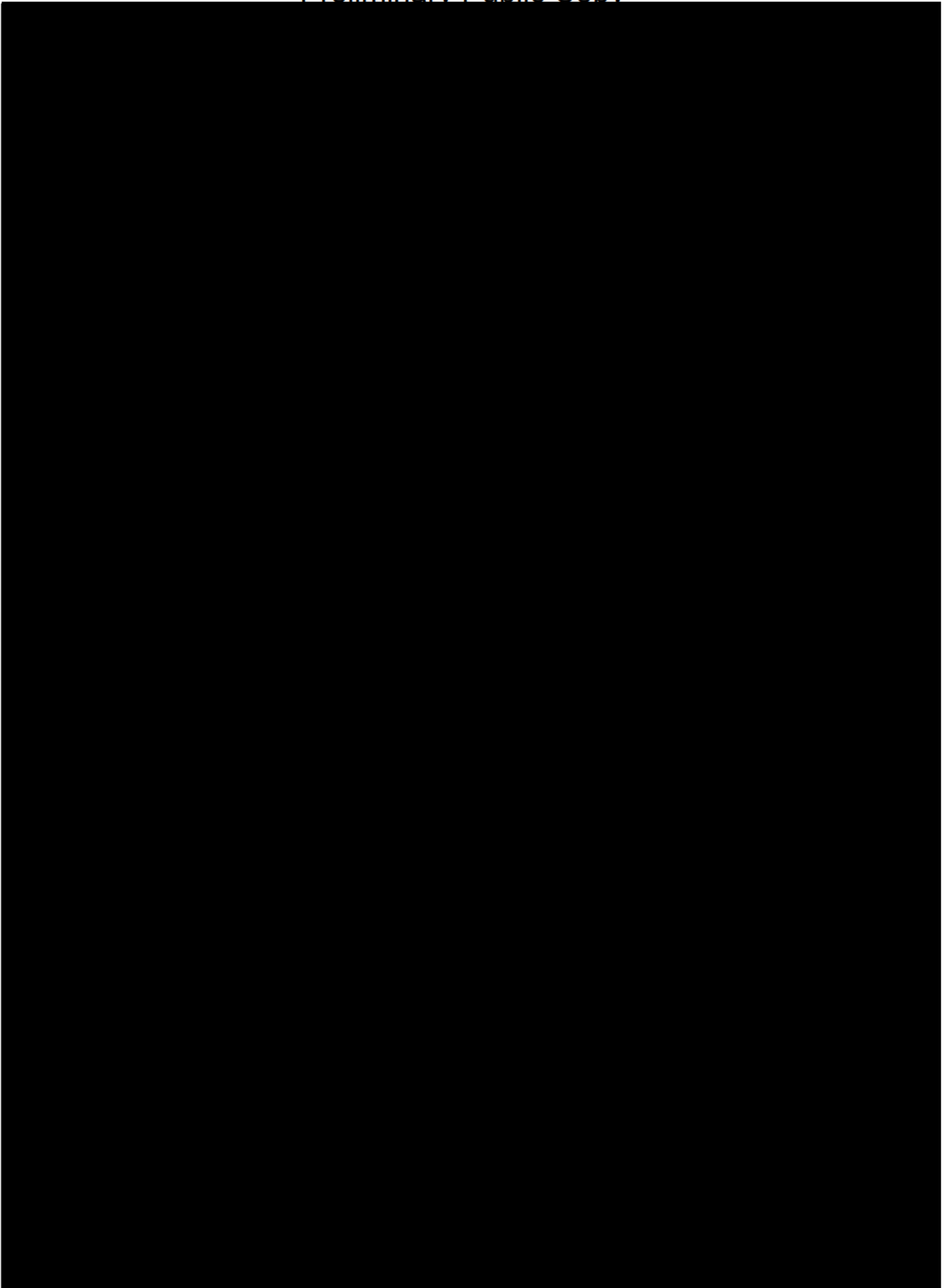












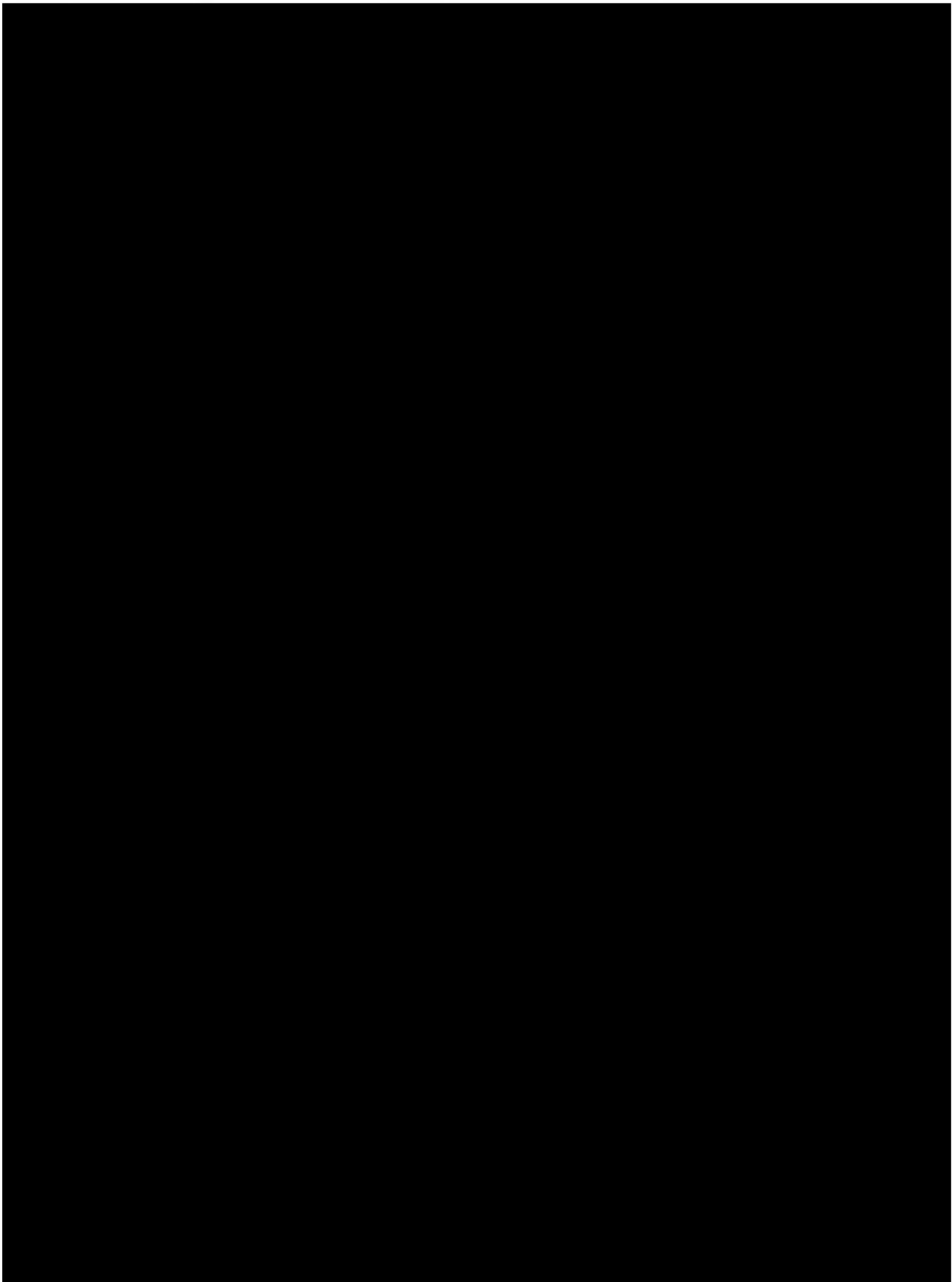


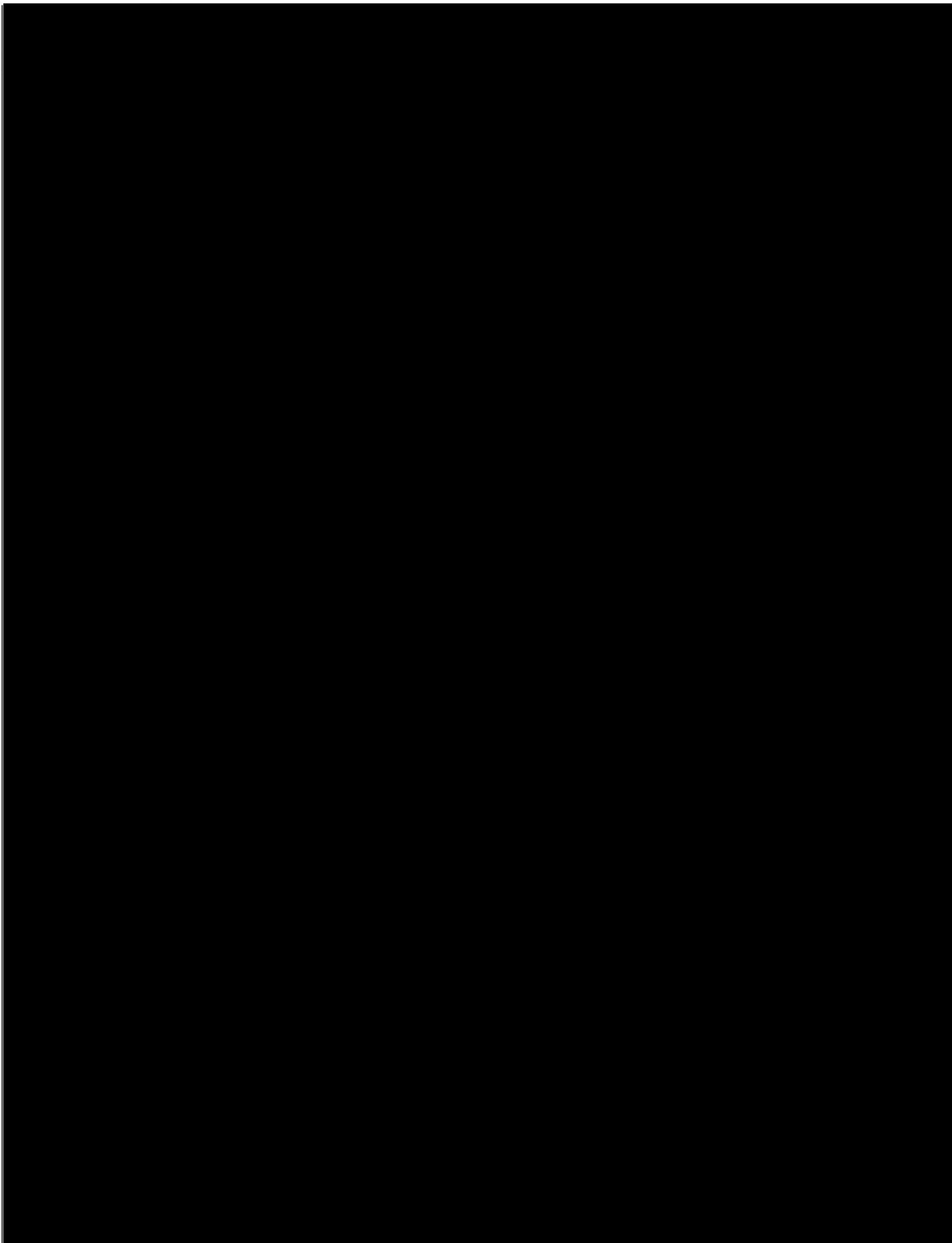
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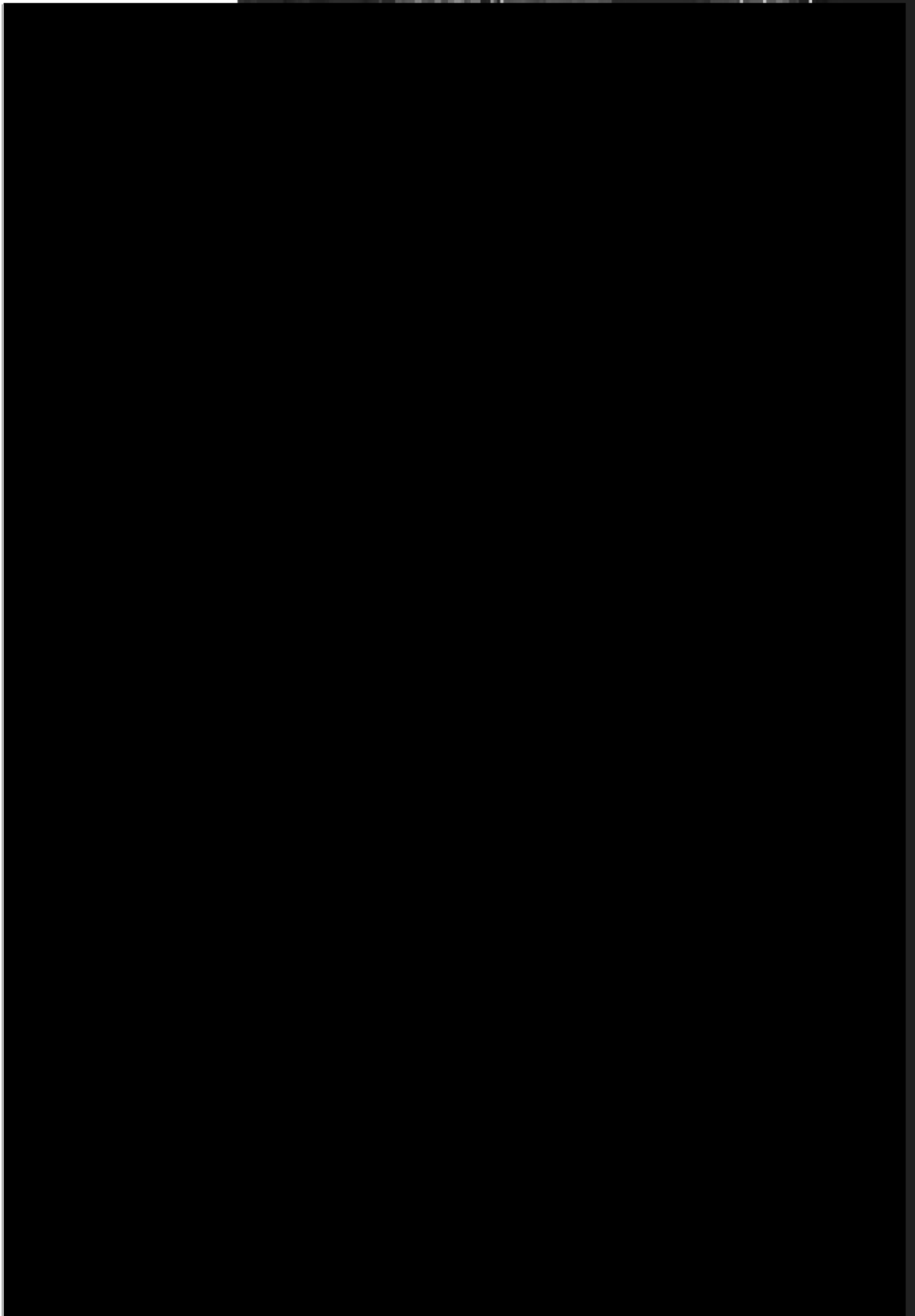
The document also highlights the need for transparency and accountability. By providing clear and concise reports to stakeholders, organizations can build trust and ensure that all parties are kept informed of the company's financial health. This involves not only reporting on the numbers but also explaining the underlying trends and factors that influence the results.

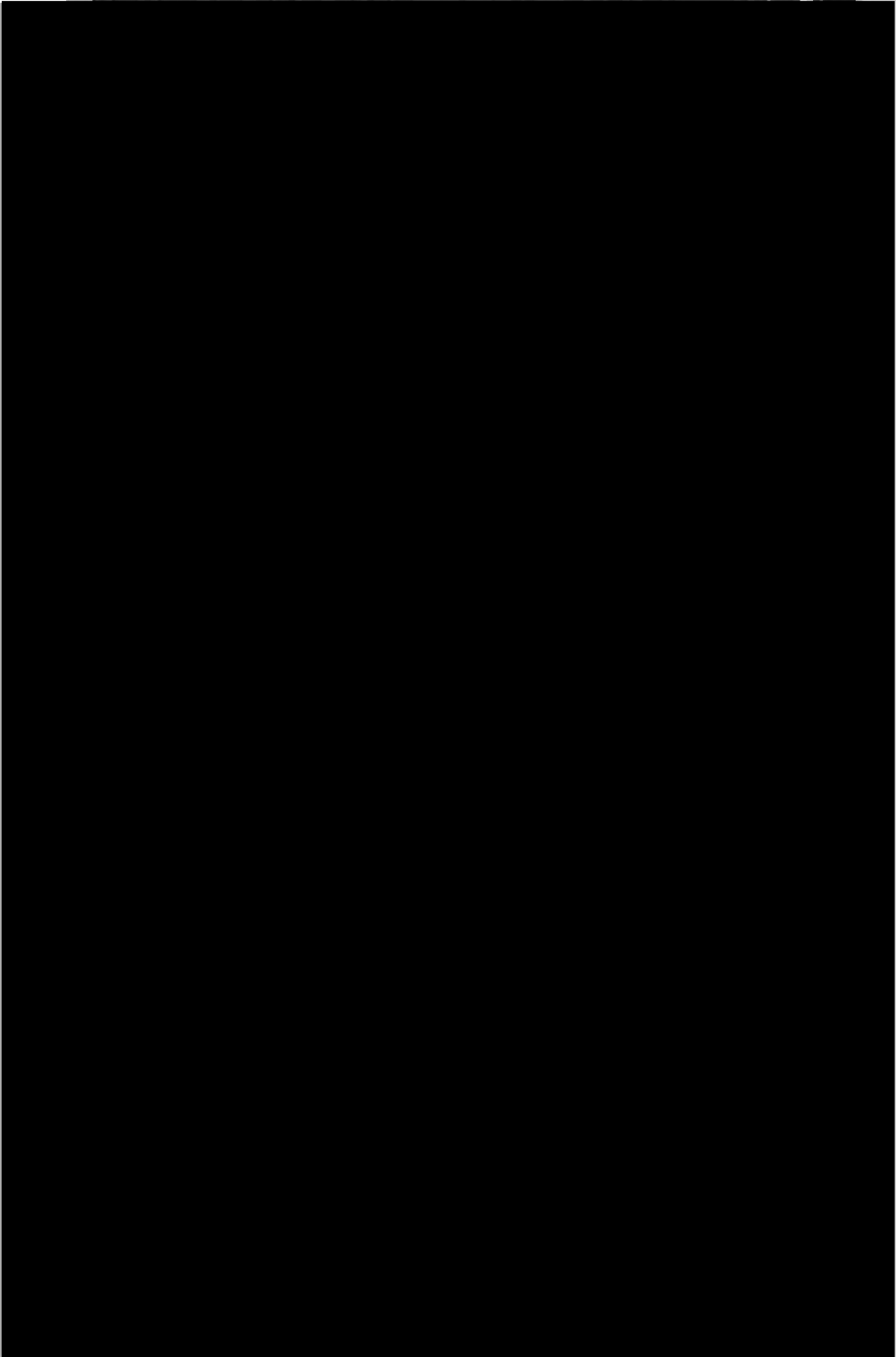
Finally, the document concludes by stressing the importance of continuous improvement. Financial management is not a one-time task but an ongoing process. Regular reviews and audits are necessary to identify areas for optimization and ensure that the organization remains on track to meet its financial goals.

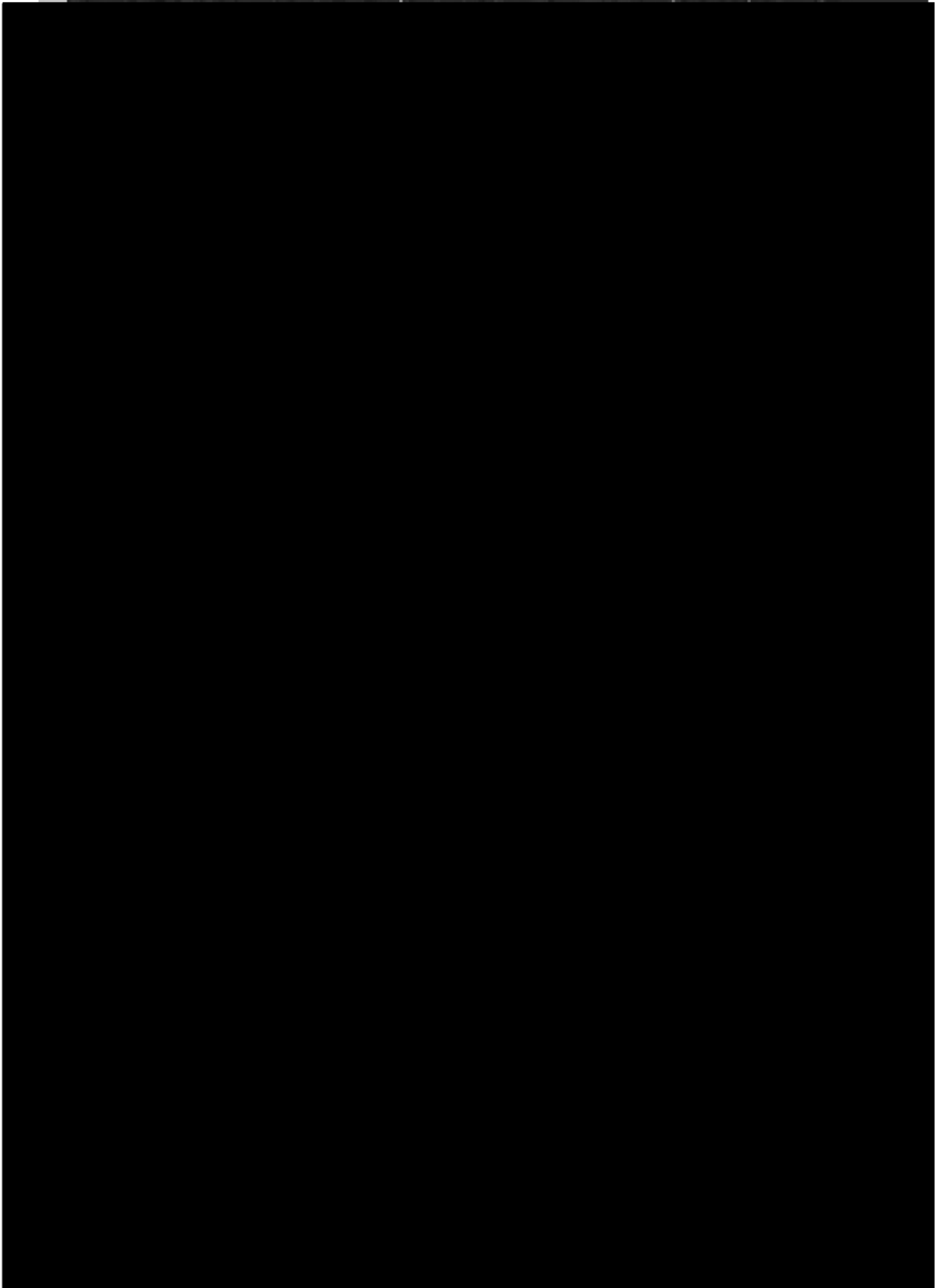


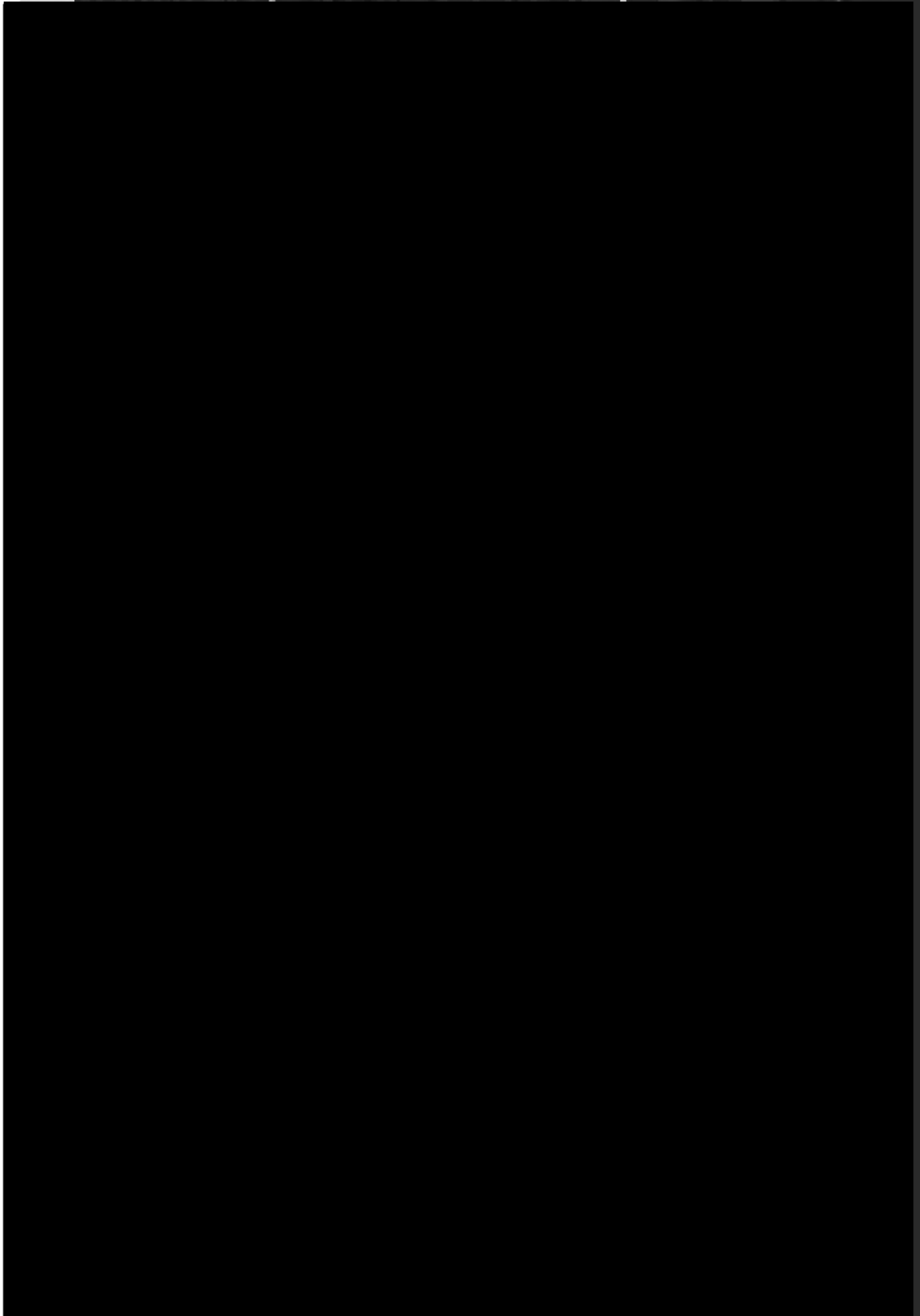


ANNEX D

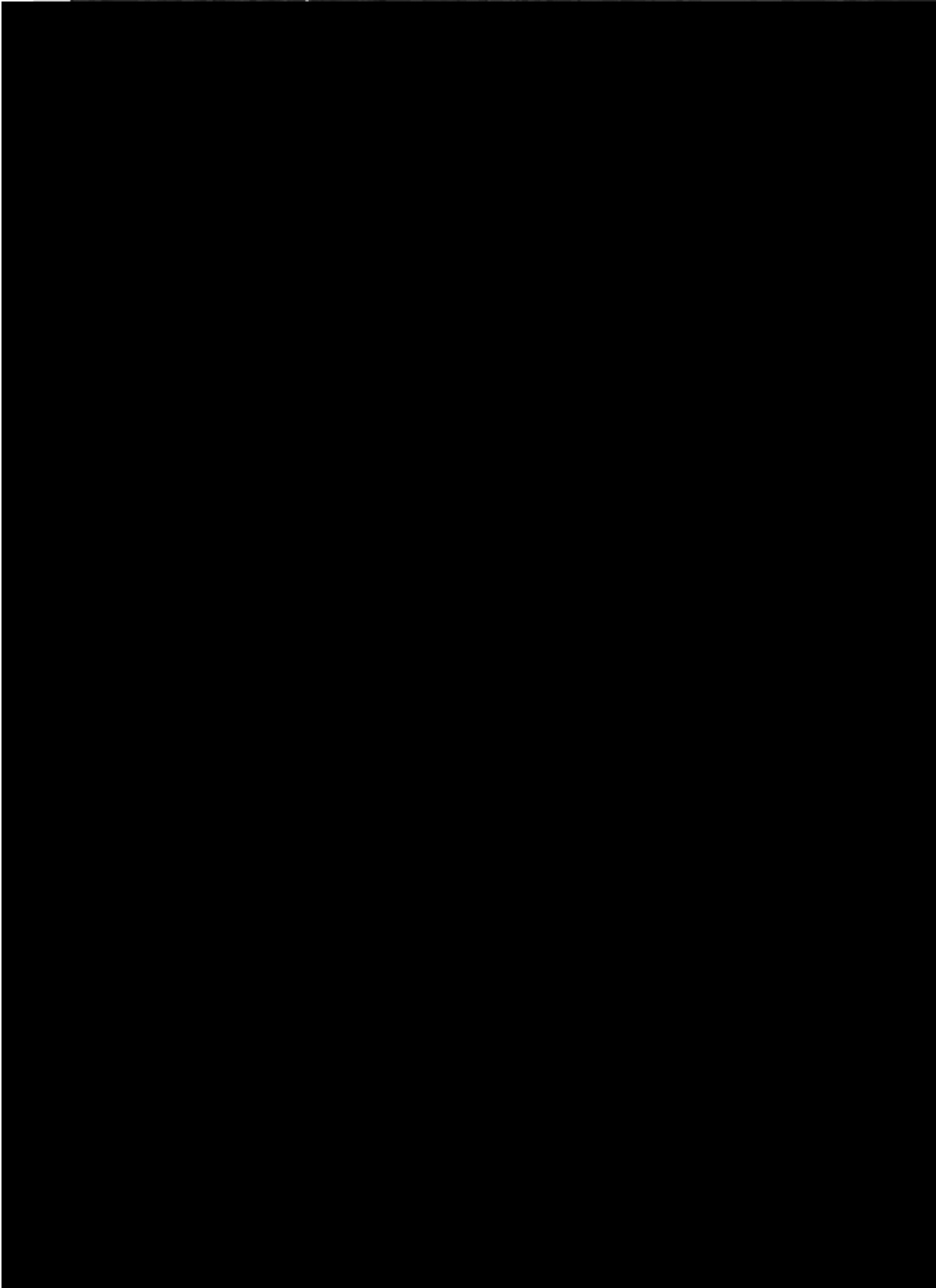


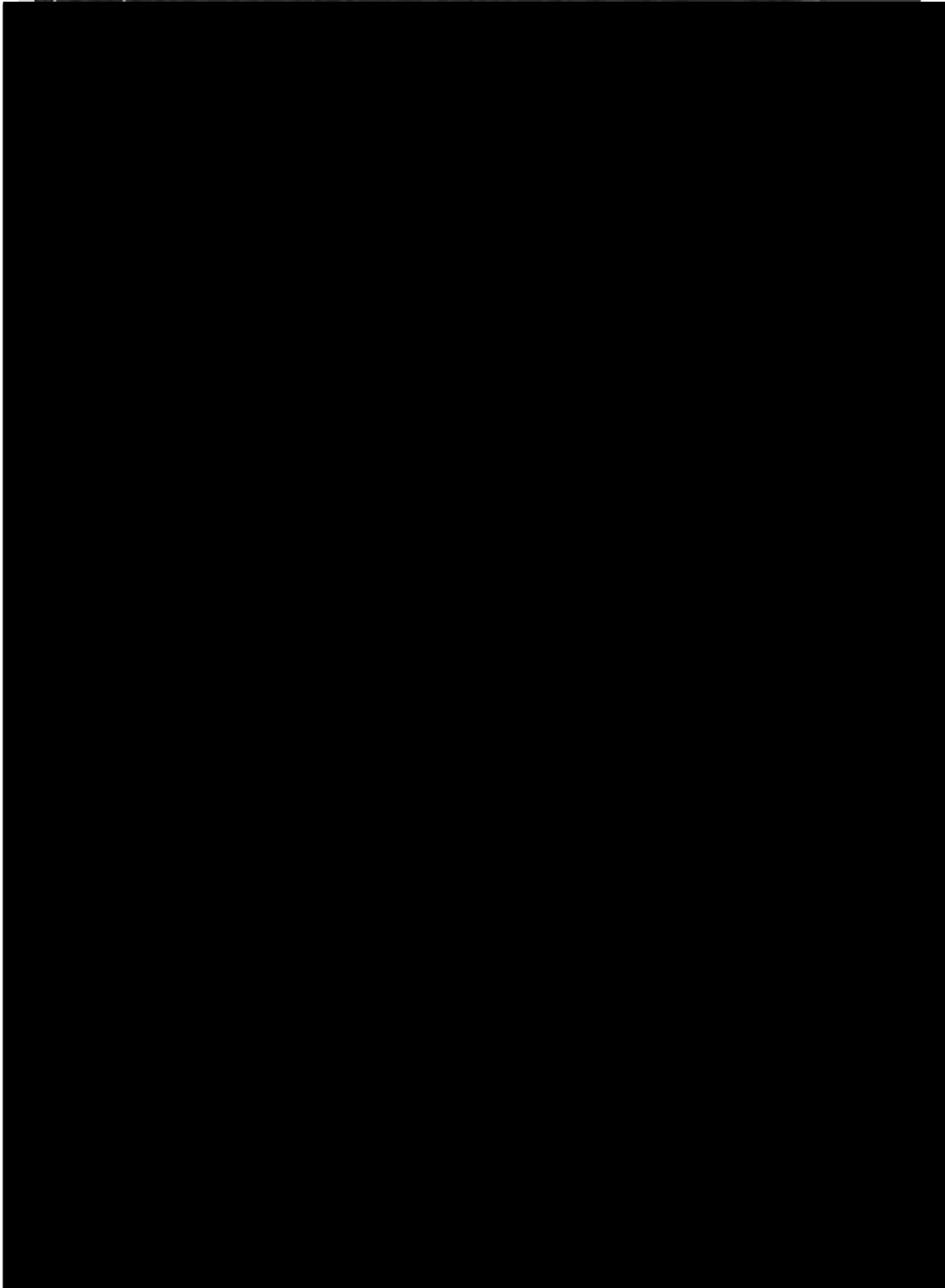


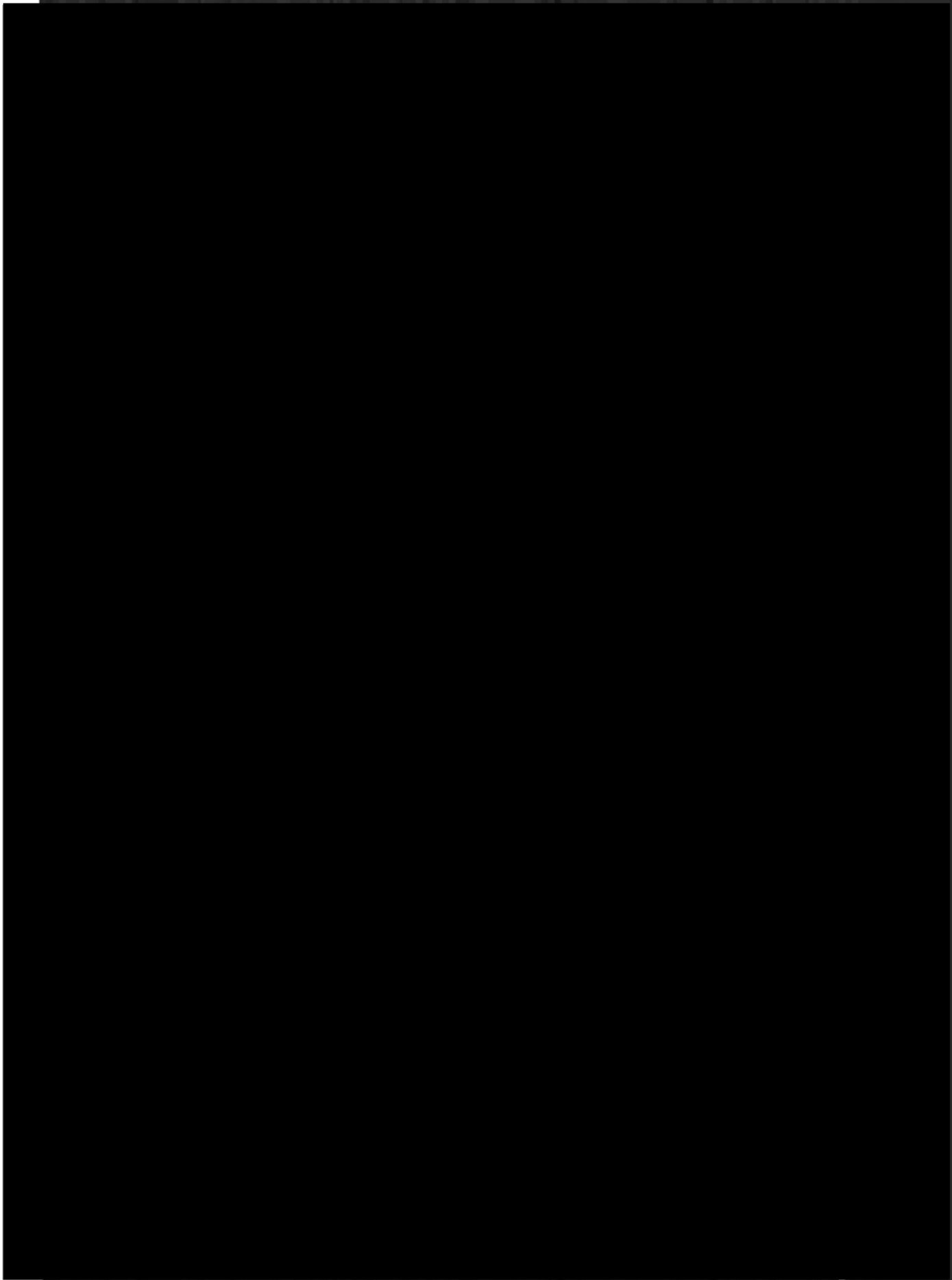


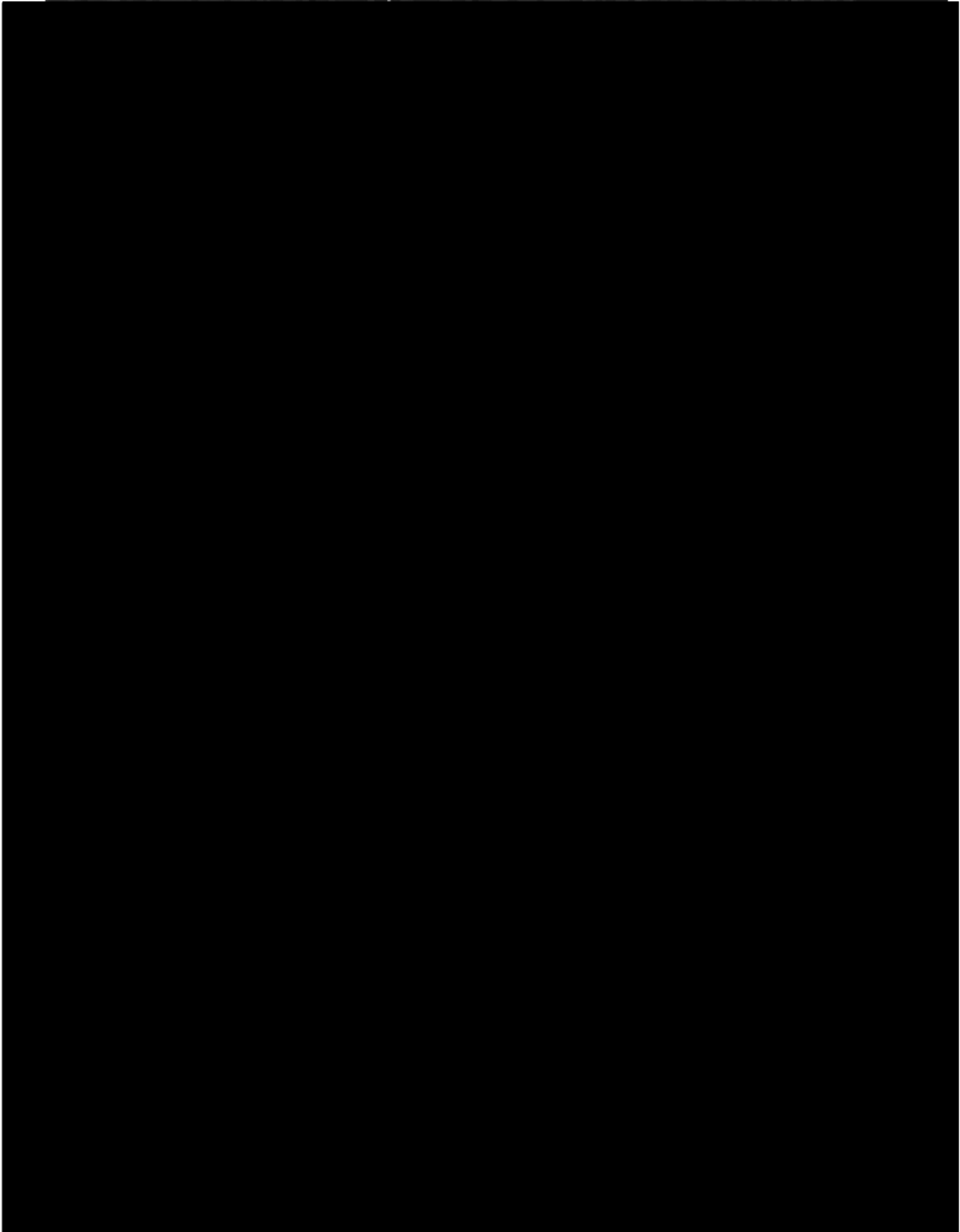


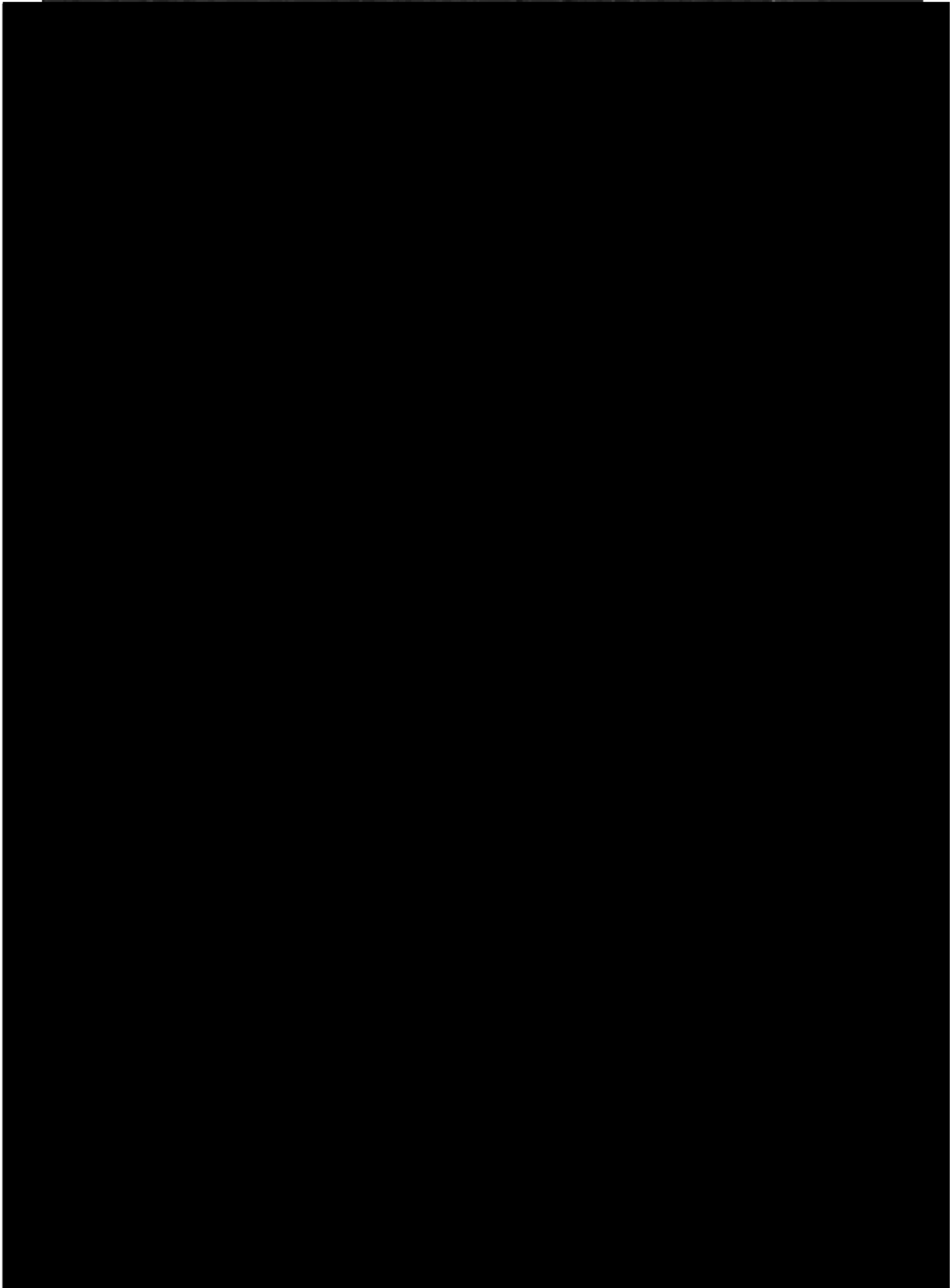


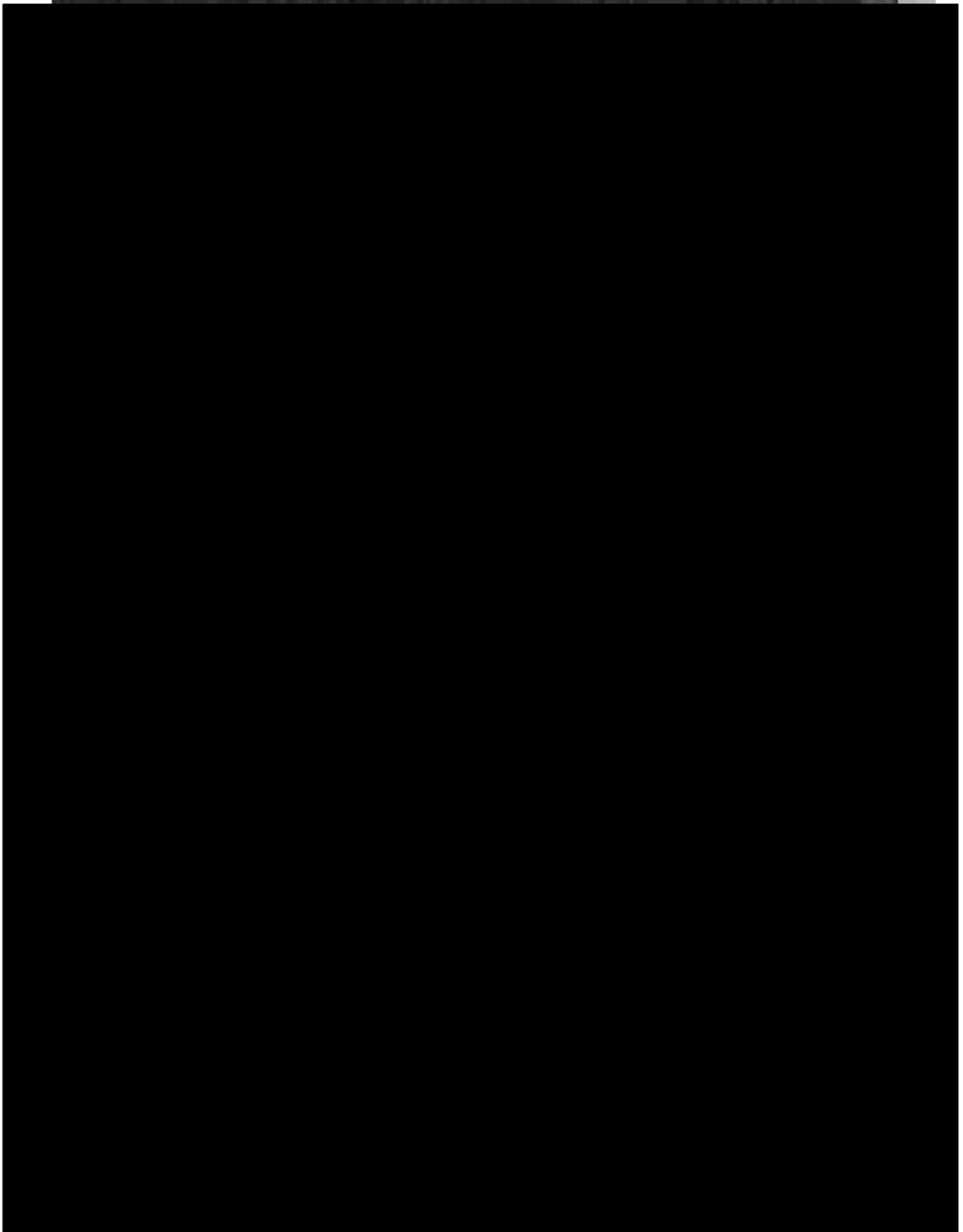


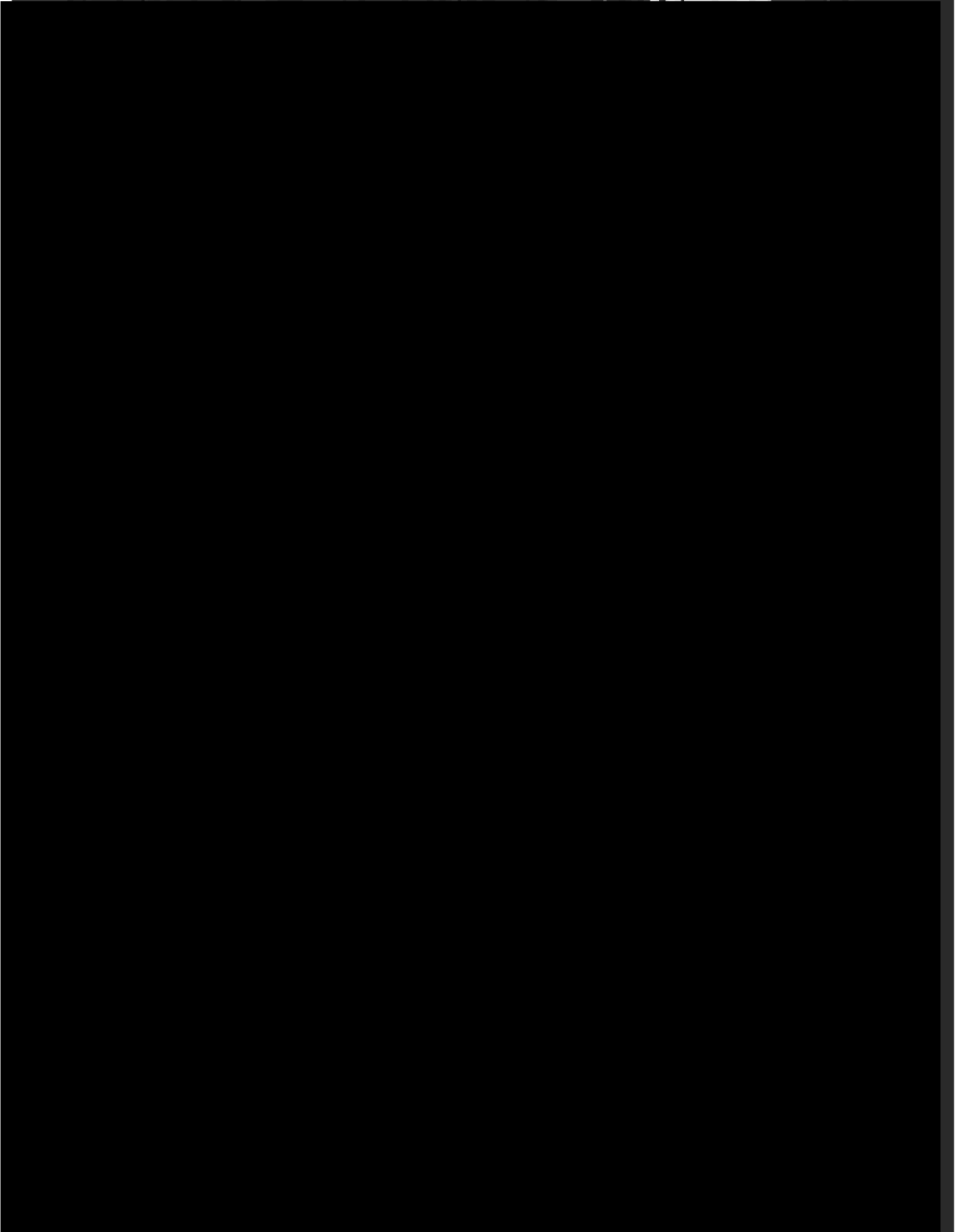


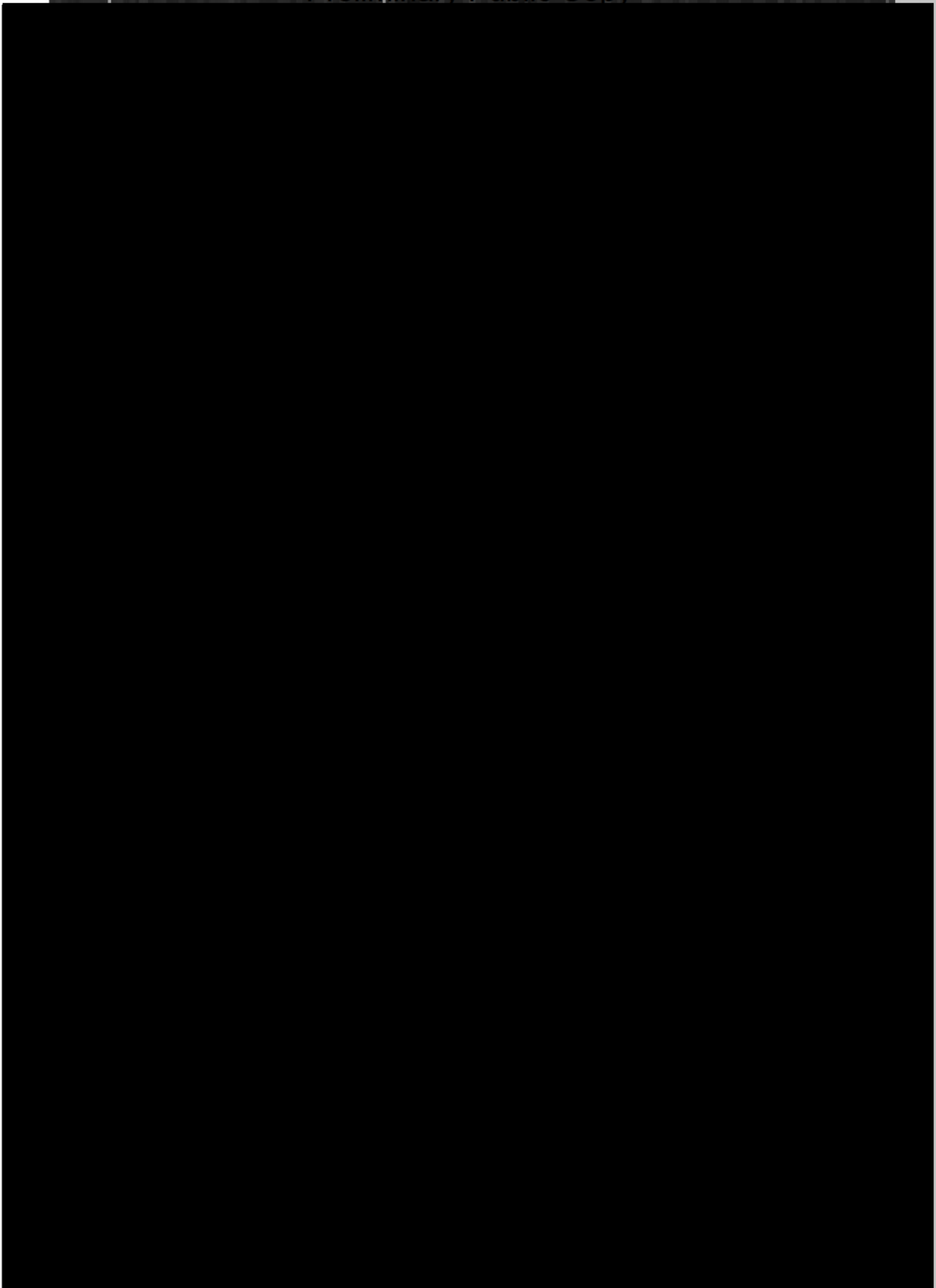




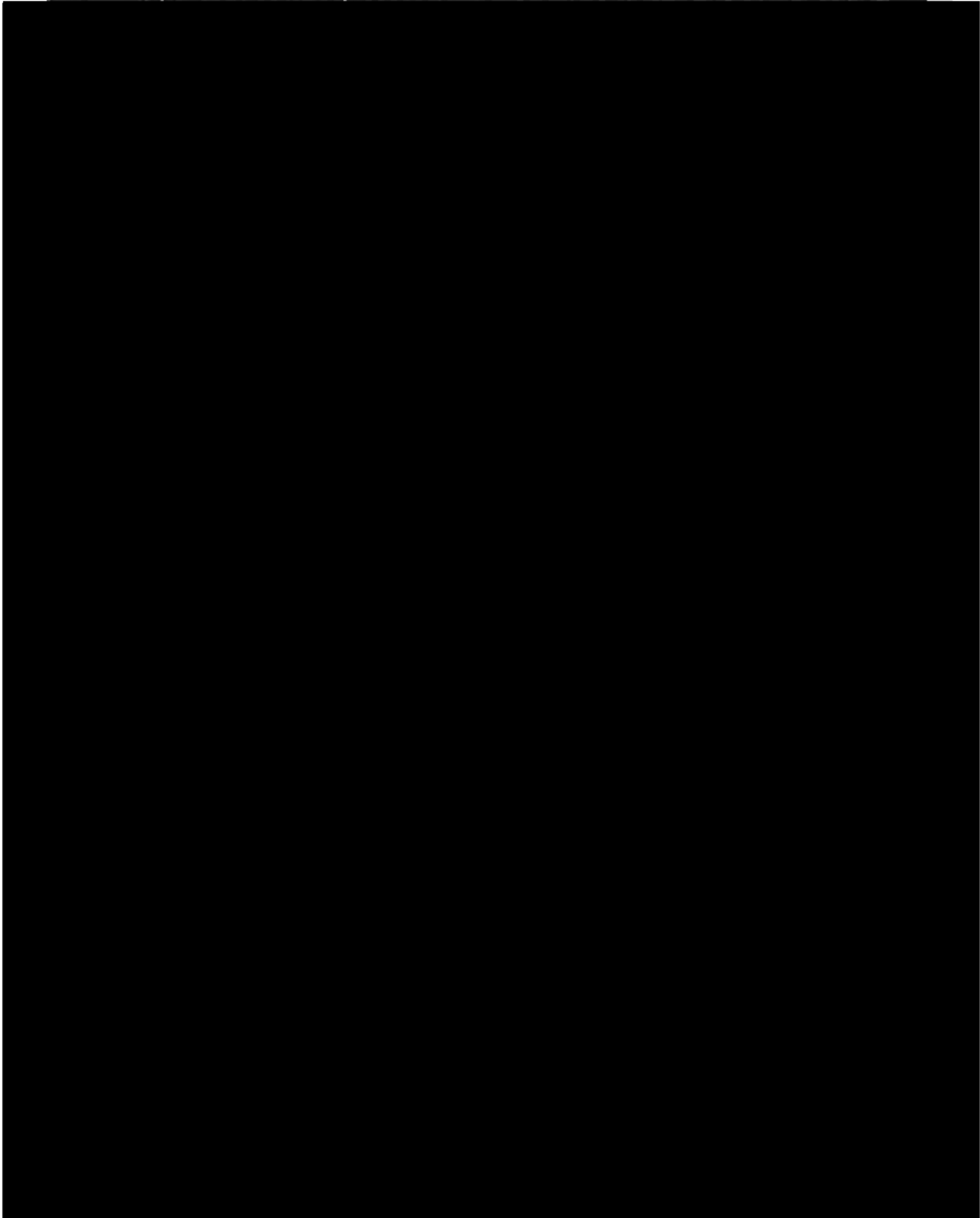


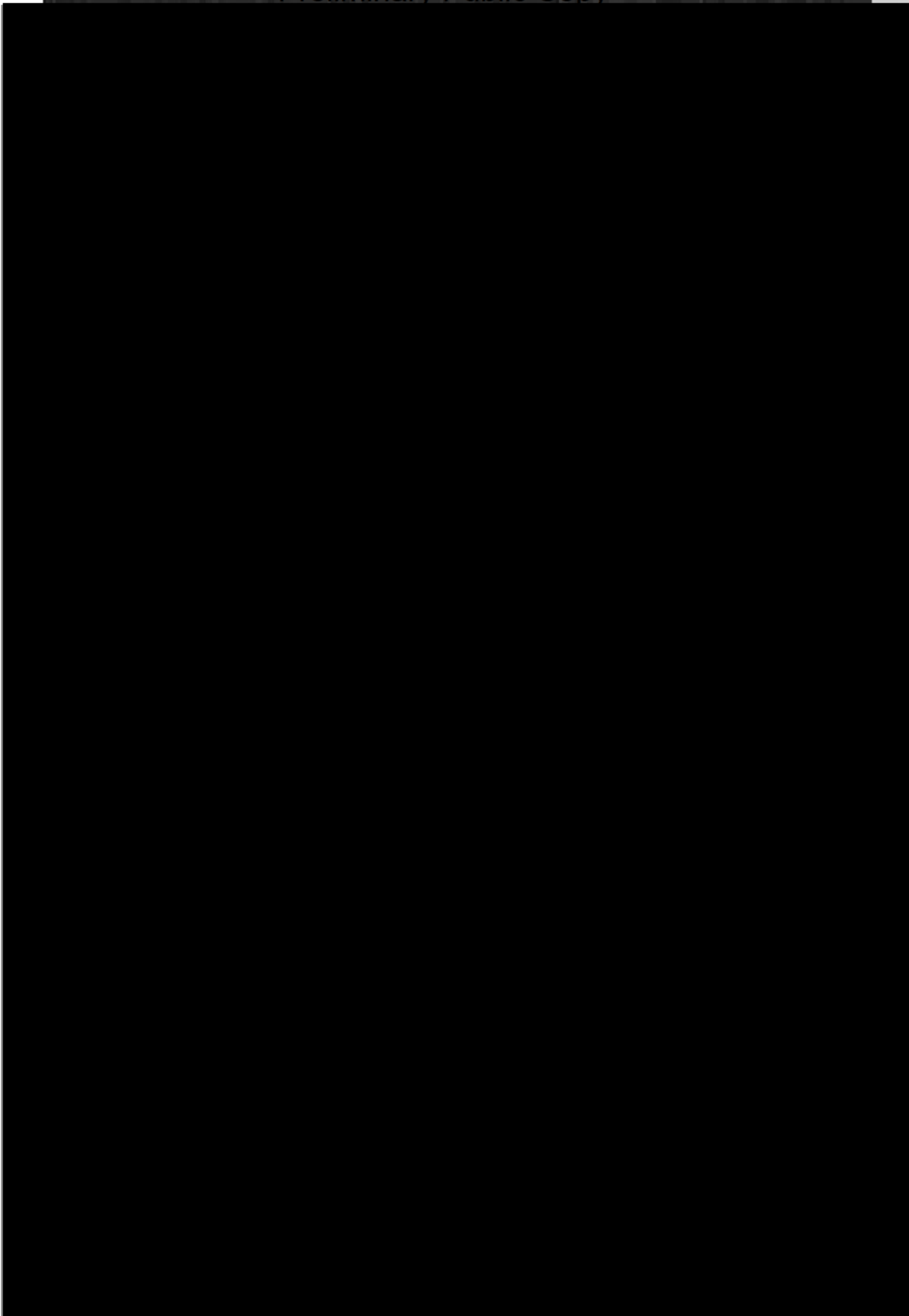


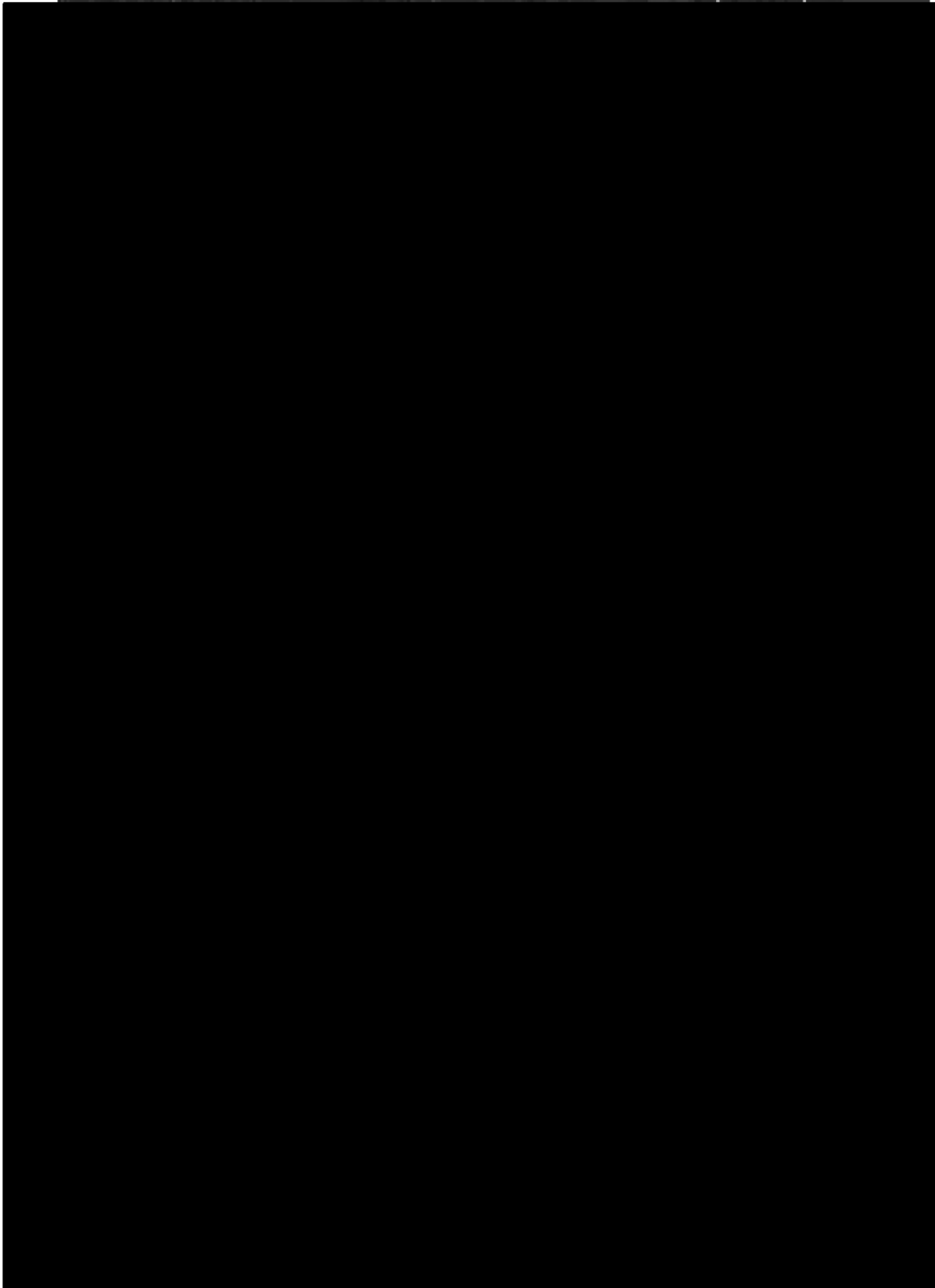


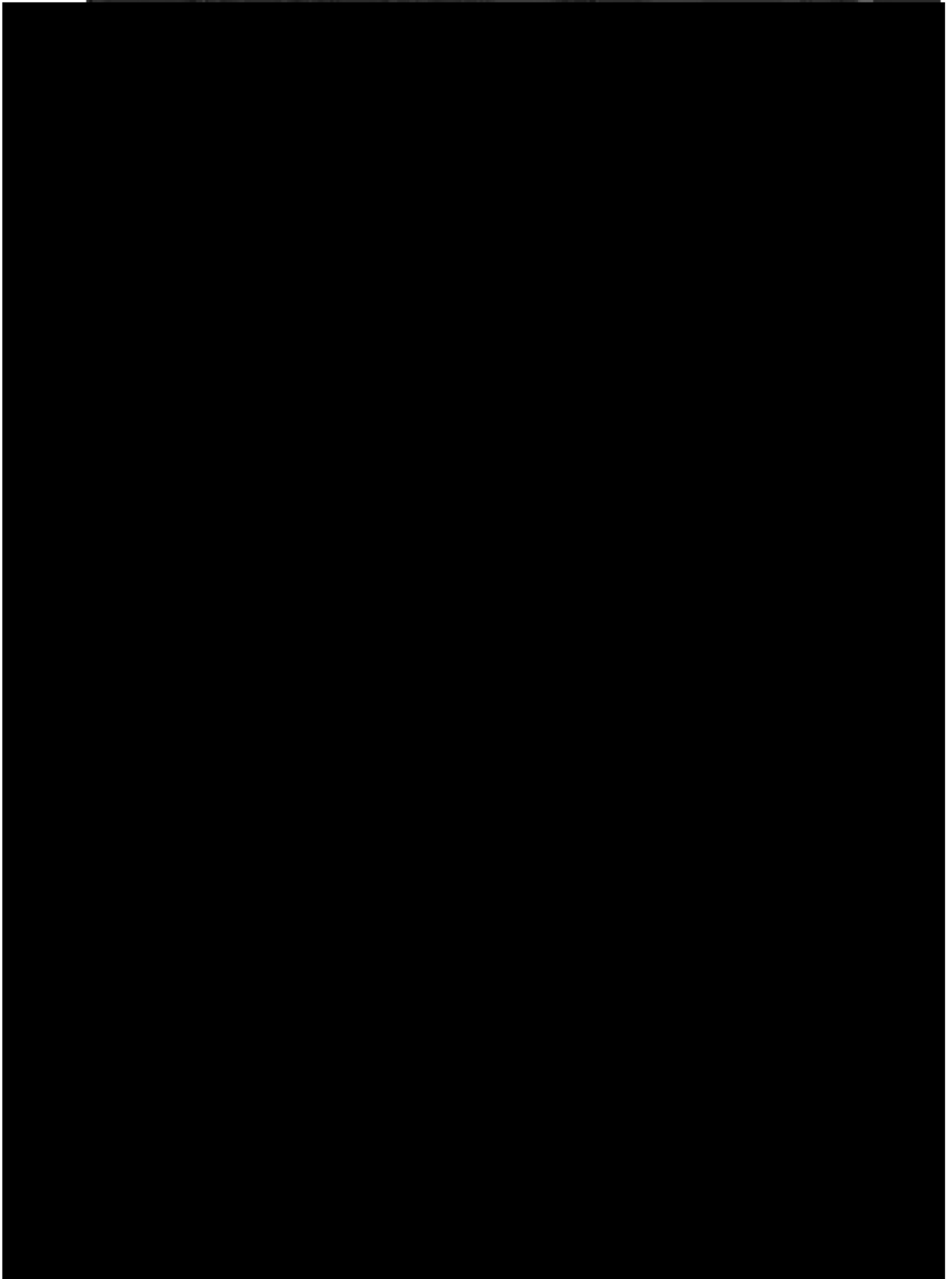


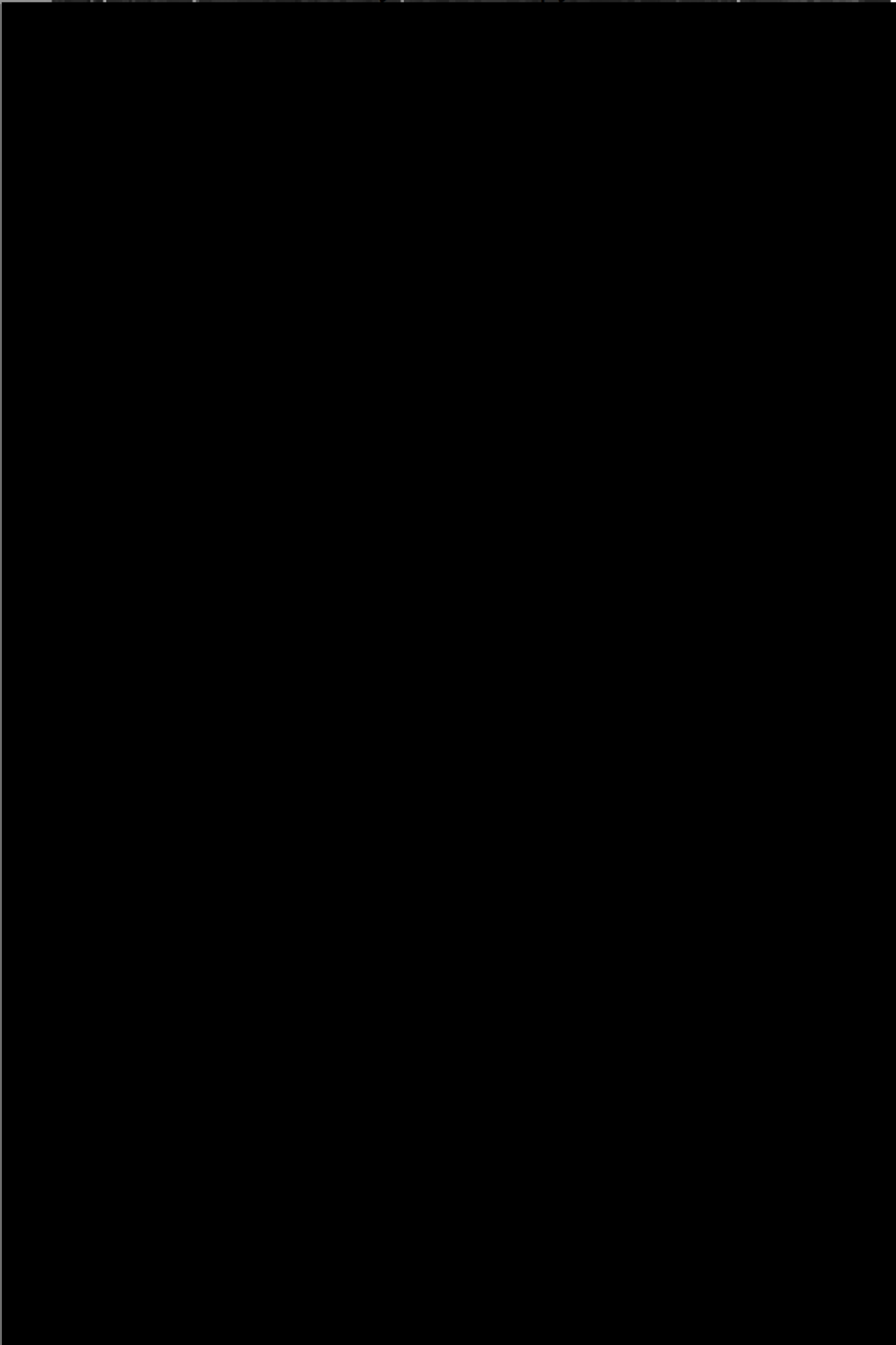


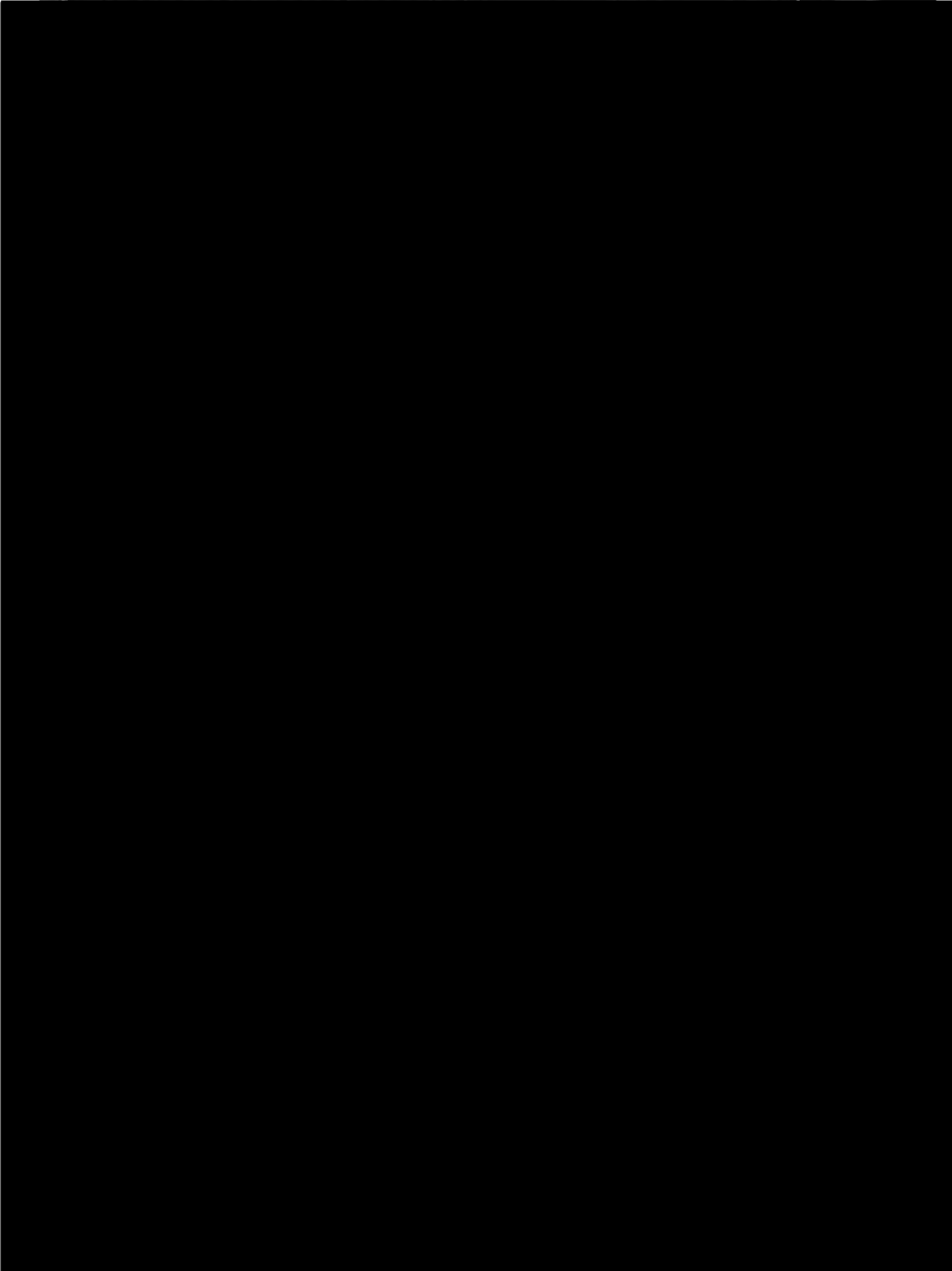


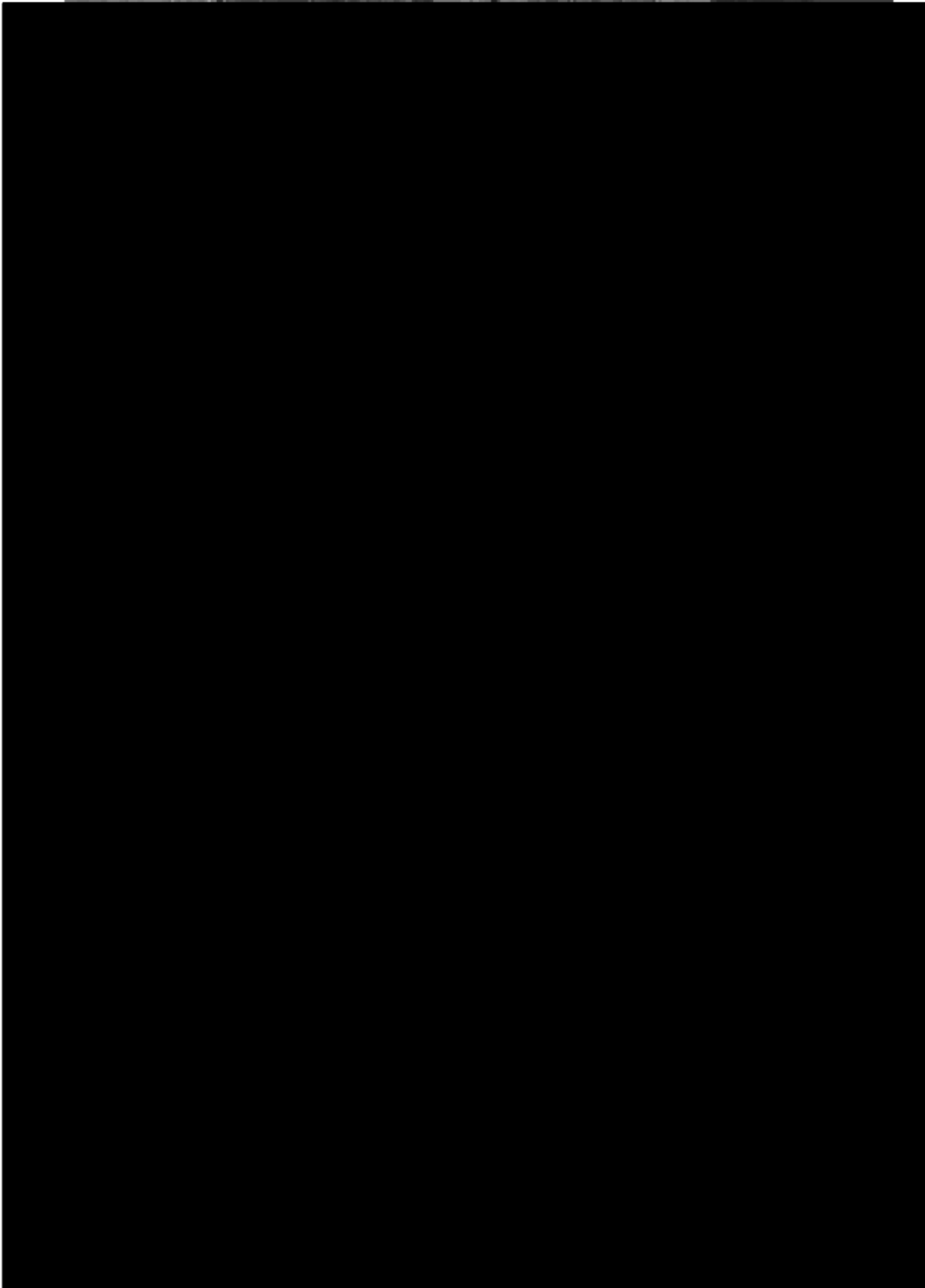


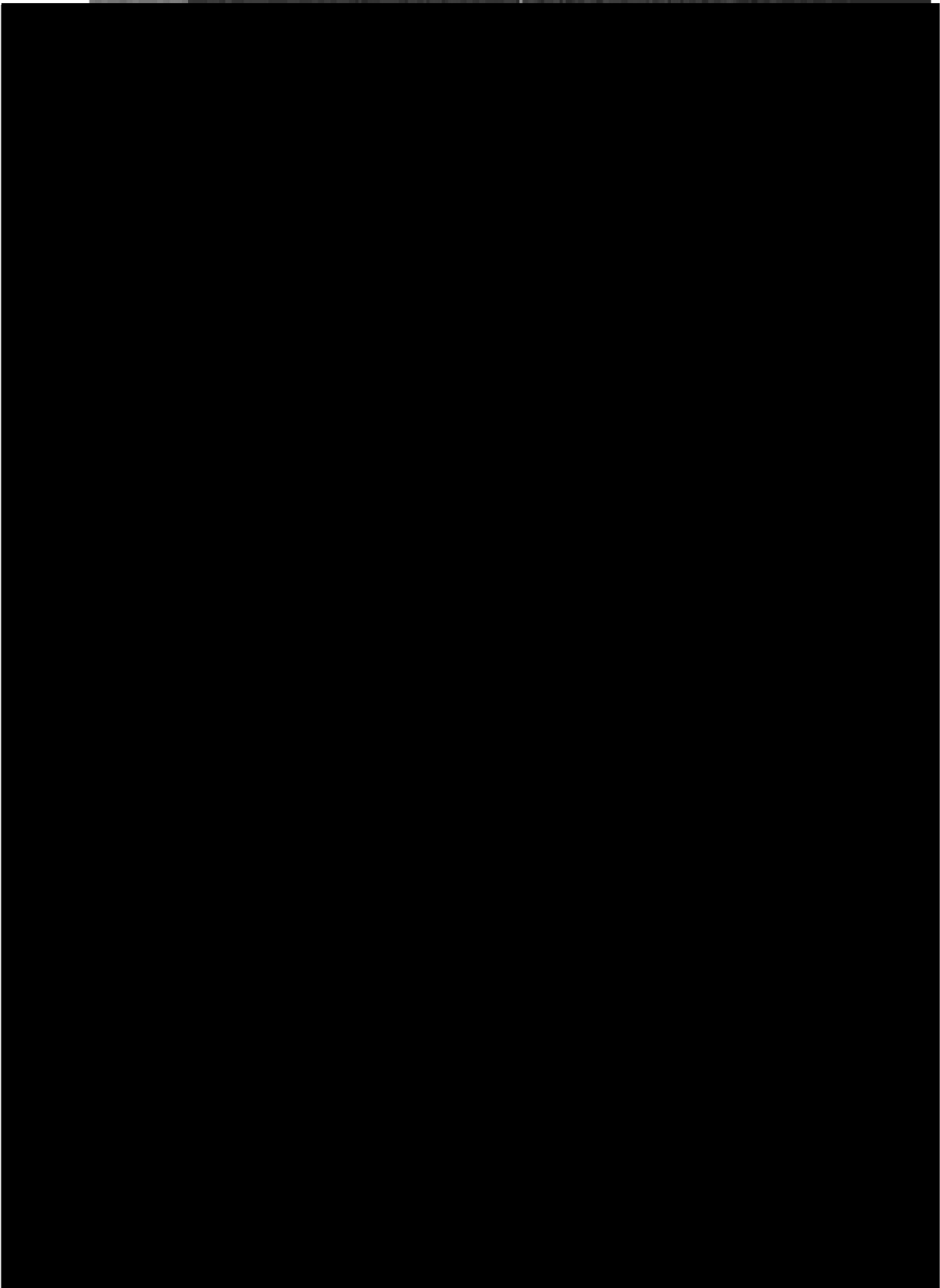




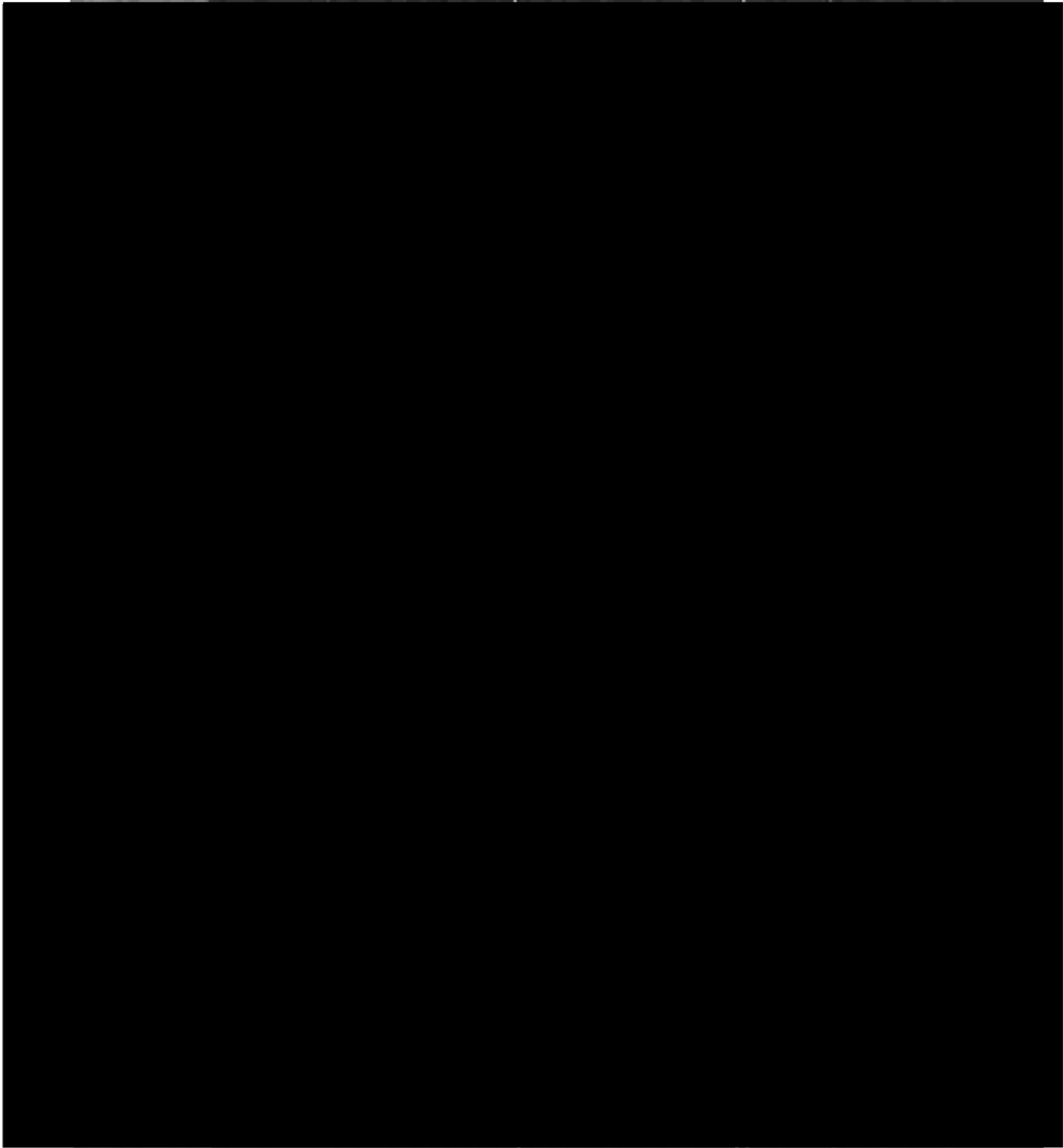




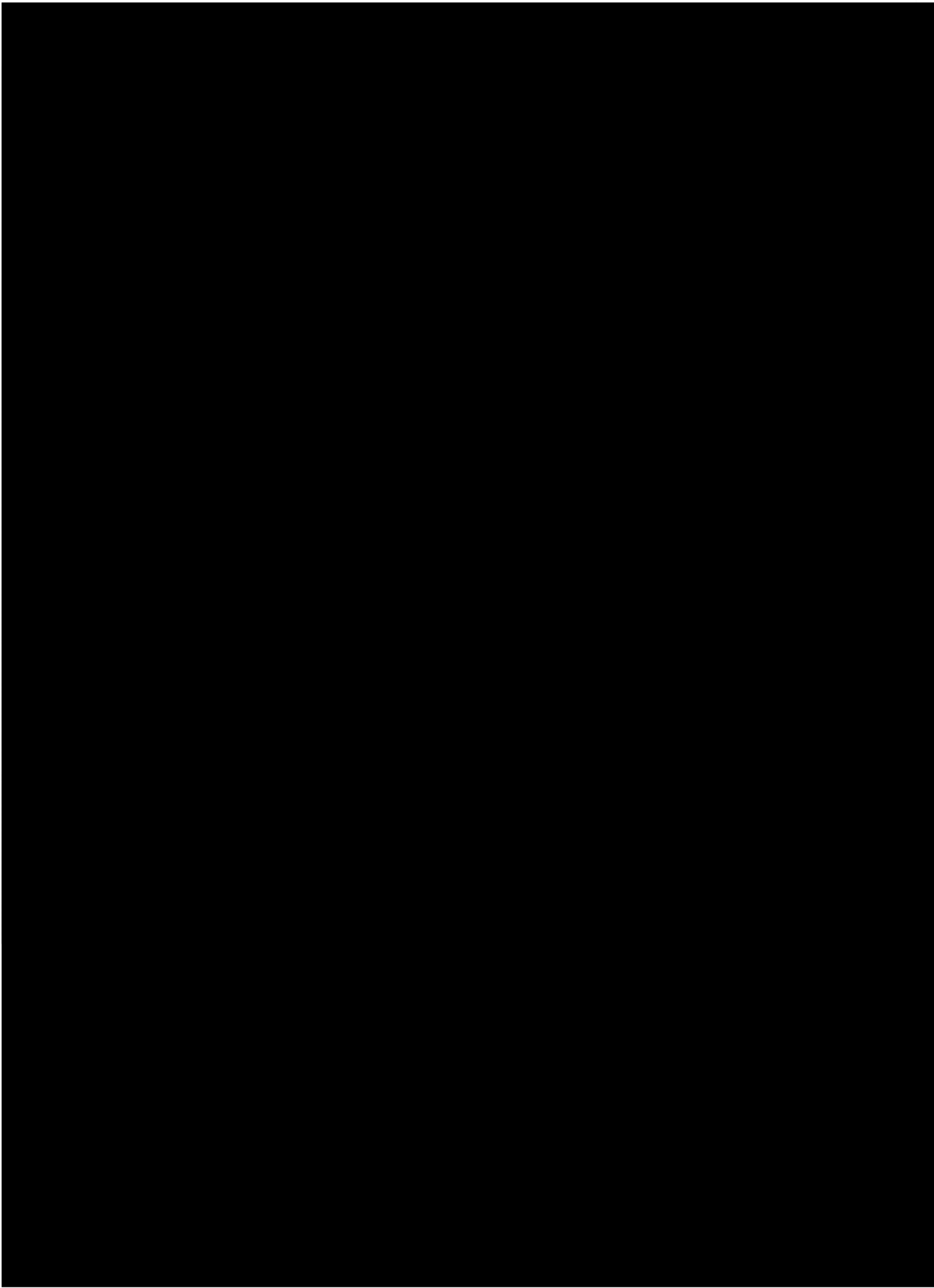


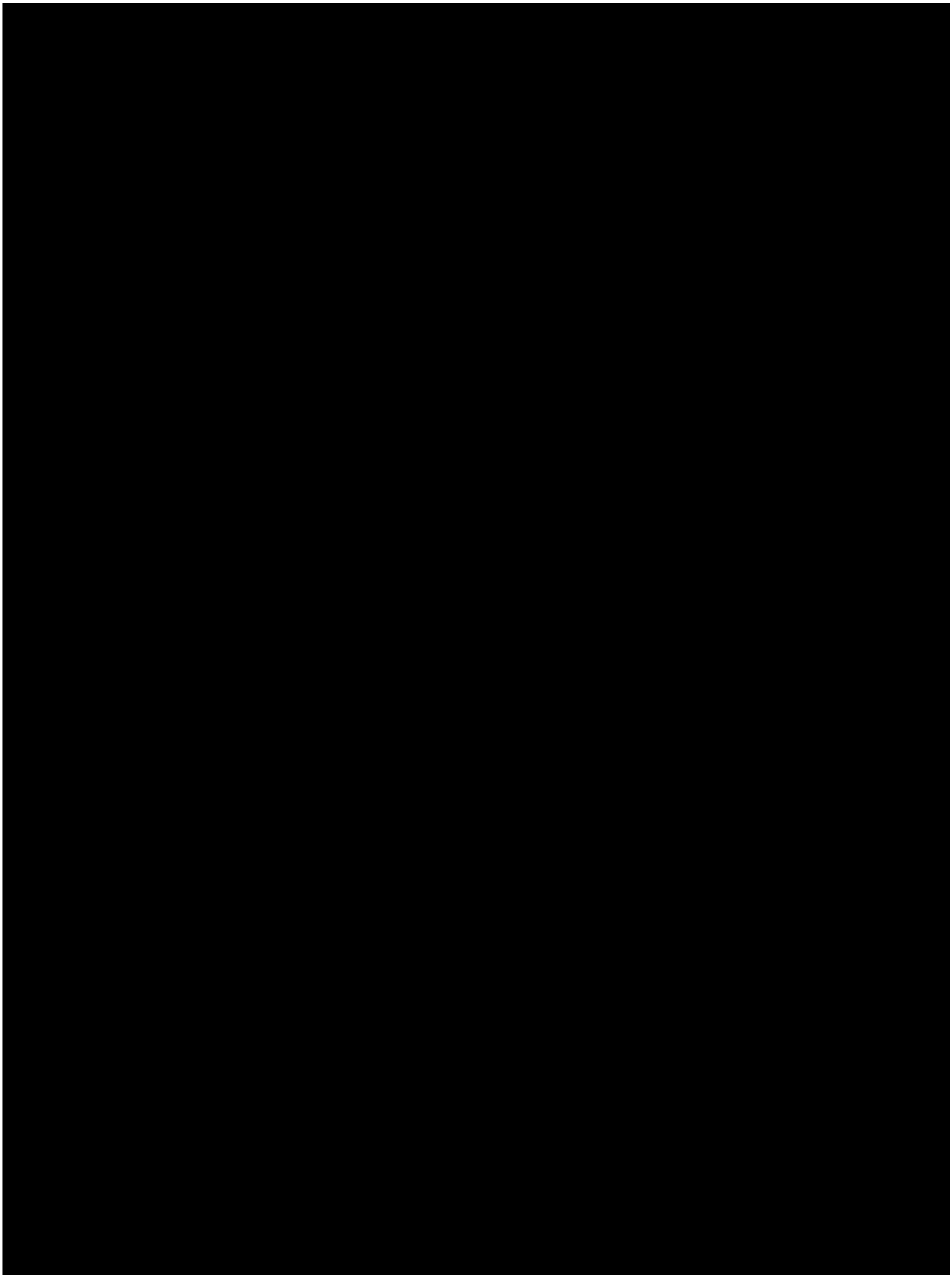






ANNEX E







The first part of the document discusses the importance of maintaining accurate records of all transactions. This includes not only sales and purchases but also the flow of goods and services between different departments and locations. By keeping detailed records, management can identify areas of inefficiency and make informed decisions to improve operations.

Secondly, the document emphasizes the need for regular communication and reporting. Managers should hold frequent meetings with their subordinates to discuss progress, address concerns, and provide feedback. This helps to ensure that everyone is on the same page and working towards common goals.

Thirdly, the document highlights the importance of staying organized and prioritizing tasks. Managers should create a clear schedule and delegate responsibilities effectively. This helps to prevent tasks from falling through the cracks and ensures that the most important work is completed first.

Finally, the document stresses the importance of being a role model. Managers should demonstrate the same level of professionalism, integrity, and hard work that they expect from their employees. This sets the tone for the organization and encourages a culture of high performance.





































































ANNEX G





ANNEX H



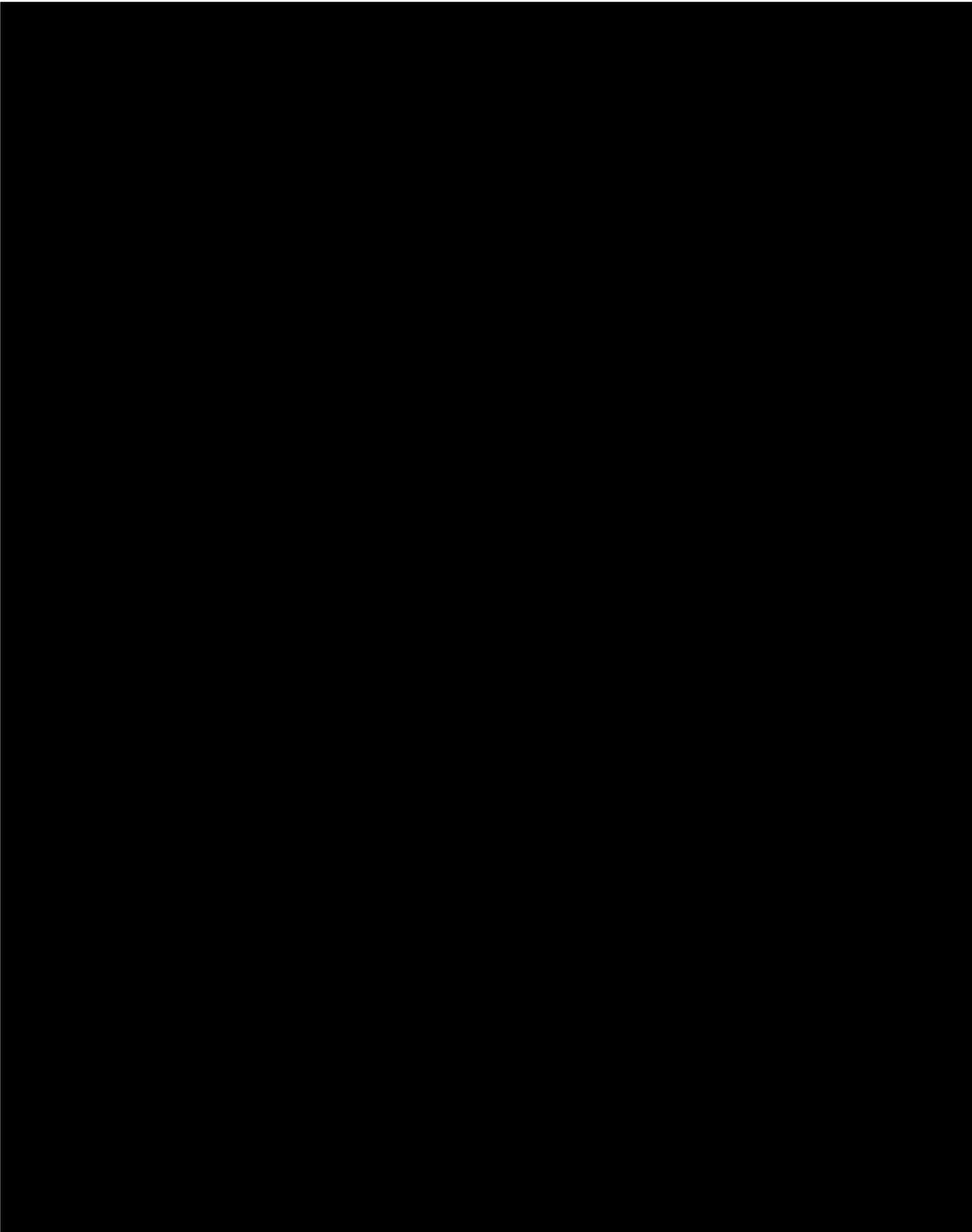




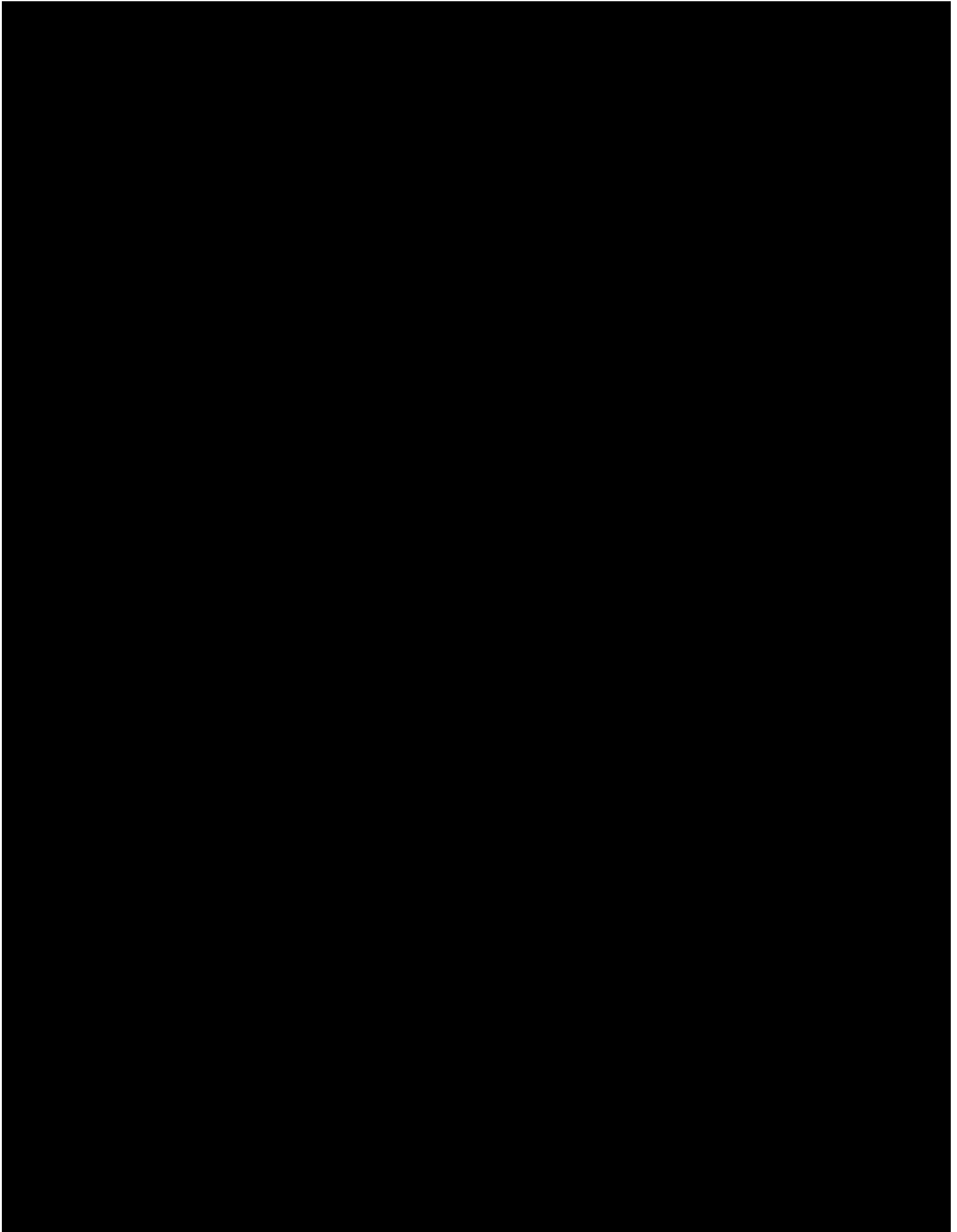
ANNEX I



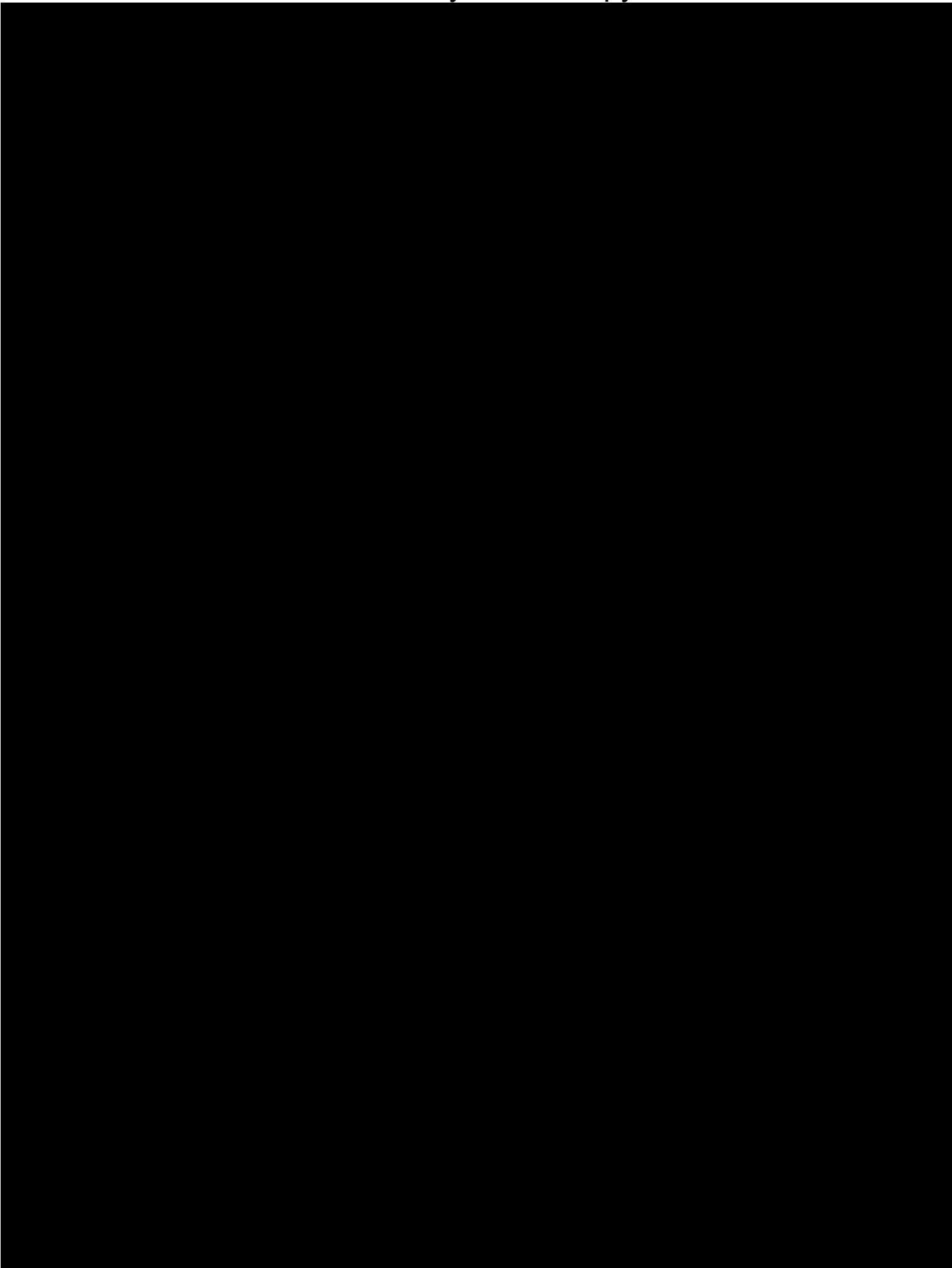




# ATTACHMENT 23







ANNEX A





















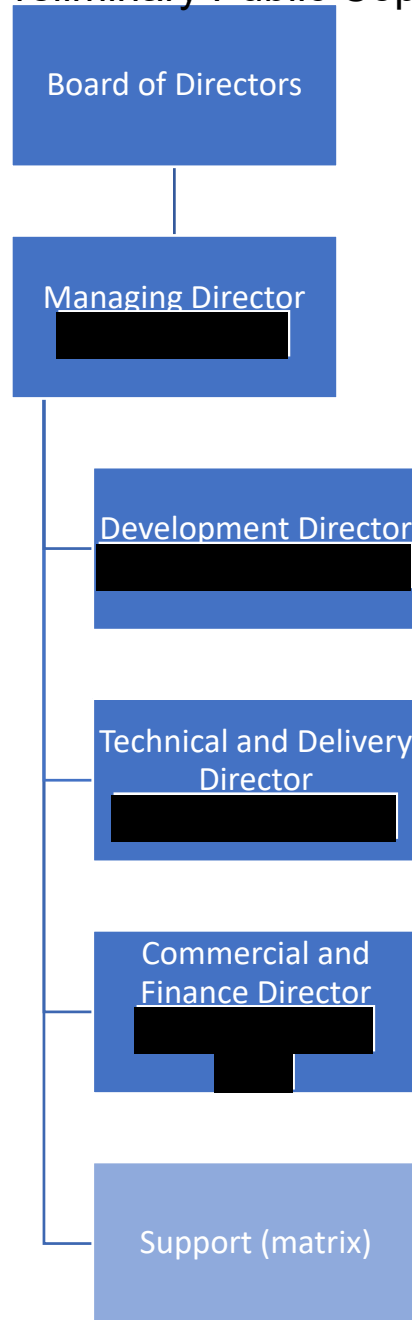




# ATTACHMENT 24

# Atlantic Shores Management Chart

Preliminary Public Copy



## Board of Directors:

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[Redacted content]

[Redacted content]

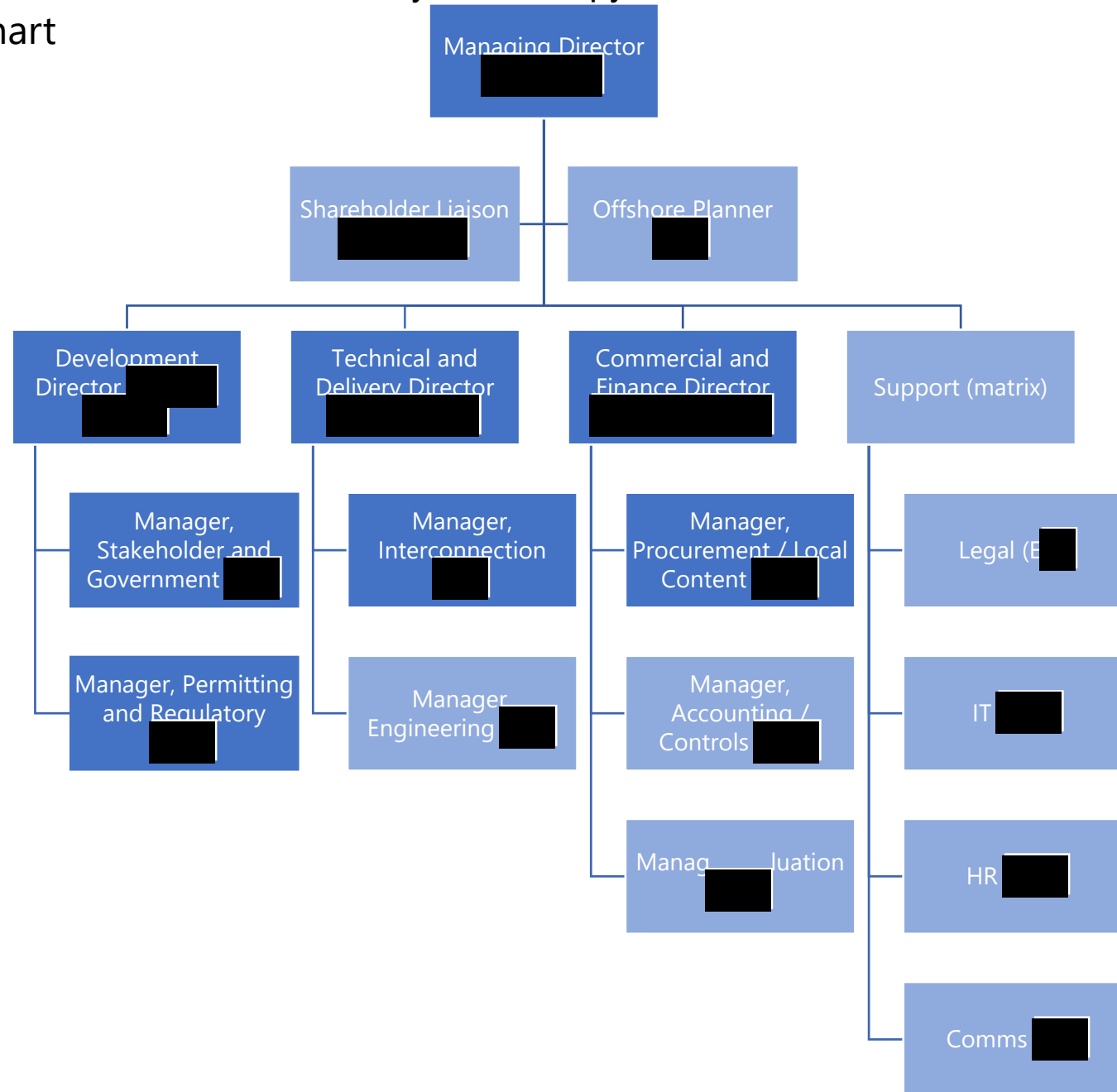
[Redacted content]

[Redacted content]

[Redacted content]

[Redacted content]

# Atlantic Shores Management Chart



Legend:

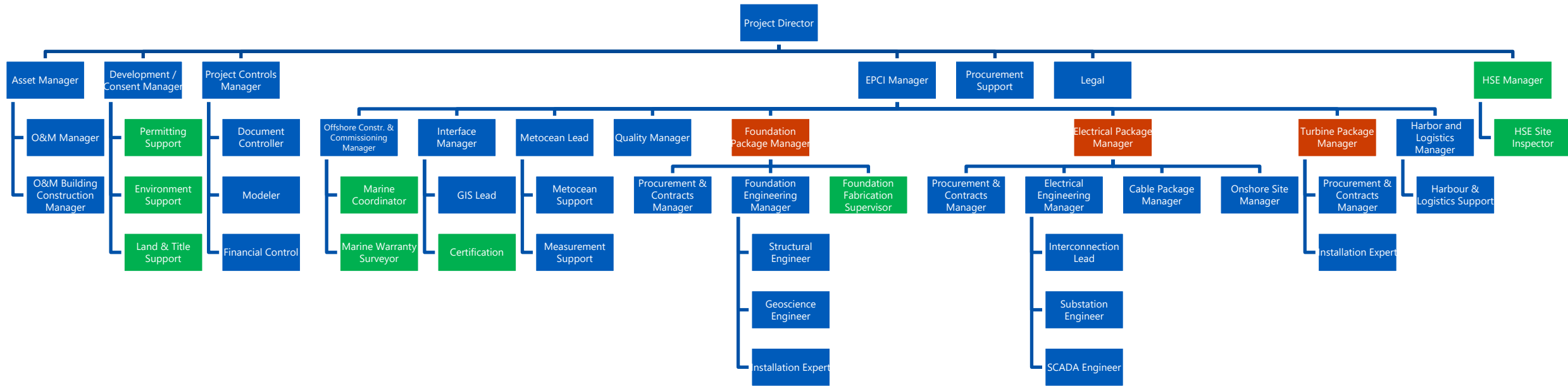
Full-time

Could be part-time



# Project Management Chart

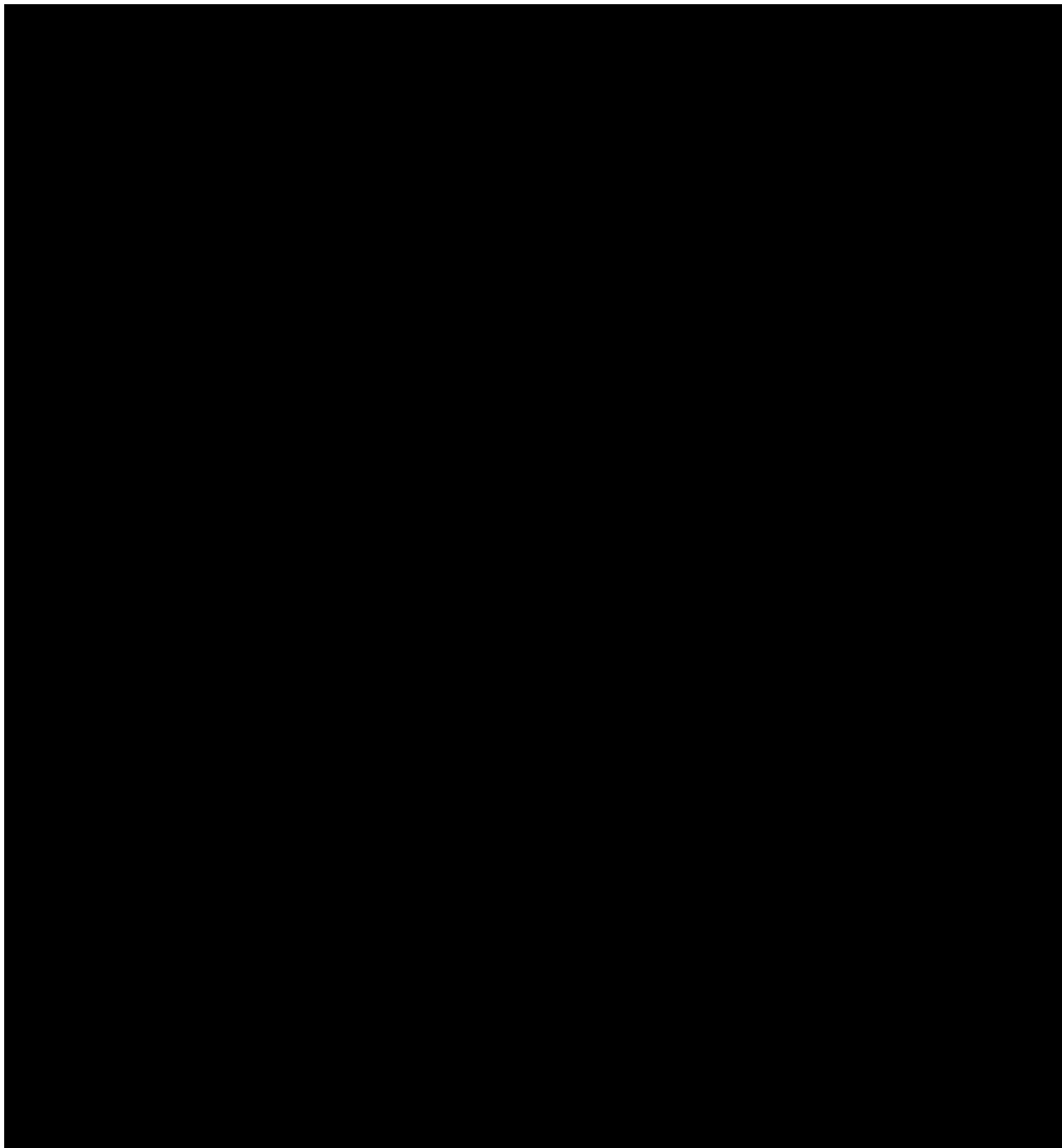
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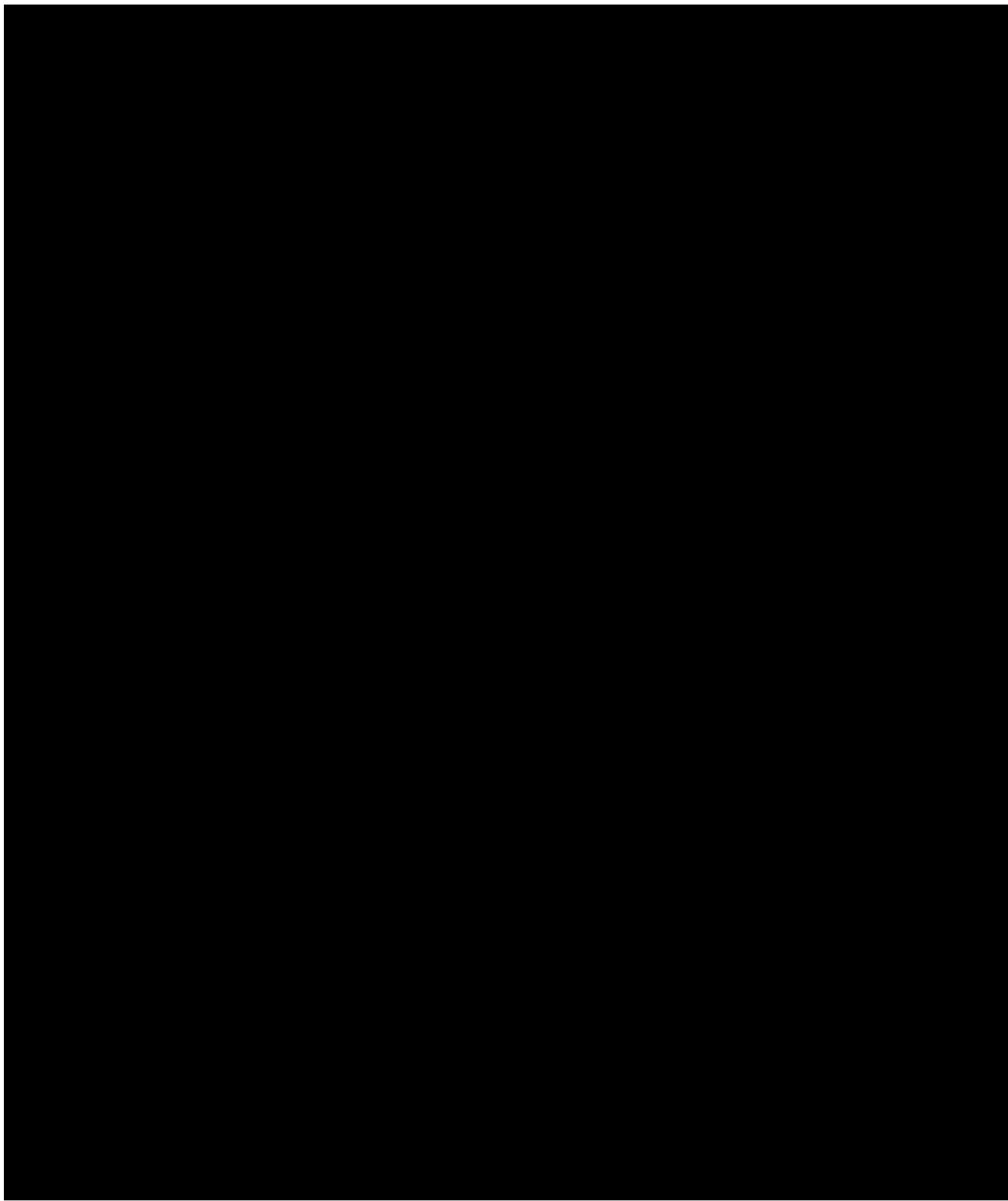


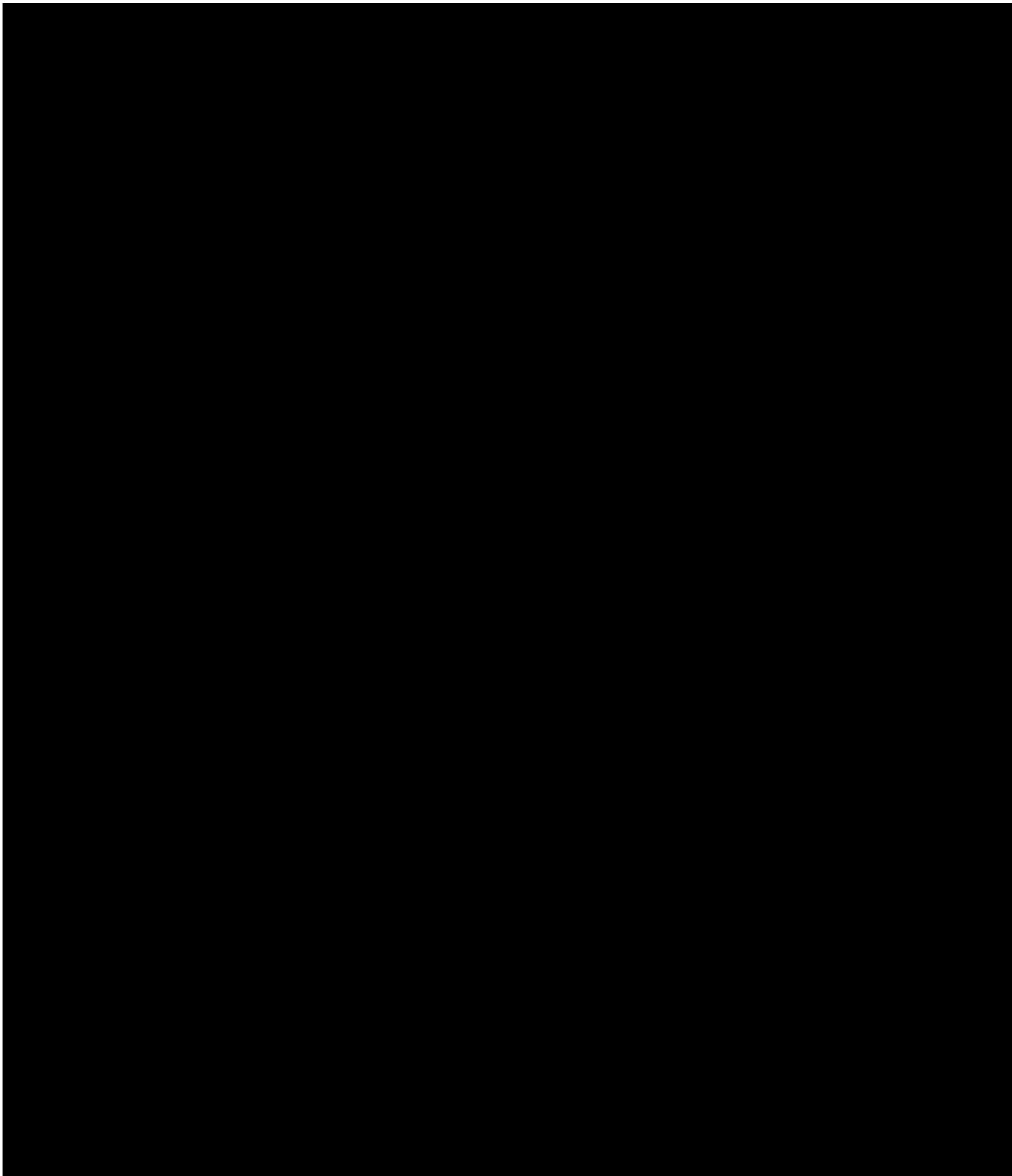
# ATTACHMENT 25

**Cliff Graham**

Vice President, US Development  
EDF Renewables





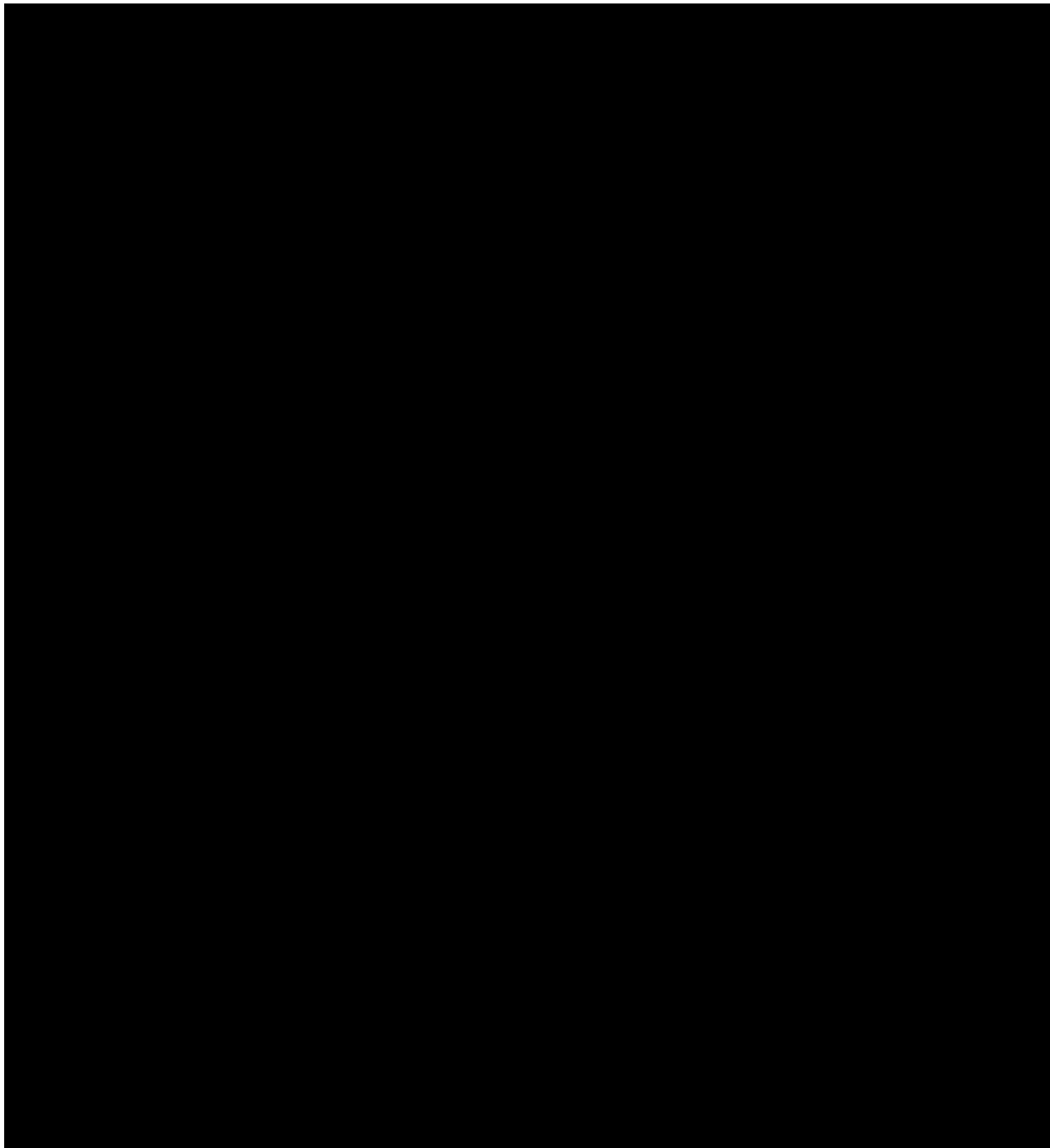


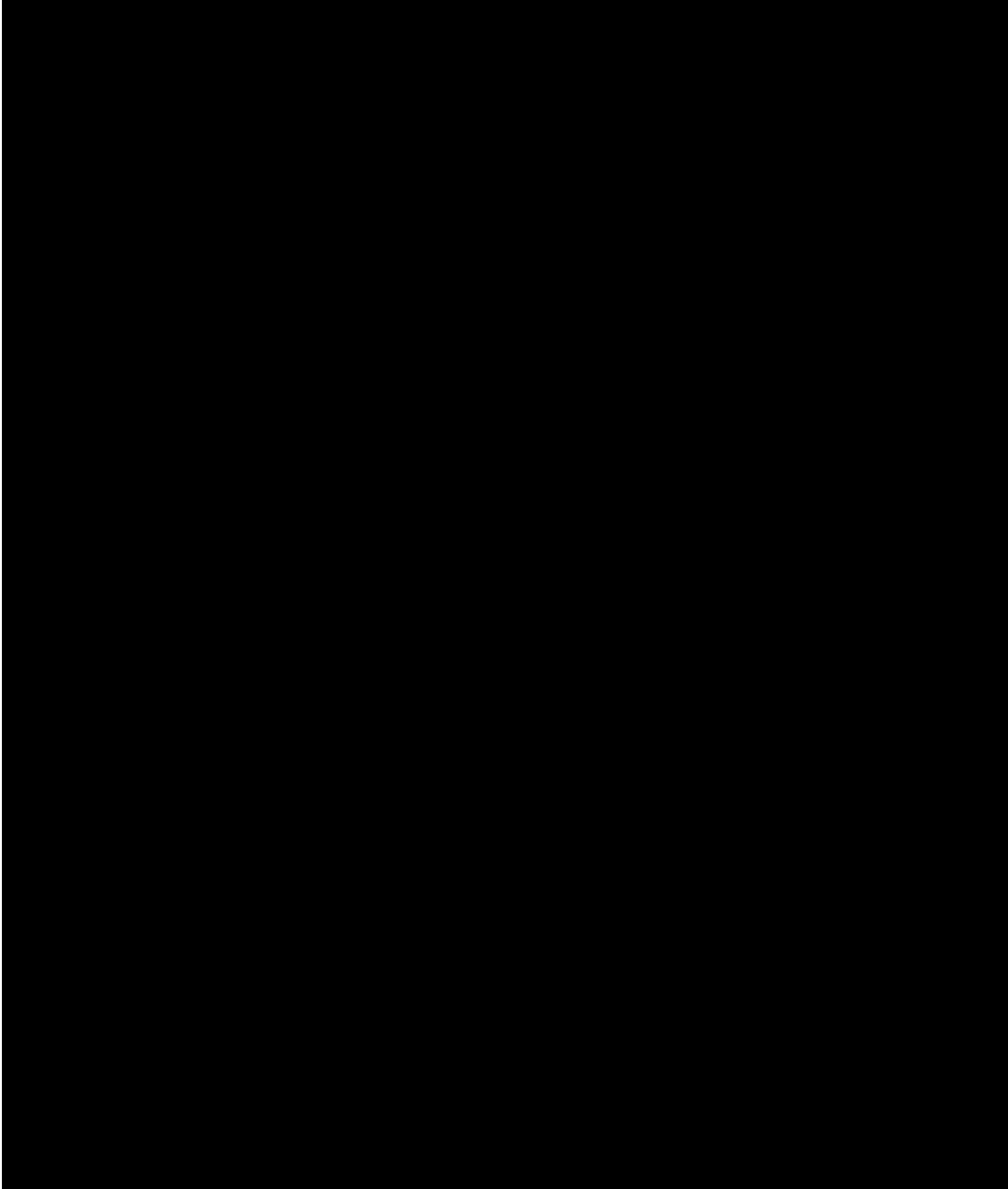
# ATTACHMENT 26

**Benoît Rigal**

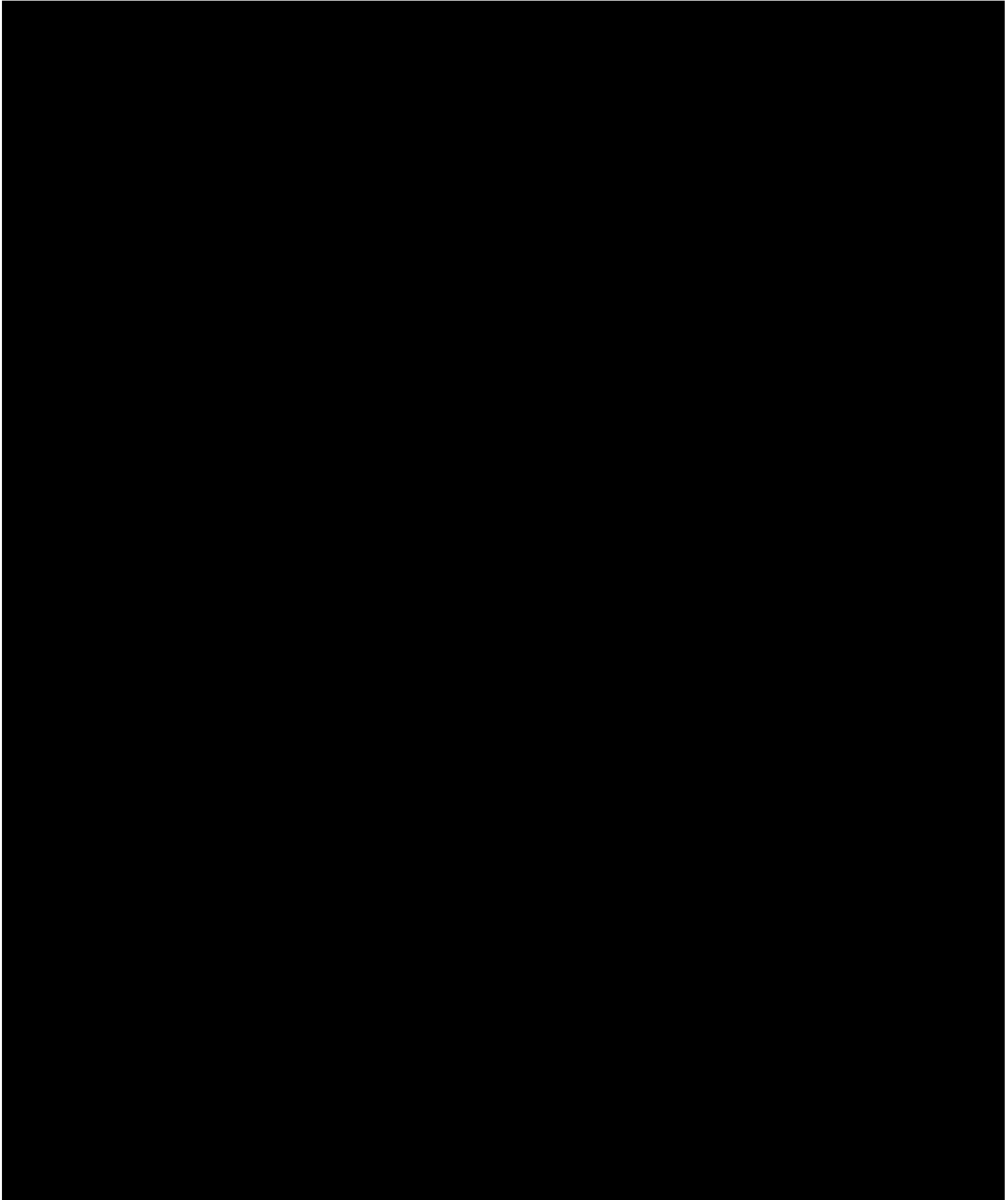
Vice President, Engineering and Construction, North America-Development

EDF Renewables







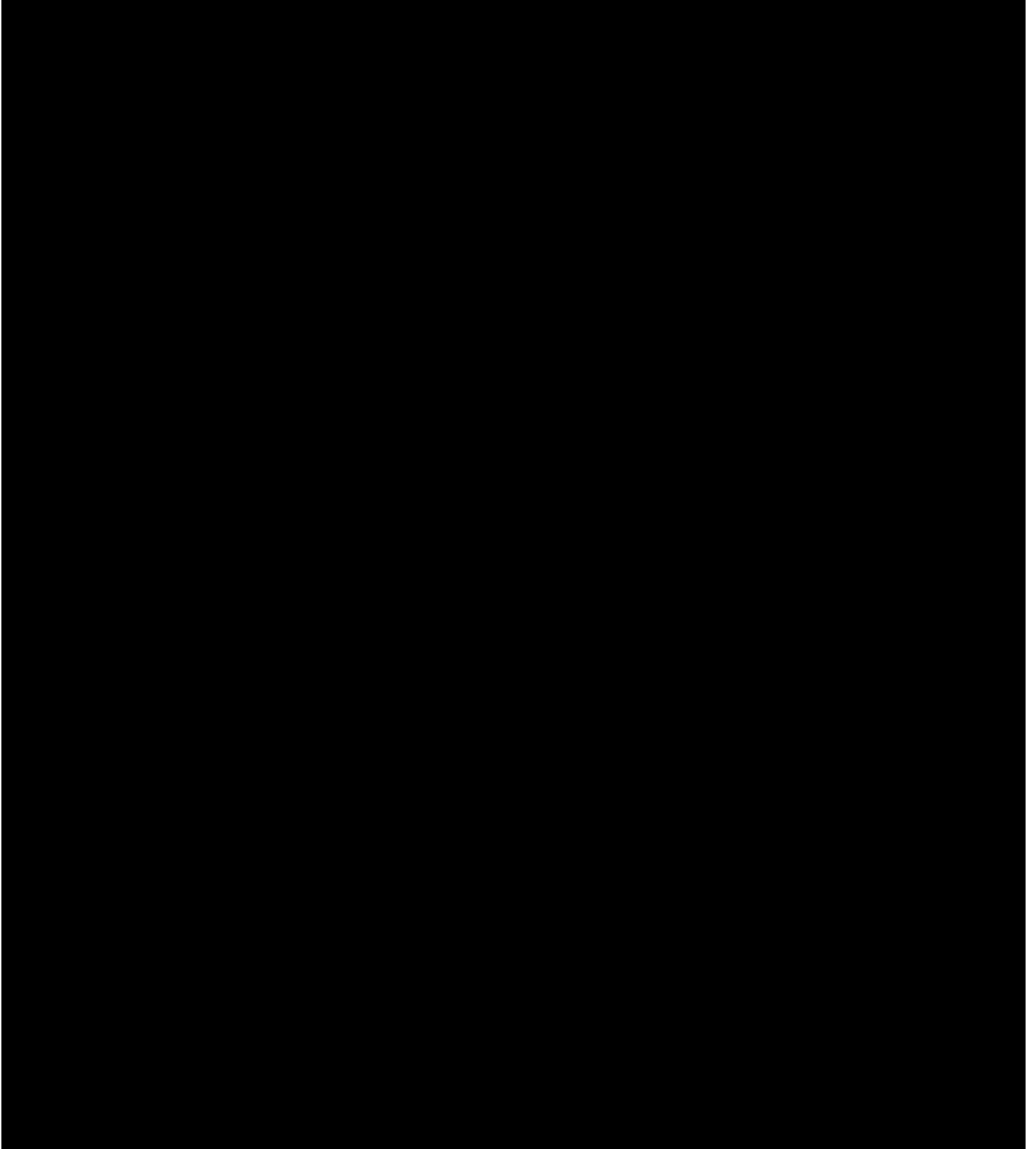


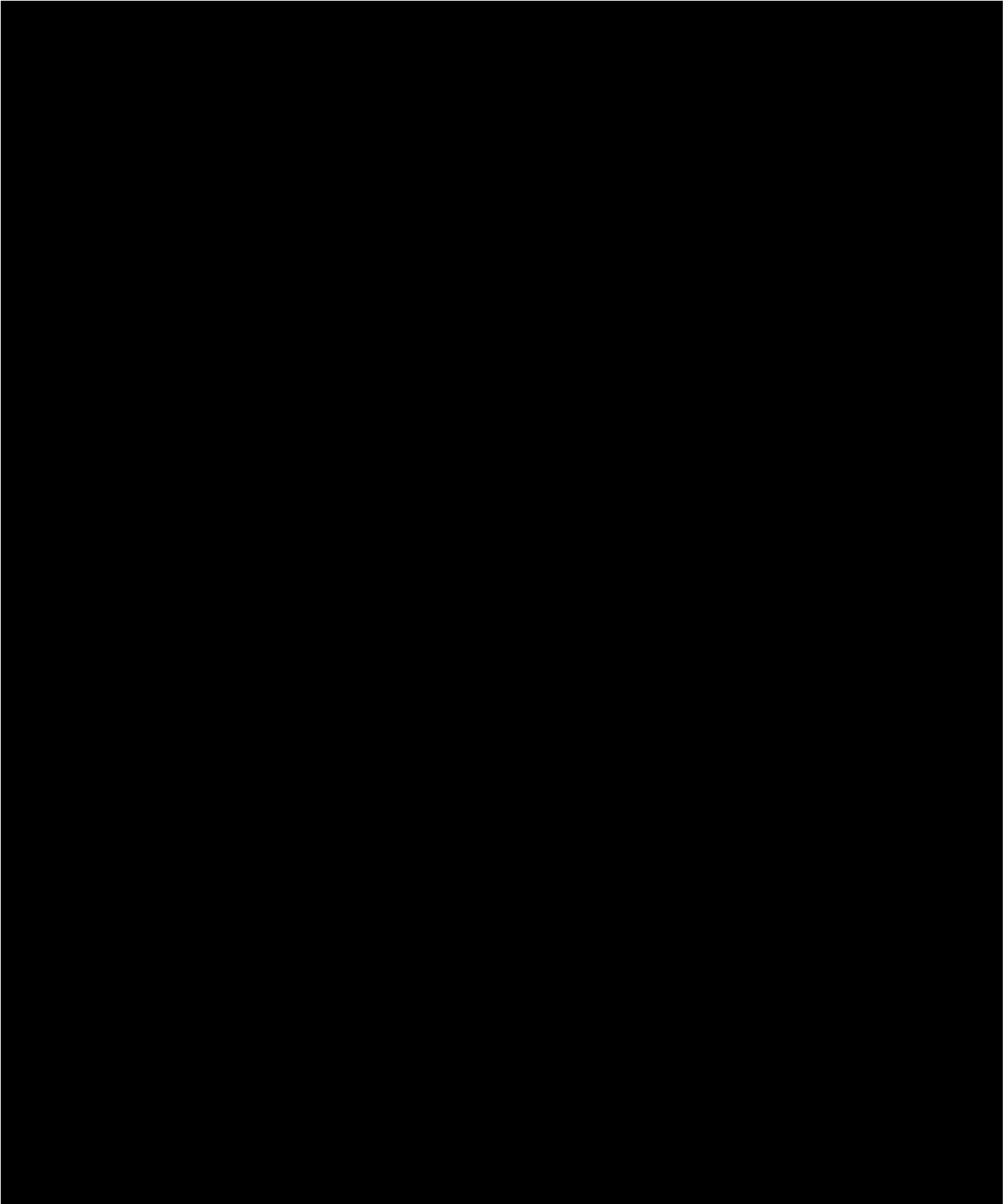
# **ATTACHMENT 27**

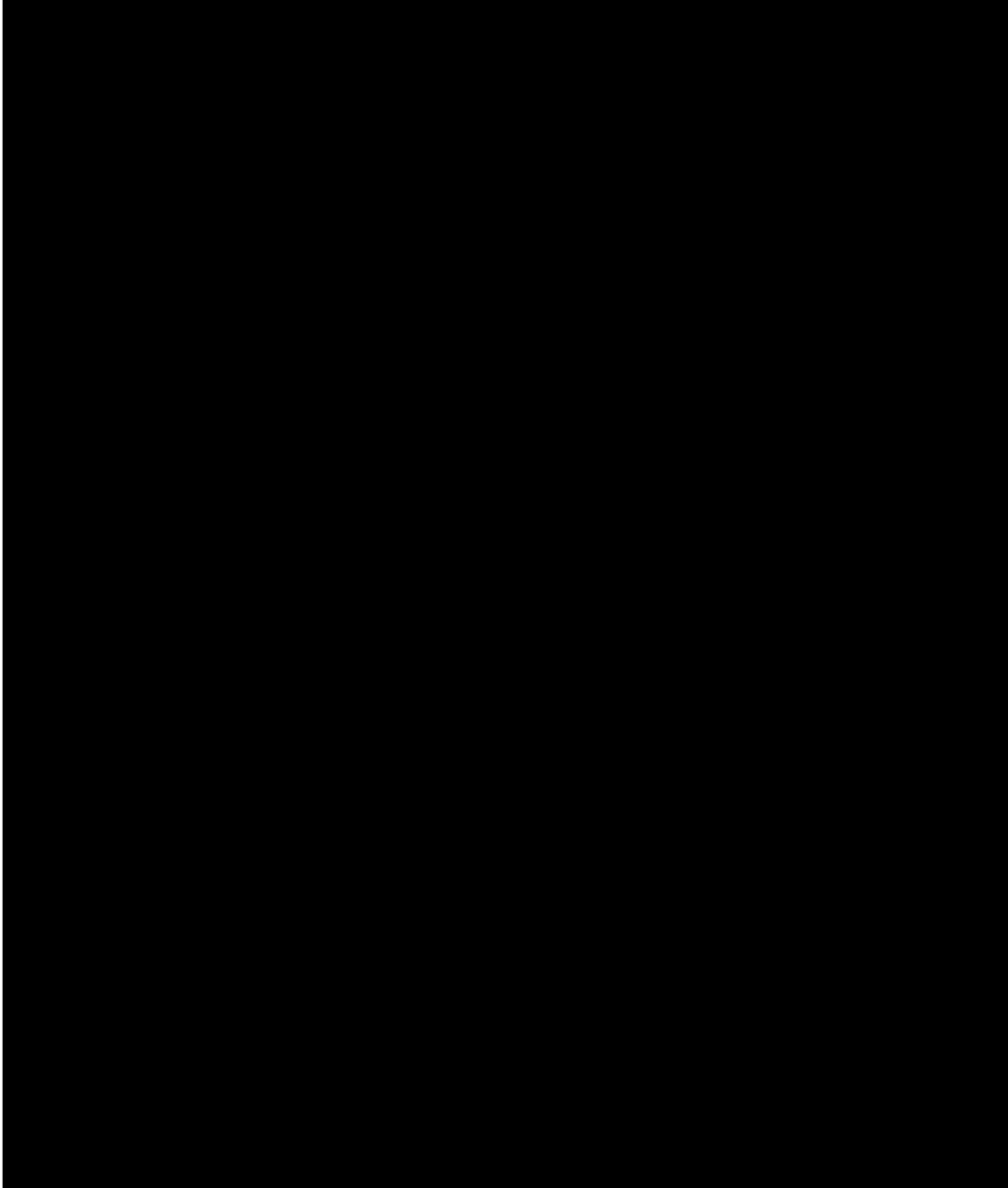
# Preliminary Public Copy

## **Christopher Hart**

Head of U.S. Offshore Wind Development – Grid-Scale Power, EDF Renewables  
Managing Director, Atlantic Shores Offshore Wind LLC





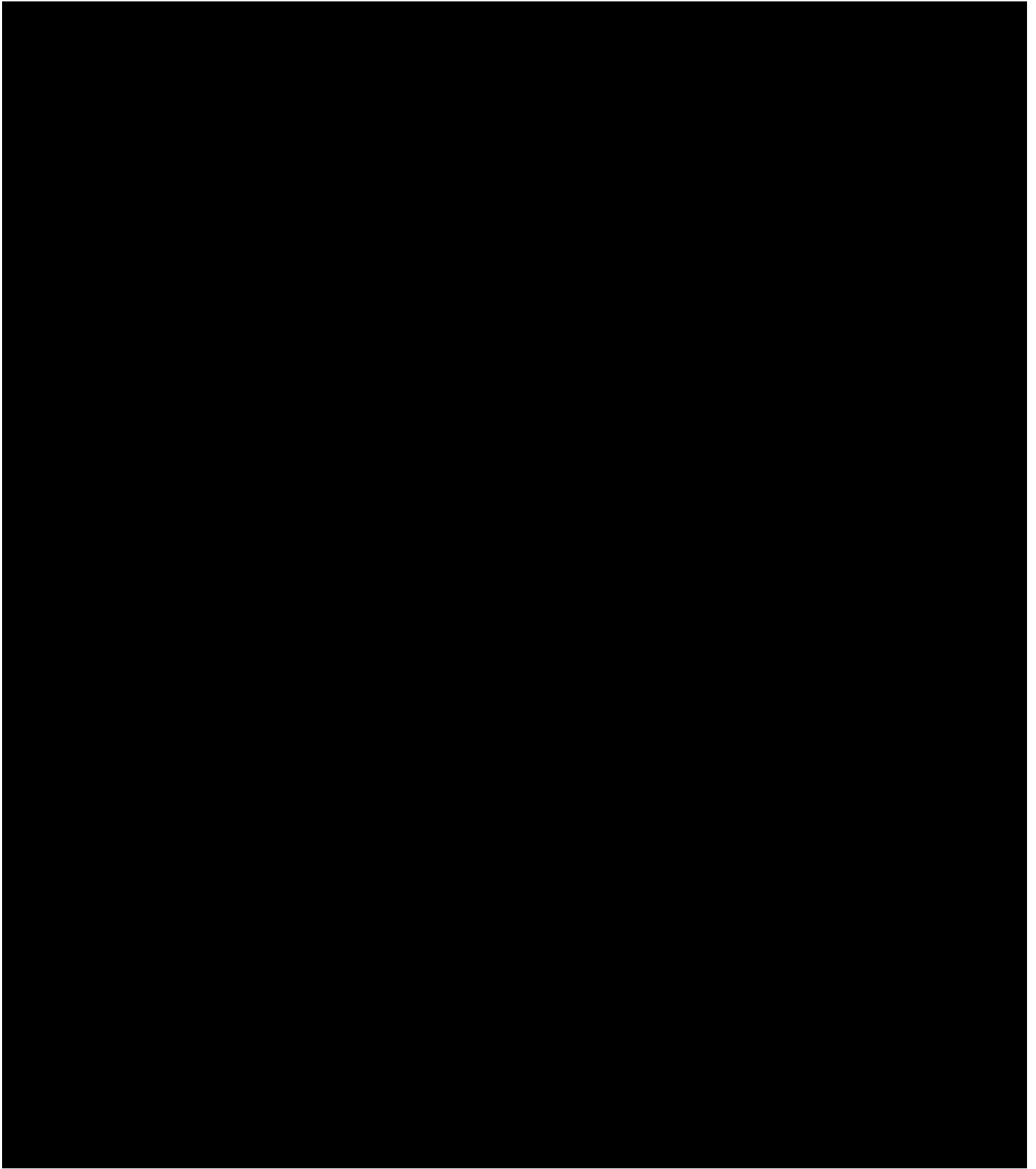


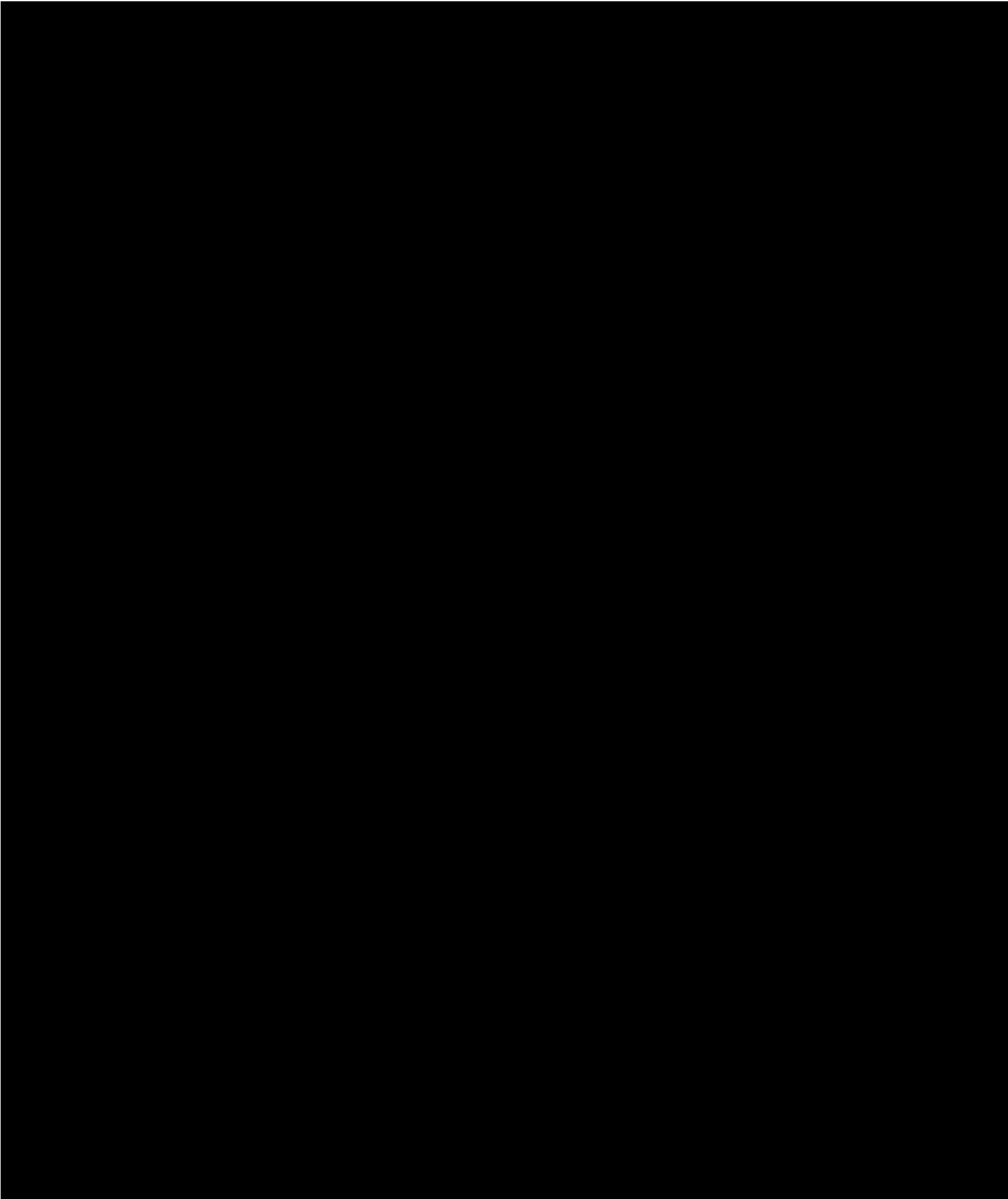
# ATTACHMENT 28

# Preliminary Public Copy

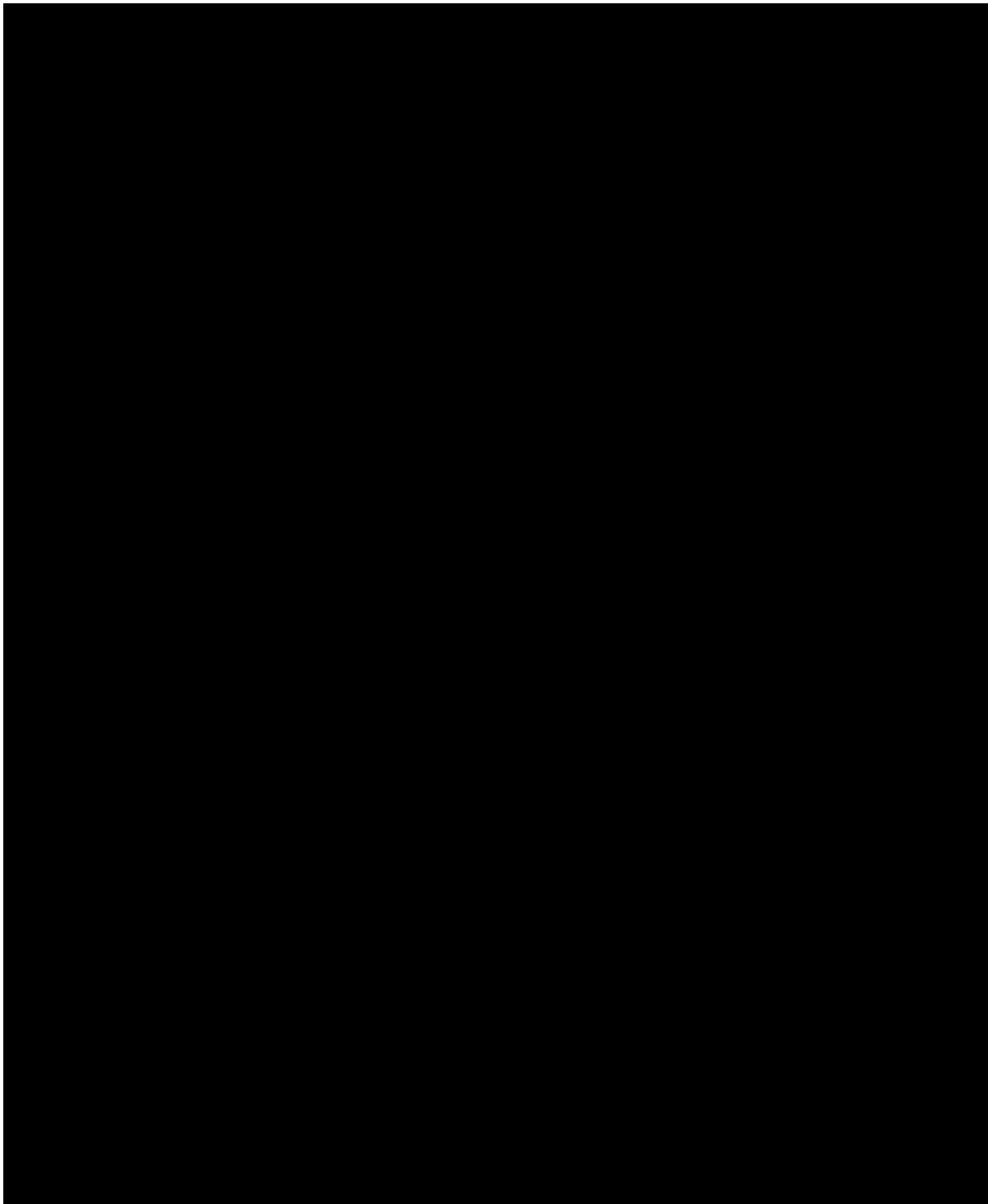
**Michael Wheeler**

Director, Project Finance Group  
EDF Renewables







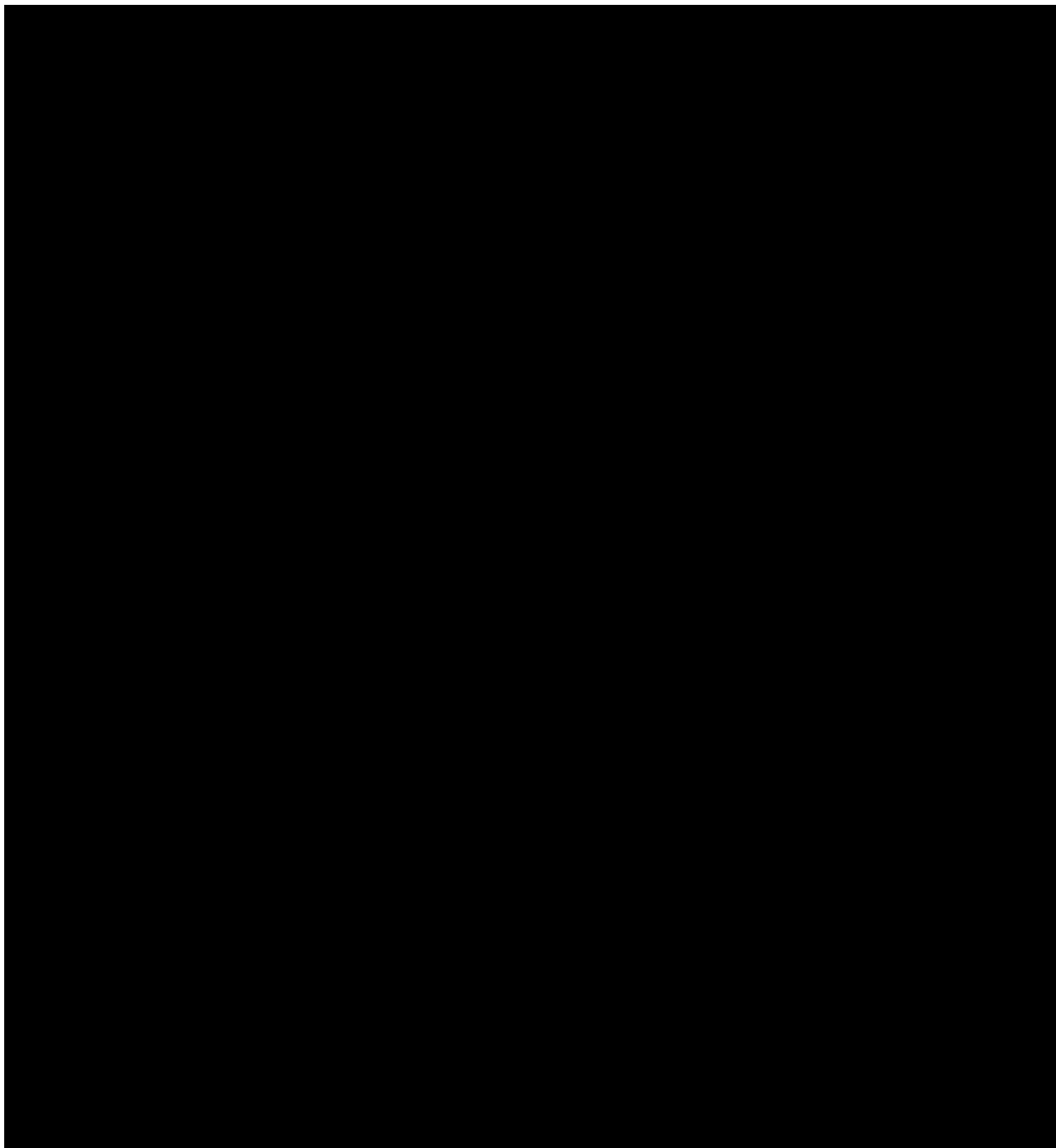


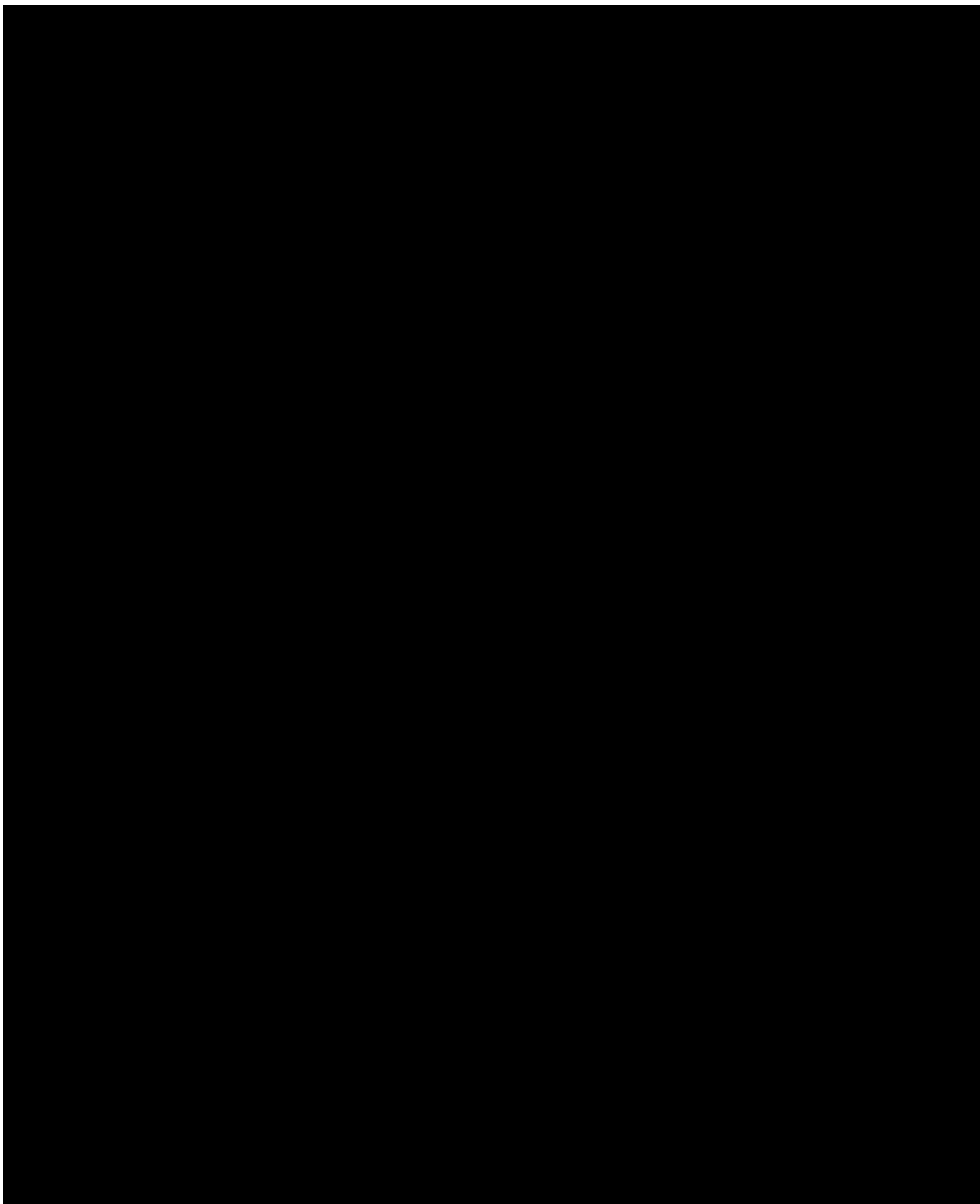
# ATTACHMENT 29

**Rick Miller**

Director, Wind Business Development

EDF Renewables



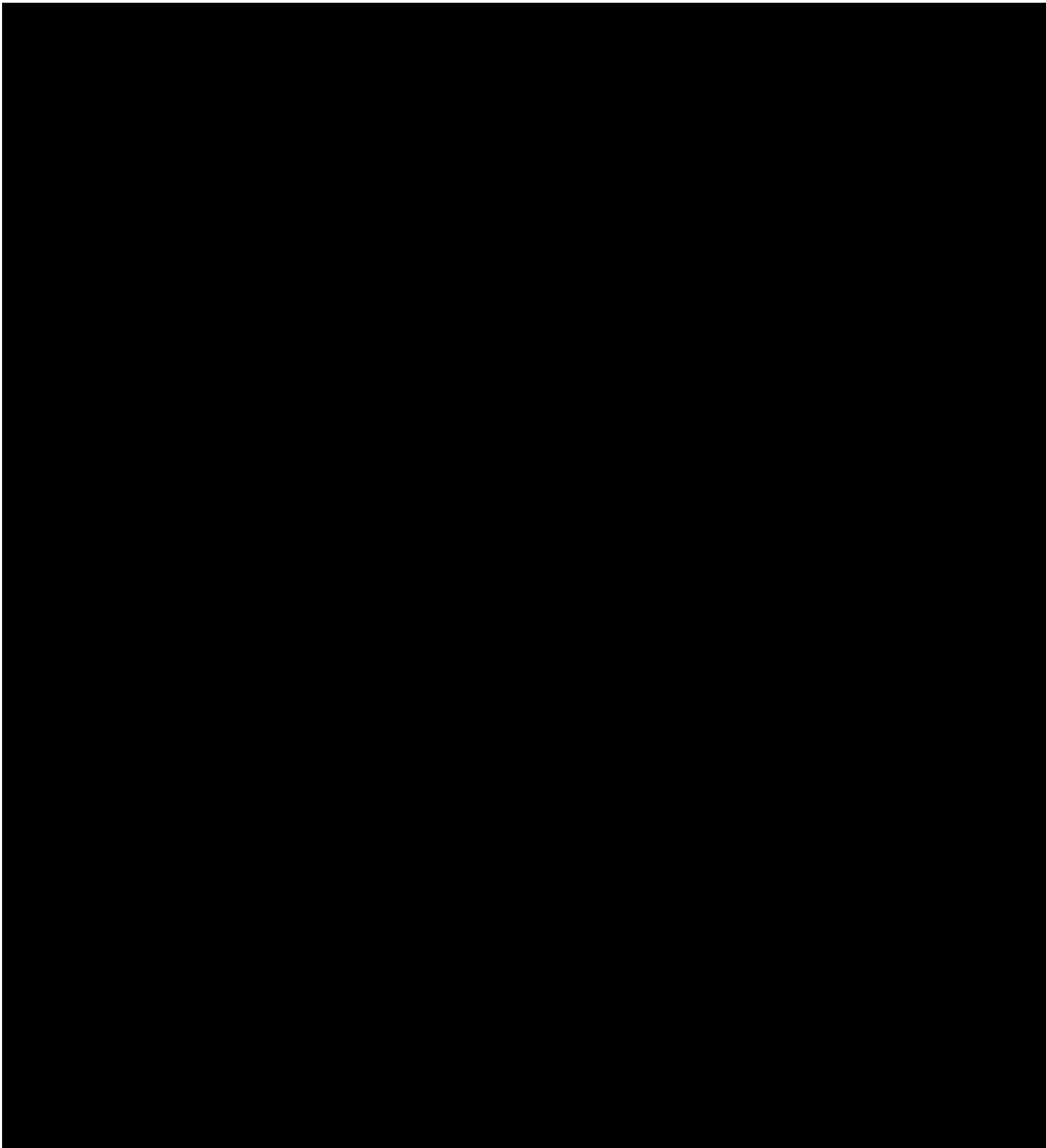


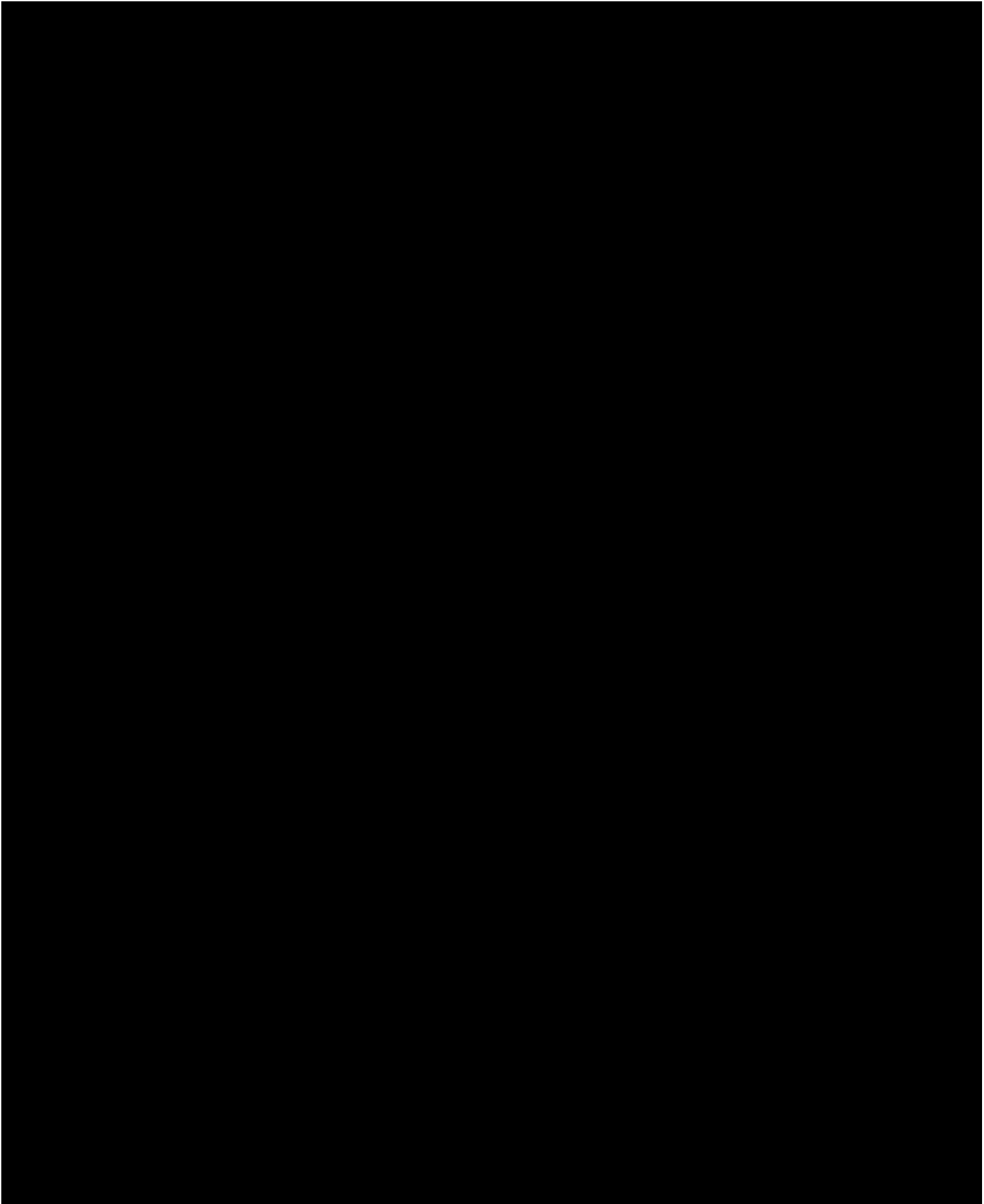
# ATTACHMENT 30

**Doug Copeland**

Senior Manager, Offshore Wind Development

EDF Renewables





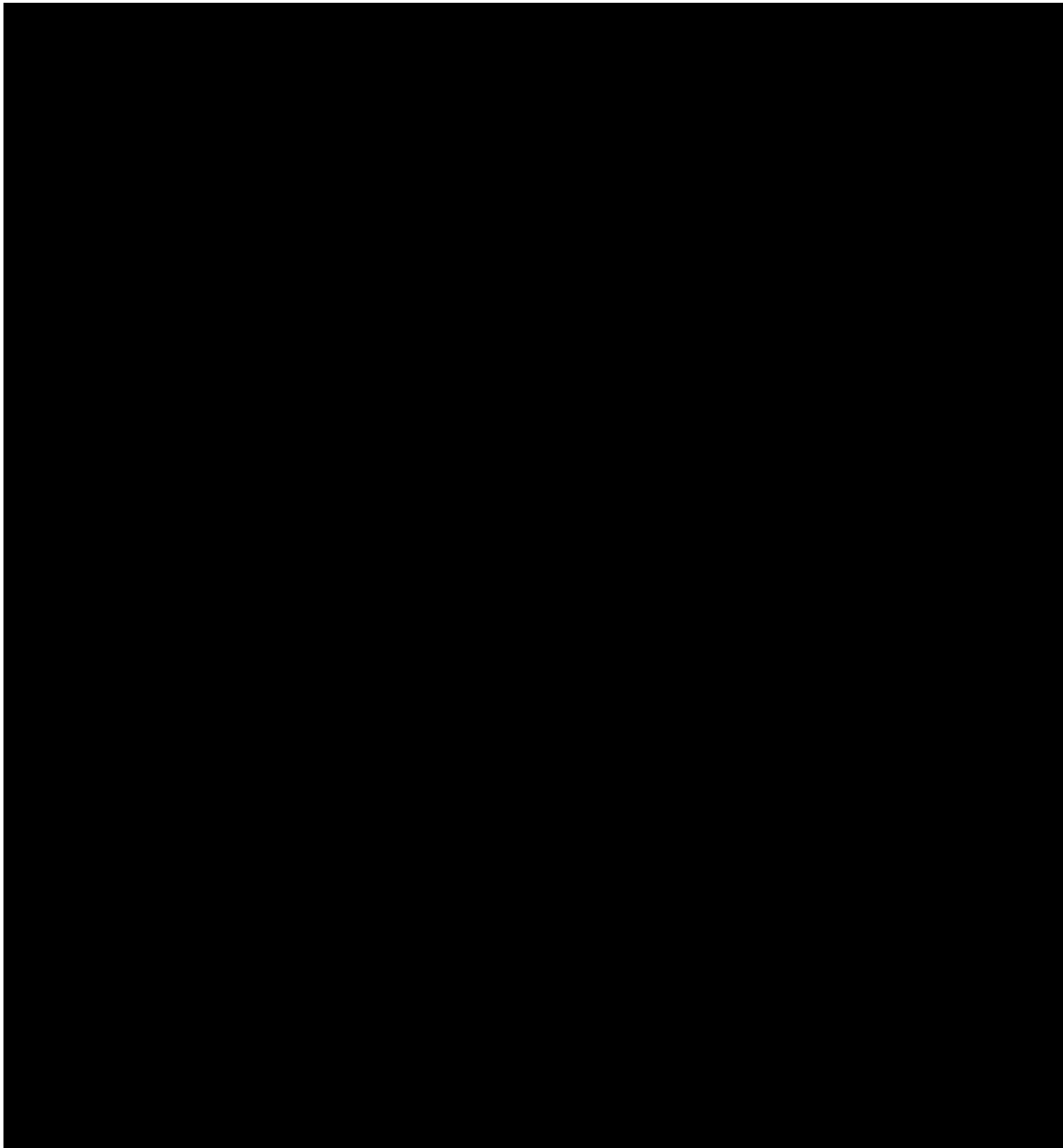
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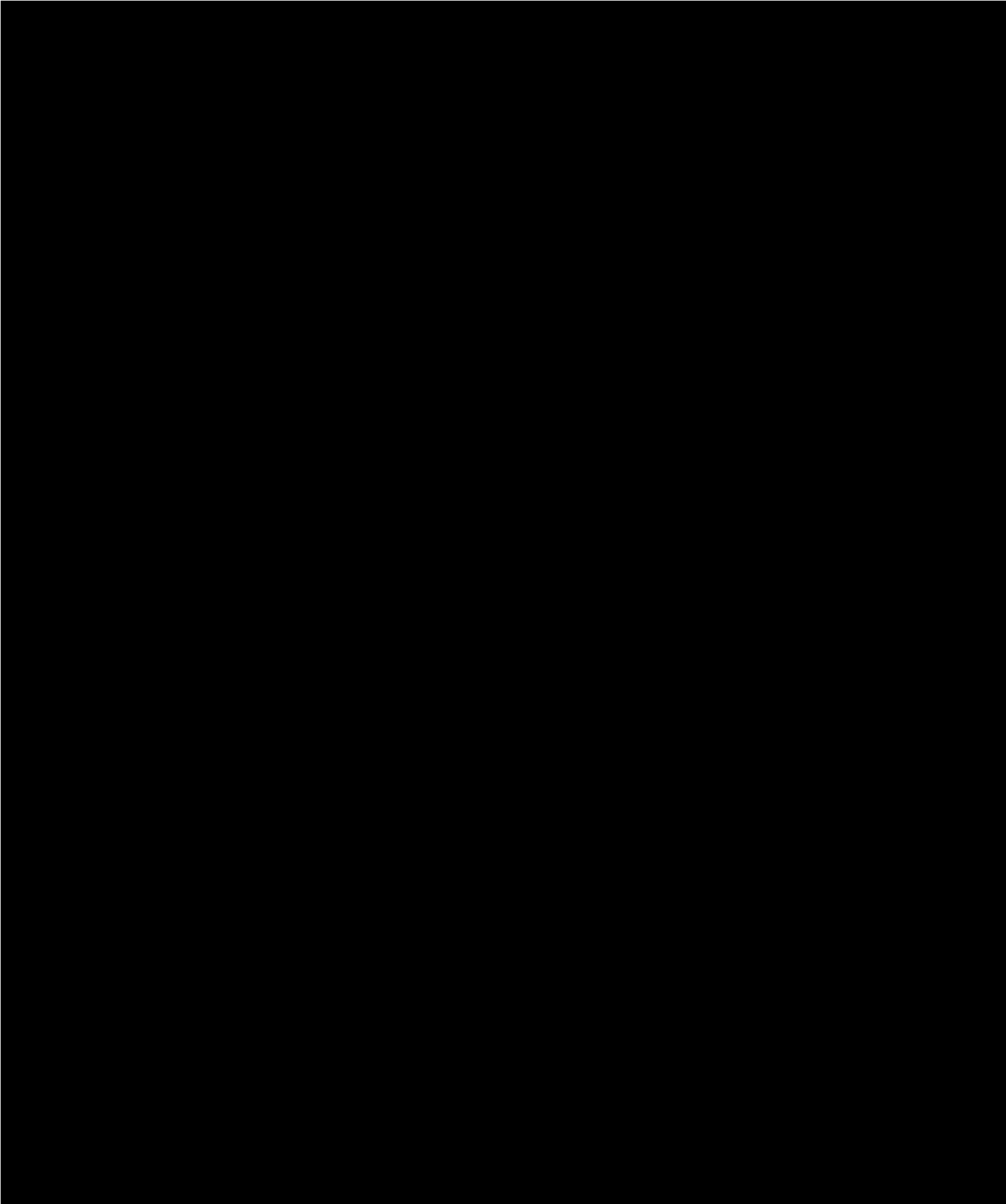


**Elisabeth Duranteau**

Offshore Engineering Coordinator – Grid-Scale Power

EDF Renewables

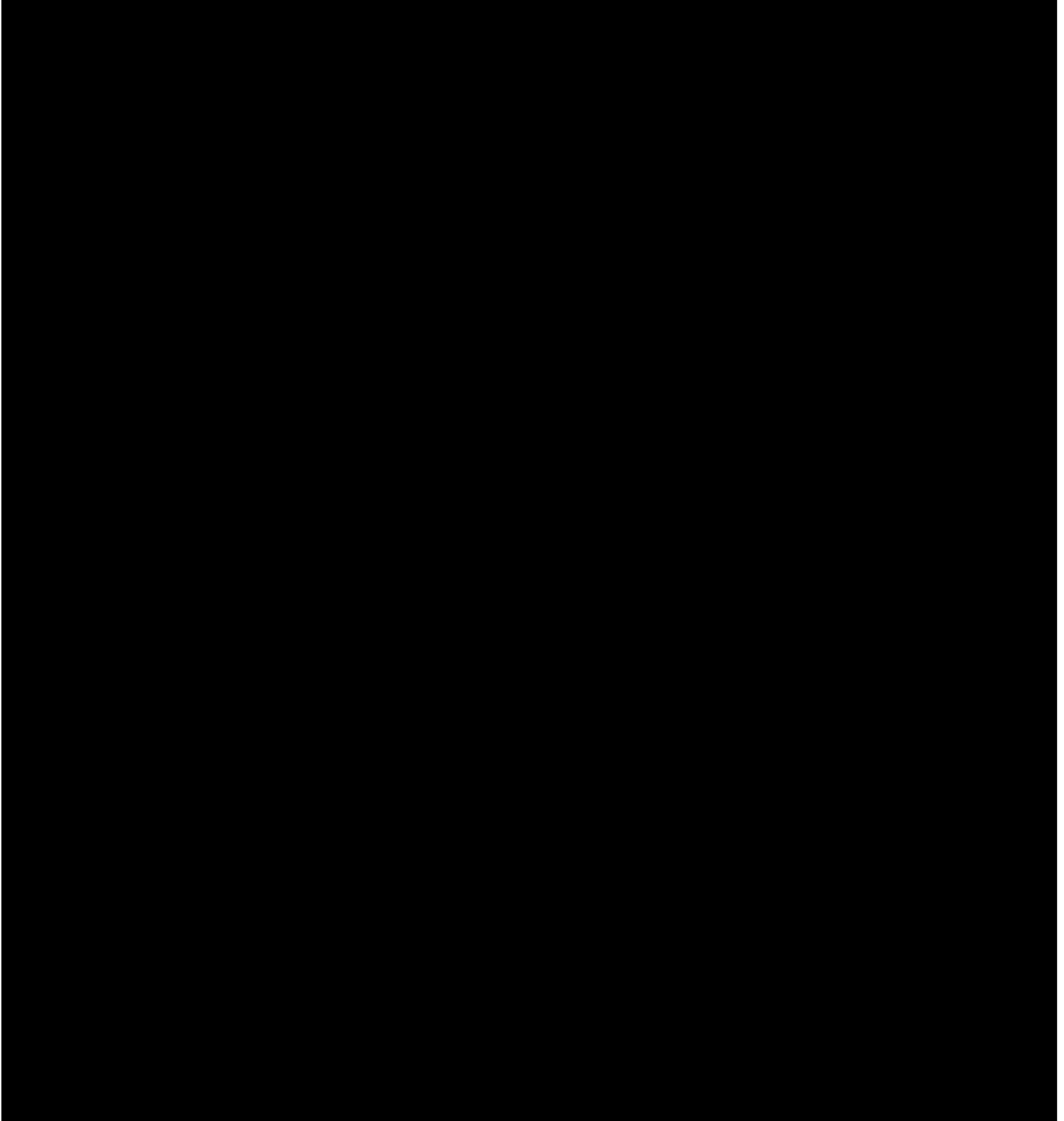


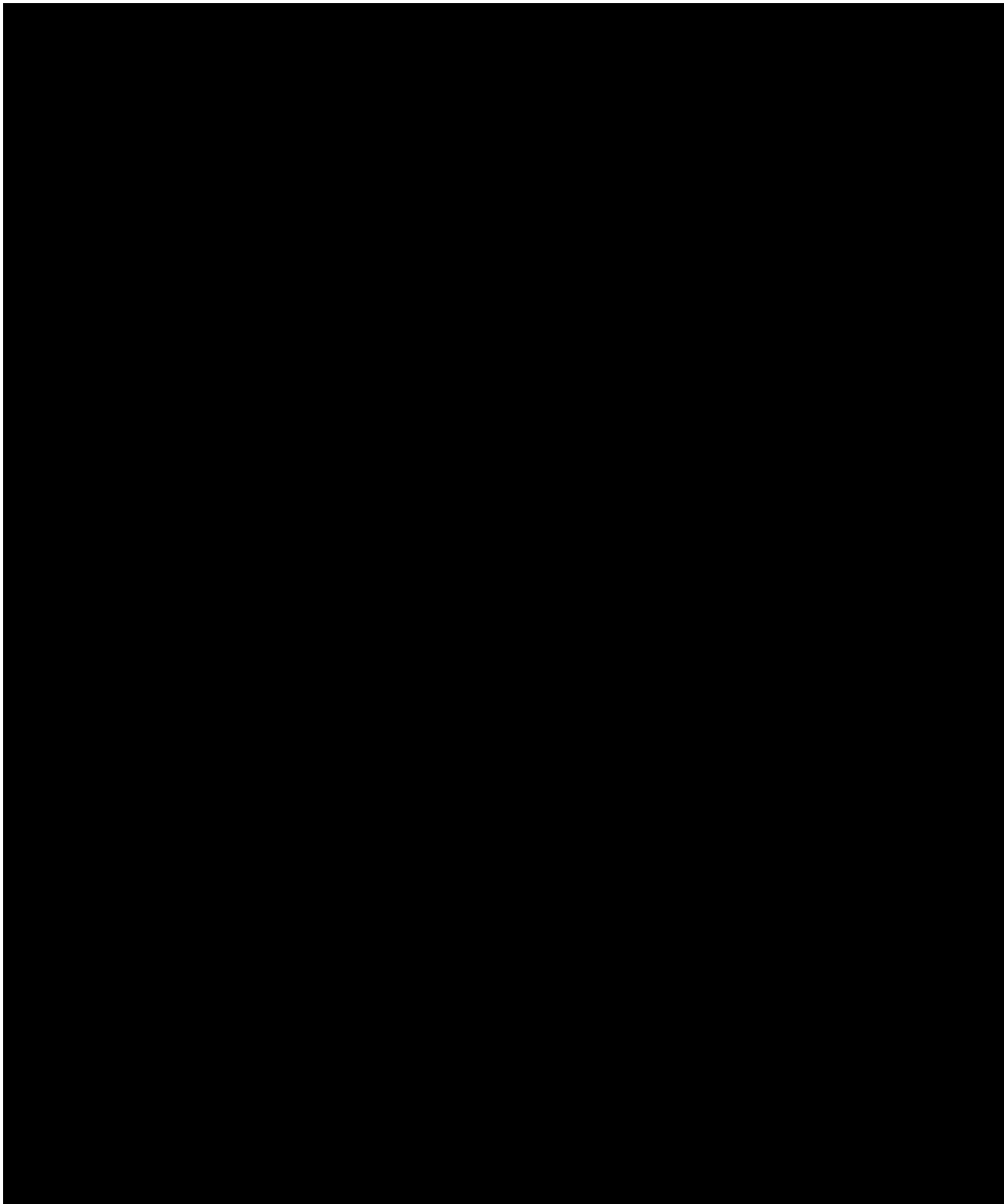


# ATTACHMENT 32

**Alexis Billet**

Offshore Wind O&M Manager  
EDF Renouvelables



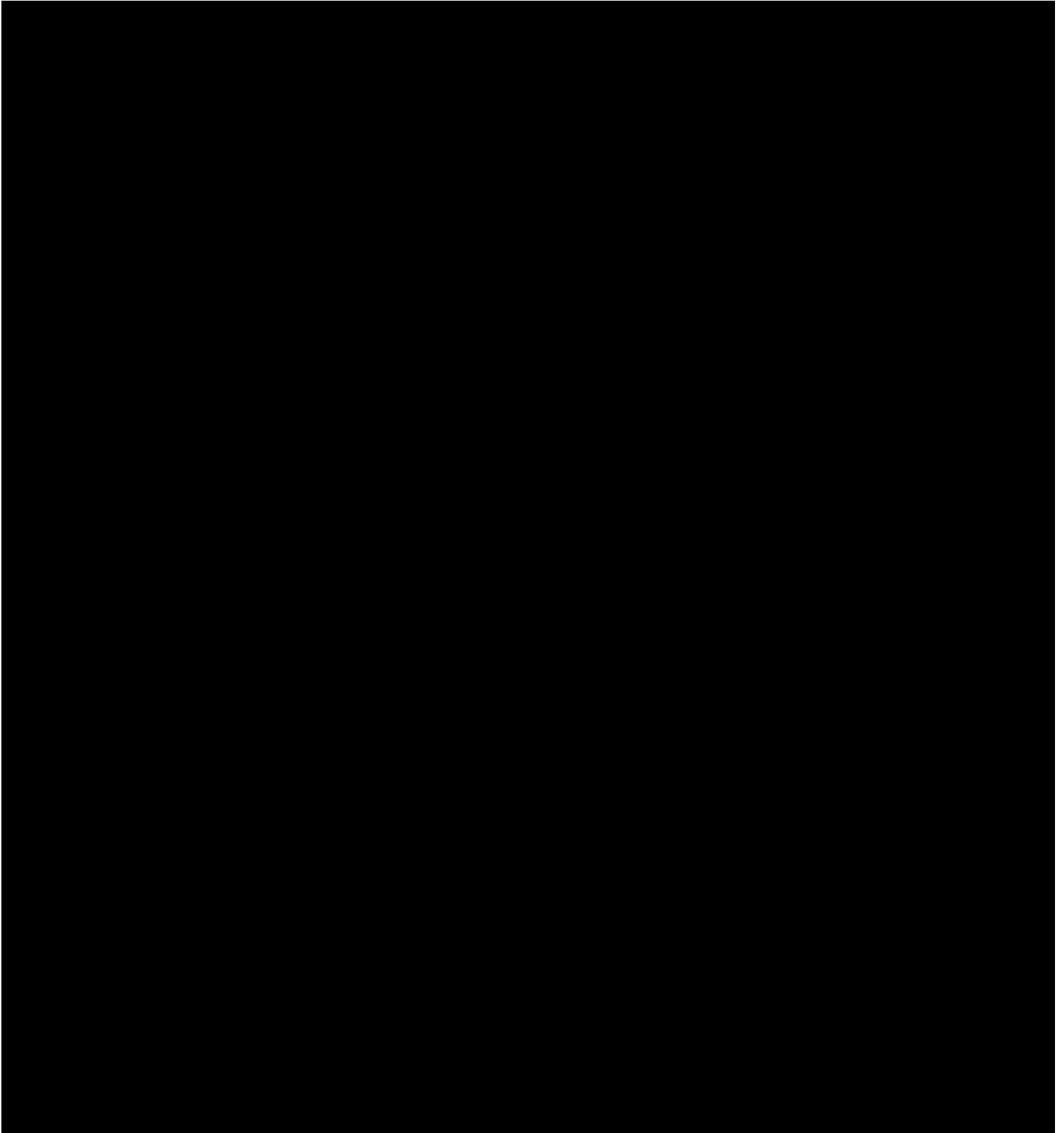


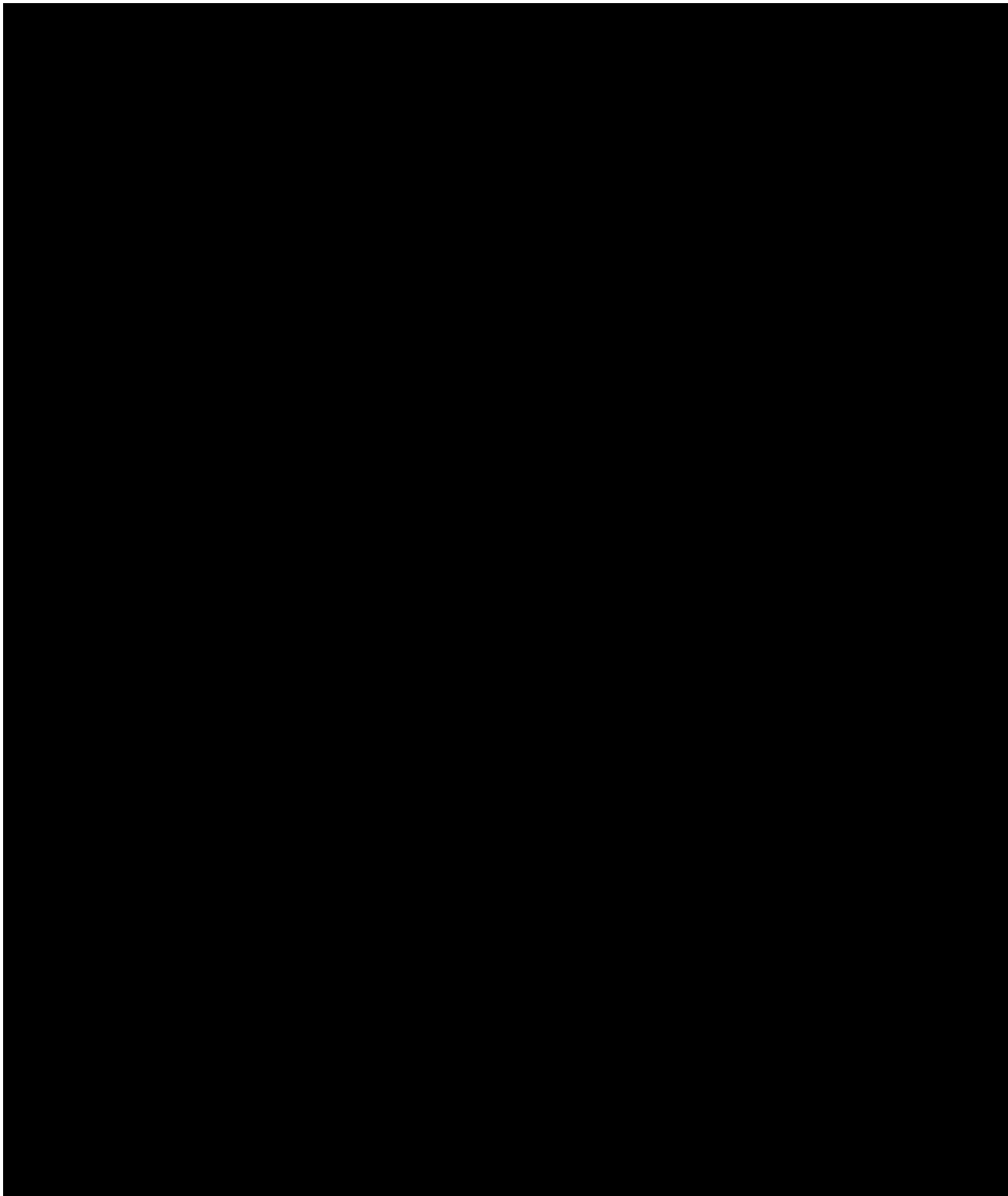
# ATTACHMENT 33

# Preliminary Public Copy

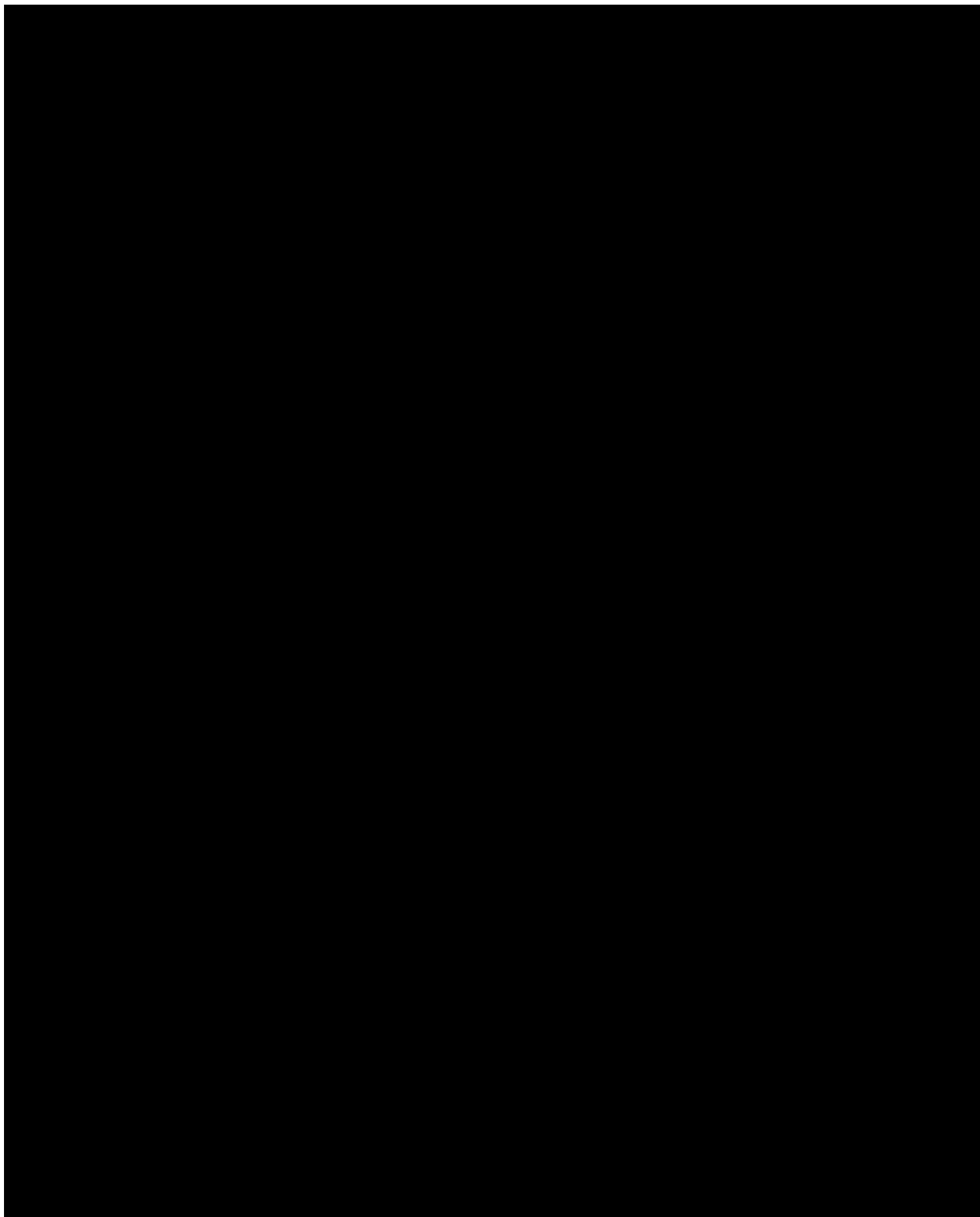
**Jennifer A. Daniels**

Director, U.S. Offshore Wind, Permitting and Regulatory, EDF Renewables  
Development Director, Atlantic Shores Offshore Wind LLC





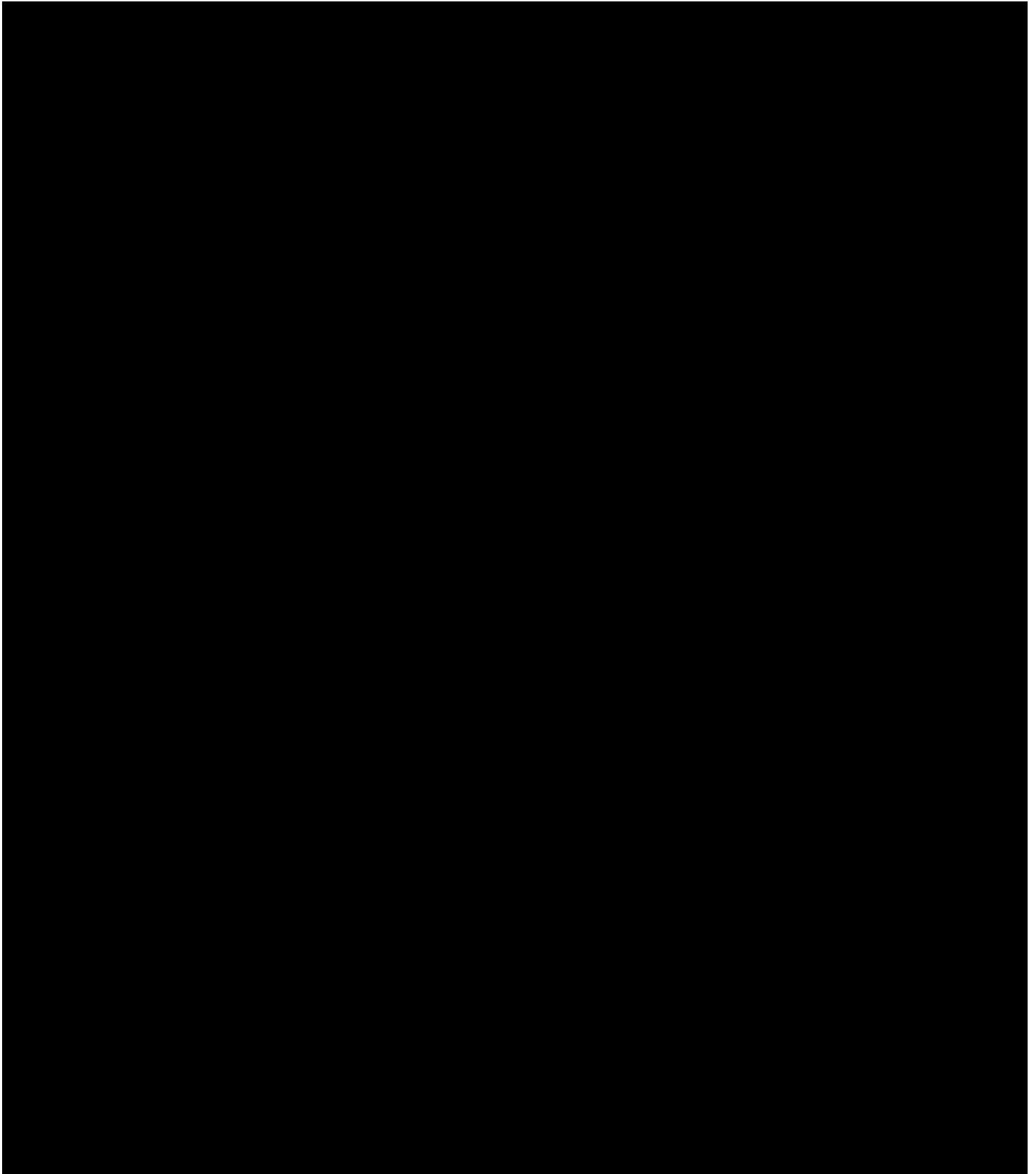


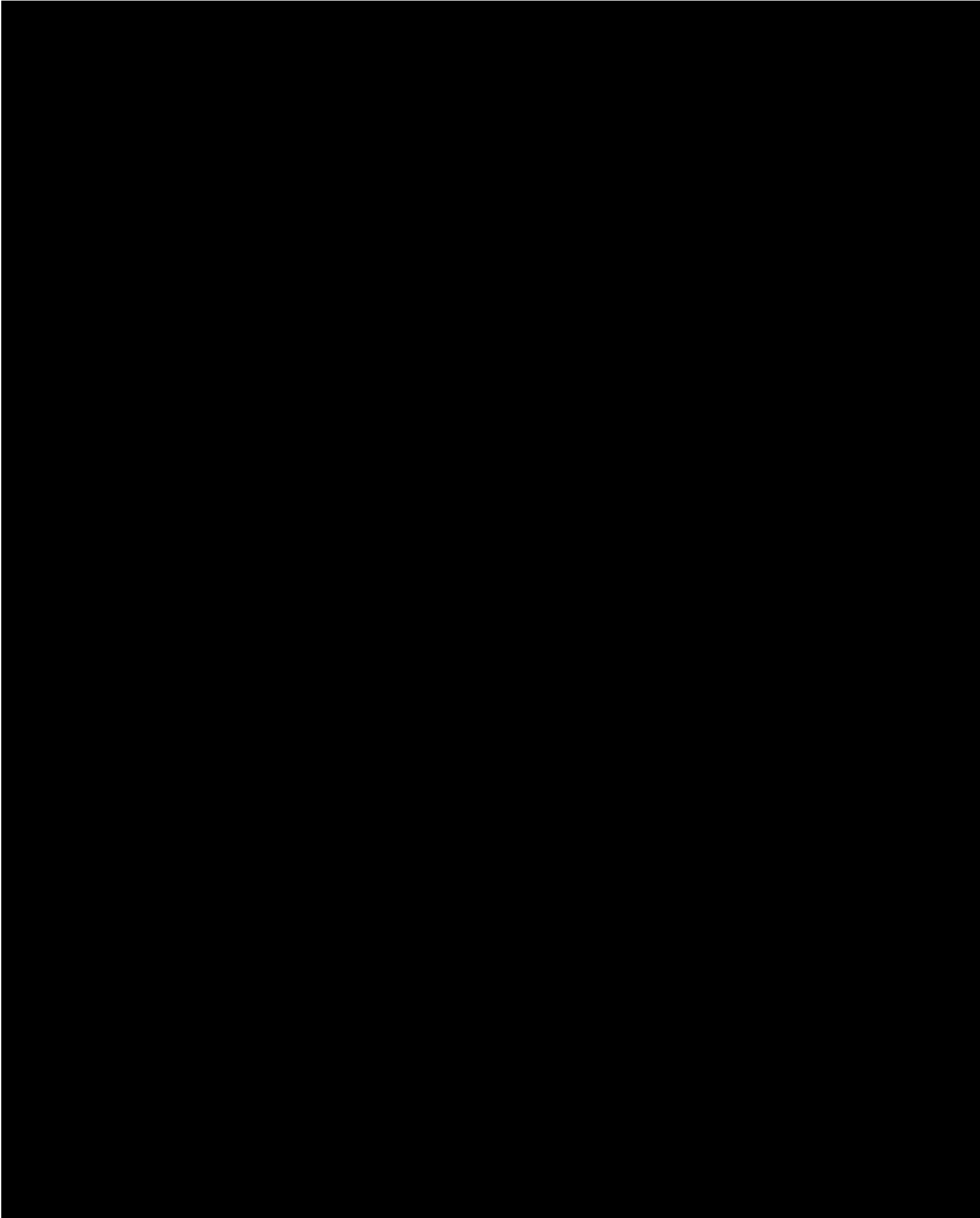


# ATTACHMENT 34

**Julia Pettit**

Senior Counsel  
EDF Renewables

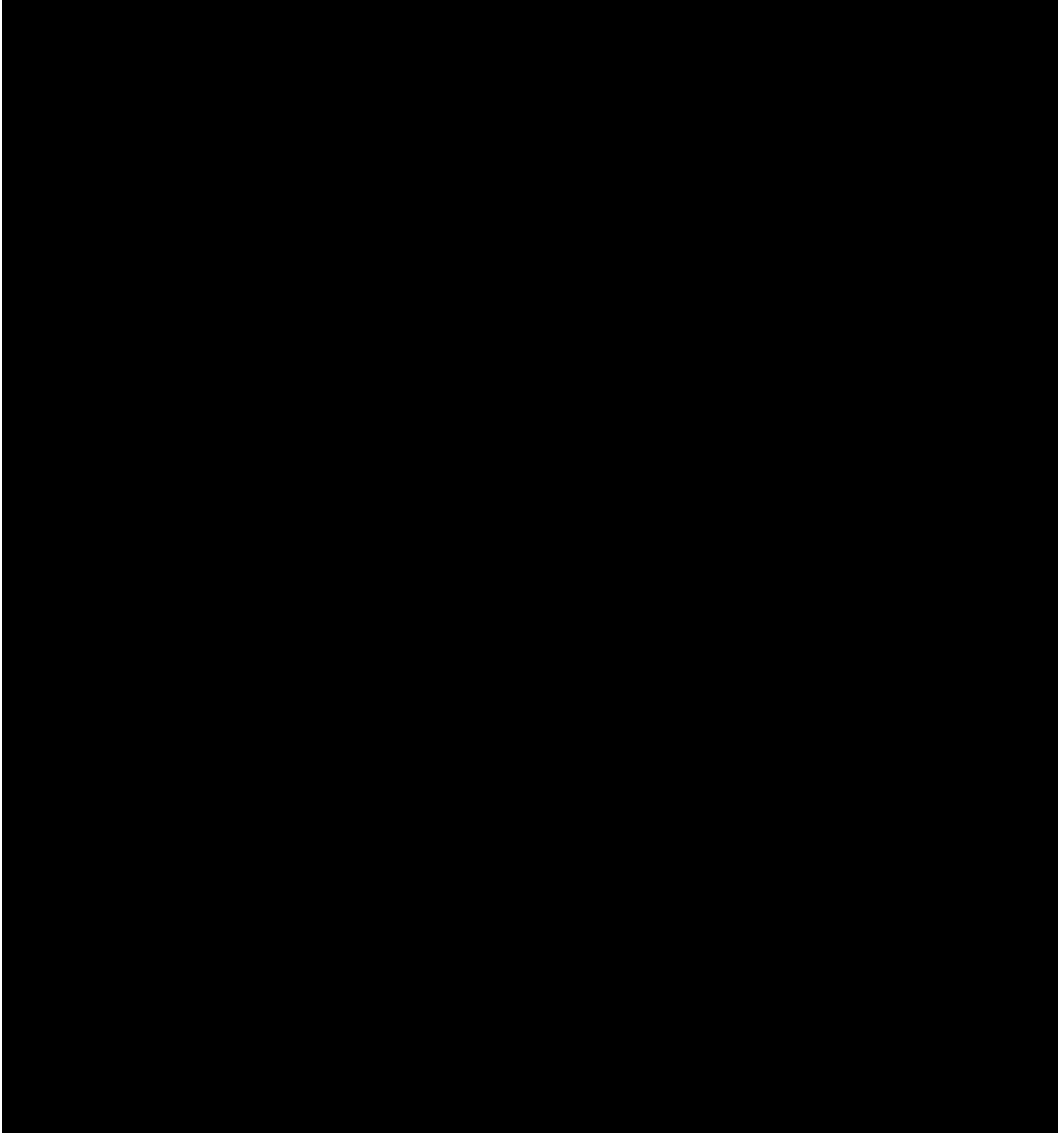


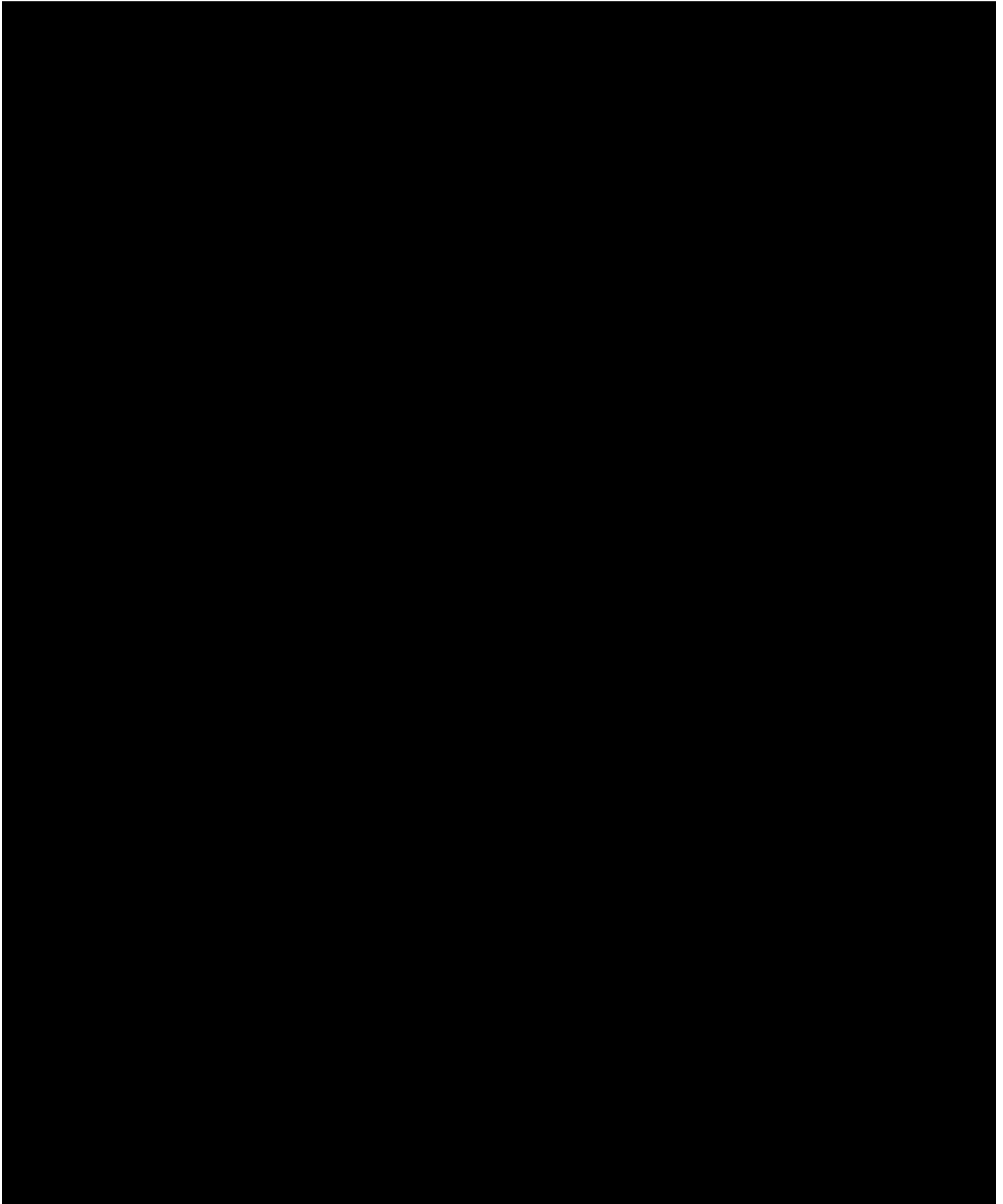


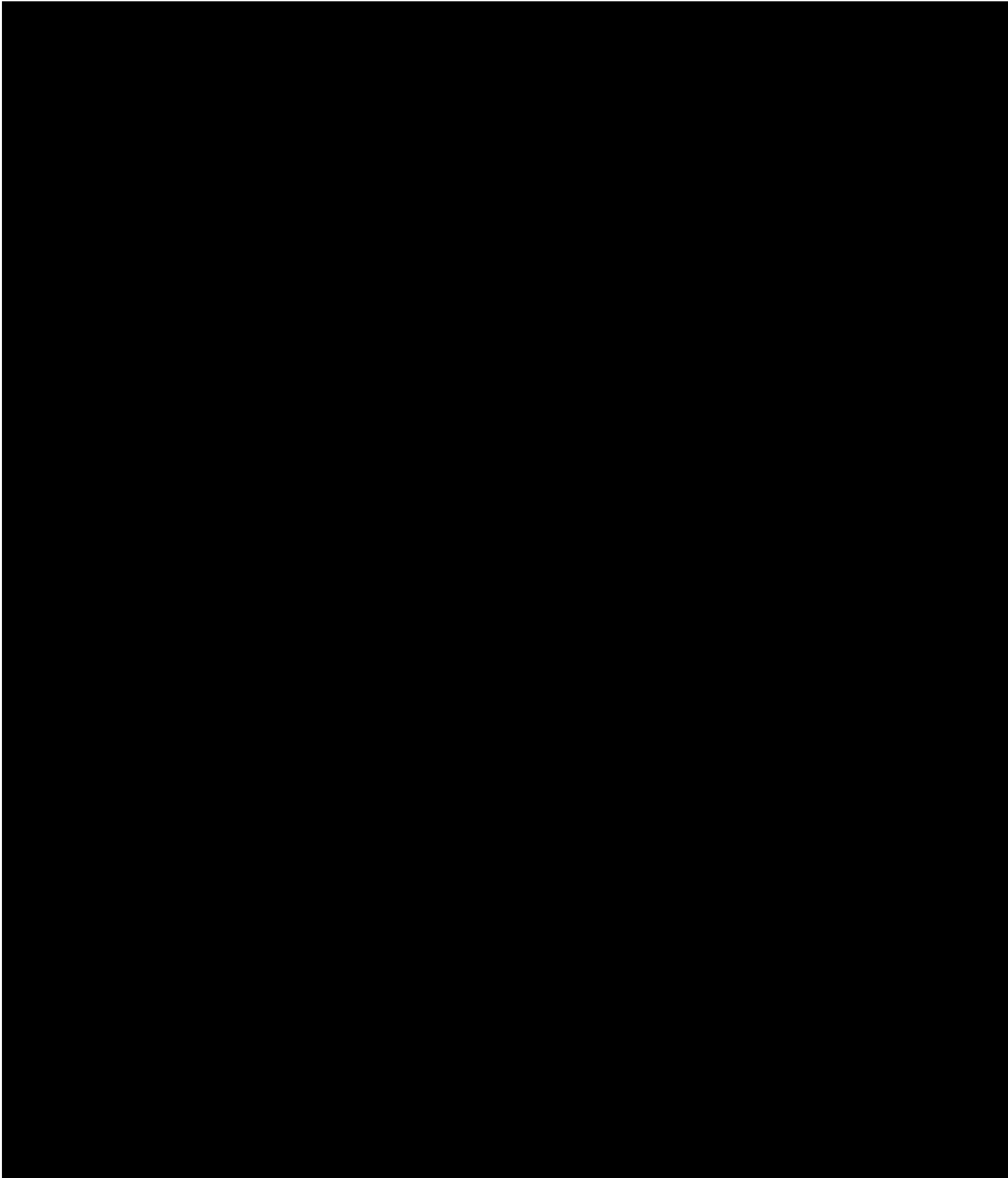
# ATTACHMENT 35

**Chris Burch**

Senior Manager, O&M Customer Accounts  
EDF Renewables







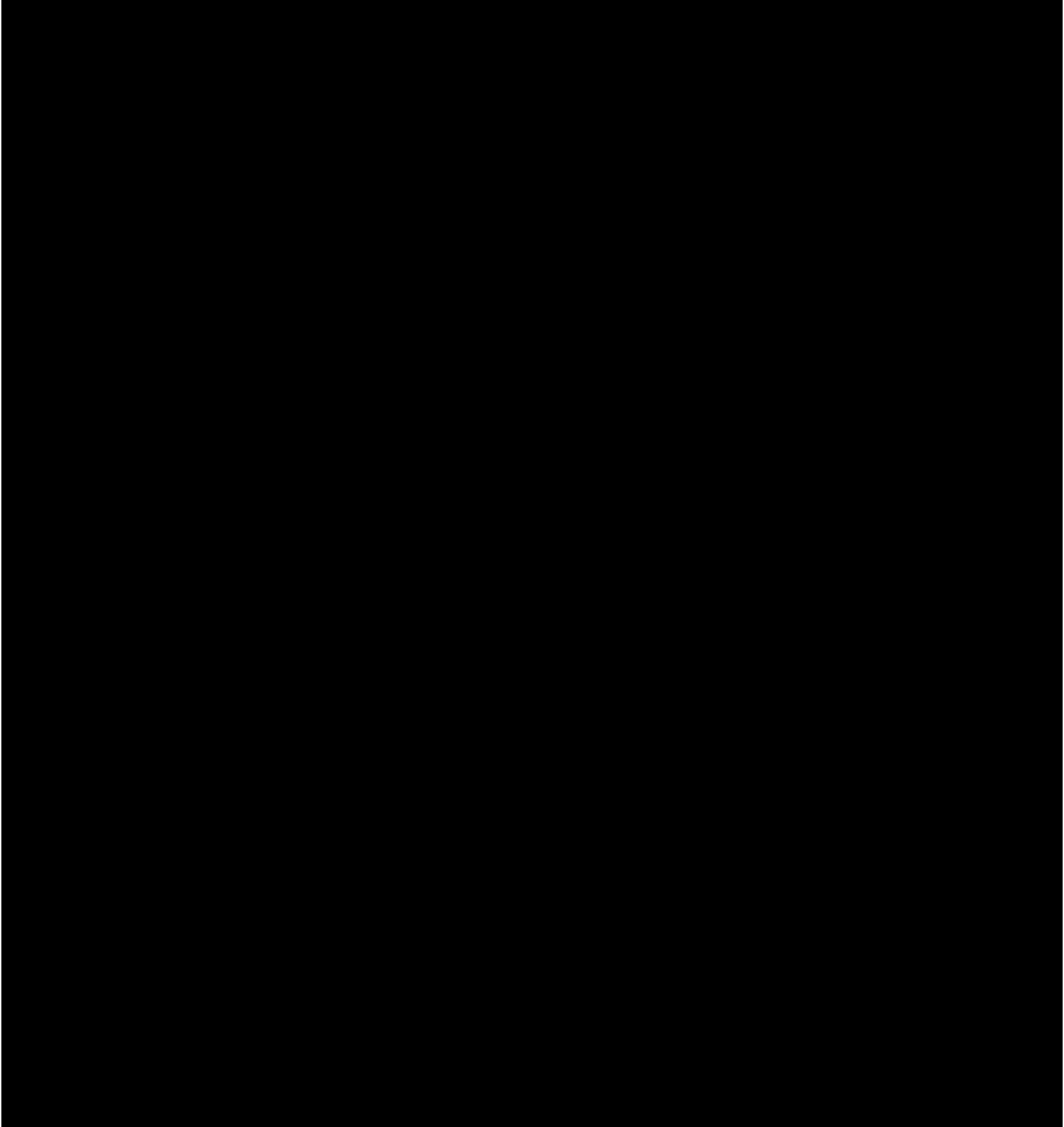


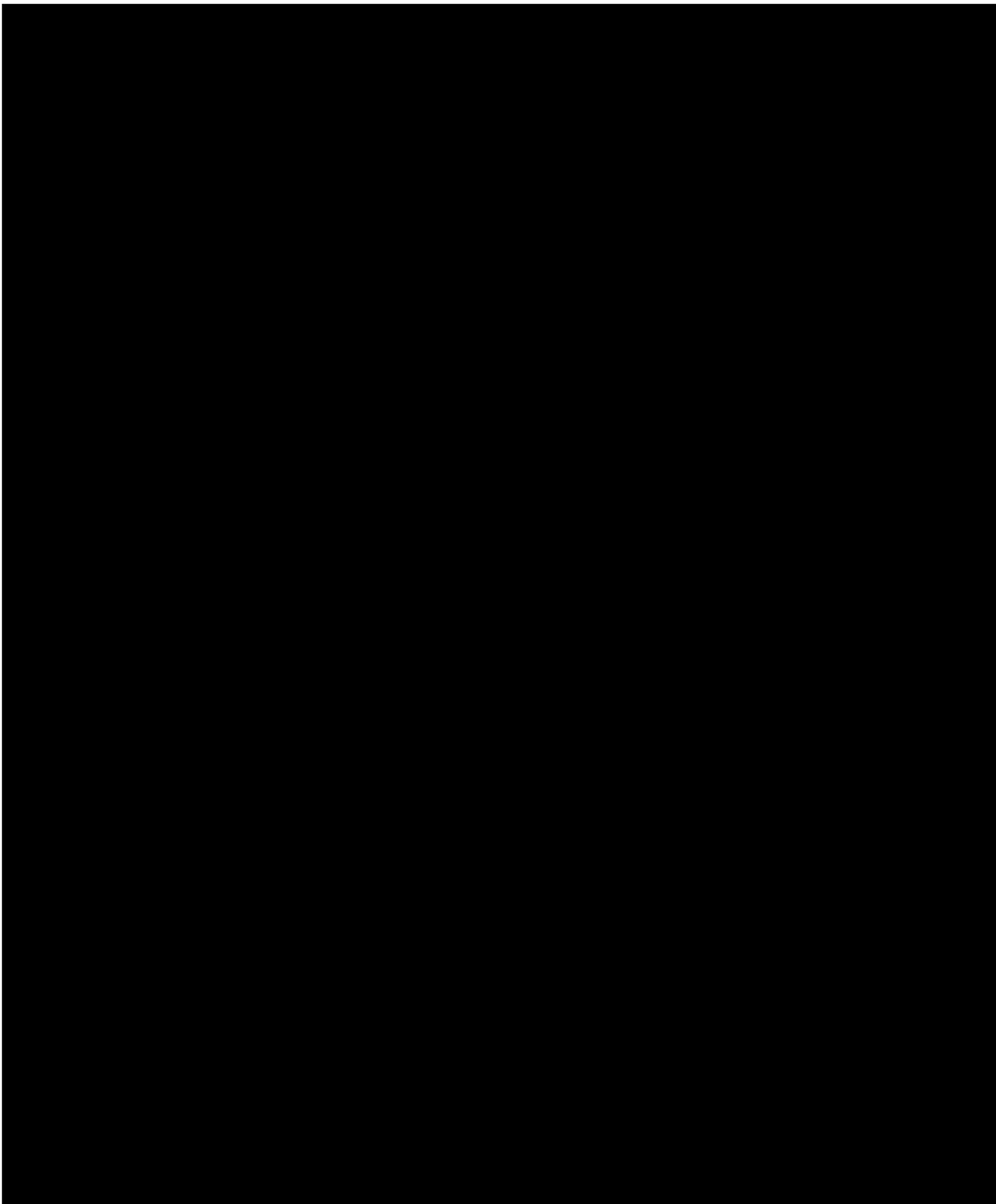
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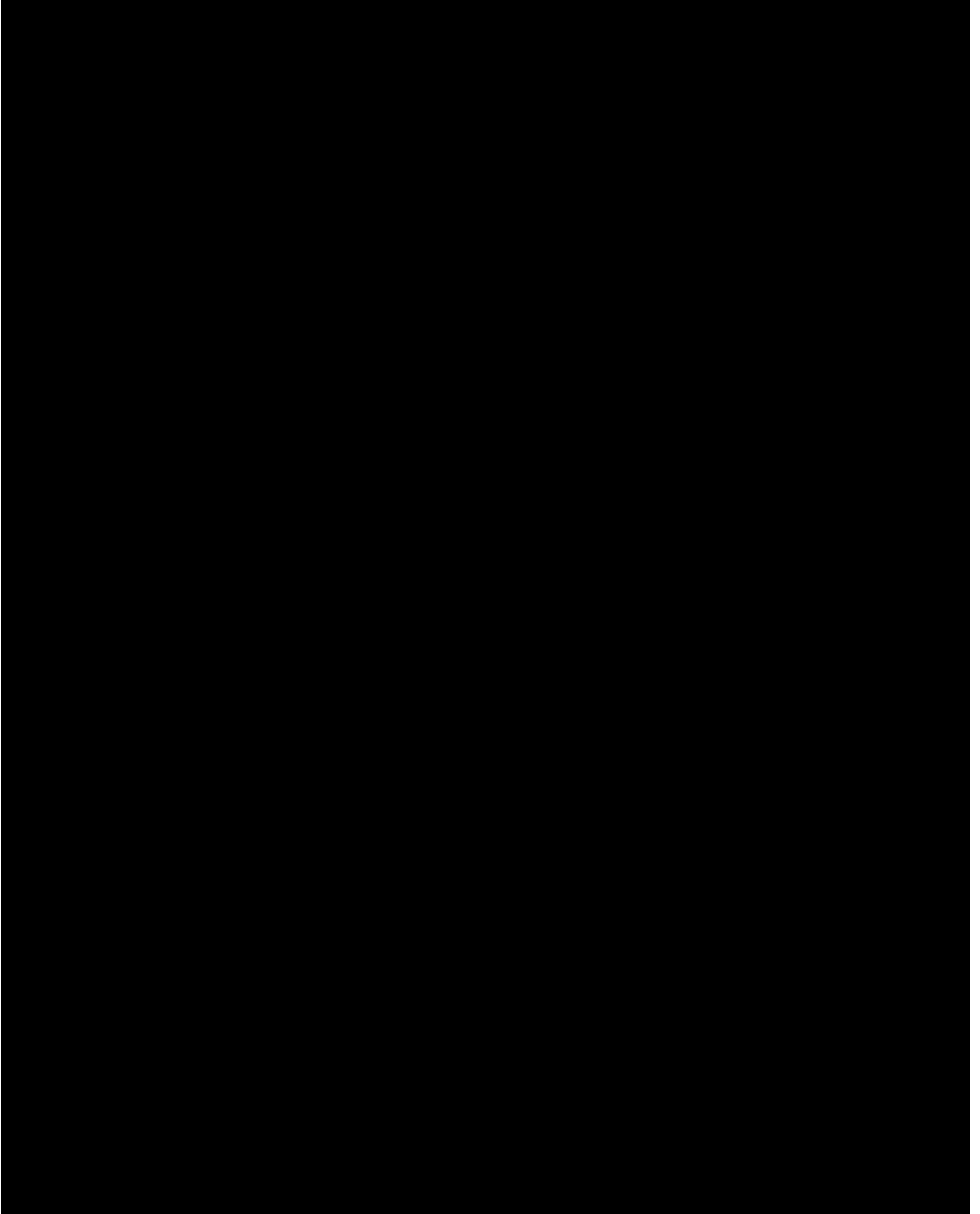
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## **Joris Veldhoven**

Contracting & Procurement Manager New Energies Wind, Shell  
Commercial Director, Atlantic Shores Offshore Wind LLC







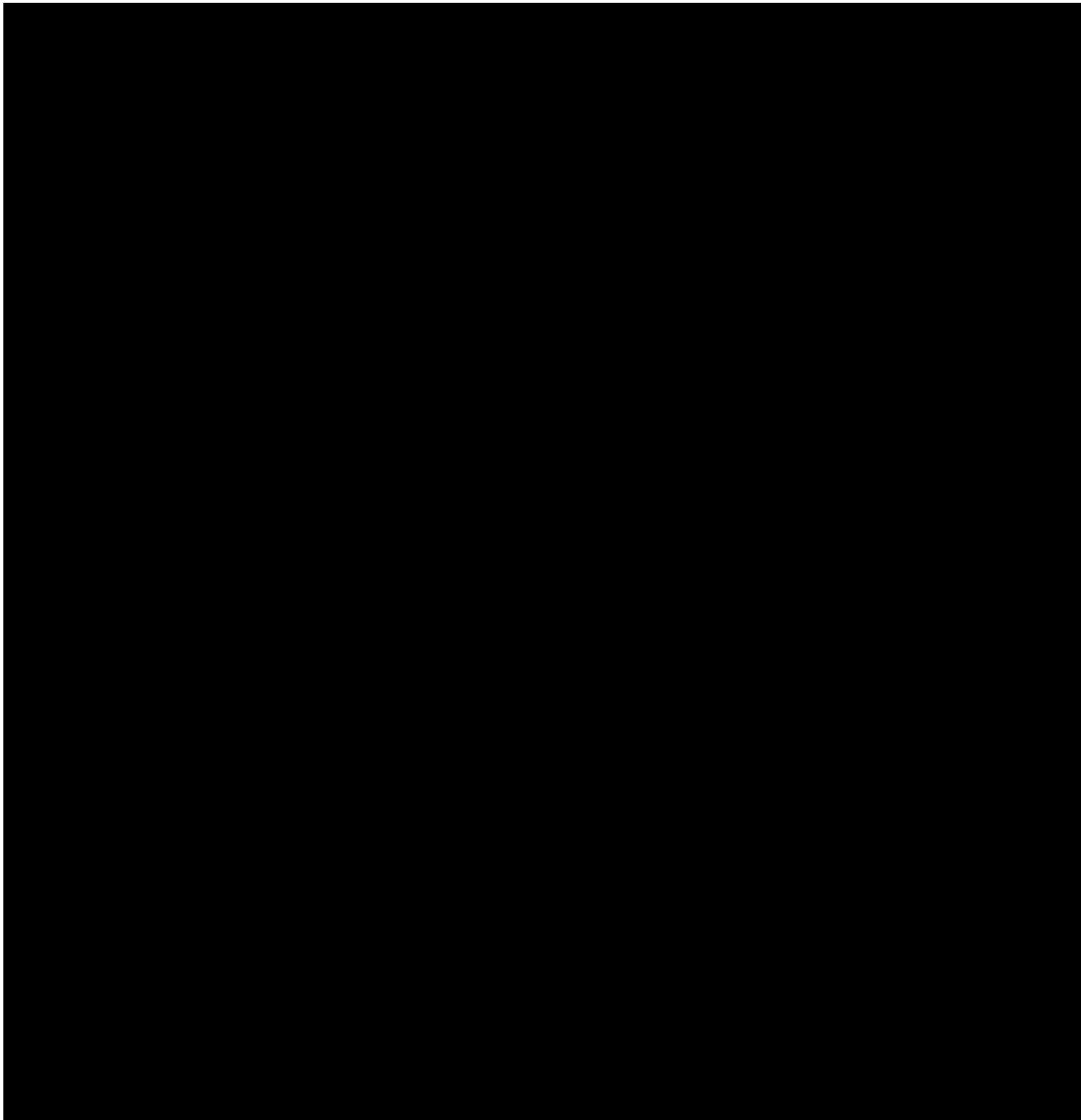
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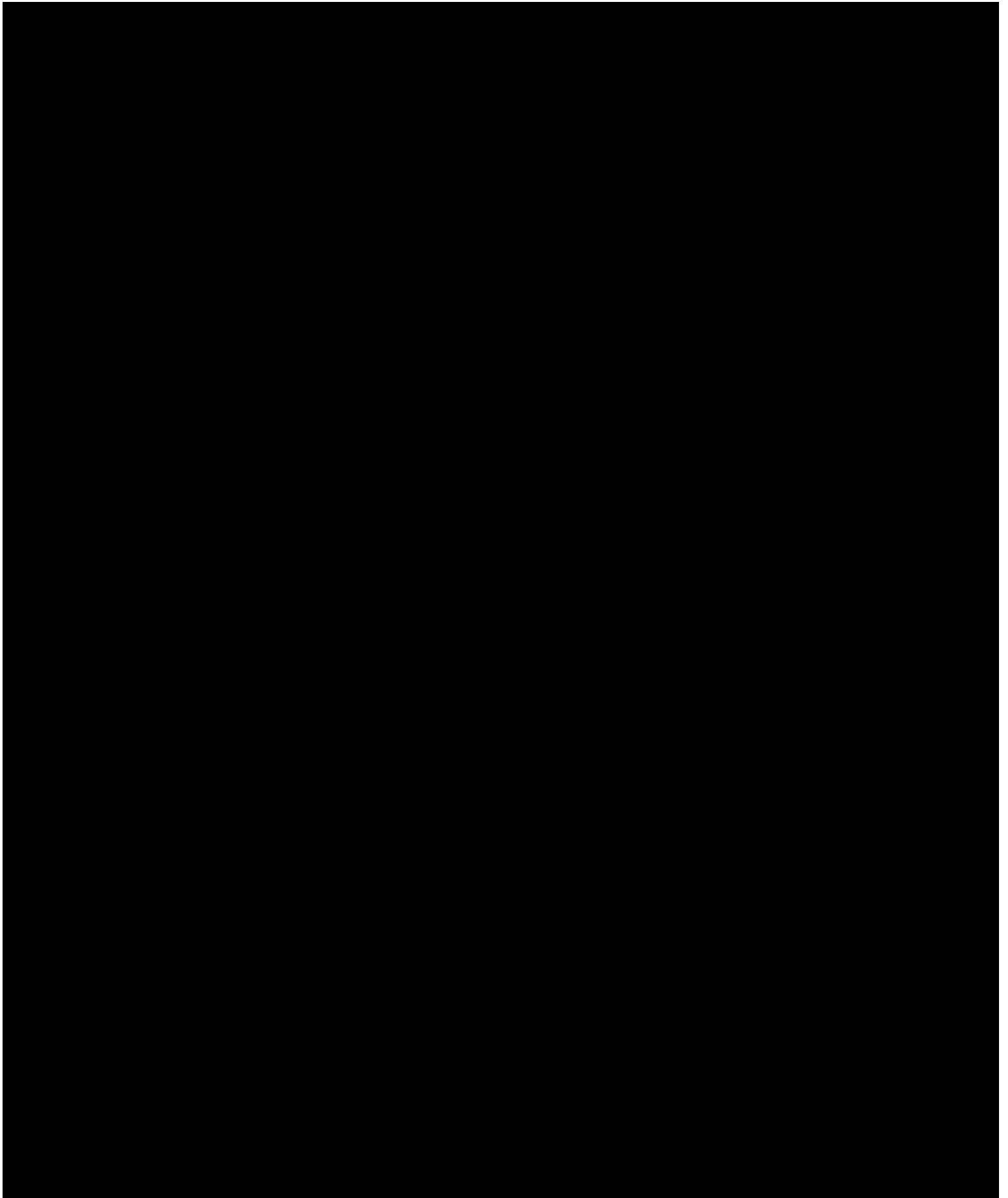
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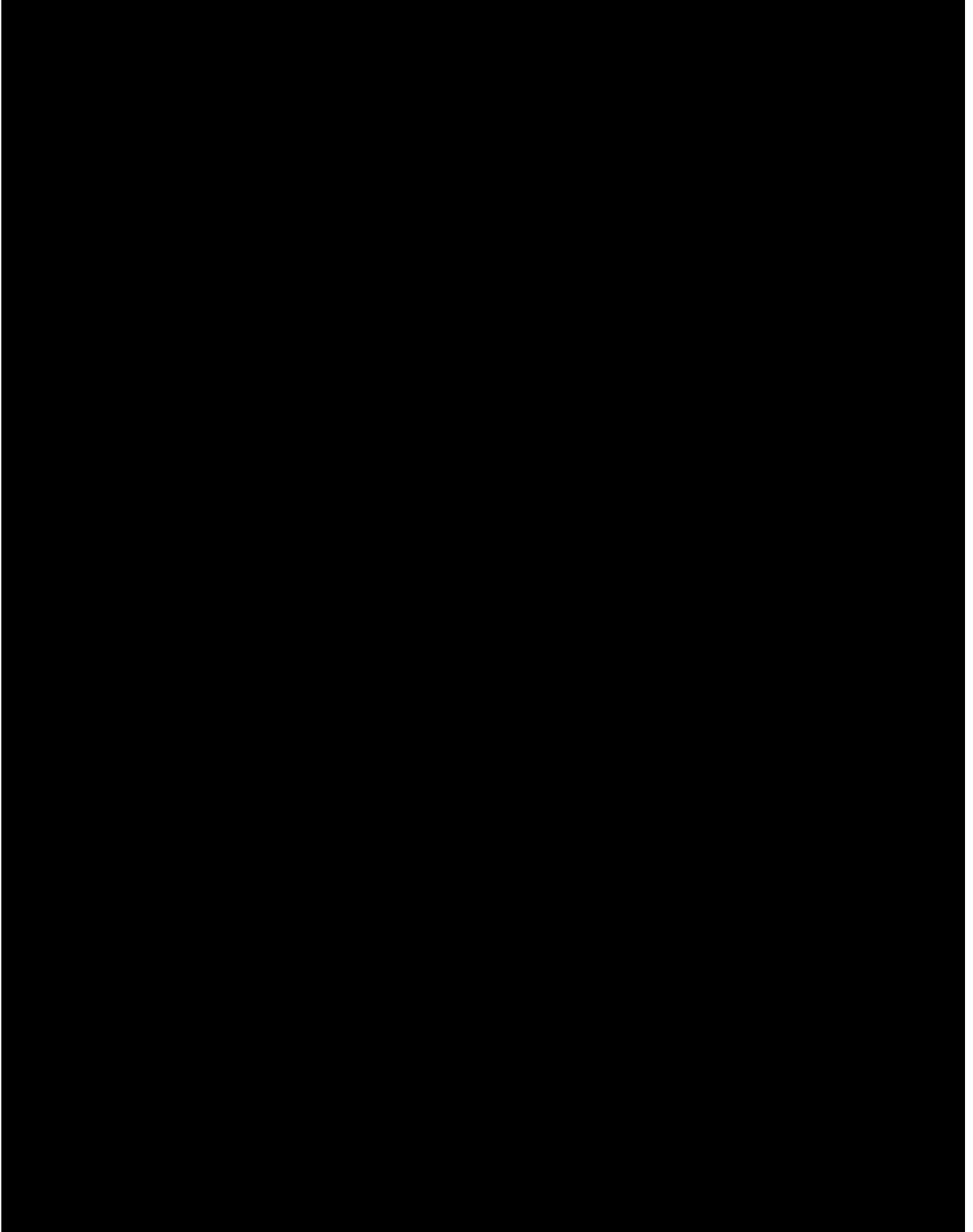
## **James Cotter**

Project and Asset Manager, Shell

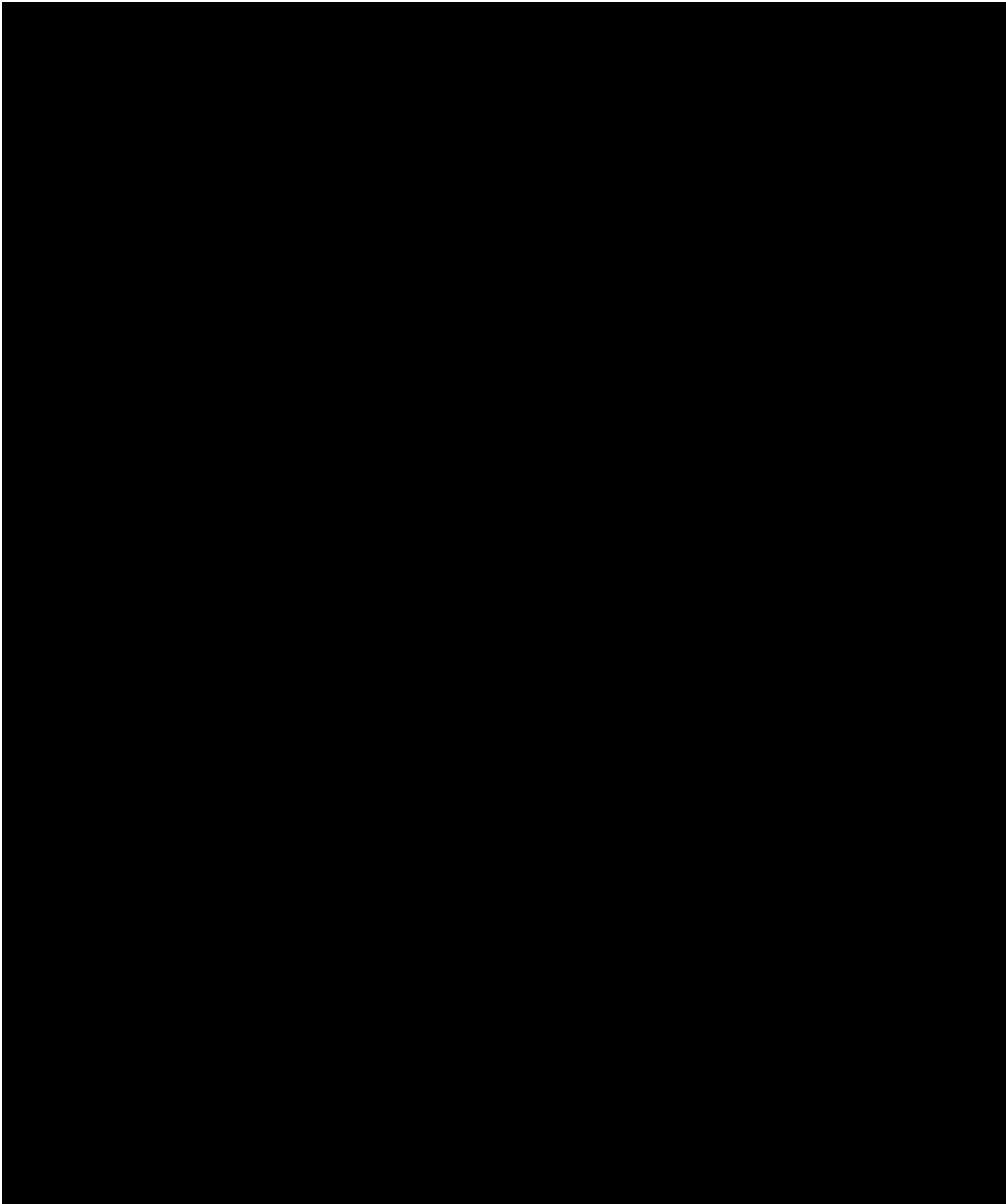
Technical Director, Atlantic Shores Offshore Wind LLC







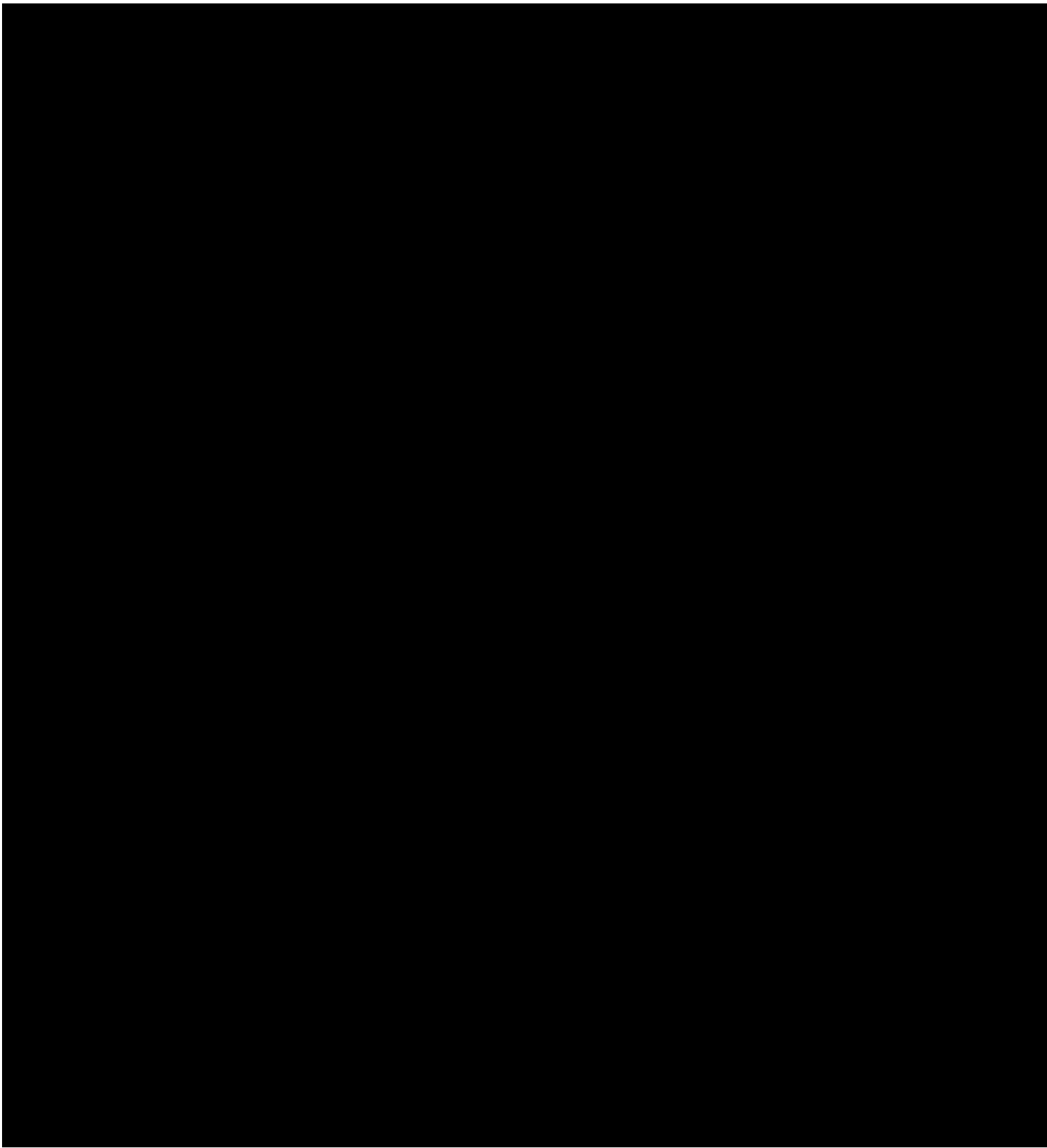


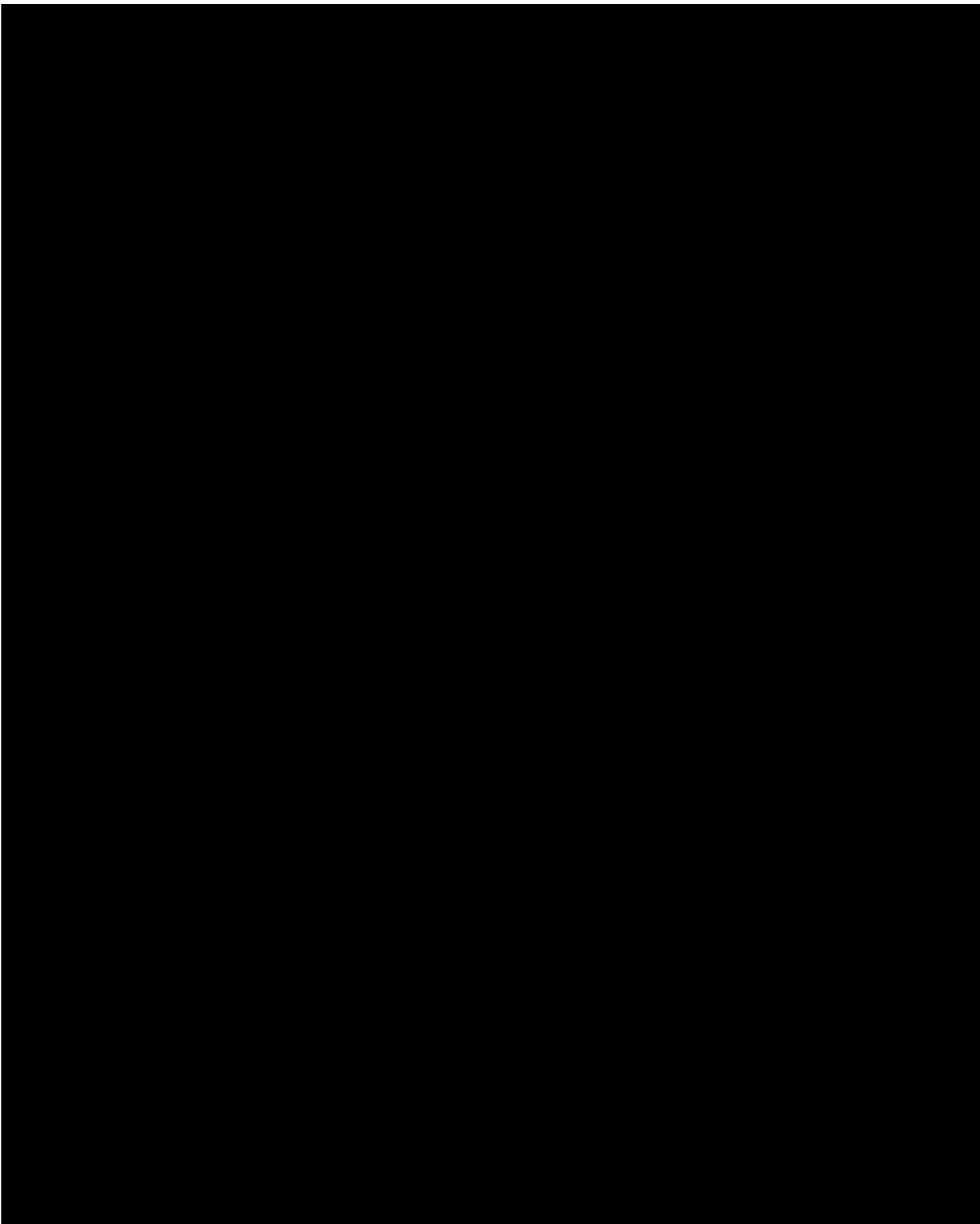


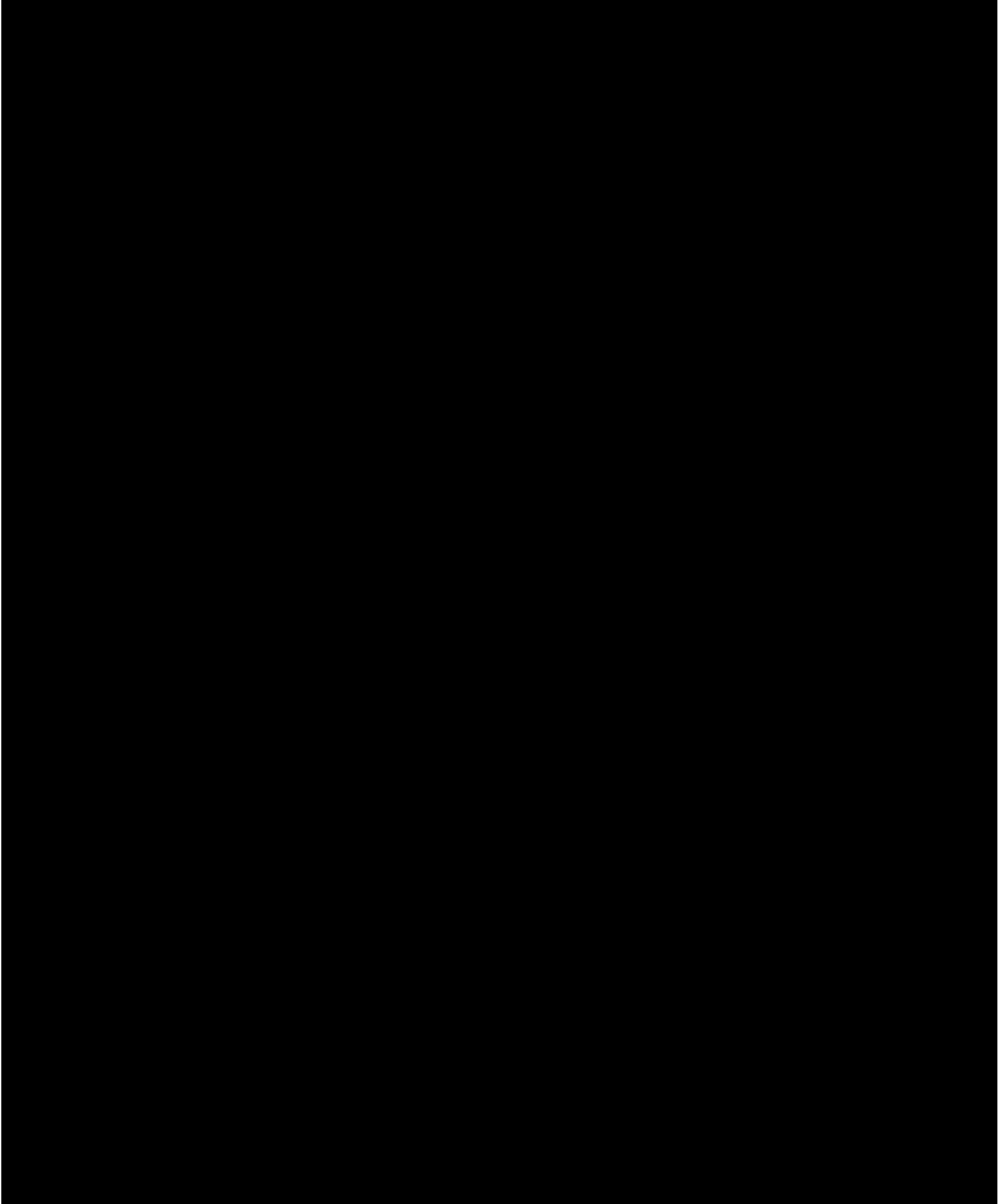
# ATTACHMENT 38

**Ruth L. Perry**

Marine Scientist & Regulatory Policy Specialist  
Shell





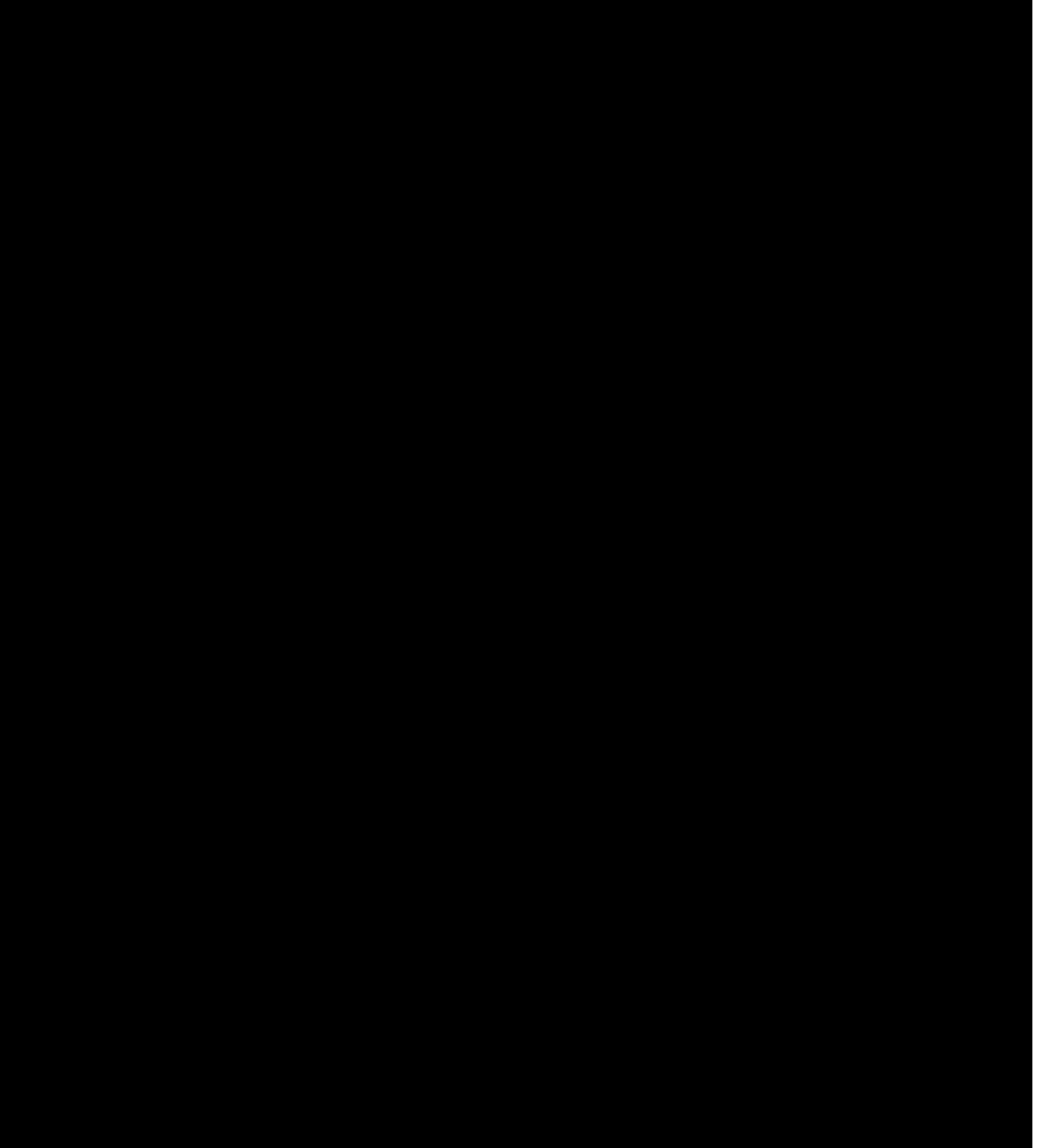


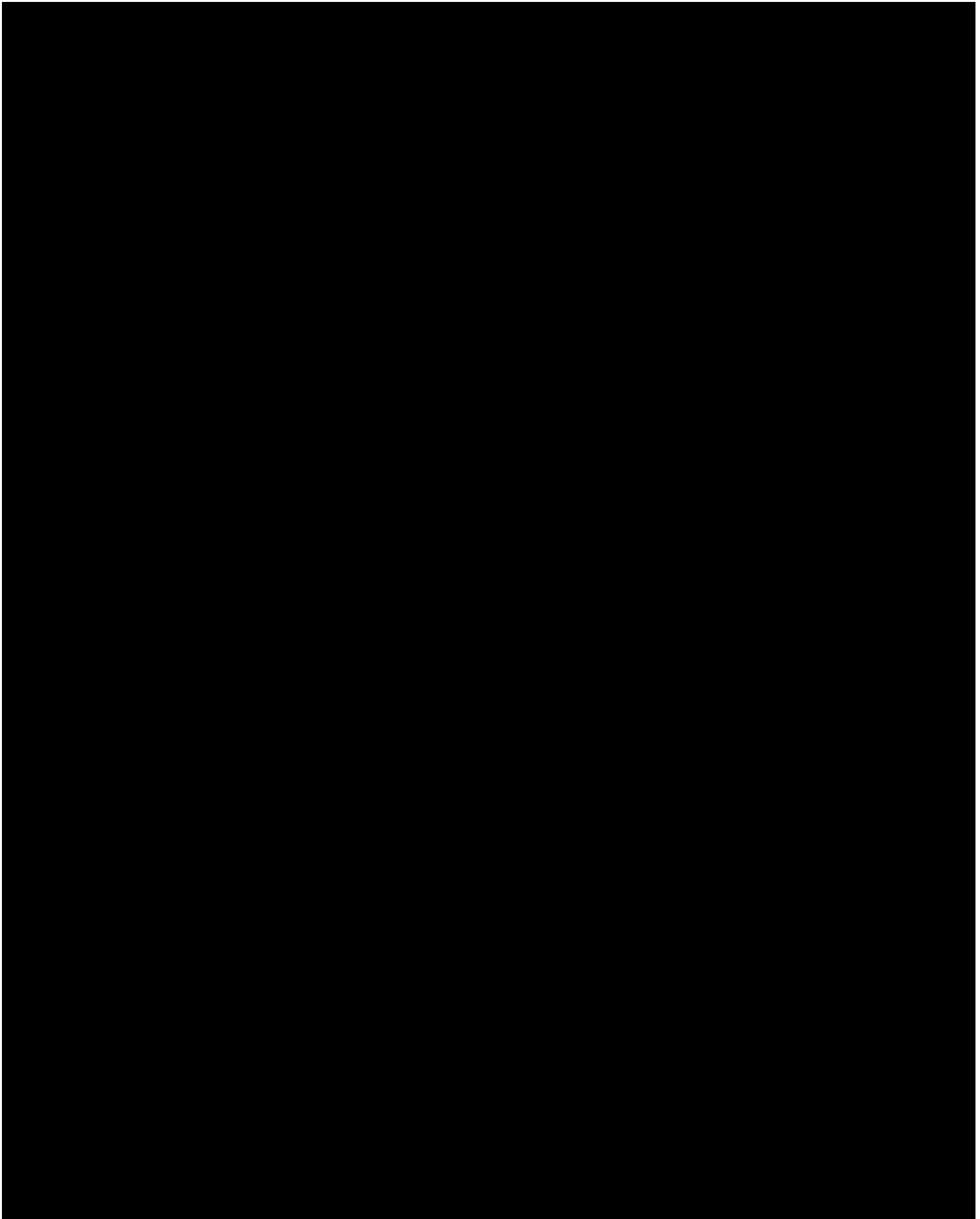
# ATTACHMENT 39

**Linda Rotasperti**

Valuation Lead

Shell



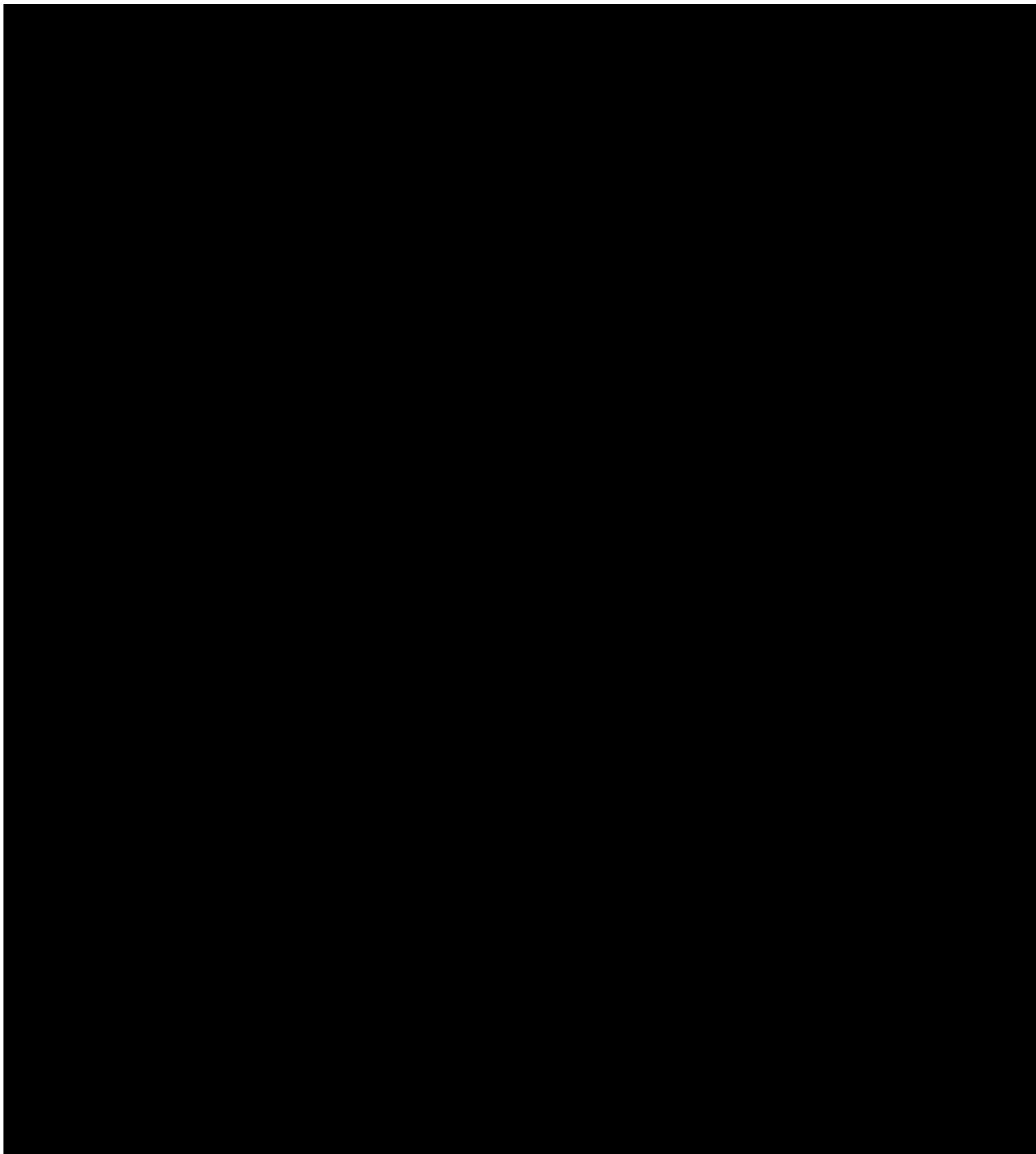


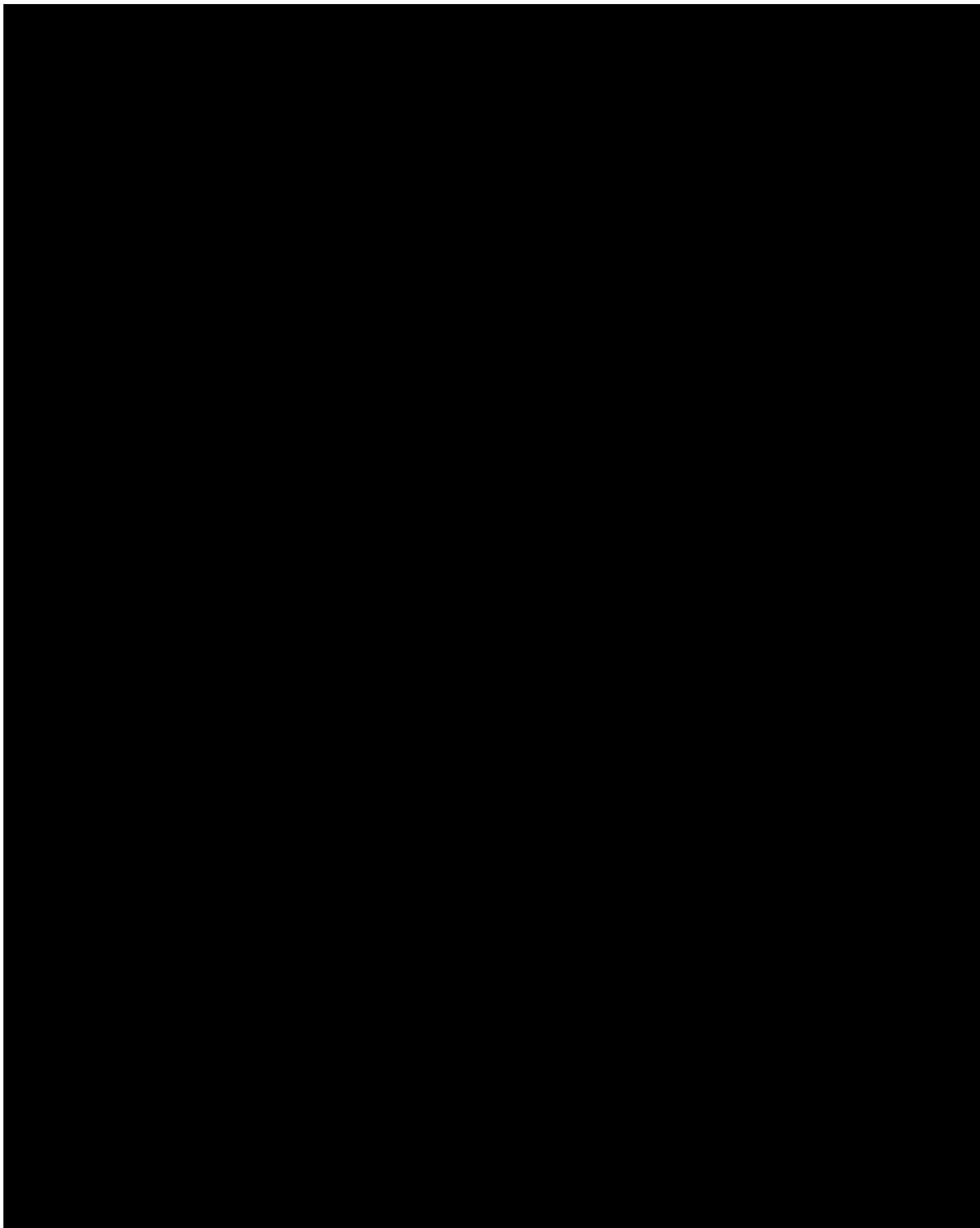


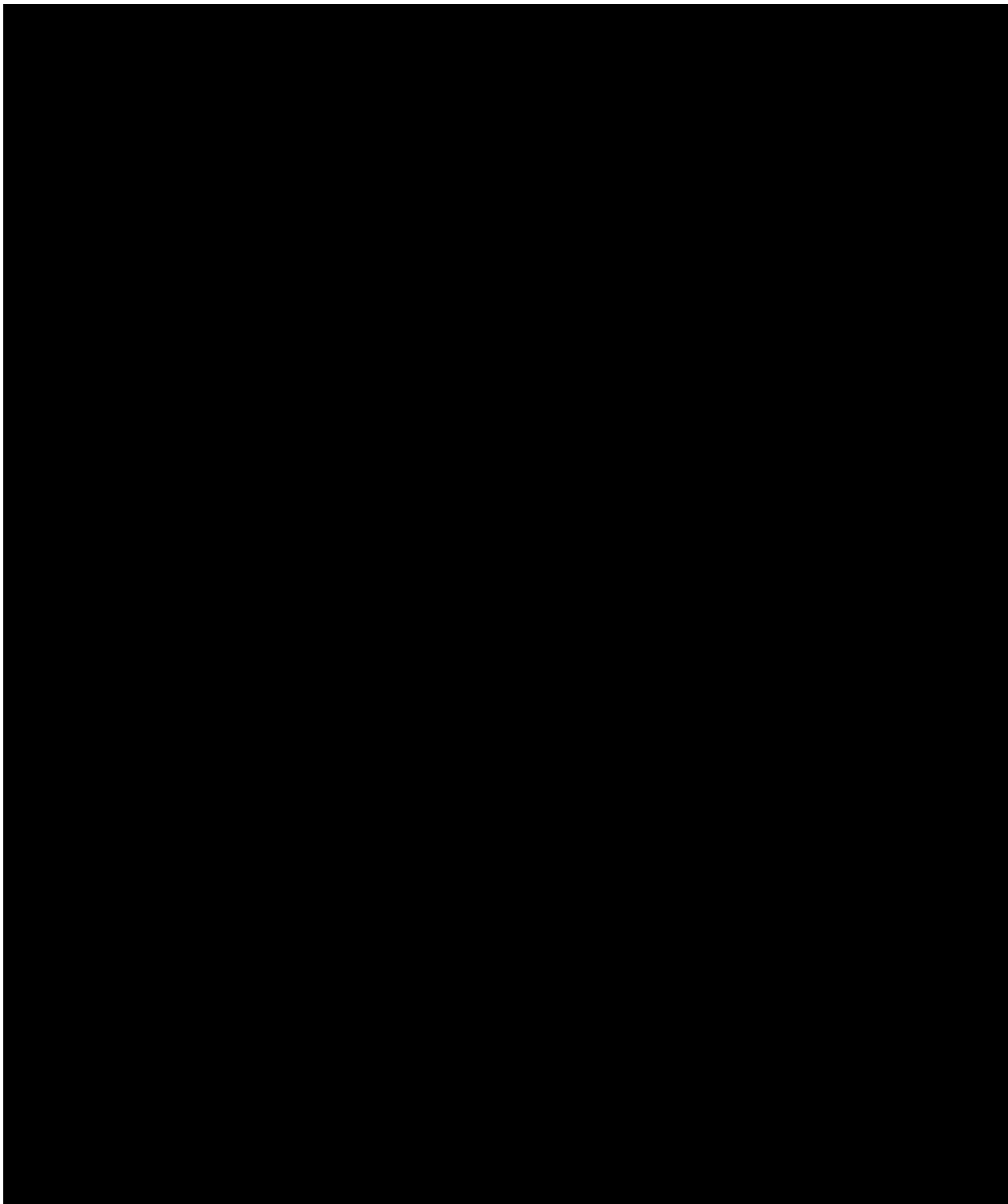
# ATTACHMENT 40

**Costanza Dingemans Cappello**

Supply Chain Lead Offshore Wind, CP New Energies  
Shell





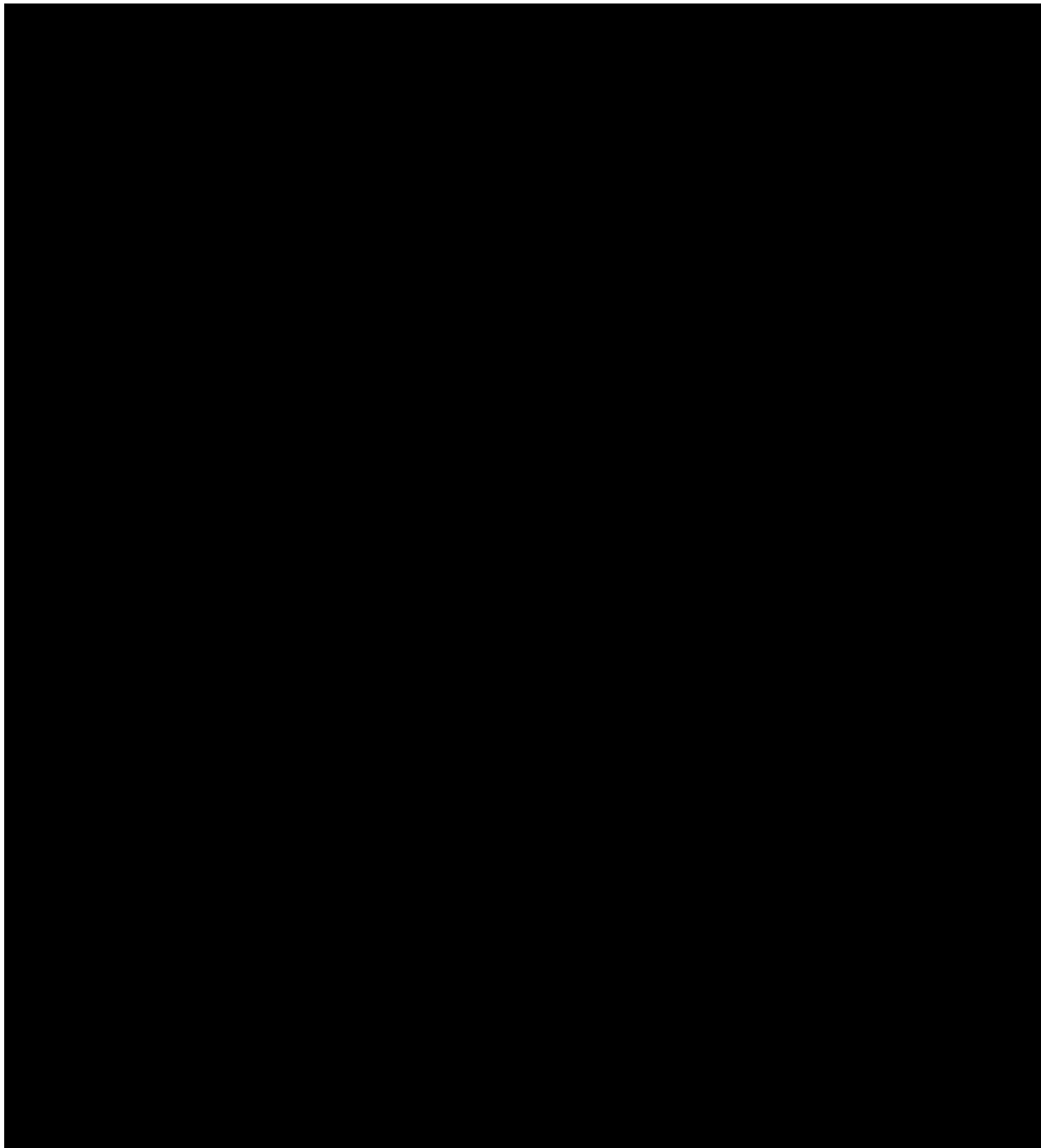


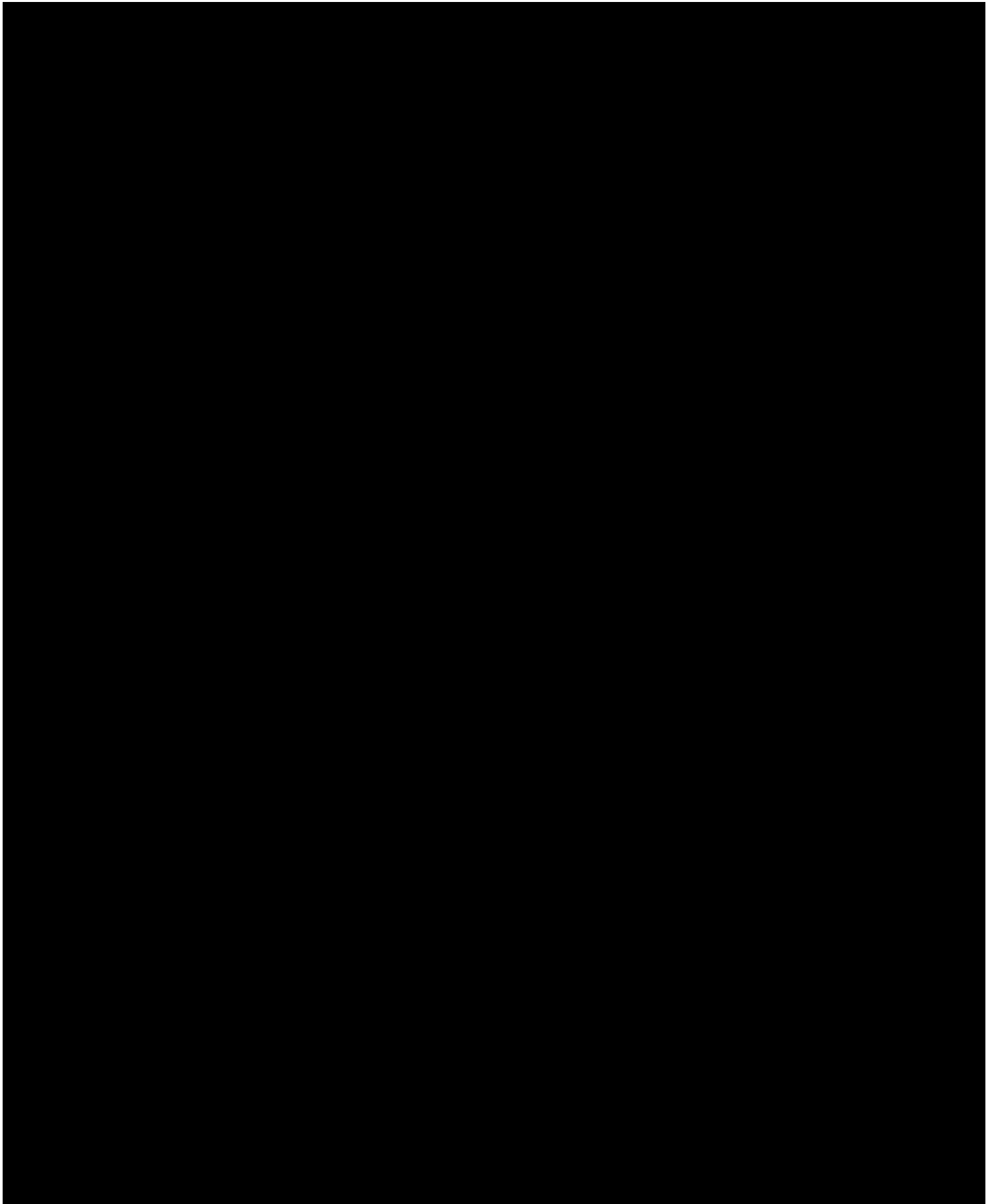
# ATTACHMENT 41

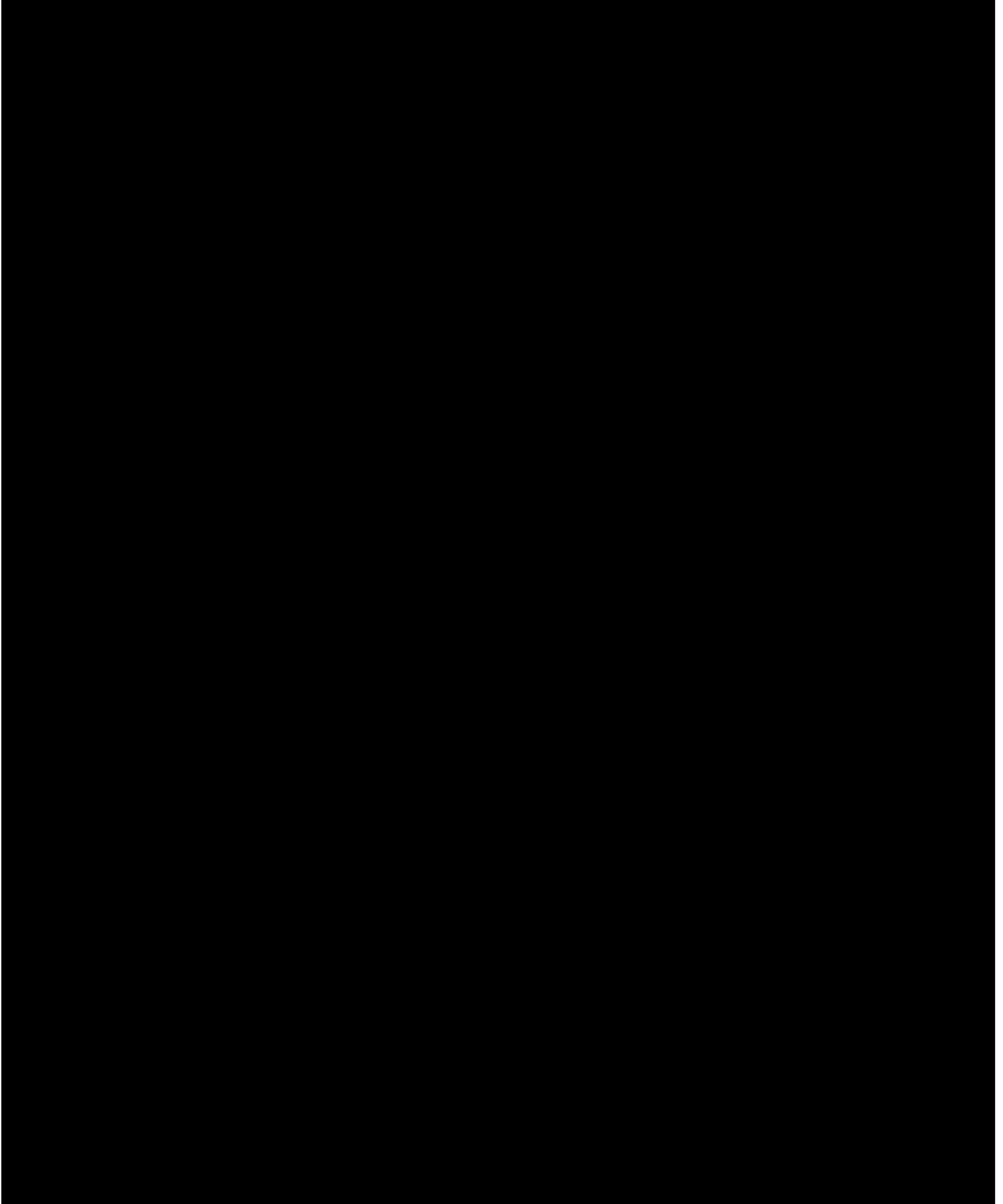
**Cristina Collier Zwissler**

Offshore wind Resource Analyst

Shell







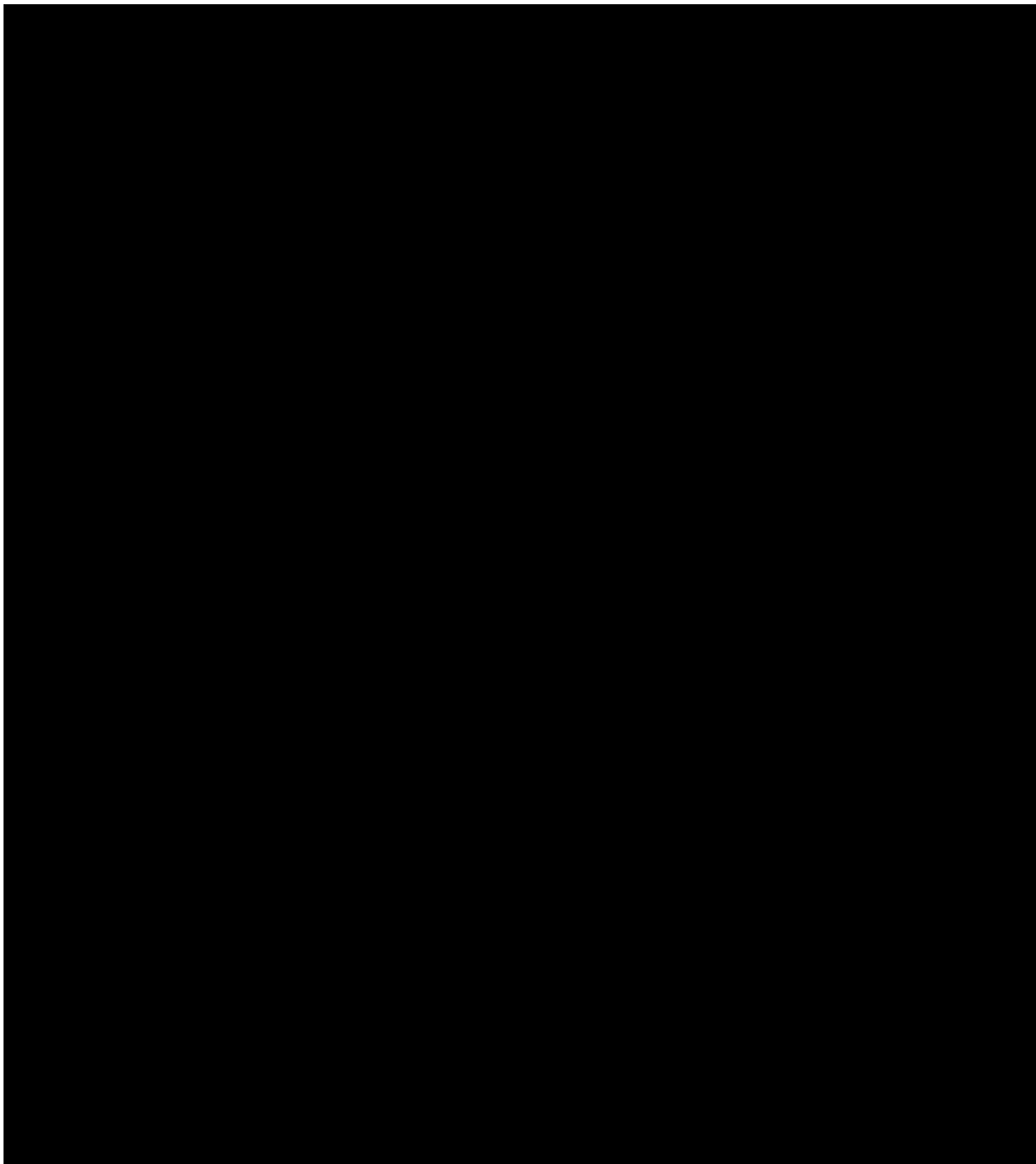


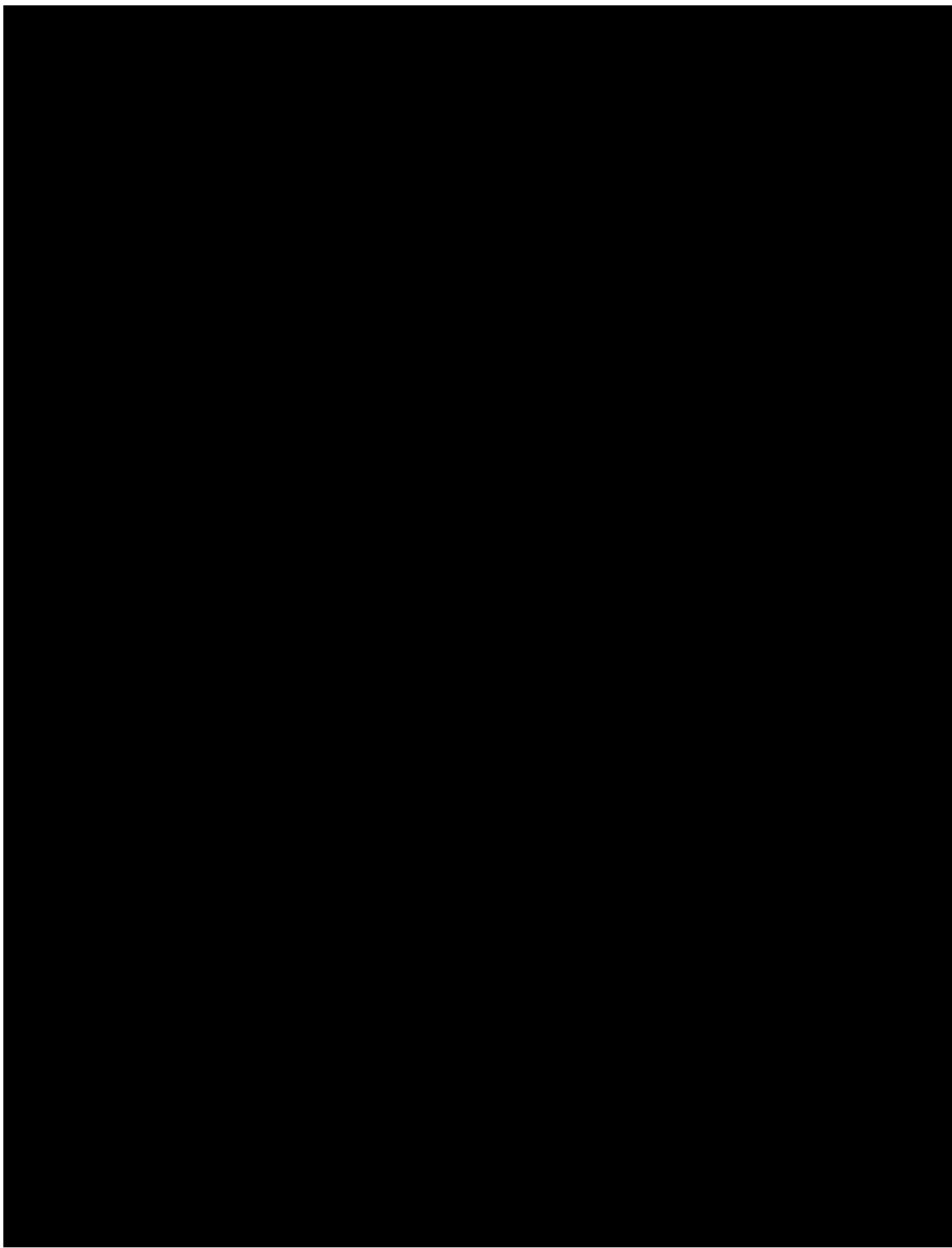
# ATTACHMENT 42

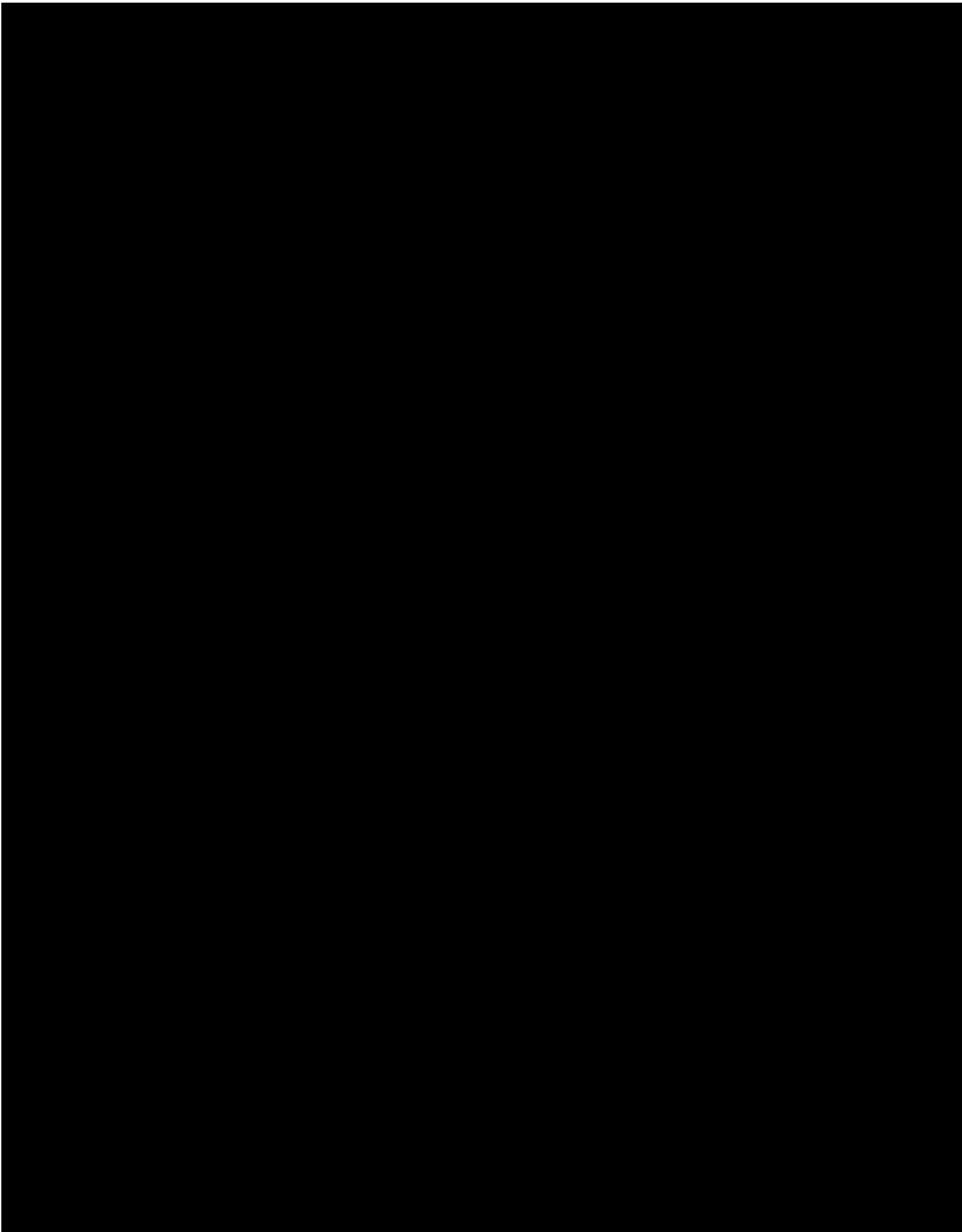
**Koen C. Bröker**

Environmental scientist and advocacy advisor

Shell New Energies





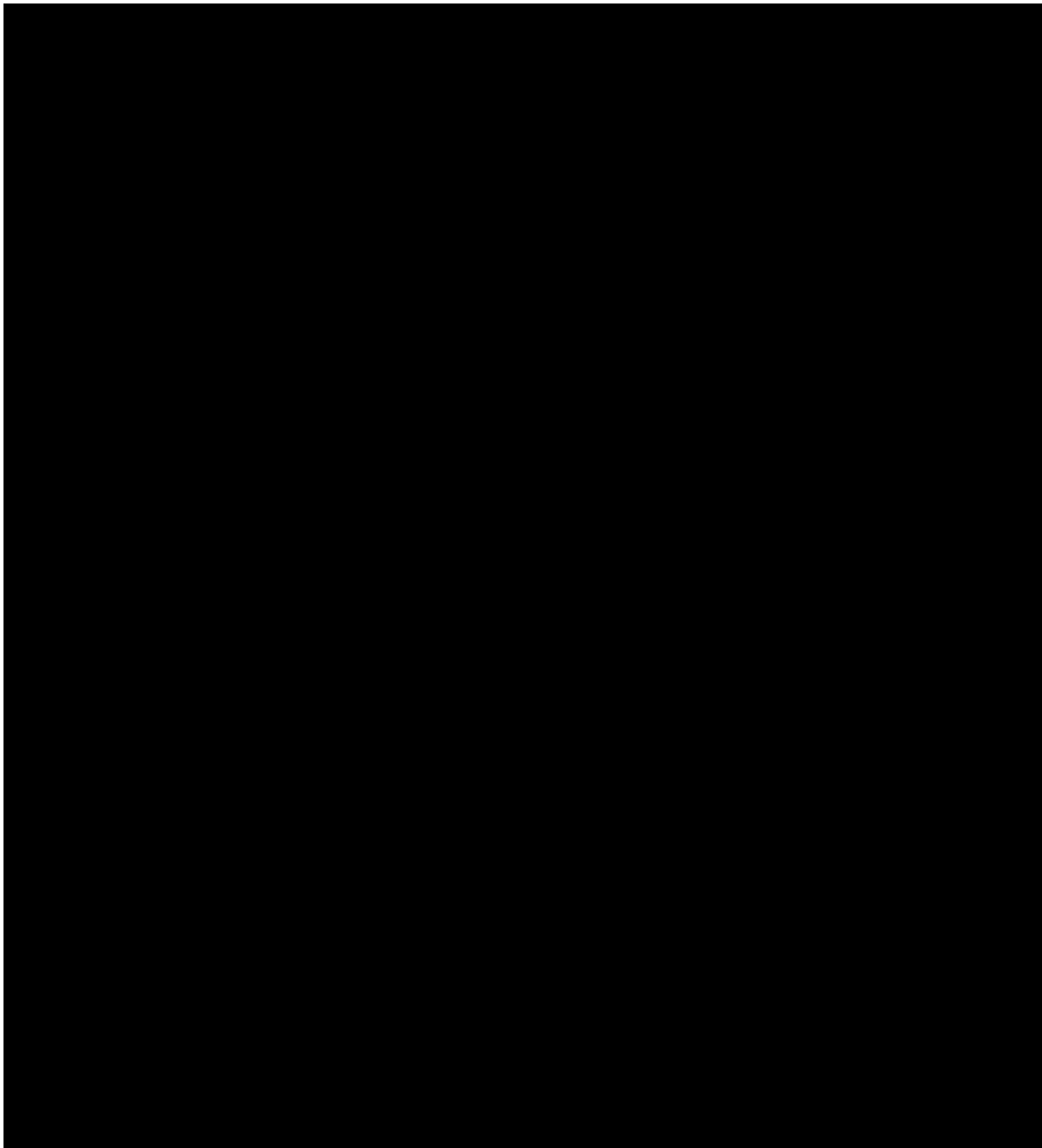


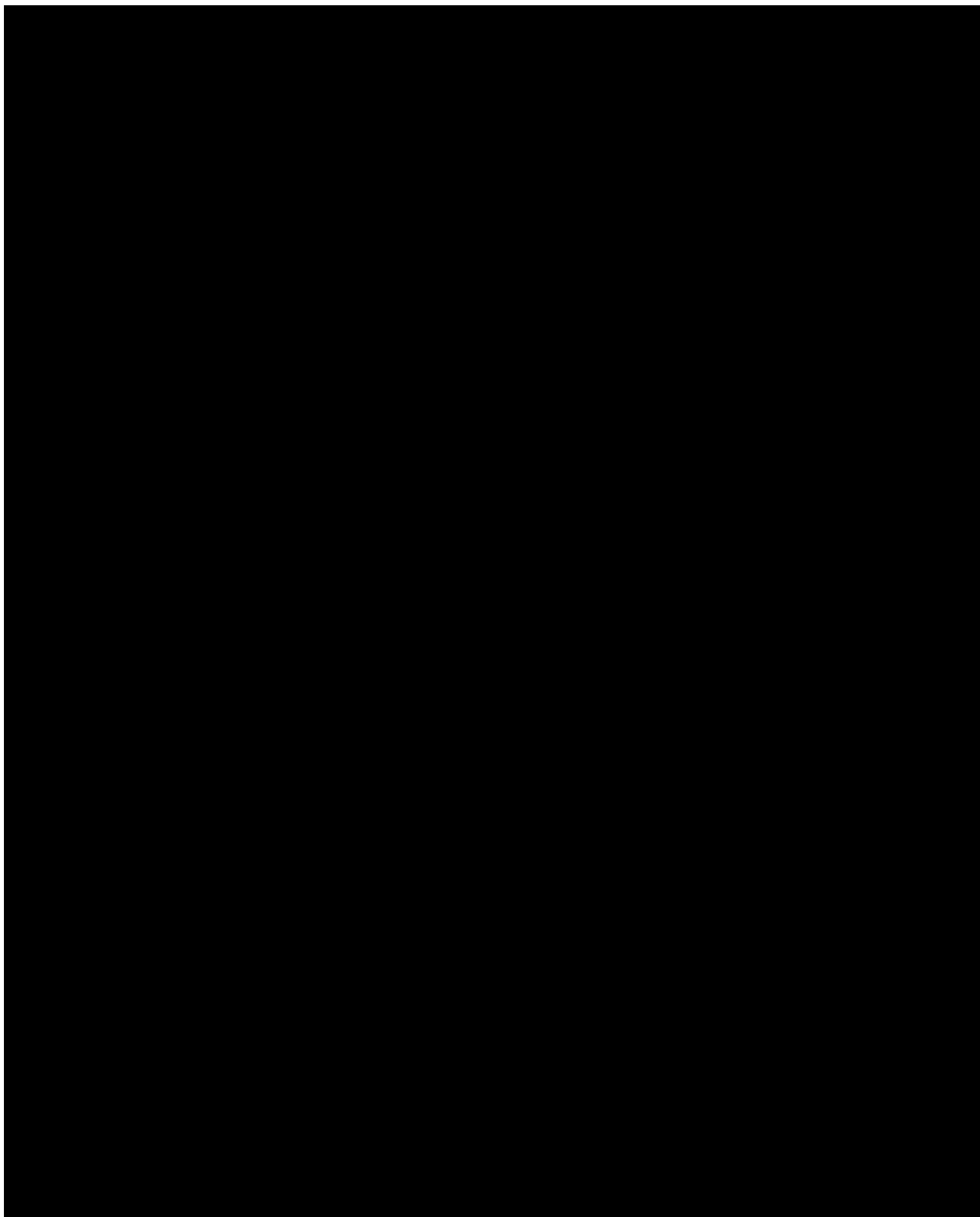
# ATTACHMENT 43

**Bouke Feenstra**

Finance Manager, Offshore Wind Development

Shell





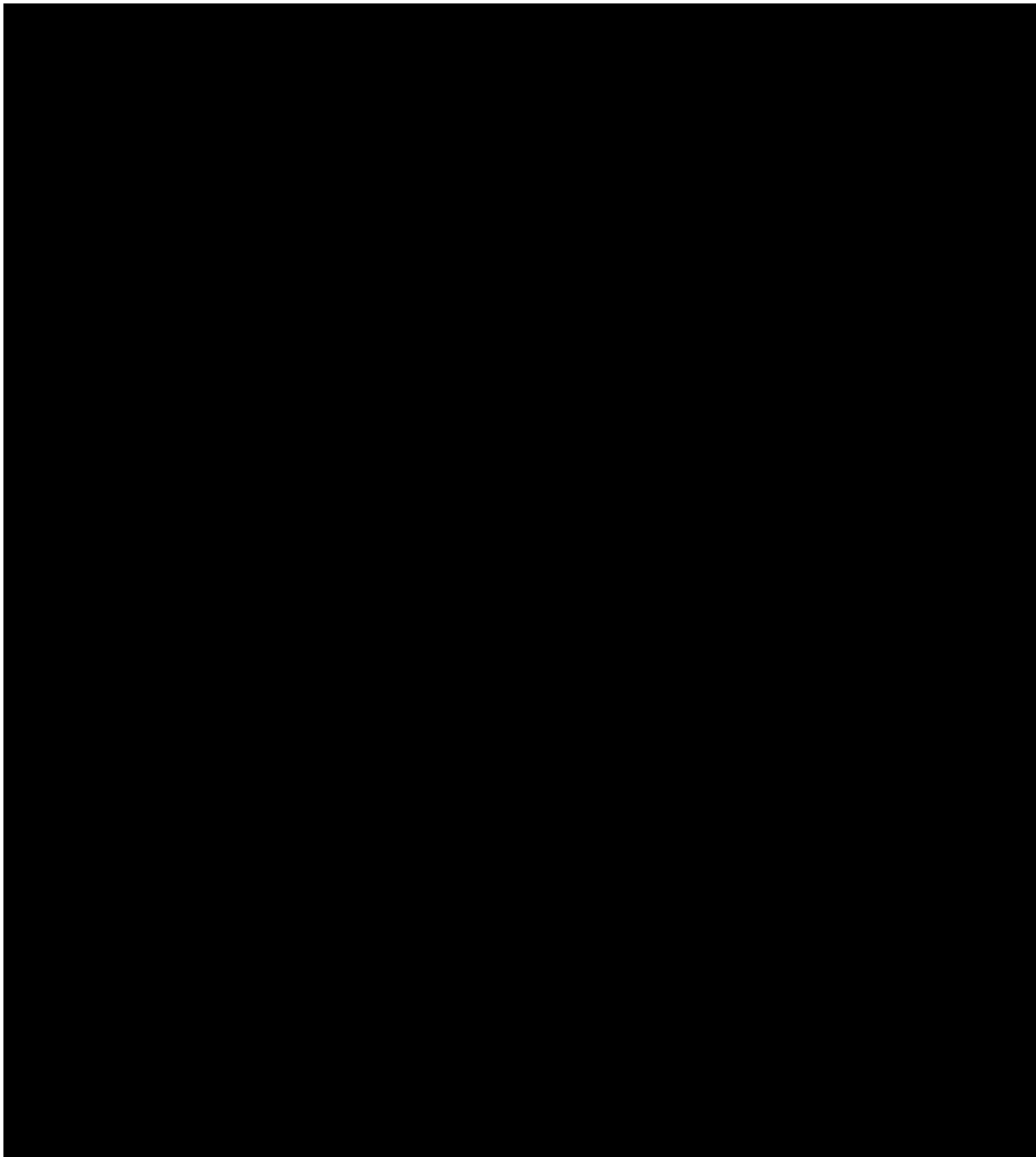
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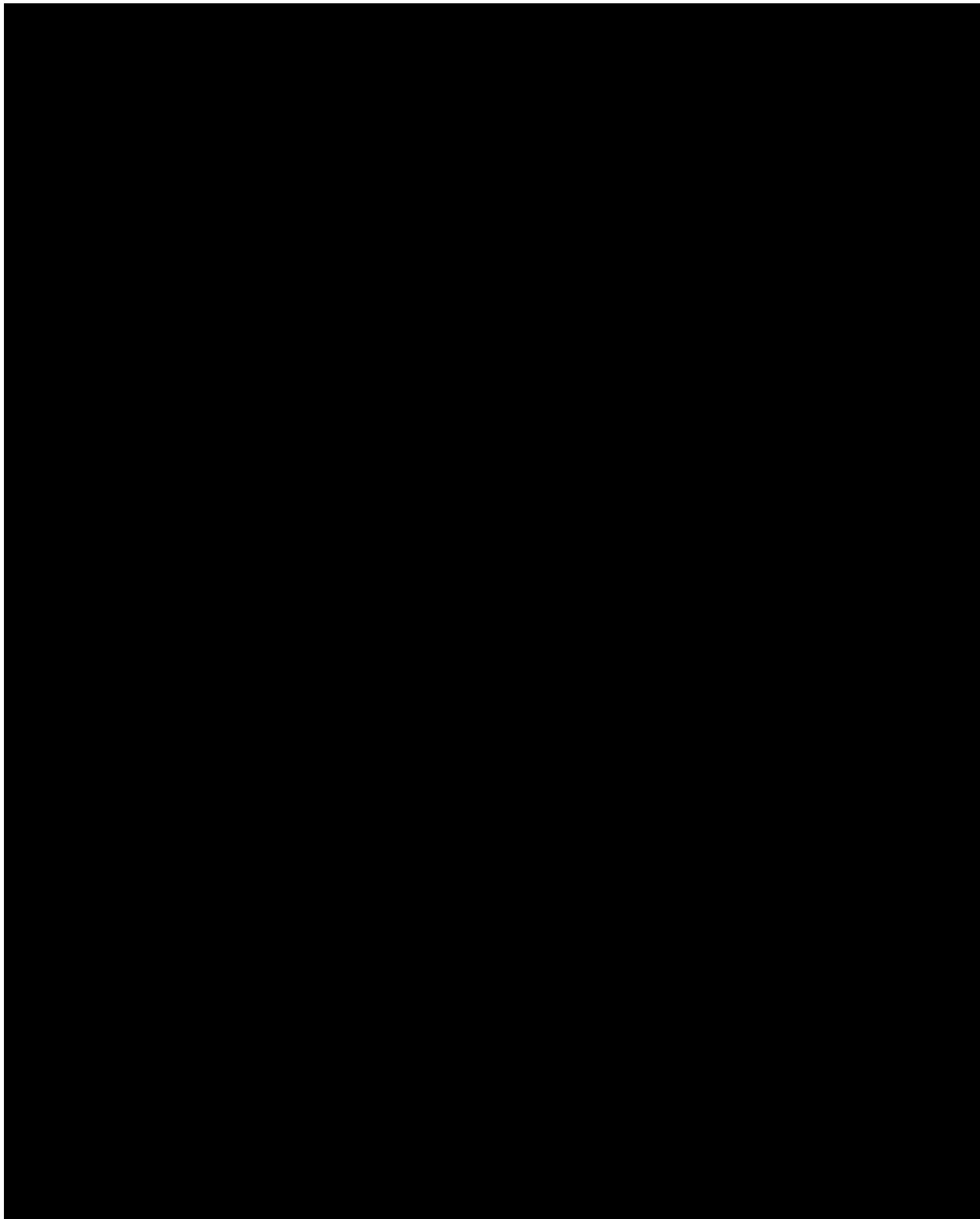


**Bernardo Franco**

America's Regional Head, Structured Finance

Shell



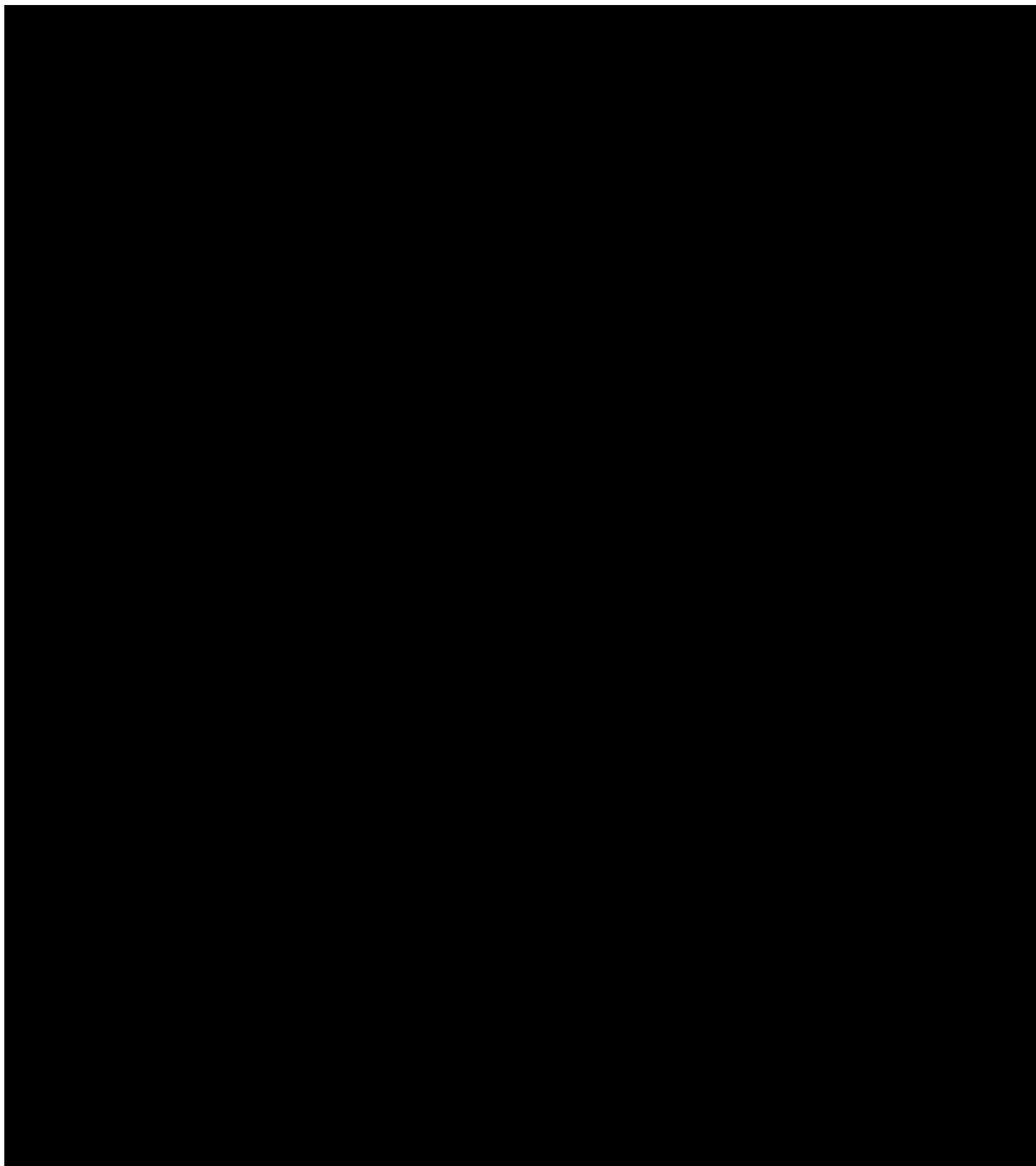


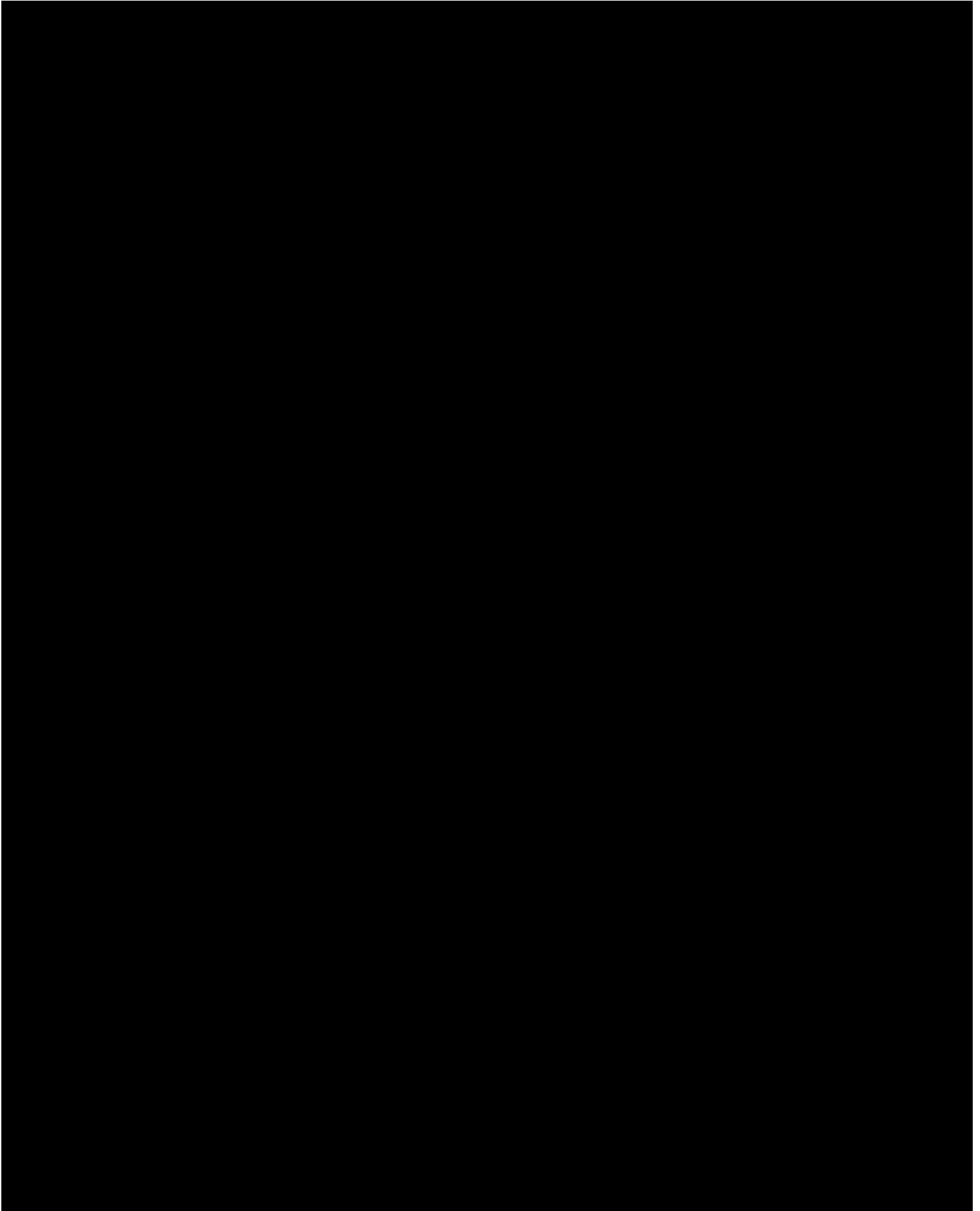
# ATTACHMENT 45

**Brian M. Murdock**

Legal Counsel – New Energies

Shell





# ATTACHMENT 46

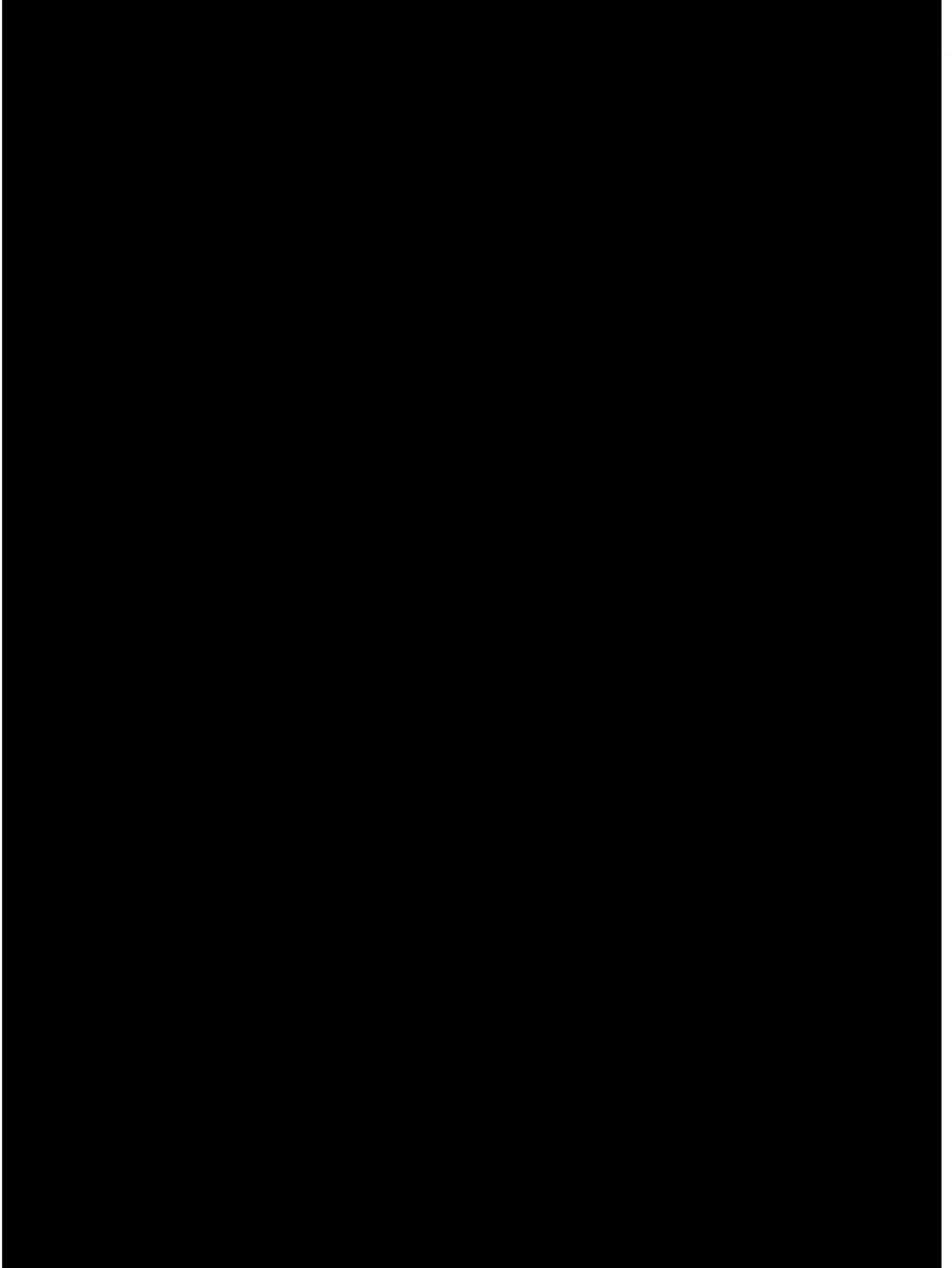


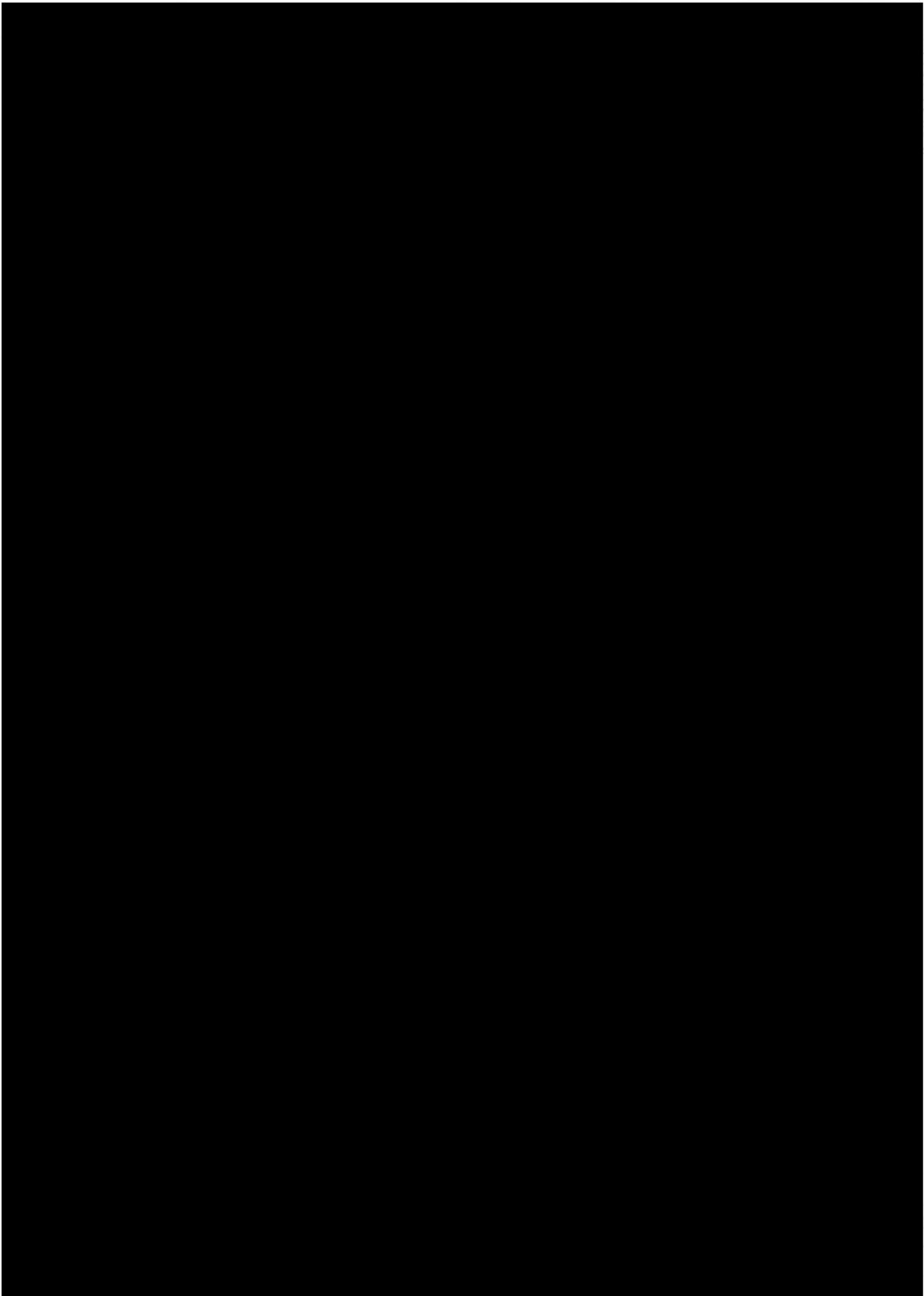




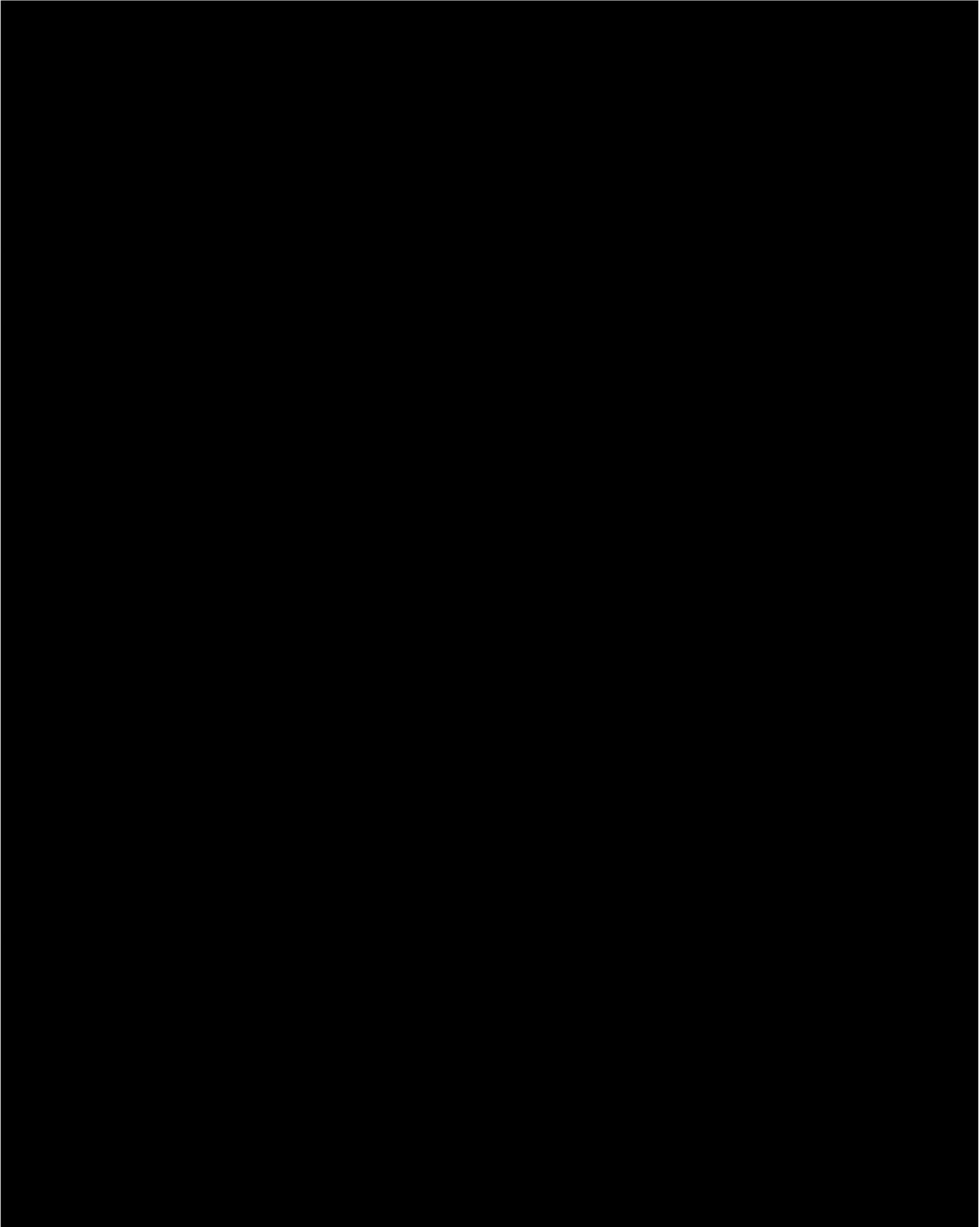


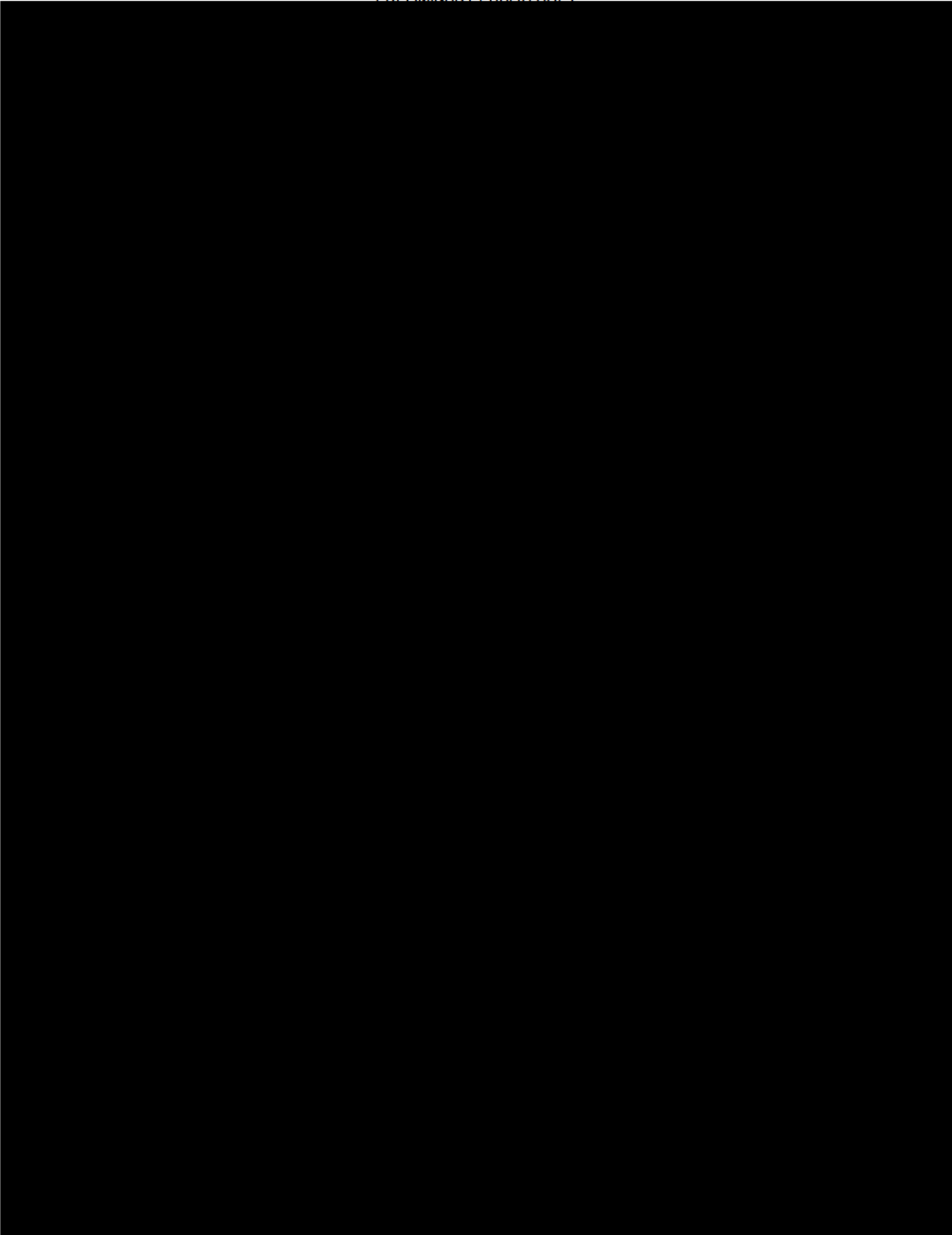
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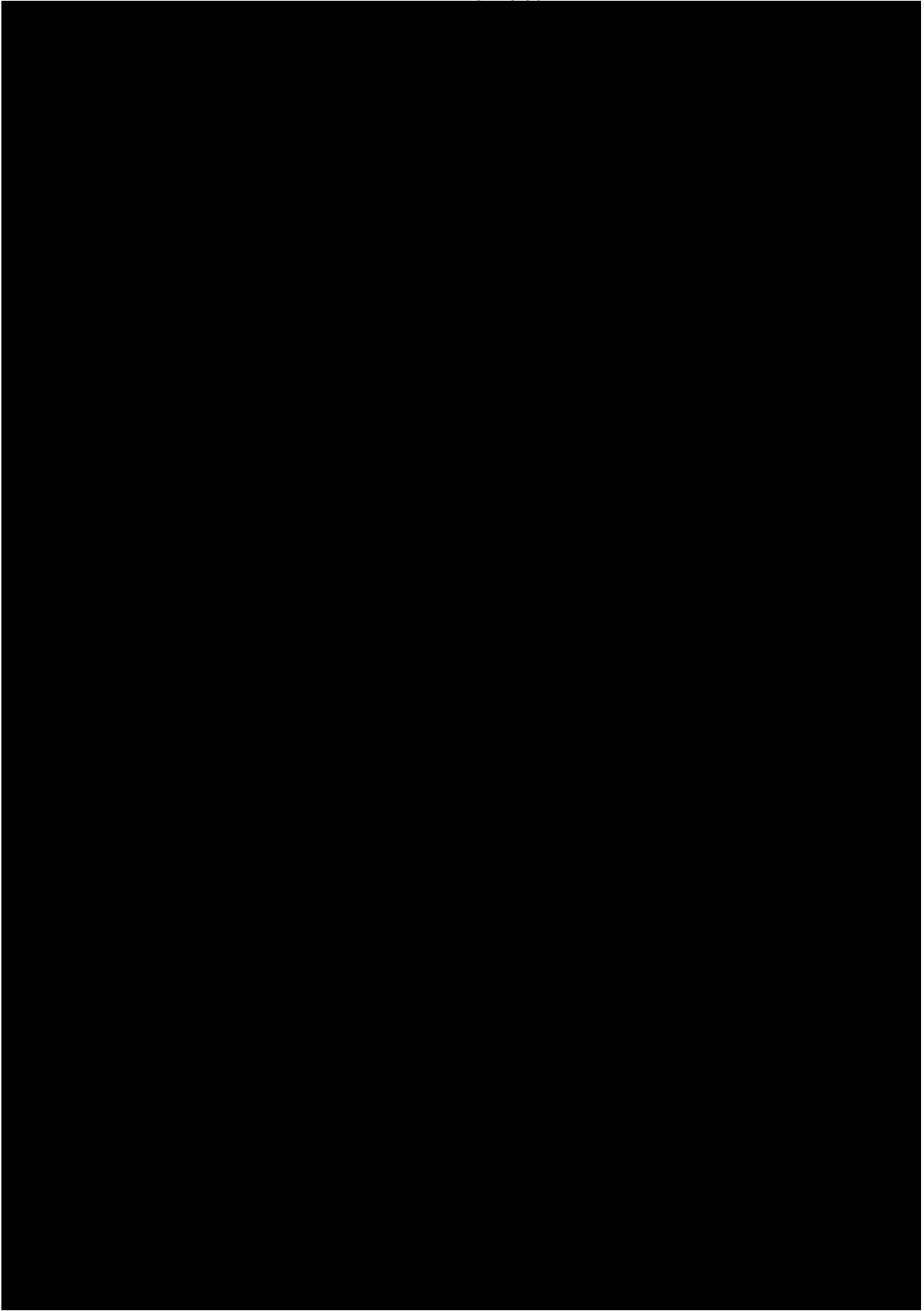
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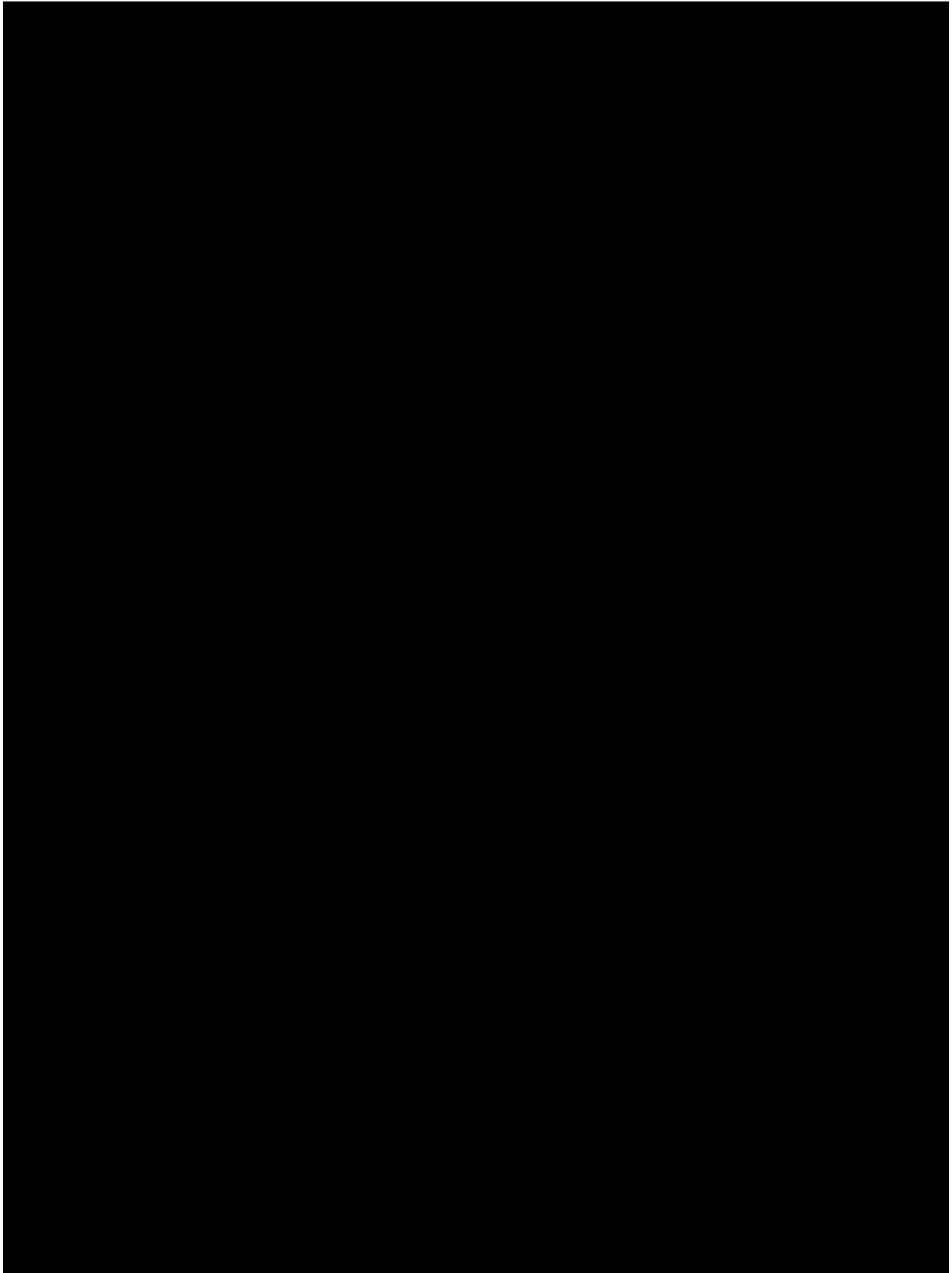




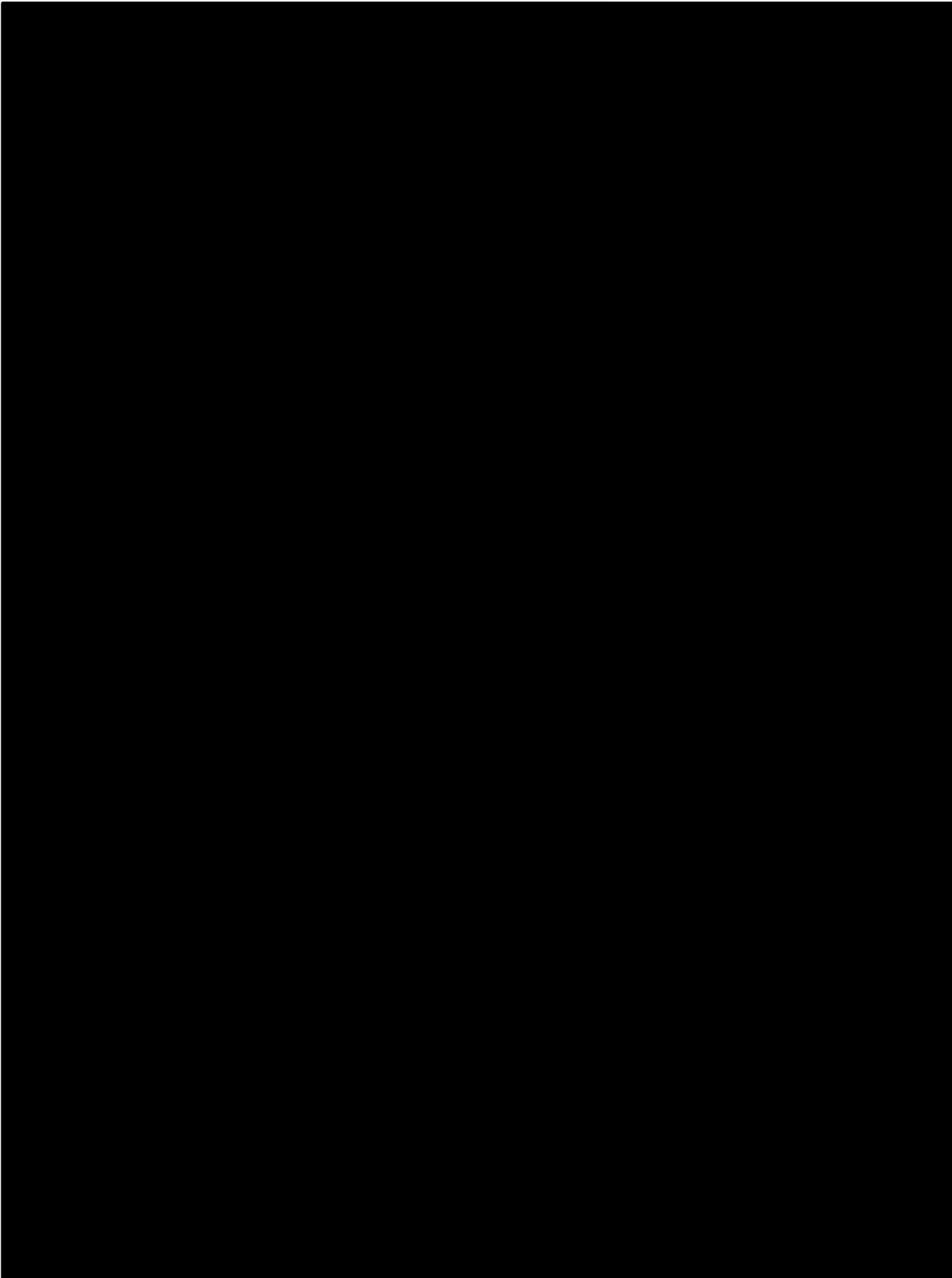
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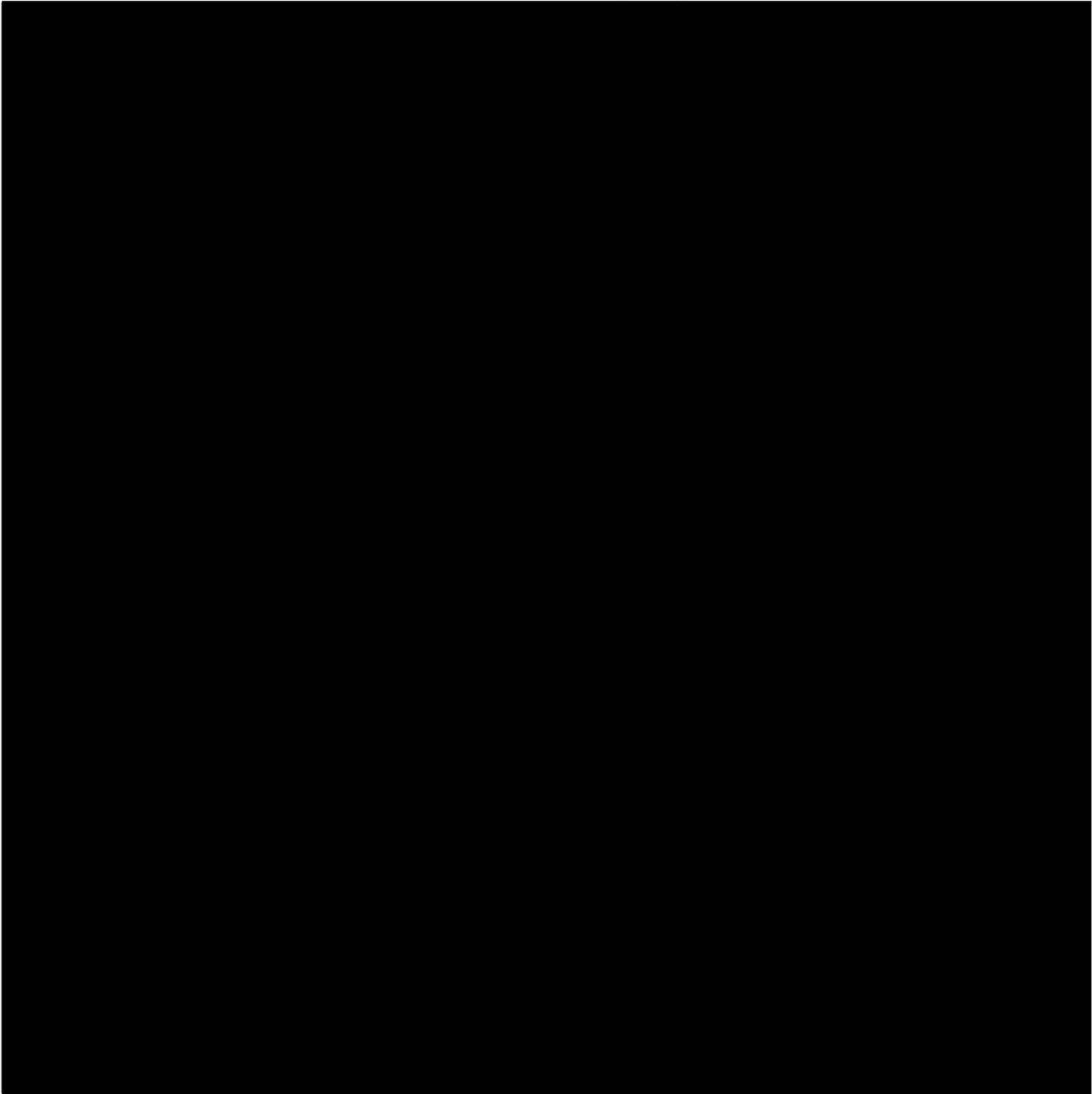




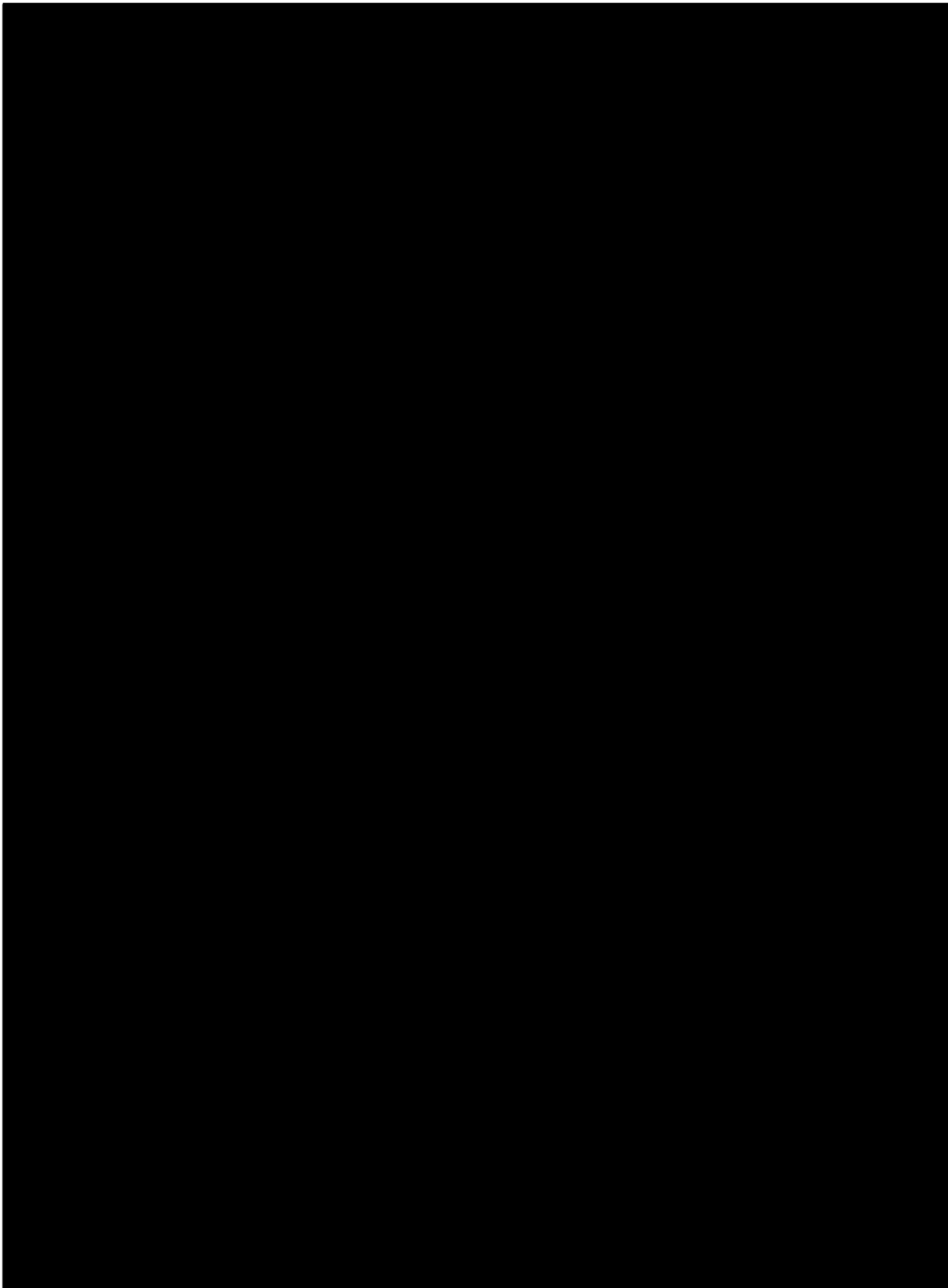


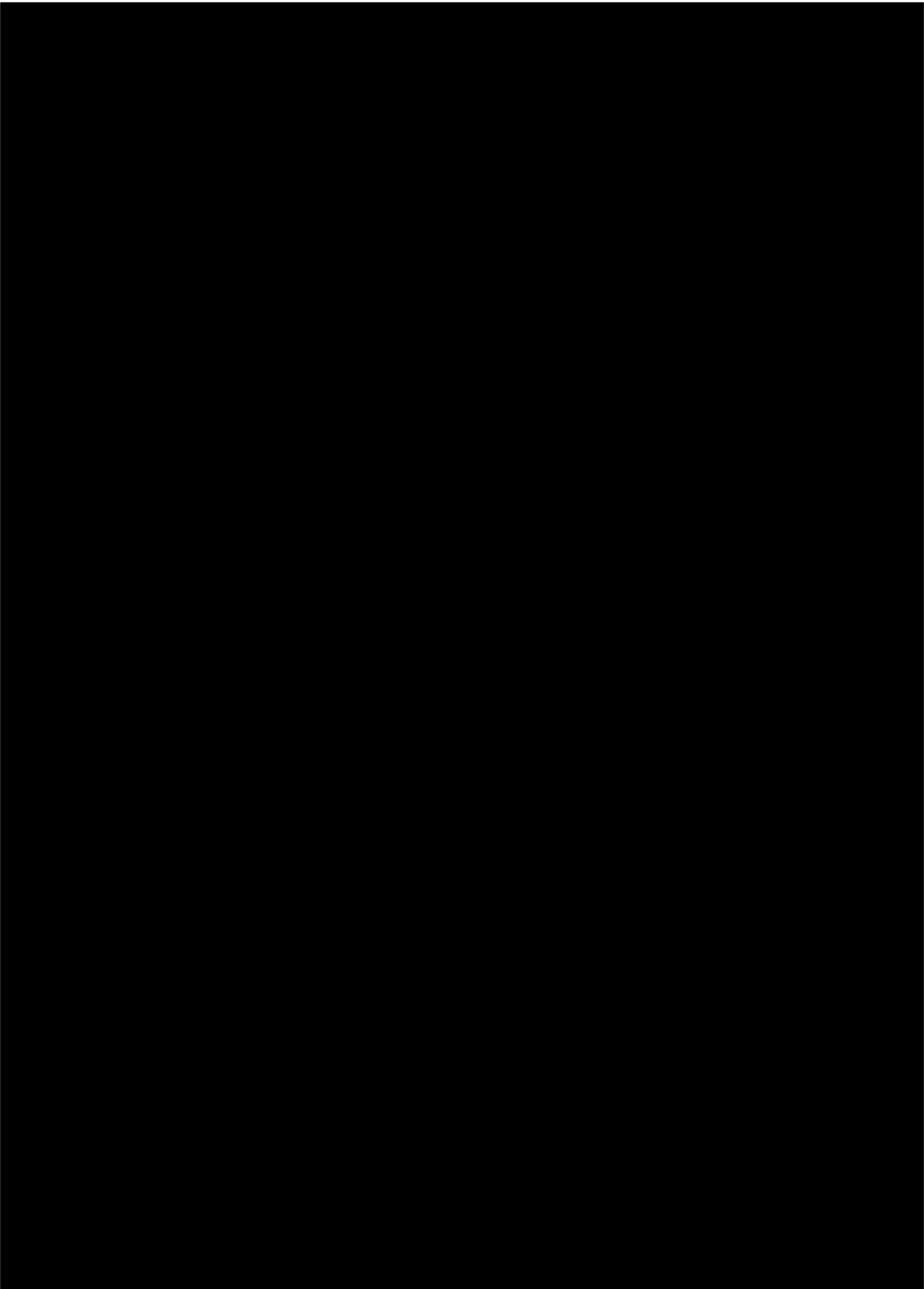
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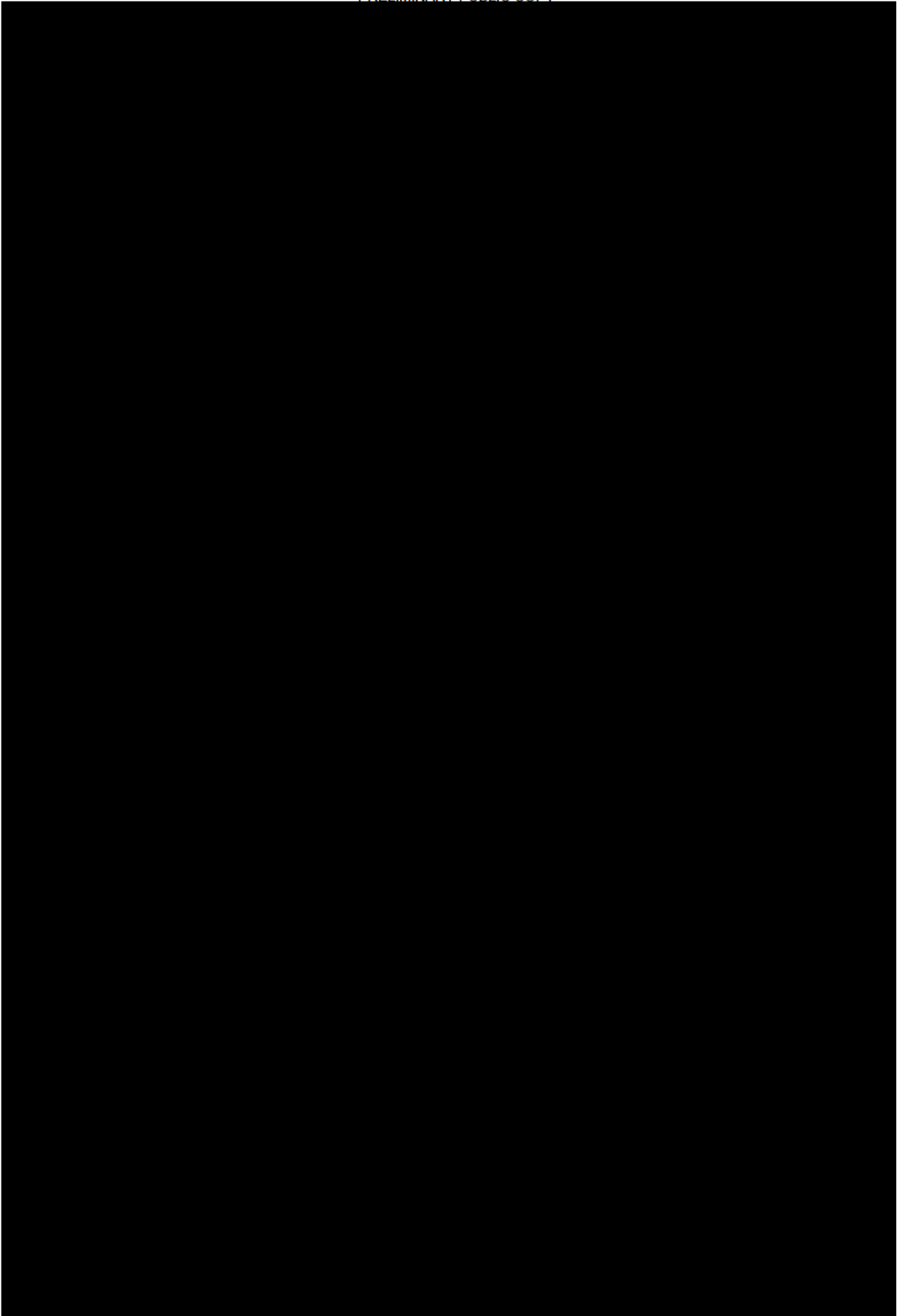
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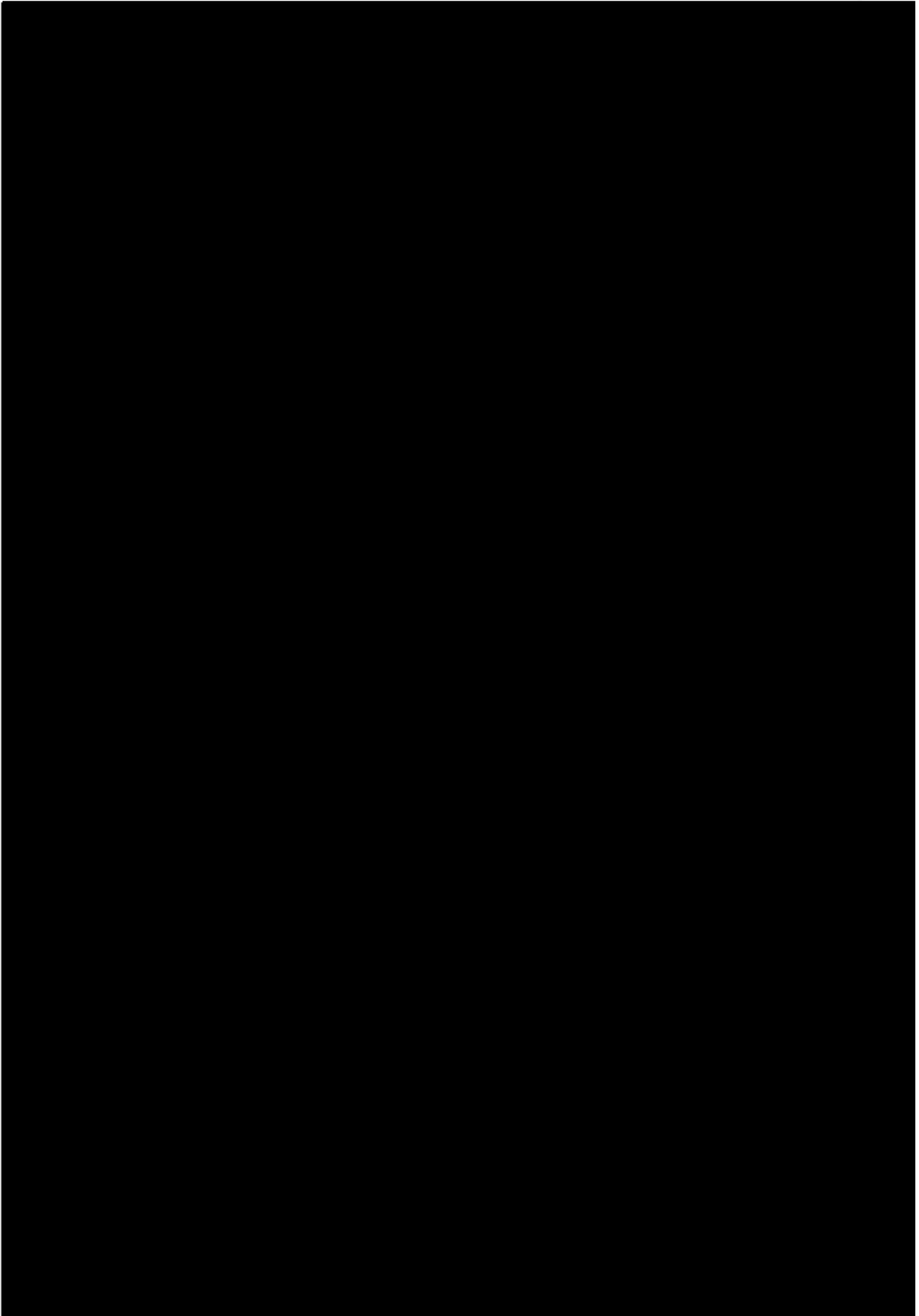


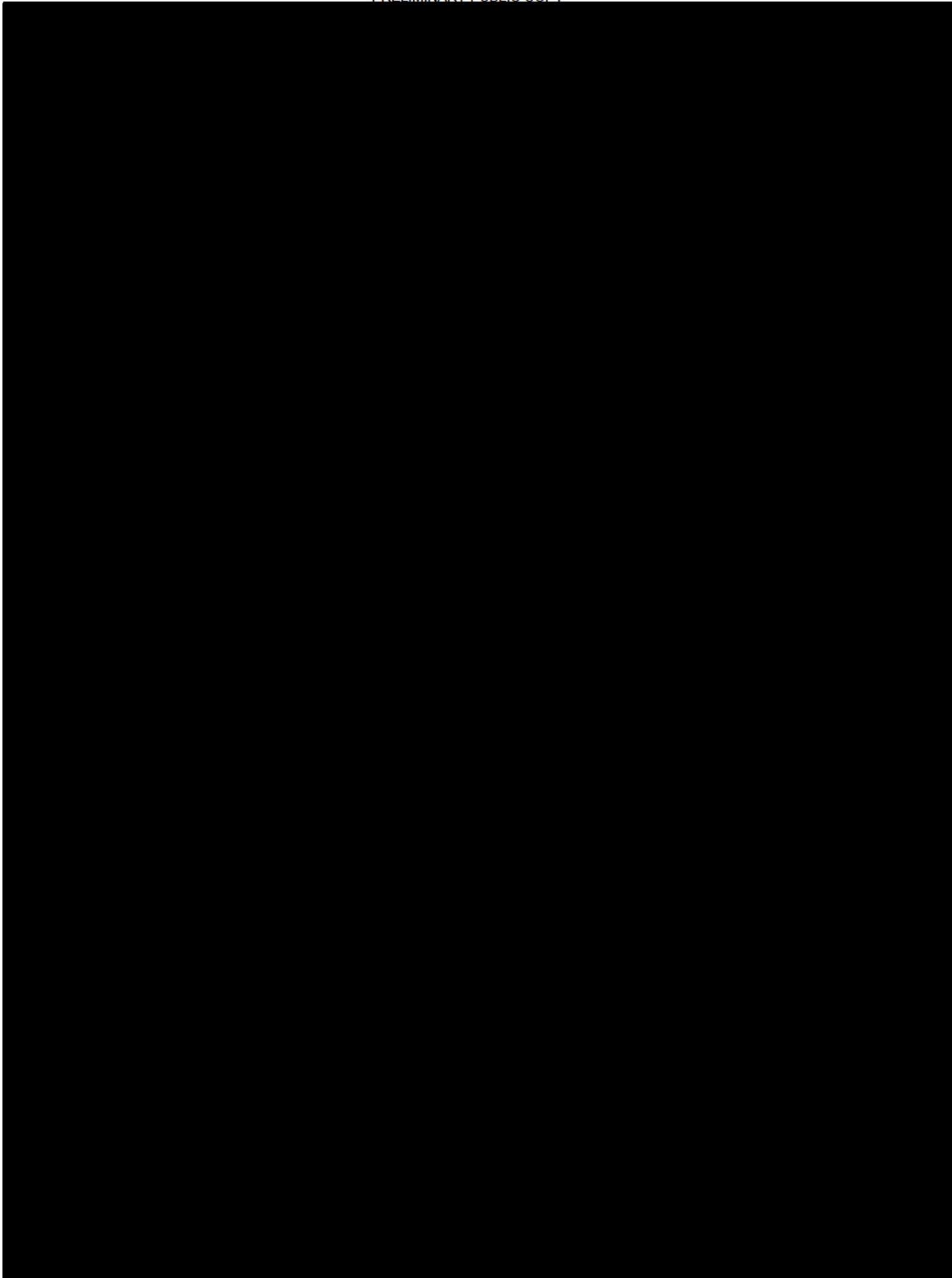




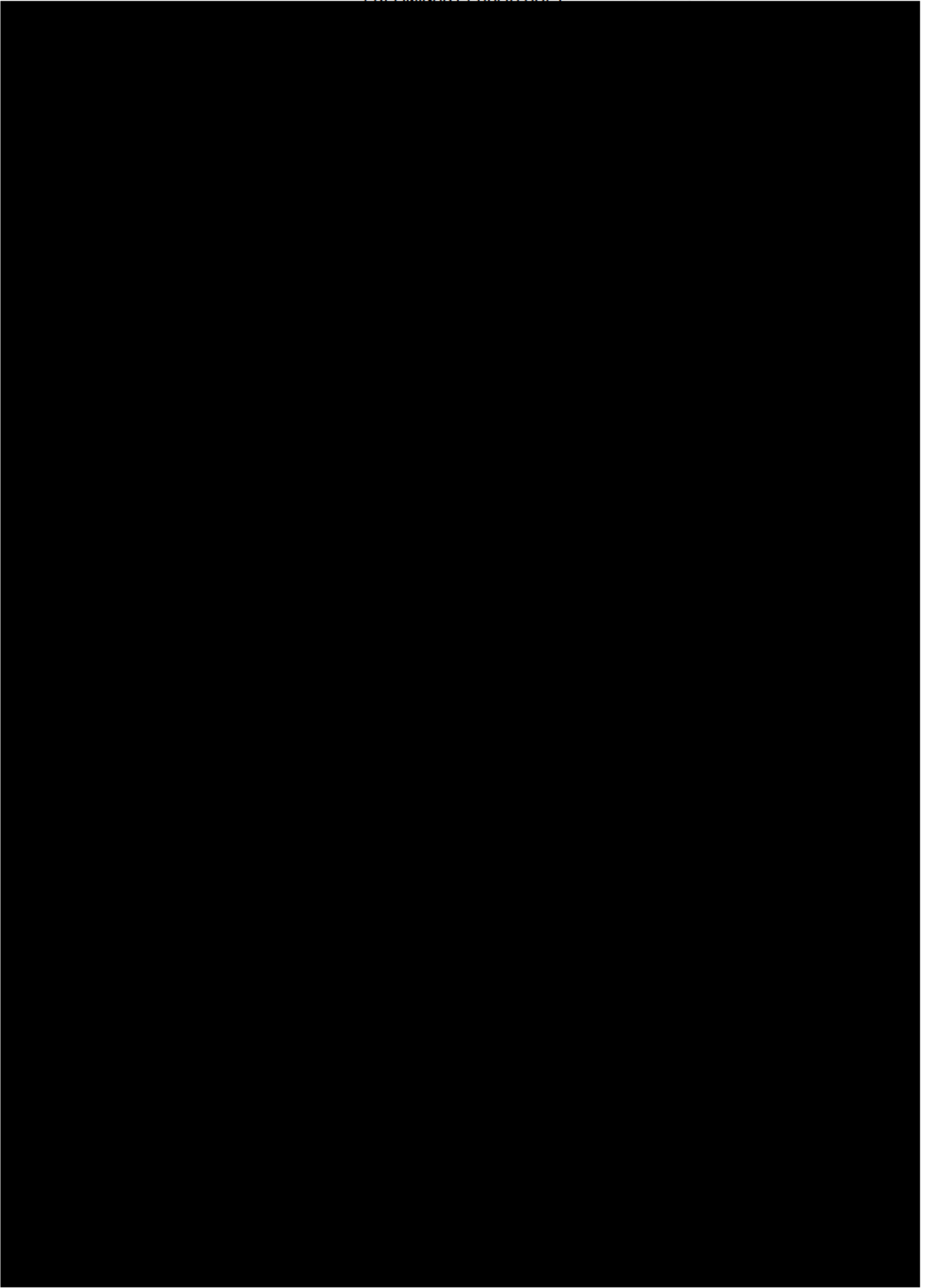
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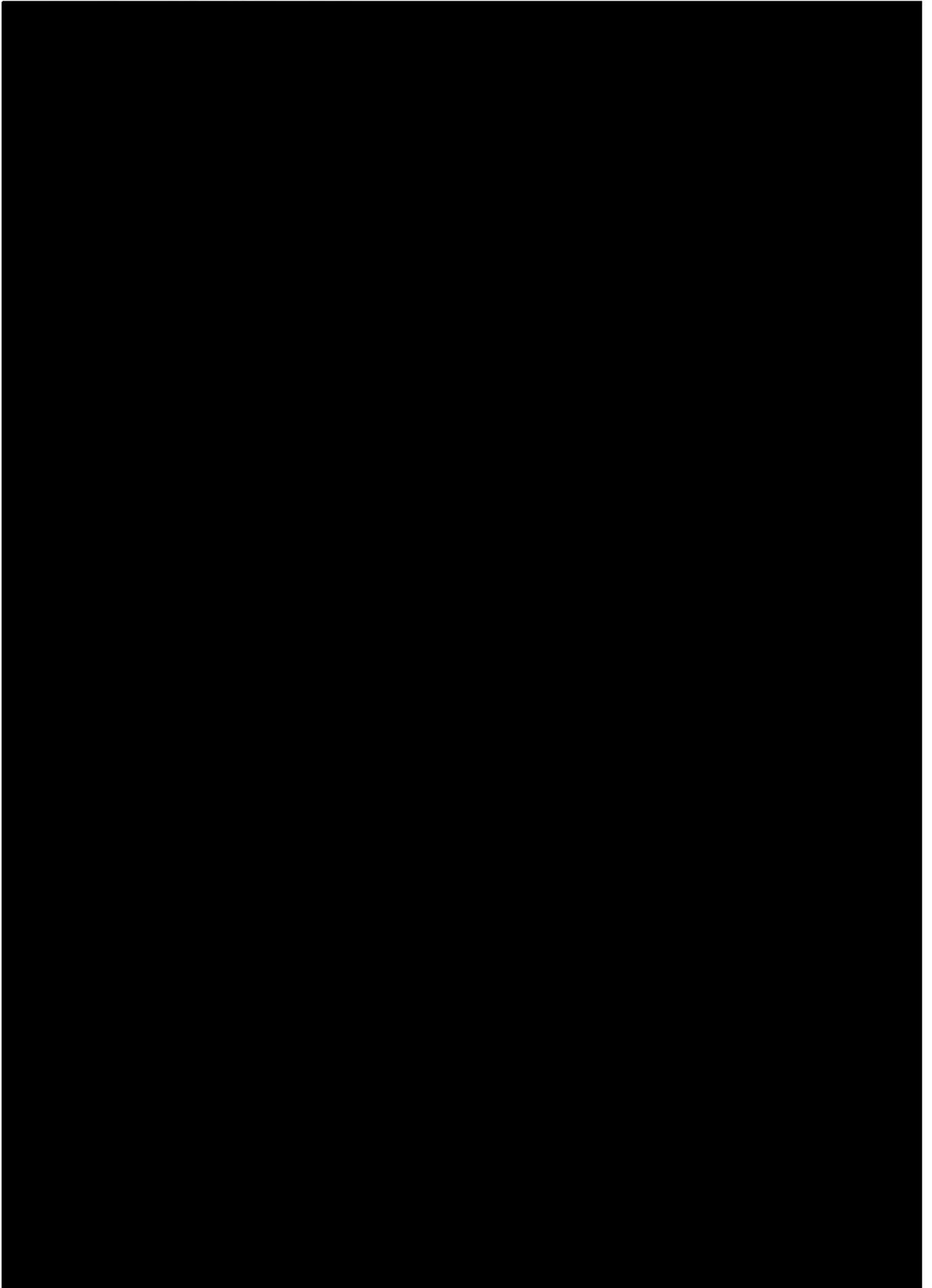






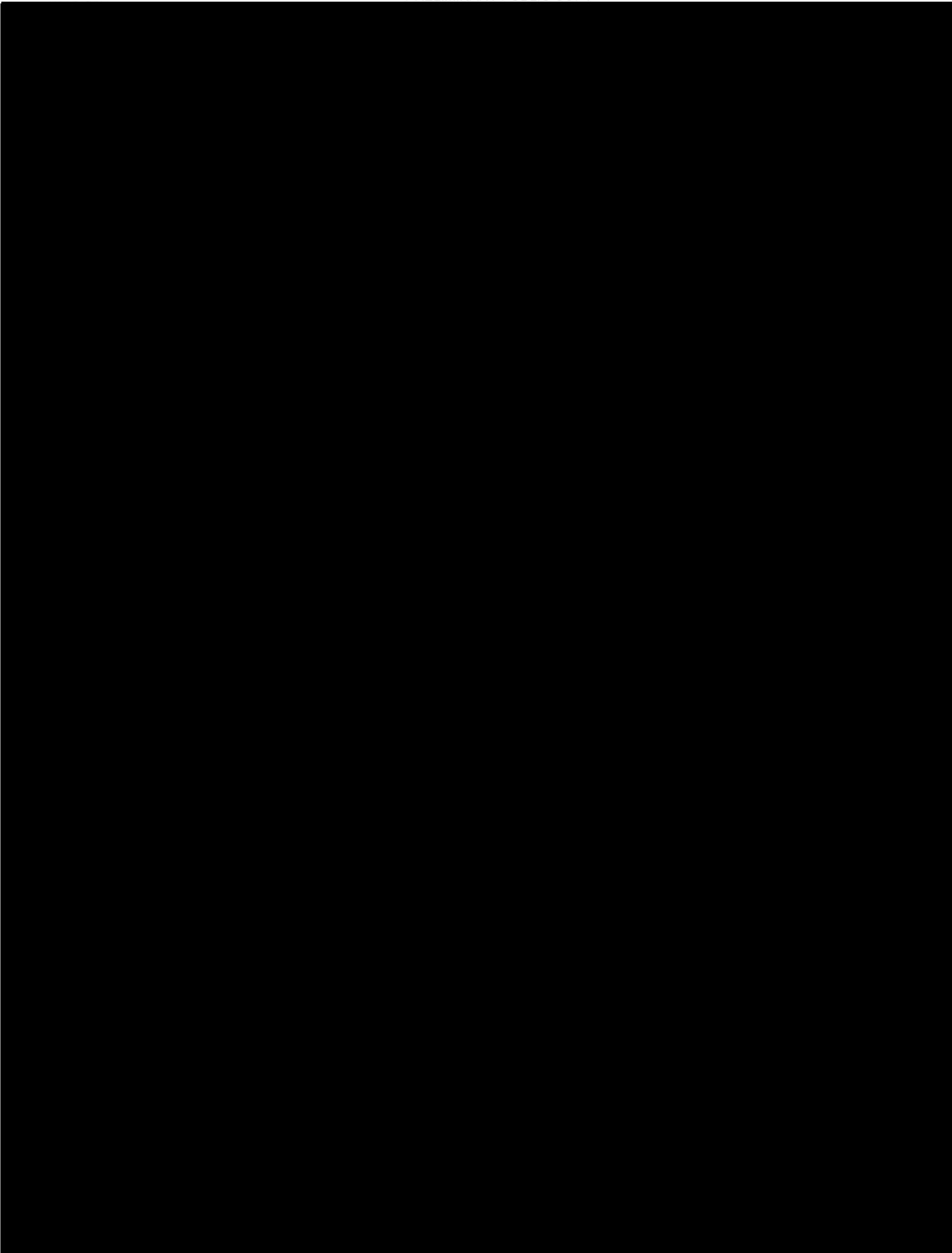
# ATTACHMENT 53

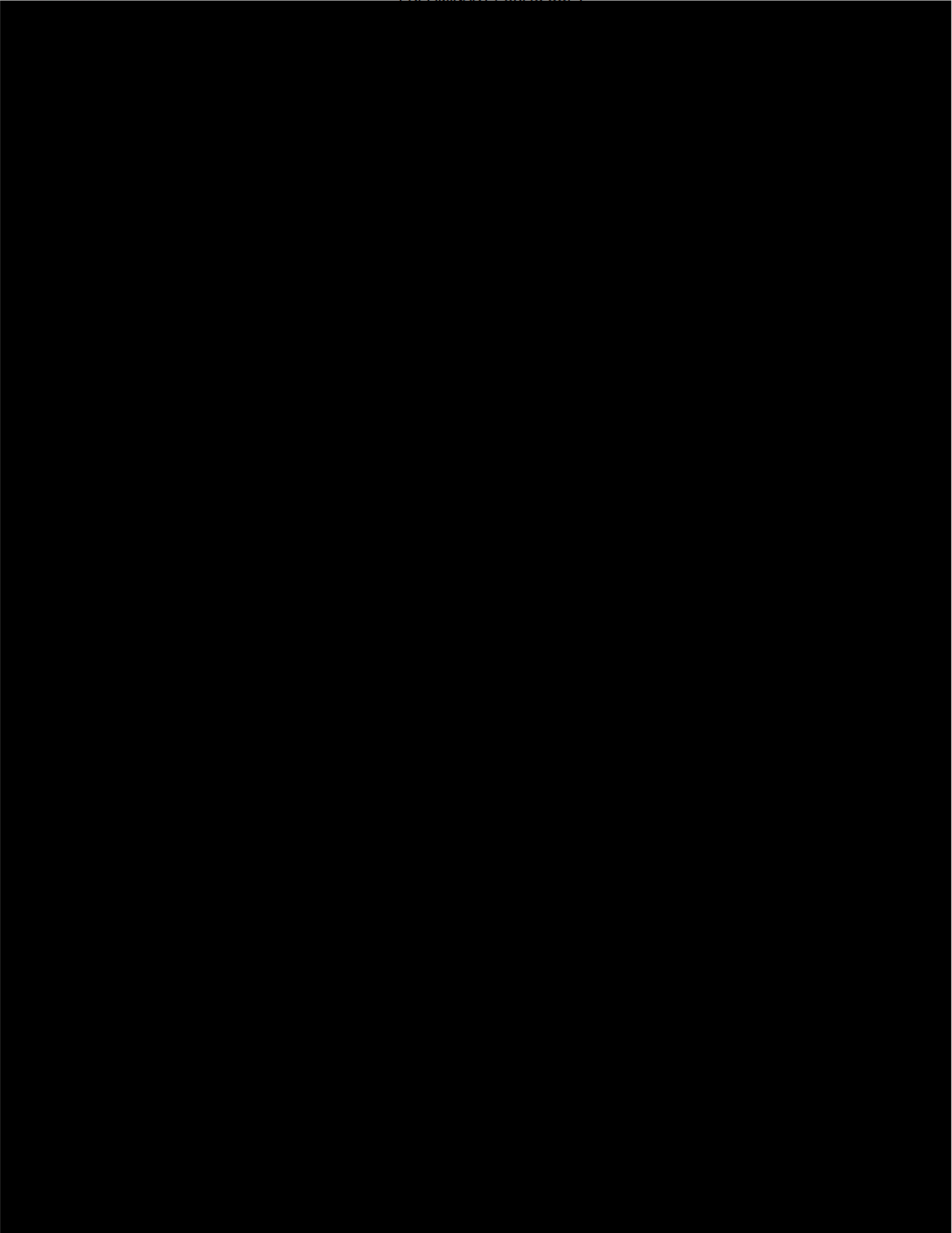


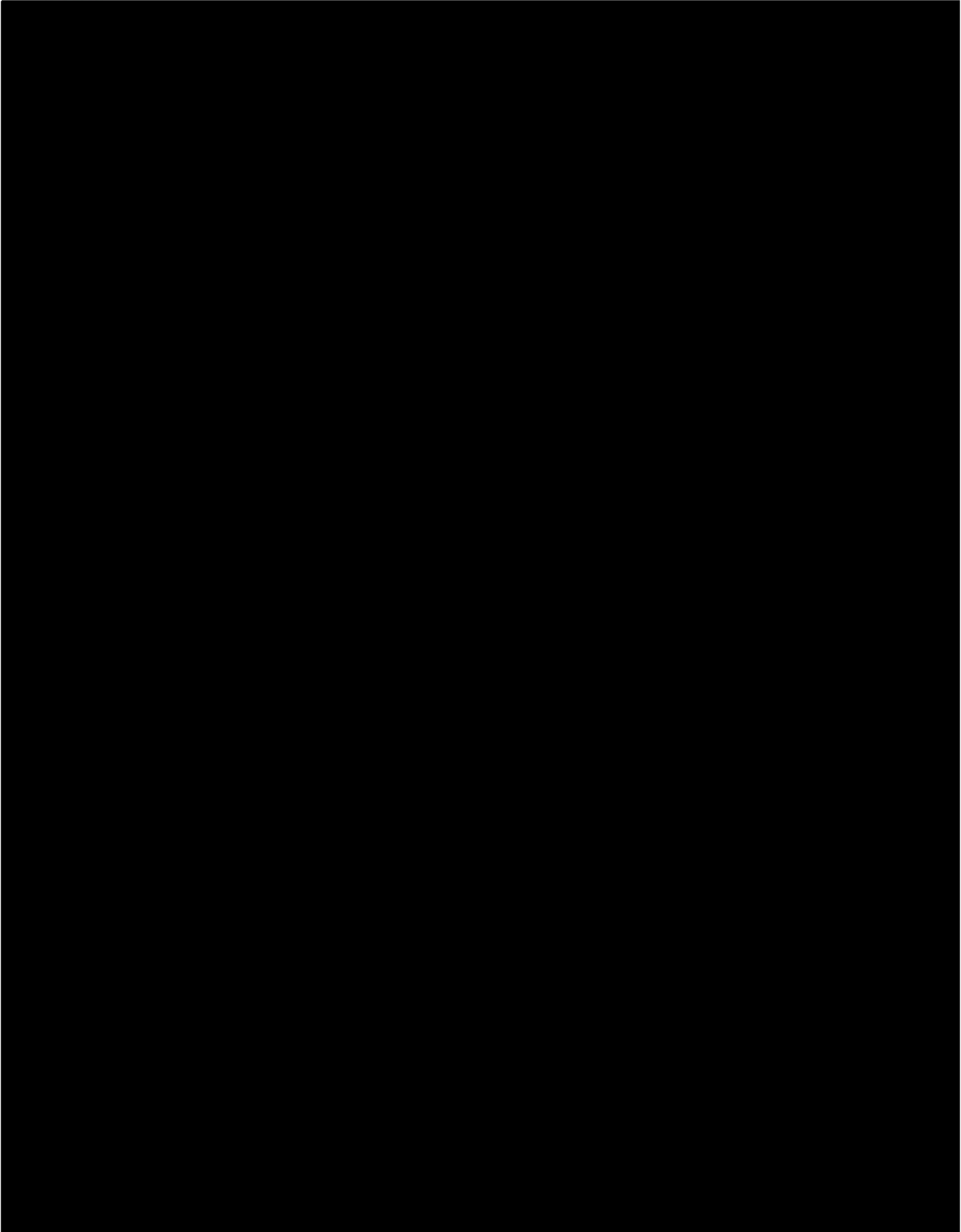


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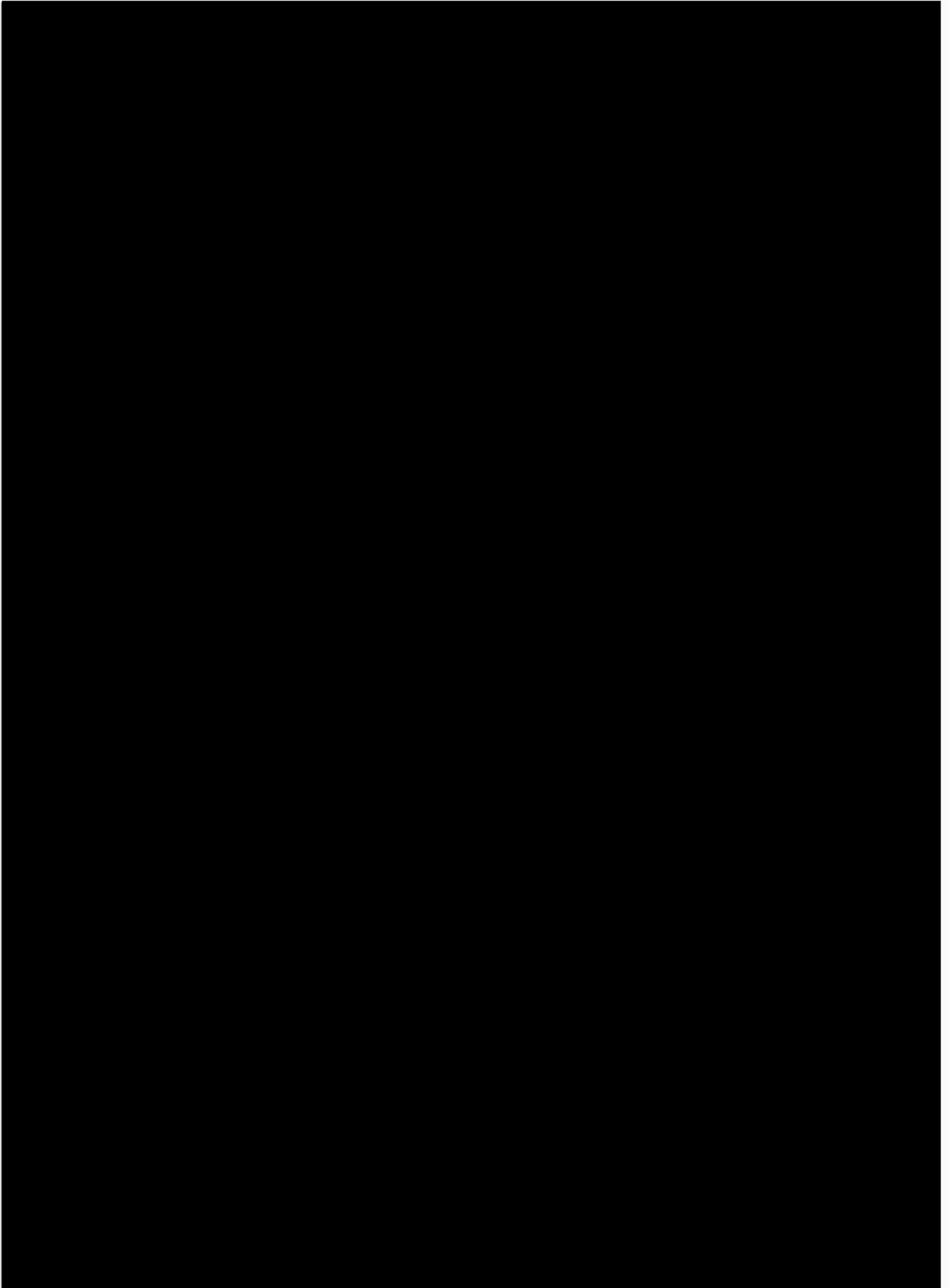


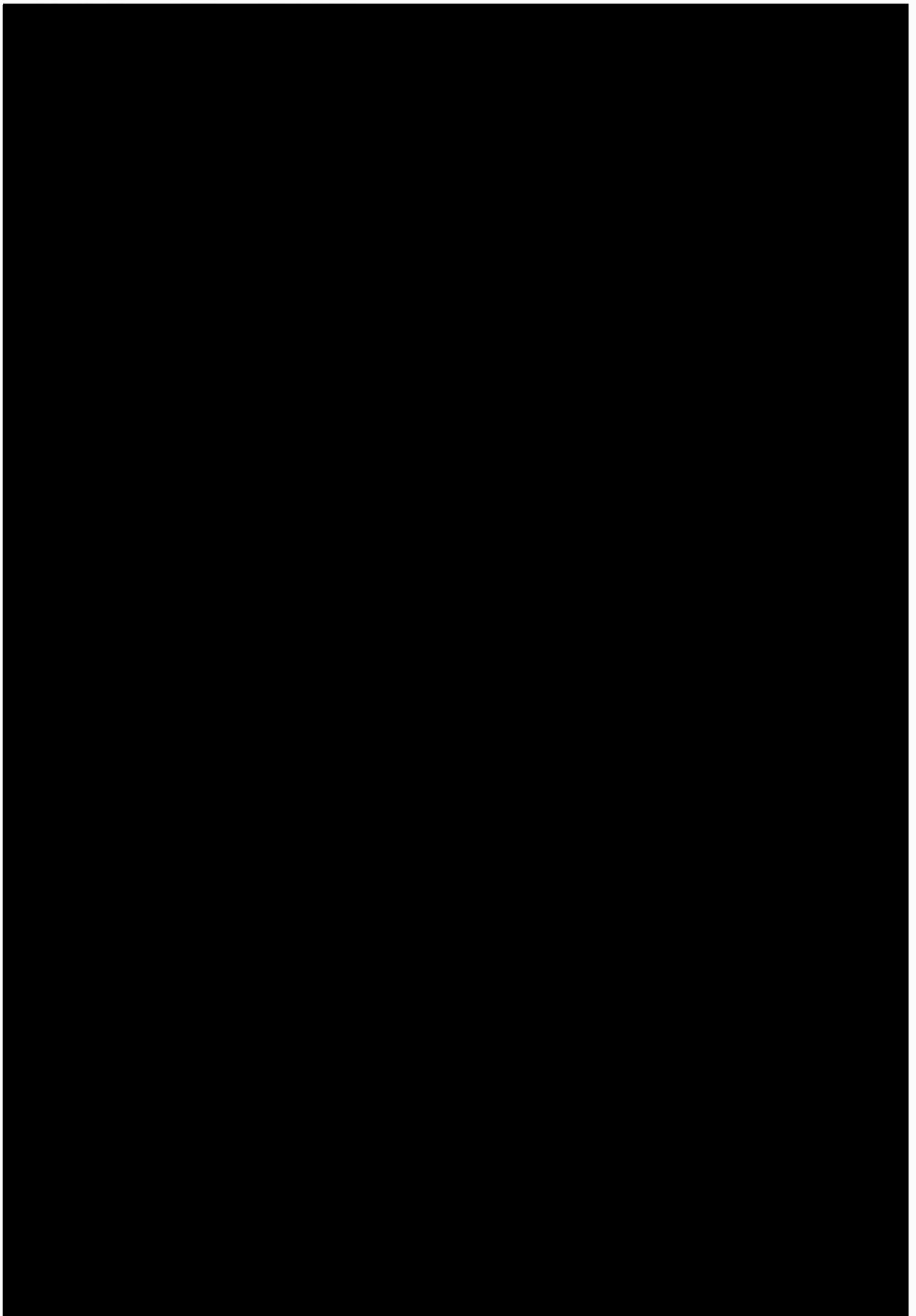


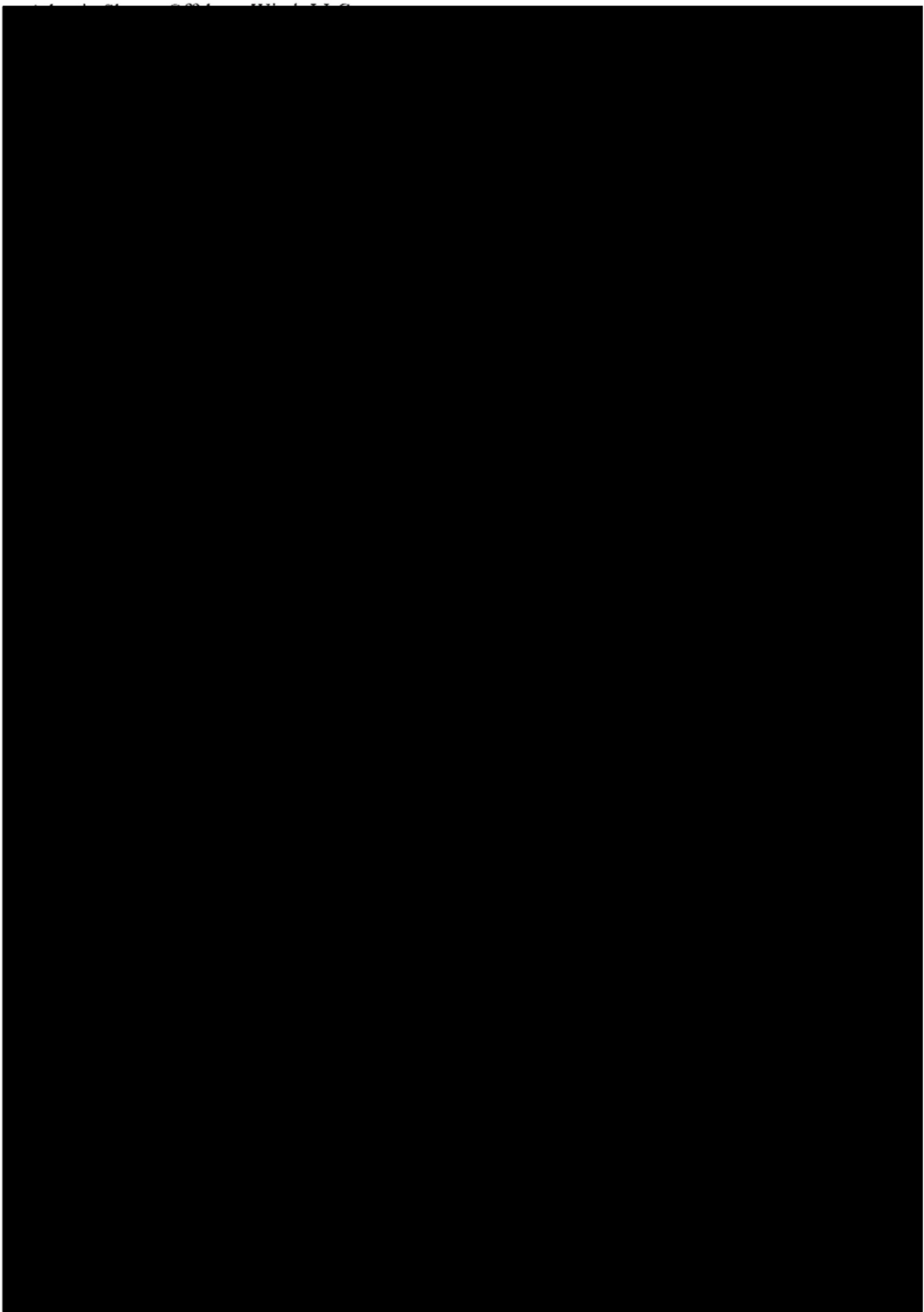




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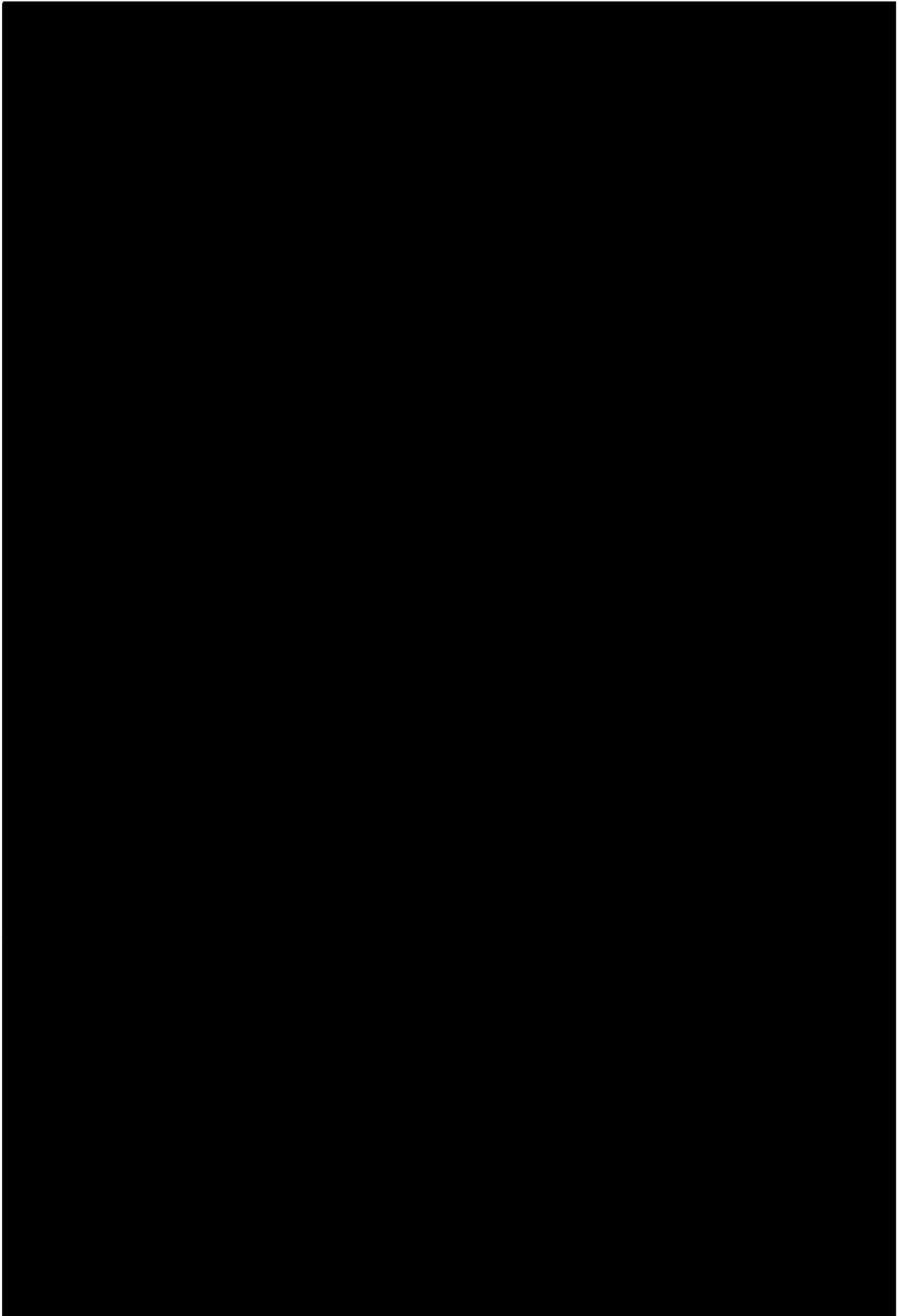


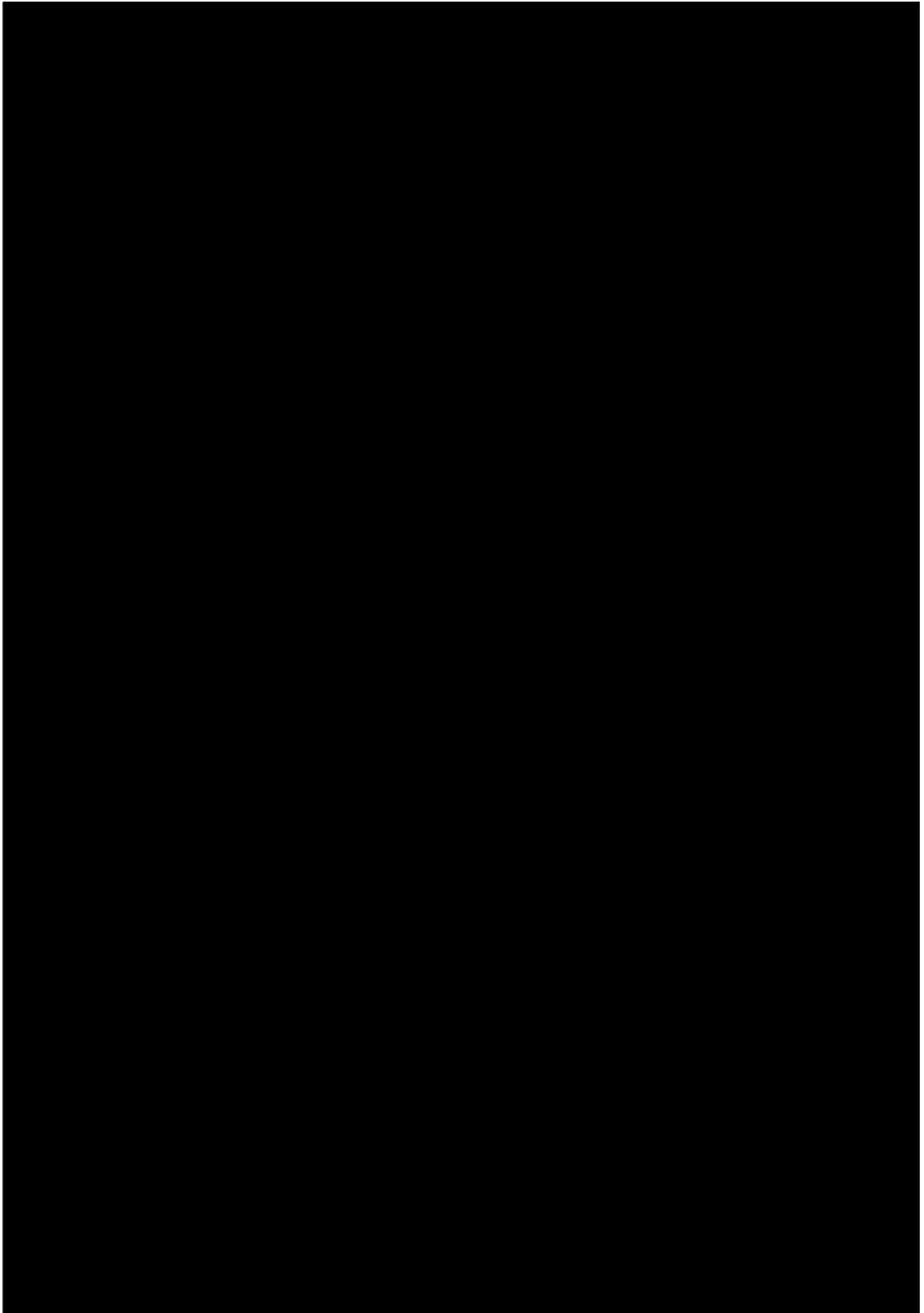




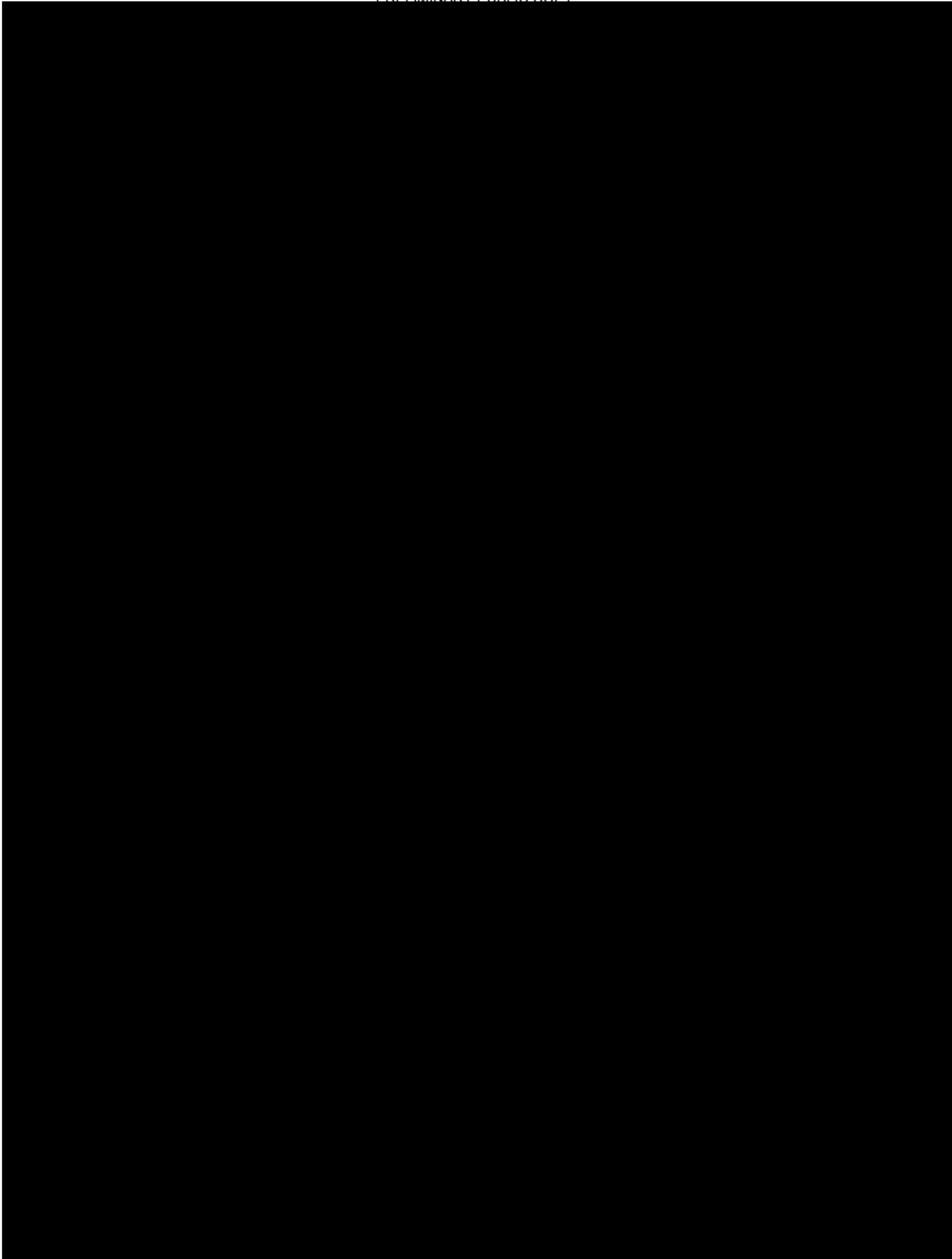
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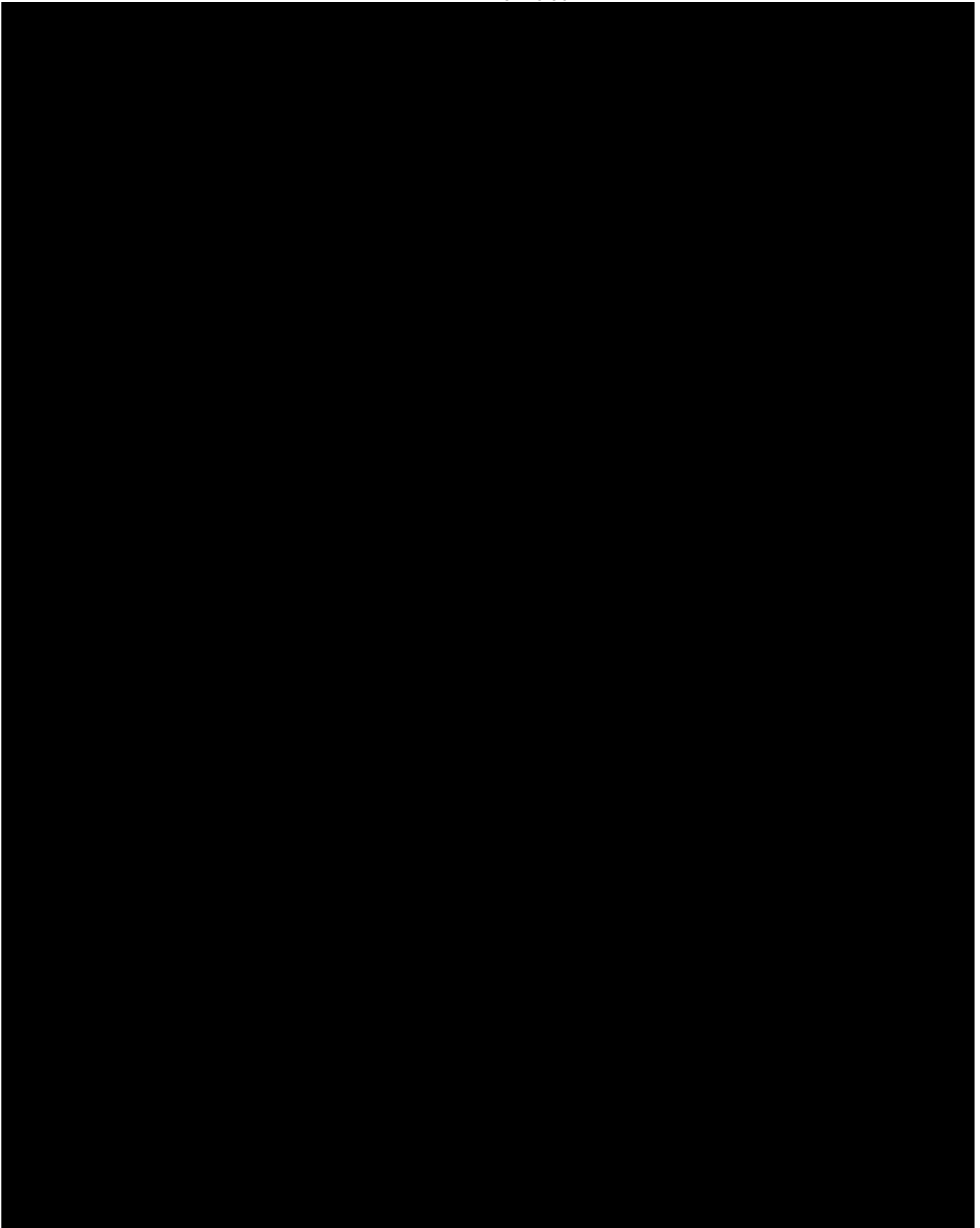




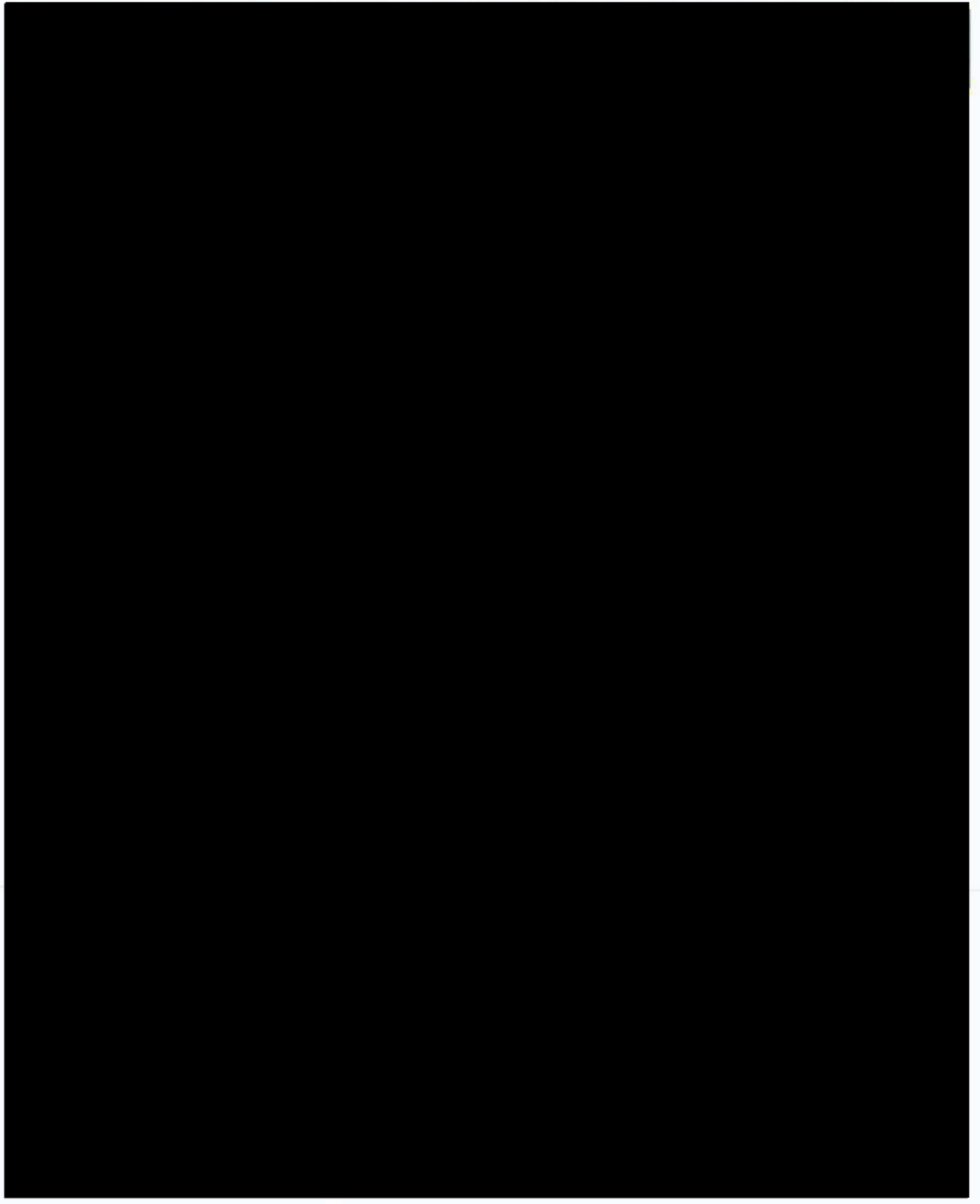


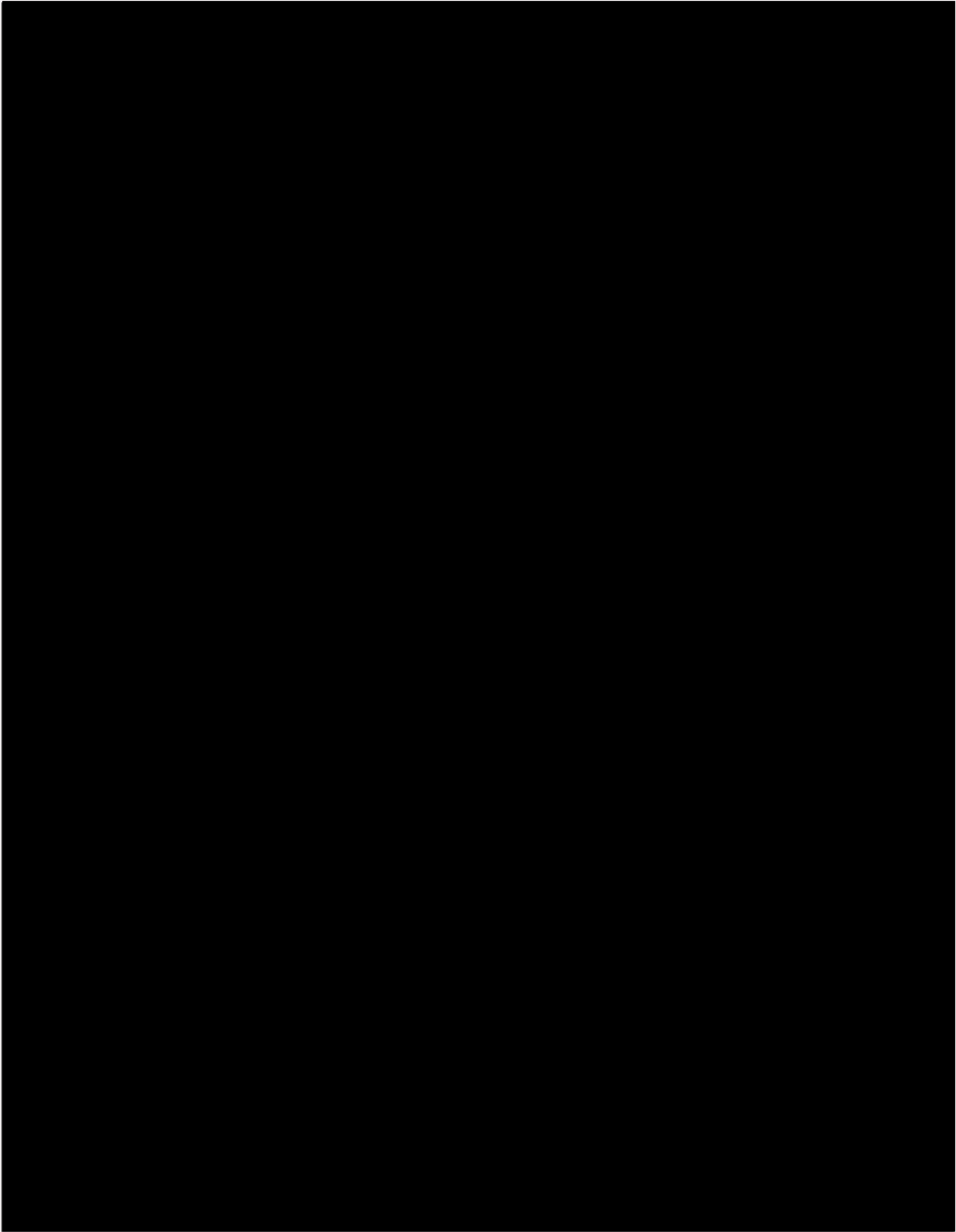
# **ATTACHMENT 57**





# ATTACHMENT 58







# ATTACHMENT 59

# ATLANTIC SHORES OFFSHORE WIND PROJECT 2



## NAMEPLATE CAPACITY

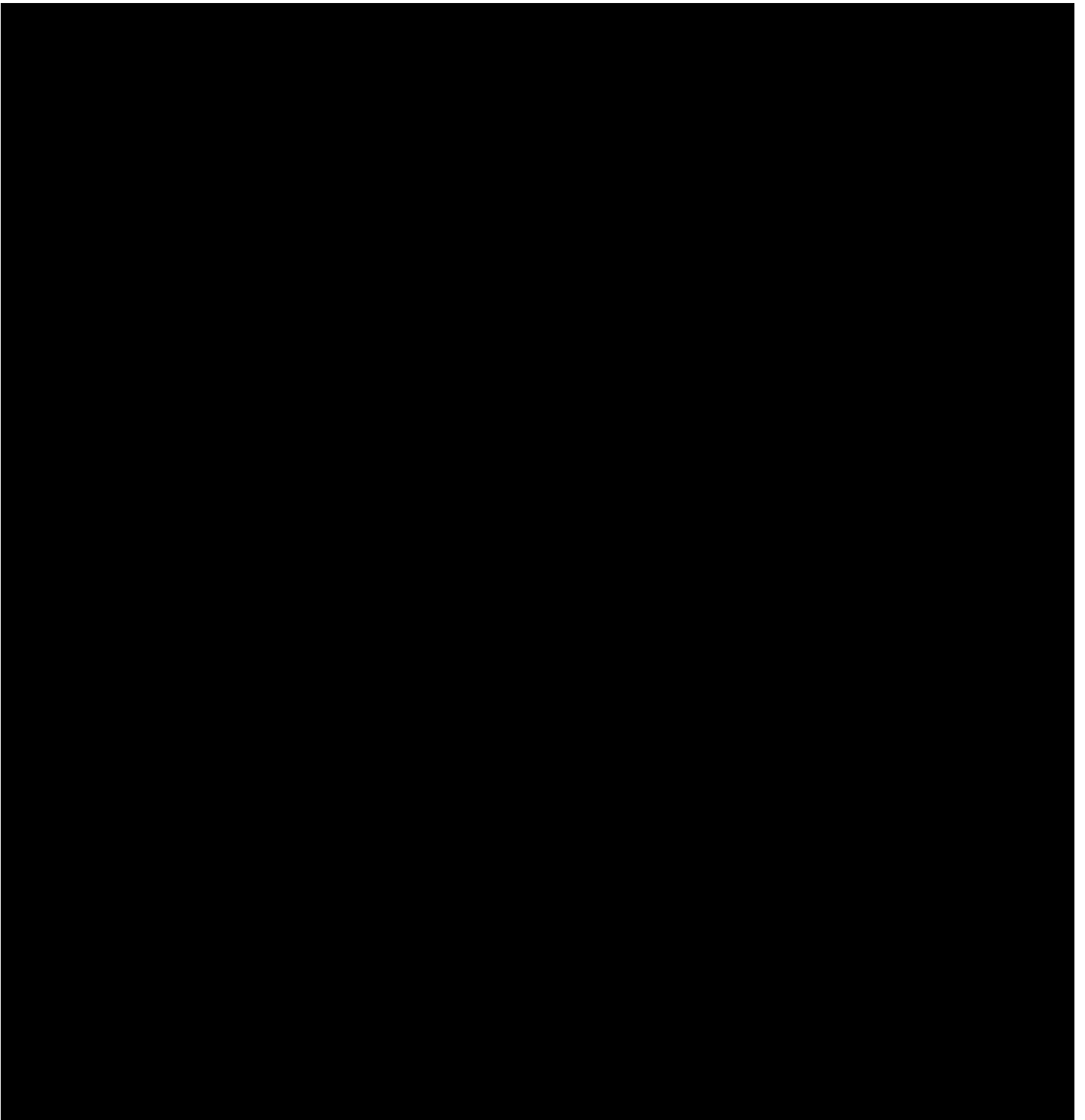
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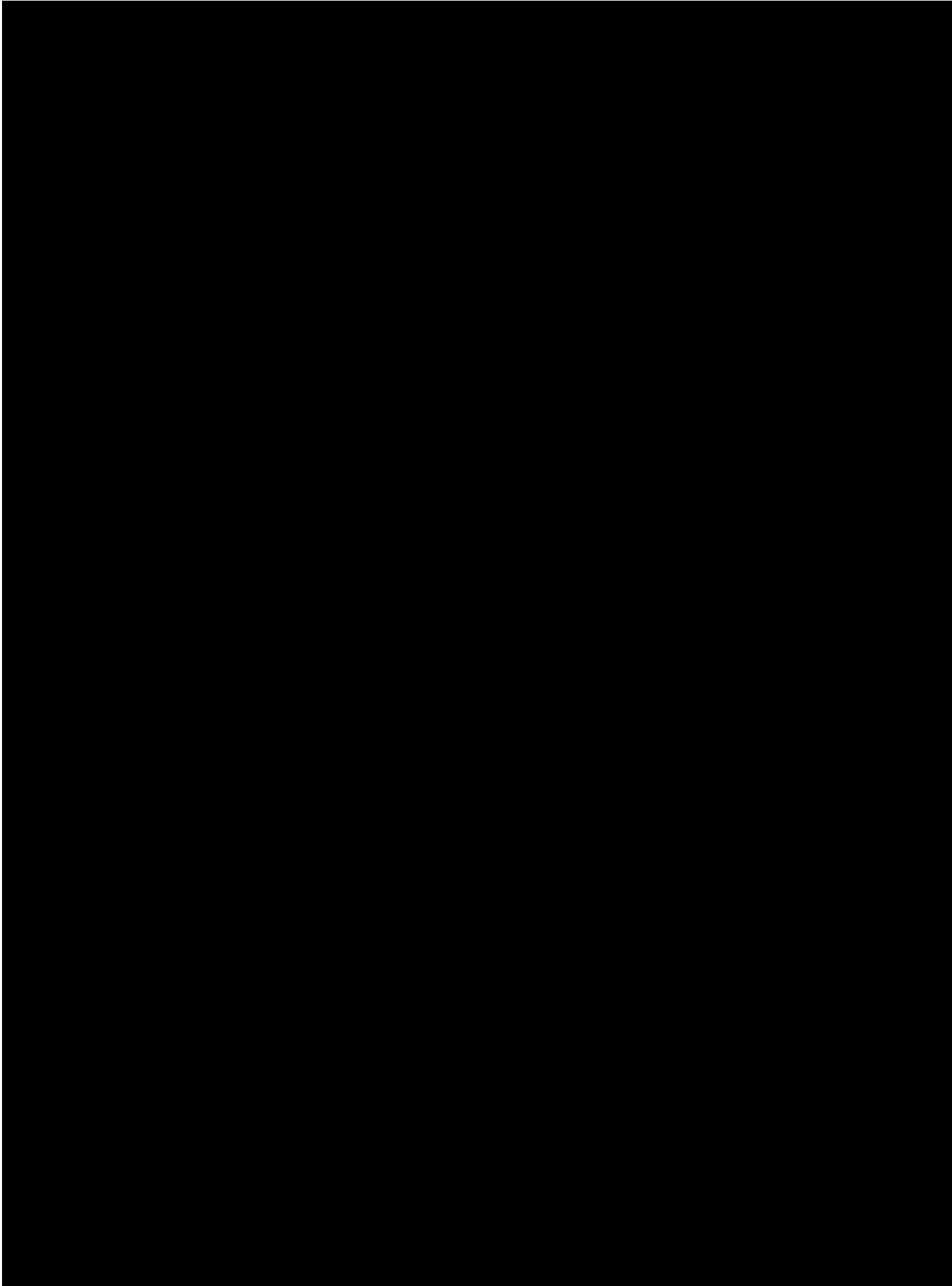


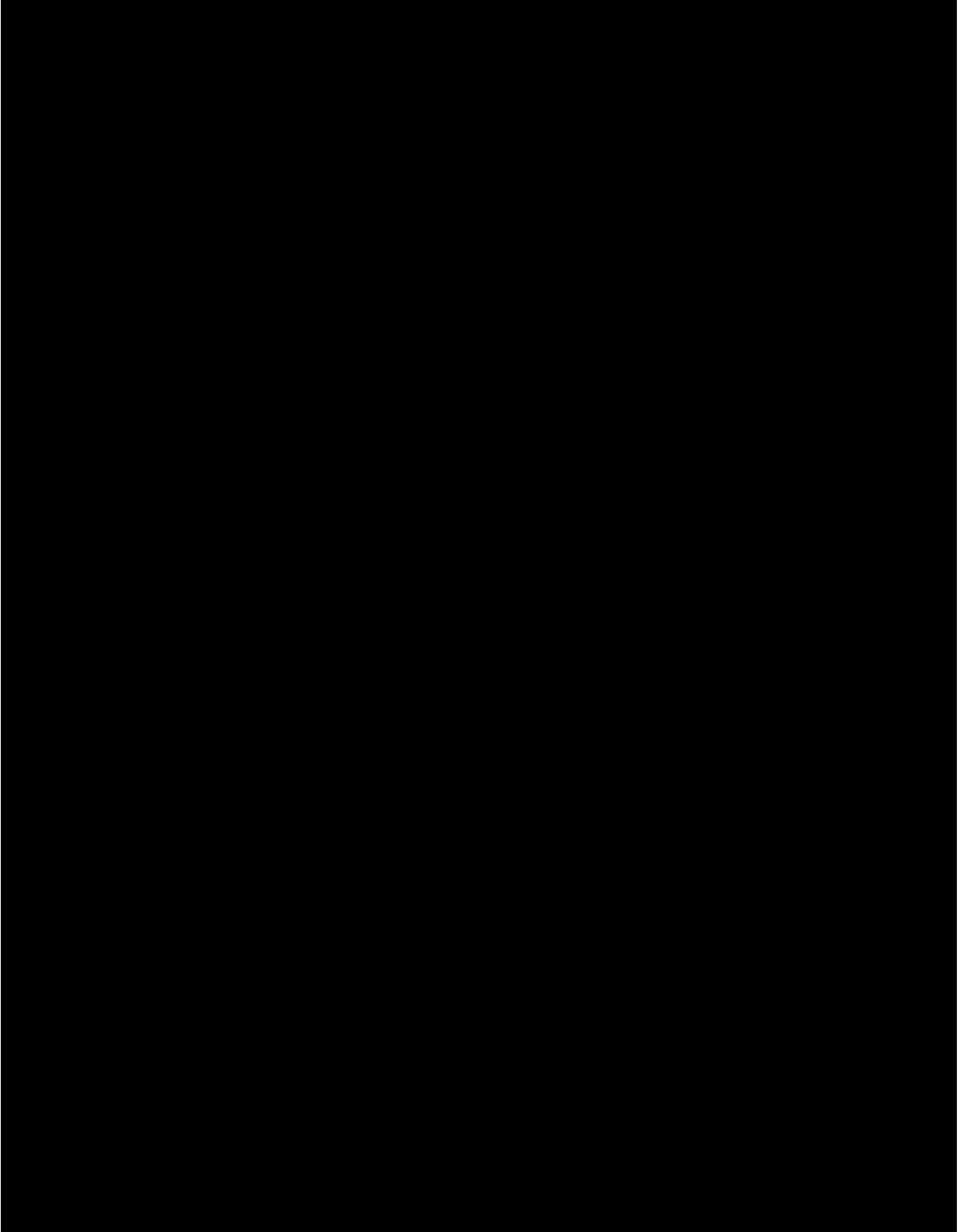
*EDF Renewables*

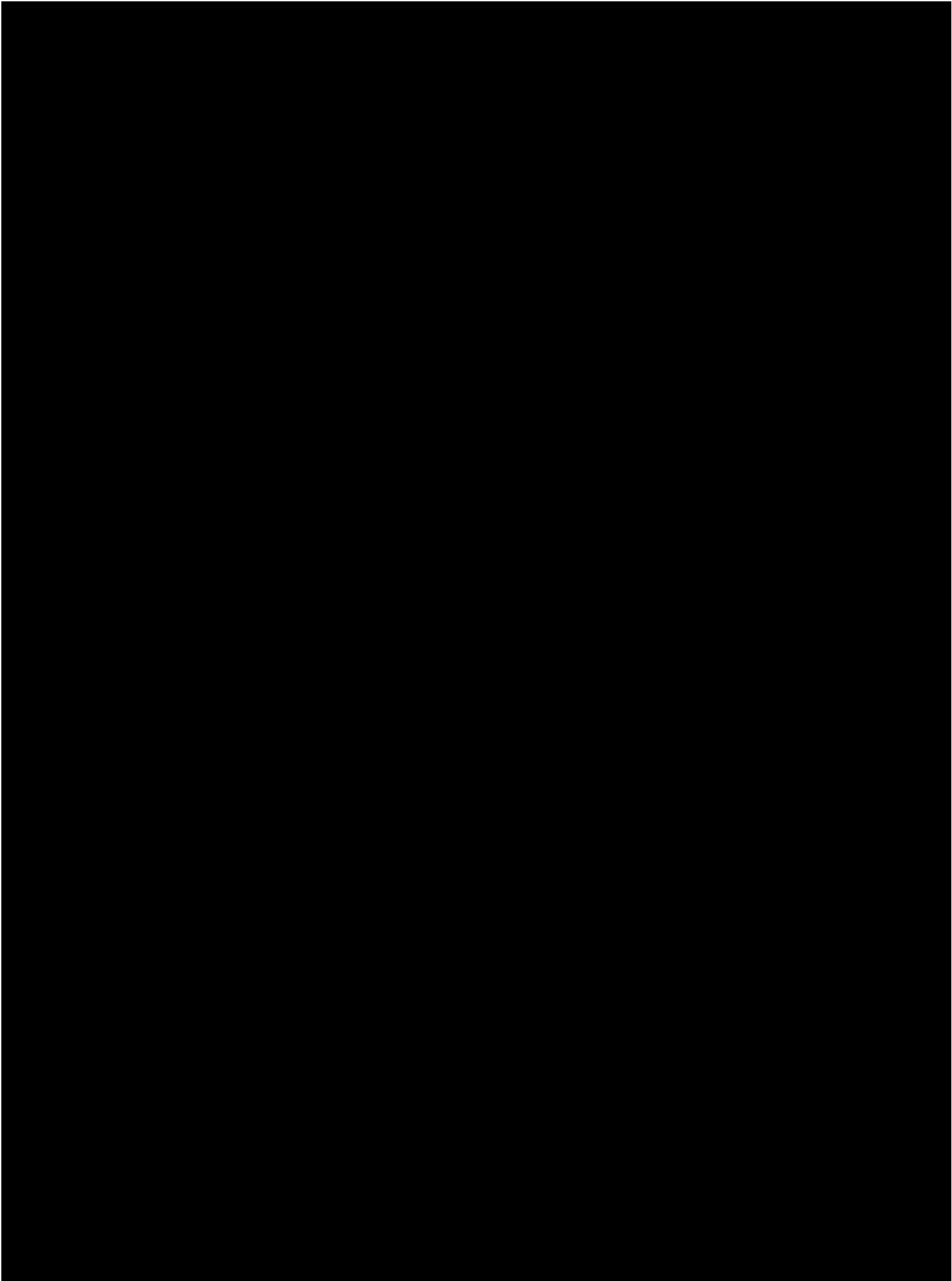


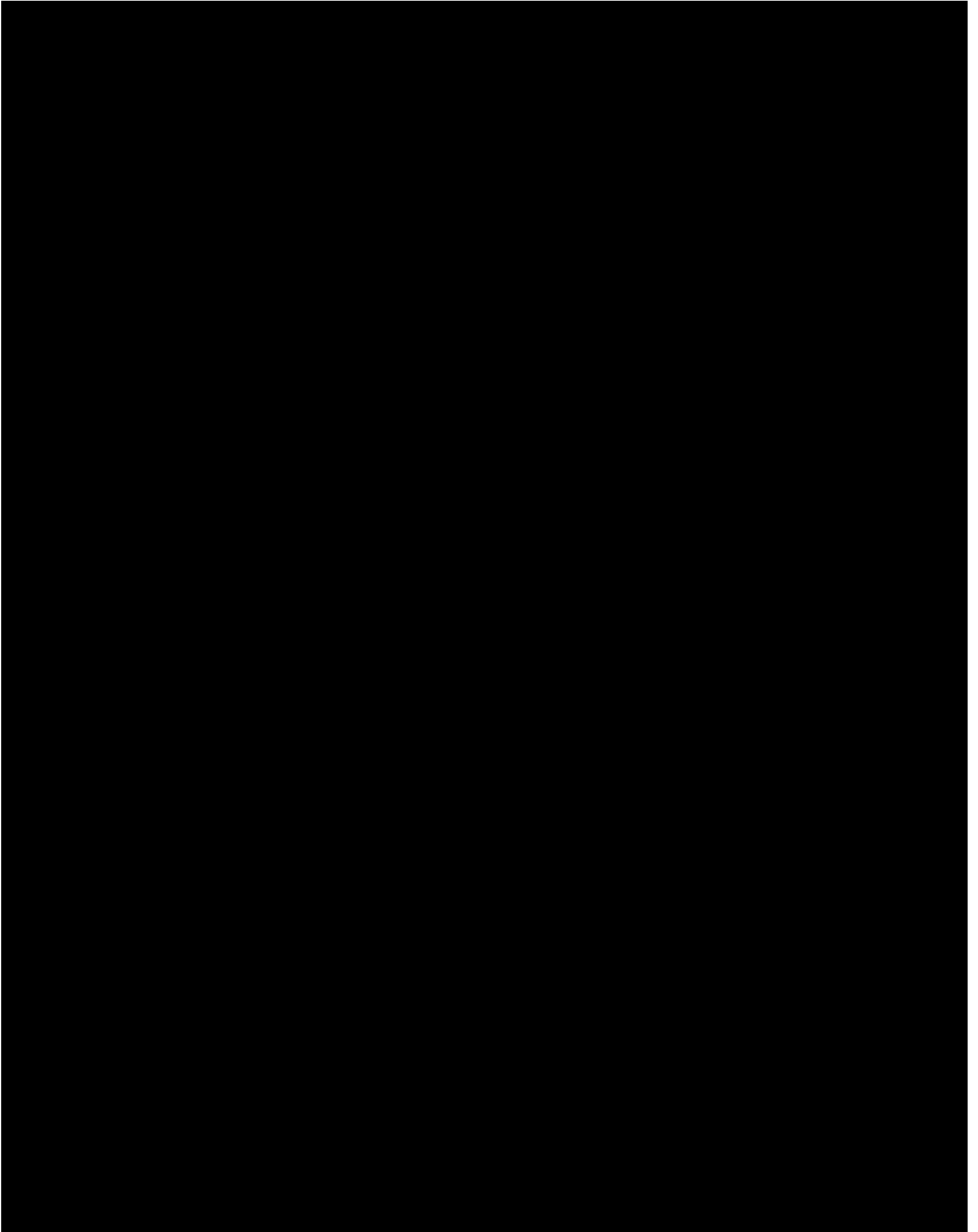
**February 2019**

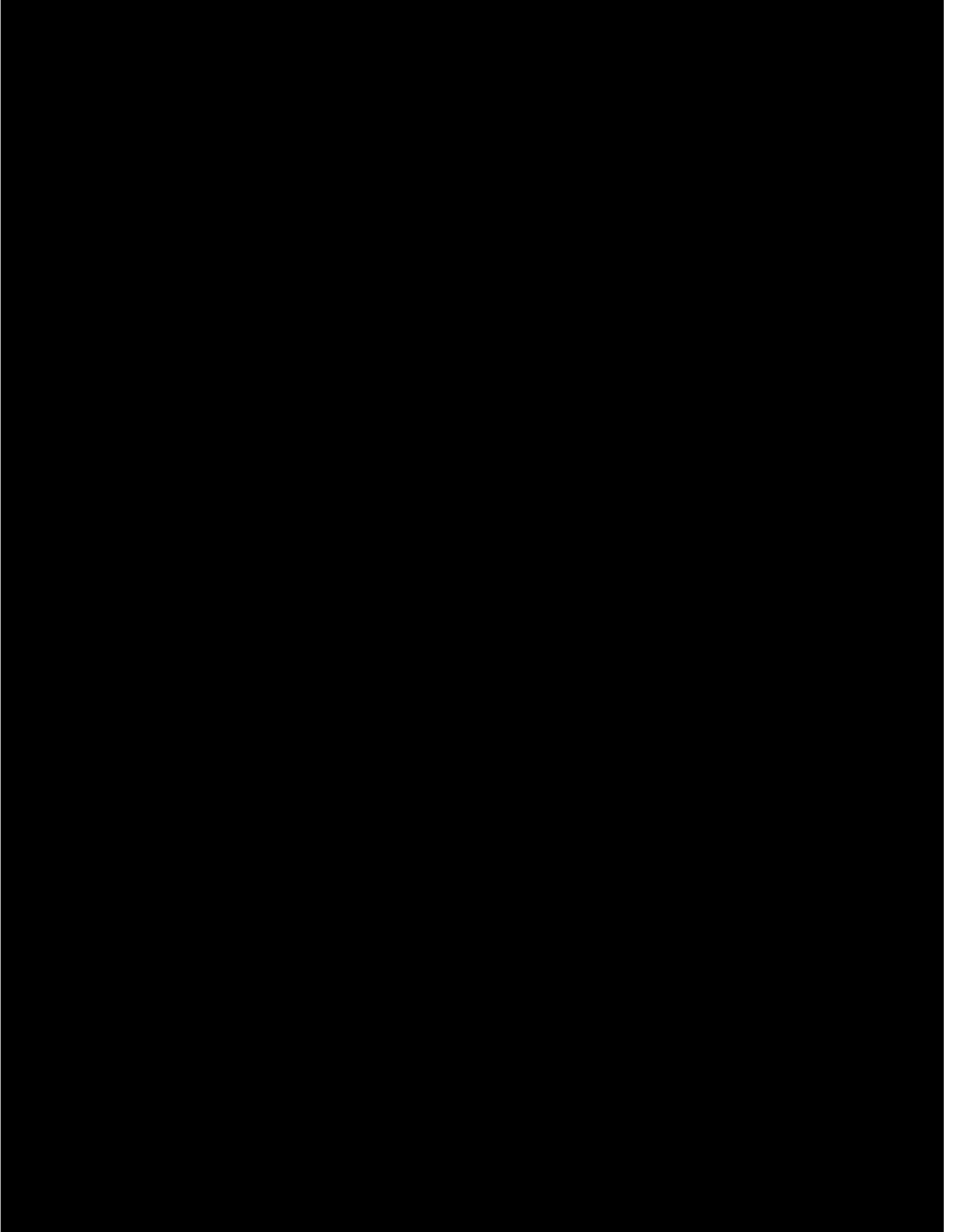




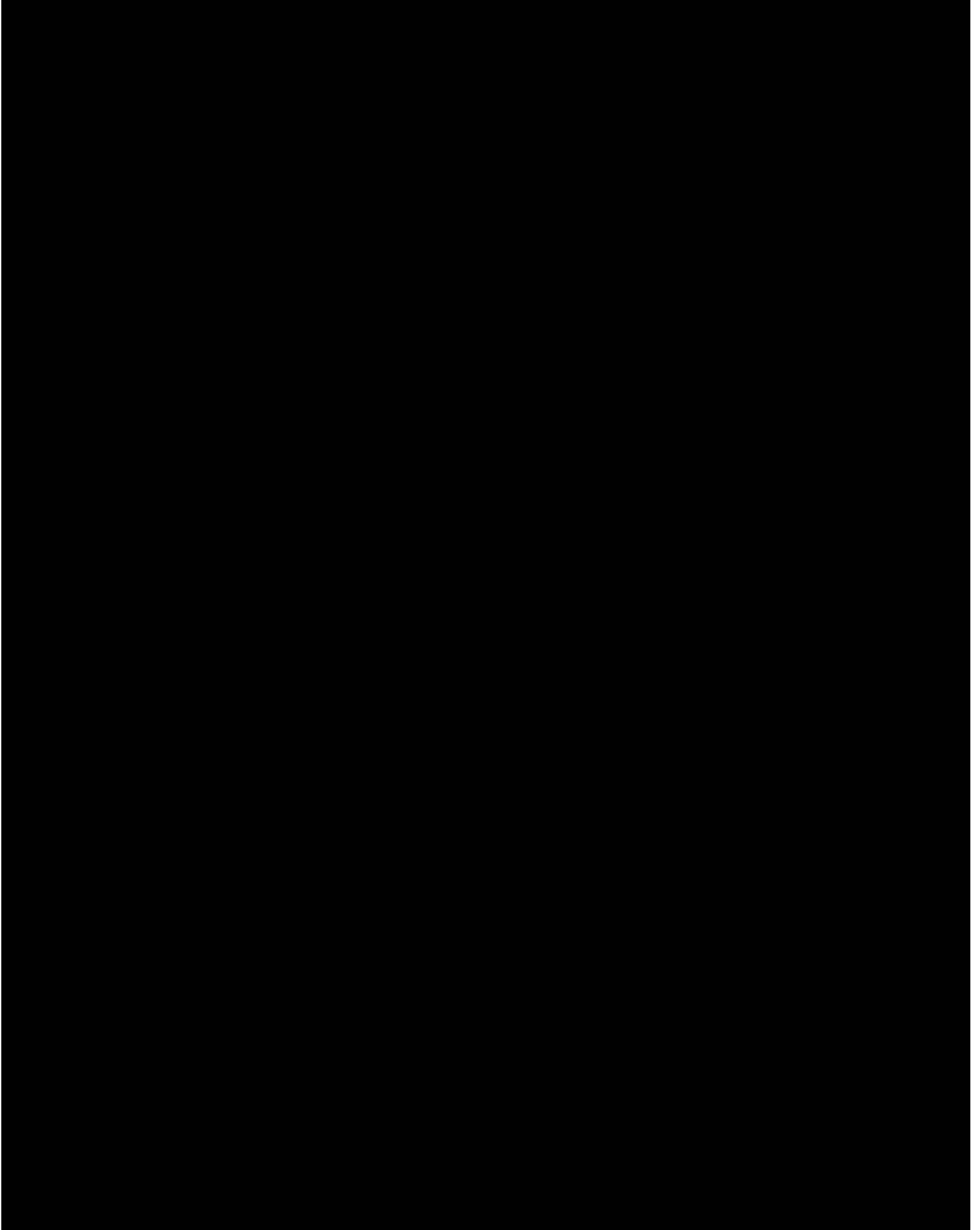


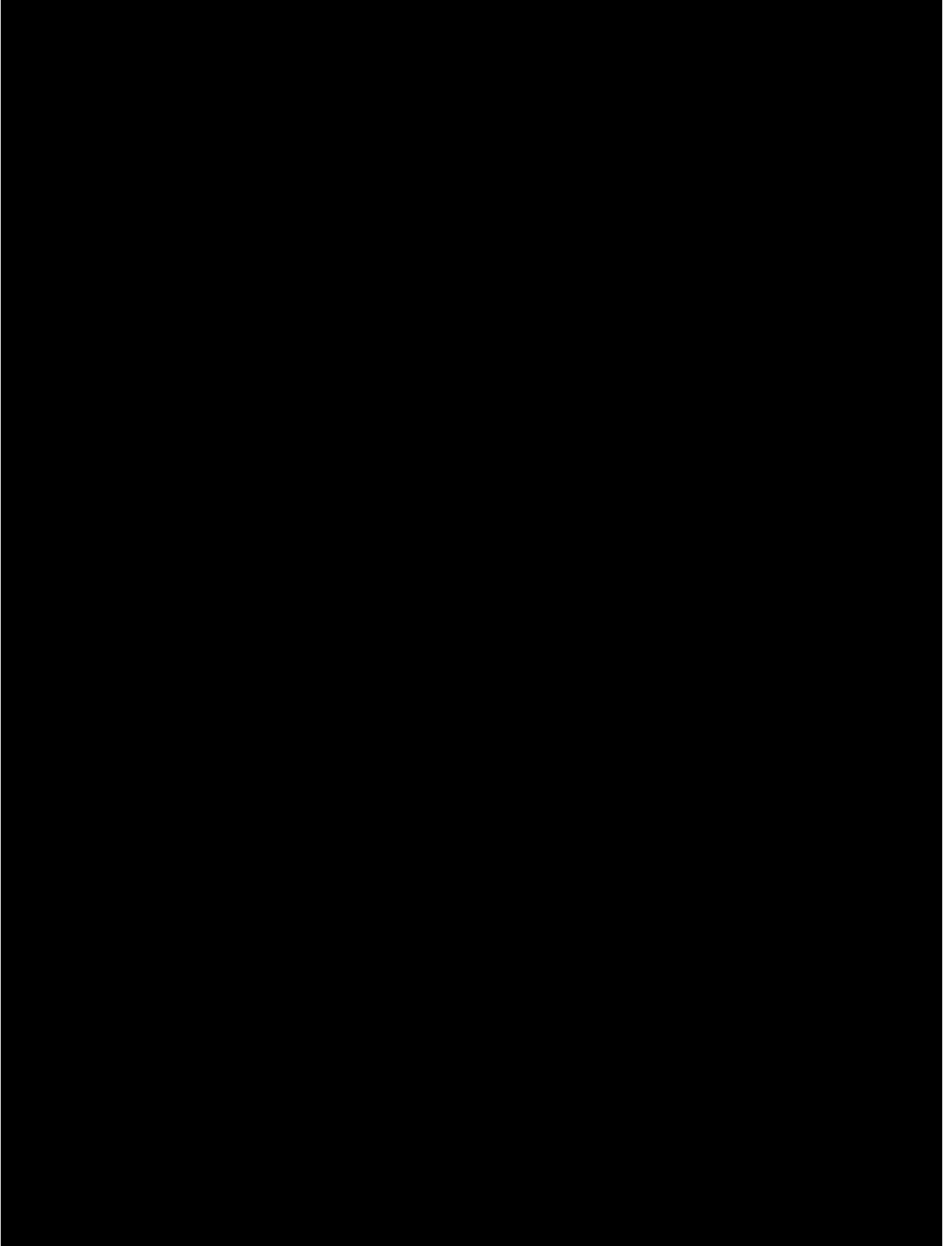




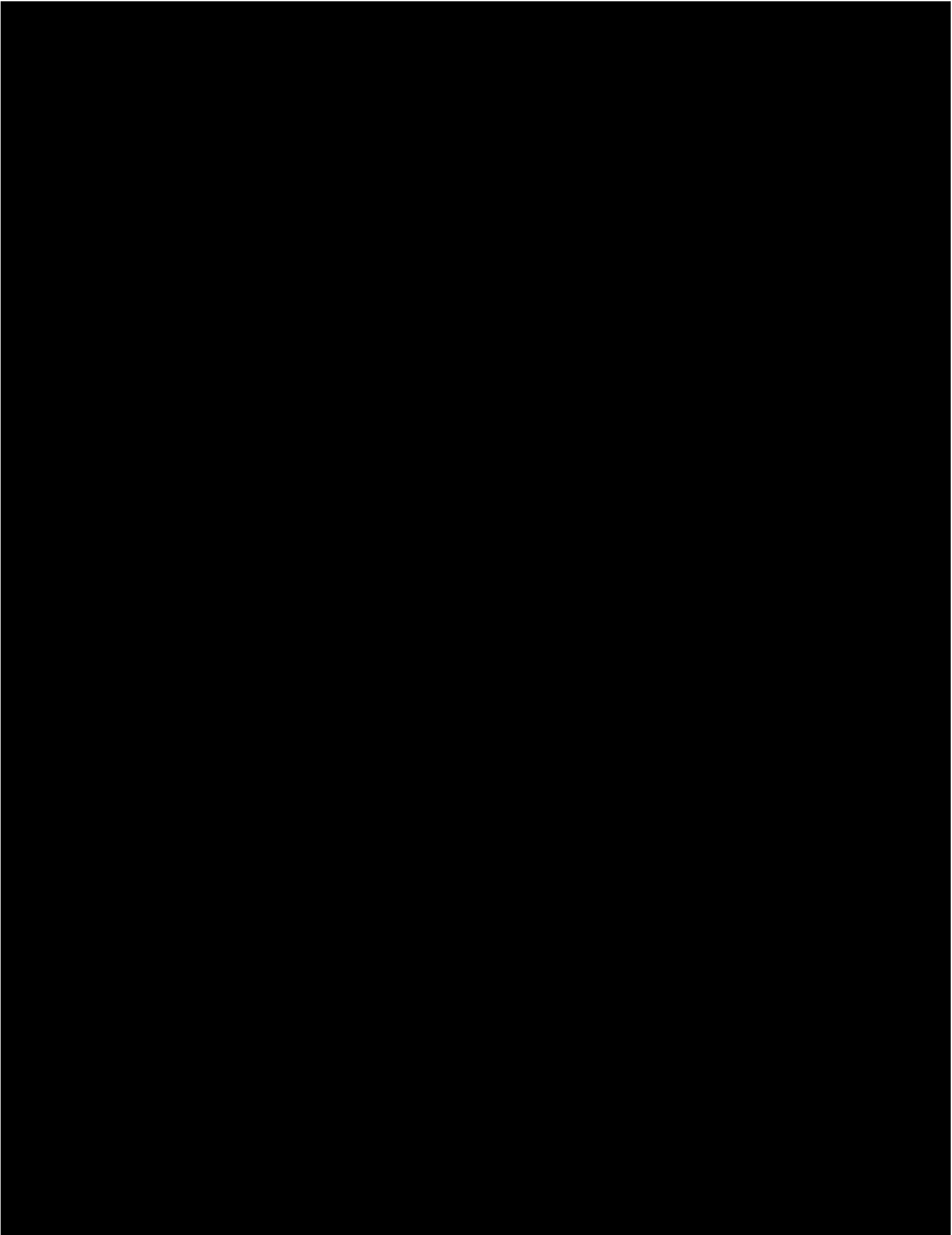


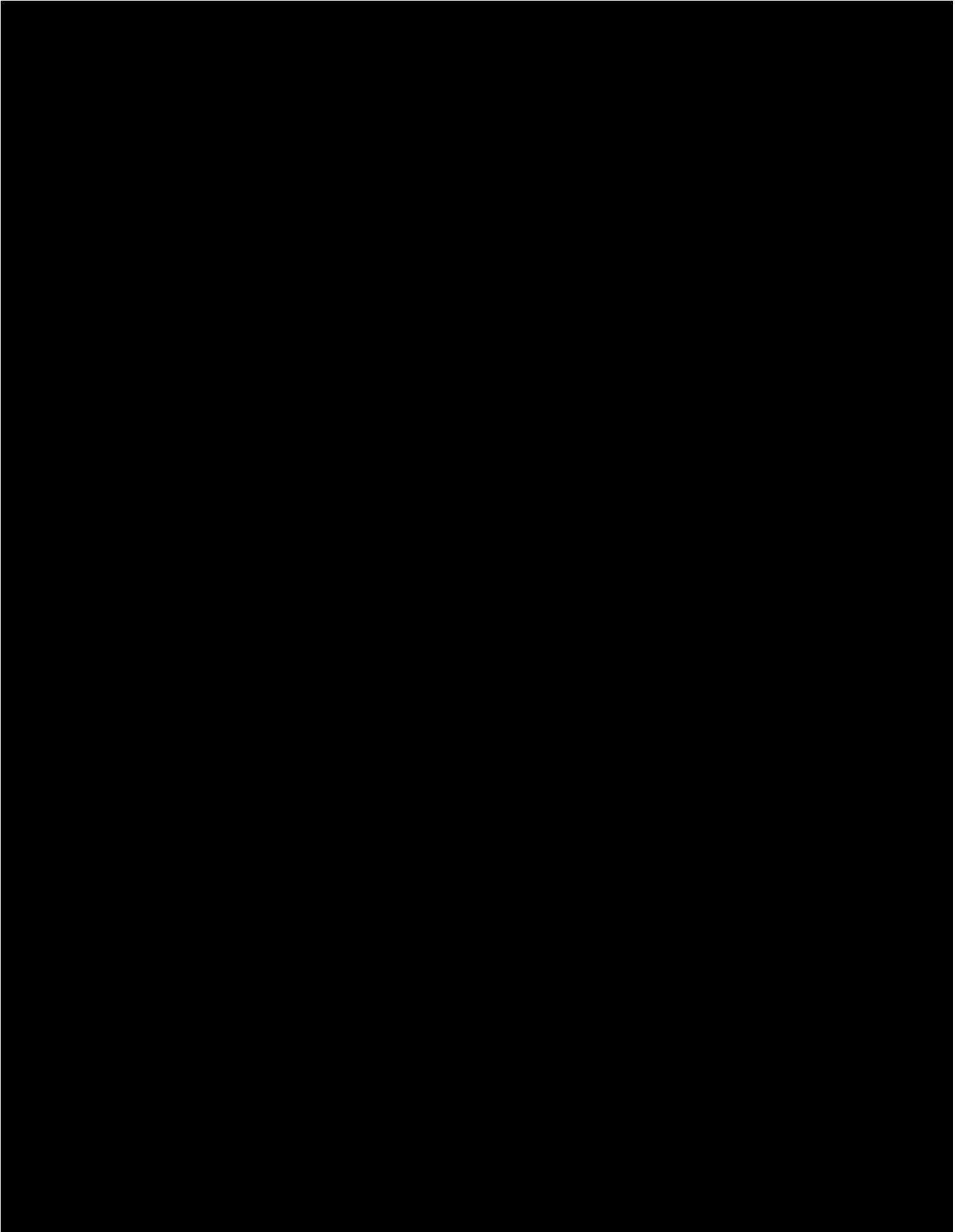


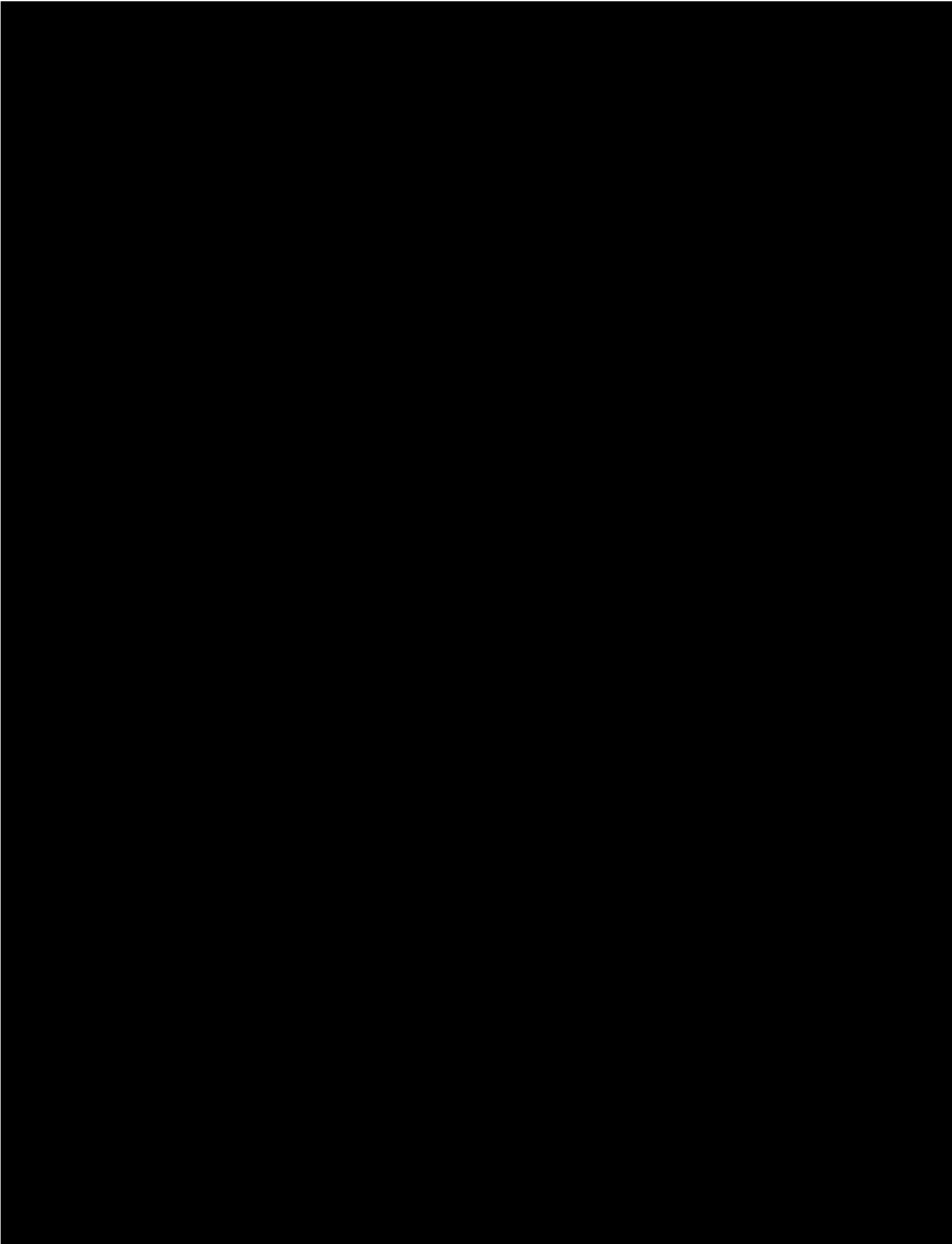


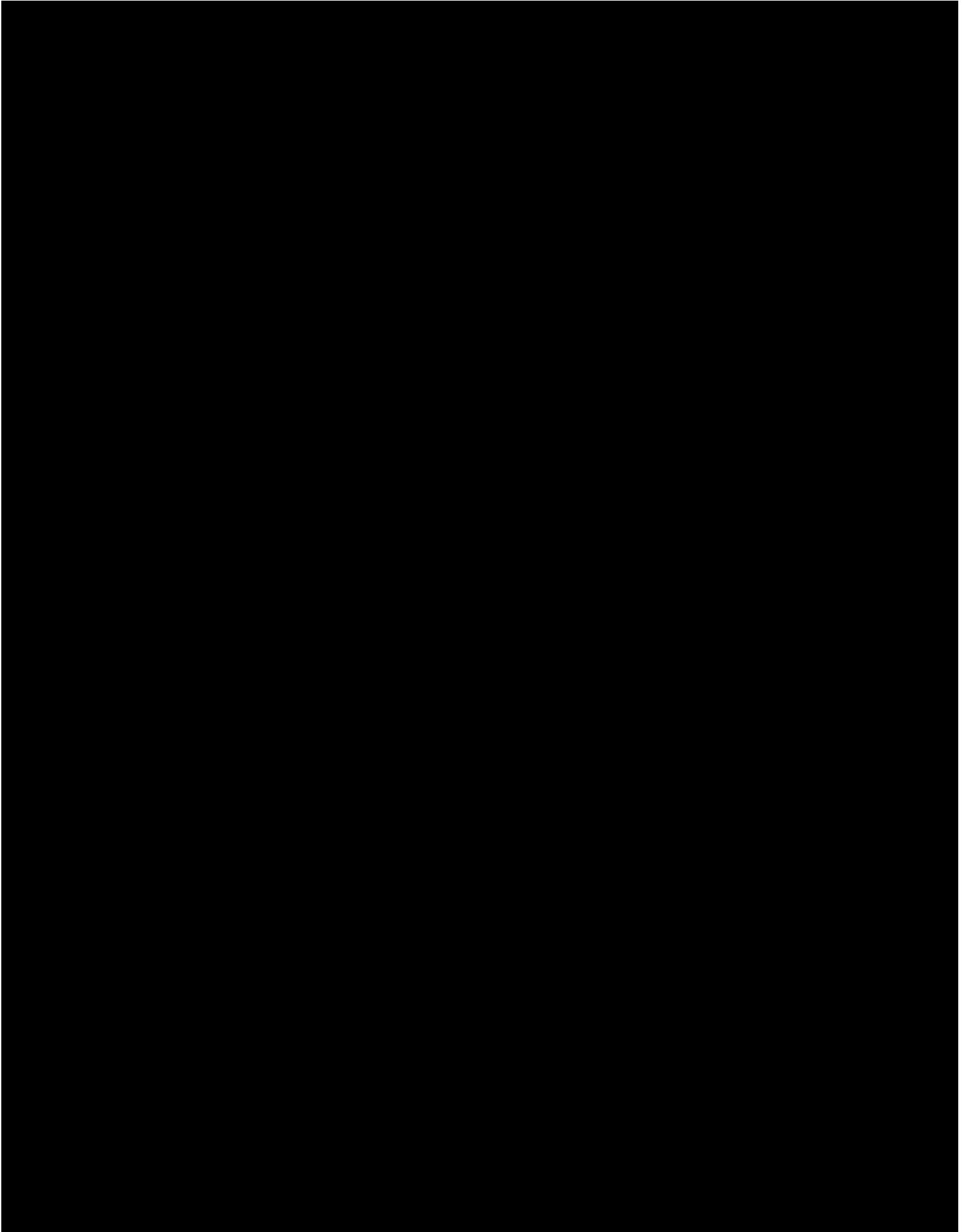


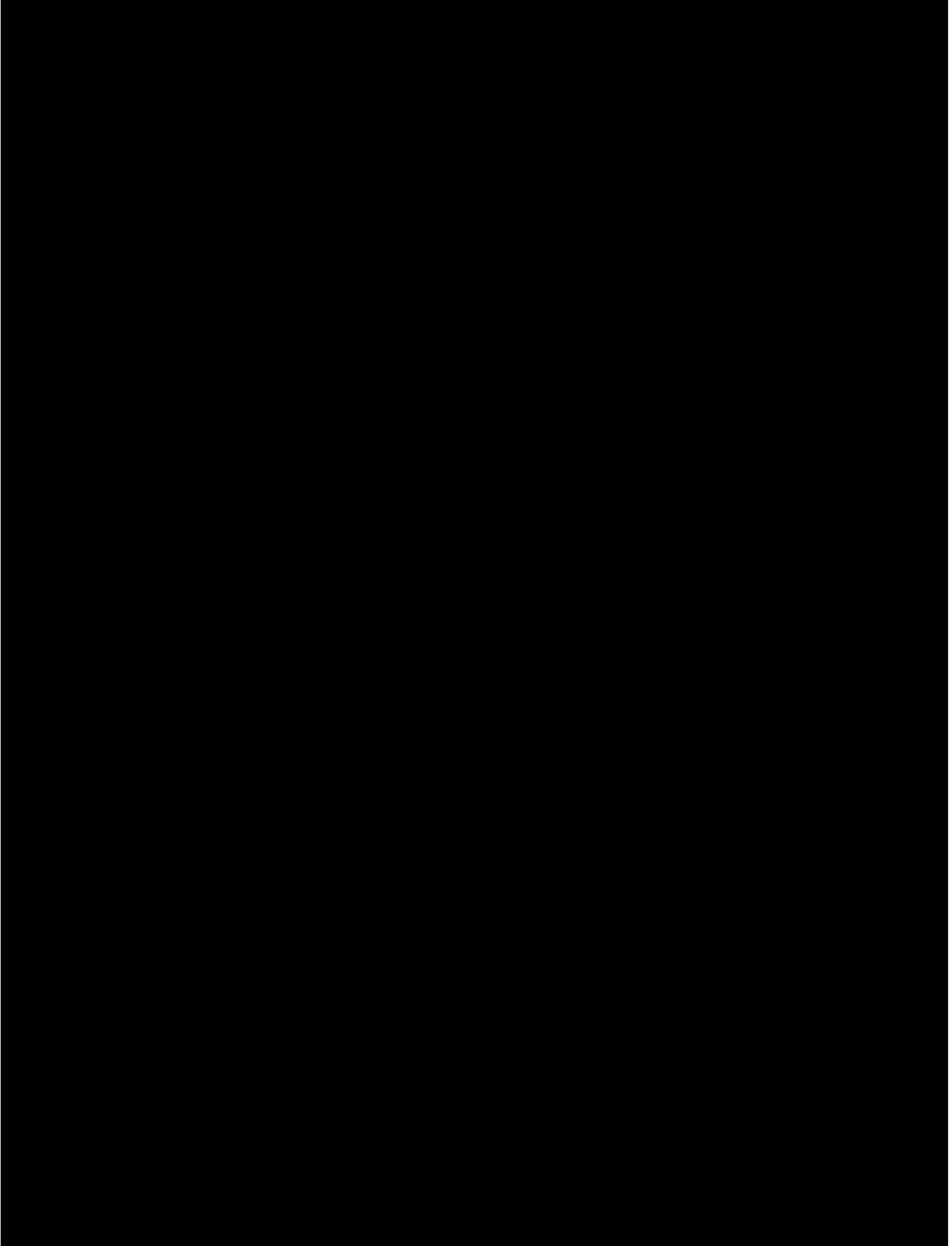




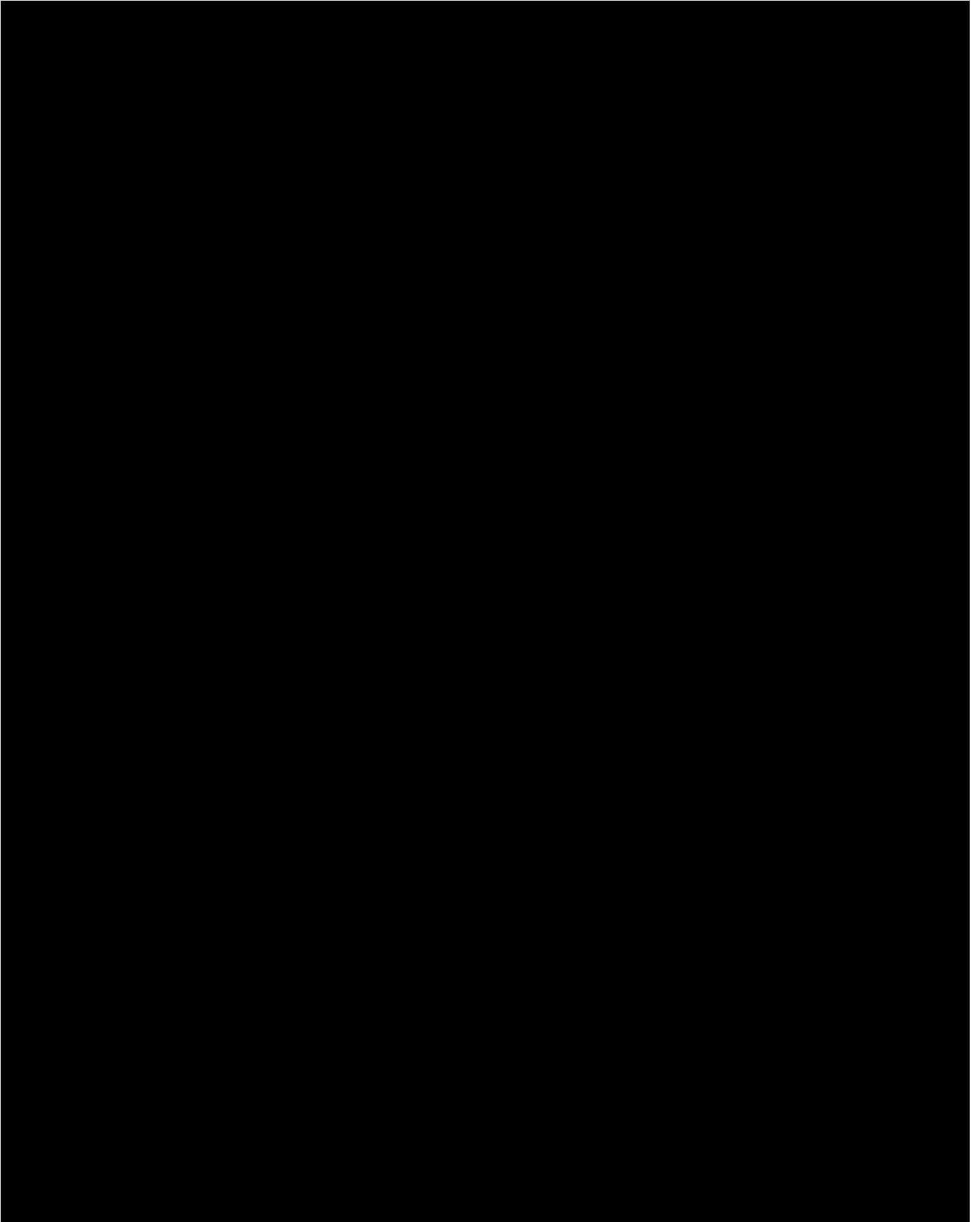


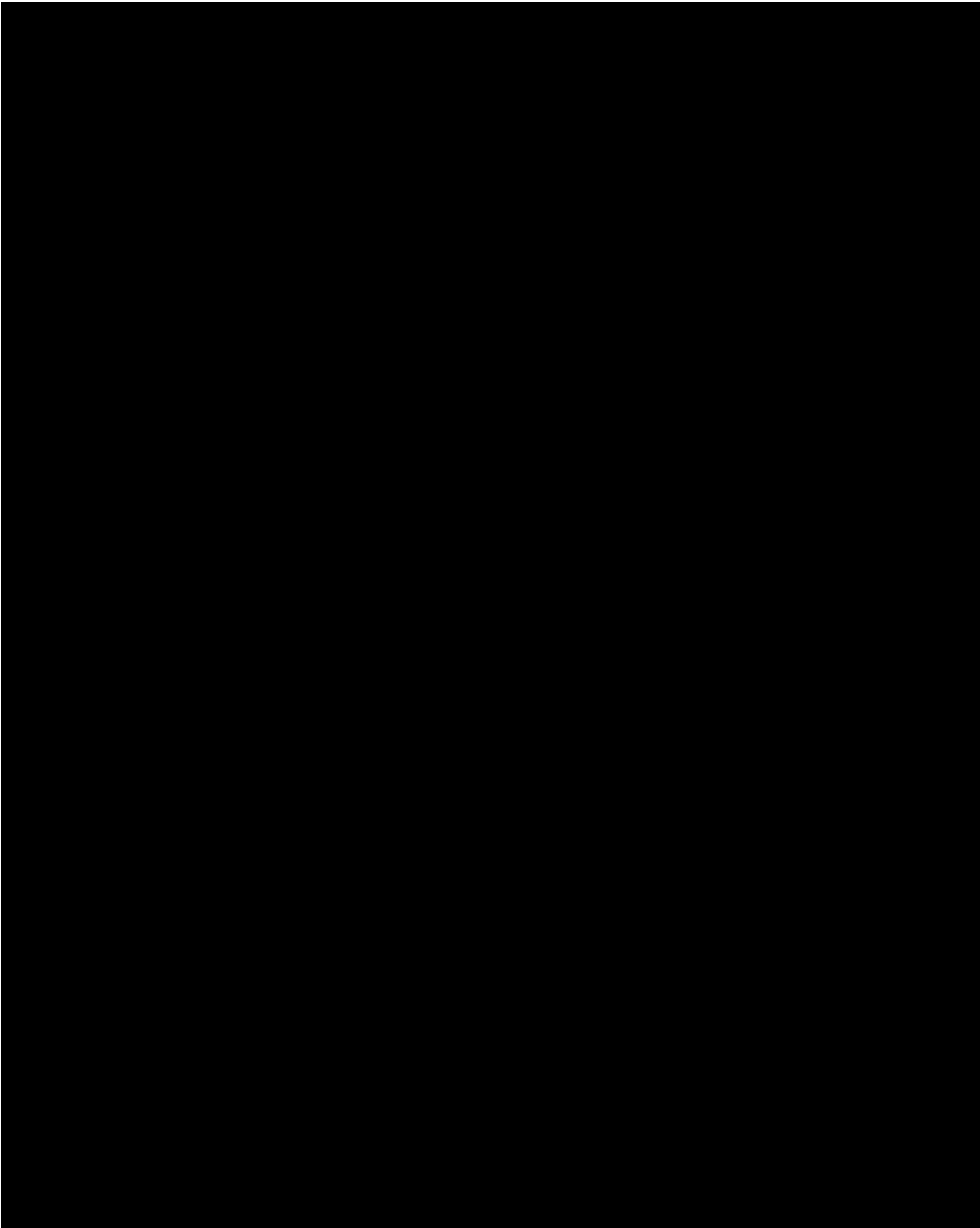




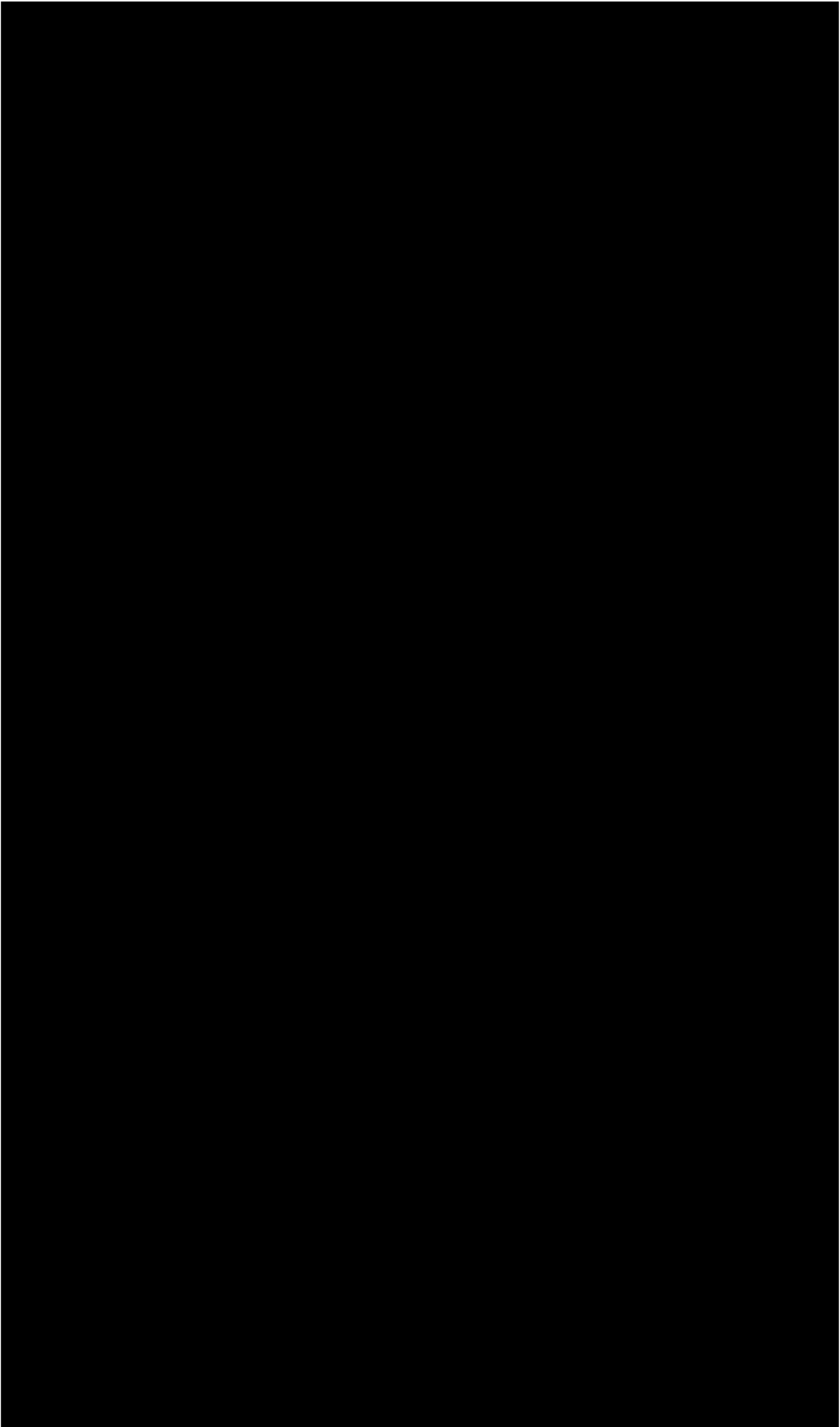








# ATTACHMENT 60



# ATTACHMENT 61

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT  <b>COMMERCIAL LEASE OF          SUBMERGED LANDS FOR          RENEWABLE ENERGY DEVELOPMENT          ON THE          OUTER CONTINENTAL SHELF</b>  <i>Paperwork Reduction Act of 1995 statement: This form does not          constitute an information collection as defined by 44 U.S.C. § 3501 et          seq. and therefore does not require approval by the Office of          Management and Budget.</i>	Office  Sterling, VA	Renewable Energy Lease Number  OCS-A 0499
	Cash Bonus and/or Acquisition Fee  \$1,006,240	Resource Type  Wind
	Effective Date  March 1, 2016	Block Number(s)  See Addendum A

This lease, which includes any addenda hereto, is hereby entered into by and between the United States of America, ("Lessor"), acting through the Bureau of Ocean Energy Management ("BOEM"), its authorized officer, and

Lessee	Interest Held
US Wind Inc.	100%

("Lessee"). This lease is effective on the date written above ("Effective Date") and will continue in effect until the lease terminates as set forth in Addendum "B." In consideration of any cash payment heretofore made by the Lessee to the Lessor and in consideration of the promises, terms, conditions, covenants, and stipulations contained herein and attached hereto, the Lessee and the Lessor agree as follows:

### **Section 1: Statutes and Regulations.**

This lease is issued pursuant to subsection 8(p) of the Outer Continental Shelf Lands Act ("the Act"), 43 U.S.C. §§ 1331 *et seq.* This lease is subject to the Act and regulations promulgated pursuant to the Act, including but not limited to, offshore renewable energy and alternate use regulations at 30 CFR Part 585 as well as other applicable statutes and regulations in existence on the Effective Date of this lease. This lease is also subject to those statutes enacted (including amendments to the Act or other statutes) and regulations promulgated thereafter, except to the extent that they explicitly conflict with an express provision of this lease. It is expressly understood that amendments to existing statutes, including but not limited to the Act, and regulations may be made, and/or new statutes may be enacted or new regulations promulgated, which do not explicitly conflict with an express provision of this lease, and that the Lessee bears the risk that such amendments, regulations, and statutes may increase or decrease the Lessee's obligations under the lease.

## **Section 2: Rights of the Lessee.**

- (a) The Lessor hereby grants and leases to the Lessee the exclusive right and privilege, subject to the terms and conditions of this lease and applicable regulations, to: (1) submit to the Lessor for approval a Site Assessment Plan (SAP) and Construction and Operations Plan (COP) for the project identified in Addendum "A" of this lease; and (2) conduct activities in the area identified in Addendum "A" of this lease ("leased area") that are described in a SAP or COP that has been approved by the Lessor. This lease does not, by itself, authorize any activity within the leased area.
- (b) The rights granted to the Lessee herein are limited to those activities described in any SAP or COP approved by the Lessor. The rights granted to the Lessee are limited by the lease-specific terms, conditions, and stipulations required by the Lessor per Addendum "C."
- (c) This lease does not authorize the Lessee to conduct activities on the Outer Continental Shelf (OCS) relating to or associated with the exploration for, or development or production of, oil, gas, other seabed minerals, or renewable energy resources other than those renewable energy resources identified in Addendum "A."

## **Section 3: Reservations to the Lessor.**

- (a) All rights in the leased area not expressly granted to the Lessee by the Act, applicable regulations, this lease, or any approved SAP or COP, are hereby reserved to the Lessor.
- (b) The Lessor will decide whether to approve a SAP or COP in accordance with the applicable regulations in 30 CFR Part 585. The Lessor retains the right to disapprove a SAP or COP based on the Lessor's determination that the proposed activities would have unacceptable environmental consequences, would conflict with one or more of the requirements set forth in subsection 8(p)(4) of the Act (43 U.S.C. § 1337(p)(4)), or for other reasons provided by the Lessor pursuant to 30 CFR 585.613(e)(2) or 30 CFR 585.628(f)(2). Disapproval of plans will not subject the Lessor to liability. The Lessor also retains the right to approve with modifications a SAP or COP, as provided in applicable regulations.
- (c) The Lessor reserves the right to suspend the Lessee's operations in accordance with the national security and defense provisions of section 12 of the Act and applicable regulations.
- (d) The Lessor reserves the right to authorize other uses within the leased area that will not unreasonably interfere with activities described in Addendum "A."

## **Section 4: Payments.**

- (a) The Lessee must make all rent payments to the Lessor in accordance with applicable regulations in 30 CFR Part 585, unless otherwise specified in Addendum "B."
- (b) The Lessee must make all operating fee payments to the Lessor in accordance with applicable regulations in 30 CFR Part 585, as specified in Addendum "B."

## **Section 5: Plans.**

The Lessee may conduct those activities described in Addendum "A" only in accordance with a SAP or COP approved by the Lessor. The Lessee may not deviate from an approved SAP or COP except as provided in applicable regulations in 30 CFR Part 585.

## **Section 6: Associated Project Easements.**

Pursuant to 30 CFR 585.200(b), the Lessee has the right to one or more project easements, without further competition, for the purpose of installing gathering, transmission, and distribution cables, pipelines, and appurtenances on the OCS, as necessary for the full enjoyment of the lease, and under applicable regulations in 30 CFR Part 585. As part of submitting a COP for approval, the Lessee may request that one or more easement(s) be granted by the Lessor. If the Lessee requests that one or more easement(s) be granted when submitting a COP for approval, such project easements will be granted by the Lessor in accordance with the Act and applicable regulations in 30 CFR Part 585 upon approval of the COP in which the Lessee has demonstrated a need for such easements. Such easements must be in a location acceptable to the Lessor, and will be subject to such conditions as the Lessor may require. The project easement(s) that would be issued in conjunction with an approved COP under this lease will be described in Addendum "D" to this lease, which will be updated as necessary.

## **Section 7: Conduct of Activities.**

The Lessee must conduct, and agrees to conduct, all activities in the leased area in accordance with an approved SAP or COP, and with all applicable laws and regulations.

The Lessee further agrees that no activities authorized by this lease will be carried out in a manner that:

- (a) could unreasonably interfere with or endanger activities or operations carried out under any lease or grant issued or maintained pursuant to the Act, or under any other license or approval from any Federal agency;
- (b) could cause any undue harm or damage to the environment;
- (c) could create hazardous or unsafe conditions; or
- (d) could adversely affect sites, structures, or objects of historical, cultural, or archaeological significance, without notice to and direction from the Lessor on how to proceed.

## **Section 8: Violations, Suspensions, Cancellations, and Remedies.**

If the Lessee fails to comply with (1) any of the applicable provisions of the Act or regulations, (2) the approved SAP or COP, or (3) the terms of this lease, including associated Addenda, the Lessor may exercise any of the remedies that are provided under the Act and applicable regulations, including, without limitation, issuance of cessation of



operations orders, suspension or cancellation of the lease, and/or the imposition of penalties, in accordance with the Act and applicable regulations.

The Lessor may also cancel this lease for reasons set forth in subsection 5(a)(2) of the Act (43 U.S.C. § 1334(a)(2)), or for other reasons provided by the Lessor pursuant to 30 CFR 585.437.

Non-enforcement by the Lessor of a remedy for any particular violation of the applicable provisions of the Act or regulations, or the terms of this lease, will not prevent the Lessor from exercising any remedy, including cancellation of this lease, for any other violation or for the same violation occurring at any other time.

### **Section 9: Indemnification.**

The Lessee hereby agrees to indemnify the Lessor for, and hold the Lessor harmless from, any claim caused by or resulting from any of the Lessee's operations or activities on the leased area or project easements or arising out of any activities conducted by or on behalf of the Lessee or its employees, contractors (including Operator, if applicable), subcontractors, or their employees, under this lease, including claims for:

- a. loss or damage to natural resources,
- b. the release of any petroleum or any Hazardous Materials,
- c. other environmental injury of any kind,
- d. damage to property,
- e. injury to persons, and/or
- f. costs or expenses incurred by the Lessor.

Except as provided in any addenda to this lease, the Lessee will not be liable for any losses or damages proximately caused by the activities of the Lessor or the Lessor's employees, contractors, subcontractors, or their employees. The Lessee must pay the Lessor for damage, cost, or expense due and pursuant to this section within 90 days after written demand by the Lessor. Nothing in this lease will be construed to waive any liability or relieve the Lessee from any penalties, sanctions, or claims that would otherwise apply by statute, regulation, operation of law, or could be imposed by the Lessor or other government agency acting under such laws.

"Hazardous Material" means

1. Any substance or material defined as hazardous, a pollutant, or a contaminant under the *Comprehensive Environmental Response, Compensation, and Liability Act* at 42 U.S.C. §§ 9601(14) and (33);
2. Any regulated substance as defined by the Resource Conservation and Recovery Act ("RCRA") at 42 U.S.C. § 6991 (7), whether or not contained in or released from underground storage tanks, and any hazardous waste regulated under RCRA pursuant to 42 U.S.C. §§ 6921 *et seq.*;
3. Oil, as defined by the Clean Water Act at 33 U.S.C. § 1321(a)(1) and the Oil Pollution Act at 33 U.S.C. § 2701(23); or

4. Other substances that applicable Federal, state, tribal, or local laws define and regulate as “hazardous.”

#### **Section 10: Financial Assurance.**

The Lessee must provide and maintain at all times a surety bond(s) or other form(s) of financial assurance approved by the Lessor in the amount specified in Addendum “B.” As required by the applicable regulations in 30 CFR Part 585, if, at any time during the term of this lease, the Lessor requires additional financial assurance, then the Lessee must furnish the additional financial assurance required by the Lessor in a form acceptable to the Lessor within 90 days after receipt of the Lessor’s notice of such adjustment.

#### **Section 11: Assignment or Transfer of Lease.**

This lease may not be assigned or transferred in whole or in part without written approval of the Lessor. The Lessor reserves the right, in its sole discretion, to deny approval of the Lessee’s application to transfer or assign all or part of this lease. Any assignment will be effective on the date the Lessor approves the Lessee’s application. Any assignment made in contravention of this section is void.

#### **Section 12: Relinquishment of Lease.**

The Lessee may relinquish this entire lease, or any officially designated subdivision thereof by filing with the appropriate office of the Lessor a written relinquishment application, in accordance with applicable regulations in 30 CFR Part 585. No relinquishment of this lease or any portion thereof will relieve the Lessee or its surety of the obligations accrued hereunder, including but not limited to, the responsibility to remove property and restore the leased area pursuant to section 13 of this lease and applicable regulations.

#### **Section 13: Removal of Property and Restoration of the Leased Area on Termination of Lease.**

Unless otherwise authorized by the Lessor, pursuant to the applicable regulations in 30 CFR Part 585, the Lessee must remove or decommission all facilities, projects, cables, pipelines, and obstructions and clear the seafloor of all obstructions created by activities on the leased area, including any project easements within two years following lease termination, whether by expiration, cancellation, contraction, or relinquishment, in accordance with any approved SAP, COP, or approved Decommissioning Application, and applicable regulations in 30 CFR Part 585.

#### **Section 14: Safety Requirements.**

The Lessee must:

- a. maintain all places of employment for activities authorized under this lease in compliance with occupational safety and health standards and, in addition, free

from recognized hazards to employees of the Lessee or of any contractor or subcontractor operating under this lease;

- b. maintain all operations within the leased area in compliance with regulations in 30 CFR Part 585 and orders from the Lessor and other Federal agencies with jurisdiction, intended to protect persons, property and the environment on the OCS; and
- c. provide any requested documents and records, which are pertinent to occupational or public health, safety, or environmental protection, and allow prompt access, at the site of any operation or activity conducted under this lease, to any inspector authorized by the Lessor or other Federal agency with jurisdiction.

### **Section 15: Debarment Compliance.**

The Lessee must comply with the Department of the Interior's non-procurement debarment and suspension regulations set forth in 2 CFR Parts 180 and 1400 and must communicate the requirement to comply with these regulations to persons with whom it does business related to this lease by including this requirement in all relevant contracts and transactions.

### **Section 16: Equal Opportunity Clause.**

During the performance of this lease, the Lessee must fully comply with paragraphs (1) through (7) of section 202 of Executive Order 11246, as amended (reprinted in 41 CFR 60-1.4(a)), and the implementing regulations, which are for the purpose of preventing employment discrimination against persons on the basis of race, color, religion, sex, or national origin. Paragraphs (1) through (7) of section 202 of Executive Order 11246, as amended, are incorporated in this lease by reference.

### **Section 17: Certification of Nonsegregated Facilities.**

By entering into this lease, the Lessee certifies, as specified in 41 CFR 60-1.8, that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. As used in this certification, the term "facilities" means, but is not limited to, any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees. Segregated facilities include those that are segregated by explicit directive or those that are in fact segregated on the basis of race, color, religion, sex, or national origin, because of habit, local custom, or otherwise; provided, that separate or single-user restrooms and necessary dressing or sleeping areas must be provided to assure privacy as appropriate. The Lessee further agrees that it will obtain identical certifications from proposed contractors and subcontractors prior to awarding contracts or subcontracts unless they are exempt under 41 CFR 60-1.5.

**Section 18: Notices.**

All notices or reports provided from one party to the other under the terms of this lease must be in writing, except as provided herein and in the applicable regulations in 30 CFR Part 585. Written notices must be delivered to the party's Lease Representative, as specifically listed in Addendum "A," either electronically, by hand, by facsimile, or by United States first class mail, adequate postage prepaid. Either party may notify the other of a change of address by doing so in writing. Until notice of any change of address is delivered as provided in this section, the last recorded address of either party will be deemed the address for all notices required under this lease. For all operational matters, notices must be provided to the party's Operations Representative, as specifically listed in Addendum "A," as well as the Lease Representative.

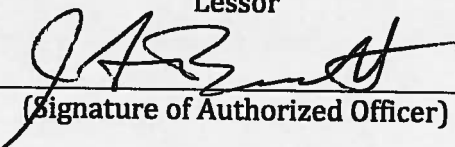
**Section 19: Severability Clause.**

If any provision of this lease is held unenforceable, all remaining provisions of this lease will remain in full force and effect.

**Section 20: Modification.**

Unless otherwise authorized by the applicable regulations in 30 CFR Part 585, this lease may be modified or amended only by mutual agreement of the Lessor and the Lessee. No such modification or amendment will be binding unless it is in writing and signed by duly authorized signatories of the Lessor and the Lessee.

US Wind Inc.  
 \_\_\_\_\_  
 Lessee  
  
 \_\_\_\_\_  
 (Signature of Authorized Officer)  
 RICCARDO TOTO  
 \_\_\_\_\_  
 (Name of Signatory)  
 Sole Director  
 \_\_\_\_\_  
 (Title)  
 January 12<sup>th</sup>, 2016  
 \_\_\_\_\_  
 (Date)

The United States of America  
 \_\_\_\_\_  
 Lessor  
  
 \_\_\_\_\_  
 (Signature of Authorized Officer)  
 James F. Bennett  
 \_\_\_\_\_  
 (Name of Signatory)  
 Program Manager, Office of  
 Renewable Energy Programs  
 \_\_\_\_\_  
 (Title)  
 February 4, 2016  
 \_\_\_\_\_  
 (Date)

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM "A"**

DESCRIPTION OF LEASED AREA AND LEASE ACTIVITIES

Lease Number OCS-A 0499

**I. Lessor and Lessee Contact Information**

Lessee Company Number: 15023

**(a) Lessor's Contact Information**

	<b>Lease Representative</b>	<b>Operations Representative</b>
Title	Program Manager	<i>SAME AS LEASE REPRESENTATIVE</i>
Address	U.S. Department of the Interior Bureau of Ocean Energy Management 45600 Woodland Road Mail Stop VAM-OREP Sterling, VA 20166	
Phone	(703) 787-1300	
Fax	(703) 787-1708	
Email	renewableenergy@boem.gov	

**(b) Lessee's Contact Information**

	<b>Lease Representative</b>	<b>Operations Representative</b>
Name	SALVATORE VITALE	PAOLO SAMMARTINO
Title	LEGAL COUNSEL	CHIEF OPERATING OFFICER
Address	US WIND INC, 1 N CHARLES ST 21202 BALTIMORE, MD SUITE 2310	US WIND INC, 1 N CHARLES ST 21202 BALTIMORE, MD SUITE 2310
Phone	410 727 4020	410 727 4020
Fax	410 727 4026	410 727 4026
Email	s.vitale@venexia.it	p.sammartino@venexia.it

**II. Description of Leased Area**

The total acreage of the lease area is approximately hectares 74,160 hectares (183,353 acres)

This area is subject to later adjustment, in accordance with applicable regulations (e.g., contraction, relinquishment, etc.).

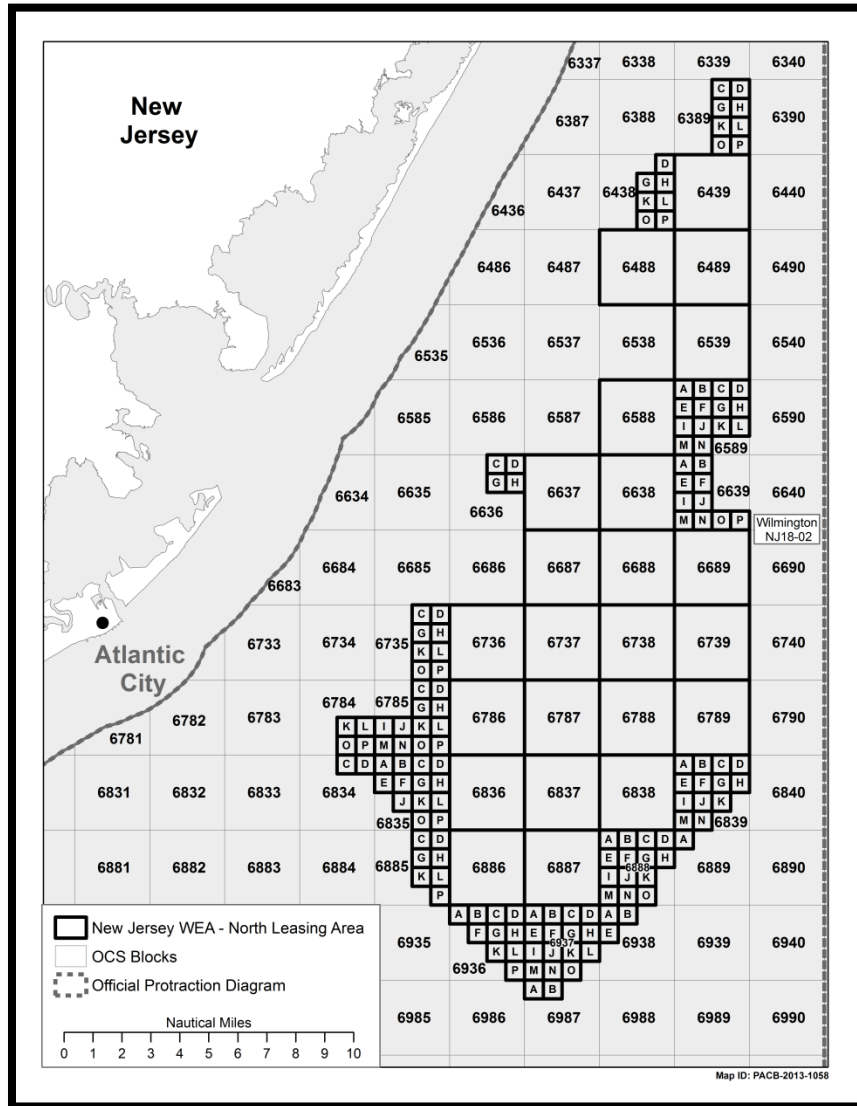
**Lease OCS-A 0499**

The following Blocks or portions of Blocks lying within Official Protraction Diagram Wilmington NJ18-02 are depicted on the map below and comprise 74,160 hectares (183,353 acres), more or less.

- 1) Block 6389, E1/2
- 2) Block 6438, NE1/4 of NE1/4, S1/2 of NE1/4, SE1/4
- 3) Block 6439, All of Block
- 4) Block 6488, All of Block
- 5) Block 6489, All of Block
- 6) Block 6539, All of Block
- 7) Block 6588, All of Block
- 8) Block 6589, N1/2, SW1/4, N1/2 of SE1/4
- 9) Block 6636, NE1/4
- 10) Block 6637, All of Block
- 11) Block 6638, All of Block
- 12) Block 6639, W1/2, S1/2 of SE1/4
- 13) Block 6687, All of Block
- 14) Block 6688 All of Block
- 15) Block 6689, All of Block
- 16) Block 6735, E1/2
- 17) Block 6736, All of Block
- 18) Block 6737, All of Block
- 19) Block 6738, All of Block
- 20) Block 6739, All of Block
- 21) Block 6784, SE1/4
- 22) Block 6785, E1/2, SW1/4
- 23) Block 6786, All of Block
- 24) Block 6787, All of Block
- 25) Block 6788, All of Block
- 26) Block 6789, All of Block
- 27) Block 6834, N1/2 of NE1/4
- 28) Block 6835, E1/2, NW1/4, NE1/4 of SW1/4
- 29) Block 6836, All of Block
- 30) Block 6837, All of Block
- 31) Block 6838, All of Block
- 32) Block 6839, NE1/4, W1/2, NW1/4 of SE1/4
- 33) Block 6885, NE1/4, N1/2 of SE1/4, SE1/4 of SE1/4
- 34) Block 6886, All of Block
- 35) Block 6887, All of Block
- 36) Block 6888, NE1/4, W1/2, W1/2 of SE1/4
- 37) Block 6889, NW1/4 of NW1/4
- 38) Block 6936, NE1/4, N1/2 of NW1/4, SE1/4 of NW1/4, N1/2 of SE1/4, SE1/4 of SE1/4

- 39) Block 6937, N1/2, SW1/4, N1/2 of SE1/4, SW1/4 of SE1/4
- 40) Block 6938, N1/2 of NW1/4, SW1/4 of NW1/4
- 41) Block 6987, N1/2 of NW1/4

For the purposes of these calculations, a full Block is 2,304 hectares. The acreage of a hectare is 2.471043930.



Map of Lease OCS-A 0499

### III. Renewable Energy Resource

Wind

IV. Description of the Project

A project to generate energy using wind turbine generators and any associated resource assessment activities, located on the OCS in the leased area, as well as associated offshore substation platforms, inner array cables, and subsea export cables.

V. Description of Project Easement(s)

Once approved, the Lessor will incorporate Lessee's project easement(s) in this lease as Addendum "D."



U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM “B”**

LEASE TERM AND FINANCIAL SCHEDULE

Lease Number OCS-A 0499

I. Lease Term

The duration of each term of the lease is described below. The terms may be extended or otherwise modified in accordance with applicable regulations in 30 CFR Part 585.

<b>Lease Term</b>	<b>Duration</b>
Preliminary Term	1 year
Site Assessment Term	5 years
Operations Term	25 years

Schedule: Addendum C includes a schedule and reporting requirements for conducting site characterization activities.

Renewal: The Lessee may request renewal of the operations term of this lease, in accordance with applicable regulations in 30 CFR Part 585. The Lessor, at its discretion, may approve a renewal request to conduct substantially similar activities as were originally authorized under this lease or in an approved plan. The Lessor will not approve a renewal request that involves development of a type of renewable energy not originally authorized in the lease. The Lessor may revise or adjust payment terms of the original lease as a condition of lease renewal.

Unless otherwise described below, the Preliminary Term begins on the Effective Date of this lease for leases issued competitively. Unless otherwise described below, for noncompetitively issued leases, the Site Assessment Term begins on the Effective Date of this lease. The Operations Term begins on the date that the Lessor approves the Lessee’s Construction and Operations Plan (COP).

II. Definitions

“Available for Commercial Operations” means the status of an individual wind generation turbine on or after the first day that it engages in Commercial Operations on the lease until the day when it is permanently decommissioned. These dates are determined by the COP.

“Commercial Operations” means the generation of electricity or other energy product for

commercial use, sale, or distribution.

“Commercial Operation Date,” or “COD,” refers to the date on which the Lessee first begins Commercial Operations on the lease.

“Delivery Point” is the meter identified in the COP where the Lessee’s facility interconnects with the electric grid to deliver electricity for sale.

“Lease Issuance Date” refers to the date on which this lease has been signed by *both* the Lessee and the Lessor.

“Effective Date” has the same meaning as “effective date” in BOEM regulations provided in 30 CFR 585.237.

“End Date” refers to the earlier of a) the last calendar day of the last month of the Operations Term; or b) the date on which the lease terminates in the event of a lease termination.

“Lease Anniversary” refers to the anniversary of the Effective Date of the lease. where the Lessee’s facility interconnects with the electric grid to deliver electricity for sale.

### III. Payments

Unless otherwise authorized by the Lessor in accordance with the applicable regulations in 30 CFR Part 585, the Lessee must make payments as described below.

(a) **Rent.** The Lessee must pay rent as described below:

Rent payments prior to the COD, or prior to the lease End Date in the event that the lease terminates prior to the COD, are calculated by multiplying the acres in the leased area by the rental rate per acre as follows:

Lease OCS-A 0499

- Acres in Project Area: 183,353
- Annual Rental Rate: \$3.00 per acre or fraction thereof
- Rental Fee for Entire Project Area: \$3.00 x 183,353 = \$550,059

The first year’s rent payment of \$550,059 is due within 45 days of the date that the lease is received by the Lessee for execution, in accordance with 30 CFR 585.503. Rent for the entire leased area for the next year and for each subsequent year is due on or before each Lease Anniversary through the year in which the COD occurs. The rent for each year subsequent to the COD on the imputed portion of the lease not authorized for Commercial Operations is due on or before each Lease Anniversary. The imputed portion of the lease that is not authorized for Commercial Operations at each Lease Anniversary in year  $t$ ,  $S_t$ , and the corresponding Adjusted Annual Rent Payment will be determined as follows:

$$(A) S_t = \left(1 - \frac{M'_t}{MAX(M'_t: \text{for all } t \geq 2)}\right)$$

(B) *Adjusted Annual Rent Payment* =  $S_t$  \* *Rental Fee for Entire Leased Area*

Where:

$S_t$  = Portion of the lease not authorized for Commercial Operations in year  $t$  based on the definition of  $t$  in Section III (b) (4) below.

$M'_t$  = Actual Nameplate capacity expressed in megawatts (MW) rounded to the nearest second decimal in year  $t$  of Commercial Operations on the lease as defined in Section III (b) (4) below, prior to any adjustments as specified in the most recent approved COP for turbine maintenance, replacements, repowering, or decommissioning. For our purposes nameplate capacity is the maximum rated electric output the turbines of the wind farm facility under commercial operations can produce at their rated wind speed designated by the turbine's manufacturer.

$MAX(M'_t)$  = Highest value of  $M'_t$  projected in the most recent approved version of the COP to be achieved in any year of Commercial Operations on the lease.

The Adjusted Annual Rent Payment calculated in Equation (A) herein, will be rounded up to the nearest dollar. The annual rent payments will be set forth in Addendum "E" when the COP is initially approved or subsequently revised.

Consider an example of a 1,000 MW project on a lease with an Effective Date of January 1, 2014 and a COD of January 1, 2022 on a lease area consisting of 100,000 acres as follows:

Payment (Jan. 1 <sup>st</sup> )	$M'_t$ (MW)	$MAX(M'_t)$ (MW)	$\left(1 - \frac{M'_t}{MAX(M'_t)}\right)$	Rental Fee for Entire Area	Payment Amount
2014	0	1,000	1.0	\$300,000	\$300,000
...	...		...		...
2021	0		1.0		\$300,000
2022	500		0.5		\$150,000
2023	500		0.5		\$150,000
2024	500		0.5		\$150,000
2025	800		0.2		\$60,000
2026	800		0.2		\$60,000
2027	800		0.2		\$60,000
2028	1,000		0.0		\$0

In the event a revised COP is approved by BOEM with an alternative installation schedule that differs from the previously-approved COP, the Lessee must make subsequent payments based on the revised installation schedule. In addition, the Lessee must make a payment equal to the sum of any incremental annual rent payments that would have been due at the Lease Anniversary of prior years based on the differences between the Initial Installation Schedules specified in the previously-approved COP and the revised COP, plus interest on the annual balances, in accordance with 30 CFR 1218.54.

Consider an example whereby the initial COP specified an installation schedule with all 1,000 MW online at the COD, i.e.,  $M'_t$  is 1,000 MW at COD. The following table demonstrates how the back rent payments would be calculated if the project was initially scheduled as a single phase, but then later determined to be the three-phase project as shown in the previous example in a revised COP approved prior to the payment due on January 1, 2023.

Payment (Jan. 1 <sup>st</sup> )	Initial $M'_t$ (MW)	Revised $M'_t$ (MW)	Single-Phase Payment Amount	Three-Phase Payment Amount	Back Rent Payment Amount	Subsequent Rent Payment Amount
2014	0	0	\$300,000	\$300,000	\$0	\$0
...	...	...	...	...	...	...
2021	0	0	\$300,000	\$300,000	\$0	\$0
2022	1,000	500	\$0	\$150,000	\$150,000	\$0
2023	1,000	500	\$0	\$150,000	\$0	\$150,000
2024	1,000	500	\$0	\$150,000	\$0	\$150,000
2025	1,000	800	\$0	\$60,000	\$0	\$60,000
2026	1,000	800	\$0	\$60,000	\$0	\$60,000
2027	1,000	800	\$0	\$60,000	\$0	\$60,000
2028	1,000	1,000	\$0	0	\$0	\$0

The last rent payment prior to Commercial Operations being authorized on the entire lease area, i.e., the year in which the value of  $S_t$  is equal to zero, or prior to the lease End Date, in the event that the lease terminates prior to Commercial Operations being authorized on the entire lease area, will represent the final rent payment, unless a revised COP identifying an alternative maximum initial capacity is approved by BOEM. All rent payments, including the last rent payment, are payable for the full year and will not be prorated to the COD or other installation milestones. The COD is equivalent to the authorization date for the first phase of development on the lease, to be updated based on the initial or revised approved COP documentation. The schedule of rent payments on the lease is defined in Addendum "E". All rent payments must be made as required in 30 CFR 1218.51. Late rent payments will be charged interest in accordance with 30 CFR 1218.54.

**(1) Project Easement.**

Rent for any project easement(s) is described in Addendum "D".

**(2) Relinquishment.**

If the Lessee submits an application for relinquishment of a portion of the leased area within the first 45 calendar days following the date that the lease is received by the Lessee for execution, and the Lessor approves that application, no rent payment will be due on that relinquished portion of the leased area. Later relinquishments of any leased area will reduce the Lessee's rent payments due the year following the Lessor's approval of the

relinquishment, through a reduction in the Acres in Leased Area, the corresponding Rental Fee for the Entire Leased Area, and any related Adjusted Annual Rent Payments.

(b) **Operating Fee.** The Lessee must pay an operating fee as described below:

**(1) Initial Operating Fee Payment.**

The Lessee must pay an initial prorated operating fee within 45 calendar days after the COD. The initial operating fee payment covers the first year of Commercial Operations on the lease and will be calculated in accordance with the following subsection (4), using an operating fee rate of 0.02 and a capacity factor of 0.4.

**(2) Annual Operating Fee Payments.**

The Lessee must pay the operating fee for each subsequent year of Commercial Operations on or before each Lease Anniversary following the formula in subsection (4). The Lessee must calculate each operating fee annually subsequent to the initial operating fee payment using an operating fee rate of 0.02 through the twenty-five year operations term of the lease. The capacity factor of 0.4 will remain in effect until the Lease Anniversary of the year in which the Lessor adjusts the capacity factor.

**(3) Final Operating Fee Payment.**

The final operating fee payment is due on the Lease Anniversary prior to the End Date. The final operating fee payment covers the last year of Commercial Operations on the lease and will be calculated in accordance with the formula in subsection (4) as follows.

**(4) The formula for calculating the operating fee in year  $t$ .**

$F_t$	=	$M_t$	*	$H$	*	$C_p$	*	$P_t$	*	$r_t$
(annual operating fee)		(nameplate capacity)		(hours per year)		(capacity factor)		(power price)		(operating fee rate)

Where:

$t$ =	the year of Commercial Operations on the lease starting from each Lease Anniversary, where $t$ equals 1 represents the year beginning on the Lease Anniversary prior to, or on, the COD.
$F_t$ =	the dollar amount of the annual operating fee in year $t$ .
$M_t$ =	the nameplate capacity expressed in megawatts (MW) rounded to the nearest second decimal place in year $t$ of Commercial Operations on the lease.  The value of $M_t$ , reflecting the availability of turbines, will be determined based on the COP. This value will be adjusted to reflect any modifications to the COP approved by BOEM as of the date each operating fee payment is due, in accordance with the calculation in Equation 1, for each year of Commercial Operations on the lease.

$$(1) M_t = \sum_{w=1}^{W_t} \left( N_w * \left[ \frac{\left( \sum_{d=1}^D E_{w,t,d} \right)}{D} \right] \right)$$

Where:

$W_t$  = Number of individual wind generation turbines,  $w$ , that will be available for Commercial Operations during any day of the year,  $t$ , per the COP.

$N_w$  = Nameplate capacity of individual wind generation turbine,  $w$ , per the COP expressed in MW.

$E_{w,t,d}$  = Indicates whether individual wind generation turbine,  $w$ , will be available for Commercial Operations on day  $d$  of year  $t$ . The value is set to 1 for any day in year  $t$  for which the condition is true, i.e., the wind turbine will be available for Commercial Operations, and zero for any day in year  $t$  for which the condition is false, i.e., the wind turbine will not be available for Commercial Operations. The month of February is always assumed to have 28 days for purposes of this calculation, where March 1<sup>st</sup> will be counted as the first day of Commercial Operations if Commercial Operations commence on February 29<sup>th</sup> of a leap year.

$D$  = Days in the year set equal to 365 in all years for purposes of this calculation.

$M_t$  may be reduced only in the event that installed capacity is permanently decommissioned per the COP.  $M_t$  will not be changed in response to routine or unplanned maintenance of units, including the temporary removal of a nacelle for off-site repair or replacement with a similar unit.

EXAMPLE: Assume that the Lease Anniversary is January 1<sup>st</sup>, the COD is July 1, 2018, that the facility will ultimately have 100 individual wind generation turbines with a nameplate capacity of 5.0 MW each, and that the COP specifies the following, cumulative installation schedule for wind turbines to become available for Commercial Operations:

- July 1, 2018 (COD): 20 turbines (20 new units);
- October 1, 2018: 45 turbines (25 new units);
- January 1, 2019: 50 turbines (5 new units);
- July 1, 2019: 65 turbines (15 new units);
- January 1, 2020: 95 turbines (30 new units);
- February 29, 2020: 100 turbines (5 new units).

Further assume that the COP calls for 50 of the turbines to be decommissioned after September 30, 2039 ( $t = 22$ ), and that the remaining turbines are decommissioned at

the End Date of March 15, 2040 ( $t = 23$ ).

The value of  $M_t$  would be estimated as demonstrated in Table 1a for each year of Commercial Operations on the lease in this example.

**Table 1a: Example of  $M_t$  Calculations for Installation and Decommissioning**

$t$	Turbines	MW	Commercial Operations Period	Comm. Ops. Days	Days in Year	Share of Days	MW	$M_t$
1	20	100	Jul. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	184	365	50.41%	50.41	81.92
	25	125	Oct. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	92		25.21%	31.51	
2	50	250	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	250.00	287.81
	15	75	Jul. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	184		50.41%	37.81	
3	95	475	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	475.00	495.96
	5	25	Mar. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	306		83.84%	20.96	
4	100	500	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	500.00	500.00
...	...	...	...	...		...	...	...
21	100	500	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	500.00	500.00
22	50	250	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	250.00	436.98
	50	250	Jan. 1 <sup>st</sup> to Sep. 30 <sup>th</sup>	273		74.79%	186.98	
23	50	250	Jan. 1 <sup>st</sup> to Mar. 15 <sup>th</sup>	74	20.27%	50.68	50.68	

To illustrate the impact of decommissioning a portion of the individual wind generation turbines and replacing them with units of greater capacity on the calculation of  $M_t$ , assume that at the end of March 31, 2022, 10 units are to be made unavailable due to decommissioning, and that the incremental units have a capacity of 7.0 MW and are expected to be made available for Commercial Operations on September 15, 2022. The impact on  $M_t$  in 2022 and in subsequent years starting in 2023 and continuing until decommissioning is illustrated in Table 1b.

**Table 1b: Example of  $M_t$  Calculations for Repowering**

$t$	Turbines	MW	Commercial Operations Period	Comm. Ops. Days	Days in Year	Share of Days	MW	$M_t$
5	90 (5.0)	450	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365	365	100.00%	450.00	483.04
	10 (5.0)	50	Jan. 1 <sup>st</sup> . to Mar. 31 <sup>st</sup>	90		24.66%	12.33	
	10 (7.0)	70	Sep. 15 <sup>th</sup> to Dec. 31 <sup>st</sup>	108		29.59%	20.71	
6	90 (5.0)	450	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	450.00	520.00
	10 (7.0)	70	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	70.00	

$H =$  the number of hours in the year for billing purposes which is equal to 8,760 for all years of Commercial Operations on the lease.

$c_p =$  the “Capacity Factor” in Performance Period  $p$ , which represents the share of anticipated generation of the facility that is delivered to where the Lessee’s facility interconnects with the electric grid (i.e. the Delivery Point) relative to its generation at continuous full power operation at the nameplate capacity, expressed as a decimal between zero and one.

The initial Capacity Factor ( $C_0$ ) will be set to 0.4.

The Capacity Factor will be subject to adjustment at the end of each Performance Period. After the sixth year of Commercial Operations on the lease has concluded, the Lessee will utilize data gathered from years two through six of Commercial Operations on the lease and propose a revised Capacity Factor to be used to calculate subsequent annual payments, as provided for in Table 2 below. A similar process will be conducted at the conclusion of each five-year Performance Period, thereafter.

**Table 2: Definition of Performance Periods**

Performance Period ( <i>p</i> )	Commercial Operation Years ( <i>t</i> )	Payments Affected by Adjustment	Capacity Factor ( <i>c</i> )	Date End Year ( <i>n</i> )
0 (COD)	Not Applicable	Payments 1 to 7	$c_0=0.4$	--
1	$t = 2$ to 6	Payments 8 to 12	$c_1$	$n_1=6$
2	$t = 7$ to 11	Payments 13 to 17	$c_2$	$n_2=11$
3	$t = 12$ to 16	Payments 18 to 22	$c_3$	$n_3=16$
4	$t = 17$ to 21	Payments 23 to End Date	$c_4$	$n_4=21$

**Adjustments to the Capacity Factor**

The Actual 5-year Average Capacity Factor ( $X_p$ ) is calculated for each Performance Period after COD ( $p > 0$ ) per Equation 2 below.  $X_p$  represents the sum of actual, metered electricity generation in megawatt-hours (MWh) at the Delivery Point to the electric grid ( $A_t$ ) divided by the amount of electricity generation in MWh that would have been produced if the facility operated continuously at its full, stated capacity ( $M_t$ ) in all of the hours ( $h_t$ ) in each year,  $t$ , of the corresponding five-year period.

$$(2) X_p = \frac{\sum_{t=n-4}^n A_t}{\left( \sum_{t=n-4}^n M_t * h_t \right)}$$

Where:

$M_t$  = Nameplate Capacity as defined above.

$n$  = “Date End Year” value for the Performance Period,  $p$ , as defined in Table 2.

$p$  = Performance Period as defined in Table 2.

$A_t$  = Actual generation in MWh associated with each year of Commercial Operations,  $t$ , on the lease that is transferred at the Delivery Point; Delivery Point meter data supporting the values submitted for annual actual generation must be recorded, preserved, and timely provided to the Lessor upon request. In the event the Lessor requires the assistance of the Lessee in obtaining information useful in verifying such information, for example by waiving confidentiality with respect to data held by a third party, such assistance must be timely provided.

$h_t$  = Hours in the year on which the Actual Generation associated with each year of



	<p>Commercial Operations, <math>t</math>, on the lease is based; this definition of “hours in the year” differs from the definition of H in the operating fee equation above. The hours in the year for purposes of calculating the capacity factor must take into account the actual number of hours, including those in leap years.</p> <p>The value of the Capacity Factor at the outset of Commercial Operations (<math>p = 0</math>) is set to 0.4 as stated in equation 3:</p> <p><b>(3)</b> <math>c_0 = 0.4</math></p> <p>The value of the Capacity Factor corresponding to each Performance Period (<math>c_p</math>) is set according to equations 4A, 4B, and 4C as follows for each value of <math>p</math> greater than zero. The Capacity Factor is set equal to the Actual 5-Year Average Capacity Factor provided that the value falls within a range of plus or minus 10 percent of the previous Performance Period’s capacity factor.</p> <p><b>(4A)</b> <math>c_p = X_p</math> for <math>c_{p-1} * 0.90 \leq X_p \leq c_{p-1} * 1.10</math></p> <p><b>(4B)</b> <math>c_p = c_{p-1} * 0.90</math> for <math>X_p &lt; c_{p-1} * 0.90</math></p> <p><b>(4C)</b> <math>c_p = c_{p-1} * 1.10</math> for <math>X_p &gt; c_{p-1} * 1.10</math></p> <p>All values for <math>c_p</math> must be rounded to the nearest third decimal place.</p>
$P_t =$	<p>a measure of the annual average wholesale electric power price expressed in dollars per MW hour.</p> <p>The Lessee must calculate <math>P_t</math> at the time each operating fee payment is due, subject to approval by the Lessor. The Base Price (<math>P_b</math>) must equal the weighted average of the peak and off-peak spot price indices for the PJM West power market for the most recent year of data available as reported by the Federal Energy Regulatory Commission (FERC) as part of its annual <u>State of the Markets Report</u> with specific reference to the summary entitled “Electric Market Overview: Regional Spot Prices.” The latest version of this report is available at <a href="http://www.ferc.gov/market-oversight/mkt-electric/overview/elec-ovr-3yr-regional-elec-pr.pdf">http://www.ferc.gov/market-oversight/mkt-electric/overview/elec-ovr-3yr-regional-elec-pr.pdf</a>. If FERC stops publishing its annual <u>State of the Markets Report</u> required for this calculation or the specified location of the data changes over time, the Lessor must specify an alternate source of data and methodology that is approximately equivalent.</p> <p>The peak and off-peak price indices must be weighted 52.0% and 48.0%, respectively, for purposes of estimating the weighted index value for the Base Price. For example, in the March 12, 2012 State of the Markets Report the peak price index for 2011 was \$51.99/MWh and the corresponding off-peak price index for 2011 was \$33.94/MWh, resulting in a weighted index value for the Base Price for 2011 (<math>P_{2011}</math>) of \$43.33/MWh (<math>=52.0\% * \\$51.99 / \text{MWh} + 48.0\% * \\$33.94 / \text{MWh}</math>). The calculation of <math>P_b</math> must be rounded up to the nearest, second decimal place.</p>

The Base Price must be adjusted for inflation from the year associated with the published spot prices to the year in which the operating fee is to be paid as shown in equations (5A) and (5B):

$$(5A) P_t = P_b * \left( \frac{GDP_g}{GDP_{g-1}} \right)^{y-g} * \left( \frac{GDP_g}{GDP_b} \right) \text{ for } g \geq b$$

$$(5B) P_t = P_b * \left( \frac{GDP_g}{GDP_{g-1}} \right)^{y-b} \text{ for } g < b$$

Where:

*GDP* = Annual Implicit Price Deflators for Gross Domestic Product (GDP deflator index) from Table 1.1.9, line 1, in the Survey of Current Business published by the U.S. Bureau of Economic Analysis (BEA) in the specified period; the latest version of this data is currently available at:

<http://bea.gov/iTable/iTable.cfm?ReqID=9&step=1>

If BEA stops publishing the data required for this calculation, or the specified location of the data changes over time, the Lessor will specify an alternative source of data and methodology that it considers approximately equivalent.

*b* = The most recent year for which FERC reports the appropriate electricity spot price data expressed as the year, e.g., 2009, as in the illustrative example below.

*g* = The most recent year for which GDP deflator indices are available from BEA expressed as the year, e.g., 2011, as in the illustrative example below.

*y* = The year the annual payment is due expressed as the year corresponding to the value of *t* described above, e.g., 2013, as in the illustrative example below.

The second term on the right-hand side of equation (5A) represents a projected annual change in the index of inflation employing the last year of data available from BEA, while the third term represents the cumulative change in the index of inflation up to the previous year.

**Example:**

The following hypothetical example is provided to illustrate the methodology using Equation (5A) and the illustrative values provided for *b*, *g*, and *y* above, applied to historical GDP deflator data. If the actual FERC price indices are based on 2009 data and the GDP deflator indices are available for 2011, the inflation-adjusted price index value would be determined from equation (5A) as follows for a payment occurring in

	<p><math>y = 2013:</math></p> $P_{t(2013)} = P_{2009} * \left( \frac{GDP_{2011}}{GDP_{2010}} \right)^{2013-2011} * \left( \frac{GDP_{2011}}{GDP_{2009}} \right) = \frac{\$40.69}{\text{MWh}} * \left( \frac{113.361}{110.992} \right)^2 * \left( \frac{113.361}{109.729} \right) = \frac{\$43.85}{\text{MWh}}$ <p>Note: The current GDP deflator index is 113.361 for 2011, 110.992 for 2010, and 109.729 for 2009 (last revised by BEA on April 27, 2012); the FERC index price for the year 2009 is \$38.40/MWh (On-peak: \$44.60/MWh; Off-peak: \$31.68/MWh; last revised March 12, 2012). Although 2011 FERC prices are available, the 2009 prices are used in the example to illustrate the concept.</p> <p>The Lessor and the Lessee will use the latest FERC price indices and revised BEA GDP deflator index values at the time the pricing adjustments are made. The source of data used in the calculations must be noted in the Lessee's documentation supporting their estimate of the value of <math>P_t</math> each year for review and approval by the Lessor.</p>
$r_t =$	the operating fee rate of 0.02 (2%).

(c) **Reporting, Validation, Audits, and Late Payments.**

The Lessee must submit the values used in the operating fee formula to the Lessor at the time the annual payment based on these values is made. Submission of this and other reporting, validation, audit and late payment information as requested by the Lessor must be sent to the Lessor using the contact information indicated in Addendum "A", unless the Lessor directs otherwise. Failure to submit the estimated values and the associated documentation on time to the Lessor may result in penalties as specified in applicable regulations.

Within 60 days of the submission by the Lessee of the annual payment, the Lessor will review the data submitted and validate that the operating fee formula was applied correctly. If the Lessor validation results in a different operating fee amount, the amount of the annual operating fee payment will be revised to the amount determined by the Lessor.

The Lessor also reserves the right to audit the meter data upon which the Actual 5-year Average Capacity Factor is based at any time during the lease term. If, as a result of such audit, the Lessor determines that any annual operating fee payment was calculated incorrectly, the Lessor has the right to correct any errors and collect the correct annual operating fee payment amount.

If the annual operating fee is revised downward as a result of the Lessee's calculations, as validated by the Lessor, or an audit of meter data conducted by the Lessee or Lessor, the Lessee will be refunded the difference between the amount of the payment received and

the amount of the revised annual operating fee, without interest. Similarly, if the payment amount is revised upward, the Lessee is required to pay the difference between the amount of the payment received and the amount of the revised annual operating fee, plus interest on the balance, in accordance with 30 CFR § 1218.54.

Late operating fee payments will be charged interest in accordance with 30 CFR § 1218.54.

### III. Financial Assurance

The Lessor will base the determination for the amounts of all SAP, COP, and decommissioning financial assurance requirements on estimates of the cost to meet all accrued lease obligations. The Lessor determines the amount of supplemental and decommissioning financial assurance requirements on a case-by-case basis. The amount of financial assurance required to meet all lease obligations includes:

(a) **Initial Financial Assurance.** Prior to the Lease Issuance date and in accordance with 30 CFR 585.515, the Lessee must provide an initial lease-specific bond, or other approved means of meeting the Lessor's initial financial assurance requirements in an amount equal to \$100,000.

(b) **Additional Financial Assurance.** In addition to the initial lease-specific financial assurance previously discussed and as set forth in 30 CFR 585.516-.517, the Lessee is also required to provide additional supplemental bonds associated with the SAP and COP, or other form of financial assurances and a decommissioning bond or other approved means of meeting the Lessee's decommissioning obligations.

(1) Prior to the Lessor's approval of a SAP, the Lessor will require an additional supplemental bond or other form of financial assurance in an amount determined by the Lessor based on the complexity, number, and location of all facilities involved in the site assessment activities planned in the SAP, and estimates of the costs to meet all accrued obligations, in accordance with applicable BOEM regulations (30 CFR 585.515-537). The supplemental financial assurance requirement is in addition to the initial lease-specific financial assurance in the amount of \$100,000. The Lessee may meet these obligations by providing a new bond or other acceptable form of financial assurance, or increasing the amount of its existing bond or other form of financial assurance.

(2) Prior to the Lessor's approval of a COP, the Lessor may require an additional supplemental bond or other form of financial assurance in an amount determined by the Lessor based on the complexity, number, location of all facilities, activities and Commercial Operations planned in the COP, and estimates of the costs to meet all accrued obligations, in accordance with applicable BOEM regulations (30 CFR 585.515-537). The supplemental financial assurance requirement is in addition to the initial lease-specific financial assurance in the amount of \$100,000, and any additional supplemental bond or other form of financial assurance required

with the SAP. The Lessee may meet these obligations by providing a new bond or other acceptable form of financial assurance, or increasing the amount of its existing bond or other form of financial assurance.

(3) The Lessor will require a decommissioning bond or other form of financial assurance based on the anticipated decommissioning costs in accordance with applicable BOEM regulations (30 CFR 585.515-537). The decommissioning obligation must be guaranteed through an acceptable form of financial assurance and will be due on a schedule to be approved by BOEM in accordance with the number of facilities installed or being installed.

(c) **Adjustments to Financial Assurance Amounts.** The Lessor reserves the right to adjust the amount of any financial assurance requirement (initial, supplemental or decommissioning) associated with this lease and/or reassess the Lessee's cumulative lease obligations, including decommissioning obligations, at any time. If the Lessee's cumulative lease obligations and/or liabilities increase or decrease, the Lessor will notify the Lessee of any intended adjustment to the financial assurance requirements and provide the Lessee an opportunity to comment in accordance with applicable BOEM regulations.

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM “C”**

LEASE-SPECIFIC TERMS, CONDITIONS, AND STIPULATIONS

Lease Number OCS-A 0499

The Lessee’s rights to conduct activities on the leased area are subject to the following terms, conditions, and stipulations. The Lessor reserves the right to impose additional terms, and conditions incident to the future approval or approval with modifications of plans, such as a Site Assessment Plan (SAP) or Construction and Operations Plan (COP).

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## 1 DEFINITIONS

- 1.1 Definition of “Archaeological Resource”: The term “archaeological resource” has the same meaning as “archaeological resource” in BOEM regulations provided in 30 CFR 585.112.
- 1.2 Definition of “Dynamic Management Area (DMA)”: The term “DMA” refers to a temporary area designated by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) and a circle around a confirmed North Atlantic right whale sighting. The radius of this circle expands incrementally with the number of whales sighted, and a buffer is included beyond the core area, as designated by NMFS, to allow for whale movement. NOAA NMFS may apply mandatory or voluntary speed restrictions. Information regarding the location and status of applicable DMAs is available from the NMFS Office of Protected Resources.
- 1.3 Definition of “Effective Date”: The term “Effective Date” has the same meaning as “effective date” in BOEM regulations provided in 30 CFR 585.237.
- 1.4 Definition of “Geological and Geophysical Survey (G&G Survey)”: The term “G&G Survey” serves as a collective term for surveys that collect data on the geology of the seafloor and landforms below the seafloor. High resolution geophysical surveys and geotechnical (sub-bottom) exploration are components of G&G surveys.
- 1.5 Definition of “Geotechnical Exploration”: The term “Geotechnical Exploration” is used to refer to the process by which site-specific sediment and underlying geologic data are acquired from the seafloor and the sub-bottom and includes geotechnical surveys utilizing borings, vibracores, and cone penetration tests.
- 1.6 Definition of “High Resolution Geophysical Survey (HRG Survey)”: The term “HRG Survey” means a marine remote-sensing survey using, but not limited to, such equipment as side-scan sonar, magnetometer, shallow and medium (seismic) penetration sub-bottom profiler systems, narrow beam or multibeam echo sounder, or other such equipment employed for the purposes of providing data on geological conditions, identifying shallow hazards, identifying archaeological resources, charting bathymetry, and gathering other site characterization information.
- 1.7 Definition of “Listed Species”: The term “listed species,” also referred to in adjective form as “listed,” means any species of fish, wildlife, or plant that has been determined to be endangered or threatened under Section 4 of the Endangered Species Act. Listed species are provided in 50 CFR 17.11-17.12.
- 1.8 Definition of “Plan”: The term “plan” means a Site Assessment Plan (SAP) and/or a Construction and Operations Plan (COP).

- 1.9 Definition of “Protected-Species Observer”: The term “protected-species observer,” or “observer,” means an individual who is trained in the shipboard identification and behavior of protected species. Protected species include marine mammals (those protected under the Endangered Species Act and those protected under the Marine Mammal Protection Act) and sea turtles.
- 1.10 Definition of “Ramp-up”: The term “ramp-up” means the process of incrementally increasing the acoustic source level of the survey equipment when conducting HRG surveys until it reaches the operational setting.
- 1.11 Definition of “Site Assessment Activities”: The term “site assessment activities” or “site assessment,” has the same meaning as “site assessment activities” in 30 CFR 585.112.
- 1.12 Definition of “Qualified Marine Archaeologist”: The term “qualified marine archaeologist” means a person retained by the Lessee who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology (48 FR 44738-44739), and has experience analyzing marine geophysical data.
- 1.13 Definition of “Take”: The terms “Takes,” “Taken,” and “Taking” have the same meaning as the term “take” as defined in 16 U.S.C. § 1532(19).

## **2 SCHEDULE**

### **2.1 Site Characterization**

#### **2.1.1 Survey Plan(s).**

- 2.1.1.1 **SAP Survey Plan**. If the Lessee proposes to conduct site assessment activities during the site assessment term, then the Lessee must submit to the Lessor a complete SAP survey plan. This SAP survey plan must include details and timelines of the surveys to be conducted on this lease necessary to support the submission of a SAP (i.e., necessary to satisfy the information requirements in the applicable regulations, including but not limited to 30 CFR 585.606, 610, 611).

The Lessee must submit the SAP survey plan to the Lessor at least 30 calendar days prior to the date of the required pre-survey meeting with the Lessor (See 2.1.2). The Lessor may require that the Lessee modify the SAP survey plan to address any comments the Lessor submits to the Lessee on the contents of the SAP survey plan in a manner deemed satisfactory to the Lessor prior to the commencement of any survey activities described in the SAP survey plan.



- 2.1.1.2 COP Survey Plan. The Lessee must submit to the Lessor a complete COP survey plan providing details and timelines of the surveys to be conducted on this lease that are necessary to support the submission of a COP (i.e., necessary to satisfy the information requirements in the applicable regulations, including but not limited to 30 CFR 585.621, 626, 627). The Lessee must submit the COP survey plan to the Lessor at least 30 calendar days prior to the date of the pre-survey meeting with the Lessor (see 2.1.2). The Lessee must modify the COP survey plan to address any comments the Lessor submits to the Lessee on the contents of the COP survey plan in a manner deemed satisfactory to the Lessor prior to the commencement of these survey activities.
- 2.1.2 Pre-Survey Meeting(s) with the Lessor. At least 60 days prior to the initiation of survey activities in support of the submission of a plan (i.e., SAP and/or COP), the Lessee must hold a pre-survey meeting with the Lessor to discuss the applicable proposed survey plan and timelines. The Lessee must ensure the presence at this meeting of a Qualified Marine Archaeologist (see 4.2.2). The Lessor may request the presence of other relevant subject matter experts at this meeting.

## **2.2 Progress Reporting**

- 2.2.1 Semi-Annual Progress Report. The Lessee must submit to the Lessor a semi-annual (i.e., every six months) progress report through the duration of the site assessment term that includes a brief narrative of the overall progress since the last progress report, or – in the case of the first report – since the Effective Date. The progress report must include an update regarding progress in executing the activities included in the survey plan(s), and include as an enclosure an updated survey plan(s) accounting for any modifications in schedule.

## **3 NATIONAL SECURITY AND MILITARY OPERATIONS**

The Lessee must comply with the requirements specified in stipulations 3.1, 3.2, and 3.3 when conducting site characterization activities in support of plan submittal.

### **3.1 Hold and Save Harmless**

The Lessee assumes all risks of damage or injury to persons or property that occurs in, on, or above the OCS, to any persons or to any property of any person or persons in connection with any activities being performed by the Lessee in, on, or above the OCS, if such injury or damage to such person or property occurs by reason of the activities of any agency of the United States Government, its contractors, or subcontractors, or any of its officers, agents or employees, being conducted as a part of, or in connection with, the programs or activities of the individual military command headquarters (hereinafter “the appropriate command headquarters”) listed in the contact information provided as an Enclosure to this lease, whether compensation for such damage or injury might be due under a theory of strict or absolute liability or otherwise.

Notwithstanding any limitation of the Lessee's liability in Section 9 of the lease, the Lessee assumes this risk whether such injury or damage is caused in whole or in part by any act or omission, regardless of negligence or fault, of the United States, its contractors or subcontractors, or any of its officers, agents, or employees. The Lessee further agrees to indemnify and save harmless the United States against all claims for loss, damage, or injury in connection with the programs or activities of the command headquarters, whether the same be caused in whole or in part by the negligence or fault of the United States, its contractors, or subcontractors, or any of its officers, agents, or employees and whether such claims might be sustained under a theory of strict or absolute liability or otherwise.

### **3.2 Evacuation or Suspension of Activities**

- 3.2.1 General. The Lessee hereby recognizes and agrees that the United States reserves and has the right to temporarily suspend operations and/or require evacuation on this lease in the interest of national security pursuant to Section 3(c) of this lease.
- 3.2.2 Notification. Every effort will be made by the appropriate military agency to provide as much advance notice as possible of the need to suspend operations and/or evacuate. Advance notice will normally be given before requiring a suspension or evacuation. Temporary suspension of operations may include but is not limited to the evacuation of personnel and appropriate sheltering of personnel not evacuated.

"Appropriate sheltering" means the protection of all Lessee personnel for the entire duration of any Department of Defense activity from flying or falling objects or substances, and will be implemented by an order (oral and/or written) from the BOEM Office of Renewable Energy Programs (OREP) Program Manager, after consultation with the appropriate command headquarters or other appropriate military agency or higher Federal authority. The appropriate command headquarters, military agency or higher authority will provide information to allow the Lessee to assess the degree of risk to, and provide sufficient protection for, the Lessee's personnel and property.

- 3.2.3 Duration. Suspensions or evacuations for national security reasons will not generally exceed 72 hours; however, any such suspension may be extended by order of the OREP Program Manager. During such periods, equipment may remain in place, but all operations, if any, must cease for the duration of the temporary suspension if so directed by the OREP Program Manager. Upon cessation of any temporary suspension, the OREP Program Manager will immediately notify the Lessee that such suspension has terminated and operations on the leased area can resume.

- 3.2.4 Lessee Point-of-Contact for Evacuation/Suspension Notifications. The Lessee must inform the Lessor of the persons/offices to be notified to implement the terms of 3.2.2 and 3.2.3.
- 3.2.5 Coordination with Command Headquarters. The Lessee must establish and maintain early contact and coordination with the appropriate command headquarters (see Contact Information for Reporting Requirements Sheet), in order to avoid or minimize the potential to conflict with and minimize the potential effects of conflicts with military operations.
- 3.2.6 Reimbursement. The Lessee is not entitled to reimbursement for any costs or expenses associated with the suspension of operations or activities or the evacuation of property or personnel in fulfillment of the military mission in accordance with 3.2.1 through 3.2.5 above.

### **3.3 Electromagnetic Emissions**

Prior to entry into any designated defense operating area, warning area, or water test area for the purpose of commencing survey activities undertaken to support SAP or COP submittal, the Lessee must enter into an agreement with the commander of the appropriate command headquarters to coordinate the electromagnetic emissions associated with such survey activities. The Lessee must ensure that all electromagnetic emissions associated with such survey activities are controlled as directed by the commander of the appropriate command headquarters.

## **4 STANDARD OPERATING CONDITIONS**

### **4.1 General Requirements**

- 4.1.1 Prior to the start of operations, the Lessee must hold a briefing to establish responsibilities of each involved party, define the chains of command, discuss communication procedures, provide an overview of monitoring procedures, and review operational procedures. This briefing must include all relevant personnel, crew members and protected species observers (PSO). New personnel must be briefed as they join the work in progress.
- 4.1.2 The Lessee must ensure that all vessel operators and crew members, including PSOs, are familiar with, and understand, the requirements specified in Addendum C.
- 4.1.3 The Lessee must ensure that a copy of the standard operating conditions (Addendum C) is made available on every project-related vessel.

4.1.4 Marine Trash and Debris Prevention. The Lessee must ensure that vessel operators, employees, and contractors actively engaged in activity in support of plan (i.e., SAP and COP) submittal are briefed on marine trash and debris awareness and elimination, as described in the Bureau of Safety and Environmental Enforcement (BSEE) Notice to Lessees and Operators (NTL) No. 2012-G01 (“Marine Trash and Debris Awareness and Elimination”) or any NTL that supersedes this NTL, except that the Lessor will not require the Lessee, vessel operators, employees, and contractors to undergo formal training or post placards. The Lessee must ensure that these vessel operator employees and contractors are made aware of the environmental and socioeconomic impacts associated with marine trash and debris and their responsibilities for ensuring that trash and debris are not intentionally or accidentally discharged into the marine environment. The above-referenced NTL provides information the Lessee may use for this awareness briefing.

## **4.2 Vessel Strike Avoidance Measures**

- 4.2.1 The Lessee must ensure that all vessels conducting activities in support of plan submittal comply with the vessel-strike avoidance measures specified in stipulations 4.2.1 through 4.2.9.1, except under extraordinary circumstances when complying with these requirements would put the safety of the vessel or crew at risk.
- 4.2.2 The Lessee must ensure that vessel operators and crews maintain a vigilant watch for cetaceans, pinnipeds, and sea turtles and slow down or stop their vessel to avoid striking these protected species.
- 4.2.3 The Lessee must ensure that all vessel operators comply with 10 knot (18.5 km/hr) speed restrictions in any Dynamic Management Area (DMA).
- 4.2.4 The Lessee must ensure that vessels 65 feet in length or greater, operating from November 1 through July 31, operate at speeds of 10 knots (18.5 km/hr) or less.
- 4.2.5 The Lessee must ensure that all vessel operators reduce vessel speed to 10 knots or less when mother/calf pairs, pods, or large assemblages of non-delphinoid cetaceans are observed near an underway vessel.
- 4.2.6 North Atlantic right whales.
- 4.2.6.1 The Lessee must ensure all vessels maintain a separation distance of 500 meters (1,640 ft) or greater from any sighted North Atlantic right whale.
- 4.2.6.2 The Lessee must ensure that the following avoidance measures are taken if a vessel comes within 500 meters (1,640 ft) of any North Atlantic right whale:

- 4.2.6.2.1 If underway, vessels must steer a course away from any sighted North Atlantic right whale at 10 knots (18.5 km/h) or less until the 500 meters (1,640 ft) minimum separation distance has been established (except as provided in 4.2.6.2.2).
- 4.2.6.2.2 If a North Atlantic right whale is sighted in a vessel's path, or within 100 meters (328 ft) to an underway vessel, the underway vessel must reduce speed and shift the engine to neutral. The lessee must not engage engines until the North Atlantic right whale has moved outside the vessel's path and beyond 100 meters (328 ft), at which point the Lessee must comply with 4.2.6.2.1.
- 4.2.6.2.3 If a vessel is stationary, the vessel must not engage engines until the North Atlantic right whale has moved beyond 100 meters (328 ft), at which point the Lessee must comply with 4.2.6.2.1.

#### 4.2.7 Non-delphinoid cetaceans other than the North Atlantic right whale.

- 4.2.7.1 The Lessee must ensure all vessels maintain a separation distance of 100 meters (328 ft) or greater from any sighted non-delphinoid cetacean.
- 4.2.7.2 The Lessee must ensure that the following avoidance measures are taken if a vessel comes within 100 meters (328 ft) of any sighted non-delphinoid cetacean:
  - 4.2.7.2.1 If any non-delphinoid cetacean is sighted, the vessel underway must reduce speed and shift the engine to neutral, and must not engage the engines until the non-delphinoid cetacean has moved outside of the vessel's path and beyond 100 meters (328 ft).
  - 4.2.7.2.2 If a vessel is stationary, the vessel must not engage engines until the sighted non-delphinoid cetacean has moved out of the vessel's path and beyond 100 meters (328 ft).

#### 4.2.8 Delphinoid cetaceans and Pinnipeds.

- 4.2.8.1 The Lessee must ensure that all vessels underway do not divert to approach any delphinoid cetacean and/or pinniped.
- 4.2.8.2 The Lessee must ensure that if a delphinoid cetacean and/or pinniped approaches any vessel underway, the vessel underway must avoid excessive speed or abrupt changes in direction to avoid injury to the delphinoid cetacean and/or pinniped.

#### 4.2.9 Sea Turtles.

- 4.2.9.1 The Lessee must ensure all vessels maintain a separation distance of 50 meters (164 ft) or greater from any sighted sea turtle.

### **4.3 Archaeological Survey Requirements**

- 4.3.1 Archaeological Survey Required. The Lessee must provide the results of an archaeological survey with its plans.
- 4.3.2 Qualified Marine Archaeologist. The Lessee must ensure that the analysis of archaeological survey data collected in support of plan submittal and the preparation of archaeological reports in support of plan submittal are conducted by a Qualified Marine Archaeologist.
- 4.3.3 Tribal Pre-Survey Meeting. The Lessee must invite by certified mail the Narragansett Indian Tribe, the Shinnecock Indian Nation, and the Lenape Tribe of Delaware to a tribal pre-survey meeting. The purpose of this meeting will be for the Lessee and the Lessee's Qualified Marine Archaeologist to discuss the Lessee's Survey Plan and consider requests to monitor portions of the archaeological survey and the geotechnical exploration activities, including the visual logging and analysis of geotechnical samples (*e.g.*, cores). This meeting must be held subsequent to the pre-survey meeting with the Lessor (see 2.1.2). Invitation to the tribal pre-survey meeting must be made at least 15 calendar days prior to the date of the proposed tribal pre-survey meeting. The meeting must be scheduled for a date at least 30 calendar days prior to the commencement of survey activities performed in support of a plan and at a location and time that affords the participants a reasonable opportunity to participate. The anticipated date for the meeting must be identified in the timeline of activities described in the applicable survey plan (see 2.1.1).
- 4.3.4 Geotechnical Exploration.
- 4.3.4.1 The Lessee may only conduct geotechnical exploration activities in support of plan submittal in locations where an analysis of the results of geophysical surveys has been completed. This analysis must include a determination by a Qualified Marine Archaeologist as to whether any potential archaeological resources are present in the area.
- 4.3.4.2 Except as allowed by the Lessor under 4.3.6, the geotechnical exploration activities must avoid potential archaeological resources by a minimum of 50 meters, and the Qualified Marine Archaeologist must calculate the avoidance distance from the maximum discernible extent of the archaeological resource.
- 4.3.4.3 Upon completion of geotechnical exploration activities, a Qualified Marine Archaeologist must certify, in the Lessee's archaeological reports, that such activities did not impact potential historic properties identified as a result of the HRG surveys performed in support of plan submittal, except as follows: in the event that the geotechnical exploration activities did impact potential historic properties identified in the archaeological surveys without the Lessor's prior approval, the Lessee and the Qualified Marine Archaeologist who prepared the report must instead provide a statement documenting the extent of these impacts.

- 4.3.5 Monitoring and Avoidance. The Lessee must inform the Qualified Marine Archaeologist that he or she is permitted to be present during HRG surveys and bottom-disturbing activities performed in support of plan submittal to ensure avoidance of potential archaeological resources, as determined by the Qualified Marine Archaeologist (including bathymetric, seismic, and magnetic anomalies; side scan sonar contacts; and other seafloor or sub-surface features that exhibit potential to represent or contain potential archaeological sites or other historic properties). In the event that the Qualified Marine Archaeologist indicates that he or she wishes to be present, the Lessee must facilitate the Qualified Marine Archaeologist's presence, as requested by the Qualified Marine Archaeologist, and provide the Qualified Marine Archaeologist the opportunity to inspect data quality.
- 4.3.6 No Impact without Approval. The Lessee must not knowingly impact a potential archaeological resource without the Lessor's prior approval.
- 4.3.7 Post-Review Discovery Clauses. If the Lessee, while conducting site characterization activities in support of plan submittal, discovers a potential archaeological resource, such as the presence of a shipwreck (*e.g.*, a sonar image or visual confirmation of an iron, steel, or wooden hull, wooden timbers, anchors, concentrations of historic objects, piles of ballast rock), prehistoric artifacts, or relict landforms within the project area, the Lessee must:
- 4.3.7.1 Immediately halt seafloor/bottom-disturbing activities within the area of discovery;
  - 4.3.7.2 Notify the Lessor within 24 hours of discovery;
  - 4.3.7.3 Notify the Lessor in writing via report to the Lessor within 72 hours of its discovery;
  - 4.3.7.4 Keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until the Lessor conducts an evaluation and instructs the applicant on how to proceed; and
  - 4.3.7.5 Conduct any additional investigations as directed by the Lessor to determine if the resource is eligible for listing in the National Register of Historic Places (30 CFR 585.802(b)). The Lessor will direct the Lessee to conduct such investigations if: (1) the site has been impacted by the Lessee's project activities; or (2) impacts to the site or to the area of potential effect cannot be avoided. If investigations indicate that the resource is potentially eligible for listing in the National Register of Historic Places, the Lessor will tell the Lessee how to protect the resource or how to mitigate adverse effects to the site. If the Lessor incurs costs in protecting the resource, under Section 110(g) of the National Historic Preservation Act, the Lessor may charge the Lessee reasonable costs for carrying out preservation responsibilities under the OCS Lands Act (30 CFR 585.802(c-d)).

#### 4.4 Geological and Geophysical (G&G) Survey Requirements

- 4.4.1 The Lessee must ensure that all vessels conducting activity in support of a plan (*i.e.*, SAP and COP) submittal comply with the geological and geophysical survey requirements specified in 4.4, except under extraordinary circumstances when complying with these requirements would put the safety of the vessel or crew at risk.
- 4.4.2 Visibility. The Lessee must not conduct G&G surveys in support of plan submittal at any time when lighting or weather conditions (*e.g.*, darkness, rain, fog, sea state) prevent visual monitoring of the high-resolution geophysical (HRG) survey exclusion zone (see 4.4.6) or the geotechnical exploration exclusion zone (see 4.4.7), except as allowed under 4.4.3.
- 4.4.3 Modification of Visibility Requirement. If the Lessee intends to conduct G&G survey operations in support of plan submittal at night or when visual observation is otherwise impaired, it must submit to the Lessor an alternative monitoring plan detailing the alternative monitoring methodology (*e.g.*, active or passive acoustic monitoring technologies). The alternative monitoring plan must demonstrate the effectiveness of the methodology proposed to the Lessor's satisfaction. The Lessor may, after consultation with National Marine Fisheries Service (NMFS), decide to allow the Lessee to conduct G&G surveys in support of plan submittal at night or when visual observation is otherwise impaired using the proposed alternative monitoring methodology.
- 4.4.4 Protected-Species Observer. The Lessee must ensure that the exclusion zone for all G&G surveys performed in support of plan submittal is monitored by NMFS-approved protected species observers around the sound source. The number of protected species observers must be sufficient to effectively monitor the exclusion zone at all times. In order to ensure effective monitoring, observers must be on watch for no more than 4 consecutive hours, with at least a 2-hour break after a 4-hour watch, unless otherwise accepted by the Lessor. Observers must be on watch for no more than 12 hours in a 24-hour period. The Lessee must provide to the Lessor a list of observers and their résumés no later than 45 calendar days prior to the scheduled start of surveys performed in support of plan submittal. The Lessee must provide the résumés of additional observers at least 15 calendar days prior to each observer's start date. The Lessor will send the observer qualifications to NMFS for approval.
- 4.4.5 Observation Location and Optical Device Availability. The Lessee must ensure that monitoring occurs from the highest available vantage point on the associated operational platform, allowing for 360-degree scanning. The Lessee must ensure that each observer has access to reticle binoculars and other suitable equipment to adequately perceive and monitor protected species within the exclusion zone during surveys conducted in support of plan submittal.



- 4.4.6 High-Resolution Geophysical (HRG) Surveys. The following stipulations are specific to HRG surveys conducted in support of plan submittal where one or more acoustic sound source is operating at frequencies below 200 kHz:
- 4.4.6.1 Establishment of Default Exclusion Zone. The Lessee must ensure that a protected species observer monitors a 200-meter default exclusion zone for cetaceans, pinnipeds, and sea turtles. In the case of the North Atlantic right whale, the Lessee must observe a minimum separation distance of 500 m (1,640 ft), as required under 4.2.6.1.
- 4.4.6.1.1 If the Lessor determines that the exclusion zone does not encompass the 180 dB Level A harassment threshold calculated for the acoustic source having the highest source level, the Lessor will consult with NMFS and may impose additional, relevant requirements on the Lessee, including, but not limited to, required expansion of this exclusion zone.
- 4.4.6.2 Field Verification of HRG Survey Exclusion Zone. The Lessee must conduct field verification of the exclusion zone for the HRG survey equipment operating below 200 kHz. As part of such field verification, the Lessee must take acoustic measurements at a minimum of two reference locations and in a manner that is sufficient to establish the following: source level (peak at 1 meter) and distance to the 207, 180, 166, 160, and 150 dB(RMS) re 1 $\mu$ Pa sound pressure level (SPL) isopleths as well as the 187 dB re 1 $\mu$ Pa cumulative sound exposure level (cSEL) and 206 dB<sub>peak</sub>. The Lessee must take these sound measurements at the reference locations at two depths (i.e., a depth at mid-water and a depth at approximately 1 meter (3.28 ft) above the seafloor). The Lessee must report the field verification results to the Lessor in the SAP and COP Survey Plans, unless otherwise authorized by the Lessor.
- 4.4.6.3 Field Verification Plan for HRG Survey Exclusion Zone. No later than 45 days prior to the commencement of the field verification activities, the Lessee must submit a plan for verifying the sound source levels of any electromechanical survey equipment operating at frequencies below 200 kHz. The plan must demonstrate how the field verification activities will comply with the requirements of 4.4.6.2. Prior to the commencement of the field verification activities, the Lessor may require the Lessee to modify the plan to address any comments the Lessor submits to the Lessee on the contents of the plan in a manner deemed satisfactory to the Lessor.

- 4.4.6.4 Modification of Exclusion Zone Per Lessee Request. The Lessee may use the results from its field verification to request modification of the exclusion zone for the specific HRG survey equipment under consideration. The Lessee must base any proposed new exclusion zone radius on the largest safety zone configuration of the target Level A or Level B harassment acoustic threshold zone as defined by NMFS. The Lessee must use this modified zone for all subsequent use of field-verified equipment. The Lessee may periodically reevaluate the modified zone using the field verification procedures described in 4.4.6.2. The Lessee must obtain Lessor approval of any new exclusion zone before it is implemented.
- 4.4.6.5 Clearance of Exclusion Zone. The Lessee must ensure that active acoustic sound sources are not activated until the protected species observer has reported the exclusion zone clear of all marine mammals and sea turtles for at least 60 minutes.
- 4.4.6.6 Seasonal Management Areas (SMAs) Right Whale Monitoring. The Lessee must ensure that between November 1 and July 31, vessel operators monitor NMFS North Atlantic Right Whale reporting systems (*e.g.*, the Early Warning System, Sighting Advisory System, and Mandatory Ship Reporting System) for the presence of North Atlantic right whales during HRG survey operations.
- 4.4.6.7 Dynamic Management Area (DMA) Shutdown Requirement. The Lessee must ensure that vessels cease HRG survey activities within 24 hours of NMFS establishing a DMA in the Lessee's HRG survey area. The Lessee may resume HRG survey activities in the affected area as soon as the DMA has expired.
- 4.4.6.8 Electromechanical Survey Equipment Ramp-Up. The Lessee must ensure that, when technically feasible, a ramp-up of the electromechanical survey equipment occurs at the start or re-start of HRG survey activities. A ramp-up must begin with the power of the smallest acoustic equipment for the HRG survey at its lowest power output. The power output must be gradually increased and other acoustic sources added in such a way that the source level would rise in steps not exceeding 6 dB per 5-minute period.
- 4.4.6.9 Shutdown for Non-Delphinoid Cetaceans and Sea Turtles. If a non-delphinoid cetacean or sea turtle is sighted at or within the exclusion zone, the Lessee must immediately shut down all the electromechanical survey equipment. The Lessee must ensure that the vessel operator immediately complies with such a call by the observer. Any disagreement or discussion must occur only after shutdown. Subsequent restart of the electromechanical survey equipment must use the ramp-up provisions described in 4.4.6.8 and must only occur following clearance of the exclusion zone of all marine mammals and sea turtles for at least 60 minutes as described in 4.4.6.5.

- 4.4.6.10 Power Down for Delphinoid Cetaceans and Pinnipeds. If a delphinoid cetacean or pinniped is sighted at or within the exclusion zone, the Lessee must immediately power down the electromechanical survey equipment to the lowest power output that is technically feasible. The Lessee must ensure that the vessel operator immediately complies with such a call by the observer. Any disagreement or discussion must occur only after power-down. Subsequent restart of the electromechanical survey equipment must use the ramp-up procedures described in 4.4.6.8 and may occur only after (1) the exclusion zone is clear of delphinoid cetaceans and pinnipeds or (2) a determination by the protected species observer after a minimum of 10 minutes of observation that the delphinoid cetacean and/or pinniped is approaching the vessel or towed equipment at a speed and vector that indicates voluntary approach to bow-ride or chase towed equipment.
- 4.4.6.10.1 Pauses in Electromechanical Survey Sound Source. The Lessee must ensure that if the electromechanical sound source shuts down for reasons other than encroachment into the exclusion zone by a non-delphinoid cetacean or sea turtle, including, reasons such as, but not limited to, mechanical or electronic failure, resulting in the cessation of the sound source for a period greater than 20 minutes, restart of the electromechanical survey equipment commences only after clearance of the exclusion zone, as described in 4.4.6.5, and the implementation of ramp-up procedures, as described in 4.4.6.8. If the shutdown is less than 20 minutes, the equipment may be restarted as soon as practicable at its operational level as long as visual surveys were continued diligently throughout the silent period and the exclusion zone remained clear of marine mammals and sea turtles. If visual surveys were not continued diligently during a shutdown of 20 minutes or less, the Lessee must restart the electromechanical survey equipment following clearance of the exclusion zone, as described in 4.4.6.5, and implementation of ramp-up procedures, as described in 4.4.6.8.
- 4.4.7 Geotechnical (Sub-bottom) Exploration. Stipulations specific to geotechnical exploration conducted in support of plan submittal are provided in 4.4.7.1 through 4.4.7.6.
- 4.4.7.1 Establishment of Default Exclusion Zone. The Lessee must ensure that a protected species observer monitors a 200-meter (656 ft) default exclusion zone for all marine mammals and sea turtles around any vessel conducting geotechnical surveys.

- 4.4.7.2 Modification of Default Exclusion Zone Per Lessee Request. If the Lessee wishes to modify the 200 m (656 ft) default exclusion zone for specific geotechnical exploration equipment, the Lessee must submit a plan for verifying the sound source levels of the specific geotechnical exploration equipment to the Lessor. The plan must demonstrate how the field verification activities will comply with the requirements of 4.4.7.3. The Lessor may require that the Lessee modify the plan to address any comments the Lessor submits to the Lessee on the contents of the plan in a manner deemed satisfactory to the Lessor prior to the commencement of field verification activities. Any new exclusion zone radius proposed by the Lessee must be based on the largest safety zone configuration of the target Level A or Level B harassment acoustic threshold zone as defined by NMFS. The Lessee must use this modified zone for all subsequent use of field-verified equipment. The Lessee may periodically reevaluate the modified zone using the field verification procedures described in 4.4.7.3. The Lessee must obtain Lessor approval of any new exclusion zone before it is implemented.
- 4.4.7.3 Field Verification of Geotechnical Exclusion Zone. If the Lessee wishes to modify the existing exclusion zone, the Lessee must conduct field verification of the exclusion zone for specific geotechnical exploration equipment. The Lessee must use the results of the sound measurements from the survey equipment to establish a new exclusion zone, which may be greater than or less than the 200 m (656 ft) default exclusion zone depending on the results of the field tests. As part of such field verification, the Lessee must take acoustic measurements at a minimum of two reference locations and in a manner that is sufficient to establish the following: source level (peak at 1 meter) and distance to the 207, 180, 166, 160, and 150 dB(RMS) re 1 $\mu$ Pa sound pressure level (SPL) isopleths as well as the 187 dB re 1 $\mu$ Pa cumulative sound exposure level (cSEL) and 206 dB<sub>peak</sub>. The Lessee must take these sound measurements at the reference locations at two depths (i.e., a depth at mid-water and a depth at approximately 1 meter above the seafloor).
- 4.4.7.4 Clearance of Exclusion Zone. The Lessee must ensure that the geotechnical sound source is not activated until the protected species observer has reported the exclusion zone clear of all marine mammals and sea turtles for 60 minutes.
- 4.4.7.5 Shutdown for Non-Delphinoid Cetaceans and Sea Turtles. If any non-delphinoid cetaceans or sea turtles are sighted at or within the exclusion zone, the Lessee must immediately shut down the geotechnical survey equipment. The vessel operator must comply immediately with such a call by the observer. Any disagreement or discussion should occur only after shutdown. Subsequent restart of the geotechnical survey equipment must only occur following clearance of the exclusion zone as described in 4.4.7.4.

4.4.7.6 Pauses in Geotechnical Survey Sound Source. The Lessee must ensure that if the geotechnical sound source shuts down for reasons other than encroachment into the exclusion zone by a non-delphinoid cetacean or sea turtle, including, but not limited to, mechanical or electronic failure resulting in the cessation of the sound source for a period greater than 20 minutes, restart of the geotechnical survey equipment commences only after clearance of the exclusion zone, as described in 4.4.7.4. If the shutdown is less than 20 minutes, the equipment may be restarted as soon as practicable as long the Lessee has continued visual surveys diligently throughout the silent period and the exclusion zone remained clear of marine mammals and sea turtles. If visual surveys were not continued diligently during a shutdown of 20 minutes or less, the Lessee must restart the geotechnical survey equipment following clearance of the exclusion zone, as described in 4.4.7.4.

#### **4.5 Protected-Species Reporting Requirements**

The Lessee must ensure compliance with the following reporting requirements for site characterization activities performed in support of plan submittal, and, where appropriate, must fulfill these requirements using the contact information provided as an Enclosure to this lease, or updated contact information as provided by the Lessor:

- 4.5.1 Reporting Injured or Dead Protected Species. The Lessee must ensure that sightings of any injured or dead protected species (*e.g.*, marine mammals, sea turtles or sturgeon) are reported to the Lessor, NMFS and the NMFS Northeast Region's Stranding Hotline (866-755-6622 or current) within 24 hours of sighting, regardless of whether the injury or death is caused by a vessel. In addition, if the injury or death was caused by a collision with a project-related vessel, the Lessee must notify the Lessor of the strike within 24 hours. The Lessee must use the form provided in Appendix A to ADDENDUM "C" to report the sighting or incident. If the Lessee's activity is responsible for the injury or death, the Lessee must ensure that the vessel assists in any salvage effort as requested by NMFS.
- 4.5.2 Reporting Observed Impacts to Protected Species.
- 4.5.2.1 The Lessee must report any observed takes of listed marine mammals, sea turtles or sturgeon (as defined in 1.13) resulting in injury or mortality within 24 hours to the Lessor and NMFS.
- 4.5.2.2 The Lessee must report any observations concerning any impacts on Endangered Species Act listed marine mammals, sea turtles or sturgeon to the Lessor and NMFS Northeast Region's Stranding Hotline within 48 hours.
- 4.5.2.3 The Lessee must record injuries or mortalities using the form provided in Appendix A to ADDENDUM "C".

- 4.5.3 Protected Species Observer Reports. The Lessee must ensure that the protected-species observer record all observations of protected species using standard marine mammal observer data collection protocols. The list of required data elements for these reports is provided in Appendix B to ADDENDUM "C".
- 4.5.4 Reports of G&G Survey Activities and Observations. The Lessee must provide BOEM and NMFS with reports every 90 calendar days following the commencement of HRG and/or geotechnical exploration activities, and a final report at the conclusion of the HRG and/or geotechnical exploration activities. Each report must include a summary of survey activities, all protected species observer and incident reports (See Appendices A and B), a summary of the survey activities, and an estimate of the number of listed marine mammals and sea turtles observed and/or taken during these survey activities.
- 4.5.5 Marine Mammal Protection Act Authorization(s). If the Lessee is required to obtain an authorization pursuant to section 101(a)(5) of the Marine Mammal Protection Act prior to conducting survey activities, the Lessee must provide to the Lessor a copy of such authorization prior to commencing survey activities, pursuant to 30 CFR 585.801(b).

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**APPENDIX "A"**

Lease Number OCS-A 0499

**Incident Report: Protected Species Injury or Mortality**

*Photographs/Video should be taken of all injured or dead animals.*

Observer's full name: \_\_\_\_\_

Reporter's full name: \_\_\_\_\_

Species Identification: \_\_\_\_\_

Name and type of platform: \_\_\_\_\_

Date animal observed: \_\_\_\_\_ Time animal observed: \_\_\_\_\_

Date animal collected: \_\_\_\_\_ Time animal collected: \_\_\_\_\_

Environmental conditions at time of observation (i.e. tidal stage, Beaufort Sea State, weather):  
\_\_\_\_\_  
\_\_\_\_\_

Water temperature (°C) and depth (m/ft) at site: \_\_\_\_\_

Describe location of animal and events 24 hours leading up to, including and after, the incident (incl. vessel speeds, vessel activity and status of all sound source use):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Photograph/Video taken: YES / NO      If Yes, was the data provided to NMFS? YES / NO  
(Please label *species, date, geographic site* and *vessel name* when transmitting photo and/or video)

Date and Time reported to NMFS Stranding Hotline: \_\_\_\_\_

**Sturgeon Information:** *(please designate cm/m or inches and kg or lbs)*

Species: \_\_\_\_\_

Fork length (or total length): \_\_\_\_\_ Weight: \_\_\_\_\_

Condition of specimen/description of animal: \_\_\_\_\_  
\_\_\_\_\_

Fish Decomposed: NO SLIGHTLY MODERATELY SEVERELY

Fish tagged: YES / NO If Yes, please record all tag numbers.

Tag #(s): \_\_\_\_\_

Genetic samples collected: YES / NO

Genetics samples transmitted to: \_\_\_\_\_ on \_\_\_\_/\_\_\_\_/20....

**Sea Turtle Species Information:** (please designate cm/m or inches)

Species: \_\_\_\_\_ Weight (kg or lbs): \_\_\_\_\_

Sex: Male Female Unknown

How was sex determined?: \_\_\_\_\_

Straight carapace length: \_\_\_\_\_ Straight carapace width: \_\_\_\_\_

Curved carapace length: \_\_\_\_\_ Curved carapace width: \_\_\_\_\_

Plastron length: \_\_\_\_\_ Plastron width: \_\_\_\_\_

Tail length: \_\_\_\_\_ Head width: \_\_\_\_\_

Condition of specimen/description of animal: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Existing Flipper Tag Information**

Left: \_\_\_\_\_ Right: \_\_\_\_\_

PIT Tag#: \_\_\_\_\_

**Miscellaneous:**

Genetic biopsy collected: YES NO Photographs taken: YES NO

**Turtle Release Information:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

State: \_\_\_\_\_ County: \_\_\_\_\_

**Remarks:** (note if turtle was involved with tar or oil, gear or debris entanglement, wounds, or mutilations, propeller damage, papillomas, old tag locations, etc.) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Marine Mammal information:** *(please designate cm/m or ft/inches)*

Length of marine mammal (note direct or estimated): \_\_\_\_\_

Weight (*if possible, kg or lbs*): \_\_\_\_\_

Sex of marine mammal (if possible): \_\_\_\_\_

How was sex determined?: \_\_\_\_\_

Confidence of Species Identification:                    SURE                    UNSURE                    BEST GUESS

Description of Identification characteristics of marine mammal: \_\_\_\_\_

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Genetic samples collected:                    YES / NO

Genetic samples transmitted to: \_\_\_\_\_ on \_\_\_\_ / \_\_\_\_ /20....

Fate of marine mammal: \_\_\_\_\_

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Description of Injuries Observed: \_\_\_\_\_

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Other Remarks/Drawings: \_\_\_\_\_

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U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**APPENDIX “B”**

Lease Number OCS-A 0499

**REQUIRED DATA ELEMENTS FOR PROTECTED SPECIES OBSERVER REPORTS**

The Lessee must ensure that the protected-species observer record all observations of protected species using standard marine mammal observer data collection protocols. The list of required data elements for these reports is provided below:

1. Vessel name;
2. Observers' names and affiliations;
3. Date;
4. Time and latitude/longitude when daily visual survey began;
5. Time and latitude/longitude when daily visual survey ended; and
6. Average environmental conditions during visual surveys including:
  - a. Wind speed and direction;
  - b. Sea state (glassy, slight, choppy, rough, or Beaufort scale);
  - c. Swell (low, medium, high, or swell height in meters); and
  - d. Overall visibility (poor, moderate, good).
7. Species (or identification to lowest possible taxonomic level);
8. Certainty of identification (sure, most likely, best guess);
9. Total number of animals;
10. Number of juveniles;
11. Description (as many distinguishing features as possible of each individual seen, including length, shape, color and pattern, scars or marks, shape and size of dorsal fin, shape of head, and blow characteristics);
12. Direction of animal's travel relative to the vessel (preferably accompanied by a drawing);
13. Behavior (as explicit and detailed as possible, noting any observed changes in behavior);
14. Activity of vessel when sighting occurred.

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM "D"**

PROJECT EASEMENT

Lease Number OCS-A 0499

This section includes a description of the Project Easement(s), if any, associated with this lease, and the financial terms associated with it. This section will be updated as necessary.

I. Rent

The Lessee must begin submitting rent payments for any project easement associated with this lease commencing on the date that BOEM approves the Construction and Operations Plan (COP) or modification of the COP describing the project easement. Annual rent for a project easement 200 feet wide, centered on the transmission cable, is \$70.00 per statute mile. For any additional acreage required, the Lessee must also pay the greater of \$5.00 per acre per year or \$450.00 per year.

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM "E"**

RENT SCHEDULE

Lease Number OCS-A 0499

This section includes a description of the schedule for rent payments that will be determined after the Construction and Operations Plan (COP) has been approved or approved with modifications. This section will be updated as necessary.

Unless otherwise authorized by the Lessor in accordance with the applicable regulations in 30 CFR Part 585, the Lessee must make rent payments as described below.

**U.S. DEPARTMENT OF THE INTERIOR**

**BUREAU OF OCEAN ENERGY MANAGEMENT**

**Lease Number OCS-A 0499**

**CONTACT INFORMATION FOR REPORTING REQUIREMENTS**

The following contact information must be used for the reporting and coordination requirements specified in Addendum C, Stipulation 3.2.5:

**United States Fleet Forces (USFF) N46**  
**1562 Mitscher Ave, Suite 250**  
**Norfolk, VA 23551**  
**(757) 836-6206**

The following contact information must be used for the reporting requirements in Addendum C, Stipulation 4.4:

**Reporting Injured or Dead Protected Species**

NOAA Fisheries Northeast Region's Stranding Hotline  
866-755-6622

**All other reporting requirements in Stipulation 4.4**

Bureau of Ocean Energy Management  
Environment Branch for Renewable Energy  
Phone: 703-787-1340  
Email: [renewable\\_reporting@boem.gov](mailto:renewable_reporting@boem.gov)

National Marine Fisheries Service  
Northeast Regional Office, Protected Resources Division  
Section 7 Coordinator  
Phone: 978-281-9328  
Email: [incidental.take@noaa.gov](mailto:incidental.take@noaa.gov); [kellie.foster-taylor@noaa.gov](mailto:kellie.foster-taylor@noaa.gov)

Vessel operators may send a blank email to [ne.rw.sightings@noaa.gov](mailto:ne.rw.sightings@noaa.gov) for an automatic response listing all current dynamic management areas (DMAs).

# ATTACHMENT 62



# United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT  
 WASHINGTON, DC 20240-0001

DEC - 4 2018

## NOTICE

<u>Assignor:</u>	:	Lease Number: OCS-A 0499
US Wind Inc.	:	Assignment Filed: 11/20/2018
155 Federal Street, Suite 700	:	Assignment Effective Date: 12/4/2018
Boston, Massachusetts 02110	:	
	:	
	:	
<u>Assignee:</u>	:	
EDF Renewables Development, Inc.	:	
15445 Innovation Drive	:	
San Diego, California 92128	:	

### Assignment of Lease Approved

Please find enclosed a copy of the above-referenced Outer Continental Shelf (OCS) Assignment of Record Title Interest in Federal OCS Renewable Energy Lease affecting lease OCS-A 0499. The Assignee must comply with all terms and conditions of the lease and the regulations in 30 C.F.R. Part 585 and is jointly and severally liable for the performance of all obligations under the lease with each prior and subsequent lessee who held an interest from the time the obligation accrued until it is satisfied (30 C.F.R. 585.411).

Bureau of Ocean Energy Management records reflect the following ownership, including all right, title, and interest, of the subject lease:

EDF Renewables Development, Inc. – 100%

EDF Renewables Development, Inc. has designated the representatives identified below to update the Lessee Contact Information included in Addendum “A” of lease OCS-A 0499.

	<b>Lease Representative</b>	<b>Operations Representative</b>
Name	Chris Hart	Benoit Rigal
Title	Head of US Offshore Wind	Vice President of Engineering and Construction
Address	EDF Renewable Energy	EDF Renewable Energy
Phone	(858) 716-4059	(858) 521-3706
Fax	(858) 521-3333	(858) 521-3333
Email	Chris.Hart@edf-re.com	Benoit.Rigal@edf-re.com

For further information regarding this notice, please contact the Ms. Gina Best at (703) 787-1341 or [gina.best@boem.gov](mailto:gina.best@boem.gov).

A handwritten signature in black ink, appearing to read 'James F. Bennett', with a stylized flourish at the end.

James F. Bennett  
Program Manager  
Office of Renewable Energy Programs

Enclosure



U.S. Department of the Interior  
Bureau of Ocean Energy Management

OMB Control No.: 1010-0176  
Expiration Date: 06/30/2019

NOV 20 2018

Office of Renewable  
Energy Programs

OCS-A 0499

Lease No.

March 1, 2016

Lease Effective Date

**ASSIGNMENT OF RECORD TITLE INTEREST IN  
FEDERAL OCS RENEWABLE ENERGY LEASE**

**Part A: Assignment**

This assignment is made with respect to the block(s) and/or aliquot part(s) described in Exhibit "A" attached hereto and made a part hereof.

Assignor(s) does hereby sell, assign, transfer and convey unto Assignee(s) the following undivided right, title and interest (insert name and qualification number of each Assignor and Assignee below):

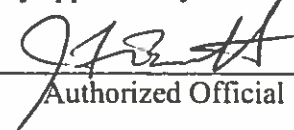
Assignor(s):	US Wind Inc.	Percentage Interest Conveyed
		100.0%

Assignee(s):	EDF Renewables Development, Inc.	Percentage Interest Received
		100.0%

Exhibit "B," which sets forth other provisions between Assignor(s) and Assignee(s), is attached to and made a part of this assignment.

**For BOEM Use only – Do Not Type Below This Line**

This Assignment of Record Title Interest has been filed as of the date stamped on this document and hereby approved by the Bureau of Ocean Energy Management on the date below.

By		Program Manager, Office of Renewable Energy Programs	DEC - 4 2018
	Authorized Official for BOEM	Title	Approval Date

**Paperwork Reduction Act of 1995 (PRA) Statement:** The PRA (44 U.S.C. 3501 et seq.) requires us to inform you that we collect this information to use in the adjudication process involved in leasing and lease operations. The BOEM uses the information to track ownership of leases in the OCS. Responses are required to obtain or retain a benefit. Release of such data and information is covered under 30 CFR 585.113. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number. Public reporting burden of this form is estimated to average 30 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 45600 Woodland Road, Sterling, Virginia 20166.

**Part B – Certification and Acceptance**

1. Each Assignor certifies it is the owner of the interest in the above-described lease that is hereby assigned to the Assignee(s) specified above.
2. **DEBARMENT COMPLIANCE:** Assignee shall comply with the Department of the Interior's nonprocurement debarment and suspension regulations as required by Subpart B of 2 CFR Part 1400 and shall communicate the requirement to comply with these regulations to persons with whom it does business related to this interest assignment by including this term in its contracts and transactions.
3. **EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION COMPLIANCE CERTIFICATION:** Assignor(s) and Assignee(s) certify that they are in full compliance with Equal Opportunity Executive Order 11246, as amended, and the implementing regulations at 41 CFR 60-01 – Obligations of Contractors and Subcontractors; and 41 CFR 60-2 – Affirmative Action Programs. These requirements are for the purpose of preventing discrimination against persons on the basis of race, color, religion, sex, or national origin. These regulations have specific performance requirements.
4. Assignee's execution of this assignment constitutes acceptance of all applicable terms, conditions, stipulations and restrictions pertaining to the lease described herein. Applicable terms and conditions include, but are not limited to, an obligation to conduct all operations on the leasehold in accordance with the terms and conditions of the lease, to restore the leased lands upon completion of any operations as described in the lease, and to furnish and maintain bond(s) pursuant to regulations at 30 CFR Part 585. This assignment is subject to the Outer Continental Shelf Lands Act of August 7, 1953, 43 U.S.C. 1331 et seq., as amended (the "Act"), and Assignee(s) is subject to, and shall fully comply with, all applicable regulations now or to be issued under the Act. Notwithstanding any agreement between the Assignor(s) and Assignee(s), the parties' liability to the Bureau of Ocean Energy Management is governed by 30 CFR Part 585.

This Assignment of Interest will be made effective between the parties hereto as of \_\_\_\_\_, upon approval by the Bureau of Ocean Energy Management, United States Department of the Interior.


This instrument may be executed in any number of counterparts, each of which will be deemed an original instrument, but all of which together shall constitute but one and the same instrument provided, however, this instrument and any other counterpart hereof, will not be binding unless and until executed by all of the parties, and will not be accepted by the Bureau of Ocean Energy Management unless all counterparts are filed simultaneously.

I certify that the statements made herein by the undersigned are true, complete and correct to the best of my knowledge and belief and are made in good faith.

Title 18 U.S.C. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Assignor Name: US Wind Inc.  
Assignor Qualification No. 15023

Assignor Name:  
Assignor Qualification No.

By:   
\_\_\_\_\_  
Signatory Name: Riccardo Toto  
Signatory Title: President


By: \_\_\_\_\_  
Signatory Name:  
Signatory Title:

11 - 16 - 2018  
\_\_\_\_\_  
Execution Date

\_\_\_\_\_  
Execution Date

Assignee Name: EDF Renewables Development, Inc.  
Assignee Qualification No. 15027

Assignee Name:  
Assignee Qualification No.

By:   
\_\_\_\_\_  
Signatory Name: Tristan Grimbert  
Signatory Title: Chief Executive Officer

By: \_\_\_\_\_  
Signatory Name:  
Signatory Title:

\_\_\_\_\_  
Execution Date

\_\_\_\_\_  
Execution Date

**Part B – Certification and Acceptance**

1. Each Assignor certifies it is the owner of the interest in the above-described lease that is hereby assigned to the Assignee(s) specified above.
2. **DEBARMENT COMPLIANCE:** Assignee shall comply with the Department of the Interior’s nonprocurement debarment and suspension regulations as required by Subpart B of 2 CFR Part 1400 and shall communicate the requirement to comply with these regulations to persons with whom it does business related to this interest assignment by including this term in its contracts and transactions.
3. **EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION COMPLIANCE CERTIFICATION:** Assignor(s) and Assignee(s) certify that they are in full compliance with Equal Opportunity Executive Order 11246, as amended, and the implementing regulations at 41 CFR 60-01 – Obligations of Contractors and Subcontractors; and 41 CFR 60-2 – Affirmative Action Programs. These requirements are for the purpose of preventing discrimination against persons on the basis of race, color, religion, sex, or national origin. These regulations have specific performance requirements.
4. Assignee’s execution of this assignment constitutes acceptance of all applicable terms, conditions, stipulations and restrictions pertaining to the lease described herein. Applicable terms and conditions include, but are not limited to, an obligation to conduct all operations on the leasehold in accordance with the terms and conditions of the lease, to restore the leased lands upon completion of any operations as described in the lease, and to furnish and maintain bond(s) pursuant to regulations at 30 CFR Part 585. This assignment is subject to the Outer Continental Shelf Lands Act of August 7, 1953, 43 U.S.C. 1331 et seq., as amended (the “Act”), and Assignee(s) is subject to, and shall fully comply with, all applicable regulations now or to be issued under the Act. Notwithstanding any agreement between the Assignor(s) and Assignee(s), the parties’ liability to the Bureau of Ocean Energy Management is governed by 30 CFR Part 585.

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This instrument may be executed in any number of counterparts, each of which will be deemed an original instrument, but all of which together shall constitute but one and the same instrument provided, however, this instrument and any other counterpart hereof, will not be binding unless and until executed by all of the parties, and will not be accepted by the Bureau of Ocean Energy Management unless all counterparts are filed simultaneously.

I certify that the statements made herein by the undersigned are true, complete and correct to the best of my knowledge and belief and are made in good faith.

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Assignor Name: US Wind Inc.  
Assignor Qualification No. 15023

Assignor Name:  
Assignor Qualification No.

By:   
\_\_\_\_\_  
Signatory Name: Riccardo Toto  
Signatory Title: President


By: \_\_\_\_\_  
Signatory Name:  
Signatory Title:

11-16-2018  
\_\_\_\_\_  
Execution Date

\_\_\_\_\_  
Execution Date

Assignee Name: EDF Renewables Development, Inc.  
Assignee Qualification No. 15027

Assignee Name:  
Assignee Qualification No.

By:   
\_\_\_\_\_  
Signatory Name: Tristan Grimbert  
Signatory Title: Chief Executive Officer  
11-11-2018  
\_\_\_\_\_  
Execution Date

By: \_\_\_\_\_  
Signatory Name:  
Signatory Title:  
  
\_\_\_\_\_  
Execution Date

**EXHIBIT "A"**

**ASSIGNMENT OF RECORD TITLE INTEREST IN  
FEDERAL OCS RENEWABLE ENERGY LEASE**

The Assignment is made with respect to the following described block(s) and/or aliquot part(s) of the lease:

Area Name or Protraction Diagram	Block	Subdivision or Aliquot Part (If entire block, enter "All")
<u>Wilmington NJ18-02</u>	All Blocks and portions of Blocks listed in Addendum A to commercial lease OCS-A 0499, including:	
_____	Block 6389, E1/2;	_____
_____	Block 6438, NE1/4 of NE1/4, S1/2 of NE1/4, SE1/4;	_____
_____	Block 6439, All;	_____
_____	Block 6488, All;	_____
_____	Block 6489, All;	_____
_____	Block 6539, All;	_____
_____	Block 6588, All	_____
_____	Block 6589, N1/2, SW1/4, N1/2 of SE1/4;	_____
_____	Block 6636, NE1/4;	_____
_____	Block 6637, All;	_____
_____	Block 6638, All;	_____
_____	Block 6639, W1/2, S1/2 of SE1/4;	_____
_____	Block 6687, All;	_____
_____	Block 6688, All;	_____
_____	Block 6689, All;	_____
_____	Block 6735, E1/2;	_____
_____	Block 6736, All;	_____
_____	Block 6737, All;	_____
_____	Block 6738, All;	_____
_____	Block 6739, All;	_____
_____	Block 6784, SE1/4;	_____
_____	Block 6785, E1/2, SW1/4;	_____
_____	Block 6786, All;	_____
_____	Block 6787, All;	_____
_____	Block 6788, All;	_____
_____	Block 6789, All;	_____
_____	Block 6834, N1/2 of NE1/4;	_____
_____	Block 6835, E1/2, NW1/4, NE1/4 of SW1/4;	_____
_____	Block 6836, All;	_____
_____	Block 6837, All;	_____
_____	Block 6838, All;	_____
_____	Block 6839, NE1/4, W1/2, NW1/4 of SE1/4;	_____
_____	Block 6885, NE1/4, N1/2 of SE1/4, SE1/4 of SE1/4;	_____
_____	Block 6886, All;	_____
_____	Block 6887, All;	_____
_____	Block 6888, NE1/4, W1/2, W1/2 of SE1/4;	_____
_____	Block 6889, NW1/4 of NW1/4;	_____
_____	Block 6936, NE1/4, N1/2 of NW1/4, SE1/4 of NW1/4, N1/2 of SE1/4, SE1/4 of SE1/4;	_____
_____	Block 6937, N1/2, SW1/4, N1/2 of SE1/4, SW1/4 of SE1/4;	_____
_____	Block 6938, N1/2 of NW1/4, SW1/4 of NW1/4; and	_____
_____	Block 6987, N1/2 of NW1/4.	_____

# ATTACHMENT 63



# United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT  
WASHINGTON, DC 20240-0001

**DEC -4 2018**

Mr. Tristan Grimbert  
EDF Renewables Development, Inc.  
15445 Innovation Drive  
San Diego, California 92128

Dear Mr. Grimbert:

The Bureau of Ocean Energy Management (BOEM) acknowledges receipt of EDF Renewables Development, Inc.'s Lease-Specific Outer Continental Shelf (OCS) Renewable Energy Lessee's, Grantee's, and Operator's Bond No. K0958268A in the amount of \$100,000, conditioned to cover lease OCS-A 0499. The bond was executed by Westchester Fire Insurance Company as the surety, on November 28, 2018 and EDF Renewables Development, Inc., as principal, on November 29, 2018.

The bond conforms to the requirements of the leasing and operating regulations for submerged lands on the OCS. It is effective as of the date filed, November 30, 2018, and has been placed in lease file OCS-A 0499 maintained in BOEM's Office of Renewable Energy Programs.

Please do not hesitate to contact Ms. Gina Best at (703) 787-1341 or [gina.best@boem.gov](mailto:gina.best@boem.gov) if you have any questions.

Sincerely,

James F. Bennett  
Program Manager  
Office of Renewable Energy Programs

Enclosure

Surety Bond No. K0958268A (Copy)

cc: Westchester Fire Insurance Company  
Attn: Stephanie M. Sierota, Attorney-in-Fact  
4695 MacArthur Court, Suite 600  
Newport Beach, CA 92660

NOV 30 2018

U.S. Department of the Interior  
Bureau of Ocean Energy Management

Office of Renewable  
Energy Programs

OMB Control No.: 1010-0176  
Expiration Date: 06/30/2019

Bond No.: K0958268A Bond Amount: \$100,000.00 Regional BOEM office: Sterling

Bond Type:  Lease or Grant-Specific  Supplemental  Decommissioning

OUTER CONTINENTAL SHELF (OCS) RENEWABLE ENERGY  
LESSEE'S, GRANTEE'S, AND OPERATOR'S BOND

The Surety is the Company Guaranteeing Performance.

Name of Surety: Westchester Fire Insurance Company

Mailing Address: 436 Walnut Street  
Philadelphia, PA 19106

If a Corporation, Incorporated in the State of: Pennsylvania; County or Parish of: Philadelphia

Check here if Surety is certified by U.S. Treasury as an acceptable surety on Federal Bonds and listed in the current U.S. Treasury Circular No. 570.

The Principal is the Lessee, Grantee, or Designated Operator for Whom the Bond is Issued.

Name of Principal: EDF Renewables Development, Inc.

Mailing Address: 15445 Innovation Drive  
San Diego, CA 92128

Schedule A: the lease or grant covered by this bond is the following: (Check one and enter Lease or Grant No.)

- Commercial Lease No. : OCS-A 0499
- Limited Lease No: \_\_\_\_\_
- Right-of-Way (ROW) Grant No. : \_\_\_\_\_
- Right-of-Use and Easement (RUE) Grant No. : \_\_\_\_\_
- Other (Specify): \_\_\_\_\_

In addition to the Obligations of the Principal during the period of liability of this bond, the Surety also accepts the following Obligations: (Check one)

- No Obligations other than the Obligations of the Principal during the period of liability of this bond.
- All Obligations of all previous Sureties or guarantors even if the Obligations are not Obligations of the Principal during the period of liability of this bond.
- All Obligations of all previous Sureties or guarantors even if the Obligations are not Obligations of the Principal during the period of liability of this bond with the exceptions or limitations identified in the attached rider.

<b>Definitions</b>	An <b>Obligation</b> includes any obligation arising from any regulations of the Department of the Interior or any Instrument issued, maintained, or approved under the OCS Lands Act (43 U.S.C. 1331 <u>et seq.</u> as amended).
<b>For the purposes of this document:</b>	An <b>Instrument</b> includes individually or collectively any lease, operating agreement, designation of operator or agent, permit, license, right-of-way, right-of-use and easement or project easement, whereunder the Principal has the right, privilege, or license to conduct operations on the OCS. A <b>Person</b> includes an individual, a public or private corporation, a State, a political subdivision of a State, any association of individuals, corporations, States, or subdivisions of States, or an Agency of the United States.

By signing below, the Principal verifies that the information above is correct and agrees to the following: The Principal, as agent on behalf of all lessees, grantees, and operators will fulfill all Obligations for the entire lease or grant to the same extent as though the Principal were the sole lessee, grantee, or operator for the lease or grant described in Schedule A.

**By signing below, the Surety verifies that the information above is correct and agrees to the following:**

1. The Surety does hereby absolutely and unconditionally bind itself to the United States of America acting through and by the Bureau of Ocean Energy Management (BOEM), or such other official designated by the Secretary of the Interior for this purpose, for the performance of all present and future Obligations.
2. The Surety agrees to meet all existing and future Obligations of the Principal on the lease or grant described in Schedule A at a cost not to exceed \$100,000.00.
3. The Surety will be responsible for all Obligations of the Principal in existence at the time this document becomes effective and all Obligations that accrue after that date and until all Obligations are met or until the Regional Director terminates the period of liability of this bond.
4. If the Regional Director terminates the period of liability of this bond, the Surety will remain responsible for Obligations that accrued during the period of liability until the Regional Director issues a written cancellation of the bond in favor of the Surety.
5. If this bond is cancelled, the Regional Director may reinstate this bond as if no cancellation had occurred if any payment of any obligations of the Principal(s) is rescinded or must be restored pursuant to any insolvency, bankruptcy, reorganization, or receivership, or should the representation of the Principal that it has paid its financial Obligations or performed the other Obligations of the lease or grant in accordance with BOEM specifications be materially false and the BOEM relied upon such representation in canceling the bond.
6. The Surety waives any right of notice of this bond taking effect and agrees that this bond will take effect upon delivery to BOEM.
7. The Surety's Obligations will remain in full force and effect, even if:
  - (a) Any person assigns all or part of any interest in an Instrument covered by this document.
  - (b) Any person modifies an Instrument or Obligation under an Instrument in any manner including modifications that result from a suspension; suspension or changes in rent or operating fee; modification of regulations or interpretations of regulations; or creation of any mortgage, pledge, or other grant of security interest in the Instrument.
  - (c) Any person, event, or condition terminates any Instrument covered by this bond, whether the termination is by operation of law or otherwise.
  - (d) The BOEM takes or fails to take any action in enforcing, as against any party to the Instrument, the payment of rent or operating fees or the performance of any other covenant, condition or agreement of the lease or grant, or giving notice of or making demand with respect to such nonperformance.
  - (e) The Surety suffers any loss by reason of any law limiting, qualifying, or discharging the Principal's Obligation.
8. The Surety agrees to be bound under this bond as to the interests in any Instrument retained by the Principal when the BOEM approves the transfer of any or all of the Instrument or interest in the Instrument.
9. In the event of any default under a lease or grant, the Surety must perform the Obligations of the Principal upon demand by the BOEM.
10. If the BOEM decides to commence suit to enforce its rights, it may commence and prosecute any claim, suit, action, or other proceeding against the Principal and Surety, or either of them, whether or not the BOEM joins the lessees, grantees or any other party.
11. In the event there is more than one Surety for the Principal's performance of the Obligations, as to any Instrument, the Surety's Obligation and liability under this bond is on a "solidary" or "joint and several" basis along with other guarantors or sureties.
12. The Surety agrees to notify the BOEM and the Principal within 5 business days of any action filed alleging the insolvency or bankruptcy of the Surety or the Principal, or alleging any violation that would result in suspension or revocation of the Surety's charter or license to do business, or if the U.S. Treasury decertifies the Surety.
13. The Surety's Obligation and liabilities under this Bond are binding upon the Surety's successors and assigns. Nothing in this document permits assignment of the Surety's Obligation without the written consent of the BOEM.
14. The Surety hereby waives any defenses to liability on this bond based on an unauthorized Principal signature.



Westchester Fire Insurance Company

Name of Surety

[Signature]  
Signature of Person Executing for Surety

Stephanie M Sierota, Attorney-in-Fact

Name and Title Typed or Printed

4695 MacArthur Court, Suite 600,  
Newport Beach, CA 92680

Business Address

EDF Renewables Development, Inc.

Name of Principal

[Signature]  
Signature of Person Executing for Principal

Chief Financial Officer

Luis Silva, CFO

Name and Title Typed or Printed

15445 Innovation Dr  
San Diego, CA 92128

Business Address

Signed on this 28th day of November, 2018, in

the State of California, in the presence of:

[Signature]  
Signature of Witness for Surety

Jamie Campbell Younger

Name Typed or Printed

4695 MacArthur Court, Suite 600

Street Address

Newport Beach, CA 92660

City, State and ZIP

Signed on this 29th day of November, 2018, in

the State of California, in the presence of:

[Signature]  
Signature of Witness for Principal

Sylvio Grandjean  
Name Typed or Printed

15445 Innovation Dr.  
Street Address

San Diego, CA 92128  
City, State and ZIP

**Note:** The party signing for the Surety must attach a corporate resolution and power of attorney stating his or her authority to undertake this Obligation, pursuant to the acts of the corporate board of directors and the laws of the State of incorporation. When the Surety is a corporation, an authorized corporate officer must sign the bond and attest to it over the corporate seal.

**Paperwork Reduction Act of 1995 (PRA) Statement:** The PRA (44 U.S.C. 3501 et seq.) requires us to inform you that BOEM collects this information to hold the surety liable for the obligations and liability of the Principal (lessee, grantee or operator). Responses are mandatory. No proprietary information is collected. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number. Public reporting burden for this form is estimated to average 1 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 45600 Woodland Road, Sterling, Virginia 20166.

# CHUBB®

## Power of Attorney

Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Ashley Register, Stephanie M. Sierota and Jamie Campbell Younger of Newport Beach, California-----

each as their true and lawful Attorney-In-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY have each executed and attested these presents and affixed their corporate seals on this 25<sup>th</sup> day of October, 2018.

*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

*Stephen M. Haney*

Stephen M. Haney, Vice President



STATE OF NEW JERSEY

County of Hunterdon

ss.

On this 25<sup>th</sup> day of October, 2018, before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with Stephen M. Haney, and knows him to be Vice President of said Companies; and that the signature of Stephen M. Haney, subscribed to said Power of Attorney is in the genuine handwriting of Stephen M. Haney, and was thereto subscribed by authority of said Companies and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR  
NOTARY PUBLIC OF NEW JERSEY  
No. 2318255  
Commission Expires July 18, 2019

*Katherine J. Adelaar*  
Notary Public

### CERTIFICATION

Resolutions adopted by the Boards of Directors of WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

\*RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested.

I, Dawn M. Chloros, Assistant Secretary of WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- (ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this



*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:

Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

# ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of Orange

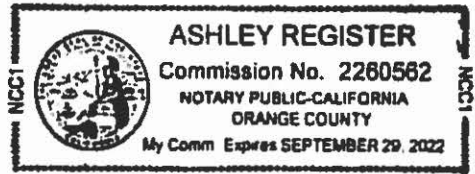
On 11/28/2018 before me, Ashley Register, Notary Public  
(insert name and title of the officer)

personally appeared Stephanie Marie Sierota  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) (s) are subscribed to the within instrument and acknowledged to me that he (she) / they executed the same in his (her) / their authorized capacity (ies), and that by his (her) / their signature (s) on the instrument the person (s), or the entity upon behalf of which the person (s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature *Ashley Register* (Seal)



# ATTACHMENT 64



# ATTACHMENT 65



# ATTACHMENT 66





**ATTACHMENT 67**

**[CONFIDENTIAL EXCEL  
FILE WITHHELD]**

# ATTACHMENT 68



**K2 Management**  
203 Crescent St Suite 205  
Waltham, MA 02453

[info@k2management.com](mailto:info@k2management.com)  
[www.k2management.com/north-america](http://www.k2management.com/north-america)

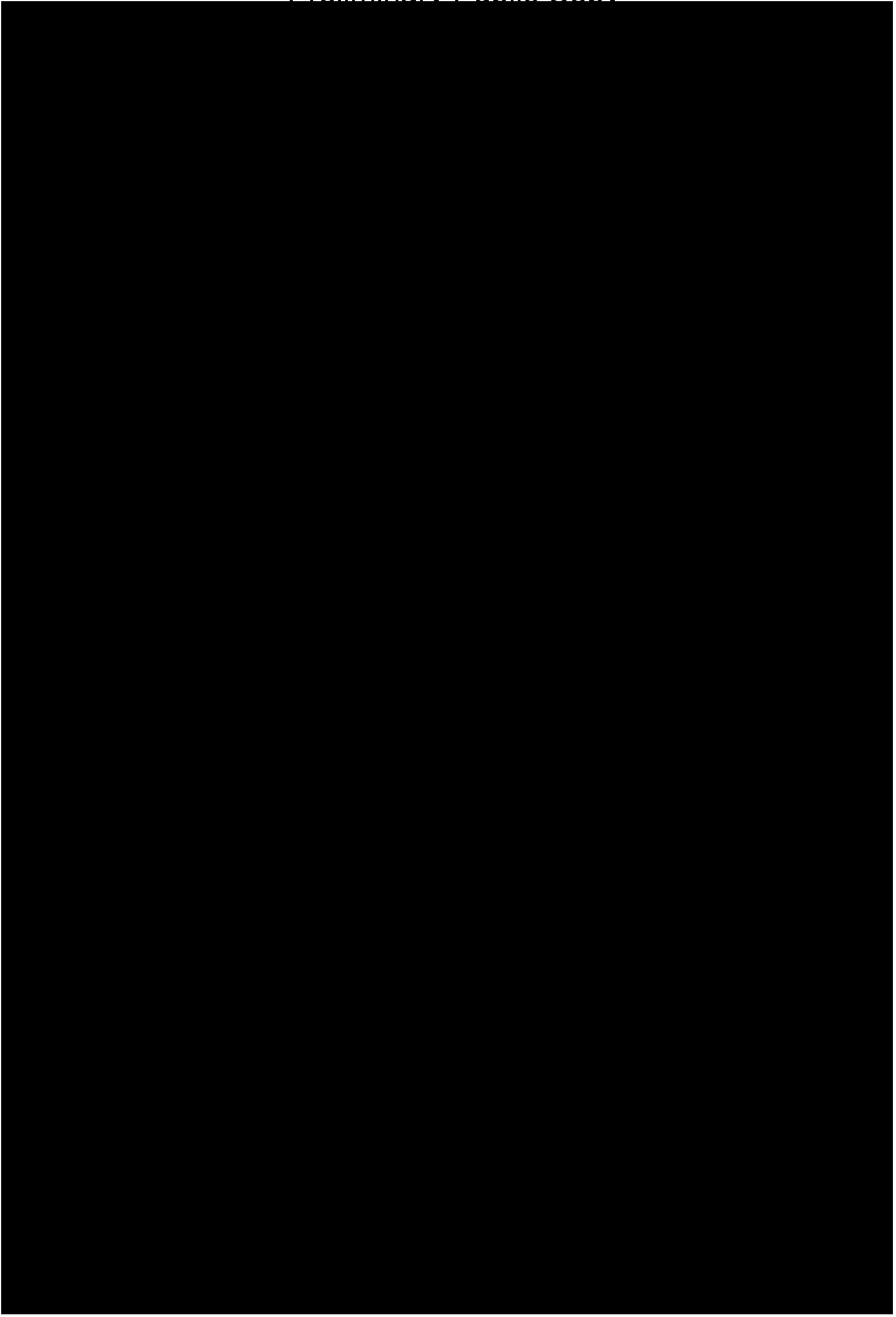


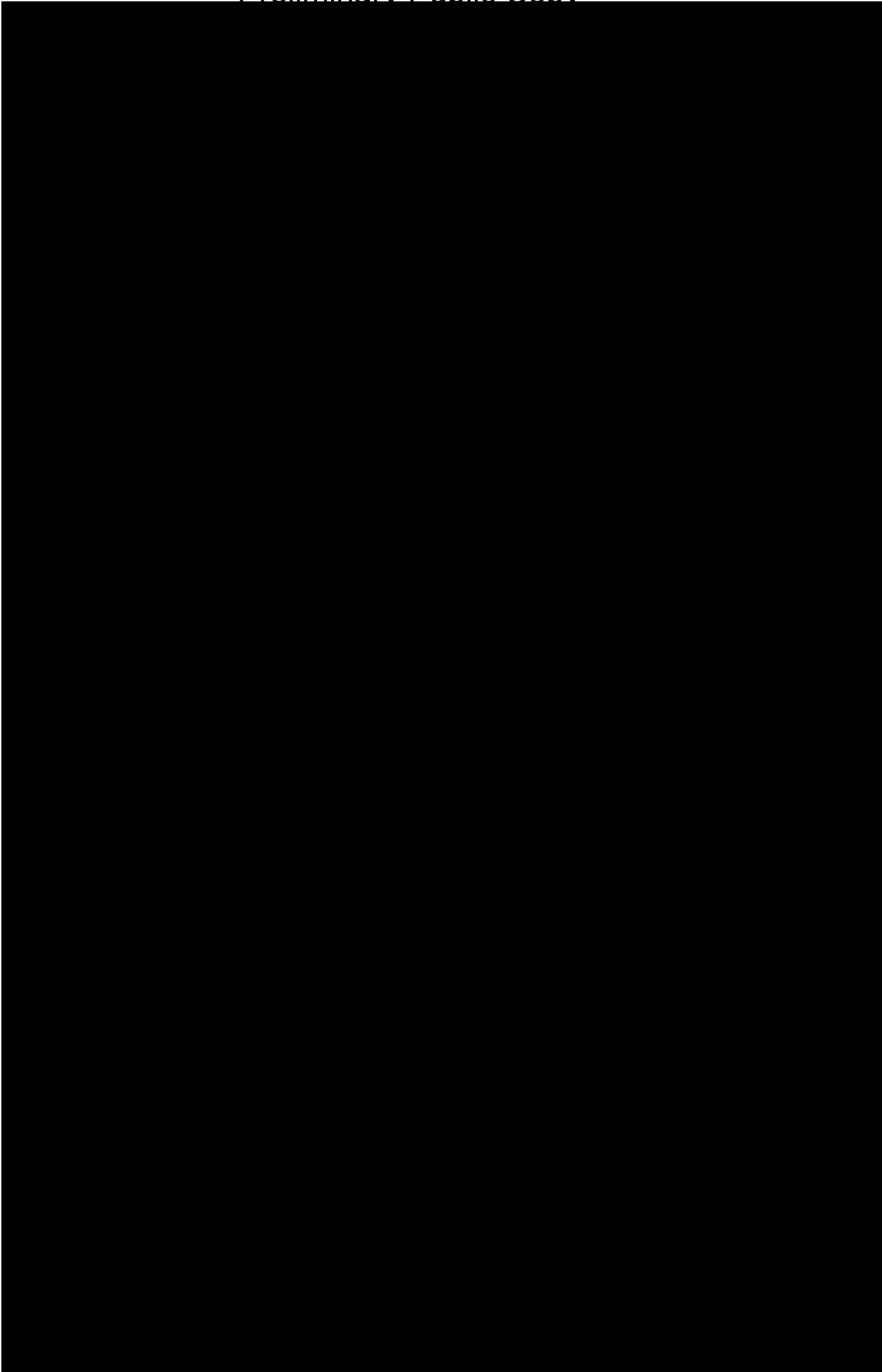
# Early Stage Energy Yield Estimate Atlantic Shores Offshore Wind

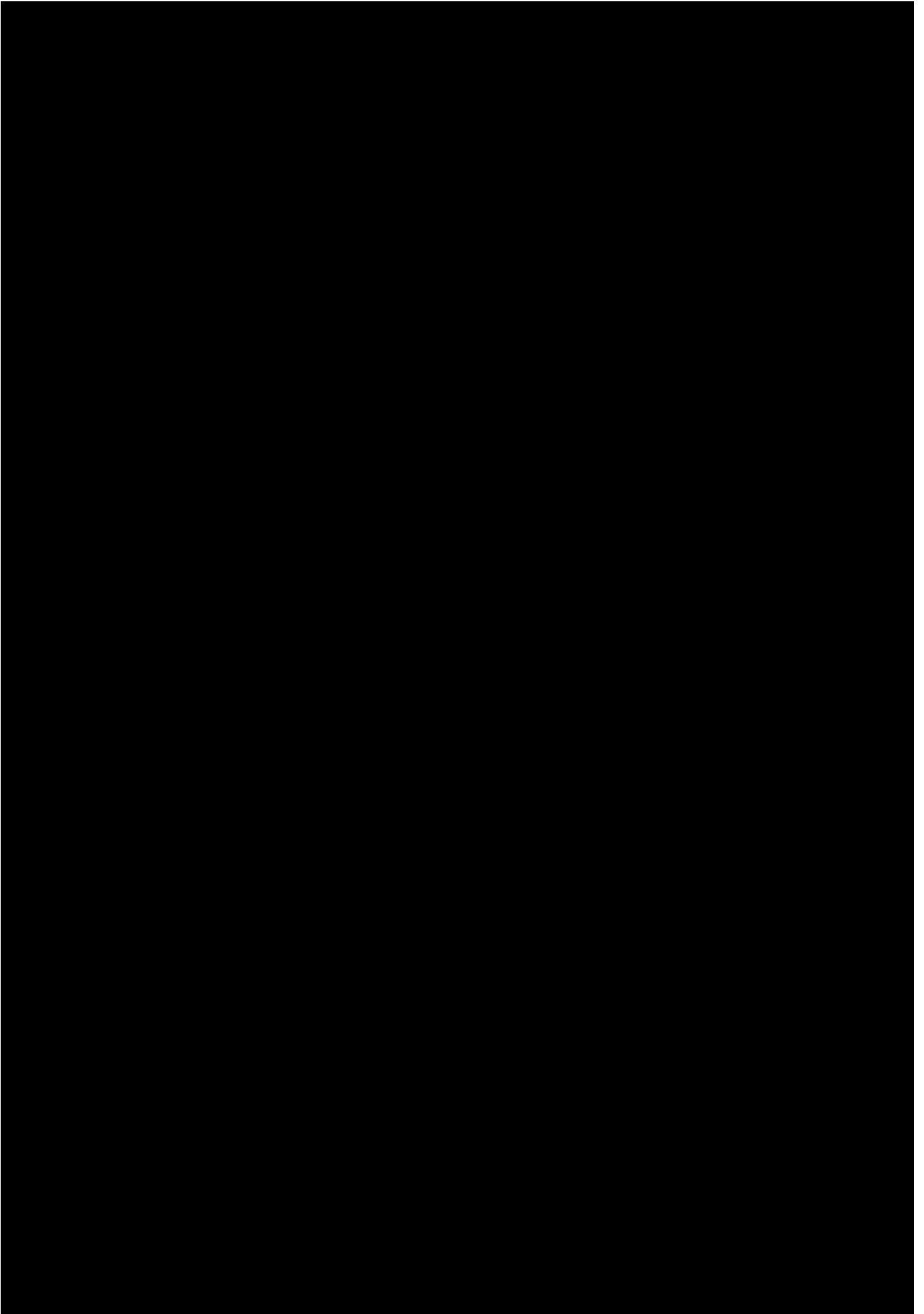
7 February 2019

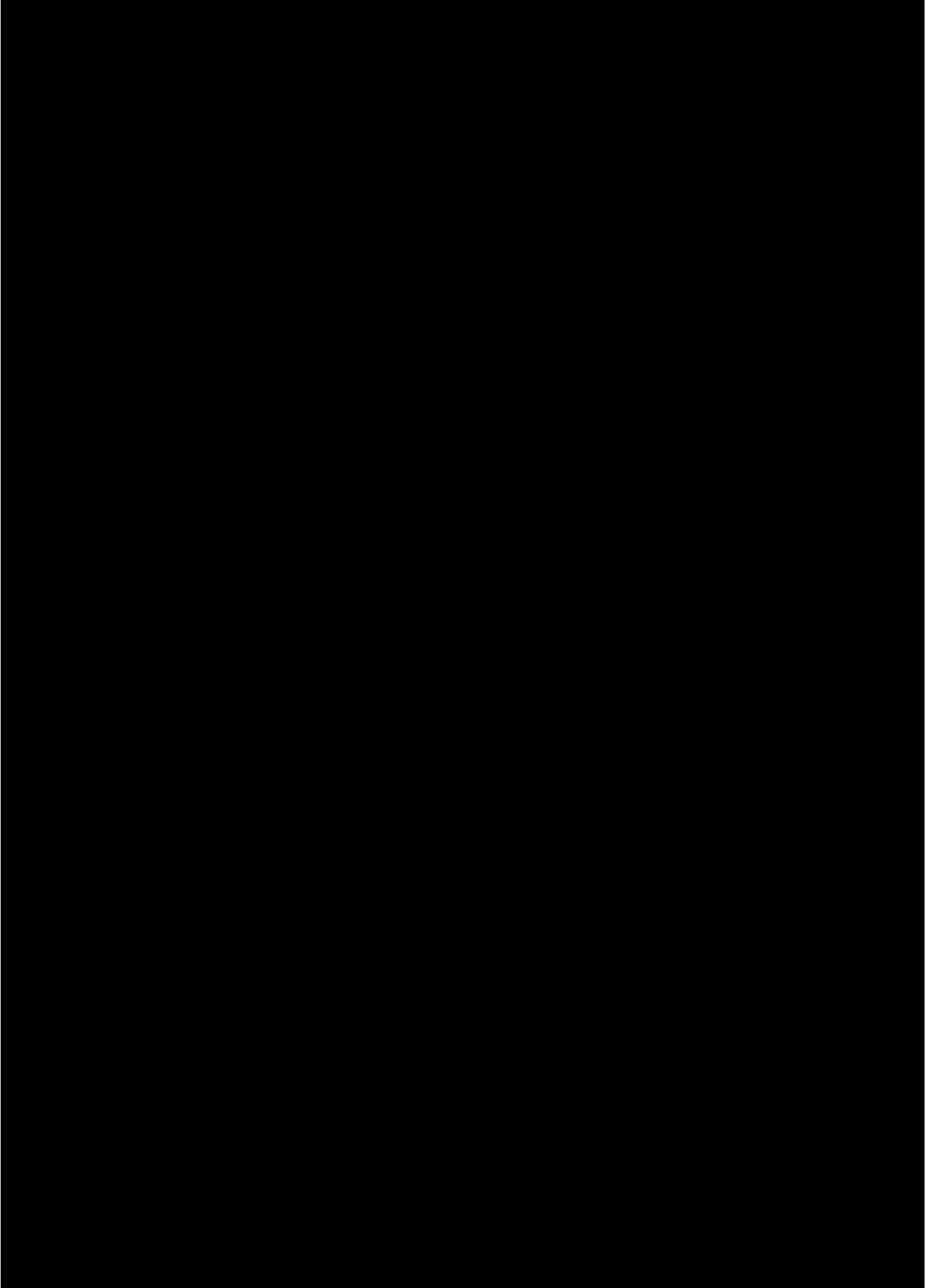
For better energy projects



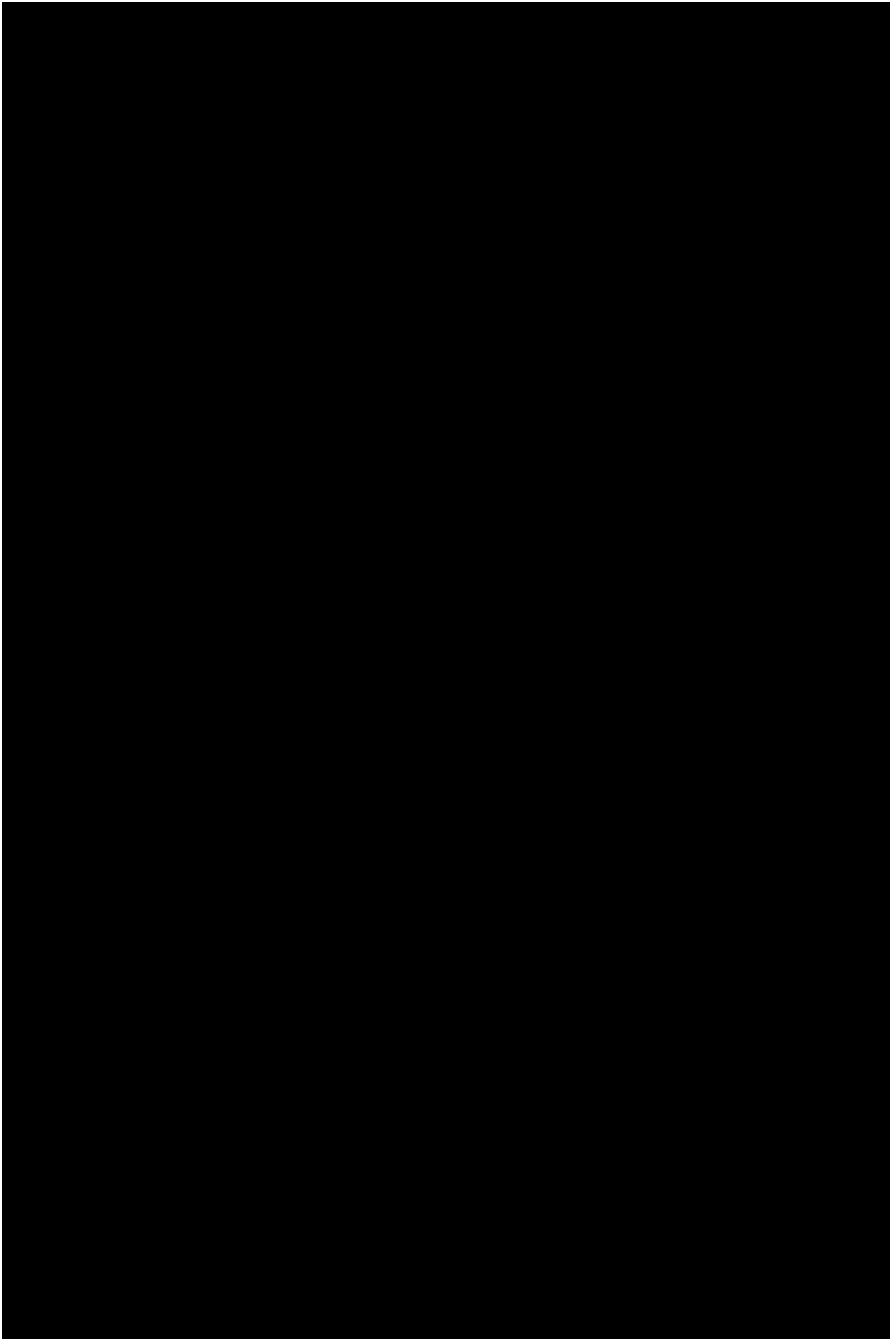


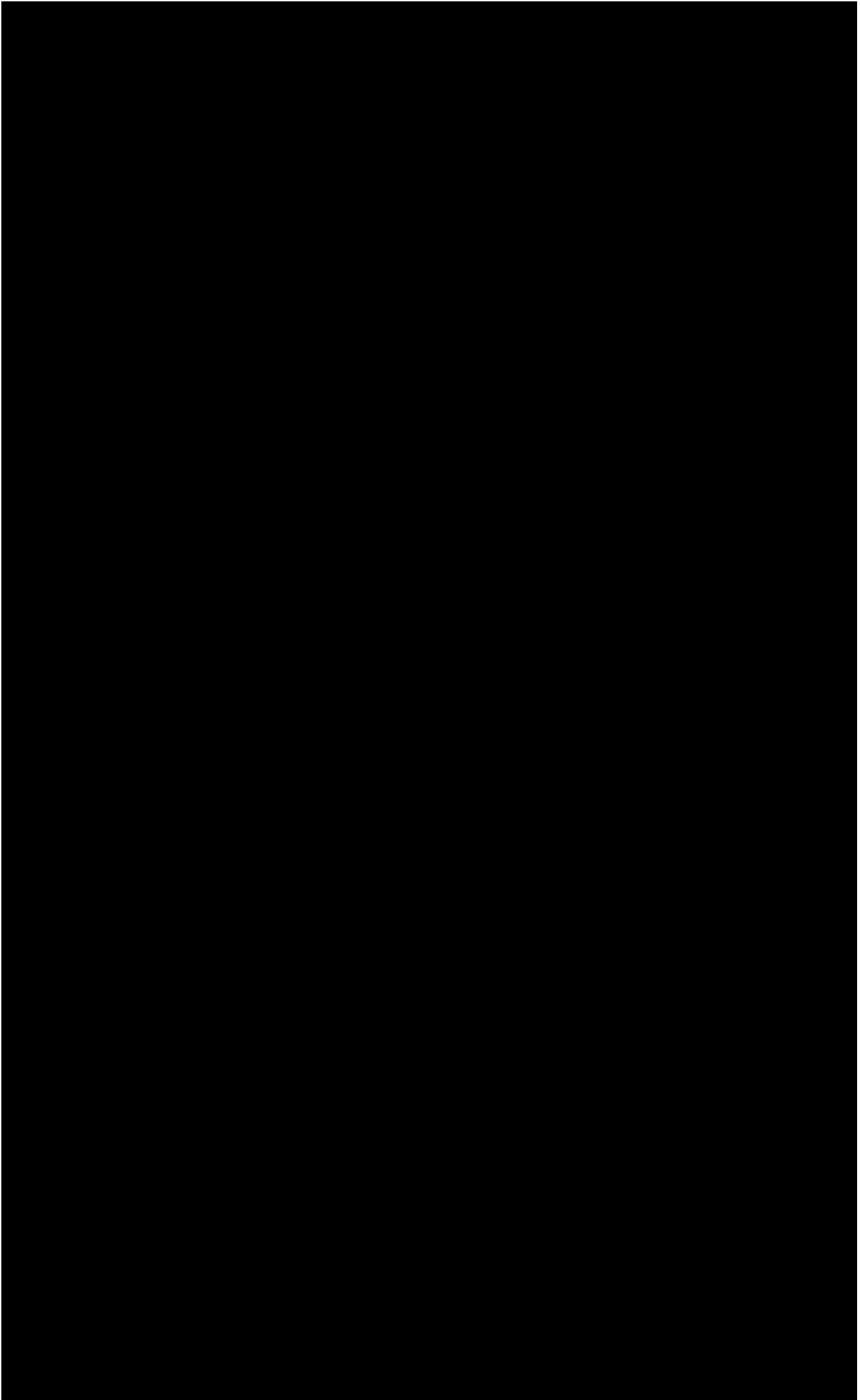


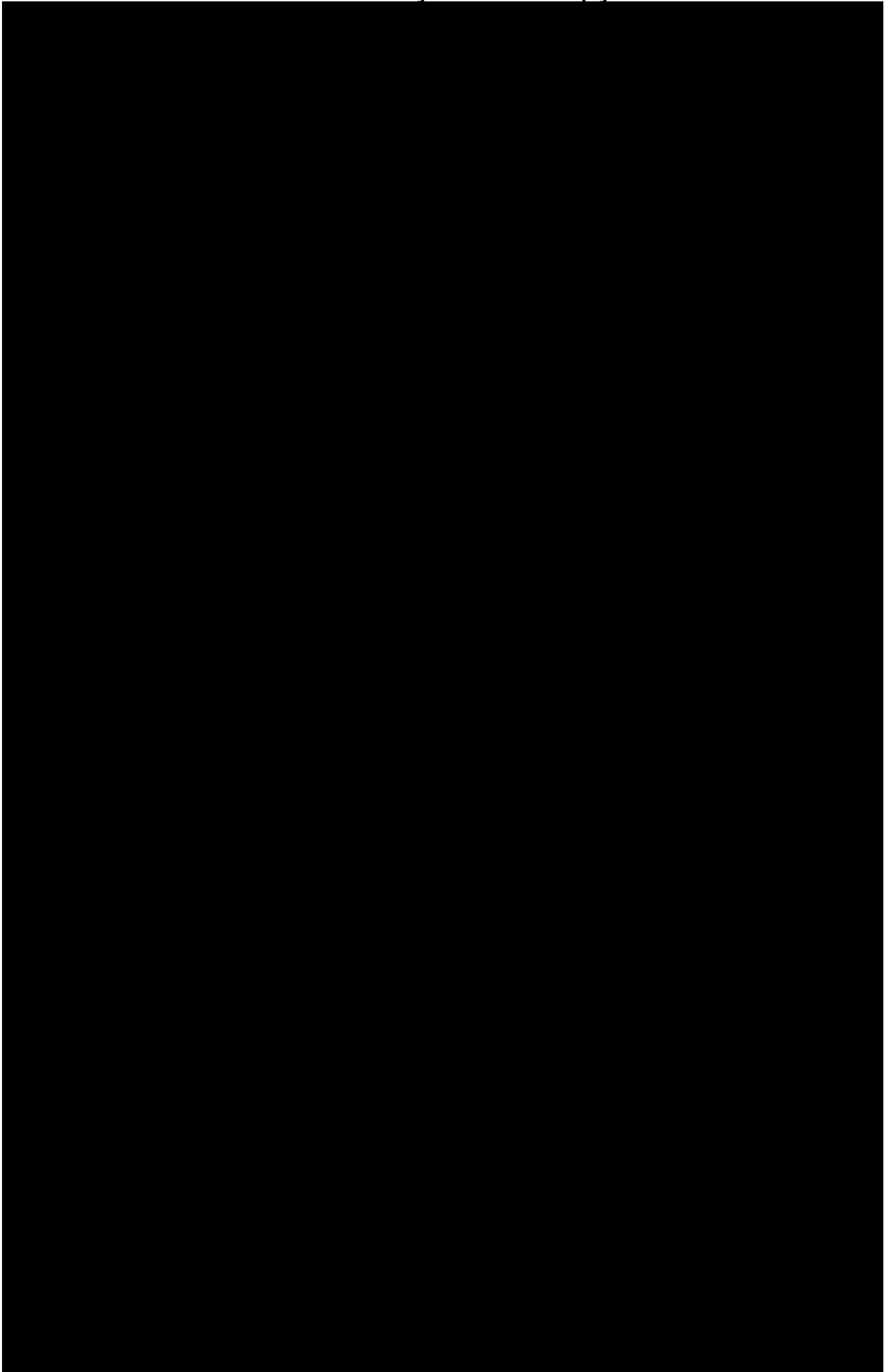


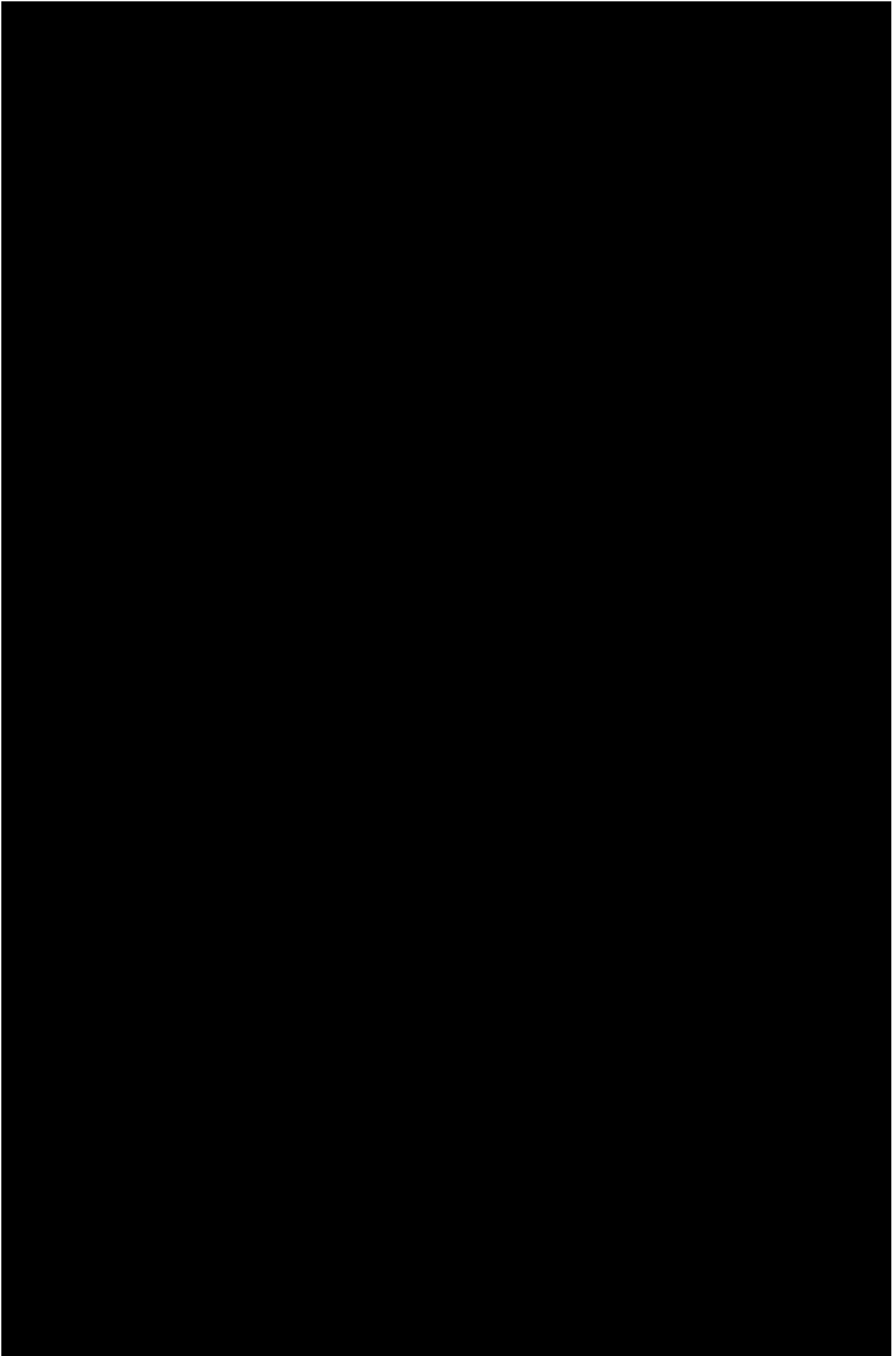


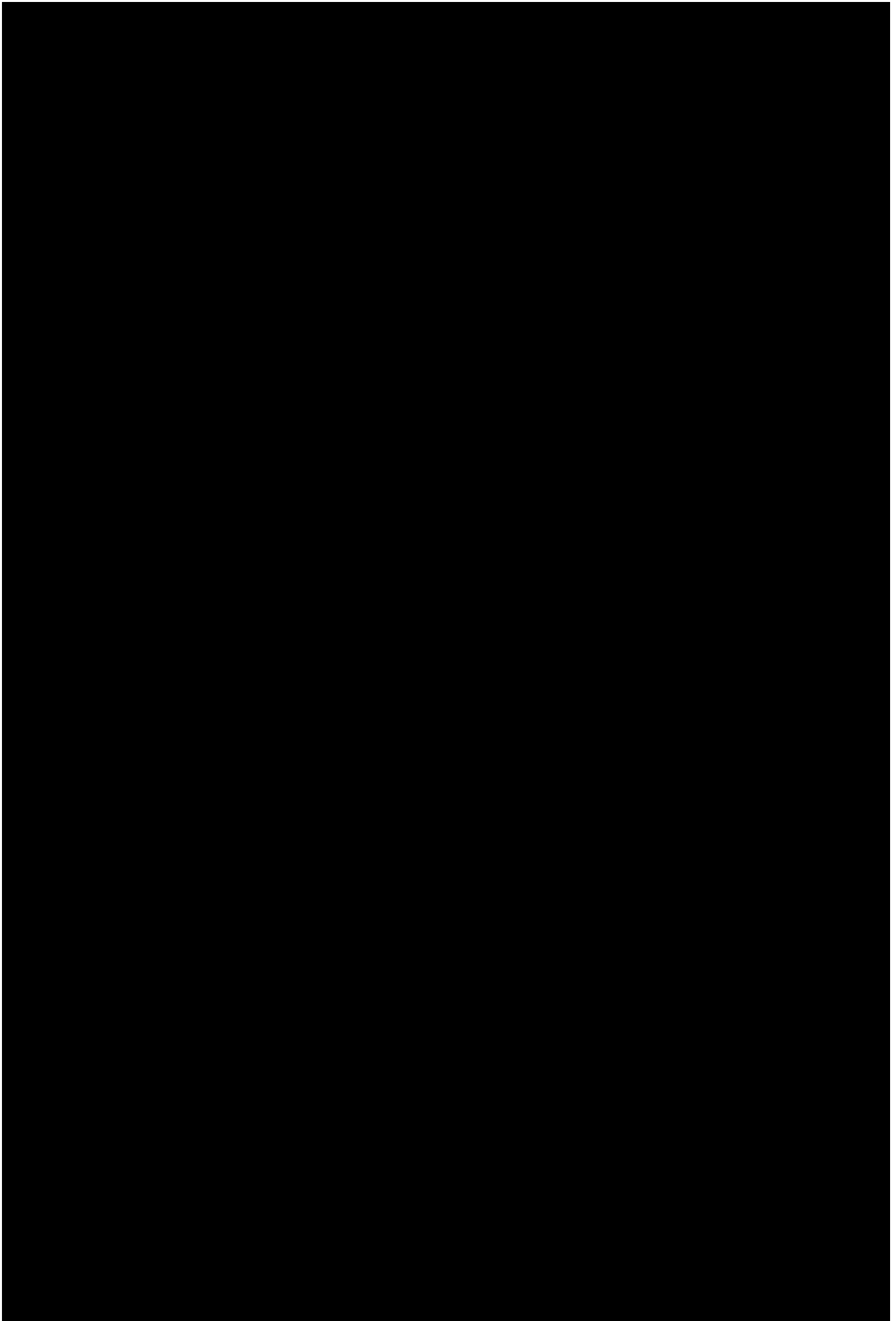


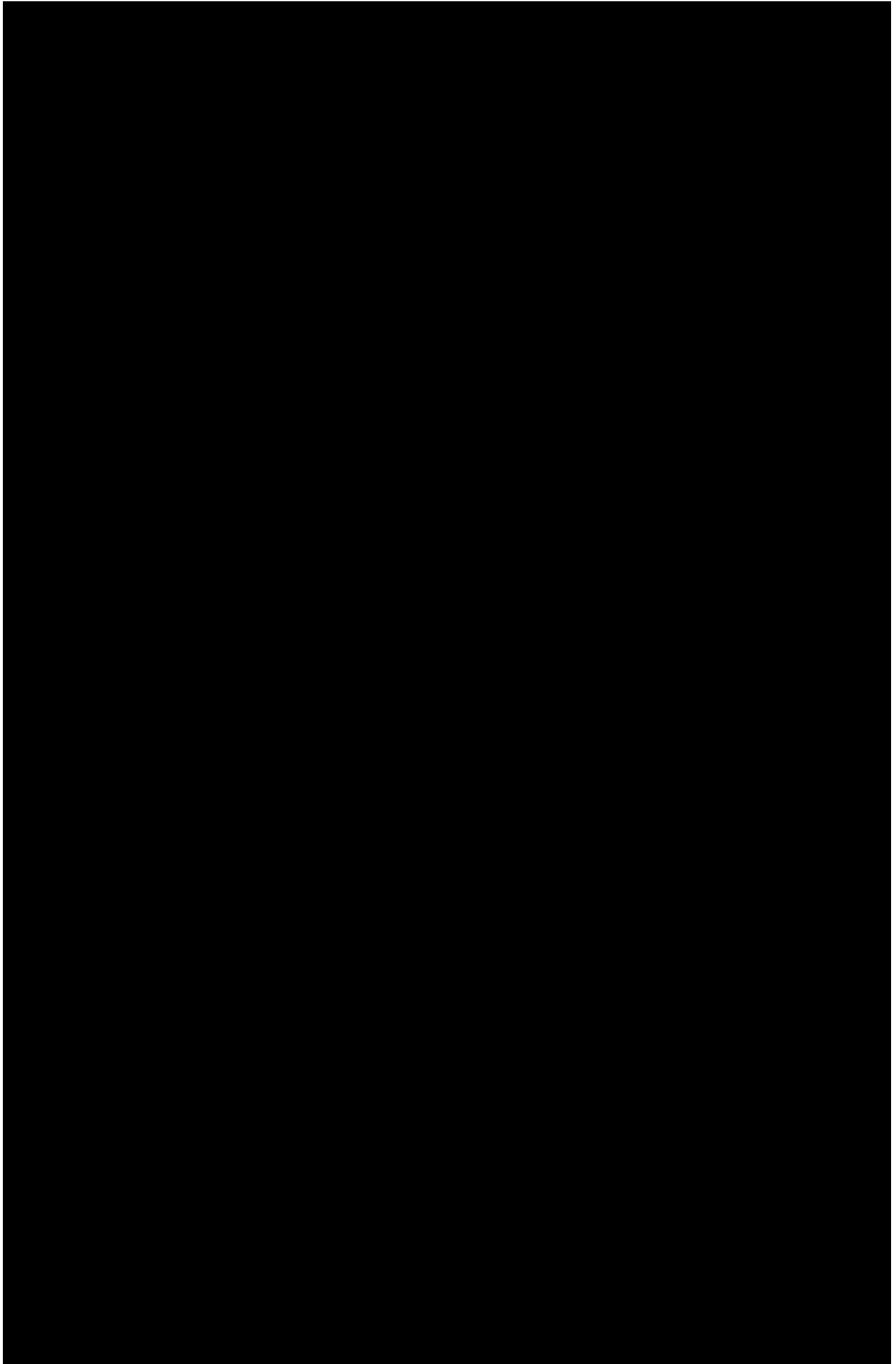


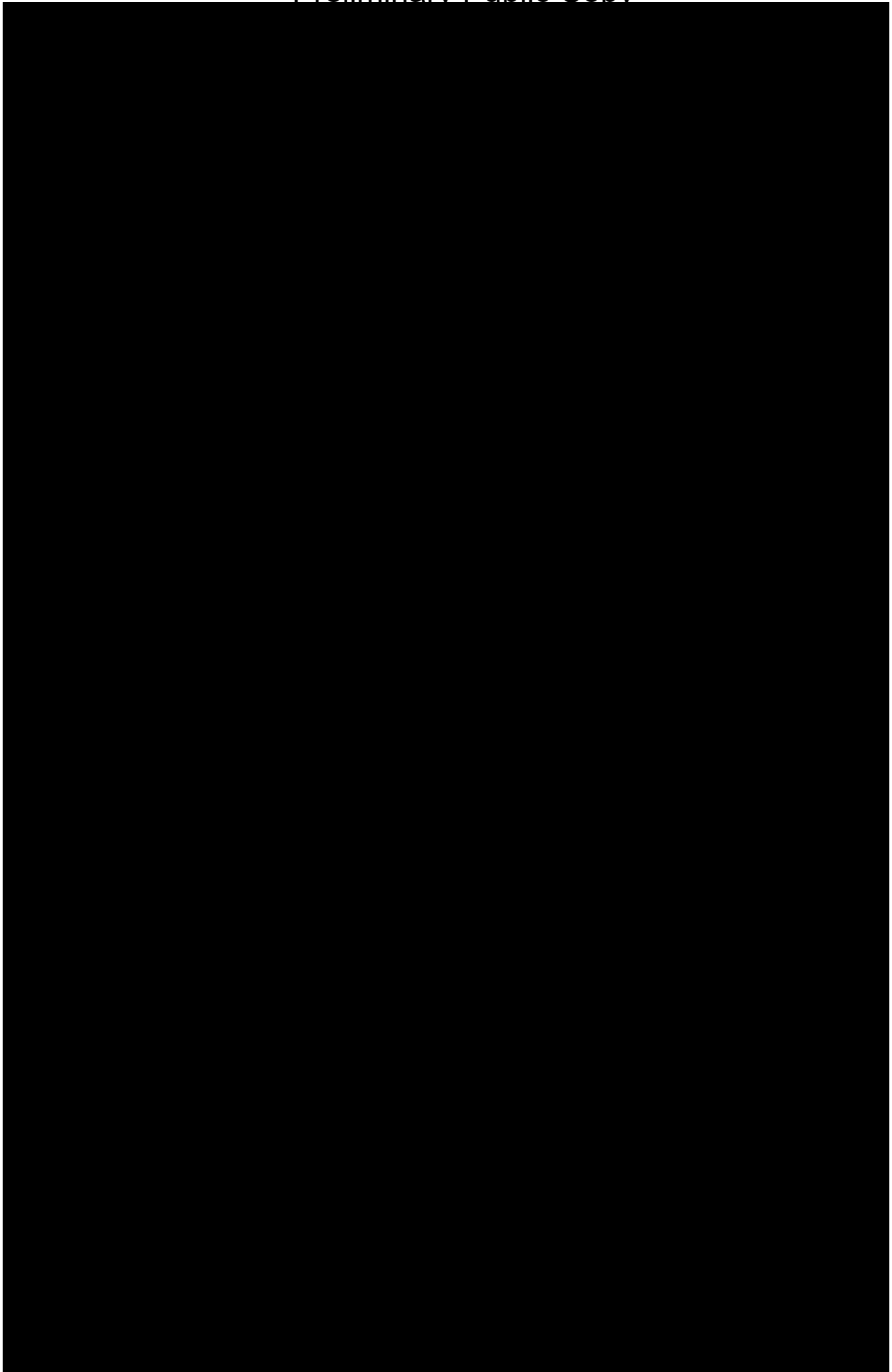


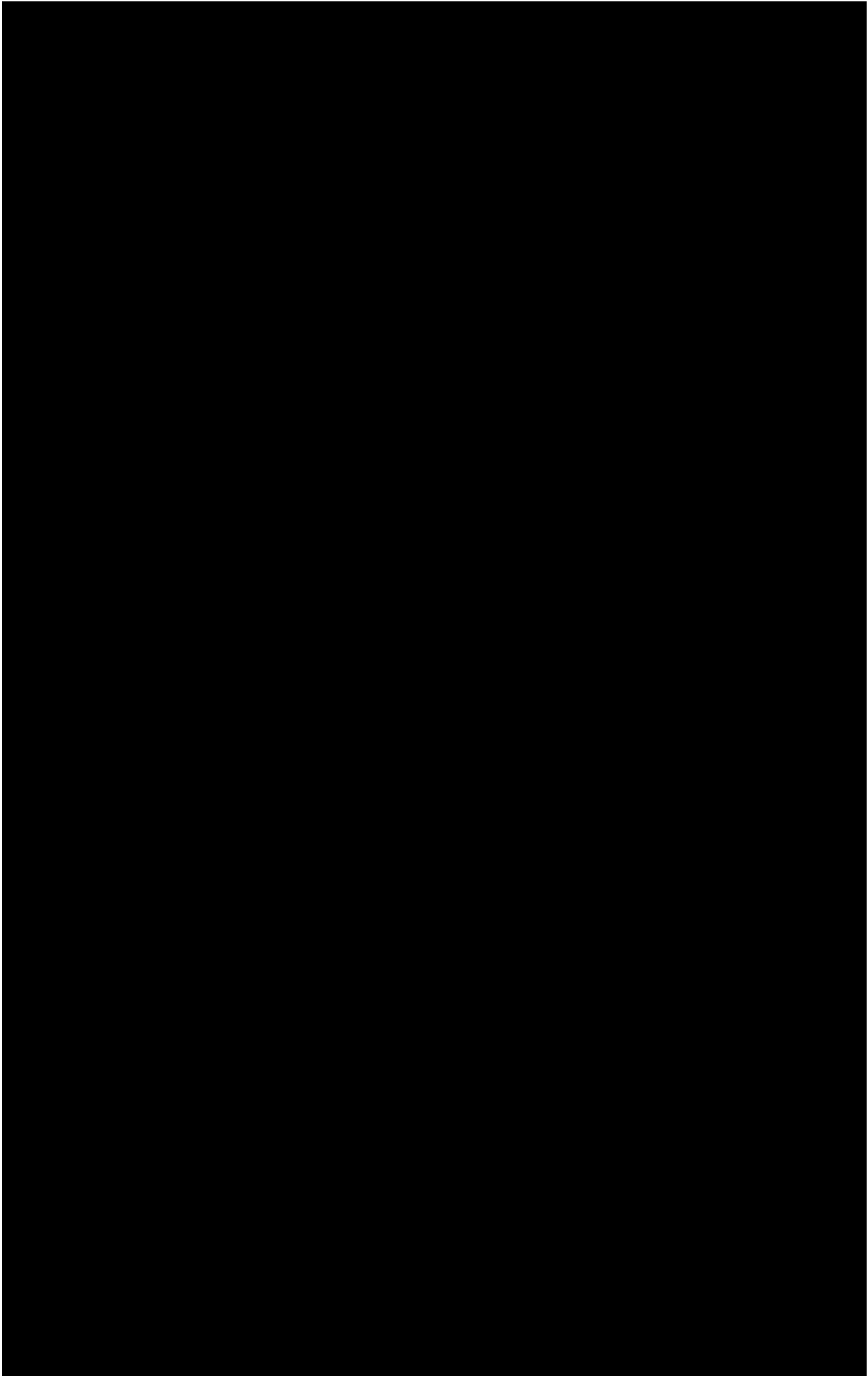




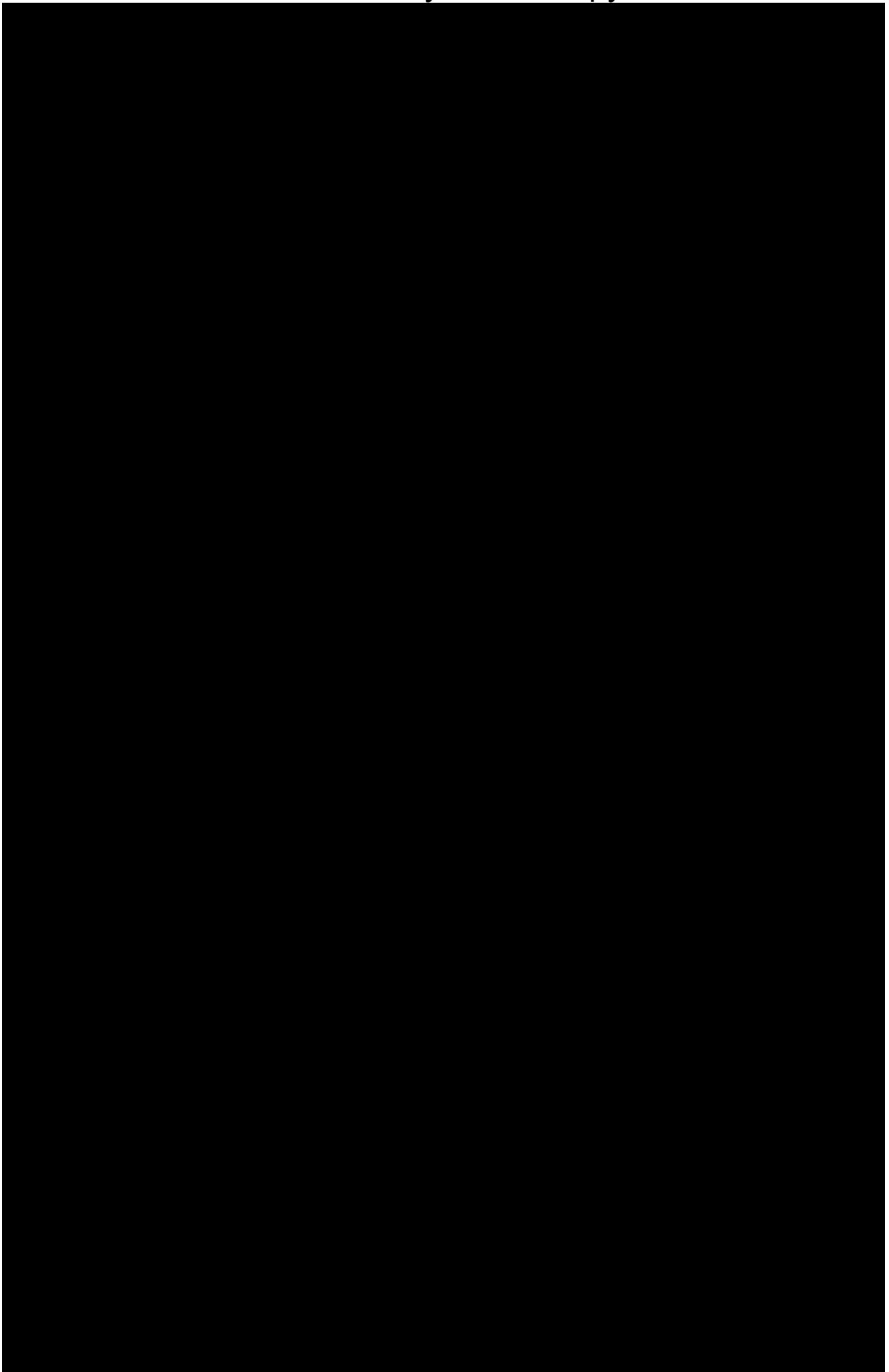


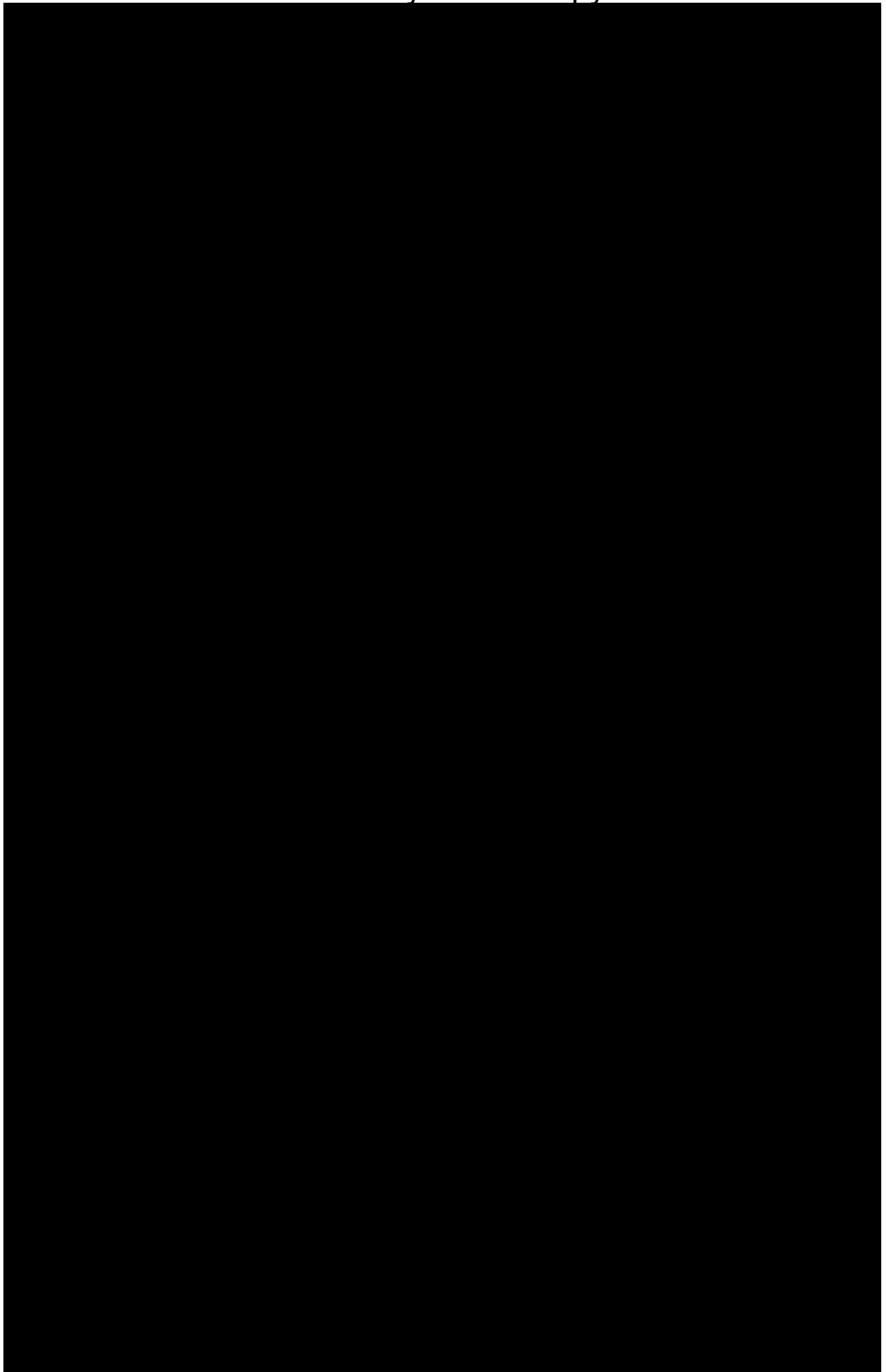


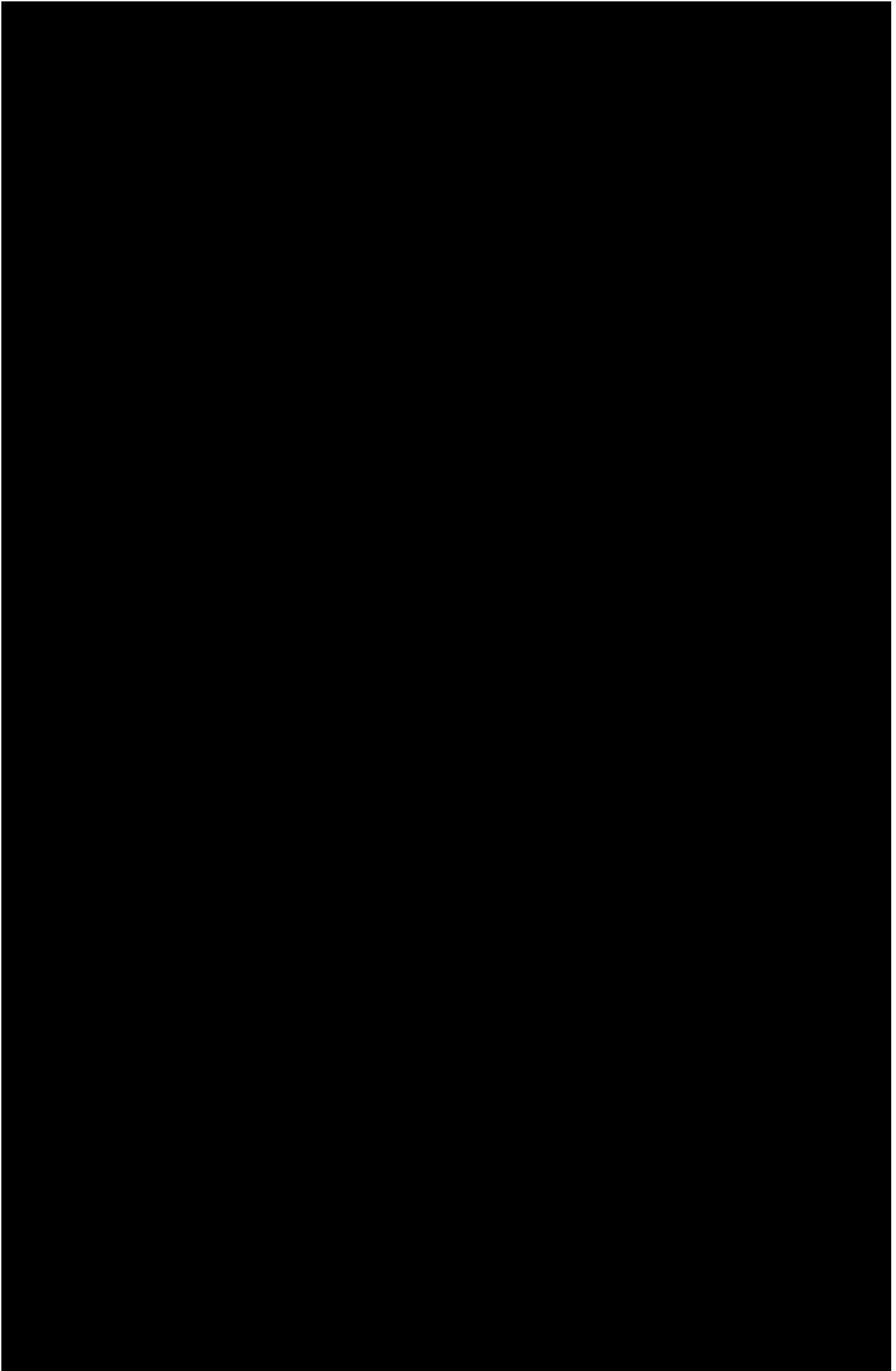


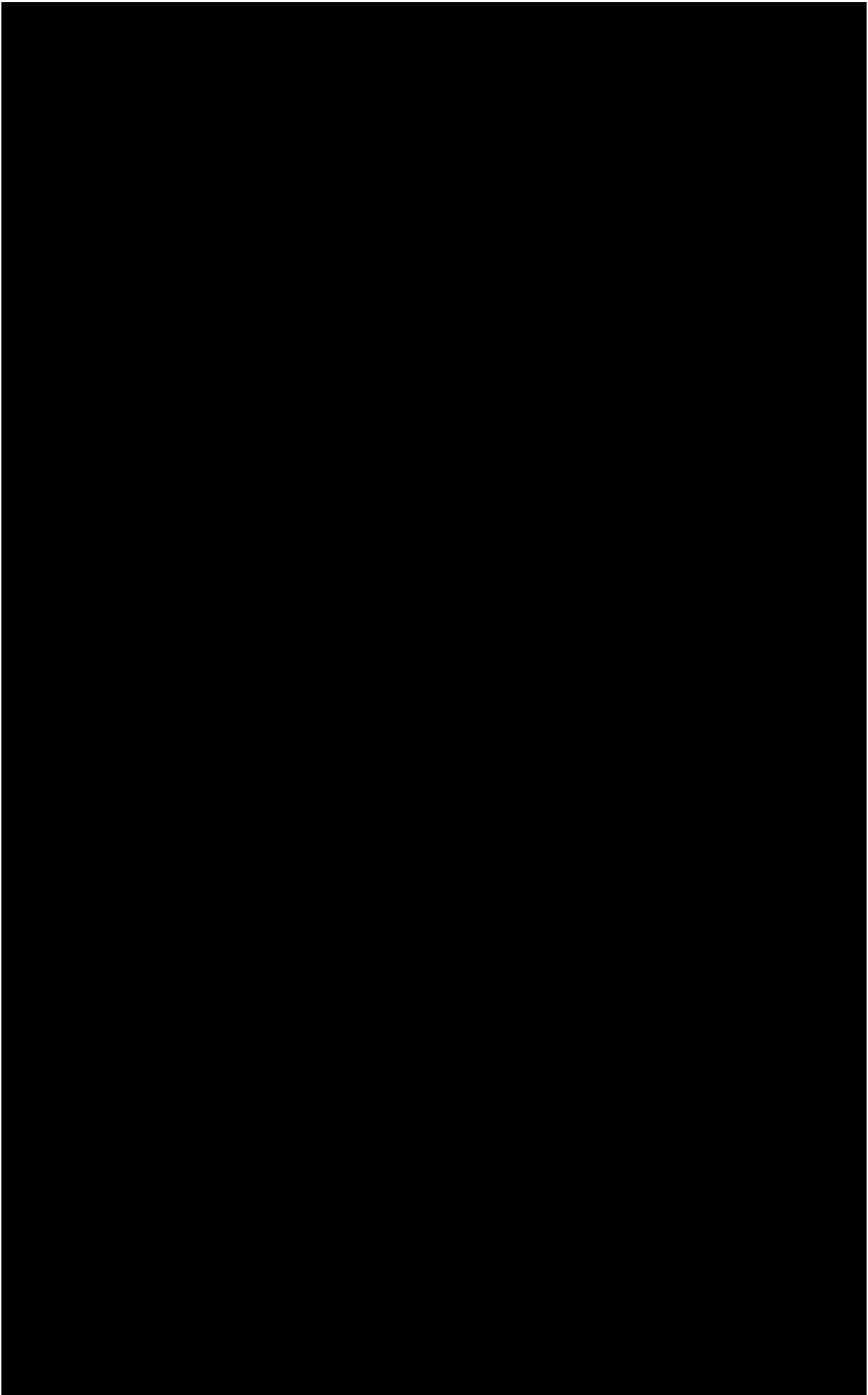


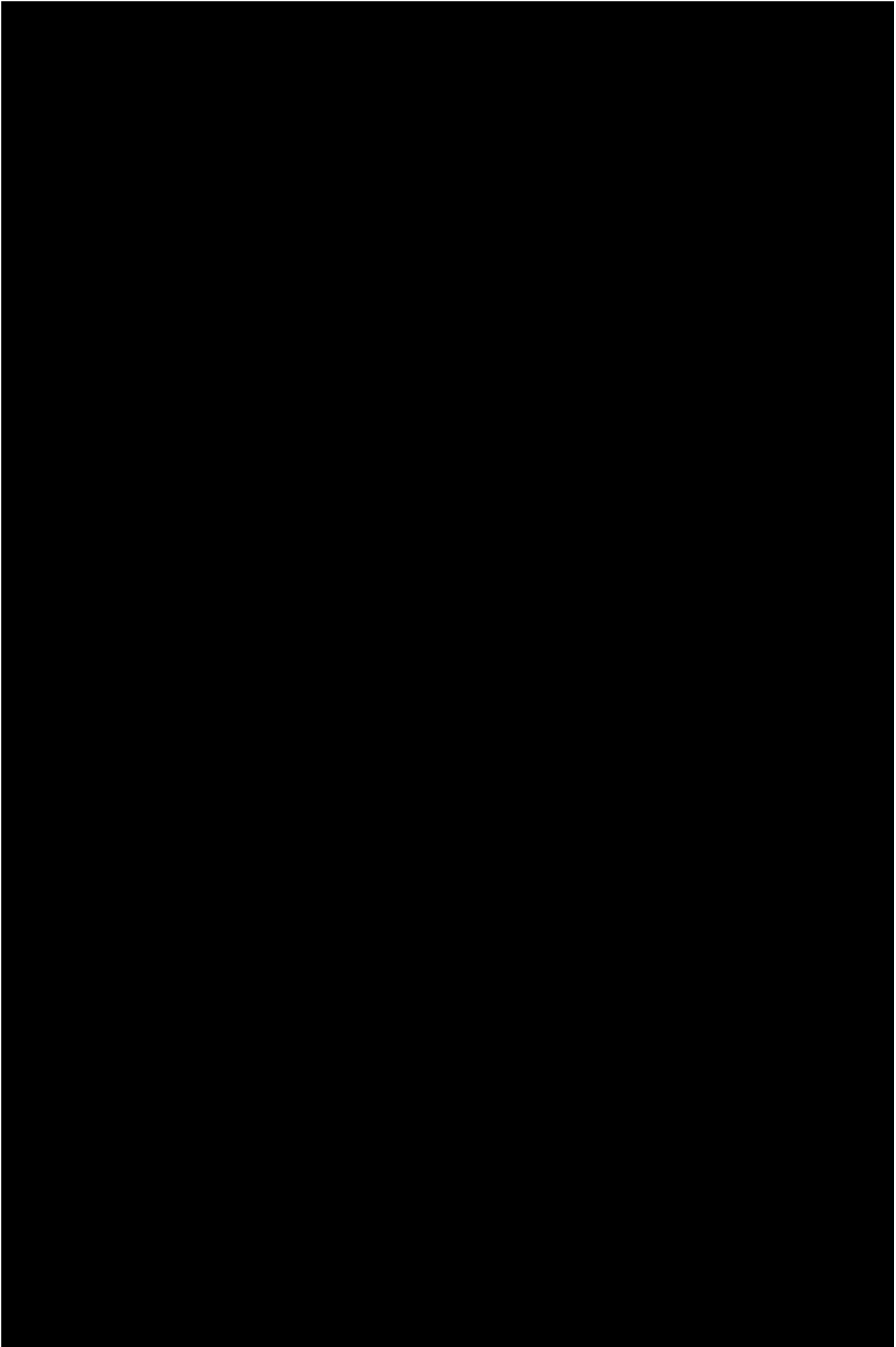


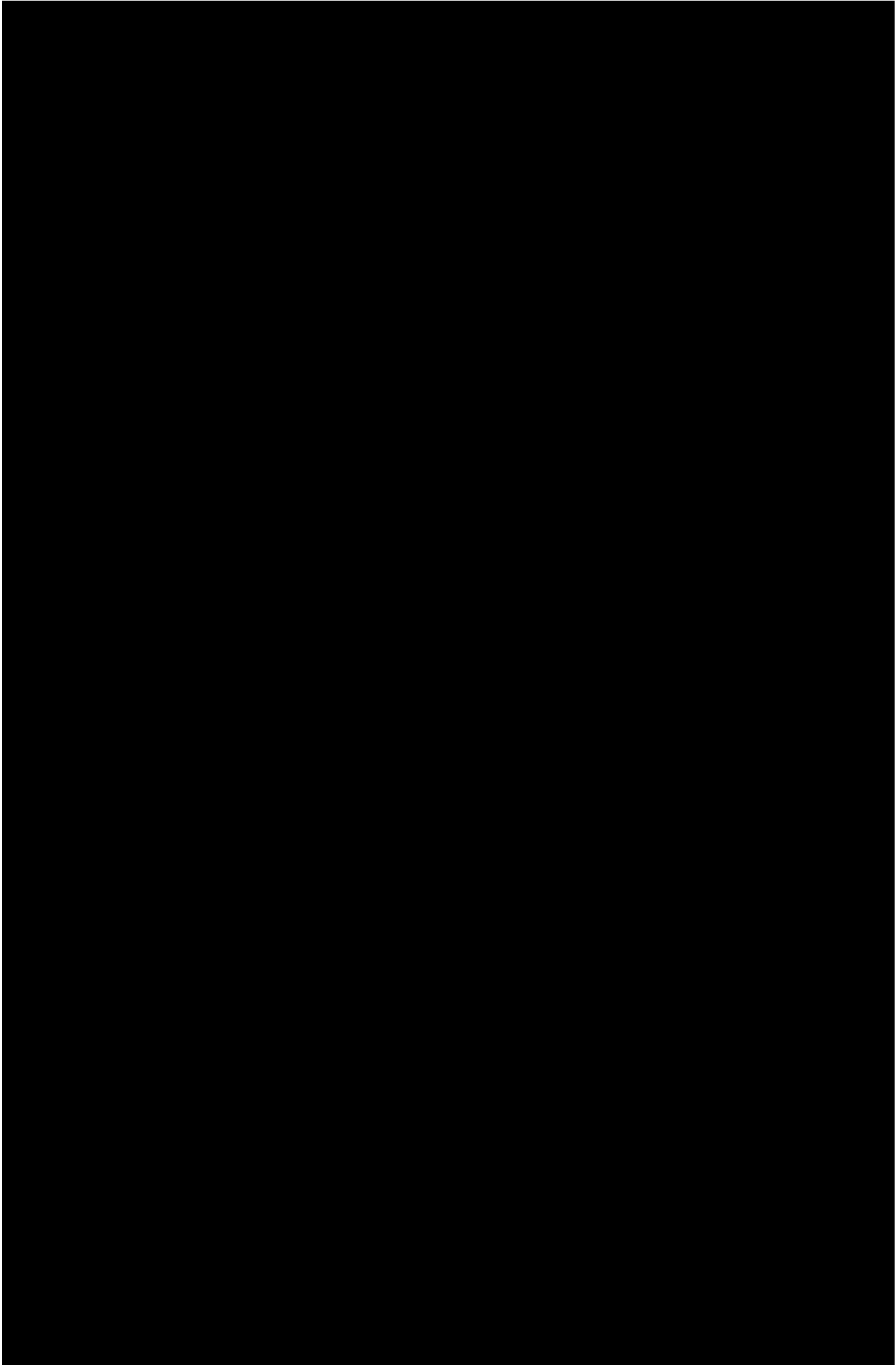


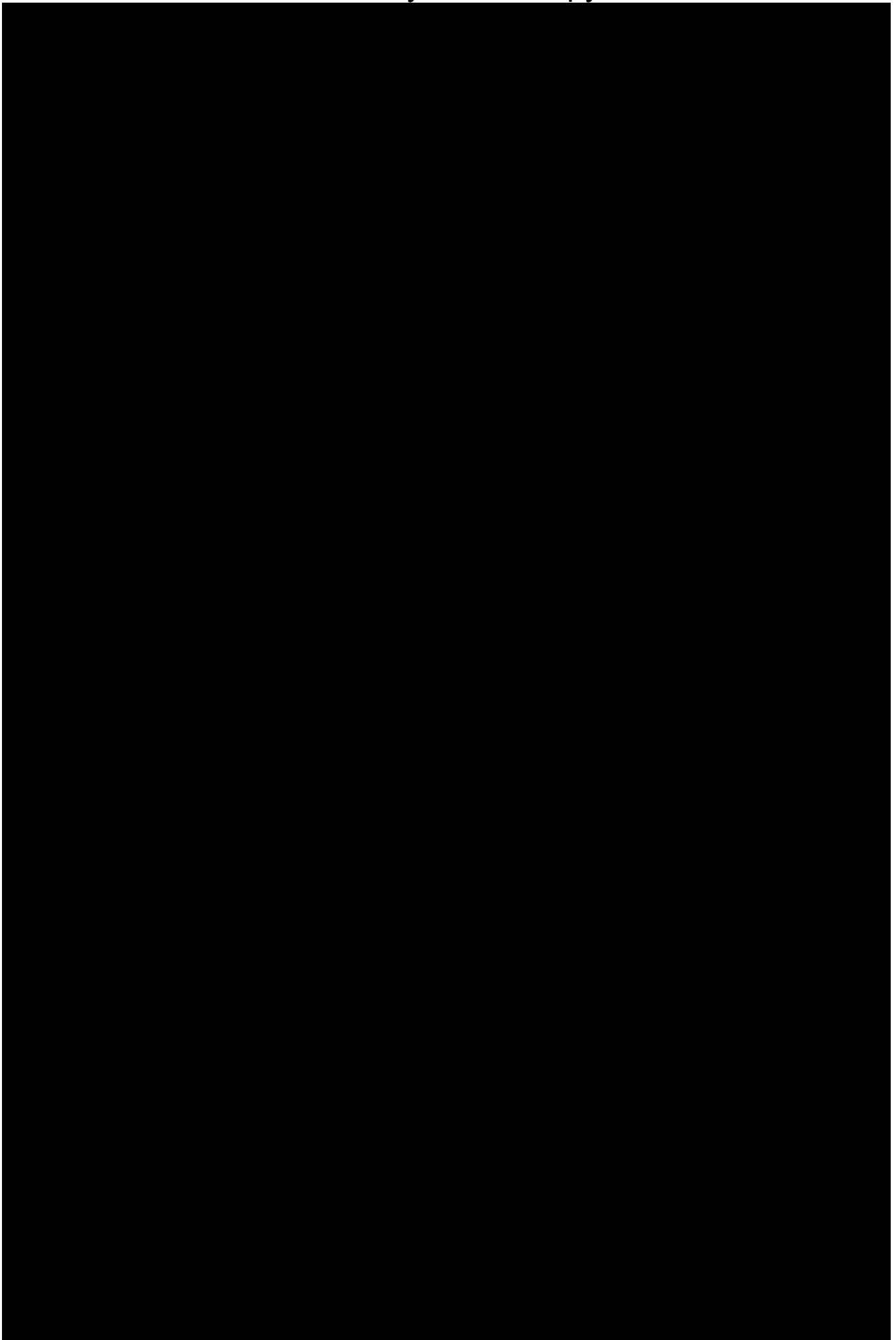


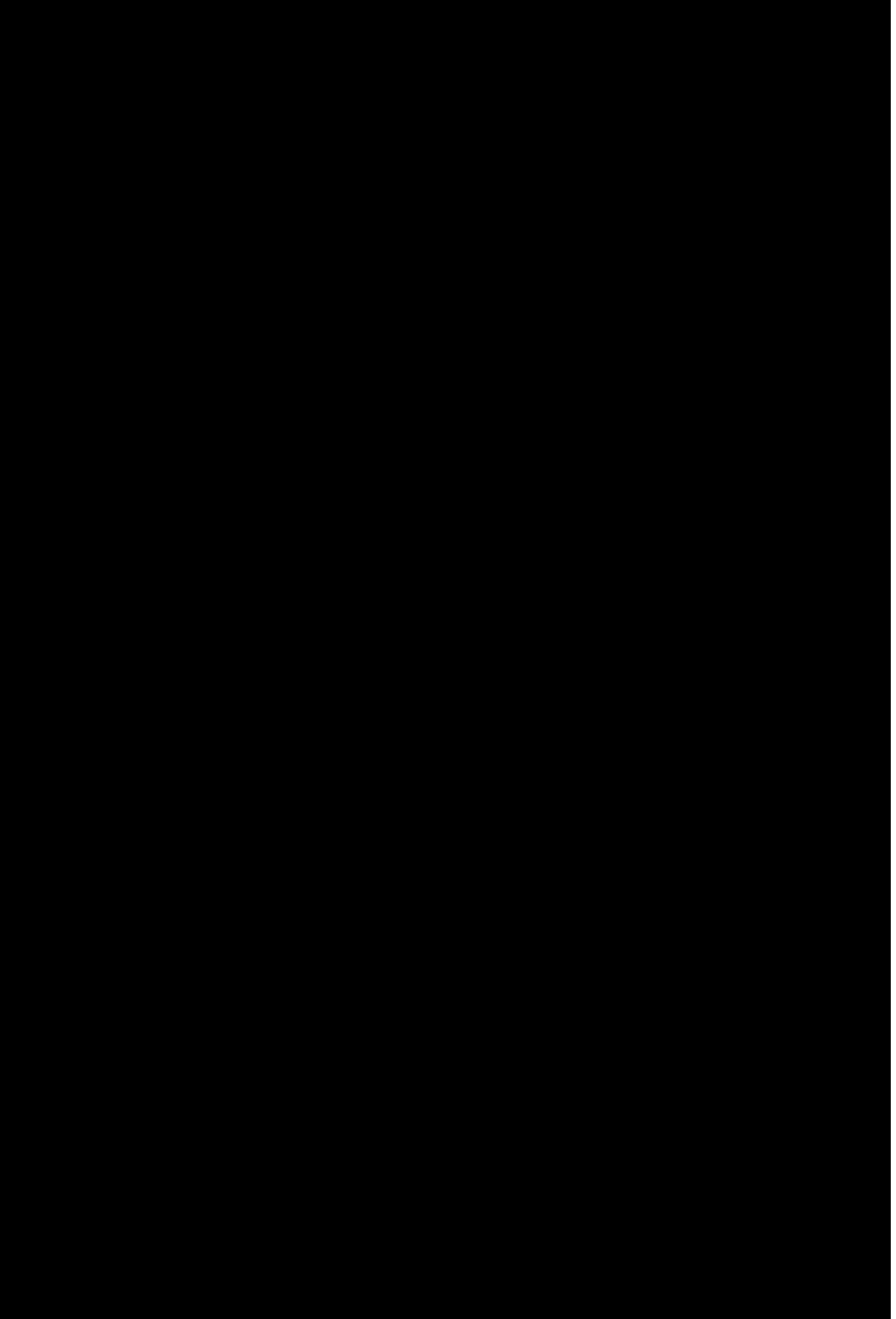




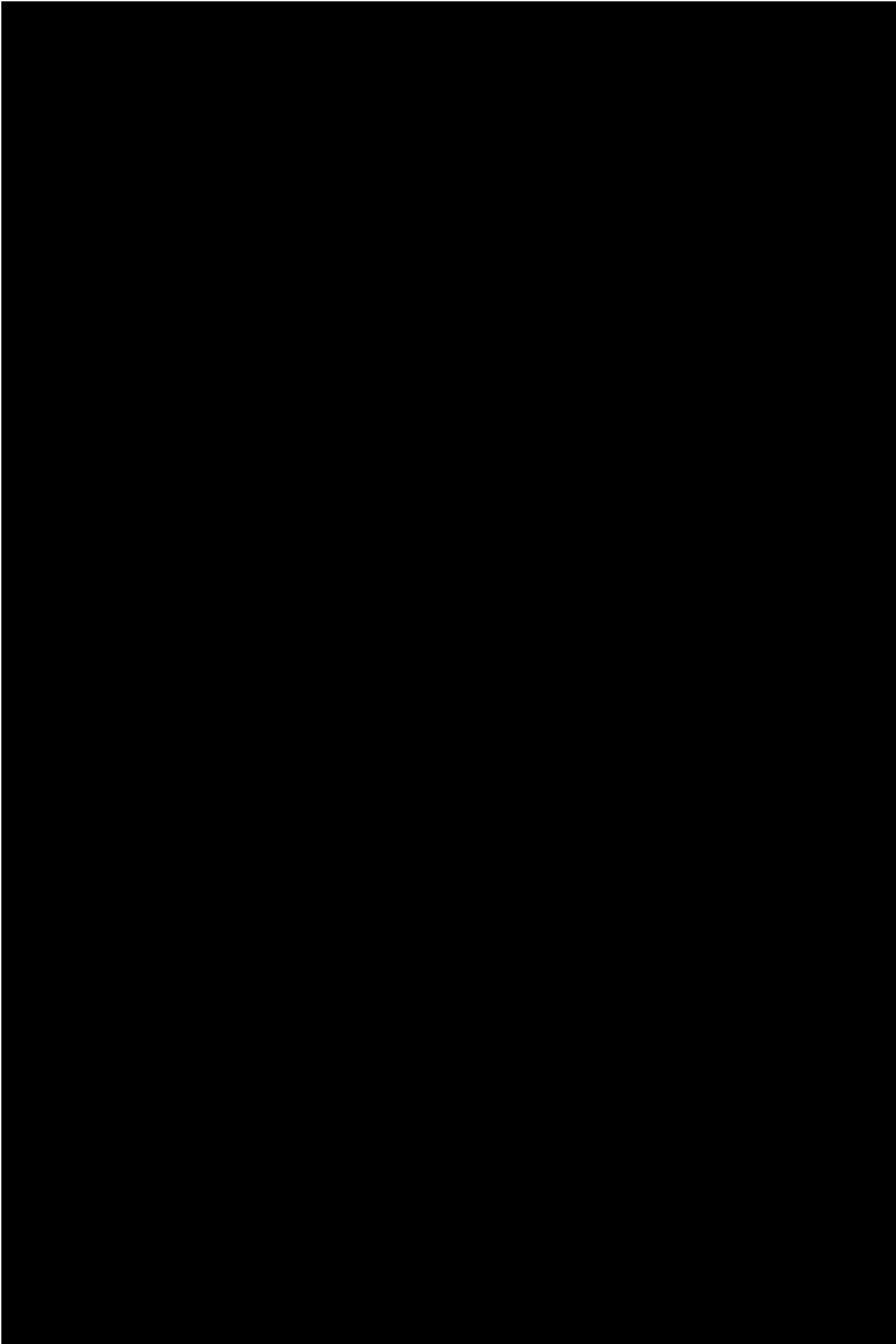


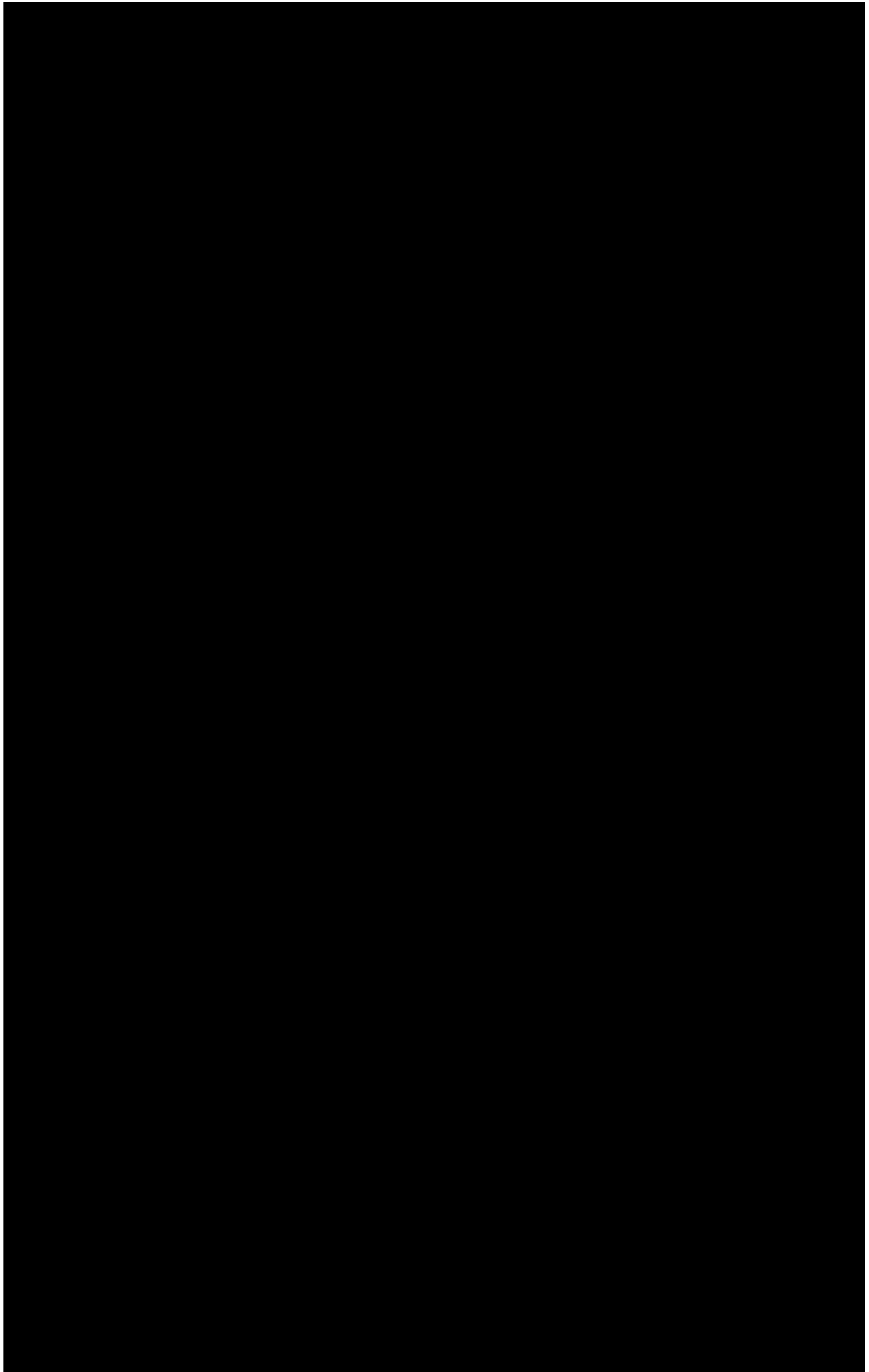


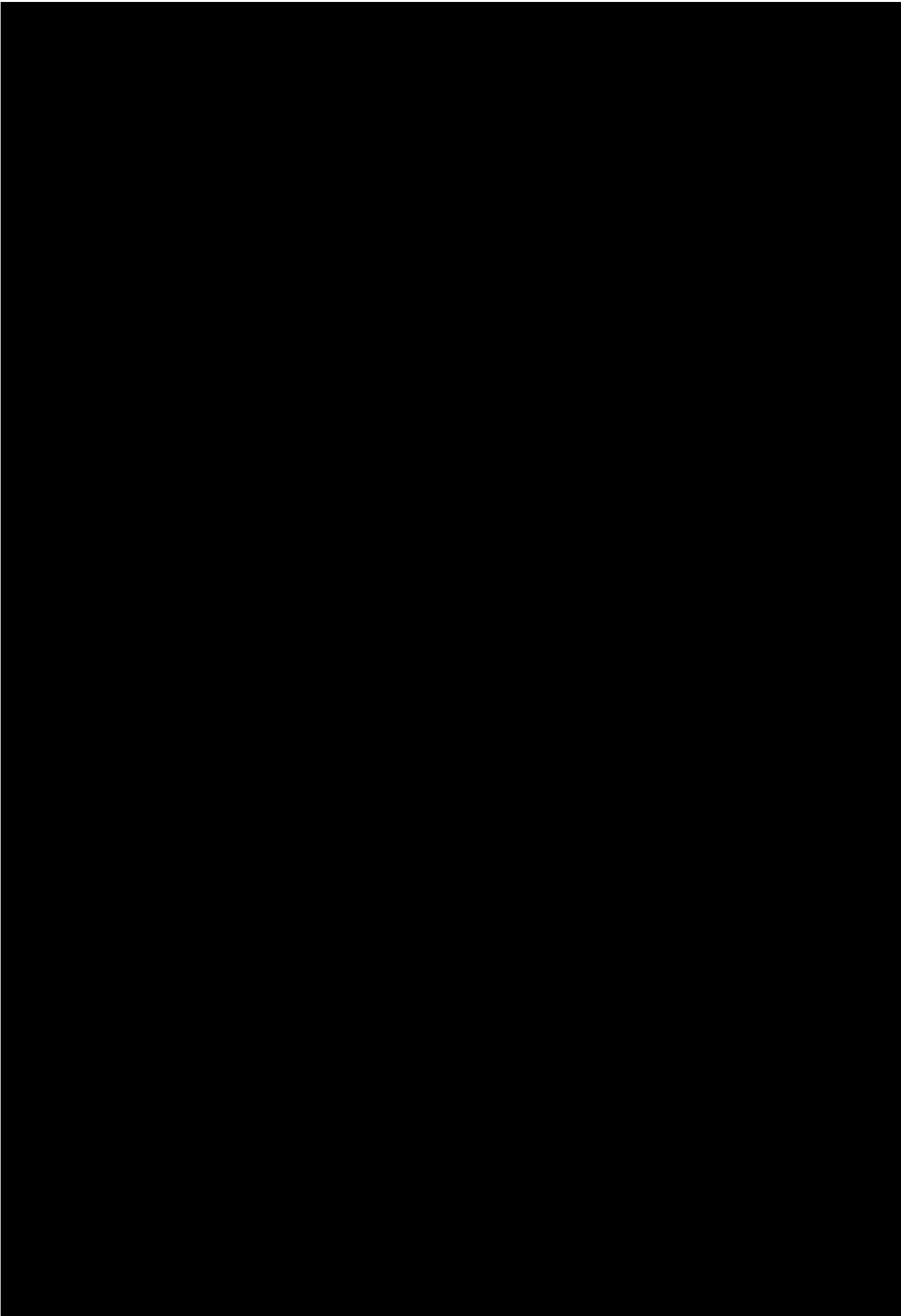


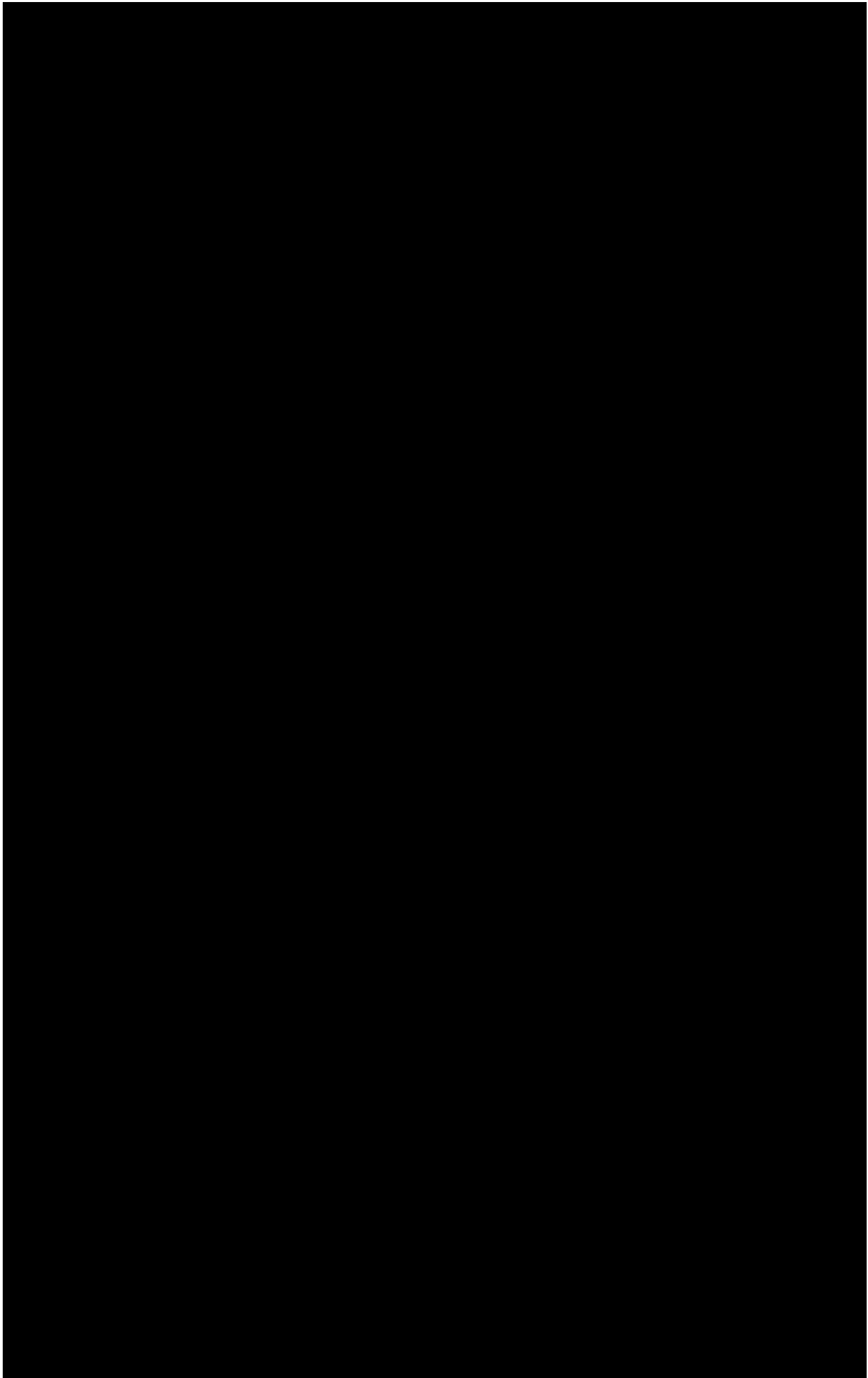


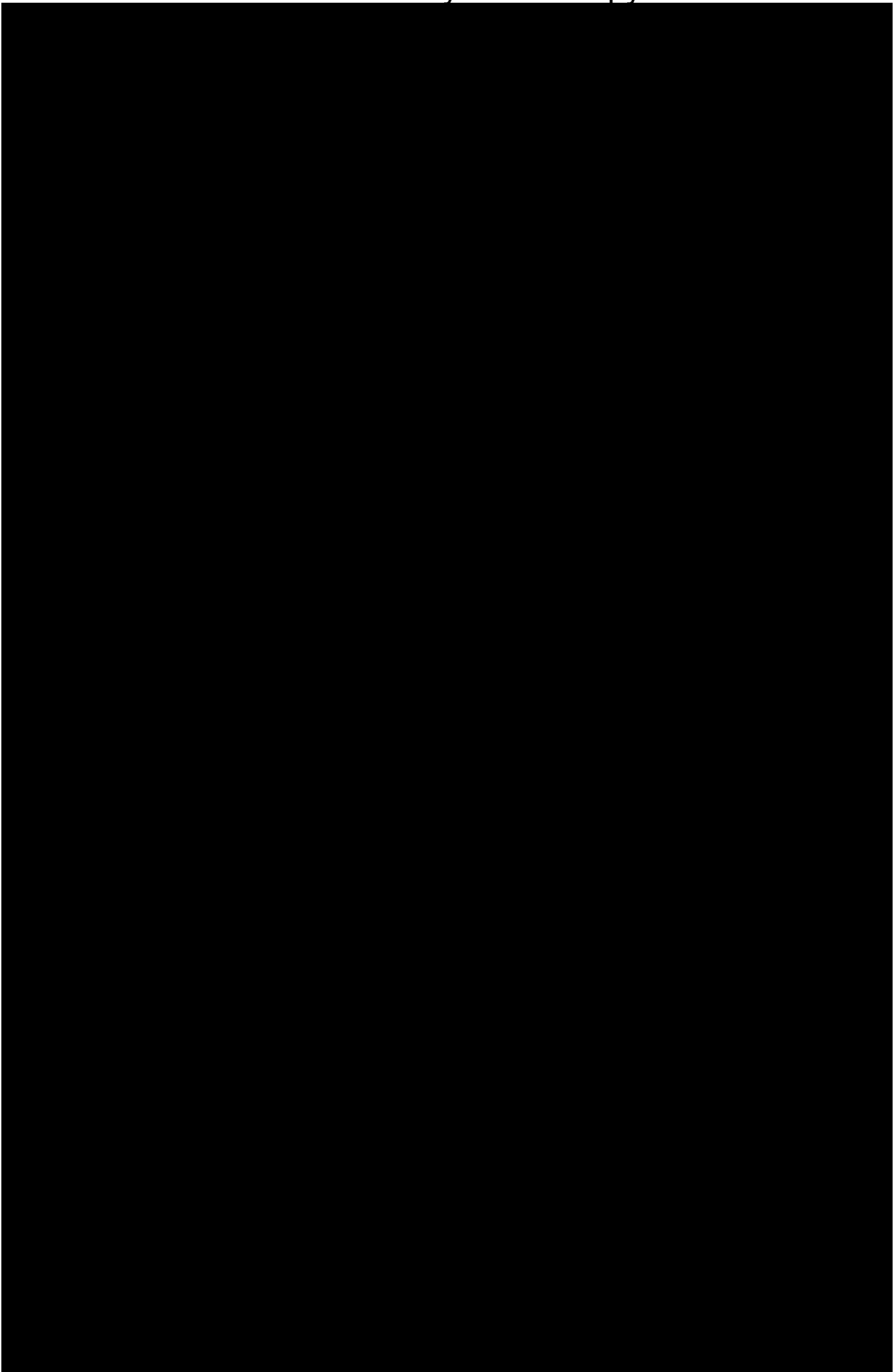


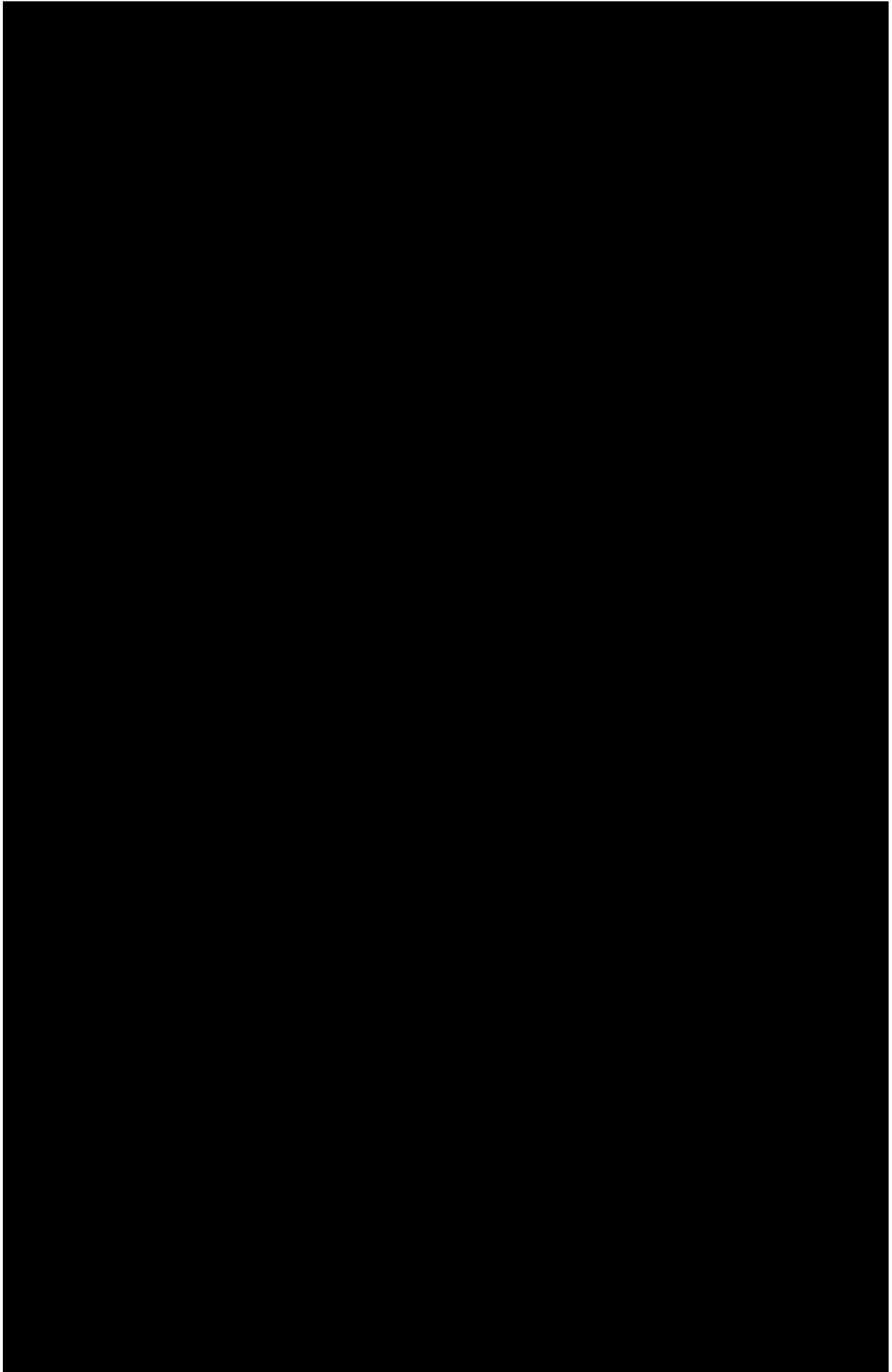


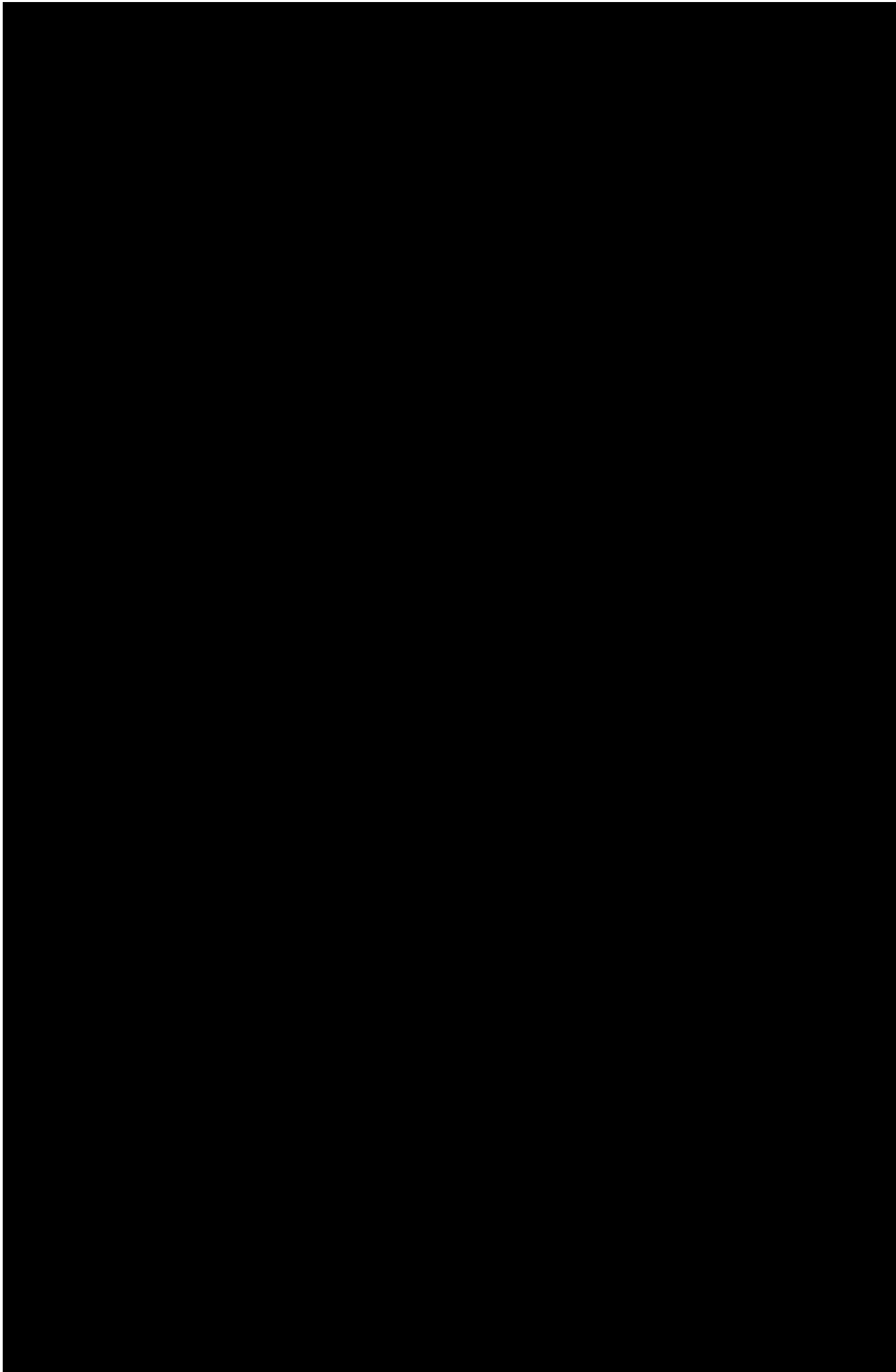


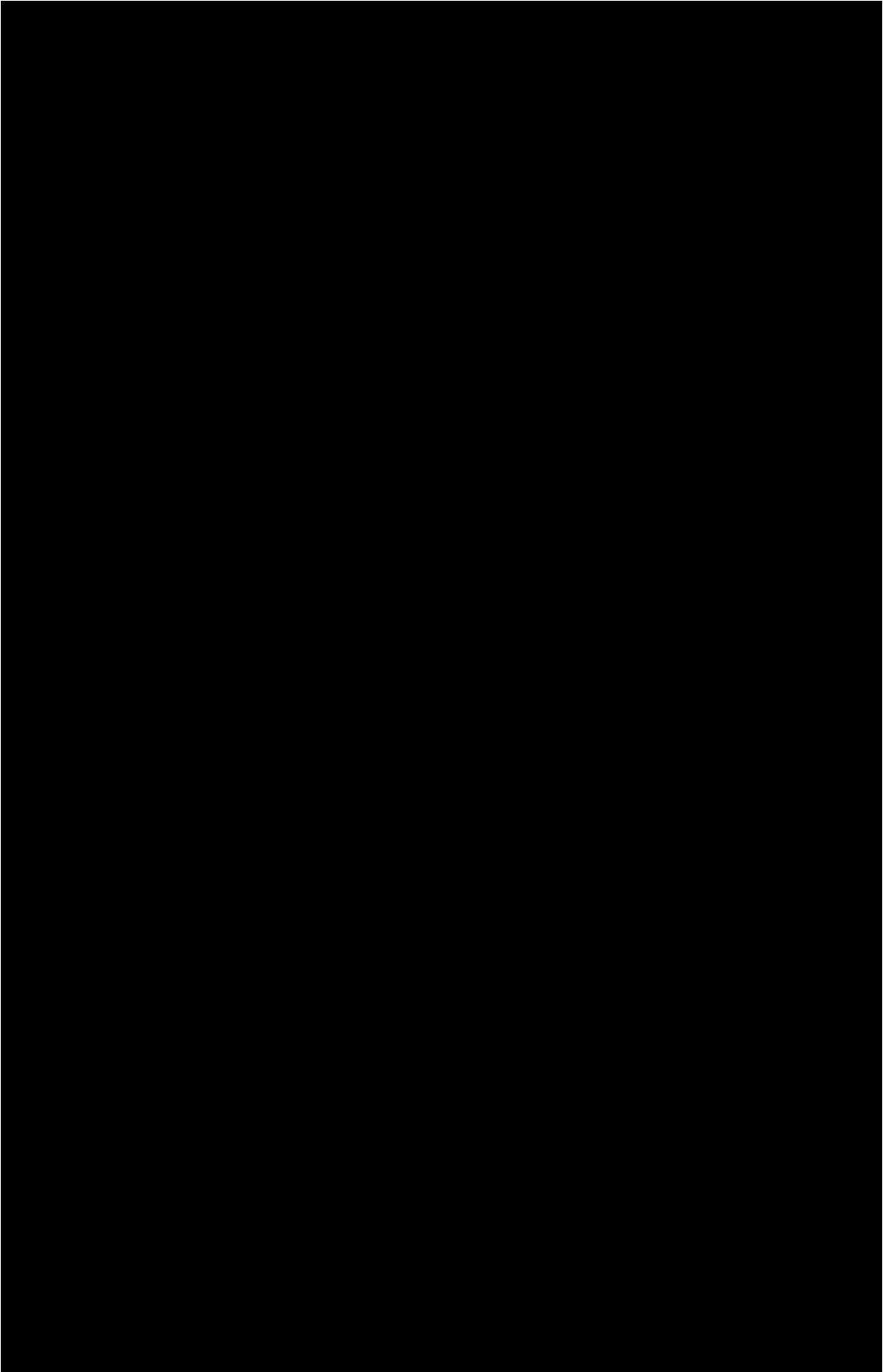




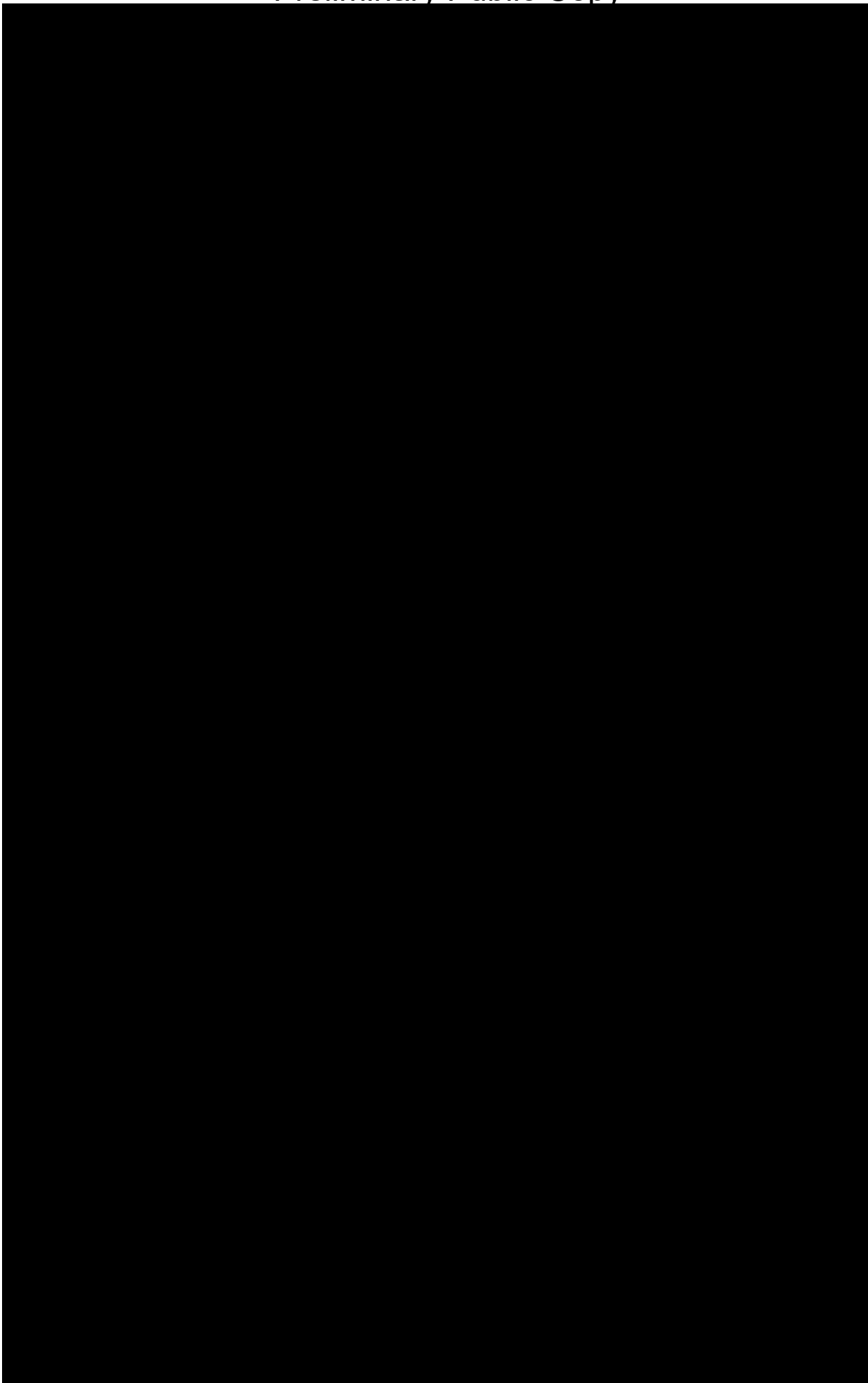


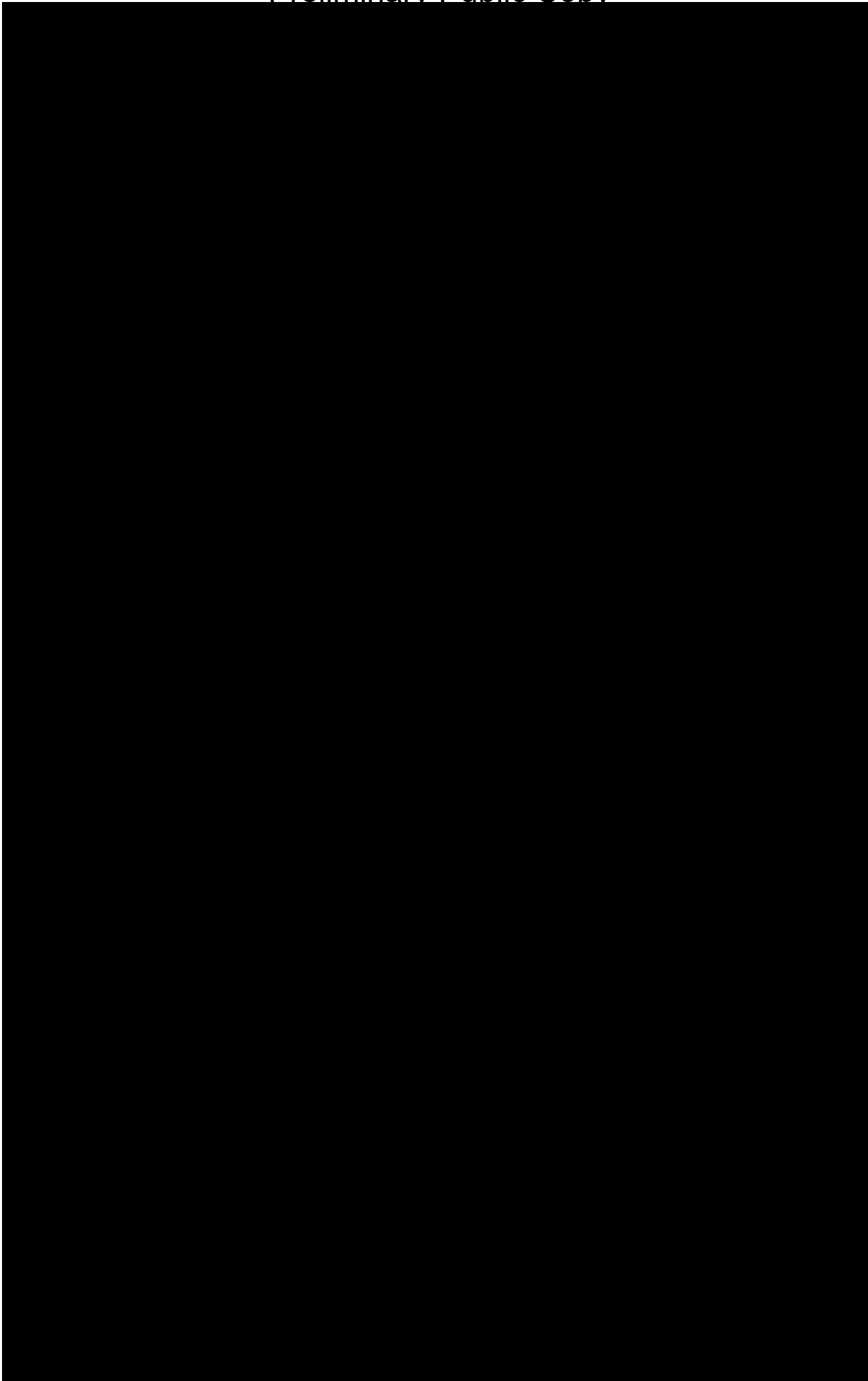


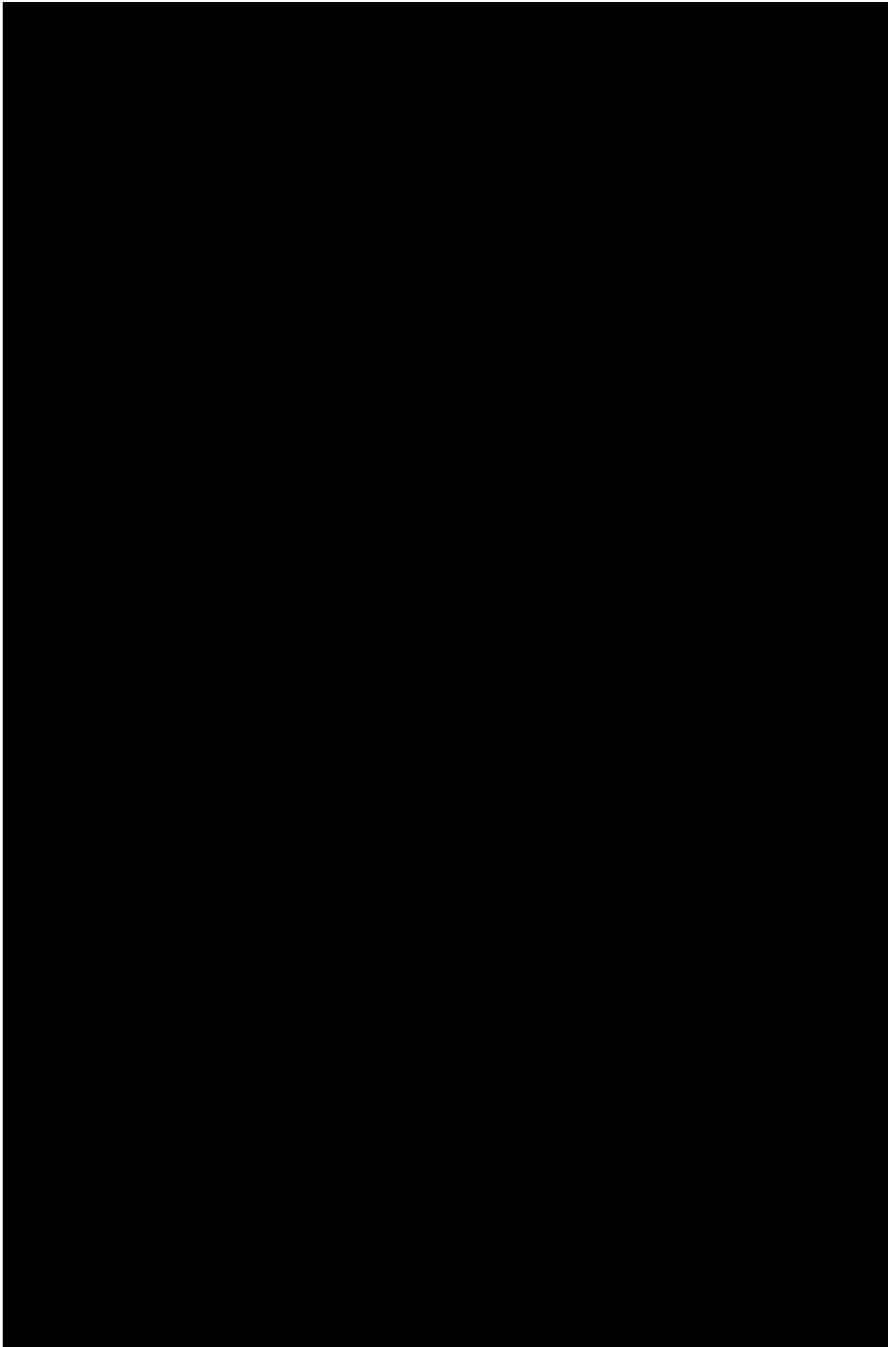


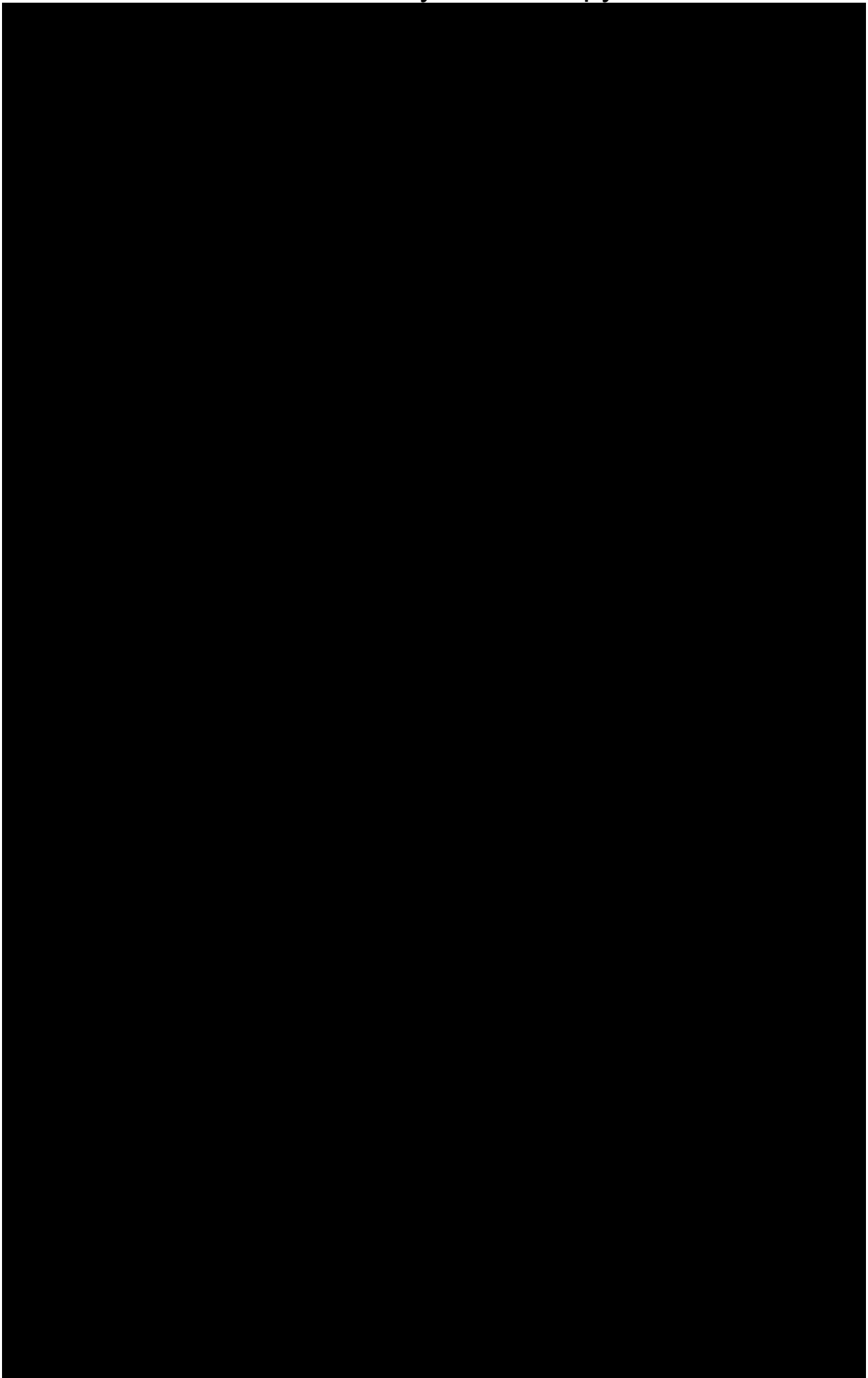


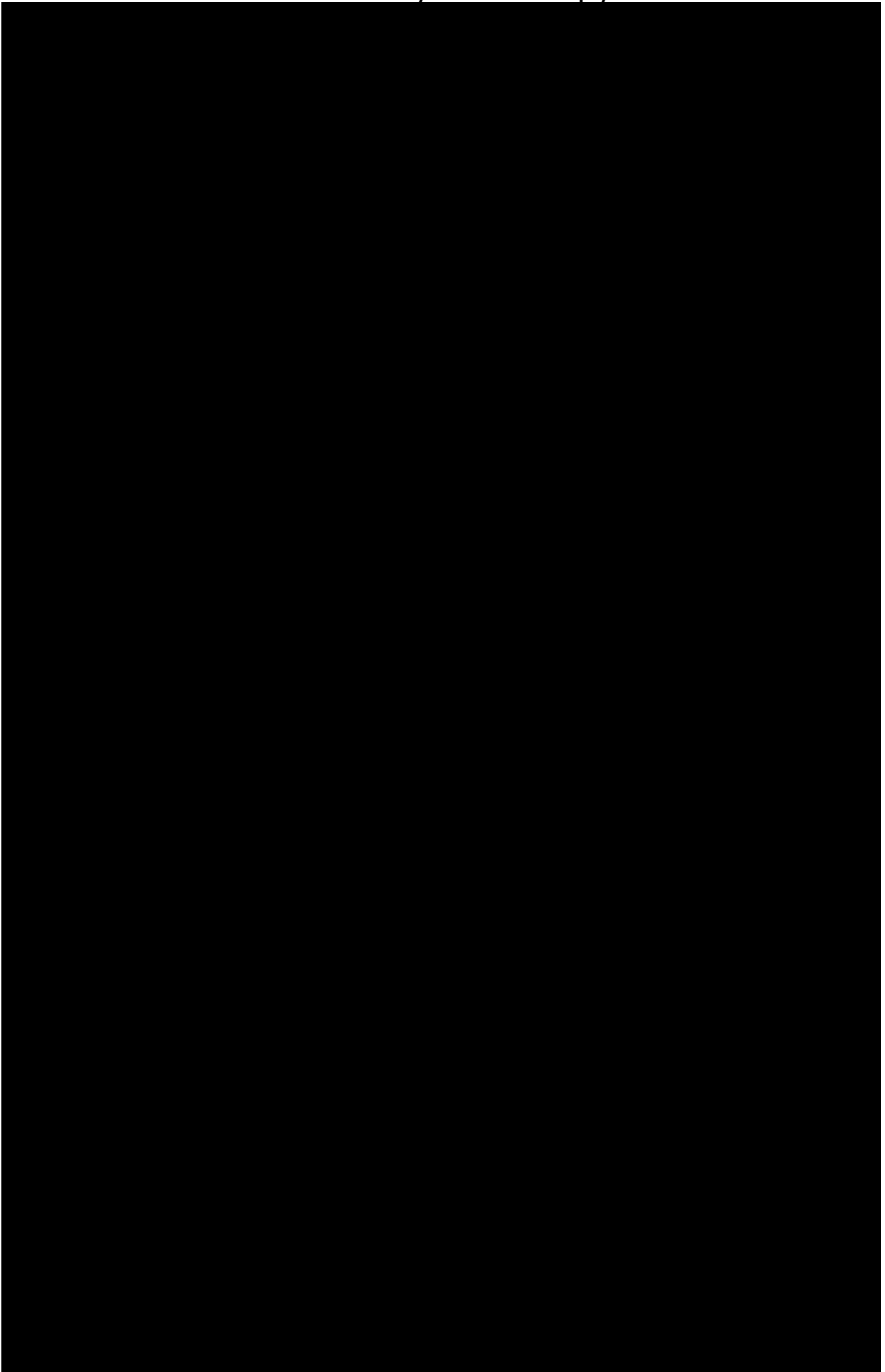


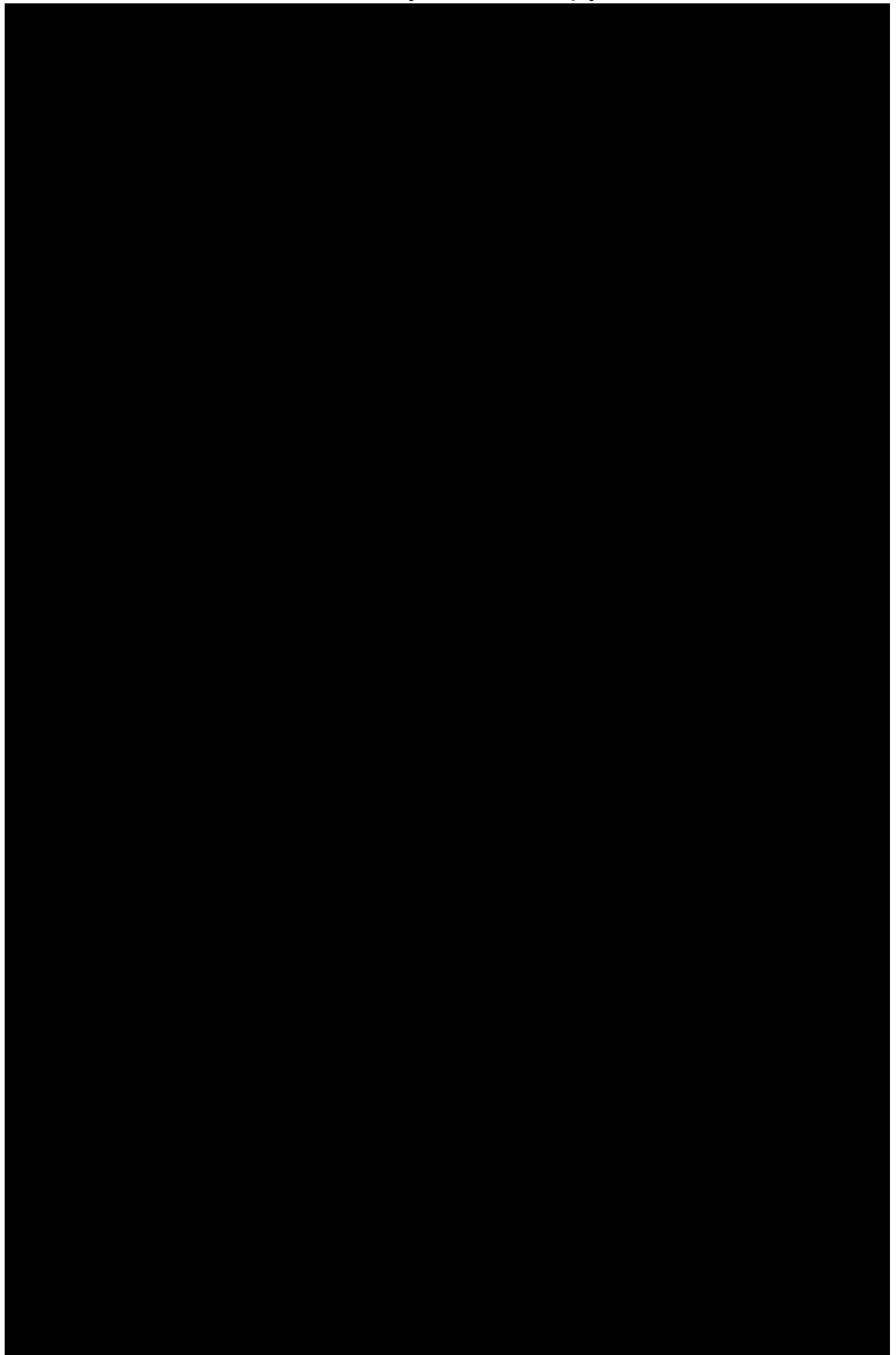


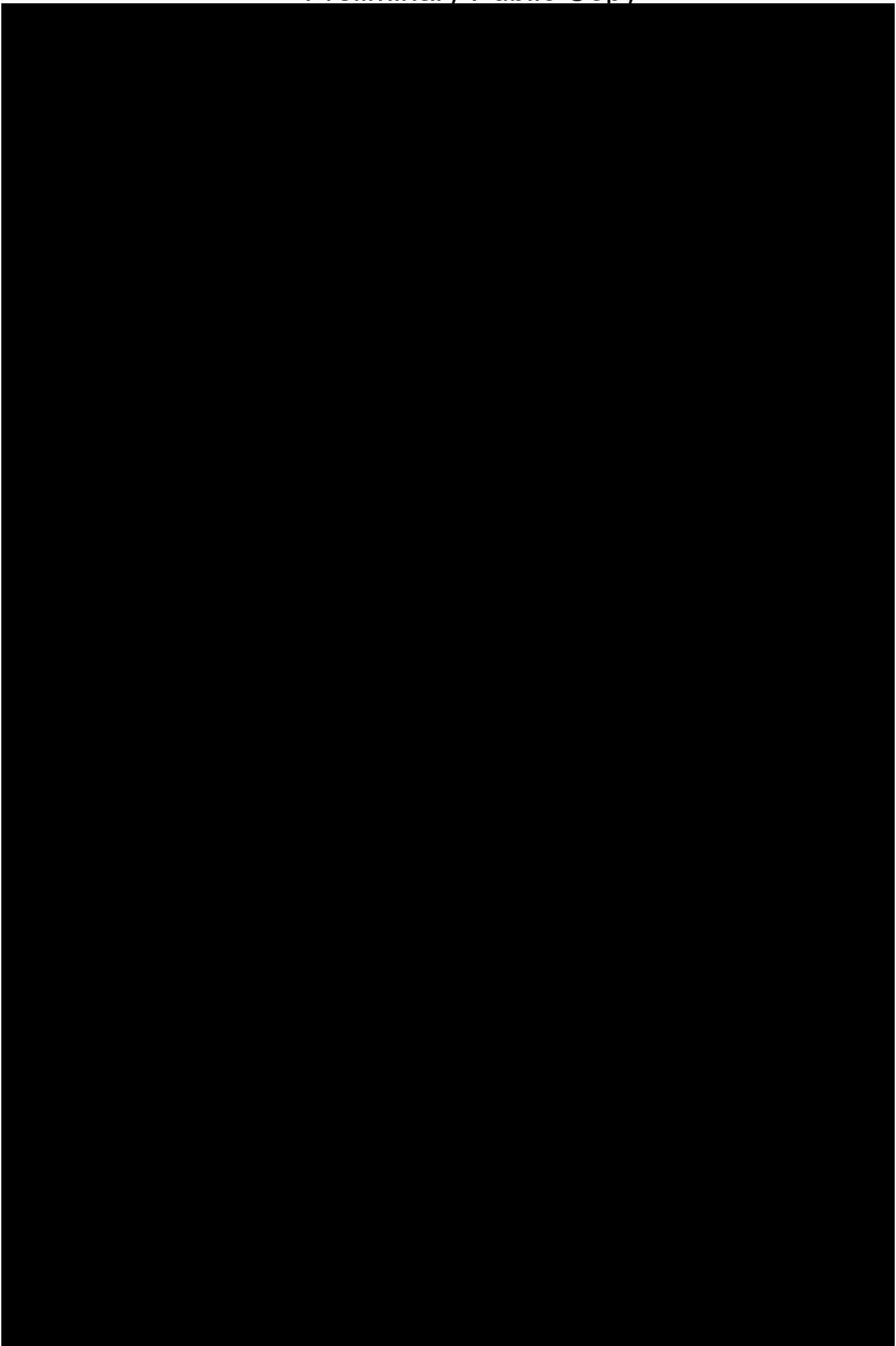












**ATTACHMENT 69**

**[CONFIDENTIAL EXCEL  
FILE WITHHELD]**



# ATTACHMENT 70

**WRITTEN CONSENT  
OF THE MANAGER OF  
ATLANTIC SHORES OFFSHORE WIND PROJECT 2, LLC  
February 13, 2019**

The undersigned, being the sole member and manager (the “*Manager*”) of Atlantic Shores Offshore Wind Project 2, LLC, a Delaware limited liability company (the “*Company*”), acting pursuant to the Company’s Amended and Restated Operating Agreement dated December 13, 2018 and Section 18-302(d) of the Delaware Limited Liability Company Act, hereby consents to and adopts the resolutions set forth below. This written consent shall be filed with the minutes of the proceedings of the Company.

WHEREAS, Atlantic Shores Offshore Wind, LLC, a Delaware limited liability company, is the sole member of the Company;

WHEREAS, the Company desires to submit a proposal (the “*NYSERDA Proposal*”) to the New York State Research and Development Authority (“*NYSERDA*”) in connection with the Request for Proposals ORECRFP18-1 for the Purchase of Offshore Wind Renewable Energy Certificates, dated November 8, 2018;

WHEREAS, in connection with the NYSERDA Proposal, the Company will enter into or execute various other certificates, documents, instruments and other agreements as may be required by NYSERDA and incur certain costs associated with the NYSERDA Proposal (each of the items in this paragraph, together with the NYSERDA Proposal, are collectively, the “*Proposal Documents*”);

WHEREAS, after careful consideration, the Manager has determined that it is in the best interests of the Company to submit the NYSERDA Proposal and to provide the Proposal Documents to NYSERDA.

NOW, THEREFORE, BE IT, RESOLVED, that the NYSERDA Proposal is consistent with, and in furtherance of, the Company’s business strategies and goals and are in the best interests of the Company;

RESOLVED, that the form, terms and provisions of the NYSERDA Proposal and the Proposal Documents are hereby authorized, approved and adopted, and any officer of the Company, or any other individual authorized under the Company’s organizational documents, by consent of the Company or otherwise authorized by the Company, including without limitation the individuals listed on Exhibit A attached hereto (collectively, the “*Authorized Representatives*”) be, and each of them acting singly hereby is, authorized and empowered, for and on behalf of the Company, to execute and deliver the NYSERDA Proposal and the Proposal Documents, with such changes therein which are consistent with the authority conferred hereby as the Authorized Representative executing the same on behalf of the Company shall deem necessary or appropriate, such Authorized Representative’s judgment to be conclusively evidenced by the execution thereof by such Authorized Representative; and

RESOLVED, that the Authorized Representatives of the Company are hereby

authorized to execute and deliver on behalf of the Company all such other documents and instruments and to do and perform all such other acts and things as may be necessary or advisable to discharge the Company's obligations in respect of the submission of the NYSERDA Proposal or otherwise to give effect to the intent and purpose of the foregoing resolutions.

**GENERAL AUTHORITY**

RESOLVED, that the Authorized Representatives of the Company are, and each of them acting alone hereby is, authorized, empowered and directed to take, from time to time in the name and on behalf of the Company, such actions and execute and deliver such certificates, instruments, notices and documents, including any amendments thereto, as may be required from time to time or as such Authorized Representatives may deem necessary, advisable or proper in order to carry out and perform the obligations of the Company under and in connection with the foregoing resolutions; and all such certificates, instruments, notices and documents to be executed and delivered in such form as the Authorized Representative executing the same shall approve, the execution and delivery thereof by such Authorized Representative to be conclusive evidence of the approval and ratification thereof by such Authorized Representative and by the Company, as applicable;

RESOLVED, that all actions taken by the Authorized Representatives on behalf of the Company, as applicable, in respect of the NYSERDA Proposal prior to the date of this written consent which are within the authority conferred hereby are ratified and approved; and

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has executed this written consent of the Manager of Atlantic Shores Offshore Wind Project 2, LLC as of the first date written above.

**ATLANTIC SHORES OFFSHORE WIND, LLC**  
sole member and manager of  
Atlantic Shores Offshore Wind Project 2, LLC

By   
Name:   
Title: President

**EXHIBIT A**

“Authorized Representatives”

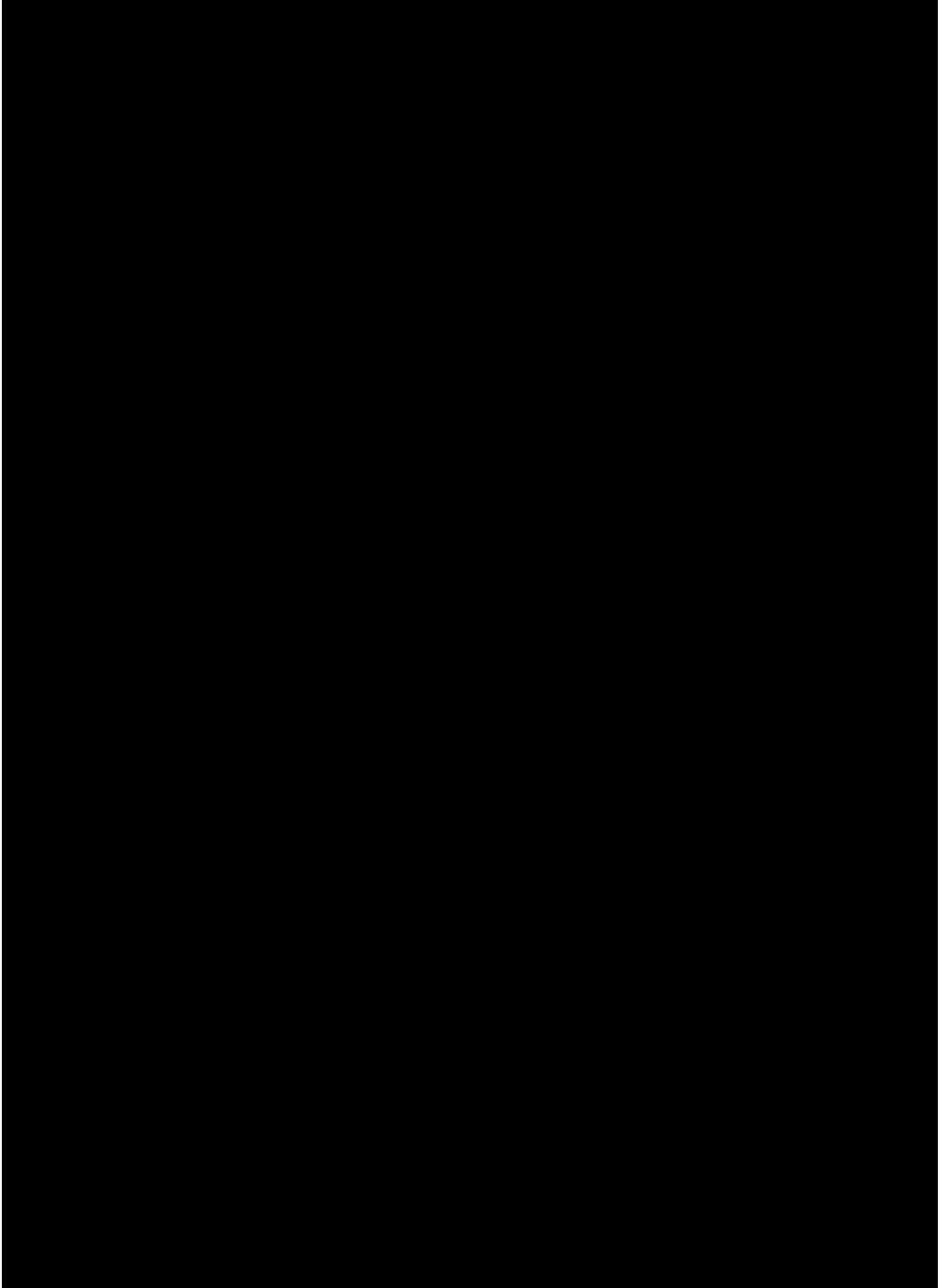


# ATTACHMENT 71

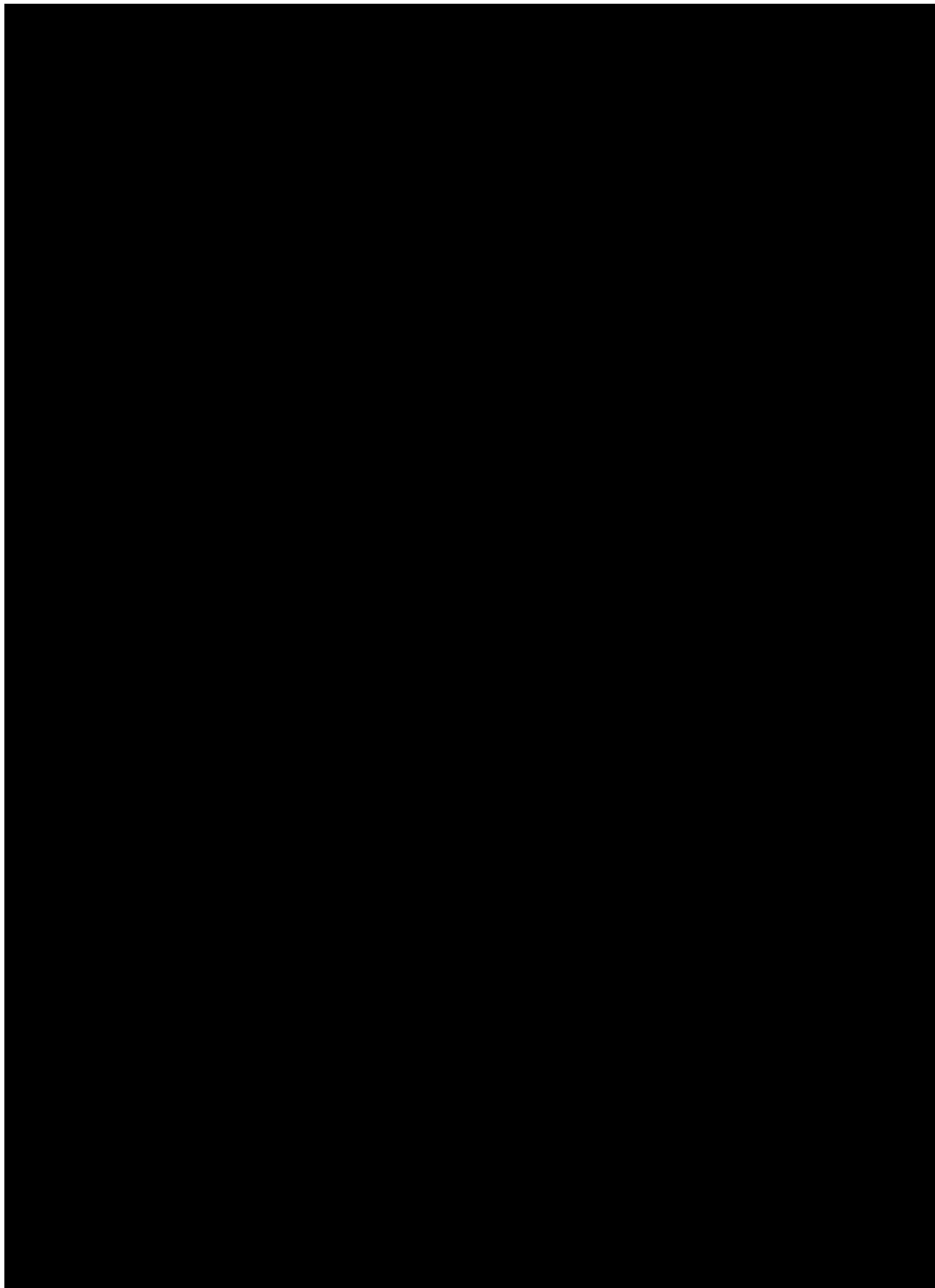


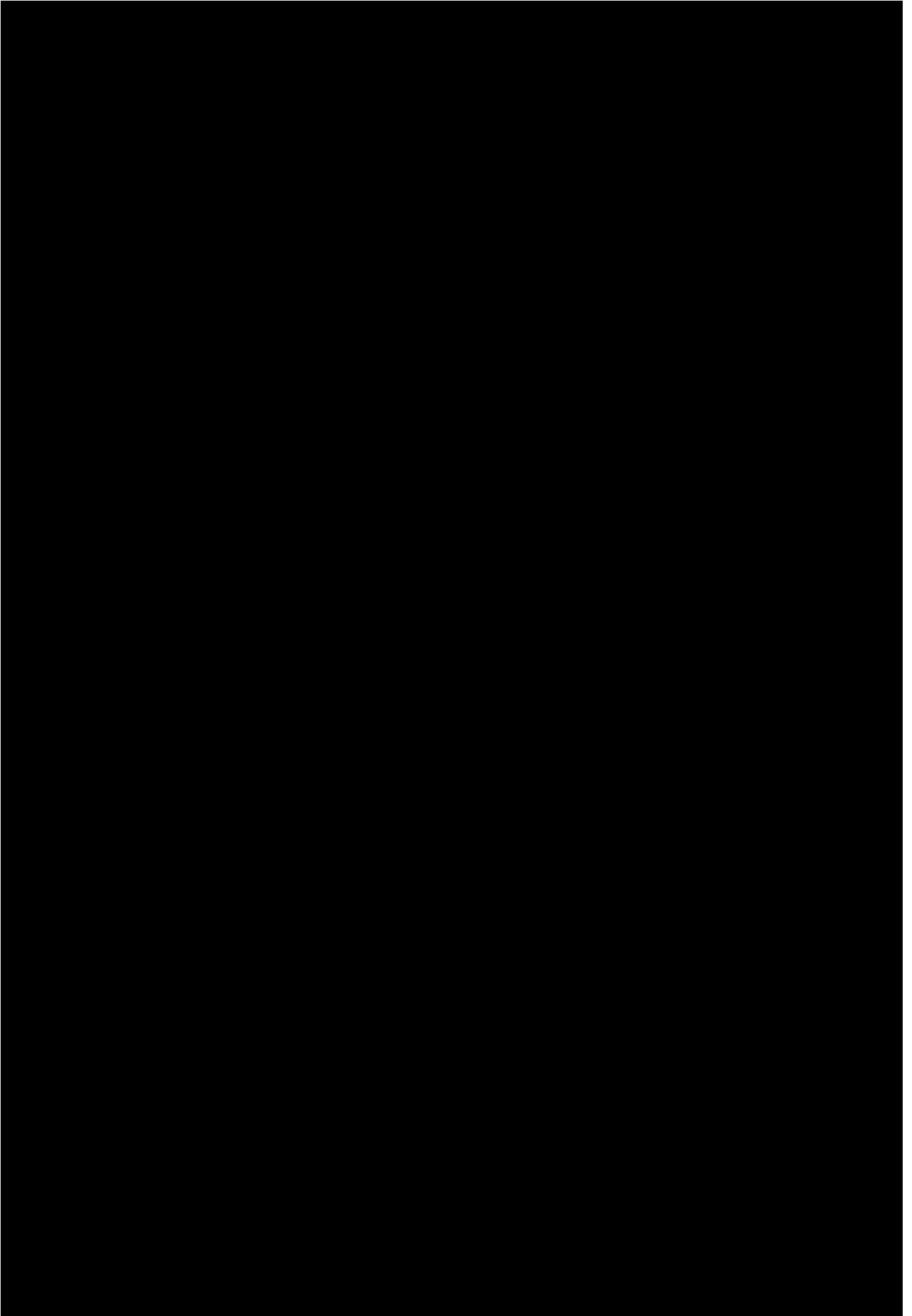
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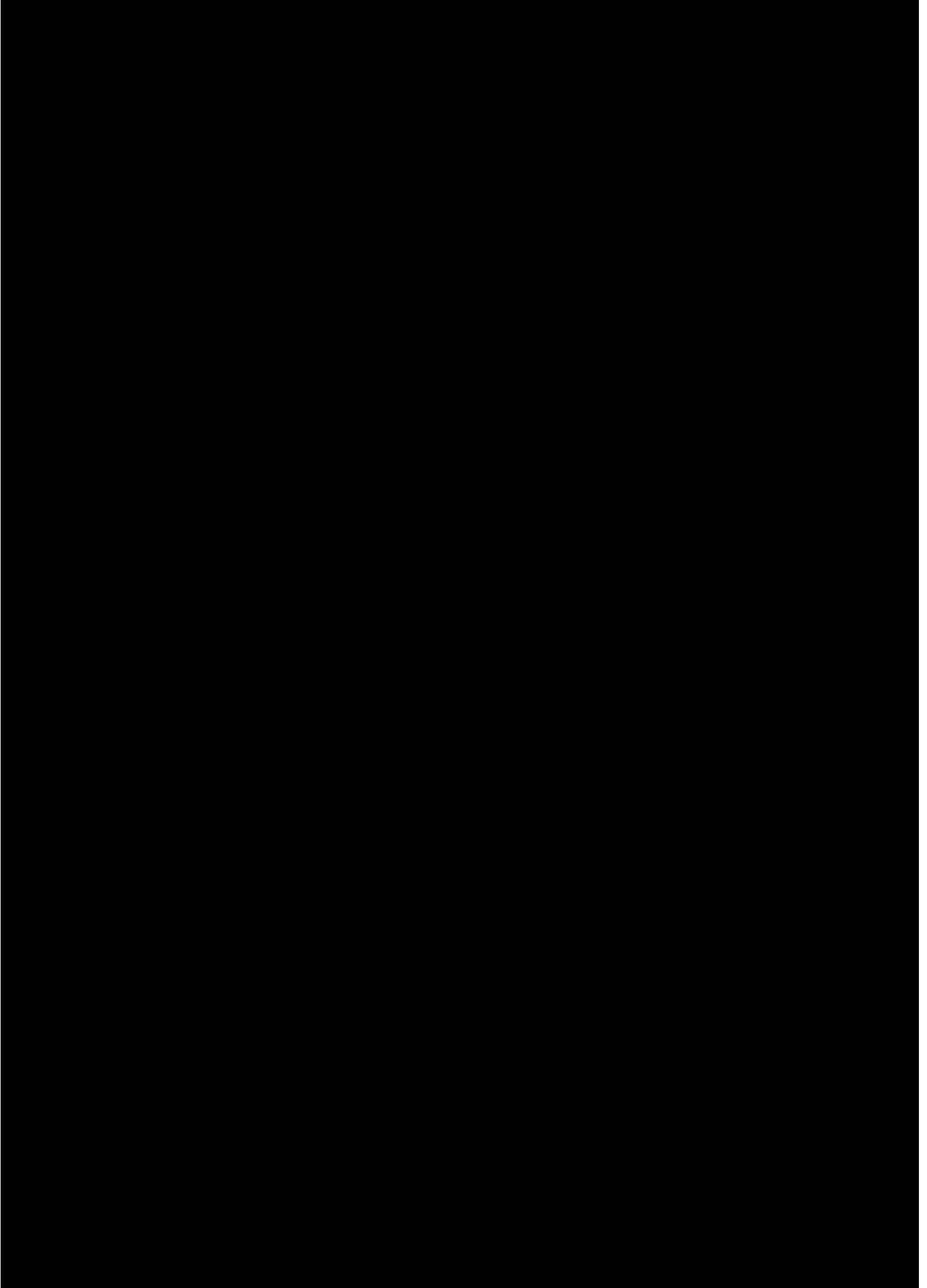
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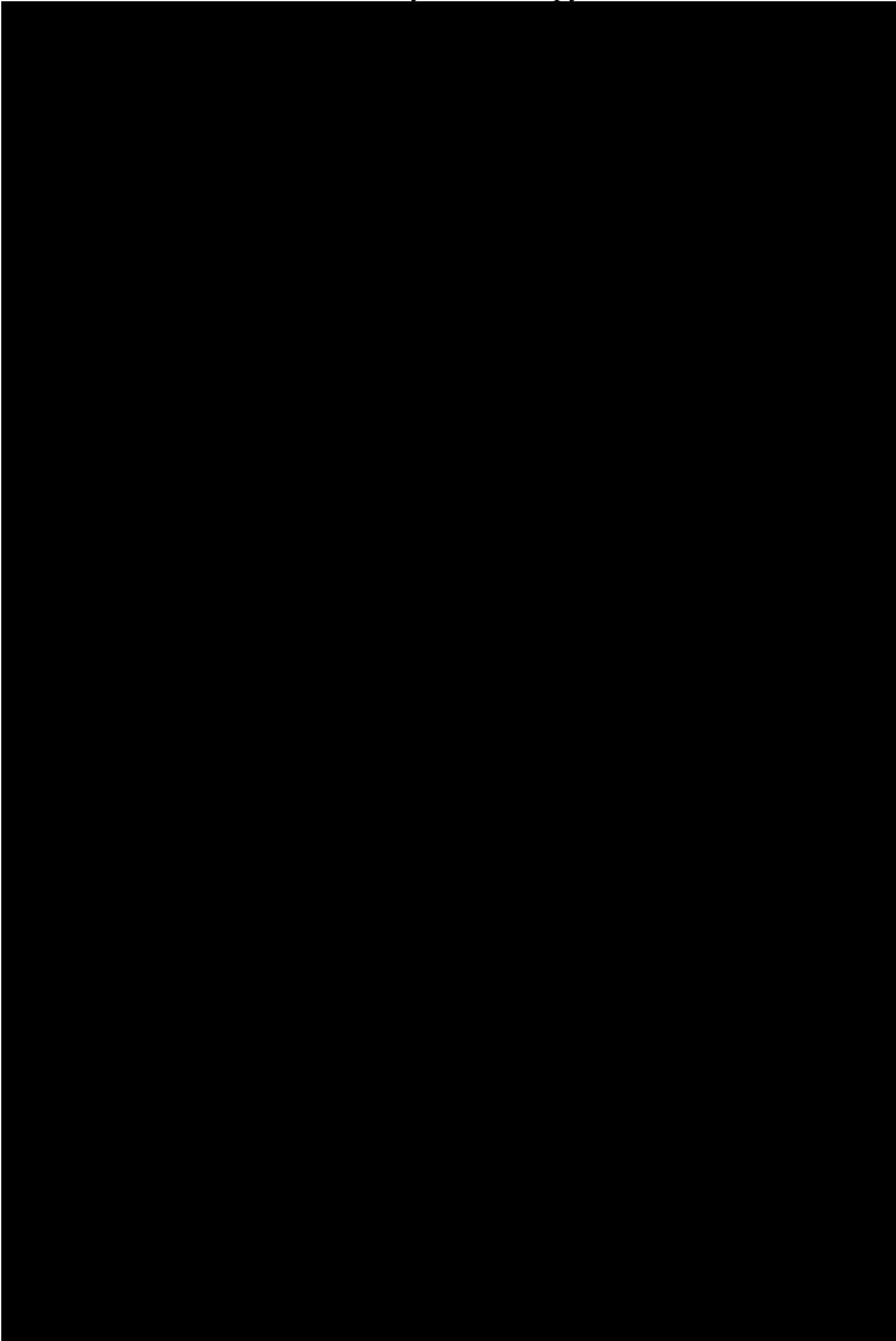


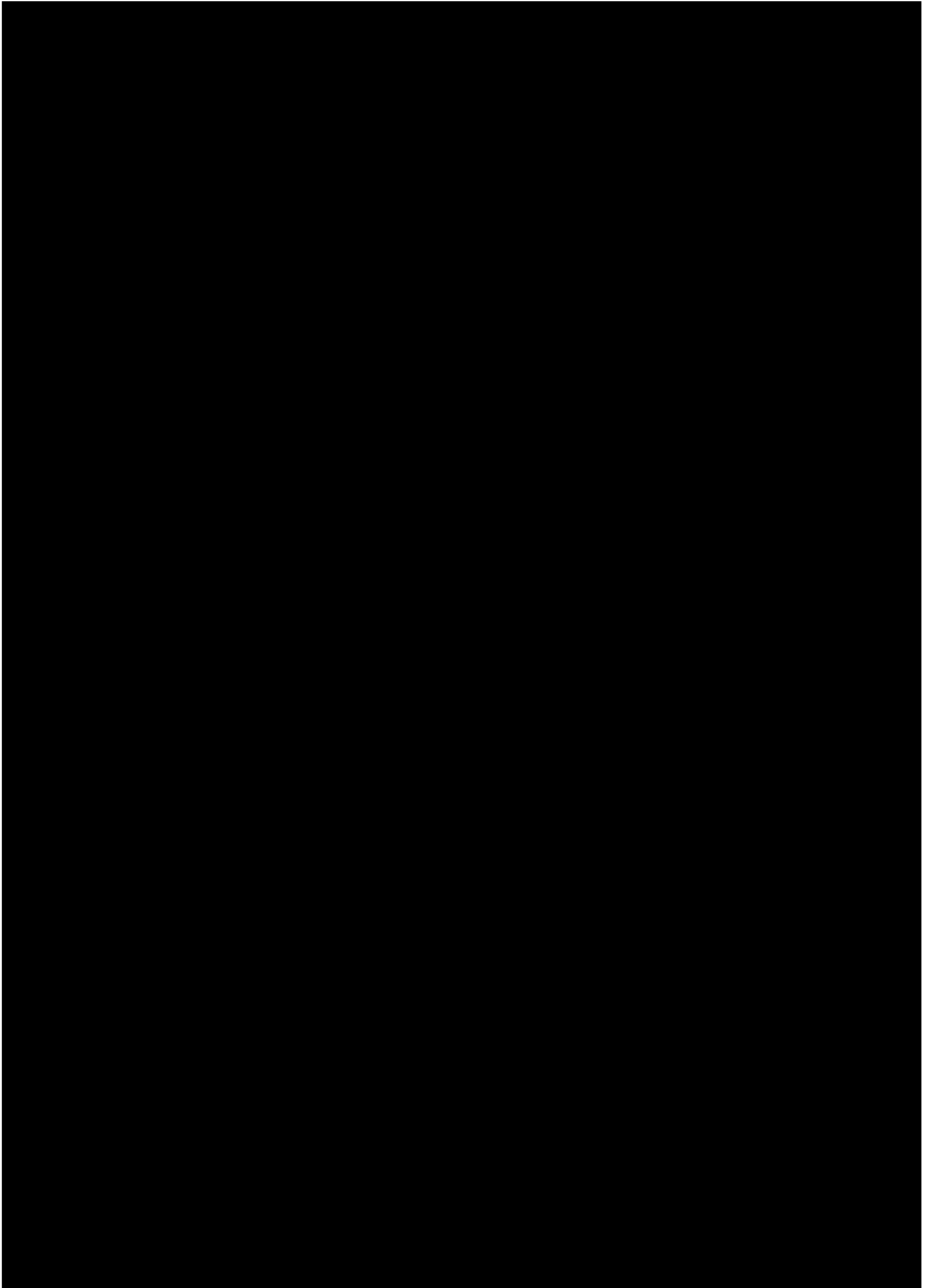


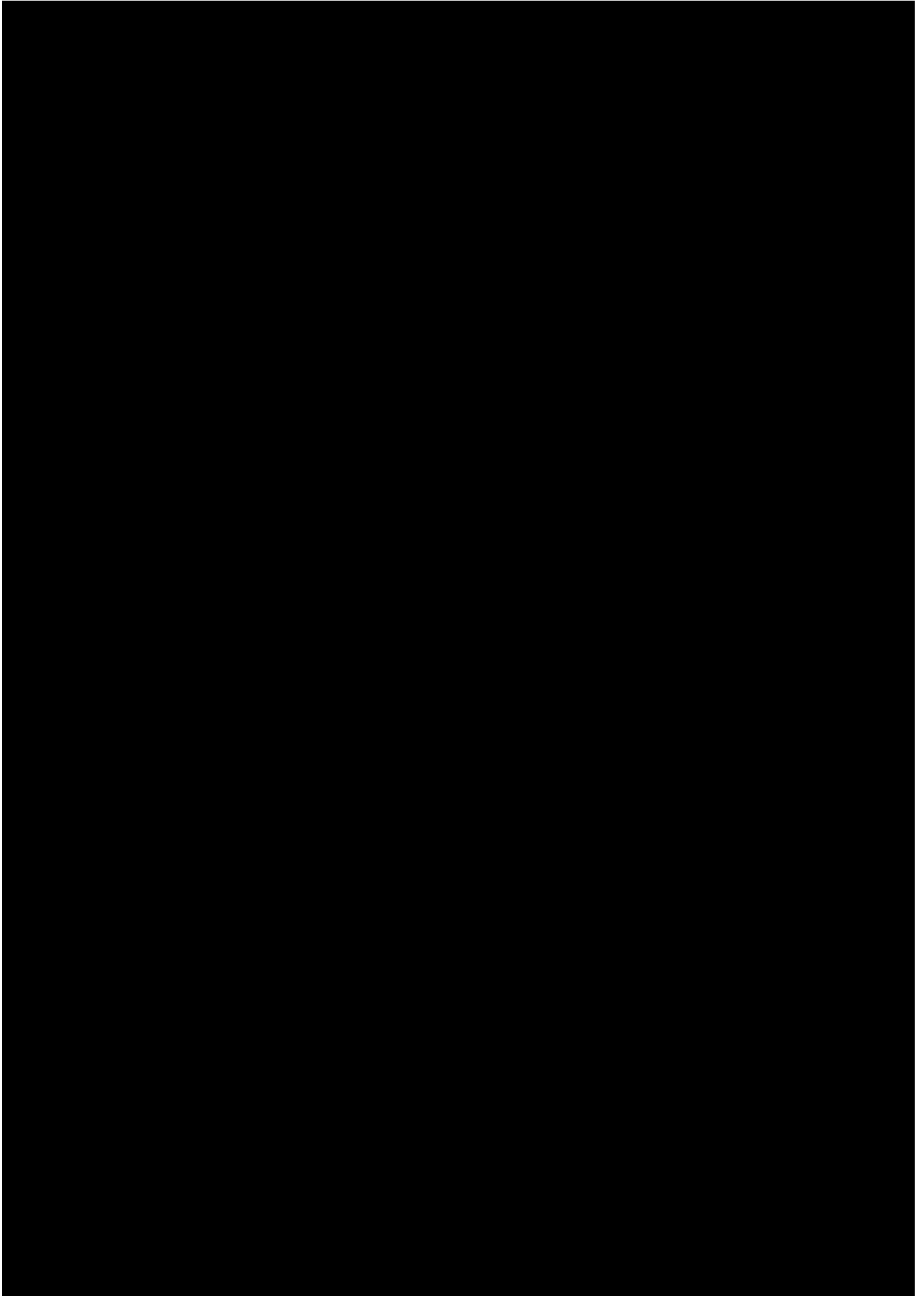


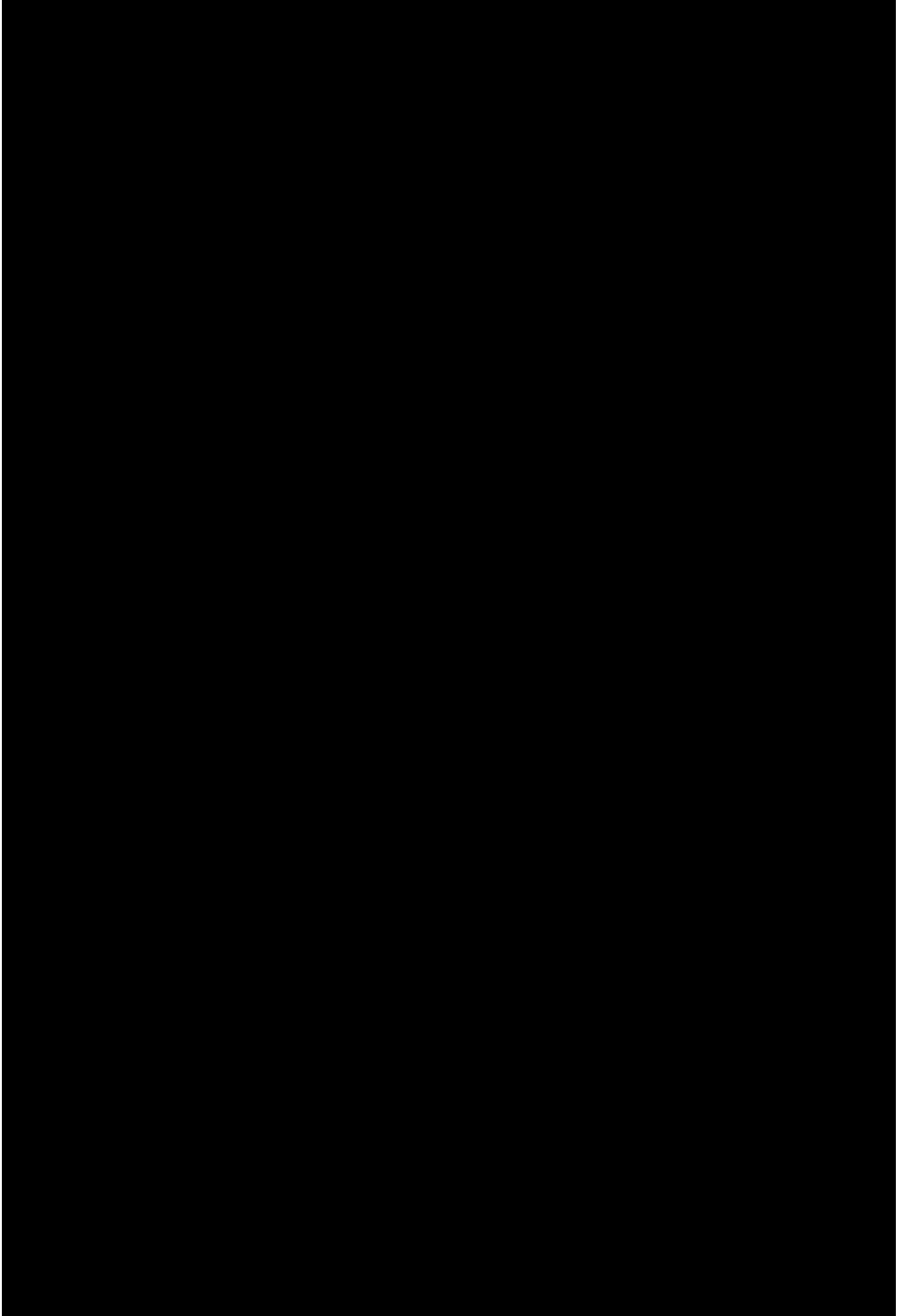


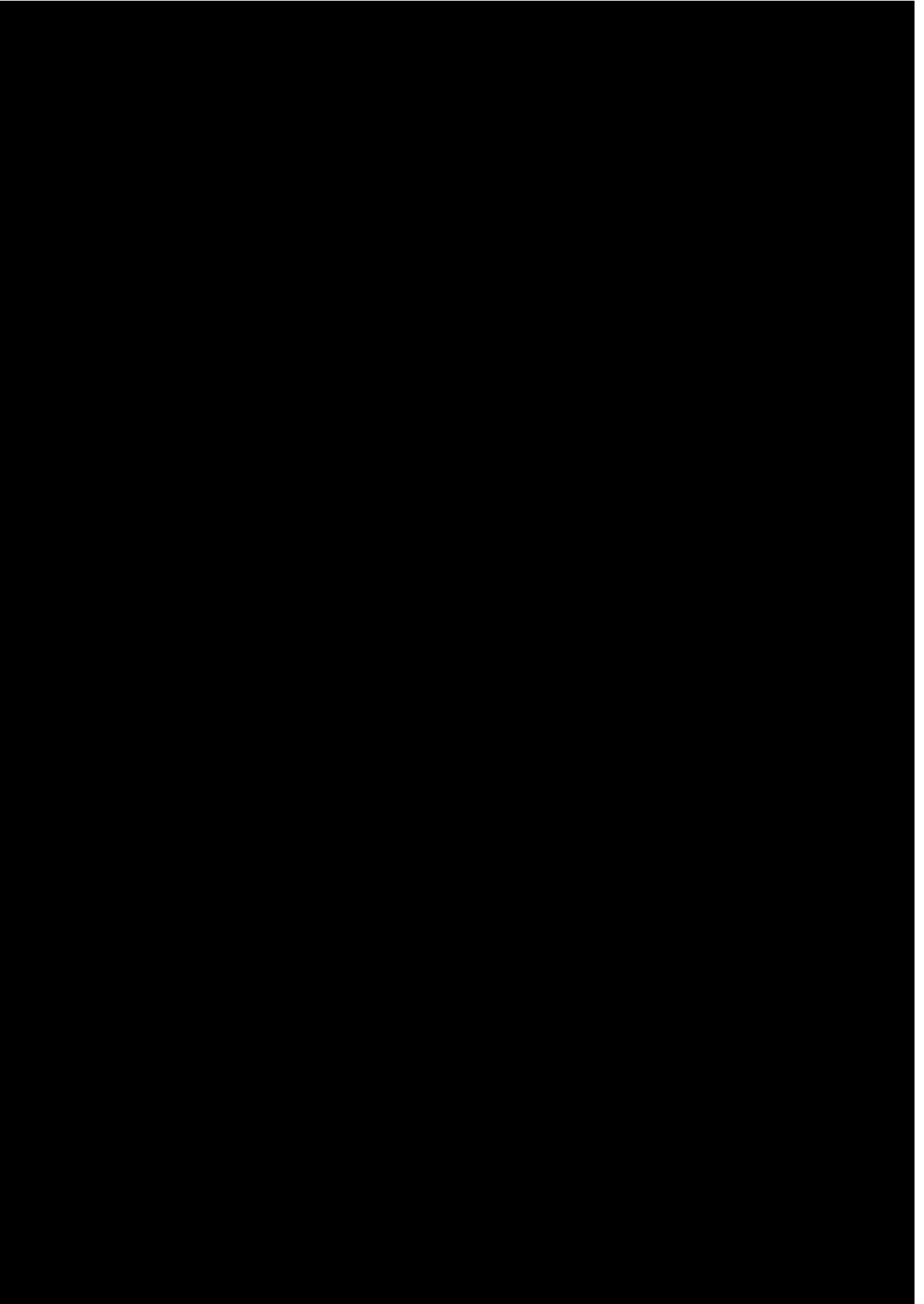




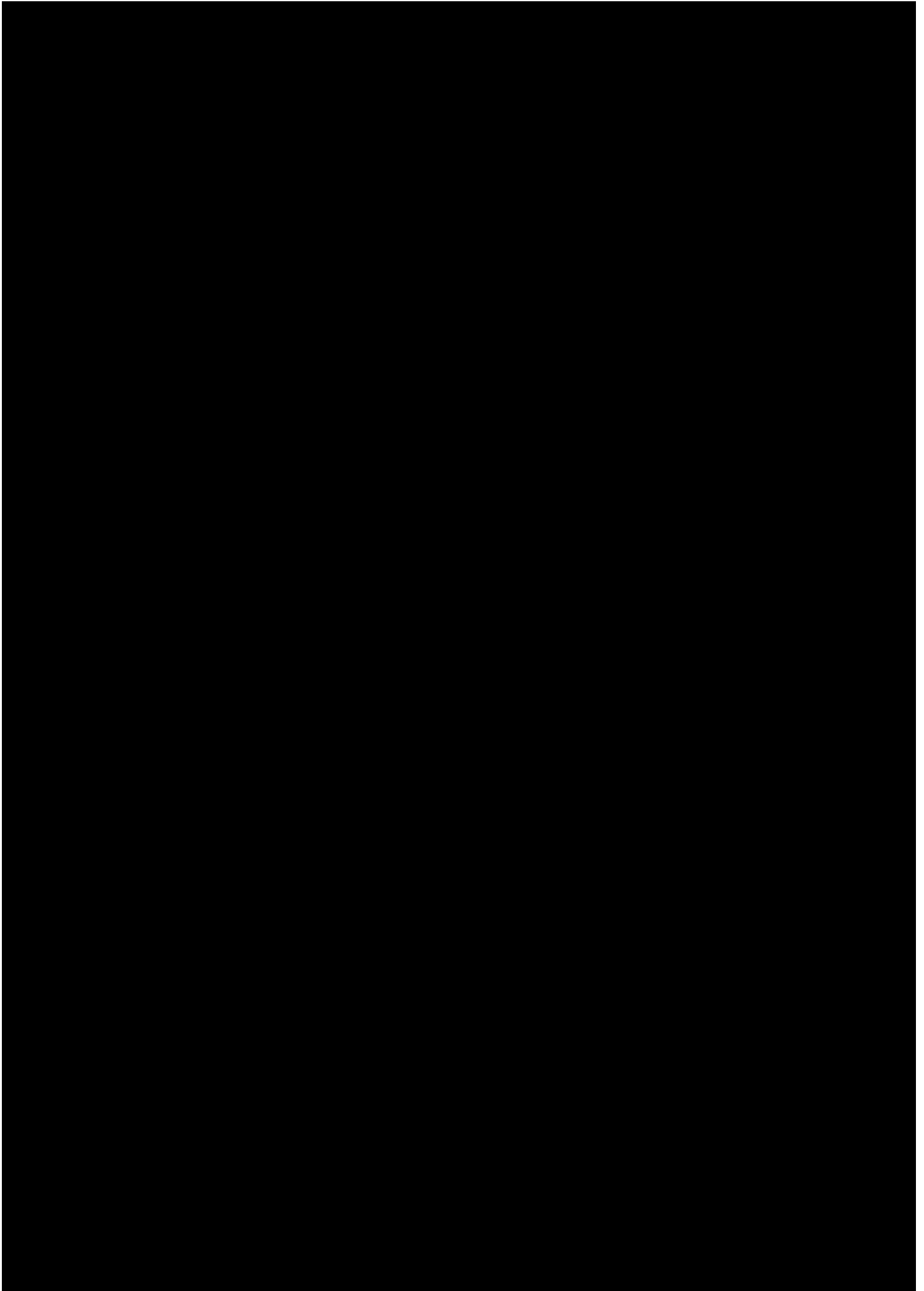


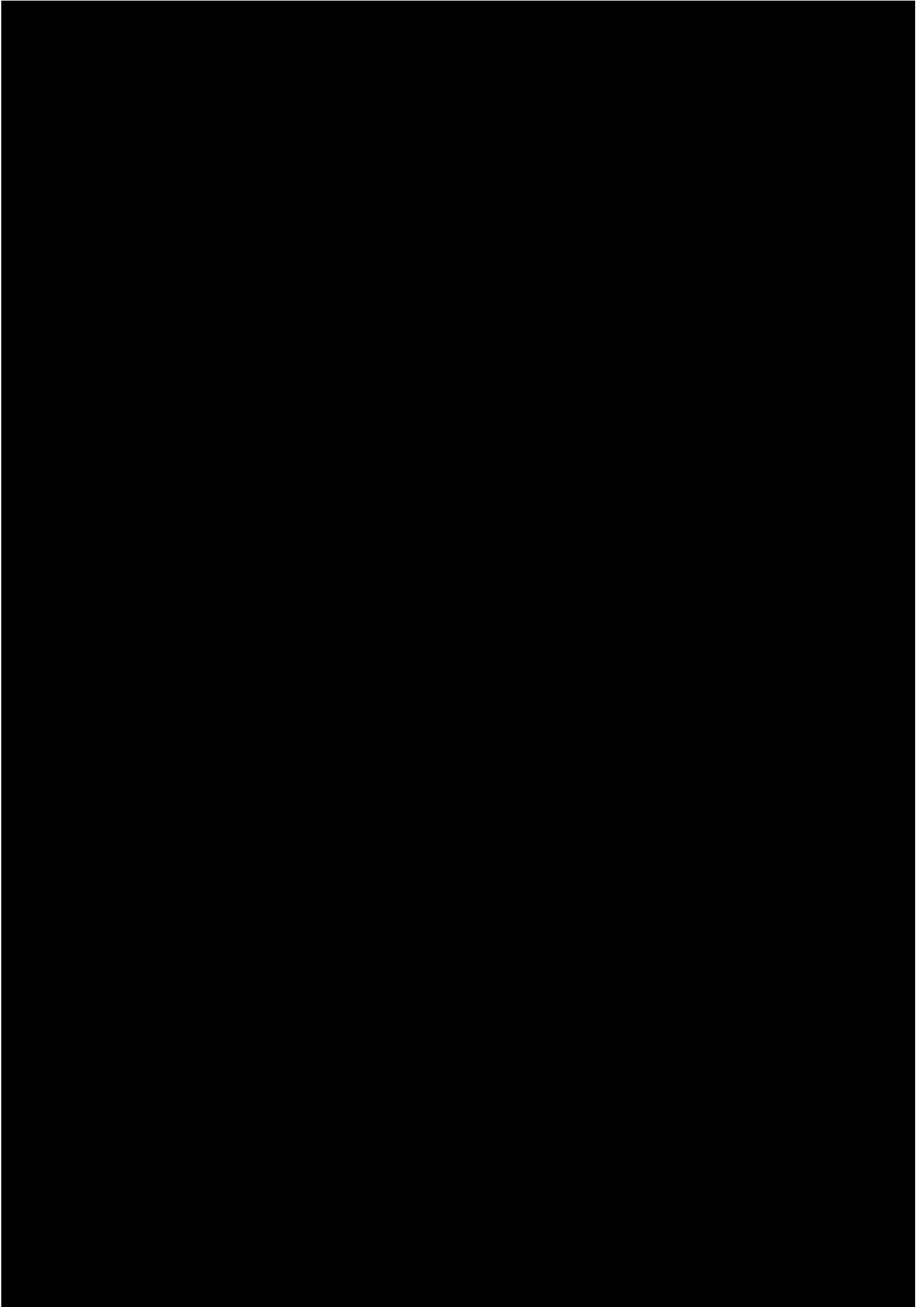


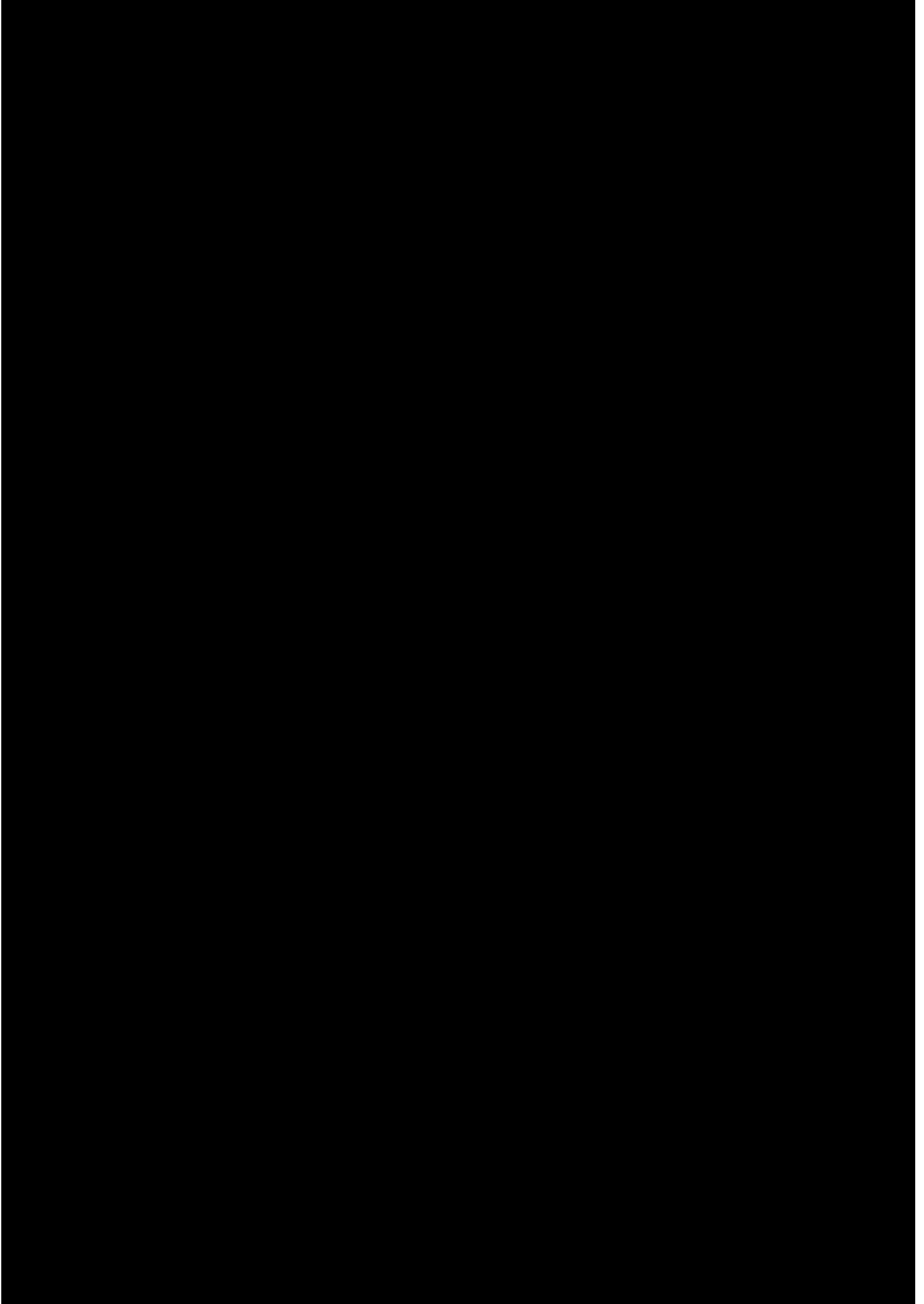


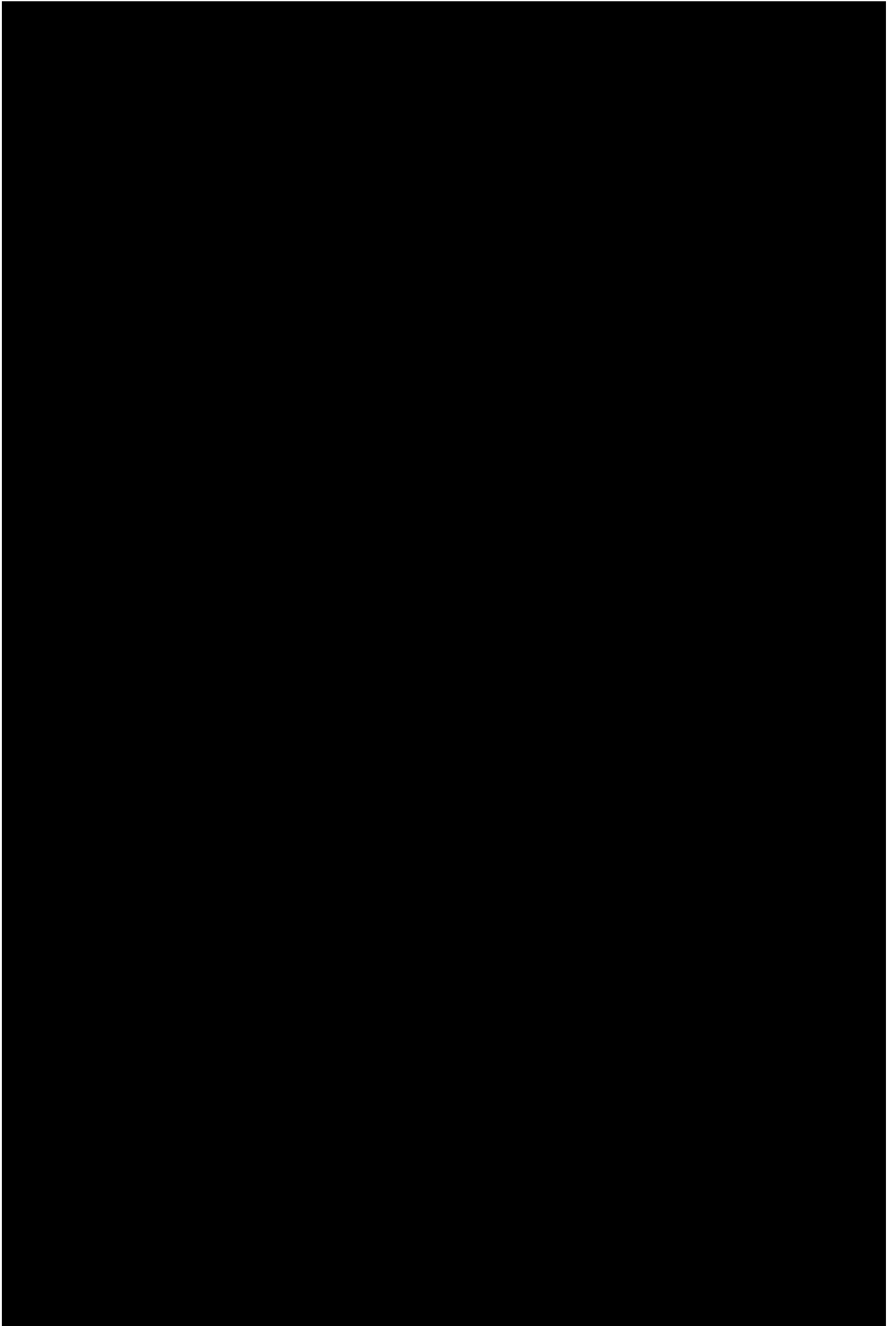


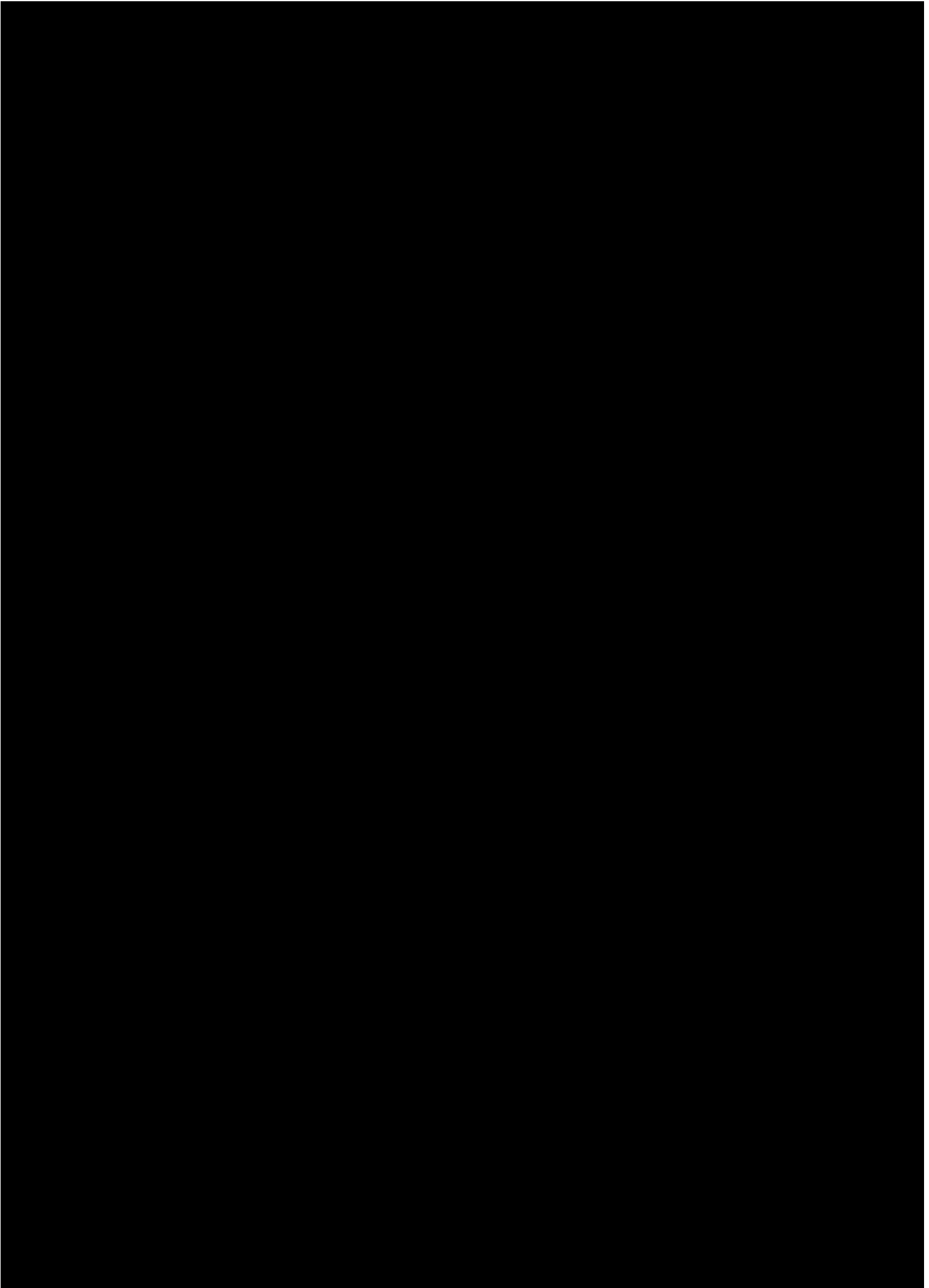


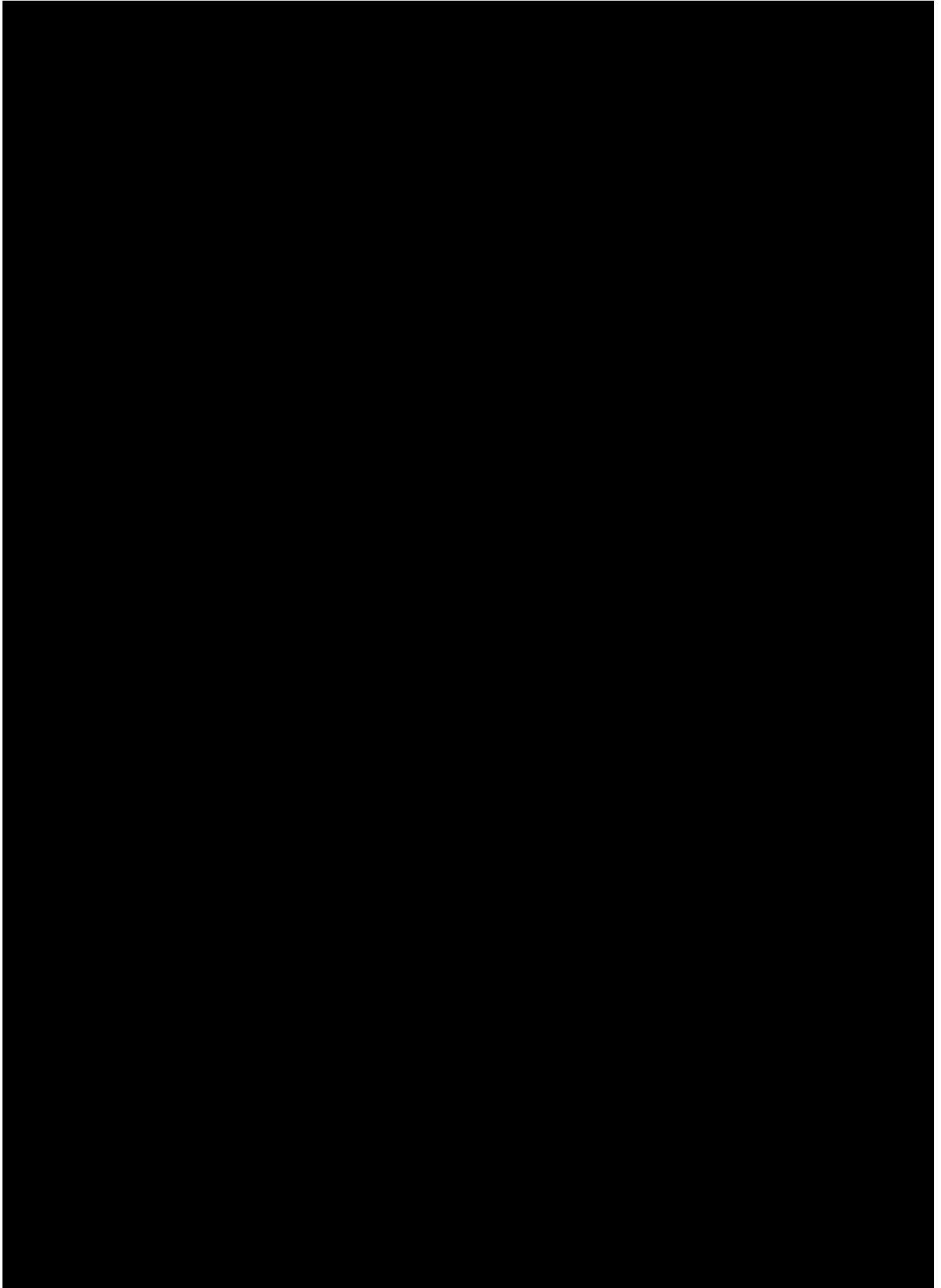


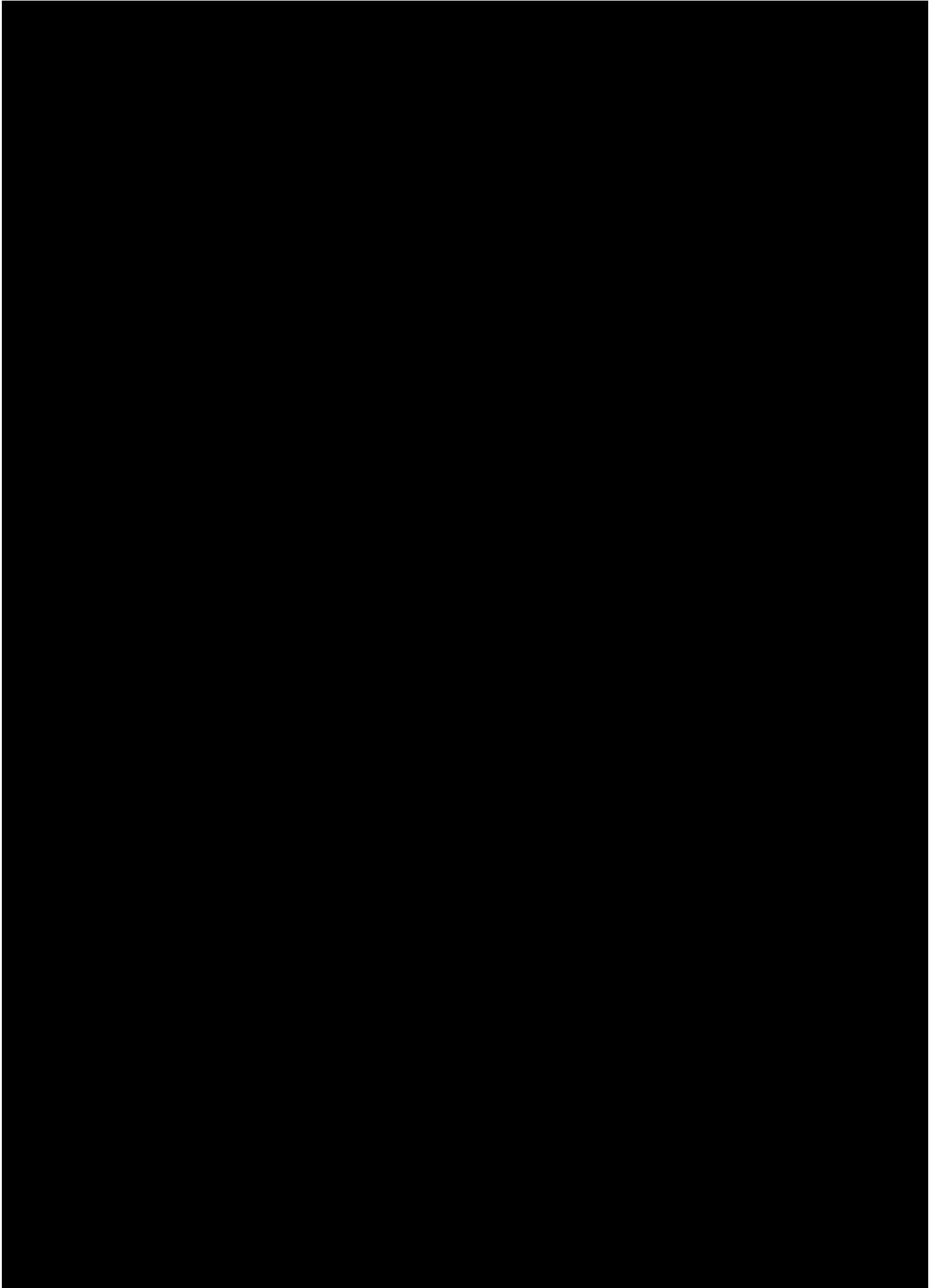


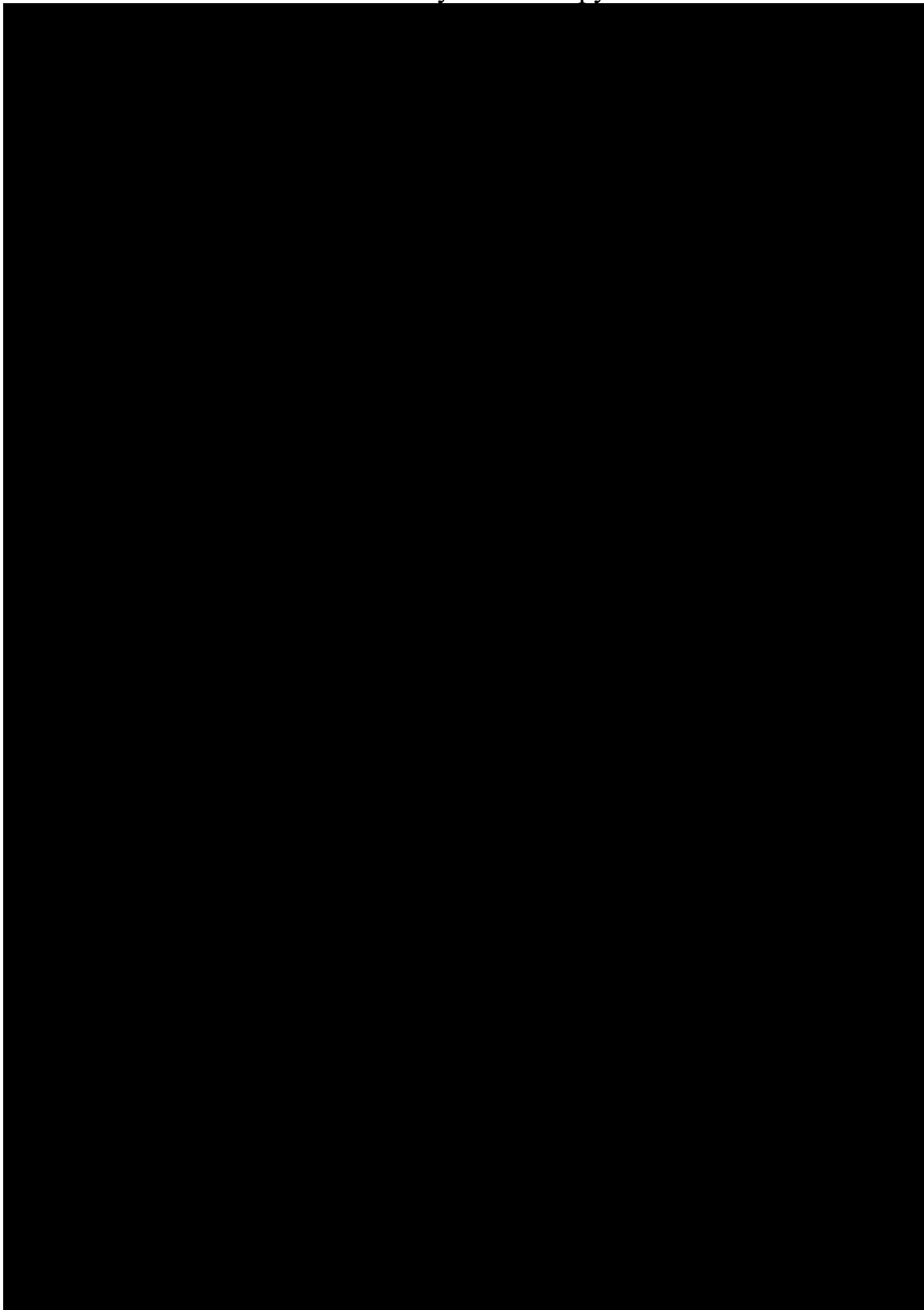




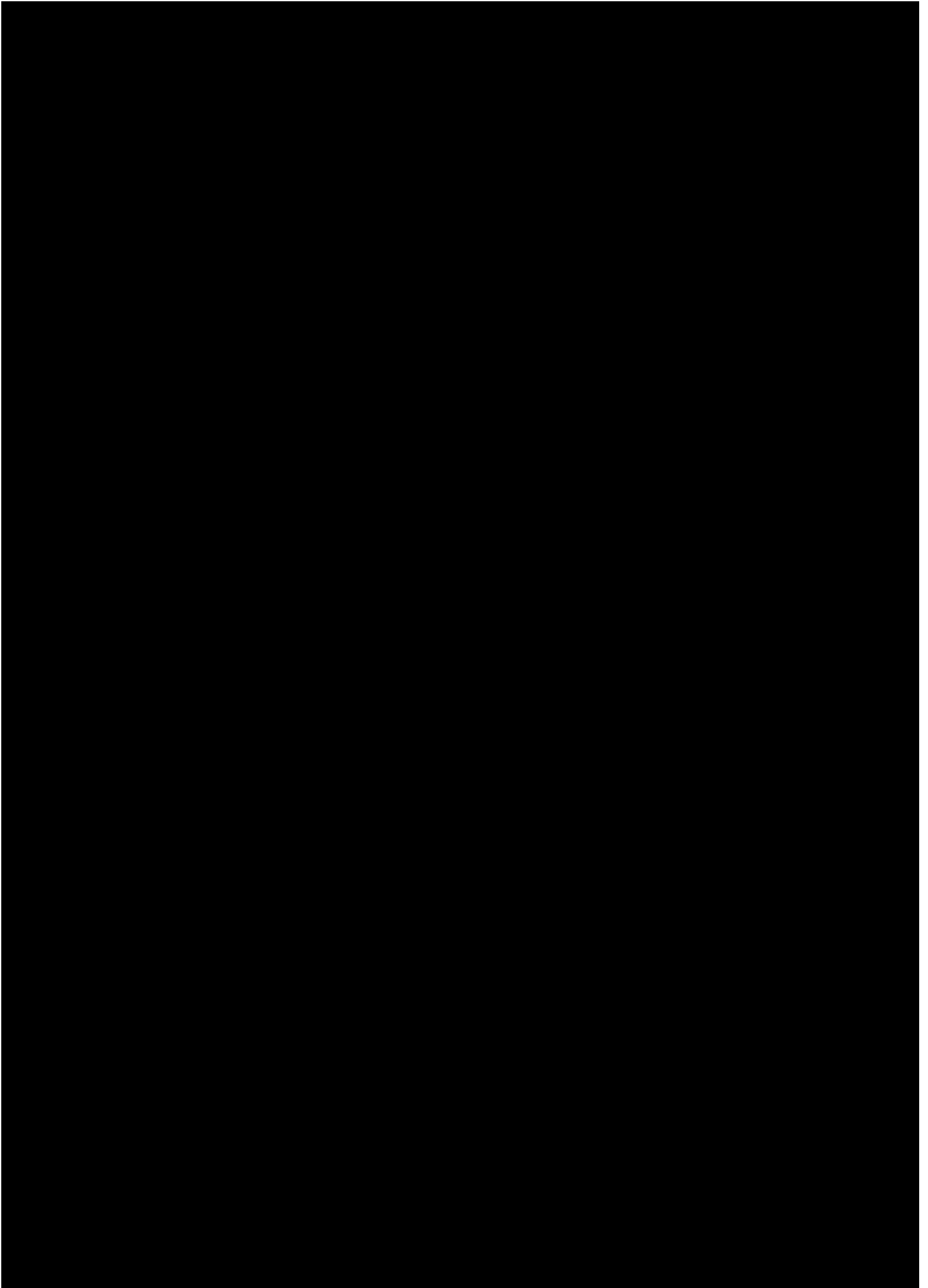


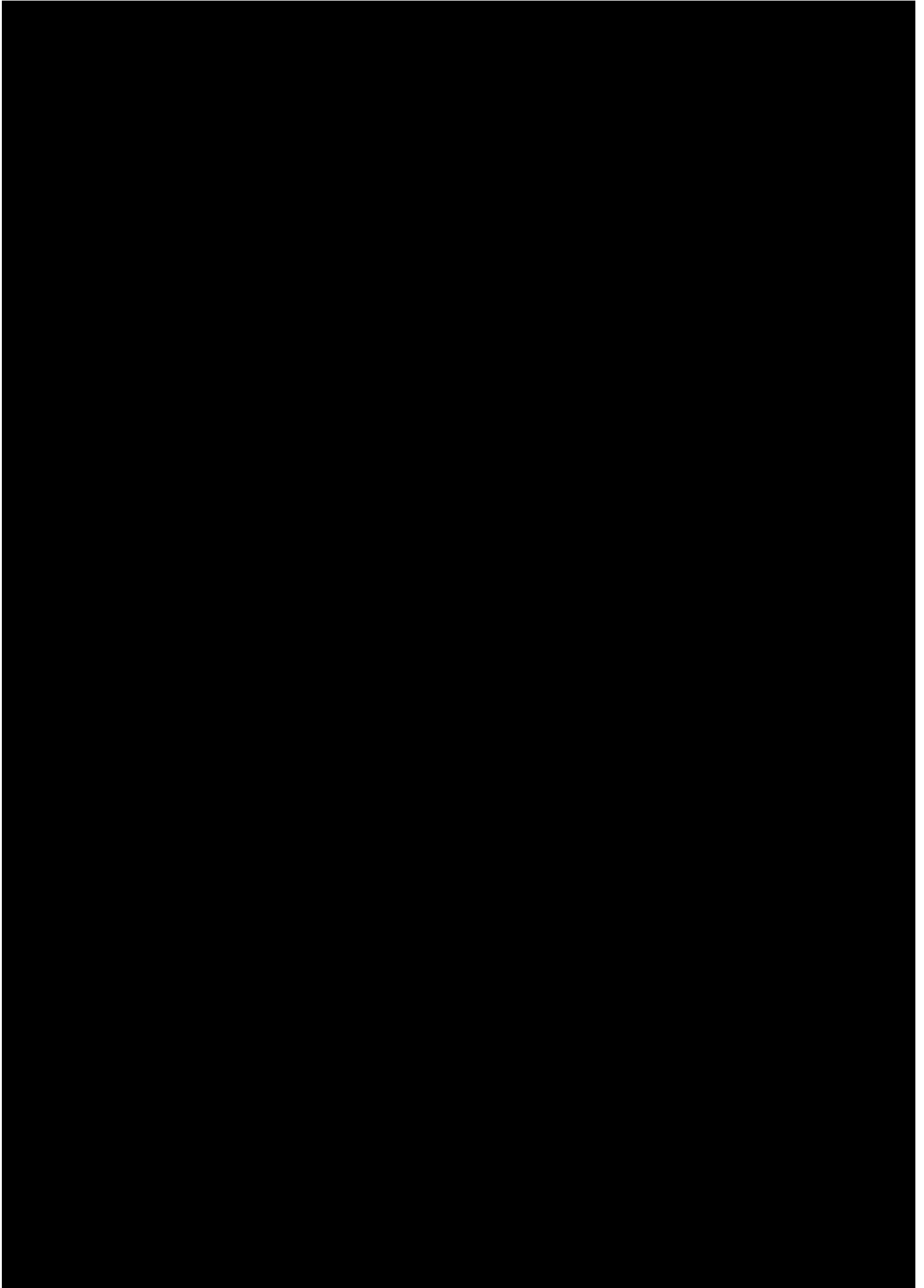


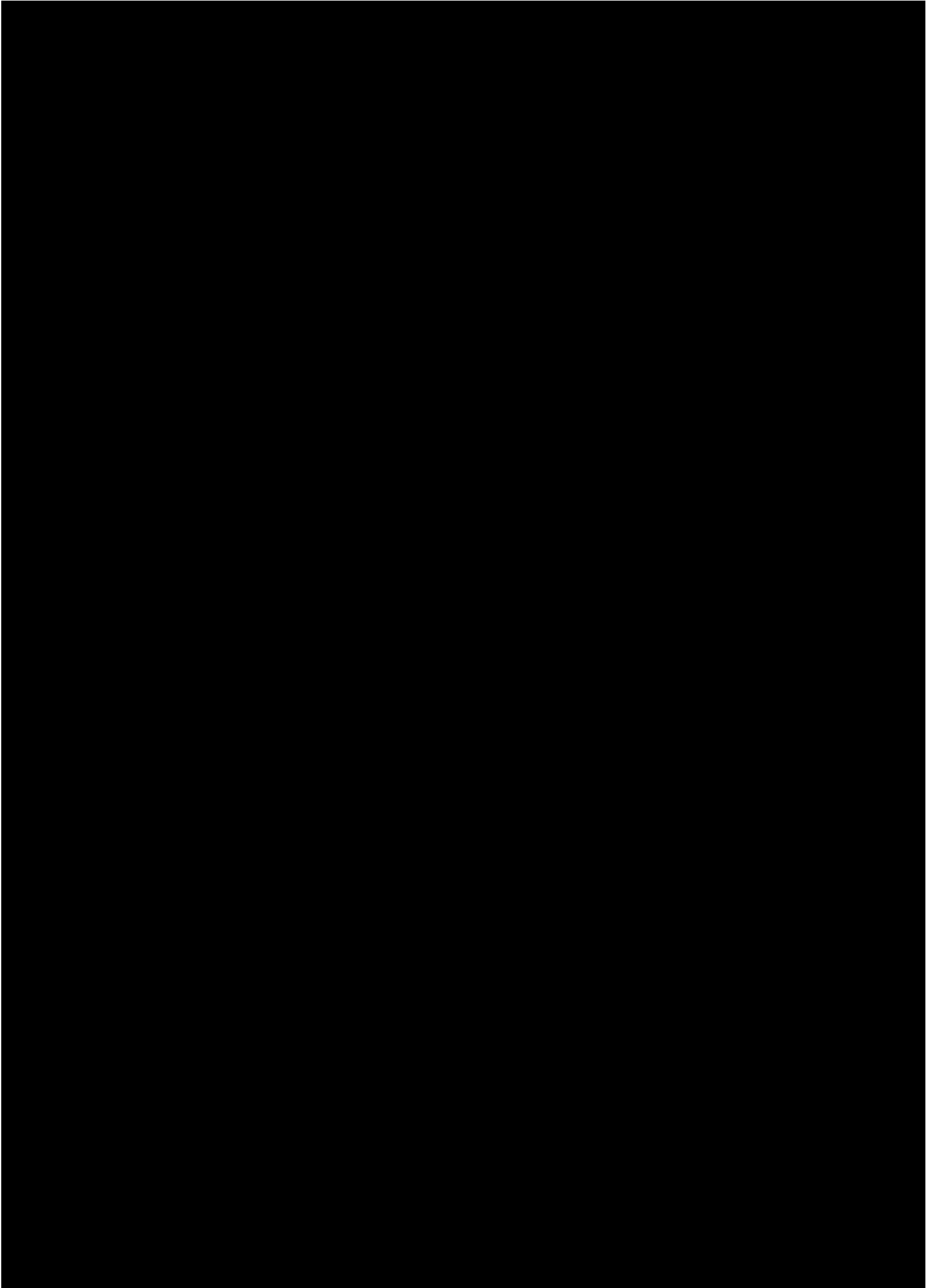


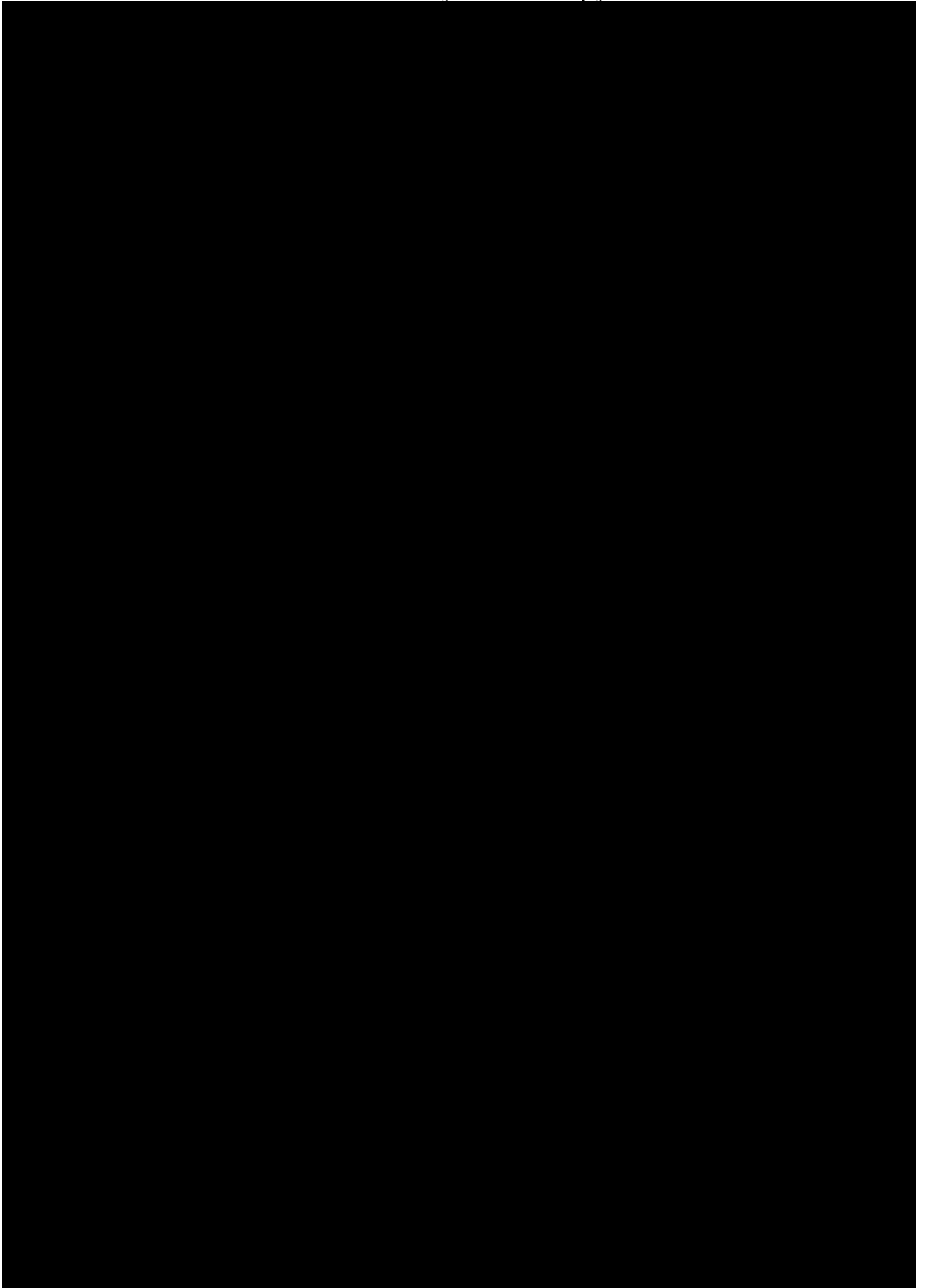


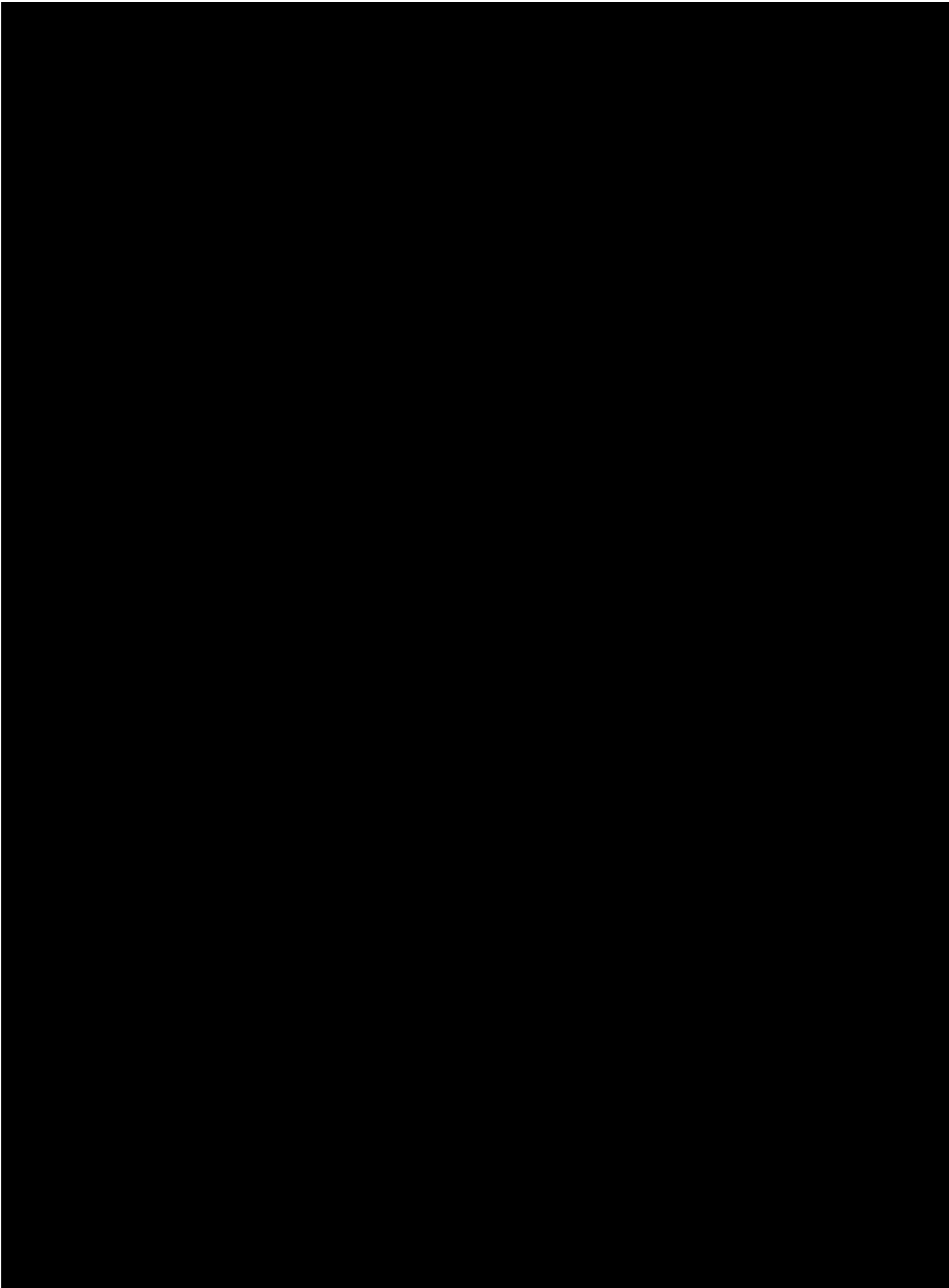


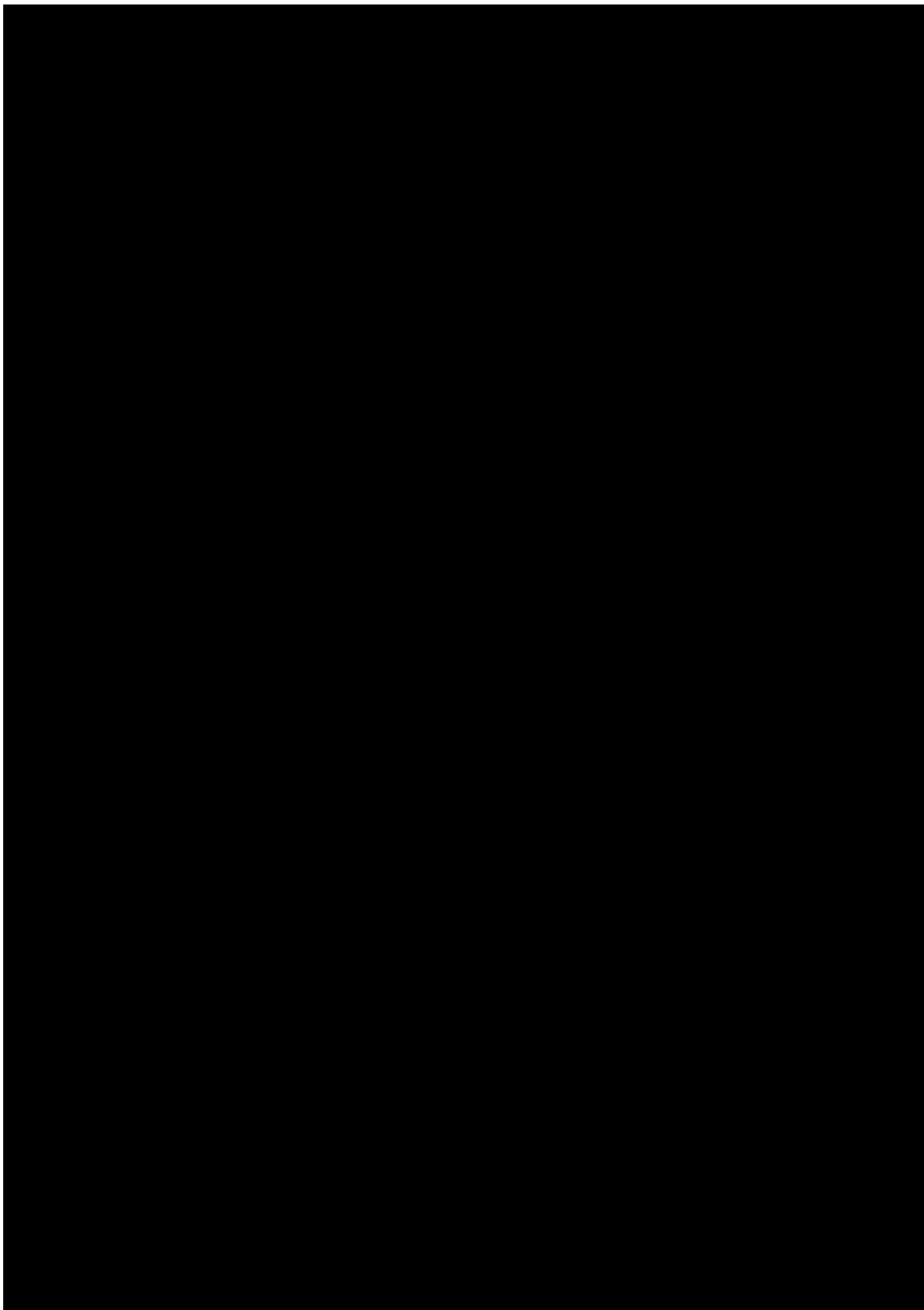


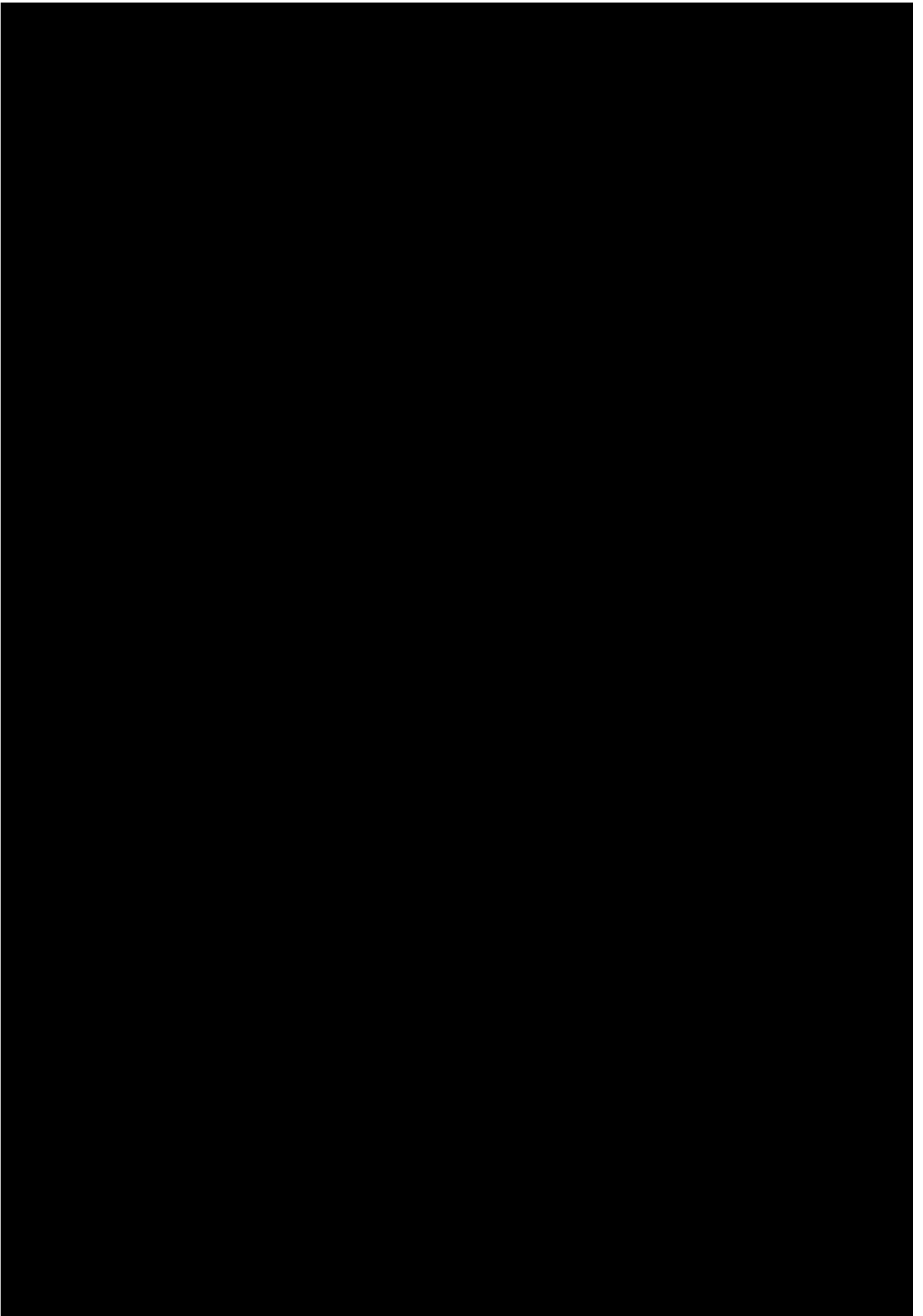


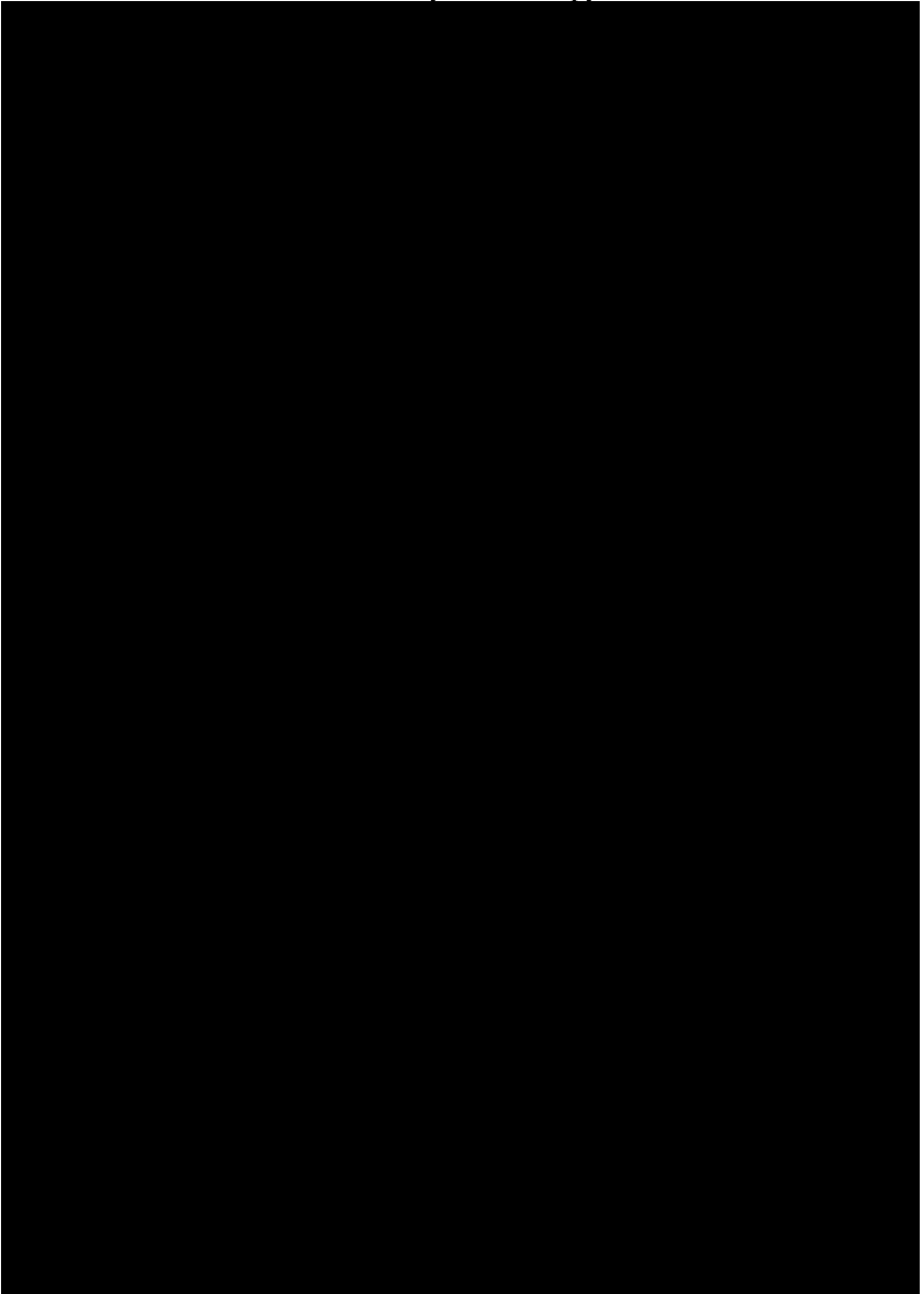




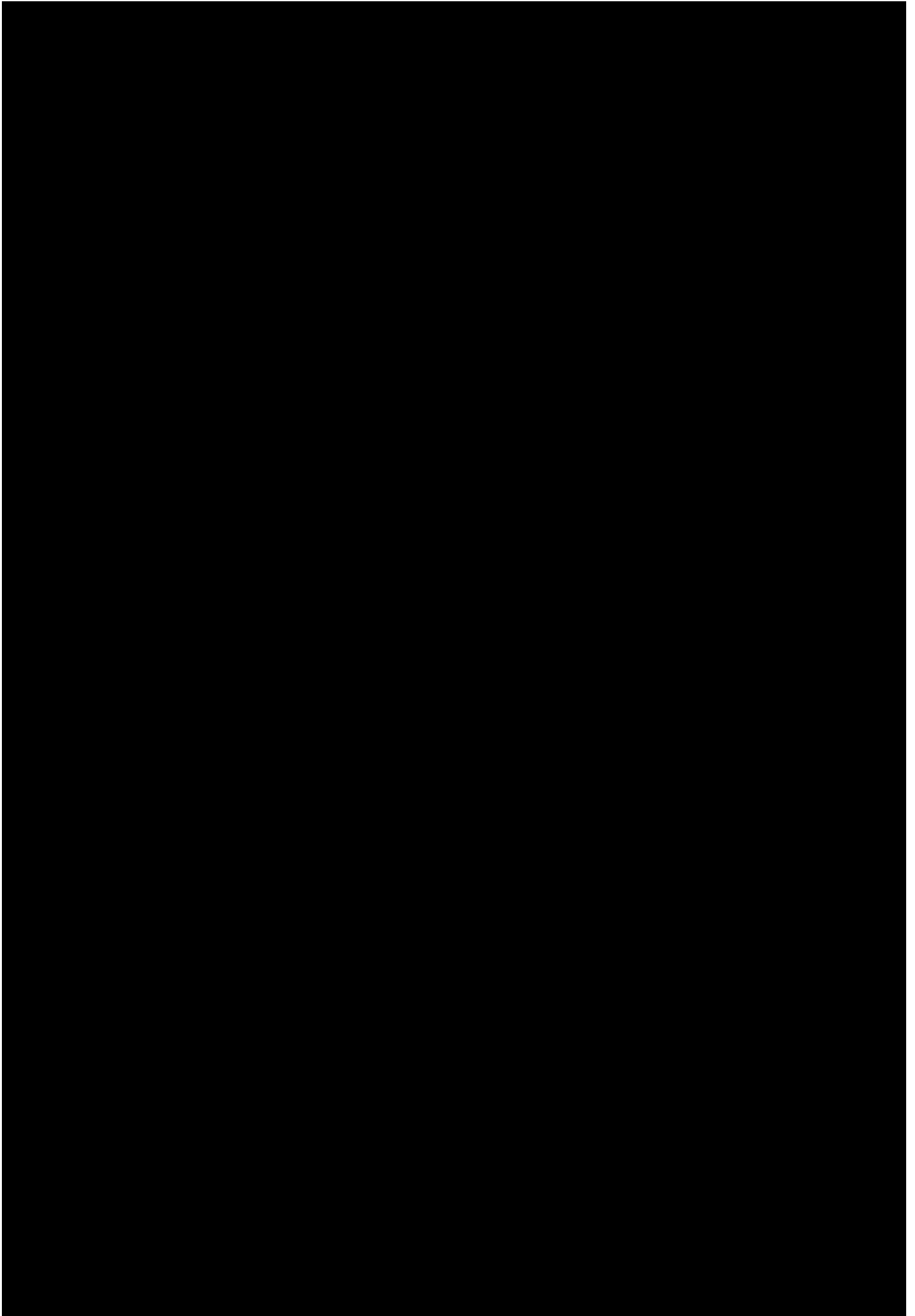


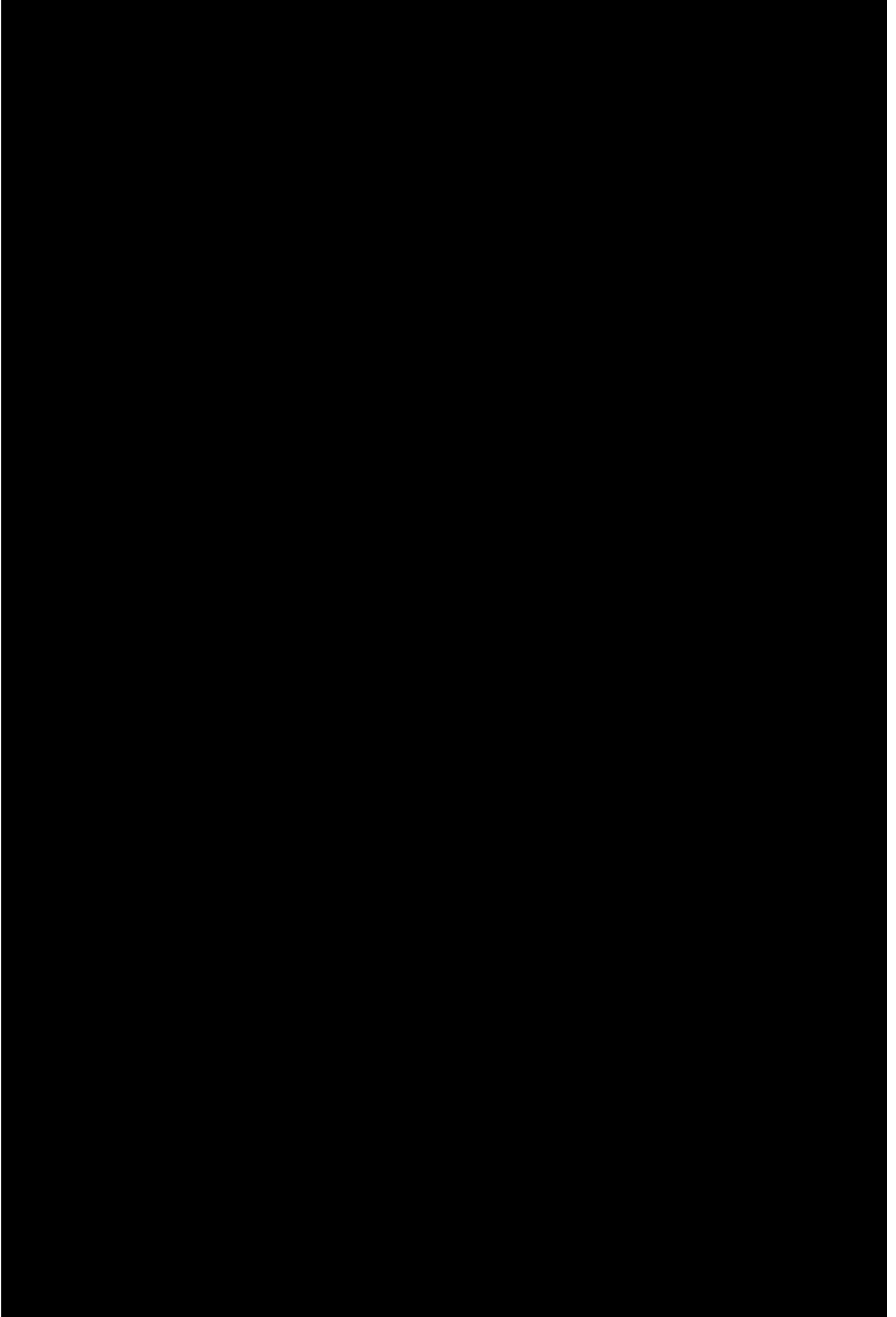


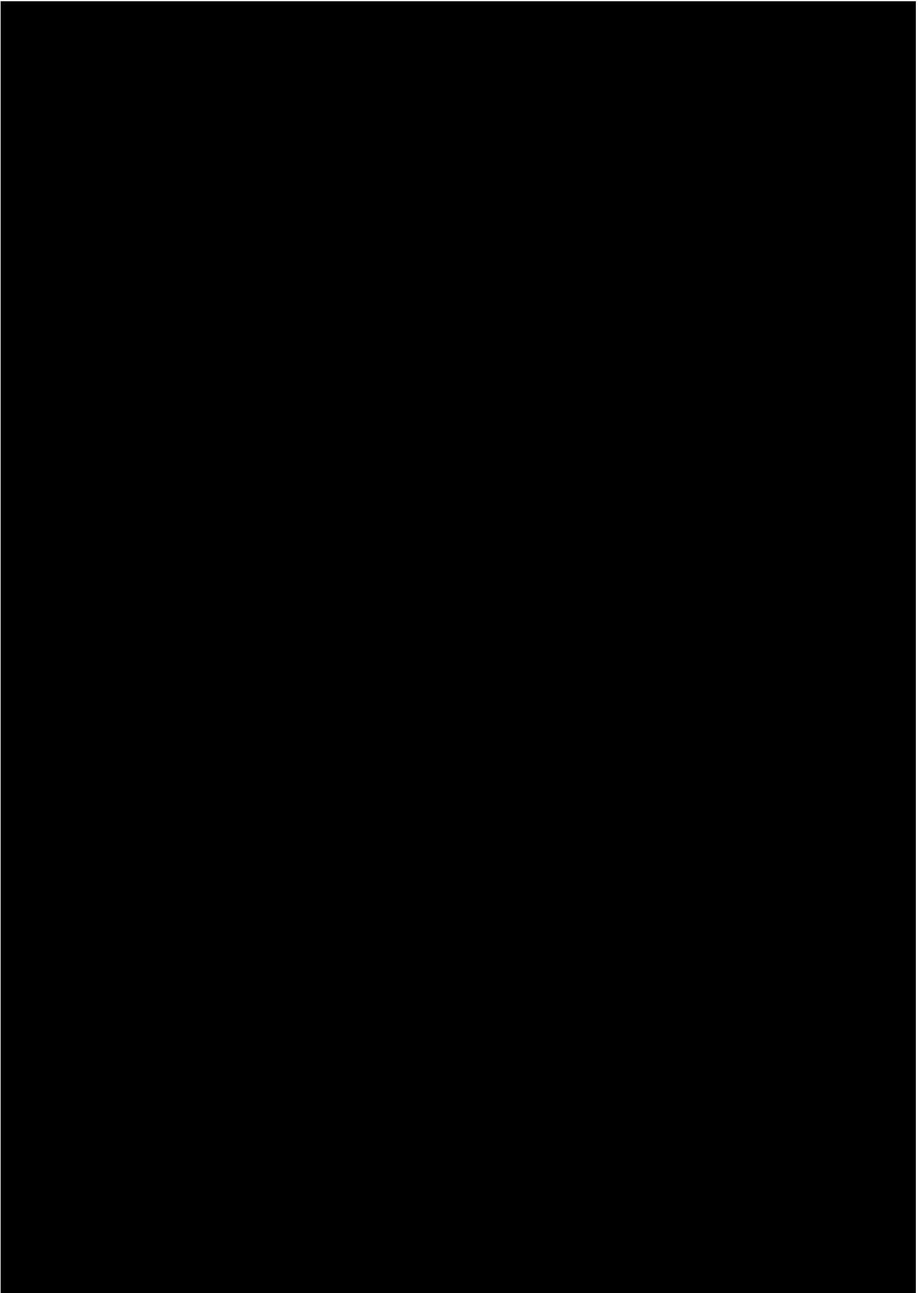


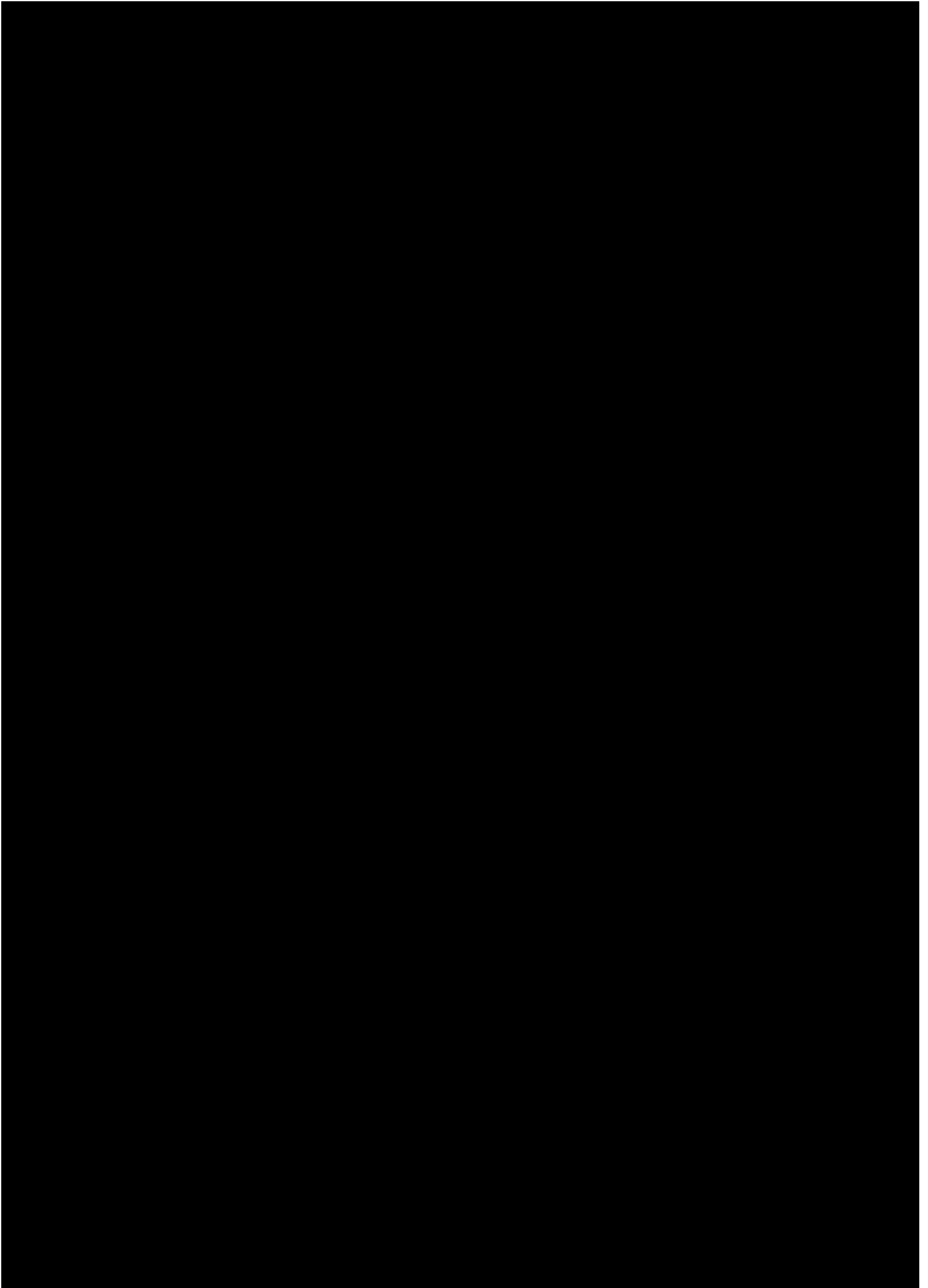


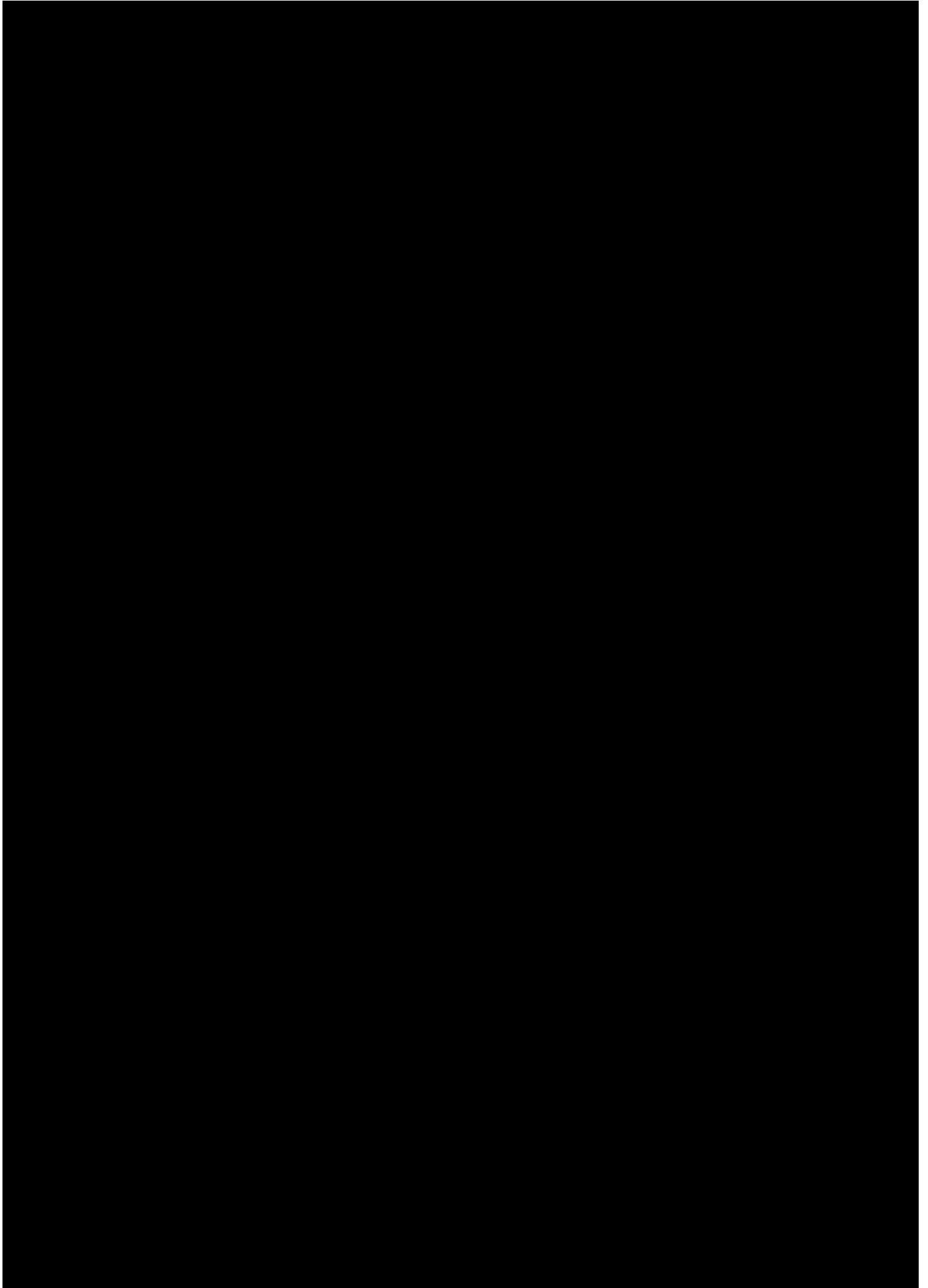


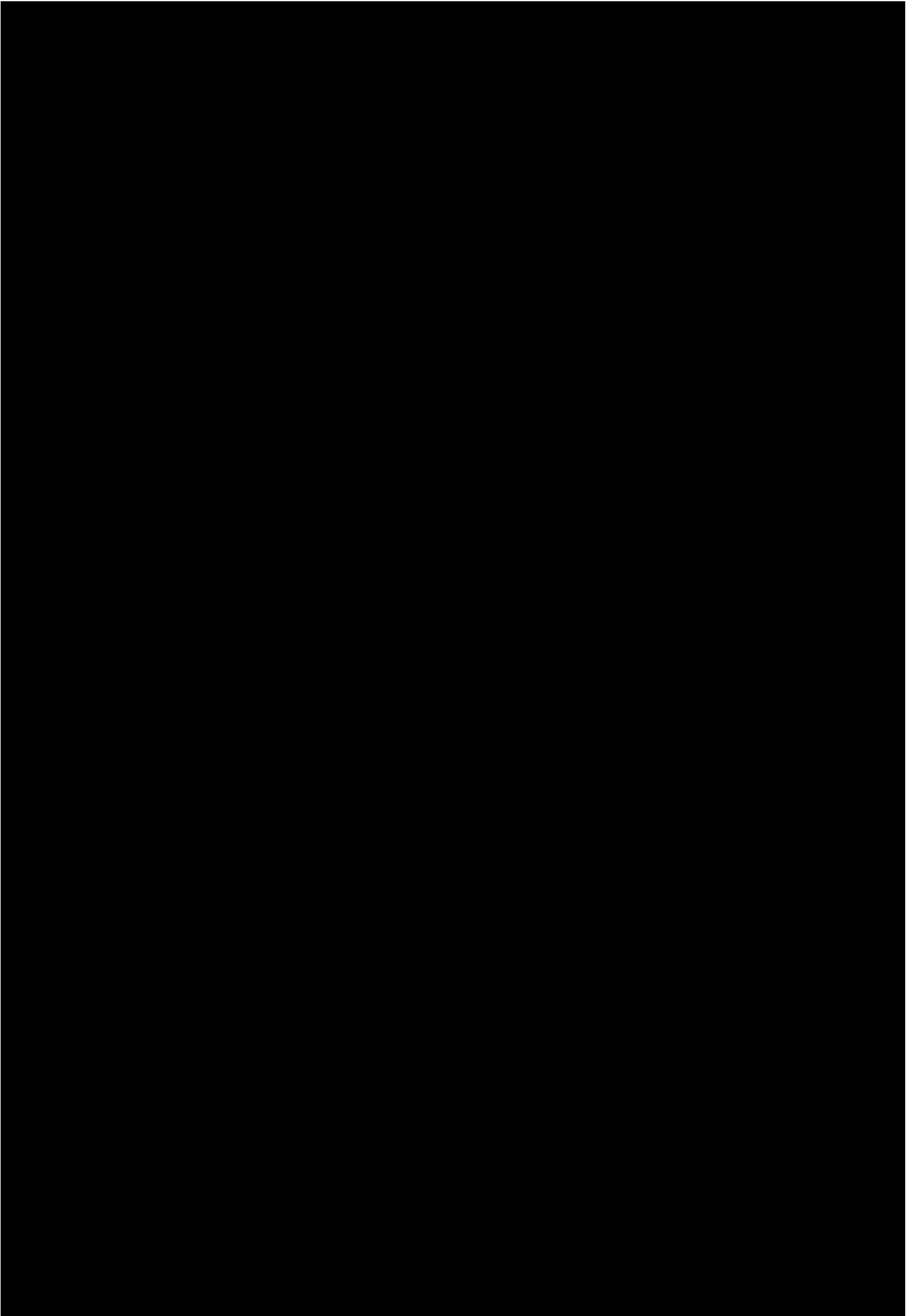


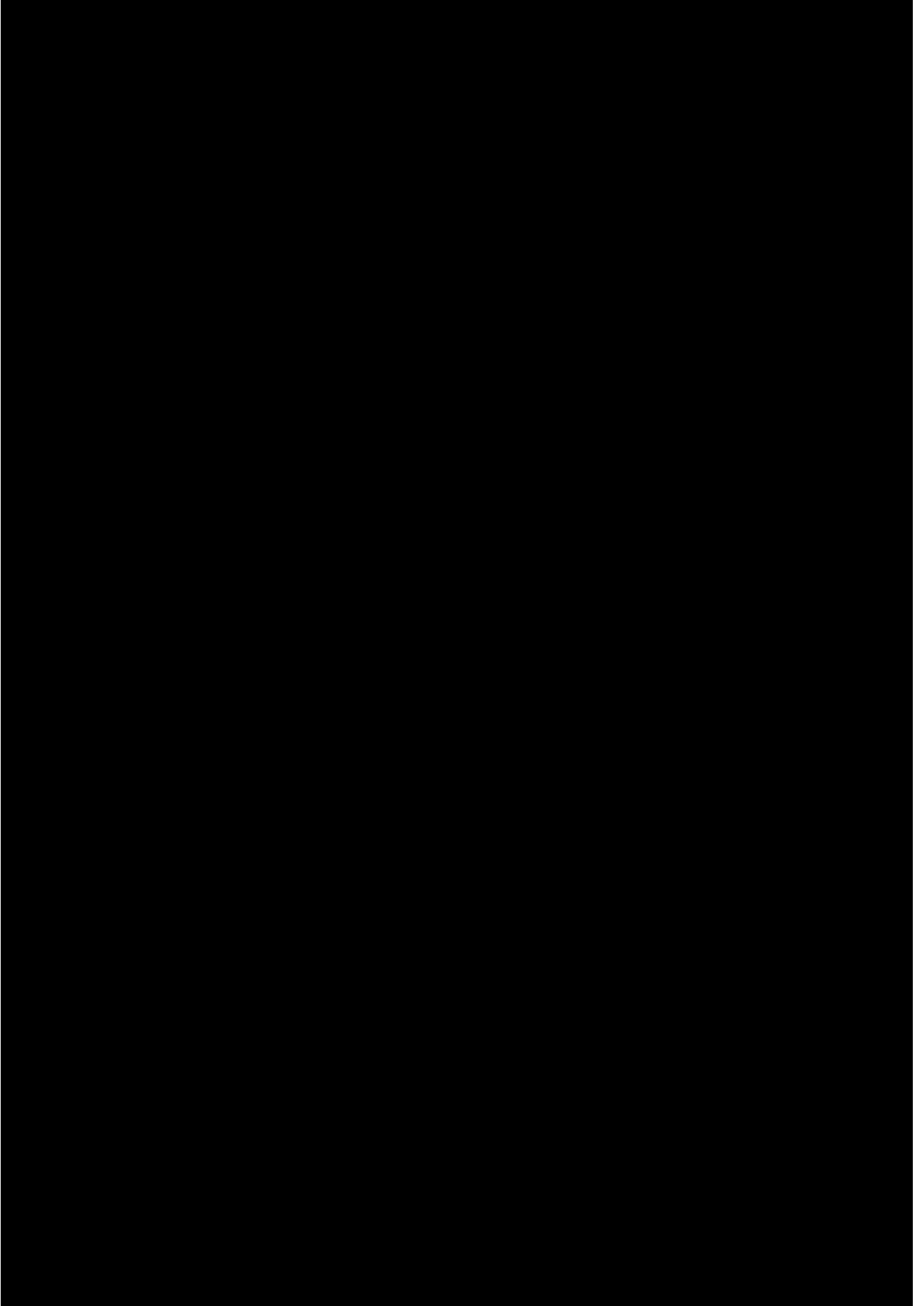


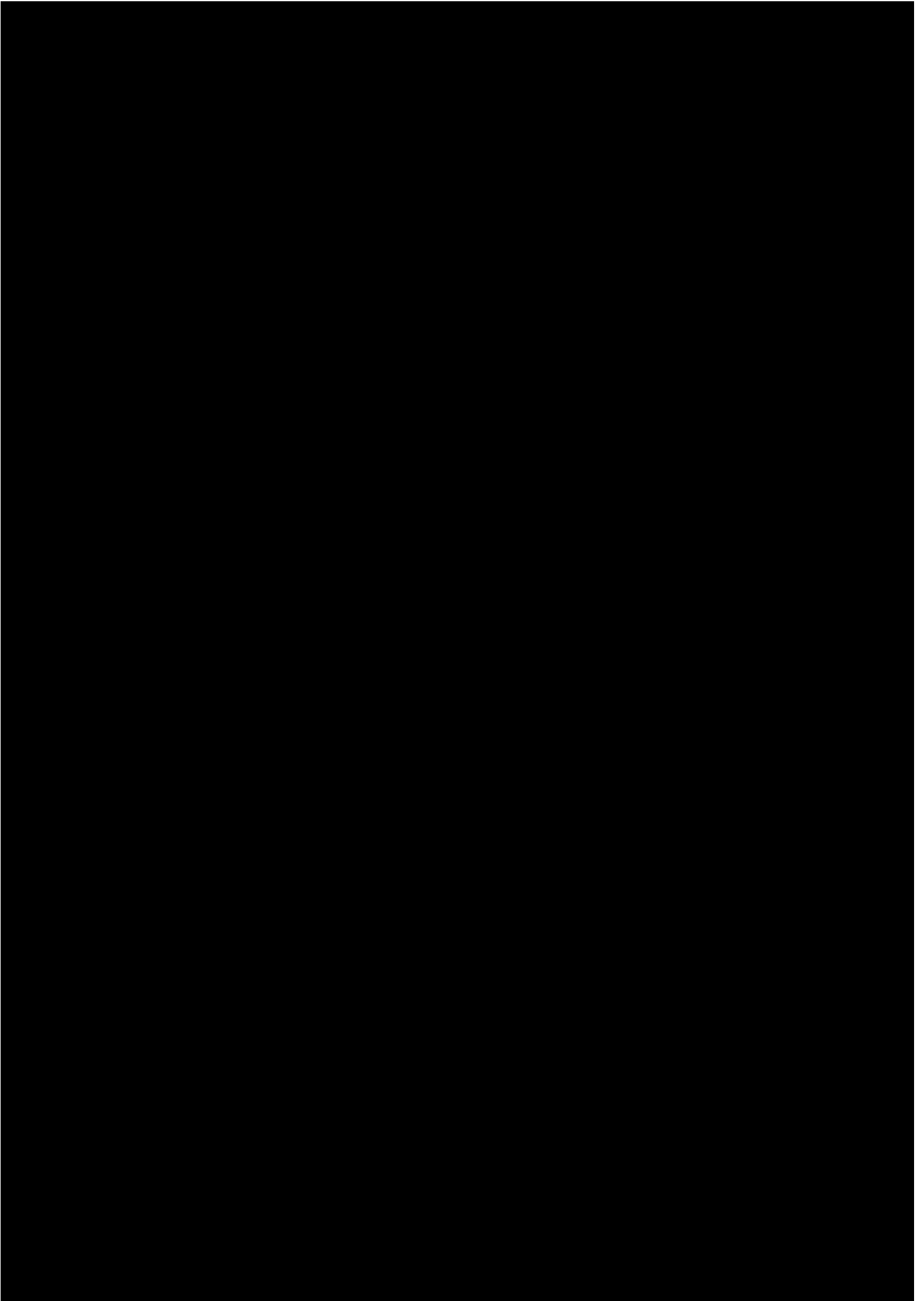




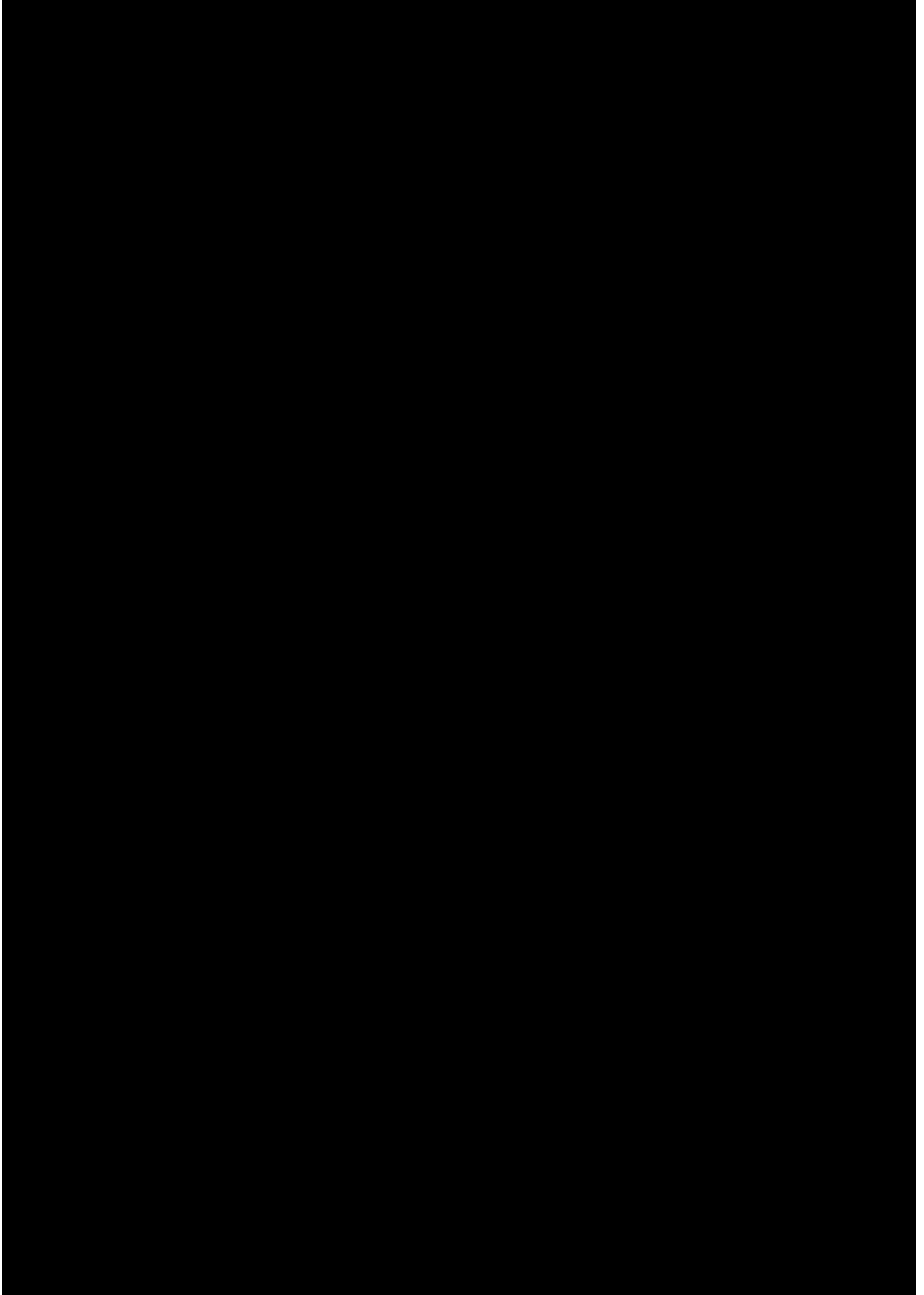


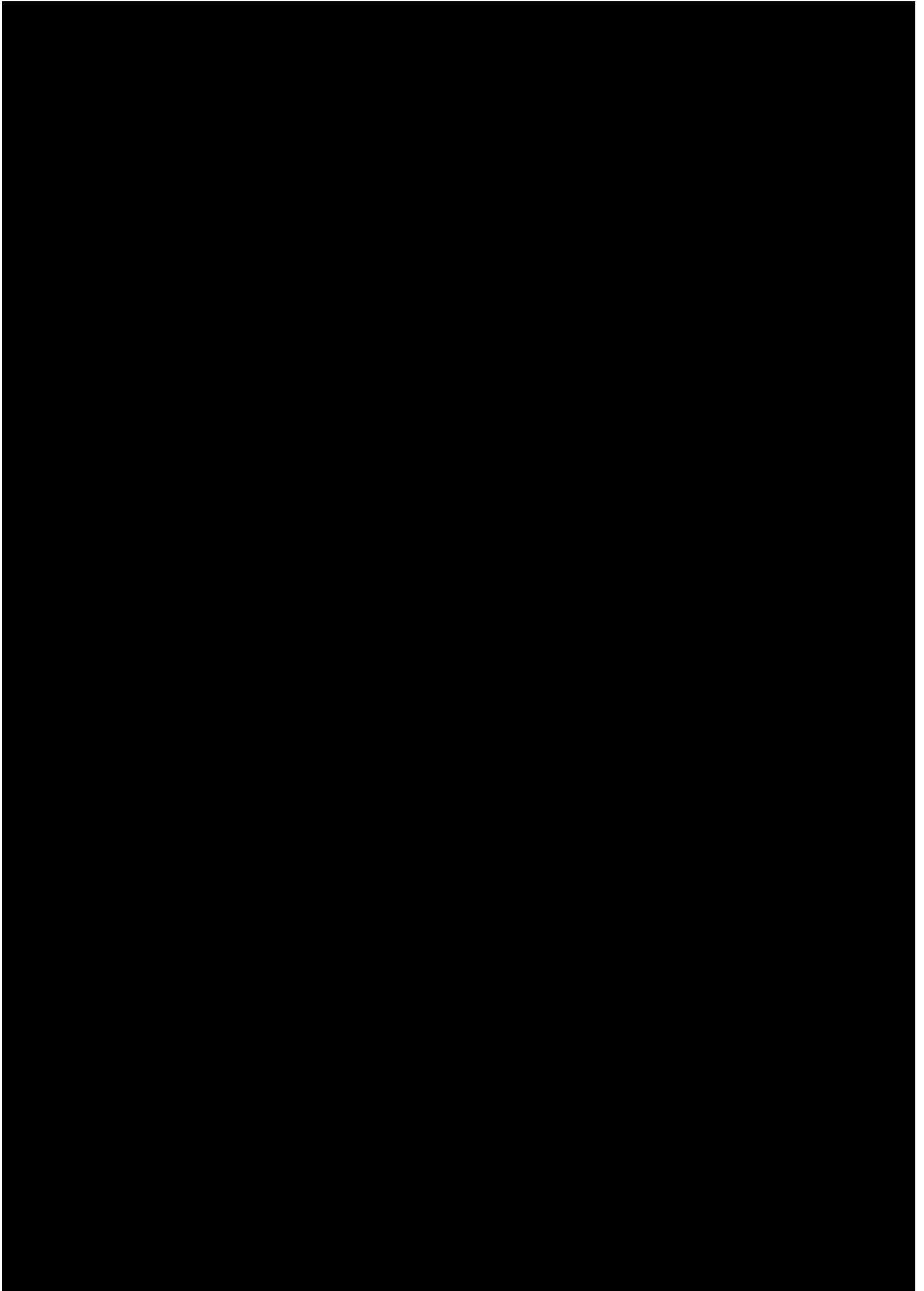


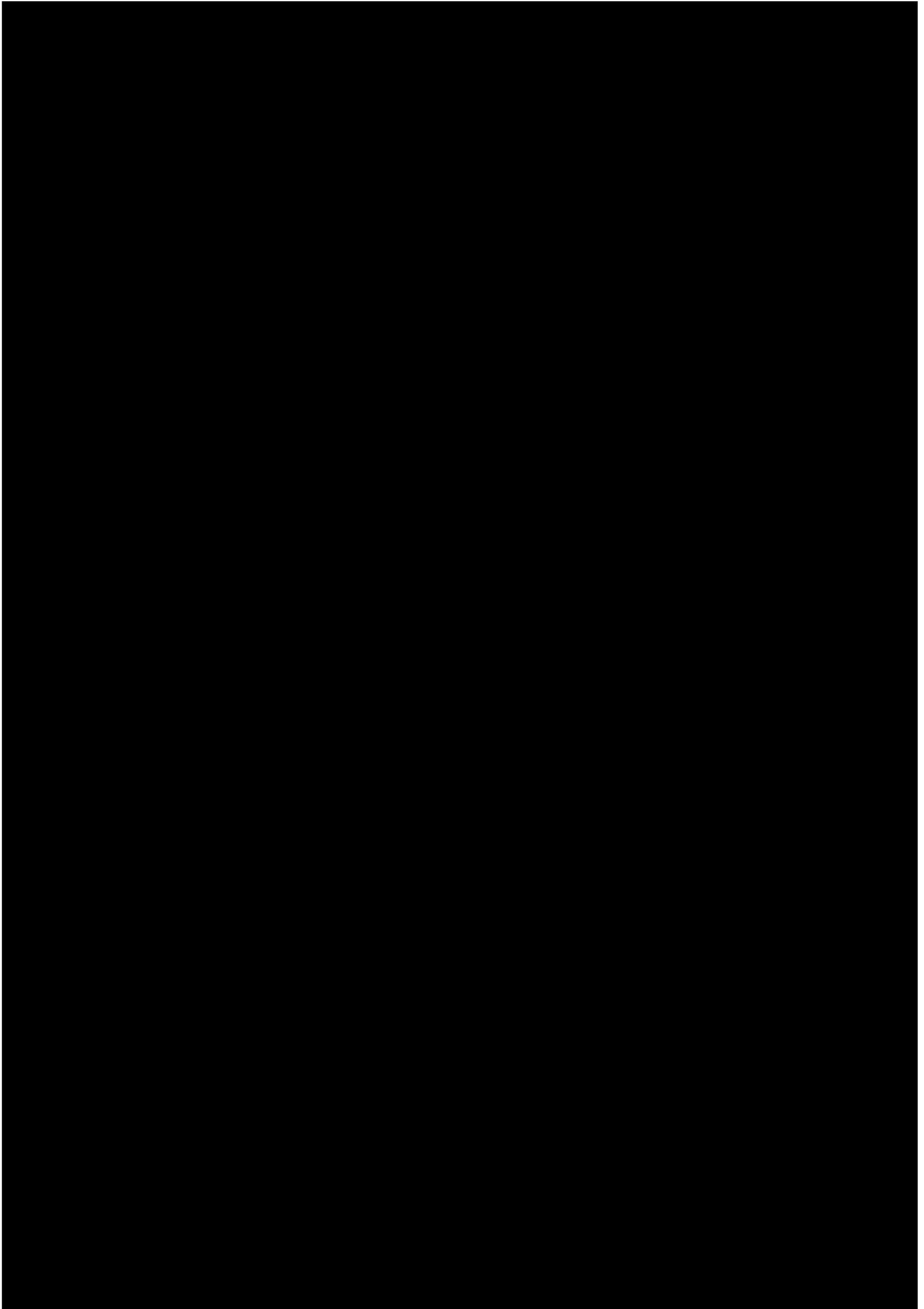


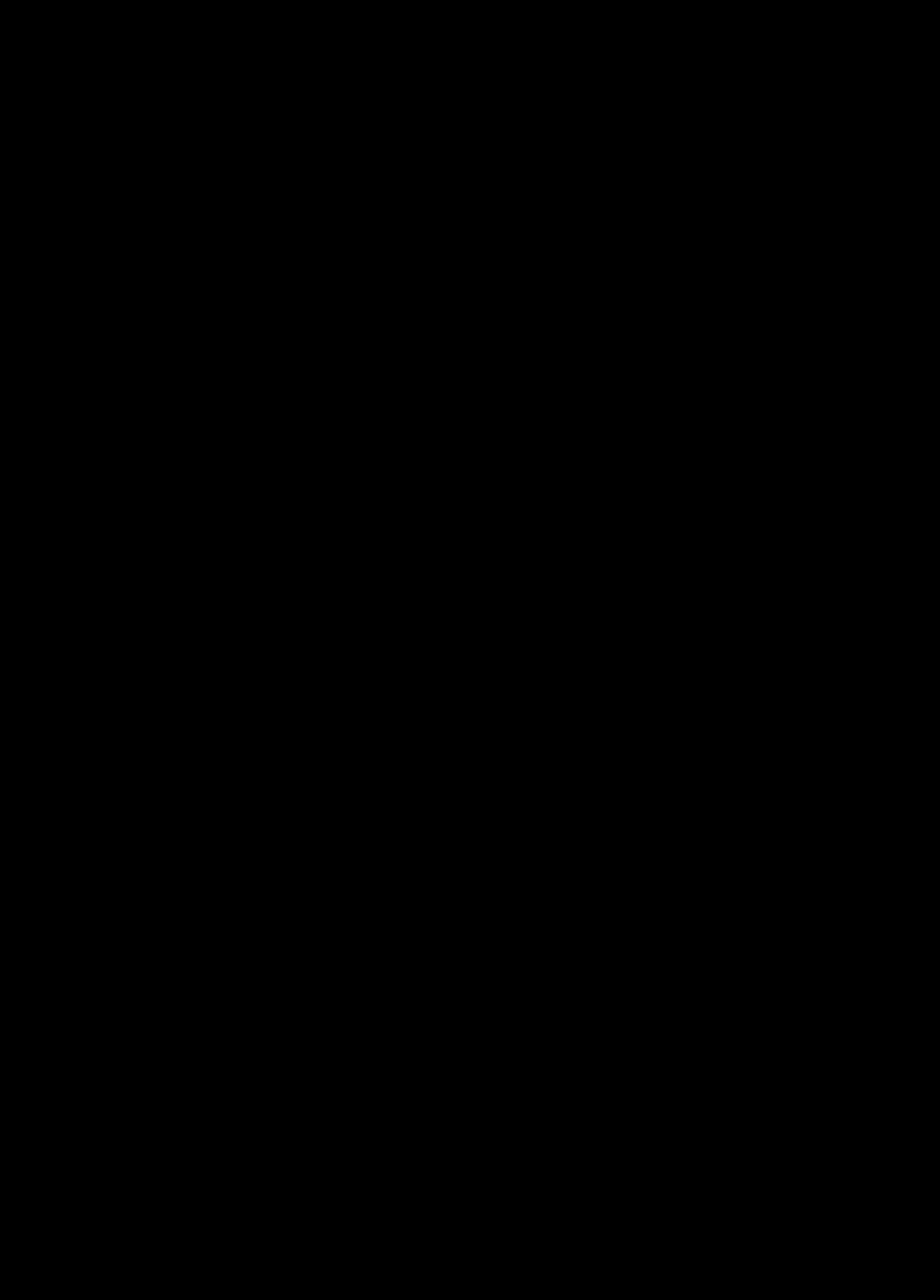


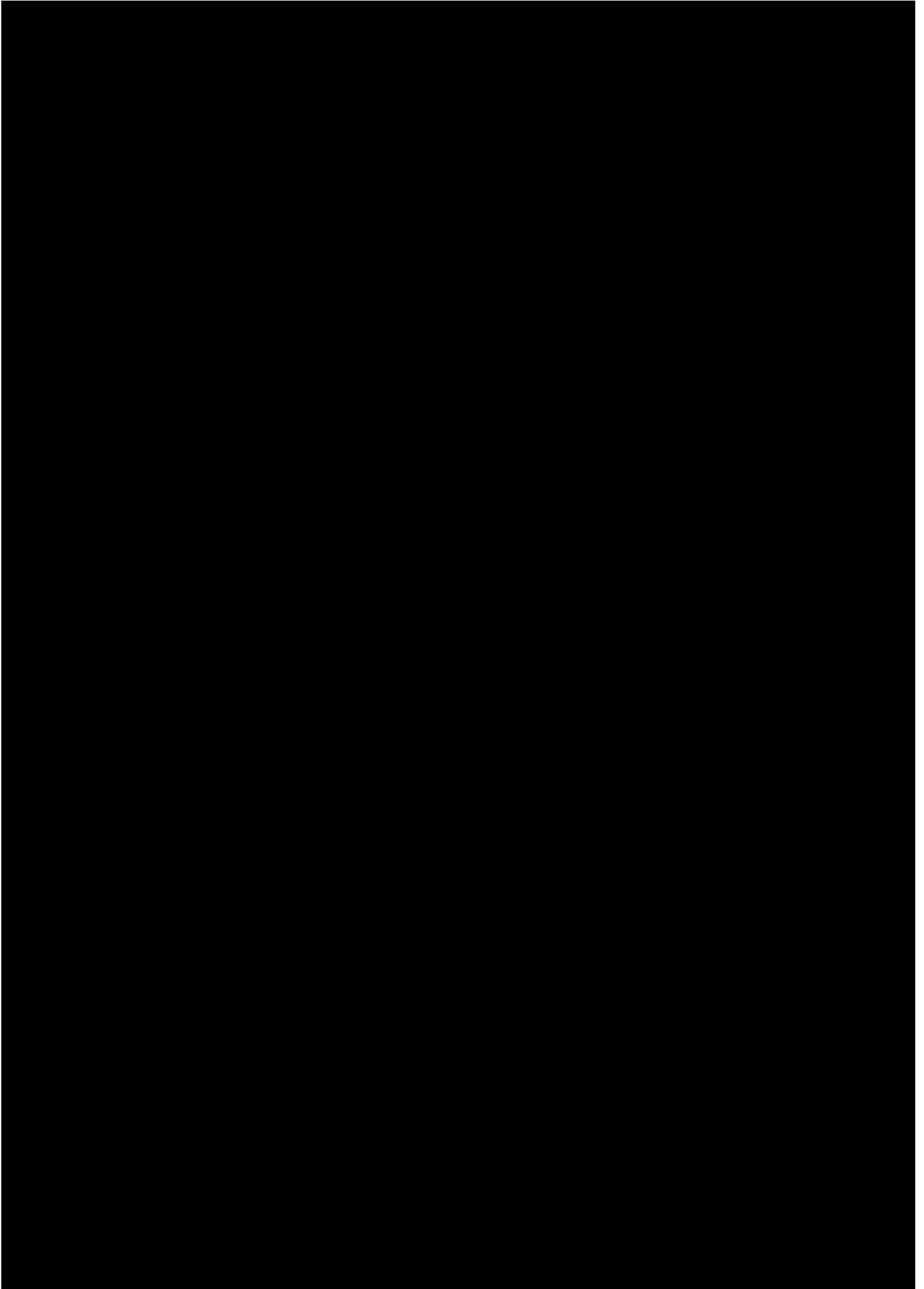


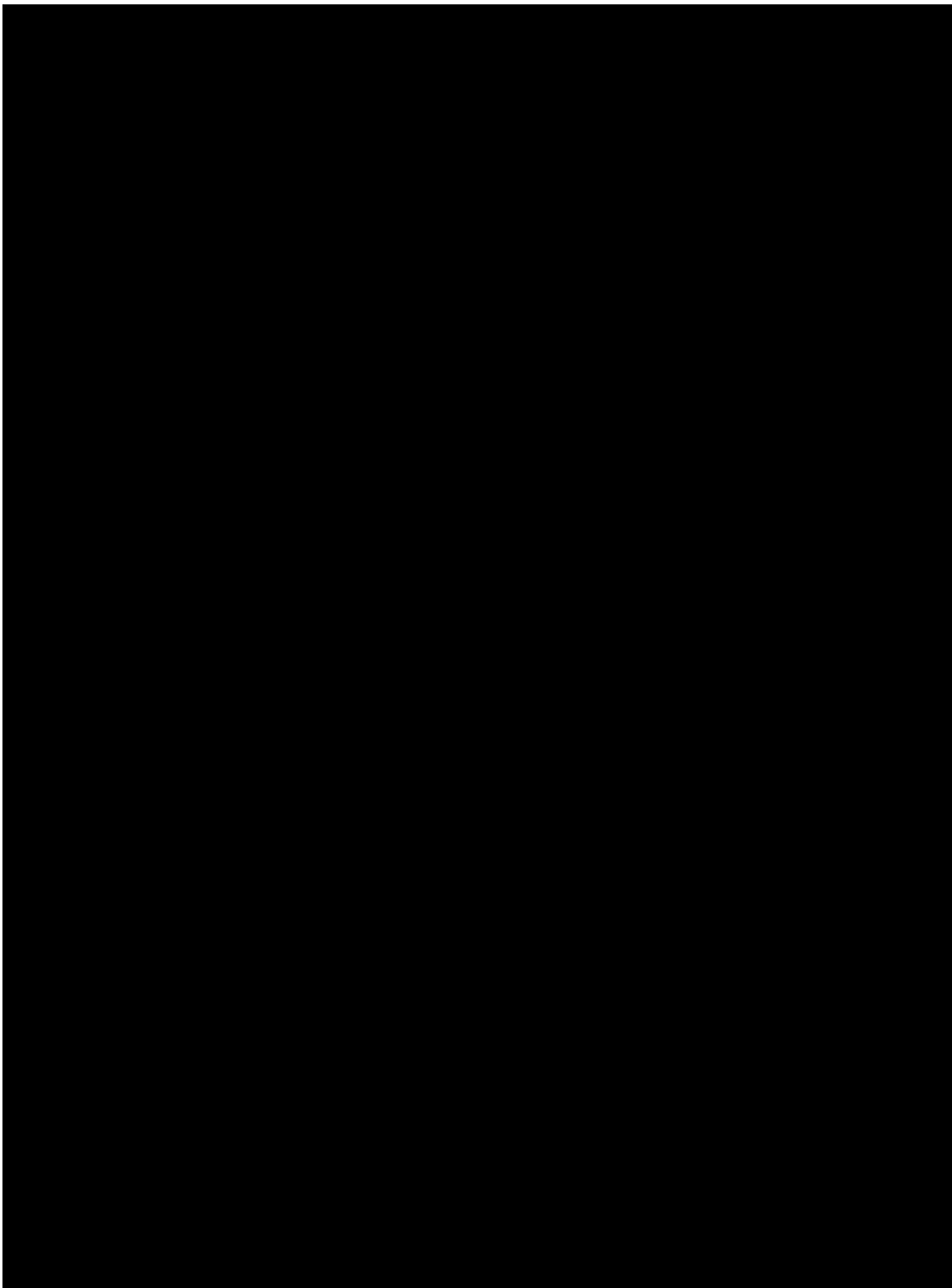


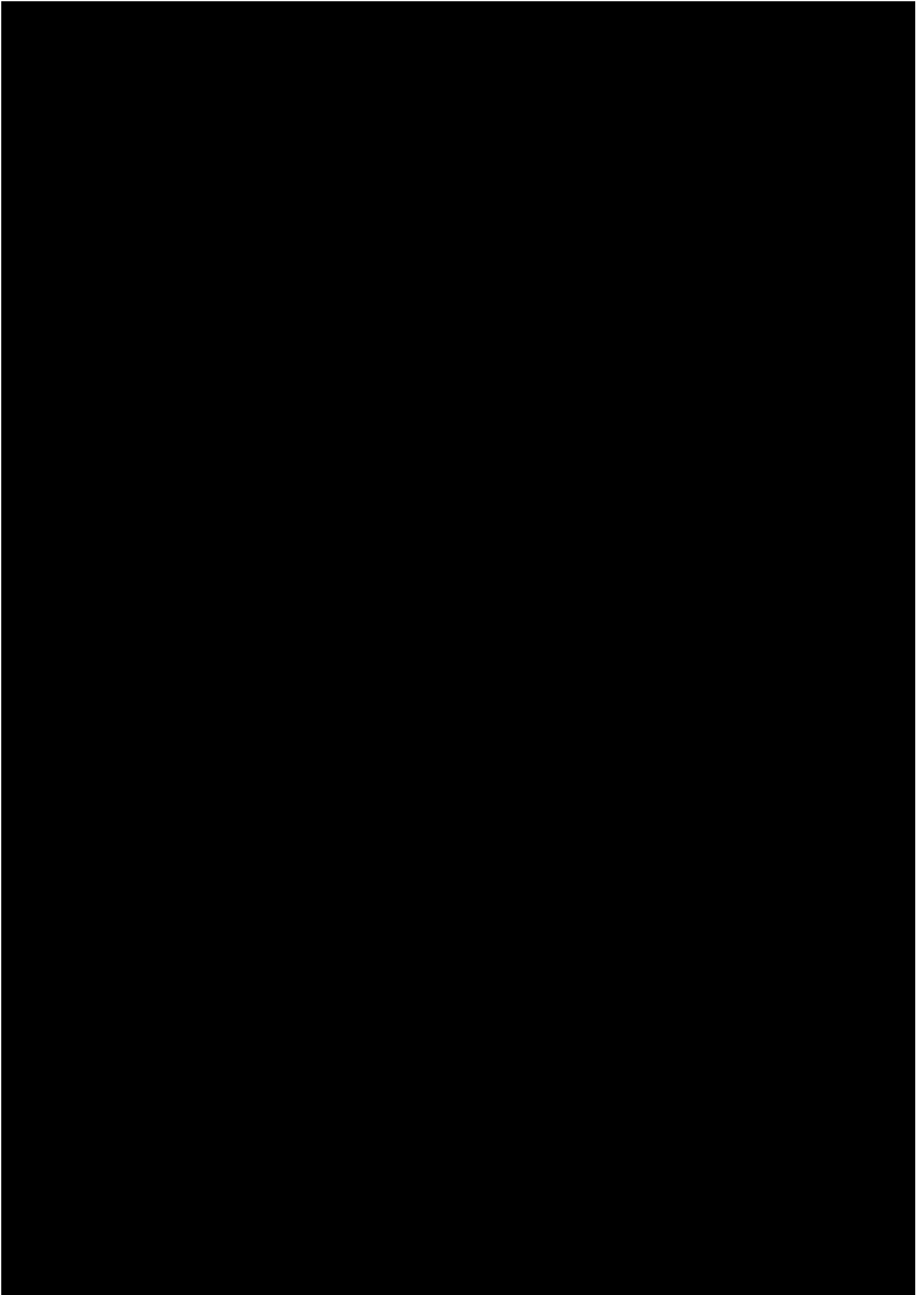


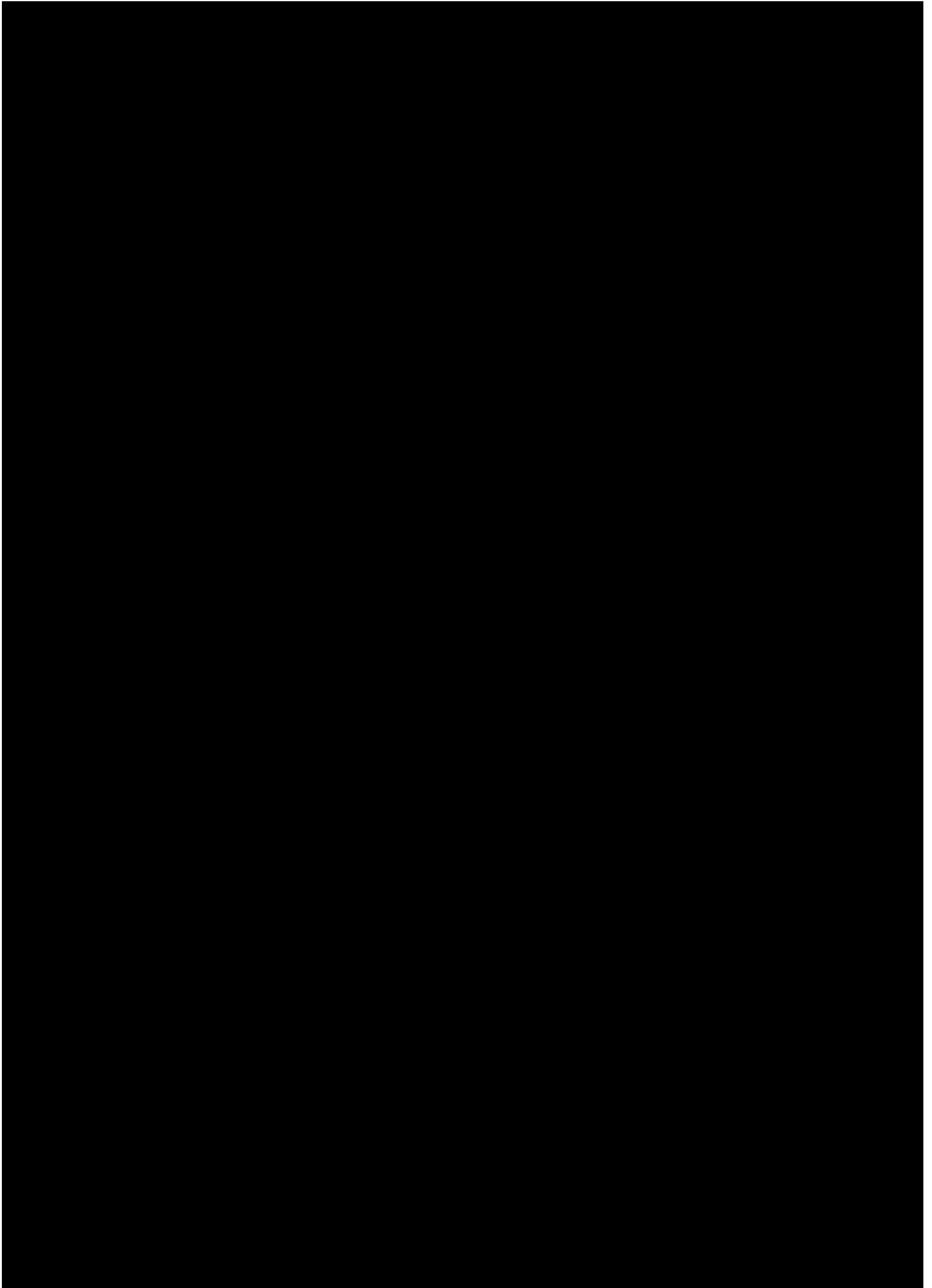




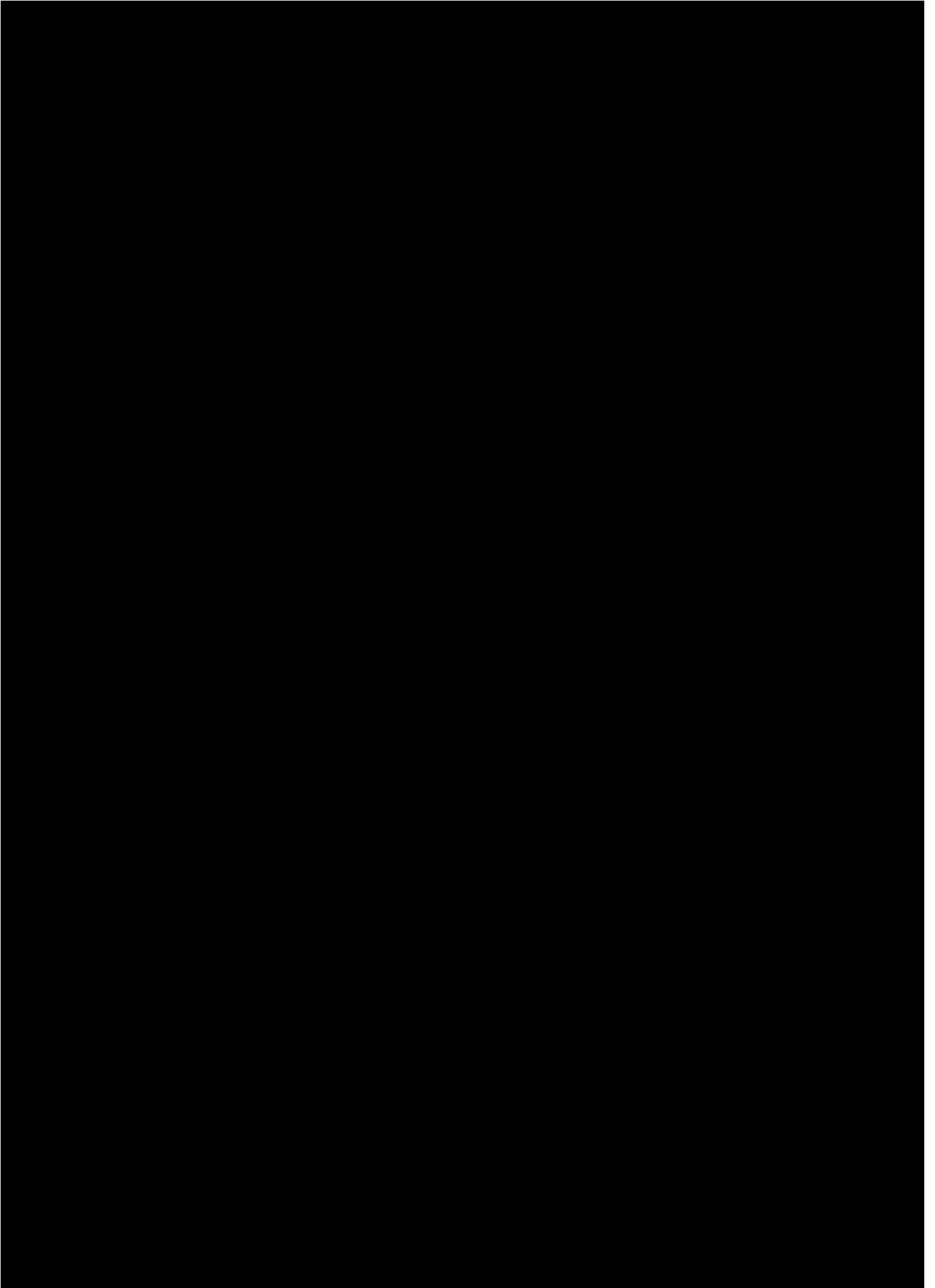


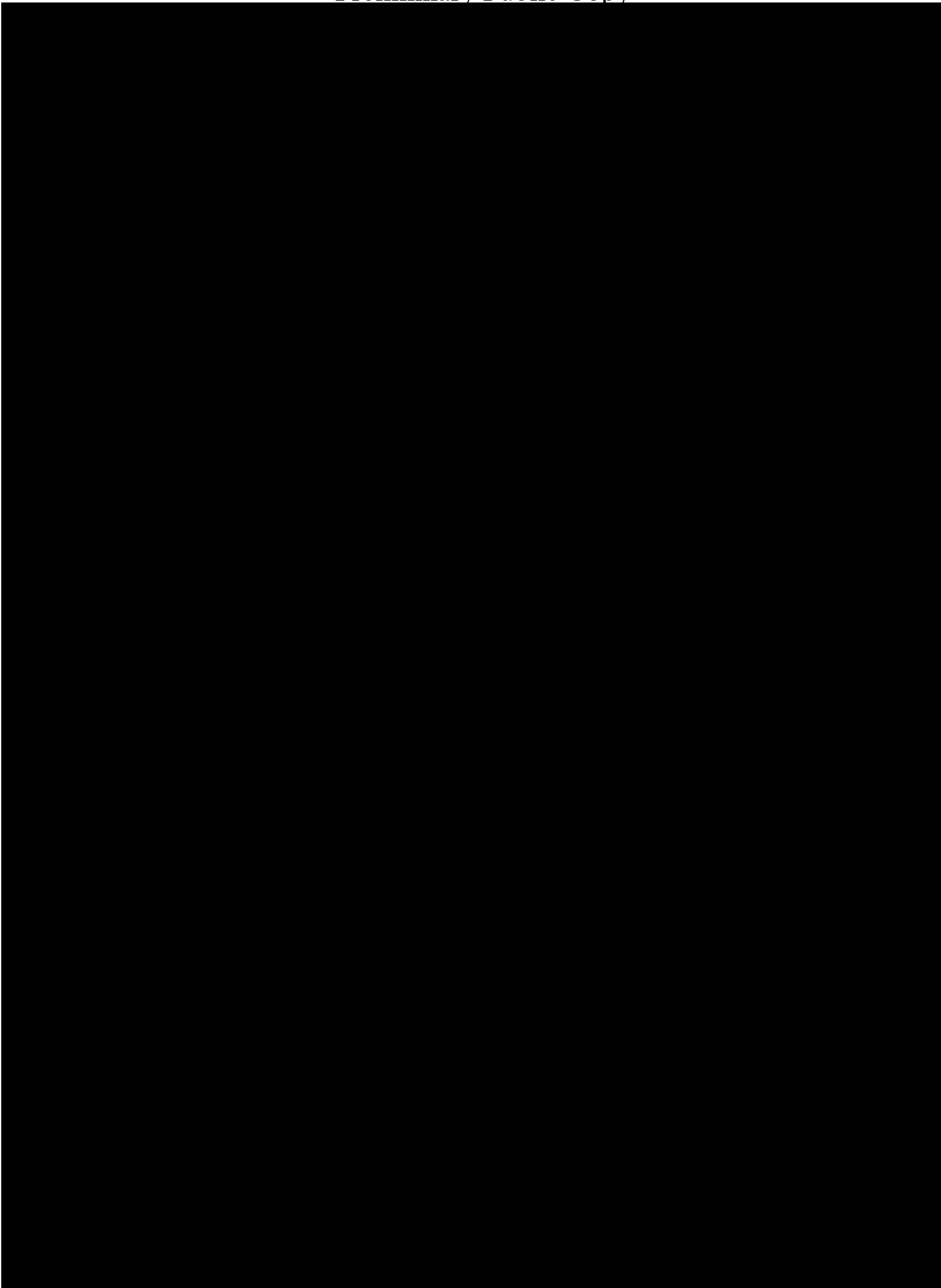


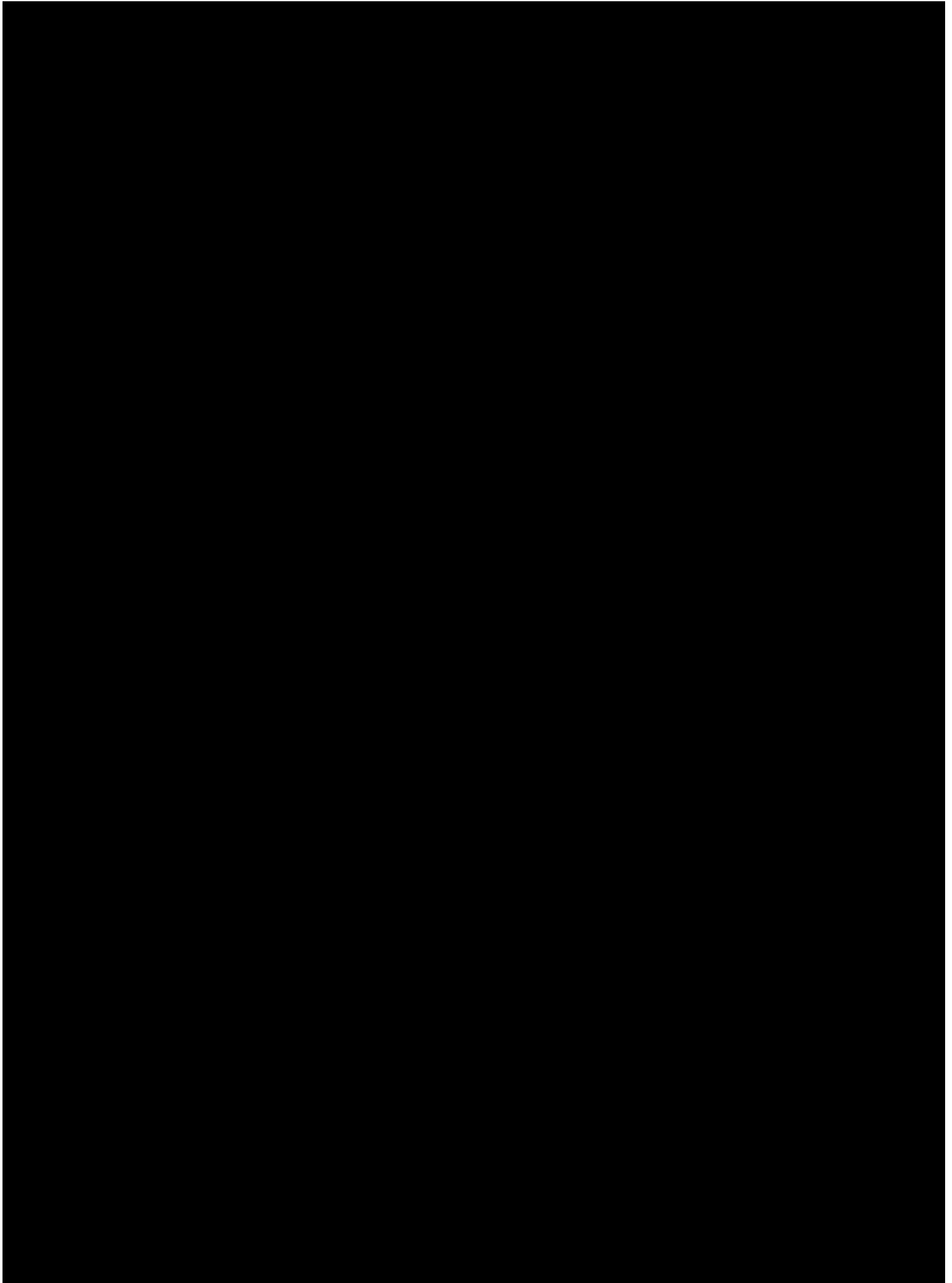


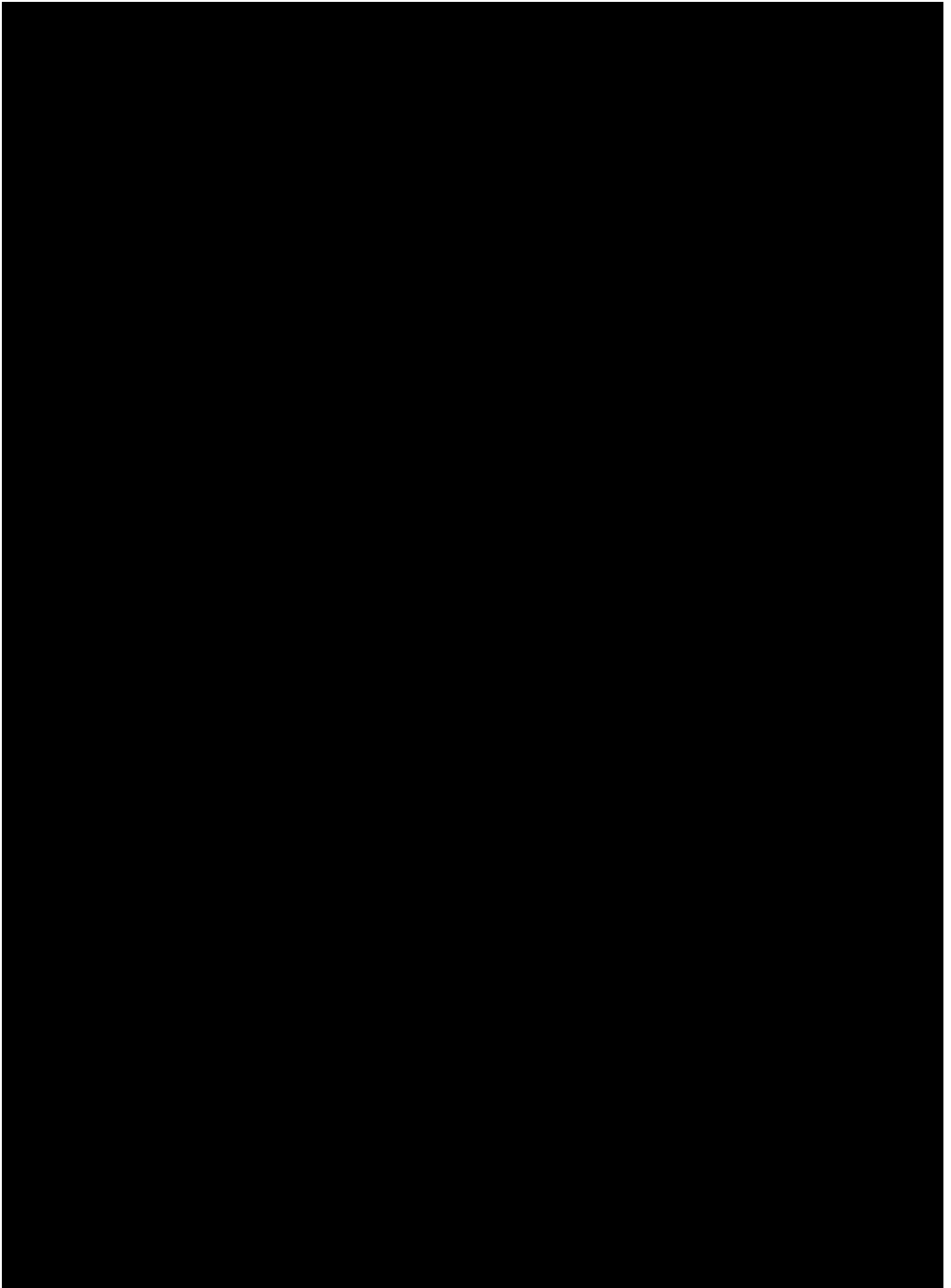


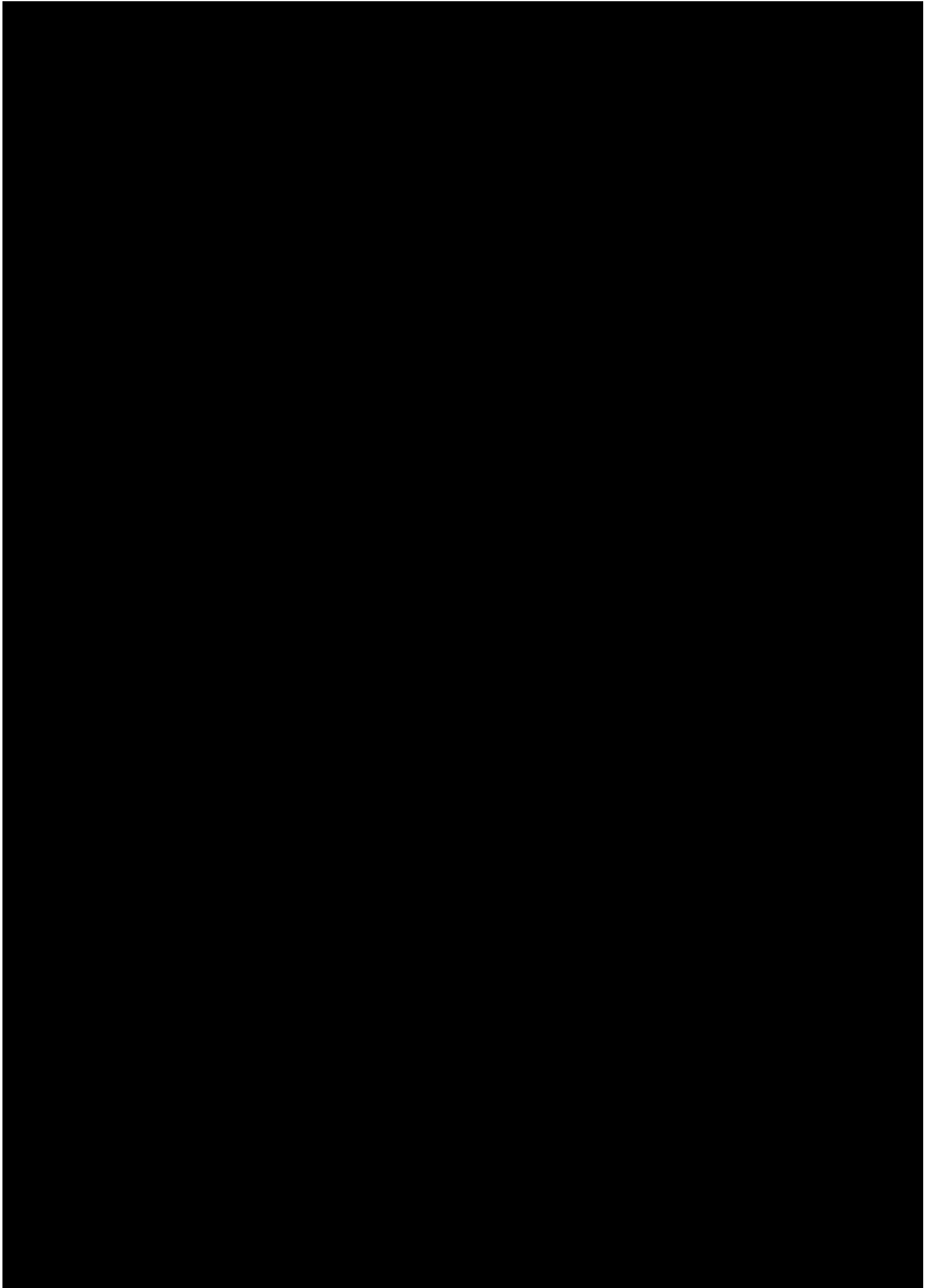


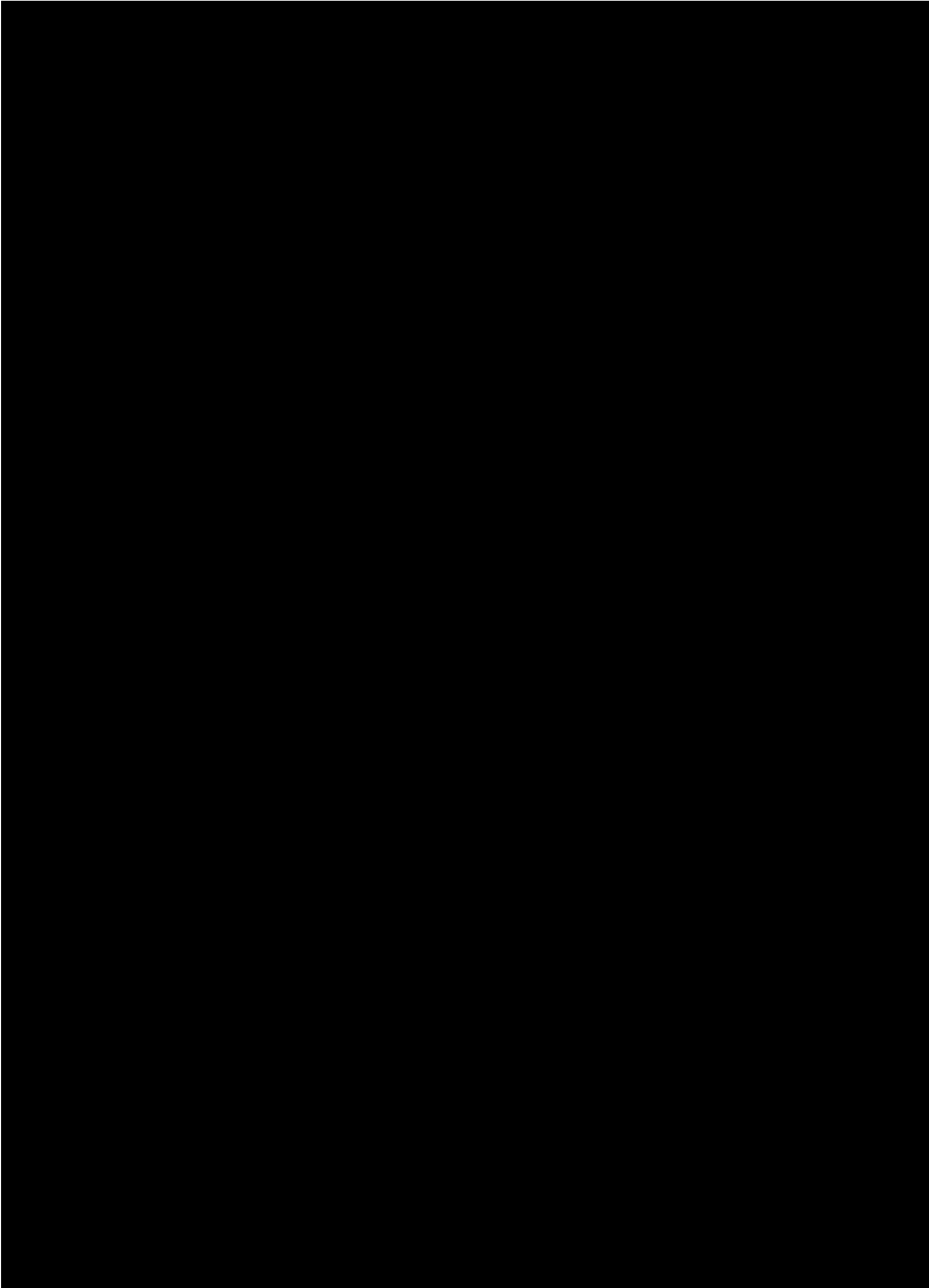


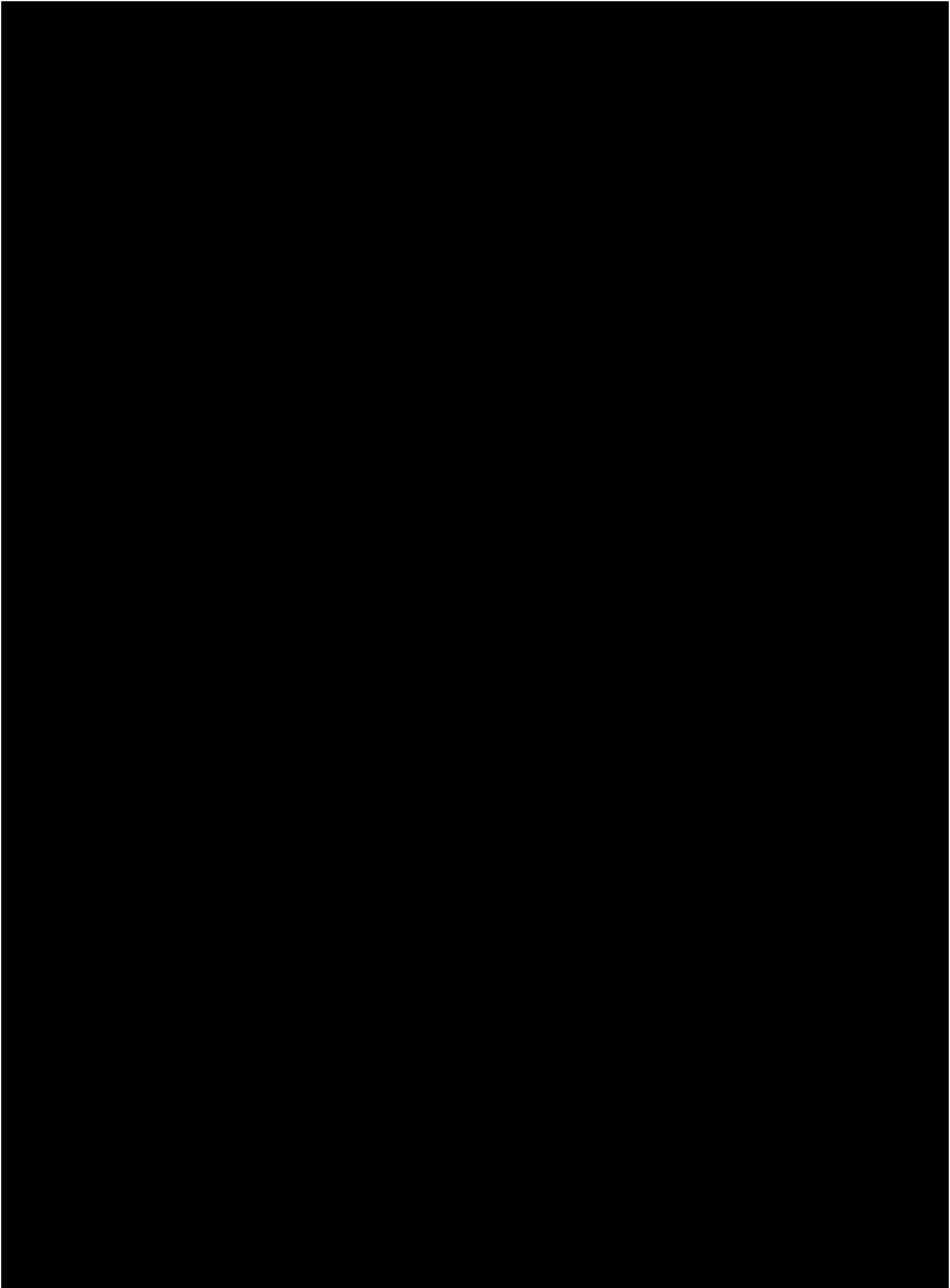


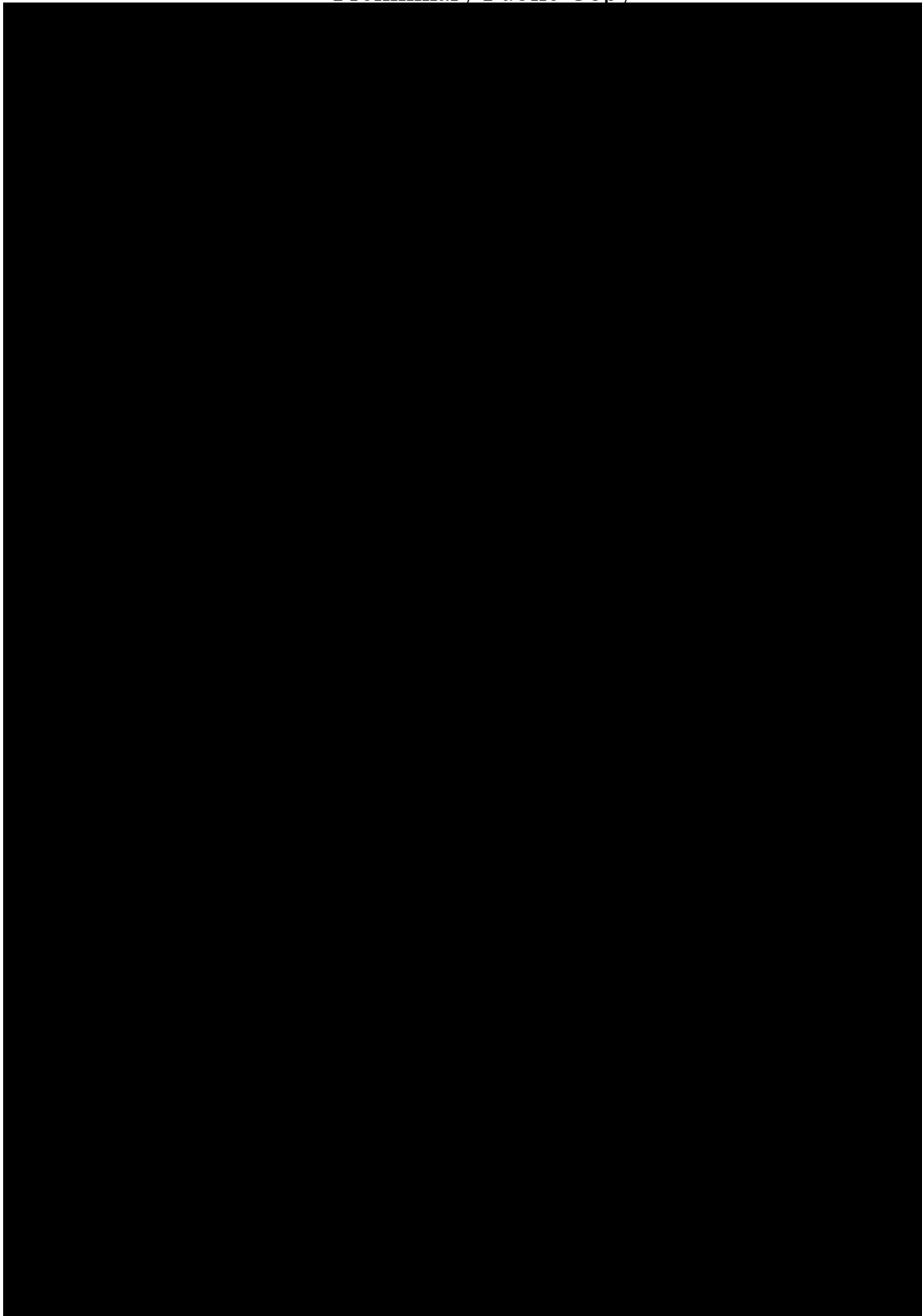




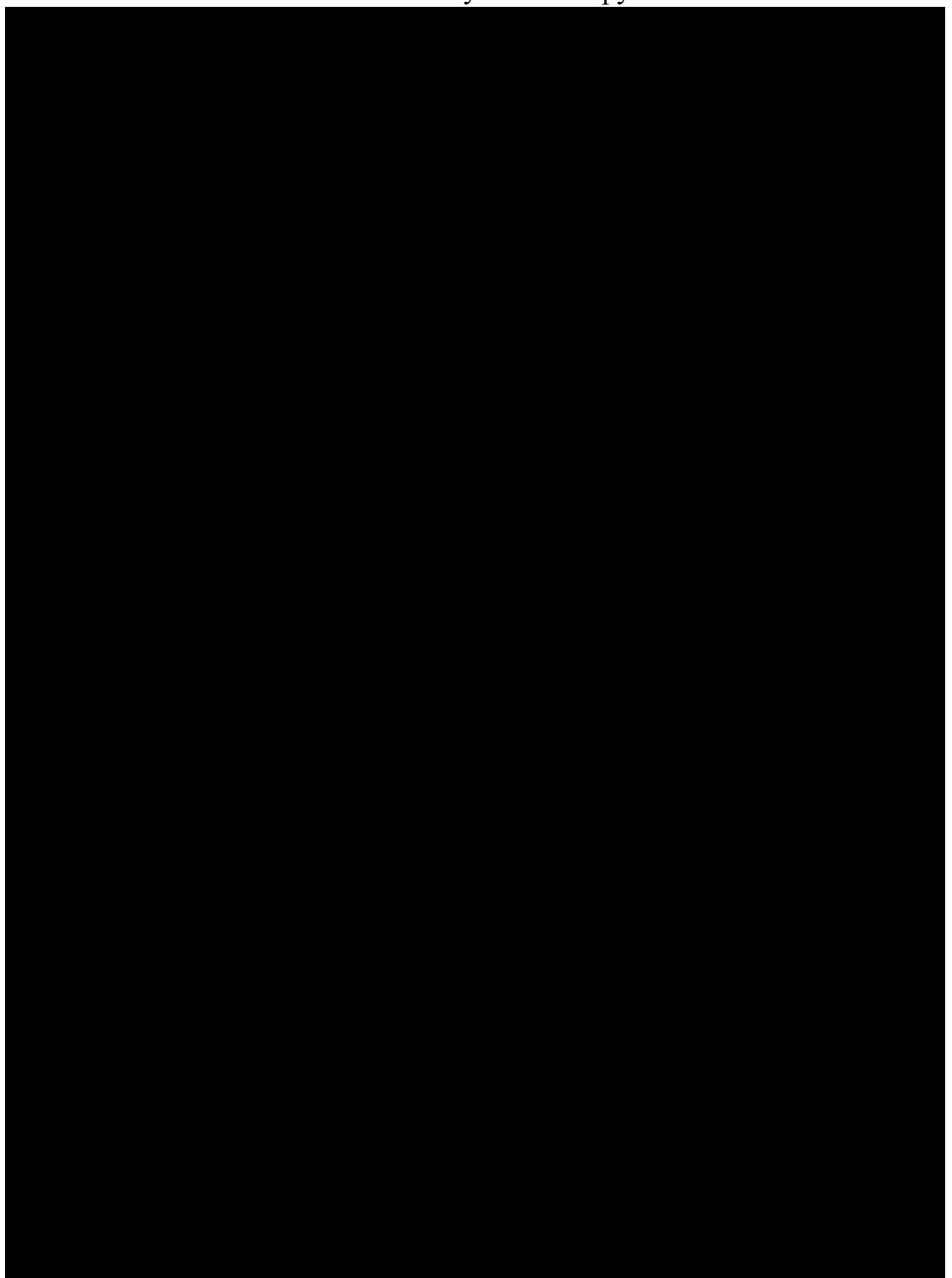


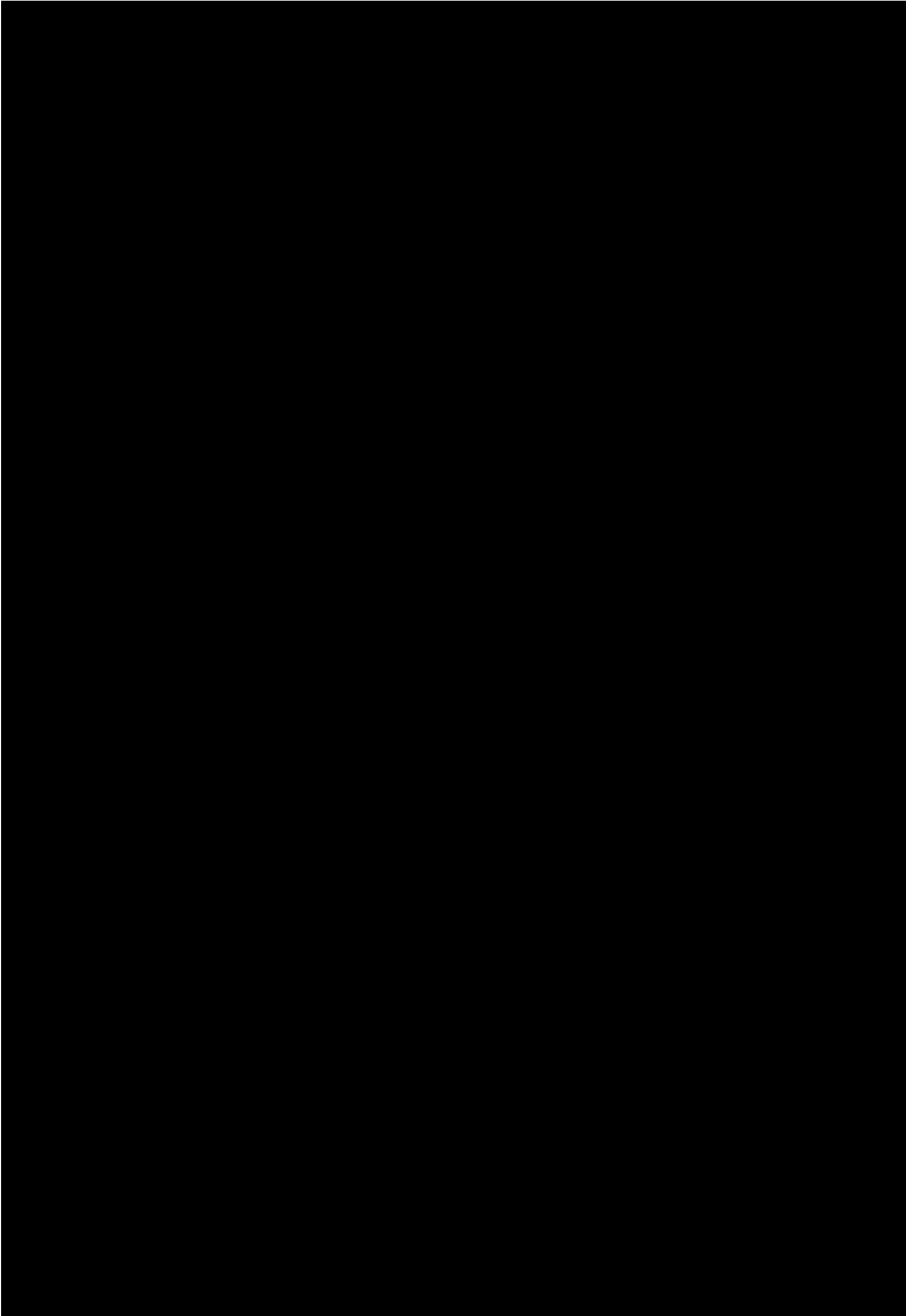


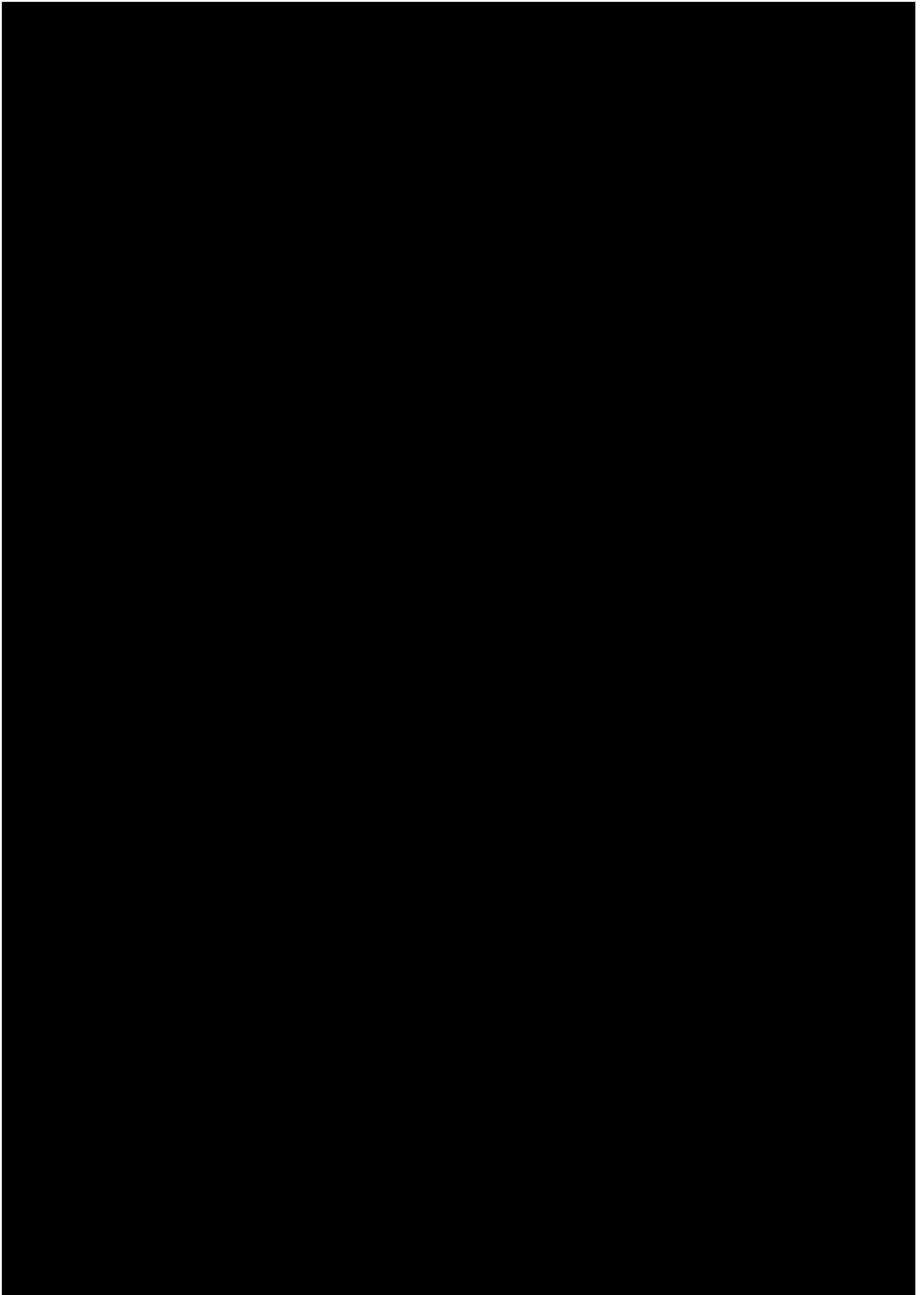


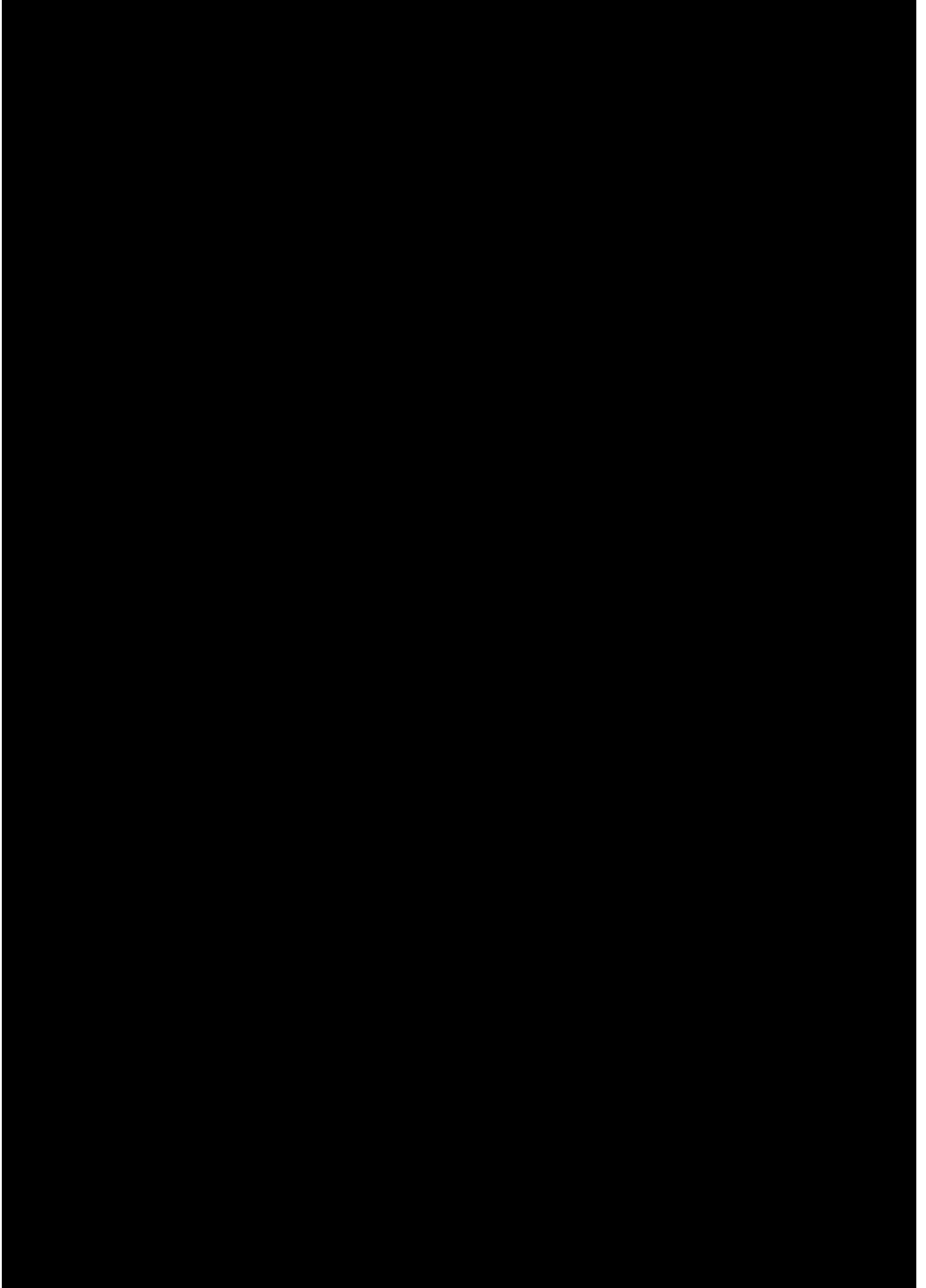


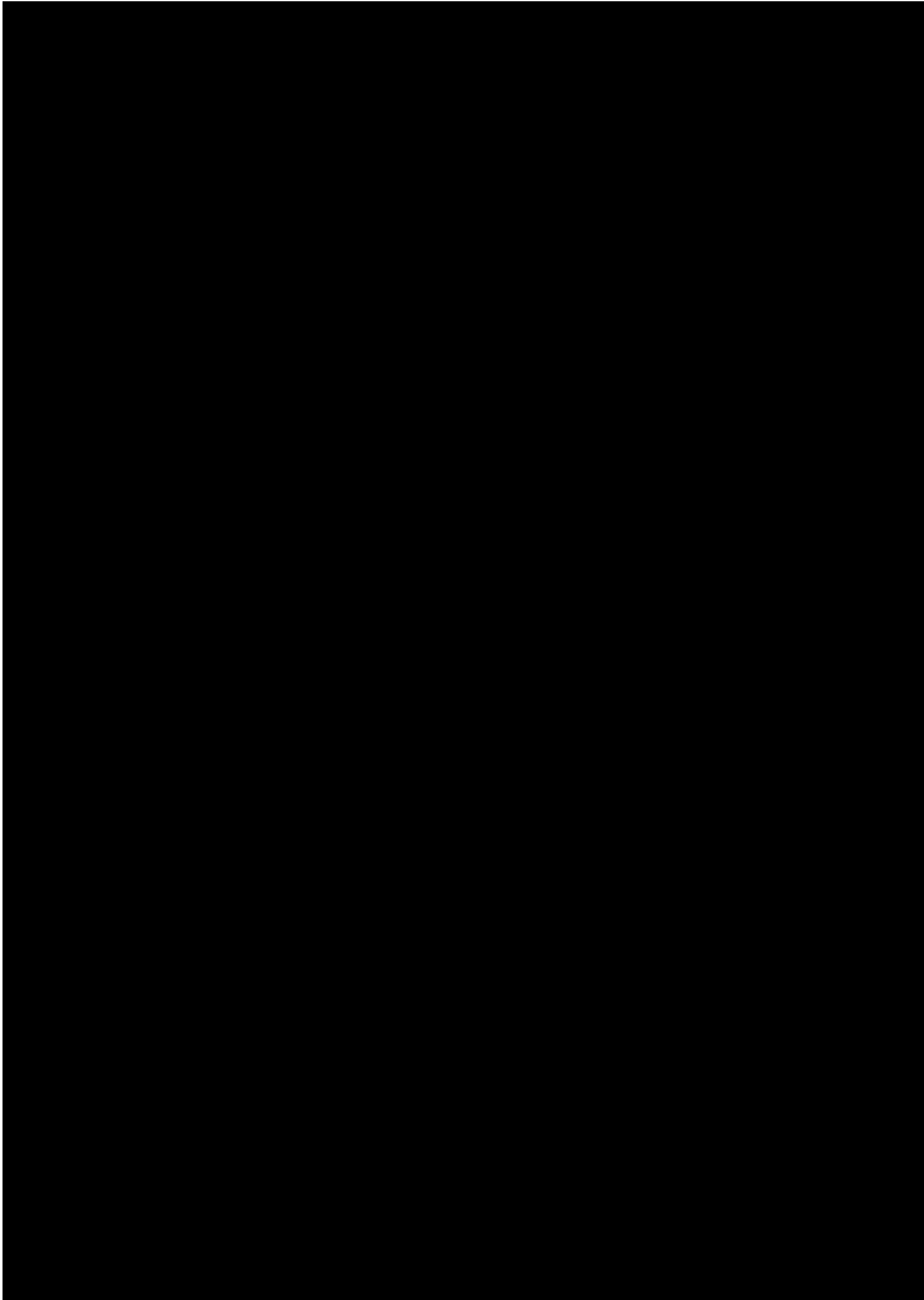


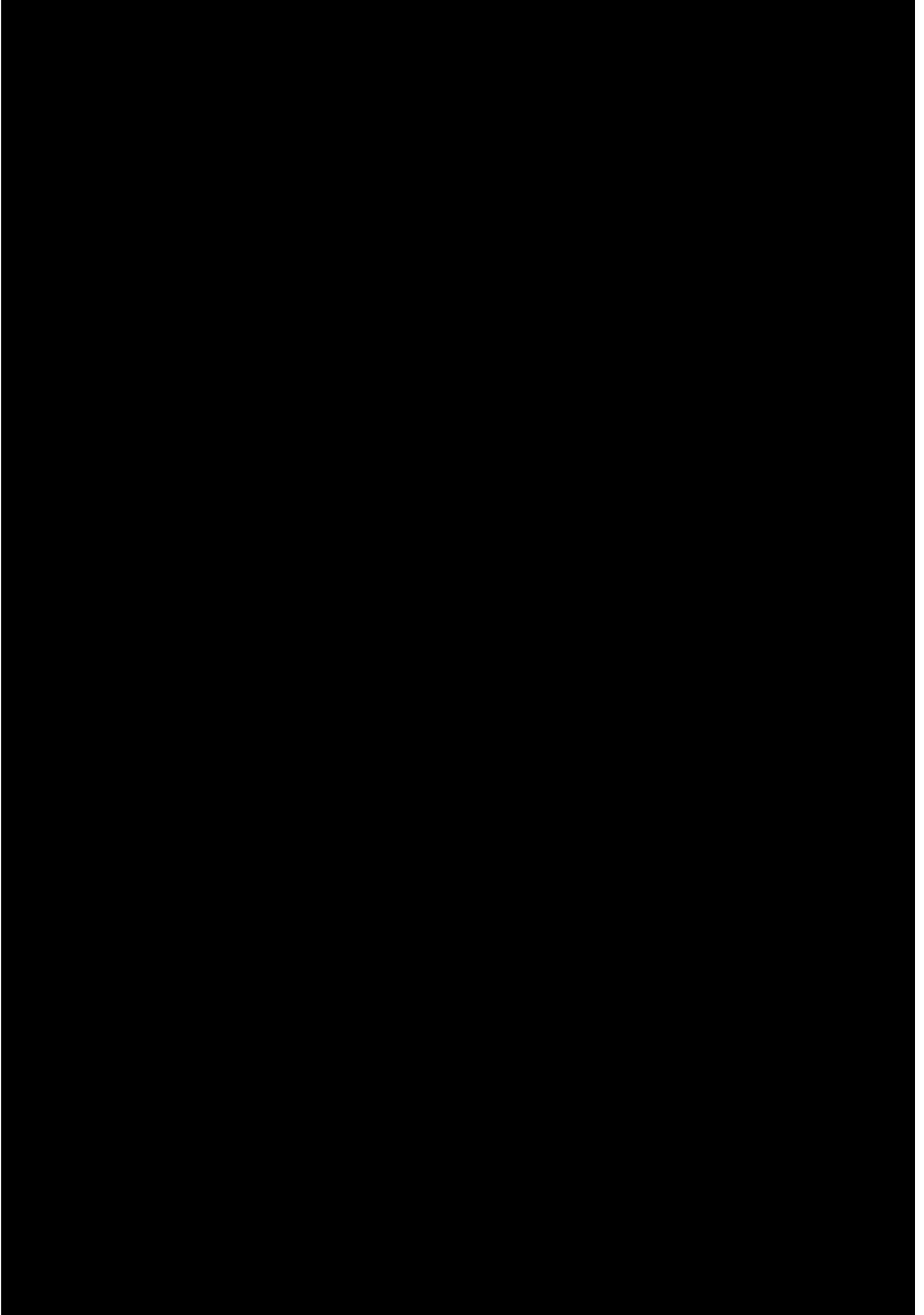


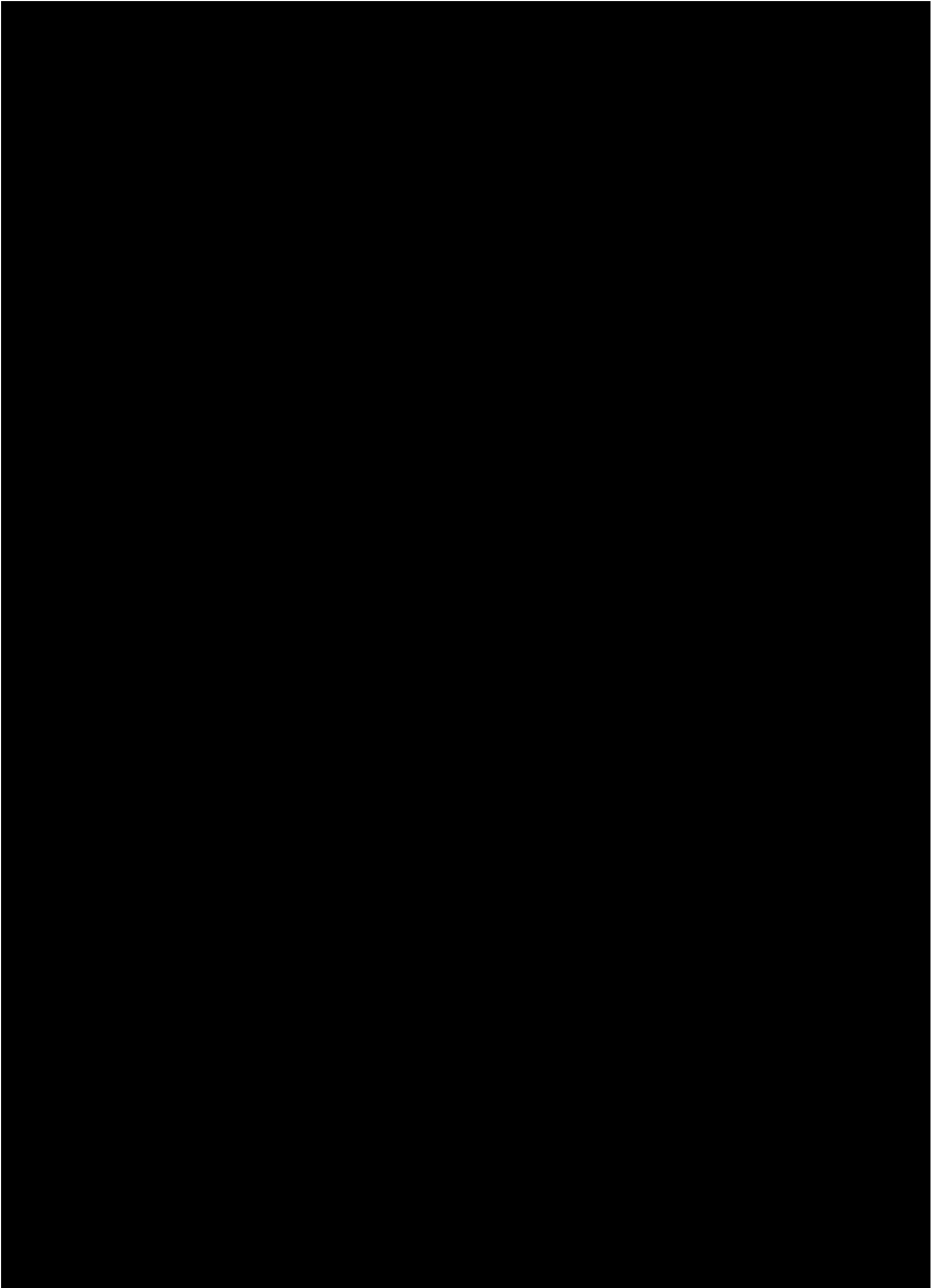


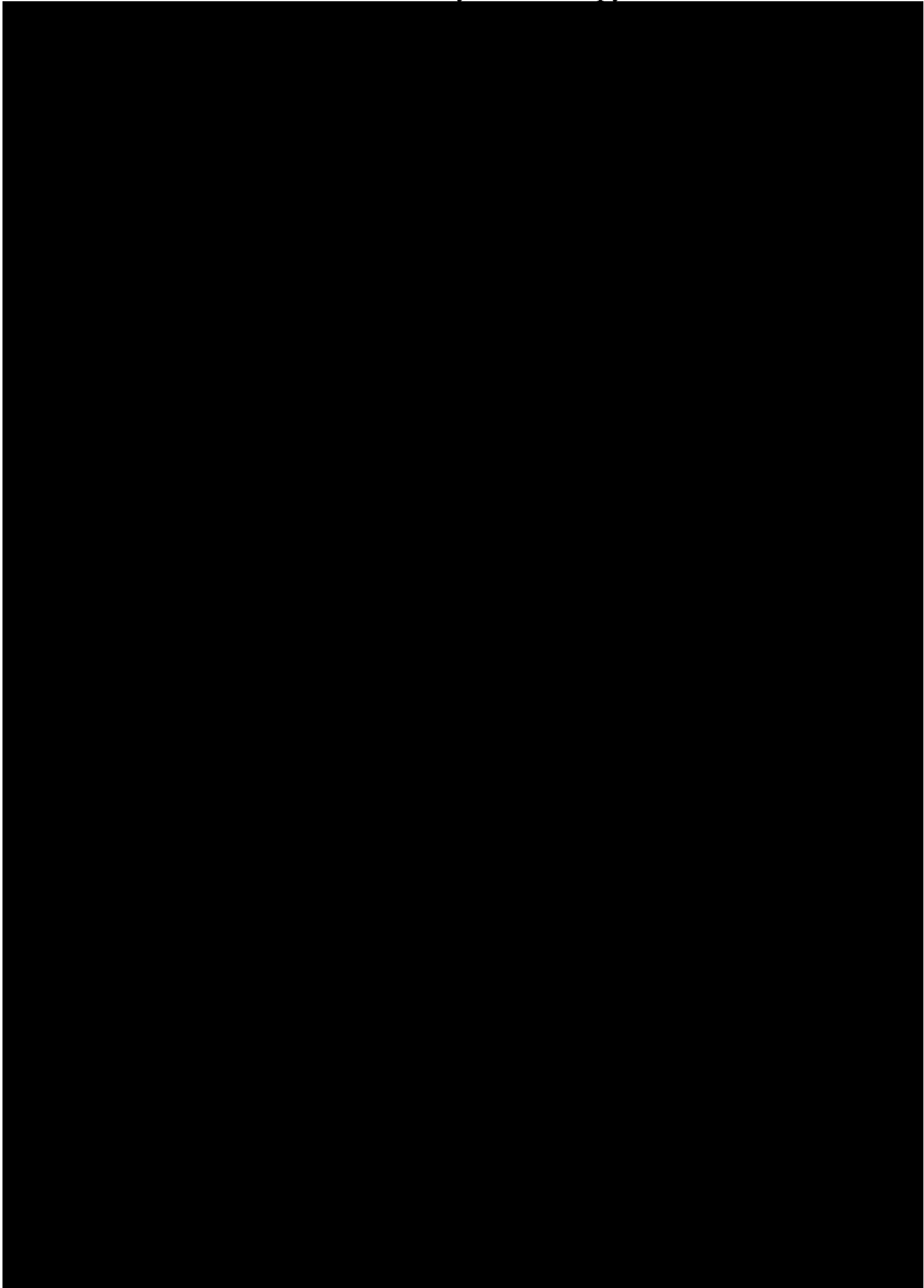




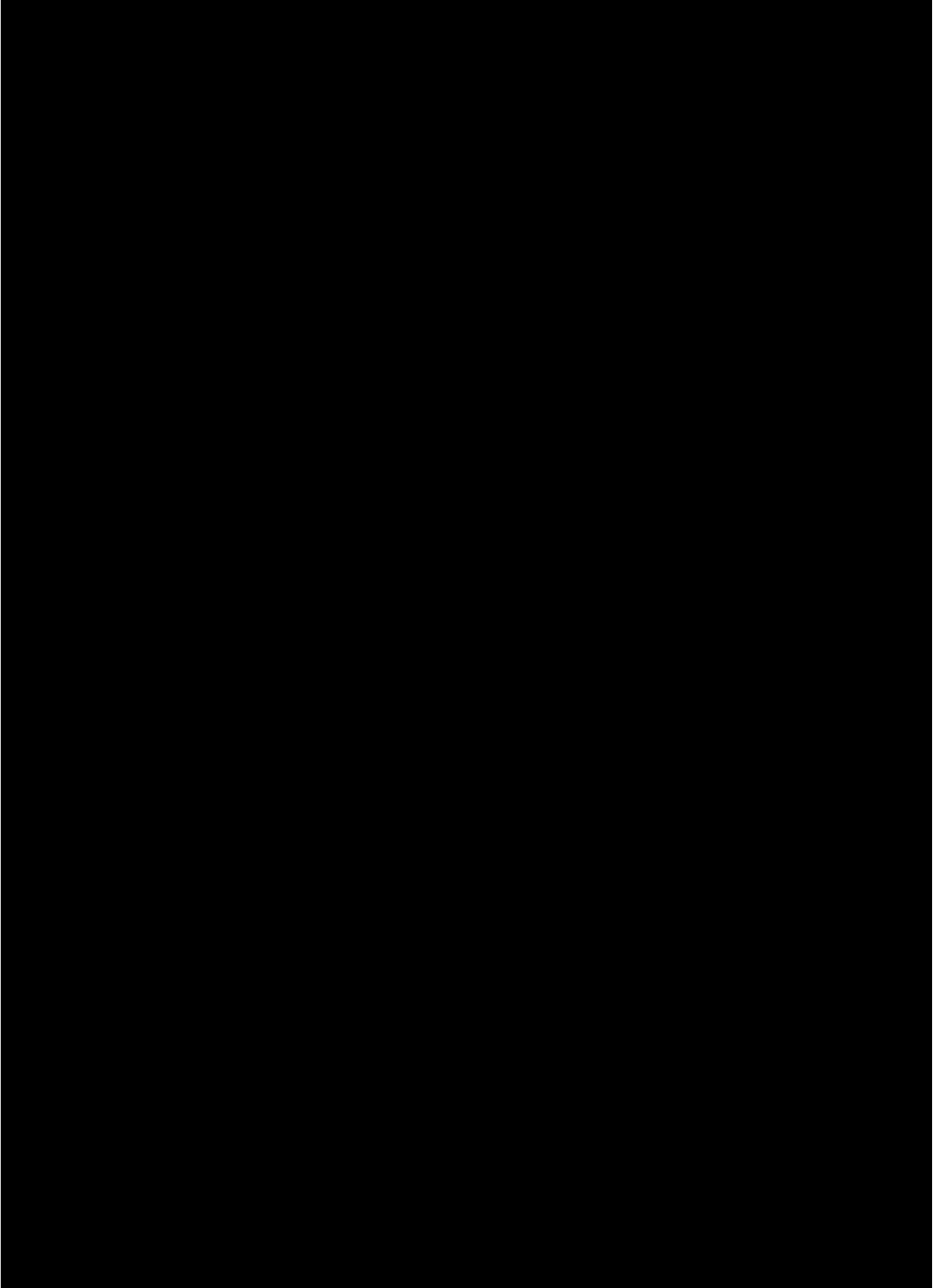


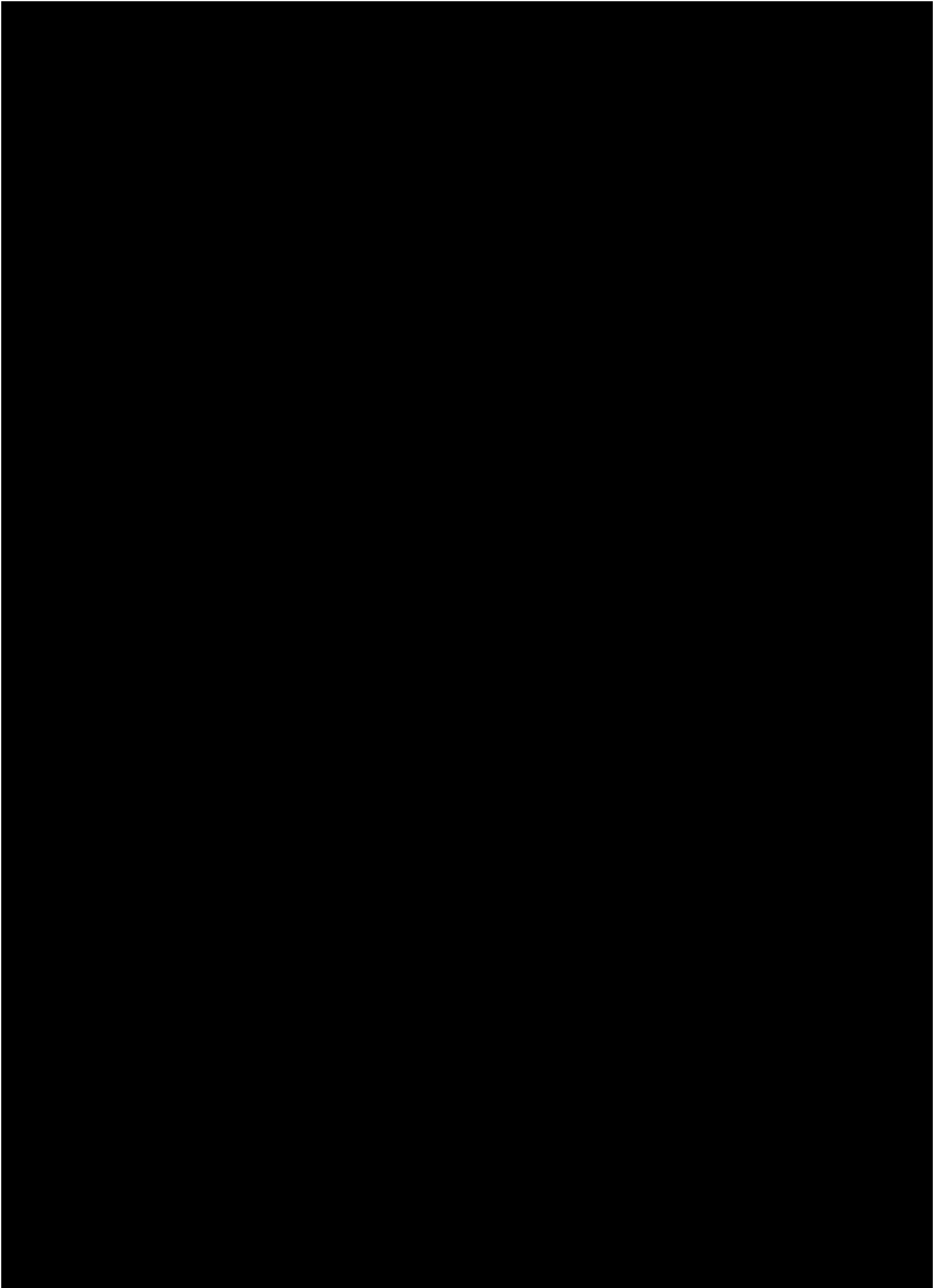


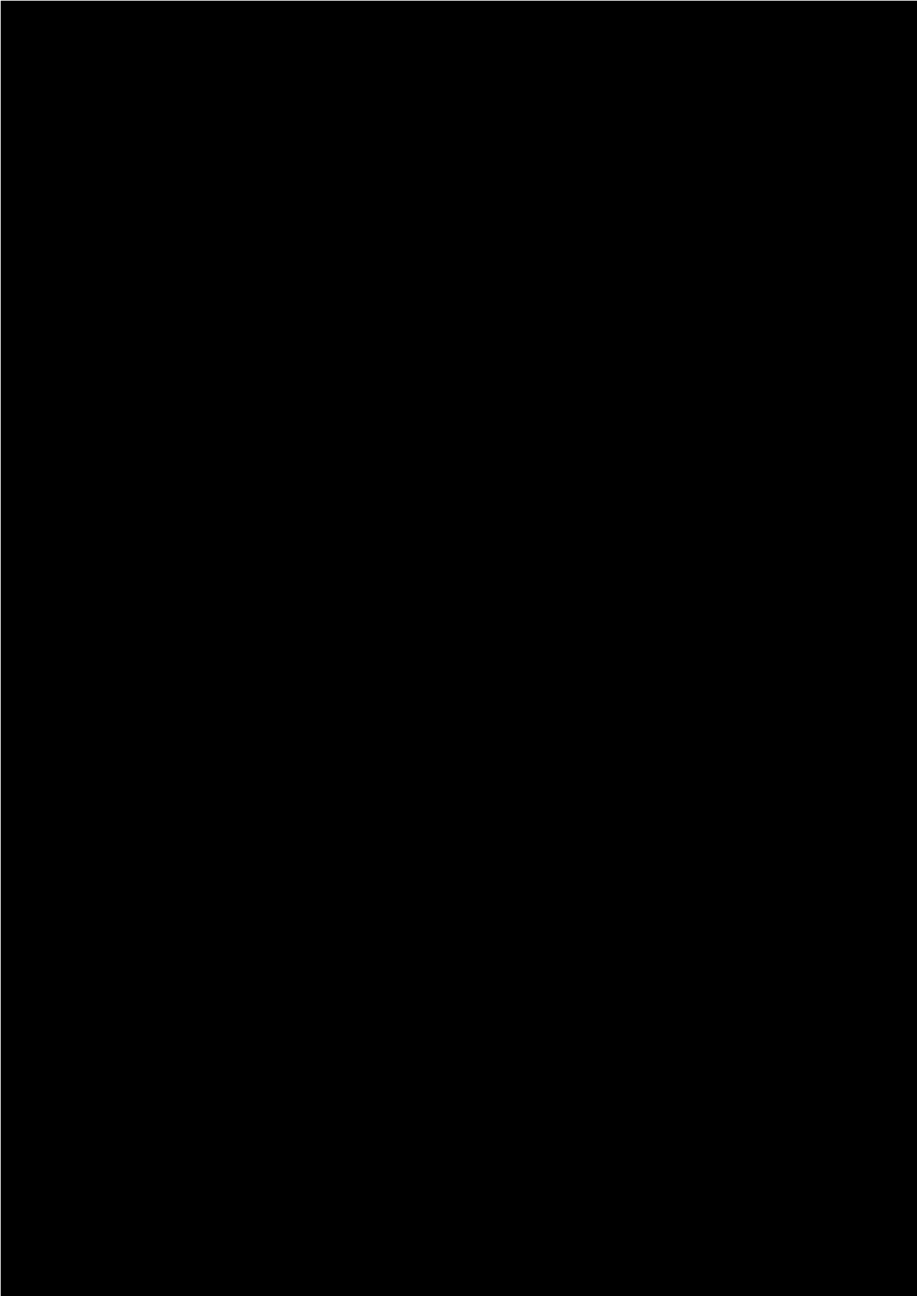


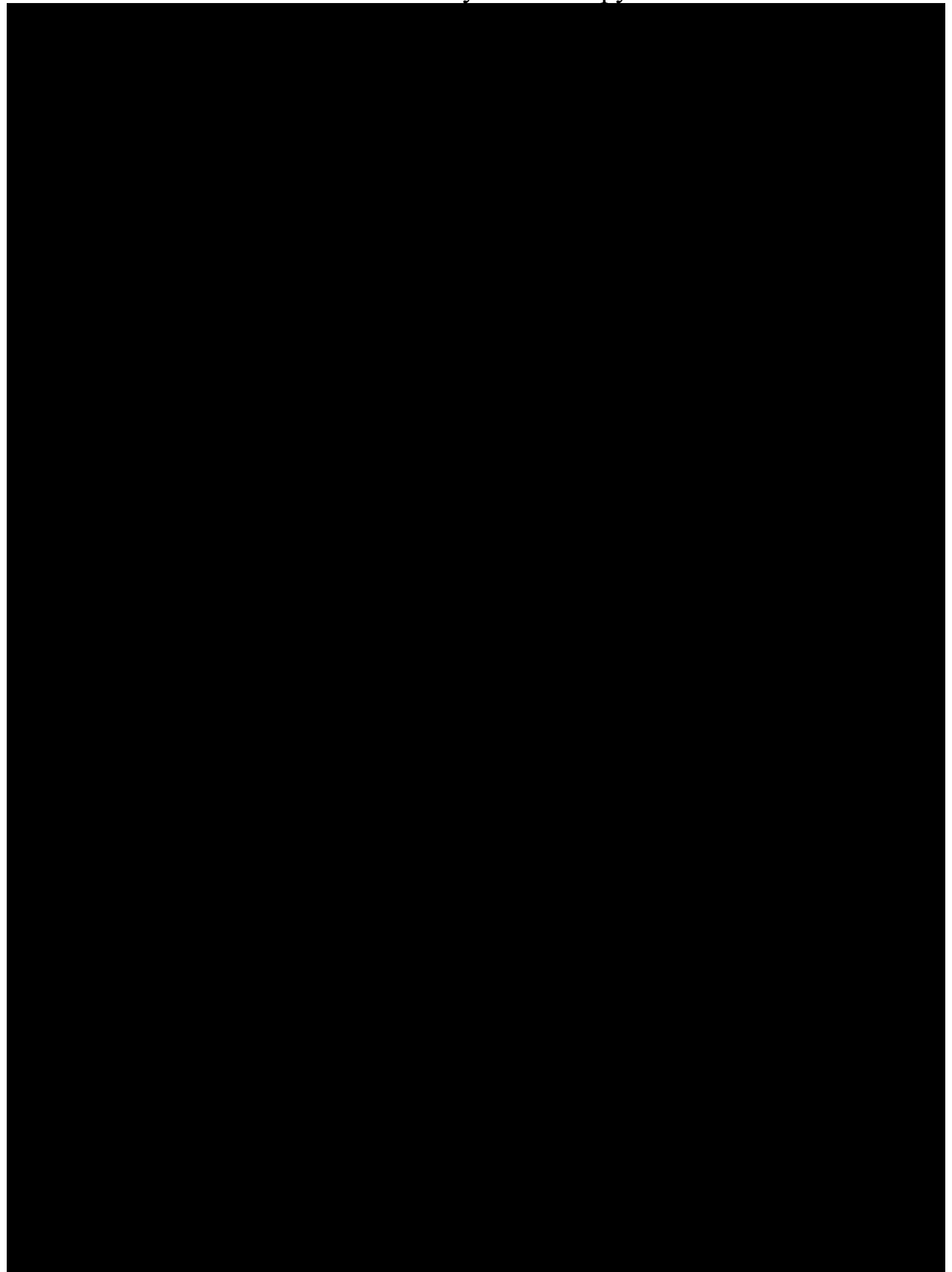


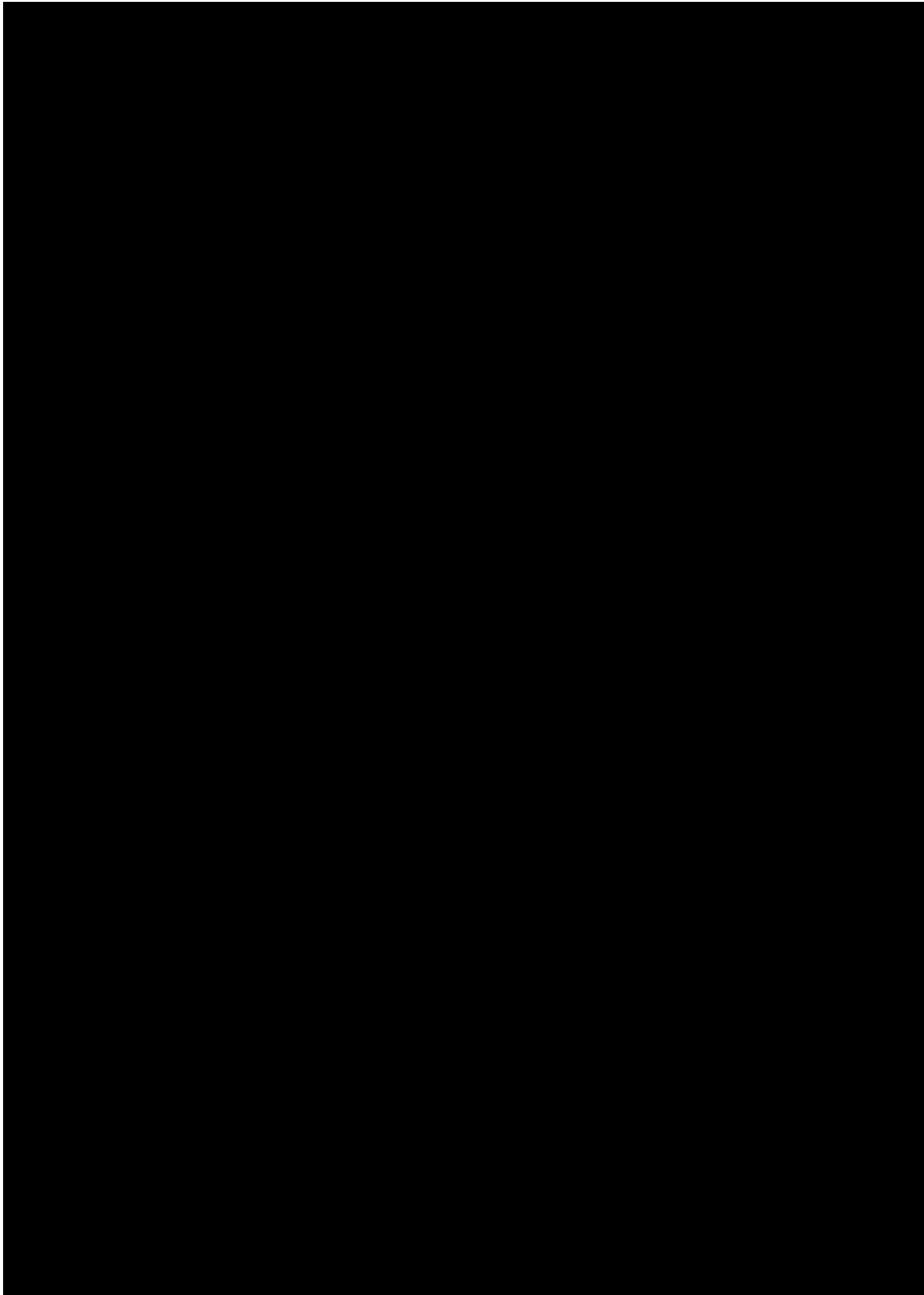


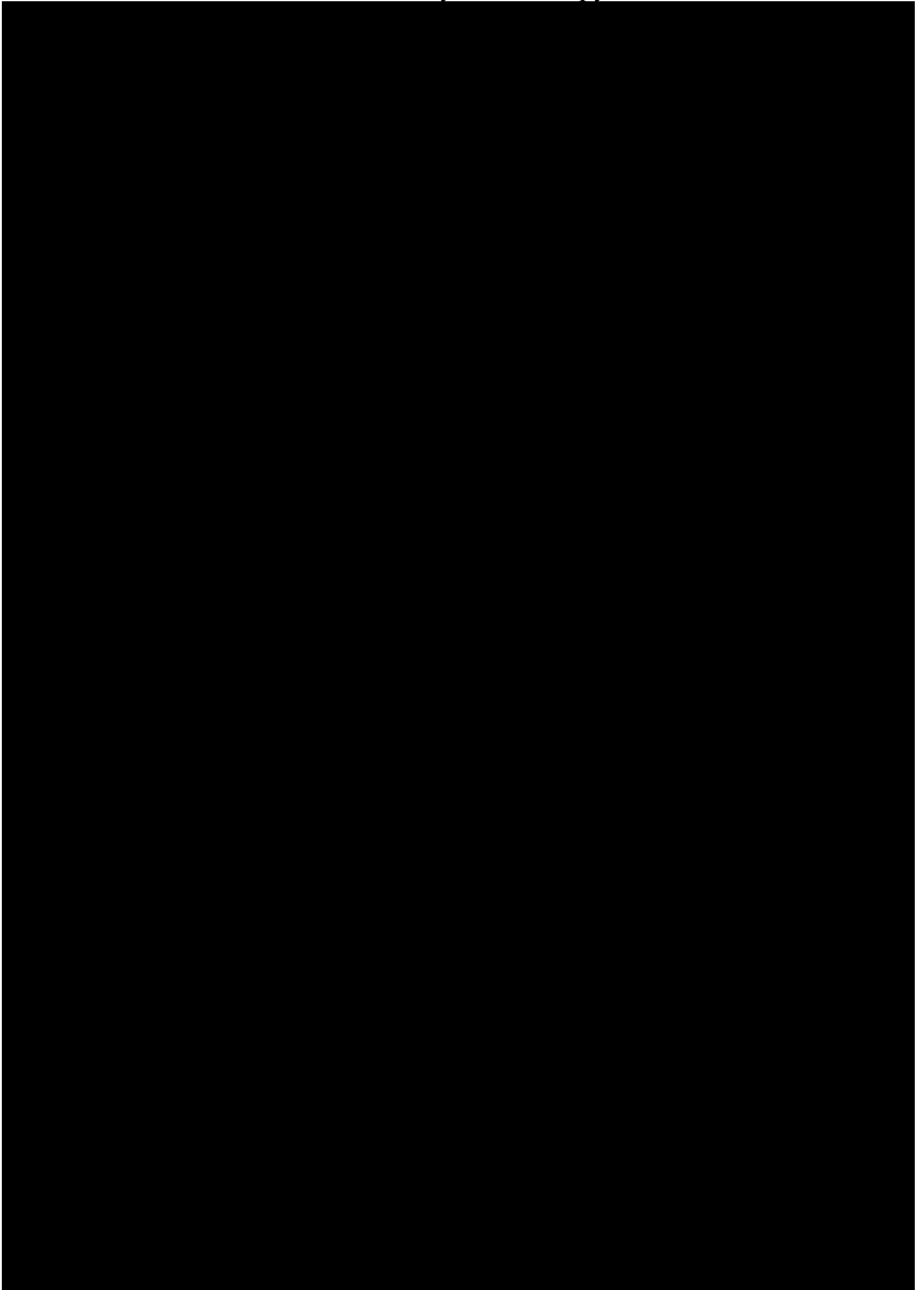


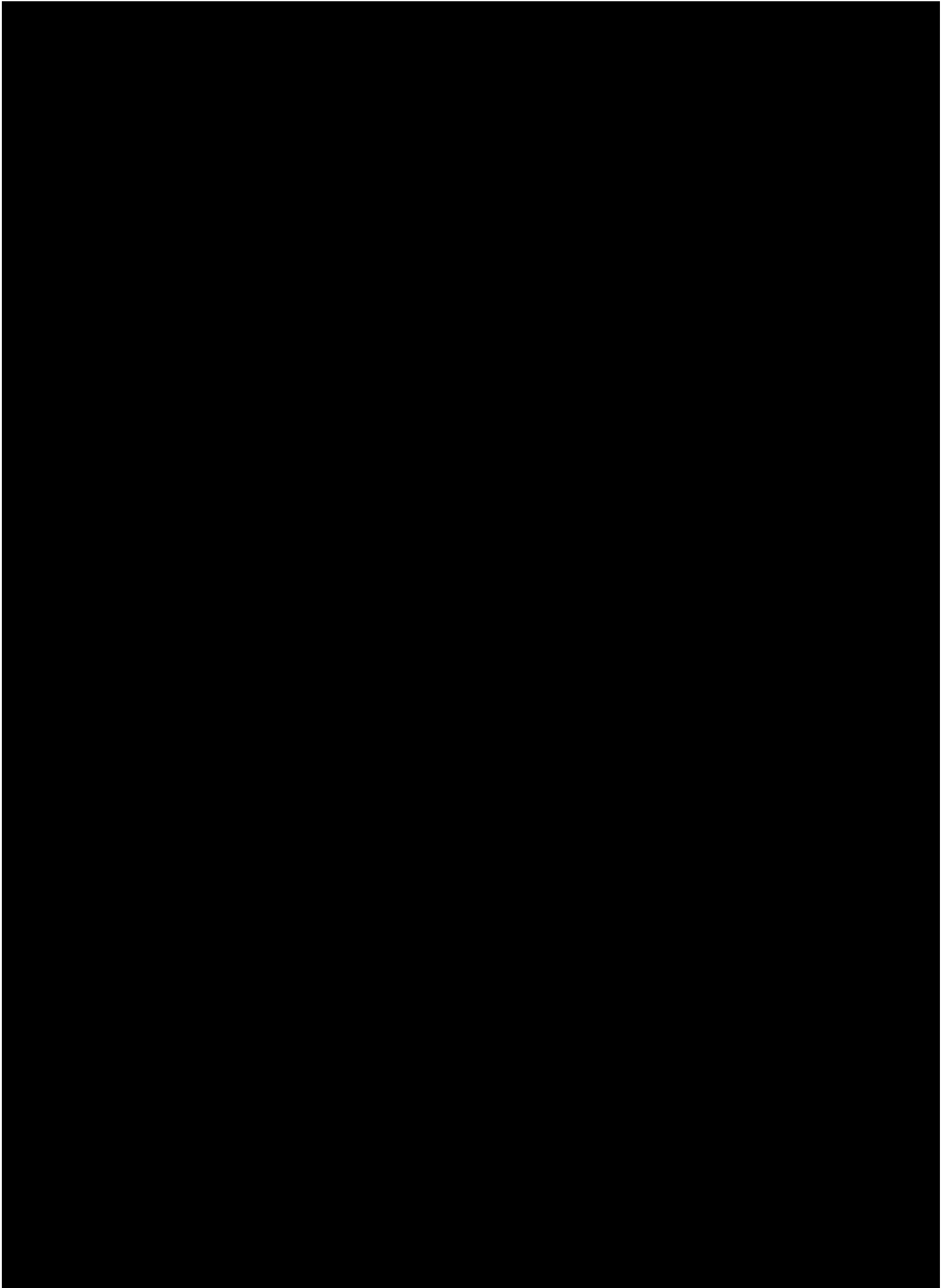


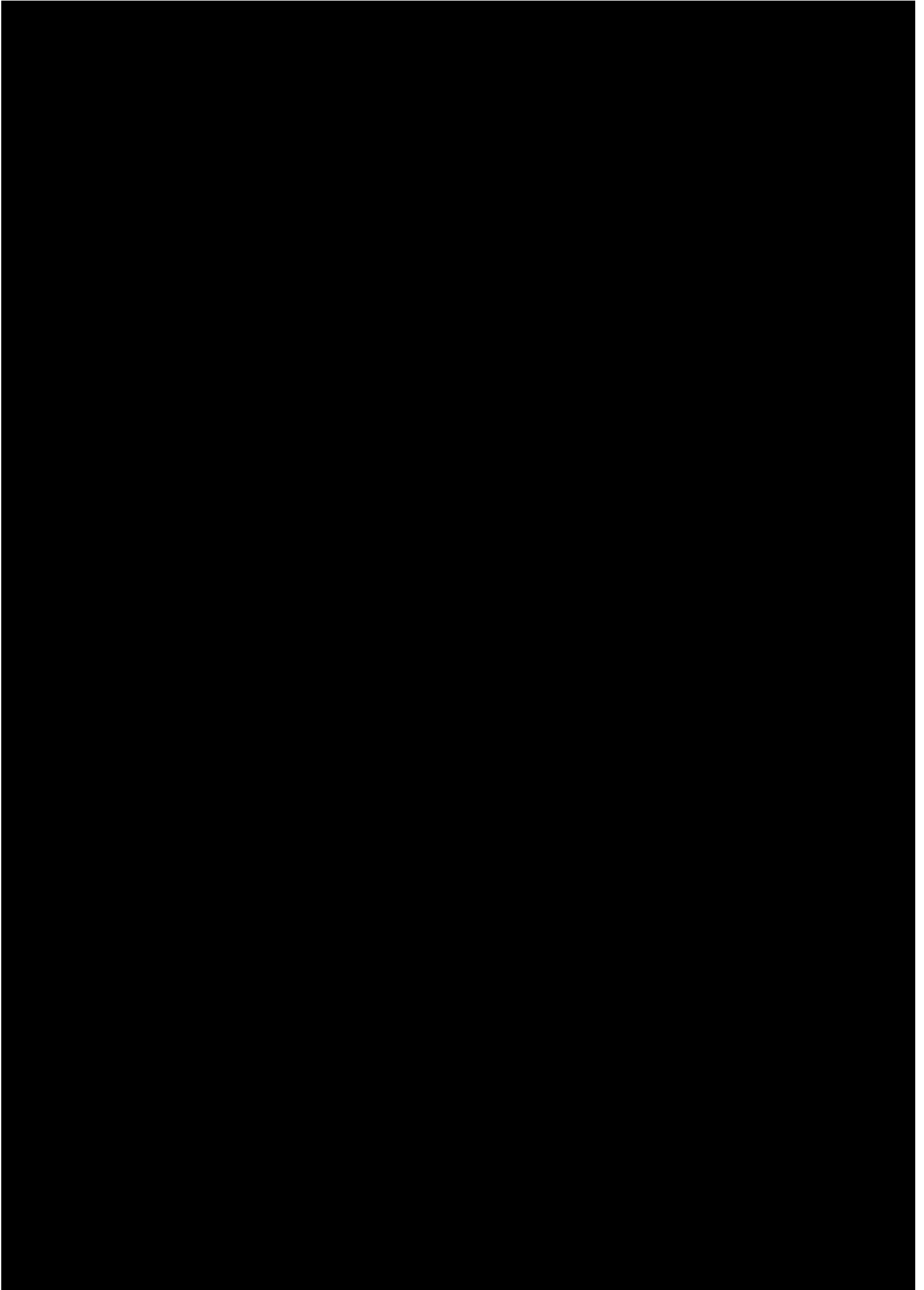




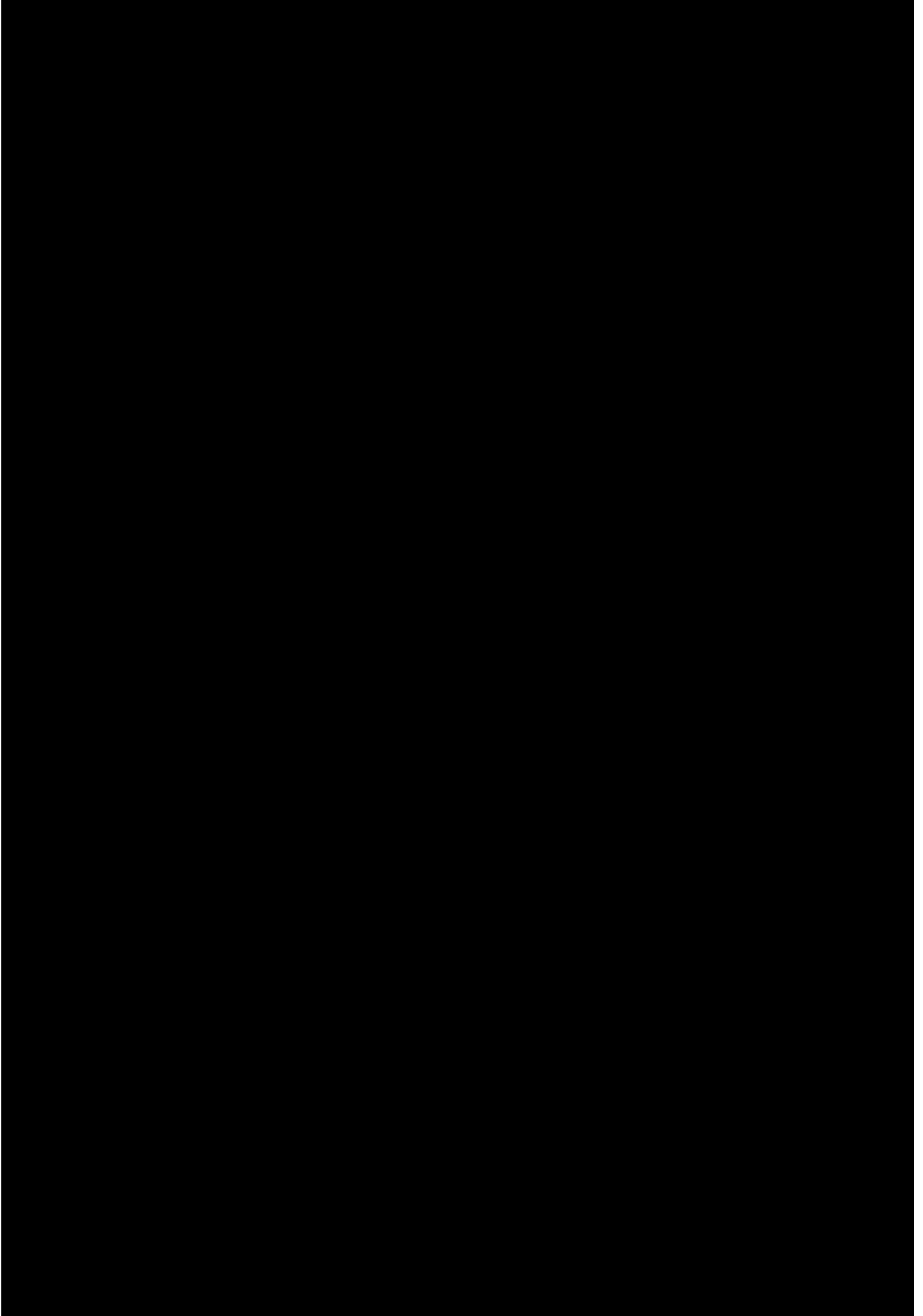


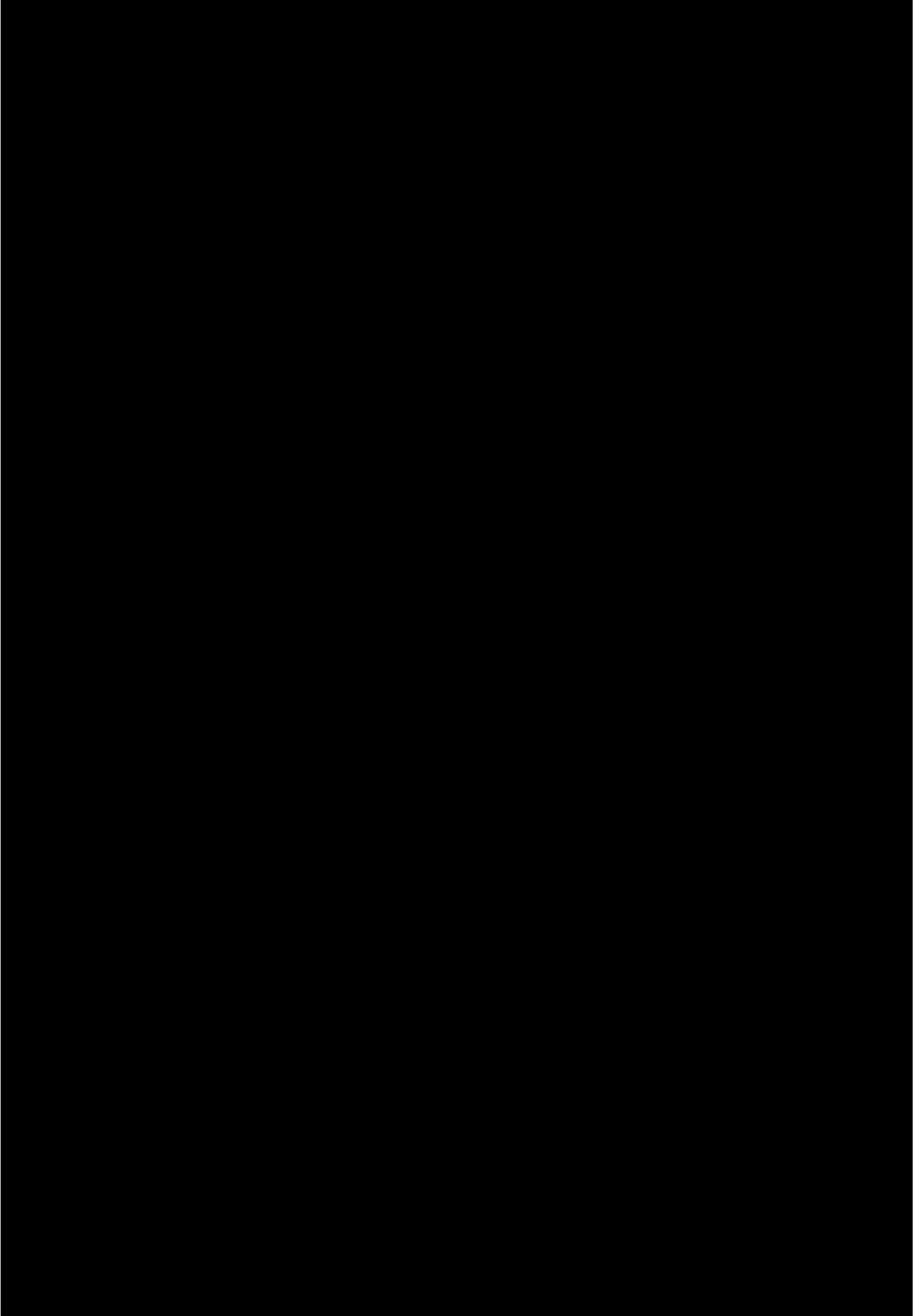


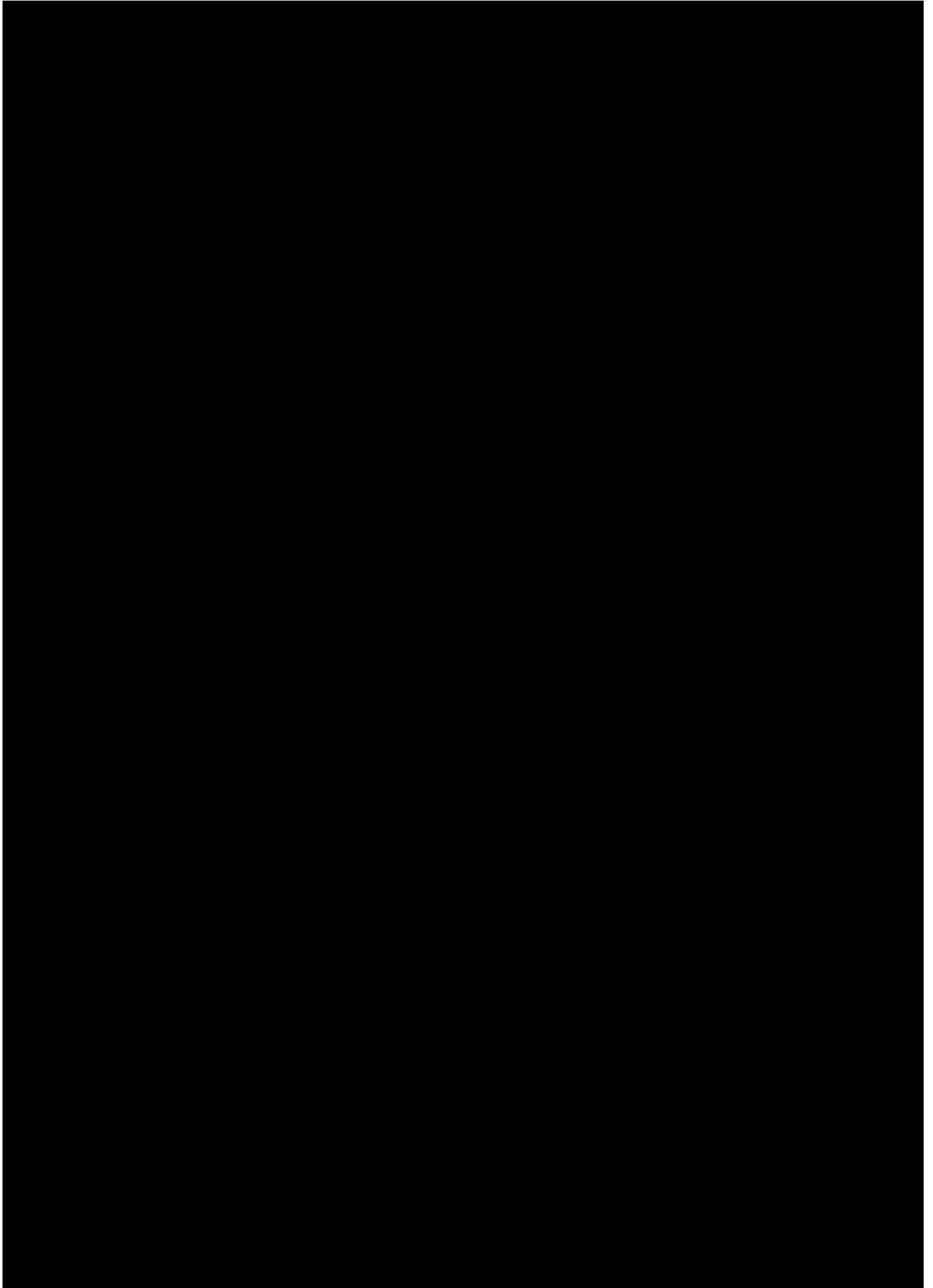


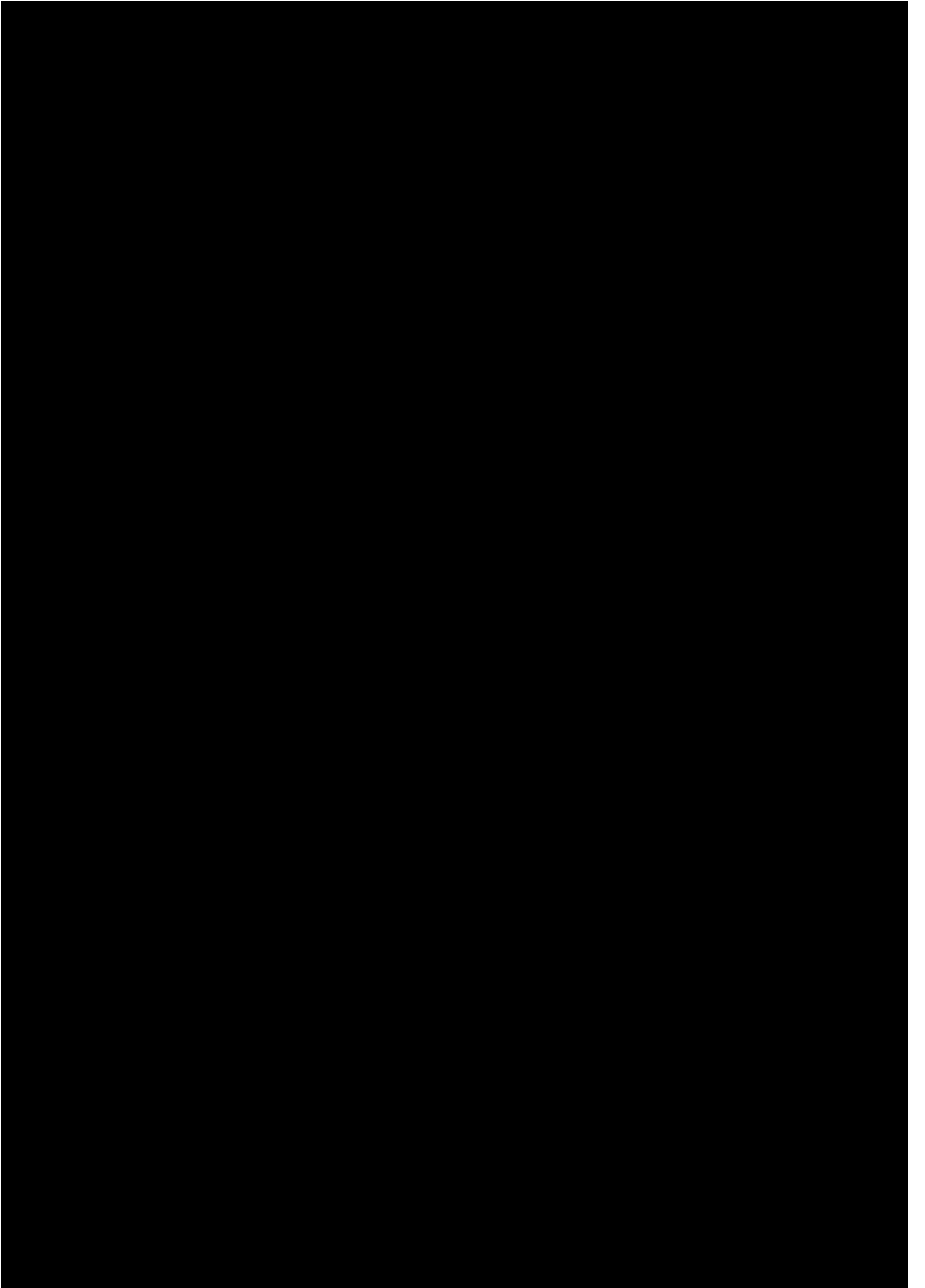


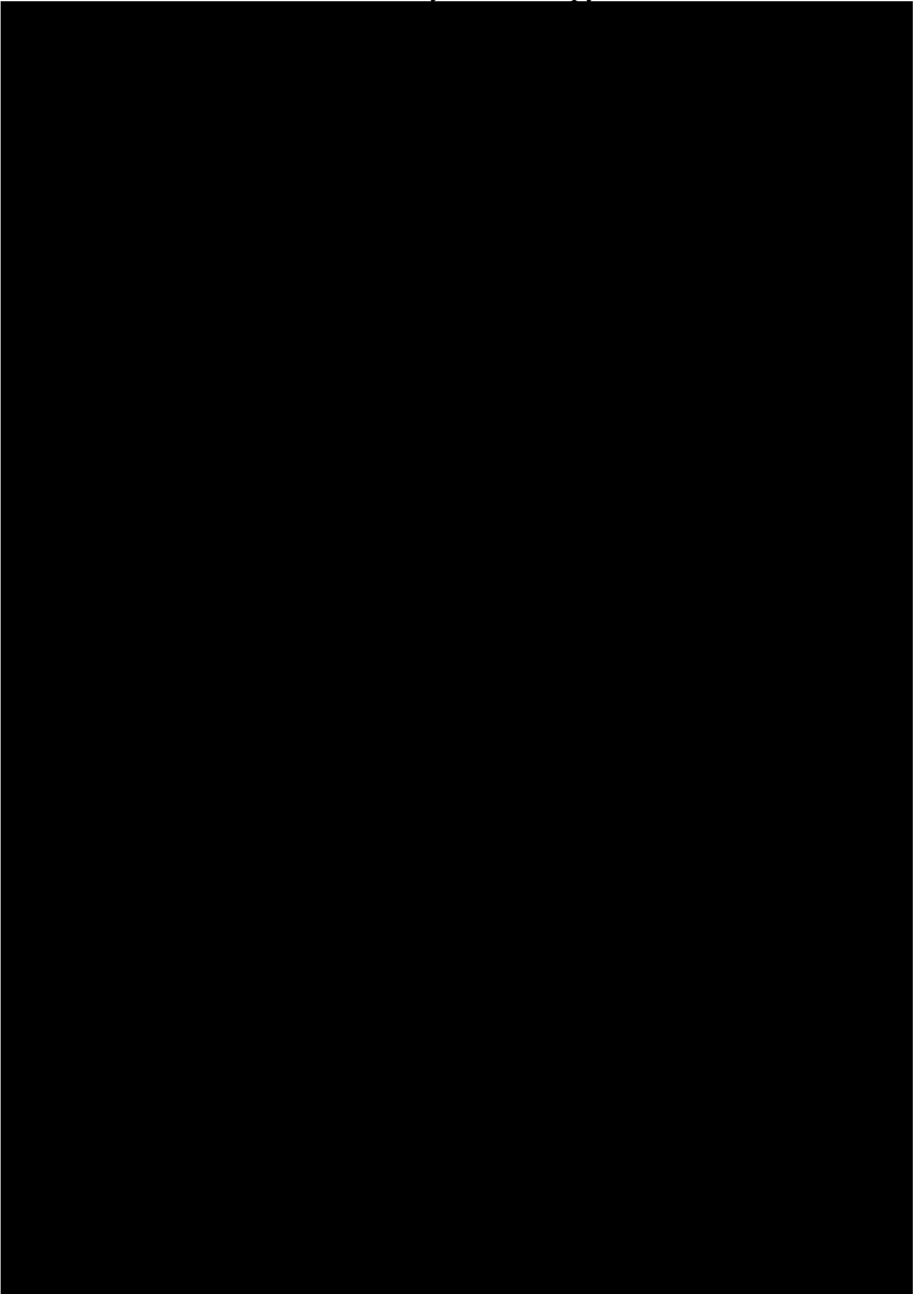


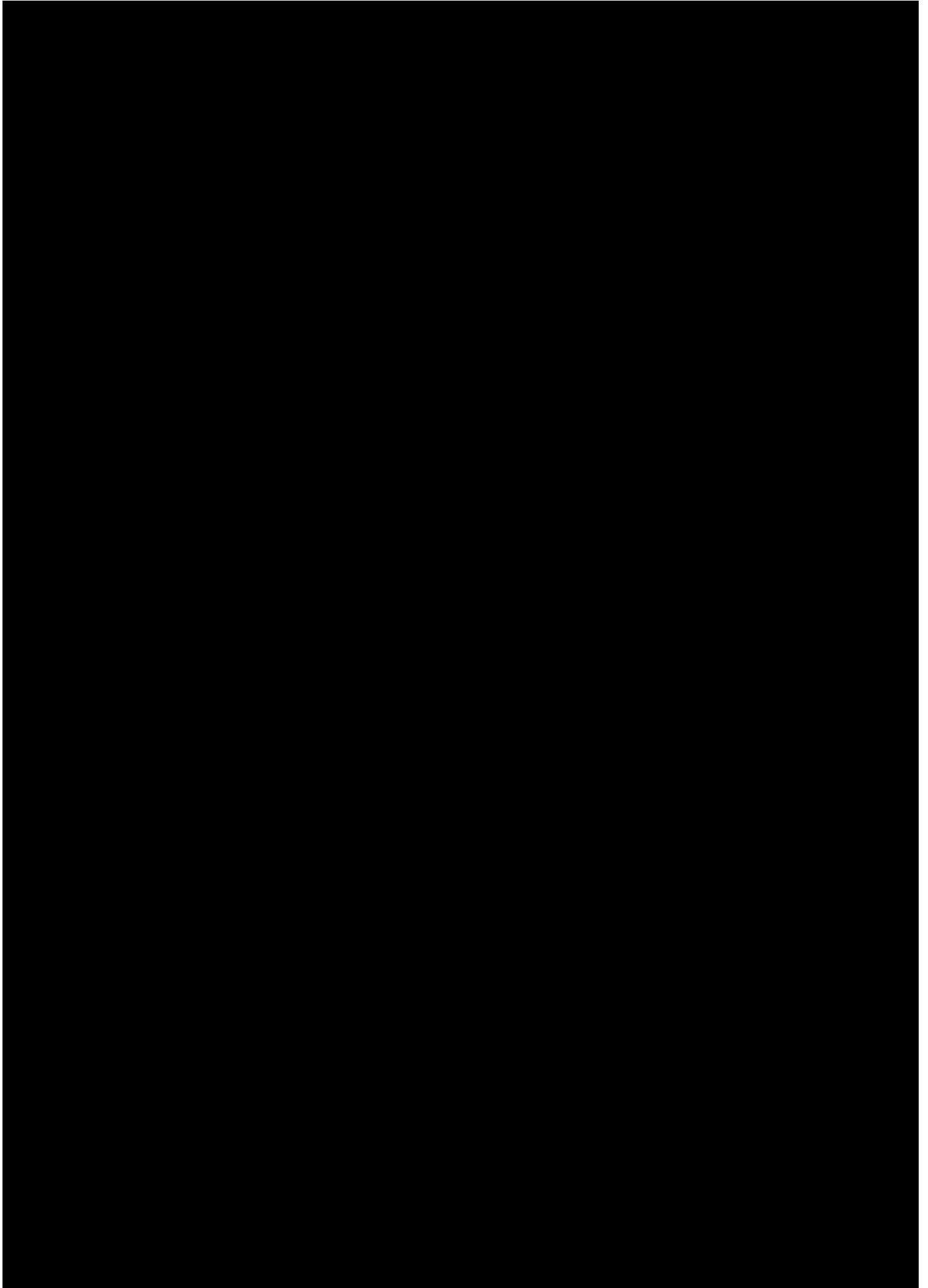


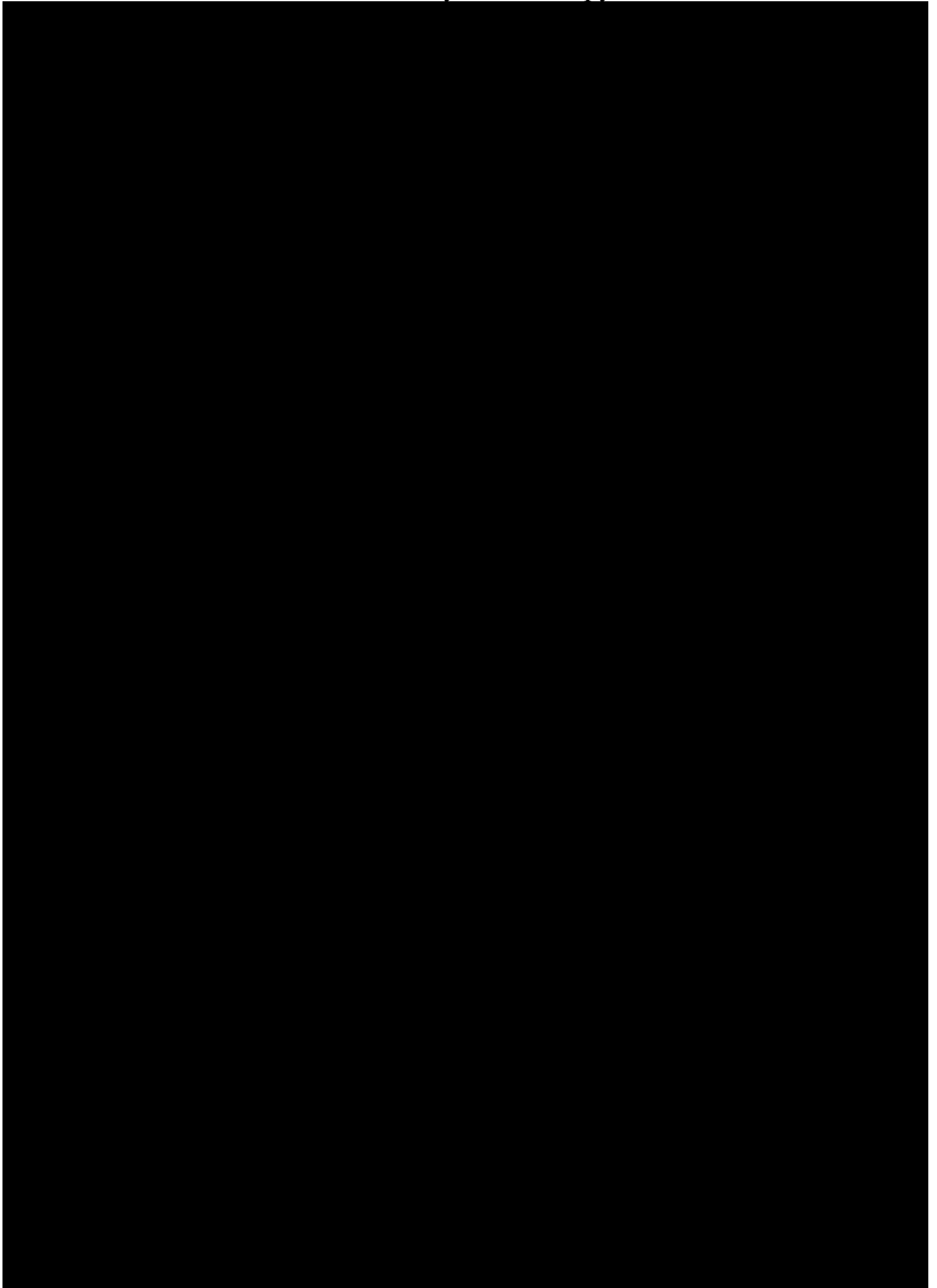


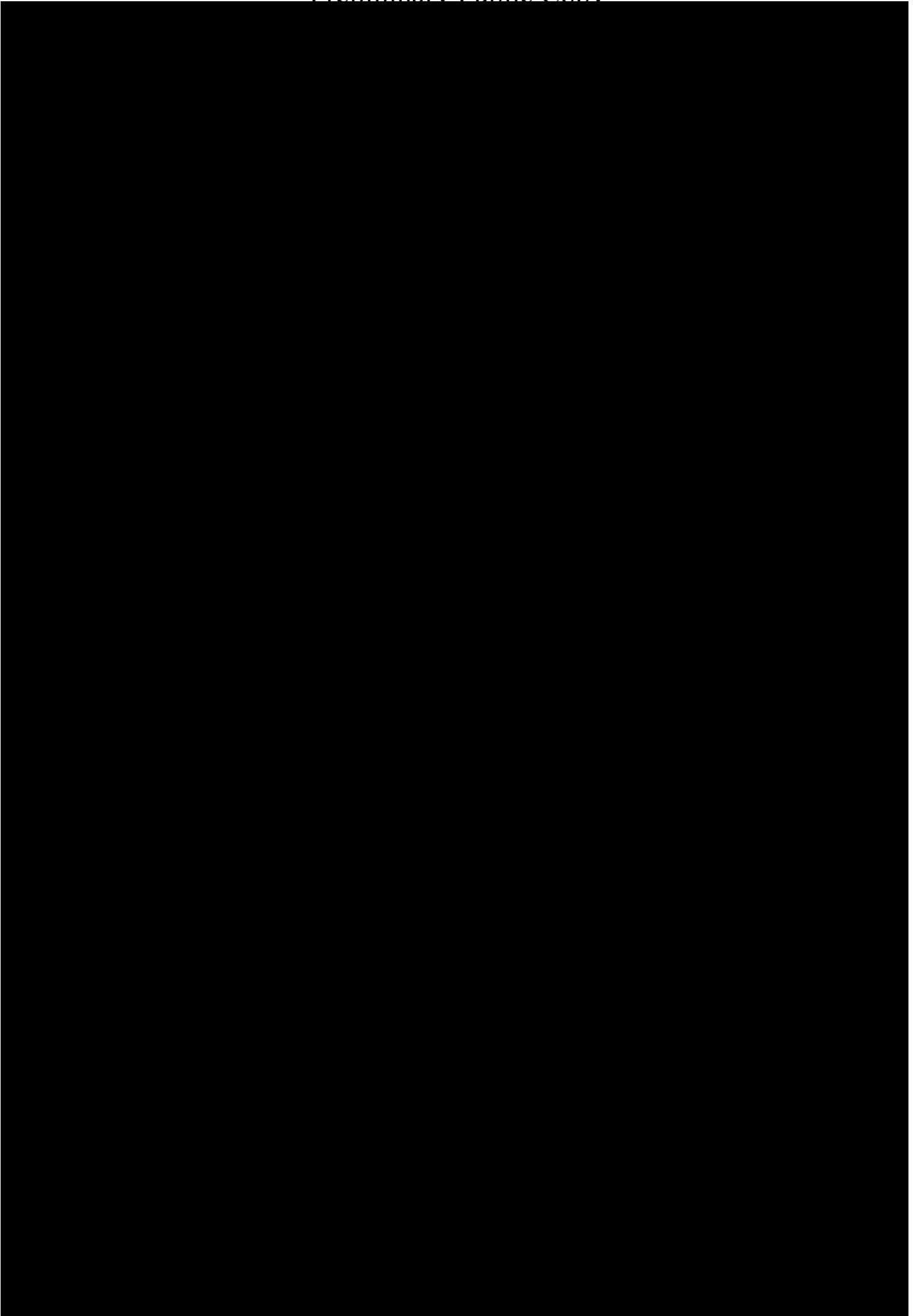




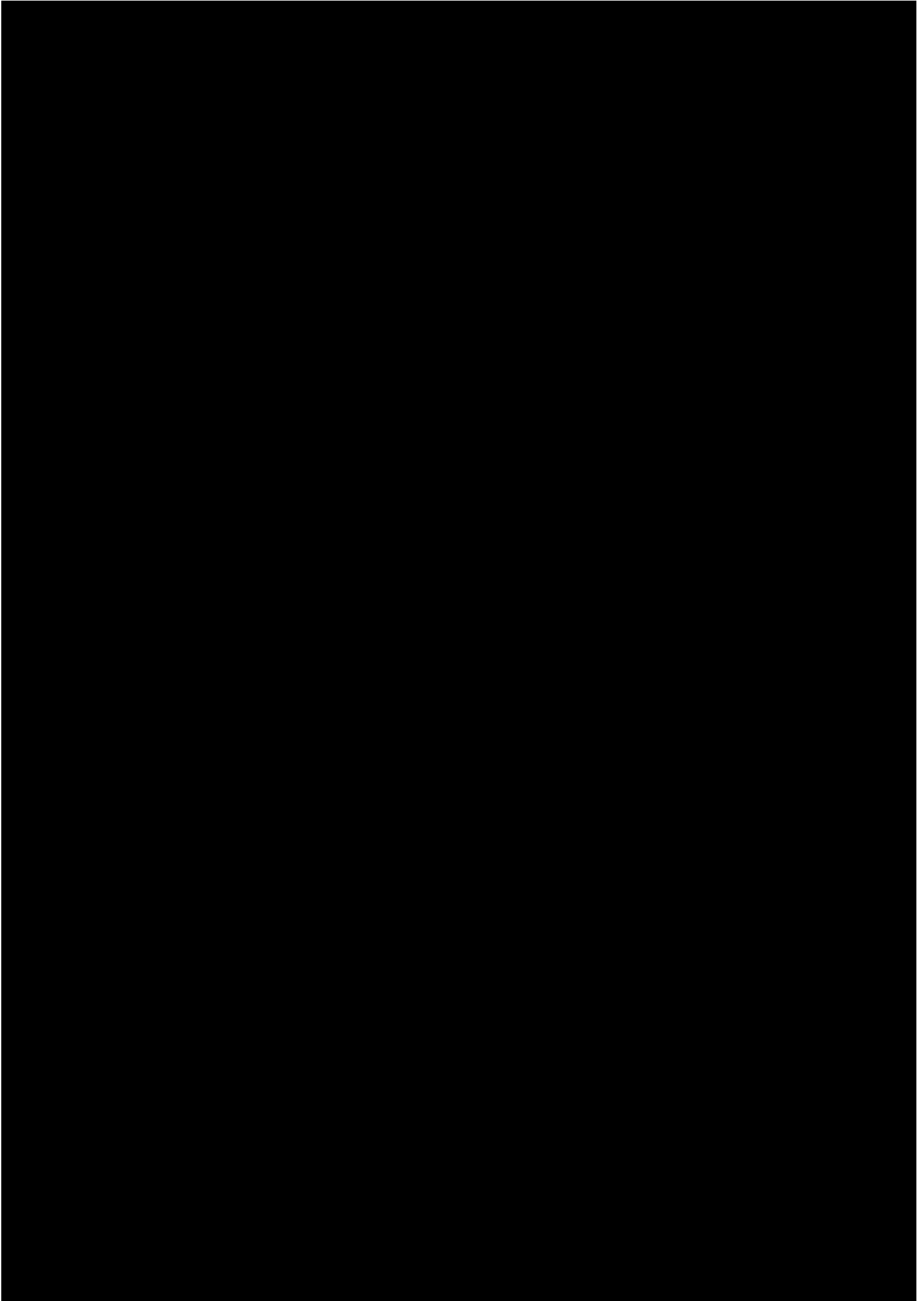


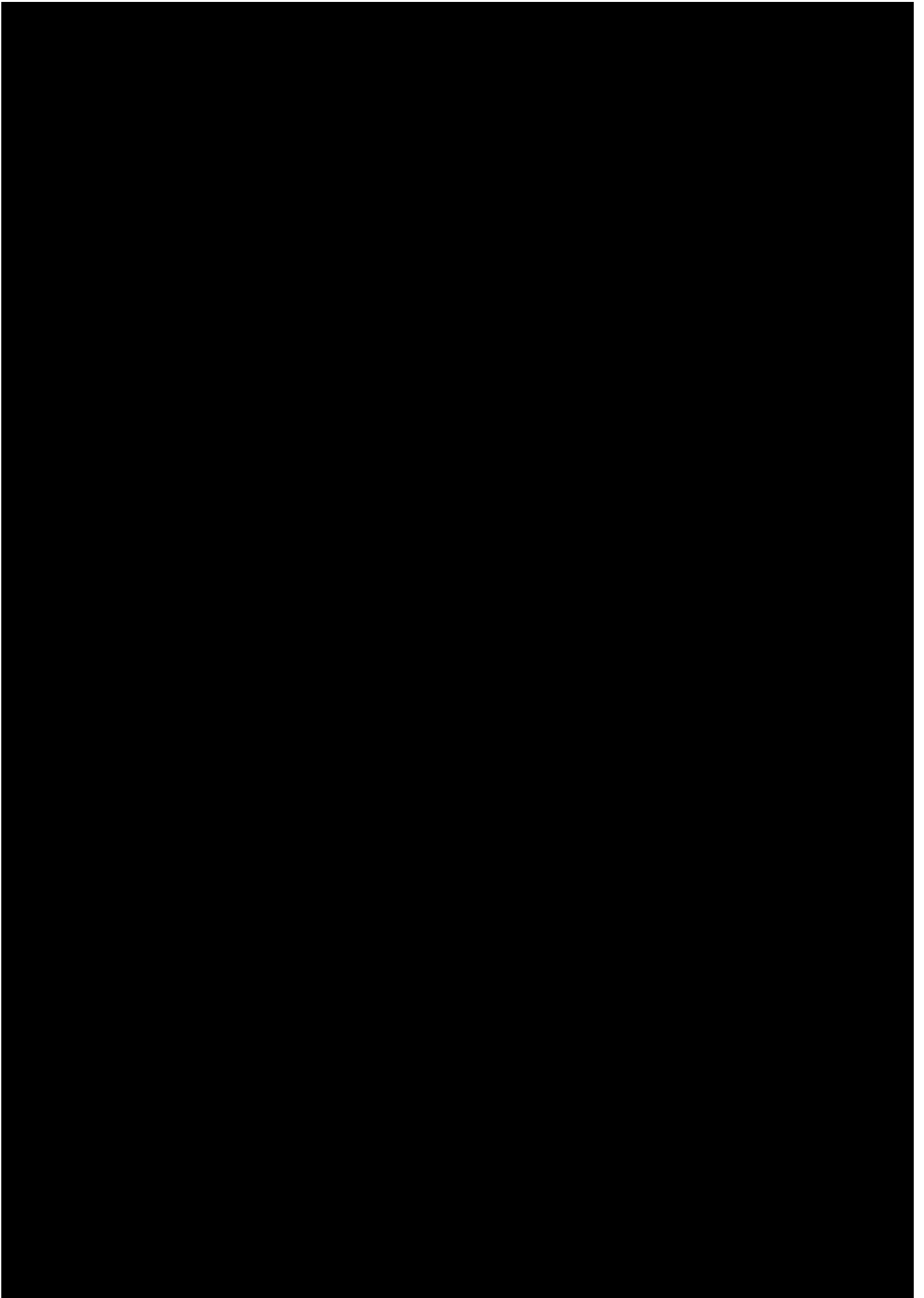


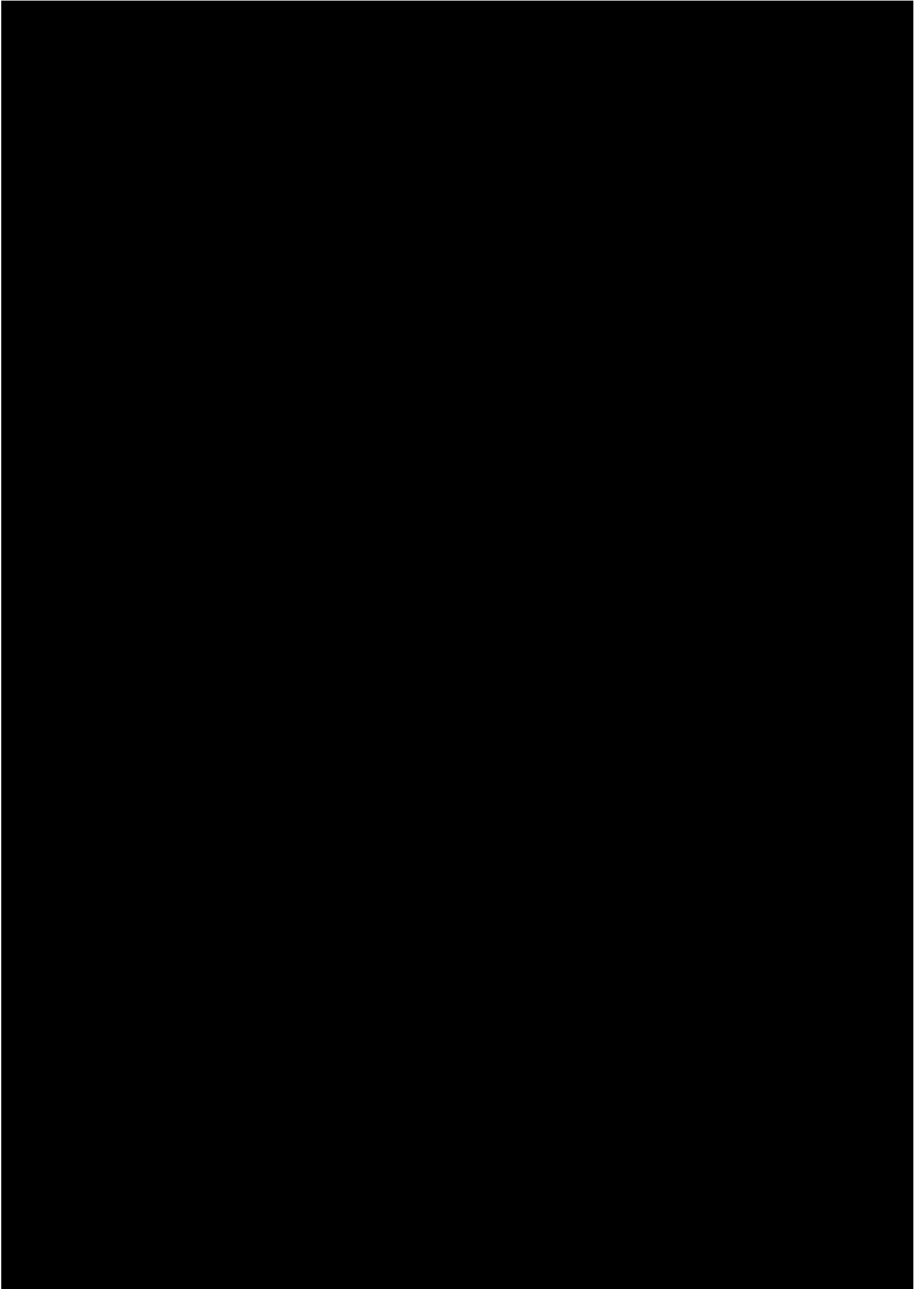


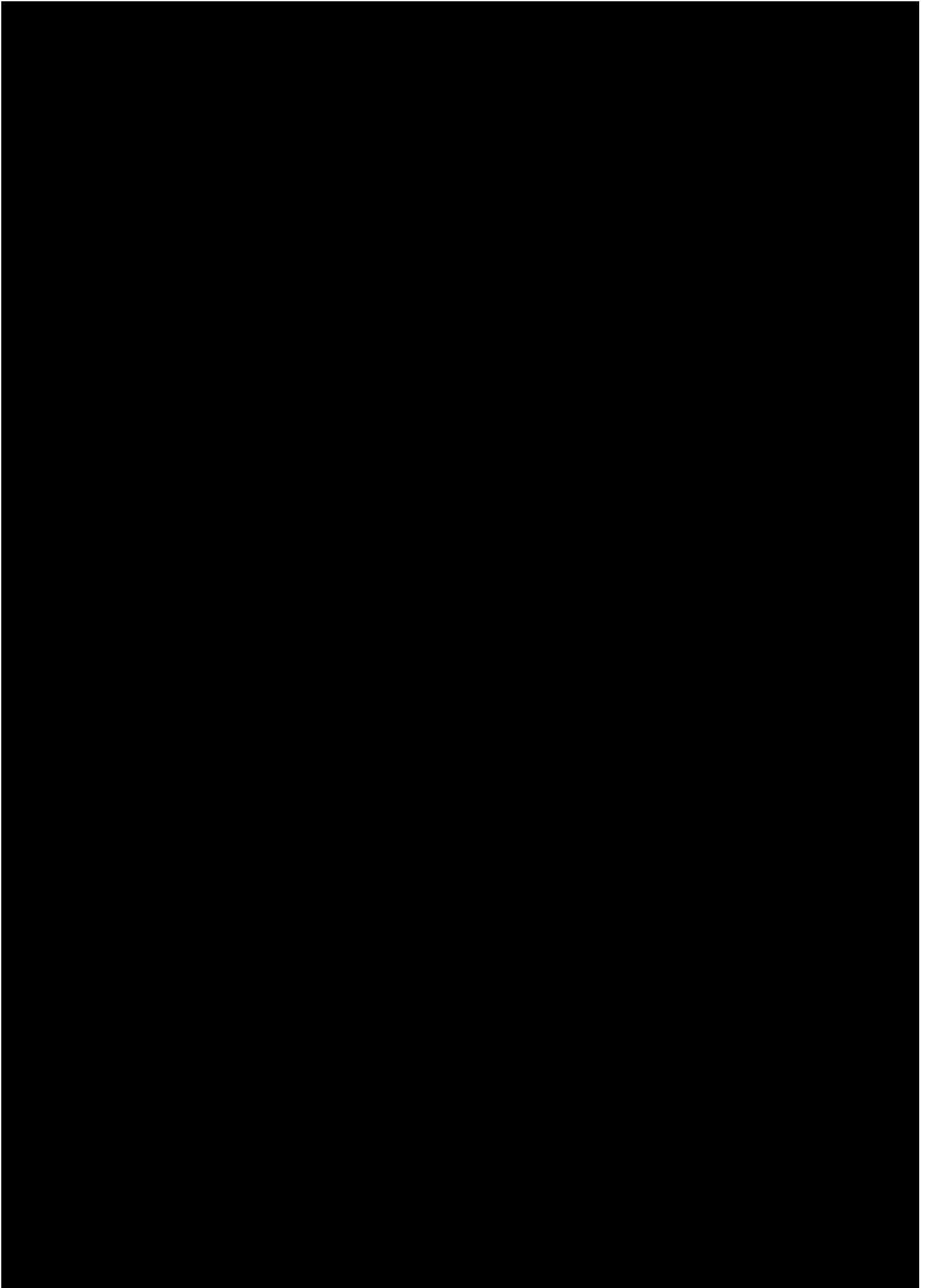


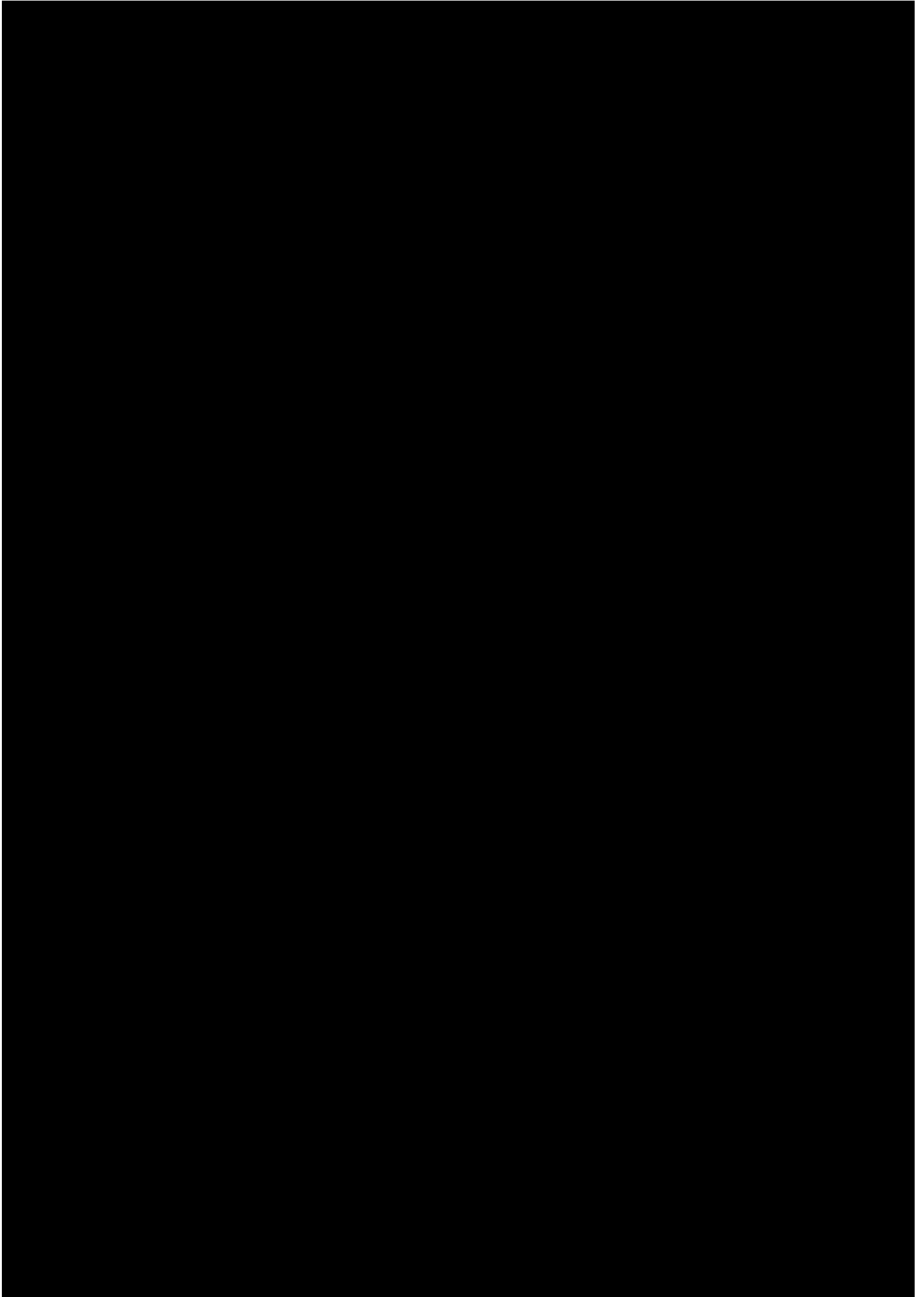


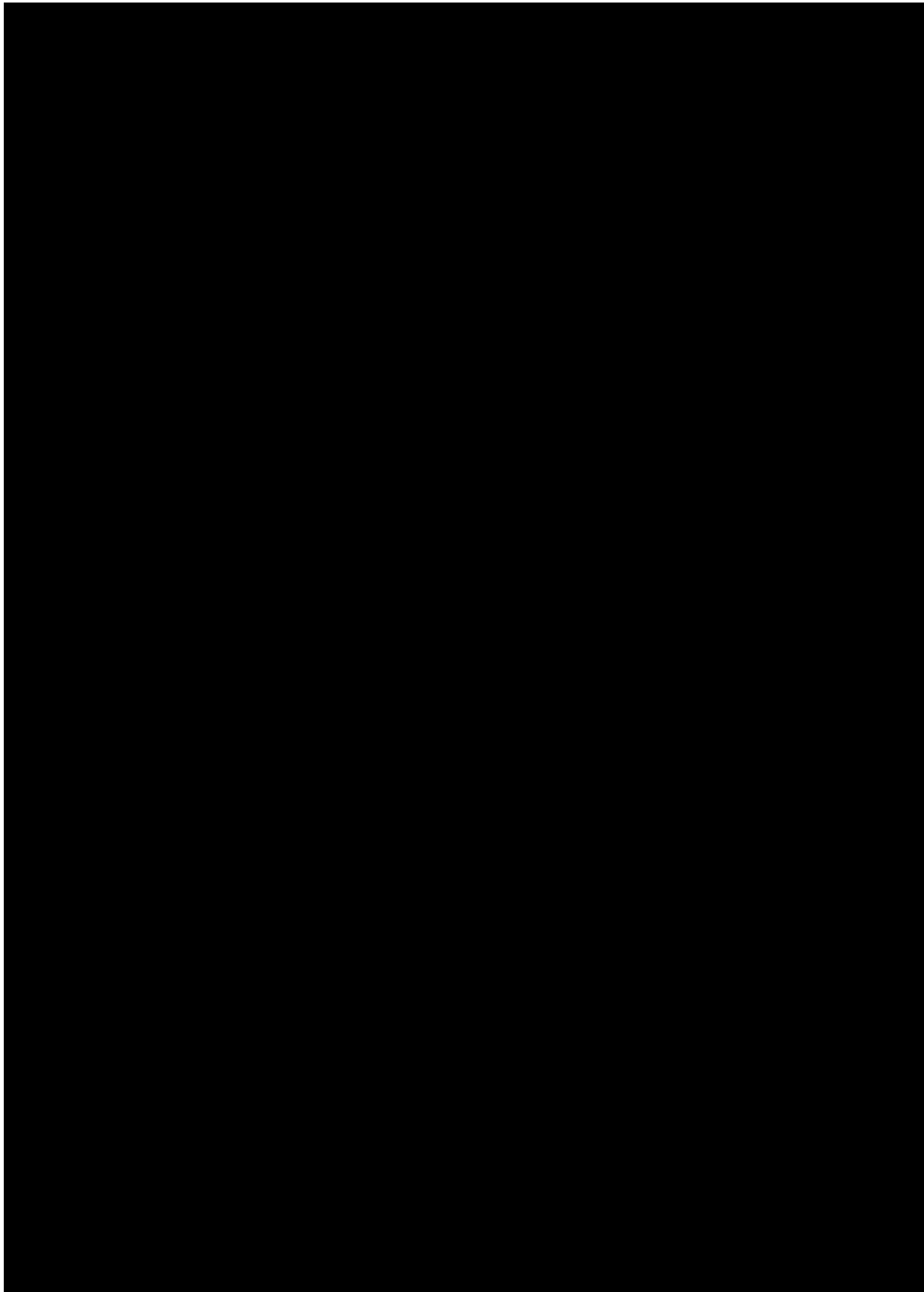


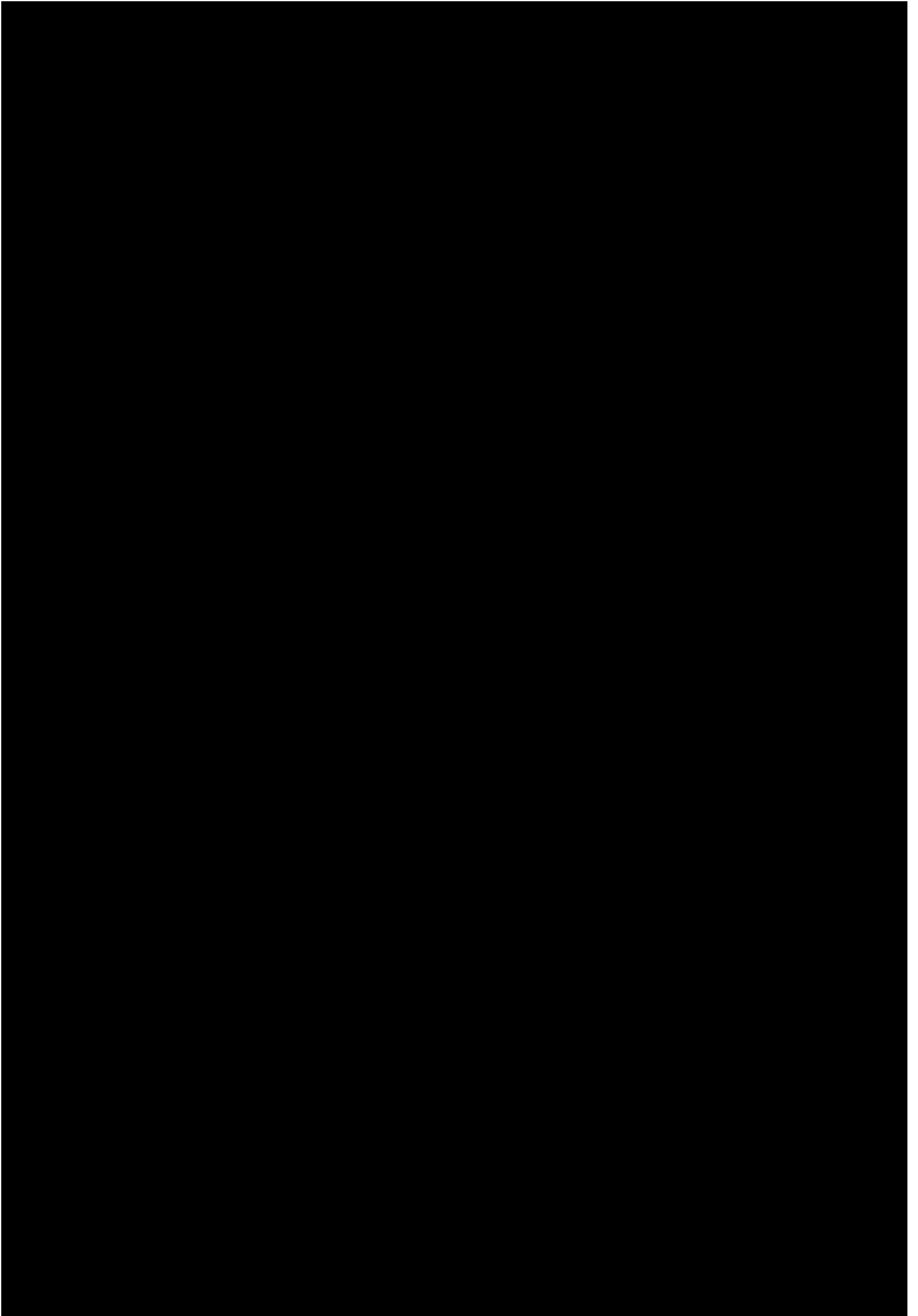


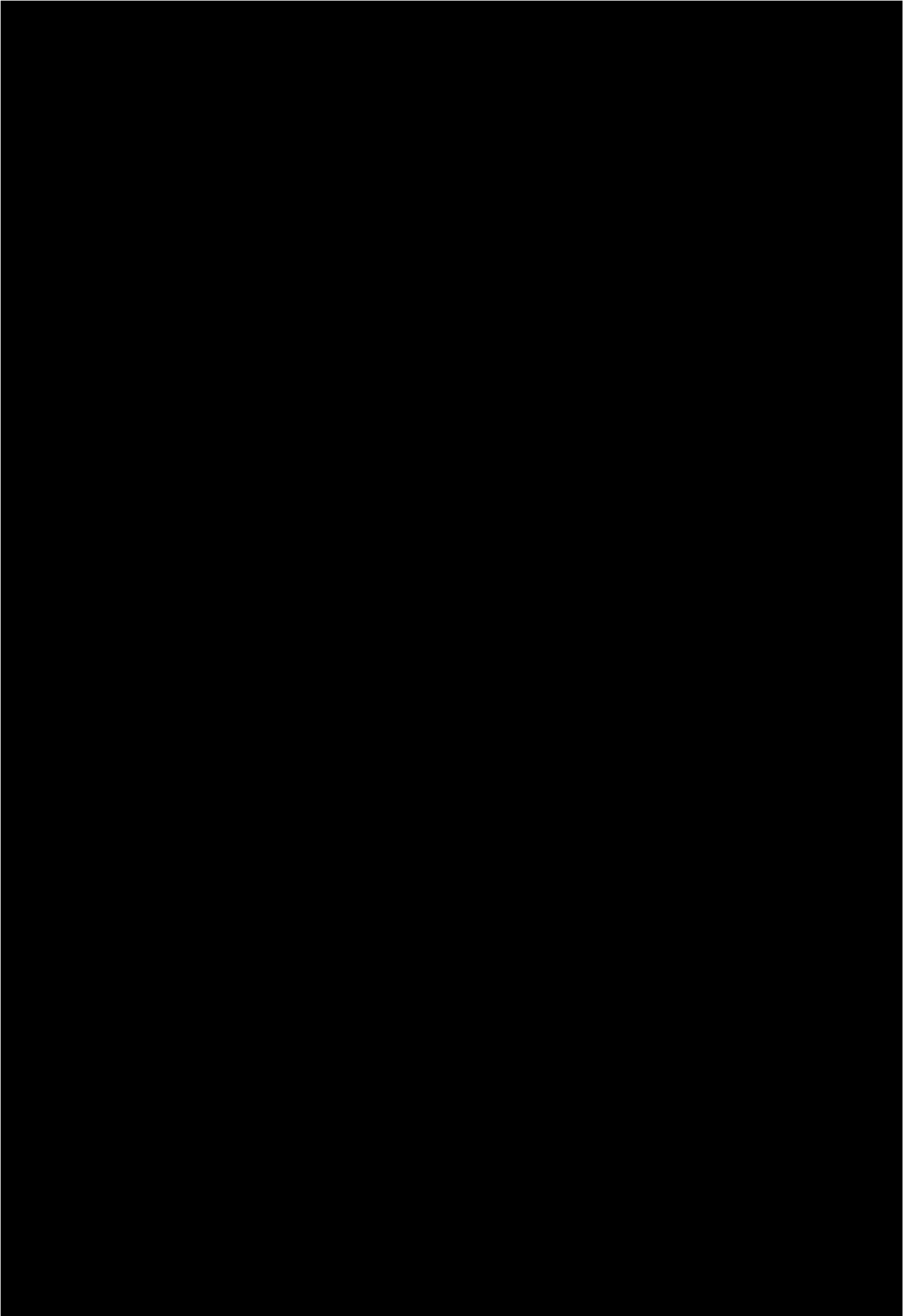




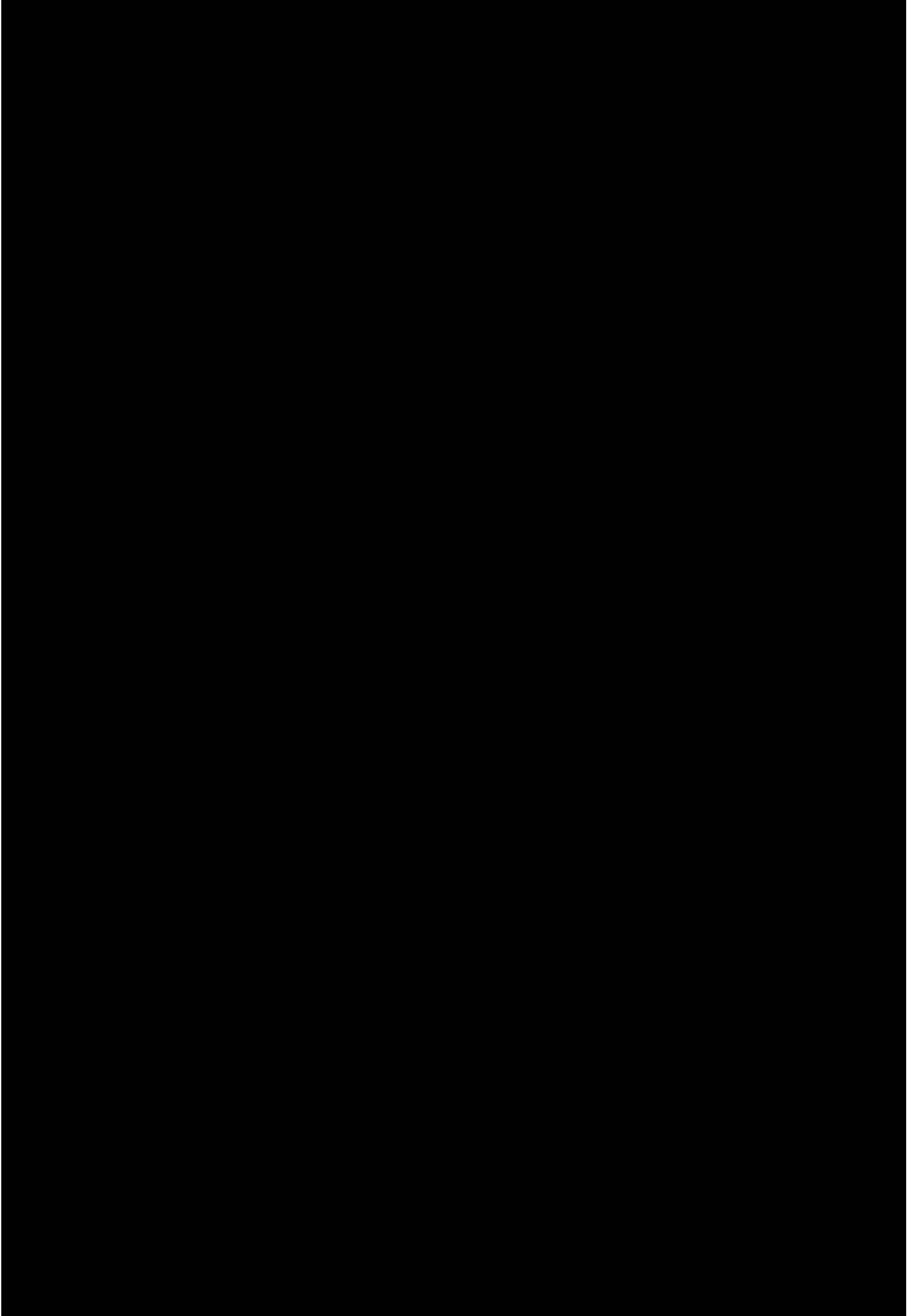


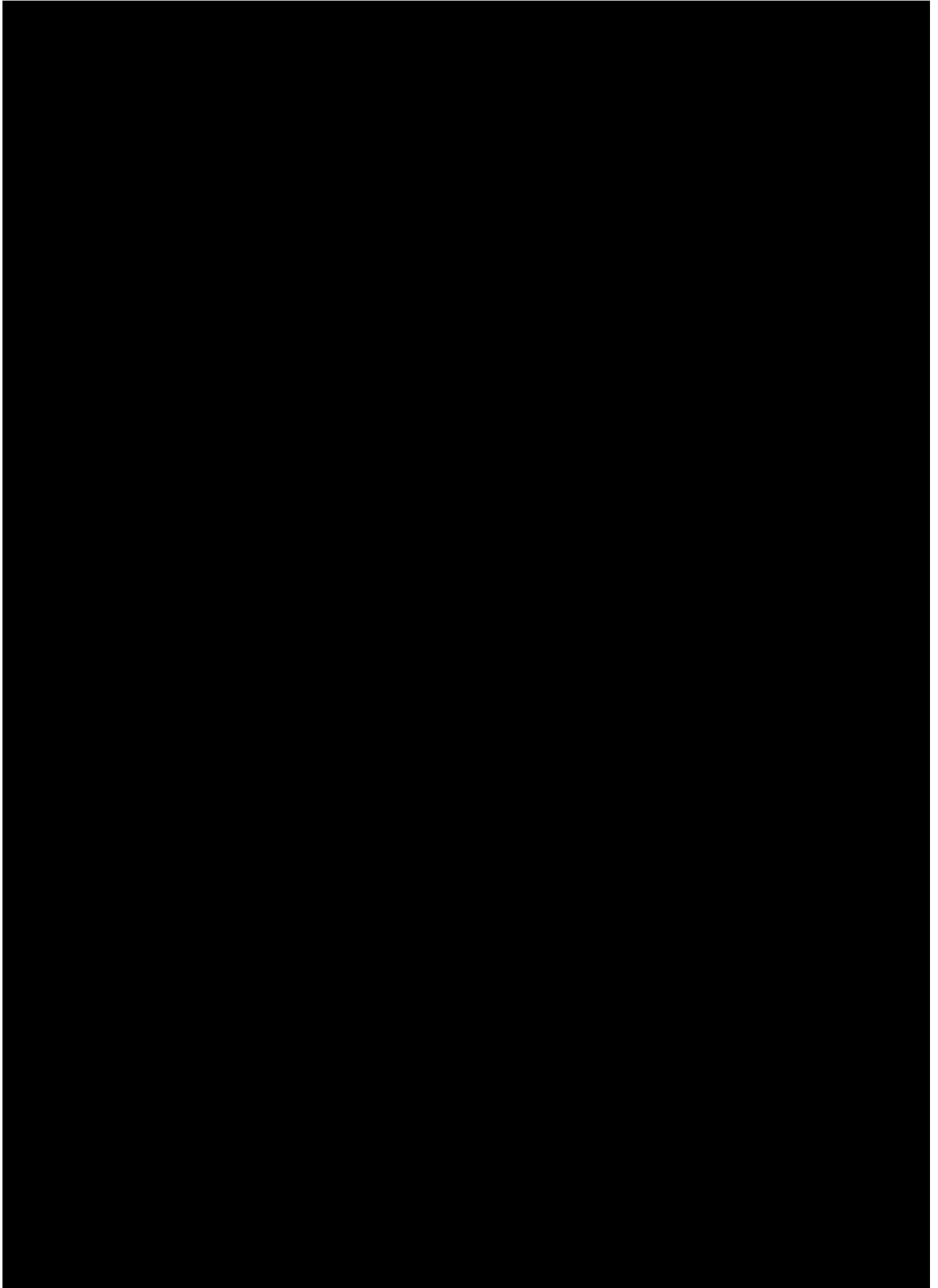












# ATTACHMENT 72



# **CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2016**

Prepared in accordance with international standards





























































































































































# ATTACHMENT 73



*EDF Energies Nouvelles S.A.*  
**Statutory auditor's report on the consolidated  
financial statements**

For the year ended 31 December 2017  
EDF Energies Nouvelles S.A.  
Coeur Défense - 100, Esplanade du Général de Gaulle  
92932 Paris La Défense Cedex  
*This report contains 5 pages*  
Reference : CP-xxx











































































































































































# ATTACHMENT 74





***EDF Renewable Energy Inc. and Subsidiaries***

**CONSOLIDATED FINANCIAL STATEMENTS**

(UNAUDITED )

Prepared on the Basis of International Financial Reporting Standards (IFRS)

**December 31, 2015**

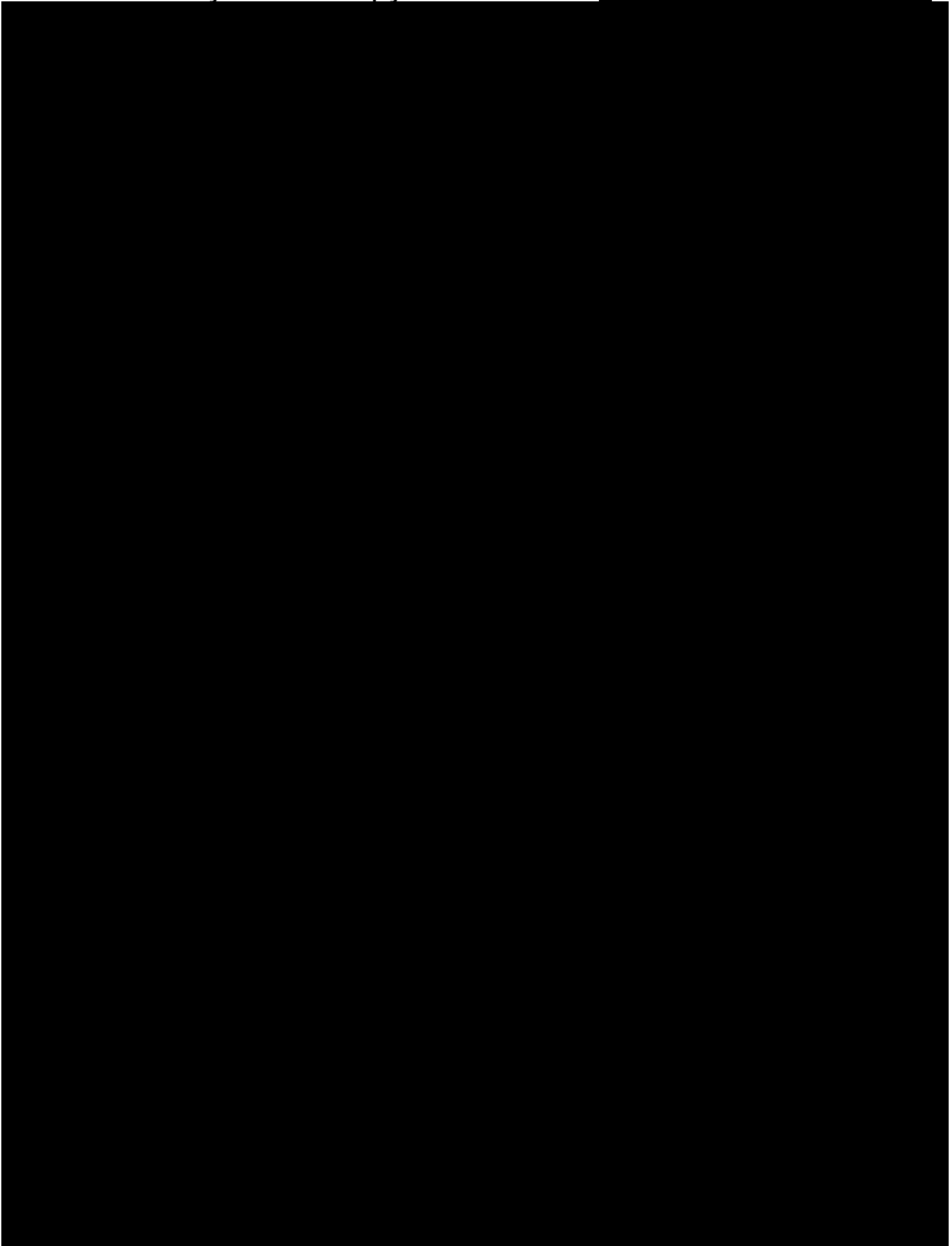
Amounts are in kUSD

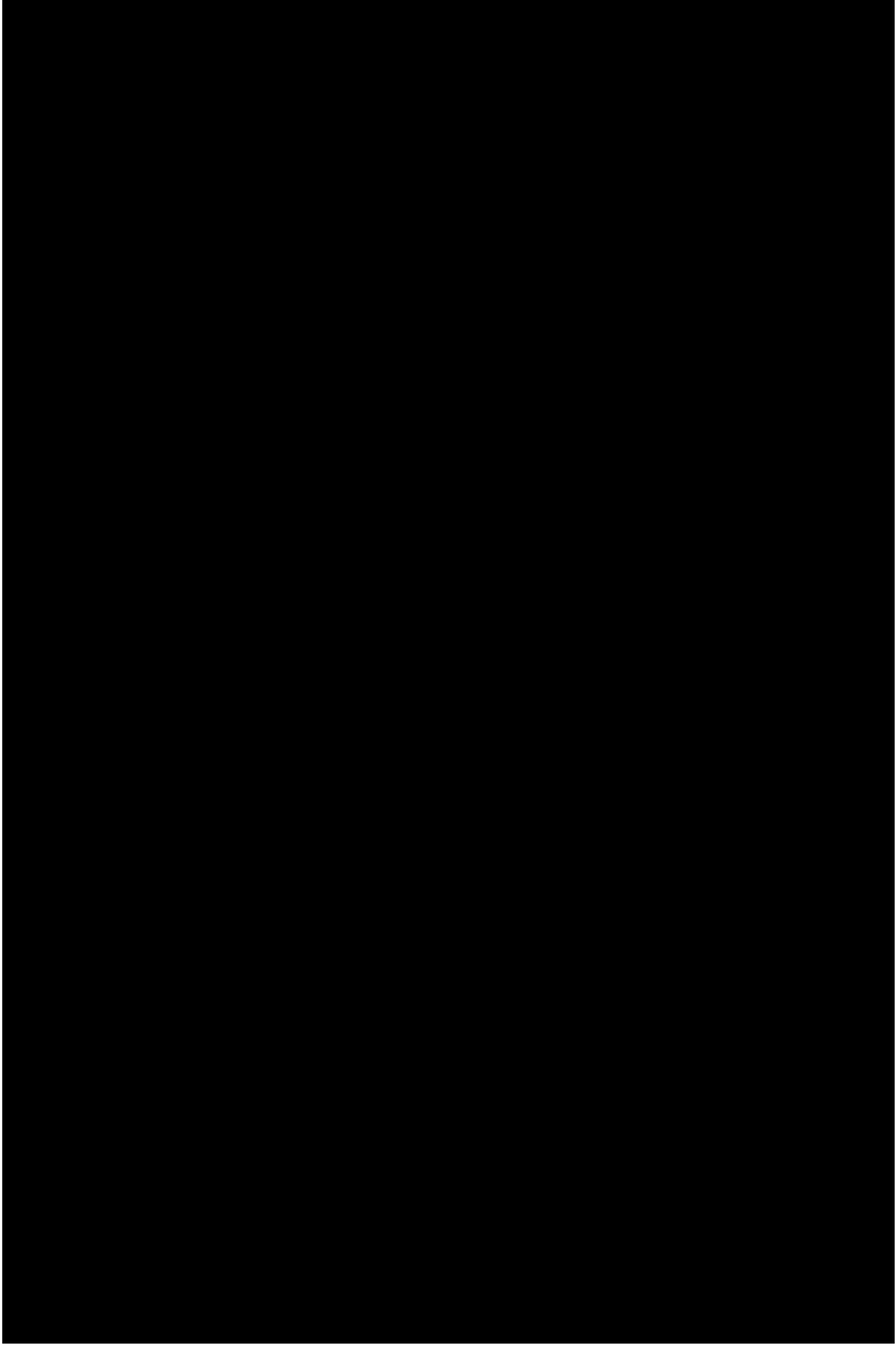
***CONTENTS***

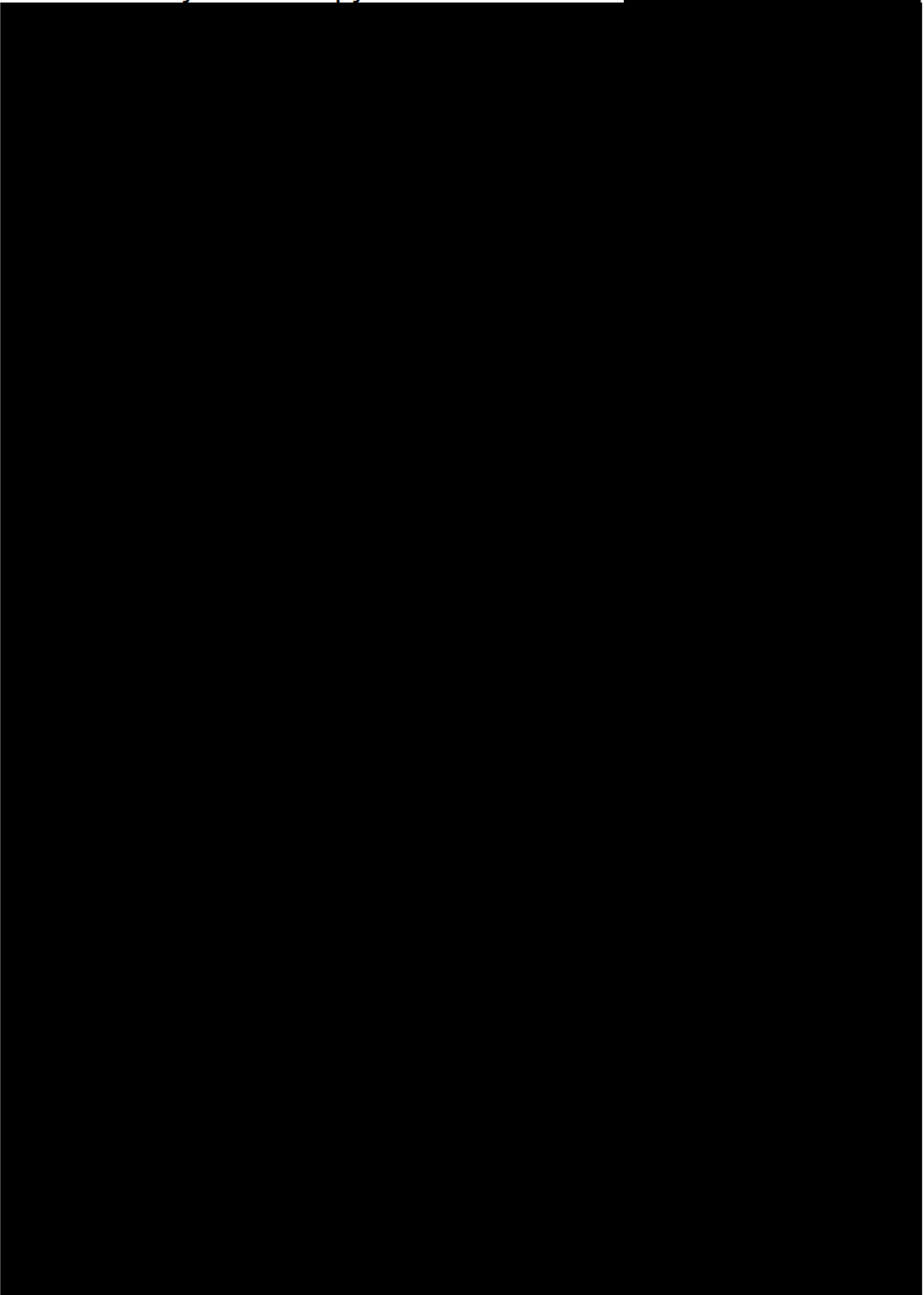
P&L

Balance Sheet

Cash Flow Statement







# ATTACHMENT 75



# ***EDF Renewable Energy Inc. and Subsidiaries***

## **SELECTED FINANCIAL INFORMATION**

(UNAUDITED)

Prepared on the basis of International Financial Reporting Standards (IFRS)

**December 31, 2016**

Amounts are in kUSD

### ***CONTENTS***

Statement of Financial Position and notes

Statement of Profit or Loss and notes

Statement of Cash Flows









# ATTACHMENT 76

# ***EDF Renewable Energy Inc. and Subsidiaries***

## SELECTED CONSOLIDATED FINANCIAL INFORMATION

December 31, 2017 and 2016

(UNAUDITED)

Prepared on the basis of International Financial Reporting Standards (IFRS) as adopted by the European Union as of and for the year ended December 31, 2017.

Amounts are in kUSD







# ATTACHMENT 77



# ANNUAL REPORT

Royal Dutch Shell plc  
Annual Report and Form 20-F  
for the year ended December 31, 2015





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The cover shows some of the ways that Shell helps to meet the world's diverse energy needs – from supplying gas for cooking, heating, and generating electricity for homes and businesses, to liquefied natural gas (LNG) to fuel trucks and ships. Pearl, the world's largest gas-to-liquids (GTL) plant, makes lubricants, fuels and products for plastics. Prelude, the world's largest floating LNG facility, will produce LNG off the coast of Australia.

Preliminary Public Copy

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 20-F

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2015

Commission file number 001-32575

Royal Dutch Shell plc

(Exact name of registrant as specified in its charter)

England and Wales

(Jurisdiction of incorporation or organisation)

Carel van Bylandtlaan 30, 2596 HR, The Hague, The Netherlands

Tel. no: 011 31 70 377 9111

royaldutchshell.shareholders@shell.com

(Address of principal executive offices)

Securities registered pursuant to Section 12(b) of the Act

Title of Each Class

Name of Each Exchange on Which Registered

Table with 2 columns: Title of Each Class and Name of Each Exchange on Which Registered. Lists various classes of securities and their registration on the New York Stock Exchange.

Securities registered pursuant to Section 12(g) of the Act: none

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: none

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

Outstanding as of December 31, 2015:

3,965,989,512 A ordinary shares with a nominal value of €0.07 each.
2,431,531,014 B ordinary shares with a nominal value of €0.07 each.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

[X] Yes [ ] No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

[ ] Yes [X] No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

[X] Yes [ ] No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

[X] Yes [ ] No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer.

See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer [X] Accelerated filer [ ] Non-accelerated filer [ ]

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

International Financial Reporting Standards as issued by the International Accounting Standards Board.

[ ] U.S. GAAP [ ]

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

[X] Other [ ]

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Item 17 [ ] Item 18 [ ]

[ ] Yes [X] No

Copies of notices and communications from the Securities and Exchange Commission should be sent to:

Royal Dutch Shell plc
Carel van Bylandtlaan 30
2596 HR, The Hague, The Netherlands
Attn: Michiel Brandjes

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## TERMS AND ABBREVIATIONS

### CURRENCIES

\$	US dollar
€	euro
£	sterling

### UNITS OF MEASUREMENT

acre	approximately 0.004 square kilometres
b(/d)	barrels (per day)
boe(/d)	barrels of oil equivalent (per day); natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel
kboe(/d)	thousand barrels of oil equivalent (per day); natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel
MMBtu	million British thermal units
mtpa	million tonnes per annum
per day	volumes are converted into a daily basis using a calendar year
scf(/d)	standard cubic feet (per day)

### PRODUCTS

GTL	gas to liquids
LNG	liquefied natural gas
LPG	liquefied petroleum gas
NGL	natural gas liquids

### MISCELLANEOUS

ADS	American Depositary Share
AGM	Annual General Meeting
API	American Petroleum Institute
CCS	carbon capture and storage
CCS earnings	earnings on a current cost of supplies basis
CO <sub>2</sub>	carbon dioxide
DBP	Deferred Bonus Plan
EMTN	Euro medium-term note
EPS	earnings per share
GAAP	generally accepted accounting principles
GHG	greenhouse gas
HSSE	health, safety, security and environment
IAS	International Accounting Standard
IEA	International Energy Agency
IFRS	International Financial Reporting Standard(s)
IPIECA	the global oil and gas industry association for environmental and social issues
LTIP	Long-term Incentive Plan
IOGP	International Association of Oil & Gas Producers
OML	oil mining lease
OPEC	Organization of the Petroleum Exporting Countries
PSC	production-sharing contract
PSP	Performance Share Plan
REMCO	Remuneration Committee
SEC	US Securities and Exchange Commission
TRCF	total recordable case frequency
TSR	total shareholder return
WTI	West Texas Intermediate

## ABOUT THIS REPORT

The Royal Dutch Shell plc Annual Report and Form 20-F (this Report) serves as the Annual Report and Accounts in accordance with UK requirements and as the Annual Report on Form 20-F as filed with the US Securities and Exchange Commission (SEC) for the year ended December 31, 2015, for Royal Dutch Shell plc (the Company) and its subsidiaries (collectively referred to as Shell). This Report presents the Consolidated Financial Statements of Shell (pages 115-152), the Parent Company Financial Statements of Shell (pages 173-181) and the Financial Statements of the Royal Dutch Shell Dividend Access Trust (pages 173-181). Cross references to Form 20-F are set out on pages 02-03 of this Report.

Information in this Report in respect of Shell's performance in 2015 and position at December 31, 2015, excludes the activities of BG Group plc, which was acquired on February 15, 2016.

Financial reporting terms used in this Report are in accordance with International Financial Reporting Standards (IFRS). The Consolidated Financial Statements comprise the financial statements of the Company and its subsidiaries. "Subsidiaries" and "Shell subsidiaries" refer to those entities over which the Company has control, either directly or indirectly. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as "joint ventures" and "joint operations" respectively, and entities over which Shell has significant influence but neither control nor joint control are referred to as "associates". "Joint ventures" and "joint operations" are collectively referred to as "joint arrangements".

In addition to the term "Shell", in this Report "we", "us" and "our" are also used to refer to the Company and its subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. The term "Shell interest" is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in an entity or unincorporated joint arrangement, after exclusion of all third-party interests. The companies in which Royal Dutch Shell plc has a direct or indirect interest are separate entities.

Except as otherwise specified, the figures shown in the tables in this Report are in respect of subsidiaries only, without deduction of any non-controlling interest. However, the term "Shell share" is used for convenience to refer to the volumes of hydrocarbons that are produced, processed or sold through subsidiaries, joint ventures and associates. All of a subsidiary's production, processing or sales volumes (including the share of joint operations) are included in the Shell share, even if Shell owns less than 100% of the subsidiary. In the case of joint ventures and associates, however, Shell-share figures are limited only to Shell's entitlement. In all cases, royalty payments in kind are deducted from the Shell share.

The financial statements contained in this Report have been prepared in accordance with the provisions of the Companies Act 2006 and with IFRS as adopted by the European Union. As applied to the financial statements, there are no material differences from IFRS as issued by the International Accounting Standards Board (IASB); therefore, the financial statements have been prepared in accordance with IFRS as issued by the IASB. IFRS as defined above includes interpretations issued by the IFRS Interpretations Committee.

Except as otherwise noted, the figures shown in this Report are stated in US dollars. As used herein all references to "dollars" or "\$" are to the US currency.

This Report contains forward-looking statements (within the meaning of the US Private Securities Litigation Reform Act of 1995) concerning the financial condition, results of operations and businesses of Shell. All statements other

than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "anticipate", "believe", "could", "estimate", "expect", "goals", "intend", "may", "objectives", "outlook", "plan", "probably", "project", "risks", "schedule", "seek", "should", "target", "will" and similar terms and phrases. There are a number of factors that could affect the future operations of Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this Report, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell's products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, fiscal and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects and delays in the reimbursement for shared costs; and (m) changes in trading conditions. Also see "Risk factors" on pages 08-12 for additional risks and further discussion. All forward-looking statements contained in this Report are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Each forward-looking statement speaks only as of the date of this Report. Neither the Company nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this Report.

This Report contains references to Shell's website and to the Shell Sustainability Report. These references are for the readers' convenience only. Shell is not incorporating by reference any information posted on [www.shell.com](http://www.shell.com) or in the Shell Sustainability Report.

### DOCUMENTS ON DISPLAY

Documents concerning the Company, or its predecessors for reporting purposes, which are referred to in this Report have been filed with the SEC and may be examined and copied at the public reference facility maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, DC 20549, USA. For further information on the operation of the public reference room and the copy charges, call the SEC at 1-800-SEC-0330. All of the SEC filings made electronically by Shell are available to the public on the SEC website at [www.sec.gov](http://www.sec.gov) (commission file number 001-32575). This Report is also available, free of charge, at [www.shell.com/annualreport](http://www.shell.com/annualreport) or at the offices of Shell in The Hague, the Netherlands and London, United Kingdom. Copies of this Report also may be obtained, free of charge, by mail.

## STRATEGIC REPORT

### CHAIRMAN'S MESSAGE

There is no doubt that 2015 was a turbulent year, with low oil and gas prices having a far-reaching impact on the energy industry.

We have taken the opportunity to strengthen our business by reducing our operating expenses and capital investment, while continuing to divest assets that are not central to our long-term strategy.

Our acquisition of BG Group plc (BG) – one of the largest takeovers in UK corporate history – in February 2016 will help sharpen our focus on liquefied natural gas (LNG) and deep-water exploration and production. Combined, we are stronger, more competitive and better-equipped financially to continue to play an important role in meeting global energy demand for decades to come. It underscores our role as one of the largest independent oil and gas producers. Increased cash flows from our newly acquired assets will also help to support dividend payments and future investment.

A major challenge facing society is how to meet the needs of a growing global population, while limiting the amount of carbon dioxide (CO<sub>2</sub>) in our atmosphere. This requires a mix of urgent action, realism and long-term planning by governments and industry alike. It will also require unprecedented co-operation, investment and innovation.

It was encouraging to see governments reach a global climate agreement in Paris in December. The agreement should now encourage countries to develop policies that balance environmental concerns with enabling a decent quality of life for more people.

Delivering the energy essential for economic development and the wellbeing of billions of people will require huge and sustained investment. Limiting the amount of CO<sub>2</sub> in our atmosphere also requires major investments in advanced technologies, such as carbon capture and storage (CCS). Oil and gas, which make up over 50% of global energy supplies today, will need to continue to provide a large part of the world's energy for decades to come.

The International Energy Agency estimates that over \$25 trillion of investment will be needed in oil and gas supply alone from 2015 to 2040. So the long-term investment case for oil and gas remains strong, despite the fall in oil prices over the last 18 months. The concern is that prices seen in late 2015 and early 2016 may be too low to spur investment in projects that are needed to ensure long-term supplies. Without sufficient investment, the risk of demand exceeding supply will increase.

We know that understanding the world's future energy needs will help us improve our competitiveness.

We have evolved over the last few decades from a company focused almost entirely on oil to one of the world's leading suppliers of gas, the cleanest-burning hydrocarbon. Gas is already playing a role in tackling carbon emissions. Switching from coal to gas for power generation is one way to reduce emissions of CO<sub>2</sub>, while increasing energy supply to a growing global population, including more than 1 billion people who lack access to electricity today.

We are working on multiple fronts to play our part in the energy transition. For example, we are now one of the world's largest suppliers of low-carbon biofuel through our Raizen joint venture in Brazil, which produces ethanol from sugar cane. We are in the early stages of developing biofuels that could further reduce the environmental impact of the transport sector. Our high-performance lubricants can already contribute to improved energy efficiency for motorists and we are working with vehicle manufacturers to improve them further. We are also increasingly offering LNG as a transport fuel and are exploring the potential of hydrogen.

CCS is an especially important technology for reducing CO<sub>2</sub> emissions from a range of industries. Quest, which we opened in 2015, captures and safely stores around one-third of the annual CO<sub>2</sub> emissions from an oil sands bitumen processing facility in Canada. We are sharing information on its design and processes so that it can serve as a blueprint for others. Strong government support is needed to encourage many more businesses around the world to invest in CCS.

The Paris climate agreement provided a promising platform for society to develop a solution to climate change. Governments now need to implement policies that will stimulate investment in all technologies that can contribute to a lower-carbon future.

Despite some of the toughest operating conditions that our industry has seen, we are in a stronger position to weather current market volatility and play our part in the energy transition.

Let me take this opportunity to thank our shareholders for supporting the BG acquisition at a very challenging time for the industry. Your Board of Directors is committed to delivering the value from this important investment.

**Chad Holliday**  
Chairman

## CHIEF EXECUTIVE OFFICER'S REVIEW

---

It was a highly challenging year for the industry, but our integrated business and improved operational performance helped soften the impact of lower energy prices.

In these difficult economic times, our acquisition of BG Group plc (BG), which came into effect on February 15, 2016, will make us stronger.

The global portfolio we acquired is a good complement to our own. The combination will help us concentrate on more profitable pillars of our business, particularly deep water and liquefied natural gas (LNG). We are entering an exciting new era for Shell.

We continued our focus on safety. However, sadly seven people working for Shell in 2015 lost their lives. A fire at our Bukom refinery in Singapore also led to six workers being injured. Such tragic events underscore the importance of unwavering vigilance.

### RESULTS

Earnings on a current cost of supplies basis attributable to Royal Dutch Shell plc shareholders were \$3.8 billion in 2015, compared with \$19.0 billion in 2014.

Lower oil prices and charges related to our exit from Alaska and decision to stop work on the Carmon Creek project in Canada contributed to our Upstream business making a loss in 2015. Strong performances by our Integrated Gas and Downstream businesses helped offset some of the impact of low energy prices. This is a reminder of the importance of remaining an integrated energy company.

Responding to the changing industry landscape, we reduced our operating expenses and capital investment by a combined \$12.5 billion in 2015 compared with 2014. We distributed \$12.0 billion to shareholders in dividends in 2015, including those taken as shares under our Scrip Dividend Programme.

Divestments amounted to \$5.5 billion in 2015, and to more than \$20 billion for 2014-2015. This exceeded our target of \$15 billion for the period. The asset sales are part of our ongoing strategy of reducing costs and concentrating on markets where we can be most competitive.

Our oil and gas production averaged around 3 million barrels of oil equivalent per day in 2015. We started production at a major project off the coast of Nigeria which, combined with increased output from existing projects, helped partially offset the impact on production from naturally declining fields and divestments.

### RENEWED FOCUS

We continue to lower our costs and take tough decisions on projects that, in the current oil-price environment, may be uncompetitive or unaffordable. For example, we stopped construction of the Carmon Creek in-situ oil project in 2015 and exited the development of the Bab sour gas project in the United Arab Emirates in early 2016. We are also postponing final investment decisions on the Bonga South West project off the coast of Nigeria and the LNG Canada facility.

Despite the current market uncertainty, it is important that we continue to invest wisely to achieve the most competitive portfolio we can. For example, we have decided to expand capacity at our Pernis refinery in the Netherlands and embark on a major expansion at our Geismar plant in the USA, reflecting the strong growth potential in chemicals for Shell.

In 2015, we announced the final investment decision to go ahead with the Appomattox deep-water project in the Gulf of Mexico.

We are prepared to reduce investments further, if evolving market conditions call for that. But we want to protect our growth prospects in a world where long-term demand for energy will continue to rise.

Greater energy efficiency and cleaner technologies are needed to help keep pace with energy demand growth, while limiting carbon dioxide (CO<sub>2</sub>) emissions in the fight against climate change.

Meeting the energy needs of a growing world population means oil and gas are expected to continue to play vital roles in global energy supply into the latter half of the century.

Carbon capture and storage (CCS) systems that safely trap CO<sub>2</sub> deep underground can play an important part in the energy future. Shell started its first major CCS facility, Quest, in Canada in 2015. Government-led carbon pricing mechanisms can provide impartial and long-term incentives to invest in effective lower-carbon technologies, such as CCS.

Natural gas, the cleanest-burning hydrocarbon, can play a role in limiting emissions if more of it is used instead of coal for power generation. Gas is also making a growing contribution as a transport fuel.

As a whole, the oil and gas industry is going through a difficult period. However, our financial fortitude before the downturn and our sound strategy are helping us through the rough weather.

The acquisition of BG reinforces and reinvigorates us, and I am confident that our combined strength greatly improves our ability to thrive in a challenging business environment.

**Ben van Beurden**  
Chief Executive Officer



## RISK FACTORS

The risks discussed below could have a material adverse effect separately, or in combination, on our operational performance, earnings, cash flows and financial condition. Accordingly, investors should carefully consider these risks.

Measures that we use to manage or mitigate our various risks are set out in the relevant sections of this Report. The Board's responsibility for identifying, evaluating and managing our significant risks is discussed in "Corporate governance" on page 74.

### **We are exposed to fluctuating prices of crude oil, natural gas, oil products and chemicals.**

The prices of crude oil, natural gas, oil products and chemicals are affected by supply and demand, both globally and regionally. Moreover, prices for oil and gas can move independently of each other. Factors that influence supply and demand include operational issues, natural disasters, weather, political instability, conflicts, economic conditions and actions by major oil and gas producing countries. Price fluctuations could have a material adverse effect on our business, including on our cash flows and earnings. For example, in a low oil and gas price environment, we would generate less revenue from our Upstream production, and, as a result, some long-term projects would become less profitable, or could incur losses. In this regard, if oil and gas prices remain at the levels observed in early 2016, there is the potential for our Upstream and Integrated Gas segments to incur a loss. Additionally, low oil and gas prices have resulted, and could continue to result, in the debooking of proved oil or gas reserves, if they become uneconomic in this type of price environment. Prolonged periods of low oil and gas prices, or rising costs, have resulted, and could continue to result, in projects being delayed or cancelled. In addition, assets have been impaired in the past, and there could be impairments in the future. Low oil and gas prices could also affect our ability to maintain our long-term capital investment programme and dividend payments. In a high oil and gas price environment, we could experience sharp increases in costs, and, under some production-sharing contracts, our entitlement to proved reserves would be reduced. Higher prices could also reduce demand for our products, which could result in lower profitability, particularly in our Downstream business. See "Market overview" on page 16.

### **Our ability to deliver competitive returns and pursue commercial opportunities depends in part on the robustness and, ultimately, the accuracy of our price assumptions.**

We use oil and gas price assumptions, which we review on a periodic basis, to evaluate project decisions and commercial opportunities. While we believe our current long-term price assumptions are prudent, if our assumptions prove to be incorrect, it could have a material adverse effect on our earnings, cash flows and financial condition. See "Market overview" on page 17.

### **Our ability to achieve strategic objectives depends on how we react to competitive forces.**

We face competition in each of our businesses. We seek to differentiate our products, however many of them are competing in commodity-type markets. Accordingly, failure to manage our costs as well as our operational performance could result in a material adverse effect on our earnings, cash flows and financial condition.

Increasingly, we compete with state-owned oil and gas entities, particularly in seeking access to oil and gas resources. These entities control vastly greater quantities of oil and gas resources than the major independent oil and gas companies. State-owned entities have access to significant resources and could be motivated by political or other factors in their business decisions, which could harm our competitive position or reduce our access to desirable projects. See "Strategy and outlook" on page 15.

### **The acquisition of BG Group plc exposes us to integration risks and other challenges.**

Our future prospects will, in part, be dependent upon our ability to integrate BG Group plc (BG) successfully and completely, without disruption to our existing business. Value delivery from a number of key jurisdictions, including BG's assets in Australia and Brazil, as well as the integration of its LNG shipping and marketing business and trading activities and the successful execution of the substantial disposals that we expect to make following the acquisition are, in particular, critical to overall success. The BG acquisition was premised on a number of factors, including expected benefits from synergies, but also our expectation of future oil and gas prices. If these synergies do not materialise or oil and gas prices remain low for a prolonged period, this could result in future impairments and further pressure on our financial framework. We will face challenges when integrating the businesses, including standardisation of ways of working, policies and procedures, processes and systems. No assurance can be given that the integration process will deliver all the expected benefits within the assumed time frame or that the expected disposals will be made as planned. Unanticipated events, liabilities, tax impacts or unknown pre-existing issues could arise and result in the costs of integration being higher and the realisable benefits being lower than expected, with a material adverse effect on our operational performance, earnings, cash flows and financial condition. See "Strategy and outlook" on page 15.

### **Following the acquisition of BG, we seek to execute divestments in the pursuit of our strategy. We may not be able to successfully divest these assets in line with our strategy.**

We may not be able to successfully divest assets at acceptable prices or within the timeline envisaged in view of market conditions or credit risk, resulting in increased pressure on our cash position. We may be held liable for past acts, failures to act or liabilities that are different from those foreseen. We may also face liabilities if a purchaser fails to honour all of its commitments. See "Strategy and outlook" on page 15.

### **Our future hydrocarbon production depends on the delivery of large and complex projects, as well as on our ability to replace proved oil and gas reserves.**

We face numerous challenges in developing capital projects, especially those which are large and complex. Challenges include uncertain geology, frontier conditions, the existence and availability of necessary technology and engineering resources, the availability of skilled labour, the existence of transportation infrastructure, project delays, the expiration of licences and potential cost overruns, as well as technical, fiscal, regulatory, political and other conditions. These challenges are particularly relevant in certain developing and emerging-market countries, such as Iraq and Kazakhstan, in frontier areas and in deep-water fields, such as in Brazil. We may fail to assess or manage these and other risks properly. Such potential obstacles could impair our delivery of these projects, our ability to fulfil the value potential at the time of the project investment approval, and our ability to fulfil related contractual commitments. These could lead to impairments and could have a material adverse effect on our operational performance, earnings, cash flows and financial condition.

Future oil and gas production will depend on our access to new proved reserves through exploration, negotiations with governments and other owners of proved reserves and acquisitions, as well as on developing and applying new technologies and recovery processes to existing fields and mines. Failure to replace proved reserves could result in lower future production, earnings and cash flows.

See "Business overview" on page 14.

OIL AND GAS PRODUCTION AVAILABLE FOR SALE	MILLION BOE [A]		
	2015	2014	2013
Shell subsidiaries	880	895	850
Shell share of joint ventures and associates	198	229	318
<b>Total</b>	<b>1,078</b>	<b>1,124</b>	<b>1,168</b>

[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

PROVED DEVELOPED AND UNDEVELOPED OIL AND GAS RESERVES [A][B] (AT DECEMBER 31)	MILLION BOE [C]		
	2015	2014	2013
Shell subsidiaries	9,117	10,181	10,835
Shell share of joint ventures and associates	2,630	2,900	3,109
<b>Total</b>	<b>11,747</b>	<b>13,081</b>	<b>13,944</b>

[A] We manage our total proved reserves base without distinguishing between proved reserves from subsidiaries and those from joint ventures and associates.

[B] Includes proved reserves associated with future production that will be consumed in operations.

[C] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

The estimation of proved oil and gas reserves involves subjective judgements based on available information and the application of complex rules, so subsequent downward adjustments are possible.

The estimation of proved oil and gas reserves involves subjective judgements and determinations based on available geological, technical, contractual and economic information. Estimates could change because of new information from production or drilling activities, or changes in economic factors, including changes in the price of oil or gas and changes in the regulatory policies of host governments or other events. Estimates could also be altered by acquisitions and divestments, new discoveries, and extensions of existing fields and mines, as well as the application of improved recovery techniques. Published proved oil and gas reserves estimates could also be subject to correction due to errors in the application of published rules and changes in guidance. Downward adjustments could indicate lower future production volumes and could also lead to impairment of some assets. This could have a material adverse effect on our operational performance, earnings, cash flows and financial condition. See "Supplementary information – oil and gas (unaudited)" on page 153.

We operate in more than 70 countries that have differing degrees of political, legal and fiscal stability. This exposes us to a wide range of political developments that could result in changes to contractual terms, laws and regulations. In addition, we and our joint arrangements and associates face the risk of litigation and disputes worldwide.

Developments in politics, laws and regulations can and do affect our operations. Potential developments include: forced divestment of assets; expropriation of property; cancellation or forced renegotiation of contract rights; additional taxes including windfall taxes, restrictions on deductions and retroactive tax claims; trade controls; price controls; local content requirements; foreign exchange controls; changing environmental regulations; and disclosure requirements. A prolonged period of lower oil and gas prices could affect the financial, fiscal, legal, political and social stability of countries that rely significantly on oil and gas revenue. This could, in turn, have a material adverse effect on us.

From time to time, cultural and political factors play a role in unprecedented and unanticipated judicial outcomes that could adversely affect Shell. Non-compliance with policies and regulations could result in regulatory investigations, litigation and ultimately sanctions. Certain governments and regulatory bodies have, in the opinion of Shell, exceeded their constitutional authority by: attempting unilaterally to amend or cancel existing agreements or arrangements; failing to honour existing contractual commitments; and

seeking to adjudicate disputes between private litigants. Additionally, certain governments have adopted laws and regulations that could potentially force us to violate other countries' laws and regulations, therefore potentially subjecting us to both criminal and civil sanctions. Such developments and outcomes could have a material adverse effect on our operational performance, earnings, cash flows and financial condition.

See "Corporate governance" on page 74.

**Our operations expose us to social instability, civil unrest, terrorism, piracy, acts of war and risks of pandemic diseases that could have a material adverse effect on our business.**

As seen in recent years in Nigeria, North Africa and the Middle East, social and civil unrest, both in the countries in which we operate and elsewhere, can and do affect us. Such potential developments that could have a material adverse effect on us include: acts of political or economic terrorism; acts of maritime piracy; conflicts including war and civil unrest (including disruptions by non-governmental and political organisations); and local security concerns that threaten the safe operation of our facilities and transport of our products. Pandemic diseases, such as Ebola, can affect our operations directly and indirectly. If such risks materialise, they could result in injuries, loss of life, environmental harm and disruption to business activities. See "Environment and society" on page 59.

**A further erosion of the business and operating environment in Nigeria could have a material adverse effect on us.**

In our Nigerian operations, we face various risks and adverse conditions which could have a material adverse effect on our operational performance, earnings, cash flows and financial condition. These risks and conditions include: security issues surrounding the safety of our people, host communities and operations; sabotage and theft; our ability to enforce existing contractual rights; litigation; limited infrastructure; potential legislation that could increase our taxes or costs of operations; the effect of lower oil and gas prices on the government budget; and regional instability created by militant activities. In addition, the Nigerian government is contemplating new legislation to govern the petroleum industry which, if passed into law, could have a material adverse effect on our existing and future activities in that country. See "Upstream" on page 29.

**Rising climate change concerns have led and could lead to additional legal and/or regulatory measures which could result in project delays or cancellations, a decrease in demand for fossil fuels and additional compliance obligations, and therefore could adversely impact our costs and/or revenue.**

There is continued and increased attention to climate change from all sectors of society. This attention has led, and we expect it to continue to lead, to additional regulations designed to reduce greenhouse gas (GHG) emissions and potential demand for fossil fuels. Furthermore, we expect that a growing share of our GHG emissions will be subject to regulation, resulting in increased compliance costs and operational restrictions. If our GHG emissions rise alongside our ambitions to increase the scale of our business, our regulatory burden will increase proportionally.

We also expect that GHG regulation will focus more on suppressing demand for fossil fuels. This could result in lower revenue. In addition, we expect that GHG emissions from flaring will rise where no gas-gathering systems are in place. We intend to continue to work with our partners to find ways to capture the gas that is flared. However, governmental support is fundamental to ensure the success of individual initiatives. There is no assurance that we will be able to obtain government support.

If we are unable to find economically viable, as well as publicly acceptable, solutions that reduce our GHG emissions and/or GHG intensity for new and existing projects or products, we could experience additional costs or financial penalties, delayed or cancelled projects,

## RISK FACTORS CONTINUED

and/or reduced production and reduced demand for hydrocarbons, which could have a material adverse effect on our operational performance, earnings, cash flows and financial condition.

See "Environment and society" on pages 54-56.

**The nature of our operations exposes us, and the communities in which we work, to a wide range of health, safety, security and environment risks.**

The health, safety, security and environment (HSSE) risks to which we, and the communities in which we work, are potentially exposed cover a wide spectrum, given the geographic range, operational diversity and technical complexity of our operations. These risks include the effects of natural disasters (including weather events), earth tremors, social unrest, personal health and safety lapses, and crime. If a major HSSE risk materialises, such as an explosion or hydrocarbon spill, this could result in injuries, loss of life, environmental harm, disruption of business activities, and loss or suspension of our licence to operate or ability to bid on mineral rights. Accordingly, this would have a material adverse effect on our operational performance, earnings, cash flows and financial condition.

Our operations are subject to extensive HSSE regulatory requirements that often change and are likely to become more stringent over time. Operators could be asked to adjust their future production plans, as the government of the Netherlands has done, affecting production and costs. We could incur significant additional costs in the future due to compliance with HSSE requirements or as a result of violations of, or liabilities under, laws and regulations, such as fines, penalties, clean-up costs and third-party claims. Therefore, HSSE risks, should they materialise, could have a material adverse effect on us.

See "Environment and society" on page 53.

**The operation of the Groningen asset in the Netherlands continues to expose communities to earth tremor risks.**

Production from the Groningen asset has resulted in earth tremors in the past and tremors are expected to continue. This has resulted in damage to buildings and complaints from local communities. The Dutch government, local authorities and the operator are implementing measures to address the concerns of the local communities. The government has ordered a cap on production and a further reduction of production is possible. If the government decides not to develop the full field as currently planned, it could have a material adverse effect on our earnings, cash flows, proved reserves and financial condition. See "Environment and society" on pages 58-59 and "Upstream" on page 27.

**Our future performance depends on the successful development and deployment of new technologies and new products.**

Technology and innovation are essential to our efforts to meet the world's energy demands in a competitive way. If we do not develop the right technology and products, do not have access to it or do not deploy these effectively, there could be a material adverse effect on the delivery of our strategy and our licence to operate. We operate in environments where advanced technologies are utilised. While we take measures to ensure that such technologies and products are safe for the environment and public health based on today's knowledge, there is always the possibility of unknown or unforeseeable technological failures or environmental and health effects that could harm our reputation and licence to operate or expose us to litigation or sanctions. We seek to benefit financially from developing and deploying advanced technology. The associated costs are sometimes underestimated or delays occur. Any of these occurrences could have a material adverse effect on our operational performance, earnings, cash flows and financial condition. See "Business overview" on page 14.

**We are exposed to treasury and trading risks, including liquidity risk, interest rate risk, foreign exchange risk, commodity price risk and credit risk. We are affected by the global macroeconomic environment as well as financial and commodity market conditions.**

Our subsidiaries, joint arrangements and associates are subject to differing economic and financial market conditions around the world. Political or economic instability affects such markets. If the associated risks set out below materialise, they could have a material adverse effect on our earnings, cash flows and financial condition.

We use debt instruments, such as bonds and commercial paper, to raise significant amounts of capital. Should our access to debt markets become more difficult, the potential impact on our liquidity could have a material adverse effect on our operations. Our financing costs could also be affected by interest rate fluctuations or any credit rating deterioration.

We are exposed to changes in currency values and to exchange controls as a result of our substantial international operations. Our reporting currency is the dollar. However, to a material extent, we hold assets and are exposed to liabilities in other currencies. We have significant financial exposure to the eurozone and could be materially affected by a significant change in the euro's value or any structural changes to the European Union (EU) or the European Economic and Monetary Union affecting the euro. Commodity trading is an important component of our Upstream and Downstream businesses and is integrated with our supply business. While we undertake some foreign exchange and commodity hedging, we do not do so for all of our activities. Furthermore, even where hedging is in place, it may not function as expected.

We are exposed to credit risk; our counterparties could fail or could be unable to meet their payment and/or performance obligations under contractual arrangements. Although we do not have significant direct exposure to sovereign debt, it is possible that our partners and customers may have exposure which could impair their ability to meet their obligations, thereby having a material adverse effect on us. In addition, our pension funds may invest in government bonds. Therefore, a sovereign debt downgrade or other default could have a material adverse effect on us.

See "Liquidity and capital resources" on page 50.

**We have substantial pension commitments, whose funding is subject to capital market risks.**

Liabilities associated with defined benefit plans can be significant, as can the cash funding requirement of such plans; both depend on various assumptions. Volatility in capital markets, and the resulting consequences for investment performance and interest rates, could result in significant changes to the funding level of future liabilities, and could also increase balance sheet liabilities. We operate a number of defined benefit pension plans and, in case of a shortfall, we could be required to make substantial cash contributions (depending on the applicable local regulations) resulting in a material adverse effect on our business, earnings and financial condition. See "Liquidity and capital resources" on page 50.

**We mainly self-insure our risk exposure. We could incur significant losses from different types of risks that are not covered by insurance from third-party insurers.**

Our insurance subsidiaries provide hazard insurance coverage to other Shell entities and only reinsure a portion of their risk exposures. Such reinsurance would not provide any material coverage in the event of an incident like BP Deepwater Horizon. Similarly, in the event of a material environmental incident, there would be no material proceeds available from

third-party insurance companies to meet our obligations. Therefore, we may incur significant losses from different types of risks that are not covered by insurance from third-party insurers, potentially resulting in a material adverse effect on our operational performance, earnings, cash flows and financial condition. See "Corporate" on page 48.

**An erosion of our business reputation could have a material adverse effect on our brand, our ability to secure new resources and our licence to operate.** Our reputation is an important asset. The Shell General Business Principles (Principles) govern how Shell and its individual companies conduct their affairs, and the Shell Code of Conduct (Code) instructs employees and contractors on how to behave in line with the Principles. Our challenge is to ensure that all employees and contractors, more than 100,000 in total, comply with these Principles and Code. Real or perceived failures of governance or regulatory compliance could harm our reputation. This could impact our licence to operate, damage our brand, reduce consumer demand for our branded products, harm our ability to secure new resources and contracts and limit our ability to access capital markets. Many other factors, including the materialisation of the risks discussed in several of the other risk factors, may impact our reputation and could have a material adverse effect on our operational performance, earnings, cash flows and financial condition. See "Corporate governance" on page 70.

**Many of our major projects and operations are conducted in joint arrangements or associates. This could reduce our degree of control, as well as our ability to identify and manage risks.**

In cases where we are not the operator, we have limited influence over, and control of, the behaviour, performance and costs of operation of such joint arrangements or associates. Despite not having control, we could still be exposed to the risks associated with these operations, including reputational, litigation (where joint and several liability could apply) and government sanction risks, which could have a material adverse effect on our operational performance, earnings, cash flows and financial condition. For example, our partners or members of a joint arrangement or an associate (particularly local partners in developing countries) may not be able to meet their financial or other obligations to the projects, threatening the viability of a given project. Where we are the operator of a joint arrangement, the other partner(s) could still be able to veto or block certain decisions, which could be to our overall detriment. See "Corporate governance" on page 74.

**We rely heavily on information technology systems for our operations.** The operation of many of our business processes depends on information technology (IT) systems. Our IT systems are increasingly concentrated in terms of geography, number of systems, and key contractors supporting the delivery of IT services. Shell, like many other multinational companies, is the target of attempts to gain unauthorised access to our IT systems through the internet, including more sophisticated and coordinated attempts often referred to as advanced persistent threats. We seek to detect and investigate all such security incidents, aiming to prevent their recurrence. Disruption of critical IT services, or breaches of information security, could harm our reputation and have a material adverse effect on our operational performance, earnings and financial condition. See "Corporate" on page 48.

**Violations of antitrust and competition laws carry fines and expose us and/or our employees to criminal sanctions and civil suits.**

Antitrust and competition laws apply to Shell and its joint ventures and associates in the vast majority of countries in which we do business. Any violation of these laws could have a material adverse effect on our operational performance, earnings, cash flows and financial condition. Shell and its joint ventures and associates have been fined for violations of antitrust and competition laws. These include a number of fines in the past by the

European Commission Directorate-General for Competition (DG COMP). Due to the DG COMP's fining guidelines, any future conviction of Shell and its joint ventures or associates for violation of EU competition law could result in significantly larger fines and have a material adverse effect on us. Violation of antitrust laws is a criminal offence in many countries, and individuals can be either imprisoned or fined. Furthermore, it is now common for persons or corporations allegedly injured by antitrust violations to sue for damages. See "Corporate governance" on page 70.

**Violations of anti-bribery and corruption laws and anti-money laundering laws carry fines and expose us and/or our employees to criminal sanctions and civil suits.**

In 2010, we agreed to a Deferred Prosecution Agreement (DPA) with the US Department of Justice (DOJ) for violations of the Foreign Corrupt Practices Act (FCPA), which arose in connection with our use of the freight-forwarding firm Panalpina. In 2013, following our fulfilment of the terms of the DPA, the criminal charges filed in connection with the DPA were dismissed. Our ethics and compliance programme was enhanced during the DPA and remains in full force and effect. The authorities in various countries are investigating our investment in Nigerian oil block OPL 245 and the 2011 settlement of litigation pertaining to that block. Any violation of the FCPA or other relevant anti-bribery and corruption legislation or anti-money laundering legislation could have a material adverse effect on our operational performance, earnings, cash flows and financial condition. See "Corporate governance" on page 70.

**Violations of data protection laws carry fines and expose us and/or our employees to criminal sanctions and civil suits.**

Data protection laws apply to Shell and its joint ventures and associates in the vast majority of countries in which we do business. Over 100 countries have data protection laws and regulations. Additionally, the impending EU Data Privacy Regulation proposes to increase penalties up to a maximum of 5% of global annual turnover for breach of the regulation. Non-compliance with data protection laws could expose us to regulatory investigations, which could result in fines and penalties. We could also be subject to litigation from persons or corporations allegedly affected by data protection violations. Violation of data protection laws is a criminal offence in some countries, and individuals can be either imprisoned or fined. Any violation could have a material adverse effect on our operational performance, earnings, cash flows and financial condition. See "Corporate governance" on page 70.

**Violations of trade controls, including sanctions, carry fines and expose us and our employees to criminal sanctions and civil suits.**

We use "trade controls" as an umbrella term for various national and international laws designed to regulate the movement of items across national boundaries and restrict or prohibit trade and other dealings with certain parties. The number and breadth of trade controls which we face continues to expand. For example, the EU and the USA continue to impose restrictions and prohibitions on certain transactions involving Syria. Additional trade controls directed at defined oil and gas activities in Russia were imposed by the EU and the USA in 2014. In addition to the significant trade-control programmes administered by the EU and the USA, many other nations are also adopting such programmes. Any violation of one or more trade-control regimes could lead to significant penalties or prosecution of Shell or its employees, and could have a material adverse effect on our operational performance, earnings, cash flows and financial condition. See "Corporate governance" on page 70.

## RISK FACTORS CONTINUED

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Investors should also consider the following, which could limit shareholder remedies.

**The Company's Articles of Association determine the jurisdiction for shareholder disputes. This could limit shareholder remedies.**

Our Articles of Association generally require that all disputes between our shareholders in such capacity and the Company or our subsidiaries (or our Directors or former Directors), or between the Company and our Directors or former Directors, be exclusively resolved by arbitration in The Hague, the Netherlands, under the Rules of Arbitration of the International Chamber of Commerce. Our Articles of Association also provide that, if this provision is to be determined invalid or unenforceable for any reason, the dispute could only be brought to the courts of England and Wales. Accordingly, the ability of shareholders to obtain monetary or other relief, including in respect of securities law claims, could be determined in accordance with these provisions.

## BUSINESS OVERVIEW

### HISTORY

From 1907 until 2005, Royal Dutch Petroleum Company and The "Shell" Transport and Trading Company, p.l.c. were the two public parent companies of a group of companies known collectively as the "Royal Dutch/Shell Group". Operating activities were conducted through the subsidiaries of these parent companies. In 2005, Royal Dutch Shell plc became the single parent company of Royal Dutch Petroleum Company and of The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited.

Royal Dutch Shell plc (the Company) is a public limited company registered in England and Wales and headquartered in The Hague, the Netherlands.

### ACTIVITIES

Shell is one of the world's largest independent oil and gas companies in terms of market capitalisation, operating cash flow and production.

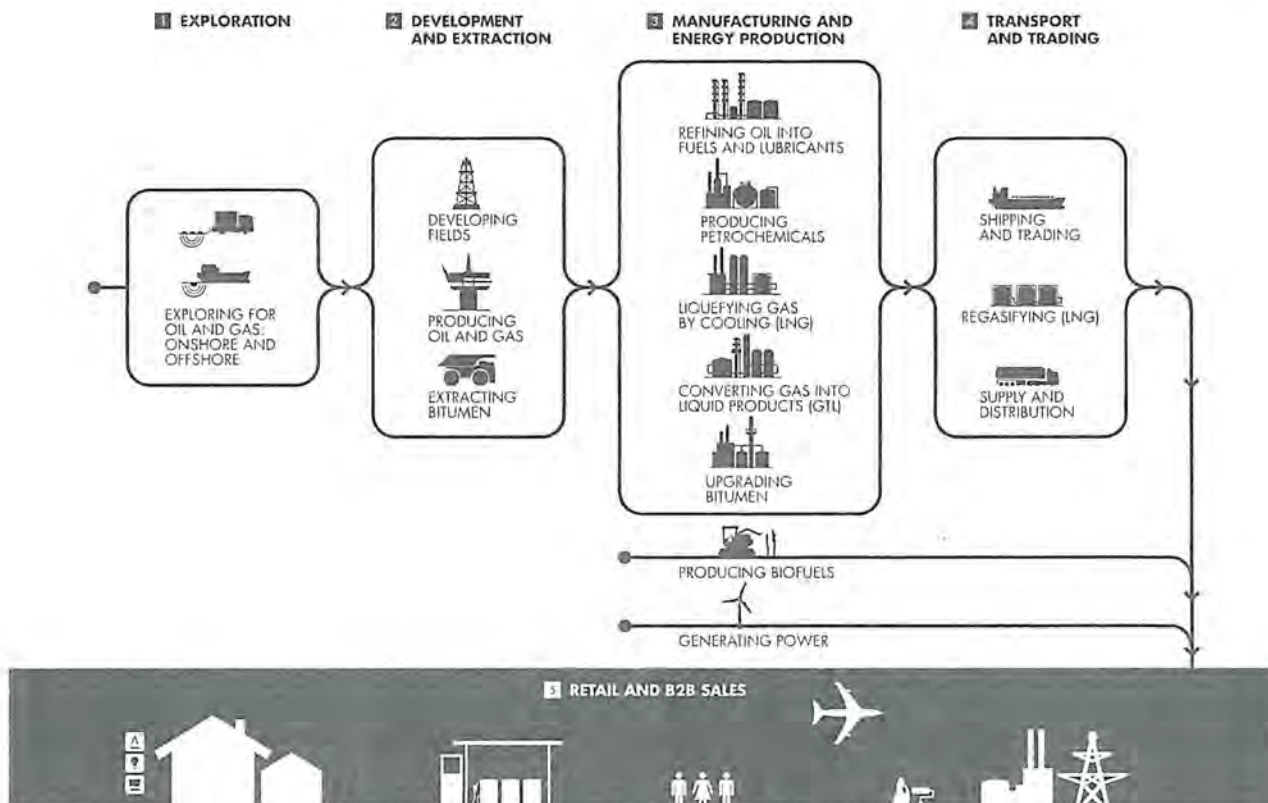
We explore for crude oil and natural gas worldwide, both in conventional fields and from sources such as tight rock, shale and coal formations. We work to develop new crude oil and natural gas supplies from major fields. For example, in 2015, production began from the Bonga Phase 3 and Erha

North Phase 2 projects in Nigeria, and the Corrib gas field in Ireland. We also extract bitumen from oil sands, which we convert into synthetic crude oil.

We cool natural gas to provide liquefied natural gas (LNG) that can be safely shipped to markets around the world, and we convert gas to liquids (GTL).

Our portfolio of refineries and chemical plants enables us to capture value from the oil and gas that we produce, turning them into a range of refined and petrochemical products, which are moved and marketed around the world for domestic, industrial and transport use. The products we sell include gasoline, diesel, heating oil, aviation fuel, marine fuel, LNG for transport, lubricants, bitumen and sulphur. We also produce and sell ethanol from sugar cane in Brazil, through our Raizen joint venture.

The distinctive Shell pecten, (a trademark in use since the early part of the 20th century), and trademarks in which the word Shell appears, help raise the profile of our brand globally. A strong patent portfolio underlies the technology that we employ in our various businesses. In total, we have about 12,000 granted patents and pending patent applications.



## BUSINESS OVERVIEW CONTINUED

### BUSINESSES AND ORGANISATION

In 2016, the Upstream International and Upstream Americas businesses were reorganised into Integrated Gas and Upstream. Our businesses and organisations described below were in place until December 31, 2015, and are consistent with the discussion of our performance in 2015 and position at December 31, 2015, in this Report.

#### Upstream International

Our Upstream International business manages Shell's Upstream activities outside the Americas. It explores for and extracts crude oil, natural gas and natural gas liquids, transports oil and gas, and operates the upstream and midstream infrastructure necessary to deliver oil and gas to market. Upstream International also manages the LNG and GTL businesses outside the Americas, and markets and trades natural gas, including LNG, outside the Americas. It manages its operations primarily by line of business, with this structure overlaying country organisations. This organisation is supported by activities such as Exploration and New Business Development. See "Upstream" on pages 23-40.

#### Upstream Americas

Our Upstream Americas business manages Shell's Upstream activities in North and South America. It explores for and extracts crude oil, natural gas and natural gas liquids, transports oil and gas, and operates the upstream and midstream infrastructure necessary to deliver oil and gas to market. Upstream Americas also extracts bitumen from oil sands that is converted into synthetic crude oil. It manages the LNG business in the Americas, and markets and trades natural gas in the Americas. Additionally, it manages the US-based wind business. It manages its operations by line of business, supported by activities such as Exploration and New Business Development. See "Upstream" on pages 23-40.

#### Downstream

Our Downstream business manages Shell's Oil Products activities, comprising Refining, Trading and Supply, Pipelines and Marketing, and Chemicals activities. See "Downstream" on pages 41-47.

#### Projects & Technology

Our Projects & Technology organisation manages the delivery of our major projects and drives research and innovation to develop new technology solutions. It provides technical services and technology capability covering both Upstream and Downstream activities. It is also responsible for providing functional leadership across Shell in the areas of safety and environment, contracting and procurement, wells activities and CO<sub>2</sub> management.

Our future hydrocarbon production depends on the delivery of large and complex projects (see "Risk factors" on page 08). Systematic management of lifecycle technical and non-technical risks is in place for each opportunity, with assurance and control activities embedded throughout the project lifecycle. We focus on the cost-effective delivery of projects through quality commercial agreements, supply-chain management and construction and engineering productivity through effective planning and simplification of delivery processes. Development of our employees' project management competencies is underpinned by project principles, standards and processes. A dedicated competence framework, training, standards and processes exist for exploration and appraisal activities. In addition, we provide governance support for our non-operated ventures or projects.

### SEGMENTAL REPORTING

Our reporting segments at December 31, 2015, were Upstream, Downstream and Corporate. Upstream combines the operating segments Upstream International and Upstream Americas. Upstream and Downstream earnings include their respective elements of Projects & Technology and of trading and supply activities. Corporate comprises Shell's holdings and treasury organisation, including its self-insurance activities as well as its headquarters and central functions. See Note 4 to the "Consolidated Financial Statements" on page 126.

REVENUE BY BUSINESS SEGMENT (INCLUDING INTER-SEGMENT SALES)				\$ MILLION		
	2015	2014	2013			
<b>Upstream</b>						
Third parties	28,480	45,240	47,357			
Inter-segment	25,447	47,059	45,512			
<b>Total</b>	<b>53,927</b>	<b>92,299</b>	<b>92,869</b>			
<b>Downstream</b>						
Third parties	236,384	375,752	403,725			
Inter-segment	1,362	2,294	702			
<b>Total</b>	<b>237,746</b>	<b>378,046</b>	<b>404,427</b>			
<b>Corporate</b>						
Third parties	96	113	153			
<b>Total</b>	<b>96</b>	<b>113</b>	<b>153</b>			

REVENUE BY GEOGRAPHICAL AREA (EXCLUDING INTER-SEGMENT SALES)				\$ MILLION		
	2015	2014	2013			
Europe	95,223	154,709	175,584			
Asia, Oceania, Africa	95,892	149,869	157,673			
USA	50,666	80,133[A]	79,581[A]			
Other Americas	23,179	36,394[A]	38,397[A]			
<b>Total</b>	<b>264,960</b>	<b>421,105</b>	<b>451,235</b>			

[A] Revised following a reassessment of geographical allocation, resulting in an increase in the USA and a corresponding decrease in Other Americas of \$9,320 million in 2014 and \$7,029 million in 2013.

With effect from 2016, our reporting segments were amended to align with the reorganisation of the Upstream business and consist of Integrated Gas, Upstream, Downstream and Corporate.

### RESEARCH AND DEVELOPMENT

In 2015, research and development expenses were \$1,093 million, compared with \$1,222 million in 2014, and \$1,318 million in 2013. Our main technology centres are in India, the Netherlands and the USA, with other centres in Canada, China, Germany, Norway, Oman and Qatar.

Technology and innovation are essential to our efforts to meet the world's energy demands in a competitive way. If we do not develop the right technology, do not have access to it or do not deploy it effectively, this could have a material adverse effect on the delivery of our strategy and our licence to operate (see "Risk factors" on page 10). We continuously scan the external environment for technologies and innovations of potential relevance to our business. Our Chief Technology Officer oversees the development and deployment of new and differentiating technologies and innovations across Shell, seeking to align business requirements and technology requirements throughout our technology maturation process.

## STRATEGY AND OUTLOOK

### STRATEGY

Our strategy seeks to reinforce our position as a leader in the oil and gas industry, while helping to meet global energy demand in a responsible way. We aim to balance growth with returns, by growing our cash flow and delivering competitive returns through economic cycles, to finance a competitive dividend and fund investment for future growth. Safety and environmental and social responsibility are at the heart of our activities.

Meeting the growing demand for energy worldwide in ways that minimise environmental and social impact is a major challenge for the global energy industry. We aim to improve energy efficiency in our own operations, support customers in managing their energy demands and continue to research and develop technologies that increase efficiency and reduce emissions from liquids and natural gas production.

Intense competition exists for access to upstream resources and to new downstream markets. But we believe that our technology, project delivery capability and operational excellence will remain key differentiators for our businesses.

In April 2015, we announced a recommended cash and share offer for BG Group plc (BG), and the transaction was completed on February 15, 2016. It should add significant scale and profitability, particularly in LNG worldwide and deep-water oil and gas in Brazil. It presents an opportunity to accelerate portfolio refocusing through asset sales and reduced spending, resulting in a simpler, more focused company.

With effect from 2016, we have a new upstream organisation that reflects recent changes in our portfolio. This is the platform for integration with BG and will help speed up the streamlining of the portfolio.

In Integrated Gas, we focus on liquefying natural gas (LNG) so that it can be safely shipped to markets around the world, and we convert gas to liquids (GTL).

In Upstream, we focus on exploration for new crude oil and natural gas reserves and on developing major new projects where our technology and know-how add value to the resources holders.

In Downstream, we focus on turning crude oil into a range of refined products, which are moved and marketed around the world for domestic, industrial and transport use. In addition, we produce and sell petrochemicals for industrial use worldwide.

We focus on a series of strategic themes, each requiring distinctive technologies and risk management:

- Our Downstream businesses in Oil Products and Chemicals are strongly cash-generative with high returns. Our distinctive product offering is underpinned by a strong manufacturing base, and offers growth potential in selective markets, particularly in petrochemicals.
- Our conventional oil and gas business has strong cash flow and returns potential, typically in mature hydrocarbon provinces. We only make investments in selective growth positions and apply our distinctive technology and operating performance to extend the productive lives of our assets and to enhance their profitability.
- In deep water, we have leading positions in the Gulf of Mexico, Brazil, Nigeria and Malaysia. Our deep-water operations have significant growth potential from our large undeveloped resource base, and deployment of our technology and capabilities.
- In Integrated Gas, covering LNG worldwide, and in GTL in Qatar and Malaysia, we have leadership positions in profitable and growing markets. We are making selective investments in new LNG capacity, and continuing to develop new markets for gas.

- We have substantial positions in both heavy oil and oil and gas plays. These reserves are in production today, with substantial longer-term growth potential.
- Reflecting the long-term trend in demand growth for lower-carbon energy, we intend to make investments in large-scale and commercial forms of lower-carbon technology and energy, such as natural gas, carbon capture and storage, biofuels, wind and solar energy.

Our commitment to technology and innovation continues to be at the core of our strategy. As energy projects become more complex and more technically demanding, we believe our engineering expertise will be a deciding factor in the growth of our businesses. Our key strengths include the development and application of technology, the financial and project-management skills that allow us to deliver large field-development projects, and the management of integrated value chains.

We aim to leverage our diverse and global business portfolio and customer-focused businesses built around the strength of the Shell brand.

Our ability to achieve strategic objectives depends on how we respond to competitive forces (see "Risk factors" on page 08). We continuously assess the external environment – the markets as well as the underlying economic, political, social and environmental drivers that shape them – to anticipate changes in competitive forces and business models. We undertake regular reviews of the markets we operate in, and analyses of our competitors' strengths and weaknesses to understand our competitive position. We maintain business strategies and plans that focus on actions and capabilities to create and sustain competitive advantage.

### OUTLOOK FOR 2016 AND BEYOND

We continuously seek to improve our operating performance, with an emphasis on health, safety, security and environment, asset performance and operating costs.

In 2016, we expect organic capital investment to be around \$33 billion in the current environment. We have options to further reduce capital investment, should the evolving market outlook warrant that step. We are being highly selective on new investment decisions. We are leveraging our Projects & Technology organisation's capabilities and taking opportunities presented by the downturn to reduce both our own costs and costs in the supply chain. Asset sales are a key element of our strategy, improving our capital efficiency by focusing our investments on the most attractive growth opportunities. Divestments of non-strategic assets in 2014-15 totalled over \$20 billion, successfully completing our divestment programme for that period. We expect divestments to increase to \$30 billion for 2016-2018.

In addition, we expect the combination with BG to generate pre-tax synergies of \$3.5 billion in operating and exploration expenses in 2018, with further upside potential. A transition organisation is in place to track the delivery of the integration plans, including the expected synergies, identification of further value upside, and move to standardised operating arrangements (see "Risk factors" on page 08).

The statements in this "Strategy and outlook" section, including those related to our growth strategies and our expected or potential future cash flow from operations, capital investment, divestments and production, are based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied herein. See "About this Report" on page 05 and "Risk factors" on pages 08-12. Forward-looking information includes the impact of the BG acquisition.



## MARKET OVERVIEW

We maintain a large business portfolio across a fully-integrated value chain and are therefore exposed to oil, gas and product prices as well as refining, chemicals and marketing margins (see "Risk factors" on page 08). This diversified portfolio helps us mitigate the impact of price volatility. Our annual planning cycle and periodic portfolio reviews aim to ensure that our levels of capital investment and operating expenses are affordable in the context of a volatile price environment. We test the resilience of our projects and other opportunities against a range of oil and gas prices. We also maintain a strong balance sheet to provide resilience in times of fluctuating oil and gas prices.

### GLOBAL ECONOMIC GROWTH

According to the International Monetary Fund's (IMF) January 2016 *World Economic Outlook*, global economic growth was 3.1% in 2015. This fell short of the IMF's forecast of 3.5% made at the beginning of 2015. Lower than expected economic growth in the USA and China, together with recessions in Brazil and Russia, contributed to lower global economic growth than forecast.

The IMF estimated that the eurozone economy grew by 1.5% in 2015, compared with 0.9% in 2014, US economic growth was 2.5%, compared with 2.4% in 2014, while Chinese economic growth slowed from 7.3% in 2014 to 6.9%. The average economic growth rate for emerging markets and developing economies was 4.0%, compared with 4.6% in 2014.

The IMF expects global economic growth to rise to 3.4% in 2016, but that would still be less than the annual average of 3.7% for the previous 10 years.

### GLOBAL OIL AND GAS DEMAND AND SUPPLY

Reflecting the combination of the economic conditions described above and of low crude oil prices during the year, global oil demand rose by 1.8% (1.7 million barrels per day (b/d)) in 2015, according to the International Energy Agency's (IEA) January 2016 *Oil Market Report*. This annual oil demand growth was the highest since 2005. Lower crude oil prices are thought to have triggered additional demand not only from end-consumers, for example in the USA, but also strategic petroleum reserves building in Asia, particularly China. Demand grew in emerging and advanced economies.

The Brent crude oil price, an international crude-oil benchmark, averaged \$52/b, the lowest level since 2005. As in 2014, oil supply continued to grow faster than demand. On the non-OPEC supply side, the US Energy Information Administration reported another year of continued supply growth albeit at a slower pace. Daily production in the USA declined in the second half of 2015, as light tight oil producers drilled fewer wells in response to lower prices. However, ongoing technical improvements and increased focus on the most productive areas helped increase recovery per well. OPEC oil production grew by 1 million b/d year-on-year driven primarily by Saudi Arabia and Iraq. At the June and December OPEC meetings, it was decided not to reduce production in support of oil prices. The market interpreted these decisions as an increased risk of oversupply: crude oil prices remained low and ended the year at around \$36/b for Brent compared with \$54/b at the start of the year.

We estimate that global gas demand grew by less than 1% in 2015, which is much lower than the average annual growth rate of about 2.3% in the past decade. A combination of mild weather and continued moderate global economic growth led to a lower rate of demand growth in most regions. We believe that most of the growth in demand was in the USA with an estimated 10% increase over 2014, driven by its power generation and industrial sectors. Asian gas demand growth weakened in the key markets of China, Japan and Korea. Chinese demand in the first nine months of 2015 grew by only 3% year-on-year, compared with the average

15% growth seen in previous years. Gas demand across the European Union is expected to have increased by about 7% in 2015 compared with 2014, according to the latest forecast from gas industry association Eurogas. The first half of 2015 saw a significant increase of approximately 9% in gas demand, compared with the same period in 2014.

### CRUDE OIL AND NATURAL GAS PRICES

The following table provides an overview of the main crude oil and natural gas price markers that we are exposed to:

OIL AND GAS AVERAGE INDUSTRY PRICES [A]			
	2015	2014	2013
Brent (\$/b)	52	99	109
West Texas Intermediate (\$/b)	49	93	98
Henry Hub (\$/MMBtu)	2.6	4.3	3.7
UK National Balancing Point (pence/therm)	43	50	68
Japan Customs-cleared Crude (\$/b)	55	105	110

[A] Yearly average prices are based on daily spot prices. The 2015 average price for Japan Customs-cleared Crude excludes December data.

The Brent crude oil price traded in a range of \$35-67/b in 2015, ending the year at about \$36/b. Both the Brent and the West Texas Intermediate (WTI) average crude oil prices for 2015 were lower than in 2014, as a result of demand growth being outpaced by continued supply growth, which has resulted in crude oil and oil products inventory levels well above their historical five-year averages.

On a yearly average basis, WTI traded at a \$3/b discount to Brent in 2015, compared with \$6/b in 2014. The discount widened during the spring US refinery maintenance season to about \$13/b as a consequence of reduced refinery crude oil intake and therefore higher crude oil inventory levels in the landlocked Cushing, Oklahoma, trading hub. Towards the end of the year, Brent and WTI crude oil prices were nearly equal.

Looking ahead, significant price volatility can be expected in the short to medium term. Crude oil prices may strengthen if the global economy accelerates, or if supply tightens as a result of a further deceleration in non-OPEC production growth due to the current price weakness, if OPEC countries reduce their production levels, or if supply disruptions occur in major producing countries. Alternatively, crude oil prices may weaken further if economic growth slows or production continues to rise, for example from Iran after the lifting of sanctions.

Unlike crude oil pricing, which is global in nature, natural gas prices vary significantly from region to region. In the USA, the natural gas price at the Henry Hub averaged \$2.6 per million British thermal units (MMBtu) in 2015, 40% lower than in 2014, and traded in a range of \$1.5-3.3/MMBtu. The year 2015 began with normal winter weather and gas at the Henry Hub traded between \$2 and 3.3/MMBtu through the first half of the year. But robust growth in gas production and normal weather in the summer led to a gradual decline in prices during the second half as gas in storage reached a record high of some 4 trillion cubic feet by November 2015. A relatively very warm start of the 2015-2016 winter season led to a steep decline in Henry Hub prices which then remained below \$2/MMBtu for prolonged periods. In the longer term, the US market may tighten due to exports of liquefied natural gas (LNG).

In Europe, natural gas prices fell during 2015. The average natural gas price at the UK National Balancing Point was 14% lower than in 2014. At the main continental European gas trading hubs – in the Netherlands, Belgium and Germany – prices were similarly weak. Lower prices reflected ample supply which was in part driven by lower oil-indexed contract prices.

Weather, a key driver for gas demand, was mixed during the year with unusually mild temperatures in the fourth quarter.

We also produce and sell natural gas in regions where supply, demand and regulatory circumstances differ markedly from those in the USA or Europe. Long-term contracted LNG prices in Asia-Pacific generally fell in 2015 as they are predominantly indexed to the price of Japan Customs-cleared Crude (JCC), which has fallen as global crude oil prices have weakened.

### CRUDE OIL AND NATURAL GAS PRICE ASSUMPTIONS

Our ability to deliver competitive returns and pursue commercial opportunities depends in part on the robustness and, ultimately, the accuracy of our price assumptions (see "Risk factors" on page 08). The range of possible future crude oil and natural gas prices used in project and portfolio evaluations is determined after a rigorous assessment of short, medium and long-term market drivers. Historical analyses, trends and statistical volatility are considered in this assessment, as are analyses of market fundamentals such as possible future economic conditions, geopolitics, actions by OPEC and other major resource holders, production costs and the balance of supply and demand. Sensitivity analyses are used to test the impact of low-price drivers, such as economic weakness, and high-price drivers, such as strong economic growth and low investment in new production capacity. Short-term events, such as relatively warm winters or cool summers, affect demand. Supply disruptions, due to weather or political instability, contribute to price volatility.

### REFINING AND PETROCHEMICAL MARGINS

REFINING MARKER AVERAGE INDUSTRY GROSS MARGINS	(\$/B)		
	2015	2014	2013
US West Coast	19.4	9.5	8.7
US Gulf Coast Coking	10.6	5.5	3.9
Rotterdam Complex	4.7	1.3	1.4
Singapore	4.7	(0.1)	(1.0)

Industry gross refining margins were higher on average in 2015 than in 2014 in each of the key refining hubs in Europe, Singapore and the USA. Oil products demand growth was stronger globally, driven in part by the sustained lower crude oil price environment compared with 2014. The refining industry has seen a period of generally tightening capacity, reducing the overcapacity that has been observed for several years. However, the improved gross margins have probably delayed some further capacity rationalisation, especially in Europe.

In 2016, demand for gasoline is expected to be a key driver of gross refining margins, especially in the middle of the year, supported by demand for middle distillates. The overall outlook remains unclear because of continuing economic uncertainty, geopolitical tensions in some regions that could lead to supply disruptions, and continued overcapacity in the global refining market.

CRACKER INDUSTRY MARGINS	(\$/TONNE)		
	2015	2014	2013
North East/South East Asia naphtha	463	296	132
Western Europe naphtha	617	613	548
US ethane	498	798	770

In Chemicals, Asian naphtha cracker margins increased in 2015 compared with 2014 due to periods of reduced cracker availability. European naphtha cracker margins remained high in 2015, supported by periods of low cracker availability. US ethane cracker margins were significantly lower due to a narrower differential between crude oil prices and US natural gas prices.

The outlook for petrochemicals in 2016 will depend on economic growth, especially in Asia, and developments in relative raw material prices which will be influenced by crude oil prices.

## SUMMARY OF RESULTS

KEY STATISTICS	\$ MILLION, EXCEPT WHERE OTHERWISE INDICATED		
	2015	2014	2013
<b>Earnings by segment [A]</b>			
Upstream	(5,663)	15,841	12,638
Downstream	10,243	3,411	3,869
Corporate	(425)	(156)	372
<b>Total segment earnings [A][B]</b>	<b>4,155</b>	<b>19,096</b>	<b>16,879</b>
Attributable to non-controlling interest	(313)	(55)	(134)
<b>Earnings on a current cost of supplies basis attributable to Royal Dutch Shell plc shareholders [B]</b>	<b>3,842</b>	<b>19,041</b>	<b>16,745</b>
Capital investment [B]	28,861	37,339	46,041
Divestments [B]	5,540	15,019	1,738
Operating expenses [B]	41,144	45,225	44,379
Return on average capital employed [B]	1.9%	7.1%	7.9%
Gearing at December 31 [C]	14.0%	12.2%	16.1%
Proved oil and gas reserves at December 31 (million boe)	11,747	13,081	13,944

[A] Segment earnings are presented on a current cost of supplies basis. See Note 4 to the "Consolidated Financial Statements" on pages 127-128.

[B] See "Non-GAAP measures reconciliations and other definitions" on pages 198-199.

[C] See Note 14 to the "Consolidated Financial Statements" on page 134.

### EARNINGS 2015-2014

Global realised liquids prices in 2015 were 48% lower than in 2014. Global realised natural gas prices were 27% lower than in 2014. Oil and gas production available for sale in 2015 was 2,954 thousand barrels of oil equivalent per day (boe/d) compared with 3,080 thousand boe/d in 2014. Liquids production increased by 2% and natural gas production decreased by 9% compared with 2014.

Realised refining margins were significantly higher in 2015 than in 2014, driven by stronger industry gross margins and improved availability early in 2015, which allowed our refineries to capitalise on the strong margin environment.

Earnings on a current cost of supplies basis (CCS earnings) exclude the effect of changes in the oil price on inventory valuation, as the purchase price of the volumes sold during a period is based on the current cost of supplies during the same period, after making allowance for the tax effect. Accordingly, when oil prices increase during the period, CCS earnings are likely to be lower than earnings calculated on a first-in first-out (FIFO) basis. Similarly, in a period with declining oil prices, CCS earnings are likely to be higher than earnings calculated on a FIFO basis. This explains why 2015 CCS earnings attributable to shareholders were higher than income attributable to shareholders calculated on a FIFO basis, as shown in "Non-GAAP measures and other definitions" on page 198.

CCS earnings attributable to Royal Dutch Shell plc shareholders were \$3,842 million in 2015 compared with \$19,041 million in 2014.

Upstream earnings in 2015 were a loss of \$5,663 million, compared with an income of \$15,841 million in 2014. Lower earnings in 2015 reflected the significant decline in oil and gas prices, charges associated with management's decision to cease Alaska drilling activities for the foreseeable future and the Carmon Creek project in Canada, higher impairment charges, lower divestment gains and the weakening of the Australian dollar and Brazilian real on deferred tax positions, partly offset by lower operating expenses and depreciation, depletion and amortisation. See "Upstream" on page 23.

Downstream earnings in 2015 were \$10,243 million compared with \$3,411 million in 2014. The increase was principally driven by lower operating expenses, as a result of favourable exchange rates and divestments, higher realised refining margins, and a lower effective tax rate,

together with lower impairment charges and higher divestment gains. See "Downstream" on pages 41-42.

Corporate earnings in 2015 were a loss of \$425 million, compared with a loss of \$156 million in 2014. See "Corporate" on page 48.

As set out in Note 4 to the "Consolidated Financial Statements" on page 127, earnings included a taxation charge of \$493 million in 2015, compared with \$15,038 million in 2014. This reduction was due to the significant tax credits associated with the impairment charges, and other charges related to ceasing activities in Alaska and the Carmon Creek project, and to the overall reduction in Upstream earnings before taxation as a result of lower oil and gas prices.

### EARNINGS 2014-2013

CCS earnings attributable to shareholders in 2014 were 14% higher than in 2013.

Upstream earnings in 2014 were \$15,841 million, compared with \$12,638 million in 2013. The increase was mainly driven by increased contributions from liquids production volumes, higher divestment gains, lower exploration expenses, increased contributions from Trading and Supply and lower impairment charges. These effects were partially offset by the impact of declining oil prices and higher depreciation (excluding impairments).

Downstream earnings in 2014 were \$3,411 million compared with \$3,869 million in 2013, reflecting significantly higher charges for impairment which were partially offset by higher realised refining margins, higher earnings from Trading and Supply and lower operating expenses.

Corporate earnings in 2014 were a loss of \$156 million, compared with a gain of \$372 million in 2013.

### CAPITAL INVESTMENT AND OTHER INFORMATION

Capital investment was \$28.9 billion in 2015, compared with \$37.3 billion in 2014, reflecting our decision to curtail spending. See "Upstream" on page 24 and "Downstream" on page 42.

Divestments were \$5.5 billion in 2015, compared with \$15.0 billion in 2014. See "Upstream" on page 24 and "Downstream" on page 42.

The decrease in operating expenses from \$45.2 billion in 2015 to \$41.1 billion in 2014 included favourable exchange rate effects and the impact of divestments. See "Upstream" on page 23 and "Downstream" on page 41.

Our return on average capital employed (ROACE) decreased to 1.9% compared with 7.1% in 2014, due to lower earnings. In 2015, 31% of our average capital employed was not generating any revenue, which reduced our ROACE by 1%. These assets included projects being developed and exploration acreage.

Gearing was 14.0% at the end of 2015, compared with 12.2% at the end of 2014. Debt and cash increased by \$12.8 billion and \$10.1 billion respectively, and total equity decreased by \$8.7 billion. See "Liquidity and capital resources" on page 50.

### PROVED RESERVES AND PRODUCTION

Shell subsidiaries' and the Shell share of joint ventures and associates' estimated net proved oil and gas reserves are summarised in "Upstream" on pages 25-26 and set out in more detail in "Supplementary information – oil and gas (unaudited)" on pages 153-161.

In 2015, proved reserves before taking production into account decreased by 220 million boe, of which 157 million boe came from Shell subsidiaries and 63 million boe from the Shell share of joint ventures and associates, including a net reduction from sales and purchases of 84 million boe. The proved reserves changes in 2015 included an addition of 600 million boe as a result of an increased entitlement share due to the lower yearly average price applied to production-sharing contracts (PSC) and tax/variable royalty contracts.

In 2015, total oil and gas production was 1,114 million boe, of which 1,078 million boe was available for sale and 36 million boe was consumed in operations. Production available for sale from subsidiaries was 880 million boe and 27 million boe was consumed in operations. The Shell share of the production available for sale of joint ventures and associates was 198 million boe and 9 million boe was consumed in operations.

Accordingly, after taking production into account, our proved reserves decreased in 2015 by 1,334 million boe to 11,747 million boe at December 31, 2015, with a decrease of 1,064 million boe from subsidiaries and a decrease of 270 million boe from the Shell share of joint ventures and associates.

### KEY ACCOUNTING ESTIMATES AND JUDGEMENTS

See Note 2 to the "Consolidated Financial Statements" on pages 120-125.

### LEGAL PROCEEDINGS

See Note 25 to the "Consolidated Financial Statements" on page 151.

### PUBLICATION OF PROFIT ESTIMATES

In our update on fourth quarter 2015 and full year 2015 unaudited results published on January 20, 2016, we made the following profit estimates for the full year 2015:

- Earnings on a CCS basis were expected to be in the region of \$10.4-10.7 billion excluding "identified items".
- Income attributable to Royal Dutch Shell plc shareholders was expected to be in the region of \$1.6-2.0 billion.

The actual results for the full year 2015, in respect of the above profit estimates, were within the ranges stated above, and were as follows:

- Earnings on a CCS basis were \$10,676 million, excluding a net charge in Upstream of \$7,443 million (see "Upstream" on page 23), a net gain of \$495 million in Downstream (see "Downstream" on pages 41-42) and a net gain in Corporate of \$114 million.
- Income attributable to Royal Dutch Shell plc shareholders was \$1,939 million. See "Non-GAAP measures reconciliations and other definitions" on page 198.

## PERFORMANCE INDICATORS

### KEY PERFORMANCE INDICATORS

#### Total shareholder return

2015	-29.9%	2014	-3.0%
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Total shareholder return (TSR) is the difference between the share price at the beginning of the year and the share price at the end of the year (each averaged over 30 days), plus gross dividends delivered during the calendar year (reinvested quarterly), expressed as a percentage of the share price at the beginning of the year (averaged over 30 days). The data used are a weighted average in dollars for A and B shares. The TSRs of major publicly-traded oil and gas companies can be compared directly, providing a way to determine how we are performing in relation to our industry peers.

#### Net cash from operating activities (\$ billion)

2015	30	2014	45
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Net cash from operating activities is the total of all cash receipts and payments associated with our sales of oil, gas, chemicals and other products. The components that provide a reconciliation from income for the period are listed in the "Consolidated Statement of Cash Flows". This indicator reflects our ability to generate cash for both distributions to shareholders and investments. See "Liquidity and capital resources" on page 49.

#### Project delivery

2015	82%	2014	83%
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Project delivery reflects our capability to complete major projects on time and within budget on the basis of targets set in our annual Business Plan. The set of projects consists of at least 20 Shell-operated capital projects that are in the execution phase (post final investment decision) and are reflected in the above index.

#### Production available for sale (thousand boe/d)

2015	2,954	2014	3,080
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Production is the sum of all average daily volumes of unrefined oil and natural gas produced for sale by Shell subsidiaries and Shell's share of those produced for sale by joint ventures and associates. The unrefined oil comprises crude oil, natural gas liquids, synthetic crude oil and bitumen. The gas volume is converted into equivalent barrels of oil to make the summation possible. Changes in production have a significant impact on our cash flow. See "Upstream" on page 24.

#### Equity sales of liquefied natural gas (million tonnes)

2015	22.6	2014	24.0
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Equity sales of liquefied natural gas (LNG) is a measure of the operational performance of our Upstream business and LNG market demand. See "Upstream" on page 24.

#### Refinery and chemical plant availability

2015	89.3%	2014	92.1%
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Refinery and chemical plant availability is the weighted average of the actual uptime of plants as a percentage of their maximum possible uptime. The weighting is based on the capital employed, adjusted for cash and non-current liabilities. It excludes downtime due to uncontrollable factors, such as hurricanes. This indicator is a measure of the operational excellence of our Downstream manufacturing facilities. See "Downstream" on page 42.

#### Total recordable case frequency (injuries per million working hours)

2015	0.94	2014	0.99
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Total recordable case frequency (TRCF) is the number of staff or contractor injuries requiring medical treatment or time off for every million hours worked. It is a standard measure of occupational safety. See "Environment and society" on pages 53-54.

ADDITIONAL PERFORMANCE INDICATORS

**Earnings on a current cost of supplies basis attributable to Royal Dutch Shell plc shareholders (\$ million)**

2015	3,842	2014	19,041
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**Earnings per share on a current cost of supplies basis (\$)**

2015	0.61	2014	3.02
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Earnings on a current cost of supplies basis (CCS earnings) attributable to Royal Dutch Shell plc shareholders is the income for the period, adjusted for the after-tax effect of oil-price changes on inventory and non-controlling interest. See "Summary of results" on page 18.

CCS earnings per share, which is on a diluted basis above, is calculated by dividing CCS earnings attributable to shareholders by the average number of shares outstanding over the year, increased by the average number of dilutive shares related to share-based compensation plans.

**Capital investment (\$ million)**

2015	28,861	2014	37,339
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Capital investment is a measure used to make decisions about allocating resources and assessing performance. It is defined as capital expenditure and investments in joint ventures and associates as reported in the "Consolidated Statement of Cash Flows" plus exploration expense, excluding exploration wells written off, new finance leases and other adjustments. See "Liquidity and capital resources" on page 52 and "Non-GAAP measures reconciliations and other definitions" on page 198.

Capital investment has replaced net capital investment as a performance indicator and is aligned with the basis for capital allocation in our annual Business Plan.

**Return on average capital employed**

2015	1.9%	2014	7.1%
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Return on average capital employed (ROACE) is defined as annual income, adjusted for after-tax interest expense, as a percentage of average capital employed during the year. Capital employed is the sum of total equity and total debt. ROACE measures the efficiency of our utilisation of the capital that we employ and is a common measure of business performance. See "Summary of results" on page 19 and "Non-GAAP measures reconciliations and other definitions" on page 199.

**Gearing**

2015	14.0%	2014	12.2%
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Gearing is defined as net debt (total debt less cash and cash equivalents) as a percentage of total capital (net debt plus total equity), at December 31. It is a measure of the degree to which our operations are financed by debt. See "Liquidity and capital resources" on page 50.

**Employees (thousand)**

2015	93	2014	94
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The employees indicator consists of the annual average full-time employee equivalent of the total number of people on full-time or part-time employment contracts with Shell subsidiaries, including our share of employees of certain additional joint operations. See "Our people" on page 60.

**Proved oil and gas reserves (million boe)**

2015	11,747	2014	13,081
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Proved oil and gas reserves are the total estimated quantities of oil and gas from Shell subsidiaries and Shell's share from joint ventures and associates that geoscience and engineering data demonstrate, with reasonable certainty, to be recoverable in future years from known reservoirs, at December 31, under existing economic conditions, operating methods and government regulations. Gas volumes are converted into barrels of oil equivalent (boe) using a factor of 5,800 standard cubic feet per barrel. Reserves are crucial to an oil and gas company, since they constitute the source of future production. Reserves estimates are subject to change due to a wide variety of factors, some of which are unpredictable. See "Summary of results" on page 19.

**Operational spills of more than 100 kilograms**

2015	108	2014	153
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The operational spills indicator is the number of incidents in respect of activities where we are the operator in which 100 kilograms or more of oil or oil products were spilled as a result of those activities. See "Environment and society" on page 56.

**Refining Energy Intensity Index (EIITM) (indexed to 2002)**

2015	95.4	2014	94.9
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The Energy Intensity Index (EIITM), as described in *Soloman Associates Refinery Comparative Performance Analysis Methodology 2014*, is a benchmark to compare energy efficiency of fuel refineries and paraffinic base oil plants. The Solomon EIITM is defined as the energy consumed by a refinery divided by the energy standard for the specific individual refinery configuration. See "Environment and society" on page 56.

**Direct greenhouse gas emissions (million tonnes of CO<sub>2</sub> equivalent)**

2015	72	2014	76
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Direct greenhouse gas emissions from facilities operated by Shell, expressed in CO<sub>2</sub> equivalent. See "Environment and society" on pages 55-56.

**Number of operational Tier 1 process safety events**

2015	51	2014	57
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A Tier 1 process safety event is an unplanned or uncontrolled release of any material, including non-toxic and non-flammable materials, from a process with the greatest actual consequence resulting in harm to members of our workforce or a neighbouring community, damage to equipment, or exceeding a threshold quantity as defined by the API Recommended Practice 754 and IOGP Standard 456. See "Environment and society" on pages 53-54.

## SELECTED FINANCIAL DATA

The selected financial data set out below are derived, in part, from the "Consolidated Financial Statements". This data should be read in conjunction with the "Consolidated Financial Statements" and related Notes, as well as with this Strategic Report.

CONSOLIDATED STATEMENT OF INCOME AND OF COMPREHENSIVE INCOME DATA					\$ MILLION
	2015	2014	2013	2012	2011
Revenue	264,960	421,105	451,235	467,153	470,171
Income for the period	2,200	14,730	16,526	26,960	31,093
Income/(loss) attributable to non-controlling interest	261	(144)	155	248	267
Income attributable to Royal Dutch Shell plc shareholders	1,939	14,874	16,371	26,712	30,826
Comprehensive (loss)/income attributable to Royal Dutch Shell plc shareholders	(811)	2,692	18,243	24,470	26,250

CONSOLIDATED BALANCE SHEET DATA					\$ MILLION
	2015	2014	2013	2012	2011
Total assets	340,157	353,116	357,512	350,294	337,474
Total debt	58,379	45,540	44,562	37,754	37,175
Share capital	546	540	542	542	536
Equity attributable to Royal Dutch Shell plc shareholders	162,876	171,966	180,047	174,749	158,480
Non-controlling interest	1,245	820	1,101	1,433	1,486

EARNINGS PER SHARE					\$
	2015	2014	2013	2012	2011
Basic earnings per €0.07 ordinary share	0.31	2.36	2.60	4.27	4.97
Diluted earnings per €0.07 ordinary share	0.30	2.36	2.60	4.26	4.96

SHARES					MILLION
	2015	2014	2013	2012	2011
Basic weighted average number of A and B shares	6,320.3	6,311.5	6,291.1	6,261.2	6,212.5
Diluted weighted average number of A and B shares	6,393.8	6,311.6	6,293.4	6,267.8	6,221.7

OTHER FINANCIAL DATA					\$ MILLION, EXCEPT WHERE OTHERWISE INDICATED
	2015	2014	2013	2012	2011
Net cash from operating activities	29,810	45,044	40,440	46,140	36,771
Dividends paid to Royal Dutch Shell plc shareholders	9,370	9,444	7,198	7,390	6,877
Increase/(decrease) in cash and cash equivalents	10,145	11,911	(8,854)	7,258	(2,152)
Earnings by segment [A]					
Upstream	(5,663)	15,841	12,638	22,244	24,466
Downstream	10,243	3,411	3,869	5,382	4,170
Corporate	(425)	(156)	372	(203)	102
Total segment earnings	4,155	19,096	16,879	27,423	28,738
Attributable to non-controlling interest	(313)	(55)	(134)	(259)	(205)
Earnings on a current cost of supplies basis attributable to Royal Dutch Shell plc shareholders [A][B]	3,842	19,041	16,745	27,164	28,533
Capital investment [A][B]	28,861	37,339	46,041	36,761	31,051
Divestments [A][B]	5,540	15,019	1,738	6,958	7,548
Operating expenses [A][B]	41,144	45,225	44,379	41,987	42,035
Return on average capital employed [A][B]	1.9%	7.1%	7.9%	13.6%	16.6%
Gearing at December 31 [A]	14.0%	12.2%	16.1%	9.8%	13.9%

[A] See "Summary of results" on pages 18-19.

[B] See "Non-GAAP measures reconciliations and other definitions" on pages 198-199. Divestments include proceeds from sale of interests in Shell Midstream Partners, L.P.

## UPSTREAM

KEY STATISTICS	\$ MILLION, EXCEPT WHERE OTHERWISE INDICATED		
	2015	2014	2013
Segment earnings [A]	(5,663)	15,841	12,638
Including:			
Revenue (including inter-segment sales) [A]	53,927	92,299	92,869
Share of profit of joint ventures and associates [A]	1,962	5,502	6,120
Interest and other income [A]	2,356	4,029	659
Operating expenses [B]	19,828	22,003	20,612
Exploration	5,719	4,224	5,278
Depreciation, depletion and amortisation [A]	23,001	17,868	16,949
Taxation charge [A]	10	15,277	17,803
Capital investment [B]	23,527	31,293	40,303
Divestments [B]	2,747	10,589	1,086
Oil and gas production available for sale (thousand boe/d)	2,954	3,080	3,199
Equity sales of LNG (million tonnes)	22.6	24.0	19.6
Proved oil and gas reserves at December 31 (million boe)	11,747	13,081	13,944

[A] See Note 4 to the "Consolidated Financial Statements" on page 127.

[B] See "Non-GAAP measures reconciliations and other definitions" on pages 198-199.

## OVERVIEW

Our Upstream businesses explore for and extract crude oil and natural gas, often in joint arrangements with international and state-owned oil and gas companies. We also extract bitumen from mined oil sands which we convert into synthetic crude oil. We liquefy natural gas by cooling it and transport the liquefied natural gas (LNG) to customers around the world. We also convert natural gas to liquids (GTL) to provide high-quality fuels and other products, and we market and trade crude oil and natural gas (including LNG) in support of our Upstream businesses.

## BUSINESS CONDITIONS

Global oil demand rose by 1.8% (1.7 million barrels per day (b/d)) in 2015, according to the International Energy Agency's January 2016 *Oil Market Report*. The Brent crude oil price averaged \$52/b, the lowest level since 2005. It traded in a range of \$35-67/b in 2015, ending the year at about \$36/b. See "Market overview" on pages 16-17.

We estimate that global gas demand grew by less than 1% in 2015, which is much lower than the average annual growth rate of about 2.3% in the past decade. In the USA, the natural gas price at the Henry Hub averaged \$2.6 per million British thermal units (MMBtu) in 2015, 40% lower than in 2014, and traded in a range of \$1.5-3.3/MMBtu. In Europe, natural gas prices fell during 2015. The average natural gas price at the UK National Balancing Point was 14% lower than in 2014. At the main continental European gas trading hubs – in the Netherlands, Belgium and Germany – prices were similarly weak. See "Market overview" on pages 16-17.

## EARNINGS 2015-2014

Segment earnings in 2015 were a loss of \$5,663 million, which included a net charge of \$7,443 million. This net charge included \$4,616 million in the third quarter related to impairments, redundancy and restructuring, and other items such as contract provisions and well write-offs, associated with management's decision in the quarter to cease Alaska drilling activities for the foreseeable future and the Carmon Creek project in Canada. Charges for Alaska were \$2,584 million, which included \$755 million associated with well write-offs, and charges for Carmon Creek were \$2,032 million. The net charge also reflected other impairment charges of some \$4,575 million, principally triggered by the downward revision of our long-term oil and gas price outlook. These charges were partly offset by net gains on divestments of around \$1,640 million and a credit of \$604 million reflecting a statutory tax rate reduction in the UK. Other net charges of

\$496 million related to the negative impact of a statutory tax rate change in Canada, redundancy and restructuring costs and the impact of fair value accounting of certain commodity derivatives and gas contracts.

Segment earnings in 2014 of \$15,841 million included a net charge of \$664 million, reflecting impairment charges of \$2,406 million and further charges of \$718 million related to an update of an Australian deferred tax asset and a deferred tax liability related to an associate company. These charges were partly offset by divestment gains of \$2,073 million, the net effect of fair value accounting of commodity derivatives and certain gas contracts and the impact of amendments to our Dutch pension plan.

Excluding the net charges as described above, segment earnings in 2015 decreased by 89% compared with 2014. Earnings were principally impacted by the significant decline in oil and gas prices (around \$15,875 million) and the effect of the weakening of the Australian dollar and Brazilian real on deferred tax positions (around \$440 million in total). Earnings benefited from lower operating expenses, including favourable exchange rate effects and divestments (around \$1,655 million in total), and decreased depreciation, depletion and amortisation (around \$515 million). Integrated Gas contributed significantly (around \$5.2 billion) to 2015 earnings. Upstream Americas incurred a loss in 2015, primarily driven by low oil and gas prices and the weakening of the Brazilian real, and partly offset by lower operating expenses and a more liquids-based production mix.

Global realised liquids prices were 48% lower than in 2014. Global realised gas prices were 27% lower than in 2014, with a 47% decrease in the Americas and a 24% decrease outside the Americas.

## EARNINGS 2014-2013

Segment earnings in 2014 of \$15,841 million included a net charge of \$664 million, as described above. Segment earnings in 2013 of \$12,638 million included a net charge of \$2,479 million, primarily related to the impairment of liquids-rich shale properties in North America, partly offset by net tax credits and gains on divestments.

Excluding the net charges described above, segment earnings in 2014 increased by 9% compared with 2013, driven by increased contributions from liquids production volumes from both the start-up of new high-margin deep-water projects and improved operational performance. Earnings also



## UPSTREAM CONTINUED

reflected lower exploration expenses, primarily driven by fewer well write-offs, and increased contributions from Trading and Supply. Earnings were impacted by declining oil prices, losses in Upstream Americas tight-gas and liquids-rich shale, and higher depreciation.

### CAPITAL INVESTMENT AND DIVESTMENTS

Capital investment in 2015 was \$23.5 billion compared with \$31.3 billion in 2014, reflecting our decision to curtail spending by reducing the number of new investment decisions and pursuing lower-cost development solutions.

Divestments in 2015 were \$2.7 billion in 2015, compared with \$10.6 billion in 2014. Divestments in 2015 were mainly from the sale of OMLs 18, 29, 71 and 72, and the Nembe Creek Trunk Line (NCTL) in Nigeria, and of our interest in Elba Liquefaction Company, LLC (Elba Liquefaction). In 2014, divestments related to a portion of our shareholding in Woodside and our interest in Wheatstone in Australia, to part of our interest in Parque das Conchas (BC-10) in Brazil and to Haynesville and Pinedale in the USA.

### PORTFOLIO AND BUSINESS DEVELOPMENT

We took the following key portfolio decisions in 2015:

- In April 2015, the Boards of the Company and BG Group plc (BG) announced that they had reached agreement on the terms of a recommended cash and share offer to be made by the Company for BG. In January 2016, shareholders of both the Company and BG voted in favour of the transaction, which was completed on February 15, 2016. See "Strategy and outlook" on page 15.
- Offshore Alaska, we drilled the Burger J well to target depth as planned. The well was considered a dry hole, with minor oil and gas shows, and the result renders the Burger prospect uneconomic. This, combined with the current economic and regulatory environment, led us to cease further exploration activity offshore Alaska for the foreseeable future.
- In Canada, we announced that we will not continue construction of the 80 thousand barrels of oil equivalent per day (boe/d) Carmon Creek thermal in-situ project (Shell interest 100%). After a careful review of the project, it was determined that it does not rank in our portfolio.
- In Malaysia, the LNG Dua JVA expired and we transferred our 15% shareholding to PETRONAS, in accordance with the original JVA terms. With the expiry of the Malaysia LNG Dua production-sharing contract (PSC), we handed over the operatorship and our 50% interest to PETRONAS.
- We took one major final investment decision (FID) and postponed a number of FIDs. We decided to advance the Appomattox deep-water development (Shell interest 79%) in the Gulf of Mexico, USA. Appomattox will initially produce from the Appomattox and Vicksburg fields, with peak production estimated to be 1.75 thousand boe/d.

In January 2016, in the United Arab Emirates, we decided to exit the joint development of the Bab sour gas reservoirs (Shell interest 40%) with Abu Dhabi National Oil Company (ADNOC) in the emirate of Abu Dhabi, and to stop further work on the project. The development of the project no longer fits with our strategy, particularly in view of the economic climate prevailing in the energy industry.

In February 2016, we announced that we postponed the FID on the Bonga South West deep-water project in Nigeria and that, together with our partners, we elected to postpone the FID of the proposed LNG project in Canada to late 2016.

We achieved the following operational milestones in 2015:

- In Nigeria, Shell Nigeria Exploration and Production Company Ltd (SNEPCO) announced the first production from the Bonga Phase 3 project

(Shell interest 55%). Bonga Phase 3 is an expansion of the Bonga Main development, with peak production expected to be about 50 thousand boe/d. The oil will be transported through existing pipelines to the Bonga floating production, storage and offloading facility (FPSO), which has the capacity to produce more than 200 thousand barrels of oil and 150 million standard cubic feet (scf) of gas per day.

- Also in Nigeria, Erha North Phase 2 began production. Erha North Phase 2 (Shell interest 43.75%) is a deep-water subsea development situated 100 kilometres offshore, in 1,000 metres of water, 6 kilometres north of the Erha field.
- In Ireland, we achieved first production from the Corrib gas field (Shell interest 45%). At peak production, the Corrib gas field is expected to produce around 45 thousand boe/d.
- In Australia, the partners in the Browse joint arrangement agreed to enter the front-end engineering and design (FEED) phase for the proposed non-operated Browse floating liquefied natural gas (FLNG) development (Shell interest 27%), using Shell FLNG technology. The proposed development is expected to produce around 12 million tonnes per annum (mtpa) of LNG.

In Australia, production of LNG and condensate started at the Gorgon LNG project on Barrow Island, off the northwest coast, in March 2016.

We continued to divest selected assets during 2015, including the following:

- In Nigeria, we completed the sale of our 30% interest in OMLs 18 and 29 and related facilities in the Eastern Niger Delta, and the NCTL.
- Also in Nigeria, we completed the sale of our 30% interests in OMLs 71 and 72 to West African Exploration and Production Company Limited, as part of our ongoing portfolio review and optimisation. Both of these blocks were non-producing.
- In the USA, we sold our 49% interest in Elba Liquefaction to Kinder Morgan, Inc., and exited the Elba Liquefaction project as a result. We retain the rights to 100% of the liquefaction capacity through a tolling arrangement.

In New Zealand, we agreed to sell our 83.75% interest in the Maui natural gas pipeline to First State Investments for a consideration of around \$0.2 billion. The transaction is expected to be completed in 2016, subject to regulatory approval.

### PRODUCTION AVAILABLE FOR SALE

In 2015, production was 2,954 thousand boe/d compared with 3,080 thousand boe/d in 2014. Liquids production increased by 2% and natural gas production decreased by 9% compared with 2014.

Production in 2015 was impacted by the divestment of a number of assets (mainly shale assets in the USA and OMLs in Nigeria), field declines, curtailment of production at Groningen in the Netherlands, licence expiries in Malaysia in 2015 and Abu Dhabi in 2014, and higher maintenance activities.

These reductions were partly offset by new field start-ups and the continued ramp-up of existing fields, in particular Cardamom and Mars B in the Gulf of Mexico and Bonga in Nigeria, which together contributed approximately 120 thousand boe/d to production in 2015. Positive PSC price effects provided further offset.

### EQUITY SALES OF LNG

Equity sales of LNG of 22.6 million tonnes were 6% lower than in 2014, mainly reflecting the expiry of the Malaysia LNG Dua Joint Venture Agreement (JVA), the divestment of a portion of our shareholding in Woodside Petroleum Limited (Woodside) in Australia and increased maintenance activities.

## PROVED RESERVES

Shell subsidiaries' and the Shell share of joint ventures and associates' estimated net proved oil and gas reserves are summarised later in this section on page 33 and set out in more detail in "Supplementary information – oil and gas (unaudited)" on pages 153-161.

In 2015, proved reserves before taking production into account decreased by 220 million boe, of which 157 million boe came from Shell subsidiaries and 63 million boe from the Shell share of joint ventures and associates.

In 2015, after taking production into account, our proved reserves decreased by 1,334 million boe to 11,747 million boe at December 31, 2015.

In order to illustrate the potential impact of falling commodity prices on our 2014 proved reserves base, we replaced the 2014 yearly average price with the 2015 yearly average price in the analysis below, holding all other variables, such as 2014 costs estimates, constant. Applying this methodology, 1,707 million boe of proved reserves would have been excluded from our SEC proved reserves at December 31, 2014, if the 2015 year average price had been used. This negative price effect of 1,707 million boe was the combined result of a decrease of 2,080 million boe due to earlier economic cut-off, a decrease of 279 million boe due to proved undeveloped reserves (PUD) no longer being economic, and an increase of 652 million boe due to a higher entitlement share as a result of the lower yearly average price. The 1,707 million boe negative price effect includes reductions of 446 million boe of proved reserves for Carmon Creek, and 950 million boe for Muskeg River Mine, both in Canada. Because of actions we took during 2015, our actual outcome does not reflect this significant price effect. For example, the 2014 proved reserves associated with the Muskeg River Mine remain part of our 2015 proved reserves base because we were able to obtain significant structural cost improvements in 2015 which offset the significant decline in prices.

### Shell subsidiaries

Before taking production into account, Shell subsidiaries' proved reserves decreased by 157 million boe in 2015. This comprised a reduction of 211 million barrels of oil and natural gas liquids and an addition of 54 million boe (315 thousand million scf) of natural gas. The reduction of 157 million boe was the net effect of a reduction of 150 million boe from revisions and reclassifications; an addition of 4 million boe from improved recovery; an addition of 89 million boe from extensions and discoveries; and a net decrease of 100 million boe related to purchases and sales.

After taking into account production of 907 million boe (of which 27 million boe were consumed in operations), Shell subsidiaries' proved reserves decreased by 1,064 million boe to 9,117 million boe at December 31, 2015.

Shell subsidiaries' proved developed reserves decreased by 210 million boe to 6,567 million boe, and PUD decreased by 854 million boe to 2,550 million boe.

The total reduction of 157 million boe proved reserves in Shell subsidiaries before taking production into account included an increase of 595 million boe due to an increased entitlement share in production sharing and tax/variable royalty contracts due to the lower yearly average price.

### SYNTHETIC CRUDE OIL

The 220 million boe reduction in total proved reserves included an addition of 230 million barrels of synthetic crude oil, largely due to a reduction in variable royalty due to the lower yearly average price. In 2015, synthetic crude oil production was 52 million barrels, of which 2 million barrels were

consumed in operations. At December 31, 2015, synthetic crude oil proved reserves were 1,941 million barrels, of which 1,405 million barrels were proved developed reserves and 536 million barrels were PUD.

### BITUMEN

The 220 million boe reduction in total proved reserves included a reduction of 420 million barrels of bitumen, largely caused by the cessation of the Carmon Creek project. In 2015, bitumen crude oil production was 5 million barrels with minimal volumes consumed in operations. At December 31, 2015, bitumen crude oil proved reserves were 3 million barrels.

### Shell share of joint ventures and associates

Before taking production into account, the Shell share of joint ventures and associates' proved reserves decreased by 63 million boe in 2015. This comprised a reduction of 63 million barrels of oil and natural gas liquids and a negligible reduction of natural gas (2 thousand million scf). The reduction of 63 million boe was the net effect of a reduction of 82 million boe from revisions and reclassifications, an addition of 2 million boe from extensions and discoveries, an increase of 1 million boe from improved recovery and an increase of 16 million boe from purchases.

After taking into account production of 207 million boe (of which 9 million boe were consumed in operations), the Shell share of joint ventures and associates' proved reserves decreased by 270 million boe to 2,630 million boe at December 31, 2015.

The Shell share of joint ventures and associates' proved developed reserves decreased by 151 million boe to 2,055 million boe, and PUD decreased by 119 million boe to 575 million boe.

The total reduction of 63 million boe proved reserves in joint ventures and associates before taking production into account included an increase of 5 million boe due to increased entitlement share in production sharing and tax/variable royalty contracts due to the lower yearly average price.

### PROVED UNDEVELOPED RESERVES

In 2015, Shell subsidiaries' and the Shell share of joint ventures and associates' PUD decreased by 973 million boe to 3,125 million boe. A large number of Shell fields saw reductions in PUD as a result of the lower yearly average price, with the largest reductions due to the cessation of Carmon Creek (Canada), economic limit test (ELT) failure of Stones (USA); and volumes matured to proved developed reserves in Soku (Africa) and Troll and Corrib (Europe). The most significant additions to PUD occurred in Muskeg River Mine (Canada) and Caesar Tonga (USA). The 973 million boe decrease in PUD was the net effect of a reduction of 1,070 million boe from revisions and reclassifications, an addition of 96 million boe from extensions, discoveries and improved recovery; and a net increase of 1 million boe related to purchases and sales.

During 2015, a total of 463 million boe of PUD were matured to proved developed reserves from projects coming on stream. An amount of 112 million boe was matured to proved developed reserves from contingent resource as a result of project execution during the year.

PUD held for five years or more (PUD5+) at December 31, 2015, amounted to 1,432 million boe, a decrease of 168 million boe compared with the end of 2014. These PUD5+ remain undeveloped because development either: requires the installation of gas compression and the drilling of additional wells, which will be executed when required to support existing gas delivery commitments (in the Netherlands and Russia); requires gas cap blow down which is awaiting end-of-oil production (in Nigeria); or will take longer than five years because of the complexity and scale of the project (Australia and Kazakhstan).

## UPSTREAM CONTINUED

The decrease in PUD5+ of 168 million boe was due to the maturation of 98 million boe PUD5+ to proved developed reserves and a net reduction of 70 million boe of PUD5+ as a result of certain projects no longer passing the ELT due to the lower yearly average price and technical downward revisions to certain PUD5+, partially offset by the ageing of a small amount of PUD that are now more than five years old. Three fields – Soku (Africa), Troll (Europe) and Malampaya (Asia) – were the main contributors to the reduction from PUD5+ to proved developed reserves from compression projects being brought on stream and PUD volumes being matured to proved developed reserves. The fields with the largest PUD5+ at December 31, 2015, were Muskeg River Mine (Canada), followed by Gorgon and Jansz-lo (Oceania), Groningen (Europe), and Kashaghan (Asia).

During 2015, we spent \$13.9 billion on development activities related to PUD maturation.

### DELIVERY COMMITMENTS

We sell crude oil and natural gas from our producing operations under a variety of contractual obligations. Most contracts generally commit us to sell quantities based on production from specified properties, although some natural gas sales contracts specify delivery of fixed and determinable quantities, as discussed below.

In the past three years, with the exception of Brunei, we met all contractual delivery commitments. In the period 2016 to 2018, we are contractually committed to deliver to third parties and joint ventures and associates a total of approximately 3,700 thousand million scf of natural gas from our subsidiaries, joint ventures and associates. The sales contracts contain a mixture of fixed and variable pricing formulae that are generally referenced to the prevailing market price for crude oil, natural gas or other petroleum products at the time of delivery.

The shortfall between our delivery commitments and our proved developed reserves is estimated at 29% of our total gas delivery commitments. This shortfall is expected to be met through the development of proved undeveloped reserves as well as new projects and purchases on the spot market.

### EXPLORATION

In 2015, we made six notable discoveries and appraisals, including in Australia, Brazil, the UK and the USA. Discoveries will be evaluated further in order to establish the extent of commercially producible volumes they contain.

In 2015, we participated in 148 productive exploratory wells with proved reserves allocated (Shell share: 114 wells). For further information, see “Supplementary information – oil and gas (unaudited)” on page 169.

In 2015, we participated in a further 185 wells (Shell share: 117 wells) that remained pending determination at December 31, 2015.

In total, the net undeveloped acreage in our exploration portfolio decreased by around 4.8 million acres in 2015, with the largest contributions comprising acreage relinquishment in Benin, China, Gabon, Russia, Saudi Arabia, Tunisia, Ukraine and the USA; and an acreage reduction in Canada. These effects were partially offset by acreage acquisitions in Algeria, Australia, Indonesia and Myanmar.

### BUSINESS AND PROPERTY

Our subsidiaries, joint ventures and associates are involved in all aspects of upstream activities, including matters such as land tenure, entitlement to produced hydrocarbons, production rates, royalties, pricing, environmental protection, social impact, exports, taxes and foreign exchange.

The conditions of the leases, licences and contracts under which oil and gas interests are held vary from country to country. In almost all cases outside North America, the legal agreements are generally granted by, or entered into with, a government, state-owned company or government-run oil and gas company, and the exploration risk usually rests with the independent oil and gas company. In North America, these agreements may also be with private parties that own mineral rights. Of these agreements, the following are most relevant to our interests:

- Licences (or concessions), which entitle the holder to explore for hydrocarbons and exploit any commercial discoveries. Under a licence, the holder bears the risk of exploration, development and production activities, and is responsible for financing these activities. In principle, the licence holder is entitled to the totality of production less any royalties in kind. The government, state-owned company or government-run oil and gas company may sometimes enter into a joint arrangement as a participant sharing the rights and obligations of the licence but usually without sharing the exploration risk. In a few cases, the state-owned company, government-run oil and gas company or agency has an option to purchase a certain share of production.
- Lease agreements, which are typically used in North America and are usually governed by similar terms as licences. Participants may include governments or private entities, and royalties are either paid in cash or in kind.
- Production-sharing contracts (PSCs) entered into with a government, state-owned company or government-run oil and gas company. PSCs generally oblige the independent oil and gas company, as contractor, to provide all the financing and bear the risk of exploration, development and production activities in exchange for a share of the production. Usually, this share consists of a fixed or variable part that is reserved for the recovery of the contractor's cost (cost oil). The remaining production is split with the government, state-owned company or government-run oil and gas company on a fixed or volume/revenue-dependent basis. In some cases, the government, state-owned company or government-run oil and gas company will participate in the rights and obligations of the contractor and will share in the costs of development and production. Such participation can be across the venture or on a field-by-field basis. Additionally, as the price of oil or gas increases above certain predetermined levels, the independent oil and gas company's entitlement share of production normally decreases, and vice versa. Accordingly, its interest in a project may not be the same as its entitlement.

### Europe

#### DENMARK

We have a non-operating interest in a producing concession in Denmark (Shell interest 36.8%), which was granted in 1962 and will expire in 2042. The Danish government is one of our partners with a 20% interest.

#### IRELAND

We are the operator of the Corrib gas project (Shell interest 45%). Corrib has the potential to supply a significant proportion of the country's gas requirements. Gas started to flow from the field, which is 83 kilometres off Ireland's northwest coast, on December 30, 2015.

#### ITALY

We have two non-operating interests in Italy: the Val d'Agri producing concession (Shell interest 39.23%) and the Tempa Rossa concession (Shell interest 25%). The Val d'Agri Phase 2 project is currently in FEED phase and work is being carried out to manage key non-technical risks. The Tempa Rossa field is under development and first oil is expected in 2018.

#### NETHERLANDS

Shell and ExxonMobil are 50:50 shareholders in Nederlandse Aardolie Maatschappij B.V. (NAM), the largest hydrocarbon producer in the

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Netherlands. An important part of NAM's gas production comes from the onshore Groningen gas field, in which the Dutch government has a 40% interest and NAM a 60% interest.

In the second quarter of 2015, the Minister of Economic Affairs of the Netherlands (the Minister) announced a further reduction in the Groningen production for 2015 to 30 billion cubic metres (bcm), in an effort to diminish the potential for seismic activity, while allowing a further 3 bcm to be taken from the Norg underground storage to ensure security of supply. The State Council ("Raad van State") ruled in November 2015 that the Groningen production limit be set at 27 bcm for the gas year 2016, until the Minister takes a new resolution on NAM's production plan. The Minister is expected to approve a new development plan for Groningen no later than October 1, 2016. NAM produced 28.1 bcm from the Groningen field in 2015. While the Dutch government currently supports the full development of the Groningen gas field, any decision to change the development plan to reduce the ultimate recovery of resources would adversely affect our proved reserves. See "Risk factors" on page 10.

NAM also has a 60% interest in the Schoonebeek oil field, which has been redeveloped using enhanced oil recovery (EOR) technology. In June 2015, due to pipeline integrity issues identified, NAM decided to shut-in the Schoonebeek field. Production is expected to resume by the end of 2016. NAM also operates a significant number of other onshore gas fields and offshore gas fields in the North Sea.

## NORWAY

We are a partner in 30 production licences on the Norwegian continental shelf. We are the operator in 13 of these, of which two are producing: the Ormen Lange gas field (Shell interest 17.8%) and the Draugen oil field (Shell interest 44.6%). The other producing fields are Troll, Gjøa, Kvitebjørn and Valemon. The Draugen field has an operational waterflood.

## UK

We operate a significant number of our interests on the UK Continental Shelf on behalf of a 50:50 joint arrangement with ExxonMobil. Most of our UK oil and gas production comes from the North Sea. We have various interests where we are not the operator in the Atlantic Margin area, principally in the West of Shetland area (Clair, Shell interest 28%, and Schiehallion, Shell interest approximately 55%). We also have interests ranging from 20% to 49% in the Beryl area fields.

Waterfloods are operational in the Beryl, Clair and Pierce fields. The Schiehallion and Loyal fields production and water injection is closed-in as the fields are being redeveloped; the fields are currently planned to resume production by mid-2017.

## REST OF EUROPE

We also have interests in Albania, Germany and Greenland.

## Asia (including the Middle East and Russia)

### BRUNEI

Shell and the Brunei government are 50:50 shareholders in Brunei Shell Petroleum Company Sendirian Berhad (BSP). BSP has long-term oil and gas concession rights onshore and offshore Brunei, and sells most of its gas production to Brunei LNG Sendirian Berhad (BLNG, Shell interest 25%). BLNG was the first LNG plant in Asia-Pacific and sells most of its LNG on long-term contracts to customers in Asia. Production from the Champion field is supported by water injection, and gas injection is installed in the South West Ampa field.

In addition to our interest in BSP, we are the operator for the Block A concession (Shell interest 53.9%), which is under exploration and

development, and also the operator for exploration Block Q (Shell interest 50%). We have a 35% non-operating interest in the Block B concession, where gas and condensate are produced from the Maharaja Lela field.

We also have non-operating interests in deep-water exploration Block CA-2 (Shell interest 12.5%) and in exploration Block N (Shell interest 50%), both under PSCs.

### CHINA

We jointly develop and produce from the onshore Changbei tight-gas field under a PSC with China National Petroleum Corporation (CNPC). The PSC includes the development of tight gas in different geological layers of the block. In Sichuan, we have agreed with CNPC to appraise, develop and produce from tight-gas and liquids-rich shale formations in the Jinqiu block under a PSC (Shell interest 49%) and have a PSC for shale-gas exploration, development and production in the Fushun Yongchuan block (Shell interest 49%).

We also have an interest in an offshore oil and gas block in the Yinggehai basin, under a PSC (Shell interest 49%).

### INDONESIA

We have a 35% participating interest in the offshore Masela block where INPEX Masela is the operator. The Masela block contains the Abadi gas field. The operator has selected an FLNG concept for the field's development phase. The development plan approval process is ongoing with the government of Indonesia.

In May 2015, we signed a PSC with the Indonesian government for the exploration and potential development of acreage called Pulau Maa, offshore in eastern Indonesia.

### IRAN

Shell transactions with Iran are disclosed separately. See "Section 13(r) of the US Securities Exchange Act of 1934 Disclosure" on page 197.

### IRAQ

We have a 45% interest in the Majnoon oil field that we operate under a technical service contract that expires in 2030. The other shareholders in Majnoon are PETRONAS (30%) and the Iraqi government (25%), which is represented by the Missan Oil Company. Majnoon is located in southern Iraq and is one of the world's largest oil fields. Production at Majnoon averaged 211 thousand boe/d in 2014 and 206 thousand boe/d in 2015.

We also have a 20% interest in the West Qurna 1 field, which is operated by ExxonMobil.

According to the provisions of both contracts, our equity entitlement volumes will be lower than our interest implies.

We also have a 44% interest in the Basrah Gas Company, which gathers, treats and processes associated gas, produced from the Rumaila, West Qurna 1 and Zubair fields, that was previously being flared. The processed gas and associated products, such as condensate and liquefied petroleum gas (LPG), are sold primarily to the domestic market with the potential to export any surplus.

### KAZAKHSTAN

We have a 16.8% interest in the North Caspian Production Sharing Agreement which covers the offshore Kashagan field, where the North Caspian Operating Company is the operator. This shallow-water field covers an area of approximately 3,400 square kilometres. Phase 1 development of the field is expected to lead to plateau production of about 300 thousand boe/d, on a 100% basis, with the possibility of increasing

## UPSTREAM CONTINUED

further with additional phases of development. Following the completion of pipeline replacement and other preparation activities, the operator expects production to start around the end of 2016.

Kashagan production will be supported by gas injection.

We also have an interest of 55% in the Pearls PSC, covering an area of approximately 900 square kilometres in the Kazakh sector of the Caspian Sea. It includes two oil discoveries, Auezov and Khazar.

We also have a 5.43% interest in Caspian Pipeline Consortium, which owns an oil pipeline running from the Caspian Sea to the Black Sea across parts of Kazakhstan and Russia.

### MALAYSIA

We explore for and produce oil and gas offshore Sabah and Sarawak under 18 PSCs, in which our interests range from 20% to 85%.

Offshore Sabah, we operate five producing oil fields (Shell interests ranging from 29% to 50%). These include the Gumusut-Kakap deep-water field (Shell interest 29%) where production via a dedicated floating production system commenced in 2014. We have additional interests ranging from 30% to 50% in PSCs for the exploration and development of four blocks. These include the Malikai deep-water field (Shell interest 35%) which we are developing, as the operator. We also have a 21% interest in the Siakap North-Pelai deep-water field and a 30% interest in the Kebabangan field, neither of which we operate.

Offshore Sarawak, we are the operator of 12 producing gas fields (Shell interests ranging from 37.5% to 70%). Nearly all of the gas produced is supplied to Malaysia LNG in Bintulu, where we have a 15% interest in the Tiga LNG joint venture, and to our Shell MDS GTL plant in Bintulu. In May 2015, the Malaysia LNG Dua JVA expired, resulting in the transfer of our 15% shareholding to PETRONAS, in accordance with the original JVA terms. The Malaysia LNG Dua PSC expired in August 2015, at which time we handed over the operatorship and our 50% interest to PETRONAS.

Waterflood is operational in the St. Joseph field and is under installation at the Malikai field. In the Gumusut Kakap field, both gas and water injections were commissioned in 2015 and are operational.

We also have a 40% interest in the 2011 Baram Delta EOR PSC and a 50% interest in Block SK-307. Additionally, we have interests in five exploration PSCs: deep-water block 2B, SK318, SK319, SK320 and SK408.

We operate a GTL plant (Shell interest 72%) adjacent to the Malaysia LNG facilities in Bintulu. Using Shell technology, the plant converts gas into high-quality middle distillates, drilling fluids, waxes and speciality products.

### OMAN

We have a 34% interest in Petroleum Development Oman (PDO); the Omani government has a 60% interest. PDO is the operator of more than 160 oil fields, mainly located in central and southern Oman over an area of 114,000 square kilometres. The concession expires in 2044. In various assets in PDO, production is supported by water injection, gas injection, steam injection or polymer flood projects.

We are also participating in the Mukhaizna oil field (Shell interest 17%) where steam flooding, an EOR method, is being applied.

We have a 30% interest in Oman LNG, which mainly supplies Asian markets under long-term contracts. We also have an 11% indirect interest in Qalhat LNG, which is part of the Oman LNG complex.

### QATAR

Pearl in Qatar is the world's largest GTL plant. We operate it under a development and production-sharing contract with the government. The fully-integrated facility has capacity for production, processing and transportation of 1.6 billion scf/d of gas from Qatar's North Field. It has an installed capacity of about 140 thousand boe/d of high-quality liquid hydrocarbon products and 120 thousand boe/d of natural gas liquids (NGL) and ethane. In 2015, Pearl produced 4.1 million tonnes of GTL products.

Of Pearl's two trains, the second train will undergo planned maintenance, starting in March 2016 and continuing into the second quarter of 2016, for an estimated two-month period. The first train underwent similar planned maintenance in 2015, which was completed in April 2015.

We have a 30% interest in Qatargas 4, which comprises integrated facilities to produce about 1.4 billion scf/d of gas from Qatar's North Field, an onshore gas-processing facility and an LNG train with a collective production capacity of 7.8 mtpa of LNG and 70 thousand boe/d of condensate and NGL. The LNG is shipped mainly to China, Europe and the United Arab Emirates.

### RUSSIA

We have a 27.5% interest in Sakhalin-2, an integrated oil and gas project located in a subarctic environment. In 2015, the project produced approximately 320 thousand boe/d and the output of LNG exceeded 10 million tonnes.

Our 100% interest in an exploration and production licence for the Lenzitsky block in the Yamalo Nenets Autonomous District was relinquished in 2015. We have a 100% interest in the North Vorkutinsky 1 and North Vorkutinsky 2 exploration and production licences in Komi Republic (Timan Pechora). We also have a 50% interest through Khanty-Mansiysk Petroleum Alliance (a 50:50 joint venture with Gazprom Neft) in three exploration licence blocks in western Siberia: South Lungorsky 1, Yuilsky 4 and Yuilsky 5.

We have a 50% interest in the Salym fields in western Siberia, Khanty Mansiysk Autonomous District, where production was approximately 120 thousand boe/d in 2015. In the Salym fields, production is supported by water injection.

As a result of European Union and US sanctions prohibiting certain defined oil and gas activities in Russia, we suspended our shale oil exploration activities undertaken through Salym and Khanty-Mansiysk Petroleum Alliance in 2014.

### UNITED ARAB EMIRATES

In Abu Dhabi, we have a 15% interest in the licence of Abu Dhabi Gas Industries Limited (GASCO), which expires in 2028. GASCO exports propane, butane and heavier-liquid hydrocarbons, which it extracts from the wet gas associated with the oil produced by the Abu Dhabi Company for Onshore Oil Operations (ADCO).

We were working with ADNOC on the development of the Bab sour gas reservoirs in Abu Dhabi (Shell interest 40%). However, following a careful and thorough evaluation of technical challenges and costs, we have decided to exit the joint development of the Bab sour gas reservoirs with ADNOC and to stop further work on the project.

### REST OF ASIA

We also have interests in Jordan, Kuwait, Myanmar, the Philippines and Turkey.

## Oceania

### AUSTRALIA

We have interests in offshore production and exploration licences in the North West Shelf (NWS) and Greater Gorgon areas of the Carnarvon Basin, as well as in the Browse Basin and Timor Sea. Some of these interests are held directly and others indirectly through a shareholding of about 14% in Woodside. All interests in Australian assets quoted below are direct interests.

Woodside is the operator of the Pluto LNG project. Woodside is also the operator on behalf of the joint-arrangement participants in the NWS gas, condensate and oil fields, which produced more than 500 thousand boe/d in 2015. We provide technical support for the NWS development.

We have a 50% interest in Arrow Energy Holdings Pty Limited (Arrow), a Queensland-based joint venture with PetroChina. Arrow owns coal-bed methane assets and a domestic power business.

We have a 25% interest in the Gorgon LNG project, which involves the development of some of the largest gas discoveries to date in Australia, beginning with the offshore Gorgon (Shell interest 25%) and Janszlo (Shell interest 19.6%) fields. The Gorgon LNG project on Barrow Island started LNG and condensate production in March 2016.

We are the operator of a permit in the Browse Basin in which two separate gas fields were found: Prelude in 2007 and Concerto in 2009. Our development concept for these fields is based on our FLNG technology. The Prelude FLNG project (Shell interest 67.5%) is expected to produce about 110 thousand boe/d of gas and NGL, delivering 3.6 mtpa of LNG, 1.3 mtpa of condensate and 0.4 mtpa of LPG. Major milestones during 2015 were the lifting of all topsides onto the FLNG facility and the conclusion of the well drilling campaign.

We are also a partner in the Browse joint arrangement (Shell interest 27%) covering the Brecknock, Calliance and Torosa gas fields. In 2015, the Browse partners supported a FEED decision for an FLNG development.

Our other interests include a joint arrangement, with Shell as the operator, of the undeveloped Crux gas and condensate field (Shell interest 82%), and the Woodside-operated, undeveloped Sunrise gas field in the Timor Sea (Shell interest 26.6%).

We are a partner in both Shell-operated and other exploration joint arrangements where we are not the operator in multiple basins including Bonaparte, Browse, Exmouth Plateau, Greater Gorgon, Outer Canning and Outer Exmouth.

### REST OF OCEANIA

We also have interests in New Zealand.

## Africa

### NIGERIA

Our share of production, onshore and offshore, in Nigeria was approximately 278 thousand boe/d in 2015, compared with approximately 300 thousand boe/d in 2014. Security issues and crude oil theft in the Niger Delta continued to be significant challenges in 2015.

#### Onshore

The Shell Petroleum Development Company of Nigeria Limited (SPDC) is the operator of a joint arrangement (Shell interest 30%) that has 17 Niger Delta onshore OMLs, which expire in 2019. Of the Nigeria onshore proved reserves, 196 million boe are expected to be produced before the expiry of

the current licences and 402 million boe beyond. To provide funding, modified carry agreements are in place for certain key projects and are being reimbursed.

SPDC supplies gas to Nigeria LNG Ltd (NLNG) mainly through its Gbaran-Ubie and Soku projects. As part of the strategic review of its interests in the eastern Niger Delta, SPDC has divested its 30% interest in OMLs 18, 29, and the NCTL. OML 25 is held for sale, subject to the resolution of pending litigation. Additional divestments may occur as a result of the strategic review.

The level of crude oil theft activities and sabotage in 2015 was significantly lower than in 2014, following the divestment of OMLs 18 and 29, and the NCTL in 2015.

In our Nigerian operations, we face various risks and adverse conditions which could have a material adverse effect on our operational performance, earnings, cash flows and financial condition (see "Risk factors" on page 09). These risks and conditions include: security issues surrounding the safety of our people, host communities and operations; sabotage and theft; our ability to enforce existing contractual rights; litigation; limited infrastructure; potential legislation that could increase our taxes or costs of operations; the effect of lower oil and gas prices on the government budget; and regional instability created by militant activities. In addition, the Nigerian government is contemplating new legislation to govern the petroleum industry which, if passed into law, could have a material adverse effect on our existing and future activities in that country. There are limitations to the extent to which we can mitigate these risks. We carry out regular portfolio assessments to remain a competitive player in Nigeria for the long term. We support the Nigerian government's efforts to improve the efficiency, functionality and domestic benefits of Nigeria's oil and gas industry, and monitor legislative developments for possible contribution. We monitor the security situation and liaise with host communities, governmental and non-governmental organisations to help promote peace and safe operations. We continue to provide transparency of spills management and reporting, along with our deployment of oil spill response capability and technology. We execute a maintenance strategy to support sustainable equipment reliability, and have implemented a multi-year programme to support sustainable reduction in the routine flaring of associated gas. See "Environment and society" on pages 55-56.

#### Offshore

Our main offshore deep-water activities are carried out by SNEPCO (Shell interest 100%) which has interests in four deep-water blocks, under PSC terms. SNEPCO operates OMLs 118 (including the Bonga field, Shell interest 55%) and 135 (Bolia and Doro, Shell interest 55%) and has a 43.75% interest in OML 133 (Erha), where we are not the operator, and a 50% interest in oil production lease 245 (Zabazaba, Eton). SNEPCO also has an approximate 43% interest in the Bonga South West/Aparo development via its 55% interest in OML 118. After close consultation with our partners, it is clear that the Bonga South West deep-water project requires further project cost reductions to make it economically viable in the current business environment. An FID is not expected before 2017.

First oil was produced in the third quarter of 2015 from the Bonga Phase 3 development. It is expected to contribute some 50 thousand boe/d at peak production through the existing Bonga FPSO export facility.

First oil was also achieved in the third quarter of 2015 from the Erha North Phase 2 development. The project, in which SNEPCO has a 43.75% interest, is a tie-back to the Erha FPSO. The Phase 2 development is expected to result in around 120 million recoverable barrels of oil from the field.

Production from the Bonga and Erha North fields is supported by water

## UPSTREAM CONTINUED

injection. The Erha Main field production is supported by a combination of water and gas injection.

Five shallow-water licences (OMLs 71, 72, 74, 77 and 79) were renewed in December 2014 and will expire in 2034. In 2015, we sold OMLs 71 and 72, both of which were non-producing.

### Liquefied natural gas

We have a 25.6% interest in NLNG, which operates six LNG trains with a total capacity of 22.0 mtpa.

### REST OF AFRICA

We also have interests in Algeria, Egypt, Gabon, Namibia, South Africa and Tanzania.

## North America

### CANADA

We have more than 1,800 mineral leases in Canada, mainly in Alberta and British Columbia. We produce and market natural gas, NGL, synthetic crude oil and bitumen. In addition, we have significant exploration acreage offshore. Bitumen is a very heavy crude oil produced through conventional methods as well as through EOR methods. Synthetic crude oil is produced by mining bitumen-saturated sands, extracting the bitumen from the sands and transporting it to a processing facility where hydrogen is added to produce a wide range of feedstocks for refineries.

### Gas and liquids-rich shale

We continued to develop fields in Alberta and British Columbia during 2015 through drilling programmes and investment in infrastructure to facilitate new production. We own and operate natural gas processing and sulphur-extraction plants in Alberta and natural gas processing plants in British Columbia. In 2014, we entered into a joint venture (Shell interest 50%) to evaluate an investment in an LNG export facility in Kitimat on the west coast of Canada. Together with our partners, we have elected to postpone the FID of the proposed LNG project to late 2016.

### Synthetic crude oil

We operate the Athabasca Oil Sands Project (AOSP) in north-east Alberta as part of a joint arrangement (Shell interest 60%). The bitumen is transported by pipeline for processing at the Scotford Upgrader, which we also operate and is located in the Edmonton area.

We also have a number of other minable oil sands leases in the Athabasca region with expiry dates ranging from 2018 to 2025. By completing the Alberta Department of Energy's prescriptive development requirements prior to their expiry, leases may be extended.

### Carbon capture and storage

The Quest carbon capture and storage project (Shell interest 60%), which is expected to capture and permanently store more than 1 mtpa of carbon dioxide from the Scotford Upgrader, began operations in late 2015.

### Bitumen

We produce and market bitumen in the Peace River area of Alberta. We also have heavy oil resources in approximately 1,200 square kilometres in the Grosmont oil sands area, also in northern Alberta. We announced that we will not continue construction of the 80 thousand boe/d Carmon Creek thermal in-situ project (Shell interest 100%). We have retained the Carmon Creek leases and preserved some equipment while continuing to evaluate options for these assets.

### Offshore

We have a 31.3% interest in the Sable Offshore Energy project, a natural-gas complex off the east coast of Canada, and other acreages in deep-water offshore Nova Scotia and Newfoundland. We have a 50% interest and operatorship in the Shelburne exploration project offshore Nova Scotia. We also have a number of exploration licences off the west coast of British Columbia and in the Mackenzie Delta in the Northwest Territories.

### USA

We produce oil and gas in the Gulf of Mexico, heavy oil in California and primarily tight gas and oil from liquids-rich shales in Pennsylvania and Texas. The majority of our oil and gas production interests are acquired under leases granted by the owner of the minerals underlying the relevant acreage, including many leases for federal onshore and offshore tracts. Such leases usually run on an initial fixed term that is automatically extended by the establishment of production for as long as production continues, subject to compliance with the terms of the lease (including, in the case of federal leases, extensive regulations imposed by federal law).

### Gulf of Mexico

The Gulf of Mexico is our major production area in the USA, and accounts for over 62% of our oil and gas production in the country. We have an interest in approximately 400 federal offshore production leases and our share of production averaged 253 thousand boe/d in 2015. Key producing assets are Auger, Brutus, Enchilada, Mars, Mars B, Perdido, Ram Powell and Ursa, which we operate, and Caesar Tonga and Na Kika, which we do not operate. Production from the Ursa and Perdido-Great White fields is supported by water injection. Efforts are ongoing to reinstate water injection at the Mars field.

We continued exploration, development and abandonment activities in the Gulf of Mexico in 2015, with an average contracted offshore rig fleet of seven mobile rigs and seven platform rigs. We also secured 17 blocks in the central Gulf of Mexico lease sales in 2015.

### Onshore

We have significant tight-gas and liquids-rich shale acreage, centred on Pennsylvania in north-east USA and in the Delaware Permian Basin in west Texas.

### California

We have a 51.8% interest in Aera Energy LLC (Aera), which operates in the San Joaquin Valley in California. Aera operates approximately 15,000 wells, producing around 130 thousand boe/d of heavy oil and gas.

Aera fields Belridge, Lost Hills, Cymric, McKiltrick, Coalinga, Midway Sunset, Ventura and San Ardo are all operated under a combination of water and steam injection.

### Alaska

We operated for almost 50 years off the coast of Alaska, including in the Cook Inlet, and the Beaufort and Chukchi seas, until 1998. Between 2005 and 2012, we acquired our current Alaska portfolio, which includes 339 federal leases for exploration in the Beaufort and Chukchi Seas, and 18 state leases in North Slope Beaufort coastal waters. The federal Chukchi leases expire in 2020. The vast majority of federal Beaufort leases end in 2017 and the remaining two in 2019. The state Beaufort leases end in 2022.

In September 2015, we safely drilled the Burger J well in the Chukchi Sea to a depth of 2,073 metres. The well was deemed a dry hole, and the result renders the Burger prospect uneconomic. The well was sealed and abandoned in accordance with regulations. We will not conduct further exploration offshore Alaska for the foreseeable future. This decision reflects

not only the outcome of the Burger J well, but also the high costs associated with the project, and the challenging and unpredictable federal regulatory environment for the Alaska outer continental shelf.

Subsequently, we safely demobilised all personnel and vessels from the Chukchi Sea. All operations were conducted without significant injury or environmental issues. We conveyed the results of the exploration season to stakeholders and worked closely with them in the subsequent winding down of operations.

Our leasehold in Alaska remains material and prospective, and strategies to generate value from this acreage – including lease extensions – will be developed and progressed accordingly. In October 2015, the Bureau of Safety and Environmental Enforcement denied our request to extend expiration dates for the federal leases. We have appealed the decision.

## South America

### BRAZIL

#### Offshore

We operate several deep-water producing fields in the Campos Basin. They include the BC-10 field (Shell interest 50%), which is supported with water injection, and the Bijupirá and Salema fields (Shell interest 80%). We expect to start production from the BC-10 Phase 3 project in 2016.

In January 2015, we signed a purchase and sale agreement to divest our interest in the Bijupirá and Salema fields, pending regulatory approvals. The agreement was cancelled in February 2016 and these assets therefore remain in our portfolio.

In the Santos Basin, we have a 20% interest in a 35-year PSC to develop the Libra pre-salt oil field and operate exploration block BM-S-54 (Shell interest 80%).

In August 2015, we ceased exploration on block BM-ES-27 (Shell interest 17.5%) in the Espírito Santos basins.

#### Onshore

In February 2015, we returned our block in the São Francisco basin area (Shell interest 60%) to the regulator.

We have an 18% interest in Brazil Companhia de Gas de São Paulo (Comgás), a natural gas distribution company in the state of São Paulo.

### REST OF SOUTH AMERICA

We also have interests in Argentina, Colombia and French Guiana. Furthermore, we have an interest in the LNG plants in Peru and Trinidad and Tobago.

## Trading and Supply

We market a portion of our share of equity production of LNG and trade LNG volumes around the world through our hubs in Dubai and Singapore. We also market and trade natural gas, power, carbon-emission rights and crude oil from certain of our Upstream operations in the Americas and Europe.



## UPSTREAM CONTINUED

CAPITAL INVESTMENT IN OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES BY GEOGRAPHICAL AREA	\$ MILLION	
	2015	2014
Oil and gas exploration and production activities		
Europe [A]	2,999	4,273
Asia	3,208	3,875
Oceania	3,526	5,068
Africa	2,312	2,825
North America – USA	7,409	8,210
North America – Canada	2,148	3,162
South America	666	1,109
<b>Total</b>	<b>22,268</b>	<b>28,522</b>
Other Upstream activities [B]	1,259	2,771
<b>Total Upstream [C]</b>	<b>23,527</b>	<b>31,293</b>

[A] Includes Greenland.

[B] Comprise LNG, GTL, trading and supply activities, and wind activities.

[C] See "Non-GAAP measures reconciliations and other definitions" on page 198.

LOCATION OF OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES [A] (AT DECEMBER 31, 2015)	Development and/or production		
	Exploration	and/or production	Shell operator[B]
<b>Europe</b>			
Albania	■		
Denmark	■	■	
Germany	■	■	
Greenland	■		■
Ireland	■	■	■
Italy	■	■	
Netherlands	■	■	■
Norway	■	■	■
UK	■	■	■
<b>Asia [C]</b>			
Brunei	■	■	■
China	■	■	■
Indonesia	■	■	■
Iraq		■	■
Jordan	■		■
Kazakhstan	■	■	
Malaysia	■	■	■
Myanmar	■		■
Oman	■	■	
Philippines	■	■	■
Qatar		■	■
Russia	■	■	■
Turkey	■		■
<b>Oceania</b>			
Australia	■	■	■
New Zealand	■	■	■
<b>Africa</b>			
Algeria	■		
Egypt	■	■	■
Gabon	■	■	■
Namibia	■		■
Nigeria	■	■	■
South Africa	■		■
Tanzania	■		
<b>North America</b>			
USA	■	■	■
Canada	■	■	■
<b>South America</b>			
Argentina	■	■	■
Brazil	■	■	■
Colombia	■		■
French Guiana	■		■

[A] Includes joint ventures and associates. Where a joint venture or associate has properties outside its base country, those properties are not shown in this table.

[B] In several countries where "Shell operator" is indicated, Shell is the operator of some but not all exploration and/or production ventures.

[C] Shell suspended all exploration and production activities in Syria in December 2011.

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SHELL ANNUAL REPORT AND FORM 20-F

10/27/2015

## PROVED OIL AND GAS RESERVES

SUMMARY OF PROVED OIL AND GAS RESERVES OF SHELL SUBSIDIARIES AND SHELL SHARE OF JOINT VENTURES AND ASSOCIATES [A] (AT DECEMBER 31, 2015)						BASED ON AVERAGE PRICES FOR 2015
	Crude oil and natural gas liquids (million barrels)	Natural gas (thousand million scf)	Synthetic crude oil (million barrels)	Bitumen (million barrels)	Total all products (million boe)[B]	
<b>Proved developed</b>						
Europe	225	9,404	–	–	1,846	
Asia	1,176	14,221	–	–	3,628	
Oceania	45	1,654	–	–	330	
Africa	437	1,386	–	–	676	
North America						
USA	455	572	–	–	554	
Canada	20	636	1,405	3	1,538	
South America	44	37	–	–	50	
<b>Total proved developed</b>	<b>2,402</b>	<b>27,910</b>	<b>1,405</b>	<b>3</b>	<b>8,622</b>	
<b>Proved undeveloped</b>						
Europe	203	1,982	–	–	545	
Asia	400	1,834	–	–	716	
Oceania	93	4,292	–	–	833	
Africa	142	850	–	–	289	
North America						
USA	105	182	–	–	136	
Canada	2	319	536	–	593	
South America	12	6	–	–	13	
<b>Total proved undeveloped</b>	<b>957</b>	<b>9,465</b>	<b>536</b>	<b>–</b>	<b>3,125</b>	
<b>Total proved developed and undeveloped</b>						
Europe	428	11,386	–	–	2,391	
Asia	1,576	16,055	–	–	4,344	
Oceania	138	5,946	–	–	1,163	
Africa	579	2,236	–	–	965	
North America						
USA	560	754	–	–	690	
Canada	22	955	1,941	3	2,131	
South America	56	43	–	–	63	
<b>Total</b>	<b>3,359</b>	<b>37,375</b>	<b>1,941</b>	<b>3</b>	<b>11,747</b>	

[A] See "Supplementary information – oil and gas (unaudited)" on pages 153-161.

[B] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

## UPSTREAM CONTINUED

## OIL AND GAS PRODUCTION (AVAILABLE FOR SALE)

	2015		2014		2013	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
<b>CRUDE OIL AND NATURAL GAS LIQUIDS [A]</b>						
<b>THOUSAND BARRELS</b>						
Europe						
Denmark	17,396	–	18,834	–	20,927	–
Italy	11,179	–	11,792	–	11,997	–
Norway	14,337	–	14,893	–	14,589	–
UK	20,762	–	14,746	–	14,445	–
Other [B]	874	1,311	849	1,986	934	1,952
<b>Total Europe</b>	<b>64,548</b>	<b>1,311</b>	<b>61,114</b>	<b>1,986</b>	<b>62,892</b>	<b>1,952</b>
Asia						
Brunei	823	18,663	648	18,576	564	20,011
Iraq	20,009	–	19,218	–	8,416	–
Malaysia	22,980	–	16,754	–	15,441	–
Oman	78,404	–	74,781	–	74,527	–
Russia	22,016	10,273	23,579	10,403	25,152	10,527
United Arab Emirates	–	–	–	2,397	–	58,104
Other [B]	24,480	7,923	27,165	8,115	25,202	8,155
<b>Total Asia</b>	<b>168,712</b>	<b>36,859</b>	<b>162,145</b>	<b>39,491</b>	<b>149,302</b>	<b>96,797</b>
<b>Total Oceania [B]</b>	<b>7,858</b>	<b>3,050</b>	<b>9,191</b>	<b>3,688</b>	<b>9,371</b>	<b>4,771</b>
Africa						
Gabon	12,472	–	12,144	–	10,781	–
Nigeria	67,832	–	69,851	–	63,800	–
Other [B]	6,159	–	5,008	–	4,254	–
<b>Total Africa</b>	<b>86,463</b>	<b>–</b>	<b>87,003</b>	<b>–</b>	<b>78,835</b>	<b>–</b>
North America						
USA	104,263	–	98,895	–	86,670	–
Canada	8,599	–	8,389	–	7,626	–
<b>Total North America</b>	<b>112,862</b>	<b>–</b>	<b>107,284</b>	<b>–</b>	<b>94,296</b>	<b>–</b>
South America						
Brazil	13,307	–	16,575	–	7,706	–
Other [B]	576	–	361	–	273	3,327
<b>Total South America</b>	<b>13,883</b>	<b>–</b>	<b>16,936</b>	<b>–</b>	<b>7,979</b>	<b>3,327</b>
<b>Total</b>	<b>454,326</b>	<b>41,220</b>	<b>443,673</b>	<b>45,165</b>	<b>402,675</b>	<b>106,847</b>

[A] Reflects 100% of production of subsidiaries except in respect of PSCs, where the figures shown represent the entitlement of the subsidiaries concerned under those contracts.

[B] Comprises countries where 2015 production was lower than 7,300 thousand barrels or where specific disclosures are prohibited.

	THOUSAND BARRELS		
	2015	2014	2013
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	49,891	46,934	46,017

	THOUSAND BARRELS		
	2015	2014	2013
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	5,258	5,779	6,903

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UPSTREAM

NATURAL GAS [A]	MILLION STANDARD CUBIC FEET					
	2015		2014		2013	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
<b>Europe</b>						
Denmark	48,211	–	49,708	–	53,283	–
Germany	58,230	–	66,718	–	73,123	–
Netherlands	–	429,626	–	581,028	–	721,344
Norway	253,108	–	252,284	–	256,396	–
UK	101,276	–	104,346	–	109,470	–
Other [B]	15,892	–	15,840	–	15,409	–
<b>Total Europe</b>	<b>476,717</b>	<b>429,626</b>	<b>488,896</b>	<b>581,028</b>	<b>507,681</b>	<b>721,344</b>
<b>Asia</b>						
Brunei	21,337	162,862	22,228	155,244	18,442	164,446
China	46,481	–	53,065	–	60,034	–
Malaysia	254,523	–	241,908	–	238,940	–
Russia	3,887	131,697	4,170	128,175	4,261	126,764
Other [B]	386,450	118,421	420,169	118,198	378,412	115,469
<b>Total Asia</b>	<b>712,678</b>	<b>412,980</b>	<b>741,540</b>	<b>401,617</b>	<b>700,089</b>	<b>406,679</b>
<b>Oceania</b>						
Australia	132,209	67,382	132,801	87,830	125,654	100,707
New Zealand	55,906	–	69,052	–	61,407	–
<b>Total Oceania</b>	<b>188,115</b>	<b>67,382</b>	<b>201,853</b>	<b>87,830</b>	<b>187,061</b>	<b>100,707</b>
<b>Africa</b>						
Egypt	65,002	–	54,079	–	46,072	–
Nigeria	195,064	–	234,599	–	201,311	–
<b>Total Africa</b>	<b>260,066</b>	<b>–</b>	<b>288,678</b>	<b>–</b>	<b>247,383</b>	<b>–</b>
<b>North America</b>						
USA	264,351	–	360,846	–	394,538	–
Canada	234,055	–	214,756	–	231,897	–
<b>Total North America</b>	<b>498,406</b>	<b>–</b>	<b>575,602</b>	<b>–</b>	<b>626,435</b>	<b>–</b>
<b>Total South America [B]</b>	<b>12,853</b>	<b>–</b>	<b>12,449</b>	<b>–</b>	<b>11,896</b>	<b>444</b>
<b>Total</b>	<b>2,148,835</b>	<b>909,988</b>	<b>2,309,018</b>	<b>1,070,475</b>	<b>2,280,545</b>	<b>1,229,174</b>

[A] Reflects 100% of production of subsidiaries except in respect of PSCs, where the figures shown represent the entitlement of the companies concerned under those contracts.

[B] Comprises countries where 2015 production was lower than 41,795 million scf or where specific disclosures are prohibited.

## UPSTREAM CONTINUED

## AVERAGE REALISED PRICE BY GEOGRAPHICAL AREA

	2015		2014		2013	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	49.77	45.97	94.57	89.68	105.23	99.27
Asia	47.73	52.21	89.47	96.85	96.46	70.34
Oceania	43.39	50.01[A]	82.26	88.07[A]	90.50	91.91[A]
Africa	51.80	–	100.55	–	110.14	–
North America – USA	44.99	–	87.90	–	98.10	–
North America – Canada	25.45	–	59.19	–	63.14	–
South America	42.38	–	88.68	–	97.17	94.01
Total	47.52	51.82	91.09	95.87	99.83	72.69

[A] Includes Shell's 14% share of Woodside from June 2014 (previously: 23% from April 2012), a publicly listed company on the Australian Securities Exchange. We have limited access to data; accordingly, the numbers are estimated.

	2015		2014		2013	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
North America – Canada	40.87	–	81.83	–	87.24	–

	2015		2014		2013	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
North America – Canada	30.25	–	70.19	–	67.40	–

	2015		2014		2013	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	7.10	6.46	8.58	8.26	10.29	9.17
Asia	3.02	7.06	4.57	11.50	4.51	10.73
Oceania	6.80	6.73[A]	10.49	11.01[A]	11.55	9.45[A]
Africa	2.10	–	2.71	–	2.84	–
North America – USA	2.39	–	4.52	–	3.92	–
North America – Canada	2.29	–	4.39	–	3.26	–
South America	2.46	–	2.85	–	2.91	0.42
Total	4.07	6.77	5.68	9.72	5.85	9.72

[A] Includes Shell's 14% share of Woodside from June 2014 (previously: 23% from April 2012), a publicly listed company on the Australian Securities Exchange. We have limited access to data; accordingly, the numbers are estimated.

AVERAGE PRODUCTION COST BY GEOGRAPHICAL AREA

CRUDE OIL, NATURAL GAS LIQUIDS AND NATURAL GAS [A]						\$/BOE
	2015		2014		2013	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	16.97	5.07	19.47	4.25	17.66	3.57
Asia	7.42	6.89	7.87	7.62	6.52	5.74
Oceania	13.43	14.66[B]	13.62	14.44[B]	11.55	13.17[B]
Africa	11.96	–	14.86	–	14.43	–
North America – USA	20.28	–	21.35	–	21.57	–
North America – Canada	18.85	–	22.96	–	22.20	–
South America	21.31	–	25.26	–	37.72	16.96
Total	13.42	6.77	15.10	6.68	14.35	5.52

[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

[B] Includes Shell's 14% share of Woodside from June 2014 (previously: 23% from April 2012), a publicly listed company on the Australian Securities Exchange. We have limited access to data; accordingly, the numbers are estimated.

SYNTHETIC CRUDE OIL				\$/BARREL
	2015		2014	
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	31.50		42.46	41.81

BITUMEN				\$/BARREL
	2015		2014	
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	18.58		23.24	23.03

## UPSTREAM CONTINUED

## LNG AND GTL PLANTS AT DECEMBER 31, 2015

LNG LIQUEFACTION PLANTS IN OPERATION				
	Asset	Location	Shell interest (%) <sup>[A]</sup>	100% capacity (mtpa) <sup>[B]</sup>
<b>Asia</b>				
Brunei	Brunei LNG	Lumut	25	7.8
Malaysia	Malaysia LNG Tiga	Bintulu	15	7.7
Oman	Oman LNG	Sur	30	7.1
	Qalhat (Oman) LNG	Sur	11 <sup>[C]</sup>	3.7
Qatar	Qatargas 4	Ras Laffan	30	7.8
Russia	Sakhalin LNG	Prigorodnoye	28	9.6
<b>Oceania</b>				
Australia	Australia North West Shelf	Karratha	19 <sup>[C]</sup>	16.3
	Australia Pluto 1	Karratha	12 <sup>[C]</sup>	4.3
<b>Africa</b>				
Nigeria	Nigeria LNG	Bonny	26	22.0
<b>South America</b>				
Peru	Peru LNG	Pampa Melchorita	20	4.5
Trinidad and Tobago	Atlantic LNG	Point Fortin	20-25	14.8

[A] Shell interest is rounded to the nearest whole percentage point.

[B] As reported by the operator.

[C] Interest, or part of the interest, is held via indirect shareholding.

LNG LIQUEFACTION PLANTS UNDER CONSTRUCTION				
	Asset	Location	Shell interest (%) <sup>[A]</sup>	100% capacity (mtpa)
<b>Oceania</b>				
Australia	Gorgon <sup>[B]</sup>	Barrow Island	25	15.6
	Prelude	Browse Basin	68	3.6

[A] Shell interest is rounded to the nearest whole percentage point.

[B] Production of LNG and condensate started in March 2016.

GTL PLANTS IN OPERATION				
	Asset	Location	Shell interest (%)	100% capacity (b/d)
<b>Asia</b>				
Malaysia	Shell MDS	Bintulu	72	14,700
Qatar	Pearl	Ras Laffan	100	140,000

## EQUITY SALES OF LNG

EQUITY SALES OF LNG		MILLION TONNES		
		2015	2014	2013
Australia		3.4	3.7	3.7
Brunei		1.6	1.5	1.7
Malaysia		1.8	2.7	2.6
Nigeria		5.0	5.0	4.4
Oman		1.9	1.8	2.0
Peru		0.7	0.8	–
Qatar		2.4	2.4	2.3
Russia		2.9	2.9	2.9
Trinidad and Tobago		2.9	3.2	–
<b>Total</b>		<b>22.6</b>	<b>24.0</b>	<b>19.6</b>

## EARNINGS AND CASH FLOW INFORMATION

								\$ MILLION	
	Europe[A]	Asia	Oceania	Africa	North America		South America	Total	
					USA	Other			
Revenue	12,721	22,299	1,858	5,620	6,384	4,405	640	53,927	
Share of profit/(loss) of joint ventures and associates	506	1,664	(802)	491	(94)	70	127	1,962	
Interest and other income	(41)	556	(13)	1,754	148	(1)	(47)	2,356	
Total revenue and other income	13,186	24,519	1,043	7,865	6,438	4,474	720	58,245	
Purchases excluding taxes	4,336	6,925	148	525	30	1,327	12	13,303	
Production and manufacturing expenses	2,890	4,725	772	1,806	3,870	3,472	481	18,016	
Taxes other than income tax	128	434	113	347	81	-	63	1,166	
Selling, distribution and administrative expenses	685	62	7	2	212	26	16	1,010	
Research and development	612	27	-	-	121	42	-	802	
Exploration	261	1,255	195	161	3,336	164	347	5,719	
Depreciation, depletion and amortisation	2,807	4,311	480	1,749	6,342	6,625	687	23,001	
Interest expense	328	100	54	130	194	48	27	881	
Income before taxation	1,139	6,680	(726)	3,145	(7,748)	(7,230)	(913)	(5,653)	
Taxation charge/(credit)	339	2,714	428	886	(2,853)	(1,788)	284	10	
Income after taxation	800	3,966	(1,154)	2,259	(4,895)	(5,442)	(1,197)	(5,663)	
Net cash from operating activities	1,303	8,882	(76)	2,946	124	87	(85)	13,181	
Less: working capital movements	(382)	430	(1,161)	785	121	46	125	(36)	
Net cash from operating activities excluding working capital movements	1,685	8,452	1,085	2,161	3	41	(210)	13,217	

[A] Includes Greenland.

								\$ MILLION	
	Europe[A]	Asia	Oceania	Africa	North America		South America	Total	
					USA	Other			
Revenue	17,891	35,629	3,299	11,129	13,553	9,250	1,548	92,299	
Share of profit/(loss) of joint ventures and associates	1,128	3,173	266	937	(4)	77	(75)	5,502	
Interest and other income	68	845	2,292	503	327	(71)	65	4,029	
Total revenue and other income	19,087	39,647	5,857	12,569	13,876	9,256	1,538	101,830	
Purchases excluding taxes	5,848	10,113	344	1,505	1,909	3,383	(63)	23,039	
Production and manufacturing expenses	3,255	4,905	809	2,483	4,572	3,391	678	20,093	
Taxes other than income tax	264	948	211	836	201	-	165	2,625	
Selling, distribution and administrative expenses	777	103	9	1	136	7	22	1,055	
Research and development	642	28	-	-	134	51	-	855	
Exploration	458	1,331	232	307	1,548	88	260	4,224	
Depreciation, depletion and amortisation	1,815	4,621	430	2,054	6,665	1,808	475	17,868	
Interest expense	364	90	55	144	211	60	29	953	
Income before taxation	5,664	17,508	3,767	5,239	(1,500)	468	(28)	31,118	
Taxation charge/(credit)	3,599	7,542	2,103	2,416	(626)	78	165	15,277	
Income after taxation	2,065	9,966	1,664	2,823	(874)	390	(193)	15,841	
Net cash from operating activities	3,975	14,619	1,684	4,629	3,935	2,685	312	31,839	
Less: working capital movements	1,148	(1,470)	(845)	616	(994)	360	(285)	(1,470)	
Net cash from operating activities excluding working capital movements	2,827	16,089	2,529	4,013	4,929	2,325	597	33,309	

[A] Includes Greenland.



## UPSTREAM CONTINUED

	2013							\$ MILLION	
	Europe[A]	Asia	Oceania	Africa	North America		South America	Total	
					USA	Other			
Revenue	23,144	35,916	3,414	11,007	9,762	8,878	748	92,869	
Share of profit of joint ventures and associates	1,469	3,235	111	1,162	1	55	87	6,120	
Interest and other income	(123)	572	172	(14)	20	52	(20)	659	
Total revenue and other income	24,490	39,723	3,697	12,155	9,783	8,985	815	99,648	
Purchases excluding taxes	9,088	9,761	290	1,378	(1,175)	2,989	48	22,379	
Production and manufacturing expenses	2,998	4,162	762	1,978	4,588	3,594	389	18,471	
Taxes other than income tax	328	1,254	226	963	223	-	85	3,079	
Selling, distribution and administrative expenses	993	85	7	1	47	26	35	1,194	
Research and development	648	15	-	-	178	106	-	947	
Exploration	627	1,082	396	354	1,790	312	717	5,278	
Depreciation, depletion and amortisation	1,444	3,114	434	1,293	7,954	2,550	160	16,949	
Interest expense	359	76	47	133	210	61	24	910	
Income before taxation	8,005	20,174	1,535	6,055	(4,032)	(653)	(643)	30,441	
Taxation charge/(credit)	4,883	10,977	475	3,100	(1,500)	(203)	71	17,803	
Income after taxation	3,122	9,197	1,060	2,955	(2,532)	(450)	(714)	12,638	
Net cash from operating activities	5,215	12,834	1,717	5,027	3,775	1,414	132	30,114	
Less: working capital movements	1,251	(88)	(929)	1,391	(86)	(346)	119	1,312	
Net cash from operating activities excluding working capital movements	3,964	12,922	2,646	3,636	3,861	1,760	13	28,802	

[A] Includes Greenland.

## DOWNSTREAM

KEY STATISTICS	\$ MILLION, EXCEPT WHERE OTHERWISE INDICATED		
	2015	2014	2013
Segment earnings [A]	10,243	3,411	3,869
Including:			
Revenue (including inter-segment sales) [A]	237,746	378,046	404,427
Share of profit of joint ventures and associates [A]	2,215	1,693	1,525
Interest and other income [A]	1,156	41	273
Operating expenses [B]	20,816	22,701	23,292
Depreciation, depletion and amortisation [A]	3,667	6,619	4,421
Taxation charge [A]	1,639	1,085	1,129
Capital investment [B]	5,119	5,910	5,528
Divestments [B]	2,282	4,410	643
Refinery availability (%) [C][D]	90	93	94
Chemical plant availability (%) [C]	85	85	92
Refinery processing intake (thousand b/d)	2,805	2,903	2,915
Oil products sales volumes (thousand b/d)	6,432	6,365	6,164
Chemicals sales volumes (thousand tonnes)	17,148	17,008	17,386

[A] See Note 4 to the "Consolidated Financial Statements" on page 127. Segment earnings are presented on a current cost of supplies basis.

[B] See "Non-GAAP measures reconciliations and other definitions" on pages 198-199.

[C] The basis of calculation differs from that used for the "Refinery and chemical plant availability" measure in "Performance indicators" on page 20, which excludes downtime due to uncontrollable factors.

[D] With effect from 2015, refinery availability includes Shell-operated process units only. Comparative data has been restated.

### OVERVIEW

Shell's Downstream organisation is made up of a number of different Oil Products and Chemicals business activities, part of an integrated value chain, that collectively turn crude oil into a range of refined products which are moved and marketed around the world for domestic, industrial and transport use. The products we sell include gasoline, diesel, heating oil, aviation fuel, marine fuel, liquefied natural gas (LNG) for transport, lubricants, bitumen and sulphur. In addition, we produce and sell petrochemicals for industrial use worldwide.

Our Oil Products activities comprise Refining, Trading and Supply, Pipelines and Marketing, referred to as classes of business. Marketing includes Retail, Lubricants, Business to Business (B2B) and Alternative Energies. In Trading and Supply, we trade crude oil, oil products and petrochemicals, to optimise feedstocks for Refining and Chemicals, to supply our Marketing businesses and third parties, and for our own profit. Chemicals has major manufacturing plants, located close to refineries, and its own marketing network.

### BUSINESS CONDITIONS

Industry gross refining margins were higher on average in 2015 than in 2014 in each of the key refining hubs in Europe, Singapore and the USA. Oil products demand growth was stronger globally, driven in part by the sustained lower oil price environment compared with 2014. The refining industry has seen a period of generally tightening capacity, reducing the overcapacity that has been observed for several years. However, the improved gross margins have probably delayed some further capacity rationalisation, especially in Europe. In 2016, demand for gasoline is expected to be a key driver of gross refining margins, especially in the middle of the year, supported by demand for middle distillates. The overall outlook remains unclear because of continuing economic uncertainty, geopolitical tensions in some regions that could lead to supply disruptions, and continued overcapacity in the global refining market. See "Market overview" on page 18.

In Chemicals, Asian naphtha cracker margins increased in 2015 compared with 2014 due to periods of reduced cracker availability. European naphtha cracker margins remained high in 2015, supported by periods of low cracker availability. US ethane cracker margins were significantly lower due to a narrower differential between crude oil prices and US natural gas prices. The outlook for petrochemicals in 2016 will depend on economic

growth, especially in Asia, and developments in relative raw material prices which will be influenced by crude oil prices. See "Market overview" on page 18.

### EARNINGS 2015-2014

Segment earnings are presented on a current cost of supplies basis (see "Summary of results" on page 18), which in 2015 were \$1,955 million higher than on a first-in, first-out basis (2014: \$4,366 million higher), as shown in "Non-GAAP measures reconciliations and other definitions" on page 198.

Segment earnings of \$10,243 million in 2015 were 200% higher than in 2014. Earnings in 2015 included a net gain of \$495 million compared with a net charge of \$2,854 million in 2014, described at the end of this section.

Excluding the impact of these items, earnings in 2015 were \$9,748 million compared with \$6,265 million in 2014. Oil Products earnings accounted for 83% of these 2015 earnings and Chemicals for 17%.

The earnings improvement of \$3,483 million (56%) compared with 2014 was principally driven by lower operating expenses, as a result of favourable exchange rates and divestments (45% of the improvement), higher realised refining margins, reflecting the industry environment (39% of the improvement), and other items (16% of the improvement) mainly reflecting a lower effective tax rate.

Improvements in earnings analysed by class of business were as follows:

- Refining represented 69% of the improvement. Realised refining margins were significantly higher overall and higher in all countries except Canada. The increase was driven by stronger industry margins and improved availability early in 2015 which allowed our refineries to capitalise on the stronger margin environment. Overall in 2015, refinery availability decreased to 90% from 93% in 2014. In Europe, realised margins benefited from the stronger margin environment despite lower availability. In Asia, realised margins were higher due to the stronger margin environment despite worse operational performance, particularly

## DOWNSTREAM CONTINUED

at the Bukom refinery in Singapore. In Canada, realised margins were impacted by a significantly weaker margin environment. In the USA, realised margins benefited from the stronger margin environment as well as improved operational performance from lower planned and unplanned downtime. Earnings at Motiva Enterprises LLC (Motiva's (Shell interest 50%) Port Arthur refinery were stronger through both a stronger margin environment and improved operational performance.

- Trading and Supply represented 10% of the improvement, driven by market volatility and optimisation opportunities, and one-off tax credits.
- Pipelines represented 3% of the improvement, which was mainly due to higher margins and joint venture earnings.
- Marketing earnings were in line with 2014, despite unfavourable exchange rate effects and divestments. Higher earnings, mainly in Lubricants, were offset by lower results from Business to Business Fuels and our Raizen joint venture (Shell interest 50%) in Brazil. Raizen earnings were impacted by unfavourable exchange rate effects as the Brazilian real weakened against the dollar.
- Chemicals represented 9% of the improvement, mainly due to tight industry supply conditions and lower taxation. These industry conditions, driven by competitor outages in Asia, benefited intermediate products globally and base chemicals in Asia. Partly offsetting these benefits were weaker margins in the USA, and unit shutdowns at the Moerdijk site in the Netherlands which had a larger earnings impact in 2015 than in 2014.

Oil product sales volumes were 1% higher than in 2014, mainly due to improved Trading and Supply volumes. Marketing volumes were lower than in 2014 due to divestments. Excluding divestments, Marketing volumes were 2% higher than in 2014, benefiting from higher Retail volumes in the USA as a result of a stronger driving season.

Chemicals sales volumes were 1% higher than in 2014. The increase was mostly driven by higher demand in Asia and improved market conditions for intermediate products globally.

Depreciation, depletion and amortisation were significantly lower in 2015 compared with 2014, mainly due to impairments in 2014 described below.

Segment earnings in 2015 included a net gain of \$495 million, reflecting net gains on divestments of \$1,095 million (primarily in China, France and Norway), reported in interest and other income, partly offset by impairment charges of \$505 million (mainly related to the Westward Ho pipeline in the USA and to expenditure at the Bukom refinery in Singapore) and other net charges of \$95 million.

Segment earnings in 2014 included a net charge of \$2,854 million, primarily from impairments (mainly in respect of refineries in Asia and Europe) and also from restructuring charges, fair value accounting of commodity derivatives and a provision connected to a prior year sale obligation. Partly offsetting these charges was a gain related to Dutch pension plan amendments.

### EARNINGS 2014-2013

Segment earnings in 2014 were \$3,411 million, 12% lower than 2013. Earnings in 2014 included a net charge of \$2,854 million described above, and earnings in 2013 included a net charge of \$597 million resulting primarily from impairments and deferred tax adjustments, which were partly due to a beneficial tax rate change in the UK and gains on divestments.

Excluding the impact of these items, earnings in 2014 were \$6,265 million compared with \$4,466 million in 2013. Oil Products earnings accounted for 78% of 2014 earnings and Chemicals for 22%.

The earnings improvement of \$1,799 million (40%) was the result of higher realised refining margins from improved operating performance and a

stronger industry environment (accounting for 35% of the earnings improvement); higher margins from Trading and Supply (accounting for 32% of the earnings improvement) which were due to increased price volatility and profitable short positions; lower operating expenses (accounting for 18% of the earnings improvement) mainly as a result of divestments; lower depreciation (accounting for 9% of the earnings improvement) as a result of divestments and reduced depreciation from impaired assets; and higher Marketing and Pipeline margins (accounting for 9% of earnings improvement). Lower margins from Chemicals, primarily driven by market conditions for intermediate products and shutdowns of some units at Moerdijk, offset 11% of these improvements.

### REFINERY AND CHEMICAL PLANT AVAILABILITY

Refinery availability was 90% in 2015 compared with 93% in 2014 and 94% in 2013. The lower availability in 2015 reflected the impact of a fire at the Bukom refinery.

Chemical plant availability was 85% in 2015, compared with 85% in 2014 and 92% in 2013. Lower availability in 2015 and 2014 reflected unit shutdowns at the Moerdijk site in each year.

### CAPITAL INVESTMENT AND DIVESTMENTS

Capital investment was \$5.1 billion in 2015 compared with \$5.9 billion in 2014. In Refining and Chemicals, it decreased by \$0.1 billion to \$3.6 billion. In Marketing, it decreased by \$0.7 billion to \$1.5 billion. In 2015, 60% of our capital investment was used to maintain the integrity and performance of our asset base, compared with 54% in 2014.

Divestments were \$2.3 billion in 2015, compared with \$4.4 billion 2014, principally from divestments in China, France, Norway and the UK, and proceeds from sale of interests in Shell Midstream Partners, L.P.

### PORTFOLIO AND BUSINESS DEVELOPMENTS

We took the following key portfolio decisions in 2015:

- In Canada, we took the final investment decision (FID) for a de-bottlenecking project at the Scaford refinery, which is expected to increase hydrocracking capacity by about 20%. Completion is expected in 2016.
- In the Netherlands, we took the FID to build a major new unit at the Pernis refinery. The new solvent deasphalter unit will remove heavier fractions from crude oil, allowing the refinery to upgrade a larger proportion of its oil intake into lighter, high-grade products. Construction work is planned to start later in 2016, subject to permit approvals, with completion expected by the end of 2018.
- In the USA, we took the FID to construct a fourth alpha olefins unit, which is expected to add 425 thousand tonnes per annum (ktpa) of alpha olefins production capacity at our chemical manufacturing site in Geismar, Louisiana. This project is expected to be completed by the end of 2018 and make the site the largest alpha olefins producer in the world.

We achieved the following operational milestones in 2015:

- In China, we opened a new lubricant blending plant in Tianjin. The plant has the capacity to produce 330 million litres of finished products per annum and brings our number of blending plants in China to eight.
- Also in China, we signed a heads of agreement with China National Offshore Oil Corporation (CNOOC) to expand our joint venture at Nanhai (Shell interest 50%) in the Guangdong province. The expansion, which is pre-FID, would double the joint venture's ethylene production to over two million tonnes per annum. CNOOC has started construction work on the expansion, with completion expected by the end of 2017.

- In Germany, we handed over the Harburg refinery to Nynas in December 2015. The transaction was agreed in 2011, and a first phase to hand over the base oil plant was completed in 2014.
- In Singapore, we started up a new 140 ktpa high-purity ethylene oxide purification unit and a new 140 ktpa ethoxylates unit at Jurong Island. These production units more than double the production of both chemical products at Jurong.
- In the USA, Shell Midstream Partners, L.P. sold additional interests to public investors via the issuance of additional limited partnership units, reducing our interest in the partnership to approximately 60%, and generating proceeds of \$595 million.
- Also in the USA, we continued detailed engineering design and site preparation for the construction of a proposed petrochemicals plant (Shell interest 100%) in the Appalachian region.

We continued to review our portfolio to divest positions that fail to deliver competitive performance or no longer meet our longer-term strategic objectives. Major divestments in 2015 included:

- our 75% interest in Tongyi lubricants in China.
- Butagaz, our liquefied petroleum gas (LPG) business in France. Butagaz constituted the majority of our LPG business. Following the sale, we only have LPG businesses in Argentina, Canada and Hong Kong.
- most of our retail, commercial fuels, and supply and distribution logistics business in Norway to ST1 Nordic Oy (ST1). The Shell brand will continue to be highly visible in Norway through a retail brand licence agreement. In addition, Shell has entered into a joint venture (Shell interest 50%) with ST1 to sell aviation fuel in Norway.
- 185 service stations across the UK to independent dealers. All service stations will retain the Shell brand and sell Shell's fuels.

In addition, we reached agreements to sell the following, with expected completion in 2016:

- our marketing business in Denmark to Couche-Tard. This includes a retail brand licence agreement under which the Shell brand will remain highly visible in Denmark.
- a 33.24% holding in Showa Shell in Japan to Idemitsu. We are retaining a 1.80% interest.
- our 51% shareholding in the Shell Refining Company in Malaysia to Malaysia Hengyuan International Ltd.

## BUSINESS AND PROPERTY

### Refining

We have interests in 23 refineries worldwide with the capacity to process a total of around 3.1 million barrels of crude oil per day (Shell share). Our refining capacity is 34% in Europe and Africa, 39% in the Americas and 27% in Asia and Oceania.

The Port Arthur refinery in Texas, USA, owned and operated by Motiva (a 50:50 joint venture with Saudi Refining, Inc), is the largest refinery in North America and includes one of the world's largest single-site base oil manufacturing plants.

### Trading and Supply

Trading and Supply trades in physical and financial contracts, lease storage and transportation capacities, and manages shipping and wholesale commercial fuel activities globally.

With more than 100 distribution terminals and 770 supply points in around 25 countries, our supply and distribution infrastructure is well positioned to make deliveries around the world. This includes supplying feedstocks for our

refineries and chemical plants and finished products such as gasoline, diesel and aviation fuel to our Marketing businesses and customers.

Shell Wholesale Commercial Fuels provides transport, industrial and heating fuels. Our range of products, from reliable main-grade fuels to premium products, can offer tangible benefits. These include fuel economy, enhanced equipment performance, reduction in maintenance frequency and costs as well as reduced emissions.

### Pipelines

Shell Pipeline Company LP (Shell interest 100%) owns and operates seven tank farms across the USA and transports more than 1.5 billion barrels of crude oil and refined products a year through about 6,000 kilometres of pipelines in the Gulf of Mexico and five US states. Our various non-operated ownership interests provide about a further 13,000 pipeline kilometres.

We carry more than 40 types of crude oil and more than 20 grades of gasoline, as well as diesel, aviation fuel, chemicals and ethylene.

Shell Midstream Partners, L.P., a Midstream Limited Partnership (MLP), was formed by Shell in 2014 to own, operate, develop and acquire pipelines and other midstream assets. Its assets consist of interests in entities that own crude oil and refined products pipeline systems and related assets that serve as key infrastructure to store onshore and offshore crude oil production and transport to refining markets and to deliver refined products to major demand centres. Shell controls the general partner and holds a majority share in the MLP.

## Marketing

### RETAIL

There were close to 43,000 Shell-branded retail stations operating in over 70 countries at the end of 2015. We have more than 100 years' experience in fuel development. In recent years, we have concentrated on developing fuels with special formulations designed to clean engines and improve performance. We sell such fuels under the Shell V-Power brand in more than 50 countries.

### LUBRICANTS

Across approximately 100 countries, we produce, market or sell technically-advanced lubricants not only for passenger cars, motorcycles, trucks and coaches but also for industrial machinery in the manufacturing, mining, power generation, agriculture and construction sectors.

We have a global lubricants supply chain with a network of eight base oil manufacturing plants, 45 lubricant blending plants, 15 grease plants and four gas-to-liquids base oil storage hubs.

Through our marine activities, we primarily provide lubricants, but also fuels and related technical services, to the shipping and maritime sectors. Following rationalisation of our product portfolio, we now supply around 80 grades of lubricants and nine types of fuel to vessels worldwide, ranging from large ocean-going tankers to small fishing boats.

### BUSINESS TO BUSINESS

Our Business-to-Business (B2B) activities encompass the sale of fuels and speciality products and services to a broad range of commercial customers.

## DOWNSTREAM CONTINUED

Shell Aviation fuels more than two million aircraft a year, with a presence at more than 800 airports in around 40 countries.

We continue to pursue opportunities in the LNG for transport sector, developing projects that provide us and our customers with the best commercial value. Since October 2015, we have had access to import and storage capacity at the Gas Access to Europe (GATE) terminal in the Netherlands, enabling us to supply our own LNG to marine and road customers in northwest Europe. We will also supply LNG for our truck refuelling network in the Netherlands from the terminal.

Shell Bitumen supplies over 1,600 customers across 28 countries and provides enough bitumen to resurface 450 kilometres of road lanes every day. It also invests in technology research and development to create innovative products.

Shell Sulphur Solutions is a business which manages the complete value chain of sulphur, from refining to marketing. The business provides sulphur for industries such as mining and textiles and also develops new products which incorporate sulphur, such as fertilisers.

### ALTERNATIVE ENERGIES

Raízen, our joint venture in Brazil, produces ethanol from sugar cane and manages a retail network. With an annual production capacity of more than 2 billion litres, it is one of the largest biofuel producers in the world. Raízen opened its first cellulosic ethanol plant at its Costa Pinto mill in Brazil in 2015. It is expected to produce 40 million litres a year of advanced biofuels from sugar-cane residues. We also continue to research and explore the potential of hydrogen as a fuel.

## Chemicals

### MANUFACTURING

Our plants produce a range of base chemicals, including ethylene, propylene and aromatics, as well as intermediate chemicals such as styrene monomer, propylene oxide, solvents, detergent alcohols, ethylene oxide and ethylene glycol. We have the capacity to produce over 6 million tonnes of ethylene a year.

### MARKETING

Each year, we supply more than 17 million tonnes of petrochemicals to around 1,000 major industrial customers worldwide. Our products are used to make numerous everyday items, from clothing and cars to detergents and bicycle helmets.

## DOWNSTREAM BUSINESS ACTIVITIES WITH IRAN, SUDAN AND SYRIA

### Iran

Shell transactions with Iran are disclosed separately. See "Section 13(r) of the US Securities Exchange Act of 1934 Disclosure" on page 197.

### Sudan

We ceased all operational activities in Sudan in 2008. However, we completed soil remediation work in 2015 related to earlier operations in the country.

### Syria

We are in compliance with all European Union and US sanctions. We supply limited quantities of polyols via a Netherlands-based distributor to private sector customers in Syria. Polyols are commonly used for the production of foam in mattresses and soft furnishings.

## DOWNSTREAM DATA TABLES

The tables below reflect Shell subsidiaries, the 50% Shell interest in Motiva in the USA and instances where Shell owns the crude oil or feedstocks processed by a refinery. Other joint ventures and associates are only included where explicitly stated.

OIL PRODUCTS – COST OF CRUDE OIL PROCESSED OR CONSUMED [A]	\$ PER BARREL		
	2015	2014	2013
Total	40.91	82.76	90.36

[A] Includes Upstream margin on crude oil supplied by Shell subsidiaries, joint ventures and associates. Excludes cost of crude oil processed or consumed by Motiva.

CRUDE DISTILLATION CAPACITY [A]	THOUSAND B/CALENDAR DAY [B]		
	2015	2014	2013
Europe	1,037	1,033	1,033
Asia	816	810	810
Oceania	–	80	118
Africa	82	82	82
Americas	1,219	1,212	1,212
Total	3,154	3,217	3,255

[A] Average operating capacity for the year, excluding mothballed capacity.

[B] Calendar day capacity is the maximum sustainable capacity adjusted for normal unit downtime.

ETHYLENE CAPACITY [A]	THOUSAND TONNES/YEAR		
	2015	2014	2013
Europe	1,702	1,659	1,659
Asia	2,222	1,922	1,922
Oceania	–	–	–
Africa	–	–	–
Americas	2,235	2,212	2,212
Total	6,159	5,793	5,793

[A] Includes the Shell share of capacity entitlement (offtake rights) of joint ventures and associates, which may be different from nominal equity interest. Nominal capacity is quoted at December 31.

OIL PRODUCTS – CRUDE OIL PROCESSED [A]	THOUSAND B/D		
	2015	2014	2013
Europe	870	941	1,010
Asia	685	688	706
Oceania	–	59	116
Africa	56	69	61
Americas	1,150	1,149	1,100
Total	2,761	2,906	2,993

[A] Includes natural gas liquids, share of joint ventures and associates and processing for others.

REFINERY PROCESSING INTAKE [A]	THOUSAND B/D		
	2015	2014	2013
Crude oil	2,596	2,716	2,732
Feedstocks	209	187	183
Total	2,805	2,903	2,915
Europe	903	941	933
Asia	627	639	634
Oceania	–	64	105
Africa	56	69	54
Americas	1,219	1,190	1,189
Total	2,805	2,903	2,915

[A] Includes crude oil, natural gas liquids and feedstocks processed in crude distillation units and in secondary conversion units.

REFINERY PROCESSING OUTTURN [A]	THOUSAND B/D		
	2015	2014	2013
Gasolines	1,012	1,049	1,049
Kerosines	316	331	368
Gas/Diesel oils	972	1,047	1,014
Fuel oil	290	316	274
Other	449	395	389
<b>Total</b>	<b>3,039</b>	<b>3,138</b>	<b>3,094</b>

[A] Excludes own use and products acquired for blending purposes.

CHEMICALS SALES VOLUMES [A]	THOUSAND TONNES		
	2015	2014	2013
<b>Europe</b>			
Base chemicals	3,000	3,287	3,423
Intermediates and others	1,936	2,019	2,281
<b>Total</b>	<b>4,936</b>	<b>5,306</b>	<b>5,704</b>
<b>Asia</b>			
Base chemicals	2,319	2,220	2,266
Intermediates and others	3,576	2,901	2,989
<b>Total</b>	<b>5,895</b>	<b>5,121</b>	<b>5,255</b>
<b>Oceania</b>			
Base chemicals	-	-	-
Intermediates and others	-	35	62
<b>Total</b>	<b>-</b>	<b>35</b>	<b>62</b>
<b>Africa</b>			
Base chemicals	-	-	-
Intermediates and others	37	43	47
<b>Total</b>	<b>37</b>	<b>43</b>	<b>47</b>
<b>Americas</b>			
Base chemicals	3,036	3,251	3,218
Intermediates and others	3,244	3,252	3,100
<b>Total</b>	<b>6,280</b>	<b>6,503</b>	<b>6,318</b>
<b>Total product sales</b>			
Base chemicals	8,355	8,758	8,907
Intermediates and others	8,793	8,250	8,479
<b>Total</b>	<b>17,148</b>	<b>17,008</b>	<b>17,386</b>

[A] Excludes feedstock trading and by-products.

OIL PRODUCT SALES VOLUMES [A][B]	THOUSAND B/D		
	2015	2014	2013
<b>Europe</b>			
Gasolines	403	405	415
Kerosines	251	264	226
Gas/Diesel oils	779	841	962
Fuel oil	186	176	194
Other products	240	205	168
<b>Total</b>	<b>1,859</b>	<b>1,891</b>	<b>1,965</b>
<b>Asia</b>			
Gasolines	379	343	325
Kerosines	214	191	191
Gas/Diesel oils	533	515	483
Fuel oil	340	325	322
Other products	489	441	256
<b>Total</b>	<b>1,955</b>	<b>1,815</b>	<b>1,577</b>
<b>Oceania</b>			
Gasolines	-	52	87
Kerosines	51	48	51
Gas/Diesel oils	-	64	115
Fuel oil	-	-	-
Other products	-	10	19
<b>Total</b>	<b>51</b>	<b>174</b>	<b>272</b>
<b>Africa</b>			
Gasolines	37	36	45
Kerosines	9	9	9
Gas/Diesel oils	57	52	43
Fuel oil	1	-	3
Other products	15	7	14
<b>Total</b>	<b>119</b>	<b>104</b>	<b>114</b>
<b>Americas</b>			
Gasolines	1,325	1,268	1,149
Kerosines	204	206	234
Gas/Diesel oils	584	583	519
Fuel oil	86	68	96
Other products	249	256	238
<b>Total</b>	<b>2,448</b>	<b>2,381</b>	<b>2,236</b>
<b>Total product sales [C]</b>			
Gasolines	2,144	2,104	2,021
Kerosines	729	718	711
Gas/Diesel oils	1,953	2,055	2,122
Fuel oil	613	569	615
Other products	993	919	695
<b>Total</b>	<b>6,432</b>	<b>6,365</b>	<b>6,164</b>

[A] Excludes deliveries to other companies under reciprocal sale and purchase arrangements, which are in the nature of exchanges. Sales of condensate and natural gas liquids are included.

[B] Includes the Shell share of sales volumes from Raizen.

[C] Certain contracts are held for trading purposes and reported net rather than gross. The effect in 2015 was a reduction in oil product sales of approximately 1,158,000 b/d (2014: 1,067,000 b/d; 2013: 921,000 b/d).

## DOWNSTREAM CONTINUED

## MANUFACTURING PLANTS AT DECEMBER 31, 2015

REFINERIES IN OPERATION		Thousand barrels/calendar day, 100% capacity[B]					
	Location	Asset class	Shell interest (%) [A]	Crude distillation capacity	Thermal cracking/visbreaking/coking	Catalytic cracking	Hydro-cracking
<b>Europe</b>							
Denmark	Fredericia	●	100	67	40	–	–
Germany	Miro [C]	■	32	310	65	89	–
	Rheinland	■●	100	325	44	–	80
Netherlands	Schwedt [C]	■	38	220	47	50	–
	Pernis	■●	100	404	45	48	83
<b>Asia</b>							
Japan	Mizue (Toa) [C]	◆◆	18	64	24	38	–
	Yamaguchi [C]	◆	13	110	–	25	–
	Yokkaichi [C]	◆◆	26	234	–	55	–
Malaysia	Port Dickson [D]	◆	51	107	–	39	–
Pakistan	Karachi [C]	■	30	43	–	–	–
Philippines	Tabangao	■	67	96	31	–	–
Saudi Arabia	Al Jubail [C]	◆◆	50	292	85	–	45
Singapore	Pulau Bukom	■●	100	468	70	34	55
<b>Africa</b>							
South Africa	Durban [C]	◆	38	165	23	34	–
<b>Americas</b>							
Argentina	Buenos Aires	◆◆	100	100	18	20	–
<b>Canada</b>							
Alberta	Scolford	◆	100	92	–	–	62
Ontario	Sarnia	◆	100	73	4	19	9
<b>USA</b>							
California	Martinez	●	100	144	42	65	37
Louisiana	Convent [C]	◆	50	227	–	82	45
	Narco [C]	■	50	229	25	107	39
Texas	Deer Park	■●	50	312	78	63	53
	Port Arthur [C]	●	50	578	144	81	73
Washington	Puget Sound	◆◆	100	137	23	52	–

[A] Shell interest is rounded to nearest whole percentage point; Shell share of production capacity may differ.

[B] Calendar day capacity is the maximum sustainable capacity adjusted for normal unit downtime.

[C] Not operated by Shell.

[D] In 2015, we agreed to sell our interest in Port Dickson refinery to Malaysia Hengyuan International Ltd. The transaction is expected to be completed in 2016.

- Integrated refinery and chemical complex.
- Refinery complex with cogeneration capacity.
- ◆ Refinery complex with chemical unit(s).

MAJOR CHEMICAL PLANTS IN OPERATION [A]						
	Location	Thousand tonnes/year, Shell share capacity[B]				Additional products
		Ethylene	Styrene monomer	Ethylene glycol	Higher olefins[C]	
<b>Europe</b>						
Germany	Rheinland	315	–	–	–	A
Netherlands	Moerdijk [D]	972	725	155	–	A, I
UK	Mossmorran [E]	415	–	–	–	–
	Stanlow [E]	–	–	–	330	I
<b>Asia</b>						
China	Nanhai [E]	475	320	175	–	A, I, P
Japan	Yamaguchi [E]	–	–	–	11	A, I
Saudi Arabia	Al Jubail [E]	366	400	–	–	A, O
Singapore	Jurong Island	281	1,020	1,005	–	A, I, P, O
	Pulau Bukom	1,100	–	–	–	A, I
<b>Americas</b>						
Canada	Scolford	–	485	520	–	A, I
USA	Deer Park	836	–	–	–	A, I
	Geismar	–	–	400	920	I
	Norco	1,399	–	–	–	A
<b>Total</b>		<b>6,159</b>	<b>2,950</b>	<b>2,255</b>	<b>1,261</b>	

[A] Major chemical plants are large integrated chemical facilities, typically producing a range of chemical products from an array of feedstocks, and are a core part of our global Chemicals business.

[B] Shell share of capacity of subsidiaries, joint arrangements and associates (Shell and non-Shell operated), excluding capacity of the Infineum additives joint ventures.

[C] Higher olefins are linear alpha and internal olefins (products range from C6-C2024).

[D] Due to operational incidents in 2014 and 2015, not all units were fully in operation at December 31, 2015.

[E] Not operated by Shell.

A Aromatics, lower olefins.

I Intermediates.

P Polyethylene, polypropylene.

O Other.

OTHER CHEMICAL LOCATIONS [A]		
	Location	Products
<b>Europe</b>		
Germany	Karlsruhe	A
	Schwedt	A
Netherlands	Pernis	A, I, O
<b>Asia</b>		
Japan	Kawasaki	A, I
	Yokkaichi	A
Malaysia	Bintulu	I
	Port Dickson	A
<b>Africa</b>		
South Africa	Durban	I
<b>Americas</b>		
Argentina	Buenos Aires	I
Canada	Sarnia	A, I
USA	Martinez	O
	Mobile	A
	Puget Sound	I

[A] Other chemical locations reflect locations with smaller chemical units, typically serving more local markets.

A Aromatics, lower olefins.

I Intermediates.

O Other.



## CORPORATE

EARNINGS	\$ MILLION		
	2015	2014	2013
Segment earnings	(425)	(156)	372
Including:			
Net interest and investment expense	995	913	832
Foreign exchange losses	731	263	189
Taxation and other	(1,301)	(1,020)	(1,393)

### OVERVIEW

The Corporate segment covers the non-operating activities supporting Shell. It comprises Shell's holdings and treasury organisation, including its self-insurance activities as well as its headquarters and central functions. All finance expense and income as well as related taxes are included in the Corporate segment earnings rather than in the earnings of the business segments.

The holdings and treasury organisation manages many of the Corporate entities and is the point of contact between Shell and external capital markets. It conducts a broad range of transactions – from raising debt instruments to transacting foreign exchange. Treasury centres in London, Singapore and Rio de Janeiro support these activities.

Headquarters and central functions provide business support in the areas of communications, finance, health, human resources, information technology, legal services, real estate and security. They also provide support for the shareholder-related activities of the Company. The central functions are supported by business service centres located around the world, which process transactions, manage data and produce statutory returns, among other services. The majority of the headquarters and central-function costs are recovered from the business segments. Those costs that are not recovered are retained in Corporate.

### SELF-INSURANCE

Shell mainly relies on self-insurance for many of its risk exposures and capital is set aside to meet self-insurance obligations (see "Risk factors" on pages 10-11). The capital held to support the self-insurance obligations is at a level at least equivalent to what would be held in the third-party insurance market. Periodically, surveys of key assets are undertaken that provide risk-engineering knowledge and best practices to Shell subsidiaries with the aim to reduce their exposure to hazard risks. Actions identified during these surveys are monitored to completion.

### INFORMATION TECHNOLOGY

Given our reliance on information technology systems for our operations, we continuously monitor external developments and share information on threats and security incidents. Shell employees and contractors are subject to mandatory courses and regular awareness campaigns, aimed at protecting us against cyber threats. We periodically review and adapt our disaster recovery plans and security response processes, and seek to enhance our security monitoring capability. See "Risk factors" on page 11

### EARNINGS 2015-2013

Segment earnings in 2015 were a loss of \$425 million, compared with a loss of \$156 million in 2014 and a gain of \$372 million in 2013.

Net interest and investment expense increased by \$82 million between 2014 and 2015. Interest expense was higher, mostly driven by new bond issuances 2015 (see "Liquidity and capital resources" on page 50), partly offset by an improvement in the liquidity premium associated with currency swaps, and an increase in the amount of interest capitalised. In 2014, net interest and investment expense decreased by \$81 million compared with 2013. Interest expense was higher, mostly driven by new bond issuances and additional finance leases, including those assumed as a result of the acquisition of Repsol LNG businesses. These effects were partly offset by an improvement in the liquidity premium associated with currency swaps.

Foreign exchange losses of \$731 million in 2015 (2014: \$263 million; 2013: \$189 million) were mainly due to the impact of exchange rates on non-functional currency loans and cash balances in operating units. The dollar strengthened against all major currencies to which Shell has exposure.

Taxation and other earnings increased by \$281 million in 2015 compared with 2014, mainly due to a gain on the sale of an office building in the UK, partly offset by lower tax credits. In 2014, taxation and other earnings were \$373 million lower than 2013, mainly due to lower tax credits.

## LIQUIDITY AND CAPITAL RESOURCES

We manage our businesses to deliver strong cash flows to fund investment for profitable growth. Our aim is that, across the business cycle, "cash in" (including cash from operations and divestments) at least equals "cash out" (including capital expenditure, interest and dividends), while maintaining a strong balance sheet. Our priorities for applying our cash are the servicing and reduction of debt commitments, payment of dividends, share buybacks and capital investment.

### OVERVIEW

The most significant factors affecting our operating cash flow are earnings and movements in working capital, which are mainly impacted by: realised prices for crude oil and natural gas; production levels of crude oil and natural gas; and refining and marketing margins.

Changes in realised crude oil and natural gas prices and production levels can have a significant impact on our operating cash flow. The extent of the impact from a decrease or increase in prices depends on: the extent to which contractual arrangements are tied to market prices; the dynamics of production-sharing contracts; the existence of agreements with governments or state-owned oil and gas companies that have limited sensitivity to crude oil and natural gas prices; tax impacts; and the extent to which changes in commodity prices flow through into operating costs. Changes in benchmark prices of crude oil and natural gas in any particular period therefore provide only a broad indicator of changes in our Upstream earnings in that period. In the longer term, replacement of proved oil and gas reserves will affect our ability to maintain or increase production levels, which in turn will affect our cash flows and earnings.

Changes in any one of a range of factors derived from either within the industry or the broader economic environment can influence refining and marketing margins. The precise impact of any such changes depends on how the oil markets respond to them. The market response is affected by

factors such as: whether the change affects all crude oil types or only a specific grade; regional and global crude-oil and refined-products inventories; and the collective speed of response of refiners and product marketers in adjusting their operations. As a result, margins fluctuate from region to region and from period to period.

### STATEMENT OF CASH FLOWS

Net cash from operating activities in 2015 was \$29.8 billion, a decrease from \$45.0 billion in 2014. The decrease mainly reflected lower income, which was principally a result of the significant decline in oil and gas prices. The increase in net cash from operating activities in 2014, compared with \$40.4 billion in 2013, mainly reflected a higher cash inflow from working capital movements.

Net cash used in investing activities was \$22.4 billion in 2015, an increase from \$19.7 billion in 2014. The increase was mainly the result of lower proceeds from sale of assets, which more than offset a reduction in capital expenditure. Net cash used in investing activities decreased from \$40.1 billion in 2013 to \$19.7 billion in 2014, mainly as a result of lower capital expenditure and higher proceeds from sale of assets.

Net cash from financing activities in 2015 was an inflow of \$3.8 billion compared with cash outflows of \$12.8 billion in 2014 and \$9.0 billion in 2013. This included net debt issued of \$14.9 billion (2014: \$0.4 billion; 2013: \$5.4 billion), partly offset by payment of dividends to Royal Dutch Shell plc shareholders of \$9.4 billion (2014: \$9.4 billion; 2013: \$7.2 billion) and interest paid of \$1.7 billion (2014: \$1.5 billion; 2013: \$1.3 billion).

Cash and cash equivalents were \$31.8 billion at December 31, 2015 (2014: \$21.6 billion; 2013: \$9.7 billion). This includes amounts held for the acquisition of BG Group plc (BG).

CASH FLOW INFORMATION [A]	\$ BILLION		
	2015	2014	2013
Net cash from operating activities excluding working capital movements			
Upstream	13.2	33.3	28.8
Downstream	10.6	4.5	7.5
Corporate	0.5	0.8	1.2
Total	24.3	38.6	37.5
Decrease in inventories	2.8	8.0	0.6
Decrease/(increase) in current receivables	9.9	(1.6)	5.6
Decrease in current payables	(7.2)	-	(3.3)
Decrease in working capital	5.5	6.4	2.9
Net cash from operating activities	29.8	45.0	40.4
Net cash used in investing activities	(22.4)	(19.7)	(40.1)
Net cash from/(used in) financing activities	3.8	(12.8)	(9.0)
Currency translation differences relating to cash and cash equivalents	(1.0)	(0.6)	(0.2)
Increase/(decrease) in cash and cash equivalents	10.2	11.9	(8.9)
Cash and cash equivalents at the beginning of the year	21.6	9.7	18.6
Cash and cash equivalents at the end of the year	31.8	21.6	9.7

[A] See the "Consolidated Statement of Cash Flows" on page 119.

## LIQUIDITY AND CAPITAL RESOURCES CONTINUED

### FINANCIAL CONDITION AND LIQUIDITY

Our financial position is strong. Despite the weakness in commodity prices, with an average Brent crude oil price of \$52 per barrel in 2015 (\$99 per barrel in 2014), our gearing increased by less than 2% over the year, from 12.2% at end 2014 to 14.0% at end 2015. Gearing, defined as net debt (total debt less cash and cash equivalents) as a percentage of total capital (net debt plus total equity), is a key measure of our capital structure. Across the business cycle, we aim to manage gearing within a range of 0-30%. Note 14 to the "Consolidated Financial Statements" on pages 134-135 provides information on our debt arrangements, including gearing.

We are affected by the global macroeconomic environment as well as financial and commodity market conditions. This exposes us to treasury and trading risks, including liquidity risk, market risk (interest rate risk, foreign exchange risk and commodity price risk) and credit risk. See "Risk factors" on page 10 and Note 19 to the "Consolidated Financial Statements" on pages 142-144. The size and scope of our businesses require a robust financial control framework and effective management of our various risk exposures.

### Market risk and credit risk

In the normal course of business, financial instruments of various kinds are used for the purposes of managing exposure to interest rate, foreign exchange and commodity price movements. Our treasury and trading operations are highly centralised, and seek to manage credit exposures associated with our substantial cash, foreign exchange and commodity positions. Our portfolio of cash investments is diversified to avoid concentrating risk in any one instrument, country, or counterparty. We monitor our investments and adjust them in light of new market information. Exposure to failed financial and trading counterparties was not material in 2015. Treasury standards are applicable to all our subsidiaries, and each subsidiary is required to adopt a treasury policy consistent with these standards. Other than in exceptional cases, the use of external derivative instruments is confined to specialist trading and central treasury organisations that have appropriate skills, experience, supervision, control and reporting systems.

### Pension commitments

We have substantial pension commitments, whose funding is subject to capital market risks (see "Risk factors" on page 10). We address key pension risks in a number of ways. Principal among these is the Pensions Forum, chaired by the Chief Financial Officer, which provides guidance on Shell's input to pension strategy, policy and operation. The forum is supported by a risk committee in reviewing the results of assurance processes with respect to pension risks. In general, local trustees manage the funded defined benefit pension plans and set the required contributions based on independent actuarial valuations in accordance with local regulations. Our total employer contributions to defined benefit pension plans were \$1.3 billion in 2015 and are estimated to be \$1.4 billion in 2016.

### Liquidity

We satisfy our funding and working capital requirements from the cash generated by our operations and through the issuance of debt. Despite challenging market conditions for our industry, we have continued to have good access to the international debt capital markets. Our debt is principally financed from these markets through central debt programmes consisting of:

- a \$10 billion global commercial paper (CP) programme, exempt from registration under section 3 (a)(3) of the US Securities Act of 1933, with maturities not exceeding 270 days;

- a \$10 billion CP programme, exempt from registration under section 4(2) of the US Securities Act of 1933, with maturities not exceeding 397 days;
- an unlimited Euro medium-term note (EMTN) programme (also referred to as the Multi-currency Debt Securities Programme); and
- an unlimited US universal shelf (US shelf) registration.

All CP, EMTN and US shelf issuances are undertaken by Shell International Finance B.V., the issuance company for Shell, with its debt being guaranteed by Royal Dutch Shell plc (the Company).

We also maintain a \$7.48 billion committed credit facility that was undrawn at December 31, 2015. Following the second one-year extension agreed in November 2015, the facility expires in 2020. This facility and internally available liquidity provide back-up coverage for CP. Other than certain borrowings in local subsidiaries, we do not have any other committed credit facilities.

Our total debt increased by \$12.8 billion in 2015 to \$58.4 billion at December 31, 2015, and the amount, excluding leases, will mature as follows: 10% in 2016; 11% in 2017; 15% in 2018; 8% in 2019; and 56% in 2020 and beyond. The portion of debt maturing in 2016 is expected to be repaid from a combination of cash balances, cash generated from operations, divestments and issuance of new debt.

In 2015, we issued \$15.0 billion of bonds under our US shelf registration, and \$5.3 billion of bonds under our EMTN programme, the proceeds of which were primarily used to finance the BG acquisition (see below). Periodically, for working capital purposes, we issued CP. We believe our current working capital is sufficient for present requirements.

In accordance with the UK City Code on Takeovers and Mergers, we maintained sufficient certain funds for the estimated £13.2 billion cash consideration portion of the BG acquisition from the date of announcement in April 2015 until the date of completion in February 2016. We entered into a £10.07 billion bridge credit facility on May 1, 2015, which was cancelled unused on February 10, 2016, once funds had been accumulated and the completion date was certain. We raised these funds through long-term debt issuance in 2015.

While our subsidiaries are subject to restrictions, such as foreign withholding taxes on the transfer of funds in the form of cash dividends, loans or advances, such restrictions are not expected to have a material impact on our ability to meet our cash obligations.

### CAPITALISATION TABLE

	\$ MILLION	
	Dec 31, 2015	Dec 31, 2014
Equity attributable to Royal Dutch Shell plc shareholders	162,876	171,966
Current debt	5,530	7,208
Non-current debt	52,849	38,332
Total debt [A]	58,379	45,540
Total capitalisation	221,255	217,506

[A] Of total debt, \$53.2 billion (2014: \$39.5 billion) was unsecured and \$5.2 billion (2014: \$6.0 billion) was secured. See Note 14 to the "Consolidated Financial Statements" on pages 134-135 for further disclosure on debt, including the amount guaranteed by the Company.

The consolidated ratio of earnings to fixed charges of Shell for each of five years ended December 31, 2011-2015, is as follows:

RATIO OF EARNINGS TO FIXED CHARGES [A]					
	2015	2014	2013	2012	2011
Ratio of earnings to fixed charges	1.93	14.41	20.11	31.12	35.71

[A] See "Exhibit 7.1" on page E1 for the calculation of the ratio of earnings to fixed charges.

## DIVIDENDS

Our policy is to grow the dollar dividend through time, in line with our view of our underlying earnings and cash flow. When setting the dividend, the Board of Directors looks at a range of factors, including the macro environment, the current balance sheet and future investment plans.

We returned \$12.0 billion to our shareholders through dividends in 2015. Some of those dividends were paid out as 96.3 million shares issued to shareholders who had elected to receive new shares instead of cash, under our Scrip Dividend Programme which was reintroduced in March 2015 from the first quarter 2015 interim dividend onwards.

We have announced an interim dividend in respect of the fourth quarter of 2015 of \$0.47 per share, in line with the dividend for the same quarter of 2014. See Note 23 to the "Consolidated Financial Statements" on page

150. The fourth quarter interim dividend will be payable to shareholders, including former BG shareholders, on the register at February 19, 2016. The Board expects that the first quarter 2016 interim dividend will be \$0.47 per share.

## PURCHASES OF SECURITIES

At the 2015 Annual General Meeting (AGM), shareholders granted an authority, which will expire at the end of the 2016 AGM, for the Company to repurchase up to 633 million of its shares. Under a similar authority granted at the 2014 AGM, we continued a share buyback programme, repurchasing 12.7 million shares in January 2015, to offset the dilution created by the issuance of shares under our Scrip Dividend Programme. The share buyback programme was suspended in February 2015. All of the shares purchased under the buyback programme are cancelled. A resolution will be proposed at the 2016 AGM to renew authority for the Company to purchase its own share capital up to specified limits for another year. Shares are also purchased by the employee share ownership trusts and trust-like entities (see the "Directors' Report" on page 68) to meet delivery commitments under employee share plans. All share purchases are made in open-market transactions.

The table below provides information on purchases of shares in 2015 by the issuer and affiliated purchasers. Purchases in euros and sterling are converted into dollars using the exchange rate on each transaction date.

## PURCHASES OF EQUITY SECURITIES BY ISSUER AND AFFILIATED PURCHASERS IN 2015 [A]

Purchase period	A shares			B shares		A ADSs	
	Number purchased for employee share plans	Number purchased for cancellation [C]	Weighted average price (\$)[B]	Number purchased for employee share plans	Weighted average price (\$)[B]	Number purchased for employee share plans	Weighted average price (\$)[B]
January	-	12,717,512	32.06	-	-	1,133,754	65.00
February	-	-	-	-	-	-	-
March	343,670	-	31.16	184,916	33.02	98,567	62.57
April	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-
June	52,359	-	29.97	150,233	30.32	-	-
July	-	-	-	-	-	-	-
August	-	-	-	-	-	21,097	50.22
September	-	-	-	163,535	24.19	-	-
October	-	-	-	-	-	-	-
November	-	-	-	-	-	-	-
December	-	-	-	181,366	22.15	-	-
<b>Total 2015</b>	<b>396,029</b>	<b>12,717,512</b>	<b>32.03</b>	<b>680,050</b>	<b>27.40</b>	<b>1,253,418</b>	<b>64.56</b>

[A] Excludes shares issued to affiliated purchasers pursuant to the Scrip Dividend Programme.

[B] Average price paid per share includes stamp duty and brokers' commission.

[C] Under the share buyback programme.

## LIQUIDITY AND CAPITAL RESOURCES CONTINUED

### CAPITAL INVESTMENT AND DIVESTMENTS

The reduction in capital investment in 2015 compared with 2014 reflects our decision to curtail spending by reducing the number of new investment decisions and designing lower-cost development solutions.

CAPITAL INVESTMENT [A]	\$ MILLION	
	2015	2014
Upstream	23,527	31,293
Downstream	5,119	5,910
Corporate	215	136
<b>Total</b>	<b>28,861</b>	<b>37,339</b>

[A] See "Non-GAAP measures reconciliations and other definitions" on page 198.

In 2015, we continued to divest assets that fail to deliver competitive performance or no longer meet our longer-term strategic objectives, including assets in China, France, Nigeria, Norway, the UK and the USA. Divestments also included the sale of interests in Shell Midstream Partners, L.P.

DIVESTMENTS	\$ MILLION	
	2015	2014
Upstream	2,747	10,589
Downstream	2,282	4,410
Corporate	511	20
<b>Divestments [A]</b>	<b>5,540</b>	<b>15,019</b>

[A] See "Non-GAAP measures reconciliations and other definitions" on page 198.

### CONTRACTUAL OBLIGATIONS

The table below summarises our principal contractual obligations at December 31, 2015, by expected settlement period. The amounts presented have not been offset by any committed third-party revenue in relation to these obligations.

CONTRACTUAL OBLIGATIONS	\$ BILLION				
	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	5 years and later	Total
Debt [A]	5.0	13.2	9.4	24.3	51.9
Finance leases [A]	1.1	1.8	1.7	5.5	10.1
Operating leases [A]	5.3	7.2	6.1	7.6	26.2
Purchase obligations [B]	89.0	51.3	32.5	112.5	285.3
Other long-term contractual liabilities [C]	-	0.4	-	0.7	1.1
<b>Total</b>	<b>100.4</b>	<b>73.9</b>	<b>49.7</b>	<b>150.6</b>	<b>374.6</b>

[A] See Note 14 to the "Consolidated Financial Statements" on page 135. Debt contractual obligations exclude interest, which is estimated to be \$1.5 billion payable in less than one year, \$2.7 billion between one and three years, \$1.9 billion between three and five years, and \$11.2 billion in five years and later. For this purpose, we assume that interest rates with respect to variable interest rate debt remain constant at the rates in effect at December 31, 2015, and that there is no change in the aggregate principal amount of debt other than repayment at scheduled maturity as reflected in the table. Finance lease contractual obligations include interest.

[B] A purchase obligation is an agreement to purchase goods or services that is enforceable and legally binding and specifies terms such as: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction.

[C] Includes all obligations included in "Trade and other payables" in "Non-current liabilities" on the "Consolidated Balance Sheet" that are contractually fixed as to timing and amount. In addition to these amounts, Shell has certain obligations that are not contractually fixed as to timing and amount, including contributions to defined benefit pension plans (see Note 17 to the "Consolidated Financial Statements" on pages 139-141) and obligations associated with decommissioning and restoration (see Note 18 to the "Consolidated Financial Statements" on pages 141-142).

### GUARANTEES AND OTHER OFF-BALANCE SHEET ARRANGEMENTS

Guarantees at December 31, 2015, were \$0.6 billion (2014: \$3.3 billion). This includes \$0.3 billion (2014: \$1.6 billion) of guarantees of debt of joint ventures and associates.

### FINANCIAL INFORMATION RELATING TO THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

The results of operations and financial position of the Royal Dutch Shell Dividend Access Trust (the Trust) are included in the consolidated results of operations and financial position of Shell. Certain condensed financial information in respect of the Trust is given below. See "Royal Dutch Shell Dividend Access Trust Financial Statements" on pages 185-189.

For the years 2015, 2014 and 2013 the Trust recorded income before tax of £2,726 million, £2,470 million and £2,361 million respectively. In each period this reflected the amount of dividends received on the dividend access share.

At December 31, 2015, the Trust had total equity of £nil (2014: £nil; 2013: £nil), reflecting cash of £2 million (2014: £1 million; 2013: £1 million) and unclaimed dividends of £2 million (2014: £1 million; 2013: £1 million). The Trust only records a liability for an unclaimed dividend, and a corresponding amount of cash, to the extent that cheques expire, which is one year after their issuance, or to the extent that they are returned unrepresented.

## ENVIRONMENT AND SOCIETY

Our success in business depends on our ability to meet a range of environmental and social challenges. We must show we can operate safely and manage the effect our activities can have on neighbouring communities and society as a whole. If we fail to do this, we may incur liabilities or sanctions, lose business opportunities, harm our reputation, or our licence to operate may be impacted (see "Risk factors" on page 10).

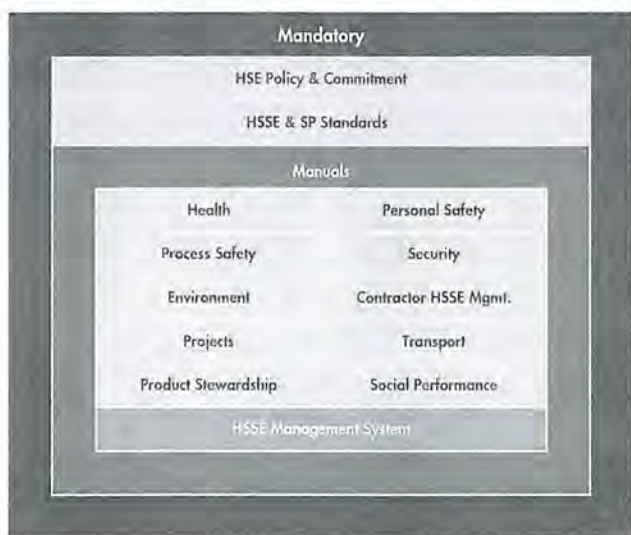
Data in this section are reported on a 100% basis in respect of activities where we are the operator. Reporting on this operational control basis differs from that applied for financial reporting purposes in the "Consolidated Financial Statements" on pages 115-152. Detailed data and information on our 2015 environmental and social performance will be published in the Shell Sustainability Report in April 2016.

### CONTROL FRAMEWORK

The Shell General Business Principles (Principles) set out our responsibilities to shareholders, customers, employees, business partners and society. They set the standards for the way we conduct business, with integrity and respect for people, the environment and communities. All ventures that we operate must conduct their activities in line with our business principles.

We work to minimise the environmental impact of new projects and existing operations and we engage with local communities and non-governmental organisations to understand and respond to their concerns. We have standards and a clear governance structure in place to help manage potential impacts. Our standards are defined in our Health, Safety, Security, Environment and Social Performance (HSSE&SP) Control Framework, in line with our Commitment and Policy and the Shell Code of Conduct, and are supported by a number of guidance documents. They apply to every Shell entity, including all employees and contractors, and to Shell-operated ventures. The Control Framework defines standards and accountabilities at each level of the organisation, and sets out the procedures and processes people are required to follow. We manage HSSE&SP risks to "As Low As Reasonably Practicable" (ALARP), which is a business responsibility, supported by the HSSE&SP function. The process safety and HSSE&SP assurance team provides assurance on the effectiveness of HSSE&SP controls.

### HSSE & SP CONTROL FRAMEWORK



Our three Golden Rules require our employees and contractors to comply with laws and regulations as well as our standards and procedures, to intervene in unsafe or non-compliant situations, and to respect our neighbours.

In ventures not operated by us, Shell-appointed representatives encourage our partners to apply standards and principles similar to our own. We support these ventures in their implementation of our Control Framework, or of a similar framework, and offer to review the effectiveness of their implementation. Even if such a review is not carried out, we periodically evaluate health, safety, security, environment and community risks faced by our ventures which we do not operate. If one of these ventures falls below expectations, plans are put in place, in agreement with our partners, to improve performance.

### SAFETY

Safety is central to the responsible delivery of energy. We develop and operate our facilities with the aim of preventing any incidents that may harm our employees, contractors or nearby communities, or cause damage to our assets or adversely impact the environment. We manage safety risks across our businesses through clear standards, controls and compliance systems combined with a safety-focused culture.

Our global standards and operating procedures define the controls and physical barriers we require to prevent incidents. For example, our offshore wells are designed with at least two independent barriers to mitigate the risk of an uncontrolled release of hydrocarbons. We regularly inspect, test and maintain these barriers to ensure they meet our standards. We also routinely prepare and practise our emergency response to potential incidents such as an oil spill or a fire. This involves working closely with local services and regulatory agencies to jointly test our plans and procedures. These tests continually improve our readiness to respond. If an incident does occur, we have procedures in place to reduce the impact on people and the environment.

We continue to strengthen the safety culture among our employees and contractors. Our safety goal is to achieve no harm and no leaks across all of our operations. We refer to this as our Goal Zero ambition. We expect everyone working for us to intervene and stop work that may appear to be unsafe. In addition to our ongoing safety awareness programmes, we hold an annual global safety day to give employees and contractors time to reflect on how to prevent incidents. We expect everyone working for us to comply with our 12 mandatory Life-Saving Rules. If employees break these rules, they face disciplinary action up to and including termination of employment. If contractors break the Life-Saving Rules, they can be removed from the worksite.

Process safety involves making sure the right precautions are in place to prevent unplanned releases of hydrocarbons or chemicals. In the event of a loss of containment such as a spill or a leak, we employ independent recovery measures to prevent the release from becoming catastrophic. This system of barriers and recovery measures is known as a "bow-tie", a model that visually represents a system where process safety hazards are managed through prevention and response barriers.

### RISK MANAGEMENT APPROACH



## ENVIRONMENT AND SOCIETY CONTINUED

While we continually work to minimise the likelihood of incidents, some do occur. We investigate all incidents to understand the underlying causes and translate these into improvements in standards or ways of working that can be applied broadly across similar facilities in Shell. As set out in "Performance indicators" on pages 20-21, our total recordable case frequency (injuries per million working hours) was 0.94 in 2015, compared with 0.99 in 2014, and there were 51 operational Tier 1 process safety events in 2015, compared with 57 in 2014. Detailed information on our 2015 safety performance will be published in the Shell Sustainability Report in April 2016.

### CLIMATE CHANGE

#### Our approach to climate change

We have long recognised that the use of fossil fuels contributes to climate change. In November 2015, 195 nations approved the *Paris Agreement* which must be ratified by 55 countries that account for at least 55% of global greenhouse gas (GHG) emissions. We welcome the efforts made by governments to reach a global climate agreement. The *Paris Agreement* provides a framework which is intended to enable governments to implement effective measures to reduce GHG emissions. The goal of limiting the increase in global temperatures to well below 2°C will be extremely challenging.

In the future, growth in energy demand means that all sources of energy will be needed over the longer term. Therefore, all forms of GHG reduction measures must be accelerated and increased in scale, including significant growth in carbon capture and storage (CCS) and renewables, significant improvements in energy efficiency, and sustained reductions in demand. The management of GHG emissions will become increasingly important as concerns over climate change lead to tighter environmental regulations. Policies and regulations designed to limit the increase in global temperatures to well below 2°C could have a material adverse effect on us. While we support the efforts to reduce GHG emissions, governments, when adopting rules and regulations, should balance the need to limit increases in temperature with society's need for energy.

Some governments have introduced carbon pricing mechanisms, which can be an effective measure to reduce GHG emissions across the economy at lowest overall cost to society. We expect more governments to follow and governments may also require companies to apply technical measures to reduce their GHG emissions. This could result in increased investments and higher project costs for us and higher energy and product costs for consumers (see "Risk factors" on pages 09-10). Our portfolio exposure is reviewed annually against changing GHG regulatory regimes and physical conditions to identify emerging risks. We test the resilience of our portfolio against externally published, future pathways, including a low emissions pathway.

To test the resilience of new projects, we assess potential costs associated with GHG emissions when evaluating all new investments. Our approach applies a uniform project screening value (PSV) of \$40 (real terms) per tonne of carbon dioxide (CO<sub>2</sub>) equivalent to the total GHG emissions of each investment. This PSV is generally applied when evaluating our new projects around the world to test their resilience across a range of future scenarios. The project development process features a number of checks that may require development of detailed GHG and energy management plans. High-emitting projects undergo additional sensitivity testing, including the potential for future CCS projects. Projects in the most GHG-exposed asset classes have GHG intensity targets that reflect standards sufficient to allow them to compete and prosper in a more CO<sub>2</sub> regulated future. These processes can lead to projects being stopped, designs being changed, and

potential GHG mitigation investments being identified, in preparation for when regulation would make these investments commercially compelling.

The International Energy Agency (IEA) has developed a *450 Scenario* that sets out an energy pathway consistent with the goal of limiting the average global temperature increase to 2°C. This is accomplished by seeking to limit the concentration of greenhouse gases in the atmosphere to around 450 parts per million of CO<sub>2</sub> equivalent. By the year 2030, the IEA's *450 Scenario* describes an energy sector with significant renewables penetration, marked improvement in vehicle as well as process efficiency, and widespread replacement of coal by natural gas in power generation. Under this scenario, CCS is expected by 2030 to be storing around 40 times the volume of CO<sub>2</sub> it does at present. The IEA has assumed oil and gas prices in 2030 of around \$97 per barrel and \$9 per MMBtu respectively, and global CO<sub>2</sub> equivalent costs of \$100 per tonne (all in real terms). The related impact on expected production is that global demand for oil would fall by 17% between 2015 and 2030, while demand for natural gas would grow by 8% during that period. The *450 Scenario* assumptions intensify through to 2050 and beyond to simulate the level of global GHG emission reductions needed to achieve the scenario goals.

We have evaluated our portfolio under the *450 Scenario*. The IEA's projected GHG regulation is expected to result in lower demand for some of our products and potential impairments to some of our less energy-efficient assets. However, we could also see certain benefits as a robust global CO<sub>2</sub> price would make some forms of energy, such as natural gas and renewables, more competitive compared with coal. A robust CO<sub>2</sub> price would also help encourage the development of CCS. Our preliminary view, looking at 2030, is that the aggregate impact under the IEA's *450 Scenario* would be positive overall for us compared with our own outlook. This is primarily due to the higher oil and gas prices assumed by the IEA. While the IEA assumes significant global CO<sub>2</sub> costs of \$100/tonne (in real terms) in 2030, our portfolio sensitivity to oil and gas prices significantly exceeds our sensitivity to CO<sub>2</sub> costs associated with our GHG emissions.

While the IEA assumes significant GHG regulatory costs by 2030, the net impact on us will be influenced by developments in the allocation of free allowances under CO<sub>2</sub> pricing regimes as well as the ability to recover the increased costs from customers. The outlook for these critical elements differs by region and asset type. We actively monitor and model such influences, using our own estimates of developments in global GHG regulation rather than the external reference point of the IEA's *450 Scenario*, to better represent country-level policy granularity.

Accordingly, we have also evaluated the resilience of our portfolio using our own business-case model that assumes an average global temperature increase of 2-3°C by 2100. This model uses our best estimates for future oil and gas prices and expected trends in GHG policies, including existing and proposed regulations. Using our model, we expect our existing portfolio to remain relatively resilient in 2030, primarily as a result of our significant gas reserves and the relative energy efficiency of certain of our portfolio assets. While our model assumes lower overall regulatory costs associated with our CO<sub>2</sub> emissions in 2030 than the IEA estimate of \$100/tonne, we also expect lower oil and gas prices, which projects a less positive outcome than under the IEA's *450 Scenario*.

Based on the above analysis, we believe current oil, gas and CO<sub>2</sub> prices are too low to stimulate the fossil fuel substitution necessary to meet the *Paris Agreement* goal of limiting the average global temperature increase to well below 2°C.

As energy demand increases and easily accessible oil and gas resources decline, we are developing resources that require more energy and advanced technologies to produce. As our production becomes more energy intensive, this could result in an associated increase in direct GHG emissions from our Upstream facilities. See "Risk factors" on pages 09-10.

We are seeking cost-effective ways to manage GHG emissions and see potential business opportunities in developing such solutions. Our main contributions to reducing global GHG emissions are in four areas: supplying more natural gas to replace coal for power generation; supplying biofuels; progressing CCS technologies; and implementing energy-efficiency measures in our operations where reasonably practical. To support this, we continue to advocate the introduction of effective government-led carbon pricing mechanisms.

According to the IEA, over 40% of global emissions in 2013 came from electricity and heat generation. For many countries, using more gas in power generation instead of coal can make the largest contribution, at the lowest cost, to meeting their GHG emission reduction objectives. We expect that, in combination with renewables and use of CCS, natural gas will be essential for significantly lower CO<sub>2</sub> emissions. With our leading position in liquefied natural gas (LNG), our portfolio of conventional gas assets and our technologies for recovering gas from tight rock formations, we can supply natural gas to replace coal for power generation. Natural gas can also act as a partner for intermittent renewable energy, such as solar and wind, to maintain a steady supply of electricity, because gas-fired plants can start and stop relatively quickly.

We believe that low-carbon biofuels are one of the most viable ways to reduce CO<sub>2</sub> from transport fuels in the coming years. Our Raízen joint venture (Shell interest 50%) in Brazil produces low-carbon biofuel from sugar cane. We are also investing in research to help develop and commercialise advanced biofuels.

CCS is a technology used for capturing CO<sub>2</sub> from flue gas before it is emitted into the atmosphere, transporting it through pipelines and injecting it into a deep geological formation for long-term storage. According to the IEA, CCS could contribute around 13% of the CO<sub>2</sub> mitigation effort required by 2050, assuming that use of CCS technology grows in accordance with the IEA scenario. In November 2015, we launched our Quest CCS project in Canada, which is designed to capture and safely store more than 1 million tonnes of CO<sub>2</sub> each year. We are also involved in the CCS test centre in Mongstad, Norway, the Gorgon CO<sub>2</sub> injection project in Australia and the Qatar Carbonates and Carbon Storage Research Centre. At the Peterhead power station in Scotland, which is operated by the British energy company SSE, we were developing the world's first full-scale CCS project for a natural gas-fired power plant. Unfortunately, in late 2015, the UK government decided not to fund the project, which meant that it could not proceed. However, our technical data and reports will be made public. We also have technology that can remove both CO<sub>2</sub> and sulphur dioxide from industrial flue gases. It is being used at the Boundary Dam coal-fired power plant in Canada.

We continue to work on improving energy efficiency at our oil and gas production facilities, refineries and chemical plants. Measures include our GHG and energy management programme that focuses on the efficient operation of existing equipment by using monitoring systems which give us instant information that we can use to make energy-saving changes.

In addition, we work to help our customers conserve energy and reduce their GHG emissions, including through the development and sale of advanced fuels and lubricants.

## Our performance

Our direct GHG emissions decreased from 76 million tonnes of CO<sub>2</sub> equivalent in 2014 to 72 million in 2015. The level of flaring in our Upstream businesses fell by 8% in 2015 compared with 2014, despite an increase in flaring levels in Malaysia in line with increased oil production in 2015. Our emissions also decreased as a result of divestments (for example, in Nigeria and the Geelong refinery in Australia), a higher level of maintenance shutdowns and the start-up of Quest. These decreases were partially offset by updated Global Warming Potentials (GWPs). GWP is an index used to compare the impact of emissions from various greenhouse gases to the impact of emissions from the equivalent mass of CO<sub>2</sub>. Our 2014 reporting was based on the GWPs from the *Second Assessment Report* published by the International Panel on Climate Change (IPCC). Consistent with updated UK regulations, our 2015 reporting is based on the GWPs from the *Fourth Assessment Report*. For example, as a result, GWP for methane increased from 21 to 25.

In 2015, we signed up to the World Bank's "Zero Routine Flaring by 2030" initiative. This is an important initiative to ensure all stakeholders, including governments and companies, work together to address routine flaring. Flaring, or burning off, of gas in our Upstream businesses contributed around 17% to our overall GHG emissions in 2015. The majority of this flaring takes place at facilities where there is no infrastructure to capture the gas produced with oil, known as associated gas. Gas flaring from these operations may rise in coming years if oil production increases before the related gas-gathering equipment is in place. In October 2015, we brought a project on stream to capture gas for reinjection in Malaysia. At the end of 2015, we also brought a project on stream that captures gas from the Majnoon field in Iraq to help supply the domestic market. We expect to further reduce our flaring levels in 2016, as gas gathering facilities that started at the end of 2015 in Malaysia and Iraq reach full capacity.

In parallel, our involvement in Basrah Gas Company (BGC), a joint venture between Shell, South Gas Company and Mitsubishi Corporation in the south of Iraq, continues to reduce flaring in the country. It is the largest gas project in Iraq's history and the world's largest flaring reduction project. BGC captures associated gas that would otherwise be flared from three non-Shell operated oil fields in southern Iraq (Rumaila, West Qurna 1 and Zubair) for use in the domestic market. It reached a peak raw gas throughput of 515 million standard cubic feet per day in 2015.

Around 25% of our flaring in 2015 took place in Nigeria, where a challenging operating environment and shortfalls in funding from the government-owned Nigerian National Petroleum Company – which has the majority interest in a venture operated by The Shell Petroleum Development Company of Nigeria Limited (SPDC) – has slowed progress on projects that are intended to gather additional associated gas that is currently flared.

Despite the noted funding challenges, flaring intensity levels in SPDC decreased by about 15% in 2015 compared with 2014. Work to improve asset reliability reduced the rate of flaring and the divestment of assets in Oil Mining Leases 18, 24 and 29 further contributed to the decrease in flaring emissions.

We recognise the importance of reducing methane emissions and take our responsibilities seriously. Methane from the flaring and venting of associated gas in our Upstream oil operations was the largest contributor to our reported methane emissions in 2015. We are working to reduce methane emissions from these sources by reducing the overall level of flaring and venting. In addition, we continue to implement "Leak Detection and Repair" programmes across our sites to identify high-emission equipment, such as high-bleed pneumatic devices, and unintended losses, so they can be replaced or repaired. We continue to work to confirm that we have identified all potential methane sources and have reported our emissions from these sources in line with regulations and industry standards.



## ENVIRONMENT AND SOCIETY CONTINUED

GHG emissions data are provided below in accordance with UK regulations introduced in 2013. GHG emissions comprise CO<sub>2</sub>, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. The data are calculated using locally regulated methods where they exist. Where there is no locally regulated method, the data are calculated using the 2009 API Compendium, which is the recognised industry standard under the GHG Protocol Corporate Accounting and Reporting Standard. There are inherent limitations to the accuracy of such data. Oil and gas industry guidelines (IPIECA/API/IOGP) indicate that a number of sources of uncertainty can contribute to the overall uncertainty of a corporate emissions inventory.

GREENHOUSE GAS EMISSIONS		
	2015	2014
Emissions (million tonnes of CO <sub>2</sub> equivalent)		
Direct [A]	72	76
Energy indirect [B]	9	10
Intensity ratios (tonne/tonne)		
All facilities [C]	0.23	0.23
Downstream refineries [D]	0.29	0.29
Upstream facilities [E]	0.14	0.14

[A] Emissions from the combustion of fuel and the operation of facilities. 2015 emissions are calculated using GWPs from the IPCC's *Fourth Assessment Report*.

[B] Emissions from the purchase of electricity, heat, steam and cooling for our own use using a market-based method.

[C] In tonnes of total direct and energy indirect GHG emissions per tonne of crude oil and feedstocks processed and petrochemicals produced in Downstream manufacturing, and oil and gas produced and gas processed by gas-to-liquid (GTL) facilities in Upstream. The regulations require the reporting of a ratio which expresses the annual emissions in relation to a quantifiable factor associated with our activities. However, oil and gas industry guidelines (IPIECA/API/IOGP) state that only presenting normalised environmental performance data separately for different business activities would generally provide meaningful information. As a result, we are also reporting the most appropriate ratio for our Downstream and Upstream businesses.

[D] In tonnes of direct and energy indirect GHG emissions per tonne of crude oil and feedstocks processed. The ratio includes chemical plants where they are integrated with refineries.

[E] In tonnes of direct and energy indirect GHG emissions per tonne of oil and gas produced. The ratio excludes GTL facilities.

As set out in "Performance indicators" on page 21, our Refining Energy Intensity Index (EII™) was 95.4 in 2015, compared with 94.9 in 2014. Detailed information on our 2015 environmental performance will be published in the Shell Sustainability Report in April 2016.

### SPILLS

Large spills of crude oil, oil products and chemicals associated with our operations can result in major clean-up costs as well as fines and other damages. They can also affect our licence to operate and harm our reputation. We have clear requirements and procedures designed to prevent spills, and our asset integrity programmes include the design, maintenance and operation of spill containment facilities.

Our business units are responsible for organising and executing oil-spill responses in line with Shell guidelines as well as with relevant legal and regulatory requirements. All our offshore installations have plans in place to respond to spills. These plans detail response strategies and techniques, available equipment, and trained personnel and contracts. We are able to call upon significant resources such as containment booms, collection vessels and aircraft. We are also able to draw upon the contracted services of oil-spill response organisations, if required. We conduct regular exercises that seek to ensure these plans remain effective. We have further developed our capability to respond to spills to water, and maintain a Global Response Support Network to support our worldwide response capability. This is also supported by our global Oil Spill Excellence Center, which tests local capability, and maintains our capability globally to respond to a significant incident.

We are a founding member of the Marine Well Containment Company, a non-profit industry consortium providing a well-containment response system for the Gulf of Mexico. In addition, we were a founding member of the Subsea Well Response Project, an industry cooperative effort to enhance global well-containment capabilities. The additional well-containment capability developed by this project is now managed by an industry consortium via Oil Spill Response Limited.

We also maintain site-specific emergency response plans in the event of an onshore spill. Like the offshore response plans, these are designed to meet Shell guidelines as well as relevant legal and regulatory requirements. They also provide for the initial assessment of incidents and the mobilisation of resources needed to manage them.

In 2015, the number of operational spills of more than 100 kilograms decreased to 108 from 153 in 2014 (see "Performance indicators" on page 21). At the end of February 2016, there were two spills under investigation in Nigeria that may result in adjustments.

Although most oil spills in Nigeria result from sabotage and theft of crude oil, there are instances where spills occur in our operations due to operational failures, accidents or corrosion. SPDC responds to all oil spills originating in the area immediately surrounding its pipelines and other facilities, regardless of the cause. It has been working to reduce operational spills that are under its control. It maintains a public website to track the response, investigation and clean-up of every spill from its facilities due to operational failure, sabotage or theft.

Accelerating implementation of the United Nations Environment Programme (UNEP)'s Environmental Assessment of Ogoniland was identified as a priority in 2015 by the newly elected Buhari administration. In August 2015, an 18-month roadmap was agreed between the government, UNEP and SPDC, which included approval of a governance model and funding framework for the Ogoni Restoration Fund recommended by UNEP.

In 2015, SPDC and the Bodo community signed a memorandum of understanding to restart the clean-up of the Bodo creeks affected by two operational spills in 2008. The clean-up will be overseen by an independent project director appointed by the Bodo mediation team. Contractors for the first phase of the clean-up were deployed to the field in 2015; however, the preliminary assessment works were stopped by the community shortly afterwards. Efforts are ongoing to engage all stakeholders so that the clean-up exercise can begin.

As both UNEP and the co-chairs of the Bodo mediation team have noted, it is essential that clean-up and remediation are accompanied by concerted efforts by government, communities and the oil and gas industry to prevent re-pollution. SPDC is pursuing a range of initiatives to prevent and minimise the impact of sabotage and crude oil theft within Ogoniland, including community-based pipeline surveillance, education and alternative livelihoods programmes.

### HYDRAULIC FRACTURING

Over the last decade, we have established our onshore oil and gas portfolio using advances in technology to access previously uneconomic tight-oil and tight-gas resources, including those locked in shale formations. This energy resource continues to play an important role in meeting global energy demand.

One of the key technologies applied in tight-oil and tight-gas fields is known as hydraulic fracturing, a technique that has been used since the 1950s. It involves pumping a fluid that is typically 99% water and sand and around 1% chemical additives into tight sand or shale rock at high pressure. This creates threadlike fissures, typically the diameter of a human hair, through which oil and gas can flow.

In 2011, we developed and publicly shared a set of five global principles that govern the onshore tight/shale oil and gas activities where hydraulic fracturing is used. The principles cover safety, air quality, water production and use, land use, and engagement with local communities. We support regulations consistent with these principles, which are designed to reduce risks to the environment and seek to ensure the safety of those living near our operations. As new technologies, challenges and regulatory requirements emerge, we review and update these principles. Each of our projects takes into account the local context, including the geology of the area and impacts such as noise and traffic, and we then design our activities with the aim to suit the local conditions.

Some jurisdictions are considering more stringent permitting, well-construction and other regulations relating to fracturing, as well as local bans and other land use restrictions. Such regulations could subject our operations to delays, increased costs or prohibitions. Our current standards meet or exceed the existing regulatory requirements of the jurisdictions where we operate. We believe we can safely and responsibly explore, develop and produce tight-oil and tight-gas where hydraulic fracturing technology is used – and we support regulation, as long as it is workable and effective.

Examples of topics which our principles cover include groundwater protection, chemicals used for hydraulic fracturing, water use and seismicity.

To protect and isolate potable groundwater from hydraulic-fracturing fluids in the wellbore, we line all our wells with steel casing and cement. All of our wells are expected to have two or more subsurface barriers to protect groundwater. We monitor a wellbore's integrity before, during and after hydraulic fracturing. When we acquire assets, we evaluate the assets' wells for conformity with our safety and operating principles, and put in place a plan with a timeline for rectifying any inconsistencies as far as reasonably practical.

To the extent allowed by our suppliers, we support full disclosure of the chemicals used in hydraulic-fracturing fluids for Shell-operated wells. Material Safety Data Sheet information is available on site where wells are being hydraulically fractured. We support regulation to require suppliers to release such information. The chemicals used in hydraulic fracturing will vary from well to well and from contractor to contractor, but some can be toxic. For that reason, we have stringent procedures for handling hydraulic-fracturing chemicals in accordance with the design and assurance processes described above. The formations into which these additives may be injected are typically more than a thousand metres below freshwater aquifers. Our procedures require that potable groundwater must be isolated from well completion and production activities. Moreover, we only use air, water or a water-based liquid while drilling through the potable groundwater aquifer to a depth below the aquifer. The casing and cement are then put in place before drilling is resumed and hydraulic fracturing is initiated.

We recycle or reuse as much water as we believe is reasonably practical. We store, treat or dispose of water in accordance with regulatory requirements and Shell standards, which meet or exceed those regulatory requirements.

There have been reports linking hydraulic fracturing to earth tremors. Most seismic events occur naturally due to motion along faults under stress in the earth's crust. Some areas are more seismically active than others. We analyse publicly available seismic, geologic and geophysical data to determine historical seismicity in areas where we plan to operate, and if seismic activity beyond historic levels is detected, we will investigate and review our operations. We are supportive of local regulations that are fit-for-purpose, based on local geology and surface conditions, in managing the risk of induced seismicity in our operating areas. In addition to adhering to local regulations, we have our own guidelines, which outline monitoring, mitigation and response procedures to avoid or minimise seismicity associated with hydraulic fracturing.

## OIL SANDS

We are developing mineable oil sands resources in Alberta, Canada. We use an aqueous extraction method (warm water) to extract bitumen, which is a heavy oil. Tailings are the residual by-products that remain after the bitumen is separated from the mined oil sands ore. They are composed of sand, clay, water, silts, some residual bitumen and other hydrocarbons, salts and trace metals, some of which are toxic. Tailings are initially stored in an above-ground tailings facility adjacent to the mined pit until the mined-out pit area is ready for tailings materials and fluids placement. This in-pit backfilling process begins approximately eight to ten years after mining has started. This period allows for mining to progress enough to allow dykes to be built within the mined pit to provide areas for tailings containment as mining continues to advance. We take active measures to prevent wildlife from interacting with the tailings facilities, and have barriers to prevent tailings water from seeping into groundwater. We regularly monitor the local groundwater and surface water bodies to confirm that these barriers are effective at preventing contamination.

In addition, tailings facilities allow water to be recycled, minimising the amount of water intake from the river. Over 75% of the water used in our oil sands mining operations is recycled from the tailings facilities at our mines.

The tailings management areas at the Athabasca Oil Sands Project's Muskeg River and Jackpine mines covered an area of approximately 43 square kilometres at the end of 2015. We estimate that the active tailings' footprint will start to decrease between 2020 and 2025 as the Muskeg River Mine external tailings facility is reclaimed and tailings materials are deposited in a pit as part of the in-pit backfilling process.

Previously, tailings were managed under the Alberta Energy Regulator's Directive 074, which had more prescriptive targets for tailings remediation. In March 2015, the Government of Alberta replaced it with a new policy – the Tailings Management Framework (TMF) – to manage existing and new tailings pond accumulation and remediation. The TMF and associated regulation will manage tailings throughout a project life cycle and will include limits on tailings accumulation. The framework also ensures that tailings are treated and progressively reclaimed and that all fluid tailings meet the TMF's definition of "ready to reclaim" within 10 years of the end of mine life. We continue to work towards improving tailings treatment technologies to treat fluid fine tailings that have a high percentage of fine particles.

## EXPLORATION IN ALASKA

We operated for almost 50 years off the coast of Alaska, including the Cook Inlet and the Beaufort and Chukchi seas, until 1998. Between 2005 and 2012, we acquired our current portfolio, which includes 339 federal leases for exploration in the Beaufort and Chukchi seas, and 18 state leases in North Slope coastal waters.

In September 2015, we safely drilled the Burger J well to a depth of 2,073 metres. The well was deemed a dry hole and was sealed and abandoned in accordance with US regulations. We will not conduct further exploration offshore Alaska for the foreseeable future. This decision reflects not only the Burger J well results, but also the high costs associated with the project, and the challenging and unpredictable federal regulatory environment for offshore Alaska.

Subsequently, we safely demobilised all personnel and vessels from the Chukchi Sea. All operations were conducted without significant injury or environmental issues. We conveyed the results of the exploration season to stakeholders and worked closely with them in the subsequent winding down of operations.

## ENVIRONMENT AND SOCIETY CONTINUED

### WATER

Although the availability of fresh water is a global issue of increasing importance, water constraints are mainly local, requiring local solutions. A combination of increasing demand for water resources, growing stakeholder expectations and concerns, and water-related legislation may drive actions that affect our ability to secure access to fresh water and to discharge water from our operations. We require our assets and projects to assess risks to water availability and, in areas of water scarcity, we develop water-management action plans that identify ways to use less fresh water, recycle water and closely monitor its use. We design and operate our facilities to help reduce their freshwater use.

On Pulau Bukom, a small island in southern Singapore, a country with limited water supplies, we use recycled water and convert sea water for steam generation at our refinery. We also make a conscious effort to reuse our process water. As a result, we are relying less on water from mainland Singapore, which frees up resources for use by local residents.

At our oil sands operations in Canada, we use far less than our water allocation from the Athabasca River and we seek to minimise the amount withdrawn during the winter months when the flow rate is low. We also reduce the amount of fresh water needed in operations by recycling water from the tailings ponds. Most of the water we use is recycled and we are investigating new ways to further reduce fresh water intake.

Our biofuel joint venture Raizen has been introducing a system that partially recovers water from sugar cane to be reused in mills, boilers, cooling towers and other equipment in the production line.

Our Pearl GTL plant in Qatar does not take fresh water from its arid surroundings. The water produced in the GTL manufacturing process is recycled in the operation, fulfilling all the water needs of the plant.

### BIOFUELS

The international market for biofuels is growing, driven largely by the introduction of new energy policies in Europe and the USA that call for more renewable, lower-carbon fuels for transport. According to the IEA, sustainable biofuels are expected to play an increasingly important role in helping to meet customers' fuel needs and reduce CO<sub>2</sub> emissions.

From cultivation to use, some biofuels emit significantly less CO<sub>2</sub> compared with conventional gasoline. But this depends on several factors, such as how the raw materials are produced. Other challenges include concerns over land competing with food crops, labour rights, and the water used in the production process.

In 2015, we used around 9.5 billion litres of biofuel in our gasoline and diesel blends worldwide, which makes us one of the world's largest biofuel suppliers. We include our own long-established sustainability clauses in our supply contracts. These clauses are designed to prevent the sourcing of biofuels from suppliers that may not abide by human rights guidelines, or that may have cleared land rich in biodiversity. In addition, where possible, we source biofuels that have been certified against internationally recognised sustainability standards.

We are also developing our own capabilities to produce sustainable biofuel components. Raizen produces approximately 2 billion litres annually of ethanol from sugar cane. This ethanol can reduce CO<sub>2</sub> emissions by around 70% compared with gasoline, from cultivation of the sugar cane to using the ethanol as fuel.

The Raizen joint-venture agreement includes developing joint sustainability principles, standards and operating procedures that also apply to third-party

suppliers. We also continue to work with industry, governments and voluntary organisations towards the development of global sustainability standards for biofuels.

We continue to invest in new ways of producing biofuels from sustainable feedstocks, such as biofuels made from waste products or cellulosic biomass. These advanced biofuels could potentially emit less CO<sub>2</sub> in the production process than the biofuels available today.

Raizen's cellulosic ethanol plant at its Costa Pinto mill in Brazil was opened in 2015. The technology was first developed from our funding of the Iogen Energy venture, which was subsequently transferred to Raizen. It is expected to produce 40 million litres a year of advanced biofuels from sugar-cane residues.

We are working on three routes for manufacturing cellulosic biofuels and now have three pilot plants at various stages of completion. The pilot plants are designed to convert cellulosic biomass, which are non-food plants and wastes, into a range of products, including gasoline, diesel, aviation fuel and ethanol. The plant built in Houston, Texas, in 2012, continues to provide valuable data in support of improving the digestion of biomass. A second plant to test a pre-treatment process for cellulosic ethanol is now being commissioned in Houston. A third plant has been approved and is expected to be built in Bangalore, India.

### ENVIRONMENTAL COSTS

We are subject to a variety of environmental laws, regulations and reporting requirements in the countries where we operate. Infringing any of these laws, regulations and requirements could result in significant costs, including clean-up costs, fines, sanctions and third-party claims, as well as harm our reputation and our ability to do business.

Our ongoing operating expenses include the costs of avoiding unauthorised discharges into the air and water, and the safe disposal and handling of waste.

We place a premium on developing effective technologies that are also safe for the environment. However, when operating at the forefront of technology, there is always the possibility that a new technology brings with it environmental impacts that have not been assessed, foreseen or determined to be harmful, when originally implemented. While we believe we take all reasonable precautions to limit these risks, we are subject to additional remedial environmental and litigation costs as a result of our operations' unknown and unforeseen impacts on the environment. Although these costs have so far not been material to us, no assurance can be given that this will always be the case.

In this regard, as oil and gas fields mature, it is possible in certain circumstances for seismic activity to increase based on the unique geology of individual fields. While earth tremors as a result of gas production have been acknowledged in the Groningen gas field in the Netherlands since 1993, an earthquake with the magnitude of 3.6 on the Richter scale in August 2012 resulted in new insights and led to increased concerns in the local community (see "Risk factors" on page 10). The field is operated by Nederlandse Aardolie Maatschappij B.V. (NAM) (Shell interest 50%) and is one of the largest onshore gas fields in Europe. An extensive study is in progress to better understand seismic risk in the area. Several universities and researchers are involved and a report is expected in 2016. Interim results from November 2015 included a fully-integrated seismic risk assessment. This risk assessment demonstrated that all the analysed production levels meet the acceptable risk boundaries set by the Ministry of Economic Affairs of the Netherlands.

The Dutch government has imposed significant gas production reduction measures since 2014. A range of actions have been taken to improve

safety, liveability and economic prospects in the region, including the cap on extraction. A long-term programme has been developed by the National Coordinator for Groningen to work with regional authorities and residents on issues such as improving the handling of claims and the resolution of disputes. NAM is working together with all relevant parties.

## SECURITY

Our operations expose us to social instability, civil unrest, terrorism, piracy, acts of war and risks of pandemic diseases that could have a material adverse effect on our business (see "Risk factors" on page 09). We seek to obtain the best possible information to enable us to assess threats and risks. We conduct detailed assessments for all sites and activities, and implement appropriate risk mitigation measures to detect, deter and respond to security threats. This includes building strong and open relationships with government security agencies, the physical hardening of sites, journey management, and information risk management. We conduct training and awareness campaigns, including travel advice and medical assistance before travel. The identities of our employees and contractors and their access to our sites and activities, both physical and logical, are consistently verified and controlled. We manage and exercise crisis response and management plans.

## NEIGHBOURING COMMUNITIES

Earning the trust of local communities is essential to the success of our projects and operations. We have global requirements for social performance – how we perform in our relationship with communities.

The requirements set clear rules and expectations for how we engage with and respect communities that may be impacted by our operations. Shell-operated major projects and facilities are required to have a social performance plan and an effective community feedback mechanism. This helps the business to understand the social context in which we plan to operate, identifies potential negative effects on the community and manages impacts. In addition, we have specific requirements intended to minimise our impact on indigenous peoples' traditional lifestyles and on handling involuntary resettlement.

## HUMAN RIGHTS

Our Principles and Code of Conduct require our employees and contractors to respect the human rights of fellow workers and communities where we operate. Our approach is informed by the Universal Declaration of Human Rights, the core conventions of the International Labour Organization and the United Nations' Guiding Principles on Business and Human Rights.

We have specific policies in place in areas across our activities where respect for human rights is particularly important to the way we operate, such as communities, labour, procurement and security. We also work with other companies and non-governmental organisations to improve the way we apply these principles. Our approach to human rights helps us operate in a responsible way, aimed at delivering projects without delays and minimising the social impacts of our operations. It also enables us to better share certain benefits of our activities, such as creating new jobs and contracts that help develop local economies.

## OUR PEOPLE

Our aim is to be the world's most competitive and innovative energy company. We recruit, train and recompense people according to a strategy that aims to maintain a productive organisation, deploying talent across the business effectively; accelerating development of our people; growing and strengthening our leadership capabilities; and enhancing employee performance through strong engagement.

### EMPLOYEE OVERVIEW

At December 31, 2015, we employed 90,000 people, compared with 94,000 at the end of 2014. The net decrease included the impact by the end of 2015, partially offset by recruitment, of our decision to reduce the number of roles across our organisation by 7,500 in 2015-2016.

We continued to recruit externally to execute our strategy and growth plans for the future, hiring about 1,000 graduates and 1,500 experienced professionals. About 40% of our graduate recruits came from universities outside Europe and the Americas, compared with 30% in 2014, in response to increasing demand for skilled people in other regions, principally in Asia. The majority of our graduate recruits came from technical disciplines.

During 2015, we employed an average of 93,000 people, shown by geographical area in the table below.

EMPLOYEES BY GEOGRAPHICAL AREA (AVERAGE NUMBERS)	THOUSAND		
	2015	2014	2013
Europe	25	25	25
Asia	29	28	27
Oceania	1	2	3
Africa	3	3	3
North America	31	32	31
South America	4	4	3
<b>Total</b>	<b>93</b>	<b>94</b>	<b>92</b>

### EMPLOYEE COMMUNICATION AND INVOLVEMENT

We strive to maintain a healthy industrial relations environment in which dialogue between management and employees – both directly and, where appropriate, through employee representative bodies – is embedded in our work practices. On a quarterly basis, management briefs employees on our operational and financial results through various channels, including team meetings, face-to-face gatherings, an email from the Chief Executive Officer, webcasts and online publications.

The Shell People Survey is one of the principal tools used to measure employee engagement: the degree of affiliation and commitment to Shell. It provides insights into employees' views and has had a consistently high response rate. The average employee engagement score in 2015 was 80% favourable, as it was in 2014.

We promote safe reporting of views about our processes and practices. In addition to local channels, the Shell Global Helpline enables employees to report potential breaches of the Shell General Business Principles and Shell Code of Conduct, confidentially and anonymously, in a choice of several languages. See "Corporate governance" on page 70.

### DIVERSITY AND INCLUSION

We have a culture that embraces diversity and fosters inclusion. By embedding these principles in our operations, we have a better understanding of the needs of our varied customers, partners and stakeholders throughout the world and can benefit from a wider talent pool. We provide equal opportunity in recruitment, career development, promotion, training and rewards for all employees, including those with

disabilities. Where possible, we make reasonable adjustments in job design and provide appropriate training for employees who have become disabled.

We actively monitor representation of women and local nationals in senior leadership positions, and have talent-development processes to support us in delivering more diverse representation.

At the end of 2015, the proportion of women in senior leadership positions was 19% compared with 18% at the end of 2014. Senior leadership positions is a Shell measure based on senior salary group levels and is distinct from the term "senior manager" in the statutory disclosures set out below.

GENDER DIVERSITY DATA (AT DECEMBER 31, 2015)	NUMBER	
	Men	Women
Directors of the Company	8 73%	3 27%
Senior managers [A]	754 78%	218 22%
Employees (thousand)	63 70%	27 30%

[A] Senior manager is defined in section 414C(9) of the Companies Act 2006 and accordingly the number disclosed comprises the Executive Committee members who were not Directors of the Company, as well as other directors of Shell subsidiaries.

The local national coverage is the number of senior local nationals (both those working in their respective base country and those expatriated) as a percentage of the number of senior leadership positions in their base country.

LOCAL NATIONAL COVERAGE (AT DECEMBER 31, 2015)	Number of selected key business countries		
	2015	2014	2013
Greater than 80%	12	12	12
Less than 80%	8	8	8
<b>Total</b>	<b>20</b>	<b>20</b>	<b>20</b>

### EMPLOYEE SHARE PLANS

We have a number of share plans designed to align employees' interests with our performance through share ownership. For information on the share-based compensation plans for Executive Directors, see the "Directors' Remuneration Report" on pages 98-102.

#### Performance Share Plan and Long-term Incentive Plan

Conditional awards of the Company's shares are made under the terms of the Performance Share Plan (PSP) to some 17,000 employees each year. From 2015, senior executives received conditional awards of the Company's shares under the terms of the Long-term Incentive Plan (LTIP) rather than under the terms of the PSP. The extent to which the awards vest under both plans is determined over a three-year performance period but the performance conditions applicable to each plan are different. Under the PSP, half of the award is linked to the key performance indicators described in "Performance indicators" on page 20, averaged over the period. The other half of the award is linked to a comparative performance condition which involves a comparison with four of our main competitors over the period, based on four relative performance measures. Under the LTIP, the award is solely linked to the comparative performance condition described above. Under both plans, all shares that vest are increased by an amount equal to the national dividends accrued on those shares during the period from the award date to the vesting date. In certain circumstances awards may be adjusted before delivery or reclaimed after delivery. None of the awards results in beneficial ownership until the shares vest. See Note 21 to the "Consolidated Financial Statements" on pages 147-148.

### Restricted Share Plan

Under the Restricted Share Plan, awards are made on a highly selective basis to senior staff. Shares are awarded subject to a three-year retention period. All shares that vest are increased by an amount equal to the national dividends accrued on those shares during the period from the award date to the vesting date. In certain circumstances awards may be adjusted before delivery or reclaimed after delivery.

### Global Employee Share Purchase Plan

Eligible employees in participating countries may participate in the Global Employee Share Purchase Plan. This plan enables them to make contributions from net pay towards the purchase of the Company's shares at a 15% discount to the market price, either at the start or at the end of an annual cycle, whichever date offers the lower market price.

### UK Sharesave Scheme

Eligible employees of participating companies in the UK may participate in the UK Sharesave Scheme. Options are granted over the Company's shares at market value on the invitation date. These options are normally exercisable after completion of a three-year or five-year contractual savings period.

### UK Shell All Employee Share Ownership Plan

Eligible employees of participating companies in the UK may participate in the Shell All Employee Share Ownership Plan, under which monthly contributions from gross pay are made towards the purchase of the Company's shares.

### ACQUISITION OF BG GROUP PLC

We acquired BG Group plc (BG) in February 2016. See "Strategy and outlook" on page 15. BG has about 5,000 employees. As a result of the identified synergies, we expect an overall potential reduction of approximately 2,800 roles globally across the combined organisation, which is in addition to the reduction of 7,500 mentioned earlier under "Employee overview".

As a result of the acquisition, certain conditional employee share awards made in 2015 under BG's Long-Term Incentive Plan were exchanged for equivalent conditional awards over shares in the Company. Certain participants in the BG Sharesave Scheme rolled over their outstanding BG share options into options over the Company's shares.

Strategic Report signed on behalf of the Board

/s/ Michiel Brandjes

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Michiel Brandjes  
Company Secretary  
March 9, 2016

## GOVERNANCE

### THE BOARD OF ROYAL DUTCH SHELL PLC

#### CHARLES O. HOLLIDAY Chairman

Born March 9, 1948. A US national, appointed Chairman of the Company with effect from May 2015, having previously served as a Non-executive Director since September 2010.

He was Chief Executive Officer of DuPont from 1998 to 2009, and Chairman from 1999 to 2009. He joined DuPont in 1970 after receiving a B.S. in industrial engineering from the University of Tennessee and held various manufacturing and business assignments, including a six-year, Tokyo-based posting as President of DuPont Asia/Pacific. He is Chairman of the National Academy of Engineering and is a founding member of the International Business Council. He has previously served as Chairman of the Bank of America Corporation, The Business Council, Catalyst, the Society of Chemical Industry – American Section and the World Business Council for Sustainable Development.

He is a Director of Deere & Company.

Chairman of the Nomination and Succession Committee

#### HANS WIJERS Deputy Chairman and Senior Independent Director

Born January 11, 1951. A Dutch national, appointed a Non-executive Director of the Company with effect from January 2009.

He was Chief Executive Officer and Chairman of the Board of Management of AkzoNobel N.V. from 2003 to 2012, having become a Board member in 2002. From 1999 to 2002, he was Senior Partner at The Boston Consulting Group. He was Dutch Minister for Economic Affairs from 1994 to 1998, and was previously Managing Partner of The Boston Consulting Group. He obtained a PhD in economics from Erasmus University Rotterdam while teaching there.

He is Chairman of the Supervisory Board of Heineken N.V., a member of the Supervisory Board of HAL Holding N.V., a Non-executive Director of GlaxoSmithKline plc and a trustee of various charities.

Chairman of the Corporate and Social Responsibility Committee and member of the Nomination and Succession Committee

#### BEN VAN BEURDEN Chief Executive Officer

Born April 23, 1958. A Dutch national, appointed Chief Executive Officer of the Company with effect from January 2014.

He was Downstream Director from January to September 2013. Previously he was Executive Vice President Chemicals from December 2006, when he served on the boards of a number of leading industry associations, including the International Council of Chemicals Associations and the European Chemical Industry Council. Prior to this, he held a number of operational and commercial roles in both Upstream and Downstream, including Vice President Manufacturing Excellence. He joined Shell in 1983, after graduating with a Master's Degree in Chemical Engineering from Delft University of Technology, the Netherlands.

#### SIMON HENRY Chief Financial Officer

Born July 13, 1961. A British national, he was appointed Chief Financial Officer of the Company with effect from May 2009.

He was Chief Financial Officer for Exploration & Production from 2004 to 2009, and was Head of Group Investor Relations from 2001 to 2004. Prior to these roles, he held various finance posts including Finance Manager of Marketing in Egypt, Controller for the Upstream business in Egypt, Oil Products Finance Adviser for Asia-Pacific, Finance Director for the Mekong Cluster, and General Manager Finance for the South East Asian Retail business. He joined Shell in 1982 as an engineer at the Stanlow refinery in the UK and in 1989 qualified as a member of the Chartered Institute of Management Accountants.

He is a Non-executive Director of Lloyds Banking Group plc.

#### GUY ELLIOTT Non-executive Director

Born December 26, 1955. A British national, appointed a Non-executive Director of the Company with effect from September 2010.

He was Chief Financial Officer of Rio Tinto plc and Rio Tinto Limited from 2002 to April 2013, and remained Senior Executive Director of these companies until the end of 2013. Prior to joining the Rio Tinto Group, he worked in investment banking and gained an MBA at INSEAD. From 2007 to 2010, he was a Non-executive Director of Cadbury plc, serving as Chairman of its Audit Committee from 2008 to 2009 and as Senior Independent Director from 2008 to 2010.

He is a member of the UK Takeover Panel and Chairman of the Code Committee of the Panel. He is Deputy Chairman and Senior Independent Director of SABMiller plc.

Member of the Audit Committee and member of the Nomination and Succession Committee

**EULEEN GOH**  
**Non-executive Director**

Born April 20, 1955. A Singaporean national, appointed a Non-executive Director of the Company with effect from September 2014.

She is a chartered accountant and also has professional qualifications in banking and taxation. She held various senior management positions with Standard Chartered Bank and was Chief Executive Officer of Standard Chartered Bank, Singapore, from 2001 until 2006.

She has also held non-executive appointments on various boards including Aviva plc, MediaCorp Pte Limited, Singapore Airlines Limited, Singapore Exchange Limited, Standard Chartered Bank Malaysia Berhad and Standard Chartered Bank Thai plc. She was previously Non-executive Chairman of the Singapore International Foundation and Chairman of International Enterprise Singapore and the Accounting Standards Council, Singapore.

She is a Non-executive Director of Capitaland Limited, DBS Bank Limited, DBS Group Holdings Limited and SATS Limited, and a Trustee of the Singapore Institute of International Affairs Endowment Fund and the Temasek Trust. She is also a Non-executive Director of Singapore Health Services Pte Limited, a not-for-profit organisation.

**Chairman of the Audit Committee**

**GERARD KLEISTERLEE**  
**Non-executive Director**

Born September 28, 1946. A Dutch national, appointed a Non-executive Director of the Company with effect from November 2010.

He was President/Chief Executive Officer and Chairman of the Board of Management of Koninklijke Philips N.V. from 2001 to 2011. Having joined Philips in 1974, he held several positions before being appointed as Chief Executive Officer of Philips' Components division in 1999 and Executive Vice-President of Philips in 2000. From 2010 to 2013, he was a member of the board of Directors of Dell Inc. and, from 2009 to April 2014, he was a member of the Supervisory Board of Daimler AG.

He is Chairman of Vodafone Group plc, a member of the Supervisory Board of ASML Holding N.V. and a Non-executive Director of IBEX Global Solutions plc. It was announced in February 2016 that Gerard Kleisterlee will be appointed Chairman of ASML Holding N.V with effect from the close of business of its AGM on April 29, 2016.

**Chairman of the Remuneration Committee and member of the Audit Committee**

**SIR NIGEL SHEINWALD GCMG**  
**Non-executive Director**

Born June 26, 1953. A British national, appointed a Non-executive Director of the Company with effect from July 2012.

He was a senior British diplomat who served as British Ambassador to the USA from 2007 to 2012, before retiring from the Diplomatic Service. Prior to this, he served as Foreign Policy and Defence Adviser to the Prime Minister and Head of the Cabinet Office Defence and Overseas Secretariat. He served as British Ambassador and Permanent Representative to the European Union in Brussels from 2000 to 2003. He joined the Diplomatic Service in 1976 and served in Brussels, Washington, Moscow and in a wide range of policy roles in London.

He is a Non-executive Director of the Innovia Group and Invesco Limited, a Senior Adviser to the Universal Music Group and a Visiting Professor and Council Member of King's College, London.

**Member of the Corporate and Social Responsibility Committee**

**LINDA G. STUNTZ**  
**Non-executive Director**

Born September 11, 1954. A US national, appointed a Non-executive Director of the Company with effect from June 2011.

She is a founding partner of the law firm of Stuntz, Davis & Staffier, P.C., based in Washington, DC. Her law practice includes energy and environmental regulation, as well as matters relating to government support of technology development and transfer. She chaired the Electricity Advisory Committee to the US Department of Energy from 2008 to 2009, and was a member of the board of Directors of Schlumberger Limited from 1993 to 2010 and Raytheon Company from 2004 to 2015. From 1989 to 1993, she held senior policy positions at the US Department of Energy, including Deputy Secretary. She played a principal role in the development and enactment of the Energy Policy Act of 1992. From 1981 to 1987, she was an Associate Minority Counsel and Minority Counsel to the Energy and Commerce Committee of the US House of Representatives.

She is a member of the US Secretary of Energy Advisory Board and a Director of Edison International.

**Member of the Audit Committee**





## SENIOR MANAGEMENT

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The Senior Management of the Company comprises the Executive Directors and those listed below. All are members of the Executive Committee (see "Corporate Governance" on page 72).

### **JOHN ABBOTT** **Downstream Director**

Born March 24, 1960. A British national, appointed Downstream Director with effect from October 2013. Previously, he was Executive Vice President Manufacturing, responsible for oil refineries and petrochemicals plants worldwide. He joined Shell in 1981, and has held a variety of management positions in refining, chemicals and upstream heavy oil, working in Canada, the Netherlands, Singapore, Thailand, the UK and the USA.

### **HARRY BREKELMANS** **Projects & Technology Director**

Born June 11, 1965. A Dutch national, appointed Projects & Technology Director with effect from October 2014. Previously, he was Executive Vice President for Upstream International Operated based in the Netherlands. He joined Shell in 1990, and has held a variety of management positions in Exploration and Production, Internal Audit, and Group Strategy and Planning. From 2011 to 2013, he was Country Chairman – Russia and Executive Vice President for Russia and the Caspian region.

### **ANDREW BROWN** **Upstream Director**

Born January 29, 1962. A British national, appointed Upstream Director with effect from January 1, 2016, having served on the Executive Committee as Upstream International Director from 2012. Previously, he was Executive Vice President for Shell's activities in Qatar and a member of the Upstream International Leadership Team. He was awarded the Order of the British Empire in 2012 for his services to British-Qatari business relations.

### **RONAN CASSIDY** **Chief Human Resources & Corporate Officer**

Born February 10, 1967. A British national, appointed Chief Human Resources & Corporate Officer with effect from January 1, 2016. Previously, he was Executive Vice President, Human Resources, Upstream International. He joined Shell in 1988 and has held a variety of human resources positions in the Upstream and Downstream businesses.

### **DONNY CHING** **Legal Director**

Born February 14, 1964. A Malaysian national, appointed Legal Director with effect from February 2014. Previously, he was General Counsel for the Project & Technology business based in the Netherlands. He joined Shell in 1988 based in Australia, moving to Hong Kong and later to London. In 2008, he was appointed Head of Legal at Shell Singapore, having served as Associate General Counsel for the Gas & Power business in Asia-Pacific.

### **MARVIN ODUM [A]** **Unconventional Resources Director**

Born December 13, 1958. A US national, appointed Unconventional Resources Director with effect from January 1, 2016, having served on the Executive Committee as Upstream Americas Director from 2009. Previously, he was Executive Vice President for the Americas for Shell Exploration & Production. In 2008, he was appointed President of Shell Oil Company, having served as Executive Vice President since 2005 with responsibility for Shell's Exploration & Production businesses in the western hemisphere.

[A] It was announced on February 24, 2016, that Marvin Odum would leave the Company on March 31, 2016, when the position of Unconventional Resources Director would cease to exist.

### **MAARTEN WETSELAAR** **Integrated Gas Director**

Born December 30, 1968. A Dutch national, appointed Integrated Gas Director with effect from January 1, 2016. Previously, he was Executive Vice President of Integrated Gas based in Singapore. He joined Shell in 1995 and has held a variety of financial, commercial and general management roles in Downstream, Trading and Upstream.

## DIRECTORS' REPORT

### MANAGEMENT REPORT

This Directors' Report, together with the "Strategic Report" on pages 6-61, serves as the Management Report for the purpose of Disclosure and Transparency Rule 4.1.8R.

### FINANCIAL STATEMENTS AND DIVIDENDS

The "Consolidated Statement of Income" and "Consolidated Balance Sheet" can be found on pages 116 and 117 respectively.

The table below sets out the dividends on each class of share and each class of American Depositary Share (ADS [A]). The Company announces its dividends in dollars and, at a later date, announces the euro and sterling equivalent amounts using a market exchange rate.

[A] ADSs are listed on the New York Stock Exchange under the symbols RDS.A and RDS.B. Each ADS represents two shares – two A shares in the case of RDS.A or two B shares in the case of RDS.B.

Dividends on Royal Dutch Shell plc A shares (A shares) are paid by default in euros, although holders are able to elect to receive dividends in sterling. Dividends on Royal Dutch Shell plc B shares (B shares) are paid by default in sterling, although holders are able to elect to receive dividends in euros. Dividends on ADSs are paid in dollars.

The Scrip Dividend Programme, which enables shareholders to increase their shareholding by choosing to receive new shares instead of cash dividends (if approved by the Board), was reintroduced with effect from the first quarter 2015 interim dividend onwards [A] [B]. More information can be found at [www.shell.com/scrip](http://www.shell.com/scrip).

[A] The Scrip Dividend Programme had been cancelled with effect from the second quarter 2014 interim dividend onwards.

[B] Only new A shares are issued under the programme, including to shareholders who held B shares.

The Directors have announced a fourth-quarter interim dividend as set out in the table below, payable on March 29, 2016, to shareholders on the Register of Members at close of business on February 19, 2016. The closing date for scrip and dividend currency elections was March 4, 2016 [C]. The euro and sterling equivalents announcement date is March 11, 2016.

[C] Both a different scrip and dividend currency election date may apply to shareholders holding shares in a securities account with a bank or financial institution ultimately holding through Euroclear Nederland. This may also apply to other shareholders who do not hold their shares either directly on the Register of Members or in the corporate sponsored nominee arrangement. Shareholders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies. A different scrip election date may also apply to registered and non-registered ADS holders. Registered ADS holders can contact The Bank of New York Mellon for the election deadline that applies. Non-registered ADS holders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies.

### DIRECTORS' RESPONSIBILITIES IN RESPECT OF THE PREPARATION OF THE ANNUAL REPORT AND ACCOUNTS

The Directors are responsible for preparing the Annual Report including the financial statements in accordance with applicable law and regulations. Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the Consolidated and Parent Company Financial Statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU). In preparing these financial statements, the Directors have also elected to comply with IFRS as issued by the International Accounting Standards Board (IASB). Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of Shell and the Company and of the profit or loss of Shell and the Company for that period. In preparing these financial statements, the Directors are required to:

- adopt the going concern basis unless it is inappropriate to do so;
- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent; and
- state whether IFRS as adopted by the EU and IFRS as issued by the IASB have been followed.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the transactions of Shell and the Company and disclose with reasonable accuracy, at any time, the financial position of Shell and the Company and to enable them to ensure that the financial statements comply with the Companies Act 2006 (the Act) and, as regards the Consolidated Financial Statements, with Article 4 of the IAS Regulation and therefore are in accordance with IFRS as adopted by the EU. The Directors are also responsible for safeguarding the assets of Shell and the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Each of the Directors, whose names and functions can be found on pages 62-64, confirms that, to the best of their knowledge:

- the financial statements, which have been prepared in accordance with IFRS as adopted by the EU, and with IFRS as issued by the IASB, give a true and fair view of the assets, liabilities, financial position and profit of Shell and the Company; and
- the Management Report includes a fair review of the development and performance of the business and the position of Shell, together with a description of the principal risks and uncertainties that it faces.

Furthermore, so far as each of the Directors is aware, there is no relevant audit information of which the auditors are unaware, and each of the Directors has taken all the steps that ought to have been taken in order to become aware of any relevant audit information and to establish that the auditors are aware of that information.

	DIVIDENDS						2015	
	A shares			B shares[A]		A ADSs	B ADSs	
	\$	€	pence	\$	pence	€	\$	\$
Q1	0.47	0.4195	30.75	0.47	30.75	0.4195	0.94	0.94
Q2	0.47	0.4227	30.92	0.47	30.92	0.4227	0.94	0.94
Q3	0.47	0.4299	31.07	0.47	31.07	0.4299	0.94	0.94
Q4	0.47	[B]	[B]	0.47	[B]	[B]	0.94	0.94
Total announced in respect of the year	1.88	[B]	[B]	1.88	[B]	[B]	3.76	3.76
Amount paid during the year		1.7050	123.94		123.94	1.7050	3.76	3.76

[A] It is expected that holders of B shares will receive dividends through the dividend access mechanism applicable to such shares. The dividend access mechanism is described more fully on page 179.

[B] The euro and sterling equivalents announcement date is March 11, 2016, which therefore is also the date when the total announced in respect of the year can be calculated.

The Directors consider that the Annual Report including the financial statements, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy.

The Directors consider it appropriate to continue to adopt the going concern basis of accounting in preparing the financial statements.

The Directors are responsible for the maintenance and integrity of the Shell website ([www.shell.com](http://www.shell.com)). Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

### VIABILITY STATEMENT

The "Strategic Report" includes information about Shell's strategy, financial condition, cash flows and liquidity, as well as the factors, including the principal risks, likely to affect Shell's future development. The Directors assess Shell's prospects both at an operating and a strategic level, each involving different time horizons. On an annual basis the Directors approve a detailed three-year operating plan, which forecasts Shell's cash flows and ability to service financing requirements, pay dividends and fund investing activities during the period, having taken into consideration upward and downward sensitivities. This period is considered appropriate for operating purposes because it allows for credible detailed forecasts. Taking account of Shell's position and principal risks at December 31, 2015, including the impact from the proposed acquisition of BG Group plc, the Directors have a reasonable expectation that Shell will be able to continue in operation and meet its liabilities as they fall due over its three-year operating plan period. Annually, the Directors also review Shell's strategic plan which takes account of longer-term forecasts including external environment factors and Shell's business portfolio developments and endorse any updates required. This aims to preserve Shell's long-term viability and ability to meet longer-term commitments such as debt and contractual obligations which can extend over several decades.

### REPURCHASES OF SHARES

At the 2015 Annual General Meeting (AGM), shareholders granted an authority, which expires at the end of the 2016 AGM, for the Company to repurchase up to a maximum of 633 million of its shares (excluding purchases for employee share plans). Under a similar authority granted at the 2014 AGM, 12.7 million A shares with a nominal value of €0.9 million (\$1.0 million) (0.2% of the Company's total issued share capital at December 31, 2015) were purchased for cancellation in 2015 for a total cost of \$0.4 billion including expenses, at an average price of \$32.06 per A share. The purpose of the share buyback programme is to offset the dilution created by the issuance of shares for the Company's Scrip Dividend Programme [A].

[A] The Scrip Dividend Programme was cancelled with effect from the second quarter 2014 interim dividend onwards, and had been reintroduced with effect from the first quarter 2015 interim dividend onwards. More information can be found at [www.shell.com/scrip](http://www.shell.com/scrip).

The Board continues to regard the ability to repurchase issued shares in suitable circumstances as an important part of the financial management of the Company. A resolution will be proposed at the 2016 AGM to renew the authority for the Company to purchase its own share capital up to specified limits for a further year. More detail of this proposal is given in the Notice of Annual General Meeting.

### BOARD OF DIRECTORS

The Directors during the year were Ben van Beurden, Guy Elliott, Euleen Goh, Simon Henry, Charles O. Holliday, Gerard Kleisterlee, Jorma Ollila (who stood down on May 19, 2015), Sir Nigel Sheinwald, Linda G. Stuntz, Hans Wijers, Patricia A. Woertz and Gerrit Zalm.

### RETIREMENT AND REAPPOINTMENT OF DIRECTORS

In line with the UK Corporate Governance Code (the Code), all Directors will retire at the 2016 AGM and seek reappointment by shareholders.

The biographies of all current Directors are given on pages 62-64 and, also in the Notice of Annual General Meeting. Details of the Executive Directors' contracts can be found on page 104 and copies are available for inspection from the Company Secretary. Furthermore, a copy of the form of these contracts has been filed with the US Securities and Exchange Commission as an exhibit.

The terms and conditions of appointment of Non-executive Directors are set out in their letters of appointment with the Company which, in accordance with the Code, are available for inspection from the Company Secretary.

No Director is, or was, materially interested in any contract subsisting during or at the end of the year that was significant in relation to the Company's business. See also "Related party transactions" below.

### DIRECTORS' INTERESTS

The interests (in shares of the Company or calculated equivalents) of the Directors in office at the end of the year, including any interests of a "connected person" (as defined in the Disclosure and Transparency Rules of the UK's Financial Conduct Authority), can be found in the "Directors' Remuneration Report" on pages 94-95.

Changes in Directors' share interests during the period from December 31, 2015, to March 9, 2016, including changes in the interests in shares awarded under the Long-term Incentive Plan and the Deferred Bonus Plan, can also be found in the "Directors' Remuneration Report" on pages 94-95.

### QUALIFYING THIRD-PARTY INDEMNITIES

The Company has entered into a deed of indemnity with each Director who served during the year under identical terms. The deeds indemnify the Directors to the widest extent permitted by the applicable laws of England against all liability incurred as a Director or employee of the Company or of certain other entities.

### RELATED PARTY TRANSACTIONS

Other than disclosures given in Notes 9 and 27 to the "Consolidated Financial Statements" on pages 132 and 151-152 respectively, there were no transactions or proposed transactions that were material to either the Company or any related party. Nor were there any transactions with any related party that were unusual in their nature or conditions.

### POLITICAL CONTRIBUTIONS

No donations were made by the Company or any of its subsidiaries to political parties or organisations during the year. Shell Oil Company administers the non-partisan Shell Oil Company Employees' Political Awareness Committee (SEPAC), a political action committee registered with the US Federal Election Commission. Eligible employees may make voluntary personal contributions to the SEPAC.

### RECENT DEVELOPMENTS AND POST-BALANCE SHEET EVENTS

Following approval of the cash and share offer by the Company for BG Group plc (BG) by means of a Scheme of Arrangement under Part 26 of the Act, 1,523,804,425 new Shell shares [A] were issued and admitted to the premium segment of the Official List and to trading on the main market for listed securities of the London Stock Exchange on February 15, 2016. The shares were admitted to listing by Euronext on Euronext Amsterdam and to trading on Euronext Amsterdam on February 16, 2016.

## DIRECTORS' REPORT CONTINUED

Information concerning the acquisition of BG can be found in Note 29 to the "Consolidated Financial Statements" on page 152.

[A] 218,728,308 A shares and 1,305,076,117 B shares.

### LIKELY FUTURE DEVELOPMENTS

Information relating to likely future developments can be found in the "Strategic Report" on pages 6-61.

### RESEARCH AND DEVELOPMENT

Information relating to Shell's research and development, including expenditure, can be found in "Business overview" on page 14.

### DIVERSITY AND INCLUSION

Information concerning diversity and inclusion can be found in "Our people" on page 60.

### EMPLOYEE COMMUNICATION AND INVOLVEMENT

Information concerning employee communication and involvement can be found in "Our people" on page 60.

### CORPORATE SOCIAL RESPONSIBILITY

A summary of Shell's approach to corporate social responsibility can be found in "Environment and society" on pages 53-59. Further details will be available in the Shell Sustainability Report 2015.

### GREENHOUSE GAS EMISSIONS

Information relating to greenhouse gas emissions can be found in "Environment and society" on pages 55-56.

### FINANCIAL RISK MANAGEMENT, OBJECTIVES AND POLICIES

Descriptions of the use of financial instruments and Shell's financial risk management objectives and policies, and exposure to market risk (including price risk), credit risk and liquidity risk can be found in Note 19 to the "Consolidated Financial Statements" on pages 142-147.

### SHARE CAPITAL

The Company's issued share capital at December 31, 2015, is set out in Note 10 to the "Parent Company Financial Statements" on pages 178-180. The percentage of the total issued share capital represented by each class of share is given below.

SHARE CAPITAL PERCENTAGE	%
Share class	
A ordinary	62.05
B ordinary	37.95
Sterling deferred	de minimis

### TRANSFER OF SECURITIES

There are no significant restrictions on the transfer of securities.

### SHARE OWNERSHIP TRUSTS AND TRUST-LIKE ENTITIES

Shell has three primary employee share ownership trusts and trust-like entities: a Dutch foundation (stichting) and two US Rabbi Trusts. The shares held by the Dutch foundation are voted by its Board and the shares in the US Rabbi Trusts are voted by the Voting Trustee, Evercore Trust Company, N.A. Both the Board of the Dutch foundation and the Voting Trustee are independent of Shell.

The UK Shell All Employee Share Ownership Plan has a separate related share ownership trust. Shares held by the trust are voted by its trustee, Computershare Trustees Limited, as directed by the participants.

### SIGNIFICANT SHAREHOLDINGS

Information concerning significant shareholdings can be found on page 191.

### ARTICLES OF ASSOCIATION

Information concerning the Articles of Association can be found on pages 75-82.

### LISTING RULE INFORMATION [A]

Information concerning the amount of interest capitalised by Shell can be found in Note 6 to the "Consolidated Financial Statements" on page 129.

[A] This information is given in accordance with Listing Rule 9.8.4R.

### AUDITOR

A resolution relating to the appointment of Ernst & Young LLP as auditor for the financial year 2016 will be proposed at the 2016 AGM. This follows an extensive competitive tender in 2015, further details of which can be found on pages 84-85.

### CORPORATE GOVERNANCE

The Company's statement on corporate governance is included in the "Corporate governance" report on pages 69-83 and is incorporated in this Directors' Report by way of reference.

### ANNUAL GENERAL MEETING

The AGM will be held on May 24, 2016, at the Circustheater, Circusstraat 4, 2586 CW, The Hague, The Netherlands. Details of the business to be put to shareholders at the AGM can be found in the Notice of Annual General Meeting.

Signed on behalf of the Board

/s/ Michiel Brandjes

Michiel Brandjes  
Company Secretary  
March 9, 2016

## CORPORATE GOVERNANCE

Dear Shareholders,

I am pleased to introduce this report, which is my first since becoming Chairman of Royal Dutch Shell plc (the Company) at last year's Annual General Meeting (AGM). My predecessor, Jorma Ollila, took his responsibility for ensuring that we met the highest standards of corporate governance very seriously, and I will continue to do so throughout my tenure.

During the year we have again applied the main principles and relevant provisions of the Financial Reporting Council's UK Corporate Governance Code (the Code), and I hope this report gives you a good understanding of the systems of governance and control which continue to operate within the Company.

As you might expect, the Board was very busy during 2015 dealing with the acquisition of BG Group plc (BG), which I am pleased to say finally completed in February 2016. Such a major acquisition carried a significant responsibility for the Board, and I am proud of the high corporate governance standards maintained throughout the process.

The acquisition of BG of course means we now have many new shareholders and I would like to welcome you to Shell. Since my appointment, I have spoken with many shareholders, and indeed other stakeholders, in the Netherlands, the UK and the USA, and I intend to continue such engagements during my time as Chairman. Indeed, I hope to see as many shareholders as possible at our AGM in The Hague, and at our Shareholders' Presentation in London, both of which are to be held in May.

In accordance with the Code, we conducted an evaluation of our performance during the year, along with that of the Board committees and individual directors. This was led by the Nomination and Succession Committee and was conducted in-house, rather than being externally facilitated. However, we intend to conduct the evaluation in 2016 with the assistance of an external facilitator. Unlike our previous evaluations, this evaluation will not be questionnaire based. Instead, it will be based upon personal observations by an experienced practitioner in the area of Board evaluation. The aim of the evaluation will be to look forward, focusing on how to improve Board effectiveness, rather than looking back at past practice.

Finally, I would like to thank my fellow Directors for their support since my appointment. Together, I believe we can continue to maintain the highest standards of corporate governance, which I believe are important for the long-term success of the Company.

**Chad Holliday**  
Chairman  
March 9, 2016

### STATEMENT OF COMPLIANCE

The Board confirms that throughout the year the Company has applied the main principles and complied with the relevant provisions set out in the Code issued by the Financial Reporting Council in September 2014. In addition to complying with applicable corporate governance requirements in the UK, the Company must follow the rules of Euronext Amsterdam as well as Dutch securities laws because of its listing on that exchange. The Company must likewise follow US securities laws and the New York Stock Exchange (NYSE) rules and regulations because its securities are registered in the USA and listed on the NYSE.

### NYSE GOVERNANCE STANDARDS

In accordance with the NYSE rules for foreign private issuers, the Company follows home-country practice in relation to corporate governance. However, foreign private issuers are required to have an audit committee that satisfies the requirements of the US Securities and Exchange Commission's (SEC) Rule 10A-3. The Company's Audit Committee satisfies such requirements. The NYSE also requires a foreign private issuer to provide certain written affirmations and notices to the NYSE, as well as a summary of the significant ways in which its corporate governance practices differ from those followed by domestic US companies under NYSE listing standards (see Section 303A.11 of the NYSE Listed Company Manual). The Company's summary of its corporate governance differences is given below and on the following page and can be found at [www.shell.com/investor](http://www.shell.com/investor).

### Non-executive Director independence

The Board follows the provisions of the Code in determining Non-executive Director independence, which states that at least half of the Board, excluding the Chairman, should comprise Non-executive Directors determined by the Board to be independent. In the case of the Company, the Board has determined that all the Non-executive Directors at the end of 2015 are wholly independent.

### Nominating/corporate governance committee and compensation committee

The NYSE listing standards require that a listed company maintain a nominating/corporate governance committee and a compensation committee, both composed entirely of independent directors and with certain specific responsibilities. The Company's Nomination and Succession Committee and Remuneration Committee both comply with these requirements, except that the terms of reference of the Nomination and Succession Committee require only a majority of the committee members to be independent.

### Audit Committee

As required by NYSE listing standards, the Company maintains an Audit Committee for the purpose of assisting the Board's oversight of its financial statements, its internal audit function and its independent auditors. The Company's Audit Committee is in full compliance with the SEC's Rule 10A-3 and Section 303A.06 of the NYSE Listed Company Manual. However, in accordance with English law, the Company's Audit Committee makes recommendations to the Board for it to put to shareholders for approval in general meeting regarding the appointment, reappointment and removal of independent auditors. Consequently, the Company's Audit Committee is not directly responsible for the appointment of independent auditors.

### Shareholder approval of share-based compensation plans

The Company complies with the listing rules of the UK Listing Authority (UKLA), which require shareholder approval for the adoption of share-based compensation plans which are either long-term incentive plans in which one or more Directors can participate or plans which involve or may involve the issue of new shares or the transfer of treasury shares. Under the UKLA rules,

## CORPORATE GOVERNANCE CONTINUED

such plans cannot be changed to the advantage of participants without shareholder approval, except for certain minor amendments, for example to benefit the administration of the plan or to take account of tax benefits. The rules on the requirements to seek shareholder approval for share-based compensation plans, including those in respect of material revisions to such plans, may deviate from the NYSE listing standards.

### Code of business conduct and ethics

The NYSE listing standards require that listed companies adopt a code of business conduct and ethics for all directors, officers and employees and promptly disclose any waivers of the code for directors or executive officers. The Company has adopted the Shell General Business Principles (see below), which satisfy the NYSE requirements. The Company also has internal procedures in place by which any employee can raise in confidence accounting, internal accounting controls and auditing concerns. Additionally, any employee can report concerns to management by telephone or over the internet without jeopardising their position (see below).

### SHELL GENERAL BUSINESS PRINCIPLES

The Shell General Business Principles define how Shell subsidiaries are expected to conduct their affairs. These principles include, among other things, Shell's commitment to support fundamental human rights in line with the legitimate role of business and to contribute to sustainable development. They are designed to mitigate the risk of damage to our business reputation and to prevent violations of local and international legislation. They can be found at [www.shell.com/sgbp](http://www.shell.com/sgbp). See "Risk factors" on page 11.

### SHELL CODE OF CONDUCT

Directors and employees are required to comply with the Shell Code of Conduct, which is intended to help them put Shell's business principles into practice. This code clarifies the basic rules and standards they are expected to follow and the behaviour expected of them. All Shell employees and contractors follow mandatory training on Shell's Code of Conduct. Designated individuals are required to follow mandatory training on antitrust and competition laws, anti-bribery and corruption laws, anti-money laundering laws, data protection laws and trade controls requirements (see "Risk factors" on page 11). The Shell Code of Conduct can be found at [www.shell.com/codeofconduct](http://www.shell.com/codeofconduct).

### CODE OF ETHICS

Executive Directors and Senior Financial Officers of Shell must also comply with a Code of Ethics. This code is specifically intended to meet the requirements of Section 406 of the Sarbanes-Oxley Act and the listing requirements of the NYSE (see above). It can be found at [www.shell.com/codeofethics](http://www.shell.com/codeofethics).

### SHELL GLOBAL HELPLINE

Employees, contractors, third parties with whom Shell has a business relationship (such as customers, suppliers and agents), and any member of the public (including shareholders) may raise ethics and compliance concerns through the Shell Global Helpline. This is a worldwide confidential reporting mechanism, operated by an external third party, which is available 24 hours a day, seven days a week by telephone and at [www.shell.com](http://www.shell.com) or <https://shell.alertline.eu>

### BOARD STRUCTURE AND COMPOSITION

During 2015, the Board comprised the Chairman; two Executive Directors, namely the Chief Executive Officer (CEO) and the Chief Financial Officer (CFO); and eight Non-executive Directors, including the Deputy Chairman and Senior Independent Director [A], except for the period from January 1, 2015 to May 19, 2015, when there were nine Non-executive Directors [A].

A list of current Directors, including their biographies, can be found on pages 62-64.

The Board recognises its collective responsibility for the long-term success of the Company. Generally it meets eight times a year [B] and has a formal schedule of matters reserved to it. This includes: overall strategy and management; corporate structure and capital structure; financial reporting and control, including approval of the Annual Report and Form 20-F, and interim dividends; oversight and review of risk management and internal control; significant contracts; and succession planning and new Board appointments. The full list of matters reserved to the Board for decision can be found at [www.shell.com/investor](http://www.shell.com/investor).

[A] Jorma Ollila stood down as Chairman on May 19, 2015 and was succeeded by Charles O. Holliday, a Non-executive Director.

[B] See page 71 for the number of meetings held in 2015.

### ROLE OF DIRECTORS

The roles of the Chairman, a non-executive role, and the CEO are separate, and the Board has agreed their respective responsibilities.

The Chairman is responsible for the leadership and management of the Board and for ensuring that the Board and its committees function effectively. One way in which this is achieved is by ensuring Directors receive accurate, timely and clear information. He is also responsible for agreeing and regularly reviewing the training and development needs of each Director (see "Induction and training" on page 71) which he does with the assistance of the Company Secretary.

The CEO bears overall responsibility for the implementation of the strategy agreed by the Board, the operational management of the Company and the business enterprises connected with it. He is supported in this by the Executive Committee which he chairs (see page 72).

### NON-EXECUTIVE DIRECTORS

Non-executive Directors are appointed by the Board or by shareholders at general meetings and, in accordance with the Code, must seek re-election by shareholders on an annual basis. Their letter of appointment refers to a specific term of office, such term being subject to the provisions of the Code and the Company's Articles of Association (the Articles). Upon appointment, Non-executive Directors confirm they are able to allocate sufficient time to meet the expectations of the role. Appointments are subject to three months' notice, and there is no compensation provision for early termination.

The Non-executive Directors bring a wide range and balance of skills and international business experience to Shell. Through their contribution to Board meetings and to Board committee meetings, they are expected to challenge constructively and help develop proposals on strategy and bring independent judgement on issues of performance and risk. Generally, prior to each meeting of the Board, the Chairman and the Non-executive Directors meet without the Executive Directors to discuss, among other things, the performance of individual Executive Directors. A number of Non-executive Directors also meet major shareholders from time to time.

The role of the Senior Independent Director is to provide a sounding board for the Chairman and to serve as an intermediary for the other Directors when necessary. The Senior Independent Director is available to shareholders if they have concerns which contact through the normal channels of Chairman, CEO or CFO has failed to resolve or for which such contact is inappropriate.

All the Non-executive Directors are considered by the Board to be wholly independent.

## CONFLICTS OF INTEREST

Certain statutory duties with respect to directors' conflicts of interest are in force under the Companies Act 2006 (the Act). In accordance with the Act and the Articles, the Board may authorise any matter that otherwise may involve any of the Directors breaching his or her duty to avoid conflicts of interest. The Board has adopted a procedure to address these requirements. It includes the Directors completing detailed conflict of interest questionnaires. The matters disclosed in the questionnaires are reviewed by the Board and, if considered appropriate, authorised in accordance with the Act and the Articles. Conflicts of interest as well as any gifts and hospitality received by and provided by Directors are kept under review by the Board. Further information relating to conflicts of interest can be found on pages 76-77.

## SIGNIFICANT COMMITMENTS OF THE CHAIRMAN

The Chairman's other significant commitments are given in his biography on page 62.

## INDEPENDENT PROFESSIONAL ADVICE

All Directors may seek independent professional advice in connection with their role as a Director. All Directors have access to the advice and services of the Company Secretary. The Company has provided both indemnities and directors' and officers' insurance to the Directors in connection with the performance of their responsibilities. Copies of these indemnities and the directors' and officers' insurance policies are open to inspection. Copies of these indemnities have been previously filed with the SEC and are incorporated by reference as an exhibit to this Report.

## BOARD ACTIVITIES DURING THE YEAR

The Board met 12 times during the year. The meetings were held in The Hague, the Netherlands, except for one meeting which was held in Rio de Janeiro, Brazil. The Board typically meets eight times a year, however in 2015 there were an additional four ad-hoc meetings to discuss matters related to the acquisition of BG.

In relation to the scheduled meetings, the agenda included a number of regular items, including reports from the CEO, the CFO and other members of the Executive Committee, from each of the Board committees and from the various functions, including finance (which includes investor relations), health and security, human resources, and legal (which includes the Company Secretary). The Board also considered and approved the quarterly, half-year and full-year financial results and dividend announcements and, at most meetings, considered a number of investment, divestment and financing proposals.

In June, it held a full-day session on strategy. This included a high-level review of the Company's vision of the future, its portfolio and its winning capabilities. As part of the review, particular consideration was given to how heavy oil, alternative energy and development of the Arctic would fit into the planned portfolio.

During the year, the Board also received reports and presentations on some of our activities, including those in China, the Gulf of Mexico, Japan, Nigeria, the UK and USA (including Alaska), and on asset integrity and process safety, litigation, risk management, safety and environmental performance, and senior management succession. In addition, it received reports on other matters of interest, including the global energy market, litigation themes and corporate governance developments.

As mentioned above, the acquisition of BG was a major corporate event and carried significant corporate governance responsibilities for the Directors. In addition to the ad-hoc meetings of the Board, a special Board sub-committee was established in early 2015 to supervise the acquisition process more regularly. Initially the committee, which met over 20 times prior to completion, comprised Jorma Ollila, Guy Elliott and Charles Holliday. However, following the 2015 AGM at which Jorma Ollila stood down as Chairman and a Director of the Company, the committee comprised Charles Holliday, Guy Elliott and Hans Wijers. The Board also sought appropriate advice from professional advisors throughout the process, to ensure compliance with all responsibilities and duties owed by the Directors.

## INDUCTION AND TRAINING

Following appointment to the Board, Directors receive a comprehensive induction tailored to their individual needs. This includes site visits and meetings with senior management to enable them to build up a detailed understanding of Shell's business and strategy, and the key risks and issues which they face.

Throughout the year, regular updates on developments in legal matters, governance and accounting are provided to Directors. The Board regards site visits as an integral part of ongoing Director training. Additional training is available so that Directors can update their skills and knowledge as appropriate.

## ATTENDANCE AT BOARD AND BOARD COMMITTEE MEETINGS

Attendance during 2015 for all Board and Board committee meetings is given in the table below.

### ATTENDANCE AT BOARD AND BOARD COMMITTEE MEETINGS [A]

	Board	Audit Committee	Corporate and Social Responsibility Committee	Nomination and Succession Committee	Remuneration Committee
Ben van Beurden	12/12				
Guy Elliott	12/12	6/6		7/7	
Euleen Goh	12/12	6/6			
Simon Henry	12/12				
Charles O. Holliday	11/12		2/2	5/5	2/2
Gerard Kleisterlee	11/12	5/6			5/5
Jorma Ollila	5/5			2/2	
Sir Nigel Sheinwald	12/12		5/5		
Linda G. Stuntz	12/12	6/6			
Hans Wijers	12/12		3/3	7/7	
Patricia A. Woertz	11/12		4/5		1/3
Gerrit Zalm	9/12		4/5		5/5

[A] The first figure represents attendance and the second figure the possible number of meetings. For example, 12/12 signifies attendance at twelve out of twelve possible meetings. Where a Director stood down from the Board or a Board committee during the year, or was appointed during the year, only meetings before standing down or after the date of appointment are shown.



## CORPORATE GOVERNANCE CONTINUED

### BOARD EVALUATION

During the year, the Board carried out a performance evaluation of itself, and evaluations were also conducted in respect of the Chairman and the Board committees. The performance evaluation of the Board was led by the Nomination and Succession Committee and was conducted in-house, without an external facilitator. In accordance with the Code, it is the intention that the evaluation process will be externally facilitated every three years and hence an external evaluation will be conducted in 2016.

The 2015 Board performance evaluation process consisted of Directors being asked to complete a questionnaire in relation to such matters as the functioning and effectiveness of the Board, the relationship and interaction with the Executive Committee, and the major issues and challenges for 2016 and beyond. Directors were asked to return the questionnaire to the Company Secretary, who summarised the responses and presented a report to the Nomination and Succession Committee.

In February 2016, the Chairman presented the report to the full Board and the Directors discussed the observations and conclusions. A major focus of the discussions was in relation to the major issues and challenges identified for 2016 and beyond, and included such matters as the integration of BG, oil price volatility, project delivery and energy transition. Directors also focused on how to ensure maximum benefit was derived from the strategy sessions held each year.

The Deputy Chairman conducted a separate review of the Chairman's performance and involved each Director completing a questionnaire specifically related to this matter. The Deputy Chairman reported the outcome of this review to the full Board, including that Directors had commented favourably on the Chairman's open style and level of engagement. A review of each Board committee was undertaken by the respective committee chairman and also reported back to the Board.

### EXECUTIVE COMMITTEE

The Executive Committee operates under the direction of the CEO in support of his responsibility for the overall management of the Company's business. The CEO has final authority in all matters of management that are not within the duties and authorities of the Board or of the shareholders' general meeting.

The current composition of the Executive Committee is as follows:

EXECUTIVE COMMITTEE	
Ben van Beurden	CEO [A][B]
Simon Henry	CFO [A][B]
John Abbott	Downstream Director [B]
Harry Brekelmans	Projects & Technology Director [B]
Andrew Brown	Upstream Director [B][C]
Ronan Cassidy	Chief Human Resources & Corporate Officer [B][D]
Donny Ching	Legal Director [B]
Marvin Odum	Unconventional Resources Director [B][E]
Maarten Wetselaar	Integrated Gas Director [B][F]

[A] Director of the Company.

[B] Designated an Executive Officer pursuant to US Exchange Act Rule 3b-7. Beneficially owns less than 1% of outstanding classes of securities.

[C] Andrew Brown was appointed Upstream Director with effect from January 1, 2016. He was previously Upstream International Director.

[D] Ronan Cassidy was appointed Chief Human Resources & Corporate Officer in succession to Hugh Mitchell with effect from January 1, 2016.

[E] Marvin Odum was appointed Unconventional Resources Director with effect from January 1, 2016. He was previously Upstream Americas Director. It was announced on February 24, 2016, that he would leave the Company on March 31, 2016, when the position of Unconventional Resources Director would cease to exist.

[F] Maarten Wetselaar was appointed Integrated Gas Director with effect from January 1, 2016.

### BOARD COMMITTEES

There are four Board committees made up of Non-executive Directors. These are the:

- Audit Committee;
- Corporate and Social Responsibility Committee;
- Nomination and Succession Committee; and
- Remuneration Committee.

Each of these Board committees has produced a report which has been approved by the relevant chairman. A copy of each committee's terms of reference is available from the Company Secretary and can be found at [www.shell.com/investor](http://www.shell.com/investor).

#### Audit Committee

The Audit Committee report which sets out the composition and work of the Audit Committee is on pages 83-85.

#### Corporate and Social Responsibility Committee

The current members of the Corporate and Social Responsibility Committee are Hans Wijers (Chairman of the Committee with effect from May 20, 2015), Sir Nigel Sheinwald and Patricia A. Woertz. Charles O. Holliday stood down as Chairman of the Committee and Gerrit Zalm stood down as a member of the Committee on May 19, 2015, and December 31, 2015, respectively. The Committee met five times during the year; the Committee members' attendances are shown on page 71.

The Committee has a mandate to maintain a comprehensive overview of the policies and performance of the subsidiaries of the Company with respect to the Shell General Business Principles and the Shell Code of Conduct, as well as major issues of public concern. Conclusions and recommendations made by the Committee are reported directly to executive management and the Board.

The Committee fulfils its responsibilities by reviewing the management of health, safety, security, environmental and social impacts of projects and operations. It does this through a series of reviews of performance, audit findings and other specific areas, such as maritime and process safety. It also monitors major issues of public concern and Shell's strategy to address them, especially in respect of environmental and social issues. In addition, it provides input into the Shell Sustainability Report and reviews a draft of the report before publication.

The key topics discussed by the Committee in 2015 were climate change and the energy transition, however the Committee also reviewed a number of other topical issues including Alaska, Nigeria and seismic activity in Groningen, the Netherlands.

In addition to holding regular formal meetings, the Committee visits Shell locations and meets with local staff and external stakeholders to hear their perspectives and observe how Shell's standards regarding health, safety, security, the environment and social performance are being implemented. In 2015, the Committee visited Shell deep-water operations in the Gulf of Mexico and the Raízen biofuels business in Brazil. During each visit they met with local stakeholders, including staff and governmental and non-governmental representatives. In addition, individual Committee members visited the Peterhead carbon capture and storage (CCS) project in the UK, and the Moerdijk chemical plant and Nederlandse Aardolie Maatschappij (NAM) in the Netherlands.

#### Nomination and Succession Committee

The members of the Nomination and Succession Committee are Charles O. Holliday (Chairman of the Committee with effect from May 20, 2015), Guy Elliott and Hans Wijers. Jorma Ollila stood down as Chairman

of the Committee on May 19, 2015. The Committee met seven times during the year; the Committee members' attendances are shown on page 71.

The Committee keeps under review the leadership needs of the Company and identifies and nominates suitable candidates for the Board's approval to fill vacancies when they arise. In addition, it makes recommendations on who should be appointed Chairman of the Audit Committee, the Corporate and Social Responsibility Committee and the Remuneration Committee and, in consultation with the relevant chairman, recommends who should sit on the Board committees. It also makes recommendations on corporate governance guidelines, monitors compliance with corporate governance requirements and makes recommendations on disclosures connected with corporate governance of its appointment processes.

The Board did not make any new Non-executive Director appointments during the year, however the Committee continued its ongoing programme of succession planning. The Board takes the issue of boardroom diversity very seriously and believes that maintaining an appropriate balance of skills, knowledge, experience and backgrounds is key to its effective performance. It believes gender diversity is an important element of this mix, and indeed the Board meets the recommendation of the Davies Report, published in 2011, that at least 25% of the Directors be women [A].

[A] In October 2015, Lord Davies published his final report on improving the gender balance on listed company Boards, and makes a number of further recommendations including increasing the voluntary target for at least 33% of the Directors to be women by 2020.

As part of its role in identifying and nominating suitable candidates for the Board's approval, the Committee will continue to review candidates from a variety of backgrounds and will seek to produce a list of candidates that fully reflects the Board's goal of becoming more diverse. In this regard, the Committee maintains contact with leading global search firms, including Egon Zehnder and Spencer Stuart, to identify and consider suitable candidates [B].

[B] Neither Egon Zehnder nor Spencer Stuart have any connection with the Company other than that of search consultants.

During the year, the Committee also considered the Executive Committee talent pipeline, Board committee membership, and a request from an Executive Director to accept an external appointment. It also led the Board evaluation process, considered any potential conflicts of interest and the independence of the Non-executive Directors, and reviewed its terms of reference.

### Remuneration Committee

The Directors' Remuneration Report, which sets out the composition and work of the Remuneration Committee, the Directors' remuneration for 2015 and the Directors' Remuneration Policy which was approved by shareholders at the 2014 AGM, is on pages 86-105.

### SHAREHOLDER COMMUNICATIONS

The Board recognises the importance of two-way communication with the Company's shareholders. The Chairman, the Deputy Chairman and Senior Independent Director, the CEO, the CFO and the Executive Vice President Investor Relations each meet regularly with major shareholders and report the views of such shareholders to the Board. As well as the Company giving a balanced report of results and progress at each AGM, all shareholders have an opportunity to ask questions in person. Shareholders are also free

to contact the Company directly at any time of the year via dedicated shareholder email addresses or via dedicated shareholder telephone numbers as given on the inside back cover of this Report. Shell's website at [www.shell.com/investor](http://www.shell.com/investor) has information for institutional and retail shareholders alike.

The Company's Registrar, Equiniti, operates an internet access facility for registered shareholders, providing details of their shareholdings at [www.shareview.co.uk](http://www.shareview.co.uk). Facilities are also provided for shareholders to lodge proxy appointments electronically. The Company's Corporate Nominee provides a facility for investors to hold their shares in the Company in paperless form.

### RESULTS PRESENTATIONS AND ANALYSTS' MEETINGS

The quarterly, half-yearly and annual results presentations as well as all major analysts' meetings are announced in advance on the Shell website and through a regulatory release. These presentations are broadcast live via webcast and teleconference. Other meetings with analysts or investors are not normally announced in advance, nor can they be followed remotely by webcast or any other means. Procedures are in place to ensure that discussions in such meetings are always limited to non-material information or information already in the public domain.

Results and meeting presentations can be found at [www.shell.com](http://www.shell.com). This is in line with the requirement to ensure that all shareholders and other parties in the financial market have equal and simultaneous access to information that may influence the price of the Company's securities.

### NOTIFICATION OF MAJOR SHAREHOLDINGS

Information concerning notifications of major shareholdings can be found on page 191.

### RESPONSIBILITY FOR PREPARING THE ANNUAL REPORT AND ACCOUNTS

Information concerning the responsibility for preparing the Annual Report and Accounts can be found on page 66.

### CONTROLS AND PROCEDURES

The Board is responsible for maintaining a sound system of risk management and internal control, and for regularly reviewing its effectiveness. It has delegated authority to the Audit Committee to assist it in fulfilling its responsibilities in relation to internal control and financial reporting (see "Audit Committee Report" on pages 83-85).

A single overall control framework is in place for the Company and its subsidiaries that is designed to manage rather than eliminate the risk of failure to achieve business objectives. It therefore only provides a reasonable and not an absolute assurance against material misstatement or loss.

The diagram on the following page illustrates the control framework's key components: "Foundations", "Management Processes" and "Organisation". "Foundations" comprises the objectives, principles and rules that underpin and establish boundaries for Shell's activities. "Management Processes" refers to the more material management processes, including how strategy, planning and appraisal are used to improve performance and how risks are to be managed through effective controls and assurance. "Organisation"

## CORPORATE GOVERNANCE CONTINUED

sets out how the various legal entities relate to each other and how their business activities are organised and managed, and how authority is delegated.

### CONTROL FRAMEWORK



The system of risk management and internal control over financial reporting is an integral part of the control framework. Regular reviews are performed to identify the significant risks to financial reporting and the key controls designed to address them. These controls are documented, responsibility is assigned, and they are monitored for design and operating effectiveness. Controls found not to be effective are remediated. The principal risks faced by Shell are set out in "Risk factors" on pages 08-12.

The Board has conducted its annual review of the effectiveness of Shell's system of risk management and internal control, including financial, operational and compliance controls.

Shell has a variety of processes for obtaining assurance on the adequacy of risk management and internal control and implements a broad array of measures to manage its various risks which are set out in the relevant sections of this Report. There are also risks that Shell accepts or does not seek to fully mitigate. The Executive Committee and the Board regularly consider group-level risks and associated control mechanisms.

Many of our major projects and operations are conducted in joint arrangements or associates, which may reduce the degree of control and ability to identify and manage risks (see "Risk factors" on page 11). In each case, Shell appoints a representative to manage its interests who seeks to ensure that such projects operate under equivalent standards to Shell.

We operate in more than 70 countries that have differing degrees of political, legal and fiscal stability. This exposes us to a wide range of political developments that could result in changes to contractual terms, laws and regulations. In addition, we and our joint arrangements and associates face the risk of litigation and disputes worldwide (see "Risk factors" on page 09). We continuously monitor geopolitical developments and societal issues relevant to our interests. Employees who engage with government officials are subject to specific training programmes, procedures and

regular communications, in addition to Shell General Business Principles and Shell Code of Conduct compliance. We are prepared to exit countries if we think we can no longer operate in them in accordance with our standards, and we have done so in the past.

The Board confirms that there is a robust process for identifying, evaluating and managing the principal risks to the achievement of Shell's objectives. This has been in place throughout 2015 and up to the date of this Report and is regularly reviewed by the Board and accords with the Internal Control: Guidance to Directors (formerly known as the Turnbull Guidance).

### Management's evaluation of disclosure controls and procedures of Shell

As indicated in the certifications in Exhibits 12.1 and 12.2 of this Report, Shell's CEO and CFO have evaluated the effectiveness of Shell's disclosure controls and procedures at December 31, 2015. On the basis of that evaluation, these officers have concluded that Shell's disclosure controls and procedures are effective.

### Management's report on internal control over financial reporting of Shell

Management, including the CEO and CFO, is responsible for establishing and maintaining adequate internal control over Shell's financial reporting and the production of the "Consolidated Financial Statements". It conducted an evaluation of the effectiveness of Shell's internal control over financial reporting and the production of the "Consolidated Financial Statements" based on the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. On the basis of this evaluation, management concluded that, at December 31, 2015, the Company's internal control over Shell's financial reporting and the production of the "Consolidated Financial Statements" was effective.

PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited the financial statements, has issued an attestation report on the Company's internal control over financial reporting, as stated in its report on page 114.

### The Trustee's and management's evaluation of disclosure controls and procedures for the Royal Dutch Shell Dividend Access Trust

The Trustee of the Royal Dutch Shell Dividend Access Trust (the Trustee) and Shell's CEO and CFO have evaluated the effectiveness of the disclosure controls and procedures in respect of the Dividend Access Trust (the Trust) at December 31, 2015. On the basis of this evaluation, these officers have concluded that the disclosure controls and procedures of the Trust are effective.

### The Trustee's and management's report on internal control over financial reporting of the Royal Dutch Shell Dividend Access Trust

The Trustee is responsible for establishing and maintaining adequate internal control over the Trust's financial reporting. The Trustee and the Company's management conducted an evaluation of the effectiveness of internal control over financial reporting based on the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. On the basis of this evaluation, the Trustee and management concluded that, at December 31, 2015, the Trust's internal control over financial reporting was effective.

PricewaterhouseCoopers CI LLP, the independent registered public accounting firm that audited the financial statements, has issued an attestation report on the Trustee's and management's internal control over financial reporting, as stated in its report on page 184.

### Changes in internal control over financial reporting

There has not been any change in the internal control over financial reporting of Shell or the Trust that occurred during the period covered by this Report that has materially affected, or is reasonably likely to materially affect, the internal control over financial reporting. Material financial information of the Trust is included in the "Consolidated Financial Statements" and is therefore subject to the same disclosure controls and procedures as Shell. See the "Royal Dutch Shell Dividend Access Trust Financial Statements" on pages 185-189 for additional information.

### ARTICLES OF ASSOCIATION

The following summarises certain provisions of the Articles [A] and of the applicable legislation (the legislation). This summary is qualified in its entirety by reference to the Articles and the Act.

[A] Copies of the Articles have been previously filed with the SEC and are incorporated by reference as exhibits to this Report. They can be found at [www.shell.com](http://www.shell.com).

### Management and Directors

The Company has a single tier Board of Directors headed by a Chairman, with management led by a CEO. See "Board structure and composition" on page 70.

### NUMBER OF DIRECTORS

The Articles provide that the Company must have a minimum of three and can have a maximum of 20 Directors (disregarding alternate directors), but these restrictions can be changed by the Board.

### DIRECTORS' SHAREHOLDING QUALIFICATION

The Directors are not required to hold any shares in the Company.

### APPOINTMENT OF DIRECTORS

The Company can, by passing an ordinary resolution, appoint any willing person to be a Director.

The Board can appoint any willing person to be a Director. Any Director appointed in this way must retire from office at the first AGM after his appointment. A Director who retires in this way is then eligible for reappointment.

At the general meeting at which a Director retires, shareholders can pass an ordinary resolution to reappoint the Director or to appoint some other eligible person in their place.

The only people who can be appointed as Directors at a general meeting are the following: (i) Directors retiring at the meeting; (ii) anyone recommended by a resolution of the Board; and (iii) anyone nominated by a shareholder (not being a person to be nominated), where the shareholder is entitled to vote at the meeting and delivers to the Company's registered office, not less than six but not more than 21 days before the day of the meeting, a letter stating that he intends to nominate another person for appointment as a Director and written confirmation from that person that he is willing to be appointed.

### RETIREMENT OF DIRECTORS

Under the Articles, at every AGM, the following Directors must retire from office: (i) any Director who has been appointed by the Board since the last AGM, (ii) any Director who held office at the time of the two preceding AGMs and who did not retire at either of them, and (iii) any Director who has been in office, other than as a Director holding an executive position, for a continuous period of nine years or more at the date of the meeting.

Notwithstanding the Articles, the Company complies with the Code which contains, among other matters, provisions regarding the composition of the Board and re-election of the Directors. As a result, the Company's current policy is that Directors are subject to annual re-election by shareholders.

Any Director who retires at an AGM may offer himself for reappointment by the shareholders.

### REMOVAL OF DIRECTORS

In addition to any power to remove Directors conferred by the legislation, the Company can pass a special resolution to remove a Director from office, even though his time in office has not ended, and can appoint a person to replace a Director who has been removed in this way by passing an ordinary resolution.

### VACATION OF OFFICE BY DIRECTORS

Any Director automatically stops being a Director if: (i) he gives the Company a written notice of resignation; (ii) he gives the Company a written notice in which he offers to resign and the Board decides to accept this offer; (iii) all of the other Directors (who must comprise at least three people) pass a resolution or sign a written notice requiring the Director to resign; (iv) he is or has been suffering from mental or physical ill-health and the Board passes a resolution removing the Director from office; (v) he has missed Directors' meetings (whether or not an alternate director appointed by him attends those meetings) for a continuous period of six months without permission from the Board and the Board passes a resolution removing the Director from office; (vi) a bankruptcy order is made against him or he makes any arrangement or composition with his creditors generally; (vii) he is prohibited from being a Director under the legislation; or (viii) he ceases to be a Director under the legislation or he is removed from office under the Articles. If a Director stops being a Director for any reason, he will also automatically cease to be a member of any committee or sub-committee of the Board.

### ALTERNATE DIRECTORS

Any Director can appoint any person (including another Director) to act in his place as an alternate director. That appointment requires the approval of the Board, unless previously approved by the Board or unless the appointee is another Director.

### PROCEEDINGS OF THE BOARD

Meetings of the Board will usually be held in the Netherlands but the Board may decide in each case when and where to have meetings and how they will be conducted. The Board can also adjourn its meetings. If no other quorum is fixed by the Board, two Directors are a quorum. A Directors' meeting at which a quorum is present can exercise all the powers and discretions of the Board.

## CORPORATE GOVERNANCE CONTINUED

All or any of the Directors can take part in a meeting of the Directors by way of a conference telephone or any communication equipment which allows everybody to take part in the meeting by being able to hear each of the other people at the meeting and by being able to speak to all of them at the same time. A person taking part in this way will be treated as being present at the meeting and will be entitled to vote and be counted in the quorum. Any such meeting will be deemed to take place where the largest group of Directors participating is assembled or, if there is no such group, where the chairman of the meeting then is.

The Board can appoint any Director as chairman or as deputy chairman and can remove him from that office at any time. Matters to be decided at a Directors' meeting will be decided by a majority vote. If votes are equal, the chairman of the meeting has a second, casting vote.

The Board will manage the Company's business. It can use all the Company's powers except where the Articles or the legislation say that powers can only be used by shareholders voting to do so at a general meeting. The Board is, however, subject to the provisions of the legislation, the requirements of the Articles and any regulations laid down by the shareholders by passing a special resolution at a general meeting.

The Board can exercise the Company's powers: (i) to borrow money; (ii) to guarantee; (iii) to indemnify; (iv) to mortgage or charge all or any of the Company's undertaking, property and assets (present and future) and uncalled capital; (v) to issue debentures and other securities; and (vi) to give security, either outright or as collateral security, for any debt, liability or obligation of the Company or of any third party. The Board must limit the borrowings of the Company and exercise all voting and other rights or powers of control exercisable by the Company in relation to its subsidiary undertakings so as to ensure that no money is borrowed if the total amount of the group's borrowings (as defined in the Articles) then exceeds, or would as a result of such borrowing exceed, two times the Company's adjusted capital and reserves (as defined in the Articles). Shareholders may pass an ordinary resolution allowing borrowings to exceed such limit.

The Board can delegate any of its powers or discretions to committees of one or more persons. Any committee must comply with any regulations laid down by the Board. These regulations can require or allow people who are not Directors to be members of the committee, and can give voting rights to such people but there must be more Directors on a committee than persons who are not Directors and a resolution of the committee is only effective if a majority of the members of the committee present at the time of the resolution were Directors.

### FEES

The total fees paid to all of the Directors (excluding any payments made under any other provision of the Articles) must not exceed €4,000,000 a year or any higher sum decided on by an ordinary resolution at a general meeting. It is for the Board to decide how much to pay each Director by way of fees.

The Board, or any committee authorised by the Board, can award extra fees to any Director who, in its view, performs any special or extra services for the Company. The extra fees can take the form of salary, commission, profit-sharing or other benefits (and can be paid partly in one way and partly in another).

The Company can pay the reasonable travel, hotel and incidental expenses of each Director incurred in attending and returning from general meetings, meetings of the Board or committees of the Board or any other meetings

which, as a Director, he is entitled to attend. The Company will pay all other expenses properly and reasonably incurred by each Director in connection the Company's business or in the performance of his duties as a Director. The Company can also fund a Director's or former Director's expenditure and that of a Director or former Director of any holding company of the Company for the purposes permitted by the legislation and can do anything to enable a Director or former Director of the Company or any holding company of the Company to avoid incurring such expenditure all as provided in the legislation.

### PENSIONS AND GRATUITIES

The Board or any committee authorised by the Board can decide whether to provide pensions, annual payments or other benefits to any Director or former Director, or any relation or dependant of, or person connected to, such a person. The Board can also decide to contribute to a scheme or fund or to pay premiums to a third party for these purposes. The Company can only provide pensions and other benefits to people who are or were Directors but who have not been employed by or held an office or executive position in the Company or any of its subsidiary undertakings or former subsidiary undertakings or any predecessor in business of the Company or any such other company or to relations or dependants of, or persons connected to, these Directors or former Directors if the shareholders approve this by passing an ordinary resolution.

### DIRECTORS' INTERESTS

#### Conflicts of interest requiring authorisation by Directors

The Board may, subject to the relevant quorum and voting requirements, authorise any matter which would otherwise involve a Director breaching his duty under the legislation to avoid conflicts of interest. A Director seeking authorisation in respect of such a conflict of interest must tell the Board the nature and extent of his interest in the conflict of interest as soon as possible. The Director must give the Board sufficient details of the relevant matter to enable it to decide how to address the conflict of interest, together with any additional information which it may request.

Any Director (including the relevant Director) may propose that the relevant Director be authorised in relation to any matter which is the subject of such a conflict of interest. Such proposal and any authority given by the Board shall be effected in the same way as any other matter may be proposed to and resolved upon by the Board except that: (i) the relevant Director and any other Director with a similar interest will not count in the quorum and will not vote on a resolution giving such authority; and (ii) the conflicted Director and any other Director with a similar interest may, if the other members of the Board so decide, be excluded from any meeting of the Board while the conflict of interest is under consideration.

Where the Board gives authority in relation to a conflict of interest or where any of the situations described in (i) to (v) of "Other conflicts of interest" on the following page applies in relation to a Director: (i) the Board may (whether at the relevant time or subsequently) (a) require that the relevant Director is excluded from the receipt of information, the participation in discussion and/or the making of decisions related to the conflict or the situation and (b) impose upon the relevant Director such other terms for the purpose of dealing with the conflict or situation as they think fit; (ii) the relevant Director will be obliged to conduct himself in accordance with any terms imposed by the Board in relation to the conflict or situation; (iii) the Board may also provide that, where the relevant Director obtains (other than through his position as a Director of the Company) information that is confidential to a third party, the Director will not be obliged to disclose that information to the Company, or to use or apply the information in relation to

the Company's affairs, where to do so would amount to a breach of that confidence; (iv) the terms of the authority shall be recorded in writing (but the authority shall be effective whether or not the terms are so recorded); and (v) the Board may revoke or vary such authority at any time but this will not affect anything done by the relevant Director prior to such revocation in accordance with the terms of such authority.

#### **Other conflicts of interest**

If a Director knows that he is in any way directly or indirectly interested in a proposed contract with the Company or a contract that has been entered into by the Company, he must tell the other Directors of the nature and extent of that interest in accordance with the legislation. If he has so disclosed the nature and extent of his interest, a Director can do one or more of the following: (i) have any kind of interest in a contract with or involving the Company or another company in which the Company has an interest; (ii) hold any other office or place of profit with the Company (except that of auditor) in conjunction with his office of Director for such period and upon such terms, including as to remuneration, as the Board may decide; (iii) alone, or through a firm with which he is associated, do paid professional work for the Company or another company in which the Company has an interest (other than as auditor); (iv) be or become a Director or other officer of, or employed by or otherwise be interested in, any holding company or subsidiary company of the Company or any other company in which the Company has an interest; and (v) be or become a Director of any other company in which the Company does not have an interest and which cannot reasonably be regarded as giving rise to a conflict of interest at the time of his appointment as a Director of that other company.

#### **Benefits**

A Director does not have to hand over to the Company or its shareholders any benefit he receives or profit that he makes as a result of any matter which would otherwise involve a direct breach of his duty under the legislation to avoid conflicts of interest but which has been authorised or anything allowed under (i) to (v) of "Other conflicts of interest" above, nor is any type of contract so authorised or so allowed liable to be avoided.

#### **Quorum and voting requirements**

Subject to certain exceptions, a Director cannot vote or be counted in the quorum on a resolution of the Board relating to appointing that Director to a position with the Company or a company in which the Company has an interest or the terms or the termination of the appointment and a Director cannot vote or be counted in the quorum on a resolution of the Board about a contract in which he has an interest and, if he does vote, his vote will not be counted.

The Company can, by ordinary resolution, suspend or relax the provisions of the relevant article in the Articles to any extent or ratify any contract which has not been properly authorised in accordance with that relevant article.

#### **DIRECTORS' INDEMNITIES**

As far as the legislation allows this, the Company can indemnify any Director or former Director of the Company, of any associated company or of any affiliate against any liability and can purchase and maintain insurance against any liability for any Director or former Director of the Company, of any associated company or of any affiliate. A Director or former Director of the Company, of any associated company or of any affiliate will not be accountable to the Company or the shareholders for any benefit so provided. Anyone receiving such a benefit will not be disqualified from being or becoming a Director of the Company.

#### **Rights attaching to shares**

The Company can issue shares with any rights or restrictions attached to them as long as this is not restricted by any rights attached to existing shares. These rights or restrictions can be decided either by an ordinary resolution passed by the shareholders or by the Board as long as there is no conflict with any resolution passed by the shareholders.

#### **DIVIDENDS**

Currently, only A shares and B shares are entitled to a dividend.

Under the legislation, dividends are payable only out of profits available for distribution, as determined in accordance with the Act and under IFRS.

Subject to the Act, if the Directors consider that the Company's financial position justifies the payment of a dividend, the Company can pay a fixed or other dividend on any class of shares on the dates prescribed for the payments of those dividends and pay interim dividends on shares of any class of any amounts and on any dates and for any periods which it decides. Shareholders can declare dividends in accordance with the rights of shareholders by passing an ordinary resolution, although such dividends cannot exceed the amount recommended by the Board.

Dividends are payable to persons registered as the holder(s) of shares, or to anyone entitled in any other way, at a particular time on a particular day selected by the Board. All dividends will be declared and paid in proportions based on the amounts paid up on the relevant shares during any period for which that dividend is paid.

Any dividend or other money payable in cash relating to a share can be paid by sending a cheque, warrant or similar financial instrument payable to the shareholder entitled to the dividend by post to the shareholder's registered address. Alternatively, it can be made payable to someone else named in a written instruction from the shareholder (or all joint shareholders) and sent by post to the address specified in that instruction. A dividend can also be paid by inter-bank transfer or by other electronic means (including payment through CREST) directly to an account with a bank or other financial institution (or another organisation operating deposit accounts if allowed by the Company) named in a written instruction from the person entitled to receive the payment under the Articles. Such an account must be held at an institution based in the UK, unless the share on which the payment is to be made is held by Euroclear Nederland and is subject to the Dutch Securities Giro Act ("Wet giroal effectenverkeer"). Alternatively, a dividend can be paid in some other way if requested in writing by a shareholder (or all joint shareholders) and agreed with the Company. The Company will not be responsible for a payment which is lost or delayed. Unless the rights attached to any shares, the terms of any shares or the Articles say otherwise, a dividend or any other money payable in respect of a share can be declared and paid in whatever currency or currencies the Board decides using an exchange rate or exchange rates selected by the Board for any currency conversions required. The Board can also decide how any costs relating to the choice of currency will be met. The Board can offer shareholders the choice to receive dividends and other money payable in respect of their shares in alternative currencies on such terms and conditions as the Board may prescribe from time to time. Where any dividends or other amounts payable on a share have not been claimed, the Board can invest them or use them in any other way for the Company's benefit until they are claimed. The Company will not be a trustee of the money and will not be liable to pay interest on it. If a dividend or other money has not been claimed for 12 years after being declared or becoming due for payment, it will be forfeited and go back to the Company, unless the Board decides otherwise.

## CORPORATE GOVERNANCE CONTINUED

The Company expects that dividends in respect of B shares will be paid under the dividend access mechanism described below. Currently, the Articles provide that if any amount paid by way of dividend by a subsidiary of the Company is received by the dividend access trustee on behalf of any holder of B shares and paid by the dividend access trustee to such holder, the entitlement of such holder of B shares to be paid any dividend declared pursuant to the Articles will be reduced by the corresponding amount that has been paid by the dividend access trustee to such holder. If a dividend is declared pursuant to the Articles and the entitlement of any holder of B shares to be paid his pro rata share of such dividend is not fully extinguished on the relevant payment date by virtue of a payment made by the dividend access trustee, the Company has a full and unconditional obligation to make payment in respect of the outstanding part of such dividend entitlement immediately. Where amounts are paid by the dividend access trustee in one currency and a dividend is declared by the Company in another currency, the amounts so paid by the dividend access trustee will, for the purposes of the comparison required by the two immediately preceding sentences, be converted into the currency in which the Company has declared the dividend at such rate as the Board shall consider appropriate. For the purposes of the provisions referred to in this paragraph, the amount that the dividend access trustee has paid to any holder of B shares in respect of any particular dividend paid by a subsidiary of the Company (a "specified dividend") will be deemed to include: (i) any amount that the dividend access trustee may be compelled by law to withhold; (ii) a pro rata share of any tax that the subsidiary paying the specified dividend is obliged to withhold or to deduct from the same; and (iii) a pro rata share of any tax that is payable by the dividend access trustee in respect of the specified dividend.

### DIVIDEND ACCESS MECHANISM FOR B SHARES

#### General

A and B shares are identical, except for the dividend access mechanism, which will only apply to B shares. Dividends paid on A shares have a Dutch source for tax purposes and are subject to Dutch withholding tax.

It is the expectation and the intention, although there can be no certainty, that holders of B shares will receive dividends through the dividend access mechanism. Any dividends paid on the dividend access share will have a UK source for UK and Dutch tax purposes. There will be no Dutch withholding tax on such dividends and certain holders (not including US holders of B American Depository Shares (ADSs)) will be entitled to a UK tax credit in respect of their proportional shares of such dividends. For further details regarding the tax treatment of dividends paid on the A and B shares and ADSs, refer to "Taxation" on pages 195-196.

#### Description of dividend access mechanism

A dividend access share has been issued by The Shell Transport and Trading Company Limited (Shell Transport) and, with effect from completion of the Company's acquisition of BG (the Acquisition), a dividend access share has been issued by BG to Computershare Trustees (Jersey) Limited as Trustee. Pursuant to a declaration of trust, the Trustee will hold any dividends paid in respect of the dividend access shares on trust for the holders of B shares and will arrange for prompt disbursement of such dividends to holders of B shares. Interest and other income earned on unclaimed dividends will be for the account of Shell Transport and BG and any dividends which are unclaimed after 12 years will revert to Shell Transport and BG (as applicable). Holders of B shares will not have any interest in either dividend access share and will not have any rights against Shell Transport and BG as issuers of the dividend access shares. The only assets held on trust for the benefit of the holders of B shares will be dividends paid to the Trustee in respect of the dividend access shares.

The declaration and payment of dividends on the dividend access shares will require board action by Shell Transport and BG (as applicable) and will be subject to any applicable limitations in law or in the Shell Transport or BG (as appropriate) articles of association in effect. In no event will the aggregate amount of the dividend paid by Shell Transport and BG under the dividend access mechanism for a particular period exceed the aggregate of the dividend announced by the Board of the Company on B shares in respect of the same period (after giving effect to currency conversions).

In particular, under their respective articles of association, Shell Transport and BG are each only able to pay a dividend on their respective dividend access shares which represents a proportional amount of the aggregate of any dividend announced by the Company on the B shares in respect of the relevant period, where such proportions are calculated by reference to, in the case of Shell Transport, the number of B shares in existence prior to completion of the Acquisition and, in the case of BG, the number of B shares issued as part of the Acquisition, in each case as against the total number of B shares in issue immediately following completion of the Acquisition.

#### Operation of the dividend access mechanism

If, in connection with the announcement of a dividend by the Company on B shares, the Board of Shell Transport and/or the Board of BG elects to declare and pay a dividend on their respective dividend access shares to the Trustee, the holders of B shares will be beneficially entitled to receive their share of those dividends pursuant to the declaration of trust (and arrangements will be made to ensure that the dividend is paid in the same currency in which they would have received a dividend from the Company).

If any amount is paid by Shell Transport or BG by way of a dividend on the dividend access shares and paid by the Trustee to any holder of B shares, the dividend which the Company would otherwise pay on B shares will be reduced by an amount equal to the amount paid to such holders of B shares by the Trustee.

The Company will have a full and unconditional obligation, in the event that the Trustee does not pay an amount to holders of B shares on a cash dividend payment date (even if that amount has been paid to the Trustee), to pay immediately the dividend announced on B shares. The right of holders of B shares to receive distributions from the Trustee will be reduced by an amount equal to the amount of any payment actually made by the Company on account of any dividend on B shares.

If for any reason no dividend is paid on the dividend access shares, holders of B shares will only receive dividends from the Company directly. Any payment by the Company will be subject to Dutch withholding tax (unless an exemption is obtained under Dutch law or under the provisions of an applicable tax treaty).

The dividend access mechanism has been approved by the Dutch Revenue Service pursuant to an agreement ("vaststellingsovereenkomst") with the Company and N.V. Koninklijke Nederlandsche Petroleum Maatschappij (Royal Dutch Petroleum Company) dated October 26, 2004, as supplemented and amended by an agreement between the same parties dated April 25, 2005, and a final settlement agreement in connection with the Company's acquisition of BG dated November 9, 2015. The agreements state, among other things, that dividend distributions on the dividend access shares by Shell Transport and/or BG will not be subject to Dutch withholding tax provided that the dividend access mechanism is structured and operated substantially as set out above.

The Company may not extend the dividend access mechanism to any future issuances of B shares without the approval of the Dutch Revenue Service.

Accordingly, the Company would not expect to issue additional B shares unless that approval were obtained or the Company were to determine that the continued operation of the dividend access mechanism was unnecessary. Any further issue of B shares is subject to advance consultation with the Dutch Revenue Service.

The dividend access mechanism may be suspended or terminated at any time by the Company's Directors or the Directors of Shell Transport or BG, for any reason and without financial recompense. This might, for instance, occur in response to changes in relevant tax legislation.

The daily operations of the Trust are administered on behalf of Shell by the Trustee. Material financial information of the Trust is included in the "Consolidated Financial Statements" and is therefore subject to the same disclosure controls and procedures as Shell.

#### PRE-EMPTION RIGHTS

Subject to the Act and the Listing Rules, any equity securities allotted by the Company for cash must first be offered to shareholders in proportion to their holdings. The Act and the Listing Rules allow for the disapplication of pre-emption rights which may be waived by a special resolution of the shareholders, either generally or specifically.

#### VOTING

Currently, only the A and B shares have voting rights.

#### CHANGING THE RIGHTS ATTACHED TO THE SHARES

The Act provides that the Articles can be amended by a special resolution.

The Articles provide that, if the legislation allows this, the rights attached to any class of shares can be changed if this is approved either in writing by shareholders holding at least three-quarters of the issued shares of that class by amount (excluding any shares of that class held as treasury shares) or by a special resolution passed at a separate meeting of the relevant shareholders. At each such separate meeting, all of the provisions of the Articles relating to proceedings at a general meeting apply, except that: (i) a quorum will be present if at least one shareholder who is entitled to vote is present in person or by proxy who owns at least one-third in amount of the issued shares of the relevant class; (ii) any shareholder who is present in person or by proxy and entitled to vote can demand a poll; and (iii) at an adjourned meeting, one person entitled to vote and who holds shares of the class, or his proxy, will be a quorum. These provisions are not more restrictive than required by law in England.

If new shares are created or issued which rank equally with any other existing shares, the rights of the existing shares will not be regarded as changed or abrogated unless the terms of the existing shares expressly say otherwise.

#### REDEMPTION PROVISIONS

The Company's shares are not subject to any redemption provisions.

#### RIGHTS ATTACHING TO THE STERLING DEFERRED SHARES

The sterling deferred shares are (unlike the A and B shares) not ordinary shares and, therefore, they have different rights and restrictions.

The sterling deferred shares have the following rights and restrictions: (i) on a distribution of assets of the Company among its shareholders on a winding-up, the holders of the sterling deferred shares will be entitled (such entitlement ranking in priority to the rights of holders of ordinary shares) to receive an amount equal to the aggregate of the capital paid up or

credited as paid up on each sterling deferred share; (ii) save as provided in (i), the holders of the sterling deferred shares will not be entitled to any participation in the profits or assets of Shell; (iii) the holders of sterling deferred shares will not be entitled to receive notice of or to attend and/or speak or vote (whether on a show of hands or on a poll) at general meetings of the Company; (iv) the written consent of the holders of three-quarters in nominal value of the issued sterling deferred shares or the sanction of a special resolution passed at a separate general meeting of the holders of the sterling deferred shares is required if the special rights and privileges attaching to the sterling deferred shares are to be abrogated, or adversely varied or otherwise directly adversely affected in any way (the creation, allotment or issue of shares or securities which rank in priority to or equally with the sterling deferred shares (or of any right to call for the allotment or issue of such shares or securities) is for these purposes deemed not to be an abrogation or variation or to have an effect on the rights and privileges attaching to sterling deferred shares); (v) all provisions of the Articles relating to general meetings of the Company will apply, with necessary modifications, to every general meeting of the holders of the sterling deferred shares; (vi) subject to the legislation, the Company will have the right at any time to redeem any such sterling deferred shares (provided that it is credited as fully paid) at a price not exceeding £1 for all the sterling deferred shares redeemed at any one time (to be paid on such date as the Board shall select as the date of redemption to such one of the holders (if more than one) as may be selected by lot) without the requirement to give notice to the holder(s) of the sterling deferred shares; (vii) if any holder of a sterling deferred share to be redeemed fails or refuses to surrender the share certificate(s) or indemnity for such sterling deferred share or if the holder selected by lot to receive the redemption monies fails or refuses to accept the redemption monies payable in respect of it, such sterling deferred share will, notwithstanding the foregoing, be redeemed and cancelled by the Company and, in the event of a failure or refusal to accept the redemption monies, the Company will retain such money and hold it on trust for the selected holder without interest, and, in each case, the Company will have no further obligation whatsoever to the holder of such sterling deferred share; and (viii) no sterling deferred share will be redeemed otherwise than out of distributable profits or the proceeds of a fresh issue of shares made for the purposes of the redemption or out of capital to the extent permitted by the legislation.

#### CALLS ON SHARES

The Board can call on shareholders to pay any money which has not yet been paid to the Company for their shares. This includes the nominal value of the shares and any premium which may be payable on those shares. The Board can also make calls on people who are entitled to shares by law.

#### WINDING-UP OF SHELL

If the Company is voluntarily wound up, the liquidator can distribute to shareholders any assets remaining after the liquidator's fees and expenses have been paid and all sums due to prior ranking creditors (as defined under the laws of England) have been paid.

#### SINKING FUND PROVISIONS

The shares are not subject to any sinking fund provision under the Articles or as a matter of the laws of England.

#### DISCRIMINATING PROVISIONS

There are no provisions in the Articles discriminating against a shareholder because of his ownership of a particular number of shares.

#### LIMITATIONS ON RIGHTS TO OWN SHARES

There are no limitations imposed by the Articles or the legislation on the rights to own shares, including the right of non-residents or foreign persons to hold or vote shares, other than limitations that would generally apply to all shareholders.



## CORPORATE GOVERNANCE CONTINUED

### TRANSFER OF SHARES

There are no significant restrictions on the transfer of shares.

Except as set out below, any shareholder can transfer some or all of his certificated shares to another person. A transfer of certificated shares must be made in writing and either in the usual standard form or in any other form approved by the Board.

Except as set out below, any shareholder can transfer some or all of his CREST shares to another person. A transfer of CREST shares must be made through CREST and must comply with the uncertificated securities rules.

The Board can refuse to register the transfer of any shares which are not fully paid. Further rights to decline registration are as follows:

#### Certificated shares

A share transfer form cannot be used to transfer more than one class of share. Each class needs a separate form. Transfers cannot be in favour of more than four joint holders. The share transfer form must be properly stamped to show payment of any applicable stamp duty or certified or otherwise shown to the satisfaction of the Board to be exempt from stamp duty and must be delivered to the Company's registered office, or any other place decided on by the Board. The transfer form must be accompanied by the share certificate relating to the share being transferred, unless the transfer is being made by a person to whom the Company was not required to, and did not send, a certificate. The Board can also ask (acting reasonably) for any other evidence to show that the person wishing to transfer the share is entitled to do so and, if the share transfer form is signed by another person on behalf of the person making the transfer, evidence of the authority of that person to do so.

#### CREST shares

Registration of a transfer of CREST shares can be refused in the circumstances set out in the uncertificated securities rules. Transfers cannot be in favour of more than four joint holders.

Where a share has not yet been entered on the register, the Board can recognise a renunciation by that person of his right to the share in favour of some other person. Such renunciation will be treated as a transfer and the Board has the same powers of refusing to give effect to such a renunciation as if it were a transfer.

### PARTLY PAID SHARES

The Articles provide that, if a shareholder fails to pay the Company any amount due on his partly paid shares, the Board can enforce the Company's lien by selling all or any of the partly paid shares in any way they decide (subject to certain conditions).

### CHANGE OF CONTROL

There are no provisions in the Articles that would delay, defer or prevent a change of control.

### CAPITAL CHANGES

The conditions imposed by the Articles for changes in capital are not more stringent than those required by the applicable laws of England

### DISPUTES BETWEEN A SHAREHOLDER OR AMERICAN DEPOSITARY SHARE HOLDER AND ROYAL DUTCH SHELL PLC, ANY SUBSIDIARY, DIRECTOR OR PROFESSIONAL SERVICE PROVIDER

The Articles generally require that, except as noted below, all disputes: (i) between a shareholder in such capacity and the Company and/or its Directors, arising out of or in connection with the Articles or otherwise; (ii) so far as permitted by law, between the Company and any of its Directors in

their capacities as such or as the Company's employees, including all claims made by the Company or on behalf of the Company against any or all of its Directors; (iii) between a shareholder in such capacity and the Company's professional service providers (which could include the Company's auditors, legal counsel, bankers and ADS depositories); and/or (iv) between the Company and its professional service providers arising in connection with any claim within the scope of (iii) above, shall be exclusively and finally resolved by arbitration under the Rules of Arbitration of the International Chamber of Commerce (ICC), as amended from time to time. This would include all disputes arising under UK, Dutch or US law (including securities laws), or under any other law, between parties covered by the arbitration provision. Accordingly, the ability of shareholders to obtain monetary or other relief, including in respect of securities law claims, may be determined in accordance with these provisions, and the ability of shareholders to obtain monetary or other relief may therefore be limited and their cost of seeking and obtaining recoveries in a dispute may be higher than otherwise would be the case.

The tribunal shall consist of three arbitrators to be appointed in accordance with the ICC rules. The chairman of the tribunal must have at least 20 years' experience as a lawyer qualified to practise in a common-law jurisdiction which is within the Commonwealth (as constituted on May 12, 2005) and each other arbitrator must have at least 20 years' experience as a qualified lawyer. The place of arbitration must be The Hague, the Netherlands; and the language of the arbitration must be English.

Pursuant to the exclusive jurisdiction provision in the Articles, if a court or other competent authority in any jurisdiction determines that the arbitration requirement described above is invalid or unenforceable in relation to any particular dispute in that jurisdiction, then that dispute may only be brought in the courts of England and Wales, as is the case with any derivative claim brought under the Act. The governing law of the Articles is the substantive law of England.

Disputes relating to the Company's failure or alleged failure to pay all or part of a dividend which has been announced and which has fallen due for payment will not be subject to the arbitration and exclusive jurisdiction provisions of the Articles. Any derivative claim brought under the Act will not be subject to the arbitration provisions of the Articles.

Pursuant to the relevant depository agreement, each holder of ADSs is bound by the arbitration and exclusive jurisdiction provisions of the Articles as described in this section as if that holder were a shareholder.

### General meetings

Under the applicable laws of England, the Company is required in each year to hold an AGM of shareholders in addition to any other meeting of shareholders that may be held. Each AGM must be held in the period six months from the date following the Company's accounting reference date. Additionally, shareholders may submit resolutions in accordance with Section 338 of the Act.

Directors have the power to convene a general meeting of shareholders at any time. In addition, Directors are required to call a general meeting once requests to do so have been received by the Company from shareholders representing at least 5% of such paid-up capital of the Company as carries voting rights at general meetings of the Company (excluding any paid-up capital held as treasury shares) pursuant to Section 303 of the Act. A request for a general meeting must state the general nature of the business to be dealt with at the meeting and must be authenticated by the requesting shareholders. If Directors fail to call such a meeting within 21 days from receipt of such requests, and on a date not more than 28 days after the date of the notice convening the meeting, the shareholders that requested

the general meeting, or any of them representing more than half of the total voting rights of all shareholders that requested the meeting, may themselves convene a general meeting which must be called for a date not more than three months after the date upon which the Directors became subject to the requirement to call a general meeting. Any such meeting must be convened in the same manner, as nearly as possible, as that in which meetings are required to be convened by the Directors of the Company.

Under the Act, the Company is required to give at least 21 clear days' notice of any AGM or, except where the conditions in Section 307A of the Act apply, any other general meeting of the Company. In addition, the Company complies with the Code which currently states that notices of AGMs should be sent to shareholders at least 20 working days before the meeting.

The Articles require that in addition to any requirements under the legislation, the notice for any general meeting must state where the meeting is to be held (the principal meeting place) and the location of any satellite meeting place, which shall be identified as such in the notice as well as details of any arrangements made for those persons not entitled to attend a general meeting to be able to view and hear the proceedings (making it clear that participation in those arrangements will not amount to attendance at the meeting to which the notice relates). At the same time that notice is given for any general meeting, an announcement of the date, time and place of that meeting will, if practical, be published in a national newspaper in the Netherlands.

A shareholder is entitled to appoint a proxy (who is not required to be another shareholder) to represent and vote on behalf of the shareholder at any general meeting of shareholders, including the AGM, if a duly completed form of proxy has been received by the Company within the relevant deadlines (in general, where a poll is not demanded, 48 hours (or such shorter time as the Board decides) before the meeting).

Before a general meeting starts to do business, there must be a quorum present. Save as in relation to adjourned meetings, a quorum for all purposes is two people who are entitled to vote. They can be shareholders who are personally present, proxies for shareholders, or a combination of both. If a quorum is not present, a chairman of the meeting can still be chosen and this will not be treated as part of the business of the meeting.

If a quorum is not present within five minutes of the time fixed for a general meeting to start or within any longer period not exceeding one hour which the chairman of the meeting can decide, or if a quorum ceases to be present during a general meeting: (i) if the meeting was called by shareholders, it will be cancelled; (ii) any other meeting will be adjourned to a day (being not less than 10 days later, excluding the day on which it is adjourned and the day for which it is reconvened) with the time and place decided upon by the chairman of the meeting; and (iii) one shareholder present in person or by proxy and entitled to vote will constitute a quorum at any such adjourned general meeting and any notice of such an adjourned meeting will say this.

Notice of cancellation of a proxy's right to vote must be received at the Company's registered office (or other place specified by the Company for receipt) not later than the last time at which a proxy form should have been received to be valid for use at the meeting or on the holding of the poll at which the vote was given or the poll taken.

### Deemed delivery of documents

Under the Articles, if any notice, document or other information is given, sent or supplied by the Company by inland post, it is treated as being received the day after it was posted if first class post (or a service similar to first class post) was used or 72 hours after it was posted if first class post (or

a service similar to first class post) was not used. If a notice or document is sent by the Company by airmail, it is treated as being received 72 hours after it was posted. Any notice, document or other information left at a shareholder's registered address or a postal address notified to the Company in accordance with the Articles by a shareholder or a person entitled to a share by law is treated as being received on the day on which it was left.

### Threshold for disclosure of share ownership

The Disclosure and Transparency Rules of the UK's Financial Conduct Authority impose an obligation on persons [A] to notify the Company of the percentage of voting rights held as a shareholder, or through the direct or indirect holding of financial instruments, if the percentage of voting rights held in the Company reaches, exceeds or falls below 3% or any 1% threshold above 3%.

[A] For this purpose "persons" includes companies, natural persons, legal persons and partnerships.

As noted in the Articles, Section 793 of the Act governs the Company's right to investigate who has an interest in its shares. Under that section, a public company may give notice to any person it knows or has reasonable cause to believe is, or was at any time in the preceding three years, interested in its shares in order to obtain certain information about that interest.

The Articles provide that when a person receives a statutory notice, he has 14 days to comply with it. If he does not do so or if he makes a statement in response to the notice which is false or inadequate in some important way, the Company can decide to restrict the rights relating to the identified shares and send out a further notice to the shareholder, known as a restriction notice, which will take effect when delivered. The restriction notice will state that the identified shares no longer give the shareholder any right to attend or vote either personally or by proxy at a shareholders' meeting or to exercise any right in relation to shareholders' meetings. Where the identified shares make up 0.25% or more (in amount or in number) of the existing shares of a class at the date of delivery of the restriction notice, the restriction notice can also contain the following further restrictions: (i) the Board can withhold any dividend or part of a dividend (including scrip dividend) or other money which would otherwise be payable in respect of the identified shares without any liability to pay interest when such money is finally paid to the shareholder; and (ii) the Board can refuse to register a transfer of any of the identified shares which are certificated shares unless the Board is satisfied that they have been sold outright to an independent third party (as specified in the Articles). Once a restriction notice has been given, the Board is free to cancel it or exclude any shares from it at any time the Board thinks fit. In addition, the Board must cancel the restriction notice within seven days of being satisfied that all of the information requested in the statutory notice has been given. Also, where any of the identified shares are sold and the Board are satisfied that they were sold outright to an independent third party, it must cancel the restriction notice within seven days of receipt of notification of the sale. The Articles do not restrict in any way the provision of the legislation which applies to failures to comply with notices under the legislation.

The UK City Code on Takeovers and Mergers (the Takeover Code) imposes disclosure obligations on parties subject to the Takeover Code's disclosure regime. The Takeover Code requires that an opening position disclosure be made after the commencement of an offer period and, if later, after the announcement that first identifies an offeror. An opening position disclosure must be made by any person that is interested in 1% or more of any class of relevant securities of any party to the offer. The Takeover Code also requires any person who is, or becomes, interested in 1% or more of any class of relevant securities of an offeree company or any securities exchange offeror to make a dealing disclosure if the person deals in any relevant securities of the offeree company or any securities exchange offeror during an offer period. Where two or more persons act together pursuant to an agreement

## CORPORATE GOVERNANCE CONTINUED

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or understanding, whether formal or informal, to acquire or control an interest in relevant securities, they will normally be deemed to be a single person for the purpose of the relevant provisions of the Takeover Code.

Rule 13d-1 of the US Securities Exchange Act of 1934 requires that a person or group that acquires beneficial ownership of more than 5% of equity securities registered under the US Securities Exchange Act, and that is not eligible to file a short-form report, disclose such information to the SEC within 10 days after the acquisition.

### FURTHER INFORMATION

The following information can be found at [www.shell.com/investor](http://www.shell.com/investor):

- the terms of reference of the Audit Committee, Corporate and Social Responsibility Committee, Nomination and Succession Committee and Remuneration Committee (these documents explain the Committees' roles and the authority the Board delegates to them);
- the full list of matters reserved to the Board for decision;
- Shell General Business Principles;
- Shell Code of Conduct;
- Code of Ethics for Executive Directors and Senior Financial Officers; and
- Articles of Association.

Signed on behalf of the Board

/s/ Michiel Brandjes

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**Michiel Brandjes**  
Company Secretary  
March 9, 2016

## AUDIT COMMITTEE REPORT

Dear Shareholders,

I am pleased to present our annual Audit Committee Report, having assumed chairmanship of the Audit Committee (AC) when Guy Elliott stepped down in January 2016. I would like to take this opportunity to thank Guy for his outstanding chairmanship since 2011. I am pleased that he has agreed to remain a member of the AC, allowing us to continue to benefit from his extensive knowledge and experience.

I trust that this report will provide you with insights into our work and the issues we considered during 2015. As the AC, we assist the Board in fulfilling its oversight responsibilities in areas such as the integrity of financial reporting, the effectiveness of the risk management and internal control system and related governance and compliance matters. We are also responsible for making a recommendation to the Board on the appointment or reappointment of the external auditor. In 2015, we held six AC meetings where we were briefed on and discussed a variety of topics including cyber-risk and tax transparency reporting. We also paid specific attention to oil price developments as well as the related impairment charges, and charges related to Alaska exploration activities and the cessation of the Carmon Creek project. We received several briefings on the status of the recommended cash and share offer for BG Group plc (BG) and in 2016 we will be monitoring the integration of BG into our accounting and reporting processes as well as within the Shell Control Framework.

The tender for the appointment of the external auditor continued to be high on our agenda in 2015. In this respect, we held three additional sessions in relation to the outcome of the tender process and the recommended appointment of Ernst & Young LLP (EY) for the financial year 2016, with our discussions addressing auditor independence and the process for a smooth auditor transition in particular. You will find more details in this report.

The report further explains those issues we considered to be significant in relation to Shell's 2015 Consolidated Financial Statements, and how we addressed them. We have advised the Board that the 2015 Annual Report including the financial statements, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy. We also explain how we arrived at this conclusion.

In accordance with new best practice from the UK Corporate Governance Code (the Code) effective from 2015, we further reviewed Shell's prospects over the three-year period selected by the Board and supported the "viability statement" made in the Directors' Report on page 67. We also reviewed and supported the disclosure of how the principal risks facing Shell are being managed or mitigated.

Finally, we conducted our annual performance evaluation and concluded that the AC was effective and able to fulfil its role in accordance with its terms of reference, which can be found at [www.shell.com/investor](http://www.shell.com/investor).

**Euleen Goh**  
Chairman of the Audit Committee  
March 9, 2016

### COMPOSITION OF THE AUDIT COMMITTEE

The current members of the AC are Euleen Goh (Chairman of the AC), Guy Elliott, Gerard Kleisterlee and Linda G. Stuntz, all of whom are financially literate, independent, Non-executive Directors. Guy Elliott stepped down as Chairman of the AC with effect from January 1, 2016, with Euleen Goh succeeding him as of this date. For the purposes of the Code and in respect of the year ended December 31, 2015, Guy Elliott qualifies as a person with "recent and relevant financial experience" and for the purposes of US securities laws is an "audit committee financial expert". The AC met six times during the year; the AC members' attendances are shown on page 71. In addition, the AC held three sessions in relation to the audit tender process and auditor transition.

### RESPONSIBILITIES

The key responsibilities of the AC are to assist the Board in fulfilling its oversight responsibilities in relation to: financial reporting; the effectiveness of the system of risk management and internal control; compliance with applicable external legal and regulatory requirements; monitoring the qualifications, expertise, resources and independence of both the internal and external auditors; and assessing the internal and external auditors' performance and effectiveness each year. The AC keeps the Board informed of the AC's activities and recommendations. Where the AC is not satisfied with, or wherever it considers that action or improvement is required concerning any aspect of financial reporting, risk management and internal control, compliance or audit-related activities, it promptly reports these concerns to the Board.

### ACTIVITIES

The AC covers a variety of topics in its meetings. These include both standing items that the AC considers as a matter of course, typically in relation to the quarterly results announcements, control issues, accounting policies and judgements and reporting matters, and a range of specific topics relevant to Shell's overall control framework. The AC invites the Chief Executive Officer, the Chief Financial Officer, the Legal Director, the Chief Internal Auditor, the Executive Vice President Controller, the Vice President Accounting and Reporting and the external auditor to attend each meeting. Other members of management attend when requested. At every meeting, the AC holds private sessions separately with the external auditor and the Chief Internal Auditor without members of management being present.

During 2015, the AC received comprehensive reports from management and the internal and external auditors. In particular, it discussed with the Chief Financial Officer, the Executive Vice President Controller, the Vice President Accounting and Reporting and the external auditor issues that arose on accounting policies, practices and reporting, and reviewed aggregated whistle-blowing reports, internal audit reports and analyses of financial reporting matters. The AC further assessed the robustness of information and risk management and security measures, and discussed the annual report of the Chief Ethics and Compliance Officer. The AC also discussed the Company's Annual Report and Accounts, half-year report and quarterly unaudited financial statements with management and the external auditor, and it reviewed the Internal Audit Department's annual audit plan as well as its five-year strategic plan and assessed the performance of the Internal Audit function as effective. The AC also requested reports on such matters that it deemed appropriate, for example: data privacy; cyber security; new and impending regulatory requirements; and financial reporting and accounting issues relating to the recommended cash and share offer for BG.

As requested by the Board, the AC has advised the Board of its view that the Annual Report including the financial statements for the year ended December 31, 2015, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to

## AUDIT COMMITTEE REPORT CONTINUED

assess Shell's position and performance, business model and strategy (see the "Directors' Report" on page 67). To arrive at this conclusion, the AC critically assessed drafts of the Annual Report including the financial statements and discussed with management the process undertaken to ensure that it was fair, balanced and understandable. This process included: requesting confirmation from the owners of each section of the Annual Report that the content of their respective section is fair and balanced; ensuring that consistent materiality thresholds are applied; taking into account comments from the external auditor; and receiving affirmation from the Executive Committee. The AC further reviewed and considered the Directors' half-year and full-year statements with respect to the going concern basis of accounting. In respect of the "viability statement", the AC supported an assessment period of three years and endorsed the statement in the "Directors' Report" on page 67.

### SYSTEM OF RISK MANAGEMENT AND INTERNAL CONTROL

In 2015, the AC reviewed and discussed regular reports on risks, controls and assurance, including the annual assessment of the system of risk management and internal control, in order to monitor the effectiveness of the procedures for internal control over financial reporting, compliance and operational matters. This included the Company's evaluation of the internal control system as required under Section 404 of the Sarbanes-Oxley Act.

### SIGNIFICANT ISSUES

The AC assessed the following significant accounting and reporting issues that arose in relation to Shell's 2015 Consolidated Financial Statements. The AC was satisfied with how each of these issues was resolved. As part of this assessment, the AC received reports, requested and received clarification from management, and sought assurance and received input from the external auditor.

#### Impairments

Following the revision of Shell's oil and gas price outlook, relevant assets were identified and tested for impairment in the third and fourth quarters of 2015. The testing, which reflected the lower oil and gas price assumptions, resulted in the recognition of impairment charges in respect of North America shale gas properties and certain other Upstream assets. The AC reviewed this process and agreed with the conclusions. The AC also reviewed other impairments during the year, considered management's reviews and critically assessed the appropriateness of the impairment charges in the global portfolio. See Notes 2 and 8 to the "Consolidated Financial Statements" on pages 120-125 and 130-131.

#### Exploration activities in Alaska and the Carmon Creek project

The AC scrutinised the impact on the Consolidated Financial Statements of the decisions by management to cease exploration activities in Alaska, USA, and the construction of the Carmon Creek project in Canada. With respect to Alaska, the impact included exploration well write-offs and related decommissioning and restoration costs, impairment charges related to leases and other assets, and provisions arising from the contractual commitments associated with the exploration drilling. With respect to the Carmon Creek project, the impact included impairment charges for past capitalised expenditure, and provisions for the cancellation of drilling and commercial contracts, staff severance costs and related decommissioning and restoration costs. See Notes 2 and 8 to the "Consolidated Financial Statements" on pages 120-125 and 130-131.

#### Disposals

The AC examined the accounting for assets subject to a binding sales agreement and consequential disposals, including Upstream assets in Malaysia (licence expiry), Nigeria, the UK and the USA and Downstream assets in China, France, Norway and the UK. Particular attention was given

to the accounting for any retained obligations, the assumptions used in determining any resulting charges, and the tax treatment.

#### Discount rate for non-current provisions

The AC was briefed on management's decision to reduce the discount rate applied to non-current provisions, mainly in respect of decommissioning and restoration costs, in light of movements in long-term US Treasury bond yields. As a result, non-current provisions and related property, plant and equipment increased. See Notes 2, 8 and 18 to the "Consolidated Financial Statements" on pages 120-125, 130-131 and 141-142.

#### NAM provisions

Nederlandse Aardolie Maatschappij B.V. (NAM) is a joint venture (Shell interest 50%). The AC discussed and supported management's approach in respect of NAM's earth tremor related provisions taking into account the outcome of the "Hazard and Risk Assessment for induced Seismicity in Groningen" study compiled by NAM.

#### Taxation

The AC reviewed management updates and external auditor assessments on certain tax matters, in particular the recoverability of deferred tax assets.

### EXTERNAL AUDITOR

Following evaluation and due consideration over the financial year 2014, the AC recommended to the Board that PricewaterhouseCoopers LLP (PwC) be reappointed as external auditor for the year ended December 31, 2015, at the 2015 Annual General Meeting (AGM). There were no contractual obligations that restricted the AC's ability to make such a recommendation.

During 2015, the AC considered the outcome of the Financial Reporting Council's Audit Quality Inspection Annual Report 2014/15 on PwC. The AC evaluated the effectiveness of PwC and the external audit process, taking into account the results of Shell management's internal survey relating to PwC's performance over the financial year 2015 as well as management's review and recommendations and its own experiences with the external auditor. Key criteria of the evaluation included: professionalism in areas including competence, integrity and objectivity; efficiency, covering aspects such as service level and cost efficiency; thought leadership and value added; and compliance with relevant legislative, regulatory and professional requirements. The AC concluded that PwC had performed effectively.

As required under UK and US auditing standards, the AC received a letter from PwC confirming its independence.

PwC presented its views on the Annual Report including the financial statements for the year ended December 31, 2015, to the AC and to the Board.

As the last competitive audit tender was in 2005 when PwC was appointed the Company's auditor, the Company announced the intention in the 2013 Annual Report to commence a tender process for the appointment of the external auditor for the financial year 2016. Following a market assessment in mid-2014, a request was sent out in November 2014 to suitable, appropriately experienced candidates to participate in the tender and to submit their proposal by March 2, 2015. The tender advisory committee, led by the then Chairman of the AC, oversaw the process and provided advice and reports to the AC to enable it to make a recommendation to the Board. On March 27, the advisory committee concluded that EY was the preferred firm to conduct the Royal Dutch Shell plc audit engagement, judged against the selection criteria including quality of the proposed team, experience with the oil and gas industry, and available resources and organisation. Following the announcement of the recommended cash and

share offer for BG in April, a further assessment was performed, as EY was the external auditor of BG and the proposed lead audit partner for the Company was at that time serving as lead audit partner for BG. The AC carefully assessed the outcome of the tender, including related recommendations and assurances on auditor independence and the establishment of a conflict of interest and independence protocol with EY, and endorsed the conclusion of the advisory committee that EY was the preferred firm to conduct the Company's audit engagement. The AC recommended to the Board that it propose to the 2016 AGM the appointment of EY as the external auditor of the Company for the financial year 2016. The tender was carried out in compliance with The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014 effective January 1, 2015, as issued by the Competition & Markets Authority in the UK.

In October, Shell published a disclosure on its website providing a detailed overview of the audit tender process, which can be found on [www.shell.com/investor](http://www.shell.com/investor). The transition activities began on October 1, 2015, when EY started shadowing PwC in its audit engagement with the Company. The AC is monitoring the transition process.

#### ITEM 16F CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Following the tender process described above, PwC are dismissed with effect from the date of their resignation, which is expected on April 11, 2016. PwC will not stand for reappointment at our 2016 AGM. In respect of fiscal years 2014 and 2015:

- PwC has not issued any report on the financial statements or on the effectiveness of internal control over financial reporting of the Company or any of its subsidiaries, or the Royal Dutch Shell Dividend Access Trust, that contained an adverse opinion or a disclaimer of opinion. The relevant PwC auditor's reports were not qualified or modified as to uncertainty, audit scope or accounting principles.
- there has not been any disagreement with PwC over any matter of accounting principle or practice, financial statement disclosure, or auditing scope or procedures, which disagreement, if not resolved to PwC's satisfaction, would have caused PwC to make reference to the subject matter of the disagreement in connection with its auditor's reports, or any reportable event as described in Item 16F(a)(1)(v) of Form 20-F.

Shell has provided PwC with a copy of the foregoing disclosure and has requested that they furnish the Company with a letter addressed to the US Securities and Exchange Commission stating whether it agrees with such disclosure and, if not, stating the respects in which it does not agree. Copies of PwC's letters dated March 9, 2016, in which they stated that they agree with such disclosure, are filed as Exhibit 16.1 and 16.2.

During fiscal years 2014 and 2015 and through March 9, 2016, the Company did not consult with EY regarding: (i) the application of accounting principles to any specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on the financial statements of the Company or any of its subsidiaries, or the Royal Dutch Shell Dividend Access Trust; or (ii) any matter that was either the subject of a disagreement or reportable event as discussed in Item 16F(a)(1) of Form 20-F. EY's proposed appointment will be presented for shareholder vote at the AGM on May 24, 2016.

#### NON-AUDIT SERVICES

The AC has adopted a policy on the engagement of the external auditor to supply non-audit services. This policy, designed to safeguard auditor objectivity and independence, includes guidelines on permitted and non-permitted services, and on services requiring specific approval by the AC.

Examples of non-permitted services are actuarial services, bookkeeping services, valuation services (unless the services are unrelated to financial reporting), management or recruitment services, legal services and expert services unrelated to the audit, tax advice and broker or dealer, investment adviser or banking services.

For other services, because of their knowledge, experience and/or for reasons of confidentiality, it can be more efficient or prudent to engage the external auditor rather than another party. Under the policy, permitted services must not present a conflict of interest. The AC reviews quarterly reports from management on the extent of the permitted non-audit services provided in accordance with the policy or for which specific approval is being sought. Non-audit services in the following categories can be contracted without further individual prior approval provided the fee value for each contract does not exceed \$500,000:

- tax compliance work that is part of the assurance process for the audit of the Consolidated or Parent Company Financial Statements or the accounts of subsidiaries;
- regulatory compliance audits; and
- verification of non-financial data for public disclosure.

Any other non-audit services must be specifically approved by the AC before the external auditor is contracted.

The scope of the permitted non-audit services contracted with the external auditor in 2015 consisted mainly of tax compliance work and the associated compensation amounted to 0.1% of total auditor's remuneration.

#### FEES

Note 28 to the "Consolidated Financial Statements" on page 152 provides a specification of the auditor's remuneration.

## DIRECTORS' REMUNERATION REPORT

### Principles

The principles underpinning the Remuneration Committee's (REMCO) approach to executive remuneration remain unchanged. They serve as the foundation for everything we do, and are listed below.

- **Alignment with Shell's strategy:** the Executive Directors' compensation package should be strongly linked to the achievement of stretch targets that are seen as indicators of the execution of Shell's strategy.
- **Pay for performance:** the majority of the Executive Directors' compensation (excluding benefits and pension) should be linked directly to Shell's performance through variable pay instruments.
- **Competitiveness:** remuneration levels should be determined by reference to companies of comparable size, complexity and global scope.
- **Long-term creation of shareholder value:** Executive Directors should align their interests with those of shareholders by holding shares in Royal Dutch Shell plc (the Company).
- **Consistency:** the remuneration structure for Executive Directors should generally be consistent with the remuneration structure for the Senior Management of Shell. This consistency builds a culture of alignment with Shell's purpose and a common approach to sharing in Shell's success.
- **Compliance:** decisions should be made in the context of the Shell General Business Principles and REMCO should ensure compliance with applicable laws and corporate governance requirements when designing and implementing policies and plans.
- **Risk assessment:** the remuneration structures and rewards should meet risk assessment tests to ensure that shareholder interests are safeguarded and that inappropriate actions are avoided.

### STATEMENT BY THE CHAIRMAN OF THE REMUNERATION COMMITTEE

Dear Shareholders,

As Chairman of the Remuneration Committee, I am pleased to present Shell's 2015 Directors' Remuneration Report. It sets out how, for this year, we have implemented the policy that was approved by shareholders at the 2014 Annual General Meeting (AGM), in accordance with the Principles outlined on the left. Our last year's report, with 96.2% voting in favour, received strong shareholder support, which was confirmed during the year in the many shareholder engagements we had. I hope that also this year we have been able to meet the high standards set.

#### PERFORMANCE CONTEXT

2015 was a very challenging year for the whole organisation because of the operational pressures in a low oil price environment where cash generation and preservation are of prime importance. Even more so for the Board, the Senior Management and specific parts of the organisation who, in addition to their normal operational tasks, had to deal with all the extra work concerning the BG Group plc (BG) acquisition.

#### PERFORMANCE

In this environment, the organisation delivered an above target operational performance.

Operational cash flow was above target, driven by higher Downstream earnings, lower working capital and strong operational performance, which partly offset the impact of lower oil and gas prices.

Project delivery was again strong, but has to be seen in the context of the decision to stop work on the Carmon Creek project in Canada.

Production was ahead of target despite the impact of the Groningen curtailment and unplanned downtime in certain assets. Liquefied natural gas (LNG) sales were also above target mainly due to better plant uptime and feed-gas availability. Downstream refinery and chemical plant availability was just above target at 89.3%, despite incidents at Bukom and Rheinland triggering unplanned downtime.

All sustainable development measures were above target, reflecting a sustained focus and commitment to improve performance in these areas.

While total recordable case frequency (TRCF) saw further improvement, remaining below one injury per million working hours, sadly, seven people lost their lives while working for Shell in 2015. These tragic events occurred in Shell-operated ventures in Nigeria and are a reminder of the need to focus on safety at all times.

**DECISIONS MADE**

Against this background, REMCO made the following decisions regarding the remuneration of the Executive Directors.

The Committee decided to increase the Directors' base salaries in line with the market as applicable for the broader workforce.

When determining the bonus outcome for the Chief Executive Officer (CEO) and the Chief Financial Officer (CFO), REMCO considered the strong operational performance outlined above, but was also very mindful of the tragic loss of life and certain other safety incidents for which senior leaders are accountable. Having further considered the impact of the decision to stop the Carman Creek project, REMCO determined to use its discretion to reduce the mathematical outcome of the bonus scorecard from 1.55 down to 1.4.

Having considered the very strong leadership and individual performance contribution of both the CEO and the CFO, REMCO determined to award them an individual performance modifier of 1.2.

Although I am satisfied that the building blocks for future success are in place and the acquisition of BG puts us in a strong position, to deliver on our strategy, we have underperformed our competitors over the three-year period 2013-2015 on the KPIs that determine the vesting of our Long-Term Incentive Plan (LTIP), resulting in an outcome of only 16% of the target opportunity.

Overall this resulted in the variable part of remuneration (annual bonus plus LTIP vesting) paying out well below target, in line with our pay for performance policy, which balances operational performance and strategic steps with long-term competitive outcomes and alignment with shareholders.

**LOOKING AHEAD**

We are reviewing the Remuneration Policy during 2016, prior to putting it to a new binding vote at the 2017 AGM.

Ahead of this review, the Committee consulted two advisers in 2015 to assess the risk profile of the Directors' remuneration policy and the alignment of our policy with Shell's long-term strategy, and to provide some insight into market practice and the advisers' views of shareholders' expectations.

As part of our regular engagement with shareholders, we held meetings with a number of shareholders in April and December 2015 during which we shared updates on remuneration developments in 2015 and sought initial views on our Policy ahead of the 2016 review. I thank shareholders for their time and input, which provide useful ongoing challenges for the Committee's reflection (for example, on further simplification of Executive Directors' pay).

I will continue to engage with shareholders and consider their views in our Policy review.

Following the successful completion of the BG acquisition, we will be focusing on further driving performance of the enlarged business. While we are not amending the Policy for 2016, annual bonus scorecard measures and targets will be updated to reflect this enlargement. As we have done in the past, we will disclose targets in the 2016 remuneration report.

As always, I welcome your feedback and look forward to meeting you at our AGM on May 24, 2016.

Finally, I want to thank Hugh Mitchell for the way in which he has supported REMCO over the past years and wish him all the best.

**THIS REPORT**

This Directors' Remuneration Report for 2015 has been prepared in accordance with relevant UK corporate governance and legal requirements, in particular Schedule 8 of The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended). The Board has approved this report.

This report consists of two further sections:

- the Annual Report on Remuneration, describing 2015 remuneration as well as implementation of the policy in 2016, which will be subject to an advisory vote at the 2016 AGM; and
- the Directors' Remuneration Policy which was approved by shareholders at the 2014 AGM and is included for reference.

**Gerard Kleisterlee**  
Chairman of REMCO  
March 9, 2016



## ANNUAL REPORT ON REMUNERATION

The Annual Report on Remuneration sets out:

- REMCO and its responsibilities and activities;
- a summary of our policy in place in 2015, and planned implementation in 2016;
- the statement of implementation of the approved policy in 2015; and
- Directors' remuneration for 2015.

The base currency in this Annual Report on Remuneration is the euro, as this is the currency of the base salary and country of employment of the Executive Directors. Where amounts are shown in other currencies, an average exchange rate for the relevant year is used, unless a specific date is stated, in which case the average exchange rate for the specific date is used.

### REMUNERATION COMMITTEE

The following Directors were members of REMCO during 2015:

- Gerard Kleisterlee (Chairman of REMCO);
- Patricia A. Woertz with effect from May 19, 2015;
- Gerrit Zalm; and
- Charles O. Holliday until he stood down on May 19, 2015.

Their biographies are given on pages 62-64; REMCO meeting attendance is given on page 71.

REMCO's key responsibilities in respect of Executive Directors include:

- setting the remuneration policy;
- agreeing performance frameworks, setting targets and reviewing performance;
- determining actual remuneration and benefits; and
- determining contractual terms.

In addition, REMCO has the responsibility for the Chairman of the Board's remuneration and for recommending and monitoring the level and structure of remuneration for Senior Management.

REMCO operates within its terms of reference, which are reviewed regularly and updated whenever necessary. They were last updated on January 28, 2015, and are available at [www.shell.com](http://www.shell.com). Alternatively, copies can be obtained from the Company Secretary.

Advice from within Shell on various subjects, including the Executive Directors' annual bonus scorecard and the remuneration of Senior Management, was provided by:

- Ben van Beurden, CEO;
- Hugh Mitchell, Chief Human Resources & Corporate Officer and Secretary to REMCO during 2015, who was succeeded by Ronan Cassidy with effect from January 1, 2016; and
- Stephanie Boyde, Executive Vice President Remuneration, Benefits & Services.

The Chairman of the Board and the CEO were consulted on remuneration proposals affecting the CFO.

REMCO consulted Deloitte and Towers Watson on a one-off basis to provide independent external perspectives on executive remuneration market practice. Both are founding members and signatories to the Code of Conduct for Remuneration Consultants, and REMCO was satisfied that their advice was objective and independent. The fees were £58,000 for Deloitte and £50,000 for Towers Watson. Deloitte also provided other services to Shell during the year, including tax services, and Towers Watson also provided other services to Shell during the year, including pay benchmarking. Deloitte and Towers Watson did not provide advice on Executive Directors' remuneration matters other than for REMCO.

During 2015, REMCO met five times and its activities included:

- approving the 2014 Directors' Remuneration Report;
- consulting with major shareholders in April and December;
- setting annual bonus performance measures and targets;
- deciding on base salaries for the CEO and the CFO;
- determining the 2014 annual bonus outcomes;
- determining vesting of the 2012 LTIP and Deferred Bonus Plan (DBP) awards for the CFO and Performance Share Plan (PSP) award for the CEO;
- reviewing the alignment between Shell's strategy and remuneration;
- tracking external developments and assessing their impact on Shell's remuneration policy; and
- reviewing REMCO's operation.

**REMUNERATION STRUCTURE**

Short term	Medium term	Long term
<ul style="list-style-type: none"> <li>■ Base salary.</li> <li>■ Annual bonus based on scorecard of short-term strategic targets and individual achievement.</li> </ul>	<ul style="list-style-type: none"> <li>■ 50% of bonus deferred into shares for three years.</li> <li>■ LTIP based on relative performance over three years. Shares to be retained for two years after vesting.</li> </ul>	<ul style="list-style-type: none"> <li>■ Shareholding requirement for tenure in role.</li> <li>■ Bonus and LTIP subject to malus and clawback provisions.</li> </ul>

**REMUNERATION POLICY AND PRACTICE AT A GLANCE**

Summary of the shareholder-approved policy (effective January 1, 2015). The full policy is set out on pages 98-105.

Base salary and pensionable salary	Policy implementation in 2015	Policy implementation in 2016
<ul style="list-style-type: none"> <li>■ Reviewed annually after considering a range of factors including market positioning, tenure and experience, planned increases for other employees, Shell's and individual performance. Maximum: €2,000,000.</li> </ul>	<ul style="list-style-type: none"> <li>■ CEO base salary and pensionable salary: €1,430,000 (+2.1%).</li> <li>■ CFO base salary: €1,030,000 (+2.0%); pensionable salary: £765,000 (+2.0%).</li> </ul>	<ul style="list-style-type: none"> <li>■ CEO base salary and pensionable salary: €1,460,000 (+2.1%).</li> <li>■ CFO base salary: €1,040,000 (+1.0%); pensionable salary: £780,000 (+2.0%).</li> </ul>

Benefits	Policy implementation in 2015	Policy implementation in 2016
<ul style="list-style-type: none"> <li>■ Typically include car allowance, transport between home and office, medical insurance. Mobility policies and tax equalisation related to expatriate employment before Board appointment or to offset double taxation may also apply.</li> </ul>	<ul style="list-style-type: none"> <li>■ CEO and CFO received standard benefits.</li> </ul>	<ul style="list-style-type: none"> <li>■ CEO and CFO will receive standard benefits.</li> </ul>

Annual bonus	Policy implementation in 2015	Policy implementation in 2016
<ul style="list-style-type: none"> <li>■ Target bonus as a % of base salary: CEO 150%; CFO 120%.</li> <li>■ Maximum: CEO 250%; CFO 240%.</li> <li>■ Calculated as base salary x target bonus % x scorecard result (0-2) against short-term strategic targets, adjusted for individual performance with a 0-1.2 multiplier.</li> <li>■ 50% delivered in cash, 50% deferred into shares and released after three years, together with dividend shares accrued over the deferral period.</li> <li>■ Subject to malus and clawback provisions.</li> <li>■ Scorecard measures: operational cash flow (30%); operational excellence (50%); and sustainable development (20%). See further details on page 100.</li> </ul>	<ul style="list-style-type: none"> <li>■ Scorecard mathematical outcome: 1.55. After REMCO's discretion: 1.40. Individual performance multiplier: 1.2.</li> <li>■ Bonus paid in respect of 2015: CEO 245% of base salary, CFO 199% of base salary. This represents about 165% of their respective target bonuses.</li> </ul>	<ul style="list-style-type: none"> <li>■ Same bonus opportunities as in 2015.</li> <li>■ Scorecard measures and targets updated to reflect the execution of the BG integration.</li> </ul>

LTIP	Policy implementation in 2015	Policy implementation in 2016
<ul style="list-style-type: none"> <li>■ Maximum award: 400% of base salary. Between 0% and 200% of the initial award may vest, depending on relative performance over a three-year period.</li> <li>■ Vesting capped at 50% of the maximum payout if there is no vesting on the total shareholder return (TSR) element.</li> <li>■ Additional shares are released representing the value of dividends payable on vested shares.</li> <li>■ Vested shares must be held for a further two years.</li> <li>■ Subject to malus and clawback provisions.</li> <li>■ Performance measures: TSR (30%), earnings per share (EPS) (30%), return on average capital employed (ROACE) (20%) and net cash from operating activities (20%).</li> </ul>	<ul style="list-style-type: none"> <li>■ Award as a % of base salary: CEO 340%; CFO 270%.</li> <li>■ Vesting of 2013 award: 16% of target (8% of maximum). The performance measures of the 2013 award were the same as those applying to the 2015 award except for production, which was used instead of ROACE.</li> </ul>	<ul style="list-style-type: none"> <li>■ Same award opportunities as in 2015.</li> <li>■ Same performance measures as in 2015.</li> </ul>

Pension	Policy implementation in 2015	Policy implementation in 2016
<ul style="list-style-type: none"> <li>■ Retirement benefits maintained in base country pension arrangements.</li> <li>■ CEO: Dutch defined benefit pension plan.</li> <li>■ CFO: UK defined benefit pension plans.</li> </ul>	<ul style="list-style-type: none"> <li>■ Maximum pensionable salary for future defined benefit accruals of €89,900. Net pay defined contribution pension plan (employer contribution: 24% of salary in excess of €89,900).</li> </ul>	<ul style="list-style-type: none"> <li>■ CEO and CFO: no change.</li> </ul>

Shareholding	Policy implementation in 2015	Policy implementation in 2016
<ul style="list-style-type: none"> <li>■ Requirement as a % of base salary: CEO: 700%; CFO: 400%.</li> <li>■ Expected to be reached through retention of vested shares, within five years of appointment and maintained for the full period of appointment.</li> </ul>	<ul style="list-style-type: none"> <li>■ Actual holding at year end: CEO: 98% of base salary; CFO: 822% of base salary.</li> </ul>	<ul style="list-style-type: none"> <li>■ No change in shareholding requirements.</li> </ul>

## ANNUAL REPORT ON REMUNERATION CONTINUED

### STATEMENT OF 2016 POLICY IMPLEMENTATION

#### Comparator group

The 2016 benchmarking comparator group is unchanged from 2015 and consists of BP, Chevron, ExxonMobil and Total ("the other oil majors") as well as a selection of major Europe-based companies. When reviewing Executive Directors' pay for 2016, data excluding banks and BG was also considered. A review of the comparator group will be conducted in 2016 as part of the broader policy review.

#### 2016 EUROPEAN COMPARATOR GROUP

Allianz	BHP Billiton	Rio Tinto
Anglo American	Deutsche Bank	Roche
AstraZeneca	Diageo	SABMiller
Barclays	GlaxoSmithKline	Siemens
BAT	HSBC	Unilever
Bayer	Novartis	Vodafone
BG Group	Philips	

#### Executive Directors

##### Salaries

Effective from January 1, 2016, the base salary and pensionable salary were set at €1,460,000 (+2.1%) for Ben van Beurden, CEO. The base salary for Simon Henry, the CFO, was set at €1,040,000 (+1.0%) and his pensionable base salary was increased by 2.0% to £780,000 in line with the broader Shell employee population in the UK.

When determining base salaries, REMCO considered: the market positioning of the Executive Directors' compensation packages; the planned average increases for 2016 for other employees across three major countries (the Netherlands, the UK and the USA); the impact of the increase on other elements of the package; Shell's performance and Executive Directors' individual performance during 2015; and the conservative positioning of the CEO's base salary on appointment (his 2016 salary remains below that of his predecessor on appointment in 2009).

##### Annual bonus

The 2016 performance measures will remain aligned with a number of our performance indicators set out on pages 20-21 and continue to comprise operational cash flow, operational excellence and sustainable development measures. Measures and targets will be updated to reflect the execution of the BG integration.

Annual bonus scorecard targets are not disclosed prospectively because to do so in a meaningful manner would require the disclosure of commercially sensitive information. As in previous years, scorecard targets will be disclosed in a future Directors' Remuneration Report when they are no longer deemed to be commercially sensitive. Disclosure of detailed personal targets is inappropriate as these are deemed commercially sensitive. However, the basis for the determination of the individual multiplier will be disclosed.

50% of the annual bonus awarded will be deferred into shares to be retained for three years.

### Long-term incentive awards

#### LONG-TERM INCENTIVE PLAN

On February 5, 2016, a conditional award of performance shares under the LTIP was made to the Executive Directors. The award had a face value of 340% of the base salary for the CEO and 270% of the base salary for the CFO, resulting in the following shares being awarded conditionally: 236,302 Royal Dutch Shell plc A shares (A shares) to Ben van Beurden, and 141,465 Royal Dutch Shell plc B shares (B shares) to Simon Henry.

As in 2015, for LTIP awards made in 2016, performance is assessed over a three-year period based on relative performance compared with the other oil majors on the following measures and vested shares are subject to a two-year holding period post vesting:

- TSR, calculated in dollars using a 90-day averaging period around the start and end of the performance period (30%);
- diluted EPS growth on a current cost of supplies basis (30%);
- net cash growth from operating activities (20%); and
- ROACE growth (20%). For this purpose, in order to facilitate the comparison, the calculation of ROACE differs from that described in "Performance indicators" on page 21 as there is no adjustment for after-tax interest expense.

The vesting schedule and holding period are unchanged from 2015.

#### Adjustment (malus) and recovery (clawback)

Bonus, DBP and LTIP are subject to adjustment (malus) and recovery (clawback) provisions, which may apply in case of direct responsibility or supervisory accountability.

REMCO may adjust an award, for example by lapsing part or all of it, reducing the number of shares by which it would otherwise vest, by imposing additional conditions on it, or imposing a new holding period. Award adjustments may be made as a result of: Shell restating the relevant year(s) financial statements due to material non-compliance with any financial reporting requirement; an individual's misconduct or misconduct through the individual's direction or non-direction, which influenced the metrics and outcomes used in determining the individual's annual bonus or LTIP outcome; any material breach of health and safety or environment regulations; serious reputational damage to Shell; material failure of risk management; and other exceptional events at the discretion of REMCO.

Adjustment may also apply after employment ends if the individual: (a) breaches any provision of his/her employment contract which applies after cessation of employment or any provision of an agreement entered into on termination of employment; (b) is found to have committed fraud or dishonesty with respect to Shell; (c) wilfully damaged the assets of or engaged in misconduct which, in any material respect, is or was injurious to Shell; (d) wrongfully disclosed or used any proprietary or confidential information which is related to the business, properties or affairs of Shell and the release of which is detrimental, in any material respect, to the competitive position or goodwill of Shell; (e) engaged in any activity which, in any material respect, reasonably constituted a conflict with the interests of Shell; or (f) breached any business principle or a term of any code of conduct applicable to employees or former employees of Shell.

Clawback applies in case of restatement of financial statements due to material non-compliance with any financial reporting requirement or as a result of the individual's misconduct or misconduct through the individual's direction or non-direction, which influenced the metrics and outcomes used in determining his/her annual bonus or LTIP outcome.

**Pension**

There are no changes to the pension plans in which the CEO and CFO participate.

**Non-executive Directors' fees**

NON-EXECUTIVE DIRECTORS' FEES 2016		€	Other fees
Chairman of the Board	850,000		Non-executive
Non-executive Director	130,000		Directors receive
Senior Independent Director	55,000		an additional fee
Audit Committee			of €5,000 for any
Chairman [A]	55,000		Board meeting
Member	25,000		involving
Corporate and Social Responsibility			intercontinental
Committee			travel – except
Chairman [A]	35,000		for one meeting
Member	17,250		a year held in a
Nomination and Succession Committee			location other than
Chairman [A]	25,000		The Hague
Member	12,000		
Remuneration Committee			
Chairman [A]	35,000		
Member	17,250		

[A] The chairman of a committee does not receive an additional fee for membership of that committee.

The Chairman's fee is determined by REMCO and the annual fee for Charles O. Holliday, with effect from May 20, 2015, has been set at €850,000.

A Non-executive Director receives a basic fee, and there are additional fees for the Senior Independent Director, a Board committee chairmanship or a Board committee membership for each committee. Non-executive Directors receive an additional fee of €5,000 for any Board meeting involving intercontinental travel, except for one meeting a year held in a location other than The Hague. Business expenses (including transport between home and office and occasional business-required spouse travel) and associated tax are paid or reimbursed by Shell. The Chairman has use of a Shell-provided accommodation in The Hague.

The Board reviews Non-executive Directors' fees periodically to ensure that they are aligned with those of other major listed companies. A review was carried out in 2014, which resulted in an increase in the basic fee from €125,000 to €130,000 and an increase in the Audit Committee Chairman fee from €45,000 to €55,000, effective January 1, 2015.

Annual fees for 2016 are indicated in the "Non-executive Directors' fees 2016" table.

**DIRECTORS' REMUNERATION FOR 2015****Non-executive Directors' remuneration for 2015**

	SINGLE TOTAL FIGURE OF REMUNERATION FOR NON-EXECUTIVE DIRECTORS (AUDITED)						€ THOUSAND	
	Fees		Taxable benefits[A]		Total			
	2015	2014	2015	2014	2015	2014		
Guy Elliott	197	177	–	1	197	178		
Euleen Goh [B]	190	60	–	–	190	60		
Charles O. Holliday [C]	616	207	121	15	737	222		
Gerard Kleisterlee	190	171	–	–	190	171		
Jorma Ollila [C]	315	825	82	133	397	958		
Sir Nigel Sheinwald	147	142	1	–	148	142		
Linda G. Stuntz	190	180	–	–	190	180		
Hans Wijers	219	206	–	–	219	206		
Patricia A. Woertz [B]	183	93	19	–	202	93		
Gerrit Zalm	165	153	–	–	165	153		

[A] UK regulations require the inclusion of benefits where these would be taxable in the UK, on the assumption that Directors are tax residents in the UK. On this premise, the taxable benefits include the cost of Non-executive Director's occasional business-required spouse travel. Shell also pays for travel between home and the head office in The Hague, where Board and committee meetings are typically held, as well as related hotel and subsistence costs. For consistency, these business expenses are not reported as taxable benefits as for most Non-executive Directors this is international travel and hence would not be taxable in the UK.

[B] Euleen Goh was appointed with effect from September 1, 2014. Patricia A. Woertz was appointed with effect from June 1, 2014.

[C] Jorma Ollila stood down on May 19, 2015, and was succeeded as Chairman by Charles O. Holliday. Their taxable benefits include company-provided transport (2015: €58,235 for Jorma Ollila) and the use of an apartment (2015: €93,467 for Charles O. Holliday and €18,065 for Jorma Ollila).

## ANNUAL REPORT ON REMUNERATION CONTINUED

## Executive Directors' remuneration for 2015

	SINGLE TOTAL FIGURE OF REMUNERATION FOR EXECUTIVE DIRECTORS (AUDITED)				€ THOUSAND	
	Ben van Beurden		Simon Henry			
	2015	2014	2015	2014		
Salaries	1,430	1,400	1,030	1,010		
Taxable benefits	42	35	24	32		
Total fixed remuneration	1,472	1,435	1,054	1,042		
Annual bonus [A]	3,500	3,300	2,050	1,900		
LTIP and DBP [B]	163	863	427	2,857		
Total variable remuneration	3,663	4,163	2,477	4,757		
Total direct remuneration	5,135	5,598	3,531	5,799		
Pension [C] [D]	441	10,695	428	442		
Tax equalisation [D] [E]	–	7,905	408	244		
Total remuneration including pension and tax equalisation	5,576	24,198	4,367	6,485		
in dollars	6,190	32,158	4,848	8,619		
in sterling	4,049	19,510	3,171	5,229		

[A] The full value of the bonus, comprising both the non-deferred and deferred value. For 2015, 50% is deferred into the DBP. For 2015, the market price of A and B shares on February 5, 2016 (€20.12 and £15.37 respectively), was used to determine the number of deferred bonus shares, resulting in 86,978 A shares for Ben van Beurden and 51,393 B shares for Simon Henry.

[B] Remuneration for performance periods of more than one year, comprising the value of released LTIP awards and DBP performance matching shares. The amounts reported for 2015 relate to the 2013 awards, which vested on March 1, 2016, at the market price of €21.21 and £16.39 for A and B shares respectively. The value in respect of the LTIP and DBP is calculated as the product of: the gross number of shares of the original award in the case of the LTIP plus accrued dividend shares; the vesting percentage; and the closing market price of A or B shares at the vesting date. The market price of B shares is converted into euros using the exchange rate on the respective date. The original deferred bonus share awards, which are those represented by the deferred bonus and dividend shares accrued on these shares, are not considered as long-term remuneration, as they relate to the short-term annual bonus value.

[C] The accrual for the period (net of inflation) multiplied by 20 in accordance with UK reporting regulations.

[D] As explained in the 2014 report, the pension and tax equalisation figures for Ben van Beurden for 2014 relate to his promotion to CEO and prior assignment to the UK and application of the standard policies.

[E] As Simon Henry spent over 10 years in the Netherlands, tax relief on employee and employer contributions to the Shell Overseas Contributory Pension Fund under the terms of the UK/Netherlands double tax agreement ceased on May 1, 2014. Tax equalisation of the pension contributions for Simon Henry has applied since then.

## Notes to the single total figure of remuneration for Executive Directors table (audited)

## SALARIES

As disclosed in the 2014 Directors' Remuneration Report, REMCO set Ben van Beurden's base salary and pensionable salary for 2015 at €1,430,000 (+2.1%) and Simon Henry's base salary at €1,030,000 (+2.0%) and pensionable salary at £765,000 (+2.0%), effective from January 1, 2015.

## TAXABLE BENEFITS

Executive Directors received car allowances or lease cars, transport between home and office, occasional business-required spouse travel, as well as employer contributions to life and medical insurance plans. Where appropriate, tax equalisation and relocation support policies were applied.

## ANNUAL BONUS

The business scorecard contains independent business measures grouped in three sections: operational cash flow, operational excellence and sustainable development. At the beginning of the year, REMCO sets a target range and weighting for each scorecard measure. The actual outcome for each measure results in a score of between zero and two, with a score of one representing "At target". These scores are multiplied by the respective weighting of each measure and aggregated, resulting in a mathematical scorecard outcome of between zero and two. REMCO may then make an adjustment to the overall scorecard outcome in view of the wider business performance for the year.

An Executive Director's individual performance is also taken into account in determining his annual bonus through the application of a multiplier between zero and 1.2. Individual performance is assessed against personal targets. Retrospective disclosure of detailed personal targets is inappropriate as these are deemed to be commercially sensitive.

50% of the annual bonus is deferred into shares, which are to be retained for three years.

## Determination of the 2015 annual bonus

The mathematical scorecard outcome for 2015 was 1.55. REMCO noted that, while many parts of Shell reported best-ever safety records, there were seven fatalities in 2015 and there were several process safety incidents (such as the fire at Bukom). REMCO also noted the termination of the Carmon Creek project. Consequently, it was determined that the outcome should be reduced to 1.4.

The CEO provided strong leadership both strategically and operationally. He adapted the structure and leadership of the organisation to the envisaged future with a strong focus on deep water and integrated gas, and showed visible hands-on leadership in the whole process of the BG acquisition, accelerating the benefits of the new organisation. He also significantly reduced capital investment with bold decisions such as exiting Alaska and stopping work on the Carmon Creek project in Canada.

REMCO determined an individual performance factor of 1.2 for the CEO and determined a final bonus outcome of €3,500,000.

The CFO showed strong personal leadership in managing down both capital investment and operating expenses, leading to cash flows above plan despite decreasing oil prices. He also personally managed the coordination and implementation of all M&A activities around the acquisition of BG, leading a large team of internal specialists and outside expert support to identify the deal value drivers, and working closely with the Board and its sub-committee to realise the combination accordingly.

REMCO determined an individual performance factor of 1.2 for the CFO and determined a final bonus outcome of €2,050,000.

## 2015 ANNUAL BONUS OUTCOME (AUDITED)

Measures	Weight (% of scorecard)	Target set	Result achieved	Score (0-2)	Bonus as a % of base salary			
					Ben van Beurden		Simon Henry	
					Target	Achieved	Target	Achieved
<b>Operational cash flow (\$ billion) [A]</b>	<b>30%</b>	28.0	30.7	<b>1.45</b>	<b>45%</b>	<b>65%</b>	<b>36%</b>	<b>52%</b>
<b>Operational excellence</b>	<b>50%</b>			<b>1.59</b>	<b>75%</b>	<b>119%</b>	<b>60%</b>	<b>95%</b>
Project delivery: identified projects on time and budget (%)	20%	75%	82%	1.35				
Production (kboe/d)	12%	2,814	2,954	2.00				
LNG sales (mtpa)	6%	21.9	22.6	2.00				
Refinery and chemical plant availability (%)	12%	88.5	89.3	1.39				
<b>Sustainable development</b>	<b>20%</b>			<b>1.59</b>	<b>30%</b>	<b>48%</b>	<b>24%</b>	<b>38%</b>
Total recordable case frequency (injuries/million hours)	5%	1.13	0.94	1.63				
Operational Tier 1 process safety events (number)	5%	65	51	1.93				
Volume of operational spills (thousand tonnes)	4%	1.2	0.8	1.67				
Refining Energy Intensity Index (EII™) (indexed to 2002)	4%	96.3	95.4	1.19				
Fresh water intensity (cubic metres per tonne of production) oil sands	2%	1.80	1.66	1.31				
	<b>100%</b>				<b>150%</b>		<b>120%</b>	
<b>Mathematical scorecard outcome</b>				1.55				
<b>Scorecard outcome after REMCO adjustment</b>				1.4				
<b>Final 2015 bonus [B]</b>					€3,500,000 (245%)	€2,050,000 (199%)		

[A] Excluding tax on divestments.

[B] Annual bonus = (base salary x target bonus % x scorecard result), adjusted for individual performance by a factor of 1.2.

## LONG-TERM INCENTIVE PLAN VESTING

In 2013, Ben van Beurden and Simon Henry were each granted a conditional award of performance shares under the LTIP. This award was a fixed number of shares for Ben van Beurden being a member of the Executive Committee, but not an Executive Director, at the time. For Simon Henry, this award was based on 240% of his base salary, with a maximum vesting of 480%. The terms of these awards are the same as those applying to the 2015 LTIP awards, other than hydrocarbon production growth being a relative performance measure in the 2013 award, replaced by ROACE growth with effect from the 2014 awards.

At the end of the performance period (January 1, 2013 to December 31, 2015), Shell was ranked fifth among its peer group in terms of TSR (30% weight), fourth in terms of diluted EPS growth on a current cost of supplies basis (30% weight), fifth in terms of hydrocarbon production growth (20% weight) and third in terms of growth in net cash from operating activities (20% weight). REMCO also considered the underlying financial performance of Shell and decided to vest 16% of shares under the LTIP, using no discretion, resulting in 7,670 A shares for Ben van Beurden and 17,557 B shares for Simon Henry. At vesting, these shares (including accrued dividend shares) had a value of €162,681 and €368,967 respectively. The vested shares from the LTIP are subject to a further two-year holding period.

## DEFERRED BONUS PLAN VESTING

Simon Henry was granted performance matching shares under the DBP. The performance period was January 1, 2013 to December 31, 2015. Given that the performance condition of the DBP is the same as for the 2013 LTIP, REMCO decided to vest 16% of the performance matching shares under the DBP, resulting in 2,785 B shares for Simon Henry. At vesting, these shares (including accrued dividend shares) had a value of €58,528.

## PENSION

The CEO's pension arrangements comprise a defined benefit plan with a maximum pensionable salary of €89,900, and a net pay defined contribution pension plan with an employer contribution of 24% of salary in excess of €89,900, with the option to take cash as an alternative to pension contributions (in either case subject to income tax). The CEO has elected to take his benefit in the form of contributions throughout 2015.

The CFO's pension is in the form of defined benefit plans. See further details on pension arrangements on page 97.

## ANNUAL REPORT ON REMUNERATION CONTINUED

SCHEME INTERESTS AWARDED TO EXECUTIVE DIRECTORS IN 2015 (AUDITED)				€	
Scheme interest type	Type of interest awarded	End of performance period	Target award[A]	Potential amount vesting	
				Minimum performance (% of shares awarded)[B]	Maximum performance (% of shares of the target award[A])[C]
LTIP	Performance shares	December 31, 2017	Ben van Beurden: 180,575 A shares, equivalent to 3.4 x base salary or €4,862,000. Simon Henry: 99,451 B shares, equivalent to 2.7 x base salary or €2,781,000.	0%	Maximum number of shares vesting is 200% of the number of shares awarded, equivalent to €9,724,000 for Ben van Beurden and €5,562,000 for Simon Henry.

[A] Awards based on a market price at January 30, 2015 (close of the award date), for A and B shares of €26.93 and £21.05 respectively.

[B] Minimum performance relates to the lowest level of achievement, for which no reward is given.

[C] The equivalent values exclude share price movements and accrued dividend shares.

To determine the appropriate award, REMCO considers the award value to be a market competitive reward for medium-term to long-term outperformance of the business relative to the other oil majors on measures considered key indicators of the delivery of the strategy in the medium to long term.

The measures and weightings applying to LTIP awards made in 2015 were: TSR growth (30%); diluted EPS growth on a current cost of supplies basis (30%); net cash growth from operating activities (20%); and ROACE (20%).

The LTIP will vest on the basis of the relative performance rankings as indicated in the table below.

## RELATIVE PERFORMANCE RANKINGS

Shell's rank against peers on each of the four performance measures	Number of conditional performance shares ultimately awarded, taking into account the weightings of the four performance measures
1st	2 x initial LTIP award
2nd	1.5 x initial LTIP award
3rd	0.8 x initial LTIP award
4th or 5th	Nil

If the TSR ranking is fourth or fifth, the level of the award that can vest on the basis of the three other measures will be capped at 50% of the maximum.

REMCO retains discretion to adjust the calculated vesting outcome if it believes that this is distorted by circumstances which are unrelated to performance, for example, reporting changes, ranking clustering, mathematical anomalies or corporate events in the comparator group. REMCO will consider using discretion to ensure that remuneration appropriately reflects Shell's performance and may adjust the final vesting outcome of the LTIP.

"At target" performance is equivalent to ranking positions which would, in line with the vesting schedule and TSR underpin, lead to a total of 100% vesting of the initial LTIP award. At maximum performance, 200% of the number of LTIP shares awarded will vest.

To deliver the shares under the LTIP, market-purchased shares are used rather than the issuing of new shares.

## STATEMENT OF DIRECTORS' SHAREHOLDING AND SHARE INTERESTS (AUDITED)

REMCO believes that Executive Directors should align their interests with those of shareholders by holding shares in the Company. In a business where it can take many years to reach a final investment decision on a project, and many additional years of development before a facility comes on stream, long-term shareholding properly aligns interests of Executive Directors with those of shareholders.

## Shareholding guidelines

The CEO is expected to build a shareholding with a value of 700% of base salary, and other Executive Directors 400% of base salary. Only unfettered shares count. The bonus deferred into shares under the DBP (net of tax) and the vested LTIP (subject to holding requirements) count towards the guidelines. Ben van Beurden has not yet met the required shareholding level. Simon Henry has done so. There are no shareholding guidelines for Non-executive Directors.

## EXECUTIVE DIRECTORS' SHAREHOLDING (AUDITED)

	Shareholding guideline (% of base salary)	Value of shares counting towards guideline (% of base at December 31, 2015)[A]
Ben van Beurden	700%	98%
Simon Henry	400%	822%

[A] Representing the value of Directors' share interests and the estimated after-tax value of DBP shares (not subject to performance conditions).

### Directors' scheme interests

The table below shows the aggregate position for Directors' interests under share schemes at December 31. For Ben van Beurden, these relate to awards made to him prior to being appointed a Director. These are A shares for Ben van Beurden and B shares for Simon Henry. During the period from December 31, 2015, to March 9, 2016, scheme interests have changed as a result of the vesting of the 2013 LTIP and DBP awards on March 1, 2016, and the 2016 LTIP and DBP awards made on February 5, 2016, as described on pages 93 and 94 respectively.

#### DIRECTORS' SCHEME INTERESTS (AUDITED)

	Share plan interests[A]									
	LTIP subject to performance conditions[B]		DBP not subject to performance conditions[C]		DBP subject to performance conditions[D]		PSP subject to performance conditions[E]		Total	
	2015	2014	2015	2014	2015	2014	2015	2014		
Ben van Beurden	425,817	216,062	79,839	13,087	7,025	6,544	-	30,289	512,681	265,982
Simon Henry	315,122	288,957	89,291	80,734	26,420	40,367	-	-	430,833	410,058

[A] Includes unvested long-term incentive awards and notional dividend shares accrued at December 31. Interests are shown on the basis of the original awards. The shares subject to performance conditions can vest at between 0% and 200%. Dividend shares accumulate each year on an assumed notional LTIP/DBP award. Such dividend shares are disclosed and recorded on the basis of the number of shares conditionally awarded but, when an award vests, dividend shares will be awarded only in relation to vested shares as if the vested shares were held from the award date. Shares released during the year are included in the "Directors' share interests" table.

[B] Total number of unvested LTIP shares at December 31, including dividend shares accrued on the original LTIP award.

[C] The number of shares deferred from the bonus (original DBP award) and the dividend shares accrued on these at December 31. Delivery of the original DBP award and the related accrued dividend shares is not subject to performance conditions.

[D] The target number of performance matching shares, which corresponds to the original DBP award. In accordance with the operation of the DBP until 2015, half of the shares from the bonus deferral are matchable with performance matching shares. The actual number of performance matching shares will be determined at vesting on the same basis as the LTIP vesting. DBP no longer attract matching shares with effect from 2015 awards.

[E] Total number of unvested PSP shares at December 31, including dividend shares accrued on the original award.

#### DIRECTORS' SHARE INTERESTS [A] (AUDITED)

	January 1, 2015		December 31, 2015	
	A shares	B shares	A shares	B shares
Ben van Beurden	12,289	-	28,062	-
Guy Elliott	-	5,677	-	5,777
Euleen Goh	-	-	-	5,000
Simon Henry	9,175	245,644	54,368	306,844
Charles O. Holliday	-	30,000[B]	-	50,000[B]
Gerard Kleisterlee	5,000	-	5,254	-
Jorma Ollila	25,000	-	25,000[C]	-
Sir Nigel Sheinwald	-	1,000	-	1,000
Linda G. Stuntz	-	8,400[D]	-	12,400[D]
Hans Wijers	5,251	-	5,251	-
Patricia A. Woertz	-	6,000[E]	-	6,000[E]
Gerrit Zalm	2,026	-	2,026	-

[A] Includes vested LTIP awards subject to holding conditions. Excludes unvested interests in shares awarded under the LTIP, DBP and PSP.

[B] Held as 15,000 ADSs (RDS.B ADS) at January 1, 2015, and as 25,000 ADSs (RDS.B ADS) at December 31, 2015. Each RDS.B ADS represents two B shares.

[C] Interests at May 19, 2015, when he stood down as a Director.

[D] Held as 4,200 ADSs (RDS.B ADS) at January 1, 2015 and as 6,200 ADSs (RDS.B ADS) at December 31, 2015. Each RDS.B ADS represents two B shares.

[E] Held as 3,000 ADSs (RDS.B ADS). Each RDS.B ADS represents two B shares.

### Directors' share interests

The interests (in shares of the Company or calculated equivalents) of the Directors in office during the year, including any interests of their connected persons, are set out in the "Directors' share interests" table.

There were no changes in Directors' share interests during the period from December 31, 2015, to March 9, 2016, except in the case of Ben van Beurden whose interests increased by 3,681 A shares and Simon Henry whose interests increased by 26,935 B shares, resulting from the release of the 2013 LTIP and DBP awards, which vested on March 1, 2016, Guy Elliott whose interests increased by 48 B shares, Euleen Goh whose interests increased by 7,895 B shares and Sir Nigel Sheinwald whose interests increased by 124 B shares.

At March 9, 2016, the Directors and Senior Management (pages 62-65) of the Company beneficially owned, individually and in aggregate (including shares under option), less than 1% of the total shares of each class of the Company shares outstanding.

### DILUTION

In any 10-year period, no more than 5% of the issued Ordinary share capital of the Company may be issued or issuable under executive (discretionary) share plans adopted by the Company. To date, no shareholder dilution has resulted from these plans, although it is permitted under the rules of the plans subject to these limits.

### PAYMENTS TO PAST DIRECTORS (AUDITED)

On March 1, 2016, Peter Voser's 2013 LTIP and DBP awards vested at 16%. The value at vesting of the LTIP shares was €529,720, and the value at vesting of the performance matching DBP shares was €133,241.

Payments below €5,000 are not reported as they are considered de minimis below this level.



## ANNUAL REPORT ON REMUNERATION CONTINUED

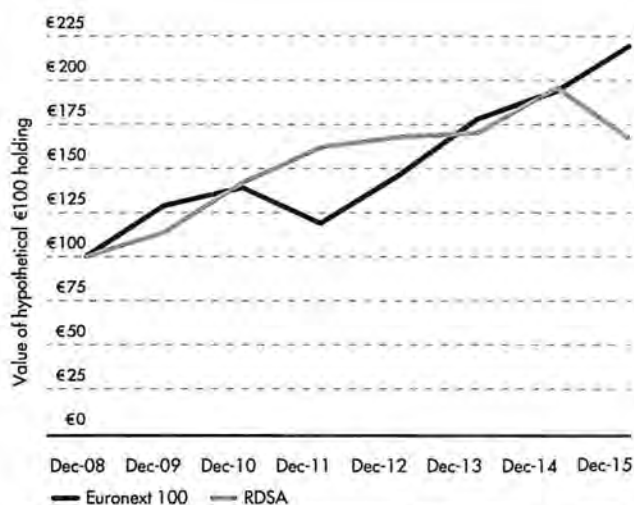
## TSR PERFORMANCE AND CEO PAY

## Performance graphs

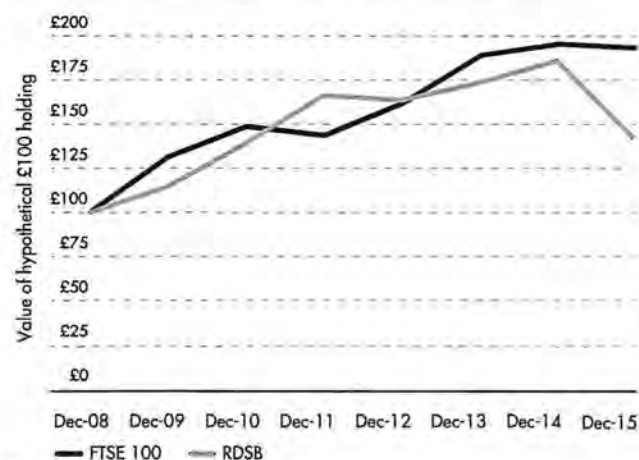
The graphs below compare the TSR performance of the Company over the past seven financial years with that of the companies comprising the Euronext 100 and the FTSE 100 share indices. The Board regards these indices as appropriate broad market equity indices for comparison, as they are the leading market indices in the Company's home markets.

**HISTORICAL TSR PERFORMANCE (RDSA)**

growth in the value of a hypothetical €100 holding over seven years  
Euronext 100 comparison based on 30 trading day average values

**HISTORICAL TSR PERFORMANCE (RDSB)**

growth in the value of a hypothetical £100 holding over seven years  
FTSE 100 comparison based on 30 trading day average values



## CEO pay outcomes

The following table sets out the single total figure of remuneration, and the annual bonus payout and long-term incentive (LTI) vesting rates compared with the respective maximum opportunity, for the CEO for the last seven years.

**CEO PAY OUTCOMES**

Year	CEO	Single total figure of remuneration (€000)	Annual bonus payout against maximum opportunity	LTI vesting rates against maximum opportunity
2015	Ben van Beurden	5,576	98%	8%
2014	Ben van Beurden	24,198	94%	49%
2013	Peter Voser	8,456	44%	30%
2012	Peter Voser	18,246	83%	88%
2011	Peter Voser	9,941	90%	30%
2010	Peter Voser	10,611	100%	75%
2009	Peter Voser	6,228	50%	0%
2009	Jeroen van der Veer	3,748	66%	0%

Peter Voser stood down on December 31, 2013, and was succeeded by Ben van Beurden. Ben van Beurden's single figure for 2014 was impacted by the increase in pension accrual calculated under the UK reporting regulations and tax equalisation as a result of his promotion and prior assignment to the UK. Jeroen van der Veer stood down on July 1, 2009, and Peter Voser took over from that date. Only remuneration relating to their position as CEO is included.

**CHANGE IN REMUNERATION OF CEO AND EMPLOYEES FROM 2014 TO 2015**

The CEO data compares the remuneration of Ben van Beurden for 2015 with 2014. The comparator group consists of local employees in the Netherlands, the UK and the USA. This is considered to be a suitable employee comparator group, because: these are countries with a significant Shell employee base; a large proportion of senior managers come from these countries; and REMCO considers remuneration levels in these countries when setting base salaries for Executive Directors.

Taxable benefits are those that align with the definition of taxable benefits applying in the respective country. In line with the "Single total figure of remuneration for Executive Directors" table, the annual bonus is included in the year in which it was earned.

**CHANGE IN REMUNERATION OF CEO AND EMPLOYEES**

	CEO	Employees
Salaries	2.1%	3.7%
Taxable benefits	18.5%	5.7%
Annual bonus	6.1%	-1.7%

## RELATIVE IMPORTANCE OF SPEND ON PAY

Distributions to shareholders by way of dividends and share buybacks and remuneration paid to or receivable by employees for the last five years are set out below, together with annual percentage changes.

Year	Dividends and share buybacks[A]		Spend on pay (all employees)[B]	
	\$ billion	Annual change	\$ billion	Annual change
2015	12.0	-18%	17.1	5%
2014	14.6	-14%	16.4	0%
2013	17.1	35%	16.4	9%
2012	12.7	9%	15.1	3%
2011	11.6	14%	14.6	4%

[A] Dividends paid, which includes the dividends settled in shares via our Scrip Dividend Programme, and repurchases of shares as reported in the "Consolidated Statement of Changes in Equity".

[B] Employee expense as reported in Note 26 to the "Consolidated Financial Statements".

Spend on pay can be compared with the major costs associated with generating income by referring to the "Consolidated Statement of Income". Over the last five years, the average spend on pay was 4% of the major costs of generating income. These costs are considered to be the sum of: purchases; production and manufacturing expenses; selling, distribution and administrative expenses; research and development; exploration; and depreciation, depletion and amortisation.

## TOTAL PENSION ENTITLEMENTS (AUDITED)

During 2015, Ben van Beurden and Simon Henry accrued retirement benefits under defined benefit plans. The pension accrued under these plans at December 31, 2015, is set out below. The exchange rates used for conversion into euros and dollars are at December 31, 2015.

ACCRUED PENSION (AUDITED)	THOUSAND		
	Local	€	\$
Ben van Beurden	€1,174	€1,174	\$1,282
Simon Henry	£472	€641	\$700

The age at which Ben van Beurden and Simon Henry can receive any pension benefit without actuarial reduction is 67 and 60 respectively. Any pension benefits on early retirement are reduced using actuarial factors to reflect early payment. No payments were made in 2015 regarding early retirement or in lieu of retirement benefits.

### Ben van Beurden

Ben van Beurden is a member of the "Stichting Shell Pensioen Fonds", the pension plan for Shell employees in the Netherlands who joined before July 2013 that provides benefits in defined benefit form. Ben van Beurden is also a member of the Shell net defined contribution pension plan in the Netherlands with effect from January 1, 2015.

### Simon Henry

Simon Henry is a member of the Shell Overseas Contributory Pension Fund (SOCPF) and the Shell Contributory Pension Fund (SCPF), with both these funded pension plans providing benefits in defined benefit form. The SOCPF provides benefits in respect of his periods of employment outside the UK, while the SCPF provides benefits in respect of his periods of employment in the UK. Simon Henry has elected to have his benefits from the SCPF restricted to the UK lifetime allowance with any excess provided from an unfunded arrangement, the Shell Supplementary Pension Plan.

## EXTERNAL APPOINTMENTS

The Board considers external appointments to be valuable in broadening Executive Directors' knowledge and experience. The number of outside directorships is generally limited to one. The Board must explicitly approve such appointments. Executive Directors are allowed to retain any cash or share-based compensation they receive from such external board directorships.

Simon Henry was appointed a Non-executive Director of Lloyds Banking Group plc with effect from June 2014. His fee in 2015 was £105,000.

## STATEMENT OF VOTING AT 2015 AGM

The Company's 2015 AGM was held on May 19, 2015, in the Netherlands. The results of the polls in respect of Directors' remuneration were as follows:

APPROVAL OF DIRECTORS' REMUNERATION REPORT		
Votes	Number	Percentage
For	3,298,794,355	96.16%
Against	131,759,717	3.84%
Total cast	3,430,554,072[A]	100.00%
Withheld [B]	44,251,500	

[A] Representing 54.15% of issued share capital.

[B] A vote "withheld" is not a vote under English law and is not counted in the calculation of the proportion of the votes "for" and "against" a resolution.

The results of the polls in respect of the Directors' Remuneration Policy approved at the 2014 AGM were as follows:

APPROVAL OF DIRECTORS' REMUNERATION POLICY		
Votes	Number	Percentage
For	3,167,299,751	92.90%
Against	242,225,203	7.10%
Total cast	3,409,524,954[A]	100.00%
Withheld [B]	63,756,314	

[A] Representing 53.47% of issued share capital.

[B] A vote "withheld" is not a vote under English law and is not counted in the calculation of the proportion of the votes "for" and "against" a resolution.

## DIRECTORS' CONTRACTS AND LETTERS OF APPOINTMENT

Executive Directors have employment contracts for an indefinite period. Non-executive Directors, including the Chairman, do not have an employment contract but letters of appointment. Details of Executive Directors' employment contracts can be found in the Directors' Remuneration Policy on page 104. Further details of Non-executive Director terms of appointment can be found in the "Directors' Report" on page 67 and the "Corporate governance" report on page 70.

## COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT

During the year ended December 31, 2015, Shell paid and/or accrued compensation totalling \$44 million (2014: \$71 million) to Directors and Senior Management for services in all capacities while serving as a Director or member of Senior Management, including \$4 million (2014: \$4 million) accrued to provide pension, retirement and similar benefits. The total for 2014 includes costs incurred in respect of additional employee levies in the Netherlands and termination and related amounts. The amounts stated are those recognised in Shell's income on an IFRS basis. Personal loans or guarantees were not provided to Directors or Senior Management. See Note 27 to the "Consolidated Financial Statements".

## DIRECTORS' REMUNERATION POLICY

This section describes the Directors' Remuneration Policy as published in the 2013 Directors' Remuneration Report which, following shareholder approval at the 2014 AGM, is effective from January 1, 2015, and will remain effective until the 2017 AGM, unless a further policy is proposed by the Company and approved by shareholders in the meantime.

### EXECUTIVE DIRECTORS

EXECUTIVE DIRECTORS' REMUNERATION POLICY TABLE			
Element	Purpose and link to strategy	Maximum opportunity	Operation and performance measurement
Base salary and pensionable base salary	<p>Rewards day-to-day leadership and strategic direction.</p> <p>Competitively positioned recognising the scope and complexity of the role to attract and retain Executive Directors.</p>	<p>As it is required to state a maximum base salary, we have set a maximum of €2,000,000, for both base salary and pensionable base salary, in the context of current peer group base salary levels. Within this limit, increases will be assessed annually based on suitable competitive pay positioning.</p>	<p>Base salary and pensionable base salary are reviewed annually with salary adjustments effective from January 1 each year.</p> <p>In making salary determinations, the Remuneration Committee (REMCO) will consider:</p> <ul style="list-style-type: none"> <li>■ the market positioning of the Executive Directors' compensation packages;</li> <li>■ the different tenure and experience each Executive Director has in their role;</li> <li>■ changes in the scope and responsibility of the Executive Director's role;</li> <li>■ the planned average salary increase for other employees across three major countries – the Netherlands, the UK and the USA;</li> <li>■ the impact of salary increases on pension benefits and other elements of the package; and</li> <li>■ Shell's performance and the Executive Directors' individual performance.</li> </ul>
Benefits	<p>Provides market-competitive benefits in order to attract and retain international candidates for the Executive Director roles, enabling them to focus on delivering performance.</p>	<p>The maximum opportunity is the cost to the Company of providing the relevant benefit as specified in the relevant local or global Company policies. These costs can vary.</p>	<p>Benefits that Executive Directors typically receive include car allowances and transport to and from home and office, risk benefits (for example ill-health, disability or death-in-service), as well as employer contributions to insurance plans (such as medical). Precise benefits will depend on the Executive Director's specific circumstances such as nationality, country of residence, length of service, and family status. Mobility policies for relocation and children's education may apply, as may tax equalisation related to expatriate employment prior to Board appointment, or in other limited circumstances to offset double taxation. REMCO may adjust the range and scope of the benefits offered in the context of developments in relevant countries.</p> <p>In relation to the maximum opportunity, and by way of example, maximum relocation and tax equalisation settlement benefits will be the grossed-up cost of meeting the specific Executive Director's actual liability incurred as a result of appointment and any associated relocation, and will depend on a variety of factors such as length of service, salary increase on appointment and the tax regime in place at the time.</p>

**EXECUTIVE DIRECTORS' REMUNERATION POLICY TABLE (CONTINUED)**

Element	Purpose and link to strategy	Maximum opportunity	Operation and performance measurement
<p><b>Annual bonus and Deferred Bonus Plan (DBP)</b></p>	<p>Rewards performance against a scorecard of short-term strategic targets and individual achievement.</p> <p>To reinforce alignment with shareholder interests, 50% is deferred and the other 50% is delivered in cash. The deferred bonus is released in the form of shares after a deferral period of three years, as well as dividend shares accrued over the deferral period. Apart from dividend shares, no additional DBP shares are awarded.</p>	<p>Target levels (as a percentage of base salary):</p> <ul style="list-style-type: none"> <li>■ Chief Executive Officer: 150%</li> <li>■ Other Executive Directors: 120%</li> </ul> <p>Maximum bonus (as a percentage of base salary):</p> <ul style="list-style-type: none"> <li>■ Chief Executive Officer: 250%</li> <li>■ Other Executive Directors: 240%</li> </ul>	<ul style="list-style-type: none"> <li>■ The bonus is determined by reference to performance from January 1 to December 31 each year.</li> <li>■ Annual bonus = base salary x target bonus % x scorecard result (0–2); adjusted for individual performance with a 0–1.2 multiplier.</li> <li>■ Taking the Shell Business Plan into consideration, each year the Board agrees the scorecard targets and weightings which support the delivery of the strategy. Measures are related to financial performance, operational excellence and sustainable development. Indicative weightings are 30%, 50% and 20% respectively. REMCO retains the ability to adjust performance measure targets and weightings year by year within the overall target and maximum payouts approved in the policy. Additionally, stretching individual targets are set.</li> <li>■ Scorecard targets will be disclosed retrospectively, with the timing of any disclosure dependent on the commercial sensitivity of the target.</li> <li>■ Individual performance is reflected by adjusting the bonus outcome. Upward adjustment is capped at 20% and subject to the overall maximum bonus cap. There is no limit to downward adjustment.</li> <li>■ For the portion of the bonus deferred into shares, additional shares may be released representing the value of dividends payable on the vested shares, as if these had been owned from award date ("dividend shares").</li> <li>■ The annual bonus and DBP have malus and clawback provisions.</li> <li>■ There are no prescribed thresholds or minimum levels of performance that equate to a prescribed payment under the policy and this structure can result in no bonus payment being made.</li> </ul>
<p><b>Long-term Incentive Plan (LTIP)</b></p>	<p>Rewards medium- to long-term outperformance of the business relative to other oil majors on measures which are selected because they are seen as key outcomes of the delivery of the strategy.</p>	<p>Awards may be made up to a value of 400% of base salary.</p> <p>Awards may vest at up to 200% of the shares originally awarded, plus dividends.</p>	<ul style="list-style-type: none"> <li>■ Award levels are determined annually by REMCO and are set within the maximum approved in the policy.</li> <li>■ Awards may vest on the basis described in the notes below, between 0% and 200% of the initial award level depending on Shell's performance against a comparator group.</li> <li>■ Although it is possible for no LTIP shares to vest, on current measures and weightings, 16% of the initial LTIP award would vest if there was a positive vesting outcome in respect of the lowest-weighted measure.</li> <li>■ Performance is assessed over a three-year period based on relative growth of the following: total shareholder return (TSR)(30%), earnings per share (EPS) on a current cost of supplies basis (30%), return on average capital employed (ROACE)(20%) and net cash from operating activities (20%). Each measure can vest independently, but if the TSR measure does not result in vesting, then the total vesting level will be capped at 50% of the maximum payout.</li> <li>■ REMCO may adjust or change the LTIP measures, targets and weightings to ensure continued alignment with Shell's strategy.</li> <li>■ Additional shares are released representing the value of dividends payable on the vested shares, as if these had been owned from the award date.</li> <li>■ Following payment of taxes, vested shares from LTIP awards must be held for a further two years to align with the strategic focus.</li> <li>■ LTIP shares are subject to malus and clawback.</li> </ul>

## DIRECTORS' REMUNERATION POLICY CONTINUED

### EXECUTIVE DIRECTORS' REMUNERATION POLICY TABLE (CONTINUED)

Element	Purpose and link to strategy	Maximum opportunity	Operation and performance measurement
Pensions	<p>Provides a competitive retirement provision in line with the individual's base country benefits policy, to attract and retain Executive Directors.</p> <p>Pensions provide a stable income after Shell employment, allowing Executive Directors to focus on delivering performance.</p>	<p>By reference to pensionable base salary, pension accrual and contribution rates and other pensionable elements, as determined by the rules of the base country pension plan of which the Executive Director is a member.</p>	<p>Executive Directors' retirement benefits are maintained in their base country pension arrangements. Only base salary is pensionable, unless country plan regulations specify otherwise. The rules of the relevant plans detail the pension benefits which members can receive on retirement (including on ill-health), death or leaving service. REMCO retains the right to amend the form of any Executive Director's pension arrangements in response to changes in legislation, so as to ensure that the original objective of this element of remuneration is preserved.</p> <p>Pensionable base salaries are reviewed annually. For Executive Directors employed outside of their base country, euro base salaries are translated into their home currencies for pension plan purposes. Once their salaries are denominated in base country currency, they are maintained in line with euro base salary increases taking into account exchange rate fluctuations and other factors as determined by REMCO.</p>
Shareholding	Aligns interests of Executive Directors with those of shareholders.	<p>Shareholding (% of base salary):</p> <ul style="list-style-type: none"> <li>■ Chief Executive Officer: 700%</li> <li>■ Other Executive Directors: 400%</li> </ul>	Executive Directors are expected to build up their shareholding to the required level over a period of five years from appointment and, once reached, to maintain this level for the full period of their appointment. The intention is for the shareholding guideline to be reached through retention of vested shares from share plans. REMCO will monitor individual progress and retains the ability to adjust the guideline in special circumstances on an individual basis.

### Notes to the Executive Directors' remuneration policy table

#### BENEFITS

Executive Directors are eligible to receive the standard benefits and allowances provided to employees in their country of employment. Personal loans or guarantees are not provided to Executive Directors. Those working outside of their base country are also eligible to receive specific benefits such as relocation support and school fees, consistent with Shell's mobility policies. Tax gross-up/tax equalisation may also apply in limited circumstances to offset double taxation. Where the Executive Director was on an international assignment prior to board appointment, there may be payments on behalf of the Executive Director in subsequent years in the form of tax equalisation settlements. Post-retirement benefits may be applicable in certain countries.

Apart from the benefits described above, Executive Directors and Senior Management have access to a chauffeured car, the provision of home security, and occasional business-required spouse travel, which are generally considered legitimate business expenses rather than components of remuneration. Where these would be taxable in the UK, their values are included as taxable benefits in the single total figure of remuneration table.

#### ANNUAL BONUS AND DEFERRED BONUS PLAN

REMCO uses the annual bonus to focus on short-term scorecard targets that the Board agrees each year as part of Shell's Business Plan, and on individual performance against personal targets. Shell considers upfront disclosure of these targets in a meaningful manner to be commercially sensitive. The scorecard targets will be retrospectively disclosed in a future Directors' Remuneration Report, when no longer deemed to be commercially sensitive.

A scorecard with financial performance, operational excellence and sustainable development targets represents the link to business results. For 2015, the scorecard measures will consist of cash flow (30% weight), operational excellence (50% weight) and sustainable development (20% weight). Annual targets and weightings for each metric are set and approved by REMCO each year. The scorecard targets are stretching but realistic.

### 2015 ANNUAL BONUS SCORECARD MEASURES FOR EXECUTIVE DIRECTORS

30% weight	50% weight
<p><b>Cash flow</b> Cash generated from operations that factors in the impact of commodity price fluctuations as well as business performance so that the Executive Directors, like shareholders, share the effects of both.</p>	<p><b>Operational excellence</b></p> <ul style="list-style-type: none"> <li>■ Project delivery: indicator of Shell's ability to deliver projects on-stream, on time, and on budget.</li> <li>■ Upstream and Downstream indicators of the full and effective use of resources – both facilities and people.</li> </ul>
<p><b>20% weight</b></p> <p><b>Sustainable development</b> Equally weighted indicators of safety and environmental performance.</p>	

For years following 2015, the framework for the annual bonus scorecard, including metrics and weightings, will be reviewed and determined by REMCO and can be adjusted accordingly.

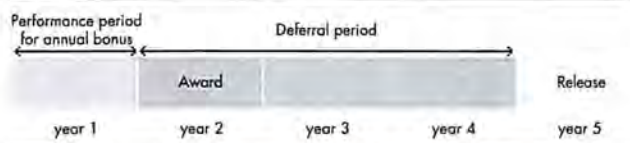
Performance is assessed over each calendar year. The outcome is usually known early in the following year, and REMCO translates this into a score of between zero and two. REMCO retains the right to exercise its judgement to adjust the mathematical bonus scorecard outcome to ensure that the final bonus scorecard outcome for Executive Directors reflects other aspects of Shell's performance which REMCO deems appropriate for the reported year.

REMCO strengthens the Executive Directors' individual accountability by increasing or decreasing their annual bonuses to take account of how well they have delivered against their individual performance targets. These targets typically relate to qualitative differentiators not already covered by the scorecard; for example, stakeholder management, portfolio development, organisational leadership and brand value. A positive individual adjustment corresponds with personal impact beyond expectations, and a negative adjustment would mean expectations were not completely met. Upward adjustment for individual performance is

capped at a multiple of 1.2 of the bonus, subject to the overall bonus maximum. There is no limit to the downward adjustment.

To reinforce alignment with shareholder interests, 50% of the annual bonus is deferred into the DBP and the other 50% is delivered in cash. The deferred bonus is released in the form of shares after a deferral period of three years along with dividend shares accrued over the deferral period.

**TIMELINE FOR DEFERRED BONUS PLAN**



**LONG-TERM INCENTIVE PLAN**

The LTIP focuses on performance relative to other oil majors.

To recognise the removal of the performance matching shares from the DBP, REMCO currently envisages 2015 LTIP awards will have a target value of 340% and 270% of base salary for the Chief Executive Officer and other Executive Directors respectively. This is within the policy limit which allows REMCO to make awards up to 400% of base salary.

The LTIP grants share-based awards which may vest by reference to Shell's performance against predefined measures over a three-year performance period. For 2015, these measures will consist of TSR, EPS growth on a current cost of supplies (CCS) basis, ROACE growth and net cash growth from operating activities. REMCO will regularly review the performance metrics and weightings. REMCO retains the right to adjust the metrics and/or weightings, so as to ensure that the LTIP continues to serve its intended purpose.

**2015 LONG-TERM INCENTIVE MEASURES FOR EXECUTIVE DIRECTORS**

<b>30% weight</b>	<b>20% weight</b>
<b>TSR</b> Assessment of actual wealth created for shareholders.	<b>Return on average capital employed (ROACE) growth</b> Indicator of capital discipline.
<b>30% weight</b>	<b>20% weight</b>
<b>EPS growth (on a CCS basis) [A]</b> Indicator of the quality of revenue growth and cost management that underpins TSR.	<b>Net cash growth from operating activities</b> Source of dividends and capital expenditure commitments which support sustainable growth based on portfolio and cost management.

[A] Earnings per share on a CCS basis takes into account the changes in the cost of supplies and thereby enables a consistent comparison with other oil majors.

For simplicity, we measure and rank growth based on the data points at the beginning of the three-year performance period relative to the data points at the end of the period, using publicly reported data.

When comparing performance against four peer companies, the relative performance ranking is as indicated in the table below. The LTIP comparator group currently consists of BP, Chevron, ExxonMobil and Total. REMCO retains the right to adjust the comparator group, to ensure that it remains appropriate. If this leads to a change in the number of companies,

the ranking framework (as set out below) may be adjusted to ensure that the LTIP continues to meet its intended purpose and level of challenge.

**RELATIVE PERFORMANCE RANKINGS**

Shell's rank against peers on each of the four performance measures	Number of conditional performance shares ultimately awarded, taking into account the weightings of the four performance measures
1st	2 x initial LTIP award
2nd	1.5 x initial LTIP award
3rd	0.8 x initial LTIP award
4th or 5th	Nil

**TSR underpin**

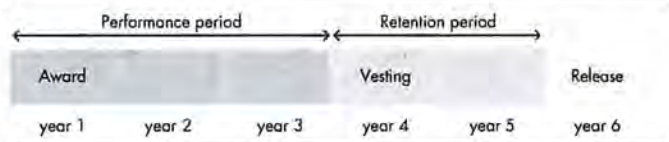
If the TSR ranking is fourth or fifth, the level of the award that can vest on the basis of the three other measures will be capped at 50% of the maximum payout for the LTIP.

**Vesting**

REMCO retains discretion to adjust the calculated vesting outcome if it believes that this is distorted by circumstances which are unrelated to performance, for example, reporting changes, ranking clustering, mathematical anomalies or corporate events in the comparator group. Upward adjustment would only be considered after consultation with major shareholders. An explanation of any such adjustment would be set out in the relevant Directors' Remuneration Report.

Performance is assessed over a three-year period. Vested shares from the LTIP are subject to a further two-year holding period post-vesting.

**TIMELINE FOR LTIP SHARE AWARDS**



**TREATMENT OF OUTSTANDING AWARDS**

Incentive awards granted prior to the approval and implementation of this policy and/or prior to an individual becoming an Executive Director will continue to vest and be delivered in accordance with the terms of the original award even if this is not consistent with the terms of this policy.

At March 12, 2014, this applies to Executive Directors Ben van Beurden and Simon Henry, and to former Directors Peter Voser, Malcolm Brinded and Jeroen van der Veer. Jeroen van der Veer and Peter Voser have share options which can be exercised until May 6, 2014, and November 4, 2014, respectively. Ben van Beurden has outstanding awards under the Performance Share Plan (PSP), LTIP and DBP. Simon Henry, Peter Voser and Malcolm Brinded have outstanding awards under the LTIP and DBP. Some PSP performance measures and their relative weightings differ from those applicable to the LTIP and DBP. In line with the terms of the DBP awards granted between 2012 and 2014, performance matching shares may vest.

**PENSIONS**

Executive Directors' pensions are maintained in their base country, as are those of other employees working internationally.

Pension accruals are determined by the plan rules of the base country pension plan of which the Executive Director is a member. These are not subject to performance conditions.

## DIRECTORS' REMUNERATION POLICY CONTINUED

### SHAREHOLDING

The Chief Executive Officer is expected to build up a shareholding of seven times his base salary over five years from appointment. Other Executive Directors are expected to build up a shareholding of four times their base salary over the same period. In the event of an increase to the guideline multiple of salary, for every additional multiple of salary required, the director will have one extra year to reach the increased guideline, subject to a maximum of five years from the date of the change.

The shareholding levels are expected to be achieved through retention of vested LTIP and DBP shares. Executive Directors are expected to maintain the shareholding level for the full period of their appointment.

### Differences for Executive Directors from other employees

The salary for each Executive Director is determined based on the indicators in the "Executive Directors' remuneration policy table", which reflect the international nature of the Executive Directors' labour market. The salary for other employees is normally set on a country basis.

Executive Directors are eligible to receive the standard benefits and allowances provided to staff in their country of employment. The provisions which are not generally available for other employees are described in the second paragraph of "Benefits".

The methodology used for determining the annual bonus for Executive Directors is broadly consistent with the approach to determining annual bonuses for Shell employees generally. However, the scorecard used for the majority of Shell staff differs in the make-up and weighting of the metrics used. Like Executive Directors, members of Senior Management are required to defer part of their annual bonus in DBP shares.

Executive Directors are not eligible to receive new awards under other employee share plans although awards previously granted will continue to vest in accordance with the terms of the original award. Selected employees participate in the PSP. The operation of the PSP is similar to the LTIP, but currently differs, for example, in some performance measures and their relative weightings.

There are no special pension arrangements exclusive to Executive Directors.

### Illustration of potential remuneration outcomes

The scenario charts below represent estimates under three scenarios ("Minimum", "At target", and "Maximum") of the potential remuneration

outcomes for each Executive Director resulting from the application of 2014 base salaries to awards, anticipated to be made in 2015 in accordance with the policy.

The scenario charts are based on future policy award levels effective January 1, 2015, combined with projected single total figures of remuneration for Ben van Beurden and Simon Henry. The pay scenarios are forward-looking and only serve to illustrate the future policy. The scenarios are based on current incumbents and thus depict the Chief Executive Officer (CEO) and Chief Financial Officer (CFO) roles.

These scenarios have been prepared on the following basis:

### FIXED PAY

In all three scenarios fixed pay includes base salaries effective January 1, 2014, as no determinations have yet been made as to any 2015 salary increase. As the new Chief Executive Officer is not included in the table showing the 2012 and 2013 single total figure of remuneration for Executive Directors, Ben van Beurden's benefits and pension values are estimates for a typical year. For the Chief Financial Officer pay scenarios, benefits and pension have been valued as per the values included in that table.

### ANNUAL INCENTIVE

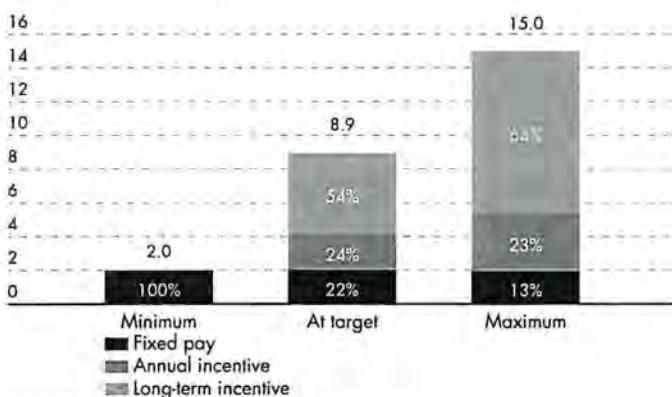
The "Minimum" scenario assumes that Shell's performance is such that no bonus is payable. The "At target" scenario assumes Shell's performance results in a bonus equal to the target bonus of 150% of base salary for the Chief Executive Officer and 120% for the Chief Financial Officer. The "Maximum" scenario assumes Shell's performance results in the maximum bonus payment of 250% of base salary for the Chief Executive Officer and 240% for the Chief Financial Officer. For the portion of the bonus deferred in DBP shares, the scenarios assume no share price movement and exclude dividend accrual, although dividend accrual during the deferral period is a feature of the DBP.

### LONG-TERM INCENTIVE

The "Minimum" scenario assumes that no LTIP awards vest. The "At target" scenario assumes the LTIP awards vest at target performance. For 2015, the target LTIP awards are illustrated as 340% of base salary for the Chief Executive Officer and 270% for the Chief Financial Officer. The "Maximum" scenario for both assumes that the LTIP awards vest at the maximum, which for the 2015 awards is 200% of the shares originally awarded. The scenarios assume no share price movement and exclude dividend accrual, although dividend accrual during the performance period is a feature of the LTIP.

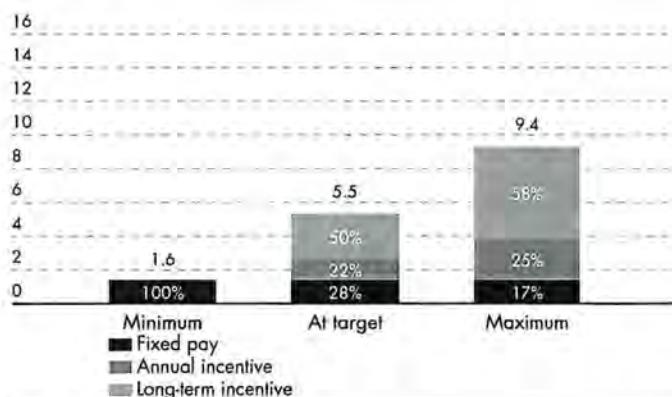
### CEO PAY SCENARIOS

€ million



### CFO PAY SCENARIOS

€ million



NON-EXECUTIVE DIRECTORS

NON-EXECUTIVE DIRECTORS' REMUNERATION POLICY TABLE		
Fee structure	Approach to setting fees	Other remuneration
<p>Non-executive Directors (NEDs) receive a fixed annual fee for their directorship. The size of the fee will differ based on the position on the Board: Chairman of the Board fee or standard Non-executive Director fee.</p> <p>Additional annual fee(s) are payable to any director who serves as Senior Independent Director, a Board committee chairman, or a Board committee member.</p> <p>A NED receives either a chairman or member fee for each committee. This means that a chairman of a committee does not receive both fees.</p> <p>NEDs receive an additional fee of €5,000 for any Board meeting involving intercontinental travel – except for one meeting a year held in a location other than The Hague.</p>	<p>The Chairman's fee is determined by REMCO. The Board determines the fees payable to NEDs. The maximum aggregate annual fees will be within the limit specified by the Articles of Association and in accordance with the NEDs' responsibilities and time commitments.</p> <p>The Board reviews NED fees periodically to ensure that they are aligned with those of other major listed companies.</p>	<p>Business expenses incurred in respect of the performance of their duties as a NED will be paid or reimbursed by Shell. Such expenses could include transport between home and office and occasional business-required spouse travel. Where required, the Chairman is offered Shell-provided accommodation in The Hague. REMCO has the discretion to offer other benefits to the Chairman as appropriate to his circumstances. Where business expenses or benefits create a personal tax liability to the director, Shell may cover the associated tax.</p> <p>The Chairman and the other NEDs cannot receive awards under any incentive or performance-based remuneration plans, and personal loans or guarantees are not granted to them.</p> <p>NEDs do not accrue any retirement benefits as a result of their non-executive directorships with Shell.</p>

**MALUS AND CLAWBACK**

Incentive awards may be made subject to adjustment events. At the discretion of REMCO, such an award may be adjusted before delivery (malus) or reclaimed after delivery (clawback) if an adjustment event occurs. Adjustment events will be specified in incentive award documentation and it is intended that they will, for example, relate to restatement of financial results due to: non-compliance with a financial reporting requirement; or misconduct by an Executive Director or misconduct through his direction or non-direction. REMCO retains the right to alter the list of adjustment events in respect of future awards.

In addition, REMCO will retain discretion in assuring itself that there is satisfactory underlying performance before releasing any variable pay to Executive Directors and may withhold all or some of the bonus or shares awarded if it considers that the underlying performance (financial, environmental, safety or other) of Shell is inadequate.

**RECRUITMENT**

**Executive Directors**

REMCO determines the remuneration package for a new Executive Director appointment. This appointment may involve external or internal recruitment or reflect a change in role of a current Executive Director. The remuneration package will include: salary, benefits, annual bonus, long-term incentives and pension benefits. If considered appropriate, it may also include compensation for the forfeiture of awards or other entitlements from a previous employer as well as recruitment incentives.

When determining remuneration packages for new Executive Directors, REMCO will seek a balanced outcome which allows Shell to:

- attract and motivate candidates of the right quality;
- take into account the individual's current remuneration package and other contractual entitlements;
- seek a competitive pay position relative to our comparator group, without overpaying;
- provide an incentive to join Shell and encourage relocation if required; and
- honour entitlements (for example, variable remuneration) of internal candidates before their promotion to the Board.

REMCO will follow the approach set out below when determining the remuneration package for a new Executive Director.

**ONGOING REMUNERATION**

The salary, benefits, annual bonus, long-term incentives and pension benefits will be positioned and delivered within the framework of the Executive Directors' remuneration policy and its stated maximum award and vesting levels.

**COMPENSATION FOR THE FORFEIT OF ANY AWARDS UNDER VARIABLE REMUNERATION ARRANGEMENTS**

To facilitate external recruitment, one-off compensation in consideration for forfeited awards under variable remuneration arrangements entered into with a previous employer may be required in addition to the ongoing annual remuneration package. REMCO will use its judgement to determine the appropriate level of compensation by matching the value of any lost awards under variable remuneration arrangements with the candidate's previous employer. This compensation may take the form of a one-off cash payment or an additional award under the LTIP. The compensation can alternatively be based on a newly created long-term incentive plan arrangement where the only participant is the new director. The maximum for any such award is an amount equal to the value of the forfeited variable remuneration awards, as assessed by REMCO. Consideration will be given to appropriate performance conditions and clawback arrangements.

**REPLACEMENT OF FORFEITED ENTITLEMENTS OTHER THAN VARIABLE REMUNERATION**

There may also be a need to compensate a new Executive Director in respect of forfeited entitlements other than variable remuneration. This could include, for example, pension or contractual entitlements, or other benefits. On recruitment, these entitlements may be replicated within the Executive Directors' remuneration policy or valued by REMCO and compensated in cash. In cases of internal promotion to the Board, any commitments made which cannot be effectively replaced under the policy may, at REMCO's discretion, continue to be honoured.



## DIRECTORS' REMUNERATION POLICY CONTINUED

### EXCEPTIONAL RECRUITMENT INCENTIVE

Apart from the ongoing annual package and any compensation in respect of the replacement of forfeited entitlements, there may be circumstances in which REMCO needs to offer a one-off recruitment incentive to ensure the right external candidate is attracted. The necessity and level of this incentive will depend on the individual's circumstances.

The maximum available for this incentive would be one times the LTIP award level, subject to the limits set out in the "Executive Directors' remuneration policy table".

### Non-executive Directors

REMCO's approach to setting the remuneration package for NEDs is to offer fee levels and specific benefits (where appropriate) in line with the "Non-executive Directors' remuneration policy table" and subject to the Articles of Association. NEDs are not offered variable remuneration or retention awards.

When determining the benefits for a new Chairman, the individual circumstances of the future Chairman will be taken into account.

### SERVICE CONTRACTS

Executive Directors have employment contracts for an indefinite period. Non-executive Directors, including the Chairman, do not have an employment contract but letters of appointment. Executive Directors' employment contracts and NEDs' letters of appointment are available for inspection at the Annual General Meeting (AGM) or on request. For further details on appointment and re-appointment of Directors, refer to the "Directors' Report".

### END OF EMPLOYMENT

#### Executive Directors

##### NOTICE PERIODS

Executive Directors' employment contracts are governed by Dutch employment law. This choice was made because mandatory provisions of Dutch employment law apply even if a foreign law has been specified to govern a contract. Employment terms are consistent with those of other Shell staff with Dutch employment contracts. The contracts can end by notice of either party (one month for an employee and up to a maximum of four months for the employer) or automatically at retirement. Under Dutch law, termination payments are not linked to the contract's notice period.

##### OUTSTANDING ENTITLEMENTS

In cases of resignation or dismissal, fixed remuneration (base salary, benefits, and employer pension contributions) will cease on the last day of employment, variable remuneration elements will generally lapse and the director is not eligible for loss-of-office compensation.

The information below generally applies to termination of employment by Shell giving notice, by mutual agreement, or in situations where the employment terminates because of retirement with Shell consent at a date other than the normal retirement date, redundancy or in other similar circumstances at REMCO's discretion.

For Executive Directors appointed prior to 2011, REMCO may offer compensation for losses resulting from termination of employment of up to one times annual pay (base salary plus target bonus). For Executive

Directors appointed from 2011 onwards, the employment contracts include a cap on any payments resulting from loss of employment of one times annual pay (base salary plus target bonus) and include a reference to the Executive Directors' duty to seek alternative employment and thereby mitigate their loss. For mitigation purposes, the delivery of compensation for loss of office payments could be phased. This level of termination payments was part of a number of policy changes agreed with shareholders in 2010, and seeks to balance governance expectations and end-of-employment practice in the Netherlands.

REMCO may adjust the termination payment for any situation where a full payment is inappropriate, taking into consideration applicable law, corporate governance provisions and the best interests of the Company and shareholders as a whole.

Base salary, benefits and employer pension contributions will cease to accrue on the last day of employment. Any annual bonus in the year of departure is prorated for service. Dependant on the timing of the departure, REMCO may in determining the final bonus payment consider the latest business scorecard position or defer payment until the full-year scorecard result is known. Outstanding long-term incentive awards will generally survive the end of employment and will remain subject to the same vesting performance conditions, and malus and clawback provisions, as if the director had remained in employment. If the participant dies before the end of the performance period, the award will vest at the target level on the date of death. In case of death after the end of the performance period, the award will continue to vest as described by this Directors' Remuneration Policy.

Because DBP shares represent the bonus which a participant has already earned and carry no further performance conditions, DBP shares will be released at the conclusion of the normal three-year deferral period and no proration will apply.

LTIP shares awarded from 2015 onwards will be prorated on a monthly basis, by reference to the Director's service within the performance period. Outstanding LTIP awards made before 2015 are prorated on an annual basis. The prorated awards may vest subject to the satisfaction of performance conditions.

### Non-executive Directors

No payments for loss of office will be made to NEDs.

### CONSIDERATION OF OVERALL PAY AND EMPLOYMENT CONDITIONS

When setting the remuneration policy for Directors' remuneration, no specific employee groups were consulted nor were any remuneration comparison measurements used to compare overall pay and employment conditions of all Shell employees with those of the Directors. However, pay and employment conditions of the wider Shell employee population were taken into account by adhering to the same performance, rewards and benefits philosophy for the Directors, as well as overall benchmarking principles. Furthermore, any potential differences from other employees (see "Differences for Executive Directors from other employees") were taken into account when providing REMCO with advice in the formation of this Directors' Remuneration Policy. Dialogue between management and staff is important, with the annual Shell People Survey being one of the principal means of gathering employee views on a range of matters.

The Shell People Survey includes questions inviting employees' views on their pay and benefit arrangements.

REMCO is kept informed by the Chief Executive Officer, the Chief Human Resources & Corporate Officer and the Executive Vice President Remuneration, Benefits & Services on the Group Scorecard and any relevant remuneration matters affecting Senior Management and other senior executives, extending to multiple levels below the Board.

#### CONSIDERATION OF SHAREHOLDER VIEWS

REMCO engages with major shareholders on a regular basis throughout the year and this allows it to test proposals when developing the Directors' Remuneration Policy. Specific examples of REMCO responding to shareholder views include the increase to the shareholding guidelines, the update to the LTIP performance conditions to include a relative ROACE growth measure, and the removal of matching share awards from the DBP.

#### ADDITIONAL POLICY STATEMENT

REMCO reserves the right to make payments outside the policy in limited exceptional circumstances, such as for regulatory, tax or administrative purposes or to take account of a change in legislation or exchange controls, and only where REMCO considers such payments are necessary to give effect to the intent of the policy.

Signed on behalf of the Board

/s/ Michiel Brandjes

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Michiel Brandjes  
Company Secretary  
March 9, 2016

# FINANCIAL STATEMENTS AND SUPPLEMENTS

## INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC

### REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

#### Our opinion

In our opinion, the Consolidated Financial Statements of Royal Dutch Shell plc (the Company) and its subsidiaries (collectively Shell):

- give a true and fair view of the state of Shell's affairs as at December 31, 2015, and of its income and cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006 and Article 4 of the IAS Regulation.

#### Separate opinion in relation to IFRS as issued by the International Accounting Standards Board (IASB)

As explained in Note 1 to the Consolidated Financial Statements, Shell, in addition to complying with its legal obligation to apply IFRS as adopted by the European Union, has also applied IFRS as issued by the IASB.

In our opinion, the Consolidated Financial Statements comply with IFRS as issued by the IASB.

#### What we have audited

The Consolidated Financial Statements, included within the Annual Report and Form 20-F (the Annual Report), comprise:

- the Consolidated Statement of Income and Consolidated Statement of Comprehensive Income for the year ended December 31, 2015;
- the Consolidated Balance Sheet as at December 31, 2015;
- the Consolidated Statement of Changes in Equity for the year ended December 31, 2015;
- the Consolidated Statement of Cash Flows for the year ended December 31, 2015; and
- the Notes to the Consolidated Financial Statements, which include a summary of significant accounting policies and other explanatory information.

Certain required disclosures have been presented elsewhere in the Annual Report rather than in the Consolidated Financial Statements. These are cross-referenced from the Consolidated Financial Statements and are identified as audited.

The financial reporting framework that has been applied in the preparation of the Consolidated Financial Statements is applicable law and IFRS as adopted by the European Union.

### OVERVIEW

#### Materiality

- We set the overall materiality level at \$1,200 million (2014: \$1,415 million), which represents 5% of income before taxation, adjusted for certain exceptional non-recurring items, averaged over a three-year period. By way of reference, this represents 0.8% of revenue, 0.6% of total assets, and 5.6% of net cash from operating activities. This overall materiality is allocated to local audit teams, such that significantly lower materiality levels are applied when performing work at the reporting units.

#### Scoping

- The scope of our audit is designed to ensure that we perform enough work to be able to give an opinion on the Consolidated Financial Statements as a whole. We perform work both at the consolidated level and the local reporting unit level.
- The following charts illustrate the relative proportion of work performed locally at the reporting units and at the consolidated level, for revenue and total assets:

#### REVENUE



■ Full scope audit  
■ Consolidated level work, including work at shared service centres

#### TOTAL ASSETS



■ Full scope audit  
■ Directed audit procedures  
■ Consolidated level work, including work at shared service centres

- Our audit considers 100% of revenue and total assets. Procedures performed on local reporting units, which cover 67% of revenue and 71% of total assets, are complemented by work performed at the consolidated level.
- The consolidated level procedures include: analytical review; tests of financial systems; processes and controls at the Shell business service centres which are pervasive to the Consolidated Financial Statements and testing of specific transactions and balances.

**OVERVIEW (CONTINUED)**

<b>Areas of focus</b>	<ul style="list-style-type: none"> <li>■ Recoverability of the carrying amount of Upstream assets</li> <li>■ BG acquisition cash flow hedge accounting</li> <li>■ Estimation of decommissioning and restoration provisions</li> <li>■ Recognition of deferred tax assets and estimation in respect of uncertain tax positions</li> <li>■ Accounting for disposals</li> <li>■ Accuracy of the recognition of unrealised trading revenue</li> </ul>
<b>Changes from prior years</b>	<ul style="list-style-type: none"> <li>■ Our overall materiality level is 15% lower than in 2014 and 28% lower than in 2013. The benchmark used for determining our materiality has been revised to reflect the commodity price environment in 2015, as explained further below.</li> <li>■ In a period of more robust margins for the refining business, we have lowered our assessment of the risk related to the recoverability of the carrying amount of Downstream assets. We have, however, continued to test management's impairment trigger assessment process.</li> <li>■ The allocation of the purchase price in respect of the Repsol acquisition related to a 2014 transaction and, therefore, no longer remained an area of focus in 2015.</li> </ul>

**OUR AUDIT APPROACH**

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) (ISAs (UK and Ireland)).

We designed our audit by determining materiality and assessing the risks of material misstatement in the Consolidated Financial Statements. In particular, we looked at where the Directors made subjective judgements that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the Directors that represented a risk of material misstatement due to fraud.

**MATERIALITY**

We set certain quantitative thresholds for materiality which, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures, and in evaluating the effect of misstatements, both individually and on the Consolidated Financial Statements as a whole.

Based on our judgement, we determined materiality for the Consolidated Financial Statements as a whole as follows:

**MATERIALITY**

<b>Overall materiality</b>	\$1,200 million (2014: \$1,415 million; 2013: \$1,675 million).
<b>How we determined it for 2015</b>	5% of the three-year average income before taxation, adjusted for certain exceptional non-recurring items.
<b>Rationale for benchmark applied and explanation for change in benchmark used</b>	<p>Each year, we are required to make a judgement with regard to materiality taking into account the levels of activity in the business and the associated financial performance. While the underlying business and level of operating activities across Shell, including production volumes and transactions processed, are broadly consistent with prior years, Shell's income before taxation has been materially impacted both by the reduction in oil and gas prices and the significant asset impairments and other charges.</p> <p>Auditing standards specifically acknowledge that an alternative approach to determining materiality may be more appropriate where revenue and income are volatile and not representative of underlying or sustained business performance.</p> <p>Given the source of volatility in Shell's results is a combination of the effects of the reduced oil and gas prices and exceptional impairments and other charges in the period, we have considered other approaches to establishing materiality and, as a result, an alternative basis has been used in 2015.</p> <p>We determined that our materiality should be based on an average of income before taxation for 2013, 2014 and 2015, excluding certain exceptional, non-recurring items. This is consistent with the approach adopted for many large, international groups and moderates the effect of the current lower oil and gas prices. Similarly, in prior years when oil and gas prices were rising, we also limited the impact of the higher prices on our materiality level.</p> <p>In identifying items to be excluded, we reviewed all identified items reported by Shell in its quarterly earnings releases, considering the magnitude and nature of the items and the impact they have on the underlying business activities. On that basis, we excluded the following items from the 2015 income before taxation amount used in our determination of materiality (there were no equivalent items in 2014 or 2013):</p> <ol style="list-style-type: none"> <li>1) Impairment and onerous contract provisions relating to the exit from Alaska: \$4.0 billion; and</li> <li>2) Impairment and provisions relating to the termination of the Carmon Creek project: \$2.8 billion.</li> </ol> <p>We consider these to be exceptional and non-recurring in nature. We did not adjust for impairment charges taken for other reasons, in particular the reduction in Shell's long-term price outlook (discussed further in the areas of focus section), as these are not considered to be highly unusual. We did not identify any positive items that would be considered equivalent in nature and magnitude.</p> <p>We also note that all exceptional items, including impairments, are subject to specific audit procedures with a materiality level well below overall materiality.</p>

## MATERIALITY (CONTINUED)

<b>Reporting unit materiality</b>	Materiality is either allocated as a proportion of the overall materiality, or determined in the context of local reporting requirements, generally local statutory accounts. In all cases the allocated or locally determined reporting unit materiality is significantly less than the overall materiality and in the range of \$30 million to \$230 million for operating units.
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Consistent with previous periods, we agreed with the Audit Committee that we would report to them misstatements identified during our audit above \$75 million (2014: \$75 million; 2013: \$75 million) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

### DETERMINING THE SCOPE OF OUR AUDIT WORK

The scope of our audit is designed to ensure that we perform enough work to be able to give an opinion on the Consolidated Financial Statements as a whole, taking into account the structure of Shell, the financial reporting systems, processes and controls, and the industry in which it operates.

The Consolidated Financial Statements include Shell's operating businesses and centralised functions. During the year ended December 31, 2015, these have been reported through three segments: Upstream, Downstream and Corporate.

In establishing the scope of our audit work, we determined the nature and extent of work to be performed both at the reporting units and at the consolidated level. Where the work is performed by the local reporting unit auditors, we perform consolidated level oversight and review procedures to ensure sufficient evidence has been obtained to support our opinion on the Consolidated Financial Statements taken as a whole. All local reporting unit audits are undertaken by PwC network firms.

Our approach to determining the scope of the audit of Shell is a three-step process whereby reporting units are deemed to be within scope for audit testing based on meeting one or more of the following criteria:

- 1) Significant contribution, greater than 1.5%, to income before taxation, revenue or total assets. These reporting units are subject to full scope audits;
- 2) The presence of a significant risk, either at the reporting unit as a whole or relating to a specific financial statement line item. This includes financial statement line items impacted by the risks of material misstatement identified in our planning and reported on in our areas of focus below; or
- 3) The most significant other reporting units that enable us to satisfy our coverage criteria on each financial statement line item and to add elements of unpredictability in our scope.

Based on this process, we identified 42 reporting units in nine countries that, in our view, required a full scope audit due to their size or risk characteristics. An additional 39 reporting units in a further eight countries were identified for directed audit procedures over specific financial statement line items. Together, these reporting units accounted for 67% of revenue and 71% of total assets.

As a result of its structure and size, Shell also has a large number of small reporting units that are individually immaterial but, in aggregate, make up a material portion of its income before taxation, revenue and total assets. These are covered by the work that we perform at the consolidated level, which includes three main components:

- 1) Overall analytical review procedures: A significant proportion of the remaining reporting units not selected for local procedures were subject to analysis of year-on-year movements at the consolidated level, with a focus on higher risk balances and unusual movements. Those not subject to overall analytical review procedures were individually, and in the aggregate, immaterial.
- 2) Tests of financial systems, processes and controls: We test pervasive controls applied at the consolidated level. Additionally, Shell has five business service centres, with responsibility for processing transactions and operating the controls over those transactions. Our audit work, in which we test the design and operating effectiveness of systems and controls at these locations is led, on a global basis, by our group audit team. The testing of these pervasive controls, systems and transaction specific controls also covers many locations not included in group audit scope, and provides evidence on the control environment. The results from this testing are reviewed throughout the year and considered in our continuous update of group audit scope.
- 3) Testing of specific transactions: In addition, at the consolidated level we performed specific transaction testing, including on impairments, acquisitions and disposals.

The Senior Statutory Auditor and other group audit partners visited 10 locations in 2015: Germany; the Netherlands; Nigeria; United Arab Emirates; and the USA (six times); and each of Shell's five business service centres (Chennai, Glasgow, Krakow, Kuala Lumpur, and Manila). During these visits members of the group audit team met with local management and reporting unit auditors. Members of the group audit team also performed on-site reviews of audit working papers for certain locations including the USA and hosted a planning workshop in November 2015 for audit partners responsible for key reporting units. The onsite visits and planning workshop were further supplemented by ongoing communications between the Senior Statutory Auditor and reporting unit team members including, but not limited to, specific meetings to review audit plans and interim testing results.

**OUR AREAS OF FOCUS**

The risks of material misstatement that had the greatest effect on our audit, including the allocation of our resources and effort, are identified as areas of focus in the table below. We have also set out how we tailored our audit to address these specific areas in order to provide an opinion on the Consolidated Financial Statements as a whole, and any comments we make on the results of our procedures should be read in this context. This is not a complete list of all risks identified by our audit.

OUR AREAS OF FOCUS	
Area of focus	How our audit addressed the area of focus
<p><b>Recoverability of the carrying amount of Upstream assets</b></p> <p>During 2015, the spot price of Brent crude oil has remained low, averaging \$52/b (2014: \$99/b). Similarly the spot price for Henry Hub gas averaged \$2.6/mmbtu (2014: \$4.3/mmbtu). The carrying amount of property, plant and equipment at December 31, 2015, was \$183 billion.</p> <p>The recoverability of the carrying amount of Upstream assets is dependent upon the future cash flows of the business. Bearing in mind the generally long-lived nature of Shell's assets, the most critical assumption is management's view on the long-term oil and gas price outlook, beyond the next three to four years.</p> <p>During the third quarter of 2015, management concluded that a downward revision was required to Shell's long-term price outlook for both oil and gas. Additional impairment triggers were also identified as a result of strategic decisions made by management, notably the exit from Alaska and the termination of the Carmon Creek project in Canada.</p> <p>The exit from Alaska and termination of the Carmon Creek project also triggered the review of all related contracts and arrangements which represent continuing obligations for which there is no longer an associated benefit.</p> <p>The update to the price outlook in the third quarter and these strategic decisions triggered impairment testing for assets in Australia, Brazil, Brunei, Canada, Ireland, Russia, the UK and the USA. This testing was performed by management for the relevant cash generating units (CGUs) during the third quarter.</p> <p>During the fourth quarter, management also analysed certain assets for sensitivity to short-term price movements. The impairment testing in both the third and fourth quarters showed the fair value of the respective assets to be lower than the carrying amount, resulting in the impairment charges disclosed in Note 8 to the Consolidated Financial Statements.</p>	<p>We first considered the appropriateness of management's defined cash-generating units (CGUs) within the Upstream business. We were satisfied that there are no factors requiring management to change their classification since the prior reporting period. We also tested management's process for identifying CGUs that required impairment testing in line with IFRS and determined that all assets requiring impairment testing were identified.</p> <p>We assessed management's macroeconomic assumptions, which include both short-term and long-term views on commodity prices, inflation rates and discount rates. The price assumptions underlying management's impairment testing models represent a critical judgement in the process. We compared the short-term price assumptions used by management to the market forward curves. We also compared the short and long-term assumptions to views published by brokers, economists, consultancies and respected industry bodies such as the International Energy Agency, which provided a range of relevant third-party data points.</p> <p>Our analysis of third-party data sources with regard to the long-term price outlook for oil and gas confirmed that management's revised assumptions at September 30, 2015, were within the range expressed by third-party sources. This position remained unchanged at December 31, 2015.</p> <p>We performed detailed procedures for the assets where the need for an impairment review was identified by management. For those assets expected to be retained in the portfolio, we checked the reasonableness of key assumptions relating to the ongoing operation of the asset, including price, cost and reserves data. We also confirmed the mathematical accuracy of the value-in-use model prepared by management, and agreed the reserves incorporated into the model to the estimates prepared by reservoir engineers. We assessed the reasonableness of the probability weightings assigned to potential valuation scenarios, along with the associated risk adjustments required under IFRS. Based on our work, we are satisfied with the accuracy and completeness of the impairment provisions recognised.</p> <p>We evaluated management's short-term price sensitivity analyses performed in response to the movement in fourth quarter prices. We have completed independent sensitivity analyses on certain additional inputs to assess the variances that may reasonably arise.</p>

## OUR AREAS OF FOCUS (CONTINUED)

Area of focus	How our audit addressed the area of focus
<p><b>Recoverability of the carrying amount of Upstream assets (continued)</b></p>	<p>Specifically in relation to the exit from Alaska and termination of the Carmon Creek project, we performed the following procedures:</p> <ul style="list-style-type: none"> <li>■ We test management's controls in relation to the capitalisation and allocation of costs to projects annually. We agreed the total charge recognised to the carrying amount at the date of termination;</li> <li>■ We assessed the adequacy of management's process relating to the review of the supply and service contracts associated with the projects. We are satisfied that provisions for termination or fulfilment of these contracts are appropriate; and</li> <li>■ We tested the current decommissioning and restoration models, including the timing of the expected cash flows, to ensure compliance with legal requirements, along with the updated cost, inflation and discount rate assumptions. We are satisfied that these are appropriate.</li> </ul>
<p><b>BG acquisition cash flow hedge accounting</b>            In the course of 2015, Shell purchased sterling cash and forward contracts to hedge the exchange rate exposure of the cash element of the BG acquisition. Management has chosen to apply cash flow hedge accounting using the sterling cash and forward contracts as the hedging instruments. In order to apply hedge accounting, management are required to demonstrate that the BG acquisition is considered to be a highly probable transaction, that the hedges are highly effective and maintain appropriate hedge documentation. Management judgement is required to make the assessment of highly probable as defined by IFRS.</p> <p>The impact of this specific hedge accounting programme is disclosed in Note 19 to the Consolidated Financial Statements, specifically the deferral of \$537 million of hedging losses in other comprehensive income at December 31, 2015, until the transaction completed in 2016. At that time the hedging losses were included as a component of consideration (Note 29).</p>	<p>Our audit procedures focussed on the assessment of whether the BG acquisition was considered a highly probable transaction at the date the first hedging relationships were designated. This included an analysis of the likelihood of regulatory and shareholder approvals being obtained and management's ability to take the actions required to fund and complete the transaction. We have also assessed whether the cash and forward contracts designated as hedging relationships met the criteria for hedging instruments and confirmed the appropriateness of management's hedge documentation.</p> <p>We are satisfied that all criteria to apply hedge accounting had been met on the date of the initial hedge designation and continued to be met through December 31, 2015.</p> <p>Management's assessment of "highly probable" has been confirmed following the deal completion on February 15, 2016.</p>
<p><b>Estimation of decommissioning and restoration provisions</b>            Provisions associated with decommissioning and restoration are disclosed in Note 18 to the Consolidated Financial Statements; a description of the accounting policy and key judgements and estimates is included in Note 2.</p> <p>The calculation of decommissioning and restoration provisions requires significant management judgement because of the inherent complexity in estimating future costs. The decommissioning of offshore infrastructure is a relatively immature activity and consequently there is limited historical precedent against which to benchmark estimates of future costs. These factors increase the complexity involved in determining accurate accounting provisions that are material to Shell's balance sheet.</p> <p>Management reviews decommissioning and restoration provisions on an annual basis. This review incorporates the effects of any changes in local regulations, management's expected approach to decommissioning, cost estimates, discount rates, and the effects of changes in exchange rates.</p>	<p>We critically assessed management's annual review of provisions recorded. In particular, we focused on those assets where changes to the cost estimate directly impact the income statement rather than being recognised as an asset. Testing involved understanding the mandatory or constructive obligations with respect to the decommissioning of each asset based on the contractual arrangements and relevant local regulation to validate the appropriateness of the cost estimate. As part of our testing we considered the competence and objectivity of the experts who produced the cost estimates.</p> <p>Of particular note, we performed procedures on the decommissioning and restoration provisions for Alaska and Carmon Creek, as described in the recoverability of the carrying amount of Upstream assets section above, along with the Brent provision in the UK given its relative size and field maturity.</p> <p>Our procedures confirmed that management's estimate of future decommissioning and restoration costs are appropriate.</p>

**OUR AREAS OF FOCUS (CONTINUED)**

Area of focus	How our audit addressed the area of focus
<p><b>Recognition of deferred tax assets and estimation in respect of uncertain tax positions</b></p> <p>Where deferred tax assets arise, management judgement is required to assess the recoverability of the balance, in particular by reference to forecast future taxable income. The periods over which the deferred tax assets are expected to be recovered can be extensive.</p> <p>Management is required to exercise considerable judgement when determining the appropriate amount to provide in respect of uncertain tax positions, which are generally associated with acquisitions, disposals and other activities in countries where the tax regime is uncertain, immature or changing.</p>	<p>In our consideration of deferred tax balances, we have challenged management over the recoverability of their deferred tax asset balances, particularly in light of the depressed oil and gas price environment, and the downward revision of the long-term price outlook, as described in the recoverability of the carrying amount of Upstream assets section of this report. We have found that support for the recognition of these deferred tax assets was consistent with the long-term business plans used by management to manage and monitor the performance of the business.</p> <p>We performed detailed testing over the tax positions in the significant tax jurisdictions in which Shell has operations, including utilising PwC's local tax expertise. Procedures included testing the rates applied to calculate provisions and deferred tax balances, and ensuring the correct taxation treatment for the significant impairments that have been recognised in 2015. We have also completed a probability assessment of the potential outcomes where uncertain tax positions exist, based on communications received from the relevant tax authorities and applying our local knowledge and experience.</p>
<p><b>Accounting for disposals</b></p> <p>Shell generated proceeds of \$5 billion from disposals during the year; a description of the accounting policy is included in Note 2.</p> <p>Disposals trigger the review of all associated agreements, including leases, for which there may be potential future obligations or contingent liabilities. Disposals included the sale of the LPG business in France, the partial disposal of an office building in London, Shell's interest in certain oil mining leases and a pipeline in Nigeria Upstream, and the Norwegian Downstream business.</p>	<p>During the year we tested those disposals which had a substantial balance sheet, income statement or cash flow impact. We assessed in detail the contract for sale of those assets in France, Nigeria and Norway. We have also considered the gains recognised on the sale of these assets, and are satisfied that the disposal has been correctly recorded.</p> <p>We have compared the sale contract and subsequent lease of the London office building with the accounting treatment used by management, and concurred with management's view that this represented a sale and lease back transaction and that the lease back to Shell should be accounted for as an operating lease.</p>
<p><b>Accuracy of the recognition of unrealised trading revenue</b></p> <p>Unrealised revenue arises on Shell's trading activities because of the requirement under IFRS to fair value derivative contracts. These contracts principally relate to commodity supply arrangements with derivatives embedded in the contractual terms.</p> <p>Management are required to exercise judgement in valuing these derivative contracts, particularly where the life of the contract is beyond the liquid market period requiring bespoke models and giving rise to a risk of material misstatement. Particular focus has been placed on the valuation of derivative contracts at the balance sheet date.</p>	<p>We assessed the overall commodity trading process, including internal risk management procedures and the system and controls around origination and maintenance of complete and accurate information relating to derivative contracts. We found the controls in place to be operating effectively and therefore placed reliance on these in our testing.</p> <p>In addition, we tested the valuation of derivative contracts at December 31, 2015, which require the use of valuation models. Our audit procedures focused on the integrity of these valuation models and the incorporation of the contract terms and the key assumptions, including future price assumptions and discount rates, in the models. Our testing confirmed that models used to value contracts are appropriate for the purposes of the valuations.</p>

**GOING CONCERN**

As noted in the Directors' statement, the Directors have concluded that it is appropriate to adopt the going-concern basis in preparing the Consolidated Financial Statements. The going-concern basis presumes that Shell has adequate resources to remain in operation, and that the Directors intend it to do so, for at least one year from the date the Consolidated Financial Statements were signed. As part of our audit, we have concluded that the Directors' use of the going-concern basis is appropriate.

Under the Listing Rules, we are required to review the Directors' statement, set out on page 67, in relation to going concern. We have nothing to report having performed our review.



Under ISAs (UK & Ireland) we are also required to report to you if we have anything material to add or to draw attention to in relation to the Directors' statement about whether they considered it appropriate to adopt the going concern basis in preparing the financial statements. We have nothing material to add or to draw attention to.

However, because not all future events or conditions can be predicted, these going concern statements are not a guarantee as to Shell's ability to continue as a going concern.

## OTHER REQUIRED REPORTING

### Consistency of other information

#### COMPANIES ACT 2006 OPINION

In our opinion, the information given in the Strategic Report and the Directors' Report for the financial year for which the Consolidated Financial Statements are prepared is consistent with the Consolidated Financial Statements.

#### ISAs (UK & IRELAND) REPORTING

Under ISAs (UK & Ireland) we are required to report to you if, in our opinion:

<ul style="list-style-type: none"> <li>■ information in the Annual Report is:               <ul style="list-style-type: none"> <li>■ materially inconsistent with the information in the audited Consolidated Financial Statements; or</li> <li>■ apparently materially incorrect based on, or materially inconsistent with, our knowledge of Shell acquired in the course of performing our audit; or</li> <li>■ otherwise misleading.</li> </ul> </li> </ul>	We have no exceptions to report.
<ul style="list-style-type: none"> <li>■ the statement given by the Directors on page 67, in accordance with provision C.1.1 of the UK Corporate Governance Code (the Code), that they consider the Annual Report including the financial statements taken as a whole, to be fair, balanced and understandable and provides the information necessary for members to assess Shell's position and performance, business model and strategy, is materially inconsistent with our knowledge of Shell acquired in the course of performing our audit.</li> </ul>	We have no exceptions to report.
<ul style="list-style-type: none"> <li>■ the section of the Annual Report on pages 83-85, as required by provision C.3.8 of the Code, describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.</li> </ul>	We have no exceptions to report.

### The Directors' assessment of the prospects of Shell and of the principal risks that would threaten the solvency or liquidity of Shell

Under ISAs (UK & Ireland) we are required to report to you if we have anything material to add or to draw attention to in relation to:

<ul style="list-style-type: none"> <li>■ the Directors' confirmation in the Annual Report, in accordance with provision C.2.1 of the Code, that they have carried out a robust assessment of the principal risks facing Shell, including those that would threaten its business model, future performance, solvency or liquidity.</li> </ul>	We have nothing material to add or to draw attention to.
<ul style="list-style-type: none"> <li>■ the disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated.</li> </ul>	We have nothing material to add or to draw attention to.
<ul style="list-style-type: none"> <li>■ the Directors' explanation in the Annual Report, in accordance with provision C.2.2 of the Code, as to how they have assessed the prospects of Shell, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that Shell will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.</li> </ul>	We have nothing material to add or to draw attention to.

Under the Listing Rules we are required to review the Directors' statement that they have carried out a robust assessment of the principal risks facing Shell and the Directors' statement in relation to the longer-term viability of Shell, set out on page 67. Our review was substantially less in scope than an audit and only consisted of making inquiries and considering the Directors' process supporting their statements; checking that the statements are in alignment with the relevant provisions of the Code; and considering whether the statements are consistent with the knowledge acquired by us in the course of performing our audit. We have nothing to report having performed our review.

### Adequacy of information and explanations received

Under the Companies Act 2006 we are required to report to you if, in our opinion, we have not received all the information and explanations we require for our audit. We have no exceptions to report arising from this responsibility.

### Directors' remuneration

Under the Companies Act 2006 we are required to report to you if, in our opinion, certain disclosures of Directors' remuneration specified by law are not made. We have no exceptions to report arising from this responsibility.

### Corporate governance statement

Under the Listing Rules we are required to review the part of the corporate governance statement relating to 10 further provisions of the Code. We have nothing to report having performed our review.

## RESPONSIBILITIES FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE AUDIT

### Our responsibilities and those of the Directors

As explained more fully in the Directors' responsibilities in respect of the preparation of the annual report and accounts set out on page 66, the Directors are responsible for the preparation of the Consolidated Financial Statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the Consolidated Financial Statements in accordance with applicable law and ISAs (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

### What an audit of Consolidated Financial Statements involves

An audit involves obtaining evidence about the amounts and disclosures in the Consolidated Financial Statements sufficient to give reasonable assurance that the Consolidated Financial Statements are free from material misstatement, whether caused by fraud or error.

This includes an assessment of:

- whether the accounting policies are appropriate to Shell's circumstances and have been consistently applied and adequately disclosed;
- the reasonableness of significant accounting estimates made by the Directors; and
- the overall presentation of the Consolidated Financial Statements.

We primarily focus our work in these areas by assessing the Directors' judgements against available evidence, forming our own judgements, and evaluating the disclosures in the Consolidated Financial Statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited Consolidated Financial Statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

### OTHER MATTER

We have reported separately on the Parent Company Financial Statements of Royal Dutch Shell plc for the year ended December 31, 2015, and on the information in the Directors' Remuneration Report that is described as having been audited.

### Ross Hunter (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP  
Chartered Accountants and Statutory Auditors  
London, United Kingdom  
March 9, 2016

Note that the report set out above is included for the purposes of Royal Dutch Shell plc's Annual Report and Accounts for 2015 only and does not form part of Royal Dutch Shell plc's Annual Report on Form 20-F for 2015.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

### TO THE BOARD OF DIRECTORS AND ROYAL DUTCH SHELL PLC SHAREHOLDERS

In our opinion, the accompanying Consolidated Statement of Income, the Consolidated Statement of Comprehensive Income, the Consolidated Balance Sheet, the Consolidated Statement of Changes in Equity, the Consolidated Statement of Cash Flows and the related Notes to the Consolidated Financial Statements present fairly, in all material respects, the financial position of Royal Dutch Shell plc (the Company) and its subsidiaries (collectively Shell) at December 31, 2015, and December 31, 2014, and the results of their operations and cash flows for each of the three years in the period ended December 31, 2015, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these Consolidated Financial Statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting of Shell set out on pages 73-75. Our responsibility is to express opinions on these Consolidated Financial Statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the Consolidated Financial Statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the Consolidated Financial Statements included examining, on a test basis, evidence supporting the amounts and disclosures in the Consolidated Financial Statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists,

and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

**PricewaterhouseCoopers LLP**  
London, United Kingdom  
March 9, 2016

Note that the report set out above is included for the purposes of Royal Dutch Shell plc's Annual Report on Form 20-F for 2015 only and does not form part of Royal Dutch Shell plc's Annual Report and Accounts for 2015.

## CONSOLIDATED FINANCIAL STATEMENTS

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CONSOLIDATED STATEMENT OF INCOME		\$ MILLION		
	NOTES	2015	2014	2013
Revenue	4	264,960	421,105	451,235
Share of profit of joint ventures and associates	9	3,527	6,116	7,275
Interest and other income	5	3,669	4,123	1,089
Total revenue and other income		272,156	431,344	459,599
Purchases		194,644	327,278	353,199
Production and manufacturing expenses		28,095	30,038	28,386
Selling, distribution and administrative expenses		11,956	13,965	14,675
Research and development		1,093	1,222	1,318
Exploration		5,719	4,224	5,278
Depreciation, depletion and amortisation	4	26,714	24,499	21,509
Interest expense	6	1,888	1,804	1,642
Total expenditure		270,109	403,030	426,007
Income before taxation		2,047	28,314	33,592
Taxation (credit)/charge	16	(153)	13,584	17,066
Income for the period	4	2,200	14,730	16,526
Income/(loss) attributable to non-controlling interest		261	(144)	155
Income attributable to Royal Dutch Shell plc shareholders		1,939	14,874	16,371
Basic earnings per share (\$)	24	0.31	2.36	2.60
Diluted earnings per share (\$)	24	0.30	2.36	2.60

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME		\$ MILLION		
	NOTES	2015	2014	2013
Income for the period		2,200	14,730	16,526
Other comprehensive income, net of tax	22			
Items that may be reclassified to income in later periods:				
Currency translation differences		(7,121)	(5,321)	(1,938)
Unrealised losses on securities		(707)	(797)	(166)
Cash flow hedging gains		61	528	178
Share of other comprehensive loss of joint ventures and associates	9	(40)	(156)	(167)
Total		(7,807)	(5,746)	(2,093)
Items that are not reclassified to income in later periods:				
Retirement benefits remeasurements		4,951	(6,482)	3,833
Other comprehensive (loss)/income for the period		(2,856)	(12,228)	1,740
Comprehensive (loss)/income for the period		(656)	2,502	18,266
Comprehensive income/(loss) attributable to non-controlling interest		155	(190)	23
Comprehensive (loss)/income attributable to Royal Dutch Shell plc shareholders		(811)	2,692	18,243

<b>CONSOLIDATED BALANCE SHEET</b>		<b>\$ MILLION</b>	
	NOTES	Dec 31, 2015	Dec 31, 2014
<b>Assets</b>			
Non-current assets			
Intangible assets	7	6,283	7,076
Property, plant and equipment	8	182,838	192,472
Joint ventures and associates	9	30,150	31,558
Investments in securities	10	3,416	4,115
Deferred tax	16	11,033	8,131
Retirement benefits	17	4,362	1,682
Trade and other receivables	11	8,717	8,304
		246,799	253,338
Current assets			
Inventories	12	15,822	19,701
Trade and other receivables	11	45,784	58,470
Cash and cash equivalents	13	31,752	21,607
		93,358	99,778
<b>Total assets</b>		<b>340,157</b>	<b>353,116</b>
<b>Liabilities</b>			
Non-current liabilities			
Debt	14	52,849	38,332
Trade and other payables	15	4,528	3,582
Deferred tax	16	8,976	12,052
Retirement benefits	17	12,587	16,318
Decommissioning and other provisions	18	26,148	23,834
		105,088	94,118
Current liabilities			
Debt	14	5,530	7,208
Trade and other payables	15	52,770	64,864
Taxes payable	16	8,233	9,797
Retirement benefits	17	350	377
Decommissioning and other provisions	18	4,065	3,966
		70,948	86,212
<b>Total liabilities</b>		<b>176,036</b>	<b>180,330</b>
<b>Equity</b>			
Share capital	20	546	540
Shares held in trust	21	(584)	(1,190)
Other reserves	22	(17,186)	(14,365)
Retained earnings		180,100	186,981
Equity attributable to Royal Dutch Shell plc shareholders		162,876	171,966
Non-controlling interest		1,245	820
<b>Total equity</b>		<b>164,121</b>	<b>172,786</b>
<b>Total liabilities and equity</b>		<b>340,157</b>	<b>353,116</b>

Signed on behalf of the Board

/s/ Simon Henry

Simon Henry  
Chief Financial Officer  
March 9, 2016

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

\$ MILLION

	Equity attributable to Royal Dutch Shell plc shareholders						Non-controlling interest	Total equity
	Share capital (see Note 20)	Shares held in trust (see Note 21)	Other reserves (see Note 22)	Retained earnings	Total			
<b>At January 1, 2015</b>	540	(1,190)	(14,365)	186,981	171,966	820	172,786	
Comprehensive (loss)/income for the period	-	-	(2,750)	1,939	(811)	155	(656)	
Dividends paid (see Note 23)	-	-	-	(11,972)	(11,972)	(117)	(12,089)	
Scrip dividends (see Note 23)	7	-	(7)	2,602	2,602	-	2,602	
Repurchases of shares	(1)	-	1	1	1	-	1	
Shares held in trust: net sales and dividends received	-	606	-	70	676	-	676	
Capital contributions from, and other changes in, non-controlling interest [A]	-	-	-	501	501	387	888	
Share-based compensation	-	-	(65)	(22)	(87)	-	(87)	
<b>At December 31, 2015</b>	546	(584)	(17,186)	180,100	162,876	1,245	164,121	
<b>At January 1, 2014</b>	542	(1,932)	(2,037)	183,474	180,047	1,101	181,148	
Comprehensive income for the period	-	-	(12,182)	14,874	2,692	(190)	2,502	
Dividends paid (see Note 23)	-	-	-	(11,843)	(11,843)	(116)	(11,959)	
Scrip dividends (see Note 23)	6	-	(6)	2,399	2,399	-	2,399	
Repurchases of shares	(8)	-	8	(2,787)	(2,787)	-	(2,787)	
Shares held in trust: net sales and dividends received	-	742	-	107	849	-	849	
Capital contributions from, and other changes in, non-controlling interest [A]	-	-	-	727	727	25	752	
Share-based compensation	-	-	(148)	30	(118)	-	(118)	
<b>At December 31, 2014</b>	540	(1,190)	(14,365)	186,981	171,966	820	172,786	
<b>At January 1, 2013</b>	542	(2,287)	(3,752)	180,246	174,749	1,433	176,182	
Comprehensive income for the period	-	-	1,872	16,371	18,243	23	18,266	
Dividends paid (see Note 23)	-	-	-	(11,338)	(11,338)	(252)	(11,590)	
Scrip dividends (see Note 23)	12	-	(12)	4,140	4,140	-	4,140	
Repurchases of shares	(12)	-	12	(5,757)	(5,757)	-	(5,757)	
Shares held in trust: net sales and dividends received	-	355	-	126	481	-	481	
Capital contributions from, and other changes in, non-controlling interest	-	-	-	18	18	(103)	(85)	
Share-based compensation	-	-	(157)	(332)	(489)	-	(489)	
<b>At December 31, 2013</b>	542	(1,932)	(2,037)	183,474	180,047	1,101	181,148	

[A] Mainly relates to public offerings of limited partner units in Shell Midstream Partners, L.P. The difference between the proceeds after tax and the increase in non-controlling interest, measured by reference to the carrying amount of the entity's net assets at the date of the transaction, was recognised in retained earnings.

CONSOLIDATED STATEMENT OF CASH FLOWS		\$ MILLION		
	NOTES	2015	2014	2013
<b>Cash flow from operating activities</b>				
Income for the period		2,200	14,730	16,526
Adjustment for:				
Current tax		7,058	13,757	18,582
Interest expense (net)		1,529	1,598	1,448
Depreciation, depletion and amortisation		26,714	24,499	21,509
Net gains on sale of non-current assets and businesses		(3,460)	(3,212)	(382)
Decrease in inventories		2,827	7,958	608
Decrease/(increase) in current receivables		9,852	(1,541)	5,648
Decrease in current payables		(7,158)	(12)	(3,268)
Share of profit of joint ventures and associates		(3,527)	(6,116)	(7,275)
Dividends received from joint ventures and associates		4,627	6,902	7,117
Deferred tax, retirement benefits, decommissioning and other provisions		(5,827)	(1,720)	(2,701)
Other		2,648	2,500	2,937
Net cash from operating activities (pre-tax)		37,483	59,343	60,749
Tax paid		(7,673)	(14,299)	(20,309)
Net cash from operating activities		29,810	45,044	40,440
<b>Cash flow from investing activities</b>				
Capital expenditure [A]		(26,131)	(31,676)[B]	(39,975)[B]
Investments in joint ventures and associates		(896)	(1,426)	(1,538)
Proceeds from sale of property, plant and equipment and businesses		4,720	9,873	1,212
Proceeds from sale of joint ventures and associates		276	4,163	538
Interest received		288	174	175
Other [A]		(664)	(765)	(558)
Net cash used in investing activities		(22,407)	(19,657)	(40,146)
<b>Cash flow from financing activities</b>				
Net (decrease)/increase in debt with maturity period within three months		(586)	(3,332)	3,126
Other debt:				
New borrowings		21,500	7,778	9,146
Repayments		(6,023)	(4,089)	(6,877)
Interest paid		(1,742)	(1,480)	(1,307)
Change in non-controlling interest		598	989	(51)
Cash dividends paid to:				
Royal Dutch Shell plc shareholders	23	(9,370)	(9,444)	(7,198)
Non-controlling interest		(117)	(116)	(252)
Repurchases of shares		(409)	(3,328)	(5,000)
Shares held in trust: net (purchases)/sales and dividends received		(39)	232	(565)
Net cash from/(used in) financing activities		3,812	(12,790)	(8,978)
Currency translation differences relating to cash and cash equivalents		(1,070)	(686)	(170)
Increase/(decrease) in cash and cash equivalents		10,145	11,911	(8,854)
Cash and cash equivalents at January 1		21,607	9,696	18,550
Cash and cash equivalents at December 31	13	31,752	21,607	9,696

[A] Reflects a minor change to the definition with effect from 2015 which has no overall impact on net cash from investing activities. Comparative information has been reclassified.

[B] Includes consideration paid for the acquisition on January 1, 2014, of Repsol liquefied natural gas (LNG) businesses outside North America (2014: \$730 million; 2013: \$3,385 million)



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 1 BASIS OF PREPARATION

The Consolidated Financial Statements of Royal Dutch Shell plc (the Company) and its subsidiaries (collectively referred to as Shell) have been prepared in accordance with the provisions of the Companies Act 2006 (the Act) and Article 4 of the International Accounting Standards (IAS) Regulation, and therefore in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. As applied to Shell, there are no material differences from IFRS as issued by the International Accounting Standards Board (IASB); therefore, the Consolidated Financial Statements have been prepared in accordance with IFRS as issued by the IASB.

As described in the accounting policies in Note 2, the Consolidated Financial Statements have been prepared under the historical cost convention except for certain items measured at fair value. Those accounting policies have been applied consistently in all periods.

The Consolidated Financial Statements were approved and authorised for issue by the Board of Directors on March 9, 2016.

### 2 KEY ACCOUNTING POLICIES, JUDGEMENTS AND ESTIMATES

#### Nature of the Consolidated Financial Statements

The Consolidated Financial Statements are presented in US dollars (dollars) and comprise the financial statements of the Company and its subsidiaries, being those entities over which the Company has control, either directly or indirectly, through exposure or rights to their variable returns and the ability to affect those returns through its power over the entities. Information about subsidiaries at December 31, 2015, is set out in Exhibit B.

Subsidiaries are consolidated from the date on which control is obtained until the date that such control ceases, using consistent accounting policies. All inter-company balances and transactions, including unrealised profits arising from such transactions, are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Non-controlling interest represents the proportion of income, other comprehensive income and net assets in subsidiaries that is not attributable to the Company's shareholders.

#### Currency translation

Foreign currency transactions are translated using the exchange rate at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at quarter-end exchange rates of monetary assets and liabilities denominated in foreign currencies (including those in respect of inter-company balances unless related to loans of a long-term investment nature) are recognised in income, except when recognised in other comprehensive income in respect of cash flow hedges, and presented within interest and other income or within purchases where not related to financing. Share capital issued in currencies other than the dollar is translated at the exchange rate at the date of issue.

On consolidation, assets and liabilities of non-dollar entities are translated to dollars at year-end rates of exchange, while their statements of income, other comprehensive income and cash flows are translated at quarterly average rates. The resulting translation differences are recognised as currency translation differences within other comprehensive income. Upon disposal of all or part of an interest in, or upon liquidation of, an entity, the appropriate portion of cumulative currency translation differences related to that entity are generally recognised in income.

#### Revenue recognition

Revenue from sales of oil, natural gas, chemicals and other products is recognised at the fair value of consideration received or receivable, after deducting sales taxes, excise duties and similar levies, when the significant risks and rewards of ownership have been transferred, which is when title passes to the customer. For sales by Upstream operations, this generally occurs when product is physically transferred into a vessel, pipe or other delivery mechanism; for sales by refining operations it is either when product is placed onboard a vessel or offloaded from the vessel, depending on the contractually agreed terms; and for wholesale sales of oil products and chemicals it is either at the point of delivery or the point of receipt, depending on contractual conditions.

Revenue resulting from hydrocarbon production from properties in which Shell has an interest with partners in joint arrangements is recognised on the basis of Shell's working interest (entitlement method). Revenue resulting from the production of oil and natural gas under production-sharing contracts (PSCs) is recognised for those amounts relating to Shell's cost recoveries and Shell's share of the remaining production. Gains and losses on derivative contracts and the revenue and costs associated with other contracts that are classified as held for trading purposes are reported on a net basis in the Consolidated Statement of Income. Purchases and sales of hydrocarbons under exchange contracts that are necessary to obtain or reposition feedstocks for refinery operations are presented net in the Consolidated Statement of Income.

#### Research and development

Development costs that are expected to generate probable future economic benefits are capitalised as intangible assets. All other research and development expenditure is recognised in income as incurred.

#### Exploration costs

Hydrocarbon exploration costs are accounted for under the successful efforts method: exploration costs are recognised in income when incurred, except that exploratory drilling costs are included in property, plant and equipment pending determination of proved reserves. Exploration costs capitalised in respect of exploration wells that are more than 12 months old are written off unless: (a) proved reserves are booked; or (b) (i) they have found commercially producible quantities of reserves and (ii) they are subject to further exploration or appraisal activity in that either drilling of additional exploratory wells is underway or firmly planned for the near future or other activities are being undertaken to sufficiently progress the assessing of reserves and the economic and operating viability of the project.

## Property, plant and equipment and intangible assets

### RECOGNITION

Property, plant and equipment comprise assets owned by Shell, assets held by Shell under finance leases and assets operated by Shell as contractor in PSCs. They include rights and concessions in respect of properties with proved reserves (proved properties) and with no proved reserves (unproved properties). Property, plant and equipment, including expenditure on major inspections, and intangible assets are initially recognised in the Consolidated Balance Sheet at cost where it is probable that they will generate future economic benefits. This includes capitalisation of decommissioning and restoration costs associated with provisions for asset retirement (see "Provisions"), certain development costs (see "Research and development") and the effects of associated cash flow hedges (see "Financial instruments and other derivative contracts") as applicable. The accounting for exploration costs is described separately (see "Exploration costs"). Intangible assets include goodwill, LNG off-take and sales contracts obtained through acquisition, software costs and trademarks. Interest is capitalised, as an increase in property, plant and equipment, on major capital projects during construction.

Property, plant and equipment and intangible assets are subsequently carried at cost less accumulated depreciation, depletion and amortisation (including any impairment). Gains and losses on disposals are determined by comparing the proceeds with the carrying amounts of assets sold and are recognised in income, within interest and other income.

### DEPRECIATION, DEPLETION AND AMORTISATION

Property, plant and equipment related to hydrocarbon production activities generally are depreciated on a unit-of-production basis over the proved developed reserves of the field concerned. Assets whose useful lives differ from the lifetime of the field are depreciated applying the straight-line method. Rights and concessions in respect of proved properties are depleted on the unit-of-production basis over the total proved reserves of the relevant area. Where individually insignificant, unproved properties may be grouped and depreciated based on factors such as the average concession term and past experience of recognising proved reserves.

Property, plant and equipment held under finance leases and capitalised LNG off-take and sales contracts are depreciated or amortised over the term of the respective contract. Other property, plant and equipment and intangible assets are depreciated or amortised on a straight-line basis over their estimated useful lives, except for goodwill, which is not amortised. They include major inspection costs, which are depreciated over the estimated period before the next planned major inspection (three to five years), and the following:

ASSET TYPE	USEFUL LIFE
Property, plant and equipment	
Refineries and chemical plants	20 years
Retail service stations	15 years
Upgraders	30 years
Intangible assets	
Software	5 years
Trademarks	40 years

Estimates of the useful lives and residual values of property, plant and equipment and intangible assets are reviewed annually and adjusted if appropriate.

### IMPAIRMENT

The carrying amount of goodwill is tested for impairment annually; in addition, assets other than unproved properties (see "Exploration costs") are tested for impairment whenever events or changes in circumstances indicate that the carrying amounts for those assets may not be recoverable. If assets are determined to be impaired, the carrying amounts of those assets are written down to their recoverable amount, which is the higher of fair value less costs to sell (see "Fair value measurements") and value in use.

Value in use is determined as the amount of estimated risk-adjusted discounted future cash flows. For this purpose, assets are grouped into cash-generating units based on separately identifiable and largely independent cash inflows. Estimates of future cash flows used in the evaluation of impairment of assets are made using management's forecasts of commodity prices, market supply and demand, product margins and, in the case of exploration and production assets, expected production volumes. The latter takes into account assessments of field and reservoir performance and includes expectations about both proved reserves and volumes that are expected to constitute proved reserves in the future (unproved volumes), which are risk-weighted utilising geological, production, recovery and economic projections. Cash flow estimates are risk-adjusted to reflect local conditions as appropriate and discounted at a rate based on Shell's marginal cost of debt.

Impairments, except those related to goodwill, are reversed as applicable to the extent that the events or circumstances that triggered the original impairment have changed.

Impairment charges and reversals are reported within depreciation, depletion and amortisation.

On reclassification as held for sale, the carrying amounts of intangible assets and property, plant and equipment are also reviewed and, where appropriate, written down to their fair value less costs to sell. No further provision for depreciation, depletion or amortisation is charged.

## KEY ACCOUNTING JUDGEMENTS AND ESTIMATES

### Proved oil and gas reserves

Unit-of-production depreciation, depletion and amortisation charges are principally measured based on management's estimates of proved developed oil and gas reserves. Also, exploration drilling costs are capitalised pending the results of further exploration or appraisal activity, which may take several years to complete and before any related proved reserves can be booked.

Proved reserves are estimated by reference to available geological and engineering data and only include volumes for which access to market is assured with reasonable certainty. Estimates of proved reserves are inherently imprecise, require the application of judgement and are subject to regular revision, either upward or downward, based on new information such as from the drilling of additional wells, observation of long-term reservoir performance under producing conditions and changes in economic factors, including product prices, contract terms or development plans.

Changes to estimates of proved developed reserves affect prospectively the amounts of depreciation, depletion and amortisation charged and, consequently, the carrying amounts of exploration and production assets. It is expected, however, that in the normal course of business the diversity of the asset portfolio will limit the effect of such revisions. The outcome of, or assessment of plans for, exploration or appraisal activity may result in the related capitalised exploration drilling costs being recognised in income in that period.

Information about the carrying amounts of exploration and production assets and the amounts charged to income, including depreciation, depletion and amortisation, is presented in Note 8.

### Impairment

For the purposes of determining whether impairment of assets has occurred, and the extent of any impairment or its reversal, the key assumptions management uses in estimating risk-adjusted future cash flows for value-in-use measures are future oil and gas prices, expected production volumes and refining margins appropriate to the local circumstances and environment. These assumptions and the judgements of management that are based on them are subject to change as new information becomes available. Changes in economic conditions can also affect the rate used to discount future cash flow estimates.

Future price assumptions tend to be stable because management does not consider short-term increases or decreases in prices as being indicative of long-term levels, but they are nonetheless subject to change. Expected production volumes, which comprise proved reserves and unproved volumes, are used for impairment testing because management believes this to be the most appropriate indicator of expected future cash flows. As discussed in "Proved oil and gas reserves" above, reserves estimates are inherently imprecise. Furthermore, projections about unproved volumes are based on information that is necessarily less robust than that available for mature reservoirs. Due to the nature and geographical spread of the business activity in which those assets are used, it is typically not practicable to estimate the likelihood or extent of impairments under different sets of assumptions. The discount rate applied is reviewed annually.

Changes in assumptions could affect the carrying amounts of assets, and impairment charges and reversals will affect income.

Information about the carrying amounts of assets and impairments is presented in Notes 7 and 8.

### Leases

Agreements under which payments are made to owners in return for the right to use an asset for a period are accounted for as leases. Leases that transfer substantially all the risks and rewards of ownership are recognised at the commencement of the lease term as finance leases within property, plant and equipment and debt at the fair value of the leased asset or, if lower, at the present value of the minimum lease payments. Finance lease payments are apportioned between interest expense and repayments of debt. All other leases are classified as operating leases and the cost is recognised in income on a straight-line basis.

### Joint arrangements and associates

Arrangements under which Shell has contractually agreed to share control (see "Nature of the Consolidated Financial Statements") with another party or parties are joint ventures where the parties have rights to the net assets of the arrangement, or joint operations where the parties have rights to the assets and obligations for the liabilities relating to the arrangement. Investments in entities over which Shell has the right to exercise significant influence but neither control nor joint control are classified as associates. Information about incorporated joint arrangements and associates at December 31, 2015, is set out in Exhibit 8.

Investments in joint ventures and associates are accounted for using the equity method, under which the investment is initially recognised at cost and subsequently adjusted for the Shell share of post-acquisition income less dividends received and the Shell share of other comprehensive income and other movements in equity, together with any loans of a long-term investment nature. Where necessary, adjustments are made to the financial statements of joint ventures and associates to bring the accounting policies used into line with those of Shell. In an exchange of assets and liabilities for an interest in a joint venture, the non-Shell share of any excess of the fair value of the assets and liabilities transferred over the pre-exchange carrying amounts is recognised in income. Unrealised gains on other transactions between Shell and its joint ventures and associates are eliminated to the extent of Shell's interest in them; unrealised losses are treated similarly but may also result in an assessment of whether the asset transferred is impaired.

Shell recognises its assets and liabilities relating to its interests in joint operations, including its share of assets held jointly and liabilities incurred jointly with other partners.

### Inventories

Inventories are stated at cost or net realisable value, whichever is lower. Cost comprises direct purchase costs (including transportation), and associated costs incurred in bringing inventories to their present condition and location, and is determined using the first-in, first-out (FIFO) method for oil and chemicals and by the weighted average cost method for materials.

### Taxation

The charge for current tax is calculated based on the income reported by the Company and its subsidiaries, as adjusted for items that are non-taxable or disallowed and using rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is determined, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the Consolidated Balance Sheet and on unused tax losses and credits carried forward.

Deferred tax assets and liabilities are calculated using the enacted or substantively enacted rates that are expected to apply when the asset or liability is recovered. They are not recognised where they arise on the initial recognition of goodwill or of an asset or liability in a transaction (other than in a business combination) that, at the time of the transaction, affects neither accounting nor taxable profit, or in respect of taxable temporary differences associated with subsidiaries, joint ventures and associates where the reversal of the respective temporary difference can be controlled by Shell and it is probable that it will not reverse in the foreseeable future.

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences, unused tax losses and credits carried forward can be utilised.

Income taxes are recognised in income except when they relate to items recognised in other comprehensive income, in which case the tax is recognised in other comprehensive income. Income tax assets and liabilities are presented separately in the Consolidated Balance Sheet except where there is a right of set-off within fiscal jurisdictions and an intention to settle such balances on a net basis.

### KEY ACCOUNTING JUDGEMENTS AND ESTIMATES

Tax liabilities are recognised when it is considered probable that there will be a future outflow of funds to a taxing authority. In such cases, provision is made for the amount that is expected to be settled, where this can be reasonably estimated. This requires the application of judgement as to the ultimate outcome, which can change over time depending on facts and circumstances. A change in estimate of the likelihood of a future outflow and/or in the expected amount to be settled would be recognised in income in the period in which the change occurs.

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in respect of deferred tax assets as well as in the amounts recognised in income in the period in which the change occurs.

Taxation information, including charges and deferred tax assets and liabilities, is presented in Note 16.

### Retirement benefits

Benefits in the form of retirement pensions and healthcare and life insurance are provided to certain employees and retirees under defined benefit and defined contribution plans.

Obligations under defined benefit plans are calculated annually by independent actuaries using the projected unit credit method, which takes into account employees' years of service and, for pensions, average or final pensionable remuneration, and are discounted to their present value using interest rates of high-quality corporate bonds denominated in the currency in which the benefits will be paid and of a duration consistent with the plan obligations. Where plans are funded, payments are made to independently managed trusts; assets held by those trusts are measured at fair value.

The amounts recognised in income in respect of defined benefit plans mainly comprise service cost and net interest. Service cost comprises principally the increase in the present value of the obligation for benefits resulting from employee service during the period (current service cost) and also amounts relating to past service and settlements or amendments of plans. Plan amendments are changes to benefits and are generally recognised when all legal and regulatory approvals have been received and the effects have been communicated to members. Net interest is calculated using the net defined benefit liability or asset matched against the discount rate yield curve at the beginning of each year for each plan. Remeasurements of the net defined benefit liability or asset resulting from actuarial gains and losses and the return on plan assets excluding the amount recognised in income are recognised in other comprehensive income.

For defined contribution plans, pension expense represents the amount of employer contributions payable for the period.

### KEY ACCOUNTING JUDGEMENTS AND ESTIMATES

Defined benefit obligations and plan assets, and the resulting liabilities and assets that are recognised, are subject to significant volatility as actuarial assumptions regarding future outcomes and market values change. Substantial judgement is required in determining the actuarial assumptions, which vary for the different plans to reflect local conditions but are determined under a common process in consultation with independent actuaries. The assumptions applied in respect of each plan are reviewed annually and adjusted where necessary to reflect changes in experience and actuarial recommendations.

#### Information

Information about the amounts reported in respect of defined benefit pension plans, assumptions applicable to the principal plans and their sensitivity to changes are presented in Note 17.

#### Provisions

Provisions are recognised at the balance sheet date at management's best estimate of the expenditure required to settle the present obligation. Non-current amounts are discounted at a rate intended to reflect the time value of money. Specific details for decommissioning and restoration costs are described below. The carrying amounts of provisions are regularly reviewed and adjusted for new facts or changes in law or technology.

Provisions for decommissioning and restoration costs, which arise principally in connection with hydrocarbon production facilities and pipelines, are measured on the basis of current requirements, technology and price levels; the present value is calculated using amounts discounted over the useful economic life of the assets. The liability is recognised (together with a corresponding amount as part of the related property, plant and equipment) once an obligation crystallises in the period when a reasonable estimate can be made. The effects of changes resulting from revisions to the timing or the amount of the original estimate of the provision are reflected on a prospective basis, generally by adjustment to the carrying amount of the related property, plant and equipment.

Other provisions are recognised in income in the period in which an obligation arises and the amount can be reasonably estimated. Provisions are measured based on current legal requirements and existing technology where applicable. Recognition of any joint and several liability is based on management's best estimate of the final pro-rata share of the liability. Provisions are determined independently of expected insurance recoveries. Recoveries are recognised when virtually certain of realisation.

#### KEY ACCOUNTING JUDGEMENTS AND ESTIMATES

Provisions are recognised for the future decommissioning and restoration of hydrocarbon production facilities and pipelines at the end of their economic lives. The estimated cost is recognised in income over the life of the proved developed reserves on a unit-of-production basis or on a straight-line basis, as applicable. Changes in the estimates of costs to be incurred, proved developed reserves or in the rate of production will therefore impact income, generally over the remaining economic life of the related assets.

Estimates of the amounts of provisions recognised are based on current legal and constructive requirements, technology and price levels. Because actual outflows can differ from estimates due to changes in laws, regulations, public expectations, technology, prices and conditions, and can take place many years in the future, the carrying amounts of provisions are regularly reviewed and adjusted to take account of such changes. The discount rate applied is reviewed annually.

Information about decommissioning and restoration provisions is presented in Note 18.

#### Financial instruments and other derivative contracts

Financial assets and liabilities are presented separately in the Consolidated Balance Sheet except where there is a legally enforceable right of offset and net settlement is regularly applied.

#### FINANCIAL ASSETS

##### Investments in securities

Investments in securities (also referred to as "securities") comprise equity and debt securities classified on initial recognition as available-for-sale and are carried at fair value, except where their fair value cannot be measured reliably, in which case they are carried at cost, less any impairment. Unrealised holding gains and losses other than impairments are recognised in other comprehensive income, except for translation differences arising on foreign currency debt securities, which are recognised in income. On maturity or disposal, net gains and losses previously deferred in accumulated other comprehensive income are recognised in income.

Interest income on debt securities is recognised in income using the effective interest method. Dividends on equity securities are recognised in income when receivable.

##### Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and in hand, including offsetting bank overdrafts, short-term bank deposits, money market funds, reverse repos and similar instruments that have a maturity of three months or less at the date of acquisition.

##### Trade receivables

Trade receivables are recognised initially at fair value based on amounts exchanged and subsequently at amortised cost less any impairment.

#### FINANCIAL LIABILITIES

Debt and trade payables are recognised initially at fair value based on amounts exchanged, net of transaction costs, and subsequently at amortised cost, except for fixed rate debt subject to fair value hedging which is remeasured for the hedged risk (see next page).

Interest expense on debt is accounted for using the effective interest method and, other than interest capitalised, is recognised in income.

#### DERIVATIVE CONTRACTS

Derivative contracts are used in the management of interest rate risk, foreign exchange risk and commodity price risk, and in the management of foreign currency cash balances. These contracts are recognised at fair value.

Those derivative contracts qualifying and designated as hedges are either: (i) a "fair value" hedge of the change in fair value of a recognised asset or liability or an unrecognised firm commitment; or (ii) a "cash flow" hedge of the change in cash flows to be received or paid relating to a recognised asset or liability or a highly probable forecast transaction.

A change in the fair value of a hedging instrument designated as a fair value hedge is recognised in income, together with the consequential adjustment to the carrying amount of the hedged item. The effective portion of a change in fair value of a derivative contract designated as a cash flow hedge is recognised in other comprehensive income until the hedged transaction occurs; any ineffective portion is recognised in income. Where the hedged item is a non-financial asset or liability, the amount in accumulated other comprehensive income is transferred to the initial carrying amount of the asset or liability; for other hedged items, the amount in accumulated other comprehensive income is recognised in income when the hedged transaction affects income.

All relationships between hedging instruments and hedged items are documented, as well as risk management objectives and strategies for undertaking hedge transactions. The effectiveness of hedges is also continually assessed and hedge accounting is discontinued when a hedge ceases to be highly effective.

Gains and losses on derivative contracts not qualifying and designated as hedges, including forward sale and purchase contracts for commodities in trading operations that may be settled by the physical delivery or receipt of the commodity, are recognised in income.

Unless designated as hedging instruments, contracts to sell or purchase non-financial items that can be settled net as if the contracts were financial instruments and that do not meet expected own use requirements (typically, forward sale and purchase contracts for commodities in trading operations), and contracts that are or contain written options, are recognised at fair value; associated gains and losses are recognised in income.

Derivatives embedded within contracts that are not already required to be recognised at fair value, and that are not closely related to the host contract in terms of economic characteristics and risks, are separated from their host contract and recognised at fair value; associated gains and losses are recognised in income.

#### Fair value measurements

Fair value measurements are estimates of the amounts for which assets or liabilities could be transferred at the measurement date, based on the assumption that such transfers take place between participants in principal markets and, where applicable, taking highest and best use into account. Where available, fair value measurements are derived from prices quoted in active markets for identical assets or liabilities. In the absence of such information, other observable inputs are used to estimate fair value. Inputs derived from external sources are corroborated or otherwise verified, as appropriate. In the absence of publicly available information, fair value is determined using estimation techniques that take into account market perspectives relevant to the asset or liability, in as far as they can reasonably be ascertained, based on predominantly unobservable inputs. For derivative contracts where publicly available information is not available, fair value estimations are generally determined using models and other valuation methods, the key inputs for which include future prices, volatility, price correlation, counterparty credit risk and market liquidity, as appropriate; for other assets and liabilities, fair value estimations are generally based on the net present value of expected future cash flows.

#### Share-based compensation plans

The fair value of share-based compensation expense arising from the Performance Share Plan (PSP) and the Long-Term Incentive Plan (LTIP) – Shell's main equity-settled plans – is estimated using a Monte Carlo option pricing model and is recognised in income from the date of grant over the vesting period with a corresponding increase directly in equity. The model projects and averages the results for a range of potential outcomes for the vesting conditions, the principal assumptions for which are the share price volatility and dividend yields for Shell and four of its main competitors over the last three years and the last 10 years. Changes in the fair value of share-based compensation for cash-settled plans are recognised in income with a corresponding change in liabilities.

#### Shares held in trust

Shares in the Company, which are held by employee share ownership trusts and trust-like entities, are not included in assets but are reflected at cost as a deduction from equity as shares held in trust.

#### Acquisitions and disposals of interests in a business

Assets acquired and liabilities assumed when control is obtained over a business are recognised at their fair value at the date of the acquisition; the amount of the purchase consideration above this value is recognised as goodwill, with any non-controlling interest recognised as the proportionate share of the identifiable net assets. The acquisition of a non-controlling interest in a subsidiary and the disposal of an interest while retaining control are accounted for as transactions within equity. The difference between the purchase consideration or disposal proceeds after tax and the relevant proportion of the non-controlling interest, measured by reference to the carrying amount of the interest's net assets at the date of acquisition or disposal, is recognised in retained earnings as a movement in equity attributable to Royal Dutch Shell plc shareholders.

#### Consolidated Statement of Income presentation

Purchases reflect all costs related to the acquisition of inventories and the effects of the changes therein, and include associated costs incurred in conversion into finished or intermediate products. Production and manufacturing expenses are the costs of operating, maintaining and managing production and manufacturing assets. Selling, distribution and administrative expenses include direct and indirect costs of marketing and selling products.

### 3 CHANGES TO IFRS NOT YET ADOPTED

The final version of IFRS 9 *Financial Instruments* was issued in 2014 and sets out the requirements for recognising and measuring financial assets, financial liabilities and certain contracts to buy or sell non-financial items. It replaces IAS 39 *Financial Instruments: Recognition and Measurement*. IFRS 9 is required to be adopted by 2018. The impact for Shell is under review and IFRS 9 may facilitate further use of hedge accounting and also could result in different income recognition, or timing of recognition, in respect of certain investments in securities.

IFRS 11 *Joint Arrangements* was amended in 2014 to clarify the accounting for the acquisition of an interest or an additional interest in a joint operation where the joint operation itself meets the IFRS definition of a business. The principles of business combination accounting, with some exceptions, should be applied to such transactions which take place on or after the implementation date. This differs from Shell's current practice which is to account for these as asset acquisitions and therefore the amendment may result in further use of fair value measurements and recognition of goodwill. The amendment will be adopted with effect from January 1, 2016, and the impact on Shell will depend on future transactions.

IFRS 15 *Revenue from Contracts with Customers* was issued in 2014 and replaces IAS 18 *Revenue*. It is required to be adopted by 2018 and is not expected to have a significant effect on Shell's accounting or disclosures.

IFRS 16 *Leases* was issued in January 2016 to replace IAS 17 *Leases* and is required to be adopted by 2019. Under the new standard all lease contracts, with limited exceptions, are recognised in financial statements by way of right of use assets and corresponding lease liabilities. Compared with the existing accounting for operating leases, it will also impact the classification and timing of expenses and consequently the classification between cash flow from operating activities and cash flow from financing activities. Key aspects being considered in Shell's review of the new standard are the application of the new definition of a lease, the adoption date and whether to apply any transitional options such as prospective application.

IFRS 10 *Consolidated Financial Statements* and IAS 28 *Investments in Associates and Joint Ventures* were amended in 2014 with an effective date of January 1, 2016, to clarify the accounting for the contribution of a business to a joint venture or an associate in exchange for an equity interest in that joint venture or associate. A full gain or loss on sale should be recognised for such transactions which take place on or after the implementation date, which differs from Shell's current practice. In 2015 the effective date of the amendment was postponed to a date yet to be determined. It is not intended to early adopt the amendment.

### 4 SEGMENT INFORMATION

Shell is engaged in the principal aspects of the oil and gas industry in more than 70 countries and reports its business through three segments. Upstream combines the operating segments Upstream International and Upstream Americas, which are engaged in the exploration for and extraction of crude oil, natural gas and natural gas liquids; the extraction of bitumen from oil sands that is converted into synthetic crude oil; the transportation of oil; the liquefaction and transportation of gas; the conversion of natural gas to liquids to provide fuels and other products; and wind energy. These operating segments have similar economic characteristics because their earnings are significantly dependent on crude oil and natural gas prices and production volumes, and because their projects generally require significant investment, are complex and generate revenues for many years. Downstream is engaged in refining, pipelines and marketing activities for oil products and chemicals and in alternative energy (excluding wind). Corporate represents the key support functions, comprising Shell's holdings and treasury organisation, including its self-insurance activities as well as its headquarters and central functions. Integrated within the Upstream and Downstream segments are Shell's trading activities, technical services and technology capability, and functions such as safety and environment, and CO<sub>2</sub> management. Sales between segments are based on prices generally equivalent to commercially available prices.

Segment earnings are presented on a current cost of supplies basis (CCS earnings), which is the earnings measure used by the Chief Executive Officer (CEO) for the purposes of making decisions about allocating resources and assessing performance. On this basis, the purchase price of volumes sold during the period is based on the current cost of supplies during the same period after making allowance for the tax effect. CCS earnings therefore exclude the effect of changes in the oil price on inventory carrying amounts.

Information by segment on a current cost of supplies basis is as follows:

<b>2015</b>				<b>\$ MILLION</b>
	Upstream	Downstream	Corporate	Total
CCS earnings	(5,663)	10,243	(425)	4,155
Revenue and other income				
Revenue				
Third party	28,480	236,384	96	264,960
Inter-segment	25,447	1,362	-	
Share of profit/(loss) of joint ventures and associates	1,962	2,215	(327)	3,850
Interest and other income	2,356	1,156	157	3,669
<b>Total</b>				<b>272,479</b>
Depreciation, depletion and amortisation charge, of which:	23,001	3,667	46	26,714
Impairment losses	8,746	556	27	9,329
Impairment reversals	-	3	-	3
Interest expense	881	51	956	1,888
Taxation charge/(credit)	10	1,639	(1,156)	493
<b>2014</b>				<b>\$ MILLION</b>
	Upstream	Downstream	Corporate	Total
CCS earnings	15,841	3,411	(156)	19,096
Revenue and other income				
Revenue				
Third party	45,240	375,752	113	421,105
Inter-segment	47,059	2,294	-	
Share of profit/(loss) of joint ventures and associates	5,502	1,693	(346)	6,849
Interest and other income	4,029	41	53	4,123
<b>Total</b>				<b>432,077</b>
Depreciation, depletion and amortisation charge, of which:	17,868	6,619	12	24,499
Impairment losses	3,587	3,396	-	6,983
Impairment reversals	100	251	-	351
Interest expense	953	86	765	1,804
Taxation charge/(credit)	15,277	1,085	(1,324)	15,038
<b>2013</b>				<b>\$ MILLION</b>
	Upstream	Downstream	Corporate	Total
CCS earnings	12,638	3,869	372	16,879
Revenue and other income				
Revenue				
Third party	47,357	403,725	153	451,235
Inter-segment	45,512	702	-	
Share of profit/(loss) of joint ventures and associates	6,120	1,525	(388)	7,257
Interest and other income	659	273	157	1,089
<b>Total</b>				<b>459,581</b>
Depreciation, depletion and amortisation charge, of which:	16,949	4,421	139	21,509
Impairment losses	4,678	749	-	5,427
Impairment reversals	17	-	-	17
Interest expense	910	83	649	1,642
Taxation charge/(credit)	17,803	1,129	(1,712)	17,220



[Table 4 continued]

RECONCILIATION OF CCS EARNINGS TO INCOME FOR THE PERIOD		\$ MILLION		
	2015	2014	2013	
CCS earnings	4,155	19,096	16,879	
Current cost of supplies adjustment:				
Purchases	(2,278)	(5,087)	(525)	
Taxation	646	1,454	154	
Share of (loss)/profit of joint ventures and associates	(323)	(733)	18	
Income for the period	2,200	14,730	16,526	

Information by geographical area is as follows:

2015		\$ MILLION			
	Europe	Asia, Oceania, Africa	USA	Other Americas	Total
Third-party revenue, by origin	95,223	95,892	50,666	23,179	264,960
Intangible assets, property, plant and equipment, joint ventures and associates at December 31	33,439	104,949	51,269	29,614	219,271

2014		\$ MILLION			
	Europe	Asia, Oceania, Africa	USA	Other Americas	Total
Third-party revenue, by origin	154,709	149,869	80,133[A]	36,394[A]	421,105
Intangible assets, property, plant and equipment, joint ventures and associates at December 31	35,220	105,226	51,124	39,536	231,106

2013		\$ MILLION			
	Europe	Asia, Oceania, Africa	USA	Other Americas	Total
Third-party revenue, by origin	175,584	157,673	79,581[A]	38,397[A]	451,235
Intangible assets, property, plant and equipment, joint ventures and associates at December 31	35,919	101,003	51,626	42,356	230,904

[A] Revised following a reassessment of geographical allocation, resulting in an increase in the USA and a corresponding decrease in Other Americas of \$9,320 million in 2014 and \$7,029 million in 2013.

## 5 INTEREST AND OTHER INCOME

		\$ MILLION		
	2015	2014	2013	
Interest income	359	206	194	
Dividend income (from investments in securities)	456	888	615	
Net gains on sale of non-current assets and businesses	3,460	3,212	382	
Foreign exchange losses on financing activities	(649)	(195)	(184)	
Other	43	12	82	
Total	3,669	4,123	1,089	

Net gains on sale of non-current assets and businesses in 2015 arose mainly in respect of interests in Nigeria (Upstream), interests in France and Norway (Downstream) and an office building in the UK (Corporate). In 2014, they arose mainly in respect of Upstream interests in Australia, Nigeria and the USA.

Other net foreign exchange losses of \$197 million in 2015 (2014: \$122 million losses; 2013: \$17 million gains) were included in purchases.

## 6 INTEREST EXPENSE

	\$ MILLION		
	2015	2014	2013
Interest incurred and similar charges	1,832	1,517	1,330
Less: interest capitalised	(839)	(757)	(762)
Other net (gains)/losses on fair value hedges of debt	(37)	5	82
Accretion expense (see Note 18)	932	1,039	992
<b>Total</b>	<b>1,888</b>	<b>1,804</b>	<b>1,642</b>

The rate applied in determining the amount of interest capitalised in 2015 was 3% (2014: 3%; 2013: 3%).

## 7 INTANGIBLE ASSETS

2015		\$ MILLION		
	LNG off-take and sales contracts	Goodwill	Software and other	Total
<b>Cost</b>				
At January 1	3,271	2,712	4,562	10,545
Additions	-	-	277	277
Sales, retirements and other movements	-	-	(174)	(174)
Currency translation differences	-	(108)	(192)	(300)
<b>At December 31</b>	<b>3,271</b>	<b>2,604</b>	<b>4,473</b>	<b>10,348</b>
<b>Depreciation, depletion and amortisation, including impairments</b>				
At January 1	278	316	2,875	3,469
Charge for the year	278	315	335	928
Sales, retirements and other movements	-	-	(156)	(156)
Currency translation differences	-	(37)	(139)	(176)
<b>At December 31</b>	<b>556</b>	<b>594</b>	<b>2,915</b>	<b>4,065</b>
<b>Carrying amount at December 31</b>	<b>2,715</b>	<b>2,010</b>	<b>1,558</b>	<b>6,283</b>

2014		\$ MILLION		
	LNG off-take and sales contracts	Goodwill	Software and other	Total
<b>Cost</b>				
At January 1	-	2,948	4,585	7,533
Additions	3,271	-	162	3,433
Sales, retirements and other movements	-	(170)	9	(161)
Currency translation differences	-	(66)	(194)	(260)
<b>At December 31</b>	<b>3,271</b>	<b>2,712</b>	<b>4,562</b>	<b>10,545</b>
<b>Depreciation, depletion and amortisation, including impairments</b>				
At January 1	-	385	2,754	3,139
Charge for the year	278	-	386	664
Sales, retirements and other movements	-	(59)	(128)	(187)
Currency translation differences	-	(10)	(137)	(147)
<b>At December 31</b>	<b>278</b>	<b>316</b>	<b>2,875</b>	<b>3,469</b>
<b>Carrying amount at December 31</b>	<b>2,993</b>	<b>2,396</b>	<b>1,687</b>	<b>7,076</b>

Additions in 2014 mainly comprise assets acquired as a result of the acquisition of Repsol LNG businesses outside North America.

Goodwill at December 31, 2015 and 2014, principally relates to Pennzoil-Quaker State Company, a lubricants business in the Downstream segment based largely in North America. For impairment testing purposes, cash flow projections for this business reflected long-term growth rates that were assumed to be equal to the average expected inflation rate for the USA (2015: 2%; 2014: 2%) and were adjusted for a variety of risks, in particular volume and margin deterioration. The nominal pre-tax discount rate applied was 6% (2014: 6%).

## 8 PROPERTY, PLANT AND EQUIPMENT

2015						\$ MILLION
	Exploration and production assets		Manufacturing, supply and distribution	Other	Total	
	Exploration and evaluation	Production				
<b>Cost</b>						
At January 1	29,922	234,725	75,681	23,871	364,199	
Additions	3,523	17,425	4,148	1,458	26,554	
Sales, retirements and other movements	(4,467)	(442)	(2,975)	(2,357)	(10,241)	
Currency translation differences	(1,250)	(12,149)	(3,206)	(1,984)	(18,589)	
<b>At December 31</b>	<b>27,728</b>	<b>239,559</b>	<b>73,648</b>	<b>20,988</b>	<b>361,923</b>	
<b>Depreciation, depletion and amortisation, including impairments</b>						
At January 1	3,810	116,476	39,347	12,094	171,727	
Charge for the year	4,968	16,229	3,654	935	25,786	
Sales, retirements and other movements	(427)	(3,912)	(2,792)	(1,748)	(8,879)	
Currency translation differences	(256)	(6,207)	(2,051)	(1,035)	(9,549)	
<b>At December 31</b>	<b>8,095</b>	<b>122,586</b>	<b>38,158</b>	<b>10,246</b>	<b>179,085</b>	
<b>Carrying amount at December 31</b>	<b>19,633</b>	<b>116,973</b>	<b>35,490</b>	<b>10,742</b>	<b>182,838</b>	

2014						\$ MILLION
	Exploration and production assets		Manufacturing, supply and distribution	Other	Total	
	Exploration and evaluation	Production				
<b>Cost</b>						
At January 1	34,102	233,180	76,624	27,209	371,115	
Additions	5,457	21,958	5,633	2,042	35,090	
Sales, retirements and other movements	(8,907)	(11,821)	(3,544)	(3,274)	(27,546)	
Currency translation differences	(730)	(8,592)	(3,032)	(2,106)	(14,460)	
<b>At December 31</b>	<b>29,922</b>	<b>234,725</b>	<b>75,681</b>	<b>23,871</b>	<b>364,199</b>	
<b>Depreciation, depletion and amortisation, including impairments</b>						
At January 1	4,978	121,714	38,421	14,105	179,218	
Charge for the year	2,587	13,633	6,234	1,381	23,835	
Sales, retirements and other movements	(3,679)	(14,353)	(3,323)	(2,295)	(23,650)	
Currency translation differences	(76)	(4,518)	(1,985)	(1,097)	(7,676)	
<b>At December 31</b>	<b>3,810</b>	<b>116,476</b>	<b>39,347</b>	<b>12,094</b>	<b>171,727</b>	
<b>Carrying amount at December 31</b>	<b>26,112</b>	<b>118,249</b>	<b>36,334</b>	<b>11,777</b>	<b>192,472</b>	

The carrying amount at December 31, 2015, includes \$45,701 million (2014: \$46,193 million) of assets under construction. This amount excludes exploration and evaluation assets. The carrying amount at December 31, 2015, also includes \$1,161 million of assets classified as held for sale (2014: \$1,412 million).

Exploration and production assets at December 31, 2015, include rights and concessions in respect of proved and unproved properties of \$17,204 million (2014: \$24,152 million). Exploration and evaluation assets principally comprise rights and concessions in respect of unproved properties and capitalised exploration drilling costs.

Contractual commitments for the acquisition of property, plant and equipment at December 31, 2015, amounted to \$3,062 million (2014: \$4,565 million).

CARRYING AMOUNT OF PROPERTY, PLANT AND EQUIPMENT HELD UNDER FINANCE LEASES			\$ MILLION
	Dec 31, 2015	Dec 31, 2014	
Exploration and production assets	2,080	2,686	
Manufacturing, supply and distribution	1,856	2,069	
Other	324	293	
<b>Total</b>	<b>4,260</b>	<b>5,048</b>	

IMPAIRMENTS	\$ MILLION		
	2015	2014	2013
Impairment losses [A]			
Exploration and production assets	8,387	3,585	4,528
Manufacturing, supply and distribution	458	3,099	305
Other	165	299	532
<b>Total</b>	<b>9,010</b>	<b>6,983</b>	<b>5,365</b>
Impairment reversals [A]			
Exploration and production assets	–	100	17
Other	3	244	–
<b>Total</b>	<b>3</b>	<b>344</b>	<b>17</b>

[A] Presented by segment in Note 4, together with impairment losses and reversals in respect of intangible assets.

Following the revisions to Shell's long-term oil and gas price outlook in 2015, relevant assets were identified for an impairment review resulting in impairment charges in 2015 of \$4.4 billion, principally related to Upstream North American shale properties. In the calculation of the value in use, cash flows were adjusted for risks specific to the related assets and the nominal pre-tax discount rate applied was 6%. Further future downward revisions to Shell's oil and gas price outlook by 10% or more would lead to further impairments which, in aggregate, are likely to be material. Also in Upstream in 2015, Shell ceased Alaska drilling activities for the foreseeable future and the Carmon Creek project in Canada, resulting in impairment charges of \$1.8 billion and \$2.2 billion respectively.

In response to changes to future capital expenditure plans, an impairment review of tight-gas properties in North America was carried out in 2014, resulting in impairment charges of \$2.7 billion in Upstream in respect of a number of US properties. Also in 2014, an impairment review of the refining portfolio was carried out in response to the continuation of weak refining margins across the industry, resulting in impairment charges of \$2.8 billion in Downstream. Impairment losses in 2013 arose principally in Upstream in respect of the US tight-gas and liquids-rich shale portfolio.

CAPITALISED EXPLORATION DRILLING COSTS	\$ MILLION		
	2015	2014	2013
At January 1	8,465	8,377	7,886
Additions pending determination of proved reserves	3,276	4,370	5,978
Amounts charged to expense	(2,771)	(1,881)	(2,742)
Reclassifications to productive wells on determination of proved reserves	(991)	(2,116)	(2,231)
Other movements	(144)	(285)	(514)
<b>At December 31</b>	<b>7,835</b>	<b>8,465</b>	<b>8,377</b>

Exploration drilling costs capitalised for periods greater than one year at December 31, 2015, analysed according to the most recent year of activity, are presented in the table below. They comprise \$869 million relating to 15 projects where drilling activities were underway or firmly planned for the future and \$3,852 million relating to 38 projects awaiting development concepts.

	Projects		Wells	
	Number	\$ MILLION	Number	\$ MILLION
Between 1 and 5 years	42	4,364	237	3,554
Between 6 and 10 years	10	332	44	1,050
Between 11 and 15 years	1	25	6	117
<b>Total</b>	<b>53</b>	<b>4,721</b>	<b>287</b>	<b>4,721</b>

## 9 JOINT VENTURES AND ASSOCIATES

SHELL SHARE OF COMPREHENSIVE INCOME OF JOINT VENTURES AND ASSOCIATES										\$ MILLION
	2015			2014			2013			
	Joint ventures	Associates	Total	Joint ventures	Associates	Total	Joint ventures	Associates	Total	
Income for the period	908[A]	2,619	3,527	1,813	4,303	6,116	2,541	4,734	7,275	
Other comprehensive (loss)/income for the period	(73)	33	(40)	(90)	(66)	(156)	24	(191)	(167)	
Comprehensive income for the period	835	2,652	3,487	1,723	4,237	5,960	2,565	4,543	7,108	

[A] Includes an impairment loss of \$837 million as a result of changes in the outlook in respect of a joint venture in the Oceania region.

CARRYING AMOUNT OF INTERESTS IN JOINT VENTURES AND ASSOCIATES							\$ MILLION
	Dec 31, 2015			Dec 31, 2014			
	Joint ventures	Associates	Total	Joint ventures	Associates	Total	
Net assets	19,065	11,085	30,150	20,387	11,171	31,558	

TRANSACTIONS WITH JOINT VENTURES AND ASSOCIATES				\$ MILLION
	2015	2014	2013	
Sales and charges to joint ventures and associates	36,548	48,379	52,003	
Purchases and charges from joint ventures and associates	26,440	36,567	35,941	

These transactions principally comprise sales and purchases of goods and services in the ordinary course of business. Related balances outstanding at December 31, 2015 and 2014, are presented in Notes 11 and 15.

OTHER ARRANGEMENTS IN RESPECT OF JOINT VENTURES AND ASSOCIATES			\$ MILLION
	Dec 31, 2015	Dec 31, 2014	
Commitments to make purchases from joint ventures and associates	86,442	131,165	
Commitments to provide debt or equity funding to joint ventures and associates	2,711	3,699	
Amounts guaranteed in respect of joint ventures and associates	289	1,636	

## 10 INVESTMENTS IN SECURITIES

Investments in securities at December 31, 2015, comprise equity and debt securities. Equity securities principally comprise a 15% interest in Malaysia LNG Tiga Sendirian Berhad (2014: a 15% interest in each of Malaysia LNG Dua Sendirian Berhad and Malaysia LNG Tiga Sendirian Berhad). Debt securities comprise a portfolio required to be held by Shell's insurance entities as security for their activities.

Equity and debt securities carried at fair value totalled \$3,052 million at December 31, 2015 (2014: \$3,776 million), with the remainder carried at cost. Of those held at fair value, \$1,427 million (2014: \$1,383 million) are measured by reference to prices in active markets for identical assets, and \$1,625 million (2014: \$2,393 million) are measured by reference to predominantly unobservable inputs. Assets in the latter category, all of which are equity securities, are measured based on expected dividend flows, adjusted for country and other risks as appropriate and discounted to their present value. In the case of the Malaysia LNG investment referred to above, were the oil price assumption used in its valuation to be decreased by \$10 per barrel with no change in other measurement inputs, its carrying amount would decrease by \$149 million (2014: \$212 million).

INVESTMENTS IN SECURITIES MEASURED USING PREDOMINANTLY UNOBSERVABLE INPUTS			\$ MILLION
	2015	2014	
At January 1	2,393	3,166	
Losses recognised in other comprehensive loss	(733)	(776)	
Other movements	(35)	3	
At December 31	1,625	2,393	

## 11 TRADE AND OTHER RECEIVABLES

	\$ MILLION			
	Dec 31, 2015		Dec 31, 2014	
	Current	Non-current	Current	Non-current
Trade receivables	20,607	–	28,393	–
Other receivables	6,694	4,018	8,968	3,738
Amounts due from joint ventures and associates	2,107	2,260	3,173	2,212
Derivative contracts (see Note 19)	13,114	744	14,037	703
Prepayments and deferred charges	3,262	1,695	3,899	1,651
<b>Total</b>	<b>45,784</b>	<b>8,717</b>	<b>58,470</b>	<b>8,304</b>

The fair value of financial assets included above approximates the carrying amount and, other than the fair value of certain derivative contracts, is determined from predominantly unobservable inputs.

Other receivables principally comprise income tax recoverable (see Note 16), other taxes recoverable and balances due from joint arrangement partners.

Provisions for impairments deducted from trade and other receivables amounted to \$456 million at December 31, 2015 (2014: \$533 million).

	\$ MILLION	
	Dec 31, 2015	Dec 31, 2014
<b>OVERDUE TRADE RECEIVABLES</b>		
Overdue 1–30 days	569	753
Overdue 31–180 days	480	415
Overdue more than 180 days	224	476
<b>Total</b>	<b>1,273</b>	<b>1,644</b>

Information about offsetting, collateral and credit risk is presented in Note 19.

## 12 INVENTORIES

	\$ MILLION	
	Dec 31, 2015	Dec 31, 2014
Oil and chemicals	14,077	17,842
Materials	1,745	1,859
<b>Total</b>	<b>15,822</b>	<b>19,701</b>

Inventories at December 31, 2015, include write-downs to net realisable value of \$1,134 million (2014: \$1,659 million).

## 13 CASH AND CASH EQUIVALENTS

	\$ MILLION	
	Dec 31, 2015[A]	Dec 31, 2014
Cash	3,237	5,095
Short-term bank deposits	7,442	7,707
Money market funds, reverse repos and other cash equivalents	21,073	8,805
<b>Total</b>	<b>31,752</b>	<b>21,607</b>

[A] See Note 19 in respect of cash flow hedges.

Included in cash and cash equivalents at December 31, 2015, are amounts totalling \$524 million (2014: \$626 million) that are subject to currency controls or other legal restrictions. Information about credit risk is presented in Note 19.

## 14 DEBT AND LEASE ARRANGEMENTS

DEBT	\$ MILLION					
	Dec 31, 2015			Dec 31, 2014		
	Debt (excluding finance lease liabilities)	Finance lease liabilities	Total	Debt (excluding finance lease liabilities)	Finance lease liabilities	Total
Short-term debt	899	–	899	1,590	–	1,590
Long-term debt due within 1 year	4,100	531	4,631	5,104	514	5,618
Current debt	4,999	531	5,530	6,694	514	7,208
Non-current debt	47,195	5,654	52,849	32,144	6,188	38,332
Total	52,194	6,185	58,379	38,838	6,702	45,540

NET DEBT	\$ MILLION			
	Current debt	Non-current debt	Cash and cash equivalents (see Note 13)	Net debt
At January 1, 2015	(7,208)	(38,332)	21,607	(23,933)
Cash flow	5,327	(20,218)	11,215	(3,676)
Other movements	(3,849)	5,436	–	1,587
Currency translation differences	200	265	(1,070)	(605)
At December 31, 2015	(5,530)	(52,849)	31,752	(26,627)
At January 1, 2014	(8,344)	(36,218)	9,696	(34,866)
Cash flow	6,518	(6,875)	12,597	12,240
Other movements	(5,472)	4,634	–	(838)
Currency translation differences	90	127	(686)	(469)
At December 31, 2014	(7,208)	(38,332)	21,607	(23,933)

Shell management's financial strategy is to manage Shell's assets and liabilities with the aim that, across the business cycle, "cash in" at least equals "cash out" while maintaining a strong balance sheet.

Gearing, calculated as net debt (total debt less cash and cash equivalents) as a percentage of total capital (net debt plus total equity), is a key measure of Shell's capital structure. Across the business cycle management aims to manage gearing within a range of 0-30%. At December 31, 2015, gearing was 14.0% (2014: 12.2%).

GEARING	\$ MILLION, EXCEPT WHERE OTHERWISE INDICATED	
	Dec 31, 2015	Dec 31, 2014
Net debt	26,627	23,933
Total equity	164,121	172,786
Total capital	190,748	196,719
Gearing	14.0%	12.2%

Our priorities for applying our cash are the servicing and reduction of debt commitments, payment of dividends, share buybacks and capital investment. Management's policy is to grow the dollar dividend through time in line with its view of Shell's underlying earnings and cash flow.

Shell has access to international debt capital markets via two commercial paper (CP) programmes, a euro medium-term note (EMTN) programme and a US universal shelf (US shelf) registration. Issuances under the CP programmes are supported by a committed credit facility and cash.

BORROWING FACILITIES AND AMOUNTS UNDRAWN	\$ MILLION			
	Facility		Amount undrawn	
	Dec 31, 2015	Dec 31, 2014	Dec 31, 2015	Dec 31, 2014
CP programmes	20,000	20,000	20,000	20,000
EMTN programme	unlimited	25,000	n/a	12,117
US shelf registration	unlimited	unlimited	n/a	n/a
Committed credit facility	7,480	7,480	7,480	7,480
Bridge credit facility	14,932	n/a	14,932	n/a

Under the CP programmes, Shell can issue debt of up to \$10 billion with maturities not exceeding 270 days and \$10 billion with maturities not exceeding 397 days. The EMTN programme is updated each year, most recently in August 2015, when the \$25 billion upper limit was removed. \$5,285 million was issued under this programme in 2015 (2014: \$6,394 million). The US shelf registration provides Shell with the flexibility to issue debt securities, ordinary shares, preferred shares and warrants. The registration is updated every three years and was last updated in October 2014. Debt totalling \$15,000 million was issued under this registration in 2015 (2014: \$nil). The committed credit facility is available on same-day terms, at pre-agreed margins, and expires in 2020. The terms and availability are not conditional on Shell's financial ratios or its financial credit ratings. The bridge credit facility was entered into in 2015 in advance of the acquisition of BG Group plc (BG) and was cancelled unused on February 10, 2016.

In addition, other subsidiaries have access to short-term bank facilities totalling \$4,652 million at December 31, 2015 (2014: \$3,760 million).

Interest rate swaps were entered into against certain of the fixed rate debt due to mature after more than one year, affecting the effective interest rate on these balances (see Note 19).

The following tables compare contractual cash flows for debt excluding finance lease liabilities at December 31, with the carrying amount in the Consolidated Balance Sheet. Contractual amounts reflect the effects of changes in foreign exchange rates; differences from carrying amounts reflect the effects of discounting, premiums and, where hedge accounting is applied, fair value adjustments. Interest is estimated assuming interest rates applicable to variable rate debt remain constant and there is no change in aggregate principal amounts of debt other than repayment at scheduled maturity, as reflected in the table.

2015								\$ MILLION	
	Contractual payments						Difference from carrying amount	Carrying amount	
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later			Total
EMTN programme	1,365	1,639	2,731	2,052	–	8,438	16,225	445	16,670
US shelf registration	2,000	3,750	4,500	2,000	5,250	15,750	33,250	(121)	33,129
Bank and other borrowings	1,634	137	475	49	27	73	2,395	–	2,395
<b>Total (excluding interest)</b>	<b>4,999</b>	<b>5,526</b>	<b>7,706</b>	<b>4,101</b>	<b>5,277</b>	<b>24,261</b>	<b>51,870</b>	<b>324</b>	<b>52,194</b>
Interest	1,500	1,394	1,264	1,052	883	11,205	17,298		

2014								\$ MILLION	
	Contractual payments						Difference from carrying amount	Carrying amount	
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later			Total
EMTN programme	–	1,519	1,823	3,039	779	5,166	12,326	752	13,078
US shelf registration	4,250	2,000	1,750	2,750	2,000	9,750	22,500	5	22,505
Bank and other borrowings	2,421	262	319	130	49	74	3,255	–	3,255
<b>Total (excluding interest)</b>	<b>6,671</b>	<b>3,781</b>	<b>3,892</b>	<b>5,919</b>	<b>2,828</b>	<b>14,990</b>	<b>38,081</b>	<b>757</b>	<b>38,838</b>
Interest	1,107	1,076	955	833	644	7,050	11,665		

Debt is issued under the EMTN programme and US shelf registration by Shell International Finance B.V., a 100%-owned subsidiary of the Company, and is underwritten by guarantees issued by the Company. Bank and other borrowings are raised by other subsidiaries with no recourse beyond the immediate borrower and/or the local assets.

The fair value of debt excluding finance lease liabilities at December 31, 2015, was \$53,480 million (2014: \$41,120 million) determined from the prices quoted for those securities.

Lease arrangements are entered into, as lessee, for: in Upstream, principally drilling and ancillary equipment, service vessels, obligations under certain power generation contracts ("tolling agreements") and LNG vessels; in Downstream, principally tankers, storage capacity and retail sites; and in Corporate, principally land and buildings.



### Lease obligations

The future minimum lease payments for finance and operating leases and the present value of future minimum finance lease payments at December 31, by payment date are as follows:

	\$ MILLION			
	Future minimum lease payments	Interest	Finance leases Present value of future minimum lease payments	Operating leases Future minimum lease payments
2015				
Less than 1 year	1,122	591	531	5,332
Between 1 and 5 years	3,462	1,475	1,987	13,293
5 years and later	5,466	1,799	3,667	7,578
<b>Total</b>	<b>10,050</b>	<b>3,865</b>	<b>6,185</b>	<b>26,203</b>

	\$ MILLION			
	Future minimum lease payments	Interest	Finance leases Present value of future minimum lease payments	Operating leases Future minimum lease payments[A]
2014				
Less than 1 year	1,068	554	514	5,099
Between 1 and 5 years	3,636	1,637	1,999	13,509
5 years and later	6,254	2,065	4,189	9,663
<b>Total</b>	<b>10,958</b>	<b>4,256</b>	<b>6,702</b>	<b>28,271</b>

[A] Revised following reassessment of contracts.

Finance lease liabilities are secured on the leased assets and include obligations under tolling agreements. The present value of the future minimum lease payments under these agreements was \$1,576 million at December 31, 2015 (2014: \$1,778 million). The agreements mature between 2021 and 2024 and the average interest rate is 8%.

The net present value of future minimum lease payments for operating leases at December 31, 2015, was \$23,640 million (2014: \$26,044 million, as revised), discounting the payments at 2.6% (2014: 2.0%). This should not be considered as a specific indication of the increase in both assets and liabilities that would result from application of IFRS 16 *Leases* at the respective date (see Note 3), which will depend on various factors including Shell's choice of adoption method.

Future minimum lease payments at December 31, 2015, are stated before deduction of expected rental income from non-cancellable sub-leases of \$485 million (2014: \$551 million) in respect of finance leases and \$169 million (2014: \$172 million) in respect of operating leases.

Operating lease expense in 2015 was \$4,751 million (2014: \$4,572 million; 2013: \$4,056 million).

## 15 TRADE AND OTHER PAYABLES

	\$ MILLION			
	Dec 31, 2015		Dec 31, 2014	
	Current	Non-current	Current	Non-current
Trade payables	23,795	-	32,131	-
Other payables	4,406	2,062	5,832	2,046
Amounts due to joint ventures and associates	2,503	24	2,702	21
Derivative contracts (see Note 19)	10,757	1,687	11,554	520
Accruals and deferred income	11,309	755	12,645	995
<b>Total</b>	<b>52,770</b>	<b>4,528</b>	<b>64,864</b>	<b>3,582</b>

The fair value of financial liabilities included above approximates the carrying amount and, other than the fair value of certain derivative contracts, is determined from predominantly unobservable inputs.

Other payables include balances due to joint arrangement partners and commitments for share repurchases undertaken on the Company's behalf under irrevocable, non-discretionary arrangements.

Information about offsetting, collateral and liquidity risk is presented in Note 19.

## 16 TAXATION

TAXATION (CREDIT)/CHARGE	\$ MILLION		
	2015	2014	2013
<b>Current tax</b>			
Charge in respect of current period	6,886	14,044	18,316
Adjustments in respect of prior periods	172	(287)	266
<b>Total</b>	<b>7,058</b>	<b>13,757</b>	<b>18,582</b>
<b>Deferred tax</b>			
Relating to the origination and reversal of temporary differences, tax losses and credits	(6,833)	(318)	(1,064)
Relating to changes in tax rates	(526)	19	(108)
Adjustments in respect of prior periods	148	126	(344)
<b>Total</b>	<b>(7,211)</b>	<b>(173)</b>	<b>(1,516)</b>
<b>Total taxation (credit)/charge</b>	<b>(153)</b>	<b>13,584</b>	<b>17,066</b>

The adjustments in respect of prior periods relate to events in the current period and reflect the effects of changes in rules, facts or other factors compared with those used in establishing the current tax position or deferred tax balance in prior periods.

The deferred tax net credit relating to temporary differences, tax losses and credits in 2015 is mainly due to impairment charges, additional provisions, operating losses and disposals.

RECONCILIATION OF APPLICABLE TAX CHARGE AT STATUTORY TAX RATES TO TAXATION (CREDIT)/CHARGE	\$ MILLION		
	2015	2014	2013
Income before taxation	2,047	28,314	33,592
Less: share of profit of joint ventures and associates	(3,527)	(6,116)	(7,275)
(Loss)/income before taxation and share of profit of joint ventures and associates	(1,480)	22,198	26,317
Applicable tax charge at statutory tax rates	930	11,206	16,463
Adjustments in respect of prior periods	320	(161)	(78)
Tax effects of:			
Income not subject to tax at statutory rates	(2,597)	(1,864)	(1,077)
Expenses not deductible for tax purposes	1,452	2,271	1,134
Deductible items not expensed	(418)	(401)	(545)
Taxable income not recognised	384	526	263
Derecognition of deferred tax assets	108	1,015	321
Other	(332)	992	585
<b>Taxation (credit)/charge</b>	<b>(153)</b>	<b>13,584</b>	<b>17,066</b>

The weighted average of statutory tax rates was (62.8)% in 2015 (2014: 50.5%; 2013: 62.6%). The negative rate in 2015 (tax charge on a pre-tax loss) was mainly due to impairment charges, and other charges related to ceasing activities in Alaska and the Carmon Creek project. These resulted in significant losses in jurisdictions with relatively low tax rates compared with Shell's typical weighted statutory average. Excluding these items, the weighted average of statutory tax rates for 2015 was comparable with 2014.

The taxation charge includes taxes at higher rates levied on income from certain Upstream activities and various other taxes to which these activities are subjected.

TAXES PAYABLE	\$ MILLION	
	Dec 31, 2015	Dec 31, 2014
Income taxes	5,653	6,396
Sales taxes, excise duties and similar levies	2,580	3,401
<b>Total</b>	<b>8,233</b>	<b>9,797</b>

Included in other receivables at December 31, 2015 (see Note 11), is income tax receivable of \$1,244 million (2014: \$1,091 million).

Table 18 (continued)

DEFERRED TAX						\$ MILLION
	Decommissioning and other provisions	Losses carried forward	Property, plant and equipment	Retirement benefits	Other	Total
<b>At January 1, 2015</b>						
Deferred tax assets	3,721	6,006	(7,194)	3,787	1,811	8,131
Deferred tax liabilities	5,167	3,310	(21,041)	973	(461)	(12,052)
	8,888	9,316	(28,235)	4,760	1,350	(3,921)
<b>Recognised in the year</b>						
Credited to income	430	2,888	2,860	295	738	7,211
Other movements	15	(270)	(290)	(967)	82	(1,430)
Currency translation differences	(352)	(440)	1,350	(318)	(43)	197
	93	2,178	3,920	(990)	777	5,978
<b>At December 31, 2015</b>						
Deferred tax assets	3,674	7,688	(6,651)	3,461	2,861	11,033
Deferred tax liabilities	5,307	3,806	(17,664)	309	(734)	(8,976)
	8,981	11,494	(24,315)	3,770	2,127	2,057
<b>At January 1, 2014</b>						
Deferred tax assets	2,007	3,087	(1,551)	1,338	904	5,785
Deferred tax liabilities	6,221	5,358	(25,582)	1,725	335	(11,943)
	8,228	8,445	(27,133)	3,063	1,239	(6,158)
<b>Recognised in the year</b>						
Credited/(charged) to income	952	1,726	(2,759)	(224)	478	173
Other movements	30	(536)	499	2,203	(386)	1,810
Currency translation differences	(322)	(319)	1,158	(282)	19	254
	660	871	(1,102)	1,697	111	2,237
<b>At December 31, 2014</b>						
Deferred tax assets	3,721	6,006	(7,194)	3,787	1,811	8,131
Deferred tax liabilities	5,167	3,310	(21,041)	973	(461)	(12,052)
	8,888	9,316	(28,235)	4,760	1,350	(3,921)

The above deferred tax information takes into consideration offsetting balances within the same tax jurisdiction.

The increase in deferred tax assets and decrease in deferred tax liabilities in 2015 was mainly the result of impairment charges, additional provisions, operating losses and disposals.

Other movements in deferred tax assets and liabilities principally relate to acquisitions, disposals and amounts recognised in other comprehensive income and directly in equity (see Note 22).

Deferred tax assets that are dependent on future taxable profits, not arising from the reversal of deferred tax liabilities, are only recognised to the extent that it is considered probable based on business forecasts that such profits will be available. Recognised losses carried forward amounted to \$41,967 million at December 31, 2015 (2014: \$37,388 million).

Unrecognised deductible temporary differences, unused tax losses and credits carried forward amounted to \$27,660 million at December 31, 2015 (2014: \$25,145 million) including amounts of \$21,978 million (2014: \$21,344 million) that are subject to time limits for utilisation of five years or later or are not time limited.

Retained earnings of subsidiaries, joint ventures and associates amounted to \$206,135 million at December 31, 2015 (2014: \$201,960 million). Provision has been made for withholding and other taxes that would become payable on the distribution of these earnings only to the extent that either Shell does not control the relevant entity or it is expected that these earnings will be remitted in the foreseeable future.

## 17 RETIREMENT BENEFITS

Retirement benefits are provided through a number of funded and unfunded defined benefit plans and defined contribution plans, the most significant of which are in the Netherlands, UK and USA. Benefits comprise principally pensions; retirement healthcare and life insurance are also provided in some countries.

RETIREMENT BENEFIT EXPENSE	\$ MILLION		
	2015	2014	2013
Defined benefit plans:			
Current service cost, net of plan participants' contributions	1,855	1,844	1,895
Interest expense on obligations	2,944	3,821	3,574
Interest income on plan assets	(2,495)	(3,524)	(3,030)
Other	207	(1,073)	(6)
<b>Total</b>	<b>2,511</b>	<b>1,068</b>	<b>2,433</b>
Defined contribution plans	473	448	416
<b>Total retirement benefit expense</b>	<b>2,984</b>	<b>1,516</b>	<b>2,849</b>

Other in 2014 mainly comprises the impact of amendments to the Dutch pension plan following regulatory changes in the Netherlands, which is reflected in other movements in defined benefit obligations.

Retirement benefit expense is presented principally within production and manufacturing expenses and selling, distribution and administrative expenses in the Consolidated Statement of Income. Interest income on plan assets is calculated using the rate applied to the related defined benefit obligations for each plan.

REMEASUREMENTS	\$ MILLION		
	2015	2014	2013
Actuarial gains/(losses) on obligations:			
Due to changes in demographic assumptions	(517)	(663)	(261)
Due to changes in financial assumptions [A]	6,381	(14,313)	1,446
Due to experience adjustments	121	135	(111)
<b>Total</b>	<b>5,985</b>	<b>(14,841)</b>	<b>1,074</b>
Return on plan assets in excess of interest income	298	6,139	4,567
Other movements	55	(18)	(284)
<b>Total remeasurements</b>	<b>6,338</b>	<b>(8,720)</b>	<b>5,357</b>

[A] Mainly in the discount rates applied.

Experience adjustments arise from differences between the actuarial assumptions made in respect of the year and actual outcomes.

DEFINED BENEFIT PLANS	\$ MILLION	
	Dec 31, 2015	Dec 31, 2014
Obligations	(89,426)	(101,331)
Plan assets	80,851	86,318
<b>Net liability</b>	<b>(8,575)</b>	<b>(15,013)</b>
Retirement benefits in the Consolidated Balance Sheet:		
Non-current assets	4,362	1,682
Non-current liabilities	(12,587)	(16,318)
Current liabilities	(350)	(377)
<b>Total</b>	<b>(8,575)</b>	<b>(15,013)</b>

(Table 17 continued)

<b>DEFINED BENEFIT OBLIGATIONS</b>		<b>\$ MILLION, EXCEPT WHERE OTHERWISE INDICATED</b>	
		<b>2015</b>	<b>2014</b>
At January 1		101,331	93,533
Current service cost		1,855	1,844
Interest expense		2,944	3,821
Actuarial (gains)/losses		(5,985)	14,841
Benefit payments		(3,508)	(3,730)
Other movements		(427)	(1,315)
Currency translation differences		(6,784)	(7,663)
At December 31		89,426	101,331
Comprising:			
Funded pension plans		80,603	91,800
Weighted average duration		17 years	18 years
Unfunded pension plans		4,496	5,016
Weighted average duration		12 years	12 years
Other unfunded plans		4,327	4,515
Weighted average duration		14 years	15 years

<b>DEFINED BENEFIT PLAN ASSETS</b>		<b>\$ MILLION, EXCEPT WHERE OTHERWISE INDICATED</b>	
		<b>2015</b>	<b>2014</b>
At January 1		86,318	85,543
Return on plan assets (in excess of interest income)		298	6,139
Interest income		2,495	3,524
Employer contributions		1,296	1,833
Plan participants' contributions		64	95
Benefit payments		(3,254)	(3,487)
Other movements		(515)	(344)
Currency translation differences		(5,851)	(6,985)
At December 31		80,851	86,318
Comprising:			
Quoted in active markets:			
Equities		34%	42%
Debt securities		47%	40%
Investment funds		1%	–
Other		1%	1%
Other:			
Equities		6%	6%
Debt securities		2%	2%
Real estate		5%	4%
Investment funds		2%	3%
Other		2%	1%
Cash		–	1%

Long-term investment strategies of plans are generally determined by the relevant pension plan trustees using a structured asset liability modelling approach to define the asset mix that best meets the objectives of optimising returns within agreed risk levels while maintaining adequate funding levels.

Employer contributions to defined benefit pension plans are set by local trustees based on actuarial valuations in accordance with local regulations and are estimated to be \$1.4 billion in 2016.

The principal assumptions applied in determining the present value of defined benefit obligations and their bases were as follows:

- rates of increase in pensionable remuneration, pensions in payment and healthcare costs: historical experience and management's long-term expectation;
- discount rates: prevailing long-term AA corporate bond yields, chosen to match the currency and duration of the relevant obligation; and
- mortality rates: published standard mortality tables for the individual countries concerned adjusted for Shell experience where statistically significant.

The weighted averages for those assumptions and related sensitivity information at December 31 are presented below. Sensitivity information indicates by how much the defined benefit obligations would increase or decrease if a given assumption were to increase or decrease with no change in other assumptions.

\$ MILLION, EXCEPT WHERE OTHERWISE INDICATED					
	Assumptions used		Range of assumptions	Effect of using alternative assumptions	
				Increase/(decrease) in defined benefit obligations	
	2015	2014		2015	2014
Rate of increase in pensionable remuneration	5%	5%	-1% to +1%	(2,015) to 2,557	(2,633) to 3,250
Rate of increase in pensions in payment	2%	2%	-1% to +1%	(7,666) to 9,639	(9,173) to 11,495
Rate of increase in healthcare costs	7%	7%	-1% to +1%	(451) to 552	(480) to 591
Discount rate for pension plans	4%	3%	-1% to +1%	14,679 to (11,568)	17,816 to (13,674)
Discount rate for healthcare plans	4%	4%	-1% to +1%	651 to (518)	723 to (571)
Expected age at death for persons aged 60:					
Men	87 years	87 years	-1 year to +1 year	(1,497) to 1,527	(2,018) to 2,048
Women	89 years	89 years	-1 year to +1 year	(1,207) to 1,228	(1,258) to 1,297

## 18 DECOMMISSIONING AND OTHER PROVISIONS

	\$ MILLION		
	Decommissioning and restoration	Other	Total
<b>At January 1, 2015</b>			
Current	1,275	2,691	3,966
Non-current	20,612	3,222	23,834
	21,887	5,913	27,800
<b>Additions</b>	522	2,999	3,521
Amounts charged against provisions	(913)	(2,410)	(3,323)
Accretion expense	881	51	932
Remeasurements and other movements	2,863	(305)	2,558
Currency translation differences	(993)	(282)	(1,275)
	2,360	53	2,413
<b>At December 31, 2015</b>			
Current	1,239	2,826	4,065
Non-current	23,008	3,140	26,148
	24,247	5,966	30,213
<b>At January 1, 2014</b>			
Current	1,340	1,907	3,247
Non-current	17,085	2,613	19,698
	18,425	4,520	22,945
<b>Additions</b>	312	2,946	3,258
Amounts charged against provisions	(1,175)	(1,177)	(2,352)
Accretion expense	971	68	1,039
Remeasurements and other movements	4,093	(208)	3,885
Currency translation differences	(739)	(236)	(975)
	3,462	1,393	4,855
<b>At December 31, 2014</b>			
Current	1,275	2,691	3,966
Non-current	20,612	3,222	23,834
	21,887	5,913	27,800

The amount and timing of settlement in respect of these provisions are uncertain and dependent on various factors that are not always within management's control. Additions to provisions are stated net of reversals of provisions recognised in prior periods.

Of the decommissioning and restoration provision at December 31, 2015, an estimated \$6,165 million is expected to be utilised within one to five years, \$6,199 million within six to 10 years, and the remainder in later periods.

Reviews of estimated decommissioning and restoration costs and the discount rate applied are carried out annually. The review of cost estimates and a decrease in the discount rate applied resulted in an increase of \$3,620 million (2014: \$4,827 million increase) in both the provision, reported within remeasurements and other movements, and the corresponding property, plant and equipment assets reported within sales, retirements and other movements in Note 8.

Other provisions principally comprise amounts recognised in respect of environmental costs (\$1,545 million at December 31, 2015; 2014 \$1,364 million), litigation costs, employee in- and end-of-service benefits, onerous contracts related to the cessation of certain activities and redundancy costs.

## 19 FINANCIAL INSTRUMENTS AND OTHER DERIVATIVE CONTRACTS

Financial instruments and other derivative contracts in the Consolidated Balance Sheet comprise investments in securities (see Note 10), cash and cash equivalents (see Note 13), debt (see Note 14) and certain amounts (including derivative contracts) reported within trade and other receivables (see Note 11) and trade and other payables (see Note 15).

### Risks

In the normal course of business, financial instruments of various kinds are used for the purposes of managing exposure to interest rate, foreign exchange and commodity price movements.

Treasury standards are applicable to all subsidiaries and each subsidiary is required to adopt a treasury policy consistent with these standards. These policies cover: financing structure; interest rate and foreign exchange risk management; insurance; counterparty risk management; and use of derivative contracts. Wherever possible, treasury operations are carried out through specialist regional organisations without removing from each subsidiary the responsibility to formulate and implement appropriate treasury policies.

Apart from forward foreign exchange contracts to meet known commitments, the use of derivative contracts by most subsidiaries is not permitted by their treasury policy.

Other than in exceptional cases, the use of external derivative contracts is confined to specialist trading and central treasury organisations that have appropriate skills, experience, supervision, control and reporting systems.

Shell's operations expose it to market, credit and liquidity risk, as described below.

### MARKET RISK

Market risk is the possibility that changes in interest rates, foreign exchange rates or the prices of crude oil, natural gas, LNG, refined products, chemical feedstocks, power and environmental products will adversely affect the value of assets, liabilities or expected future cash flows.

#### Interest rate risk

Most debt is raised from central borrowing programmes. Shell's policy continues to be to have debt principally denominated in dollars and to maintain a largely floating interest rate exposure profile; however, Shell has issued a significant amount of fixed rate debt in recent years, taking advantage of historically low interest rates available in US debt markets. As a result, a substantial portion of the debt portfolio at December 31, 2015, is at fixed rates and this reduces Shell's exposure to the dollar LIBOR interest rate.

The financing of most subsidiaries is structured on a floating-rate basis and, except in special cases, further interest rate risk management is discouraged.

On the basis of the floating rate net debt position at December 31, 2015, (both issued and hedged), and assuming other factors (principally foreign exchange rates and commodity prices) remained constant and that no further interest rate management action was taken, an increase in interest rates of 1% would have increased 2015 pre-tax income by \$36 million (2014: \$17 million, based on the net debt position at December 31, 2014).

The carrying amounts and maturities of debt and borrowing facilities are presented in Note 14. Interest expense is presented in Note 6.

#### Foreign exchange risk

Many of the markets in which Shell operates are priced, directly or indirectly, in dollars. As a result, the functional currency of most Upstream entities and those with significant cross-border business is the dollar. For Downstream entities, the functional currency is typically the local currency. Consequently, Shell is exposed to varying levels of foreign exchange risk when an entity enters into transactions that are not denominated in its functional currency, when foreign currency monetary assets and liabilities are translated at the balance sheet date and as a result of holding net investments in operations that are not dollar-functional. Each entity has treasury policies in place that are designed to measure and manage its foreign exchange exposures by reference to its functional currency.

Exchange rate gains and losses arise in the normal course of business from the recognition of receivables and payables and other monetary items in currencies other than an entity's functional currency. Foreign exchange risk may also arise in connection with capital expenditure. For major projects, an assessment is made at the final investment decision stage whether to hedge any resulting exposure.

Hedging of net investments in foreign operations or of income that arises in foreign operations that are non-dollar functional is not undertaken.

Assuming other factors (principally interest rates and commodity prices) remained constant and that no further foreign exchange risk management action were taken, a 10% appreciation against the dollar at December 31 of the main currencies to which Shell is exposed would have the following pre-tax effects:

	\$ MILLION			
	Increase/(decrease) in income		Increase in net assets	
	2015	2014	2015	2014
10% appreciation against the dollar of:				
Canadian dollar	(99)	(111)	1,701	1,709
Euro	63	103	1,185	917
Sterling	35	(103)	2,951	887
Malaysian ringgit	187	288	160	263

The above sensitivity information is calculated by reference to carrying amounts of assets and liabilities at December 31 only. The pre-tax effect on income arises in connection with monetary balances denominated in currencies other than an entity's functional currency; the pre-tax effect on net assets arises principally from the translation of assets and liabilities of entities that are not dollar-functional.

Foreign exchange gains and losses included in income are presented in Note 5.

#### Commodity price risk

Certain subsidiaries have a mandate to trade crude oil, natural gas, LNG, refined products, chemical feedstocks, power and environmental products, and to use commodity derivative contracts (forwards, futures, swaps and options) as a means of managing price and timing risks arising from this trading. In effecting these transactions, the entities concerned operate within procedures and policies designed to ensure that risks, including those relating to the default of counterparties, are managed within authorised limits.

Risk management systems are used for recording and valuing instruments. Commodity price risk exposure is monitored, and the acceptable level of exposure determined, by a market risk committee. There is regular reviewing of mandated trading limits by senior management, daily monitoring of market risk exposure using value-at-risk (VAR) techniques, daily monitoring of trading positions against limits, marking-to-fair value of trading exposures with a department independent of traders reviewing the market values applied. Although trading losses can and do occur, the nature of the trading portfolio and its management are considered adequate mitigants against the risk of significant losses.

VAR techniques based on variance/covariance or Monte Carlo simulation models are used to make a statistical assessment of the market risk arising from possible future changes in market values over a 24-hour period and within a 95% confidence level. The calculation of the range of potential changes in fair value takes into account positions, the history of price movements and the correlation of these price movements. Each of the models is regularly back-tested against actual fair value movements to ensure model integrity is maintained. All VAR ranges and year-end positions in respect of commodities traded in active markets, which are presented in the table below, are calculated on a diversified basis in order to reflect the effect of offsetting risk within combined portfolios.

VALUE-AT-RISK (PRE-TAX)	\$ MILLION							
	2015				2014			
	High	Low	Average	Year-end	High	Low	Average	Year-end
Global oil	39	10	18	26	23	9	15	14
North America gas and power	18	4	7	8	16	2	7	13
Europe gas and power	4	-	1	1	7	1	2	3

#### CREDIT RISK

Policies are in place to ensure that wholesale sales of products are made to customers with appropriate creditworthiness. These policies include detailed credit analysis and monitoring of trading partners and restricting large-volume trading activities to the highest-rated counterparties. Credit information is regularly shared between business and finance functions, with dedicated teams in place to quickly identify and respond to cases of credit deterioration. Mitigation measures are defined and implemented for high-risk business partners and customers, and include shortened payment terms, collateral or other security posting and vigorous collections. In addition, policies limit the amount of credit exposure to any individual financial institution. There are no material concentrations of credit risk, with individual customers or geographically, and there has been no significant level of counterparty default in recent years.

Surplus cash is invested in a range of short-dated, secure and liquid instruments including short-term bank deposits, money market funds, reverse repos and similar instruments. The portfolio of these investments is diversified to avoid concentrating risk in any one instrument, country or counterparty. Management monitors the investments regularly and adjusts the investment portfolio in light of new market information where necessary to ensure credit risk is effectively diversified.



(Note 14 continued)

In commodity trading, counterparty credit risk is managed within a framework of credit limits with utilisation being regularly reviewed. Credit risk exposure is monitored and the acceptable level is determined by a credit committee. Credit checks are performed by a department independent of traders, and are undertaken before contractual commitment. Where appropriate, netting arrangements, credit insurance, prepayments and collateral are used to manage specific risks.

Shell routinely enters into offsetting, master netting and similar arrangements with trading and other counterparties to manage credit risk. Where there is a legally enforceable right of offset under such arrangements and net settlement is regularly applied, the net asset or liability is recognised in the Consolidated Balance Sheet, otherwise assets and liabilities are presented gross. These amounts, as presented net and gross within trade and other receivables and trade and other payables in the Consolidated Balance Sheet at December 31, were as follows:

2015	\$ MILLION					
	Gross amounts before offset	Amounts offset	Amounts offset	Amounts not offset	Amounts not offset	Net amounts
			Net amounts as presented	Cash collateral received/pledged	Other offsetting instruments	
<b>Assets:</b>						
Within trade receivables	9,629	6,252	3,377	1	209	3,167
Within derivative contracts	32,330	22,165	10,165	162	7,562	2,441
<b>Liabilities:</b>						
Within trade payables	8,861	6,137	2,724	–	210	2,514
Within derivative contracts	30,213	20,505	9,708	98	7,538	2,072

2014	\$ MILLION					
	Gross amounts before offset	Amounts offset	Amounts offset	Amounts not offset	Amounts not offset	Net amounts
			Net amounts as presented	Cash collateral received/pledged	Other offsetting instruments	
<b>Assets:</b>						
Within trade receivables	13,964	8,982	4,982	6	119	4,857
Within derivative contracts	38,151	27,437	10,714	209	7,065	3,440
<b>Liabilities:</b>						
Within trade payables	12,290	8,941	3,349	–	124	3,225
Within derivative contracts	35,623	26,577	9,046	158	7,036	1,852

Amounts not offset principally relate to contracts where the intention to settle on a net basis was not clearly established at December 31.

The carrying amount of financial assets pledged as collateral for liabilities or contingent liabilities at December 31, 2015, presented within trade and other receivables, was \$1,824 million (2014: \$1,726 million). The carrying amount of collateral held at December 31, 2015, presented within trade and other payables, was \$541 million (2014: \$771 million). Collateral mainly relates to initial margins held with commodity exchanges and over-the-counter counterparty variation margins.

#### LIQUIDITY RISK

Liquidity risk is the risk that suitable sources of funding for Shell's business activities may not be available. Management believes that it has access to sufficient debt funding sources (capital markets), and to undrawn committed borrowing facilities to meet foreseeable requirements. Information about borrowing facilities is presented in Note 14.

#### Derivative contracts

Derivative contracts are used principally as hedging instruments, however, because hedge accounting is not always applied, movements in the carrying amounts of derivative contracts that are recognised in income are not always matched in the same period by the recognition of the income effects of the related hedged items.

## CARRYING AMOUNTS, MATURITIES AND HEDGING

The carrying amounts of derivative contracts at December 31 (see Notes 11 and 15), designated and not designated as hedging instruments for hedge accounting purposes, were as follows:

	\$ MILLION						
	Assets			Liabilities			
	Designated	Not designated	Total	Designated	Not designated	Total	Net
Interest rate swaps	51	–	51	35	–	35	16
Forward foreign exchange contracts	–	508	508	136	236	372	136
Currency swaps and options	16	361	377	1,637	51	1,688	(1,311)
Commodity derivatives	–	12,611	12,611	–	10,210	10,210	2,401
Other contracts	–	311	311	–	139	139	172
<b>Total</b>	<b>67</b>	<b>13,791</b>	<b>13,858</b>	<b>1,808</b>	<b>10,636</b>	<b>12,444</b>	<b>1,414</b>

	\$ MILLION						
	Assets			Liabilities			
	Designated	Not designated	Total	Designated	Not designated	Total	Net
Interest rate swaps	113	–	113	–	–	–	113
Forward foreign exchange contracts	3	523	526	152	229	381	145
Currency swaps	116	186	302	199	–	199	103
Commodity derivatives	–	13,463	13,463	–	11,110	11,110	2,353
Other contracts	–	336	336	–	384	384	(48)
<b>Total</b>	<b>232</b>	<b>14,508</b>	<b>14,740</b>	<b>351</b>	<b>11,723</b>	<b>12,074</b>	<b>2,666</b>

Net gains before tax on derivative contracts, excluding realised commodity contracts and those accounted for as hedges, were \$4,107 million in 2015 (2014: \$6,053 million; 2013: \$1,083 million).

Certain contracts entered into to hedge price risk relating to forecast commodity transactions and foreign exchange risk relating to forecast capital expenditure and disposals were designated in cash flow hedging relationships. Net gains of \$1,235 million (2014: \$606 million net gains; 2013: \$47 million net losses) arising on these contracts, the majority of which mature in 2016, were recognised in other comprehensive income in 2015; a further \$1 million net gains (2014: \$13 million net gains; 2013: \$6 million net losses) were recognised in income. The net asset carrying amount of commodity derivative contracts designated as cash flow hedging instruments of \$1,050 million at December 31, 2015 (2014: \$618 million), is presented after the offset of related margin balances maintained with exchanges.

In addition, in 2015 certain cash and cash equivalents and forward foreign exchange contracts were designated as cash flow hedges of a significant portion of the forecast cash consideration for the acquisition of BG (see Note 29). The total cash and cash equivalents and amounts receivable under the forward foreign exchange contracts at December 31, 2015 was \$19,912 million and related losses of \$537 million were recognised in other comprehensive income in 2015.

Certain interest rate and currency swaps were designated in fair value hedges, principally in respect of debt for which the carrying amount of the related derivative contracts, net of accrued interest, at December 31, 2015, was a net liability of \$1,847 million (2014: net liability of \$203 million).

In the course of trading operations, certain contracts are entered into for delivery of commodities that are accounted for as derivatives. The resulting price exposures are managed by entering into related derivative contracts. These contracts are managed on a fair value basis and the maximum exposure to liquidity risk is the undiscounted fair value of derivative liabilities.

For a minority of commodity derivative contracts, carrying amounts cannot be derived from quoted market prices or other observable inputs, in which case fair value is estimated using valuation techniques such as Black-Scholes, option spread models and extrapolation using quoted spreads with assumptions developed internally based on observable market activity.

Other contracts include certain contracts that are held to sell or purchase commodities and others containing embedded derivatives, which are required to be recognised at fair value because of pricing or delivery conditions, even though they were entered into to meet operational requirements. These contracts are expected to mature between 2016 and 2025, with certain contracts having early termination rights (for either party). Valuations are derived from quoted market prices for the next six years and, thereafter, from forward gas price formulae used in similar contracts. Future gas price assumptions are the most significant input to this model, and a decrease at December 31, 2015, of 10% in the projected gas price would, assuming other inputs remained unchanged, increase pre-tax income by \$59 million (2014: \$83 million).

[Note 19 (continued)]

The contractual maturities of derivative liabilities at December 31 compare with their carrying amounts in the Consolidated Balance Sheet as follows:

2015							\$ MILLION		
	Contractual maturities						Total	Discounting	Carrying amount
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later			
Forward foreign exchange contracts	334	75	12	8	–	–	429	(57)	372
Currency swaps	162	443	713	292	188	1,771	3,569	(1,881)	1,688
Commodity derivatives	8,770	1,215	230	150	32	102	10,499	(289)	10,210
Other contracts	32	58	65	35	11	–	201	(27)	174
<b>Total</b>	<b>9,298</b>	<b>1,791</b>	<b>1,020</b>	<b>485</b>	<b>231</b>	<b>1,873</b>	<b>14,698</b>	<b>(2,254)</b>	<b>12,444</b>

2014							\$ MILLION		
	Contractual maturities						Total	Discounting	Carrying amount
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later			
Forward foreign exchange contracts	362	34	4	–	–	–	400	(19)	381
Currency swaps	(6)	20	71	97	129	877	1,188	(989)	199
Commodity derivatives	9,332	1,215	321	106	58	126	11,158	(48)	11,110
Other contracts	99	105	105	104	59	–	472	(88)	384
<b>Total</b>	<b>9,787</b>	<b>1,374</b>	<b>501</b>	<b>307</b>	<b>246</b>	<b>1,003</b>	<b>13,218</b>	<b>(1,144)</b>	<b>12,074</b>

## FAIR VALUE MEASUREMENTS

The net carrying amounts of derivative contracts held at December 31, categorised according to the predominant source and nature of inputs used in determining the fair value of each contract, were as follows:

2015					\$ MILLION	
	Prices in active markets for identical assets/liabilities	Other observable inputs	Unobservable inputs	Total		
Interest rate swaps	–	16	–	16		
Forward foreign exchange contracts	–	136	–	136		
Currency swaps and options	–	(1,311)	–	(1,311)		
Commodity derivatives	10	2,070	321	2,401		
Other contracts	5	(119)	286	172		
<b>Total</b>	<b>15</b>	<b>792</b>	<b>607</b>	<b>1,414</b>		

2014					\$ MILLION	
	Prices in active markets for identical assets/liabilities	Other observable inputs	Unobservable inputs	Total		
Interest rate swaps	–	113	–	113		
Forward foreign exchange contracts	–	145	–	145		
Currency swaps	–	103	–	103		
Commodity derivatives	(6)	2,410	(51)	2,353		
Other contracts	6	(359)	305	(48)		
<b>Total</b>	<b>–</b>	<b>2,412</b>	<b>254</b>	<b>2,666</b>		

## NET CARRYING AMOUNTS OF DERIVATIVE CONTRACTS MEASURED USING PREDOMINANTLY UNOBSERVABLE INPUTS

	\$ MILLION	
	2015	2014
At January 1	254	(276)
Net gains/(losses) recognised in revenue	291	(76)
Purchases	(129)	(313)
Sales	142	264
Recategorisations (net)	72	687
Currency translation differences	(23)	(32)
<b>At December 31</b>	<b>607</b>	<b>254</b>

Included in net gains recognised in revenue for 2015 are unrealised net losses totalling \$490 million relating to assets and liabilities held at December 31, 2015 (2014: \$158 million unrealised net losses included in recognised net losses).

## 20 SHARE CAPITAL

ISSUED AND FULLY PAID	NUMBER OF SHARES		
	Ordinary shares of €0.07 each		Sterling deferred shares of £1 each
	A	B	
At January 1, 2015	3,907,302,393	2,440,410,614	50,000
Scrip dividends	96,336,688	-	-
Repurchases of shares	(12,717,512)	-	-
At December 31, 2015	3,990,921,569	2,440,410,614	50,000
At January 1, 2014	3,898,011,213	2,472,839,187	50,000
Scrip dividends	64,568,758	-	-
Repurchases of shares	(55,277,578)	(32,428,573)	-
At December 31, 2014	3,907,302,393	2,440,410,614	50,000

NOMINAL VALUE	\$ MILLION		
	Ordinary shares of €0.07 each		Total
	A	B	
At January 1, 2015	334	206	540
Scrip dividends	7	-	7
Repurchases of shares	(1)	-	(1)
At December 31, 2015	340	206	546
At January 1, 2014	333	209	542
Scrip dividends	6	-	6
Repurchases of shares	(5)	(3)	(8)
At December 31, 2014	334	206	540

The total nominal value of sterling deferred shares is less than \$1 million.

At the Company's Annual General Meeting (AGM) on May 19, 2015, the Board was authorised to allot ordinary shares in the Company, and to grant rights to subscribe for or to convert any security into ordinary shares in the Company, up to an aggregate nominal amount of €147 million (representing 2,100 million ordinary shares of €0.07 each), and to list such shares or rights on any stock exchange. This authority expires at the earlier of the close of business on August 19, 2016, and the end of the AGM to be held in 2016, unless previously renewed, revoked or varied by the Company in a general meeting.

## 21 SHARE-BASED COMPENSATION PLANS AND SHARES HELD IN TRUST

SHARE-BASED COMPENSATION EXPENSE	\$ MILLION		
	2015	2014	2013
Equity-settled plans	621	517	549
Cash-settled plans	129	287	23
Total	750	804	572

The principal share-based employee compensation plans are the PSP and LTIP. Awards of shares and American Depository Shares (ADSs) of the Company under the PSP and LTIP are granted upon certain conditions to eligible employees. The actual amount of shares that may vest ranges from 0% to 200% of the awards, depending on the outcomes of prescribed performance conditions over a three-year period beginning on January 1 of the award year. Shares and ADSs vest for nil consideration.

## SHARE AWARDS UNDER THE PSP AND LTIP

	Number of A shares (million)	Number of B shares (million)	Number of A ADSs (million)	Weighted average remaining contractual life (years)
At January 1, 2015	33	11	9	1.0
Granted	13	5	4	
Vested	(10)	(4)	(3)	
At December 31, 2015	36	12	10	1.0
At January 1, 2014	30	11	9	1.0
Granted	12	4	3	
Vested	(9)	(4)	(3)	
At December 31, 2014	33	11	9	1.0

Other plans offer employees opportunities to acquire shares and ADSs of the Company or receive cash benefits measured by reference to the Company's share price. Prior to the introduction in 2005 of the PSP, plans were operated under which options over shares and ADSs of the Company were awarded to eligible employees. The options have a range of expiry dates until 2016 and no additional expense to Shell arises in connection with them.

Shell employee share ownership trusts and trust-like entities purchase the Company's shares in the open market to meet delivery commitments under employee share plans. At December 31, 2015, they held 12.7 million A shares (2014: 23.4 million), 8.9 million B shares (2014: 12.7 million) and 6.1 million A ADSs (2014: 8.3 million).

## 22 OTHER RESERVES

	\$ MILLION					
	Merger reserve	Share premium reserve	Capital redemption reserve	Share plan reserve	Accumulated other comprehensive income	Total
At January 1, 2015	3,405	154	83	1,723	(19,730)	(14,365)
Other comprehensive loss attributable to Royal Dutch Shell plc shareholders	-	-	-	-	(2,750)	(2,750)
Scrip dividends	(7)	-	-	-	-	(7)
Repurchases of shares	-	-	1	-	-	1
Share-based compensation	-	-	-	(65)	-	(65)
At December 31, 2015	3,398	154	84	1,658	(22,480)	(17,186)
At January 1, 2014	3,411	154	75	1,871	(7,548)	(2,037)
Other comprehensive loss attributable to Royal Dutch Shell plc shareholders	-	-	-	-	(12,182)	(12,182)
Scrip dividends	(6)	-	-	-	-	(6)
Repurchases of shares	-	-	8	-	-	8
Share-based compensation	-	-	-	(148)	-	(148)
At December 31, 2014	3,405	154	83	1,723	(19,730)	(14,365)
At January 1, 2013	3,423	154	63	2,028	(9,420)	(3,752)
Other comprehensive income attributable to Royal Dutch Shell plc shareholders	-	-	-	-	1,872	1,872
Scrip dividends	(12)	-	-	-	-	(12)
Repurchases of shares	-	-	12	-	-	12
Share-based compensation	-	-	-	(157)	-	(157)
At December 31, 2013	3,411	154	75	1,871	(7,548)	(2,037)

The merger reserve and share premium reserve were established as a consequence of the Company becoming the single parent company of Royal Dutch Petroleum Company and The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited, in 2005. The capital redemption reserve was established in connection with repurchases of shares of the Company. The share plan reserve is in respect of equity-settled share-based compensation plans (see Note 21), and the movement in 2015 is after deduction of tax of \$nil (2014: \$5 million reversal; 2013: \$5 million deduction).

Accumulated other comprehensive income comprises the following:

2015								\$ MILLION
	Jan 1	Pre-tax	Tax	After tax	Share of joint ventures and associates	Non-controlling interest	Attributable to Royal Dutch Shell plc shareholders	Dec 31
Currency translation differences								
Recognised in other comprehensive income		(7,170)	2	(7,168)				
Reclassified to income		47	–	47				
Net currency translation differences	(5,931)	(7,123)	2	(7,121)	2	110	(7,009)	(12,940)
Unrealised gains/(losses) on securities								
Recognised in other comprehensive income		(650)	4	(646)				
Reclassified to income		(61)	–	(61)				
Net unrealised gains/(losses) on securities	2,112	(711)	4	(707)	4	–	(703)	1,409
Cash flow hedging gains/(losses)								
Recognised in other comprehensive income		698	(37)	661				
Reclassified to income		(610)	10	(600)				
Net cash flow hedging gains/(losses)	458	88	(27)	61	(46)	–	15	473
Retirement benefits remeasurements	(16,369)	6,338	(1,387)	4,951	–	(4)	4,947	(11,422)
Total	(19,730)	(1,408)	(1,408)	(2,816)	(40)	106	(2,750)	(22,480)

2014								\$ MILLION
	Jan 1	Pre-tax	Tax	After tax	Share of joint ventures and associates	Non-controlling interest	Attributable to Royal Dutch Shell plc shareholders	Dec 31
Currency translation differences								
Recognised in other comprehensive income		(4,832)	(5)	(4,837)				
Reclassified to income		(484)	–	(484)				
Net currency translation differences	(551)	(5,316)	(5)	(5,321)	(112)	53	(5,380)	(5,931)
Unrealised gains/(losses) on securities								
Recognised in other comprehensive income		(741)	(12)	(753)				
Reclassified to income		(44)	–	(44)				
Net unrealised gains/(losses) on securities	2,929	(785)	(12)	(797)	(20)	–	(817)	2,112
Cash flow hedging gains/(losses)								
Recognised in other comprehensive income		606	(23)	583				
Reclassified to income		(56)	1	(55)				
Net cash flow hedging gains/(losses)	(46)	550	(22)	528	(24)	–	504	458
Retirement benefits remeasurements	(9,880)	(8,720)	2,238	(6,482)	–	(7)	(6,489)	(16,369)
Total	(7,548)	(14,271)	2,199	(12,072)	(156)	46	(12,182)	(19,730)

(Note 27 continues)

2013								\$ MILLION
	Jan 1	Pre-tax	Tax	After tax	Share of joint ventures and associates	Non-controlling interest	Attributable to Royal Dutch Shell plc shareholders	Dec 31
Currency translation differences								
Recognised in other comprehensive income		(2,031)	123	(1,908)				
Reclassified to income		(30)	–	(30)				
Net currency translation differences	1,466	(2,061)	123	(1,938)	(210)	131	(2,017)	(551)
Unrealised gains/(losses) on securities								
Recognised in other comprehensive income		(123)	3	(120)				
Reclassified to income		(46)	–	(46)				
Net unrealised gains/(losses) on securities	3,075	(169)	3	(166)	19	1	(146)	2,929
Cash flow hedging gains/(losses)								
Recognised in other comprehensive income		(47)	5	(42)				
Reclassified to income		227	(7)	220				
Net cash flow hedging gains/(losses)	(248)	180	(2)	178	24	–	202	(46)
Retirement benefits remeasurements	(13,713)	5,357	(1,524)	3,833	–	–	3,833	(9,880)
Total	(9,420)	3,307	(1,400)	1,907	(167)	132	1,872	(7,548)

## 23 DIVIDENDS

INTERIM DIVIDENDS				\$ MILLION
	2015	2014	2013	
A shares				
Cash: \$1.88 per share (2014: \$1.86; 2013: \$1.78)	5,203	5,413	3,505	
Scrip: \$1.88 per share (2014: \$1.86; 2013: \$1.78)	2,154	1,866	3,282	
Total – A shares	7,357	7,279	6,787	
B shares				
Cash: \$1.88 per share (2014: \$1.86; 2013: \$1.78)	4,167	4,031	3,693	
Scrip: \$1.88 per share (2014: \$1.86; 2013: \$1.78)	448	533	858	
Total – B shares	4,615	4,564	4,551	
Total	11,972	11,843	11,338	

In addition, on February 4, 2016, the Directors announced a further interim dividend in respect of 2015 of \$0.47 per A share and \$0.47 per B share. The total dividend is estimated to be \$3,739 million and is payable on March 29, 2016, to shareholders, including former BG shareholders, on the registrar at February 19, 2016. Under the Scrip Dividend Programme, shareholders can elect to receive dividends in the form of A shares.

Dividends on A shares are by default paid in euros, although holders may elect to receive dividends in sterling. Dividends on B shares are by default paid in sterling, although holders may elect to receive dividends in euros. Dividends on ADSs are paid in dollars.

## 24 EARNINGS PER SHARE

	2015	2014	2013
Income attributable to Royal Dutch Shell plc shareholders (\$ million)	1,939	14,874	16,371
Weighted average number of A and B shares used as the basis for determining:			
Basic earnings per share (million)	6,320.3	6,311.5	6,291.1
Diluted earnings per share (million)	6,393.8	6,311.6	6,293.4

Basic earnings per share are calculated by dividing the income attributable to Royal Dutch Shell plc shareholders for the year by the weighted average number of A and B shares outstanding during the year. The weighted average number of shares outstanding excludes shares held in trust.

Diluted earnings per share are based on the same income figures. The weighted average number of shares outstanding during the year is increased by dilutive shares related to share-based compensation plans.

Earnings per share are identical for A and B shares.

## 25 LEGAL PROCEEDINGS AND OTHER CONTINGENCIES

### Pesticide litigation

Shell Oil Company (SOC), along with other agricultural chemical pesticide manufacturers and distributors, has been sued by public and quasi-public water purveyors alleging responsibility for groundwater contamination caused by applications of chemical pesticides. Most of these law suits assert various theories of strict liability and seek to recover actual damages, including water well treatment and remediation costs. All of the suits assert claims for punitive damages. There are approximately 30 such cases pending. Based on the claims asserted and SOC's track record with regard to amounts paid to resolve varying claims, management does not expect that the outcome of these suits pending at December 31, 2015, will have a material impact on Shell, although no assurance can be provided.

### Nigerian litigation

Shell subsidiaries and associates operating in Nigeria are parties to various environmental and contractual disputes brought in the courts of Nigeria, England and the Netherlands. These disputes are at different stages in litigation, including at the appellate stage, where judgments have been rendered against Shell entities. If taken at face value, the aggregate amount of these judgments could be seen as material. Management, however, believes that the outcomes of these matters will ultimately be resolved in a manner favourable to Shell. While these matters are not expected to have a material impact on Shell, no assurance can be provided.

### Other

In the ordinary course of business, Shell subsidiaries are subject to a number of other loss contingencies arising from litigation and claims brought by governmental and private parties. The operations and earnings of Shell subsidiaries continue, from time to time, to be affected to varying degrees by political, legislative, fiscal and regulatory developments, including those relating to the protection of the environment and indigenous groups in the countries in which they operate. The industries in which Shell subsidiaries are engaged are also subject to physical risks of various types. The nature and frequency of these developments and events, as well as their effect on future operations and earnings, are unpredictable. While these matters are not expected to have a material impact on Shell, no assurance can be provided.

## 26 EMPLOYEES

EMPLOYEE EXPENSE		\$ MILLION		
	2015	2014	2013	
Remuneration	12,558	13,092	12,047	
Social security contributions	830	944	907	
Retirement benefits (see Note 17)	2,984	1,516	2,849	
Share-based compensation (see Note 21)	750	804	572	
<b>Total</b>	<b>17,122</b>	<b>16,356</b>	<b>16,375</b>	

AVERAGE EMPLOYEE NUMBERS		THOUSAND		
	2015	2014	2013	
Upstream	35	33	31	
Downstream	43	47	48	
Corporate	15	14	13	
<b>Total</b>	<b>93</b>	<b>94</b>	<b>92</b>	

Employees working in business service centres are included in the Corporate segment.

## 27 DIRECTORS AND SENIOR MANAGEMENT

REMUNERATION OF DIRECTORS OF THE COMPANY		\$ MILLION		
	2015	2014	2013	
Emoluments	12	24	11	
Value of released awards under long-term incentive plans	1	5	8	
Employer contributions to pension plans	1	1	1	

Emoluments comprise salaries and fees, annual bonuses (for the period for which performance is assessed) and other benefits. Emoluments in 2014 included \$11 million for tax equalisation which arose mainly as a result of the promotion of the CEO. The value of released awards under long-term incentive plans for the period is in respect of the performance period ending in that year. In 2015, retirement benefits were accrued in respect of qualifying services under defined benefit plans by two Directors.

Further information on the remuneration of the Directors can be found in the Directors' Remuneration Report on pages 86-97.



[Numbered]

DIRECTORS AND SENIOR MANAGEMENT EXPENSE	\$ MILLION		
	2015	2014	2013
Short-term benefits	21	43	24
Retirement benefits	4	4	5
Share-based compensation	19	18	23
Termination and related amounts	–	5	–
<b>Total</b>	<b>44</b>	<b>70</b>	<b>52</b>

Directors and Senior Management comprise members of the Executive Committee and the Non-executive Directors of the Company.

Short-term benefits comprise salaries and fees, annual bonuses delivered in cash (for the period for which performance is assessed), other benefits and employer social security contributions. Short-term benefits in 2014 included tax equalisation as described on the previous page. In addition, costs of \$1 million were incurred in 2014 (2013: \$6 million) in respect of additional employee levies in the Netherlands.

## 28 AUDITOR'S REMUNERATION

	\$ MILLION		
	2015	2014	2013
Fees in respect of the audit of the Consolidated and Parent Company Financial Statements, including audit of consolidation returns	5	5	5
Other audit fees, principally in respect of audits of accounts of subsidiaries	46	45	41
<b>Total audit fees</b>	<b>51</b>	<b>50</b>	<b>46</b>
Audit-related fees (for other services provided pursuant to legislation)	2	2	1
Fees in respect of non-audit services (principally for tax compliance)	–	1	1
<b>Total</b>	<b>53</b>	<b>53</b>	<b>48</b>

In addition, PricewaterhouseCoopers provides audit services to retirement benefit plans for employees of subsidiaries. Remuneration amounted to \$1 million in 2015 (2014: \$1 million; 2013: \$1 million).

## 29 ACQUISITION OF BG GROUP PLC

On February 15, 2016, the Company acquired all the voting rights in BG by means of a Scheme of Arrangement under Part 26 of the Act for a purchase consideration of \$54.0 billion. This comprised cash of £13.1 billion (\$19.0 billion) and the fair value (\$34.1 billion) of 218.7 million A shares and 1,305.1 million B shares issued in exchange for all BG shares, together with \$0.9 billion reclassified from accumulated other comprehensive income representing the loss that arose on cash flow hedges in respect of the forecast cash consideration. The fair value of the shares issued was calculated using the market price of the Company's A and B shares of 1,545.0 and 1,538.5 pence, respectively, on the London Stock Exchange at its opening of business on February 15, 2016.

BG's activities mainly comprise exploration, development, production, liquefaction and marketing of hydrocarbons, the development and use of LNG import facilities, and the purchase, shipping and sale of LNG and regasified natural gas. The acquisition is expected to accelerate Shell's growth strategy in global LNG and deep water. It is expected to add material proved oil and gas reserves and production volumes, and provides Shell with enhanced positions in competitive new oil and gas projects, particularly in Australia LNG and Brazil deep water.

The fair value of the net assets acquired and any resultant goodwill to be recognised as a result of the acquisition have not yet been determined. Access to information required to assess the market participant value to be assigned to individual assets acquired and liabilities assumed at the date of acquisition was necessarily limited in the period prior to the signing of these Consolidated Financial Statements.

## SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED)

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The information set out on pages 153-170 is referred to as “unaudited” as a means of clarifying that it is not covered by the audit opinion of the independent registered public accounting firm that has audited and reported on the “Consolidated Financial Statements”.

### PROVED RESERVES

Proved reserves estimates are calculated pursuant to the US Securities and Exchange Commission (SEC) Rules and the Financial Accounting Standard Board’s Topic 932. Proved reserves can be either developed or undeveloped. The definitions used are in accordance with the SEC Rule 4-10 (a) of Regulation S-X. We include proved reserves associated with future production that will be consumed in operations.

Proved reserves shown are net of any quantities of crude oil or natural gas that are expected to be (or could be) taken as royalties in kind. Proved reserves outside North America include quantities that will be settled as royalties in cash. Proved reserves include certain quantities of crude oil or natural gas that will be produced under arrangements that involve Shell subsidiaries, joint ventures and associates in risks and rewards but do not transfer title of the product to those entities.

The impact of the reclassification of certain entities, consistent with the change in their accounting treatment as a result of the adoption of IFRS 11 *Joint Arrangements* with effect from January 1, 2013, resulted in a decrease in the Shell share of joint ventures and associates’ proved reserves during 2013 and a corresponding increase in Shell subsidiaries’ proved reserves. These effects are referred to as “IFRS 11 reclassification” on pages 157, 161 and 164.

Subsidiaries’ proved reserves at December 31, 2015, were divided into 72% developed and 28% undeveloped on a barrel of oil equivalent basis. For the Shell share of joint ventures and associates, the proved reserves at December 31, 2015, were divided into 78% developed and 22% undeveloped on a barrel of oil equivalent basis.

Proved reserves are recognised under various forms of contractual agreements. Shell’s proved reserves volumes at December 31, 2015, present in agreements such as production-sharing contracts, tax/variable royalty contracts or other forms of economic entitlement contracts, where the Shell share of reserves can vary with commodity prices, were 3,169 million barrels of crude oil and natural gas liquids, and 13,474 thousand million standard cubic feet (scf) of natural gas.

Proved reserves cannot be measured exactly because estimation of reserves involves subjective judgement (see “Risk factors” on page 09 and our “Proved reserves assurance process” below). These estimates remain subject to revision and are unaudited supplementary information.

### PROVED RESERVES ASSURANCE PROCESS

A central group of reserves experts, who on average have around 28 years’ experience in the oil and gas industry, undertake the primary assurance of the proved reserves bookings. This group of experts is part of the Resources Assurance and Reporting (RAR) organisation within Shell. A Vice President with 34 years’ experience in the oil and gas industry currently heads the RAR organisation. He is a member of the Society of Petroleum Engineers and holds a diploma of Ingénieur Civil des Ponts et Chaussées de France. The RAR organisation reports directly to an Executive Vice President of Finance, who is a member of the Upstream Reserves Committee (URC). The URC is a multidisciplinary committee consisting of senior representatives from the Finance, Legal, Projects & Technology and Upstream organisations. The URC reviews and endorses all major (larger than 20 million barrels of oil equivalent) proved reserves bookings and endorses the total aggregated proved reserves. Final approval of all proved reserves bookings remains with Shell’s Executive Committee. The Internal Audit function also provides secondary assurance through audits of the control framework.

## CRUDE OIL, NATURAL GAS LIQUIDS, SYNTHETIC CRUDE OIL AND BITUMEN

Shell subsidiaries' estimated net proved reserves of crude oil, natural gas liquids, synthetic crude oil and bitumen at the end of the year; their share of the net proved reserves of joint ventures and associates at the end of the year; and the changes in such reserves during the year are set out on pages 155-157.

Significant changes in proved developed and undeveloped reserves of crude oil, natural gas liquids, synthetic crude oil and bitumen are discussed below.

### Proved reserves 2015-2014

#### SHELL SUBSIDIARIES

##### Europe

The net decrease of 97 million barrels in revisions and reclassifications resulted from field performance studies and development activities in Italy and the UK.

##### Asia

The net increase of 149 million barrels in revisions and reclassifications resulted mainly from increased PSC entitlement share in Iraq and Qatar due to the lower yearly average price.

##### Africa

The net increase of 50 million barrels in revisions and reclassifications resulted from field performance updates, development activities and increased PSC entitlement share due to the lower yearly average price. The decrease of 76 million barrels from sales of minerals in place resulted from divestment of assets in Nigeria.

##### USA

The net decrease of 61 million barrels in revisions and reclassifications resulted from field performance updates, development activities, and the lower yearly average price (early economic truncation and de-booking of uneconomic prior year proved undeveloped reserves).

##### Canada

The net increase of 204 million barrels in synthetic crude oil revisions and reclassifications resulted from reductions in variable royalties due to the lower yearly average price. The net decrease of 420 million barrels in bitumen revisions and reclassifications resulted from the cessation of the Carmon Creek project.

### Proved reserves 2014-2013

#### SHELL SUBSIDIARIES

##### Europe

The net decrease of 129 million barrels in revisions and reclassifications resulted from field performance studies and development activities. The reservoir performance analyses and updates in fields resulted in a worse performance than previously estimated in the UK and a better performance than historically predicted in Norway.

##### Asia

The net increase of 120 million barrels in revisions and reclassifications resulted from field performance studies and development activities. The reservoir performance analyses and updates in fields resulted in many relatively small contributions from fields in Iraq, Malaysia, Oman and Russia.

##### Africa

The net increase of 126 million barrels in revisions and reclassifications resulted from field performance studies and development activities. The reservoir performance analyses and updates in fields resulted in reserves volumes increases in our operations in Egypt, Gabon and Nigeria.

##### USA

The net decrease of 169 million barrels in revisions and reclassifications resulted from field performance studies and development activities. Reservoir performance analyses and updates in fields resulted in reserves volume decreases for the Mars, Stones and Ursa deep-water fields in the Gulf of Mexico and for the Permian project. The Na Kika Coulomb deep-water field in the Gulf of Mexico benefited from a better than predicted reservoir performance.

##### Canada

The net increase of 81 million barrels in synthetic crude oil revisions and reclassifications resulted from field performance studies and development activities at the Athabasca Oil Sands Project's Muskeg River and Jackpine mines.

## PROVED DEVELOPED AND UNDEVELOPED RESERVES 2015

MILLION BARRELS

	Europe	Asia	Oceania	Africa	USA	North America			South America	Total							
						Oil and NGL	Oil and NGL	Oil and NGL		Oil and NGL	Synthetic crude oil	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen products	All
<b>Shell subsidiaries</b>																	
At January 1	579	1,306	128	691	711	44	1,763	428	63	3,522	1,763	428	5,713				
Revisions and reclassifications	(97)	149	6	50	(61)	(25)	204	(420)	7	29	204	(420)	(187)				
Improved recovery	-	-	-	-	4	-	-	-	-	4	-	-	4				
Extensions and discoveries	-	-	-	-	10	12	26	-	-	22	26	-	48				
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-				
Sales of minerals in place	-	-	-	(76)	-	-	-	-	-	(76)	-	-	(76)				
Production [A]	(65)	(169)	(8)	(86)	(104)	(9)	(52)	(5)	(14)	(455)	(52)	(5)	(512)				
At December 31	417	1,286	126	579	560	22	1,941	3	56	3,046	1,941	3	4,990				
<b>Shell share of joint ventures and associates [B]</b>																	
At January 1	29	376	12	-	-	-	-	-	-	417	-	-	417				
Revisions and reclassifications	(17)	(49)	1	-	-	-	-	-	-	(65)	-	-	(65)				
Improved recovery	-	-	-	-	-	-	-	-	-	-	-	-	-				
Extensions and discoveries	-	-	-	-	-	-	-	-	-	-	-	-	-				
Purchases of minerals in place	-	-	2	-	-	-	-	-	-	2	-	-	2				
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-				
Production	(11)	(37)	(3)	-	-	-	-	-	-	(41)	-	-	(41)				
At December 31	11	290	12	-	-	-	-	-	-	313	-	-	313				
<b>Total</b>	<b>428</b>	<b>1,576</b>	<b>138</b>	<b>579</b>	<b>560</b>	<b>22</b>	<b>1,941</b>	<b>3</b>	<b>56</b>	<b>3,359</b>	<b>1,941</b>	<b>3</b>	<b>5,303</b>				
<b>Reserves attributable to non-controlling interest in Shell subsidiaries at December 31</b>	-	-	-	7	-	-	-	-	-	7	-	-	7				

[A] Includes 2 million barrels consumed in operations for synthetic crude oil.

[B] Oceania includes Shell's 14% share of Woodside Petroleum Limited (Woodside), a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

## PROVED DEVELOPED RESERVES 2015

MILLION BARRELS

	Europe	Asia	Oceania	Africa	USA	North America			South America	Total							
						Oil and NGL	Oil and NGL	Oil and NGL		Oil and NGL	Synthetic crude oil	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen products	All
<b>Shell subsidiaries</b>																	
At January 1	350	947	41	534	494	26	1,273	9	51	2,443	1,273	9	3,725				
At December 31	220	972	36	437	455	20	1,405	3	44	2,184	1,405	3	3,592				
<b>Shell share of joint ventures and associates [A]</b>																	
At January 1	22	222	10	-	-	-	-	-	-	254	-	-	254				
At December 31	5	204	9	-	-	-	-	-	-	218	-	-	218				

[A] Oceania includes Shell's 14% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

## PROVED UNDEVELOPED RESERVES 2015

MILLION BARRELS

	Europe	Asia	Oceania	Africa	USA	North America			South America	Total							
						Oil and NGL	Oil and NGL	Oil and NGL		Oil and NGL	Synthetic crude oil	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen products	All
<b>Shell subsidiaries</b>																	
At January 1	229	359	87	157	217	18	490	419	12	1,079	490	419	1,988				
At December 31	197	314	90	142	105	2	536	-	12	862	536	-	1,398				
<b>Shell share of joint ventures and associates [A]</b>																	
At January 1	7	154	2	-	-	-	-	-	-	163	-	-	163				
At December 31	6	86	3	-	-	-	-	-	-	95	-	-	95				

[A] Oceania includes Shell's 14% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

Supplementary financial statements for the period ended 31 December 2014

PROVED DEVELOPED AND UNDEVELOPED RESERVES 2014													MILLION BARRELS	
	Europe	Asia	Oceania	Africa	North America			South America	Total					
					USA	Canada	USA		Canada	USA	Canada	USA	Canada	USA
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	products	All
<b>Shell subsidiaries</b>														
At January 1	769	1,343	139	651	991	29	1,731	422	95	4,017	1,731	422	6,170	
Revisions and reclassifications	(129)	120	2	126	(169)	3	81	17	(7)	(54)	81	17	44	
Improved recovery	-	-	-	9	-	-	-	-	-	9	-	-	9	
Extensions and discoveries	-	5	1	8	18	21	-	1	13	66	-	1	67	
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sales of minerals in place	-	-	(5)	(15)	(30)	(1)	-	(6)	(21)	(72)	-	(6)	(78)	
Production [A]	(61)	(162)	(9)	(88)	(99)	(8)	(49)	(6)	(17)	(444)	(49)	(6)	(499)	
At December 31	579	1,306	128	691	711	44	1,763	428	63	3,522	1,763	428	5,713	
<b>Shell share of joint ventures and associates [B]</b>														
At January 1	29	381	24	-	-	-	-	-	17	451	-	-	451	
Revisions and reclassifications	2	33	-	-	-	-	-	-	(17)	18	-	-	18	
Improved recovery	-	-	-	-	-	-	-	-	-	-	-	-	-	
Extensions and discoveries	-	1	-	-	-	-	-	-	-	1	-	-	1	
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sales of minerals in place	-	-	(8)	-	-	-	-	-	-	(8)	-	-	(8)	
Production	(2)	(39)	(4)	-	-	-	-	-	-	(45)	-	-	(45)	
At December 31	29	376	12	-	-	-	-	-	-	417	-	-	417	
<b>Total</b>	<b>608</b>	<b>1,682</b>	<b>140</b>	<b>691</b>	<b>711</b>	<b>44</b>	<b>1,763</b>	<b>428</b>	<b>63</b>	<b>3,939</b>	<b>1,763</b>	<b>428</b>	<b>6,130</b>	
<b>Reserves attributable to non-controlling interest in Shell subsidiaries at December 31</b>	-	-	-	9	-	-	-	-	-	9	-	-	9	

[A] Includes 2 million barrels consumed in operations for synthetic crude oil.

[B] Oceania includes Shell's 14% share of Woodside from June 2014 (previously 23%) a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

PROVED DEVELOPED RESERVES 2014													MILLION BARRELS	
	Europe	Asia	Oceania	Africa	North America			South America	Total					
					USA	Canada	USA		Canada	USA	Canada	USA	Canada	
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	products	All
<b>Shell subsidiaries</b>														
At January 1	396	942	48	453	440	21	1,299	13	59	2,359	1,299	13	3,671	
At December 31	350	947	41	534	494	26	1,273	9	51	2,443	1,273	9	3,725	
<b>Shell share of joint ventures and associates [A]</b>														
At January 1	22	316	23	-	-	-	-	-	15	376	-	-	376	
At December 31	22	222	10	-	-	-	-	-	-	254	-	-	254	

[A] Oceania includes Shell's 14% share of Woodside from June 2014 (previously 23%), a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

PROVED UNDEVELOPED RESERVES 2014													MILLION BARRELS	
	Europe	Asia	Oceania	Africa	North America			South America	Total					
					USA	Canada	USA		Canada	USA	Canada	USA	Canada	
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	products	All
<b>Shell subsidiaries</b>														
At January 1	373	401	91	198	551	8	432	409	36	1,658	432	409	2,499	
At December 31	229	359	87	157	217	18	490	419	12	1,079	490	419	1,988	
<b>Shell share of joint ventures and associates [A]</b>														
At January 1	7	65	1	-	-	-	-	-	2	75	-	-	75	
At December 31	7	154	2	-	-	-	-	-	-	163	-	-	163	

[A] Oceania includes Shell's 14% share of Woodside from June 2014 (previously 23%), a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

## PROVED DEVELOPED AND UNDEVELOPED RESERVES 2013

MILLION BARRELS

	Europe	Asia	Oceania	Africa	North America				South America	Total				
					USA		Canada			Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	All products
					Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL						
<b>Shell subsidiaries</b>														
At January 1	769	1,191	146	688	609	33	1,763	49	69	3,505	1,763	49	5,317	
IFRS 11 reclassification	-	84	-	-	294	-	-	-	-	378	-	-	378	
Revisions and reclassifications	39	205	6	38	14	(2)	16	(30)	8	308	16	(30)	294	
Improved recovery	-	1	-	-	1	-	-	410	-	2	-	410	412	
Extensions and discoveries	-	11	-	4	158	6	-	-	3	182	-	-	182	
Purchases of minerals in place	24	-	-	-	1	-	-	-	23	48	-	-	48	
Sales of minerals in place	-	-	(4)	-	-	-	-	-	-	(4)	-	-	(4)	
Production [A]	(63)	(149)	(9)	(79)	(86)	(8)	(48)	(7)	(8)	(402)	(48)	(7)	(457)	
At December 31	769	1,343	139	651	991	29	1,731	422	95	4,017	1,731	422	6,170	
<b>Shell share of joint ventures and associates [B]</b>														
At January 1	24	515	28	-	294	-	-	-	18	879	-	-	879	
IFRS 11 reclassification	-	(84)	-	-	(294)	-	-	-	-	(378)	-	-	(378)	
Revisions and reclassifications	7	47	1	-	-	-	-	-	2	57	-	-	57	
Improved recovery	-	-	-	-	-	-	-	-	-	-	-	-	-	
Extensions and discoveries	-	-	-	-	-	-	-	-	-	-	-	-	-	
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-	
Production	(2)	(97)	(5)	-	-	-	-	-	(3)	(107)	-	-	(107)	
At December 31	29	381	24	-	-	-	-	-	17	451	-	-	451	
<b>Total</b>	<b>798</b>	<b>1,724</b>	<b>163</b>	<b>651</b>	<b>991</b>	<b>29</b>	<b>1,731</b>	<b>422</b>	<b>112</b>	<b>4,468</b>	<b>1,731</b>	<b>422</b>	<b>6,621</b>	
<b>Reserves attributable to non-controlling interest in Shell subsidiaries at December 31</b>	-	-	-	10	-	-	-	-	-	10	-	-	10	

[A] Includes 2 million barrels consumed in operations for synthetic crude oil.

[B] Oceania includes Shell's 23% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have limited access to data from Woodside, consequently the proved reserves are based on our best assessment.

## PROVED DEVELOPED RESERVES 2013

MILLION BARRELS

	Europe	Asia[A]	Oceania	Africa	North America				South America	Total				
					USA[A]		Canada			Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	All products
					Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL						
<b>Shell subsidiaries</b>														
At January 1	425	817	34	496	283	28	1,271	18	31	2,114	1,271	18	3,403	
At December 31	396	942	48	453	440	21	1,299	13	59	2,359	1,299	13	3,671	
<b>Shell share of joint ventures and associates [B]</b>														
At January 1	23	460	19	-	217	-	-	-	17	736	-	-	736	
At December 31	22	316	23	-	-	-	-	-	15	376	-	-	376	

[A] As a result of the adoption of IFRS 11 Joint Arrangements with effect from January 1, 2013, proved developed reserves of 81 million barrels in Asia and 217 million barrels in the USA were reclassified during 2013 from the Shell share of joint ventures and associates' proved developed reserves to Shell subsidiaries' proved developed reserves.

[B] Oceania includes Shell's 23% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have limited access to data from Woodside, consequently the proved reserves are based on our best assessment.

## PROVED UNDEVELOPED RESERVES 2013

MILLION BARRELS

	Europe	Asia[A]	Oceania	Africa	North America				South America	Total				
					USA[A]		Canada			Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	All products
					Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL						
<b>Shell subsidiaries</b>														
At January 1	344	374	112	192	326	5	492	31	38	1,391	492	31	1,914	
At December 31	373	401	91	198	551	8	432	409	36	1,658	432	409	2,499	
<b>Shell share of joint ventures and associates [B]</b>														
At January 1	1	55	9	-	77	-	-	-	1	143	-	-	143	
At December 31	7	65	1	-	-	-	-	-	2	75	-	-	75	

[A] As a result of the adoption of IFRS 11 Joint Arrangements with effect from January 1, 2013, proved undeveloped reserves of 3 million barrels in Asia and 77 million barrels in the USA were reclassified during 2013 from the Shell share of joint ventures and associates' proved undeveloped reserves to Shell subsidiaries' proved undeveloped reserves.

[B] Oceania includes Shell's 23% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have limited access to data from Woodside, consequently the proved reserves are based on our best assessment.

## NATURAL GAS

Shell subsidiaries' estimated net proved reserves of natural gas at the end of the year; their share of the net proved reserves of joint ventures and associates at the end of the year; and the changes in such reserves during the year are set out on pages 159-161. Volumes are not adjusted to standard heat content. Apart from integrated projects, volumes of gas are reported on an "as-sold" basis. The price used to calculate future revenue and cash flows from proved gas reserves is the contract price or the 12-month average on "as-sold" volumes. Volumes associated with integrated projects are those measured at a designated transfer point between the Upstream and Downstream portions of the integrated project. Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel. Significant changes in natural gas proved developed and undeveloped reserves are discussed below.

### Proved reserves 2015-2014

#### SHELL SUBSIDIARIES

##### Asia

The net increase of 1,385 thousand million scf in revisions and reclassifications resulted mainly from increased PSC entitlement share in Qatar due to the lower yearly average price.

##### USA

The net decrease of 587 thousand million scf in revisions and reclassifications was mainly the result of early economic field cut-off and previously booked proved undeveloped reserves no longer meeting the economic limit test due to the lower yearly average price.

##### Canada

The net decrease of 581 thousand million scf in revisions and reclassifications was mainly the result of early economic field cut-off and previously booked proved undeveloped reserves no longer meeting the economic limit test due to the lower yearly average price.

#### SHELL SHARE OF JOINT VENTURES AND ASSOCIATES

##### Asia

The net decrease of 214 thousand million scf in revisions and reclassifications resulted mainly from field performance updates and development activities in Brunei.

### Proved reserves 2014-2013

#### SHELL SUBSIDIARIES

##### Asia

The net increase of 630 thousand million scf in revisions and reclassifications resulted from field performance studies and development activities. The reservoir performance analyses and updates in multiple fields supported continuing better performance than historically predicted in Malaysia, Brunei and other countries.

##### Oceania

The sales of minerals in place of 325 thousand million scf resulted from the divestment of Wheatstone-lago.

##### Africa

The net increase of 621 thousand million scf in revisions and reclassifications resulted from field performance studies and development activities. The reservoir performance analyses and updates in multiple fields supported continuing better performance than historically predicted in Nigeria and Gabon.

##### USA

The purchase of minerals in place of 287 thousand million scf resulted from the acquisition of properties in Appalachia from Ultra Petroleum. Sales of minerals in place of 578 thousand million scf resulted from the sale of our interests in Pinedale, Eagle Ford and Haynesville.

##### Canada

The increase of 449 thousand million scf in extensions and discoveries resulted predominantly from extensions in tight-gas operations in Groundbirch, Fox Creek and Deep Basin East.

#### SHELL SHARE OF JOINT VENTURES AND ASSOCIATES

##### Asia

The net increase of 455 thousand million scf in revisions and reclassifications resulted from field performance studies and development activities. The reservoir performance analyses and updates in multiple fields supported continuing better performance than historically predicted in Russia, Brunei and other countries.

##### Oceania

The sales of minerals in place of 354 thousand million scf resulted from the reduction in our shareholding in Woodside from 23% to 14%.

	PROVED DEVELOPED AND UNDEVELOPED RESERVES 2015								THOUSAND MILLION STANDARD CUBIC FEET			
	Europe	Asia	Oceania	Africa	North America		South America	Total				
					USA	Canada						
<b>Shell subsidiaries</b>												
At January 1	4,430	10,071	5,575	2,621	1,561	1,611	48	25,917				
Revisions and reclassifications	(61)	1,385	41	5	(587)	(581)	11	213				
Improved recovery	-	-	-	-	1	-	-	1				
Extensions and discoveries	-	-	-	4	59	175	-	238				
Purchases of minerals in place	-	-	-	-	-	2	-	2				
Sales of minerals in place	(19)	-	-	(115)	(5)	-	-	(139)				
Production [A]	(502)	(764)	(205)	(279)	(275)	(252)	(16)	(2,293)				
At December 31	3,848	10,692	5,411	2,236	754	955	43	23,939				
<b>Shell share of joint ventures and associates [B]</b>												
At January 1	7,866	6,030	503	-	-	-	-	14,399				
Revisions and reclassifications	92	(214)	23	-	-	-	-	(99)				
Improved recovery	6	-	-	-	-	-	-	6				
Extensions and discoveries	11	-	-	-	-	-	-	11				
Purchases of minerals in place	-	-	84	-	-	-	-	84				
Sales of minerals in place	-	-	-	-	-	-	-	-				
Production [C]	(437)	(453)	(75)	-	-	-	-	(965)				
At December 31	7,538	5,363	535	-	-	-	-	13,436				
<b>Total</b>	<b>11,386</b>	<b>16,055</b>	<b>5,946</b>	<b>2,236</b>	<b>754</b>	<b>955</b>	<b>43</b>	<b>37,375</b>				
<b>Reserves attributable to non-controlling interest in Shell subsidiaries at December 31</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5</b>				

[A] Includes 145 thousand million standard cubic feet consumed in operations.

[B] Oceania includes Shell's 14% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

[C] Includes 55 thousand million standard cubic feet consumed in operations.

	PROVED DEVELOPED RESERVES 2015								THOUSAND MILLION STANDARD CUBIC FEET			
	Europe	Asia	Oceania	Africa	North America		South America	Total				
					USA	Canada						
<b>Shell subsidiaries</b>												
At January 1	3,774	9,114	1,398	1,162	1,275	939	42	17,704				
At December 31	3,471	9,920	1,234	1,386	572	636	37	17,256				
<b>Shell share of joint ventures and associates [A]</b>												
At January 1	6,386	4,501	433	-	-	-	-	11,320				
At December 31	5,933	4,301	420	-	-	-	-	10,654				

[A] Oceania includes Shell's 14% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

	PROVED UNDEVELOPED RESERVES 2015								THOUSAND MILLION STANDARD CUBIC FEET			
	Europe	Asia	Oceania	Africa	North America		South America	Total				
					USA	Canada						
<b>Shell subsidiaries</b>												
At January 1	656	957	4,177	1,459	286	672	6	8,213				
At December 31	377	772	4,177	850	182	319	6	6,683				
<b>Shell share of joint ventures and associates [A]</b>												
At January 1	1,480	1,529	70	-	-	-	-	3,079				
At December 31	1,605	1,062	115	-	-	-	-	2,782				

[A] Oceania includes Shell's 14% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.



[Table continues on next page]

	PROVED DEVELOPED AND UNDEVELOPED RESERVES 2014							
	THOUSAND MILLION STANDARD CUBIC FEET							Total
	Europe	Asia	Oceania	Africa	North America		South America	
				USA	Canada			
<b>Shell subsidiaries</b>								
At January 1	4,767	10,170	6,092	2,257	2,199	1,500	74	27,059
Revisions and reclassifications	175	630	(20)	621	(46)	(5)	(11)	1,344
Improved recovery	-	-	-	-	-	-	-	-
Extensions and discoveries	-	82	46	61	73	449	8	719
Purchases of minerals in place	-	-	-	-	287	-	-	287
Sales of minerals in place	-	-	(325)	(10)	(578)	(100)	(8)	(1,021)
Production [A]	(512)	(811)	(218)	(308)	(374)	(233)	(15)	(2,471)
<b>At December 31</b>	<b>4,430</b>	<b>10,071</b>	<b>5,575</b>	<b>2,621</b>	<b>1,561</b>	<b>1,611</b>	<b>48</b>	<b>25,917</b>
<b>Shell share of joint ventures and associates [B]</b>								
At January 1	8,508	5,991	909	-	-	-	6	15,414
Revisions and reclassifications	(60)	455	34	-	-	-	(6)	423
Improved recovery	-	-	-	-	-	-	-	-
Extensions and discoveries	6	26	11	-	-	-	-	43
Purchases of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	(354)	-	-	-	-	(354)
Production [C]	(588)	(442)	(97)	-	-	-	-	(1,127)
<b>At December 31</b>	<b>7,866</b>	<b>6,030</b>	<b>503</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14,399</b>
<b>Total</b>	<b>12,296</b>	<b>16,101</b>	<b>6,078</b>	<b>2,621</b>	<b>1,561</b>	<b>1,611</b>	<b>48</b>	<b>40,316</b>
<b>Reserves attributable to non-controlling interest in Shell subsidiaries at December 31</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9</b>

[A] Includes 162 thousand million standard cubic feet consumed in operations.

[B] Oceania includes Shell's 14% share of Woodside from June 2014 (previously: 23%), a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

[C] Includes 58 thousand million standard cubic feet consumed in operations.

	PROVED DEVELOPED RESERVES 2014							
	THOUSAND MILLION STANDARD CUBIC FEET							Total
	Europe	Asia	Oceania	Africa	North America		South America	
				USA	Canada			
<b>Shell subsidiaries</b>								
At January 1	3,942	9,132	1,621	946	1,492	908	48	18,089
At December 31	3,774	9,114	1,398	1,162	1,275	939	42	17,704
<b>Shell share of joint ventures and associates [A]</b>								
At January 1	6,856	4,894	806	-	-	-	4	12,560
At December 31	6,386	4,501	433	-	-	-	-	11,320

[A] Oceania includes Shell's 14% share of Woodside from June 2014 (previously: 23%), a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

	PROVED UNDEVELOPED RESERVES 2014							
	THOUSAND MILLION STANDARD CUBIC FEET							Total
	Europe	Asia	Oceania	Africa	North America		South America	
				USA	Canada			
<b>Shell subsidiaries</b>								
At January 1	825	1,038	4,471	1,311	707	592	26	8,970
At December 31	656	957	4,177	1,459	286	672	6	8,213
<b>Shell share of joint ventures and associates [A]</b>								
At January 1	1,652	1,097	103	-	-	-	2	2,854
At December 31	1,480	1,529	70	-	-	-	-	3,079

[A] Oceania includes Shell's 14% share of Woodside from June 2014 (previously: 23%), a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

APPENDIX A

SUPPLEMENTARY INFORMATION TO FINANCIAL STATEMENTS

		THOUSAND MILLION STANDARD CUBIC FEET							
		Europe	Asia	Oceania	Africa	North America		South America	Total
						USA	Canada		
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES 2013</b>									
<b>Shell subsidiaries</b>									
At January 1		5,021	10,220	5,571	2,241	2,265	1,011	95	26,424
IFRS 11 reclassification		—	15	—	—	87	—	—	102
Revisions and reclassifications		229	695	778	197	(4)	236	(26)	2,105
Improved recovery		—	—	—	—	—	160	—	160
Extensions and discoveries		13	5	—	86	250	344	11	709
Purchases of minerals in place		38	—	—	—	8	—	8	54
Sales of minerals in place		—	—	(55)	—	—	—	—	(55)
Production [A]		(534)	(765)	(202)	(267)	(407)	(251)	(14)	(2,440)
At December 31		4,767	10,170	6,092	2,257	2,199	1,500	74	27,059
<b>Shell share of joint ventures and associates [B]</b>									
At January 1		9,147	6,091	1,039	—	87	—	4	16,368
IFRS 11 reclassification		—	(15)	—	—	(87)	—	—	(102)
Revisions and reclassifications		92	350	(20)	—	—	—	3	425
Improved recovery		—	—	—	—	—	—	—	—
Extensions and discoveries		—	12	—	—	—	—	—	12
Purchases of minerals in place		—	—	—	—	—	—	—	—
Sales of minerals in place		—	—	—	—	—	—	—	—
Production [C]		(731)	(447)	(110)	—	—	—	(1)	(1,289)
At December 31		8,508	5,991	909	—	—	—	6	15,414
<b>Total</b>		<b>13,275</b>	<b>16,161</b>	<b>7,001</b>	<b>2,257</b>	<b>2,199</b>	<b>1,500</b>	<b>80</b>	<b>42,473</b>
<b>Reserves attributable to non-controlling interest in Shell subsidiaries at December 31</b>									
		—	6	—	6	—	—	—	12

[A] Includes 153 thousand million standard cubic feet consumed in operations.

[B] Oceania includes Shell's 23% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have limited access to data from Woodside, consequently the proved reserves are based on our best assessment.

[C] Includes 63 thousand million standard cubic feet consumed in operations.

		THOUSAND MILLION STANDARD CUBIC FEET							
		Europe	Asia[A]	Oceania	Africa	North America		South America	Total
						USA[A]	Canada		
<b>PROVED DEVELOPED RESERVES 2013</b>									
<b>Shell subsidiaries</b>									
At January 1		4,192	9,366	843	1,012	1,607	872	81	17,973
At December 31		3,942	9,132	1,621	946	1,492	908	48	18,089
<b>Shell share of joint ventures and associates [B]</b>									
At January 1		7,407	5,088	581	—	67	—	3	13,146
At December 31		6,856	4,894	806	—	—	—	4	12,560

[A] As a result of the adoption of IFRS 11 *Joint Arrangements* with effect from January 1, 2013, proved developed reserves of 14 thousand million standard cubic feet in Asia and 67 thousand million standard cubic feet in the USA were reclassified during 2013 from the Shell share of joint ventures and associates' proved developed reserves to Shell subsidiaries' proved developed reserves.

[B] Oceania includes Shell's 23% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have limited access to data from Woodside, consequently the proved reserves are based on our best assessment.

		THOUSAND MILLION STANDARD CUBIC FEET							
		Europe	Asia[A]	Oceania	Africa	North America		South America	Total
						USA[A]	Canada		
<b>PROVED UNDEVELOPED RESERVES 2013</b>									
<b>Shell subsidiaries</b>									
At January 1		829	854	4,728	1,229	658	139	14	8,451
At December 31		825	1,038	4,471	1,311	707	592	26	8,970
<b>Shell share of joint ventures and associates [B]</b>									
At January 1		1,740	1,003	458	—	20	—	1	3,222
At December 31		1,652	1,097	103	—	—	—	2	2,854

[A] As a result of the adoption of IFRS 11 *Joint Arrangements* with effect from January 1, 2013, proved undeveloped reserves of 1 thousand million standard cubic feet in Asia and 20 thousand million standard cubic feet in the USA were reclassified during 2013 from the Shell share of joint ventures and associates' proved undeveloped reserves to Shell subsidiaries' proved undeveloped reserves.

[B] Oceania includes Shell's 23% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have limited access to data from Woodside, consequently the proved reserves are based on our best assessment.

## STANDARDISED MEASURE OF DISCOUNTED FUTURE CASH FLOWS

The SEC Form 20-F requires the disclosure of a standardised measure of discounted future net cash flows, relating to estimated net proved reserves quantities and based on a 12-month unweighted arithmetic average sales price, calculated on a first-day-of-the-month basis, with cost factors based on those at the end of each year, currently enacted tax rates and a 10% annual discount factor. In our view, the information so calculated does not provide a reliable measure of future cash flows from proved reserves, nor does it permit a realistic comparison to be made of one entity with another because the assumptions used cannot reflect the varying circumstances within each entity. In addition, a substantial but unknown proportion of future real cash flows from oil and gas production activities is expected to derive from reserves which have already been discovered, but which cannot yet be regarded as proved.

### Standardised measure of discounted future cash flows relating to proved reserves at December 31

2015 – SHELL SUBSIDIARIES								\$ MILLION
	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	46,910	83,549	36,644	35,856	28,755	81,957	2,264	315,935
Future production costs	21,526	25,494	11,690	17,470	21,480	60,449	1,728	159,837
Future development costs	12,003	12,730	12,987	6,344	10,930	17,983	898	73,875
Future tax expenses	7,660	15,926	1,407	6,357	864	1,099	86	33,399
Future net cash flows	5,721	29,399	10,560	5,685	(4,519)	2,426	(448)	48,824
Effect of discounting cash flows at 10%	1,870	14,181	5,894	1,372	(2,394)	2,241	(221)	22,943
Standardised measure of discounted future net cash flows	3,851	15,218	4,666	4,313	(2,125)[A]	185	(227)[A]	25,881
Non-controlling interest included	–	(1)	–	(149)[A]	–	–	–	(150)

[A] While proved reserves are economically producible at the 2015 yearly average price, the standardised measure of discounted future net cash flows is negative for those proved reserves at December 31, 2015, due to addition of overhead, tax and abandonment costs.

2015 – SHELL SHARE OF JOINT VENTURES AND ASSOCIATES								\$ MILLION
	Europe	Asia	Oceania[A]	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	45,488	43,271	5,261	–	–	–	–	94,020
Future production costs	27,279	19,566	1,055	–	–	–	–	47,900
Future development costs	1,513	7,449	492	–	–	–	–	9,454
Future tax expenses	4,121	6,384	1,121	–	–	–	–	11,626
Future net cash flows	12,575	9,872	2,593	–	–	–	–	25,040
Effect of discounting cash flows at 10%	9,597	3,393	1,087	–	–	–	–	14,077
Standardised measure of discounted future net cash flows	2,978	6,479	1,506	–	–	–	–	10,963

[A] Includes Shell's 14% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

2014 – SHELL SUBSIDIARIES								\$ MILLION
	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	94,201	154,314	59,407	77,122	72,537	190,183	5,573	653,337
Future production costs	37,786	36,742	14,296	29,978	42,784	100,074	3,173	264,833
Future development costs	14,154	15,729	12,629	7,214	15,584	33,495	1,450	100,255
Future tax expenses	25,692	43,303	6,607	25,207	5,299	14,730	778	121,616
Future net cash flows	16,569	58,540	25,875	14,723	8,870	41,884	172	166,633
Effect of discounting cash flows at 10%	5,493	27,974	14,997	4,825	1,583	33,365	(231)	88,006
Standardised measure of discounted future net cash flows	11,076	30,566	10,878	9,898	7,287	8,519	403	78,627
Non-controlling interest included	–	(5)	–	59	–	–	–	54

**2014 – SHELL SHARE OF JOINT VENTURES AND ASSOCIATES** \$ MILLION

	Europe	Asia	Oceania[A]	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	60,397	92,756	11,370	–	–	–	–	164,523
Future production costs	42,656	37,961	3,021	–	–	–	–	83,638
Future development costs	1,631	10,089	2,580	–	–	–	–	14,300
Future tax expenses	6,005	16,368	1,708	–	–	–	–	24,081
Future net cash flows	10,105	28,338	4,061	–	–	–	–	42,504
Effect of discounting cash flows at 10%	4,953	12,218	1,989	–	–	–	–	19,160
Standardised measure of discounted future net cash flows	5,152	16,120	2,072	–	–	–	–	23,344

[A] Includes Shell's 14% share of Woodside from June 2014 (previously: 23%), a publicly listed company on the Australian Securities Exchange. We have no direct access to data from Woodside, consequently the proved reserves are based on our best assessment.

**2013 – SHELL SUBSIDIARIES** \$ MILLION

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	129,740	162,149	67,288	77,958	103,657	180,827	9,025	730,644
Future production costs	45,084	35,001	15,304	27,452	56,457	93,964	4,698	277,960
Future development costs	17,186	14,259	17,863	8,473	24,653	27,806	1,285	111,525
Future tax expenses	42,490	46,960	7,271	25,774	8,397	15,214	1,291	147,397
Future net cash flows	24,980	65,929	26,850	16,259	14,150	43,843	1,751	193,762
Effect of discounting cash flows at 10%	9,145	30,238	18,838	5,460	4,768	34,056	(42)	102,463
Standardised measure of discounted future net cash flows	15,835	35,691	8,012	10,799	9,382	9,787	1,793	91,299
Non-controlling interest included	–	5	–	188	–	–	–	193

**2013 – SHELL SHARE OF JOINT VENTURES AND ASSOCIATES** \$ MILLION

	Europe	Asia	Oceania[A]	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	73,876	94,675	13,572	–	–	–	1,682	183,805
Future production costs	55,680	41,504	3,040	–	–	–	696	100,920
Future development costs	1,751	8,517	3,744	–	–	–	55	14,067
Future tax expenses	6,203	17,286	2,004	–	–	–	494	25,987
Future net cash flows	10,242	27,368	4,784	–	–	–	437	42,831
Effect of discounting cash flows at 10%	4,097	11,669	1,753	–	–	–	132	17,651
Standardised measure of discounted future net cash flows	6,145	15,699	3,031	–	–	–	305	25,180

[A] Includes Shell's 23% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have limited access to data; accordingly, the numbers are estimated.

## Change in standardised measure of discounted future net cash flows relating to proved reserves

2015			\$ MILLION
	Shell subsidiaries	Shell share of joint ventures and associates	Total
At January 1	78,627	23,344	101,971
Net changes in prices and production costs	(123,966)	(19,098)	(143,064)
Revisions of previous reserves estimates	7,672	(1,255)	6,417
Extensions, discoveries and improved recovery	297	7	304
Purchases and sales of minerals in place	(1,706)	218	(1,488)
Development cost related to future production	4,329	927	5,256
Sales and transfers of oil and gas, net of production costs	(18,930)	(4,383)	(23,313)
Development cost incurred during the year	17,818	1,463	19,281
Accretion of discount	13,837	3,188	17,025
Net change in income tax	47,903	6,552	54,455
At December 31	25,881	10,963	36,844

2014			\$ MILLION
	Shell subsidiaries	Shell share of joint ventures and associates	Total
At January 1	91,299	25,180	116,479
Net changes in prices and production costs	(22,475)	1,025	(21,450)
Revisions of previous reserves estimates	6,451	(28)	6,423
Extensions, discoveries and improved recovery	2,837	191	3,028
Purchases and sales of minerals in place	(2,551)	(1,497)	(4,048)
Development cost related to future production	(9,372)	(1,362)	(10,734)
Sales and transfers of oil and gas, net of production costs	(40,495)	(7,401)	(47,896)
Development cost incurred during the year	22,619	1,350	23,969
Accretion of discount	16,367	3,670	20,037
Net change in income tax	13,947	2,216	16,163
At December 31	78,627	23,344	101,971

2013			\$ MILLION
	Shell subsidiaries	Shell share of joint ventures and associates	Total
At January 1	85,078	33,846	118,924
IFRS 11 reclassification	6,884	(6,884)	–
Net changes in prices and production costs	(7,375)	1,636	(5,739)
Revisions of previous reserves estimates	11,142	1,984	13,126
Extensions, discoveries and improved recovery	8,744	–	8,744
Purchases and sales of minerals in place	1,145	–	1,145
Development cost related to future production	(24,747)	(1,275)	(26,022)
Sales and transfers of oil and gas, net of production costs	(40,244)	(13,891)	(54,135)
Development cost incurred during the year	24,816	1,620	26,436
Accretion of discount	17,273	3,883	21,156
Net change in income tax	8,583	4,261	12,844
At December 31	91,299	25,180	116,479

**OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES CAPITALISED COSTS**

The aggregate amount of property, plant and equipment and intangible assets relating to oil and gas exploration and production activities, and the aggregate amount of the related depreciation, depletion and amortisation at December 31, are shown in the tables below.

**Shell subsidiaries**

	\$ MILLION	
	2015	2014
<b>Cost</b>		
Proved properties [A]	231,768	228,532
Unproved properties	27,928	30,161
Support equipment and facilities	5,717	6,325
	<b>265,413</b>	<b>265,018</b>
<b>Depreciation, depletion and amortisation</b>		
Proved properties [A]	118,575	113,943
Unproved properties	8,295	3,867
Support equipment and facilities	3,000	2,741
	<b>129,870</b>	<b>120,551</b>
<b>Net capitalised costs</b>	<b>135,543</b>	<b>144,467</b>

[A] Includes capitalised asset decommissioning and restoration costs and related depreciation.

**Shell share of joint ventures and associates**

	\$ MILLION	
	2015	2014
<b>Cost</b>		
Proved properties [A]	44,003	42,524
Unproved properties	3,698	3,504
Support equipment and facilities	3,724	3,596
	<b>51,425</b>	<b>49,624</b>
<b>Depreciation, depletion and amortisation</b>		
Proved properties [A]	25,014	22,916
Unproved properties	156	78
Support equipment and facilities	2,124	1,834
	<b>27,294</b>	<b>24,828</b>
<b>Net capitalised costs</b>	<b>24,131</b>	<b>24,796</b>

[A] Includes capitalised asset decommissioning and restoration costs and related depreciation.

## OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES COSTS INCURRED

Costs incurred during the year in oil and gas property acquisition, exploration and development activities, whether capitalised or charged to income currently, are shown in the tables below. Development costs include capitalised asset decommissioning and restoration costs and exclude costs of acquiring support equipment and facilities, but include depreciation thereon.

## Shell subsidiaries

	2015								\$ MILLION
	Europe[A]	Asia	Oceania	Africa	North America		South America	Total	
					USA	Other[B]			
Acquisition of properties									
Proved	2	3	–	–	2	86	–	93	
Unproved	1	1	–	–	135	30	10	177	
Exploration	360	822	198	376	3,433	554	542	6,285	
Development	3,777	2,703	3,760	2,829	5,720	1,747	80	20,616	

[A] Includes Greenland.

[B] Comprises Canada and Mexico.

	2014								\$ MILLION
	Europe[A]	Asia	Oceania	Africa	North America		South America	Total	
					USA	Canada			
Acquisition of properties									
Proved	2	57	–	132	36	–	10	237	
Unproved	–	97	–	221	401	37	136	892	
Exploration	680	1,339	415	254	2,546	851	717	6,802	
Development	5,139	3,189	5,111	2,717	6,482	2,437	409	25,484	

[A] Includes Greenland.

	2013								\$ MILLION
	Europe[A]	Asia	Oceania	Africa	North America		South America	Total	
					USA	Canada			
Acquisition of properties									
Proved	290	20	–	1	51	–	684	1,046	
Unproved	29	168	9	62	416	293	1,364	2,341	
Exploration	752	1,493	448	504	3,496	1,400	592	8,685	
Development	4,309	3,225	5,720	2,293	5,314	1,742	830	23,433	

[A] Includes Greenland.

## Shell share of joint ventures and associates

Joint ventures and associates did not incur costs in the acquisition of oil and gas properties in 2015, 2014 or 2013.

	2015								\$ MILLION
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Canada			
Exploration	40	132	125	–	–	–	–	297	
Development	254	2,434	854	–	–	–	–	3,542	

	2014								\$ MILLION
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Canada			
Exploration	18	181	162	–	–	–	–	361	
Development	220	3,430	143	–	–	–	–	3,793	

	2013								\$ MILLION
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Canada			
Exploration	42	272	321	–	–	–	13	648	
Development	169	2,545	293	–	–	–	23	3,030	

## OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES EARNINGS

The results of operations for oil and gas producing activities are shown in the tables below.

## Shell subsidiaries

2015								\$ MILLION
	Europe[A]	Asia	Oceania	Africa	North America		South America	Total
					USA	Other[B]		
Revenue								
Third parties	1,866	2,577	1,202	1,174	567	53	85	7,524
Sales between businesses	5,707	8,040	418	3,737	4,941	4,045	535	27,423
Total	7,573	10,617	1,620	4,911	5,508	4,098	620	34,947
Production costs excluding taxes	2,490	2,163	541	1,570	3,039	2,612	343	12,758
Taxes other than income tax [C]	128	435	115	347	79	-	63	1,167
Exploration	261	1,255	195	161	3,336	164	347	5,719
Depreciation, depletion and amortisation	2,769	3,047	478	1,733	6,259	6,570	687	21,543
Other costs/(income)	779	1,465	226	(1,441)	668	2,172	232	4,101
Earnings before taxation	1,146	2,252	65	2,541	(7,873)	(7,420)	(1,052)	(10,341)
Taxation charge/(credit)	418	2,516	429	866	(2,907)	(1,815)	278	(215)
Earnings after taxation	728	(264)	(364)	1,675	(4,966)	(5,605)	(1,330)	(10,126)

[A] Includes Greenland.

[B] Comprises Canada and Mexico.

[C] Includes cash-paid royalties to governments outside North America.

2014								\$ MILLION
	Europe[A]	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Revenue								
Third parties	2,808	4,914	1,867	3,004	1,078	202	126	13,999
Sales between businesses	7,869	13,973	990	6,516	9,903	7,399	1,376	48,026
Total	10,677	18,887	2,857	9,520	10,981	7,601	1,502	62,025
Production costs excluding taxes	2,831	2,282	599	2,032	3,440	3,367	482	15,033
Taxes other than income tax [B]	264	948	216	836	198	-	165	2,627
Exploration	457	1,331	232	307	1,549	88	260	4,224
Depreciation, depletion and amortisation	1,772	3,341	427	2,037	6,576	1,709	475	16,337
Other costs/(income)	766	2,058	(2,123)	129	845	2,137	78	3,890
Earnings before taxation	4,587	8,927	3,506	4,179	(1,627)	300	42	19,914
Taxation charge/(credit)	3,362	6,800	2,113	2,404	(654)	60	157	14,242
Earnings after taxation	1,225	2,127	1,393	1,775	(973)	240	(115)	5,672

[A] Includes Greenland.

[B] Includes cash-paid royalties to governments outside North America.

2013								\$ MILLION
	Europe[A]	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Revenue								
Third parties	4,116	5,535	1,982	2,690	3,416	52	64	17,855
Sales between businesses	8,420	17,538	1,038	6,873	7,232	7,354	684	49,139
Total	12,536	23,073	3,020	9,563	10,648	7,406	748	66,994
Production costs excluding taxes	2,656	1,762	481	1,753	3,336	3,303	378	13,669
Taxes other than income tax [B]	328	1,254	231	963	223	-	85	3,084
Exploration	627	1,082	396	354	1,790	312	717	5,278
Depreciation, depletion and amortisation	1,400	2,268	423	1,276	7,858	2,366	160	15,751
Other costs	1,052	3,713	40	419	1,395	2,129	124	8,872
Earnings before taxation	6,473	12,994	1,449	4,798	(3,954)	(704)	(716)	20,340
Taxation charge/(credit)	4,843	10,251	486	3,093	(1,461)	(231)	71	17,052
Earnings after taxation	1,630	2,743	963	1,705	(2,493)	(473)	(787)	3,288

[A] Includes Greenland.

[B] Includes cash-paid royalties to governments outside North America.



(B) Includes cash-paid royalties to governments outside North America.

## Shell share of joint ventures and associates

2015								\$ MILLION
	Europe	Asia	Oceania[A]	Africa	North America		South America	Total
					USA	Canada		
Third party revenue	2,764	5,177	632	-	-	-	-	8,573
Total	2,764	5,177	632	-	-	-	-	8,573
Production costs excluding taxes	382	745	215	-	-	-	-	1,342
Taxes other than income tax [B]	1,253	877	31	-	-	-	-	2,161
Exploration	21	20	42	-	-	-	-	83
Depreciation, depletion and amortisation	196	1,463	1,114	-	-	-	-	2,773
Other costs	221	580	11	-	-	-	-	812
Earnings before taxation	691	1,492	(781)	-	-	-	-	1,402
Taxation charge	237	242	19	-	-	-	-	498
Earnings after taxation	454	1,250	(800)	-	-	-	-	904

[A] Includes Shell's 14% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have limited access to data; accordingly, the numbers are estimated.

[B] Includes cash-paid royalties to governments outside North America.

2014								\$ MILLION
	Europe	Asia	Oceania[A]	Africa	North America		South America	Total
					USA	Canada		
Third party revenue	4,966	8,811	1,292	-	-	-	-	15,069
Total	4,966	8,811	1,292	-	-	-	-	15,069
Production costs excluding taxes	434	829	272	-	-	-	-	1,535
Taxes other than income tax [B]	2,634	2,518	24	-	-	-	-	5,176
Exploration	22	83	66	-	-	-	18	189
Depreciation, depletion and amortisation	198	1,117	373	-	-	-	-	1,688
Other costs/(income)	(6)	643	96	-	-	-	258	991
Earnings before taxation	1,684	3,621	461	-	-	-	(276)	5,490
Taxation charge	608	1,256	190	-	-	-	-	2,054
Earnings after taxation	1,076	2,365	271	-	-	-	(276)	3,436

[A] Includes Shell's 14% share of Woodside from June 2014 (previously: 23%), a publicly listed company on the Australian Securities Exchange. We have limited access to data; accordingly, the numbers are estimated.

[B] Includes cash-paid royalties to governments outside North America.

2013								\$ MILLION
	Europe	Asia	Oceania[A]	Africa	North America		South America	Total
					USA	Canada		
Third party revenue	6,825	11,040	1,334	-	-	-	313	19,512
Total	6,825	11,040	1,334	-	-	-	313	19,512
Production costs excluding taxes	451	958	291	-	-	-	58	1,758
Taxes other than income tax [B]	3,989	3,907	58	-	-	-	86	8,040
Exploration	16	162	165	-	-	-	13	356
Depreciation, depletion and amortisation	188	1,335	578	-	-	-	37	2,138
Other costs/(income)	(151)	694	310	-	-	-	40	893
Earnings before taxation	2,332	3,984	(68)	-	-	-	79	6,327
Taxation charge/(credit)	879	1,655	(185)	-	-	-	93	2,442
Earnings after taxation	1,453	2,329	(117)	-	-	-	(14)	3,885

[A] Includes Shell's 23% share of Woodside, a publicly listed company on the Australian Securities Exchange. We have limited access to data; accordingly, the numbers are estimated.

[B] Includes cash-paid royalties to governments outside North America.

REVENUE AND EXPENSES

FINANCIAL STATEMENTS AND SUPPLEMENTS

## ACREAGE AND WELLS

The tables below reflect acreage and wells of Shell subsidiaries, joint ventures and associates. The term "gross" refers to the total activity in which Shell subsidiaries, joint ventures and associates have an interest. The term "net" refers to the sum of the fractional interests owned by Shell subsidiaries plus the Shell share of joint ventures and associates' fractional interests. Net data below are rounded to the nearest whole number.

OIL AND GAS ACREAGE (AT DECEMBER 31)										THOUSAND ACRES			
	2015				2014				2013				
	Developed		Undeveloped		Developed		Undeveloped		Developed		Undeveloped		
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	
Europe [A]	7,152	2,194	14,623	7,732	9,603	2,693	16,161	8,563	9,614	2,698	15,978	6,225	
Asia	25,581	9,181	36,658	22,995	25,724	9,252	46,487	25,155	26,349	9,275	56,373	27,791	
Oceania	1,657	434	70,509	26,312	1,657	433	71,941	25,992	1,659	466	74,055	29,811	
Africa	4,650	2,071	40,435	27,058	5,174	2,232	39,297	26,409	5,217	2,245	37,811	24,553	
North America - USA	1,659	1,158	5,033	4,262	1,635	1,131	6,133	5,047	1,901	1,213	8,432	6,613	
North America - Canada	1,227	745	32,706	25,716	1,132	748	33,094	27,223	1,259	832	33,307	28,677	
South America	100	52	7,851	3,621	100	52	8,637	4,081	162	89	15,116	7,210	
<b>Total</b>	<b>42,026</b>	<b>15,835</b>	<b>207,815</b>	<b>117,696</b>	<b>45,025</b>	<b>16,541</b>	<b>221,750</b>	<b>122,470</b>	<b>46,161</b>	<b>16,818</b>	<b>241,072</b>	<b>130,880</b>	

[A] Includes Greenland.

NUMBER OF PRODUCTIVE WELLS [A] (AT DECEMBER 31)												
	2015				2014				2013			
	Oil		Gas		Oil		Gas		Oil		Gas	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	1,272	344	1,229	392	1,256[B]	332[B]	1,209[D]	333[D]	1,315	349	1,193[F]	334[F]
Asia	8,271	2,853	334	190	7,529	2,643	353	198	8,187	2,578	340	192
Oceania	-	-	624	234	44	3	625	235	44	5	655	244
Africa	812	362	129	87	887[C]	349[C]	116	79	921[E]	350[E]	109	71
North America - USA	15,331	7,893	2,522	2,403	15,313	7,760	2,555	1,849	15,347	8,150	4,316	2,878
North America - Canada	286	286	1,209	1,059	325	320	1,125	878	337	331	1,238	949
South America	25	15	7	2	25	15	7	2	74	31	7	2
<b>Total</b>	<b>25,997</b>	<b>11,753</b>	<b>6,054</b>	<b>4,367</b>	<b>25,379</b>	<b>11,422</b>	<b>5,990</b>	<b>3,574</b>	<b>26,225</b>	<b>11,794</b>	<b>7,858</b>	<b>4,670</b>

[A] The number of productive wells with multiple completions (more than one formation producing into the same well bore) at December 31, 2015, was 1,733 gross (727 net); 2014: 1,802 gross (corrected from 1,815) and 762 net (corrected from 763); 2013: 2,200 gross (805 net).

[B] Corrected from 1,269 gross (333 net).

[C] Corrected from 891 gross (352 net).

[D] Corrected from 1,311 gross (410 net).

[E] Corrected from 920 gross (351 net).

[F] Corrected from 1,295 gross (411 net).

NUMBER OF NET PRODUCTIVE WELLS AND DRY HOLES DRILLED						
	2015		2014		2013	
	Productive	Dry	Productive	Dry	Productive	Dry
<b>Exploratory [A]</b>						
Europe	1	2	1	2	1	3
Asia	-	11	2	10	2	9
Oceania	-	3	-	1	-	1
Africa	5	-	4	4	6	3
North America - USA	35	8	53	89	173	33
North America - Canada	73	5	39	2	17	2
South America	-	1	-	1	-	5
<b>Total</b>	<b>114</b>	<b>30</b>	<b>99</b>	<b>109[B]</b>	<b>199</b>	<b>56</b>
<b>Development</b>						
Europe	10	-	8	1	6	2
Asia	252	2	243	9	218	6
Oceania	2	-	6	1	12	-
Africa	27	-	23[C]	2	24[C]	-
North America - USA	433	-	392	3	447	2
North America - Canada	20	2	22	-	57	1
South America	3	1	3	-	4	-
<b>Total</b>	<b>747</b>	<b>5</b>	<b>697</b>	<b>16</b>	<b>768</b>	<b>11</b>

[A] Productive wells are wells with proved reserves allocated. Exploratory wells in the process of drilling are excluded and presented separately on page 170.

[B] Includes 50 net exploratory wells sold in North and South America.

[C] Corrected from 25.

Oil and gas reserves

NUMBER OF WELLS IN THE PROCESS OF EXPLORATORY DRILLING [A]										2015	
	At January 1		Wells in the process of drilling at January 1 and allocated proved reserves during the year		Wells in the process of drilling at January 1 and determined as dry during the year		New wells in the process of drilling at December 31		At December 31		
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	
Europe	24[B]	8	(4)	(1)	(3)	(1)	2	1	19	7	
Asia	122	55[C]	(9)	(3)	(24)	(15)	17	6	106	43	
Oceania	461[D]	201[D]	-	-	(4)	(3)	6	3	463	201	
Africa	27	13	(2)	(1)	(4)	(1)	6	5	27	16	
North America – USA	155[E]	121[E]	(40)	(26)	(11)	(9)	77	43	181	129	
North America – Canada	200[F]	184[F]	(85)	(78)	(21)	(18)	23	19	117	107	
South America	23[G]	15[G]	-	-	(2)	(1)	11	5	32	19	
<b>Total</b>	<b>1,012</b>	<b>597</b>	<b>(140)</b>	<b>(109)</b>	<b>(69)</b>	<b>(48)</b>	<b>142</b>	<b>82</b>	<b>945</b>	<b>522</b>	

[A] Wells in the process of drilling includes exploratory wells temporarily suspended.

[B] Corrected from 27.

[C] Corrected from 63.

[D] Corrected from 548 gross (192 net).

[E] Corrected from 143 gross (113 net).

[F] Corrected from 187 gross (170 net).

[G] Corrected from 21 gross (14 net).

NUMBER OF WELLS IN THE PROCESS OF DEVELOPMENT DRILLING [A]										2015	
	At January 1		At December 31		At January 1		At December 31				
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	
Europe	11[B]	2[B]	13	3							
Asia	60	18	80	24							
Oceania	19	9	7	3							
Africa	11[C]	6[C]	12	5							
North America – USA	47	37	37	26							
North America – Canada	11	11	36	33							
South America	-	-	-	-							
<b>Total</b>	<b>159</b>	<b>83</b>	<b>185</b>	<b>94</b>							

[A] In addition to the present activities mentioned above, Shell has ongoing activities related to the installation of water flood projects in Europe, Asia and Africa. Activities related to steam floods are in progress in Europe, Asia and North America, and gas compression is being installed in Europe and Asia.

[B] Corrected from 13 gross (3 net).

[C] Corrected from 10 gross (5 net).

# INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC

## REPORT ON THE PARENT COMPANY FINANCIAL STATEMENTS

### Our opinion

In our opinion, the Parent Company Financial Statements of Royal Dutch Shell plc (the Company):

- give a true and fair view of the state of the Company's affairs as at December 31, 2015, and of its income and cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

### Separate opinion in relation to IFRS as issued by the International Accounting Standards Board (IASB)

As explained in Note 1 to the Parent Company Financial Statements, the Company, in addition to complying with its legal obligation to apply IFRS as adopted by the European Union, has also applied IFRS as issued by the IASB.

In our opinion, the Parent Company Financial Statements comply with IFRS as issued by the IASB.

### What we have audited

The Parent Company Financial Statements comprise:

- the Parent Company Statement of Income and Parent Company Statement of Comprehensive Income for the year ended December 31, 2015;
- the Parent Company Balance Sheet as at December 31, 2015;
- the Parent Company Statement of Changes in Equity for the year ended December 31, 2015;
- the Parent Company Statement of Cash Flows for the year ended December 31, 2015; and
- the Notes to the Parent Company Financial Statements, which include a summary of significant accounting policies and other explanatory information.

Certain required disclosures have been presented elsewhere in the Annual Report and Form 20-F (the Annual Report), rather than in the Parent Company Financial Statements. These are cross-referenced from the Parent Company Financial Statements and are identified as audited.

The financial reporting framework that has been applied in the preparation of the Parent Company Financial Statements is applicable law and IFRS as adopted by the European Union.

## OTHER REQUIRED REPORTING

### Consistency of other information

#### COMPANIES ACT 2006 OPINION

In our opinion, the information given in the Strategic Report and the Directors' Report for the financial year for which the Parent Company Financial Statements are prepared is consistent with the Parent Company Financial Statements.

#### ISAS (UK & IRELAND) REPORTING

Under International Standards on Auditing (UK and Ireland) (ISAs (UK & Ireland)) we are required to report to you if, in our opinion, information in the Annual Report is:

- materially inconsistent with the information in the audited Parent Company Financial Statements; or
- apparently materially incorrect based on, or materially inconsistent with, our knowledge of the Company acquired in the course of performing our audit; or
- otherwise misleading.

We have no exceptions to report arising from this responsibility.

### Adequacy of accounting records and information and explanations received

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company Financial Statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

## Directors' remuneration

#### DIRECTORS' REMUNERATION REPORT – COMPANIES ACT 2006 OPINION

In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

#### OTHER COMPANIES ACT 2006 REPORTING

Under the Companies Act 2006 we are required to report to you if, in our opinion, certain disclosures of Directors' remuneration specified by law are not made. We have no exceptions to report arising from this responsibility.

## RESPONSIBILITIES FOR THE PARENT COMPANY FINANCIAL STATEMENTS AND THE AUDIT

### Our responsibilities and those of the Directors

As explained more fully in the Directors' responsibilities in respect of the preparation of the annual report and accounts set out on pages 66-67, the Directors are responsible for the preparation of the Parent Company Financial Statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the Parent Company Financial Statements in accordance with applicable law and ISAs (UK & Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

### What an audit of Parent Company Financial Statements involves

We conducted our audit in accordance with ISAs (UK & Ireland). An audit involves obtaining evidence about the amounts and disclosures in the Parent Company Financial Statements sufficient to give reasonable assurance that the Parent Company Financial Statements are free from material misstatement, whether caused by fraud or error.

This includes an assessment of:

- whether the accounting policies are appropriate to the Company's circumstances and have been consistently applied and adequately disclosed;
- the reasonableness of significant accounting estimates made by the Directors; and
- the overall presentation of the Parent Company Financial Statements.

We primarily focus our work in these areas by assessing the Directors' judgements against available evidence, forming our own judgements, and evaluating the disclosures in the Parent Company Financial Statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited Parent Company Financial Statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

### OTHER MATTER

We have reported separately on the Consolidated Financial Statements of Royal Dutch Shell plc for the year ended December 31, 2015.

#### Ross Hunter (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP  
Chartered Accountants and Statutory Auditors  
London, United Kingdom  
March 9, 2016

Note that the report set out above is included for the purposes of Royal Dutch Shell plc's Annual Report and Accounts for 2015 only and does not form part of Royal Dutch Shell plc's Annual Report on Form 20-F for 2015.

## PARENT COMPANY FINANCIAL STATEMENTS

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The Parent Company Financial Statements have not been audited in accordance with the standards of the Public Company Accounting Oversight Board (United States).

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STATEMENT OF INCOME		\$ MILLION	
	NOTES	2015	2014
Dividend income		8,167	18,031
Finance income	3	5	49
Administrative expenses		(113)	(57)
Finance expense	3	(2,029)	(1,956)
Income before taxation		6,030	16,067
Taxation (charge)/credit	8	(1)	12
Income for the period		6,029	16,079

STATEMENT OF COMPREHENSIVE INCOME		\$ MILLION	
		2015	2014
Income for the period		6,029	16,079
Comprehensive income for the period		6,029	16,079

BALANCE SHEET		\$ MILLION	
	NOTES	Dec 31, 2015	Dec 31, 2014
<b>Assets</b>			
Non-current assets			
Investments in subsidiaries	4	203,066	202,791
Deferred tax	8	438	493
		203,504	203,284
Current assets			
Accounts receivable	5	19,006	20,652
Cash and cash equivalents	6	465	168
		19,471	20,820
<b>Total assets</b>		<b>222,975</b>	<b>224,104</b>
<b>Liabilities</b>			
Non-current liabilities			
Accounts payable and accrued liabilities	7	245	260
		245	260
Current liabilities			
Accounts payable and accrued liabilities	7	4,465	2,856
		4,465	2,856
<b>Total liabilities</b>		<b>4,710</b>	<b>3,116</b>
<b>Equity</b>			
Share capital	10	546	540
Other reserves	11	201,674	201,745
Retained earnings		16,045	18,703
<b>Total equity</b>		<b>218,265</b>	<b>220,988</b>
<b>Total liabilities and equity</b>		<b>222,975</b>	<b>224,104</b>

Signed on behalf of the Board

/s/ Simon Henry

Simon Henry  
Chief Financial Officer  
March 9, 2016

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FINANCIAL STATEMENTS AND SUPPLEMENTS

STATEMENT OF CHANGES IN EQUITY					\$ MILLION
	NOTES	Share capital	Other reserves	Retained earnings	Total equity
<b>At January 1, 2015</b>		540	201,745	18,703	220,988
Comprehensive income for the period		–	–	6,029	6,029
Dividends paid	12	–	–	(11,972)	(11,972)
Scrip dividends	12	7	(7)	2,602	2,602
Repurchases of shares	11	(1)	1	1	1
Share-based compensation	11	–	(65)	682	617
<b>At December 31, 2015</b>		546	201,674	16,045	218,265
<b>At January 1, 2014</b>		542	201,898	14,183	216,623
Comprehensive income for the period		–	–	16,079	16,079
Dividends paid	12	–	–	(11,843)	(11,843)
Scrip dividends	12	6	(6)	2,399	2,399
Repurchases of shares	11	(8)	8	(2,787)	(2,787)
Share-based compensation	11	–	(155)	672	517
<b>At December 31, 2014</b>		540	201,745	18,703	220,988

STATEMENT OF CASH FLOWS				\$ MILLION
	NOTES	2015	2014	
<b>Cash flow from operating activities</b>				
Income for the period		6,029	16,079	
Adjustment for:				
Dividend income		(8,167)	(18,031)	
Tax		1	(12)	
Interest income		(5)	(7)	
Interest and other expense		41	14	
Share-based compensation		32	27	
Decrease/(increase) in working capital		3,607	(3,771)	
Net cash from/(used in) operating activities		1,538	(5,701)	
<b>Cash flow from investing activities</b>				
Dividends received		8,167	18,031	
Interest received		5	7	
Share-based compensation		407	402	
Net cash from investing activities		8,579	18,440	
<b>Cash flow from financing activities</b>				
Cash dividends paid	12	(9,370)	(9,444)	
Repurchases of shares		(409)	(3,328)	
Interest and other expense paid		(41)	(14)	
Net cash used in financing activities		(9,820)	(12,786)	
Increase/(decrease) in cash and cash equivalents		297	(47)	
Cash and cash equivalents at January 1		168	215	
Cash and cash equivalents at December 31	6	465	168	



## NOTES TO THE PARENT COMPANY FINANCIAL STATEMENTS

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### 1 BASIS OF PREPARATION

The Financial Statements of Royal Dutch Shell plc (the Company) have been prepared in accordance with the provisions of the Companies Act 2006 (the Act) and with International Financial Reporting Standards (IFRS) as adopted by the European Union. As applied to the Company, there are no material differences from IFRS as issued by the International Accounting Standards Board (IASB); therefore, the Financial Statements have been prepared in accordance with IFRS as issued by the IASB.

As described in the accounting policies in Note 2, the Financial Statements have been prepared under the historical cost convention except for certain items measured at fair value. Those accounting policies have been applied consistently in all periods presented.

The Financial Statements were approved and authorised for issue by the Board of Directors on March 9, 2016.

The preparation of financial statements in conformity with IFRS requires the use of certain accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. Actual results may differ from those estimates.

The financial results of the Company are included in the Consolidated Financial Statements on pages 115-152. The financial results of the Company incorporate the results of the Dividend Access Trust (the Trust), the financial statements for which are presented on pages 185-189.

The Company's principal activity is being the parent company for Shell, as described in Note 1 to the Consolidated Financial Statements.

### 2 KEY ACCOUNTING POLICIES

The Company's accounting policies generally follow those of Shell as set out in Note 2 to the Consolidated Financial Statements. The following are Company-specific policies.

#### Presentation currency

The Company's presentation and functional currency is US dollars (dollars).

#### Investments

Investments in subsidiaries are stated at cost, net of any impairment. Key accounting estimates and judgements affecting the assessment and measurement of impairment follow those set out in Note 2 to the Consolidated Financial Statements.

The original cost of the Company's investment in Royal Dutch Petroleum Company (Royal Dutch) was based on the fair value of the shares transferred to the Company by the former shareholders of Royal Dutch in exchange for A shares in the Company during the public exchange offer in 2005. The original cost of the Company's investment in The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited (Shell Transport), was the fair value of the shares held by the former shareholders of The "Shell" Transport and Trading Company, p.l.c. transferred in consideration for the issuance of B shares as part of the Scheme of Arrangement in 2005. The Company's investments in Royal Dutch and Shell Transport now represent an investment in Shell Petroleum N.V. (Shell Petroleum); this change had no impact on the cost of investments in subsidiaries.

#### Dividend income

Interim dividends are recognised on a paid basis unless the dividend has been confirmed by a general meeting of Shell Transport or of Shell Petroleum, in which case income is recognised on the date at which receipt is deemed virtually certain.

#### Share-based compensation plans

The fair value of share-based compensation for equity-settled plans granted to employees of subsidiaries under the Company's plans is recognised as an investment in subsidiaries from the date of grant over the vesting period with a corresponding increase in equity. Changes in the fair value of share-based compensation for cash-settled plans relating to employees of subsidiaries are recognised as an investment in subsidiaries with a corresponding change in liabilities. In the year of vesting of a plan, the costs for the actual deliveries are charged to the relevant employing subsidiaries. This is recognised as a realisation of the investment originally booked. If the actual vesting costs are higher than the cumulatively recognised share-based compensation charge, the difference is recognised in income.

Refer to Note 21 to the Consolidated Financial Statements for information on the Company's principal plan.

#### Taxation

The Company is tax-resident in the Netherlands. For the assessment of corporate income tax in the Netherlands, the Company and certain of its subsidiaries form a fiscal unit, in respect of which the Company recognises any current tax receivable or payable or (or deferred tax asset or liability) for the fiscal unit as a whole.

The Company's tax charge or credit recognised in income is calculated at the statutory tax rate prevailing in the Netherlands.

## 3 FINANCE INCOME AND EXPENSE

	\$ MILLION	
	2015	2014
Finance income		
Interest income	5	7
Other income	–	42
<b>Total</b>	<b>5</b>	<b>49</b>
Finance expense		
Interest expense	(28)	(14)
Other expense	(13)	–
Foreign exchange losses	(1,988)	(1,942)
<b>Total</b>	<b>(2,029)</b>	<b>(1,956)</b>

## 4 INVESTMENTS IN SUBSIDIARIES

	\$ MILLION	
	2015	2014
At January 1	202,791	202,458
Share-based compensation	715	753
Recovery of vested share-based compensation	(440)	(420)
<b>At December 31</b>	<b>203,066</b>	<b>202,791</b>

## 5 ACCOUNTS RECEIVABLE

	\$ MILLION	
	Dec 31, 2015	Dec 31, 2014
Amounts due from subsidiaries (see Note 15)	19,006	20,652
<b>Total</b>	<b>19,006</b>	<b>20,652</b>

## 6 CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprise call deposits in euros, sterling and dollars with Shell Treasury Centre Limited, a subsidiary.

## 7 ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	\$ MILLION			
	Dec 31, 2015		Dec 31, 2014	
	Current	Non-current	Current	Non-current
Amounts due to subsidiaries (see Note 15)	4,178	–	2,179	–
Withholding tax payable	145	–	249	–
Accruals and other liabilities	139	245	426	260
Unclaimed dividends	3	–	2	–
<b>Total</b>	<b>4,465</b>	<b>245</b>	<b>2,856</b>	<b>260</b>

Accruals and other liabilities are principally in respect of cash-settled share-based compensation and commitments for share repurchases undertaken on the Company's behalf under irrevocable, non-discretionary arrangements.

## 8 TAXATION

TAXATION CHARGE/(CREDIT)	\$ MILLION	
	2015	2014
Deferred tax		
Relating to the origination and reversal of temporary differences	1	(6)
Adjustments in respect of prior periods	-	(6)
Total taxation charge/(credit)	1	(12)

RECONCILIATION OF APPLICABLE TAX CHARGE AT STATUTORY RATE TO TAXATION CHARGE/(CREDIT)	\$ MILLION	
	2015	2014
Income before taxation	6,030	16,067
Applicable tax charge at the statutory tax rate of 25.0% (2014: 25.0%)	1,508	4,017
Adjustments in respect of prior periods	-	(6)
Tax effects of:		
Income not subject to tax	(1,538)	(4,038)
Expenses not deductible for tax purposes	8	7
Other	23	8
Taxation charge/(credit)	1	(12)

Taxes payable are reported within accounts payable and accrued liabilities (see Note 7).

DEFERRED TAX ASSETS	\$ MILLION	
	2015	2014
At January 1	493	565
Recognised in income	(1)	12
Other movements	(54)	(84)
At December 31	438	493

Deferred tax assets are recognised principally in respect of tax losses, which are available for relief against future taxable profits for up to nine years from the year in which the losses were incurred.

## 9 FINANCIAL INSTRUMENTS

Financial assets and liabilities in the Company's Balance Sheet comprise cash and cash equivalents (see Note 6), accounts receivable (see Note 5) and certain amounts reported within accounts payable and accrued liabilities (see Note 7). The fair value of financial assets and liabilities at December 31, 2015, and 2014, approximates their carrying amount.

Information on financial risk management is presented in Note 19 to the Consolidated Financial Statements. Foreign currency derivatives are used by the Company to manage foreign exchange risk. Foreign exchange risk arises when certain transactions are denominated in a currency that is not the Company's functional currency. There were no derivative financial instruments held at December 31, 2015, or December 31, 2014.

## 10 SHARE CAPITAL

ISSUED AND FULLY PAID	NUMBER OF SHARES		
	Ordinary shares of €0.07 each		Sterling deferred shares of £1 each
	A	B	
At January 1, 2015	3,907,302,393	2,440,410,614	50,000
Scrip dividends	96,336,688	-	-
Repurchases of shares	(12,717,512)	-	-
At December 31, 2015	3,990,921,569	2,440,410,614	50,000
At January 1, 2014	3,898,011,213	2,472,839,187	50,000
Scrip dividends	64,568,758	-	-
Repurchases of shares	(55,277,578)	(32,428,573)	-
At December 31, 2014	3,907,302,393	2,440,410,614	50,000

NOMINAL VALUE	Ordinary shares of €0.07 each		\$ MILLION
	A	B	
At January 1, 2015	334	206	540
Scrip dividends	7	–	7
Repurchases of shares	(1)	–	(1)
At December 31, 2015	340	206	546
At January 1, 2014	333	209	542
Scrip dividends	6	–	6
Repurchases of shares	(5)	(3)	(8)
At December 31, 2014	334	206	540

The total nominal value of sterling deferred shares is less than \$1 million.

A and B shares repurchased in 2015 and 2014 under the Company's share buyback programme were all cancelled.

At the Company's Annual General Meeting (AGM) on May 19, 2015, the Board was authorised to allot ordinary shares in the Company, and to grant rights to subscribe for or to convert any security into ordinary shares in the Company, up to an aggregate nominal amount of €147 million (representing 2,100 million ordinary shares of €0.07 each), and to list such shares or rights on any stock exchange. This authority expires at the earlier of the close of business on August 19, 2016, and the end of the AGM to be held in 2016, unless previously renewed, revoked or varied by the Company in a general meeting.

B shares rank equally in all respects with A shares except for the dividend access mechanism described below. The Company and Shell Transport can procure the termination of the dividend access mechanism at any time. Upon such termination, B shares will form one class with A shares ranking equally in all respects and A and B shares will be known as ordinary shares without further distinction.

The sterling deferred shares are redeemable only at the discretion of the Company for £1 each and carry no voting rights. There are no further rights to participate in profits or assets, including the right to receive dividends. Upon winding up or liquidation, the shares carry a right to repayment of paid-up nominal value, ranking ahead of A and B shares.

For information on the number of shares in the Company held by Shell employee share ownership trusts and trust-like entities to meet delivery commitments under employee share plans, refer to Note 21 to the Consolidated Financial Statements.

## Dividend access mechanism for B shares

### GENERAL

Dividends paid on A shares have a Dutch source for tax purposes and are subject to Dutch withholding tax.

It is the expectation and the intention, although there can be no certainty, that holders of B shares will receive dividends via the dividend access mechanism. Any dividends paid on the dividend access share will have a UK source for Dutch and UK tax purposes; there will be no UK or Dutch withholding tax on such dividends and certain holders (not including US holders) of B shares or B American Depositary Shares (ADSs) will be entitled to a UK tax credit in respect of their proportional share of such dividends.

### DESCRIPTION OF DIVIDEND ACCESS MECHANISM DURING THE YEAR

A dividend access share has been issued by Shell Transport to Computershare Trustees (Jersey) Limited as dividend access trustee (the Trustee). Pursuant to a declaration of trust, the Trustee will hold any dividends paid in respect of the dividend access share on trust for the holders of B shares from time to time and will arrange for prompt disbursement of such dividends to holders of B shares. Interest and other income earned on unclaimed dividends will be for the account of Shell Transport and any dividends that are unclaimed after 12 years will revert to Shell Transport. Holders of B shares will not have any interest in the dividend access share and will not have any rights against Shell Transport as issuer of the dividend access share. The only assets held on trust for the benefit of the holders of B shares will be dividends paid to the Trustee in respect of the dividend access share.

The declaration and payment of dividends on the dividend access share will require Board action by Shell Transport and will be subject to any applicable legal or articles limitations in effect from time to time. In no event will the aggregate amount of the dividend paid by Shell Transport under the dividend access mechanism for a particular period exceed the aggregate amount of the dividend declared by the Company's Board on B shares in respect of the same period.

### OPERATION OF THE DIVIDEND ACCESS MECHANISM DURING THE YEAR

If, in connection with the declaration of a dividend by the Company on B shares, the Board of Shell Transport elects to declare and pay a dividend on the dividend access share to the Trustee, the holders of B shares will be beneficially entitled to receive their share of that dividend pursuant to the declaration of trust (and arrangements will be made to ensure that the dividend is paid in the same currency in which they would have received a dividend from the Company).

If any amount is paid by Shell Transport by way of a dividend on the dividend access share and paid by the Trustee to any holder of B shares, the dividend which the Company would otherwise pay on B shares will be reduced by an amount equal to the amount paid to such holders of B shares by the Trustee.

The Company will have a full and unconditional obligation, in the event that the Trustee does not pay an amount to holders of B shares on a cash dividend payment date (even if that amount has been paid to the Trustee), to pay immediately the dividend declared on B shares. The right of holders of B shares to receive distributions from the Trustee will be reduced by an amount equal to the amount of any payment actually made by the Company on account of any dividend on B shares.

The dividend access mechanism may be suspended or terminated at any time by the Company's Directors or the Directors of Shell Transport, for any reason and without financial recompense. This might, for instance, occur in response to changes in relevant tax legislation.

## 11 OTHER RESERVES

	\$ MILLION				
	Merger Reserve	Share premium reserve	Capital redemption reserve	Share plan reserve	Total
At January 1, 2015	200,338	154	83	1,170	201,745
Scrip dividends	(7)	-	-	-	(7)
Repurchases of shares	-	-	1	-	1
Share-based compensation	-	-	-	(65)	(65)
At December 31, 2015	200,331	154	84	1,105	201,674
At January 1, 2014	200,344	154	75	1,325	201,898
Scrip dividends	(6)	-	-	-	(6)
Repurchases of shares	-	-	8	-	8
Share-based compensation	-	-	-	(155)	(155)
At December 31, 2014	200,338	154	83	1,170	201,745

The merger reserve was established as a consequence of the Company becoming the single parent company of Royal Dutch and Shell Transport and represented the difference between the cost of the investment in those companies and the nominal value of shares issued in exchange for those investments as required by the prevailing legislation at that time, section 131 of the Companies Act 1985.

On January 6, 2006, loan notes were converted into 4,827,974 A shares. The difference between the carrying value of the loan notes and the nominal value of the new shares issued was credited to the share premium reserve. The capital redemption reserve was established in connection with repurchases of shares of the Company. The share plan reserve is in respect of equity-settled share-based compensation plans (refer to Note 21 to the Consolidated Financial Statements).

## 12 DIVIDENDS

Refer to Note 23 to the Consolidated Financial Statements.

## 13 LEGAL PROCEEDINGS AND OTHER CONTINGENCIES

Refer to Note 25 to the Consolidated Financial Statements.

## 14 DIRECTORS AND SENIOR MANAGEMENT

Refer to Note 27 to the Consolidated Financial Statements for the remuneration of Directors of the Company. In 2015, the Company recognised \$25 million (2014: \$25 million) in administrative expenses for the compensation of Directors and Senior Management.

## 15 RELATED PARTIES

Information about the Company's subsidiaries, and whether held directly or indirectly, and other related undertakings (all of which are held indirectly) at December 31, 2015, is set out in Exhibit 8.

	\$ MILLION			
	Amounts due from subsidiaries (See Note 5)		Amounts due to subsidiaries (See Note 7)	
	2015	2014	2015	2014
Shell Petroleum	19,002	20,650	425	455
Shell Treasury Luxembourg Sarl	-	-	3,738	1,724
Other	4	2	15	-
Total	19,006	20,652	4,178	2,179

The amount due from Shell Petroleum, which is denominated in dollars, is repayable on demand. Interest is calculated at US LIBOR less 0.103% and interest income was \$5 million in 2015 (2014: less than \$1 million).

The net amount due to Shell Treasury Luxembourg Sarl at December 31, 2015, comprises an interest-bearing receivable of €14,278 million (2014: €15,537 million) and an interest-bearing payable of \$19,334 million (2014: \$20,610 million). Interest on euro balances is calculated at Euro OverNight Index Average (EONIA) less 0.1% (2014: EONIA less 0.1%) and on dollar balances at US LIBOR (2014: US LIBOR). Net interest expense on these balances in 2015 was \$28 million (2014: \$7 million).

#### **Other transactions and balances**

The Company enters into forward and spot foreign currency contracts with Treasury companies, which are subsidiaries. There were no open foreign currency contracts at December 31, 2015, or December 31, 2014.

The Company settles general and administrative expenses of the Trust, including the auditor's remuneration.

The Company has guaranteed contractual payments totalling \$49,475 million at December 31, 2015 (2014: \$34,826 million), and related interest in respect of listed debt issued by Shell International Finance B.V.

#### **16 AUDITOR'S REMUNERATION**

Refer to Note 28 to the Consolidated Financial Statements.

#### **17 ACQUISITION OF BG GROUP PLC**

On February 15, 2016, the Company acquired all the voting rights in BG Group plc by means of a Scheme of Arrangement under Part 26 of the Act in exchange for cash of £13.1 billion (\$19.0 billion) and 218.7 million A shares and 1,305.1 million B shares issued with a total fair value of \$34.1 billion. The fair value of the shares issued was calculated using the market price of the Company's A and B shares of 1,545.0 and 1,538.5 pence, respectively, on the London Stock Exchange at its opening of business on February 15, 2016.

# INDEPENDENT AUDITORS' REPORT TO COMPUTERSHARE TRUSTEES (JERSEY) LIMITED AS TRUSTEE OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

## REPORT ON THE FINANCIAL STATEMENTS

### Our opinion

In our opinion the Financial Statements of the Royal Dutch Shell Dividend Access Trust (the Trust):

- give a true and fair view of the state of the Trust's affairs as at December 31, 2015, and of its income and cash flows for the year then ended; and
- have been properly prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union.

### Separate opinion in relation to IFRS as issued by the International Accounting Standards Board (IASB)

As explained in Note 2 to the Royal Dutch Shell Dividend Access Trust Financial Statements, the Trust, in addition to complying with its legal obligation to apply IFRS as adopted by the European Union, has also applied IFRS as issued by the IASB.

In our opinion the Royal Dutch Shell Dividend Access Trust Financial Statements comply with IFRS as issued by the IASB.

### What we have audited

The Royal Dutch Shell Dividend Access Trust Financial Statements comprise:

- the Royal Dutch Shell Dividend Access Trust Statement of Income and the Royal Dutch Shell Dividend Access Trust Statement of Comprehensive Income for the year ended December 31, 2015;
- the Royal Dutch Shell Dividend Access Trust Balance Sheet as at December 31, 2015;
- the Royal Dutch Shell Dividend Access Trust Statement of Changes in Equity for the year ended December 31, 2015;
- the Royal Dutch Shell Dividend Access Trust Statement of Cash Flows for the year ended December 31, 2015; and
- the Notes to the Royal Dutch Shell Dividend Access Trust Financial Statements, which include a summary of significant accounting policies and other explanatory information.

Certain required disclosures have been presented elsewhere in the Royal Dutch Shell plc Annual Report and Form 20-F (the Annual Report), rather than in the Royal Dutch Shell Dividend Access Trust Financial Statements. These are cross-referenced from the Royal Dutch Shell Dividend Access Trust Financial Statements and are identified as audited.

The financial reporting framework that has been applied in the preparation of the Royal Dutch Shell Dividend Access Trust Financial Statements is applicable law and IFRS as adopted by the European Union.

### What an audit of Dividend Access Trust financial statements involves

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) (ISAs (UK and Ireland)). An audit involves obtaining evidence about the amounts and disclosures in the Royal Dutch Shell Dividend Access Trust Financial Statements sufficient to give reasonable assurance that the Royal Dutch Shell Dividend Access Trust Financial Statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of:

- whether the accounting policies are appropriate to the Trust's circumstances and have been consistently applied and adequately disclosed;

- the reasonableness of significant accounting estimates made by the Trustee; and
- the overall presentation of the Royal Dutch Shell Dividend Access Trust Financial Statements.

We primarily focus our work in these areas by assessing the Trustees' judgements against available evidence, forming our own judgements, and evaluating the disclosures in the Royal Dutch Shell Dividend Access Trust Financial Statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited Royal Dutch Shell Dividend Access Trust Financial Statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

### OPINION ON OTHER MATTER

In our opinion the information given in the Annual Report for the financial year for which the Royal Dutch Shell Dividend Access Trust Financial Statements are prepared is consistent with the Royal Dutch Shell Dividend Access Trust Financial Statements.

### MATTERS ON WHICH WE HAVE AGREED TO REPORT BY EXCEPTION

We have agreed to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept; or
- the Royal Dutch Shell Dividend Access Trust Financial Statements are not in agreement with the accounting records.

We have no exceptions to report arising from this responsibility.

### RESPONSIBILITIES FOR THE FINANCIAL STATEMENTS AND THE AUDIT

#### Our responsibilities and those of the Trustee

The Trustee is responsible for the preparation of the Royal Dutch Shell Dividend Access Trust Financial Statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the Royal Dutch Shell Dividend Access Trust Financial Statements in accordance with applicable law and ISAs (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report, including the opinions, has been prepared for and only for the Trustee as a body and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

PricewaterhouseCoopers CI LLP  
Chartered Accountants  
Jersey, Channel Islands  
March 9, 2016

Note that the report set out above is included for the purposes of Royal Dutch Shell plc's Annual Report and Accounts for 2015 only and does not form part of Royal Dutch Shell plc's Annual Report on Form 20-F for 2015.



## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

### TO COMPUTERSHARE TRUSTEES (JERSEY) LIMITED AS TRUSTEE OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST AND THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ROYAL DUTCH SHELL PLC.

In our opinion, the accompanying Statement of Income, the Statement of Comprehensive Income, the Balance Sheet, the Statement of Changes in Equity, the Statement of Cash Flows, and the related Notes to the Royal Dutch Shell Dividend Access Trust Financial Statements present fairly, in all material respects, the financial position of the Royal Dutch Shell Dividend Access Trust (the Trust) at December 31, 2015 and December 31, 2014, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2015 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union. Also in our opinion, the Trust maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Trustee and the management of Royal Dutch Shell plc are responsible for these Financial Statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the Trustee's and Management's Report on Internal Control over Financial Reporting of the Royal Dutch Shell Dividend Access Trust set out on pages 185-189. Our responsibility is to express opinions on these Financial Statements and on the Trust's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the Financial Statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the Financial Statements included examining, on a test basis, evidence supporting the amounts and disclosures in the Financial Statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers CI LLP  
Jersey, Channel Islands  
March 9, 2016

Note that the report set out above is included for the purposes of Royal Dutch Shell plc's Annual Report on Form 20-F for 2015 only and does not form part of Royal Dutch Shell plc's Annual Report and Accounts for 2015.

## ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST FINANCIAL STATEMENTS

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STATEMENT OF INCOME		£ MILLION		
	2015	2014	2013	
Dividend income	2,726	2,470	2,361	
Income before taxation and for the period	2,726	2,470	2,361	

STATEMENT OF COMPREHENSIVE INCOME		£ MILLION		
	2015	2014	2013	
Income for the period	2,726	2,470	2,361	
Comprehensive income for the period	2,726	2,470	2,361	

BALANCE SHEET		£ MILLION		
	NOTES	Dec 31, 2015	Dec 31, 2014	
<b>Assets</b>				
Current assets				
Cash and cash equivalents		2	1	
Total assets		2	1	
<b>Liabilities</b>				
Current liabilities				
Unclaimed dividends	4	2	1	
Total liabilities		2	1	
<b>Equity</b>				
Capital account	5	-	-	
Revenue account		-	-	
Total equity		-	-	
Total liabilities and equity		2	1	

Signed on behalf of Computershare Trustees (Jersey) Limited  
as Trustee of the Royal Dutch Shell Dividend Access Trust

/s/ Karen Kurys

Karen Kurys  
March 9, 2016

/s/ Martin Fish

Martin Fish

STATEMENT OF CHANGES IN EQUITY				£ MILLION
	NOTES	Capital account	Revenue account	Total equity
<b>At January 1, 2015</b>		–	–	–
Comprehensive income for the period		–	2,726	2,726
Distributions made	6	–	(2,726)	(2,726)
<b>At December 31, 2015</b>		–	–	–
<b>At January 1, 2014</b>		–	–	–
Comprehensive income for the period		–	2,470	2,470
Distributions made	6	–	(2,470)	(2,470)
<b>At December 31, 2014</b>		–	–	–
<b>At January 1, 2013</b>		–	–	–
Comprehensive income for the period		–	2,361	2,361
Distributions made	6	–	(2,361)	(2,361)
<b>At December 31, 2013</b>		–	–	–

STATEMENT OF CASH FLOWS				£ MILLION
	2015	2014	2013	
<b>Cash flow from operating activities</b>				
Income for the period	2,726	2,470	2,361	
Adjustment for:				
Dividends received	(2,726)	(2,470)	(2,361)	
Net cash from operating activities	–	–	–	
<b>Cash flow from investing activities</b>				
Dividends received	2,726	2,470	2,361	
Net cash from investing activities	2,726	2,470	2,361	
<b>Cash flow from financing activities</b>				
Cash distributions made	(2,725)	(2,470)	(2,361)	
Net cash used in financing activities	(2,725)	(2,470)	(2,361)	
Change in cash and cash equivalents	1	–	–	
Cash and cash equivalents at January 1	1	1	1	
Cash and cash equivalents at December 31	2	1	1	

## NOTES TO THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST FINANCIAL STATEMENTS

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### 1 THE TRUST

The Royal Dutch Shell Dividend Access Trust (the Trust) was established on May 19, 2005, by The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited (Shell Transport), and Royal Dutch Shell plc (the Company). The Trust is governed by the applicable laws of England and Wales and is resident and domiciled in Jersey. The Trust is not subject to taxation. The Trustee of the Trust is Computershare Trustees (Jersey) Limited, registration number 92182 (the Trustee), Queensway House, Hilgrove Street, St Helier, Jersey, JE1 1ES. The Trust was established as part of a dividend access mechanism.

A dividend access share has been issued by Shell Transport to the Trustee. Following the announcement of a dividend by the Company on the B shares, Shell Transport may declare a dividend on the dividend access share.

The primary purposes of the Trust are to receive, on behalf of the B shareholders of the Company and in accordance with their respective holdings of B shares in the Company, any amounts paid by way of dividend on the dividend access share and to pay such amounts to the B shareholders on the same pro rata basis. The Trust is not subject to significant market risk, credit risk or liquidity risk.

The Trust shall not endure for a period in excess of 80 years from May 19, 2005, being the date on which the Trust Deed was executed.

### 2 BASIS OF PREPARATION

The Financial Statements of the Trust have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. As applied to the Trust, there are no material differences from IFRS as issued by the International Accounting Standards Board (IASB); therefore, the Financial Statements have been prepared in accordance with IFRS as issued by the IASB.

The Financial Statements have been prepared under the historical cost convention. The accounting policies described in Note 3 have been applied consistently in all periods presented.

The Financial Statements were approved and authorised for issue by the Trustee on March 9, 2016.

The preparation of financial statements in conformity with IFRS requires the use of certain accounting estimates. It also requires management to exercise its judgement in the process of applying the Trust's accounting policies. Actual results may differ from these estimates.

The financial results of the Trust are included in the Consolidated and Parent Company Financial Statements on pages 115-152 and pages 173-181 respectively.

### 3 ACCOUNTING POLICIES

The Trust's accounting policies generally follow those of Shell as set out in Note 2 to the Consolidated Financial Statements. The following are Trust-specific policies.

#### Presentation currency

The Trust's presentation and functional currency is sterling. The Trust's dividend income and dividends paid are principally in sterling.

#### Dividend income

Interim dividends on the dividend access share are recognised on a paid basis unless the dividend has been confirmed by a general meeting of Shell Transport, in which case income is recognised on the date on which receipt is deemed virtually certain.

#### Distributions made

Amounts are recorded as distributed once a wire transfer or cheque is issued. To the extent that cheques expire or are returned unrepresented, the Trust records a liability for unclaimed dividends and a corresponding amount of cash.

### 4 UNCLAIMED DIVIDENDS

Unclaimed dividends of £1,725,047 (2014: £1,497,815) include any dividend cheque payments that have expired or have been returned unrepresented.

### 5 CAPITAL ACCOUNT

The capital account is represented by the dividend access share of 25 pence settled in the Trust by Shell Transport, which also represents an asset in the Trust.

### 6 DISTRIBUTIONS MADE

Distributions are made to the B shareholders of the Company in accordance with the Trust Deed. Refer to Note 23 to the Consolidated Financial Statements for information about dividends per share. All cheques are valid for one year from the date of issue. Any wire transfers that are not completed are replaced by cheques.

**7 RELATED PARTIES**

The Trust received dividend income of £2,726 million (2014: £2,470 million; 2013: £2,361 million) in respect of the dividend access share. The Trust made distributions of £2,726 million (2014: £2,470 million; 2013: £2,361 million) to the B shareholders of the Company.

The Company pays the general and administrative expenses of the Trust, including the auditor's remuneration.

**8 AUDITOR'S REMUNERATION**

Auditor's remuneration for 2015 audit services was £33,750 (2014: £33,750; 2013: £33,750).

## ADDITIONAL INFORMATION

### SHAREHOLDER INFORMATION

Royal Dutch Shell plc (the Company) was incorporated in England and Wales on February 5, 2002, as a private company under the Companies Act 1985, as amended. On October 27, 2004, the Company was re-registered as a public company limited by shares and changed its name from Forthdeal Limited to Royal Dutch Shell plc. The Company is registered at Companies House, Cardiff, under company number 4366849, and at the Chamber of Commerce, The Hague, under company number 34179503. The business address for the Directors and Senior Management is: Carel van Bylandlaan 30, 2596 HR, The Hague, The Netherlands.

The Company is resident in the Netherlands for Dutch and UK tax purposes and its primary objective is to carry on the business of a holding company. It is not directly or indirectly owned or controlled by another corporation or by any government and does not know of any arrangements that may result in a change of control of the Company.

#### NATURE OF TRADING MARKET

The Company has two classes of ordinary shares: A and B shares. The principal trading market for A shares is Euronext Amsterdam and the principal trading market for B shares is the London Stock Exchange. Ordinary shares are traded in registered form.

A and B American Depositary Shares (ADSs) are listed on the New York Stock Exchange [A]. A depositary receipt is a certificate that evidences ADSs. Depositary receipts are issued, cancelled and exchanged at the office of The Bank of New York Mellon, 101 Barclay Street, New York, NY 10286, USA, as depositary (the Depositary) under a deposit agreement between the Company, the Depositary and the holders of ADSs. Each ADS represents two €0.07 shares of Royal Dutch Shell plc deposited under the agreement. More information relating to ADSs is given on page 194.

[A] At February 12, 2016, 452,302,640 A ADSs and 186,894,163 B ADSs were outstanding, representing 23% and 15% of the respective share capital class, held by 6,360 and 867 holders of record with an address in the USA, respectively. In addition to holders of ADSs, at February 12, 2016, 70,267 A shares and 639,157 B shares of €0.07 each were outstanding, representing 0.002% and 0.026% of the respective share capital class, held by 128 and 804 holders of record registered with an address in the USA, respectively.

#### LISTING INFORMATION

	A shares	B shares
Ticker symbol London	RDSA	RDSB
Ticker symbol Amsterdam	RDSA	RDSB
Ticker symbol New York (ADS [A])	RDS.A	RDS.B
ISIN Code	GB00B03MLX29	GB00B03MM408
CUSIP	G7690A100	G7690A118
SEDOL Number London	B03MLX2	B03MM40
SEDOL Number Euronext	B09CBL4	B09CBN6
Weighting on FTSE at 31/12/15	3.73%	2.33%
Weighting on AEX at 31/12/15	12.64%	not included

[A] Each A ADS represents two A shares of €0.07 each and each B ADS represents two B shares of €0.07 each.

#### SHARE CAPITAL

The issued and fully paid share capital of the Company at February 12, 2016, was as follows:

	Issued and fully paid	
	Number	Nominal value
Ordinary shares of €0.07 each		
A shares	3,990,921,569	€279,364,510
B shares	2,440,410,614	€170,828,743
Sterling deferred shares of £1 each	50,000	£50,000

The Directors may only allot new ordinary shares if they have authority from shareholders to do so. The Company seeks to renew this authority annually at its Annual General Meeting (AGM). Under the resolution passed at the Company's 2015 AGM, the Directors were granted authority to allot ordinary shares up to an aggregate nominal amount equivalent to approximately one-third of the issued ordinary share capital of the Company (in line with the guidelines issued by institutional investors).

The following is a summary of the material terms of the Company's ordinary shares, including brief descriptions of the provisions contained in the Articles of Association (the Articles) and applicable laws of England and Wales in effect on the date of this document. This summary does not purport to include complete statements of these provisions:

- upon issuance, A and B shares are fully paid and free from all liens, equities, charges, encumbrances and other interest of the Company and not subject to calls of any kind;
- all A and B shares rank equally for all dividends and distributions on ordinary share capital; and
- A and B shares are admitted to the Official List of the UK listing Authority and to trading on the market for listed securities of the London Stock Exchange. A and B shares are also admitted to trading on Euronext Amsterdam. A and B ADSs are listed on the New York Stock Exchange.

At December 31, 2015, trusts and trust-like entities holding shares for the benefit of employee share plans of Shell held (directly and indirectly) 33.8 million shares of the Company with an aggregate market value of \$775 million and an aggregate nominal value of €2.4 million.

**SIGNIFICANT SHAREHOLDINGS**

The Company's A and B shares have identical voting rights, and accordingly the Company's major shareholders do not have different voting rights.

**Significant direct shareholdings**

Direct holdings of 3% or more of A and B shares combined held by registered members representing the interests of underlying investors at December 31, 2015, are given below.

	A shares		B shares		Total	
	Number	%	Number	%	Number	%
Euroclear Nederland	1,846,211,701	46.26	14,219,008	0.58	1,860,430,709	28.93
BNY (Nominees) Limited	725,432,962	18.18	348,545,326	14.28	1,073,978,288	16.70
Chase Nominees Limited	54,043,249	1.35	165,989,952	6.80	220,033,201	3.42
State Street Nominees Limited (OM02)	100,320,754	2.51	105,993,280	4.34	206,314,034	3.21

**Significant indirect shareholdings**

Interests of investors with 3% or more of A and B shares combined at December 31, 2015, are given below.

	A shares		B shares		Total	
	Number	%	Number	%	Number	%
Blackrock, Inc.	268,988,292	6.74	207,391,590	8.50	476,379,882	7.41
The Capital Group Companies, Inc.	65,117,539	1.63	188,025,528	7.70	253,143,067	3.94
The Vanguard Group Inc.	137,755,309	3.45	81,750,203	3.35	219,505,512	3.41
Legal And General Investment Management Limited	124,940,639	3.13	80,170,180	3.29	205,110,819	3.19

**NOTIFICATION OF MAJOR SHAREHOLDINGS**

During the year ended December 31, 2015, the Company was notified by the following investor of its interests in the Company's shares pursuant to Disclosure and Transparency Rule 5.

INVESTOR	Date of notification	A shares		B shares		Total	
		Number	%	Number	%	Number	%
The Capital Group Companies, Inc.	January 13, 2015	66,253,448	1.70	187,698,386	7.69	253,951,834	4.00
The Capital Group Companies, Inc.	September 10, 2015	65,400,844	1.67	188,324,131	7.72	253,724,975	3.99

The Company did not receive any further notifications pursuant to Disclosure and Transparency Rule 5 in the period from December 31, 2015, to February 12, 2016 (being a date not more than one month prior to the date of the Company's Notice of Annual General Meeting).



## SHAREHOLDER INFORMATION CONTINUED

## DIVIDENDS

The following tables show the dividends on each class of share and each class of ADS for the years 2011-2015.

A AND B SHARES						\$
	2015	2014	2013	2012	2011	
Q1	0.47	0.47	0.45	0.43	0.42	
Q2	0.47	0.47	0.45	0.43	0.42	
Q3	0.47	0.47	0.45	0.43	0.42	
Q4	0.47	0.47	0.45	0.43	0.42	
Total announced in respect of the year	1.88	1.88	1.80	1.72	1.68	

A SHARES						€ [A]
	2015	2014	2013	2012	2011	
Q1	0.42	0.35	0.34	0.35	0.29	
Q2	0.42	0.36	0.34	0.34	0.29	
Q3	0.43	0.38	0.33	0.33	0.32	
Q4	[B]	0.43	0.32	0.33	0.32	
Total announced in respect of the year	[B]	1.53	1.34	1.35	1.22	
Amount paid during the year	1.71	1.42	1.34	1.34	1.20	

[A] Euro equivalent, rounded to the nearest euro cent.

[B] The euro equivalent announcement date is March 11, 2016, which therefore is also the date when the total announced in respect of the year can be calculated.

B SHARES						PENCE [A]
	2015	2014	2013	2012	2011	
Q1	30.75	28.03	28.99	27.92	25.71	
Q2	30.92	29.09	28.67	27.08	25.77	
Q3	31.07	30.16	27.51	26.86	27.11	
Q4	[B]	31.20	26.88	28.79	26.74	
Total announced in respect of the year	[B]	118.48	112.05	110.65	105.33	
Amount paid during the year	123.94	114.16	113.96	108.60	104.41	

[A] Sterling equivalent.

[B] The sterling equivalent announcement date is March 11, 2016, which therefore is also the date when the total announced in respect of the year can be calculated.

A AND B ADSs						\$
	2015	2014	2013	2012	2011	
Q1	0.94	0.94	0.90	0.86	0.84	
Q2	0.94	0.94	0.90	0.86	0.84	
Q3	0.94	0.94	0.90	0.86	0.84	
Q4	0.94	0.94	0.90	0.86	0.84	
Total announced in respect of the year	3.76	3.76	3.60	3.44	3.36	
Amount paid during the year	3.76	3.72	3.56	3.42	3.36	

**HIGH, LOW AND YEAR-END SHARE PRICES**

The following tables show the high, low and year-end prices, taken directly from the respective securities exchange, of the Company's registered ordinary shares:

- of €0.07 nominal value on the London Stock Exchange;
- of €0.07 nominal value on Euronext Amsterdam; and
- in the form of ADSs on the New York Stock Exchange (ADSs do not have a nominal value).

**ANNUAL SHARE PRICES**

	Euronext Amsterdam A shares			New York Stock Exchange A ADSs		
	High €	Low €	Year-end €	High \$	Low \$	Year-end \$
2011	28.40	20.12	28.15	77.96	57.97	73.09
2012	29.18	24.30	25.98	74.51	60.62	68.95
2013	27.06	23.40	25.91	73.00	62.65	71.27
2014	31.13	24.30	27.66	83.42	60.84	66.95
2015	29.59	19.58	21.10	67.16	43.26	45.79

	London Stock Exchange B shares			New York Stock Exchange B ADSs		
	High pence	Low pence	Year-end pence	High \$	Low \$	Year-end \$
2011	2,476	1,768	2,454	78.75	58.42	76.01
2012	2,499	2,020	2,175	77.52	63.05	70.89
2013	2,375	2,070	2,280	75.18	65.02	75.11
2014	2,614	1,985	2,233	88.13	62.11	69.56
2015	2,315	1,423	1,543	70.15	43.51	46.04

**QUARTERLY SHARE PRICES**

	Euronext Amsterdam A shares		London Stock Exchange B shares		New York Stock Exchange A ADSs		New York Stock Exchange B ADSs	
	High €	Low €	High pence	Low pence	High \$	Low \$	High \$	Low \$
2014								
Q1	26.96	25.01	2,385	2,183	74.17	67.75	80.07	71.42
Q2	30.65	26.36	2,614	2,327	82.86	72.94	87.59	77.51
Q3	31.13	29.43	2,599	2,407	83.42	75.77	88.13	78.77
Q4	30.24	24.30	2,436	1,985	75.77	60.84	78.76	62.11
2015								
Q1	29.59	25.75	2,315	2,004	67.16	56.82	70.15	59.33
Q2	29.50	25.37	2,210	1,807	64.46	56.50	65.98	56.85
Q3	27.14	20.27	1,920	1,503	59.16	45.81	59.52	45.92
Q4	25.51	19.58	1,864	1,423	56.41	43.26	57.28	43.51

**MONTHLY SHARE PRICES**

	Euronext Amsterdam A shares		London Stock Exchange B shares		New York Stock Exchange A ADSs		New York Stock Exchange B ADSs	
	High €	Low €	High pence	Low pence	High \$	Low \$	High \$	Low \$
2015								
September	23.66	20.27	1,728	1,503	52.26	45.81	52.31	45.92
October	25.11	21.46	1,864	1,574	56.41	47.88	57.28	48.15
November	25.51	22.23	1,803	1,571	55.22	47.79	55.23	47.98
December	24.01	19.58	1,703	1,423	50.73	43.26	51.20	43.51
2016								
January	21.39	16.53	1,573	1,261	46.14	35.80	46.41	35.96
February	21.21	18.04	1,660	1,407	46.50	41.05	46.49	41.13

## SHAREHOLDER INFORMATION CONTINUED

### METHOD OF HOLDING SHARES OR AN INTEREST IN SHARES

There are several ways in which Royal Dutch Shell plc registered shares or an interest in these shares can be held, including:

- directly as registered shares either in uncertificated form or in certificated form in a shareholder's own name;
- indirectly through Euroclear Nederland (in respect of which the Dutch Securities Giro Act ("Wet giraal effectenverkeer") is applicable);
- through the Royal Dutch Shell Corporate Nominee; and
- as a direct or indirect holder of either an A or a B ADS with the Depository.

### AMERICAN DEPOSITARY SHARES

The Depository is the registered shareholder of the shares underlying the A or B ADSs and enjoys the rights of a shareholder under the Articles. Holders of ADSs will not have shareholder rights. The rights of the holder of an A or a B ADS are specified in the respective Depository agreements with the Depository and are summarised below.

The Depository will receive all cash dividends and other cash distributions made on the deposited shares underlying the ADSs and, where possible and on a reasonable basis, will distribute such dividends and distributions to holders of ADSs. Rights to purchase additional shares will also be made available to the Depository who may make such rights available to holders of ADSs. All other distributions made on the Company's shares will be distributed by the Depository in any means that the Depository thinks is equitable and practical. The Depository may deduct its fees and expenses and the amount of any taxes owed from any payments to holders and it may sell a holder's deposited shares to pay any taxes owed. The Depository is not responsible if it decides that it is unlawful or impractical to make a distribution available to holders of ADSs.

The Depository will notify holders of ADSs of shareholders' meetings of the Company and will arrange to deliver voting materials to such holders of ADSs if requested by the Company. Upon request by a holder, the Depository will endeavour to appoint such holder as proxy in respect of such holder's deposited shares entitling such holder to attend and vote at shareholders' meetings. Holders of ADSs may also instruct the Depository to vote their deposited securities and the Depository will try, as far as practical and lawful, to vote deposited shares in accordance with such instructions. The Company cannot ensure that holders will receive voting materials or otherwise learn of an upcoming shareholders' meeting in time to ensure that holders can instruct the Depository to vote their shares.

Upon payment of appropriate fees, expenses and taxes: (i) shareholders may deposit their shares with the Depository and receive the corresponding class and amount of ADSs; and (ii) holders of ADSs may surrender their ADSs to the Depository and have the corresponding class and amount of shares credited to their account.

Further, subject to certain limitations, holders may, at any time, cancel ADSs and withdraw their underlying shares or have the corresponding class and amount of shares credited to their account. The Depository may also deliver ADSs prior to deposit of the underlying securities subject to certain conditions, including, without limitation, that such pre-released ADSs are fully collateralised and that the underlying securities are assigned to and held for the account of the Depository.

### Fees paid by holders of ADSs

The Depository collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depository collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depository may generally refuse to provide fee-attracting services until its fees for those services are paid. (See page 195.)

### Reimbursements to the Company

The Bank of New York Mellon, as Depository, has agreed to reimburse the Company for expenses it incurs that are related maintenance expenses of the ADS programme. The Depository has agreed to reimburse the Company for its continuing annual stock exchange listing fees. The Depository has also agreed to pay certain legal expenses and the standard out-of-pocket maintenance costs for the ADSs, which consist of the expenses of postage and envelopes for mailing annual and interim financial reports, printing and distributing dividend cheques, electronic filing of US federal tax information, mailing required tax forms, stationery, postage, facsimile and telephone calls. It has also agreed to reimburse the Company annually for certain costs associated with the AGM, investor relationship programmes and special investor relations promotional activities. There are limits on the amount of expenses for which the Depository will reimburse the Company, but the amount of reimbursement available to the Company is not necessarily tied to the amount of fees the Depository collects from investors. From January 1, 2015, to February 12, 2016, the Company received \$7,337,285 from the Depository.

### SCRIP DIVIDEND PROGRAMME

The Scrip Dividend Programme, which enables shareholders to increase their shareholding by choosing to receive new shares instead of cash dividends (if approved by the Board), was reintroduced with effect from the first quarter 2015 interim dividend onwards [A] [B]. More information can be found at [www.shell.com/scrip](http://www.shell.com/scrip).

[A] The Scrip Dividend Programme had been cancelled with effect from the second quarter 2014 interim dividend onwards.

[B] Only new A shares are issued under the programme, including to shareholders who held B shares

<b>Persons depositing or withdrawing shares must pay:</b> \$5.00 or less per 100 ADSs (or portion of 100 ADSs)	<b>For:</b> Issuance of ADSs, including those resulting from a distribution of shares, rights or other property; Cancellation of ADSs for the purpose of their withdrawal, including if the deposit agreement terminates; and Distribution of securities to holders of deposited securities by the Depositary to ADS registered holders.
Registration and transfer fees	Registration and transfer of shares on the share register to or from the name of the Depositary or its agent when they deposit or withdraw shares.
Expenses of the Depositary	Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement); and Converting foreign currency into dollars.
Taxes and other governmental charges the Depositary or the custodian has to pay on any ADS or share underlying an ADS, for example, share transfer taxes, stamp duty or withholding taxes	As necessary.

**EXCHANGE CONTROLS AND OTHER LIMITATIONS AFFECTING SECURITY HOLDERS**

Other than those individuals and entities that are subject to European Union sanctions, for example, regarding Syria, there is no legislative or other legal provision currently in force in the UK, the Netherlands or arising under the Articles restricting remittances to non-resident holders of the Company's ordinary shares or affecting the import or export of capital for use by the Company.

**TAXATION**

**General**

The Company is incorporated in England and Wales and tax-resident in the Netherlands. As a tax resident of the Netherlands, it is generally required by Dutch law to withhold tax at a rate of 15% on dividends on its ordinary shares and ADSs, subject to the provisions of any applicable tax convention or domestic law. The following sets forth the operation of the provisions on dividends on the Company's various ordinary shares and ADSs to UK and US holders, as well as certain other tax rules pertinent to holders. Holders should consult their tax adviser for more details.

**Dividends paid on the dividend access share**

There is no Dutch withholding tax on dividends on B shares or B ADSs provided that such dividends are paid on the dividend access share pursuant to the dividend access mechanism (see "Dividend access mechanism for B shares" on pages 78-79). Dividends paid on the dividend access share are treated as UK-source for tax purposes and there is no UK withholding tax on them. Also, under UK law, individual shareholders resident in the UK are entitled to a UK tax credit with dividends paid on the dividend access share. The amount of the UK tax credit is 10/90ths of the cash dividend; it is not repayable when it exceeds the individual's UK tax liability. In 2015, all dividends with respect to B shares and B ADSs were paid on the dividend access share pursuant to the dividend access mechanism.

**Dutch withholding tax**

When Dutch withholding tax applies on dividends paid to a US holder (that is, dividends on A shares or A ADSs, or on B shares or B ADSs that are not paid on the dividend access share pursuant to the dividend access mechanism), the US holder will be subject to Dutch withholding tax at the rate of 15%. A US holder who is entitled to the benefits of the 1992 Double Taxation Convention (the Convention) between the USA and the Netherlands as amended by the protocol signed on March 8, 2004, will

be entitled to a reduction in the Dutch withholding tax, either by way of a full or a partial exemption at source or by way of a partial refund or a credit as follows:

- if the US holder is an exempt pension trust as described in article 35 of the Convention, or an exempt organisation as described in article 36 thereof, the US holder will be exempt from Dutch withholding tax; or
- if the US holder is a company that holds directly at least 10% of the voting power in the Company, the US holder will be subject to Dutch withholding tax at a rate not exceeding 5%.

In general, the entire dividend (including any amount withheld) will be dividend income to the US holder and the withholding tax will be treated as a foreign income tax that is eligible for credit against the US holder's income tax liability or a deduction subject to certain limitations. A "US holder" includes, but is not limited to, a citizen or resident of the USA, or a corporation or other entity organised under the laws of the USA or any of its political subdivisions.

When Dutch withholding tax applies on dividends paid to UK tax-resident holders (that is, dividends on A shares or A ADSs, or on B shares or B ADSs that are not paid on the dividend access share pursuant to the dividend access mechanism), the dividend will typically be subject to withholding tax at a rate of 15%. Such UK tax-resident holder will be entitled to a credit (not repayable) for withholding tax against their UK tax liability. However, certain corporate shareholders are, subject to conditions, exempt from UK tax on dividends. Withholding tax suffered cannot be offset against such exempt dividends. Pension plans meeting certain defined criteria can, however, claim a full refund of the dividend tax withheld. Also, UK tax-resident corporate shareholders holding at least a 5% shareholding and meeting other defined criteria are exempted at source from dividend tax.

For shareholders who are tax-resident in any other country, the availability of a whole or partial exemption or refund of Dutch withholding tax is governed by Dutch tax law and/or the tax convention, if any, between the Netherlands and the country of the shareholder's residence.

**Scrip Dividend Programme**

The Scrip Dividend Programme enables shareholders to increase their shareholding by choosing to receive new shares instead of cash dividends (if approved by the Board). Only new A shares are issued under the programme, including to shareholders who held B shares. The tax consequences of electing to receive new A shares in place of a cash dividend depends on individual circumstances.

## SHAREHOLDER INFORMATION CONTINUED

More information about the programme, including the taxation consequences, can be found at [www.shell.com/scrip](http://www.shell.com/scrip).

### Dutch capital gains taxation

Capital gains on the sale of shares of a Dutch tax-resident company by a US holder are generally not subject to taxation by the Netherlands unless the US shareholder has a permanent establishment therein and the capital gain is derived from the sale of shares that are part of the business property of the permanent establishment.

### Dutch succession duty and gift taxes

Shares of a Dutch tax-resident company held by an individual who is not a resident or a deemed resident of the Netherlands will generally not be subject to succession duty in the Netherlands on the individual's death.

A gift of shares of a Dutch tax-resident company by an individual who is not a resident or a deemed resident of the Netherlands is generally not subject to Dutch gift tax.

### UK stamp duty and stamp duty reserve tax

Sales or transfers of the Company's ordinary shares within a clearance service (such as Euroclear Nederland) or of the Company's ADSs within the ADS depository receipts system will not give rise to a stamp duty reserve tax (SDRT) liability and should not in practice require the payment of UK stamp duty.

The transfer of the Company's ordinary shares to a clearance service (such as Euroclear Nederland) or to an issuer of depository shares (such as ADSs) will generally give rise to a UK stamp duty or SDRT liability at the rate of 1.5% of consideration given or, if none, of the value of the shares. A sale of the Company's ordinary shares that are not held within a clearance service (for example, settled through the UK's CREST system of paperless transfers) will generally be subject to UK stamp duty or SDRT at the rate of 0.5% of the amount of the consideration, normally paid by the purchaser.

### Capital gains tax

For the purposes of UK capital gains tax, the market values [A] of the shares of the former public parent companies of the Royal Dutch/Shell Group at the relevant dates were:

	March 31, 1982	July 20, 2005
Royal Dutch Petroleum Company (N.V. Koninklijke Nederlandsche Petroleum Maatschappij) which ceased to exist on December 21, 2005	1.1349	17.6625
The "Shell" Transport and Trading Company, p.l.c. which delisted on July 19, 2005	1.4502	Not applicable

[A] Restated where applicable to reflect all capitalisation issues since the relevant date. This includes the change in the capital structure in 2005, when Royal Dutch Shell plc became the single parent company of Royal Dutch Petroleum Company and of The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited, and one share in Royal Dutch Petroleum Company was exchanged for two Royal Dutch Shell plc A shares and one share in The "Shell" Transport and Trading Company, p.l.c. was exchanged for 0.287333066 Royal Dutch Shell plc B shares.

## SECTION 13(R) OF THE US SECURITIES EXCHANGE ACT OF 1934 DISCLOSURE

In accordance with our General Business Principles and Code of Conduct, Shell seeks to comply with all applicable international trade laws including applicable sanctions and embargoes.

The activities listed below have been conducted outside the USA by non-US Shell subsidiaries. None of the payments disclosed below were made in US dollars, however, for disclosure purposes, all have been converted into US dollars at the appropriate exchange rate. We do not believe that any of the transactions or activities listed below violated US sanctions.

In 2010, we ceased all of our Upstream commercial activities in Iran and suspended new business development, as a direct consequence of the international sanctions imposed on the country. In 2013, we closed our small representative office in Iran.

In 2015, we paid \$170,432 to the Iranian Ministry of Finance, consisting of a final settlement of corporate income tax related to the financial year ended December 31, 2013.

We paid \$6,113 to the Iranian Ministry of Finance, consisting of a final settlement of salary and withholding taxes related to the financial year ended December 31, 2013 and withholding taxes related to the first quarter of 2015.

We paid \$102 in stamp duties to the Iranian Ministry of Finance.

We paid \$7,866 to the Iranian Ministry of Finance for VAT claims related to the financial year ended December 31, 2009.

These payments were made through our Iranian accountant Bayat Rayan. We paid \$58,778 to our Iranian accountant Bayat Rayan for accounting and tax related services. These payments were made through cheques guaranteed by Bank Karafarin.

These transactions did not generate gross revenue or net profit. We expect to make additional payments in support of the liquidation process of our legal entities in Iran. However, as a result of the suspension of US and European Union (EU) sanctions, we are currently considering potential opportunities in Iran, which may lead us to suspend or stop the liquidation process in the future.

We maintain accounts with Bank Karafarin where our cash deposits (balance of \$3.0 million at December 31, 2015) generated non-taxable interest income of \$0.5 million in 2015. We paid \$2 in bank charges to Bank Karafarin.

Payments to the Iranian Civil Aviation Authority for the clearance of overflight permits for Shell aircraft over Iranian airspace amounted to \$10,278 in 2015. There was no gross revenue or net profit associated with these transactions. On occasion, our aircraft may be routed over Iran and therefore these payments may continue in the future.

In Downstream, through our subsidiary Deheza S.A.I.C.F.el., we provided retail services in December 2015 to the Iranian Embassy in Argentina. This transaction generated a gross revenue of \$42 and an estimated net profit of \$8. We have no contractual agreement with this embassy.

After the suspension of US and EU sanctions, we made a series of payments in February and March 2016, totalling €1,770 million (\$1,942 million), to settle the payable amount for oil cargoes purchased from the National Iranian Oil Company (NIOC) prior to EU sanctions.

At March 9, 2016, we have the following amounts outstanding with NIOC: a net payable of \$0.4 million in respect of demurrage and a receivable of \$10.5 million associated with our previous Upstream activities conducted prior to the EU sanctions. We intend to resolve these outstanding balances in the near future.

During 2015, Shell officials met Iranian officials in Tehran. They discussed Shell's then outstanding debt to NIOC and potential areas for cooperation should sanctions be lifted. Shell officials also attended a conference in Iran, for which a conference fee of \$4,518 will be paid to IICIC (Iranian Inc for Contemporary International Conferences & Fairs).

In order to obtain visas for these officials, an amount of \$699 was paid to the Iranian Embassy in the Netherlands, an amount of \$408 was paid to the Iran Consulate in Dubai, United Arab Emirates, and \$59 was paid to the Iranian Consulate in Pakistan. There was no gross revenue or net profit associated with these transactions. We expect to continue discussions with Iranian officials and therefore similar payments may continue in the future.

## NON-GAAP MEASURES RECONCILIATIONS AND OTHER DEFINITIONS

### EARNINGS ON A CURRENT COST OF SUPPLIES BASIS

Segment earnings are presented on a current cost of supplies basis (CCS earnings), which is the earnings measure used by the Chief Executive Officer for the purposes of making decisions about allocating resources and assessing performance. On this basis, the purchase price of volumes sold during the period is based on the current cost of supplies during the same period after making allowance for the tax effect. CCS earnings therefore exclude the effect of changes in the oil price on inventory carrying amounts. The current cost of supplies adjustment does not impact our net cash from operating activities in the "Consolidated Statement of Cash Flows".

RECONCILIATION OF CCS EARNINGS TO INCOME FOR THE PERIOD					\$ MILLION
	2015	2014	2013	2012	2011
Earnings on a current cost of supplies basis (CCS earnings)	4,155	19,096	16,879	27,423	28,738
Attributable to non-controlling interest	(313)	(55)	(134)	(259)	(205)
Earnings on a current cost of supplies basis attributable to Royal Dutch Shell plc shareholders	3,842	19,041	16,745	27,164	28,533
Current cost of supplies adjustment	(1,955)	(4,366)	(353)	(463)	2,355
Non-controlling interest	52	199	(21)	11	(62)
Income attributable to Royal Dutch Shell plc shareholders	1,939	14,874	16,371	26,712	30,826
Non-controlling interest	261	(144)	155	248	267
Income for the period	2,200	14,730	16,526	26,960	31,093

### CAPITAL INVESTMENT

Capital investment is a measure used to make decisions about allocating resources and assessing performance.

RECONCILIATION OF CAPITAL INVESTMENT TO CAPITAL EXPENDITURE					\$ MILLION
	2015	2014	2013	2012	2011
Capital investment					
Upstream	23,527	31,293	40,303	31,179	23,363
Downstream	5,119	5,910	5,528	5,454	7,548
Corporate	215	136	210	128	140
Total	28,861	37,339	46,041	36,761	31,051
Investments in joint ventures and associates	(896)	(1,426)	(1,538)	(3,028)	(1,886)
Exploration expense, excluding exploration wells written off	(2,948)	(2,244)	(2,506)	(2,114)	(1,462)
Finance leases and other [A]	1,114	(1,993)	(2,022)	1,565	(1,612)
Capital expenditure [A]	26,131	31,676	39,975	33,184	26,091

[A] Reflects a minor change to the definition with effect from 2015 which has no overall impact on net cash used in investing activities in the "Consolidated Statement of Cash Flows". Comparative information has been reclassified.

### DIVESTMENTS

"Divestments" is a measure used to monitor the progress of our divestment programme. This measure comprises proceeds from sale of property, plant and equipment and businesses, joint ventures and associates, and other Upstream and Downstream investments, adjusted onto an accruals basis, and proceeds from sale of interests in Shell Midstream Partners, L.P.

DIVESTMENTS					\$ MILLION
	2015	2014	2013	2012	2011
Proceeds from sale of property, plant and equipment and businesses [A]	4,720	9,873	1,212	6,346	6,990
Proceeds from sale of joint ventures and associates [A]	276	4,163	538	698	468
Other [A]	(664)	(765)	(558)	522	(120)
Proceeds from sale of interests in Shell Midstream Partners, L.P. [B]	595	1,012	-	-	-
Other [C]	613	736	546	(608)	210
Total	5,540	15,019	1,738	6,958	7,548
Of which					
Upstream	2,747	10,589	1,086	5,859	4,280
Downstream	2,282	4,410	643	1,179	3,206
Corporate	511	20	9	(80)	62

[A] Included within Cash flow from investing activities in the "Consolidated Statement of Cash Flows".

[B] Included within "Change in non-controlling interest" in Cash flow from financing activities in the "Consolidated Statement of Cash Flows".

[C] Mainly changes in non-current receivables included within Other (above), which are not considered to be divestments.

## OPERATING EXPENSES

OPERATING EXPENSES					\$ MILLION
	2015	2014	2013	2012	2011
Production and manufacturing expenses	28,095	30,038	28,386	26,215	26,553
Selling, distribution and administrative expenses	11,956	13,965	14,675	14,465	14,359
Research and development	1,093	1,222	1,318	1,307	1,123
Total	41,144	45,225	44,379	41,987	42,035
Of which					
Upstream	19,828	22,003	20,612	18,434	17,539
Downstream	20,816	22,701	23,292	22,837	24,052
Corporate	500	521	475	716	444

## RETURN ON AVERAGE CAPITAL EMPLOYED

Return on average capital employed (ROACE) measures the efficiency of our utilisation of the capital that we employ. In this calculation, ROACE is defined as income for the period adjusted for after-tax interest expense as a percentage of the average capital employed for the period. Capital employed consists of total equity, current debt and non-current debt.

CALCULATION OF RETURN ON AVERAGE CAPITAL EMPLOYED					\$ MILLION
	2015	2014	2013	2012	2011
Income for the period	2,200	14,730	16,526	26,960	31,093
Interest expense after tax	2,030	938	808	938	769
Income before interest expense	4,230	15,668	17,334	27,898	31,862
Capital employed – opening	218,326	225,710	213,936	197,141	186,552
Capital employed – closing	222,500	218,326	225,710	213,936	197,141
Capital employed – average	220,413	222,018	219,823	205,539	191,847
ROACE	1.9%	7.1%	7.9%	13.6%	16.6%



## INDEX TO THE EXHIBITS

Exhibit No.	Description	Page
1.1	Memorandum of Association of Royal Dutch Shell plc, together with a special resolution of Royal Dutch Shell plc dated May 18, 2010, (incorporated by reference to Exhibit 4.12 to the Registration Statement on Form F-3 (No. 333-177588) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on October 28, 2011).	
1.2	Articles of Association of Royal Dutch Shell plc, together with a special resolution of Royal Dutch Shell plc dated May 18, 2010, (incorporated by reference to Exhibit 4.11 to the Registration Statement on Form F-3 (No. 333-177588) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on October 28, 2011).	
2	Amended and Restated Dividend Access Trust Deed.	
4.1	Shell Provident Fund Regulations and Trust Agreement (incorporated by reference to Exhibit 4.7 to the Post-Effective Amendment to Registration Statement on Form S-8 (No. 333-126715) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on June 18, 2007).	
4.2	Form of Director Indemnity Agreement (incorporated by reference to Exhibit 4.3 to the Annual Report for the fiscal year ended December 31, 2005, on Form 20-F (File No. 001-32575) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on March 13, 2006).	
4.3	Senior Debt Securities Indenture dated June 27, 2006, among Shell International Finance B.V., as issuer, Royal Dutch Shell plc, as guarantor, and Deutsche Bank Trust Company Americas, as trustee (incorporated by reference to Exhibit 4.3 to the Registration Statement on Form F-3 (No. 333-126726) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on July 20, 2005, amended from then to be dated as of June 27, 2006, and with the parties signatures).	
4.4	Form of contract of employment for Executive Directors (incorporated by reference to Exhibit 4.5 to the Annual Report for fiscal year ended December 31, 2013, on Form 20-F (File No. 001-32575) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on March 13, 2014).	
4.5	Form of Letter of appointments for Non-executive Directors (incorporated by reference to Exhibit 4.11 to the Annual Report for fiscal year ended December 31, 2006, on Form 20-F (File No. 001-32575) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on March 13, 2007).	
7.1	Calculation of Ratio of Earnings to Fixed Charges.	E1
7.2	Calculation of Return on Average Capital Employed (ROACE) (incorporated by reference to page 199 herein).	
7.3	Calculation of gearing (incorporated by reference to page 21 and Note 14 to the Consolidated Financial Statements on page 134 herein).	
8	Significant Shell subsidiaries at December 31, 2015.	E2
12.1	Section 302 Certification of Royal Dutch Shell plc.	E19
12.2	Section 302 Certification of Royal Dutch Shell plc.	E20
13.1	Section 906 Certification of Royal Dutch Shell plc.	E21
16.1	Letter from PricewaterhouseCoopers LLP, London.	
16.2	Letter from PricewaterhouseCoopers LLP, Jersey, Channel Islands, relating to the Royal Dutch Shell Dividend Access Trust.	
99.1	Consent of PricewaterhouseCoopers LLP, London.	E22
99.2	Consent of PricewaterhouseCoopers CI LLP, Jersey, Channel Islands, relating to the Royal Dutch Shell Dividend Access Trust.	E23

## SIGNATURES

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The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorised the undersigned to sign the Annual Report on Form 20-F on its behalf.

Royal Dutch Shell plc

/s/ Ben van Beurden

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**Ben van Beurden**  
Chief Executive Officer  
March 9, 2016

## EXHIBIT 7.1

CALCULATION OF RATIO OF EARNINGS TO FIXED CHARGES					\$ MILLION
	2015	2014	2013	2012	2011
Pre-tax income from continuing operations before					
income from equity investees	(1,480)	22,198	26,317	41,564	46,806
Total fixed charges	2,495	2,113	1,710	1,712	1,608
Distributed income from equity investees	4,627	6,902	7,117	10,573	9,681
Interest capitalised	(839)	(757)	(762)	(567)	(674)
Total earnings	4,803	30,456	34,382	53,282	57,421
Interest expensed and capitalised	1,795	1,522	1,412	1,461	1,209
Interest within rental expense	700	591	298	251	399
Total fixed charges	2,495	2,113	1,710	1,712	1,608
Ratio of earnings to fixed charges	1.93	14.41	20.11	31.12	35.71

For the purposes of the table above, earnings consist of pre-tax income from continuing operations (before adjustment for non-controlling interest) plus fixed charges (excluding capitalised interest) less undistributed income of joint ventures and associates. Fixed charges consist of expensed and capitalised interest (excluding accretion expense) plus interest within rental expenses (for operating leases).

## EXHIBIT 8

## SIGNIFICANT SUBSIDIARIES AND OTHER RELATED UNDERTAKINGS (AUDITED)

Significant subsidiaries and other related undertakings at December 31, 2015, are set out below. Significant subsidiaries each meet a threshold of 1% of the average yearly income attributable to Royal Dutch Shell plc shareholders in 2011-2015 and/or 1% of Shell's total assets at December 31, 2015. Shell's percentage of share capital is shown to the nearest whole number. All subsidiaries have been included in the "Consolidated Financial Statements" on pages 115-152. Those held directly by the Company are marked with an asterisk (\*). A number of the entities listed are dormant or not yet operational.

## SIGNIFICANT SUBSIDIARIES

Country of incorporation	Company name	%	Class of shares held
Argentina	Shell Compania Argentina De Petroleo S.A.	100	Nominative (Voting)
Australia	Shell Australia Pty Ltd	100	Ordinary
Australia	Shell Energy Holdings Australia Limited	100	Ordinary
Barbados	Shell Western Supply & Trading Ltd	100	Ordinary
Bermuda	Qatar Shell GTL Limited	100	Ordinary
Bermuda	Shell International Trading Middle East Limited	100	Ordinary
Bermuda	Shell Oman Trading Limited	100	Ordinary
Bermuda	Solen Insurance Limited	100	Ordinary
Bermuda	Tacoma Company Limited	100	Ordinary
Brazil	Shell Brasil Petroleo Ltda	100	Quotas (Voting)
Canada	Shell Canada Energy	100	Ordinary
Canada	Shell Canada Limited	100	Ordinary
Canada	Shell Canada Products	100	Ordinary
Gabon	Shell Gabon SA	75	Ordinary
Germany	Deutsche Shell GmbH	100	Ordinary
Germany	Deutsche Shell Holding GmbH	100	Ordinary
Germany	Shell Deutschland Oil GmbH	100	Ordinary
Italy	Shell Italia E&P SpA	100	Ordinary
Luxembourg	Shell Finance Luxembourg Sarl	100	Ordinary
Luxembourg	Shell Luxembourgeoise Sarl	100	Ordinary
Luxembourg	Shell Treasury Luxembourg Sarl	100	Ordinary
Malaysia	Sarawak Shell Berhad	100	Ordinary
Netherlands	B.V. Dordsche Petroleum Maatschappij	100	Ordinary
Netherlands	Shell Brazil Holding B.V.	100	Ordinary
Netherlands	Shell Finance (Netherlands) B.V.	100	Ordinary
Netherlands	Shell Gas B.V.	100	Ordinary
Netherlands	Shell International Finance B.V.*	100	Ordinary
Netherlands	Shell Kazakhstan Development B.V.	100	Ordinary
Netherlands	Shell Nederland Raffinaderij B.V.	100	Ordinary
Netherlands	Shell Olie – Og Gasudvinding Danmark B.V.	100	Ordinary
Netherlands	Shell Overseas Investments B.V.	100	Ordinary
Netherlands	Shell Petroleum N.V.*	100	Ordinary
Netherlands	Shell Philippines Exploration B.V.	100	Ordinary
Nigeria	Shell Nigeria Exploration and Production Company Ltd	100	Ordinary
Nigeria	The Shell Petroleum Development Company of Nigeria Limited	100	Ordinary
Norway	A/S Norske Shell	100	Ordinary
Singapore	Shell Eastern Petroleum (Pte) Ltd	100	Ordinary
Singapore	Shell Eastern Trading (Pte) Ltd	100	Ordinary
Singapore	Shell Treasury Centre East (Pte) Ltd	100	Ordinary
Switzerland	Shell Finance Switzerland AG	100	Ordinary
Switzerland	Solen Versicherungen AG	100	Registered (Voting)
UK	Enterprise Oil Limited	100	Ordinary
UK	Shell China Exploration and Production Company Limited	100	Ordinary
UK	Shell Energy Europe Limited	100	Ordinary
UK	Shell Energy Investments Limited	100	Ordinary
UK	Shell Holdings (U.K.) Limited	100	Ordinary
UK	Shell Overseas Holdings Limited	100	Ordinary
UK	Shell Trading International Limited	100	Ordinary
UK	Shell Treasury Centre Limited	100	Ordinary
UK	Shell Treasury Dollar Company Limited	100	Ordinary

## EXHIBIT 8 CONTINUED

Country of incorporation	Company name	%	Class of shares held
UK	Shell Treasury UK Limited	100	Ordinary
UK	Shell U.K. Limited	100	Ordinary
UK	The Shell Petroleum Company Limited	100	Ordinary
UK	The Shell Transport and Trading Company Limited	100	Ordinary
USA	Enterprise Oil North America Inc.	100	Ordinary
USA	Equilon Enterprises LLC	100	Membership Interest
USA	SCOGI, G.P.	100	Partnership Capital
USA	Shell Chemical LP	100	Partnership Capital
USA	Shell Energy North America (US), L.P.	100	Partnership Capital
USA	Shell Gulf of Mexico Inc.	100	Ordinary
USA	Shell Offshore Inc.	100	Ordinary
USA	Shell Oil Company	100	Ordinary
USA	Shell Petroleum Inc.	100	Ordinary
USA	Shell Trading (US) Company	100	Ordinary
USA	Shell US E&P Investments LLC	100	Membership Interest
USA	SOI Finance Inc.	100	Ordinary
USA	SOPC Holdings East LLC	100	Membership Interest
USA	SOPC Holdings West LLC	100	Membership Interest
USA	SWEPI LP	100	Partnership Capital
USA	TMR Company	100	Ordinary

## OTHER RELATED UNDERTAKINGS

Country of incorporation	Company name	%	Class of shares held
Argentina	Deheza S.A.I.C.F.Ei.	100	Ordinary
Argentina	Energina Compania Argentina De Petroleo S.A	100	Ordinary, Nominative (Voting)
Argentina	Estacion Lima S.A.	100	Ordinary
Argentina	O & G Developments Ltd S.A.	100	Ordinary
Argentina	Shell Gas S.A	100	Ordinary
Australia	Arrow Energy Holdings Pty Ltd	50	Ordinary
Australia	Austen and Butta Pty Ltd	100	Ordinary
Australia	Cairns Airport Refuelling Service Pty Ltd	25	Ordinary
Australia	Fuelink Pty Ltd	100	Ordinary
Australia	Manash Energy Pty Ltd	50	Ordinary
Australia	North West Shelf LNG Pty Ltd	100	Ordinary
Australia	Provident & Pensions Holdings Proprietary Limited	100	Ordinary
Australia	Sasf Pty Ltd	100	Ordinary
Australia	Shell Australia Lubricants Production Pty Ltd.	100	Ordinary
Australia	Shell Australia Services Company Pty Ltd	100	Ordinary
Australia	Shell Aviation Australia Pty Ltd.	100	Ordinary
Australia	Shell Custodian Pty Ltd	100	Ordinary
Australia	Shell Development (Psc 19) Pty Ltd	100	Ordinary
Australia	Shell Development (Psc 20) Pty Ltd	100	Ordinary
Australia	Shell Eastern Australia Pty Ltd	100	Ordinary
Australia	Shell Energy Investments Australia Pty Ltd	100	Ordinary
Australia	Shell Finance (Australia) Pty Ltd	100	Ordinary
Australia	Shell Global Solutions Australia Pty Ltd	100	Ordinary
Australia	Shell Tankers Australia Pty Ltd	100	Ordinary
Australia	Sirius Well Manufacturing Services Australia Pty Ltd	50	Ordinary
Australia	Trident LNG Shipping Services Pty Ltd	100	Ordinary
Australia	Trident Shipping Services Pty Ltd	100	Ordinary
Australia	Woodside Petroleum Ltd	14	Ordinary
Australia	Zip Airport Services Pty Ltd	100	Ordinary
Austria	Salzburg Fuelling GmbH	33	Ordinary
Austria	Shell Austria Gesellschaft M.B.H.	100	Ordinary
Austria	Shell Brazil Holding GmbH	100	Ordinary
Austria	Shell China Holding GmbH	100	Ordinary

Country of incorporation	Company name	%	Class of shares held
Austria	TBG Tanklager Betriebsgesellschaft mbH	50	Ordinary
Austria	Transalpine Oelleitung In Osterreich Gesellschaft M.B.H.	19	Ordinary
Bahamas	Shell E & P Ireland Offshore Inc	100	Ordinary
Belgium	Belgian Shell S.A.	100	Ordinary
Belgium	Cri Catalyst Company Belgium N.V	100	Ordinary
Belgium	Ethyleen Pijpleiding Maatschappij (Belgie) N.V.	100	Ordinary
Belgium	New Market Belgium	100	Ordinary
Bermuda	Gas Investments & Services Company Ltd	85	Ordinary
Bermuda	Kuwait Shell Limited	100	Ordinary
Bermuda	Pecten Middle East Services Company Ltd	100	Ordinary
Bermuda	Pecten Somalia Company Limited	100	Ordinary
Bermuda	Sakhalin Energy Investment Company Ltd.	28	Ordinary
Bermuda	Shell Australia Natural Gas Shipping Limited	100	Ordinary
Bermuda	Shell Bermuda (Overseas) Limited	100	Ordinary
Bermuda	Shell Caribbean & Central America Ltd	100	Ordinary
Bermuda	Shell Cuiaba Holdings Limited	100	Ordinary
Bermuda	Shell Deepwater Borneo Limited	100	Ordinary
Bermuda	Shell EP International Limited	100	Ordinary
Bermuda	Shell Exploration and Production Guyana Limited	100	Ordinary
Bermuda	Shell Gabon Holdings Limited	100	Ordinary
Bermuda	Shell Holdings (Bermuda) Limited	100	Ordinary
Bermuda	Shell Markets (Middle East) Limited	100	Ordinary
Bermuda	Shell Mexico Exploration and Production Investment Limited	100	Ordinary
Bermuda	Shell Offshore Central Gabon Ltd	100	Ordinary
Bermuda	Shell Overseas Holdings (Oman) Limited	100	Ordinary
Bermuda	Shell Petroleum (Malaysia) Ltd	100	Ordinary
Bermuda	Shell Saudi Arabia (Refining) Limited	100	Ordinary
Bermuda	Shell South Syria Exploration Limited	100	Ordinary
Bermuda	Shell Trading (M.E.) Private Limited	100	Ordinary
Bermuda	Shell Trust (Bermuda) Limited	100	Ordinary
Bermuda	Shell Trust (U.K. Property) Limited	100	Ordinary
Bermuda	South Rub Al-Khali Company Ltd	50	Ordinary
Brazil	Cangas – Companhia De Gas De Sao Paulo	22	Ordinary
Brazil	Fusus Comercio E Participacoes Ltda.	100	Ordinary
Brazil	Icolub – Industria De Lubrificantes S.A.	100	Quotas (Voting)
Brazil	Pecten Do Brasil Servicos De Petroleo Ltda	100	Quotas (Voting)
Brazil	Raizen Combustiveis S/A	50	Ordinary
Brazil	Raizen Energia S.A	50	Ordinary
Brazil	Raizen S/A	50	Equity (Voting)
Brazil	Seapos Ltda	100	Quotas (Voting)
Brunei	Brunei LNG Sendirian Berhad	25	Ordinary
Brunei	Brunei Shell Marketing Company Sendirian Berhad	50	Ordinary
Brunei	Brunei Shell Petroleum Company Sendirian Berhad	50	Ordinary
Brunei	Brunei Shell Tankers Sendirian Berhad	25	Ordinary
Brunei	Shell Borneo Sendirian Berhad	100	Ordinary
Bulgaria	Shell Bulgaria Ead	100	Ordinary
Cambodia	Angkor Resources Co Ltd	49	Ordinary
Canada	3095381 Nova Scotia Company	100	Ordinary
Canada	6581528 Canada Ltd.	100	Ordinary
Canada	7026609 Canada Inc.	100	Ordinary
Canada	Alberta Products Pipe Line Ltd.	20	Ordinary
Canada	Albian Sands Energy Inc.	60	Ordinary
Canada	Blackrock Ventures Inc.	100	Ordinary
Canada	BR Oil Sands Corporation	100	Ordinary
Canada	Cansolv Technologies Inc.	100	Ordinary
Canada	Caral Cibola Canada Inc.	100	Ordinary
Canada	Criterion Catalysts & Technologies Canada, Inc.	100	Ordinary
Canada	FP Solutions Corporation	33	Ordinary

## EXHIBIT 8 CONTINUED

Country of incorporation	Company name	%	Class of shares held
Canada	Jackpine Mine Inc.	100	Ordinary
Canada	LNG Canada Development Inc.	50	Ordinary
Canada	Pennzoil-Quaker State Canadian Holdings Ltd.	100	Ordinary
Canada	Sable Offshore Energy Inc.	33	Ordinary
Canada	SCL Pipeline Inc.	100	Ordinary
Canada	SFJ Inc.	50	Ordinary
Canada	Shell Americas Funding (Canada) Limited	100	Ordinary
Canada	Shell Canada Exploration	100	Membership Interest
Canada	Shell Canada Op Inc.	100	Ordinary
Canada	Shell Canada Resources	100	Membership Interest
Canada	Shell Canada Services Limited	100	Ordinary
Canada	Shell Chemicals Canada	100	Membership Interest
Canada	Shell Energy North America (Canada) Inc.	100	Ordinary
Canada	Shell Global Solutions Canada Inc.	100	Ordinary
Canada	Shell Quebec Limitee	100	Ordinary
Canada	Shell Trading Canada	100	Membership Interest
Canada	Sirius Well Manufacturing Services Canada Ltd	50	Ordinary
Canada	Sun-Canadian Pipeline Company Limited	45	Ordinary
Canada	Trans-Northern Pipelines Inc.	20	Ordinary
Cayman Islands	Beryl North Sea Limited	100	Ordinary
Cayman Islands	Schiehallion Oil & Gas Limited	100	Ordinary
Cayman Islands	Shell North Sea Holdings Limited	100	Ordinary
Cayman Islands	Shell Upstream Gabon Cayman Holdings No. 1	100	Ordinary
Cayman Islands	Shell Upstream Gabon Cayman Holdings No. 2	100	Ordinary
Cayman Islands	Shell Upstream Gabon Cayman Holdings No. 3	100	Ordinary
Channel Islands	Morzine Limited	33	Ordinary
Channel Islands	Shell Service Station Properties Limited	100	Ordinary
China	Beijing Shell Petroleum Company Ltd	49	Ordinary
China	Cansolv Technologies (Beijing) Company Limited	100	Ordinary
China	Chongqing Doyen Shell Petroleum and Chemical Co. Ltd.	49	Ordinary
China	CNOOC and Shell Petrochemicals Company Limited	50	Ordinary
China	Guangdong Gsz Shell Service Stations Company Ltd	100	Ordinary
China	Hangzhou Natural Gas Company Limited	25	Ordinary
China	Shell (China) Limited	100	Ordinary
China	Shell (China) Projects & Technology Limited	100	Ordinary
China	Shell (Shanghai) Technology Limited	100	Ordinary
China	Shell (Tianjin) Lubricants Company Limited	100	Ordinary
China	Shell (Tianjin) Oil and Petrochemical Company Limited	100	Ordinary
China	Shell (Zhuhai) Lubricants Company Limited	100	Ordinary
China	Shell Energy (China) Limited	100	Ordinary
China	Shell North China Petroleum Group Co., Ltd.	49	Ordinary
China	Shell Road Solutions (Ezhou) Co. Ltd.	69	Ordinary
China	Shell Road Solutions (Luzhou) Co. Ltd.	100	Ordinary
China	Shell Road Solutions (Xi'An) Co. Ltd.	100	Ordinary
China	Shell Road Solutions (Zhenjiang) Co. Ltd	100	Ordinary
China	Shell Road Solutions Xinyue (Foshan) Co. Ltd.	60	Ordinary
China	Sinopec and Shell (Jiangsu) Petroleum Marketing Company Limited	40	Ordinary
China	Sirius Well Manufacturing Services (China) Co. Ltd.	50	Ordinary
China	Suzhou Liyuan Retail Site Management Co., Ltd.	50	Ordinary
China	Yanchang and Shell (Guangdong) Petroleum Co., Ltd.	49	Ordinary
China	Yanchang and Shell (Sichuan) Petroleum Company Limited	45	Ordinary
China	Yanchang and Shell Petroleum Company Limited	45	Ordinary
China	Yueyang Sinopec and Shell Coal Gasification Company Limited	50	Equity (Voting)
China	Zhejiang Shell Oil and Petrochemical Company Limited	100	Ordinary
Colombia	C.I. Shell Comercializadora Colombia, S.A.S	100	Ordinary
Colombia	Shell Colombia S.A.	100	Ordinary
Colombia	Shell Exploration and Production Colombia GmbH Sucursal Cola	100	Ordinary

Country of incorporation	Company name	%	Class of shares held
Colombia	Union Temporal Bloque Sin Off 7	65	Ordinary
Cook Islands	Bransone (International) Limited	100	Ordinary, Redeemable
Cyprus	Rosneft-Shell Caspian Ventures Ltd	49	Ordinary, Non-redeemable
Czech Republic	Shell Czech Republic A.S.	100	Ordinary
Denmark	A/S Dansk Shell	100	Ordinary
Denmark	Dansk Fuels A/S	100	Ordinary
Denmark	Shell – Statoil Refuelling (Billund) I/S	50	Ordinary
Denmark	Shell EP Holdingselskab Danmark ApS	100	Ordinary
Denmark	Shell Olie-Og Gasudvinding Danmark Pipelines ApS	100	Ordinary
Denmark	Shell/Statoil Total I/S	33	Ordinary
Egypt	Alam El Shawish Petroleum Company	20	Ordinary
Egypt	Badr Petroleum Company	50	Ordinary
Egypt	Obaiyed Petroleum Company	50	Ordinary
Egypt	Shell Egypt Trading	100	Ordinary
Egypt	Shell Lubricants Egypt	100	Ordinary
Egypt	Sitra Petroleum Company	50	Ordinary
Egypt	Tiba Petroleum Company	26	Ordinary
Egypt	West Sitra Petroleum Company	50	Ordinary
Finland	Shell Aviation Finland Oy	100	Ordinary
France	Avitair SAS	100	Ordinary
France	Geogaz Lavera SA	28	Ordinary
France	Geovexin SA	20	Ordinary
France	Groupement Petrolier Aviation (G.I.E.)	33	Ordinary
France	Infineum France	50	Ordinary
France	Service Aviation Paris (G.I.E.)	33	Ordinary
France	Shell Exploration and Production France SAS	100	Ordinary
France	Shell Retraites SAS	100	Ordinary
France	Soc. De. Part. Dans "Spitp" Sarl	53	Ordinary
France	Societe De Gestion Mobiliere Et Immobiliere SA	100	Ordinary
France	Societe Des Lubrifiants De Nanterre	100	Ordinary
France	Societe Des Petroles Shell SAS	100	Ordinary
France	Societe Provencale Des Bitumes (S.A.S.)	100	Ordinary
France	Ste Du Pipeline Sud Europeen SA	21	Ordinary
Gabon	Shell Upstream Gabon SA	100	Ordinary
Germany	Ages Maul System GmbH & Co KG	20	Ordinary
Germany	Beb Beteiligungs GmbH	50	Ordinary
Germany	Beb Erdgas Und Erdoel GmbH & Co. KG	50	Ordinary
Germany	Beb Holding GmbH	50	Ordinary
Germany	Carissa EinzelhandelUnd Tankstellenservice GmbH & Co. KG	100	Ordinary
Germany	Carissa Verwaltungsgesellschaft mbH	100	Ordinary
Germany	Cri Catalyst Leuna GmbH	100	Ordinary
Germany	Cri Deutschland GmbH	100	Ordinary
Germany	Deutsche Transalpine Oelleitung GmbH	19	Ordinary
Germany	Erdoel-Raffinerie Deurag-Nerag GmbH	50	Ordinary
Germany	Euroshell Deutschland GmbH & Co.KG	100	Ordinary
Germany	Euroshell Deutschland Verwaltungsgesellschaft mbH	100	Ordinary
Germany	FBG Ferngasbeteiligungsgesellschaft mbH	100	Ordinary
Germany	H2 Mobility Deutschland GmbH and Co KG	28	Ordinary
Germany	Hprds Und Spnv Deutschland Oil GmbH & Co. KG	100	Ordinary
Germany	Hprds Und Spnv Deutschland Verwaltungsges. mbH	90	Ordinary
Germany	Min. Oelralf. Oberrh. Verw. GmbH	32	Ordinary
Germany	Nord-West Oelleitung GmbH	20	Ordinary
Germany	Oberrhein. Mineraloelwerke GmbH	42	Ordinary
Germany	Pck Raffinerie GmbH	38	Ordinary
Germany	Reg Raffinerie-Energie GmbH & Co. OHG	20	Ordinary
Germany	Rheinland Kraftstoff GmbH	100	Ordinary
Germany	Rhein/Main-Rohrleitungstransportgesellschaft mbH	63	Ordinary
Germany	Shell Algeria Zerafa GmbH	100	Ordinary



## EXHIBIT 8 CONTINUED

Country of incorporation	Company name	%	Class of shares held
Germany	Shell Energy Deutschland GmbH	100	Equity (Voting)
Germany	Shell Erdgas Beteiligungsgesellschaft mbH	100	Ordinary
Germany	Shell Erdgas Marketing GmbH & Co. KG	50	Equity (Voting)
Germany	Shell Erdoel Und Erdgas Exploration GmbH	100	Ordinary
Germany	Shell Erneuerbare Energien GmbH	100	Ordinary
Germany	Shell Exploration and Development Libya GmbH I	100	Ordinary
Germany	Shell Exploration and Production Colombia GmbH	100	Ordinary
Germany	Shell Exploration and Production Libya GmbH	100	Ordinary
Germany	Shell Exploration Et Production Du Maroc GmbH	100	Ordinary
Germany	Shell Exploration New Ventures One GmbH	100	Ordinary
Germany	Shell Exploration and Produktion Deutschland GmbH	100	Ordinary
Germany	Shell Global Solutions Deutschland GmbH	100	Ordinary
Germany	Shell Grundstuecksgesellschaft Wesseling GmbH & Co KG	100	Ordinary
Germany	Shell Hydrogen Deutschland GmbH	100	Ordinary
Germany	Shell Tunisia El Jem GmbH	100	Ordinary
Germany	Shell Tunisia Kairouan GmbH	100	Ordinary
Germany	Shell Tunisia Offshore GmbH	100	Ordinary
Germany	Shell Verwaltungsgesellschaft Fur Erdgasbeteiligungen mbH	100	Ordinary
Germany	SPNV Deutschland Beteiligungsges. mbH	100	Ordinary
Germany	Zeller & Cie S.A.R.L.	50	Ordinary
Greece	Attiki Gas Supply Company S.A.	49	Ordinary
Greece	Shell & MOH Aviation Fuels A.E.	51	Nominalive (Voting)
Greenland	Shell Greenland A/S	100	Ordinary
Guam	Shell Guam Inc.	100	Ordinary
Hong Kong	AFSC Management Limited	11	Ordinary
Hong Kong	AFSC Operations Limited	11	Ordinary
Hong Kong	AFSC Refuelling Limited	11	Ordinary
Hong Kong	Aviation Fuel Supply Company-Partnership	11	Ordinary
Hong Kong	Branstone Company Limited	100	Ordinary
Hong Kong	Fulmar Limited	100	Ordinary
Hong Kong	Hong Kong Response Limited	25	Ordinary
Hong Kong	Ocean Century Tf Limited	100	Ordinary, Redeemable
Hong Kong	Shell Bitumen China Holdings Limited	100	Ordinary
Hong Kong	Shell Developments (HK) Limited	100	Ordinary, Redeemable
Hong Kong	Shell Hong Kong Limited	100	Ordinary
Hong Kong	Shell Korea Limited	100	Ordinary
Hong Kong	Shell Macau Limited	100	Ordinary
Hungary	Shell Hungary Kereskedelmi Cld.	100	Ordinary
India	Andhra LNG Private Limited	100	Equity (Voting)
India	Hazira LNG Private Limited	74	Equity (Voting)
India	Hazira Port Private Limited	74	Equity (Voting)
India	Pennzoil Quaker State India Limited	100	Ordinary
India	Shell India Markets Private Limited	100	Equity (Voting)
India	Shell Mrpl Aviation Fuels and Services Limited	50	Ordinary
Indonesia	PT. Gresik Distribution Terminal	100	Ordinary
Indonesia	PT. Shell Indonesia	100	Ordinary
Indonesia	PT. Shell Manufacturing Indonesia	100	Ordinary
Indonesia	PT. Shell Solar Indonesia	100	Ordinary
Indonesia	Shell Upstream Indonesia Services Rep Office	100	Ordinary
Iraq	Basrah Gas Company	44	Ordinary
Ireland	Asiatic Petroleum Company (Dublin) Limited	100	Ordinary
Ireland	Irish Shell Trust Limited	100	Ordinary
Ireland	Shell and Topaz Aviation Ireland Limited	50	Ordinary
Ireland	Shell Bitumen Ireland Limited	100	Ordinary
Ireland	Shell E&P Ireland Limited	100	Ordinary
Isle of Man	Petrolon Europe Limited	100	Ordinary
Isle of Man	Petrolon International Limited	100	Ordinary

Country of incorporation	Company name	%	Class of shares held
Isle of Man	Shell Marine Personnel (I.O.M.) Limited	100	Ordinary
Isle of Man	Shell Ship Management Limited	100	Ordinary
Italy	Alle Srl	100	Quotas (Voting)
Italy	Aquila S.P.A.	100	Ordinary
Italy	Infineum Italia Srl	50	Quotas (Voting)
Italy	Shell Energy Italia S.R.L	100	Quotas (Voting)
Italy	Shell Italia Holding SpA	100	Ordinary
Italy	Shell Italia Oil Products S.R.L	100	Quotas (Voting)
Italy	Societa Italiana Per L'Oleodotto Transalpina S.P.A.	19	Ordinary
Italy	Societa' Oleodotti Meridionali SpA	30	Ordinary
Japan	Brunei Energy Services Company, Ltd.	25	Ordinary
Japan	Japan Chemtech Ltd	30	Ordinary
Japan	Sakhalin LNG Services Company Ltd.	50	Ordinary
Japan	Shell Chemicals Japan Ltd.	100	Ordinary
Japan	Shell Japan Limited	100	Ordinary
Japan	Shell Japan Trading Ltd.	68	Ordinary
Japan	Showa Shell Sekiyu K.K.	35	Ordinary
Luxembourg	Bully 2 (Luxembourg) S.A R.L.	50	Ordinary
Luxembourg	Tank Reinsurance SA	21	Ordinary
Macau	Shell Gas (LPG) Macau Limited	100	Quotas (Voting)
Malaysia	Bonuskad Loyalty Sdn Bhd	33	Ordinary, Redeemable
Malaysia	IOT Management Sdn. Bhd.	7	Ordinary
Malaysia	Kebabangan Petroleum Operating Company Sdn. Bhd.	30	Ordinary
Malaysia	P S Pipeline Sdn Bhd	50	Ordinary
Malaysia	P S Terminal Sdn Bhd	35	Ordinary
Malaysia	Pertini Vista Sdn. Bhd	100	Ordinary
Malaysia	Provista Ventures Sdn Bhd	100	Ordinary
Malaysia	Shell Business Service Centre Sdn. Bhd.	100	Ordinary
Malaysia	Shell Global Solutions (Malaysia) Sdn Bhd	100	Ordinary
Malaysia	Shell Malaysia Trading Sendirian Berhad	100	Ordinary
Malaysia	Shell Mds (Malaysia) Sendirian Berhad	72	Ordinary
Malaysia	Shell New Ventures Malaysia Sdn. Bhd.	100	Ordinary, Redeemable
Malaysia	Shell People Services Asia Sdn Bhd	100	Ordinary
Malaysia	Shell Refining Company (Federation of Malaya) Berhad	51	Ordinary
Malaysia	Shell Sabah Selatan Sdn. Bhd.	100	Ordinary
Malaysia	Shell Timur Sdn Bhd	70	Ordinary
Malaysia	Shell Treasury Malaysia (I) Limited	100	Ordinary
Malaysia	Tanjung Manis Oil Terminal Management Sdn. Bhd.	14	Ordinary
Mauritius	Pennzoil Products International Company	100	Equity (Voting)
Mexico	Gas Del Litoral, S. De R.L. De C.V.	75	Ordinary
Mexico	Shell Exploracion Y Extraccion De Mexico, S.A. De C.V.	100	Ordinary
Mexico	Shell Mexico Gas Natural, S De RI De CV	100	Ordinary
Mexico	Shell Mexico,S.A. De C.V.	100	Ordinary
Mexico	Shell Servicios Mexico, S.A. De C.V.	100	Ordinary
Mexico	Shell Trading Mexico, S. De R.L. De C.V.	100	Ordinary
Netherlands	Amsterdam Schiphol Pijpleiding Beheer B.V	40	Ordinary
Netherlands	Attiki Gas B.V.	100	Ordinary
Netherlands	B.R.E. B.V.	100	Ordinary
Netherlands	B.V. Petroleum Assurantie Maatschappij	100	Ordinary
Netherlands	BJS Oil Operations B.V.	80	Ordinary
Netherlands	BJSA Exploration and Production B.V.	100	Ordinary
Netherlands	Bogstone Holding BV	51	Ordinary
Netherlands	Caspi Mercury Operating Company B.V.	40	Ordinary
Netherlands	Chosun Shell B.V.	100	Redeemable, Non-redeemable
Netherlands	Cicerone Holding BV	51	Ordinary
Netherlands	Ellba BV	50	Ordinary
Netherlands	Ellba CV	50	Ordinary

## EXHIBIT 8 CONTINUED

Country of incorporation	Company name	%	Class of shares held
Netherlands	Euroshell Cards B.V.	100	Ordinary
Netherlands	Gasterra B.V.	25	Ordinary
Netherlands	Infineum Holdings BV	50	Ordinary
Netherlands	Integral Investments B.V.	100	Ordinary
Netherlands	Jordan Oil Shale Company B.V.	100	Ordinary
Netherlands	Libra Oil& Gas B.V.	20	Ordinary
Netherlands	LNG Shipping Operation Services Netherlands B.V.	100	Ordinary
Netherlands	Loyalty Management Netherlands B.V.	33	Ordinary
Netherlands	Maasvlakte Olie Terminal C.V.	22	Partnership Capital
Netherlands	Multi Tank Card B.V.	30	Ordinary
Netherlands	N.V. Rotterdam-Rijn Pijpleiding Maatschappij	56	Ordinary
Netherlands	Nederlandse Aardolie Maatschappij B.V.	50	Ordinary
Netherlands	Netherlands Alng Holding Company B.V.	100	Ordinary
Netherlands	Noordzeewind B.V.	50	Ordinary
Netherlands	Noordzeewind CV	50	Membership Interest
Netherlands	Paqell BV	50	Ordinary
Netherlands	Pernis Refining Company B.V.	100	Ordinary
Netherlands	Raffinaderij Shell Mersin N.V.	100	Ordinary
Netherlands	Resco B.V.	100	Ordinary
Netherlands	Rub' Al-Khali Gas Development B.V.	100	Ordinary
Netherlands	Salym Petroleum Development N.V.	50	Ordinary
Netherlands	Salym Petroleum Services B.V.	50	Ordinary
Netherlands	Shell Abu Dhabi B.V.	100	Ordinary
Netherlands	Shell Additives Holdings (I) BV	100	Ordinary
Netherlands	Shell Additives Holdings (II) BV	100	Ordinary
Netherlands	Shell and Vivo Lubricants B.V.	50	Ordinary
Netherlands	Shell Asset Management Company B.V.	100	Ordinary
Netherlands	Shell Bab Gas Development B.V.	100	Ordinary
Netherlands	Shell Business Development Central Asia B.V.	100	Non-redeemable
Netherlands	Shell Caspian B.V.	100	Ordinary
Netherlands	Shell Caspian Pipeline Holdings B.V.	100	Ordinary
Netherlands	Shell Chemicals Europe B.V.	100	Ordinary
Netherlands	Shell Chemicals Ventures B.V.	100	Redeemable, Non-redeemable
Netherlands	Shell China B.V.	100	Ordinary
Netherlands	Shell China Holdings B.V.	100	Ordinary
Netherlands	Shell Deepwater Tanzania B.V.	100	Ordinary
Netherlands	Shell Development Iran B.V.	100	Non-redeemable
Netherlands	Shell Development Kashagan B.V.	100	Ordinary
Netherlands	Shell Downstream Services International B.V.	100	Ordinary
Netherlands	Shell E & P Investment Holdings B.V.	100	Ordinary
Netherlands	Shell E and P Offshore Services B.V.	100	Ordinary
Netherlands	Shell Egypt N.V.	100	Non-redeemable
Netherlands	Shell Energy Europe B.V.	100	Ordinary
Netherlands	Shell EP Holdings (EE&ME) B.V.	100	Ordinary
Netherlands	Shell EP Middle East Holdings B.V.	100	Ordinary
Netherlands	Shell EP Russia Investments (III) B.V.	100	Ordinary
Netherlands	Shell EP Russia Investments (V) B.V.	100	Ordinary
Netherlands	Shell EP Somalia B.V.	100	Ordinary
Netherlands	Shell EP Wells Equipment Services B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (XI) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LI) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LVII) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LIX) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LX) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXI) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXII) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXIII) B.V.	100	Ordinary

Country of incorporation	Company name	%	Class of shares held
Netherlands	Shell Exploration and Production (LXIV) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXV) N.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXVI) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXVII) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXIX) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXX) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXXI) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXXIV) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production (LXXV) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production Holdings B.V.	100	Redeemable, Non-redeemable
Netherlands	Shell Exploration and Production Investments B.V.	100	Ordinary
Netherlands	Shell Exploration and Production Services (RF) B.V.	100	Non-redeemable
Netherlands	Shell Exploration and Production Ukraine I B.V.	100	Ordinary
Netherlands	Shell Exploration and Production Ukraine Investments (I) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production Ukraine Investments (II) B.V.	100	Ordinary
Netherlands	Shell Exploration and Production Ukraine Investments (IV) B.V.	100	Ordinary
Netherlands	Shell Exploration B.V.	100	Ordinary
Netherlands	Shell Exploration Company (RF) B.V.	100	Ordinary
Netherlands	Shell Exploration Company (West) B.V.	100	Ordinary
Netherlands	Shell Exploration Company B.V.	100	Ordinary
Netherlands	Shell Exploration Venture Services B.V.	100	Ordinary
Netherlands	Shell Gas & Power Developments B.V.	100	Ordinary
Netherlands	Shell Gas (LPG) Holdings B.V.	100	Ordinary
Netherlands	Shell Gas Iraq B.V.	100	Ordinary
Netherlands	Shell Gas Nigeria B.V.	100	Ordinary
Netherlands	Shell Gas Venezuela B.V.	100	Ordinary
Netherlands	Shell Generating (Holding) B.V.	100	Ordinary
Netherlands	Shell Global Solutions (Eastern Europe) B.V.	100	Registered (Voting)
Netherlands	Shell Global Solutions International B.V.	100	Ordinary
Netherlands	Shell Global Solutions Services B.V.	100	Ordinary
Netherlands	Shell Information Technology International B.V.	100	Ordinary
Netherlands	Shell International B.V.	100	Ordinary
Netherlands	Shell International Exploration and Production B.V.	100	Ordinary
Netherlands	Shell Internationale Research Maatschappij B.V.	100	Ordinary
Netherlands	Shell Internet Ventures B.V.	100	Ordinary
Netherlands	Shell Iraq B.V.	100	Ordinary
Netherlands	Shell Iraq Petroleum Development B.V.	100	Ordinary
Netherlands	Shell Korea Exploration and Production B.V.	100	Ordinary
Netherlands	Shell Kuwait Exploration and Production B.V.	100	Ordinary
Netherlands	Shell LNG Port Spain BV	100	Ordinary
Netherlands	Shell Lubricants Supply Company B.V.	100	Ordinary
Netherlands	Shell Manufacturing Services B.V.	100	Ordinary
Netherlands	Shell Montell Holding I B.V.	100	Ordinary
Netherlands	Shell Mozambique B.V.	100	Ordinary
Netherlands	Shell Mspa 2 Holding B.V.	100	Ordinary
Netherlands	Shell Namibia Upstream B.V.	100	Ordinary
Netherlands	Shell Nanhai B.V.	100	Ordinary
Netherlands	Shell Nederland B.V.	100	Ordinary
Netherlands	Shell Nederland Chemie B.V.	100	Ordinary, Redeemable
Netherlands	Shell Nederland Verkoopmaatschappij B.V.	100	Ordinary
Netherlands	Shell Nusantara Trading B.V.	100	Ordinary
Netherlands	Shell Offshore (Personnel) Services B.V.	100	Ordinary
Netherlands	Shell Offshore North Gabon B.V.	100	Ordinary
Netherlands	Shell Offshore Services B.V.	100	Ordinary
Netherlands	Shell Oking Holdings B.V.	100	Ordinary
Netherlands	Shell Olie Og Gas Holding B.V.	100	Redeemable, Non-redeemable
Netherlands	Shell Pensioenbureau Nederland B.V.	100	Ordinary

## EXHIBIT 8 CONTINUED

Country of incorporation	Company name	%	Class of shares held
Netherlands	Shell Pernis Holding B.V.	100	Ordinary
Netherlands	Shell Pipeline Company B.V.	100	Ordinary
Netherlands	Shell Project Development (VIII) B.V.	100	Ordinary
Netherlands	Shell RDS Holding B.V.	100	Ordinary
Netherlands	Shell Sakhalin Holdings B.V.	100	Ordinary
Netherlands	Shell Sakhalin Services B.V.	100	Ordinary
Netherlands	Shell Salym Development B.V.	100	Non-redeemable
Netherlands	Shell Services Oman B.V.	100	Ordinary
Netherlands	Shell Shared Services (Asia) B.V.	100	Ordinary
Netherlands	Shell South Africa Upstream B.V.	100	Ordinary
Netherlands	Shell Technology Ventures B.V.	100	Ordinary
Netherlands	Shell Technology Ventures Fund 1 B.V.	52	Ordinary
Netherlands	Shell Technology Ventures Investments B.V.	100	Ordinary
Netherlands	Shell Trademark Management B.V.	100	Ordinary
Netherlands	Shell Trading Rotterdam B.V.	100	Ordinary
Netherlands	Shell Trading Russia B.V.	100	Ordinary
Netherlands	Shell Upstream Albania B.V.	100	Ordinary
Netherlands	Shell Upstream Development B.V.	100	Ordinary
Netherlands	Shell Upstream Indonesia Services B.V.	100	Ordinary
Netherlands	Shell Upstream Spain B.V.	100	Ordinary
Netherlands	Shell Upstream Turkey B.V.	100	Ordinary
Netherlands	Shell Western LNG B.V.	100	Ordinary
Netherlands	Shell Windenergy Netherlands B.V.	100	Ordinary
Netherlands	Shell Windenergy NZW 1 B.V.	100	Ordinary
Netherlands	Sirius Well Manufacturing Services B.V.	50	Ordinary
Netherlands	Snijders Olie BV	100	Ordinary
Netherlands	Stichting Pernis Refining Company Administratiekantoor	100	Ordinary
Netherlands	Syria Shell Petroleum Development B.V.	65	Ordinary, Redeemable, Non-redeemable
Netherlands	Tamba B.V.	50	Ordinary
Netherlands	Tankstation Exploitatie Maatschappij Holding B.V.	100	Ordinary
Netherlands	Vivo Energy Holding BV	20	Ordinary
Netherlands	Waalbrug Exploitatie Maatschappij B.V.	100	Ordinary
New Zealand	Energy Finance NZ Limited	100	Ordinary
New Zealand	Energy Holdings Offshore Limited	100	Ordinary
New Zealand	Energy Infrastructure Limited	100	Ordinary
New Zealand	Energy Petroleum Holdings Limited	100	Ordinary
New Zealand	Energy Petroleum Investments Limited	100	Ordinary, Redeemable
New Zealand	Energy Petroleum Taranaki Limited	100	Ordinary
New Zealand	Mauit Development Limited	84	Ordinary
New Zealand	Shell (Petroleum Mining) Company Limited	100	Ordinary
New Zealand	Shell Energy Asia Limited	100	Ordinary
New Zealand	Shell Exploration NZ Ltd	100	Ordinary, Redeemable
New Zealand	Shell GSB Limited	100	Ordinary
New Zealand	Shell Investments NZ Limited	100	Ordinary
New Zealand	Shell New Zealand (2011) Limited	100	Ordinary, Redeemable
New Zealand	Shell New Zealand Pensions Limited	100	Ordinary
New Zealand	Shell Todd Oil Services Limited	50	Ordinary
New Zealand	Southern Petroleum No Liability	100	Ordinary
New Zealand	Taranaki Offshore Petroleum Company Of NZ	100	Ordinary
Nicaragua	Compania Quimica Nicaraguense S.A.	100	Nominative (Voting)
Nigeria	Delta Business Development Limited	100	Ordinary
Nigeria	Nigeria LNG Limited	26	Ordinary
Nigeria	Shell Exploration and Production Africa Limited	100	Ordinary
Nigeria	Shell Nig. Closed Pension Fund Administrator Ltd	100	Ordinary
Nigeria	Shell Nigeria Exploration and Production Delta Limited	100	Ordinary
Nigeria	Shell Nigeria Exploration and Production Echo Limited	100	Ordinary
Nigeria	Shell Nigeria Exploration Properties Alpha Limited	100	Ordinary

Country of incorporation	Company name	%	Class of shares held
Nigeria	Shell Nigeria Exploration Properties Beta Limited	100	Ordinary
Nigeria	Shell Nigeria Exploration Properties Charlie Limited	100	Ordinary
Nigeria	Shell Nigeria Gas Ltd (SNG)	100	Ordinary
Nigeria	Shell Nigeria Infrastructure Development Limited	100	Ordinary
Nigeria	Shell Nigeria Offshore Prospecting Limited	100	Ordinary
Nigeria	Shell Nigeria Oil Products Limited (SNOP)	100	Ordinary
Nigeria	Shell Nigeria Ultra Deep Limited	100	Ordinary
Nigeria	Shell Nigeria Upstream Ventures Limited	100	Ordinary
Nigeria	Shell Thrift & Loan Fund Trustees Nig Ltd	99	Ordinary
Norway	Aviation Fuelling Services Norway AS	50	Ordinary
Norway	CO <sub>2</sub> Technology Centre Mongstad DA	2	Ordinary
Norway	Energiparken Eiendom AS	100	Ordinary
Norway	Gasnor AS	100	Ordinary
Norway	Ormen Lange Eiendom DA	17	Ordinary
Norway	Shell Marine Products AS	100	Ordinary
Norway	Shell Technology Norway AS	100	Ordinary
Norway	Vestprosess DA	8	Ordinary
Oman	Oman LNG LLC	30	Ordinary
Oman	Petroleum Development Oman LLC	34	Ordinary
Oman	Shell Development Oman LLC	100	Ordinary
Oman	Shell Oman Marketing Company SAOG	49	Ordinary
Pakistan	Pak Arab Pipeline Company Limited	20	Ordinary
Pakistan	Pakistan Refinery Limited	30	Ordinary
Pakistan	Shell Pakistan Limited	76	Ordinary
Peru	Peru LNG Srl	20	Ordinary
Peru	Shell Gnl Peru S.A.C.	100	Ordinary
Peru	Shell Operaciones Peru SAC	100	Ordinary
Philippines	Bonifacio Gas Corporation	30	Ordinary
Philippines	First Philippine Industrial Corporation	40	Ordinary
Philippines	Kamayon Realty Corporation	27	Ordinary
Philippines	Pandacan Depots Services, Inc.	23	Ordinary
Philippines	Pilipinas Shell Petroleum Corporation	68	Ordinary
Philippines	SCCP Land, Inc.	40	Ordinary
Philippines	Shell Chemicals Philippines, Inc.	100	Ordinary
Philippines	Shell Gas and Energy Philippines Corporation	100	Ordinary
Philippines	Tabangao Realty, Inc.	40	Ordinary
Poland	Shell Polska Sp. Z O.O.	100	Ordinary
Portugal	Shell Madeira Praia Formosa	100	Ordinary
Puerto Rico	Station Managers of Puerto Rico, Inc.	100	Ordinary
Qatar	Qatar Liquefied Gas Company Limited (4)	30	Ordinary
Qatar	Qatar Shell Research & Technology Centre QSTP-LLC	100	Ordinary
Qatar	Qatar Shell Service Company	100	Ordinary
Russia	AO Shell Aerofuels	50	Ordinary
Russia	Khanty-Mansiysk Petroleum Alliance Closed Joint Stock Company	50	Ordinary
Russia	Limited Liability Company "Shell Neftegaz Development (I)"	100	Equity (Voting)
Russia	Limited Liability Company "Shell Neftegaz Development (II)"	100	Equity (Voting)
Russia	Limited Liability Company "Shell Neftegaz Development (III)"	100	Equity (Voting)
Russia	Limited Liability Company "Shell Neftegaz Development (IV)"	100	Equity (Voting)
Russia	Limited Liability Company "Shell Neftegaz Development (V)"	100	Equity (Voting)
Russia	Limited Liability Company "Shell Neftegaz Development (VI)"	100	Equity (Voting)
Russia	Limited Liability Company "Shell Neftegaz Development (VII)"	100	Equity (Voting)
Russia	Limited Liability Company "Shell Neftegaz Development (VIII)"	100	Equity (Voting)
Russia	Limited Liability Company "Shell Neftegaz Development (IX)"	100	Equity (Voting)
Russia	Limited Liability Company "Shell Neftegaz Development (X)"	100	Equity (Voting)
Russia	LLC "Shell Neft"	100	Equity (Voting)
Saint Kitts and Nevis	Shell Oil & Gas (Malaysia) LLC	90	Equity (Voting)
Saint Lucia	Shell JPT Limited	100	Ordinary
Saudi Arabia	Al Jomah and Shell Lubricating Oil Co.Ltd.	50	Ordinary

## EXHIBIT 8 CONTINUED

Country of incorporation	Company name	%	Class of shares held
Saudi Arabia	Peninsular Aviation Services Company Limited	25	Ordinary
Saudi Arabia	Saudi Aramco Shell Refinery Company	50	Ordinary
Saudi Arabia	Saudi Petrochemical Company	50	Ordinary
Saudi Arabia	Shell Global Solutions Saudi Arabia LLC	100	Equity (Voting)
Singapore	Cri/Criterion Marketing Asia Pacific Pte Ltd	100	Ordinary
Singapore	Ellba Eastern (Pte) Ltd	100	Ordinary
Singapore	Infineum Singapore Pte Ltd	50	Ordinary
Singapore	Petrochemical Corporation of Singapore (Private) Limited	26	Ordinary
Singapore	QPI and Shell Petrochemicals (Singapore) Pte Ltd	51	Ordinary
Singapore	Shell Chemicals Seraya Pte. Ltd.	100	Ordinary
Singapore	Shell India Ventures Pte. Ltd.	100	Ordinary
Singapore	Shell International Shipping Services (Pte) Ltd	100	Ordinary
Singapore	Shell Myanmar Energy Pte Ltd	100	Ordinary
Singapore	Shell Myanmar Petroleum Pte. Ltd.	100	Ordinary
Singapore	Shell Pulau Maa Pte Ltd	100	Ordinary
Singapore	Shell Seraya Pioneer (Pte) Ltd	100	Ordinary
Singapore	Shell Singapore Trustees (Pte) Ltd	100	Ordinary
Singapore	Shell Tankers (Singapore) Private Limited	100	Ordinary
Singapore	Singapore Lube Park Pte. Ltd.	45	Ordinary
Singapore	Sirius Well Manufacturing Services Pte. Ltd.	50	Ordinary
Singapore	The Polyolefin Company (Singapore) Pte. Ltd.	15	Ordinary
Slovakia	Shell Slovakia S.R.O.	100	Equity (Voting)
Slovenia	Shell Adria D.O.O.	100	Ordinary
South Africa	Bituguard Southern Africa (Pty) Ltd	36	Ordinary
South Africa	Blendcor (Pty) Ltd.	36	Ordinary
South Africa	Sekelo Oil Trading (Pty) Limited	43	Ordinary
South Africa	Shell & BP South African Petroleum Refineries (Pty) Limited	36	Ordinary
South Africa	Shell Downstream South Africa (Pty) Ltd	72	Ordinary
South Africa	Shell Global Customer Services Centre CA	100	Ordinary
South Africa	Shell South Africa Energy (Pty) Ltd	100	Ordinary
South Africa	Shell South Africa Exploration (Pty) Limited	100	Ordinary
South Africa	Shell South Africa Holdings (Pty) Ltd	100	Ordinary
South Africa	Stisa (Pty) Limited	72	Ordinary
South Korea	Hankook Shell Oil Company	54	Ordinary
South Korea	Hyundai and Shell Base Oil Co., Ltd	40	Ordinary
Spain	Shell & Disa Aviation España, S.L.	50	Ordinary
Spain	Shell Espana S.A.	100	Ordinary
Spain	Shell Spain LNG S.A.U.	100	Ordinary
Sudan	Shell (Sudan) Petroleum Development Company Limited	100	Ordinary
Sweden	A Flygbranslehantering Aktiebolag	25	Ordinary
Sweden	Gothenburgh Fuelling Company AB	33	Ordinary
Sweden	Malmo Fuelling Services AB	33	Ordinary
Sweden	Shell Aviation Sweden AB	100	Ordinary
Sweden	Stockholm Fuelling Services AB	33	Ordinary
Switzerland	Aree Di Servizio Autostradali Bellinzona S.A.	50	Registered (Voting)
Switzerland	Bully 1 (Switzerland) GmbH	50	Ordinary
Switzerland	Bully 2 (Switzerland) GmbH	50	Ordinary
Switzerland	Saraco SA, Geneva	20	Registered (Voting)
Switzerland	Shell (Switzerland) AG	100	Registered (Voting)
Switzerland	Shell Brands International AG	100	Registered (Voting)
Switzerland	Shell Lubricants Switzerland AG	100	Registered (Voting)
Switzerland	Shell Trading Switzerland AG	100	Registered (Voting)
Switzerland	Sogep Societe Genevoise Des Petroles	34	Registered (Voting)
Switzerland	Ubag Unterflurbetankungsanlage Flughafen, Zurich	30	Registered (Voting)
Syria	Al Badiyah Petroleum Company	22	Ordinary
Syria	Al Furat Petroleum Company	20	Ordinary
Taiwan	CPC Shell Lubricants Co. Ltd	51	Ordinary

Country of incorporation	Company name	%	Class of shares held
Taiwan	Shell Taiwan Limited	100	Ordinary
Tanzania	Shell Tanzania Limited	100	Ordinary
Thailand	Pattanaadhorn Company Limited	41	Ordinary
Thailand	Pattanakij Chemical Company Limited	70	Ordinary
Thailand	Sahapanichkijphun Company Limited	41	Ordinary
Thailand	Shell Global Solutions (Thailand) Limited	48	Ordinary
Thailand	Shell Global Solutions Holdings (Thailand) Limited	49	Ordinary
Thailand	Unitas Company Limited	41	Ordinary
Togo	Complexe Petrolier De Lome S.A.	60	Ordinary
Togo	Societe Togolaise De Stockage De Lome S.A.	64	Ordinary
Togo	Togo Et Shell S.A.	80	Ordinary
Trinidad and Tobago	Atlantic LNG 2/3 Company of Trinidad and Tobago	25	Ordinary
Trinidad and Tobago	Atlantic LNG 4 Company of Trinidad and Tobago	22	Ordinary
Trinidad and Tobago	Atlantic LNG Company of Trinidad and Tobago	20	Ordinary
Trinidad and Tobago	Shell LNG T&T Ltd	100	Ordinary
Trinidad and Tobago	Shell Lubricants Caribbean Limited	100	Ordinary
Trinidad and Tobago	Shell Trinidad Ltd	100	Ordinary
Turkey	Ambarli Depolama Hizmetleri Ltd Sti.	35	Ordinary
Turkey	Atas Anadolu Tasfiyehanesi A.S.	27	Ordinary
Turkey	Cekisan Depolama Hizmetleri Limited Sirketi	35	Ordinary
Turkey	Marmara Depoculuk Hizmetleri AS	32	Ordinary
Turkey	Samsun Akaryakit Depolama A.S.	35	Ordinary
Turkey	Shell & Turcas Petrol A.S.	70	Ordinary
Turkey	Shell Enerji Anonim Sirketi	100	Ordinary
Turkey	Shell Petrol A.S.	70	Ordinary
Ukraine	Alliance Holding LLC	51	Partnership Capital
Ukraine	Invest Region LLC	51	Partnership Capital
Ukraine	Shell Cards Ukraine LLC	51	Partnership Capital
Ukraine	Shell Energy Ukraine LLC	100	Equity (Voting)
Ukraine	Shell Oil Products Ukraine	100	Membership Interest
Ukraine	Shell Ukraine Exploration and Production 1 LLC	100	Ordinary
Ukraine	Shell Ukraine Exploration and Production 4 LLC	100	Ordinary
United Arab Emirates	Abu Dhabi Gas Industries Limited (GASCO)	15	Ordinary
United Arab Emirates	Emdad Aviation Fuel Storage FZCO	32	Ordinary
United Arab Emirates	Sharjah Fuelling Services Company Ltd.	49	Ordinary
UK	Abu Dhabi Petroleum Company Limited	24	Ordinary
UK	Angkor Shell Limited	100	Ordinary
UK	Autogas Limited	50	Ordinary
UK	British Pipeline Agency Limited	50	Ordinary
UK	Cri Catalyst Company Europe Limited	100	Ordinary
UK	Cri/Criterion Catalyst Company Limited	100	Ordinary
UK	Eastham Refinery Limited	50	Ordinary
UK	Enterprise Oil Middle East Limited	100	Ordinary
UK	Enterprise Oil Norge Limited	100	Ordinary
UK	Enterprise Oil Operations Limited	100	Ordinary
UK	Enterprise Oil U.K. Limited	100	Ordinary
UK	Framecroft Limited	100	Ordinary
UK	Gainrace Limited	100	Ordinary
UK	Gatwick Airport Storage And Hydrant Company Limited	13	Ordinary
UK	Glossop Limited	100	Ordinary
UK	GOGB Limited	100	Ordinary
UK	Heathrow Airport Fuel Company Limited	17	Ordinary
UK	Heathrow Hydrant Operating Company Limited	10	Ordinary
UK	Holaw (619) Limited	100	Ordinary
UK	International Inland Waterways, Limited	100	Ordinary
UK	Khmer Shell Limited	100	Ordinary
UK	Lensbury Limited	100	Ordinary



## EXHIBIT 8 CONTINUED

Country of incorporation	Company name	%	Class of shares held
UK	Manchester Airport Storage and Hydrant Company Limited	25	Ordinary
UK	Meteor Lead Limited	100	Ordinary
UK	Murphy Schiehallion Limited	100	Ordinary
UK	Mytilus Insurance Company Limited	100	Ordinary
UK	Octane Holdings Limited	100	Ordinary
UK	Octane Properties Limited	100	Ordinary
UK	Peterhead Carbon Capture and Storage Limited	100	Ordinary
UK	Private Oil Holdings Oman Limited	85	Ordinary
UK	Sabah Shell Petroleum Company Limited	100	Ordinary
UK	Saxon Oil Limited	100	Ordinary
UK	Saxon Oil Miller Limited	100	Ordinary
UK	Selap Limited	100	Ordinary
UK	Shell Aircraft Limited	100	Ordinary
UK	Shell Arabia Car Service Limited	100	Ordinary
UK	Shell Aviation Limited	100	Ordinary
UK	Shell Benin Upstream Ltd	100	Ordinary
UK	Shell Business Development Middle East Limited	100	Ordinary
UK	Shell Caribbean Investments Limited	100	Ordinary
UK	Shell Chemical Company of Eastern Africa Limited	100	Ordinary
UK	Shell Chemicals (Hellas) Limited	100	Ordinary
UK	Shell Chemicals Limited	100	Ordinary
UK	Shell Chemicals Support Services Asia Limited	100	Ordinary
UK	Shell Chemicals U.K. Limited	100	Ordinary
UK	Shell Clair UK Limited	100	Ordinary
UK	Shell Club Corringham Limited	100	Ordinary
UK	Shell Company (Hellas), Limited	100	Ordinary
UK	Shell Company (Pacific Islands) Limited	100	Ordinary
UK	Shell Corporate Director Limited	100	Ordinary
UK	Shell Corporate Secretary Limited	100	Ordinary
UK	Shell Direct (U.K.) Limited	100	Ordinary
UK	Shell Distributor (Holdings) Limited	100	Ordinary
UK	Shell East Europe Company Limited	100	Ordinary
UK	Shell Employee Benefits Trustee Limited	100	Ordinary
UK	Shell EP Offshore Ventures Limited	100	Ordinary
UK	Shell Exploration and Production Oman Limited	100	Ordinary
UK	Shell Gas Holdings (Malaysia) Limited	100	Ordinary
UK	Shell Information Technology International Limited	100	Ordinary
UK	Shell International Gas Limited	100	Ordinary
UK	Shell International Holdings Limited	100	Ordinary
UK	Shell International Investments Limited	100	Ordinary
UK	Shell International Limited	100	Ordinary
UK	Shell International Petroleum Company Limited	100	Ordinary
UK	Shell International Trading and Shipping Company Limited	100	Ordinary
UK	Shell Malaysia Limited	100	Ordinary
UK	Shell Marine Products Limited	100	Ordinary
UK	Shell Overseas Services Limited	100	Ordinary
UK	Shell Pension Reserve Company (SIPF) Limited	100	Ordinary
UK	Shell Pension Reserve Company (SOCPF) Limited	100	Ordinary
UK	Shell Pension Reserve Company (UK) Limited	100	Ordinary
UK	Shell Pensions Trust Limited	100	Ordinary
UK	Shell Property Company Limited	100	Ordinary
UK	Shell Research Limited	100	Ordinary
UK	Shell Response Limited	100	Ordinary
UK	Shell Saudi Ventures Limited	100	Ordinary
UK	Shell Shared Service Centre – Glasgow Limited	100	Ordinary
UK	Shell Subsidiary Distributors Pension Trustee Limited	100	Ordinary
UK	Shell Supplementary Pension Plan Trustees Limited	100	Ordinary

Country of incorporation	Company name	%	Class of shares held
UK	Shell Tankers (U.K.) Limited	100	Ordinary
UK	Shell Thailand Manufacturing Limited	100	Ordinary
UK	Shell Treasury Euro Company Limited	100	Ordinary
UK	Shell Trustee Solutions Limited	100	Ordinary
UK	Shell U.K. North Atlantic Limited	100	Ordinary
UK	Shell U.K. Oil Products Limited	100	Ordinary
UK	Shell Upstream Overseas Services (I) Limited	100	Ordinary
UK	Shell Ventures New Zealand Limited	100	Ordinary
UK	Shell Ventures U.K. Limited	100	Ordinary
UK	Shell Windenergy Limited	100	Ordinary
UK	Shell-Mex and B.P. Limited	60	Ordinary
UK	Stansted Fuelling Company Limited	14	Ordinary
UK	STT (Das Beneficiary) Limited*	100	Ordinary
UK	Synthetic Chemicals (Northern) Limited	100	Ordinary
UK	Telegraph Service Stations Limited	100	Ordinary
UK	The Anglo-Saxon Petroleum Company Limited	100	Ordinary
UK	The Asiatic Petroleum Company Limited	100	Ordinary
UK	The Consolidated Petroleum Company Limited	50	Ordinary
UK	The Consolidated Petroleum Supply Company Limited	50	Ordinary
UK	The Mexican Eagle Oil Company Limited	100	Ordinary
UK	The Shell Company (W.I.) Limited	100	Ordinary
UK	The Shell Company of Hong Kong Limited	100	Ordinary
UK	The Shell Company of India Limited	100	Ordinary
UK	The Shell Company of Nigeria Limited	100	Ordinary
UK	The Shell Company of Thailand Limited	100	Ordinary
UK	The Shell Company of The Philippines Limited	75	Ordinary
UK	The Shell Company of Turkey Limited	100	Ordinary
UK	The Shell Company of West Africa Limited	100	Ordinary
UK	The Shell Marketing Company of Borneo Limited	100	Ordinary
UK	Thermocomfort Limited	100	Ordinary
UK	UK Shell Pension Plan Trust Limited	100	Ordinary
UK	United Kingdom Oil Pipelines Limited	48	Ordinary
UK	Walton-Gatwick Pipeline Company Limited	52	Ordinary
UK	West London Pipeline and Storage Limited	38	Ordinary
UK	Woodlea Limited	100	Ordinary
USA	Aera Energy LLC	52	Ordinary
USA	Aera Energy Services Company	50	Ordinary
USA	Amberjack Pipeline Company	63	Ordinary
USA	Atlantic 1 Holdings LLC	20	Membership Interest
USA	Atlantic 2/3 Holdings LLC	25	Membership Interest
USA	Atlantic 4 Holdings LLC	22	Membership Interest
USA	Au Energy, LLC	50	Equity (Voting)
USA	Bacanton Power LLC	35	Membership Interest
USA	Bengal Pipeline Company LLC	58	Equity (Voting)
USA	Brazos Wind Ventures, LLC	50	Ordinary
USA	Bully 1 (US) Corporation	50	Ordinary
USA	Colonial Pipeline Company	16	Equity (Voting)
USA	Colorado Wind Ventures, LLC	50	Equity (Voting)
USA	Concha Chemical Pipeline LLC	100	Membership Interest
USA	Cri Catalyst Company LP	100	Partnership Capital
USA	Cri Sales and Services Inc.	100	Ordinary
USA	Cri U.S. LP	100	Partnership Capital
USA	Cri Zeolites Inc.	100	Ordinary
USA	Cri/Criterion Inc.	100	Ordinary
USA	Criterion Catalyst Company	100	Ordinary
USA	Criterion Catalysts & Technologies L.P.	100	Equity (Voting)
USA	Deer Park Refining Limited Partnership	50	Membership Interest

## EXHIBIT 8 CONTINUED

Country of incorporation	Company name	%	Class of shares held
USA	Explorer Pipeline Company	36	Ordinary
USA	Gaviota Terminal Company	20	Partnership Capital
USA	Gulf Coast GI LLC	100	Membership Interest
USA	Infinium USA Inc.	50	Ordinary
USA	Infinium USA L.P.	50	Ordinary
USA	Jiffy Lube International, Inc	100	Ordinary
USA	LOCAP LLC	41	Equity (Voting)
USA	Loop LLC	46	Equity (Voting)
USA	Maple Power Holdings LLC	68	Ordinary
USA	Mars Oil Pipeline Company	72	Partnership Capital
USA	Mattox Pipeline Company LLC	79	Membership Interest
USA	Mertvyi Kulluk LLC	100	Ordinary
USA	Moliva Company	50	Ordinary
USA	Motiva Enterprises LLC	50	Equity (Voting)
USA	Nedpower Mount Storm LLC	50	Membership Interest
USA	Noble Assurance Company	100	Ordinary
USA	Northern Pipeline Company	55	Membership Interest
USA	Odyssey Pipeline L.L.C.	71	Membership Interest
USA	Oryx Caspian Pipeline, L.L.C.	100	Membership Interest
USA	Pacwest Energy, LLC.	50	Equity (Voting)
USA	Pecten Arabian Company	100	Ordinary
USA	Pecten Brazil Exploration Company	100	Ordinary
USA	Pecten Midstream LLC	100	Membership Interest
USA	Pecten Orient Company	100	Ordinary
USA	Pecten Orient Company LLC	100	Membership Interest
USA	Pecten Producing Company	100	Ordinary
USA	Pecten Trading Company	100	Ordinary
USA	Pecten Victoria Company	100	Ordinary
USA	Pecten Yemen Masila Company	100	Ordinary
USA	Pelican Transmission, LLC	100	Membership Interest
USA	Pennzoil-Quaker State Company	100	Ordinary
USA	Pennzoil-Quaker State International Corporation	100	Ordinary
USA	Pennzoil-Quaker State Nominee Company	100	Ordinary
USA	Peru LNG Company LLC	20	Membership Interest
USA	Poseidon Oil Pipeline Company, L.L.C.	36	Equity (Voting)
USA	Power Limited Partnership	100	Partnership Capital
USA	Quaker State Investment Corporation	100	Ordinary
USA	RDK Ventures, LLC	50	Equity (Voting)
USA	Rilette Springs, LLC	100	Ordinary
USA	RK Caspian Shipping Company, LLC	100	Membership Interest
USA	S T Exchange, Inc.	100	Ordinary
USA	San Pablo Bay Pipeline Company LLC	100	Membership Interest
USA	Shell (US) Gas & Power M&T Holdings, Inc.	100	Ordinary
USA	Shell Broadwater Holdings LLC	100	Ordinary
USA	Shell California Pipeline Company LLC	100	Membership Interest
USA	Shell Catalysts Ventures Inc.	100	Ordinary
USA	Shell Chemical Appalachia LLC	100	Membership Interest
USA	Shell Chemical Capital Company	100	Ordinary
USA	Shell Chemicals Arabia LLC	100	Membership Interest
USA	Shell Communications Inc.	100	Ordinary
USA	Shell Deepwater Royalties Inc.	100	Ordinary
USA	Shell Downstream Inc.	100	Ordinary
USA	Shell Energy Company	100	Ordinary
USA	Shell Energy Holding GP LLC	100	Membership Interest
USA	Shell Energy Resources Company	100	Ordinary
USA	Shell EP Holdings Inc.	100	Ordinary
USA	Shell Expatriate Employment US Inc.	100	Ordinary

Country of incorporation	Company name	%	Class of shares held
USA	Shell Exploration & Production Company	100	Ordinary
USA	Shell Exploration Company Inc.	100	Ordinary
USA	Shell Frontier Oil & Gas Inc.	100	Ordinary
USA	Shell Gas Gathering Corp. #2	100	Ordinary
USA	Shell Global Solutions (US) Inc	100	Ordinary
USA	Shell Gom Pipeline Company LLC	100	Membership Interest
USA	Shell Information Technology International Inc.	100	Ordinary
USA	Shell International Exploration and Production Inc.	100	Ordinary
USA	Shell Leasing Company	100	Ordinary
USA	Shell Marine Products (US) Company	100	Ordinary
USA	Shell Midstream LP Holdings LLC	100	Membership Interest
USA	Shell Midstream Operating LLC	100	Membership Interest
USA	Shell Midstream Partners GP LLC	100	Membership Interest
USA	Shell Midstream Partners, L.P.	60	Ordinary
USA	Shell Na Gas & Power Holding Company	100	Ordinary
USA	Shell Na LNG LLC	100	Membership Interest
USA	Shell North America Gas & Power Services Company	100	Ordinary
USA	Shell Offshore and Chemical Investments Inc.	100	Ordinary
USA	Shell Offshore Response Company LLC	100	Membership Interest
USA	Shell Oil Products Company LLC	100	Membership Interest
USA	Shell Onshore Ventures Inc.	100	Ordinary
USA	Shell Pipeline Company LP	100	Partnership Capital
USA	Shell Pipeline Gp LLC	100	Membership Interest
USA	Shell Rail Operations Company	100	Ordinary
USA	Shell RSC Company	100	Ordinary
USA	Shell Technology Ventures LLC	100	Membership Interest
USA	Shell Trademark Management Inc.	100	Ordinary
USA	Shell Trading North America Company	100	Ordinary
USA	Shell Trading Risk Management, LLC	100	Membership Interest
USA	Shell Trading Services Company	100	Ordinary
USA	Shell Transportation Holdings LLC	100	Membership Interest
USA	Shell Treasury Center (West) Inc.	100	Ordinary
USA	Shell US Clean Coal Energy, Inc	100	Ordinary
USA	Shell US Gas & Power LLC	100	Membership Interest
USA	Shell US Hosting Company	100	Ordinary
USA	Shell Windenergy Inc	100	Ordinary
USA	Shell Windenergy Services Inc.	100	Ordinary
USA	Ship Shoal Pipeline Company	43	Partnership Capital
USA	Tejas Coral GP, LLC	100	Membership Interest
USA	Tejas Coral Holding, LLC	100	Membership Interest
USA	Tejas Power Generation, LLC	100	Membership Interest
USA	Texas Petroleum Group LLC	50	Equity (Voting)
USA	Texas-New Mexico Pipe Line Company	100	Ordinary
USA	The Valley Camp Coal Company	100	Ordinary
USA	Three Wind Holdings LLC	50	Ordinary
USA	Top Deer Wind Ventures LLC	50	Membership Interest
USA	Trilon Diagnostics Inc	100	Ordinary
USA	True North Energy LLC	50	Equity (Voting)
USA	Ursa Oil Pipeline Company LLC	45	Membership Interest
USA	Zeolyst International	50	Equity (Voting)
USA	Zydeco Pipeline Company LLC	100	Membership Interest
Venezuela	Petroregional Del Lago, S.A.	40	Ordinary
Venezuela	Shell Venezuela Productas C.A.	100	Ordinary
Venezuela	Shell Venezuela S.A.	100	Ordinary
Venezuela	Sucre Gas S.A	30	Ordinary
Vietnam	Shell Vietnam Ltd	100	Equity (Voting)
Zimbabwe	Central African Petroleum Refineries (Private) Limited	21	Ordinary

## EXHIBIT 12.1

---

I, Ben van Beurden, certify that:

1. I have reviewed the Annual Report on Form 20-F of Royal Dutch Shell plc (the Company);
2. Based on my knowledge, the report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by the report;
3. Based on my knowledge, the financial statements, and other financial information included in the report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in the report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which the report is being prepared;
  - designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - evaluated the effectiveness of the Company's disclosure controls and procedures and presented in the report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by the report based on such evaluation; and
  - disclosed in the report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's Board of Directors (or persons performing the equivalent functions):
  - all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarise and report financial information; and
  - any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

/s/ Ben van Beurden

---

Ben van Beurden  
Chief Executive Officer  
March 9, 2016

## EXHIBIT 12.2

---

I, Simon Henry, certify that:

1. I have reviewed the Annual Report on Form 20-F of Royal Dutch Shell plc (the Company);
2. Based on my knowledge, the report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by the report;
3. Based on my knowledge, the financial statements, and other financial information included in the report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in the report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which the report is being prepared;
  - designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - evaluated the effectiveness of the Company's disclosure controls and procedures and presented in the report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by the report based on such evaluation; and
  - disclosed in the report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's Board of Directors (or persons performing the equivalent functions):
  - all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarise and report financial information; and
  - any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

/s/ Simon Henry

---

Simon Henry  
Chief Financial Officer  
March 9, 2016

## EXHIBIT 13.1

---

In connection with the Annual Report on Form 20-F of Royal Dutch Shell plc (the Company) for the year ended December 31, 2015, as filed with the Securities and Exchange Commission on the date hereof (the Report), each of the undersigned officers of the Company certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to such officer's knowledge, that:

1. The Report fully complies, in all material respects, with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of, and for, the periods presented in the Report.

The foregoing certification is provided solely for purposes of complying with the provisions of Section 906 of the Sarbanes-Oxley Act of 2002 and is not intended to be used or relied upon for any other purpose.

/s/ Ben van Beurden

---

**Ben van Beurden**  
Chief Executive Officer

/s/ Simon Henry

---

**Simon Henry**  
Chief Financial Officer  
March 9, 2016

## EXHIBIT 99.1

---

### CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form F-3 (No. 333-199736) and the Registration Statements on Form S-8 (No. 333-126715, 333-141397, 333-171206, 333-192821 and 333-200953) of Royal Dutch Shell plc of our report dated March 9, 2016, relating to the Consolidated Financial Statements and the effectiveness of internal control over financial reporting, which appears in this Annual Report on Form 20-F.

/s/ PricewaterhouseCoopers LLP

---

PricewaterhouseCoopers LLP

London

March 9, 2016



## EXHIBIT 99.2

---

### CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form F-3 (No. 333-199736) and the Registration Statements on Form S-8 (No. 333-126715, 333-141397, 333-171206, 333-192821 and 333-200953) of the Royal Dutch Shell Dividend Access Trust of our report dated March 9, 2016, relating to the Royal Dutch Shell Dividend Access Trust Financial Statements, and the effectiveness of internal control over financial reporting, which appears in this Annual Report on Form 20-F.

/s/ PricewaterhouseCoopers CI LLP

---

PricewaterhouseCoopers CI LLP

Jersey, Channel Islands

March 9, 2016

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## FINANCIAL CALENDAR IN 2016

The Annual General Meeting will be held on May 24, 2016.

	2015 Fourth quarter [A]	2016 First quarter [B]	2016 Second quarter [B]	2016 Third quarter [B]
Results announcements	February 4	May 4	July 28	October 27
Interim dividend timetable				
Announcement date	February 4 [C]	May 4	July 28	October 27
Ex-dividend date A and B ADSs [D]	February 17	May 18	August 10	November 8
Ex-dividend date A and B shares [D]	February 18	May 19	August 11	November 10
Record date	February 19	May 20	August 12	November 11
Scrip reference share price announcement date	February 25	May 26	August 18	November 17
Closing date for scrip election and currency election [E]	March 4	June 6	August 26	November 25
Euro and sterling equivalents announcement date	March 11	June 13	September 5	December 2
Payment date	March 29	June 27	September 19	December 16

[A] In respect of the financial year ended December 31, 2015.

[B] In respect of the financial year ended December 31, 2016.

[C] The Directors do not propose to recommend any further distribution in respect of 2015.

[D] The London Stock Exchange and Euronext Amsterdam, with effect from October 6, 2014, reduced the standard settlement cycle in accordance with the Regulation of the European Parliament and of the Council on improving securities settlement in the European Union (EU) and on Central Securities Depositories (CSDs) and amending Directive 98/26/EC (the CSD Regulation). The CSD Regulation aims to harmonise EU securities settlement cycles towards a T + 2 cycle. As a result, the ex-dividend dates for A and B shares traded on these markets are one trading day later than A and B ADSs traded in the USA. Record dates are not affected.

[E] Both a different scrip and dividend currency election date may apply to shareholders holding shares in a securities account with a bank or financial institution ultimately through Euroclear Nederland. This may also apply to other shareholders who do not hold their shares either directly on the Register of Members or in the corporate sponsored nominee arrangement. Shareholders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies. A different scrip election date may also apply to registered and non-registered ADS holders. Registered ADS holders can contact The Bank of New York Mellon for the election deadline that applies. Non-registered ADS holders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies.

### REGISTERED OFFICE

Royal Dutch Shell plc  
Shell Centre  
London SE1 7NA  
United Kingdom

Registered in England and Wales  
Company number 4366849  
Registered with the Dutch Trade Register  
under number 34179503

### HEADQUARTERS

Royal Dutch Shell plc  
Carel van Bylandtlaan 30  
2596 HR The Hague  
The Netherlands

### SHAREHOLDER RELATIONS

Royal Dutch Shell plc  
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2596 HR The Hague  
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+31 (0)70 377 4088  
or  
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Shell Centre  
London SE1 7NA  
United Kingdom  
+44 (0)20 7934 3363

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www.shell.com/shareholder

### INVESTOR RELATIONS

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PO Box 162  
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USA  
+1 832 337 2034

ir-europe@shell.com  
ir-usa@shell.com  
www.shell.com/investor

### SHARE REGISTRATION

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0800 169 1679 (UK)  
+44 (0)121 415 7073

For online information about your holding  
and to change the way you receive your  
company documents:  
www.shareview.co.uk

### AMERICAN DEPOSITARY SHARES (ADSs)

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PO Box 30170  
College Station, TX 77842-3170  
USA

Overnight correspondence to:  
BNY Mellon Shareowner Services  
211 Quality Circle, Suite 210  
College Station, TX 77845  
USA  
+1 888 737 2377 (USA)  
+1 201 680 6825 (international)

shrrelations@cpushareownerservices.com  
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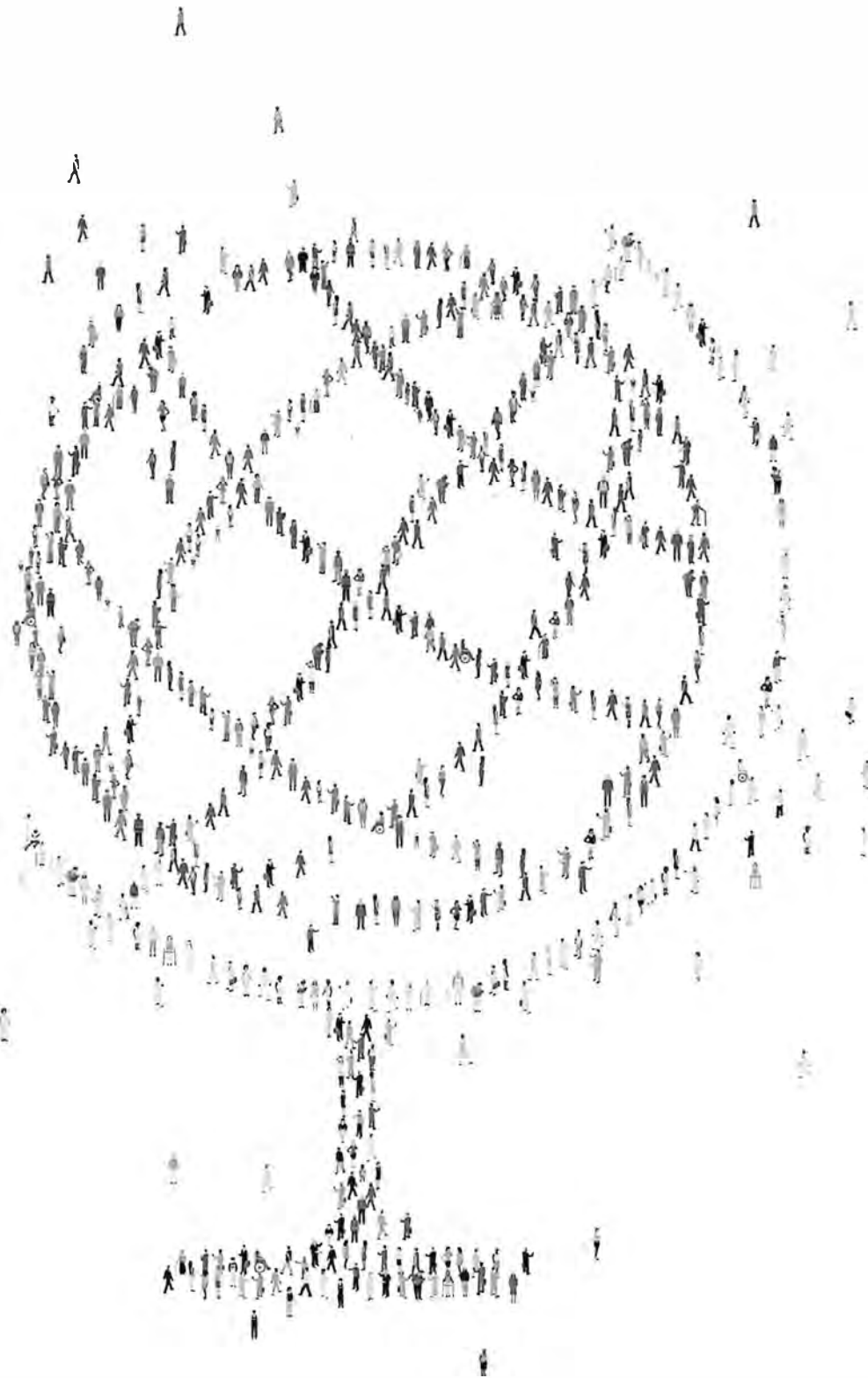
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# ATTACHMENT 78



# ANNUAL REPORT

Royal Dutch Shell plc  
Annual Report and Form 20-F  
for the year ended December 31, 2016



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#### Cover image

The cover shows how Shell works with innovators, communities, customers and partners worldwide to provide more and cleaner energy solutions.

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

## FORM 20-F

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2016  
Commission file number 001-32575

### Royal Dutch Shell plc

(Exact name of registrant as specified in its charter)  
England and Wales

(Jurisdiction of incorporation or organisation)

Carel van Bylandtlaan 30, 2596 HR, The Hague, The Netherlands

Tel. no: 011 31 70 377 9111

royaldutchshell.shareholders@shell.com

(Address of principal executive offices)

Securities registered pursuant to Section 12(b) of the Act

Title of Each Class	Name of Each Exchange on Which Registered
American Depositary Shares representing two A ordinary shares of the issuer with a nominal value of €0.07 each	New York Stock Exchange
American Depositary Shares representing two B ordinary shares of the issuer with a nominal value of €0.07 each	New York Stock Exchange
1.125% Guaranteed Notes due 2017	New York Stock Exchange
1.25% Guaranteed Notes due 2017	New York Stock Exchange
5.2% Guaranteed Notes due 2017	New York Stock Exchange
Floating Rate Guaranteed Notes due 2017	New York Stock Exchange
1.625% Guaranteed Notes due 2018	New York Stock Exchange
1.9% Guaranteed Notes due 2018	New York Stock Exchange
2.0% Guaranteed Notes due 2018	New York Stock Exchange
Floating Rate Guaranteed Notes due 2018	New York Stock Exchange
1.375% Guaranteed Notes due May 2019	New York Stock Exchange
1.375% Guaranteed Notes due September 2019	New York Stock Exchange
4.3% Guaranteed Notes due 2019	New York Stock Exchange
Floating Rate Guaranteed Notes due 2019	New York Stock Exchange
2.125% Guaranteed Notes due 2020	New York Stock Exchange
2.25% Guaranteed Notes due 2020	New York Stock Exchange
4.375% Guaranteed Notes due 2020	New York Stock Exchange
Floating Rate Guaranteed Notes due 2020	New York Stock Exchange
1.75% Guaranteed Notes due 2021	New York Stock Exchange
1.875% Guaranteed Notes due 2021	New York Stock Exchange
2.375% Guaranteed Notes due 2022	New York Stock Exchange
2.25% Guaranteed Notes due 2023	New York Stock Exchange
3.4% Guaranteed Notes due 2023	New York Stock Exchange
3.25% Guaranteed Notes due 2025	New York Stock Exchange
2.5% Guaranteed Notes due 2026	New York Stock Exchange
2.875% Guaranteed Notes due 2026	New York Stock Exchange
4.125% Guaranteed Notes due 2035	New York Stock Exchange
6.375% Guaranteed Notes due 2038	New York Stock Exchange
5.5% Guaranteed Notes due 2040	New York Stock Exchange
3.625% Guaranteed Notes due 2042	New York Stock Exchange
4.55% Guaranteed Notes due 2043	New York Stock Exchange
4.375% Guaranteed Notes due 2045	New York Stock Exchange
3.75% Guaranteed Notes due 2046	New York Stock Exchange
4.00% Guaranteed Notes due 2046	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: none

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: none

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.  
Outstanding as of December 31, 2016:

4,406,063,759 A ordinary shares with a nominal value of €0.07 each.  
3,739,277,889 B ordinary shares with a nominal value of €0.07 each.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer.

See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP   
 Other

International Financial Reporting Standards as issued by the International Accounting Standards Board.

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

Copies of notices and communications from the Securities and Exchange Commission should be sent to:

Royal Dutch Shell plc  
Carel van Bylandtlaan 30  
2596 HR, The Hague, The Netherlands  
Attn: Linda M. Szymanski

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## TERMS AND ABBREVIATIONS

### Currencies

\$	US dollar
€	euro
£	sterling

### Units of measurement

acre	approximately 0.004 square kilometres
b(/d)	barrels (per day)
boe(/d)	barrels of oil equivalent (per day); natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel
kboe(/d)	thousand barrels of oil equivalent (per day); natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel
MMBtu	million British thermal units
mtpa	million tonnes per annum
per day	volumes are converted into a daily basis using a calendar year
scf(/d)	standard cubic feet (per day)

### Products

GTL	gas to liquids
LNG	liquefied natural gas
LPG	liquefied petroleum gas
NGL	natural gas liquids

### Miscellaneous

ADS	American Depositary Share
AGM	Annual General Meeting
API	American Petroleum Institute
CCS	carbon capture and storage
CCS earnings	earnings on a current cost of supplies basis
CO <sub>2</sub>	carbon dioxide
DBP	Deferred Bonus Plan
EMTN	Euro medium-term note
EPS	earnings per share
GAAP	generally accepted accounting principles
GHG	greenhouse gas
HSSE	health, safety, security and environment
IAS	International Accounting Standard
IEA	International Energy Agency
IFRS	International Financial Reporting Standard(s)
IPIECA	the global oil and gas industry association for environmental and social issues
LTIP	Long-term Incentive Plan
IOGP	International Association of Oil & Gas Producers
OECD	Organisation for Economic Co-operation and Development
OML	oil mining lease
OPEC	Organization of the Petroleum Exporting Countries
PSC	production-sharing contract
PSP	Performance Share Plan
REMCO	Remuneration Committee
SEC	US Securities and Exchange Commission
TRCF	total recordable case frequency
TSR	total shareholder return
WTI	West Texas Intermediate

## ABOUT THIS REPORT

The Royal Dutch Shell plc Annual Report and Form 20-F (this Report) serves as the Annual Report and Accounts in accordance with UK requirements and as the Annual Report on Form 20-F as filed with the US Securities and Exchange Commission (SEC) for the year ended December 31, 2016, for Royal Dutch Shell plc (the Company) and its subsidiaries (collectively referred to as Shell). This Report presents the Consolidated Financial Statements of Shell (pages 117-152), the Parent Company Financial Statements of Shell (pages 171-179) and the Financial Statements of the Royal Dutch Shell Dividend Access Trust (pages 183-186). Cross references to Form 20-F are set out on pages O2-O3 of this Report.

Financial reporting terms used in this Report are in accordance with International Financial Reporting Standards (IFRS). The Consolidated Financial Statements comprise the financial statements of the Company and its subsidiaries. "Subsidiaries" and "Shell subsidiaries" refer to those entities over which the Company has control, either directly or indirectly. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as "joint ventures" and "joint operations" respectively, and entities over which Shell has significant influence but neither control nor joint control are referred to as "associates". "Joint ventures" and "joint operations" are collectively referred to as "joint arrangements".

The acquisition of BG Group plc (BG) was completed on February 15, 2016. For practical purposes, BG was consolidated within Shell's results with effect from February 1, 2016. The additional period is immaterial to the financial and operational performance of Shell.

In addition to the term "Shell", in this Report "we", "us" and "our" are also used to refer to the Company and its subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. The term "Shell interest" is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in an entity or unincorporated joint arrangement, after exclusion of all third-party interests. The companies in which Royal Dutch Shell plc has a direct or indirect interest are separate entities.

Except where indicated, the figures shown in the tables in this Report are in respect of subsidiaries only, without deduction of any non-controlling interest. However, the term "Shell share" is used for convenience to refer to the volumes of hydrocarbons that are produced, processed or sold through subsidiaries, joint ventures and associates. All of a subsidiary's production, processing or sales volumes (including the share of joint operations) are included in the Shell share, even if Shell owns less than 100% of the subsidiary. In the case of joint ventures and associates, however, Shell-share figures are limited only to Shell's entitlement. In all cases, royalty payments in kind are deducted from the Shell share.

The financial statements contained in this Report have been prepared in accordance with the provisions of the Companies Act 2006 and with IFRS as adopted by the European Union. As applied to the financial statements, there are no material differences from IFRS as issued by the International Accounting Standards Board (IASB); therefore, the financial statements have been prepared in accordance with IFRS as issued by the IASB. IFRS as defined above includes interpretations issued by the IFRS Interpretations Committee.

Except where indicated, the figures shown in this Report are stated in US dollars. As used herein all references to "dollars" or "\$" are to the US currency.

This Report contains forward-looking statements (within the meaning of the US Private Securities Litigation Reform Act of 1995) concerning the financial condition, results of operations and businesses of Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Shell to market risks and

statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "anticipate", "believe", "could", "estimate", "expect", "goals", "intend", "may", "objectives", "outlook", "plan", "probably", "project", "risks", "schedule", "seek", "should", "target", "will" and similar terms and phrases. There are a number of factors that could affect the future operations of Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this Report, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell's products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, fiscal and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects and delays in the reimbursement for shared costs; and (m) changes in trading conditions. Also see "Risk factors" on pages 12-15 for additional risks and further discussion. There can be no assurance that future dividend payments will match or exceed previous dividend payments. All forward-looking statements contained in this Report are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Each forward-looking statement speaks only as of the date of this Report. Neither the Company nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this Report.

This Report contains references to Shell's website and to the Shell Sustainability Report. These references are for the readers' convenience only. Shell is not incorporating by reference any information posted on [www.shell.com](http://www.shell.com) or in the Shell Sustainability Report.

### DOCUMENTS ON DISPLAY

Documents concerning the Company, or its predecessors for reporting purposes, which are referred to in this Report, have been filed with the SEC and may be examined and copied at the public reference facility maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, DC 20549, USA. For further information on the operation of the public reference room and the copy charges, call the SEC at 1-800-SEC-0330. All of the SEC filings made electronically by Shell are available to the public on the SEC website at [www.sec.gov](http://www.sec.gov) (commission file number 001-32575). This Report is also available, free of charge, at [www.shell.com/annualreport](http://www.shell.com/annualreport) or at the offices of Shell in The Hague, the Netherlands and London, United Kingdom. Copies of this Report also may be obtained, free of charge, by mail.

## STRATEGIC REPORT

### CHAIR'S MESSAGE

The successful completion of our acquisition of BG Group plc (BG) was a transformational step for Shell. It is a bold and compelling stride forward in our liquefied natural gas and deep-water growth strategy.

The overarching goal of buying BG was to create value for shareholders. The effective integration of BG into our portfolio, which has now been completed, will help deliver that value and accelerate the reshaping of Shell into a world-class investment. The foundations for building this investment case are now set.

Shell's management, under the leadership of our Chief Executive Officer Ben van Beurden, is tightly controlling capital investment and operating expenses while still investing in growth opportunities. The priority is on reducing debt and generating higher returns for shareholders.

As we move into the next decade, cash flow from our core businesses will help fund further investments while continuing to generate returns for shareholders, including dividends.

Shell Board members met with shareholders during 2016 to explain our refreshed strategy and update them on the progress of the BG integration. Members also discussed with investors how the Board sees Shell's role in powering sustainable economic growth in the decades ahead.

I would like to take this opportunity to thank our outgoing Chief Financial Officer, Simon Henry, for the dedication, drive and professionalism he has shown throughout nearly eight years of service to the Board. He has played a key role in strengthening and streamlining Shell.

#### SUSTAINABLE PROGRESS

Sustained global co-operation is vital for providing better living standards for a growing population, while limiting the accumulation of greenhouse gases (GHG). The entry into force in November of the United Nations (UN) Paris Agreement on climate change is an important foundation for developing ways to reduce global emissions effectively over the years ahead.

Meeting the long-term challenge of providing more and cleaner energy will require sustained, collaborative effort by governments, businesses and non-governmental groups. Governments can help accelerate progress around the world by establishing policy frameworks that help the private sector play a greater role through profitable competition.

There are many ways this could be accomplished, including regulations on emissions, government-led carbon pricing mechanisms and initiatives to encourage more widespread use of carbon capture and storage (CCS) technology. But any framework for combating climate change must have strong global support.

Sustainable development is about more than providing low-carbon energy to those who can afford it. It is also about reducing inequality by creating better employment opportunities, education and medical services, including for the hundreds of millions of people who still lack access to basic infrastructure. Better access to energy can play an important role in meeting these needs.

The UN has adopted 17 sustainable development goals in a major initiative to tackle the world's most serious environmental, economic and social challenges over the next decade. Society can only achieve these goals by working together.

Companies can do their part by contributing positively to the environments and communities in which they work. But no company, however large, can meet these challenges alone.

A good example of co-operation is our involvement in the Basrah Gas Company (BGC), a joint venture with the government of Iraq and Japan's Mitsubishi Corporation. BGC captures gas that would otherwise be flared from three non-Shell-operated oil fields in southern Iraq. It processed an average of 574 million standard cubic feet per day of gas in 2016. Thanks to gas it supplies to local power plants, people living in the city of Basrah benefit from much-improved supplies of electricity.

As with activities in other parts of the world that we are involved in, such projects also promote sustainable development by creating jobs for local people and supporting local suppliers, while helping provide electricity for businesses, schools and medical facilities.

#### ENERGY SOLUTIONS FOR A SHARED FUTURE

Shell has been working to reduce overall GHG emissions from its own operations for well over a decade and has helped to develop technology that can reduce emissions from a range of industries. For example, our Quest project in Canada captured and safely stored more than 1 million tonnes of carbon dioxide (CO<sub>2</sub>) deep underground in 2016, its first full year of operation.

Cleaner and lower-carbon fuels, such as natural gas and biofuels, combined with more widespread use of technologies such as CCS, are needed for limiting CO<sub>2</sub> emissions across the global economy.

We created a New Energies business in 2016 to further explore opportunities in alternative transport fuels, such as biofuels and hydrogen, along with new ways to connect energy producers and consumers, including through increased use of digital technology.

All types of energy will be required to meet the needs of the world's growing population over the decades ahead. So our New Energies business is also looking at how new technologies could work more effectively together, for example, by using gas as a partner with renewables to ensure steady power supplies when the sun does not shine or the wind does not blow. It will also act as an incubator for potentially game-changing technologies of the future.

There is no single solution to meeting the challenges of climate change and a growing population. Building a better quality of life for more people on a healthy planet will require a patchwork of energy solutions.

For many countries, replacing coal with gas for power generation can make the most dramatic cuts to emissions at lowest cost. The successful completion of the BG integration has significantly increased our ability to deliver gas around the world.

We are determined to provide shareholders with a world-class investment while contributing to sustainable global growth.

**Chad Holliday**  
Chair

## CHIEF EXECUTIVE OFFICER'S REVIEW

Strict capital discipline, substantial cost savings and our integrated business model helped support earnings during another challenging year for the oil and gas industry.

Completing the BG Group plc (BG) acquisition in February was a great achievement and undoubtedly the highlight of the year. I was also impressed by how well Shell and BG teams worked together to complete the integration well ahead of plan. BG has proven to be an important growth accelerator, as well as a catalyst for the changes we are making to our work practices, cost structure and global portfolio.

We also continued our unrelenting efforts to ensure safety wherever we work, but sadly three people still lost their lives while working for Shell in 2016. Another person was seriously injured in one of those incidents. Tragic events such as these underscore the paramount importance of focusing on safety.

### RESULTS

Income for the period was \$4.8 billion in 2016 compared with \$2.2 billion in 2015. Earnings on a current cost of supplies basis were \$3.7 billion, compared with \$4.2 billion in 2015. We distributed \$15 billion to shareholders in dividends in 2016, including those taken as shares under our Scrip Dividend Programme.

The portfolio acquired with BG, combined with the start-up of the Gorgon liquefied natural gas production facility in Australia, strengthened our role in the growing global market for gas. Our oil and gas production also increased in 2016, driven by the portfolio we acquired with BG and the major deep-water projects we started up in the Gulf of Mexico and off the coasts of Malaysia and Brazil.

Overall, our production averaged 3.7 million barrels of oil equivalent per day (boe/d), compared with 3.0 million boe/d in 2015. This increase was largely driven by the acquisition of BG.

Refining margins were weaker in our Downstream business, while a modest rise in crude oil prices gave some support to our Upstream earnings as the year progressed. This again shows the strength of the integrated energy company model.

### MORE FOCUSED

We continued to streamline our Downstream business – including divestments in Japan, Denmark and Malaysia – as part of our ongoing effort to improve efficiency by lowering costs and concentrating on our most competitive businesses.

We also sold Upstream assets, including in the Gulf of Mexico and in Canada, and decided not to go ahead with the Bab gas project in the United Arab Emirates. Our divestment drive gained momentum during the year and we plan to continue selling assets in 2017 as part of our overall divestment programme of \$30 billion for the 2016-18 period. In March 2017, we agreed to sell, in a series of transactions, all of our in-situ and undeveloped oil sands interests in Canada and to reduce our interest in the Athabasca Oil Sands Project from 60% to 10%. This is a significant step in reshaping Shell's portfolio in line with our long-term strategy. See Note 30 to the "Consolidated Financial Statements" on page 152.

The oil and gas market outlook remains uncertain. But it is important to continue investing to achieve the most competitive portfolio. That is why we took final investment decisions on petrochemicals projects in China and the USA in 2016. Excluding the acquisition of BG, our capital investment was around \$27 billion in 2016, which was about \$20 billion below the combined level for Shell and BG in 2014. We will maintain strict capital discipline and expect capital investment to be around \$25 billion in 2017, at the lower end of our \$25-30 billion range for 2017-2020.

Our priority is to reduce debt following the BG deal and support shareholder returns into the future.

### RESHAPING SHELL

We remain ready to invest in the most competitive projects. But we are working to reshape Shell into a more focused and resilient company by capping our investments for the next few years, while continuing to drive down costs and to sell assets.

Following the integration of BG, our Integrated Gas business has become an engine for generating cash and returns. The increased strength of our global gas business, combined with our other cash engines, should deliver rising free cash flow from around 2020.

We plan to continue prioritising growth in our deep-water and chemicals businesses beyond 2020. But we expect them to become major cash engines over the next decade.

This should enable Shell to achieve the scale and profitability that will help us to adapt and thrive in the transition to a lower-carbon global energy system. The evolving energy landscape offers exciting potential for future growth and further integration in our business. That is why we created a New Energies business in 2016 to explore and develop attractive commercial opportunities.

We expect demand for oil and gas to continue to grow. But we also intend to build upon our portfolio and will continue to look at the potential of low-carbon biofuels, hydrogen, solar and wind as the energy transition unfolds. Our New Energies business intends to act with conviction and commercial realism – when the value for shareholders and society is clear.

In the meantime, Shell's existing oil and gas portfolio will help drive growth in free cash flow over the next few years, across a range of possible oil prices. The integration of BG has also reinforced the foundations for generating competitive returns from our core oil and gas businesses over the longer term.

We have set an ambitious and clear path for the years ahead. We revitalised Shell in 2016 and I am confident that 2017 will be another year of progress in building our world-class investment case.

**Ben van Beurden**  
Chief Executive Officer

## STRATEGY AND OUTLOOK

### STRATEGY

Our strategy seeks to create a world-class investment case for shareholders. This strategy is underpinned by Shell's outlook for the energy sector and the need to adapt to substantial changes in the world around us. Rising global population and standards of living should continue to drive demand growth for oil and gas for decades to come. At the same time, there is a transition underway to: a lower-carbon energy system; a world with increased customer choice; continued energy price volatility; and, with the advent of low-cost shale reserves, a new dynamic in value creation in oil and gas. Safety and environmental and social responsibility are at the heart of our activities.

The ability to achieve our strategic objectives depends on how we respond to competitive forces (see "Risk factors" on page 12). We continuously assess the external environment – the markets as well as the underlying economic, political, social and environmental drivers that shape them – to anticipate changes in competitive forces and business models. We undertake regular reviews of the markets we operate in and analyse our competitors' strengths and weaknesses to understand our competitive position. We maintain business strategies and plans that focus on actions and capabilities to create and sustain competitive advantage.

### STRATEGIC AMBITIONS

Against this backdrop, Shell has the following strategic ambitions:

- to create a world-class investment case by reshaping Shell to grow free cash flow and increase returns, all underpinned by a conservative financial framework;
- to reduce our carbon intensity as part of the energy transition;
- to maintain a position of leadership and influence in our industry and to have the largest value share among our competitors; and
- to create shared value for society.

We have defined our strategy to deliver against these long-term ambitions and believe that success will lead to sustaining a world-class investment case.

### STRATEGIC THEMES

We focus on a series of strategic themes, described in categories of cash engines, growth priorities and future opportunities, each requiring distinctive technologies and risk management:

Cash engines need to deliver strong and stable returns and strong and stable free cash flow that can cover the dividend and share buybacks throughout macroeconomic cycles and leave us with enough cash to fund the future.

- Our Oil Products businesses' distinctive product offering is underpinned by a strong manufacturing base, and offers growth potential in selective markets.
- In our conventional oil and gas business, we only make investments in selective growth positions and apply our distinctive technology and operating performance to extend the productive lives of our assets and to enhance their profitability.
- In Integrated Gas, covering liquefied natural gas (LNG) worldwide, and gas-to-liquids (GTL) production facilities in Qatar and Malaysia, we have leadership positions in profitable and growing markets. We focus on delivering cash and returns, creating and securing new gas demand, and making selective new investments in additional LNG supply capacity.

Growth priorities have a clear pathway towards delivering strong returns and free cash flow in the medium term.

- In deep water, we have leading positions in the Gulf of Mexico, Brazil, Nigeria and Malaysia. Our deep-water operations have significant growth potential from our large undeveloped resource base and deployment of our technology and capabilities.
- Our Chemicals business strategy is based on investment at existing sites to increase capacity, improve efficiency and integration, and strengthen our feedstock sources. Securing new integrated growth projects and developing technologies to convert gas into chemicals are also critical strategic components.

Future opportunities should provide us with material growth in free cash flow in the next decade or beyond when the energy transition opens up new areas of value for us.

- We have a substantial position in shales in North America and Argentina. These are in production today, with substantial longer-term growth potential.
- Our New Energies business is exploring opportunities in various sectors and we intend to invest at scale in new opportunities where sufficient commercial value is available.

Through all of our strategic themes, our intention is to be in fundamentally advantaged and resilient positions. We allocate capital to each of these strategic themes to drive an optimal cash flow and returns profile over multiple timelines. When we set our plans and goals, we do so on the basis of delivering sustained returns over decades.

We aim to leverage our diverse and global business portfolio and customer-focused businesses built around the strength of the Shell brand.

### OUTLOOK FOR 2017 AND BEYOND

We continuously seek to improve our operating performance, with an emphasis on health, safety, security, environment, asset performance and operating expenses.

We have identified four levers to manage through the market down-cycle: divestments, reduced capital investment and operating expenses, and delivering new projects that will add significant cash flow.

- Following the acquisition of BG Group plc (BG), we expect the pace of our asset sales to increase with \$30 billion of divestments in 2016-18, including up to 10% of Shell's oil and gas production and exit from five to ten countries and selected midstream and Downstream assets. This is a value-driven – not a time-driven – divestment programme, and an integral element of Shell's portfolio improvement plan. We completed \$4.7 billion divestments of non-strategic assets in 2016 with further sales underway.
- We expect organic capital investment to be between \$25 billion and \$30 billion a year until 2020. We see \$30 billion as a ceiling, as we reduce debt following the BG acquisition and meet our goals for shareholder distributions. The \$25 billion level reflects the expenditure we believe is needed to maintain medium-term growth for Shell; we can go below that level if warranted by oil prices. The final outcome in any given year will be determined by the pace of development and overall affordability considerations. In 2017, we expect organic capital investment to be around \$25 billion.

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- The consolidation of BG resulted in an increase in operating expenses of \$1 billion in 2016, to \$42 billion. This also included redundancy and restructuring charges of \$1.9 billion and BG acquisition costs of \$0.4 billion. The impact of the consolidation of BG was offset by steps taken to reduce expenses, realising synergies and follow-on benefits from the acquisition. We plan to reduce our operating expenses further in 2017. We expect the combination with BG to generate pre-tax synergies of \$4.5 billion in operating and exploration expenses in 2018, up from our earlier expectation of \$3.5 billion, with further upside potential.
- In 2016, we started up eight major projects in Australia, Brazil, Kazakhstan, Malaysia and the USA. We expect these projects to add more than 250 thousand barrels of oil equivalent per day to our production and 3.9 million tonnes of LNG a year to our liquefaction capacity once fully ramped up. In addition, we took final investment decisions on new petrochemicals investments in China and the USA. We are being highly selective on new investment decisions and plan to continue this approach throughout 2017.

We welcome the efforts made by all parties to take the Paris Agreement forward and establish the necessary work programmes. We look forward to progress being made on Article 6 in particular, which has the potential to deliver the foundation elements for carbon trading at a global level. This is essential to stimulate and accelerate further development of lower carbon fuels, technologies and innovations to provide the full range of energy needs for a growing and more prosperous global population.

The statements in this "Strategy and outlook" section, including those related to our growth strategies and our expected or potential future cash flow from operations, free cash flow, capital investment, divestments, production and BG pre-tax synergies, are based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied herein. See "About this Report" on page 05 and "Risk factors" on pages 12-15. Forward-looking information includes the expected impact of the BG acquisition.

## BUSINESS OVERVIEW

### HISTORY

From 1907 until 2005, Royal Dutch Petroleum Company and The "Shell" Transport and Trading Company, p.l.c. were the two public parent companies of a group of companies known collectively as the "Royal Dutch/Shell Group". Operating activities were conducted through the subsidiaries of these parent companies. In 2005, Royal Dutch Shell plc became the single parent company of Royal Dutch Petroleum Company and of The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited.

Royal Dutch Shell plc (the Company) is a public limited company registered in England and Wales and headquartered in The Hague, the Netherlands.

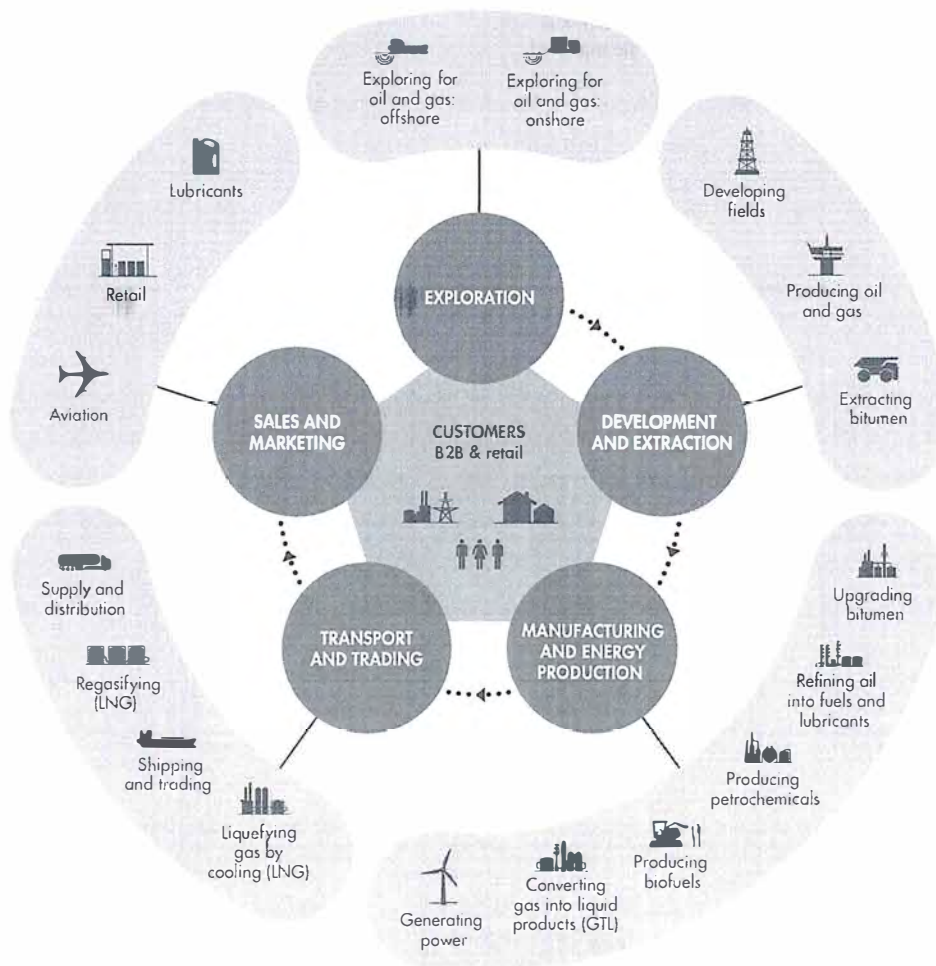
### ACTIVITIES

We explore for crude oil and natural gas worldwide, both in conventional fields and from sources such as tight rock, shale and coal formations. We work to develop new crude oil and natural gas supplies from major fields. We also extract bitumen from oil sands, which we convert into synthetic crude oil.

We cool natural gas to produce liquefied natural gas (LNG) that can be safely shipped to markets around the world, and we convert gas to liquids (GTL).

Our portfolio of refineries and chemical plants enables us to capture value from the oil and gas that we produce, turning them into a range of refined and petrochemical products which are moved and marketed around the world for domestic, industrial and transport use. The products we sell include gasoline, diesel, heating oil, aviation fuel, marine fuel, LNG for transport, lubricants, bitumen and sulphur. We also produce and sell ethanol from sugar cane in Brazil, through our Raízen joint venture.

The distinctive Shell pecten, a trademark in use since the early part of the 20th century, and trademarks in which the word Shell appears, help raise the profile of our brand globally. A strong patent portfolio underlies the technology that we employ in our various businesses. In total, we have around 11,500 granted patents and pending patent applications.





## ORGANISATION

### INTEGRATED GAS AND NEW ENERGIES

Our Integrated Gas and New Energies organisation manages LNG activities and the conversion of natural gas into GTL fuels and other products, as well as our New Energies portfolio. It includes natural gas exploration and extraction, when contractually linked to the production and transportation of LNG, and the operation of the upstream and midstream infrastructure necessary to deliver gas to market. It markets and trades crude oil, natural gas, LNG, electricity, carbon-emission rights and also markets and sells LNG as a fuel for heavy-duty vehicles and marine vessels.

### UPSTREAM

Our Upstream organisation explores for and extracts crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates the infrastructure necessary to deliver them to market.

### DOWNSTREAM

Our Downstream organisation manages different Oil Products and Chemicals activities as part of an integrated value chain, including trading activities, that turns crude oil and other feedstocks into a range of products which are moved and marketed around the world for domestic, industrial and transport use. The products we sell include gasoline, diesel, heating oil, aviation fuel, marine fuel, lubricants, bitumen and sulphur. In addition, we produce and sell petrochemicals for industrial use worldwide. Our Downstream organisation also manages our Oil Sands operations, which extract bitumen from mined oil sands and convert this into synthetic crude oil.

### PROJECTS & TECHNOLOGY

Our Projects & Technology organisation manages the delivery of our major projects and drives research and innovation to develop new technology solutions. It provides technical services and technology capability for our Integrated Gas, Upstream and Downstream activities. It is also responsible for providing functional leadership across Shell in the areas of safety and environment, contracting and procurement, wells activities and greenhouse gas management.

Our future hydrocarbon production depends on the delivery of large and complex projects (see "Risk factors" on page 12). Systematic management of lifecycle technical and non-technical risks is in place for each opportunity, with assurance and control activities embedded throughout the project lifecycle. We focus on the cost-effective delivery of projects through quality commercial agreements, supply-chain management, and construction and engineering productivity through effective planning and simplification of delivery processes. Development of our employees' project management competencies is underpinned by project principles, standards and processes. A dedicated competence framework, training, standards and processes exist for exploration and appraisal activities. In addition, we provide governance support for our non-Shell-operated ventures or projects.

### SEGMENTAL REPORTING

Our reporting segments are Integrated Gas, Upstream, Downstream and Corporate. Upstream combines the operating segments Upstream (managed by our Upstream organisation) and Oil Sands (managed by our Downstream organisation), which have similar economic characteristics. Integrated Gas, Upstream and Downstream include their respective elements of our Projects & Technology organisation. The Corporate segment comprises our holdings and treasury organisation, self-insurance activities, and headquarters and central functions. See Note 5 to the "Consolidated Financial Statements" on pages 129-130.

Segmental reporting has been changed with effect from 2016, in line with a change in the way Shell's businesses are managed. Integrated Gas was previously part of Upstream. Comparative information in this Report has been reclassified.

### Revenue by business segment (including inter-segment sales)

	\$ million		
	2016	2015	2014
<b>Integrated Gas</b>			
Third parties	25,282	21,741	33,148
Inter-segment	3,908	4,248	6,861
<b>Total</b>	<b>29,190</b>	<b>25,989</b>	<b>40,009</b>
<b>Upstream</b>			
Third parties	6,412	6,739	12,092
Inter-segment	26,524	26,824	47,838
<b>Total</b>	<b>32,936</b>	<b>33,563</b>	<b>59,930</b>
<b>Downstream</b>			
Third parties	201,823	236,384	375,752
Inter-segment	1,727	1,362	2,294
<b>Total</b>	<b>203,550</b>	<b>237,746</b>	<b>378,046</b>
<b>Corporate</b>			
Third parties	74	96	113
<b>Total</b>	<b>74</b>	<b>96</b>	<b>113</b>

### Revenue by geographical area (excluding inter-segment sales)

	\$ million		
	2016	2015	2014
Europe	81,573	95,223	154,709
Asia, Oceania, Africa	83,103	95,892	149,869
USA	49,147	50,666	80,133
Other Americas	19,768	23,179	36,394
<b>Total</b>	<b>233,591</b>	<b>264,960</b>	<b>421,105</b>

### RESEARCH AND DEVELOPMENT

In 2016, research and development expenses were \$1,014 million, compared with \$1,093 million in 2015, and \$1,222 million in 2014. Our main technology centres are in India, the Netherlands and the USA, with other centres in Canada, China, Germany, Norway, Oman and Qatar.

Technology and innovation are essential to our efforts to meet the world's energy demands in a competitive way. If we do not develop the right technology, do not have access to it or do not deploy it effectively, this could have a material adverse effect on the delivery of our strategy and our licence to operate (see "Risk factors" on page 14). We continuously look for technologies and innovations of potential relevance to our business. Our Chief Technology Officer oversees the development and deployment of new and differentiating technologies and innovations across Shell, seeking to align business and technology requirements throughout our technology maturation process.

## RISK FACTORS

The risks discussed below could have a material adverse effect separately, or in combination, on our earnings, cash flows and financial condition. Accordingly, investors should carefully consider these risks.

Measures that we use to manage or mitigate our various risks are set out in the relevant sections of this Report. The Board's responsibility for identifying, evaluating and managing our significant risks is discussed in "Corporate governance" on page 71.

### **We are exposed to fluctuating prices of crude oil, natural gas, oil products and chemicals.**

The prices of crude oil, natural gas, oil products and chemicals are affected by supply and demand, both globally and regionally. Moreover, prices for oil and gas can move independently of each other. Factors that influence supply and demand include operational issues, natural disasters, weather, political instability, conflicts, economic conditions and actions by major oil and gas producing countries. Additionally, in a low oil and gas price environment, we would generate less revenue from our Upstream and Integrated Gas businesses, and, as a result, parts of those businesses could become less profitable, or could incur losses. Additionally, low oil and gas prices have resulted, and could continue to result, in the debooking of proved oil or gas reserves, if they become uneconomic in this type of price environment. Prolonged periods of low oil and gas prices, or rising costs, can result in projects being delayed or cancelled. In addition, assets have been impaired in the past, and there could be impairments in the future. Low oil and gas prices could also affect our ability to maintain our long-term capital investment programme and dividend payments. In a high oil and gas price environment, we could experience sharp increases in costs, and, under some production-sharing contracts, our entitlement to proved reserves would be reduced. Higher prices could also reduce demand for our products, which could result in lower profitability, particularly in our Downstream business. Accordingly, price fluctuations could have a material adverse effect on our earnings, cash flows and financial condition.

See "Market overview" on page 16.

### **Our ability to deliver competitive returns and pursue commercial opportunities depends in part on the accuracy of our price assumptions.**

We use oil and gas price range assumptions, which we review on a periodic basis, to evaluate project decisions and commercial opportunities. If our assumptions prove to be incorrect, it could have a material adverse effect on our earnings, cash flows and financial condition.

See "Market overview" on page 17.

### **Our ability to achieve strategic objectives depends on how we react to competitive forces.**

We face competition in each of our businesses. We seek to differentiate our products; however, many of them are competing in commodity-type markets. Accordingly, failure to manage our costs as well as our operational performance could result in a material adverse effect on our earnings, cash flows and financial condition. Increasingly, we compete with state-owned oil and gas entities, particularly in seeking access to oil and gas resources. These entities control vastly greater quantities of oil and gas resources than the major independent oil and gas companies. State-owned entities have access to significant resources and could be motivated by political or other factors in their business decisions, which could harm our competitive position or reduce our access to desirable projects, which in turn could have a material adverse effect on our earnings, cash flows and financial condition.

See "Strategy and outlook" on page 08.

### **We seek to execute divestments in the pursuit of our strategy. We may not be able to successfully divest these assets in line with our strategy.**

We may not be able to successfully divest assets at acceptable prices or within the timeline envisaged due to market conditions or credit risk, resulting in increased pressure on our cash position and potential impairments. We may be held liable for past acts, failures to act or liabilities that are different from those foreseen. We may also face liabilities if a purchaser fails to honour all of its commitments. Accordingly, if we are unable to divest assets at acceptable prices or within our envisaged timeframe, this could have a material adverse effect on our earnings, cash flows and financial condition.

See "Strategy and outlook" on pages 08-09.

### **Our future hydrocarbon production depends on the delivery of large and complex projects, as well as on our ability to replace proved oil and gas reserves.**

We face numerous challenges in developing capital projects, especially those which are large and complex. Challenges include uncertain geology, frontier conditions, the existence and availability of necessary technology and engineering resources, the availability of skilled labour, the existence of transportation infrastructure, project delays, the expiration of licences and potential cost overruns, as well as technical, fiscal, regulatory, political and other conditions. These challenges are particularly relevant in certain developing and emerging-market countries such as Iraq, in frontier areas and in deep-water fields, such as off the coast of Brazil. We may fail to assess or manage these and other risks properly. Such potential obstacles could impair our delivery of these projects, our ability to fulfil the value potential at the time of the project investment approval, and/or our ability to fulfil related contractual commitments. These could lead to impairments and could have a material adverse effect on our earnings, cash flows and financial condition.

Future oil and gas production will depend on our access to new proved reserves through exploration, negotiations with governments and other owners of proved reserves and acquisitions, as well as on developing and applying new technologies and recovery processes to existing fields and mines. Failure to replace proved reserves could result in lower future production, potentially having a material adverse effect on our earnings, cash flows and financial condition.

See "Business overview" on page 11.

Oil and gas production available for sale	Million boe [A]		
	2016	2015	2014
Shell subsidiaries	1,158	880	895
Shell share of joint ventures and associates	184	198	229
<b>Total</b>	<b>1,342</b>	<b>1,078</b>	<b>1,124</b>

[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

Proved developed and undeveloped oil and gas reserves [A][B] (at December 31)	Million boe [C]		
	2016	2015	2014
Shell subsidiaries	11,040	9,117	10,181
Shell share of joint ventures and associates	2,208	2,630	2,900
<b>Total</b>	<b>13,248</b>	<b>11,747</b>	<b>13,081</b>

[A] We manage our total proved reserves base without distinguishing between proved reserves from subsidiaries and those from joint ventures and associates.

[B] Includes proved reserves associated with future production that will be consumed in operations.

[C] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

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The estimation of proved oil and gas reserves involves subjective judgements based on available information and the application of complex rules; therefore, subsequent downward adjustments are possible.

The estimation of proved oil and gas reserves involves subjective judgements and determinations based on available geological, technical, contractual and economic information. Estimates could change because of new information from production or drilling activities, or changes in economic factors, including changes in the price of oil or gas and changes in the regulatory policies of host governments or other events. Estimates could also be altered by acquisitions and divestments, new discoveries, and extensions of existing fields and mines, as well as the application of improved recovery techniques. Published proved oil and gas reserves estimates could also be subject to correction due to errors in the application of published rules and changes in guidance. Downward adjustments could indicate lower future production volumes and could also lead to impairment of some assets. This could have a material adverse effect on our earnings, cash flows and financial condition.

See "Supplementary information – oil and gas (unaudited)" on page 153.

**Rising climate change concerns have led and could lead to additional legal and/or regulatory measures which could result in project delays or cancellations, a decrease in demand for fossil fuels and additional compliance obligations, and therefore could adversely impact our costs and/or revenue.**

There is continued and increased attention to climate change from all sectors of society. This attention has led, and we expect it to continue to lead, to additional regulations designed to reduce greenhouse gas (GHG) emissions and potential demand for fossil fuels. Furthermore, we expect that a growing share of our GHG emissions will be subject to regulation, resulting in increased compliance costs and operational restrictions. If our GHG emissions rise alongside our ambitions to increase the scale of our business, our regulatory burden will increase proportionally.

We also expect that GHG regulation will focus more on suppressing demand for fossil fuels. This could result in lower revenue. In addition, we expect that GHG emissions from flaring will rise where no gas-gathering systems are in place. We intend to continue to work with our partners to find ways to capture the gas that is flared. However, governmental support is fundamental to ensure the success of individual initiatives. There is no assurance that we will be able to obtain government support.

If we are unable to find economically viable, as well as publicly acceptable, solutions that reduce our GHG emissions and/or GHG intensity for new and existing projects or products, we could experience additional costs or financial penalties, delayed or cancelled projects, and/or reduced production and reduced demand for hydrocarbons, which could have a material adverse effect on our earnings, cash flows and financial condition.

See "Environment and society" on pages 54-55.

**Our operations expose us to social instability, civil unrest, terrorism, piracy, acts of war and risks of pandemic diseases that could have a material adverse effect on our business.**

As seen in recent years in Nigeria, North Africa and the Middle East, social and civil unrest, both in the countries in which we operate and elsewhere, can and do affect us. Such potential developments that could have a material adverse effect on our earnings, cash flows and financial condition include: acts of political or economic terrorism; acts of maritime piracy; conflicts including war and civil unrest (including disruptions by non-governmental and political organisations); and local security concerns that threaten the safe operation of our facilities and transport of our products. Pandemic diseases can also affect our operations directly and indirectly. If such risks materialise, they could result in injuries, loss of life, environmental harm and disruption to business activities, which in turn could have a material adverse effect on our earnings, cash flows and financial condition.

See "Environment and society" on page 58.

We operate in more than 70 countries that have differing degrees of political, legal and fiscal stability. This exposes us to a wide range of political developments that could result in changes to contractual terms, laws and regulations. In addition, we and our joint arrangements and associates face the risk of litigation and disputes worldwide.

Developments in politics, laws and regulations can and do affect our operations. Potential impacts include: forced divestment of assets; expropriation of property; cancellation or forced renegotiation of contract rights; additional taxes including windfall taxes, restrictions on deductions and retroactive tax claims; antitrust claims; changes to trade compliance regulations; price controls; local content requirements; foreign exchange controls; changes to environmental regulations; changes to regulatory interpretations and enforcement; and changes to disclosure requirements. A prolonged period of lower oil and gas prices could affect the financial, fiscal, legal, political and social stability of countries that rely significantly on oil and gas revenue. This could, in turn, have a material adverse effect on our earnings, cash flows and financial condition. It also could have an adverse effect on the ultimate value derived from the assets acquired from BG Group plc.

From time to time, cultural and political factors play a role in unprecedented and unanticipated judicial outcomes that could adversely affect Shell. Non-compliance with policies and regulations could result in regulatory investigations, litigation and ultimately sanctions. Certain governments and regulatory bodies have, in Shell's opinion, exceeded their constitutional authority by: attempting unilaterally to amend or cancel existing agreements or arrangements; failing to honour existing contractual commitments; and seeking to adjudicate disputes between private litigants. Additionally, certain governments have adopted laws and regulations that could potentially force us to violate other countries' laws and regulations, therefore potentially subjecting us to both criminal and civil sanctions. Such developments and outcomes could have a material adverse effect on our earnings, cash flows and financial condition.

See "Corporate governance" on page 72.

**The nature of our operations exposes us, and the communities in which we work, to a wide range of health, safety, security and environment risks.**

The health, safety, security and environment (HSSE) risks to which we, and the communities in which we work, are potentially exposed cover a wide spectrum, given the geographic range, operational diversity and technical complexity of our operations. These risks include the effects of natural disasters (including weather events), earth tremors, social unrest, personal health and safety lapses, and crime. If a major HSSE risk materialises, such as an explosion or hydrocarbon spill, this could result in injuries, loss of life, environmental harm, disruption of business activities, and loss or suspension of our licence to operate or ability to bid on mineral rights. Accordingly, this would have a material adverse effect on our earnings, cash flows and financial condition.

Our operations are subject to extensive HSSE regulatory requirements that often change and are likely to become more stringent over time. Operators could be asked to adjust their future production plans, as the government of the Netherlands has done, affecting production and costs. We could incur significant additional costs in the future due to compliance with HSSE requirements or as a result of violations of, or liabilities under, laws and regulations, such as fines, penalties, clean-up costs and third-party claims. Therefore, HSSE risks, should they materialise, could have a material adverse effect on our earnings, cash flows and financial condition.

See "Environment and society" on page 53.

**A further erosion of the business and operating environment in Nigeria could have a material adverse effect on us.**

In our Nigerian operations, we face various risks and adverse conditions. These include: security issues surrounding the safety of our people, host communities and operations; sabotage and theft; our ability to enforce existing contractual rights; litigation; limited infrastructure; potential legislation that could increase our taxes or costs of operations; the effect of lower oil and gas prices on the government budget; and regional instability created by militant activities. Any of these risks or adverse conditions could have a material adverse effect on our earnings, cash flows and financial condition.

See "Upstream" on page 31.

## Risk factors *Continued*

### **Production from the Groningen field in the Netherlands continues to cause earthquakes that affect local communities.**

Shell and ExxonMobil are 50:50 shareholders in Nederlandse Aardolie Maatschappij B.V. (NAM), which Shell operates. An important part of NAM's gas production comes from the onshore Groningen gas field, in which EBN, a Dutch government entity, has a 40% interest and NAM a 60% interest. Production from the Groningen field has caused earthquakes in the past which are expected to continue. The earthquakes have caused damage to houses and other structures in the region and complaints from the local community. Additional earthquakes could have a material adverse effect on our earnings, cash flows and financial condition. Since 2013, the Minister of Economic Affairs (Minister) has imposed a cap on production from the Groningen field in order to reduce the impact of the earthquakes on the neighbouring communities. In September 2016, the Minister approved the production of 24 billion cubic metres per annum from the Groningen field until October 1, 2021. At the request of the Dutch parliament, the Minister will review annually whether new circumstances have arisen that call for a further reduction of the production. The first such annual review is expected by October 1, 2017.

See "Upstream" on page 29.

### **Our future performance depends on the successful development and deployment of new technologies and new products.**

Technology and innovation are essential to our efforts to meet the world's energy demands in a competitive way. If we do not develop the right technology and products, do not have access to such technology and products or do not deploy these effectively, there could be a material adverse effect on the delivery of our strategy and our licence to operate. We operate in environments where advanced technologies are utilised. While we take measures to ensure that such technologies and products are safe for the environment and public health based on today's knowledge, there is always the possibility of unknown or unforeseeable technological failures or environmental and health effects that could harm our reputation and licence to operate or expose us to litigation or sanctions. We seek to benefit financially from developing and deploying advanced technology. The associated costs are sometimes underestimated or delays occur. Any of these occurrences could have a material adverse effect on our earnings, cash flows and financial condition.

See "Business overview" on page 11.

### **We are exposed to treasury and trading risks, including liquidity risk, interest rate risk, foreign exchange risk, commodity price risk and credit risk. We are affected by the global macroeconomic environment as well as financial and commodity market conditions.**

Our subsidiaries, joint arrangements and associates are subject to differing economic and financial market conditions around the world. Political or economic instability affects such markets.

We use debt instruments, such as bonds and commercial paper, to raise significant amounts of capital. Should our access to debt markets become more difficult, the potential impact on our liquidity could have a material adverse effect on our operations. Our financing costs could also be affected by interest rate fluctuations or any credit rating deterioration.

We are exposed to changes in currency values and to exchange controls as a result of our substantial international operations. Our reporting currency is the dollar. However, to a material extent, we hold assets and are exposed to liabilities in other currencies. See Note 20 to the "Consolidated Financial Statements" on page 144. Commodity trading is an important component of our Upstream, Integrated Gas and Downstream businesses and is integrated with our supply business. While we undertake some foreign exchange and commodity hedging, we do not do so for all of our activities. Furthermore, even where hedging is in place, it may not function as expected.

We are exposed to credit risk; our counterparties could fail or could be unable to meet their payment and/or performance obligations under contractual arrangements. Although we do not have significant direct exposure to sovereign debt, it is possible that our partners and customers may have exposure which could impair their ability to meet their obligations. In addition, our pension plans may invest in government bonds, and therefore could be affected by a sovereign debt downgrade or other default.

If any of the risks set out above materialise, they could have a material adverse effect on our earnings, cash flows and financial condition.

See "Liquidity and capital resources" on page 50.

### **We have substantial pension commitments, whose funding is subject to capital market risks.**

Liabilities associated with defined benefit pension plans can be significant, as can the cash funding requirement of such plans; both depend on various assumptions. Volatility in capital markets, and the resulting consequences for investment performance and interest rates, could result in significant changes to the funding level of future liabilities, and could also increase balance sheet liabilities. We operate a number of defined benefit pension plans and, in case of a shortfall, we could be required to make substantial cash contributions (depending on the applicable local regulations) resulting in a material adverse effect on our earnings, cash flows and financial condition.

See "Liquidity and capital resources" on page 49.

### **We mainly self-insure our risk exposure. We could incur significant losses from different types of risks that are not covered by insurance from third-party insurers.**

Our insurance subsidiaries provide hazard insurance coverage to other Shell entities and only reinsure a portion of their risk exposures. Such reinsurance would not provide any material coverage in the event of a large-scale safety and environmental incident. Similarly, in the event of a material safety and environmental incident, there would be no material proceeds available from third-party insurance companies to meet our obligations. Therefore, we may incur significant losses from different types of risks that are not covered by insurance from third-party insurers, potentially resulting in a material adverse effect on our earnings, cash flows and financial condition.

See "Corporate" on page 48.

### **An erosion of our business reputation could have a material adverse effect on our brand, our ability to secure new resources and our licence to operate.**

Our reputation is an important asset. The Shell General Business Principles (Principles) govern how Shell and its individual companies conduct their affairs, and the Shell Code of Conduct (Code) instructs employees and contract staff on how to behave in line with the Principles. Our challenge is to ensure that all employees and contract staff, more than 100,000 in total, comply with these Principles and this Code. Real or perceived failures of governance or regulatory compliance could harm our reputation. This could impact our licence to operate, damage our brand, reduce consumer demand for our branded products, harm our ability to secure new resources and contracts, and limit our ability to access capital markets. Many other factors, including the materialisation of the risks discussed in several of the other risk factors, could impact our reputation and could have a material adverse effect on our earnings, cash flows and financial condition.

See "Corporate governance" on page 68.

**Many of our major projects and operations are conducted in joint arrangements or associates. This could reduce our degree of control, as well as our ability to identify and manage risks.**

In cases where we are not the operator, we have limited influence over, and control of, the behaviour, performance and costs of operation of such joint arrangements or associates. Despite not having control, we could still be exposed to the risks associated with these operations, including reputational, litigation (where joint and several liability could apply) and government sanction risks. For example, our partners or members of a joint arrangement or an associate (particularly local partners in developing countries) may not be able to meet their financial or other obligations to the projects, threatening the viability of a given project. Where we are the operator of a joint arrangement, the other partner(s) could still be able to veto or block certain decisions, which could be to our overall detriment. Accordingly, where we have limited influence, we are exposed to operational risks that could have a material adverse effect on our earnings, cash flows and financial condition.

See "Corporate governance" on page 72.

**We rely heavily on information technology systems for our operations.**

The operation of many of our business processes depends on reliable information technology (IT) systems. Our IT systems are increasingly concentrated in terms of geography, number of systems, and key contractors supporting the delivery of IT services. Shell, like many other multinational companies, is the target of attempts to gain unauthorised access to our IT systems and our data through various channels, including more sophisticated and coordinated attempts often referred to as advanced persistent threats. Timely detection is becoming increasingly complex but we seek to detect and investigate all such security incidents, aiming to prevent their recurrence. Disruption of critical IT services, or breaches of information security, could harm our reputation and have a material adverse effect on our earnings, cash flows and financial condition.

See "Corporate" on page 48.

**Violations of antitrust and competition laws carry fines and expose us and/or our employees to criminal sanctions and civil suits.**

Antitrust and competition laws apply to Shell and its joint ventures and associates in the vast majority of countries in which we do business. Shell and its joint ventures and associates have been fined for violations of antitrust and competition laws. These include a number of fines in the past by the European Commission Directorate-General for Competition (DG COMP). Due to the DG COMP's fining guidelines, any future conviction of Shell or any of its joint ventures or associates for violation of European Union (EU) competition law could result in significantly larger fines and have a material adverse effect on us. Violation of antitrust laws is a criminal offence in many countries, and individuals can be imprisoned or fined. Furthermore, it is now common for persons or corporations allegedly injured by antitrust violations to sue for damages. Any violation of these laws or harm to our reputation could have a material adverse effect on our earnings, cash flows and financial condition.

See "Corporate governance" on page 68.

**Violations of anti-bribery and corruption laws and anti-money laundering laws carry fines and expose us and/or our employees to criminal sanctions and civil suits.**

In 2010, we agreed to a Deferred Prosecution Agreement (DPA) with the US Department of Justice for violations of the Foreign Corrupt Practices Act (FCPA), which arose in connection with our use of the freight-forwarding firm Panalpina. In 2013, following our fulfilment of the terms of the DPA, the criminal charges filed in connection with the DPA were dismissed.

Authorities in various countries are investigating our investment in Nigerian oil block OPL 245 and the 2011 settlement of litigation pertaining to that block. On January 27, 2017, the Nigeria Federal High Court issued an Interim Order of Attachment for oil block OPL 245, pending the conclusion of the investigation. Shell has applied to discharge this order on constitutional and procedural grounds. On February 14, 2017, we received notice of the request of indictment from the Italian prosecution office in Milan with respect to this matter.

Any violation of the FCPA or other relevant anti-bribery and corruption legislation or anti-money laundering legislation could harm our reputation and have a material adverse effect on our earnings, cash flows and financial condition.

See "Corporate governance" on page 68.

**Violations of data protection laws carry fines and expose us and/or our employees to criminal sanctions and civil suits.**

Data protection laws apply to Shell and its joint ventures and associates in the vast majority of countries in which we do business. Over 100 countries have data protection laws and regulations. Additionally, the EU General Data Protection Regulation, which will be applicable from May 2018, increases penalties up to a maximum of 4% of global annual turnover for breach of the regulation. Non-compliance with data protection laws could expose us to regulatory investigations, which could result in fines and penalties. Regulators may also issue orders to stop processing personal data in addition to imposing fines, which could disrupt operations. We could also be subject to litigation from persons or corporations allegedly affected by data protection violations. Violation of data protection laws is a criminal offence in some countries, and individuals can be imprisoned or fined. Any violation of these laws or harm to our reputation could have a material adverse effect on our earnings, cash flows and financial condition.

See "Corporate governance" on page 68.

**Violations of trade compliance laws and regulations, including sanctions, carry fines and expose us and our employees to criminal sanctions and civil suits.**

We use "trade compliance" as an umbrella term for various national and international laws designed to regulate the movement of items across national boundaries and restrict or prohibit trade and other dealings with certain parties. The number and breadth of such laws continue to expand. For example, the EU and the USA continue to impose restrictions and prohibitions on certain transactions involving Syria. In addition, the USA continues to have sanctions in place against Iran. Additional restrictions and controls directed at defined oil and gas activities in Russia, which were imposed by the EU and the USA in 2014, are still in force. In addition to the significant trade-control programmes administered by the EU and the USA, many other nations are also adopting such programmes. Any violation of one or more of these regimes could lead to loss of import or export privileges, significant penalties on or prosecution of Shell or its employees, and could harm our reputation and have a material adverse effect on our earnings, cash flows and financial condition.

See "Corporate governance" on page 68.

Investors should also consider the following, which could limit shareholder remedies.

**The Company's Articles of Association determine the jurisdiction for shareholder disputes. This could limit shareholder remedies.**

Our Articles of Association generally require that all disputes between our shareholders in such capacity and the Company or our subsidiaries (or our Directors or former Directors), or between the Company and our Directors or former Directors, be exclusively resolved by arbitration in The Hague, the Netherlands, under the Rules of Arbitration of the International Chamber of Commerce. Our Articles of Association also provide that, if this provision is to be determined invalid or unenforceable for any reason, the dispute could only be brought before the courts of England and Wales. Accordingly, the ability of shareholders to obtain monetary or other relief, including in respect of securities law claims, could be determined in accordance with these provisions.

## MARKET OVERVIEW

We maintain a large business portfolio across a fully-integrated value chain and are therefore exposed to crude oil, natural gas, oil product and chemical prices (see "Risk factors" on page 12). This diversified portfolio helps us mitigate the impact of price volatility. Our annual planning cycle and periodic portfolio reviews aim to ensure that our levels of capital investment and operating expenses are affordable in the context of a volatile price environment. We test the resilience of our projects and other opportunities against a range of crude oil, natural gas, oil product and chemical prices and costs. We also aim to maintain a strong balance sheet to provide resilience against weak market prices.

### GLOBAL ECONOMIC GROWTH

One of the key drivers of oil and gas demand is economic activity. According to the International Monetary Fund's (IMF) January 2017 *World Economic Outlook*, global economic growth was 3.1% in 2016, compared with 3.2% in 2015. Growth in 2016 fell short of the IMF's forecast of 3.4% made at the beginning of the year. Lower than expected economic growth in the USA, together with recessions in Brazil and Russia, contributed to lower global economic growth than forecast.

The IMF estimated that the eurozone economy grew by 1.7% in 2016, compared with 2.0% in 2015, US economic growth was 1.6%, compared with 2.6% in 2015, and Chinese economic growth was 6.7% compared with 6.9% in 2015. The average economic growth rate for advanced economies slowed to 1.6% in 2016 from 2.1% in 2015, while growth in emerging markets and developing economies was 4.1%, unchanged from 2015.

The IMF expects globaleconomic growth to rise to 3.4% in 2017, which is close to the annual average of 3.5% for the previous 10 years. The IMF expects growth of 1.6% in the eurozone, 6.5% in China and 2.3% in the USA.

### GLOBAL PRICES, DEMAND AND SUPPLY

The following table provides an overview of the main crude oil and natural gas price markers that we are exposed to:

#### Oil and gas average industry prices [A]

	2016	2015	2014
Brent (\$/b)	44	52	99
West Texas Intermediate (\$/b)	43	49	93
Henry Hub (\$/MMBtu)	2.5	2.6	4.3
UK National Balancing Point (pence/therm)	35	43	50
Japan Customs-cleared Crude (\$/b)	42	55	105

[A] Yearly average prices are based on daily spot prices. The 2016 average price for Japan Customs-cleared Crude excludes December data.

### CRUDE OIL

Brent crude oil, an international benchmark, traded between \$26 per barrel and \$56/b in 2016, ending the year at \$55/b. It averaged \$44/b, the lowest level since 2004 and \$8/b less than in 2015.

On a yearly average basis, West Texas Intermediate crude oil traded at a \$0.4/b discount to Brent in 2016, compared with \$3/b in 2015. The discount narrowed as production in the USA declined in response to lower oil prices and logistical bottlenecks were removed due to added pipeline capacity between the landlocked trading hub in Cushing, Oklahoma, and demand centres such as refineries and export terminals.

Reflecting the economic conditions described above, global oil demand grew by 1.5% (or 1.5 million barrels per day) to 96.5 million b/d, according to the International Energy Agency's (IEA) January 2017 *Oil Market Report*. This annual oil demand growth was mainly driven by emerging economies, where demand grew by 1.2 million b/d, due to increased use by final consumers and continued strategic petroleum reserves building in Asia, particularly China. Annual oil demand growth in 2016 was 0.5 million b/d less than in 2015 when demand rose by 2.0 million b/d. The effect of lower crude oil prices on crude oil demand growth was less in 2016 than in 2015 because the average price was only \$8/b lower than in 2015, whereas the average price in 2015 was \$47/b lower than in 2014.

Oil supply in 2016 is estimated at 96.9 million b/d, an increase of 0.3 million b/d compared with 2015. Oil markets remained well supplied in 2016 because oil supply was 0.4 million b/d higher than demand, according to the IEA. In 2015, oil supply was 1.6 million b/d higher than demand. Consequently, crude oil and oil products inventory levels remained well above the average of the last five years. The IEA reported in the January 2017 *Oil Market Report* that commercial and government-controlled inventory levels for OECD countries for September 2016 were estimated at around 4,650 million barrels, some 300 million barrels above the average of the last five years, putting downward pressure on prices.

On the non-OPEC supply side, the US Energy Information Administration reported a continuation of a decline in US supply, which started in mid-2015, until the end of the third quarter of 2016. US production increased towards the end of the year as prices rose. US production fell by 0.5 million b/d in 2016 compared with 2015. Other non-OPEC producers also responded to the low oil price environment, contributing to a year-on-year fall in total non-OPEC production of 0.8 million b/d.

OPEC oil production grew by 1 million b/d year-on-year driven mainly by rising output in Saudi Arabia and Iraq, as well as in Iran following the lifting of sanctions. OPEC oil production reached a record high of about 33.4 million b/d in October 2016, according to the IEA. At a meeting in Vienna in November, OPEC announced its intention to support prices by reducing its collective production level by as much as 1.2 million b/d. Several non-OPEC producers, most notably Russia, agreed in December to also reduce production by a total of around 0.6 million b/d, which helped to drive up prices in that month.

Looking ahead, higher global economic activity as indicated by IMF's global economic outlook and moderate oil price levels at the beginning of 2017 could attract around 1.3 million b/d of additional demand growth in 2017, according to the IEA. If OPEC and the co-operating non-OPEC resource holders reduce production as agreed at the end of 2016, then the global production level in 2017 could be similar to that in 2016, leading to market tightening and withdrawals from storage. This would support prices. Looking further ahead, the low oil price environment has led to postponements and cancellations of new supply projects, which could lead to further market tightening three to five years from now. In such a scenario, we believe the Brent crude oil price around 2020 may average in a range of 60% to 80% higher than the 2016 average. We believe that price weakening, possibly at 2016 levels, could occur if OPEC and those non-OPEC resource holders abandon their production cut pledges, the global economy accelerates less quickly, or if other non-OPEC producers, such as US shale producers, effectively manage costs and deliver cheaper oil to the market. Further price upside can be expected when markets tighten more rapidly due to a faster acceleration of the global economy, continued supply cuts from major resource holders or occurrence of more supply disruptions in major producing countries.

## NATURAL GAS

Global gas demand grew by about 1% in 2016, which is much lower than the average annual growth rate of 2.3% in the past decade. A combination of mild weather and continued moderate global economic growth led to a lower rate of demand growth in most regions. The global liquefied natural gas (LNG) market grew by 17 million tonnes year on year. Supply growth was primarily driven by the start-up of new projects in Australia and, to a lesser extent, in the USA. The majority of additional LNG supply was absorbed by China, India and the Middle East, offsetting a decline in imports by Japan and Latin America and resulting in lower than expected LNG volumes delivered to Europe.

Unlike crude oil pricing, which is global in nature, natural gas prices can vary significantly from region to region.

In the USA, the natural gas price at the Henry Hub averaged \$2.5 per million British thermal units (MMBtu) in 2016, 4% lower than in 2015, and traded in a range of \$1.5-3.8/MMBtu. Mild winter weather led to a record of 2.5 trillion cubic feet (tcf) of gas in storage at the end of March. Henry Hub prices remained below \$2.3/MMBtu until June. Thereafter, prices increased steadily to \$3.1/MMBtu in September due to warm summer weather driving gas demand for electricity generation, declining domestic gas production and new demand from LNG exports as two liquefaction trains on the US Gulf Coast began operations. Prices averaged \$3.6/MMBtu in December, driven by weather-related demand growth and falling gas production.

In Europe, natural gas prices fell during 2016. The average price at the UK National Balancing Point was 23% lower than in 2015. At the main continental European gas trading hubs – in the Netherlands, Belgium and Germany – prices were also weaker. Lower prices reflected the net effect of abundant supply, for example from Russia and Algeria, despite some demand growth driven by electricity generation, other industrial-sector demand and increased gas use for transportation.

We also produce and sell natural gas in regions where supply, demand and regulatory circumstances differ markedly from those in the USA or Europe. Long-term contracted LNG prices in the Asia-Pacific region generally fell in 2016 as they are predominantly indexed to the price of Japan Customs-cleared Crude, which has fallen as global crude oil prices have weakened.

Looking ahead, we expect gas markets in North America, Europe and Asia Pacific to be well supplied over the next few years, despite LNG demand growth in the Middle East and in Asia, in particular. Price developments are very uncertain and dependent on many factors. In the USA, we believe that Henry Hub gas prices in 2020 could average 20-60% higher than the 2016 average, at which level demand growth for LNG exports, pipeline exports to Mexico and domestic/industrial use could balance supply growth from, in particular, the Marcellus and Utica shale plays. In Europe, we believe gas prices in 2020 could be driven by LNG imports from the USA, and the price at the UK National Balancing Point could average 15-70% higher than the 2016 average. In the LNG markets of Asia Pacific, gas prices are expected to continue to be strongly influenced by oil prices, but also increasingly by Henry Hub gas prices. In 2020, we expect the price of LNG delivered under contract to Asia-Pacific markets to be 10-70% higher than the 2016 average.

## CRUDE OIL AND NATURAL GAS PRICE ASSUMPTIONS

Our ability to deliver competitive returns and pursue commercial opportunities ultimately depends on the accuracy of our price assumptions (see "Risk factors" on page 12). The range of possible future crude oil and natural gas prices used in project and portfolio evaluations is determined after a rigorous assessment of short-, medium- and long-term market drivers. Historical analyses, trends and statistical volatility are considered in this assessment, as are analyses of market fundamentals such as possible future economic conditions, geopolitics, actions by OPEC and other major resource holders, production costs and the balance of supply and demand. Sensitivity analyses are used to test the impact of low-price drivers, such as economic weakness, and high-price drivers, such as strong economic growth and low investment in new production capacity. Short-term events, such as relatively warm winters or cool summers, affect demand. Supply disruptions, due to weather or political instability, contribute to price volatility.

## REFINING MARGINS

Refining marker average industry gross margins	(\$/b)		
	2016	2015	2014
US West Coast	12.9	19.4	9.5
US Gulf Coast Coking	9.1	10.6	5.5
Rotterdam Complex	2.5	4.7	1.3
Singapore	2.8	4.7	(0.1)

Industry gross refining margins were lower on average in 2016 than in 2015 in each of the key refining hubs of Europe, Singapore and the USA. Oil products demand growth was stronger globally, with an increase of 1.5 million b/d compared with 2015, driven in part by the lower crude oil price environment. In spite of overcapacity in the refining industry, some new refinery capacity came on line in 2016, which could weaken margins going forward.

In 2017, we expect demand for products such as gasoline and middle distillates to continue to grow and support margins, driven by increasing economic activity as well as freight and passenger transport. However, ample refining capacity and potentially strengthening feedstock prices could narrow margins. Overall, we believe margins could be similar to 2016, but demand and supply-side uncertainty may drive significant volatility.

## PETROCHEMICAL MARGINS

Cracker industry margins	(\$/tonne)		
	2016	2015	2014
North East/South East Asia naphtha	672	463	296
Western Europe naphtha	598	617	613
US ethane	450	498	798

Asian naphtha cracker margins rose strongly in 2016 for the second consecutive year due to rising demand and periods of reduced cracker capacity availability. European naphtha cracker margins remained at similar levels to 2015, supported by demand growth. US ethane cracker margins declined as lower crude oil prices reduced the margin available in the ethane to polyethylene value chain.

The outlook for petrochemical margins in 2017 is very uncertain. Demand for petrochemicals is closely linked to economic growth as well as product prices. Product prices reflect prices of raw materials which are closely linked to crude oil and natural gas prices. The balance of these factors will drive margins.

The statements in this "Market overview" section, including those related to our price forecasts, are based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied herein. See "About this Report" on page 05 and "Risk factors" on pages 12-15.

## SUMMARY OF RESULTS

### Key statistics

\$ million, except where indicated

	2016	2015	2014
Income for the period	4,777	2,200	14,730
Current cost of supplies adjustment	(1,085)	1,955	4,366
Total segment earnings [A][B], of which:	3,692	4,155	19,096
Integrated Gas	2,529	3,170	10,610
Upstream	(3,674)	(8,833)	5,231
Downstream	6,588	10,243	3,411
Corporate	(1,751)	(425)	(156)
Capital investment [B]	79,877	28,861	37,339
Divestments [B]	4,709	5,540	15,019
Operating expenses [B]	41,549	41,144	45,225
Return on average capital employed [B]	3.0%	1.9%	7.1%
Gearing at December 31 [C]	28.0%	14.0%	12.2%
Oil and gas production (thousand boe/d)	3,668	2,954	3,080
Proved oil and gas reserves at December 31 (million boe)	13,248	11,747	13,081

[A] Segment earnings are presented on a current cost of supplies basis. See Note 5 to the "Consolidated Financial Statements" on pages 129-130.

[B] See "Non-GAAP measures reconciliations" on pages 195-196.

[C] See Note 15 to the "Consolidated Financial Statements" on page 137.

### EARNINGS 2016-2015

BG Group plc (BG) was consolidated within Shell's results with effect from February 2016 following its acquisition.

Income for the period was \$4,777 million in 2016 compared with \$2,200 million in 2015. After current cost of supplies adjustment, total segment earnings were \$3,692 million in 2016 compared with \$4,155 million in 2015.

Earnings on a current cost of supplies basis (CCS earnings) exclude the effect of changes in the oil price on inventory carrying amounts, after making allowance for the tax effect. The purchase price of volumes sold in the period is based on the current cost of supplies during the same period, rather than on the historic cost calculated on a first-in, first-out (FIFO) basis. Therefore, when oil prices are decreasing CCS earnings are likely to be higher than earnings calculated on a FIFO basis, and when prices are increasing CCS earnings are likely to be lower than earnings calculated on a FIFO basis.

Integrated Gas earnings in 2016 were \$2,529 million, compared with \$3,170 million in 2015. Compared with 2015, earnings in 2016 were mainly impacted by higher operating expenses and depreciation, mainly due to the consolidation of BG, lower oil and liquefied natural gas (LNG) prices and higher taxation. These impacts were partly offset by higher production and LNG liquefaction volumes, mainly as a result of the BG acquisition and lower impairment charges and well write-offs. See "Integrated Gas" on page 22.

Upstream earnings in 2016 were a loss of \$3,674 million, compared with a loss of \$8,833 million in 2015. The lower loss in 2016 was partly explained by the significant charges in 2015 associated with the decision to cease Alaska drilling activities and the Carmon Creek project in Canada and other impairments. In addition, compared with 2015, earnings in 2016 benefited from higher production volumes, mainly as a result of the BG acquisition, and lower operating expenses, despite the consolidation of BG. These impacts were partly offset by lower oil and gas prices and higher depreciation, mainly due to the consolidation of BG, and lower gains on divestments. See "Upstream" on page 27.

Downstream earnings in 2016 were \$6,588 million compared with \$10,243 million in 2015. The decrease in earnings was mainly due to lower realised refining and trading margins and a higher effective tax rate. There was a partial offset from stronger marketing margins, in turn partly offset by the impact of divestments and unfavourable exchange rate effects and fairvalue accounting of commodity derivatives. See "Downstream" on pages 41-42.

Corporate earnings in 2016 were a loss of \$1,751 million, compared with a loss of \$425 million in 2015. Interest expense was significantly higher in 2016, due to additional debt for the BG acquisition and debt assumed on the acquisition, partly offset by lower foreign exchange losses. There were also BG acquisition costs and lower tax credits in 2016, and a gain in 2015 on the sale of an office building. See "Corporate" on page 48.

### EARNINGS 2015-2014

Income for the period was \$2,200 million in 2015 compared with \$14,730 million in 2014. After current cost of supplies adjustment, total segment earnings were \$4,155 million in 2015 compared with \$19,096 million in 2014.

Integrated Gas earnings in 2015 were \$3,170 million, compared with \$10,610 million in 2014. Lower earnings in 2015 reflected the significant decline in oil and gas prices, lower divestment gains and the impact of the weakening of the Australian dollar on a deferred tax position and a deferred tax liability related to an associate company.

Upstream earnings in 2015 were a loss of \$8,833 million, compared with an income of \$5,231 million in 2014. Lower earnings in 2015 reflected the significant decline in oil and gas prices, charges associated with management's decision to cease Alaska drilling activities and the Carmon Creek project in Canada, higher impairment charges, lower divestment gains and the impact of the weakening of the Brazilian real on a deferred tax position.

Downstream earnings in 2015 were \$10,243 million compared with \$3,411 million in 2014. The increase was principally driven by lower operating expenses, as a result of favourable exchange rates and divestments, higher realised refining margins, and a lower effective tax rate, together with lower impairment charges and higher divestment gains.

Corporate earnings in 2015 were a loss of \$425 million, compared with a loss of \$156 million in 2014.

### PRODUCTION AVAILABLE FOR SALE

Oil and gas production available for sale in 2016 was 1,342 million barrels of oil equivalent (boe), or 3,668 thousand boe per day (boe/d), compared with 1,078 million boe, or 2,954 thousand boe/d, in 2015. The increase was mainly driven by the BG acquisition. Liquids production increased by 22% and natural gas production by 27% compared with 2015.



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## Oil and gas production available for sale [A]

	Thousand boe/d		
	2016	2015	2014
Crude oil and natural gas liquids	1,679	1,358	1,339
Synthetic crude oil	146	137	129
Bitumen	13	14	16
Natural gas [B]	1,830	1,445	1,596
Total	3,668	2,954	3,080
Of which:			
Integrated Gas	884	631	682
Upstream	2,784	2,323	2,398

[A] See "Oil and gas information" on pages 37-38.

[B] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

## PROVED RESERVES

The proved oil and gas reserves of Shell subsidiaries and the Shell share of the proved oil and gas reserves of joint ventures and associates are summarised in "Oil and gas information" on pages 33-35 and set out in more detail in "Supplementary information – oil and gas (unaudited)" on pages 153-161.

Before taking production into account, our proved reserves increased by 2,887 million boe in 2016. This comprised an increase of 3,117 million boe from Shell subsidiaries (of which 2,431 million boe were added with the acquisition of BG), which was partly offset by a decrease of 230 million boe from the Shell share of joint ventures and associates. The increase in proved reserves included an increase of 139 million boe as a result of an increased entitlement share due to the lower yearly average price applied to production-sharing and tax/variable royalty contracts.

In 2016, total oil and gas production was 1,386 million boe, of which 1,342 million boe was available for sale and 44 million boe was consumed in

## SELECTED FINANCIAL DATA

The selected financial data set out below are derived, in part, from the "Consolidated Financial Statements". This data should be read in conjunction with the "Consolidated Financial Statements" and related Notes, as well as with this Strategic Report. BG was consolidated within Shell's results with effect from February 2016.

### Consolidated Statement of Income and of Comprehensive Income data

	\$ million				
	2016	2015	2014	2013	2012
Revenue	233,591	264,960	421,105	451,235	467,153
Income for the period	4,777	2,200	14,730	16,526	26,960
Income/(loss) attributable to non-controlling interest	202	261	(144)	155	248
Income attributable to Royal Dutch Shell plc shareholders	4,575	1,939	14,874	16,371	26,712
Comprehensive (loss)/income attributable to Royal Dutch Shell plc shareholders	(1,374)	(811)	2,692	18,243	24,470

### Consolidated Balance Sheet data

	\$ million				
	2016	2015	2014	2013	2012
Total assets	411,275	340,157	353,116	357,512	350,294
Total debt	92,476	58,379	45,540	44,562	37,754
Share capital	683	546	540	542	542
Equity attributable to Royal Dutch Shell plc shareholders	186,646	162,876	171,966	180,047	174,749
Non-controlling interest	1,865	1,245	820	1,101	1,433

### Earnings per share

	\$				
	2016	2015	2014	2013	2012
Basic earnings per €0.07 ordinary share	0.58	0.31	2.36	2.60	4.27
Diluted earnings per €0.07 ordinary share	0.58	0.30	2.36	2.60	4.26

### Shares

	Million				
	2016	2015	2014	2013	2012
Basic weighted average number of A and B shares	7,833.7	6,320.3	6,311.5	6,291.1	6,261.2
Diluted weighted average number of A and B shares	7,891.7	6,393.8	6,311.6	6,293.4	6,267.8

operations. Production available for sale from subsidiaries was 1,158 million boe and 36 million boe was consumed in operations. The Shell share of the production available for sale of joint ventures and associates was 184 million boe and 8 million boe was consumed in operations.

Accordingly, after taking production into account, our proved reserves increased by 1,501 million boe in 2016, to 13,248 million boe at December 31, 2016, with an increase of 1,923 million boe from subsidiaries and a decrease of 422 million boe from the Shell share of joint ventures and associates.

## CAPITAL INVESTMENT AND OTHER INFORMATION

Capital investment was \$79.9 billion in 2016, including \$52.9 billion related to the BG acquisition, compared with \$28.9 billion in 2015.

Divestments were \$4.7 billion in 2016, compared with \$5.5 billion in 2015.

Operating expenses increased by \$1 billion in 2016, to \$42 billion. This included redundancy and restructuring charges of \$1.9 billion and BG acquisition costs of \$0.4 billion. The impact of the consolidation of BG was offset by steps taken to reduce expenses, realising synergies and follow-on benefits from the acquisition.

Our return on average capital employed (ROACE) increased to 3.0% compared with 1.9% in 2015, driven by a higher income in 2016.

Gearing was 28.0% at the end of 2016, compared with 14.0% at the end of 2015. There was an increase of 9.7% on the acquisition of BG.

## KEY ACCOUNTING ESTIMATES AND JUDGEMENTS

See Note 2 to the "Consolidated Financial Statements" on pages 122-127.

## LEGAL PROCEEDINGS

See Note 26 to the "Consolidated Financial Statements" on page 151.

## PERFORMANCE INDICATORS

### KEY PERFORMANCE INDICATORS

#### Total shareholder return

2016	38.7%	2015	-29.9%
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Total shareholder return (TSR) is the difference between the share price at the beginning of the year and the share price at the end of the year (each averaged over 30 days), plus gross dividends delivered during the calendar year (reinvested quarterly), expressed as a percentage of the share price at the beginning of the year (averaged over 30 days). The data used are a weighted average in dollars for A and B shares. The TSRs of major publicly traded oil and gas companies can be compared directly, providing a way to determine how we are performing in relation to our industry peers.

#### Cash flow from operating activities (\$ billion)

2016	21	2015	30
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Cash flow from operating activities is the total of all cash receipts and payments associated with our sales of oil, gas, chemicals and other products. The components that provide a reconciliation from income for the period are listed in the "Consolidated Statement of Cash Flows". This indicator reflects our ability to generate cash to service and reduce our debt and for distributions to shareholders and investments. See "Liquidity and capital resources" on page 50.

#### Project delivery

2016	94%	2015	82%
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Project delivery reflects our capability to complete major projects on time and within budget on the basis of targets set in our annual Business Plan. The set of projects reflected in this indicator consists of at least 20 Shell-operated capital projects that are in the execution phase (post final investment decision).

#### Production available for sale (thousand boe/d)

2016	3,668	2015	2,954
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Production is the sum of all average daily volumes of unrefined oil and natural gas produced for sale by Shell subsidiaries and Shell's share of those produced for sale by joint ventures and associates. The unrefined oil comprises crude oil, natural gas liquids, synthetic crude oil and bitumen. The gas volume is converted into equivalent barrels of oil to make the summation possible. Changes in production have a significant impact on our cash flow. See "Summary of results" on pages 18-19.

#### LNG liquefaction volumes (million tonnes)

2016	30.9	2015	22.6
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Liquefied natural gas (LNG) liquefaction volumes is a measure of the operational performance of our Integrated Gas business and LNG market demand. See "Integrated Gas" on page 22.

#### Refinery and chemical plant availability

2016	90.3%	2015	89.3%
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Refinery and chemical plant availability is the weighted average of the actual uptime of plants as a percentage of their maximum possible uptime. The weighting is based on the capital employed, adjusted for cash and non-current liabilities. It excludes downtime due to uncontrollable factors, such as hurricanes. This indicator is a measure of the operational excellence of our Downstream manufacturing facilities. See "Downstream" on page 41.

#### Total recordable case frequency (injuries per million working hours)

2016	1.00	2015	0.94
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Total recordable case frequency (TRCF) is the number of employees and contract staff injuries requiring medical treatment or time off for every million hours worked. It is a standard measure of occupational safety. See "Environment and society" on page 54.

## ADDITIONAL PERFORMANCE INDICATORS

### Earnings on a current cost of supplies basis (\$ million)

2016	3,692	2015	4,155
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### Earnings per share on a current cost of supplies basis (\$)

2016	0.45	2015	0.61
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Earnings on a current cost of supplies basis (CCS earnings) is the income for the period, adjusted for the after-tax effect of oil-price changes on inventory. Segment earnings presented on a current cost of supplies basis is the earnings measure used by the Chief Executive Officer for the purposes of making decisions about allocating resources and assessing performance. See "Summary of results" on page 18 and "Non-GAAP measures reconciliations" on page 195.

CCS earnings per share, which is on a diluted basis above, is calculated by dividing CCS earnings attributable to shareholders (see "Non-GAAP measures reconciliations" on page 195) by the average number of shares outstanding over the year, increased by the average number of dilutive shares related to share-based compensation plans.

### Capital investment (\$ million)

2016	79,877	2015	28,861
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Capital investment is a measure used to make decisions about allocating resources and assessing performance. It is defined as capital expenditure and investments in joint ventures and associates as reported in the "Consolidated Statement of Cash Flows" plus exploration expense, excluding exploration wells written off, new finance leases and other adjustments. In 2016, capital investment also included the respective amount for the acquisition of BG Group plc. See "Liquidity and capital resources" on page 50 and "Non-GAAP measures reconciliations" on page 195.

### Return on average capital employed

2016	3.0%	2015	1.9%
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Return on average capital employed (ROACE) is defined as annual income, adjusted for after-tax interest expense, as a percentage of average capital employed during the year. Capital employed is the sum of total equity and total debt. ROACE measures the efficiency of our utilisation of the capital that we employ and is a common measure of business performance. See "Summary of results" on page 19 and "Non-GAAP measures reconciliations" on page 196.

### Gearing

2016	28.0%	2015	14.0%
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Gearing is defined as net debt (total debt less cash and cash equivalents) as a percentage of total capital (net debt plus total equity), at December 31. It is a measure of the degree to which our operations are financed by debt. See "Liquidity and capital resources" on page 49.

### Employees (thousand)

2016	92	2015	93
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The employee number indicator is the annual average full-time employee equivalent of the total number of people on full-time or part-time employment contracts with Shell subsidiaries, including our share of employees of joint operations. It excludes employees working for Shell's joint ventures and associates. See "Our people" on page 59.

### Proved oil and gas reserves (million boe)

2016	13,248	2015	11,747
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Proved oil and gas reserves are the total estimated quantities of oil and gas from Shell subsidiaries and Shell's share from joint ventures and associates that geoscience and engineering data demonstrate, with reasonable certainty, to be recoverable in future years from known reservoirs, at December 31, under existing economic conditions, operating methods and government regulations. Gas volumes are converted into barrels of oil equivalent (boe) using a factor of 5,800 standard cubic feet per barrel. Reserves are crucial to an oil and gas company, since they constitute the source of future production. Reserves estimates are subject to change due to a wide variety of factors, some of which are unpredictable. See "Summary of results" on page 19, "Oil and gas information" on pages 33-35 and "Supplementary information – oil and gas (unaudited)" on pages 153-161.

### Operational spills of more than 100 kilograms

2016	71	2015	108
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The operational spills indicator is the number of incidents in respect of activities where we are the operator in which 100 kilograms or more of oil or oil products were spilled as a result of those activities. See "Environment and society" on page 56.

### Refining Energy Intensity Index (EII™) (indexed to 2002)

2016	95.4	2015	95.4
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The Energy Intensity Index (EII™), as described in Solomon Associates Refinery Comparative Performance Analysis Methodology 2014, is a benchmark to compare energy efficiency of fuel refineries and paraffinic base oil plants. The Solomon (EII™) is defined as the energy consumed by a refinery divided by the energy standard for the specific individual refinery configuration. See "Environment and society" on page 55.

### Direct greenhouse gas emissions (million tonnes of CO<sub>2</sub> equivalent)

2016	70	2015	72
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Direct greenhouse gas emissions from facilities operated by Shell, expressed in carbon dioxide (CO<sub>2</sub>) equivalent. See "Environment and society" on page 55.

### Number of operational Tier 1 process safety events

2016	39	2015	51
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A Tier 1 process safety event is an unplanned or uncontrolled release of any material, including non-toxic and non-flammable materials, from a process with the greatest actual consequence resulting in harm to members of our workforce or a neighbouring community, damage to equipment, or exceeding a threshold quantity as defined by the API Recommended Practice 754 and IOGP Standard 456. See "Environment and society" on page 54.

## INTEGRATED GAS

### Key statistics

\$ million, except where indicated

	2016	2015	2014
Segment earnings	2,529	3,170	10,610
Including:			
Revenue (including intersegment sales)	29,190	25,989	40,009
Share of profit of joint ventures and associates	1,116	1,471	4,324
Interest and other income	765	537	3,156
Operating expenses [A]	6,479	4,088	4,609
Exploration	494	1,290	1,439
Depreciation, depletion and amortisation	4,509	2,597	2,662
Taxation charge	1,254	937	4,008
Capital investment [A]	26,214	5,178	9,124
Divestments [A]	352	269	4,819
Oil and gas production available for sale (thousand boe/d)	884	631	682
LNG liquefaction volumes (million tonnes)	30.9	22.6	24.0

[A] See "Non-GAAP measures reconciliations" on pages 195-196.

### OVERVIEW

Our Integrated Gas business manages liquefied natural gas (LNG) activities and the conversion of natural gas into gas-to-liquids (GTL) fuels and other products, as well as our New Energies portfolio. It includes natural gas exploration and extraction, when contractually linked to the production and transportation of LNG, and the operation of the upstream and midstream infrastructure necessary to deliver gas to market. It markets and trades crude oil, natural gas, LNG, electricity, carbon-emission rights and also markets and sells LNG as a fuel for heavy-duty vehicles and marine vessels.

### BUSINESS CONDITIONS

Global oil demand grew by 1.5% in 2016, with the Brent crude oil price averaging \$44 per barrel.

Global gas demand grew about 1% in 2016, a much lower rate than the average annual growth rate of 2.3% in the past decade. A combination of mild weather and continued moderate global economic growth led to a lower rate of demand growth in most regions.

The global LNG market grew by 17 million tonnes, or 6.9%, year on year. Supply growth was primarily driven by the startup of new projects in Australia and, to a lesser extent, in the USA. The majority of additional LNG supply was absorbed by China, India and the Middle East, offsetting a decline in imports by Japan and Latin America and resulting in lower than expected LNG volumes delivered to Europe. Unlike crude oil pricing, which is global in nature, natural gas prices vary significantly from region to region.

In the USA, the natural gas price at the Henry Hub averaged \$2.5 per million British thermal units (MMBtu) in 2016, 4% lower than in 2015, and traded in a range of \$1.5-3.8/MMBtu.

In Europe, the average price at the UK National Balancing Point was \$4.3/MMBtu, 23% lower than in 2015. At the main continental European gas trading hubs – in the Netherlands, Belgium and Germany – prices were also weaker.

Long-term contracted LNG prices in the Asia-Pacific region generally fell in 2016 as they are predominantly indexed to the price of Japan Customs-cleared Crude, which has fallen as global crude oil prices have weakened.

See "Market overview" on pages 16-17.

### PRODUCTION AVAILABLE FOR SALE

In 2016, production was 323 million barrels of oil equivalent (boe), or 884 thousand boe per day (boe/d), compared with 230 million boe, or 631 thousand boe/d in 2015. Liquids production increased by 9% and natural gas production increased by 55% compared with 2015, mainly due to the acquisition of BG Group plc (BG).

### LNG LIQUEFACTION VOLUMES

LNG liquefaction volumes of 30.9 million tonnes in 2016 were 37% higher than in 2015, mainly reflecting the contribution of assets acquired with BG and our strong operational performance. There were also incremental volumes from the start-up of Gorgon trains 1 and 2 in Australia. These impacts were partly offset by the expiry of the Malaysia LNG Dua joint venture agreement in 2015, lower feedgas availability at Atlantic LNG in Trinidad and Tobago, and a higher level of planned maintenance activity.

LNG sales volumes of 57.1 million tonnes in 2016 were 46% higher than in 2015, mainly reflecting our enlarged portfolio following the acquisition of BG.

### EARNINGS 2016-2015

BG was consolidated within Shell's results with effect from February 2016 following its acquisition.

Segment earnings in 2016 were \$2,529 million, which included a net charge of \$1,171 million. The net charge included impairments of \$451 million, reported mainly in share of profit of joint ventures and associates, the reassessment of a deferred tax asset in Australia of \$533 million, onerous contract provisions in Europe and the USA of \$390 million and redundancy and restructuring charges of \$245 million, partly offset by gains on divestments of \$212 million and on the accounting reclassification of Shell's interest in Woodside Petroleum Limited (Woodside) in Australia of \$479 million (both reported in interest and other income).

Segment earnings in 2015 were \$3,170 million, which included a net charge of \$1,887 million, including impairments of \$1,109 million and the impact of the weakening of the Australian dollar on deferred tax positions of \$560 million.

Excluding the net charges described above, segment earnings were \$3,700 million in 2016 compared with \$5,057 million in 2015. Earnings were impacted by higher operating expenses and depreciation mainly due to the consolidation of BG (around \$1,860 million), lower oil and LNG prices (around \$1,730 million), higher taxation (around \$570 million), and other net negative impacts of around \$120 million. These impacts were partly offset by higher oil and gas production and LNG liquefaction volumes (around \$2,260 million), mainly as a result of the BG acquisition, and lower well write-offs (around \$660 million).

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## EARNINGS 2015-2014

Segment earnings in 2015 were \$3,170 million, which included a net charge of \$1,887 million as described above. Segment earnings in 2014 of \$10,610 million included a net gain of \$278 million, principally driven by divestment gains of \$1,411 million, mainly related to a portion of our shareholding in Woodside and to Wheatstone LNG in Australia, which was partly offset by charges of \$718 million related to an update of a deferred tax asset and the recognition of a deferred tax liability related to an associate company, and the \$429 million impact of the weakening of the Australian dollar on deferred tax positions.

Excluding the net charge and net gain described above, segment earnings were \$5,057 million in 2015 compared with \$10,332 million in 2014, principally as a result of the significant decline in oil and gas prices.

## CAPITAL INVESTMENT AND DIVESTMENTS

Capital investment in 2016 was \$26.2 billion, compared with \$5.2 billion in 2015, mainly reflecting \$21.8 billion related to the acquisition of BG.

Divestments in 2016 were \$0.4 billion, compared with \$0.3 billion in 2015.

## PORTFOLIO AND BUSINESS DEVELOPMENT

Following the acquisition of BG in February 2016, the assets have been integrated into our portfolio. Notable acquired interests are identified in the Business and property section.

Key portfolio events in 2016 included the following:

- In Indonesia, INPEX Masela Ltd (Shell interest 35%) received a notification from the Indonesian government authorities instructing it to re-propose a development plan for the Abadi gas field based on an onshore LNG project.
- In Australia, the participants in the Browse joint arrangement (Shell interest 27%) decided not to move forward with the selected development concept in the current economic and market environment. There is still the intent to develop the Browse field.
- Shell and its partners in the LNG Canada joint venture (Shell interest 50%) decided to postpone a final investment decision (FID) on the proposed export project in British Columbia, in recognition of the current global LNG market conditions.
- We decided to delay the FID on the Lake Charles LNG project in the USA that was planned for 2016. The proposed project would convert the existing Lake Charles LNG regasification facility owned by Energy Transfer into a liquefaction plant in which we would have capacity rights.
- Shell and its partners withdrew their application to the Polish competition authority to create a joint venture that would construct the Nord Stream 2 gas pipeline, following objections raised by the president of the Polish Office of Competition and Consumer Protection. The joint venture sought to design, finance, construct, and operate the pipeline running from the Russian Baltic coast to an exit point near Greifswald, Germany.
- We were appointed by the Energy Market Authority of Singapore as one of the importers for the next tranche of LNG supply into Singapore, which is expected to begin in 2017. Shell and another importer will have exclusivity for three years to supply up to 1 million tonnes of LNG a year each.
- We signed an agreement with the Gibraltar government for the supply of LNG and the construction of a regasification unit to provide gas for power generation in Gibraltar.

We reached the following milestones in 2016:

- The Sabine Pass LNG export terminal in the USA started operations in February and we have started loading volumes in line with a long-term offtake agreement assumed on the acquisition of BG.
- In Australia, production of LNG and condensate from the first train at the Gorgon LNG project (Shell interest 25%) on Barrow Island, off the northwest coast, started in March 2016. The second train started production in October 2016.
- In September, the first loading of the Shell-chartered Coral Methane vessel was completed at the recently opened third jetty at the Gas Access to Europe (GATE) LNG terminal in Rotterdam, the Netherlands.

The Pearl gas-to-liquids (GTL) plant (Shell interest 100%) in Qatar operated at a reduced rate of production from December 2016, due to unforeseen maintenance required on the gasifier units, until a controlled shutdown on February 1, 2017. We expect Pearl to ramp back up during the second quarter of 2017.

We continued to divest selected assets during 2016, including:

- In New Zealand, we sold our 83.75% interest in the Maui natural gas pipeline.
- As a result of the BG acquisition, we gained a 49.75% interest in Mahanagar Gas (MGL), a natural gas distribution company in Mumbai, India. In June 2016, MGL held an initial public offering (IPO), reducing our interest to 32.5%.

In January 2017, we reached an agreement with KUFPEC Thailand Holdings Pte Limited, a subsidiary of Kuwait Foreign Petroleum Exploration Company, for the sale of Shell Integrated Gas Thailand Pte Limited and Thai Energy Co Limited (Shell interests 100%), which together have an approximate 22% interest in the Bongkot field, and adjoining acreage offshore Thailand, for a consideration of \$900 million.

## BUSINESS AND PROPERTY

### EUROPE

#### Greece

We have a 49% interest in Attiki Gas Supply Company S.A., a natural gas distribution company in Athens. Under Greek law, it will be unbundled into separate supply and distribution companies in 2017.

#### Netherlands

We have access to import and storage capacity at the GATE LNG terminal in the Netherlands (Shell capacity rights: 1.4 million tonnes per annum, mtpa), enabling us to supply LNG to marine and road transport customers in northwest Europe. We are also using the terminal to supply LNG to our growing truck refuelling network in the Netherlands. In 2016, GATE's third jetty became operational and we carried out our first loading from it.

As part of our New Energies business (see page 25), we have an interest in the consortium that, in December 2016, was awarded the concession by the Dutch government to develop the Borssele III and IV offshore wind farm projects, which are to be located about 20 kilometres off the Dutch coast.

#### Norway

Gasnor (Shell interest 100%) provides LNG fuel for ships and industrial customers and has a natural gas pipeline network.

#### UK

As a result of the BG acquisition, we have a 50% interest in the Dragon LNG regasification terminal, with long-term arrangements in place governing the use of capacity rights.

## ASIA (INCLUDING THE MIDDLE EAST AND RUSSIA)

### Brunei

We have a 25% interest in Brunei LNG Sendirian Berhad which sells most of its LNG on long-term contracts to customers in Asia.

### China

We jointly develop and produce from the onshore Changbei tight-gas field under a production-sharing contract (PSC) with China National Petroleum Corporation (CNPC). In 2016, we completed the Changbei I development programme under the PSC and subsequently handed over the production operatorship to CNPC. We also completed drilling appraisal wells for Changbei II Phase I under the PSC, and have submitted a development plan to CNPC.

In Sichuan, we completed a significant drilling programme in all three blocks in 2016, in accordance with provisions of the PSCs with CNPC. The geology is challenging and the mixed evaluation results do not justify further investment.

We also have a 49% interest in an offshore oil and gas block in the Yinggehai basin, under a PSC with China National Offshore Oil Corporation (CNOOC). Based on the results from the second deep-water exploration well, LD11-1-1 block 62/17, we decided not to pursue this opportunity further.

## Integrated Gas Continued

### India

As a result of the acquisition of BG, we have a 30% interest in each of the producing oil and gas fields Panna/Mukta, Mid Tapti and South Tapti. The Tapti fields ceased production in the first quarter of 2016.

Also as a result of the acquisition, we gained a 49.75% interest in MGL, a natural gas distribution company in Mumbai. As result of an IPO, our interest was reduced to 32.5% in June 2016.

Hazira is a regasification terminal, in which we have a 74% interest, in the state of Gujarat on the west coast of India.

### Indonesia

We have a 35% interest in the INPEX Masela Ltd joint venture which owns and operates the offshore Masela block. In April 2016, the joint venture received a notification from the Indonesian government authorities instructing it to re-propose a plan for the Abadi gas field based on an onshore LNG project. The partners are committed to working together with the Indonesia government to move the project forward.

### Iran

Shell transactions with Iran are disclosed separately. See "Section 13(r) of the US Securities Exchange Act of 1934 Disclosure" on page 194.

### Malaysia

We have a 15% interest in Malaysia LNG Tiga located in Bintulu. We also operate a gas-to-liquids (GTL) plant, Shell MDS (Shell interest 72%), adjacent to the Malaysia LNG facilities. Using Shell technology, the plant converts gas into high-quality middle distillates, drilling fluids, waxes and specialty products.

### Oman

We have a 30% interest in Oman LNG, which mainly supplies Asian markets under long-term contracts. We also have an 11% interest in Qalhat LNG, which is part of the Oman LNG complex.

### Qatar

We operate the Pearl GTL plant (Shell interest 100%) in Qatar under a development and production-sharing contract with the government. The fully-integrated facility has capacity for production, processing and transportation of 1.6 billion standard cubic feet per day (scf/d) of gas from Qatar's North Field. It has an installed capacity of about 140 thousand boe/d of high-quality liquid hydrocarbon products and 120 thousand boe/d of natural gas liquids (NGL) and ethane. In 2016, Pearl GTL produced 5 million tonnes of GTL products.

Of Pearl's two trains, the second underwent planned maintenance in March to May 2016.

Pearl operated at a reduced rate of production from December 2016, due to unforeseen maintenance required on the gasifier units, until a controlled shutdown on February 1, 2017. We expect Pearl to ramp back up during the second quarter of 2017.

We have a 30% interest in Qatargas 4, which comprises integrated facilities to produce about 1.4 billion scf/d of gas from Qatar's North Field, an onshore gas-processing facility and one LNG train with a collective production capacity of 7.8 mtpa of LNG and 70 thousand boe/d of condensate and NGL.

### Russia

We have a 27.5% interest in Sakhalin-2, an integrated oil and gas project located in a subarctic environment.

We have a 50% interest in the Salym fields in western Siberia, Khanty Mansiysk Autonomous District, where production was approximately 125 thousand boe/d in 2016.

As a result of European Union and US sanctions prohibiting certain defined oil and gas activities in Russia, we suspended our shale oil exploration activities undertaken through Salym and Khanty/Mansiysk Petroleum Alliance in 2014.

### Singapore

In 2016, Shell and Keppel Offshore & Marine secured the licence to supply LNG fuel for vessels in the Port of Singapore after submitting a joint bid to the Maritime and Port Authority of Singapore. With the granting of the licence, Shell and Keppel have formed a 50:50 joint venture to fuel ships with LNG. We currently have an exclusive role as the aggregator of LNG demand for the Singapore market. In October 2016, we won a licence to import a further 1 mtpa, starting in 2017.

### Thailand

As a result of the acquisition of BG, we have a 22.2% interest in the Bongkot and G12/48 fields in the Gulf of Thailand and a 66.7% interest in exploration Blocks 7 and 8 where activity is currently suspended due to overlapping claims by Thailand and Cambodia. We have an agreement over Block 9a under which we receive royalties. Production from the Bongkot field supplies around 20% of the country's gas demand.

In January 2017, we reached an agreement with KUFPEC Thailand Holdings Pte Limited, for the sale of our interest in the Bongkot field and adjoining offshore acreage.

## OCEANIA

### Australia

We have interests in offshore production and exploration licences in the North West Shelf (NWS) and Greater Gorgon areas of the Carnarvon Basin, as well as in the Browse Basin and Timor Sea. Woodside (Shell interest 13.3%) is the operator on behalf of the joint arrangement participants in the NWS gas, condensate and oil fields, which produced more than 500 thousand boe/d in 2016.

We have a 25% interest in the Gorgon LNG project, which involves the development of some of the largest gas discoveries to date in Australia, beginning with the offshore Gorgon and Janszlo fields. Gorgon LNG began production in March 2016.

We are the operator of a permit in the Browse Basin in which two separate gas fields were found: Prelude in 2007 and Concerto in 2009. Our development concept for these fields is based on our floating liquefied natural gas (FLNG) technology. The Prelude FLNG project (Shell interest 67.5%) is expected to produce about 110 thousand boe/d of gas and NGL, 3.6 mtpa of LNG, 1.3 mtpa of condensate and 0.4 mtpa of liquefied petroleum gas. Major milestones during 2016 were the lifting of all modules on to the FLNG facility in South Korea, completion of wells and subsea installation, and starting to commission some of the facilities.

We are also a partner in the Browse joint arrangement (Shell interest 27%) covering the Brecknock, Calliance and Torosa gas fields. In 2016, the Browse partners decided not to move forward with the selected development concept given the prevailing economic and market conditions.

Our other interests include: a joint arrangement, with Shell as the operator, for the undeveloped Crux gas and condensate field (Shell interest 82%), and the Woodside-operated undeveloped Sunrise gas field in the Timor Sea (Shell interest 26.6%). We are a partner in both Shell-operated and other exploration joint arrangements in multiple basins including Bonaparte, Browse, Exmouth Plateau, Greater Gorgon and Outer Canning.

We have a 50% interest in Arrow Energy Holdings Pty Limited, a Queensland-based joint venture with CNPC. Arrow owns coal-bed methane assets and a domestic power business.

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As a result of the BG acquisition, we have a 50% interest in train one and a 97.5% interest in train two of the Shell-operated Queensland Curtis LNG venture. The two-train liquefaction plant has an installed capacity of 8.5 mtpa. Our production of onshore natural gas from the Surat Basin supplies both this plant and the domestic market.

## New Zealand

Our interests include the Maui (83.75%), Kapuni (50%) and Pohokura (48%) natural gas fields. We are an operator with an approximate 60% interest in two exploration licences in the Great South Basin and a 37.5% interest in the petroleum prospecting permit in the New Caledonia Basin.

The business is under strategic review and we sold our 83.75% interest in the Maui natural gas pipeline in 2016.

## AFRICA

### Egypt

As a result of the BG acquisition, we have interests of 35.5% and 38%, respectively, in trains one and two of the Egyptian LNG (ELNG) plant. In January 2014, force majeure notices were issued under the LNG agreements as a result of domestic gas diversions severely restricting volumes available to ELNG. These notices remain in place. See "Oil and gas information" on page 35.

### Nigeria

We have a 25.6% interest in Nigeria LNG Ltd, which operates six LNG trains.

### Tanzania

As a result of the BG acquisition, we have a 60% interest in, and are the operator of, Blocks 1 and 4 offshore southern Tanzania. The blocks cover approximately 7,000 square kilometres of the Mafia Deep Offshore Basin and the northern part of the Rovuma Basin. In 2014, a heads of agreement (HoA) was signed and subsequently extended between the partners of Blocks 1, 4 and 2 to develop a potential LNG project. A memorandum of understanding was also signed between the HoA partners and the Tanzania government to lease an agreed site for the project. In 2016, we completed drilling on all remaining wells.

### Rest of Africa

We have a 17.9% share in the West African Gas Pipeline Company.

## NORTH AMERICA

### Canada

In 2014, we entered into a joint venture (Shell interest 50%) to evaluate an investment in an LNG export facility in Kitimat on the west coast of Canada. Together with our partners, we have elected to postpone the FID on the project.

### USA

We have offtake rights to 100% of the capacity (2.5 mtpa) of the Elba Island liquefaction plant, which is under construction. Elba Island also has a regasification terminal in which we have contracted capacity of 11.6 mtpa.

We have 13.1 mtpa contracted capacity in the Lake Charles regasification terminal in Louisiana. Also, as a result of the acquisition of BG, we are involved in the Lake Charles LNG project. In 2016, we decided to delay the FID on this project to convert the existing regasification facility into a liquefaction plant in which we would have capacity rights.

## SOUTH AMERICA

### Bolivia

As a result of the BG acquisition, we have a 100% interest in the La Vertiente, Los Suris and Tarija XX East blocks and the La Vertiente gas processing plant. We have a 37.5% interest in the Caipipendi block where we mainly produce from the Margarita field. We also have a 25% interest in the Tarija XX West block where we produce from the Itaú field. We have the rights to explore and further develop the onshore Huacareta block.

## Trinidad and Tobago

As a result of the BG acquisition, we are now the largest shareholder in all four trains at Atlantic LNG. We have an interest in three concessions with producing fields – Central Block (Shell interest 65%), East Coast Marine Area (Shell interest 50%) and North Coast Marine Area (Shell interest 45.88%). We also have an interest in exploration activities in blocks 5(c), 5(d), 6(d), and Atlantic Area blocks 3, 5, 6 and 7, with interests ranging from 35% to 100%.

## Rest of South America

We have a 17% interest in Brazil's Companhia de Gas de São Paulo (Comgás), a natural gas distribution company in the state of São Paulo. In Peru, we have a 20% interest in an LNG liquefaction plant. We have interests in a gas pipeline connecting Uruguay to Argentina.

## TRADING AND SUPPLY

We market a portion of our share of equity production of LNG and trade LNG volumes around the world through our hubs in the UK, Dubai and Singapore. We also market and trade natural gas, power and carbon-emission rights mainly in North America and Europe, of which a portion includes equity volumes from our upstream operations.

## NEW ENERGIES

In 2016, we formed a New Energies business to pursue three main areas of opportunities: new fuels for transport, such as biofuels and hydrogen; integrated energy solutions, where wind and solar energy can partner with gas to manage intermittency; and connecting customers with new business models for energy, enabled by digitalisation and the decentralisation of energy systems.

Our focus remains on areas that share aspects with our core businesses, such as our biofuels joint venture Raizen (Shell interest 50%) in Brazil that produces ethanol from sugar cane, as well as hydrogen as a transport fuel. Working with the H2 Mobility joint venture in Germany, we aim to grow the hydrogen fuel network and are exploring other opportunities in the UK and USA. We are looking at how best to combine wind and solar power with our existing business and capabilities. Our share of capacity from wind power projects in the USA is more than 400 megawatts. In the Netherlands, we have an interest in the consortium that, in December 2016, was awarded the concession by the Dutch government to develop the Borssele III and IV offshore wind farm projects, which are to be located 20 kilometres off the Dutch coast. We are exploring ways to deploy solar technologies to lower the carbon intensity of our operations.

## INTEGRATED GAS DATA TABLES

### LNG liquefaction volumes

	Million tonnes		
	2016	2015	2014
Australia	9.5	3.4	3.7
Brunei	1.6	1.6	1.5
Egypt	0.2	–	–
Malaysia	1.3	1.8	2.7
Nigeria	4.5	5.0	5.0
Norway	0.1	–	–
Oman	2.0	1.9	1.8
Peru	0.9	0.7	0.8
Qatar	2.4	2.4	2.4
Russia	3.0	2.9	2.9
Trinidad and Tobago	5.4	2.9	3.2
<b>Total</b>	<b>30.9</b>	<b>22.6</b>	<b>24.0</b>

**Integrated Gas** *Continued*

**LNG AND GTL PLANTS AT DECEMBER 31, 2016**

**LNG liquefaction plants in operation**

	Asset	Location	Shell interest (%)	100% capacity (mtpa)[A]
Europe				
Norway	Gasnor	Bergen	100.0	0.3
Asia				
Brunei	Brunei LNG	Lumut	25.0	7.8
Malaysia	Malaysia LNG Tiga	Bintulu	15.0	7.7
Oman	Oman LNG	Sur	30.0	7.1
	Qalhat LNG	Sur	11.0 [B]	3.7
Qatar	Qatargas 4	Ras Laffan	30.0	7.8
Russia	Sakhalin LNG	Prigorodnoye	27.5	9.6
Oceania				
Australia	Australia North West Shelf	Karratha	18.9 [B]	16.7
	Australia Pluto 1	Karratha	11.9 [B]	4.9
	Gorgon LNG T1	Barrow Island	25.0	5.2
	Gorgon LNG T2	Barrow Island	25.0	5.2
	Queensland Curtis LNG T1	Curtis Island	50.0	4.3
	Queensland Curtis LNG T2	Curtis Island	97.5	4.3
Africa				
Egypt	Egyptian LNG T1	Idku	35.5	3.6
	Egyptian LNG T2	Idku	38.0	3.6
Nigeria	Nigeria LNG	Bonny	25.6	22.0
South America				
Peru	Peru LNG	Pampa Melchorita	20.0	4.5
Trinidad and Tobago	Atlantic LNG T1	Point Fortin	46.0	3.1
	Atlantic LNG T2/T3	Point Fortin	57.5	6.6
	Atlantic LNG T4	Point Fortin	51.1	5.2

[A] As reported by the operator.

[B] Interest, or part of the interest, is held via indirect shareholding.

**LNG liquefaction plants under construction**

	Asset	Location	Shell interest (%)	100% capacity (mtpa)
Oceania				
Australia	Gorgon LNG T3	Barrow Island	25.0	5.2
	Prelude	Browse Basin	68.0	3.6

**GTL plants in operation**

	Asset	Location	Shell interest (%)	100% capacity (b/d)
Asia				
Malaysia	Shell MDS	Bintulu	72.0	14,700
Qatar	Pearl	Ras Laffan	100.0	140,000



## UPSTREAM

### Key statistics

	\$ million, except where indicated		
	2016	2015	2014
Segment earnings	(3,674)	(8,833)	5,231
Including:			
Revenue (including inter-segment sales)	32,936	33,563	59,930
Share of profit of joint ventures and associates	222	491	1,178
Interest and other income	839	1,819	873
Operating expenses [A]	14,501	15,740	17,394
Exploration	1,614	4,429	2,785
Depreciation, depletion and amortisation	16,779	20,404	15,206
Taxation (credit)/charge	(938)	(927)	11,269
Capital investment [A]	47,507	18,349	22,169
Divestments [A]	1,451	2,478	5,770
Oil and gas production available for sale (thousand boe/d)	2,784	2,323	2,398

[A] See Non-GAAP measures reconciliations\* on pages 195-196.

### OVERVIEW

Our Upstream business explores for and extracts crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates the infrastructure necessary to deliver them to market. We also extract bitumen from mined oil sands and convert it into synthetic crude oil.

### BUSINESS CONDITIONS

Global oil demand grew by 1.5% in 2016. Brent crude oil, an international benchmark, traded between \$26 and \$56 per barrel in 2016, ending the year at \$55/b. It averaged \$44/b, the lowest level since 2004 and \$8/b less than in 2015. On a yearly average basis, West Texas Intermediate crude oil traded at a \$0.4/b discount to Brent in 2016, compared with \$3/b in 2015. The discount narrowed as production in the USA declined in response to lower oil prices and logistical bottlenecks were removed due to added pipeline capacity between the landlocked trading hub in Cushing, Oklahoma, and demand centres such as refineries and export terminals.

Global gas demand grew by about 1% in 2016, which is much lower than the average annual growth rate of 2.3% in the past decade. A combination of mild weather and continued moderate global economic growth led to a lower rate of demand growth in most regions. In the USA, the natural gas price at the Henry Hub averaged \$2.5 per million British thermal units (MMBtu) in 2016, 4% lower than in 2015, and traded in a range of \$1.5-3.8/MMBtu. Mild winter weather led to a record of 2.5 trillion cubic feet (tcf) of gas in storage at the end of March. Thereafter, Henry Hub prices remained below \$2.3/MMBtu until June. Prices then increased steadily to \$3.1/MMBtu in September due to warm summer weather driving gas demand for electricity generation, declining domestic gas production and new demand from LNG exports as two liquefaction trains on the US Gulf Coast began operations. Prices averaged \$3.6/MMBtu in December, driven by weather-related demand growth and falling gas production. In Europe, natural gas prices fell during 2016. The average price at the UK National Balancing Point was 23% lower than in 2015. At the main continental European gas trading hubs – in the Netherlands, Belgium and Germany – prices were also weaker. Lower prices reflected the net effect of abundant supply, for example from Russia and Algeria, and demand growing by 6%, driven by electricity generation, other industrial-sector demand and increased gas use for transportation.

See “Market overview” on pages 16-17.

### PRODUCTION AVAILABLE FOR SALE

In 2016, production was 1,019 million barrels of oil equivalent (boe), or 2,784 thousand boe per day (boe/d), compared with 848 million boe, or 2,323 thousand boe/d in 2015. Liquids production increased by 24% and natural gas production increased by 15% compared with 2015.

Production in 2016 increased mainly due to the acquisition of BG Group plc (BG) (around 490 thousand boe/d), stronger operational performance (around 75 thousand boe/d) and new field start-ups and the continued ramp-up of existing fields (around 70 thousand boe/d), particularly the Corrib gas field in Ireland and the Erha North Phase 2 project in Nigeria. This was partly offset by field declines (around 90 thousand boe/d), sabotage and security issues in Nigeria (around 40 thousand boe/d), and other items with a net negative impact of around 45 thousand boe/d.

### EARNINGS 2016-2015

BG was consolidated within Shell's results with effect from February 2016 following its acquisition.

Segment earnings in 2016 were a loss of \$3,674 million, which included a net charge of \$970 million. The net charge included impairment charges of \$1,147 million (reported in depreciation), primarily related to shale and deep-water properties in North and South America, redundancy and restructuring charges of \$654 million, a \$235 million provision for onerous drilling rig contracts, \$198 million related to the reassessment of deferred tax positions in Malaysia and a net charge on fair value accounting of certain commodity derivatives and gas contracts of \$145 million. These charges were partly offset by a gain of \$661 million related to the impact of the strengthening Brazilian real on a deferred tax position, divestment gains of \$645 million, reported in interest and other income, and a credit of \$103 million reflecting a statutory tax rate reduction in the UK.

Segment earnings in 2015 were a loss of \$8,833 million, which included a net charge of \$6,578 million. The net charge included \$4,616 million related to impairments, redundancy and restructuring, and other items associated with the decision to cease Alaska drilling activities for the foreseeable future and the Carmon Creek project in Canada. Charges for Alaska were \$2,584 million, which included \$755 million associated with well write-offs, and charges for Carmon Creek were \$2,032 million. The net charge also reflected other impairment charges of \$3,466 million and a charge of \$463 million related to the impact of the weakening Brazilian real on a deferred tax position. These charges were partly offset by gains on divestments of \$1,603 million and a credit of \$604 million reflecting a statutory tax rate reduction in the UK.

Excluding the net charges described above, segment earnings in 2016 were a loss of \$2,704 million compared with a loss of \$2,255 million in 2015. Earnings were impacted by lower oil and gas prices (around \$2,950 million), and higher depreciation (around \$2,210 million), mainly related to the acquisition of BG, and other net negative impacts of around \$380 million. These impacts were partly offset by higher production volumes (around \$3,750 million), mainly due to the acquisition of BG, lower operating expenses (around \$920 million), which more than offset the impact of the consolidation of BG, and lower exploration expense (around \$420 million).

## Upstream Continued

### EARNINGS 2015-2014

Segment earnings in 2015 were a loss of \$8,833 million, which included a net charge of \$6,578 million, as described on page 27. Segment earnings in 2014 of \$5,231 million included a net charge of \$1,523 million, including impairment charges of \$2,260 million, partly offset by divestment gains of \$662 million, the net effect of fair value accounting of commodity derivatives and certain gas contracts and the impact of amendments to our Dutch pension plan. Excluding these net charges, segment earnings in 2015 decreased by \$9,009 million compared with 2014, principally as a result of the significant decline in oil and gas prices.

### CAPITAL INVESTMENT

Capital investment in 2016 was \$47.5 billion, compared with \$18.3 billion in 2015. Capital investment in 2016 included \$31.1 billion related to the acquisition of BG. Organic capital investment was \$1.6 billion lower than in 2015, reflecting our continuing efforts to curtail spending by reducing the number of new investment decisions and pursuing lowercost development solutions.

### DIVESTMENTS

Divestments in 2016 were \$1.5 billion, compared with \$2.5 billion in 2015. Divestments in 2016 were mainly the sale of US Gulf of Mexico assets – the Brutus tension leg platform (TLP), the Glider subsea production system, the pipelines used to transport oil and gas from the TLP, and 20% of our interest in the Kaikias project – and acreage in the Deep Basin and Gundy areas in Canada.

### PORTFOLIO AND BUSINESS DEVELOPMENT

Following the acquisition of BG in February 2016, the assets have been integrated into our portfolio. Notable acquired interests are identified in the Business and property section.

We took the following key portfolio decisions:

- In 2016, in the United Arab Emirates, we decided to exit the joint development of the Bab sour gas reservoirs (Shell interest 40%) with Abu Dhabi National Oil Company (ADNOC) in the emirate of Abu Dhabi, and to stop further work on the project.
- In February 2017, we took the final investment decision (FID) to execute Phase 1 of the Kaikias deep-water project (Shell interest 80%) in the USA. Kaikias is a subsea tie-back to the Shell-operated Ursa platform. Phase 1 will include three wells which collectively are expected to reach a peak production of approximately 40 thousand boe/d.

We achieved the following operational milestones in 2016:

- In Brazil, we started oil production from the third phase of the deep-water Parque das Conchas BC-10 development (Shell interest 50%) in the Campos basin.
- Also in Brazil, the seventh, eighth and ninth floating production, storage and offloading facilities (FPSO) – Cidade de Maricá, (Shell interest 25%, production capacity of 150 thousand boe/d), Cidade de Saquarema (Shell interest 25%, production capacity of 150 thousand boe/d) and Cidade de Caraguatuba (Shell interest 30%, production capacity of 100 thousand boe/d) respectively – achieved first oil in various offshore blocks.
- In Brunei, the non-Shell-operated ML South development (Shell interest 35%) achieved first production. The expected peak production from this development is around 40 thousand boe/d.
- In Kazakhstan, first crude oil was exported on October 29, 2016, and the Commencement of Commercial Production milestone was achieved on November 1, 2016, from the non-Shell-operated Kashagan development (Shell interest 16.8%).
- In Malaysia, we started production from the Malikai TLP (Shell interest 35%), located 100 kilometres off the coast of the state of Sabah. Malikai is expected to reach a peak production of 60 thousand boe/d.
- In the USA, we started production at the Stones development (Shell interest 100%) in the Gulf of Mexico. Stones is expected to produce around 50 thousand boe/d when fully ramped up at the end of 2017.

We continued to divest selected assets during 2016, including:

- In Canada, we sold our interest in 145 thousand net acres in the Deep Basin acreage and 61 thousand net acres in the Gundy acreage.
- In the USA, we sold our 100% interest in the Brutus TLP, the Glider subsea production system, and the pipelines used to transport oil and gas from the TLP.
- Also in the USA, we sold a 20% interest in the Kaikias project in the Gulf of Mexico. We retain an 80% interest.

We reached the following agreements:

- In Malaysia in 2016, we agreed to sell our 50% interest in the 2011 North Sabah EOR Production Sharing Contract, subject to obtaining regulatory and partner approval.
- In January 2017, we agreed to sell our interests in the UK North Sea assets Buzzard, Beryl, Bressay, Elgin-Franklin, J-Block, the Greater Armada cluster, Everest, Lomond and Erskine, as well as a 10% interest in Schiehallion, for a consideration of up to \$3.8 billion, including an initial consideration of \$3.0 billion, a payment of up to \$0.6 billion between 2018 and 2021 subject to commodity price, and potential further payments of up to \$0.2 billion for future discoveries. The transaction is subject to partner and regulatory approvals, with completion expected in 2017.
- In March 2017, we agreed to sell all of our in-situ and undeveloped oil sands interests in Canada, and our 60% interest in the Athabasca Oil Sands Project (AOSP). The transaction is estimated to result in a post-tax impairment loss of \$1.3 billion to \$1.5 billion, subject to adjustments. In a related transaction, we have agreed to jointly acquire Marathon Oil Canada Corporation (MOCC), which has a 20% interest in the AOSP. Upon completion of all transactions, we will continue as operator of the Scotford Upgrader and Quest carbon capture and storage (CCS) project. The transactions are expected to close in mid 2017, subject to customary closing conditions, adjustments and regulatory approvals. Subject to closing of all transactions and additional further conditions, we may swap our 50% purchased interest in MOCC for a 20% interest in assets of the Scotford Upgrader and Quest CCS project. If the swap were to occur, we would fully exit AOSP mining operations and have a 20% interest in the Scotford Upgrader and Quest CCS project. See Note 30 to the "Consolidated Financial Statements" on page 152.

### BUSINESS AND PROPERTY

Our subsidiaries, joint ventures and associates are involved in all aspects of upstream activities, including matters such as land tenure, entitlement to produced hydrocarbons, production rates, royalties, pricing, environmental protection, social impact, exports, taxes and foreign exchange.

The conditions of the leases, licences and contracts under which oil and gas interests are held vary from country to country. In almost all cases outside North America, the legal agreements are generally granted by, or entered into with, a government, state-owned company or government-run oil and gas company, and the exploration risk usually rests with the independent oil and gas company. In North America, these agreements may also be with private parties that own mineral rights. Of these agreements, the following are most relevant to our interests:

- Licences (or concessions), which entitle the holder to explore for hydrocarbons and exploit any commercial discoveries. Under a licence, the holder bears the risk of exploration, development and production activities, and is responsible for financing these activities. In principle, the licence holder is entitled to the totality of production less any royalties in kind. The government, state-owned company or government-run oil and gas company may sometimes enter into a joint arrangement as a participant sharing the rights and obligations of the licence but usually without sharing the exploration risk. In a few cases, the state-owned company, government-run oil and gas company or agency has an option to purchase a certain share of production.

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- Lease agreements, which are typically used in North America and are usually governed by terms similar to licences. Participants may include governments or private entities, and royalties are either paid in cash or in kind.
- Production-sharing contracts (PSCs) entered into with a government, state-owned company or government-run oil and gas company. PSCs generally oblige the independent oil and gas company, as contractor, to provide all the financing and bear the risk of exploration, development and production activities in exchange for a share of the production. Usually, this share consists of a fixed or variable part that is reserved for the recovery of the contractor's cost (cost oil). The remaining production is split with the government, state-owned company or government-run oil and gas company on a fixed or volume/revenue-dependent basis. In some cases, the government, state-owned company or government-run oil and gas company will participate in the rights and obligations of the contractor and will share in the costs of development and production. Such participation can be across the venture or on a field-by-field basis. Additionally, as the price of oil or gas increases above certain predetermined levels, the independent oil and gas company's entitlement share of production normally decreases, and vice versa. Accordingly, its interest in a project may not be the same as its entitlement.

## EUROPE

### Denmark

We have a non-operating interest in a producing concession in Denmark (Shell interest 36.8%), which was granted in 1962 and expires in 2042. The Danish government is one of our partners with a 20% interest.

### Ireland

We are the operator of the Corrib gas project (Shell interest 45%), which has been in production since 2015.

### Italy

We have a 39.23% interest in the Val d'Agri producing concession, operated by ENI. Over the course of about four months in 2016, operational issues with the waste-water classification resulted in production being shut in. During 2016, the Val d'Agri Phase 2 project was reshaped and an alternative phased approach defined to improve capital efficiency, resolve critical sustainable development elements and lower non-technical risks.

We also have a 25% interest in the Tempa Rossa concession operated by Total. The Tempa Rossa field is under development and first oil is expected in 2018.

### Netherlands

Shell and ExxonMobil are 50:50 shareholders in Nederlandse Aardolie Maatschappij B.V. (NAM). An important part of NAM's gas production comes from the onshore Groningen gas field, in which EBN, a Dutch government entity, has a 40% interest and NAM a 60% interest.

Production from the Groningen field has caused earthquakes in the past which are expected to continue. The earthquakes have caused damage to houses and other structures in the region and complaints from the local community. Since 2013 the Minister of Economic Affairs has imposed caps on production in order to reduce the impact of the earthquakes on the neighbouring communities. In September 2016, the Minister approved the production of 24 billion cubic metres per year from the Groningen field until October 1, 2021. At the request of Parliament, the Minister will review annually whether new circumstances have arisen that call for a further reduction of the production. Since 2013, a variety of measures have been taken by NAM, the Minister and the government, including an in-depth study and measuring programme (both sub-surface and above surface) and issuance of specific building regulations. A national coordinator has been appointed by the government to coordinate public oversight and a dedicated damage claim handling company has been set up, with improvements to damage claim handling kept under review. See "Risk factors" on page 14.

NAM also has a 60% interest in the Schoonebeek oil field, which resumed operations in September 2016 following the resolution of pipeline integrity issues, and operates a significant number of other onshore gas fields and offshore gas fields in the North Sea.

## Norway

As a result of the BG acquisition, we are the operator in the producing Gaupe (Shell interest 60%) and Knarr fields (Shell interest 45%).

Overall, we are a partner in 42 production licences on the Norwegian continental shelf, including seven new licences awarded in January 2017. We are the operator in 19 of these, of which four are producing: the Draugen oil field (Shell interest 44.6%), the Gaupe and Knarr fields, and the Ormen Lange gas field (Shell interest 17.8%). We have interests in the producing fields Troll, Gjøa, Kvitebjørn and Valemon, where we are not the operator.

## UK

We operate a significant number of our interests on the UK continental shelf on behalf of a 50:50 joint arrangement with ExxonMobil. Most of our UK oil and gas production comes from the North Sea. In the Atlantic Margin area, we have various interests where we are not the operator, principally in the West of Shetland area (Clair, Shell interest 28%, and Schiehallion, Shell interest approximately 55%).

Production from the Schiehallion and Loyal fields was suspended during 2013 as the fields are being redeveloped. A replacement FPSO was installed in 2016 and production from these fields is expected to resume in 2017.

As a result of the BG acquisition, we also have interests, where we are not the operator, in the Buzzard field (Shell interest 21.7%, operated by Nexen Petroleum), located in the Outer Moray Firth, central North Sea; in the J-Block and Jade area (Shell interests ranging from 30.5% to 35%, operated by ConocoPhillips); interests ranging from 20% to 49% in the Beryl area fields operated by Apache; and other operated and non-Shell operated interests in offshore blocks, with Shell interests ranging from 14.1% to 100%.

In 2016, we sold our 7.59% interest in the Maclure oil and gas field in the North Sea, and we sold the Anasuria FPSO (including the Guillemot A, Cook and Teal fields), also in the North Sea.

In January 2017, we agreed to sell our interests in the UK North Sea assets Buzzard, Beryl, Bressay, Elgin-Franklin, J-Block, the Greater Armada cluster, Everest, Lomond and Erskine, as well as a 10% interest in Schiehallion. Completion is subject to partner and regulatory approvals.

## Rest of Europe

We also have interests in Albania, Bulgaria, Cyprus, Germany and Greenland.

## ASIA (INCLUDING THE MIDDLE EAST AND RUSSIA)

### Brunei

Shell and the Brunei government are 50:50 shareholders in Brunei Shell Petroleum Company Sendirian Berhad (BSP). BSP has long-term oil and gas concession rights onshore and offshore Brunei, and sells most of its gas production to Brunei LNG Sendirian Berhad (See "Integrated Gas" on page 23). BSP started up the Champion Intermediate Deep (expected peak production of around 9 thousand boe/d) and Champion Waterflood B2-B3 (expected peak production of around 10 thousand boe/d) projects in 2016.

In addition to our interest in BSP, we are the operator for the Block A concession (Shell interest 53.9%), which is under exploration and development, and also the operator for exploration Block Q (Shell interest 50%). We have a 35% non-operating interest in the Block B concession, where gas and condensate are produced from the Maharaja Lela field.

We also have non-operating interests in deep-water exploration Block CA-2 (Shell interest 12.5%) and in exploration Block N (Shell interest 50%), both under PSCs.

The non-Shell-operated ML South development (Shell interest 35%) achieved first production in 2016.

## Upstream Continued

### Iran

Shell transactions with Iran are disclosed separately. See "Section 13(r) of the US Securities Exchange Act of 1934 Disclosure" on page 194.

### Iraq

We have a 45% interest in the Majnoon oil field that we operate under a development and production services contract that expires in 2030. The other partners in Majnoon are PETRONAS (30%) and the Iraqi government, which is represented by the Missan Oil Company (25%). Majnoon is located in southern Iraq and is one of the world's largest oil fields. Production at Majnoon averaged 215 thousand boe/d in 2016, compared with 206 thousand boe/d in 2015. We also have a 20% interest in the development and production services contract for the West Qurna 1 field, which is operated by ExxonMobil. This interest is subject to an ongoing sales process.

We also have a 44% interest in the Basrah Gas Company, which gathers, treats and processes associated gas produced from the Rumaila, West Qurna 1 and Zubair fields that was previously being flared. The processed gas and associated products, such as condensate and liquefied petroleum gas (LPG), are sold primarily to the domestic market with the potential to export any surplus. In 2016, Basrah Gas processed over 570 million standard cubic feet per day of associated gas into dry gas, condensate and LPG, and executed its first exports of LPG and condensates.

### Kazakhstan

As a result of the BG acquisition, we are the joint operator of the onshore Karachaganak oil and condensate field (Shell interest 29.25%), where we have a licence to the end of 2037. Karachaganak produced around 390 thousand boe/d, on a 100% basis, in 2016.

We have a 16.8% interest in the North Caspian Sea Production Sharing Agreement which covers among others the Kashagan field in the Kazakh sector of the Caspian Sea, where first crude oil was exported on October 29, 2016, and the Commencement of Commercial Production milestone was achieved on November 1, 2016. The North Caspian Operating Company is the operator. This shallow-water field covers an area of approximately 3,400 square kilometres. Phase 1 development of the field is expected to lead to plateau oil production capacity of about 370 thousand b/d, on a 100% basis, with the possibility of increases with additional phases of development. Production started in October 2016.

We also have an interest of 55% in the Pearls PSC, covering an area of approximately 900 square kilometres in the Kazakh sector of the Caspian Sea. It includes two oil discoveries, Auezov and Khazar.

We also have a 7.43% interest in Caspian Pipeline Consortium, which owns and operates an oil pipeline running from the Caspian Sea to the Black Sea across parts of Kazakhstan and Russia.

### Malaysia

We explore for and produce oil and gas offshore Sabah and Sarawak under 16 PSCs, in which our interests range from 20% to 75%.

Offshore Sabah, we operate five producing oil fields (Shell interests ranging from 29% to 50%). These include the Gumusut-Kakap deep-water field (Shell interest 29%) where production is via a dedicated floating production system. We have additional interests ranging from 30% to 40% in PSCs for the exploration and development of four blocks. These include the Malikai deep-water field (Shell interest 35%), which we are developing as the operator and where we started production from the Malikai TLP. We also have a 21% interest in the Siakap North-Petai deep-water field and a 30% interest in the Keabangan field, both operated by third parties.

In 2016, we agreed to sell our 50% interest in the 2011 North Sabah EOR Production Sharing Contract in Malaysia, subject to obtaining regulatory and partner approval.

Offshore Sarawak, we are the operator of 12 producing gas fields (Shell interests ranging from 37.5% to 70%). Nearly all of the gas produced is supplied to Malaysia LNG in Bintulu and to our gas-to-liquids plant in Bintulu. See "Integrated Gas" on page 24.

We also have a 40% interest in the 2011 Baram Delta EOR PSC and a 50% interest in Block SK307. Additionally, we have interests in four exploration PSCs: SK318, SK319, SK320 and SK408.

### Oman

We have a 34% interest in Petroleum Development Oman (PDO); the Omani government has a 60% interest. PDO is the operator of more than 160 oil fields, mainly located in central and southern Oman, over an area of 85,823 square kilometres. The concession expires in 2044.

We also participate in the Mukhaizna oil field (Shell interest 17%).

### United Arab Emirates

In Abu Dhabi, we have a 15% interest in the licence of Abu Dhabi Gas Industries Limited (GASCO), which expires in 2028. GASCO exports propane, butane and heavier liquid hydrocarbons, which it extracts from the wet gas associated with the oil produced by the Abu Dhabi Company for Onshore Oil Operations.

In 2016, we decided to exit the joint development of the Bab sour gas reservoirs (Shell interest 40%) with ADNOC in the emirate of Abu Dhabi, and to stop further work on the project.

### Rest of Asia

We also have interests in Jordan, Kuwait, Mongolia, Myanmar, State of Palestine, the Philippines and Turkey.

## AFRICA

### Egypt

We have a 50% interest in the Badr Petroleum Company (BAPETCO), a self-operated joint venture between Shell and the Egyptian General Petroleum Corporation (EGPC). BAPETCO onshore operations are located in the Western Desert where we have an interest in nine oil and gas producing development leases as well as three exploration concessions (North East Obaiyed, North Matrouh and North East Alam El Shawish).

As a result of the BG acquisition, we have interests in two gas-producing areas offshore the Nile Delta. We have a 40% interest in the Rashid Petroleum Company (RASHPETCO), a self-operated joint venture between Shell, EGPC and Edison which operates the Rosetta concession (Shell interest 80%). In 2016, the contractor parties to the Rosetta concession (Shell and Edison) handed over the right of use for the Rosetta onshore gas processing plant to BP and RWV.

We also have a 25% interest in the Burullus Gas Company (Burullus), a self-operated joint venture between Shell, EGPC and PETRONAS. Burullus operates the West Delta Deep Marine concession (WDDM, Shell interest 50%).

In 2016, gas was supplied from the WDDM concession to the Egyptian LNG plant (see "Integrated Gas" on page 25).

We also have a 60% interest in the development rights over the Harmattan Deep discovery and in the Notus discovery offshore the Nile Delta.

### Gabon

We have an interest in eight onshore mining concessions (Shell interest ranging from 40% to 100%), of which five are Shell operated and three are Total operated. The onshore concessions are governed through seven PSCs and one tax agreement. An important part of the Gabon production comes from the Toucan (Shell interest 94.25%), Rabi (Shell interest 52.5%) and Kaula fields (Shell interest 40%). We also have a 75% interest in Shell-operated Gabon deep-water exploration licences.

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## Nigeria

Our share of production, onshore and offshore, in Nigeria was 258 thousand boe/d in 2016, compared with 278 thousand boe/d in 2015. Security issues, sabotage and crude oil theft in the Niger Delta continued to be significant challenges in 2016.

### Onshore

The Shell Petroleum Development Company of Nigeria Limited (SPDC) is the operator of a joint arrangement (Shell interest 30%) that has 17 Niger Delta onshore oil mining leases (OML), which expire in 2019. These include OML 25 which is held for sale subject to the resolution of pending litigation. Of the Nigeria onshore proved reserves, 164 million boe are expected to be produced before the expiry of the current licences, and 377 million boe beyond. To provide funding, modified carry agreements are in place for certain key projects and are being reimbursed.

Although the level of crude oil theft decreased in 2016 compared with 2015, a substantial increase in the level of sabotage was reported as a result of the Forcados export line attacks, which led to a significantly higher overall production loss than in 2015.

SPDC supplies gas to Nigeria LNG Ltd (see "Integrated Gas" on page 24) mainly through its Gbaran-Ubie and Soku projects.

### Offshore

Our main offshore deep-water activities are carried out by Shell Nigeria Exploration and Production Company Limited (SNEPCO, Shell interest 100%), which has interests in four deep-water blocks, under PSC terms. SNEPCO operates OMLs 118 (including the Bonga field, Shell interest 55%) and 135 (Bolia and Daro, Shell interest 55%) and has a 43.75% interest in OML 133 (Erha), where we are not the operator, and a 50% interest in OPL 245 (Zabazaba, Etan), where we are also not the operator.

Authorities in various countries are investigating our investment in Nigerian oil block OPL 245 and the 2011 settlement of litigation pertaining to that block. On January 27, 2017, the Nigeria Federal High Court issued an Interim Order of Attachment for oil block OPL 245, pending the conclusion of the investigation. Shell has applied to discharge this order on constitutional and procedural grounds. On February 14, 2017, we received notice of the request of indictment from the Italian prosecution office in Milan with respect to this matter.

SNEPCO also has an approximate 43% interest in the Bonga South West/Aparo development via its 55% interest in OML 118. Following the decision to delay the Bonga South West/Aparo project, a reframing exercise is under way to make this project economically viable in the current business environment. FID is not expected before 2018.

SPDC also has three shallow-water licences (OMLs 74, 77, and 79) and a 40% interest in the non-Shell operated Sunlink joint venture that has one shallow-water licence (OML 144); all four shallow-water OMLs expire in 2034.

In our Nigerian operations, we face various risks and adverse conditions which could have a material adverse effect on our operational performance, earnings, cash flows and financial condition (see "Risk factors" on page 13). These risks and conditions include: security issues surrounding the safety of our people, host communities and operations; sabotage and crude oil theft; our ability to enforce existing contractual rights; litigation; limited infrastructure; potential legislation that could increase our taxes or costs of operations; the effect of lower oil and gas prices on the government budget; and regional instability created by militant activities. There are limitations to the extent to which we can mitigate these risks. We carry out regular portfolio assessments to remain a competitive player in Nigeria for the long term. We support the Nigerian government's efforts to improve the efficiency, functionality and domestic benefits of Nigeria's oil and gas industry, and we monitor legislative developments. We monitor the security situation and liaise with host communities, governmental and non-governmental organisations to help promote peace and safe operations. We continue to provide transparency of spills management and reporting, along with our deployment of oil-spill response capability and technology. We execute a maintenance strategy to support sustainable equipment reliability, and have implemented a multi-year programme to support sustainable reductions in the routine flaring of associated gas. See "Environment and society" on page 56.

## Rest of Africa

We also have interests in Algeria, Kenya, Namibia, South Africa, Tanzania and Tunisia.

## NORTH AMERICA

### Canada

We have approximately 1,600 mineral leases in Canada, mainly in Alberta and British Columbia. We produce and market natural gas, natural gas liquids, synthetic crude oil and bitumen. In addition, we have significant exploration acreage offshore.

### Shales

We continued to develop fields in Alberta and British Columbia during 2016 through drilling programmes and investment in infrastructure to facilitate new production. We own and operate natural gas processing and sulphur extraction plants in Alberta and natural gas processing plants in British Columbia. Our investment focus remains on liquid-rich shale assets in Alberta. As part of that focus, we sold shale gas assets located in Deep Basin East and Gundy in November 2016.

### Bitumen and synthetic crude oil

Bitumen is a very heavy crude oil produced through conventional methods as well as through enhanced oil recovery methods. We produce and market bitumen in the Peace River area of Alberta. We also have heavy oil resources in approximately 1,200 square kilometres of the Grosmont oil sands area, also in northern Alberta.

Synthetic crude oil is produced by mining bitumen-saturated sands, extracting the bitumen from the sands and transporting it to a processing facility where hydrogen is added to produce a wide range of feedstocks for refineries. We operate the Athabasca Oil Sands Project in north-east Alberta as part of a joint arrangement (Shell interest 60%). The bitumen is transported by pipeline for processing at the Scotford Upgrader, and is located in the Edmonton area. We also have a number of other minable oil sands leases in the Athabasca region with expiry dates ranging from 2018 to 2025. By completing the Alberta Department of Energy's development requirements prior to their expiry, leases may be extended.

In March 2017, we agreed to sell, in a series of transactions, all of our in-situ and undeveloped oil sands interests in Canada and reduce our interest in the AOSP from 60% to 10%. See Note 30 to the "Consolidated Financial Statements" on page 152.

### Carbon capture and storage (CCS)

In 2015, we launched our Quest CCS project in Canada, which captured and safely stored more than 1 million tonnes of CO<sub>2</sub> in 2016.

### Offshore

We have a 31.3% interest in the Sable Offshore Energy project, a natural-gas complex off the east coast of Canada, and other acreages in deep-water offshore Nova Scotia and Newfoundland. We have a 50% interest and operatorship in the Shelburne exploration project offshore Nova Scotia. We also have a number of exploration licences off the west coast of British Columbia and in the Mackenzie Delta in the Northwest Territories.

## USA

We produce oil and gas in deep water in the Gulf of Mexico, heavy oil in California and oil and gas from shale in Pennsylvania, Texas and Louisiana. The majority of our oil and gas production interests are acquired under leases granted by the owner of the minerals underlying the relevant acreage, including many leases for federal onshore and offshore tracts. Such leases usually run on an initial fixed term that is automatically extended by the establishment of production for as long as production continues, subject to compliance with the terms of the lease (including, in the case of federal leases, extensive regulations imposed by federal law).

### Gulf of Mexico

The Gulf of Mexico is our major production area in the USA, and accounts for more than 62% of our oil and gas production in the country. We have an interest in approximately 400 federal offshore production leases and our share of production averaged 248 thousand boe/d in 2016.

## Upstream Continued

We are the operator of eight production hubs, Mars A, Mars B, Auger, Perdido, Ursa, Enchilada/Salsa, Ram Powell and Stones, as well as the West Delta 143 Processing Facilities (Shell interests ranging from 38% to 100%). We also have non-operating interests in Nakika (Shell interest 50%) and Caesar Tonga (Shell interest 22.5%), and the Coulomb field (Shell interest 100%).

During 2016, the Stones field came on stream with Shell's first FPSO in the Gulf of Mexico. We also began drilling operations at the Appomattox field. Construction of the facilities and export pipeline continues with first oil expected in 2019.

In 2016, we sold our 100% interest in the Brutus TLP, the Glider subsea production system, and the pipelines used to transport the oil and gas from the TLP. Additionally, we sold a 20% interest in the Kaikias project in the Gulf of Mexico. We retain an 80% interest, and, in February 2017, we took the FID to execute Phase 1 of the project. Phase 1 will include three wells which collectively are expected to reach a peak production of approximately 40 thousand boe/d.

### Onshore

We have significant shale acreage, focused in the Delaware Permian Basin in west Texas and the Marcellus and Utica plays in Pennsylvania. As a result of the acquisition of BG, we acquired a position in the Haynesville shale gas formation in Northern Louisiana, which is operated by EXCO Resources Inc.

### California

We have a 51.8% interest in Aera Energy LLC (Aera) which operates approximately 15,000 wells in the San Joaquin Valley in California, mostly producing heavy oil and associated gas.

### Alaska

We found indications of oil and gas in the Burger J well in the Chukchi Sea in 2015, but they were insufficient to warrant further exploration in the prospect and the well was deemed a dry hole. The well was sealed and abandoned in accordance with US regulations.

During the summer of 2016, contractors safely collected the remaining equipment used for our prior offshore exploration and drilling operations, and successfully conducted Phase 4 of the drilling discharge monitoring process in accordance with federal Environmental Protection Agency requirements.

In 2016, we relinquished all but one federal lease in the Chukchi Sea and half of our federal leases in the Beaufort Sea. We concluded a commercial deal to transfer 21 Beaufort federal leases to the Arctic Slope Regional Corporation. We also transferred operatorship of our remaining federal leases (Shell interest 40%) in the Beaufort Harrison Bay area to ENI. We retain 18 state leases nearby and continue to evaluate all our Beaufort holdings for commercial options. The BG acquisition added an onshore gas portfolio in the Alaska Foothills, in which we now have a 33% non-Shell-operated interest along with Anadarko and Suncor. We continue to evaluate options for this portfolio.

### Rest of North America

We also have interests in Honduras.

## SOUTH AMERICA

### Brazil

We operate several producing fields in the Campos Basin, offshore Brazil. They include the Bijupirá and Salema fields (Shell interests 80%) and the BC-10 field (Shell interest 50%). Production from the BC-10 Phase 3 project started in 2016. In February 2016, the agreement to sell our 80% interest in Bijupirá Salema was cancelled and therefore this asset remains in our portfolio.

As a result of the BG acquisition, we have a 30% interest in the Sapinhoa and Lapa fields, as well as 25% interests in the Lula, Itacema, Berbigão, Sururu and Atapu West fields. We have nine producing FPSOs in Brazil, of those the seventh, eighth and ninth FPSOs – Cidade de Maricá, Cidade de Saquarema and Cidade de Caraguatuba respectively – reached first oil in 2016 in various offshore blocks and are expected to ramp up to full production capacity by

2020. Two further FPSOs (Lula North and Lula South) are expected to be brought online in 2017 and four are expected to do so over the period 2018-2020 (Berbigão, Lula Extreme South, Atapu South, Atapu North).

We have further development and exploration leases in the Santos Basin within the Libra (Shell interest 20%) and Gato-do-Mato BM-S-54 (Shell interest 80%) fields and have a further 20% non-Shell-operated interest in the Sagitario BM-S-50 offshore exploration block also in the Santos Basin.

Additionally, as a further result of the BG acquisition, we operate 10 offshore exploration blocks in the Barreirinhas Basin (Shell interests ranging from 50% to 100%).

### Rest of South America

We also have interests in Argentina, Colombia and Uruguay.

### TRADING AND SUPPLY

We market and trade crude oil from some of our Upstream operations.

## OIL AND GAS INFORMATION

### Proved developed and undeveloped reserves of Shell subsidiaries and Shell share of joint ventures and associates

	Crude oil and natural gas liquids (million barrels)	Natural gas (thousand million scf)	Synthetic crude oil (million barrels)	Bitumen (million barrels)	Total (million boe)[A]
Shell subsidiaries					
Increase in 2016:					
Revisions and reclassifications	260	532	33	4	389
Improved recovery	24	10	–	–	26
Extensions and discoveries	30	551	96	–	221
Purchases and sales of minerals in place	1,195	7,460	–	–	2,481
Total before taking production into account	1,509	8,553	129	4	3,117
Production [B]	(576)	(3,233)	(56)	(5)	(1,194)
Total	933	5,320	73	(1)	1,923
At January 1, 2016	3,046	23,939	1,941	3	9,117
At December 31, 2016	3,979	29,259	2,014	2	11,040
Shell share of joint ventures and associates					
Increase/(decrease) in 2016:					
Revisions and reclassifications	(13)	(1,297)	–	–	(237)
Extensions and discoveries	1	35	–	–	7
Total before taking production into account	(12)	(1,262)	–	–	(230)
Production [C]	(38)	(892)	–	–	(192)
Total	(50)	(2,154)	–	–	(422)
At January 1, 2016	313	13,436	–	–	2,630
At December 31, 2016	263	11,282	–	–	2,208
Total					
Increase before taking production into account	1,497	7,291	129	4	2,887
Production	(614)	(4,125)	(56)	(5)	(1,386)
Increase/(decrease)	883	3,166	73	(1)	1,501
At January 1, 2016	3,359	37,375	1,941	3	11,747
At December 31, 2016 [D][E]	4,242	40,541	2,014	2	13,248

[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 standard cubic feet (scf) per barrel.

[B] Included 36 million barrels of oil equivalent (boe) consumed in operations (natural gas: 197 thousand million scf; synthetic crude oil: 2 million barrels).

[C] Included 8 million boe consumed in operations (natural gas: 44 thousand million scf).

[D] Included 5 million boe of reserves attributable to non-controlling interest in Shell subsidiaries.

[E] In March 2017, we agreed to sell, in a series of transactions, all of our in-situ and undeveloped oil sands interests in Canada and reduce our interest in the Athabasca Oil Sands Project from 60% to 10%. See Note 30 to the "Consolidated Financial Statements" on page 152. Proved reserves associated with these oil sands interests and our 60% interest in the AOSP were 2 billion barrels at December 31, 2016.

### PROVED RESERVES

The proved oil and gas reserves of Shell subsidiaries and the Shell share of the proved oil and gas reserves of joint ventures and associates are set out in more detail in "Supplementary information – oil and gas (unaudited)" on pages 153-161.

Before taking production into account, our proved reserves increased by 2,887 million boe in 2016. This comprised an increase of 3,117 million boe from Shell subsidiaries and a decrease of 230 million boe from the Shell share of joint ventures and associates.

After taking production into account, our proved reserves increased by 1,501 million boe in 2016 to 13,248 million boe at December 31, 2016.

In order to illustrate the potential impact of falling commodity prices on our 2015 proved reserves base, we replaced the 2015 yearly average price with the 2016 yearly average price in the analysis below, holding all other variables, such as 2015 costs estimates, constant. Applying this methodology, 1,480 million boe of proved reserves would have been excluded from our SEC proved reserves at December 31, 2015, if the 2016 yearly average price had been used. This negative price effect of 1,480 million boe was the combined effect of a decrease of 1,614 million boe due to an earlier economic cut-off, a decrease of 17 million boe due to proved undeveloped reserves (PUD) no longer being economic, and an increase of 151 million boe due to a higher entitlement share

as a result of the lower yearly average price. The 1,480 million boe negative price effect includes a decrease of 1,045 million boe of proved reserves for Muskeg River Mine in Canada. Because of actions we took during 2016, our actual outcome does not reflect this significant price effect. For example, the 2015 proved reserves associated with the Muskeg River Mine remain part of our 2016 proved reserves base because we were able to obtain significant structural cost improvements in 2016 which offset the further decline in prices.

### SHELL SUBSIDIARIES

Before taking production into account, Shell subsidiaries' proved reserves increased by 3,117 million boe in 2016. This comprised increases of 1,642 million barrels of oil and natural gas liquids and 1,475 million boe (8,553 thousand million scf) of natural gas. The 3,117 million boe increase is the net effect of a net increase of 389 million boe from revisions and reclassifications (which included an increase of 138 million boe from an increased entitlement share in production-sharing and tax/variable royalty contracts due to the lower yearly average price); an increase of 26 million boe from improved recovery; an increase of 221 million boe from extensions and discoveries; and a net increase of 2,481 million boe related to purchases and sales of which 2,431 million boe were additions on acquisition of BG.

After taking into account production of 1,194 million boe (of which 36 million boe were consumed in operations), Shell subsidiaries' proved reserves increased by 1,923 million boe in 2016 to 11,040 million boe. Shell subsidiaries' proved

## Oil and gas information *Continued*

developed reserves (PD) increased by 1,510 million boe to 8,077 million boe, and PUD increased by 413 million boe to 2,963 million boe.

### Synthetic crude oil

The 2,887 million boe increase in proved reserves before taking production into account in 2016 included an increase of 129 million barrels of synthetic crude oil. This is mainly due to extensions and discoveries of 96 million boe and the price effect from variable royalty contracts of 33 million boe. In 2016, synthetic crude oil production was 56 million barrels, of which 2 million barrels were consumed in operations. At December 31, 2016, synthetic crude oil proved reserves were 2,014 million barrels, of which 1,387 million barrels were PD and 627 million barrels were PUD.

### Bitumen

The 2,887 million boe increase in proved reserves before taking production into account in 2016 included an increase of 4 million barrels of bitumen. In 2016, bitumen crude oil production was 5 million barrels with minimal volumes consumed in operations. At December 31, 2016, bitumen crude oil proved reserves were 2 million barrels.

### SHELL SHARE OF JOINT VENTURES AND ASSOCIATES

Before taking production into account, the Shell share of joint ventures and associates' proved reserves decreased by 230 million boe in 2016. This comprised decreases of 12 million barrels of oil and natural gas liquids and 218 million boe (1,262 thousand million scf) of natural gas. The 230 million boe decrease is the net effect of a net decrease of 237 million boe from revisions and reclassifications (which included an increase of 1 million boe from an increased entitlement share in production sharing and tax/variable royalty contracts due to the lower yearly average price) and an increase of 7 million boe from extensions and discoveries.

After taking into account production of 192 million boe (of which 8 million boe were consumed in operations), the Shell share of joint ventures and associates' proved reserves decreased by 422 million boe to 2,208 million boe at December 31, 2016.

The Shell share of joint ventures and associates' proved PD decreased by 219 million boe to 1,836 million boe, and PUD decreased by 203 million boe to 372 million boe.

### PROVED UNDEVELOPED RESERVES

In 2016, Shell subsidiaries' and the Shell share of joint ventures and associates' PUD increased by 210 million boe to 3,335 million boe.

The increase in 2016 consisted of additions of 1,093 million boe from purchases (of which 1,017 million boe related to the BG acquisition) and of 626 million boe matured from contingent resources to PUD from new projects, partly offset by a decrease of 1,111 million boe of PUD volumes that were matured to PD from major projects coming on stream during the year — Iracema and Sapinhoa gas export and two new FPSOs at Lula (Brazil), Janszlo (Australia), Kashaghan (Kazakhstan) and many smaller projects — and a net decrease of 398 million boe from revisions and reclassifications of prior PUD volumes due to the lower yearly average price, projects removed from our business plan and technical changes both up and down of prior PUD estimates.

The 1,111 million boe PUD volumes matured to PD included 187 million boe that were matured to PD from contingent resource through PUD as a result of project execution during the year.

PUD held for five years or more (PUD5+) at December 31, 2016, amounted to 1,494 million boe, an increase of 62 million boe compared with the end of 2015. These PUD5+ remain undeveloped because development either: requires the installation of gas compression and the drilling of additional wells, which will be executed when required to support existing gas delivery commitments (Netherlands and Russia); requires gas cap blow down which is awaiting end-of-oil production (in Nigeria); or will take longer than five years because of the complexity and scale of the project (Australia and Kazakhstan) or next mine phase awaiting completion of excavation of the current development phase (Canada).

The increase in PUD5+ of 62 million boe consisted of a net increase of 246 million boe, described below, partly offset by a decrease of 184 million boe due to the maturation of PUD5+ to PD from projects coming on stream during 2016, mainly Janszlo field (Australia) and Kashaghan field (Kazakhstan). The net increase of 246 million boe included the first time booking of PUD5+ of 341 million boe for projects with aged PUDs first reported over five years ago — mainly Prelude (Australia) and Clair and Schiehallion (UK) — and positive revisions of 82 million boe to previously reported PUD5+, partly offset by a decrease of 177 million boe from PUD associated with projects that are no longer included in our business plan, and other negative revisions to previously reported PUD5+.

The fields with the largest PUD5+ at December 31, 2016, were Muskeg River Mine (Canada), followed by Gorgon, Prelude and Janszlo (Australia), Groningen (Netherlands), and Kashaghan (Kazakhstan).

During 2016, we spent \$11.1 billion on development activities related to PUD maturation.



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## Summary of proved oil and gas reserves of Shell subsidiaries and Shell share of joint ventures and associates (at December 31, 2016)

Based on average prices for 2016

	Crude oil and natural gas liquids (million barrels)	Natural gas (thousand million scf)	Synthetic crude oil (million barrels)	Bitumen (million barrels)	Total (million boe)[A]
<b>Proved developed</b>					
Europe	261	8,677	–	–	1,757
Asia	1,399	14,679	–	–	3,930
Oceania	36	3,997	–	–	725
Africa	461	1,618	–	–	740
North America					
USA	437	563	–	–	534
Canada	14	458	1,387	2	1,482
South America	543	1,172	–	–	745
Total proved developed	3,151	31,164	1,387	2	9,913
<b>Proved undeveloped</b>					
Europe	181	1,561	–	–	450
Asia	243	1,148	–	–	441
Oceania	92	5,085	–	–	969
Africa	68	607	–	–	173
North America					
USA	54	112	–	–	73
Canada	4	386	627	–	698
South America	449	478	–	–	531
Total proved undeveloped	1,091	9,377	627	–	3,335
<b>Total proved developed and undeveloped</b>					
Europe	442	10,238	–	–	2,207
Asia	1,642	15,827	–	–	4,371
Oceania	128	9,082	–	–	1,694
Africa	529	2,225	–	–	913
North America					
USA	491	675	–	–	607
Canada	18	844	2,014	2	2,180
South America	992	1,650	–	–	1,276
Total	4,242	40,541	2,014	2	13,248

[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

### DELIVERY COMMITMENTS

We sell crude oil and natural gas from our producing operations under a variety of contractual obligations. Most contracts generally commit us to sell quantities based on production from specified properties, although some natural gas sales contracts specify delivery of fixed and determinable quantities, as discussed below.

In the past three years, we met our contractual delivery commitments, with the notable exception of Brunei and, in the last year, the former BG assets in Egypt and Trinidad and Tobago. In the period 2017 to 2019, we are contractually committed to deliver to third parties and joint ventures and associates a total of approximately 7,021 thousand million scf of natural gas from our subsidiaries, joint ventures and associates. The sales contracts contain a mixture of fixed and variable pricing formulae that are generally referenced to the prevailing market price for crude oil, natural gas or other petroleum products at the time of delivery.

In the period 2017-2019, we expect to meet our delivery commitments for almost all of our companies in the different countries where we operate, with an estimated 69% coming from PD, 21% through the delivery of gas that comes available to us from paying royalties in cash, and 10% from the development of PUD as well as other new projects and purchases on the spot market. The key exception (with a shortfall of 820 thousand million scf of natural gas) is Egypt,

where the diversion of gas from the recently acquired BG offshore fields to domestic use is expected to continue in the near future for reasons beyond our control, leaving our commitment to deliver the liquefied natural gas under force majeure. In addition, in Trinidad and Tobago, the proved developed reserves failed the economic test at the low yearly average price for gas at the end of 2016. However, we expect to cover 70% of our delivery commitments from existing developed resource volumes, resulting in an expected true shortfall of some 120 thousand million scf.

### EXPLORATION

In 2016, we made four notable discoveries in the heartlands of Egypt, Malaysia and the Gulf of Mexico in the USA. Discoveries are being evaluated further in order to establish the extent of commercially producible volumes they contain.

In 2016, we participated in 79 productive exploratory wells with proved reserves allocated (Shell share: 46 wells). For further information, see "Supplementary information – oil and gas (unaudited)" on page 169.

In total, the net undeveloped acreage in our exploration portfolio increased by around 28 million acres in 2016, mainly as a result of the BG acquisition. The largest contributions were acreage acquisitions in Asia and South America.

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## Oil and gas information *Continued*

### LOCATION OF OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES

#### Location of oil and gas exploration and production activities [A] (at December 31, 2016)

	Exploration	Development and/or production	Shell operator [B]
Europe			
Albania	■		■
Bulgaria	■		
Cyprus		■	■
Denmark	■	■	
Germany	■	■	
Greenland	■		■
Ireland	■	■	■
Italy	■	■	
Netherlands	■	■	■
Norway	■	■	■
UK	■	■	■
Asia [C]			
Brunei	■	■	■
China	■	■	■
India		■	■
Indonesia	■	■	
Iraq		■	■
Jordan	■		■
Kazakhstan	■	■	
Malaysia	■	■	■
Mongolia	■		
Myanmar	■		■
Oman	■	■	
Philippines	■	■	■
Qatar		■	■
Russia	■	■	■
State of Palestine		■	■
Thailand	■	■	■
Turkey	■		■
Oceania			
Australia	■	■	■
New Zealand	■	■	■
Africa			
Algeria	■		
Egypt	■	■	■
Gabon	■	■	■
Kenya	■		■
Namibia	■		■
Nigeria	■	■	■
South Africa	■		■
Tanzania	■	■	■
Tunisia		■	■
North America			
Canada	■	■	■
Honduras	■		■
USA	■	■	■
South America			
Argentina	■	■	■
Bolivia	■	■	■
Brazil	■	■	■
Colombia	■		■
Trinidad and Tobago	■	■	■
Uruguay	■		■

[A] Includes joint ventures and associates. Where a joint venture or an associate has properties outside its base country, those properties are not shown in this table.

[B] In several countries where "Shell operator" is indicated, Shell is the operator of some but not all exploration and/or production ventures.

[C] Shell suspended all exploration and production activities in Syria in December 2011.

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## OIL AND GAS PRODUCTION AVAILABLE FOR SALE

### Crude oil and natural gas liquids [A]

Thousand barrels

	2016		2015		2014	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe						
Denmark	15,423	–	17,396	–	18,834	–
Norway	21,656	–	14,337	–	14,893	–
UK	41,426	–	20,762	–	14,746	–
Other [B]	7,695	872	12,053	1,311	12,641	1,986
Total Europe	86,200	872	64,548	1,311	61,114	1,986
Asia						
Brunei	952	17,402	823	18,663	648	18,576
Iraq	19,809	–	20,009	–	19,218	–
Kazakhstan	21,330	–	–	–	–	–
Malaysia	27,241	–	22,980	–	16,754	–
Oman	80,567	–	78,404	–	74,781	–
Russia	22,134	10,966	22,016	10,273	23,579	10,403
Other [B]	29,319	7,850	24,480	7,923	27,165	10,512
Total Asia	201,352	36,218	168,712	36,859	162,145	39,491
Total Oceania [B]	8,524	1,268	7,858	3,050	9,191	3,688
Africa						
Gabon	12,838	–	12,472	–	12,144	–
Nigeria	62,739	–	67,832	–	69,851	–
Other [B]	9,427	–	6,159	–	5,008	–
Total Africa	85,004	–	86,463	–	87,003	–
North America						
USA	102,795	–	104,263	–	98,895	–
Canada	10,883	–	8,599	–	8,389	–
Total North America	113,678	–	112,862	–	107,284	–
South America						
Brazil	78,477	–	13,307	–	16,575	–
Other [B]	2,935	–	576	–	361	–
Total South America	81,412	–	13,883	–	16,936	–
Total	576,170	38,358	454,326	41,220	443,673	45,165

[A] Reflects 100% of production of subsidiaries except in respect of production-sharing contracts (PSCs), where the figures shown represent the entitlement of the subsidiaries concerned under those contracts.

[B] Comprises countries where 2016 production was lower than 7,300 thousand barrels or where specific disclosures are prohibited.

### Synthetic crude oil

Thousand barrels

	2016	2015	2014
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	53,603	49,891	46,934

### Bitumen

Thousand barrels

	2016	2015	2014
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	4,606	5,258	5,779

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## Oil and gas information *Continued*

### Natural gas [A]

Million standard cubic feet

	2016		2015		2014	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe						
Denmark	47,143	–	48,211	–	49,708	–
Germany	51,483	–	58,230	–	66,718	–
Ireland	44,660	–	27	–	–	–
Netherlands	–	402,759	–	429,626	–	581,028
Norway	242,736	–	253,108	–	252,284	–
UK	190,185	–	101,276	–	104,346	–
Other [B]	10,076	–	15,865	–	15,840	–
Total Europe	586,283	402,759	476,717	429,626	488,896	581,028
Asia						
Brunei	26,918	155,881	21,337	162,862	22,228	155,244
China	43,699	–	46,481	–	53,065	–
Kazakhstan	77,122	–	–	–	–	–
Malaysia	221,661	–	254,523	–	241,908	–
Philippines	45,070	–	41,430	–	40,289	–
Russia	4,141	133,396	3,887	131,697	4,170	128,175
Thailand	59,774	–	–	–	–	–
Other [B]	383,763	118,366	345,020	118,421	379,880	118,198
Total Asia	862,148	407,643	712,678	412,980	741,540	401,617
Oceania						
Australia	418,793	36,704	132,209	67,382	132,801	87,830
New Zealand	58,239	–	55,906	–	69,052	–
Total Oceania	477,032	36,704	188,115	67,382	201,853	87,830
Africa						
Egypt	145,198	–	65,002	–	54,079	–
Nigeria	184,188	–	195,064	–	234,599	–
Other [B]	34,901	–	–	–	–	–
Total Africa	364,287	–	260,066	–	288,678	–
North America						
USA	309,298	–	264,351	–	360,846	–
Canada	253,509	–	234,055	–	214,756	–
Total North America	562,807	–	498,406	–	575,602	–
South America						
Bolivia	67,191	–	–	–	–	–
Trinidad and Tobago	78,433	–	–	–	–	–
Other [B]	38,980	–	12,853	–	12,449	–
Total South America	184,604	–	12,853	–	12,449	–
Total	3,037,161	847,106	2,148,835	909,988	2,309,018	1,070,475

[A] Reflects 100% of production of subsidiaries except in respect of PSCs, where the figures shown represent the entitlement of the subsidiaries concerned under those contracts.

[B] Comprises countries where 2016 production was lower than 41,795 million scf or where specific disclosures are prohibited.

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## AVERAGE REALISED PRICE BY GEOGRAPHICAL AREA

### Crude oil and natural gas liquids

	\$/barrel					
	2016		2015		2014	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	38.62	40.75	49.77	45.97	94.57	89.68
Asia	38.11	43.95	47.73	52.21	89.47	96.85
Oceania	36.64	33.76 [A]	43.39	50.01 [A]	82.26	88.07 [A]
Africa	42.73	–	51.80	–	100.55	–
North America – USA	37.50	–	44.99	–	87.90	–
North America – Canada	25.76	–	25.45	–	59.19	–
South America	38.58	–	42.38	–	88.68	–
Total	38.60	43.58	47.52	51.82	91.09	95.87

[A] Included Shell's 14% share of Woodside Petroleum Limited (Woodside) from June 2014 to April 2016 (previously: 23%). Woodside is a publicly listed company on the Australian Securities Exchange for which we have limited access to data; accordingly, the numbers are estimated. The accounting classification of Woodside was changed from an associate to an investment in securities in April 2016.

### Synthetic crude oil

	\$/barrel		
	2016	2015	2014
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	37.61	40.87	81.83

### Bitumen

	\$/barrel		
	2016	2015	2014
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	25.74	30.25	70.19

### Natural gas

	\$/thousand scf					
	2016		2015		2014	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	4.75	4.19	7.10	6.46	8.58	8.26
Asia	2.32	4.63	3.02	7.06	4.57	11.50
Oceania	5.31	4.33 [A]	6.80	6.73 [A]	10.49	11.01 [A]
Africa	2.33	–	2.10	–	2.71	–
North America – USA	2.21	–	2.39	–	4.52	–
North America – Canada	1.71	–	2.29	–	4.39	–
South America	1.83	–	2.46	–	2.85	–
Total	3.16	4.41	4.07	6.77	5.68	9.72

[A] Included Shell's 14% share of Woodside from June 2014 to April 2016 (previously: 23%). Woodside is a publicly listed company on the Australian Securities Exchange for which we have limited access to data; accordingly, the numbers are estimated. The accounting classification of Woodside was changed from an associate to an investment in securities in April 2016.

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## Oil and gas information *Continued*

### AVERAGE PRODUCTION COST BY GEOGRAPHICAL AREA

#### Crude oil, natural gas liquids and natural gas [A]

	2016		2015		2014	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	13.70	4.17	16.97	5.07	19.47	4.25
Asia	6.32	6.62	7.42	6.89	7.87	7.62
Oceania	8.87	16.19 [B]	13.43	14.66 [B]	13.62	14.44 [B]
Africa	9.93	–	11.96	–	14.86	–
North America – USA	21.44	–	20.28	–	21.35	–
North America – Canada	13.59	–	18.85	–	22.96	–
South America	7.64	–	21.31	–	25.26	–
Total	10.92	6.08	13.42	6.77	15.10	6.68

[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

[B] Included Shell's 14% share of Woodside from June 2014 to April 2016 (previously: 23%). Woodside is a publicly listed company on the Australian Securities Exchange for which we have limited access to data; accordingly, the numbers are estimated. The accounting classification of Woodside was changed from an associate to an investment in securities in April 2016.

#### Synthetic crude oil

	2016	2015	2014
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	26.14	31.50	42.46

#### Bitumen

	2016	2015	2014
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America – Canada	14.19	18.58	23.24

## DOWNSTREAM

### Key statistics

	\$ million, except where indicated		
	2016	2015	2014
Segment earnings [A]	6,588	10,243	3,411
Including:			
Revenue (including intersegment sales)	203,550	237,746	378,046
Share of profit of joint ventures and associates [A]	2,244	2,215	1,693
Interest and other income	851	1,156	41
Operating expenses [B]	19,681	20,816	22,701
Depreciation, depletion and amortisation	3,681	3,667	6,619
Taxation charge [A]	1,008	1,639	1,085
Capital investment [B]	6,057	5,119	5,910
Divestments [B]	2,889	2,282	4,410
Refinery availability (%) [C]	90	90	93
Chemical plant availability (%) [C]	90	85	85
Refinery processing intake (thousand b/d)	2,701	2,805	2,903
Oil products sales volumes (thousand b/d)	6,483	6,432	6,365
Chemicals sales volumes (thousand tonnes)	17,292	17,148	17,008

[A] See Note 5 to the "Consolidated Financial Statements" on pages 129-130. Segment earnings are presented on a current cost of supplies basis.

[B] See "Non-GAAP measures reconciliations" on pages 195-196.

[C] The basis of calculation differs from that used for the "Refinery and chemical plant availability" measure in "Performance indicators" on page 20, which excludes downtime due to uncontrollable factors.

### OVERVIEW

Our Downstream business is made up of a number of different Oil Products and Chemicals activities, part of an integrated value chain, including trading activities, that turns crude oil and other feedstocks into a range of products which are moved and marketed around the world for domestic, industrial and transport use. The products we sell include gasoline, diesel, heating oil, aviation fuel, marine fuel, lubricants, bitumen and sulphur. In addition, we produce and sell petrochemicals for industrial use worldwide.

Our Oil Products activities comprise Refining and Trading, and Marketing, referred to as classes of business. Marketing includes Retail, Lubricants, Business to Business (B2B), Pipelines and Biofuels and alternative energies. Chemicals has major manufacturing plants, located close to refineries, and its own marketing network. In Trading and Supply, we trade crude oil, oil products and petrochemicals, to optimise feedstocks for Refining and Chemicals, to supply our Marketing businesses and third parties, and for our own profit.

### BUSINESS CONDITIONS

Industry gross refining margins were lower on average in 2016 than in 2015 in each of the key refining hubs of Europe, Singapore and the USA. Oil products demand growth was stronger globally, with an increase of 1.5 million b/d compared with 2015, driven in part by the lower crude oil price environment. In spite of overcapacity in the refining industry, some new refinery capacity came on line in 2016, which could weaken margins going forward. In 2017, we expect demand for products such as gasoline and middle distillates will continue to grow and support margins, driven by increasing economic activity as well as freight and passenger transport. However, ample refining capacity and potentially strengthening feedstock prices could narrow margins. Overall, we believe margins could be similar to 2016, but demand and supply-side uncertainty may drive significant volatility. See "Market overview" on page 16.

Asian naphtha cracker margins rose strongly in 2016 for the second consecutive year due to rising demand and periods of reduced cracker capacity availability. European naphtha cracker margins remained at similar levels to 2015, supported by demand growth. US ethane cracker margins declined as lower crude oil prices reduced the margin available in the ethane to polyethylene value chain. The outlook for petrochemical margins in 2017 is very uncertain. Demand for petrochemicals closely relates to economic growth as well as product prices. Product prices reflect prices of raw materials which are closely linked to crude oil and natural gas prices. The balance of these factors will drive margins. See "Market overview" on page 16.

### REFINERY AND CHEMICAL PLANT AVAILABILITY

Refinery availability was 90% in both 2016 and 2015.

Chemicals plant availability was 90% in 2016, compared with 85% in 2015, mainly reflecting recovery at the Moerdijk site in the Netherlands which was partly offset by unit shutdowns at the Bukom site in Singapore.

### OIL PRODUCTS AND CHEMICALS SALES

Oil products sales volumes increased by 1% in 2016 compared with 2015, reflecting higher trading volumes. This was partly offset by lower marketing volumes, mainly as a result of divestments.

Chemicals sales volumes increased by 1% in 2016 compared with 2015. The improvement was principally due to improved asset availability and utilisation. Sales volumes were impacted by outages at Bukom in 2016, but the impact was slightly less than that caused by outages in Europe (Moerdijk and Rheinland) in 2015.

### EARNINGS 2016-2015

Segment earnings are presented on a current cost of supplies basis (see "Summary of results" on page 18), which in 2016 were \$1,085 million lower than on a first-in, first-out basis (2015: \$1,955 million higher), as shown in "Non-GAAP measures reconciliations" on page 195.

Segment earnings in 2016 of \$6,588 million were 36% lower than in 2015. Earnings in 2016 included a net charge of \$655 million compared with a net gain in 2015 of \$495 million, described at the end of this section.

Excluding the impact of these items, earnings in 2016 were \$7,243 million, compared with \$9,748 million in 2015. Refining and Trading accounted for 20% of these 2016 earnings, Marketing for 57% and Chemicals for 23%.

The decrease in these earnings of \$2,505 million (26%) compared with 2015 was mainly driven by lower realised refining and trading margins (around \$2,710 million), a higher effective tax rate (around \$540 million), mainly due to one-off impacts and the geographical split of earnings, and other net negative impacts (around \$250 million). There was a partial offset from lower operating expenses and stronger marketing margins (around \$500 million each) excluding the effect of divestments and exchange rates.

## Downstream Continued

The decrease in earnings of \$2,505 million analysed by class of business was as follows:

- Refining and Trading earnings were \$2,861 million lower than in 2015. Realised refining margins were significantly lower across all regions, reflecting weaker global refining industry conditions due to oversupply and high inventory levels. The fall in margins was exacerbated by operational issues at the Bukom refinery in Singapore. In the Americas, in addition to the weaker margin environment, there were operational issues at the Martinez and Deer Park refineries in the USA, and a major turnaround at the Scotford refinery in Canada. Motiva Enterprises LLC (Motiva) joint venture (Shell interest 50%) earnings were also impacted by the weaker margin environment and operational issues at the Port Arthur and Convent refineries in the USA. In Europe, slightly improved operations at the Pernis (in the Netherlands) and Fredericia (in Denmark) refineries partly offset the impact of the weaker market. In Asia, realised margins were reduced by delays to unit turnarounds at the Bukom refinery. Trading margins were lower than in 2015 due to lower market volatility and challenging market conditions.
- Marketing earnings were \$359 million higher than in 2015. Compared with 2015, earnings in 2016 benefited from stronger unit margins and lower operating expenses, more than offsetting the impact of divestments and unfavourable exchange rate effects. Our Raízen joint venture (Shell interest 50%) in Brazil benefited from higher sugar and ethanol prices as well as strong unit margins in its retail operation.
- Chemicals earnings were \$3 million lower than in 2015. Earnings in 2016 were primarily impacted by unit shutdowns at Bukom and weaker intermediates industry conditions, partly offset by recovery at Moerdijk, tight supply conditions in Asia and lower operating expenses.

Segment earnings in 2016 included a net charge of \$655 million, reflecting redundancy and restructuring charges of \$523 million, impairments of \$506 million (mainly in respect of the Port Dickson refinery in Malaysia, the Fredericia refinery and expenditure at the Bukom refinery), reported in depreciation, a net charge from fair value accounting of commodity derivatives of \$373 million and other net charges of \$25 million. These were partly offset by net gains on divestments of \$772 million (mainly in respect of Showa Shell and our Marketing business in Denmark) reported in interest and other income.

Segment earnings in 2015 included a net gain of \$495 million, reflecting net gains on divestments of \$1,095 million (primarily in China, France and Norway), partly offset by impairment charges of \$505 million (mainly related to the Westward Ho pipeline in the USA and to expenditure at the Bukom refinery) and other net charges of \$95 million.

### EARNINGS 2015-2014

Segment earnings are presented on a current cost of supplies basis, which in 2015 were \$1,955 million higher than on a first-in, first-out basis (2014: \$4,366 million higher).

Segment earnings of \$10,243 million in 2015 were 200% higher than in 2014. Earnings in 2015 included a net gain of \$495 million described above. Earnings in 2014 included a net charge of \$2,854 million, primarily from impairments (mainly in respect of refineries in Asia and Europe) and also from restructuring charges, fair value accounting of commodity derivatives and a provision connected to a prior year sale obligation. Partly offsetting these charges was a gain related to Dutch pension plan amendments.

Excluding the impact of these items, earnings in 2015 were \$9,748 million, compared with \$6,265 million in 2014. Oil Products earnings accounted for 83% of these 2015 earnings, and Chemicals for 17%.

The earnings improvement of \$3,483 million (56%) compared with 2014 was principally driven by lower operating expenses as a result of favourable exchange rates and divestments (around \$1,570 million of the improvement), higher realised refining margins, reflecting the industry environment (around \$1,360 million), and other items mainly reflecting a lower effective tax rate (around \$550 million).

Depreciation, depletion and amortisation were significantly lower in 2015 compared with 2014, mainly due to impairments in 2014.

### CAPITAL INVESTMENT

Capital investment was \$6.1 billion in 2016, compared with \$5.1 billion in 2015. In Refining, it increased by \$0.3 billion to \$2.2 billion. In Chemicals, it increased by \$0.6 billion to \$2.5 billion and in Marketing, it decreased by \$0.1 billion to \$1.4 billion. The increase in Chemicals was mainly due to expenditure on a new cracker in Pennsylvania, USA, and on a growth project in Nanhai, China.

### DIVESTMENTS

Divestments were \$2.9 billion in 2016, compared with \$2.3 billion in 2015. The principal divestments in 2016 were an interest in Showa Shell in Japan, our Marketing business in Denmark, our interest in Shell Refining Company (SRC) in Malaysia, and the sale of interests in Pilipinas Shell Petroleum Corporation (PSPC) and Shell Midstream Partners, L.P. in the Philippines and USA respectively.

### PORTFOLIO AND BUSINESS DEVELOPMENTS

We continued to divest selected assets during 2016, including:

- In Denmark, we sold our Marketing business to Couche-Tard.
- In Japan, we sold a 31.2% interest in Showa Shell to Idemitsu, retaining a 3.8% interest.
- In Malaysia, we sold our 51% interest in SRC to Malaysia Hengyuan International Limited. SRC owns the Port Dickson refinery.
- In the Philippines, PSPC, a subsidiary of Shell, priced its initial public offering (IPO) at 67 Philippine pesos per share. Following the IPO, Shell remains the majority shareholder in PSPC with a 55% interest.

The following agreements were reached in 2016:

- We signed an agreement with Vitol Africa B.V. to sell our 20% interest in Vivo Energy, the Shell licensee in 16 markets in Africa. Completion is expected in 2017, subject to regulatory approval.
- In Australia, we signed an agreement with Viva Energy Australia Pty Ltd for the sale of our aviation business. It follows the sale of Shell's other Downstream activities in the country to Viva Energy in 2014. The sale is expected to complete in the first half of 2017.
- In Denmark, we agreed to sell the Fredericia refinery and local trading and supply activities to Dansk Olieselskab ApS. The sale is expected to be completed in 2017, subject to regulatory approval.

In January 2017, we agreed to sell our 50% interest in the SADAF petrochemicals joint venture with SABIC in Saudi Arabia. In 2016, the joint venture's production was around 4 million tonnes. The transaction is expected to be completed in 2017.

In the USA, subsequent to the release of the fourth quarter and full year 2016 unaudited results, Shell signed binding definitive agreements with Saudi Refining Inc. (SRI, a wholly owned subsidiary of Saudi Arabian Oil Company) on the separation of assets, liabilities and businesses of Motiva. Following the completion of this transaction, Shell will assume sole ownership of the Norco and Convent refineries in Louisiana, 11 distribution terminals, and Shell-branded markets in Alabama, Mississippi, Tennessee, Louisiana, a portion of the Florida panhandle, and the North-eastern region of the USA. A balancing payment of \$2.2 billion by SRI has been agreed between the parties, subject to adjustments including for working capital. This value will be satisfied by a combination of SRI assuming more than its 50% share of Motiva's net debt on completion and a cash payment for the balance. At December 31, 2016, Motiva's total net debt was \$3.2 billion, of which Shell will assume \$0.1 billion, resulting in a deduction to the cash portion of the balancing payment of \$1.5 billion. The transaction is expected to be completed in 2017, subject to necessary approvals.



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We took the following key portfolio decisions in 2016:

- In China, we announced the final investment decision (FID) to expand our 50:50 joint venture with China National Offshore Oil Corporation (CNOOC) in Huizhou, Guangdong Province, which includes the Nanhai petrochemicals complex. The expansion includes the ongoing construction of a new ethylene cracker and ethylene derivatives units, which are expected to increase ethylene capacity by more than 1 million tonnes per year when fully completed in 2019.
- We announced the FID to build a major petrochemicals complex, comprising an ethylene cracker with polyethylene derivatives unit, in Pennsylvania, USA. Main construction is expected to start in 2018, with commercial production beginning early in the next decade.

## BUSINESS AND PROPERTY

### REFINING AND TRADING

#### Refining

We have interests in 22 refineries worldwide with the capacity to process a total of 2.9 million barrels of crude oil per day (Shell share). Our refining capacity is 35% in Europe and Africa, 42% in the Americas and 23% in Asia and Oceania.

#### Trading and Supply

Trading and Supply trades in physical and financial contracts, lease storage and transportation capacities, and manages shipping and wholesale commercial fuel activities globally. This includes supplying feedstocks for our refineries and chemical plants and finished products such as gasoline, diesel and aviation fuel to our Marketing businesses and customers.

With more than 100 Shell and joint venture distribution terminals and around 770 supply points in around 25 countries, our supply and distribution infrastructure is well positioned to make deliveries around the world.

Shell Wholesale Commercial Fuels provides transport, industrial and heating fuels. Our range of products, from reliable main-grade fuels to premium products, can offer tangible benefits. These include fuel economy, enhanced equipment performance, reductions in maintenance frequency and costs, and reduced emissions.

### MARKETING

#### Retail

There were more than 43,000 Shell-branded retail stations operating in over 70 countries at the end of 2016. Every day, about 30 million customers pass through these sites to buy fuel and convenience items, including coffee and snacks.

We have more than 100 years' experience in fuel development. In recent years, aided by our innovative partnership with Scuderia Ferrari, we have concentrated on developing fuels with special formulations designed to clean engines and improve performance. We sell such fuels under the Shell V-Power brand in a growing number of countries, 68 at the end of 2016.

#### Lubricants

Across more than 100 countries, we produce, market and sell technically advanced lubricants for passenger cars, motorcycles, trucks, coaches, and machinery used in the manufacturing, mining, power generation, agriculture and construction sectors.

We also manufacture premium lubricants from natural gas using gas-to-liquid (GTL) base oils produced at our Pearl GTL plant in Qatar (see "Integrated Gas" page 24).

We have a global lubricants supply chain with a network of seven base oil manufacturing plants, 44 lubricant blending plants, 15 grease plants and four GTL base oil storage hubs.

Through our marine activities, we primarily provide lubricants, but also fuels and related technical services, to the shipping and maritime sectors. Following rationalisation of our product portfolio, we supply around 80 grades of lubricants and nine types of fuel to vessels worldwide, ranging from large ocean-going tankers to small fishing boats.

#### Business to Business

Our Business-to-Business (B2B) activities encompass the sale of fuels and speciality products and services to a broad range of commercial customers.

Shell Aviation fuels more than two million aircraft a year, with a presence at about 900 airports in around 40 countries.

Shell Bitumen supplies over 1,600 customers across 28 countries and provides enough bitumen to resurface 450 kilometres of road lanes every day. It also invests in technology research and development to create innovative products.

Shell Sulphur Solutions is a business which manages the complete value chain of sulphur, from refining to marketing. The business provides sulphur for industries such as mining and textiles and also develops new products which incorporate sulphur, such as fertilisers.

#### Pipelines

Shell Pipeline Company LP (Shell interest 100%) owns and operates seven tank farms across the USA and transports more than 1.5 billion barrels of crude oil and refined products a year through about 6,000 kilometres of pipelines in the Gulf of Mexico and five US states. Our various non-Shell-operated ownership interests provide about a further 13,000 pipeline kilometres.

We carry more than 40 types of crude oil and more than 20 grades of gasoline, as well as diesel, aviation fuel, chemicals and ethylene.

Shell Midstream Partners, L.P., a midstream limited partnership, owns, operates, develops and acquires pipelines and other midstream assets. Its assets consist of interests in entities that own crude oil and refined products pipeline systems and related assets that serve as key infrastructure to store onshore and offshore crude oil production, transport it to refining markets and deliver refined products to major demand centres. Shell controls the general partner.

#### Biofuels and alternative energies

Raizen, our joint venture in Brazil (Shell interest 50%), produces ethanol from sugar cane, with an annual production capacity of more than 2 billion litres, and manages a retail network. Raizen opened its first cellulosic ethanol plant at its Costa Pinto mill in Brazil in 2015, which produced 6.9 million litres in 2016. When fully operational, the mill is expected to produce around 40 million litres a year of advanced biofuels from sugar-cane residues.

As part of our biofuel development activities, we continue to invest in new ways to produce biofuels from sustainable feedstocks, such as waste and cellulosic biomass, and have three pilot plants at different stages of construction in India and the USA. These plants are designed to convert cellulosic biomass, which are non-food plants and wastes, into a range of products, including gasoline, diesel, aviation fuel and ethanol. The plant built in Houston, Texas, in 2012, continues to provide valuable data in support of improving the conversion of biomass. A second plant to test a pre-treatment process for cellulosic ethanol is being commissioned in Houston. A third plant has been approved to be installed in Bangalore, India.

Shell is taking part in several initiatives to encourage the adoption of hydrogen-electric energy as a transport fuel. In Germany, the government is supporting the deployment of a national network of hydrogen-electric fuelling stations across the country by 2023. We are working on this project with our joint-venture partners in H2 Mobility Germany – Air Liquide, Daimler, Linde, OMV and Total. We currently have four hydrogen filling stations in Germany and two in Los Angeles, California. We are partnering with ITM Power to make hydrogen fuel available at three retail sites in the south east of the UK. We are assessing the potential for similar projects in Austria, Belgium, France, Luxembourg, the Netherlands, Switzerland and the USA.

With effect from 2017, our biofuel development and hydrogen activities will be reported within Integrated Gas as part of our New Energies business. Raizen will remain within Downstream.

**Downstream Continued**

**CHEMICALS**

**Manufacturing**

Our plants produce a range of base chemicals, including ethylene, propylene and aromatics, as well as intermediate chemicals such as styrene monomer, propylene oxide, solvents, detergent alcohols, ethylene oxide and ethylene glycol. We have the capacity to produce over 6 million tonnes of ethylene a year.

**Marketing**

Each year, we supply more than 17 million tonnes of petrochemicals to around 1,000 major industrial customers worldwide. Our products are used to make numerous everyday items, from clothing and cars to detergents and bicycle helmets.

**DOWNSTREAM BUSINESS ACTIVITIES WITH IRAN, SUDAN AND SYRIA**

**IRAN**

Shell transactions with Iran are disclosed separately. See "Section 13(r) of the US Securities Exchange Act of 1934 Disclosure" on page 194.

**SUDAN**

We ceased all operational activities in Sudan in 2008.

**SYRIA**

We are in compliance with all European Union and US sanctions. We supply limited quantities of polyols via a Netherlands-based distributor to private sector customers in Syria. Polyols are commonly used for the production of foam in mattresses and soft furnishings.

**DOWNSTREAM DATA TABLES**

The tables below reflect Shell subsidiaries, the 50% Shell interest in Motiva in the USA and instances where Shell owns the crude oil or feedstocks processed by a refinery. Other joint ventures and associates are only included where explicitly stated.

**Oil products – cost of crude oil processed or consumed [A]**

	\$ per barrel		
	2016	2015	2014
Total	34.47	40.91	82.76

[A] Includes Upstream margin on crude oil supplied by Shell subsidiaries, joint ventures and associates. Excludes cost of crude oil processed or consumed by Motiva.

**Crude distillation capacity [A]**

	Thousand b/calendar day [B]		
	2016	2015	2014
Europe	973	1,037	1,033
Asia	808	816	810
Oceania	–	–	80
Africa	82	82	82
Americas	1,223	1,219	1,212
Total	3,086	3,154	3,217

[A] Average operating capacity for the year, excluding mothballed capacity.

[B] Calendar day capacity is the maximum sustainable capacity adjusted for normal unit downtime.

**Ethylene capacity [A]**

	Thousand tonnes/year		
	2016	2015	2014
Europe	1,702	1,702	1,659
Asia	2,222	2,222	1,922
Oceania	–	–	–
Africa	–	–	–
Americas	2,235	2,235	2,212
Total	6,159	6,159	5,793

[A] Includes the Shell share of capacity entitlement (offset rights) of joint ventures and associates, which may be different from nominal equity interest. Nominal capacity is quoted at December 31.

**Oil products – crude oil processed [A]**

	Thousand b/d		
	2016	2015	2014
Europe	898	870	941
Asia	563	685	688
Oceania	–	–	59
Africa	68	56	69
Americas	1,088	1,150	1,149
Total	2,617	2,761	2,906

[A] Includes natural gas liquids, share of joint ventures and associates and processing for others.

**Refinery processing intake [A]**

	Thousand b/d		
	2016	2015	2014
Crude oil	2,317	2,596	2,716
Feedstocks	384	209	187
Total	2,701	2,805	2,903
Europe	896	903	941
Asia	568	627	639
Oceania	–	–	64
Africa	67	56	69
Americas	1,170	1,219	1,190
Total	2,701	2,805	2,903

[A] Includes crude oil, natural gas liquids and feedstocks processed in crude distillation units and in secondary conversion units.

**Refinery processing outturn [A]**

	Thousand b/d		
	2016	2015	2014
Gasolines	1,021	1,012	1,049
Kerosines	326	316	331
Gas/Diesel oils	942	972	1,047
Fuel oil	277	290	316
Other	386	449	395
Total	2,952	3,039	3,138

[A] Excludes own use and products acquired for blending purposes.

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Oil product sales volumes [A][B]	Thousand b/d		
	2016	2015	2014
Europe			
Gasolines	309	403	405
Kerosines	258	251	264
Gas/Diesel oils	765	779	841
Fuel oil	183	186	176
Other products	287	240	205
<b>Total</b>	<b>1,802</b>	<b>1,859</b>	<b>1,891</b>
Asia			
Gasolines	388	379	343
Kerosines	195	214	191
Gas/Diesel oils	519	533	515
Fuel oil	354	340	325
Other products	593	489	441
<b>Total</b>	<b>2,049</b>	<b>1,955</b>	<b>1,815</b>
Oceania			
Gasolines	-	-	52
Kerosines	55	51	48
Gas/Diesel oils	-	-	64
Fuel oil	-	-	-
Other products	-	-	10
<b>Total</b>	<b>55</b>	<b>51</b>	<b>174</b>
Africa			
Gasolines	41	37	36
Kerosines	10	9	9
Gas/Diesel oils	66	57	52
Fuel oil	1	1	-
Other products	7	15	7
<b>Total</b>	<b>125</b>	<b>119</b>	<b>104</b>
Americas			
Gasolines	1,331	1,325	1,268
Kerosines	205	204	206
Gas/Diesel oils	540	584	583
Fuel oil	69	86	68
Other products	307	249	256
<b>Total</b>	<b>2,452</b>	<b>2,448</b>	<b>2,381</b>
<b>Total product sales [C]</b>			
Gasolines	2,069	2,144	2,104
Kerosines	723	729	718
Gas/Diesel oils	1,890	1,953	2,055
Fuel oil	607	613	569
Other products	1,194	993	919
<b>Total</b>	<b>6,483</b>	<b>6,432</b>	<b>6,365</b>

[A] Excludes deliveries to other companies under reciprocal sale and purchase arrangements, which are in the nature of exchanges. Sales of condensate and natural gas liquids are included.

[B] Includes the Shell share of Raizen's sales volumes.

[C] Certain contracts are held for trading purposes and reported net rather than gross. The effect in 2016 was a reduction in oil product sales of approximately 839,000 b/d (2015: 1,158,000 b/d; 2014: 1,067,000 b/d).

Chemicals sales volumes [A]	Thousand tonnes		
	2016	2015	2014
Europe			
Base chemicals	3,670	3,000	3,287
Intermediates and others	2,073	1,936	2,019
<b>Total</b>	<b>5,743</b>	<b>4,936</b>	<b>5,306</b>
Asia			
Base chemicals	2,200	2,319	2,220
Intermediates and others	2,927	3,576	2,901
<b>Total</b>	<b>5,127</b>	<b>5,895</b>	<b>5,121</b>
Oceania			
Base chemicals	-	-	-
Intermediates and others	-	-	35
<b>Total</b>	<b>-</b>	<b>-</b>	<b>35</b>
Africa			
Base chemicals	-	-	-
Intermediates and others	22	37	43
<b>Total</b>	<b>22</b>	<b>37</b>	<b>43</b>
Americas			
Base chemicals	4,041	3,036	3,251
Intermediates and others	2,359	3,244	3,252
<b>Total</b>	<b>6,400</b>	<b>6,280</b>	<b>6,503</b>
<b>Total product sales</b>			
Base chemicals	9,911	8,355	8,758
Intermediates and others	7,381	8,793	8,250
<b>Total</b>	<b>17,292</b>	<b>17,148</b>	<b>17,008</b>

[A] Excludes feedstock trading and by-products.

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## Downstream Continued

### MANUFACTURING PLANTS AT DECEMBER 31, 2016

#### Refineries in operation

Thousand barrels/calendar day, 100% capacity [B]

	Location	Asset class	Shell interest (%) [A]	Crude distillation capacity	Thermal cracking/ visbreaking/ coking	Catalytic cracking	Hydro-cracking
Europe							
Denmark	Fredericia [C]	●	100	67	25	–	–
Germany	Miro [D]		32	310	65	89	–
	Rheinland	■●	100	325	44	–	80
Netherlands	Schwedt [D]		38	204	41	52	–
	Pernis	■●	100	404	45	48	83
Asia							
Japan	Mizue [Toa] [D]	●◆	2	64	24	38	–
	Yamaguchi [D]	◆	1	110	–	25	–
	Yokkaichi [D]	●◆	3	234	–	55	–
Pakistan	Karachi [D]		30	43	–	–	–
Philippines	Tabangao		67	96	31	–	–
Saudi Arabia	Al Jubail [D]	●◆	50	292	62	–	45
Singapore	Pulau Bukom	■●	100	460	62	33	54
Africa							
South Africa	Durban [D]	◆	36	165	23	34	–
Americas							
Argentina	Buenos Aires	●◆	100	100	18	20	–
Canada							
Alberta	Scoford	◆	100	92	–	–	62
Ontario	Sarnia	◆	100	73	4	19	9
USA							
California	Martinez	●	100	144	42	65	37
Louisiana	Convent [D][E]	◆	50	235	–	83	49
	Norco [D][E]	■	50	229	25	107	39
Texas	Deer Park	■●	50	312	78	63	53
	Port Arthur [D][E]	●	50	578	144	81	73
Washington	Puget Sound	●◆	100	137	23	52	–

[A] Shell interest is rounded to the nearest whole percentage point; Shell share of production capacity may differ.

[B] Calendar day capacity is the maximum sustainable capacity adjusted for normal unit downtime.

[C] In September 2016, we agreed to sell the Fredericia refinery.

[D] Not operated by Shell.

[E] We have signed agreements with SRI as a result of which we will assume sole ownership of the Convent and Norco refineries and SRI will assume sole ownership of the Port Arthur refinery (see "Downstream" on page 42).

■ Integrated refinery and chemical complex.

● Refinery complex with cogeneration capacity.

◆ Refinery complex with chemical unit(s).

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## Major chemical plants in operation [A]

		Thousand tonnes/year, Shell share capacity [B]				Additional products
		Ethylene	Styrene monomer	Ethylene glycol	Higher olefins [C]	
Europe						
Germany	Rheinland	315	–	–	–	A
Netherlands	Moerdijk	972	725	155	–	A, I
UK	Mossmorran [D]	415	–	–	–	–
	Stanlow [D]	–	–	–	330	I
Asia						
China	Nanghai [D]	475	320	175	–	A, I, P
Saudi Arabia	Al Jubail [D][E]	366	400	–	–	A, O
Singapore	Jurong Island	281	1,020	1,005	–	A, I, P, O
	Pulau Bukom	1,100	–	–	–	A, I
Americas						
Canada	Scotford	–	485	520	–	A, I
USA	Deer Park	836	–	–	–	A, I
	Geismar	–	–	400	920	I
	Norco	1,399	–	–	–	A
Total		6,159	2,950	2,255	1,250	

[A] Major chemical plants are large integrated chemical facilities, typically producing a range of chemical products from an array of feedstocks, and are a core part of our global Chemicals business.

[B] Shell share of capacity of subsidiaries, joint arrangements and associates (Shell and non-Shell-operated), excluding capacity of the Infineum additives joint ventures.

[C] Higher olefins are linear alpha and internal olefins (products range from C6-C2024).

[D] Not operated by Shell.

[E] In January 2017, we agreed to sell our interest.

- A Aromatics, lower olefins.
- I Intermediates.
- P Polyethylene, polypropylene.
- O Other.

## Other chemical locations [A]

	Location	Products
Europe		
Germany	Karlsruhe	A
	Schwedt	A
Netherlands	Pernis	A, I, O
Americas		
Argentina	Buenos Aires	I
Canada	Sarnia	A, I
USA	Martinez	O
	Mobile	A
	Puget Sound	I

[A] Other chemical locations reflect locations with smaller chemical units, typically serving more local markets.

- A Aromatics, lower olefins.
- I Intermediates.
- O Other.

## CORPORATE

### Earnings

	2016	2015	\$ million 2014
Segment earnings	(1,751)	(425)	(156)
Comprising:			
Net interest and investment expense [A]	(1,824)	(995)	(913)
Foreign exchange gains/(losses) [B]	3	(731)	(263)
Taxation and other [C]	70	1,301	1,020

[A] Mainly Shell's interest expense (excluding accretion expense) and interest income, together with the Shell share of joint ventures and associates' net interest expense, and net gains on sales from Shell insurance entities' portfolio of debt securities.

[B] On Shell's financing activities, together with the Shell share of joint ventures and associates' net foreign exchange (gains)/losses on financing activities.

[C] Other earnings mainly comprise headquarters and central functions' costs not recovered from business segments, and net gains on sale of properties.

### OVERVIEW

The Corporate segment covers the non-operating activities supporting Shell. It comprises Shell's holdings and treasury organisation, its self-insurance activities and its headquarters and central functions. All finance expense and income as well as related taxes are included in the Corporate segment earnings rather than in the earnings of the business segments.

The holdings and treasury organisation manages many of the Corporate entities and is the point of contact between Shell and external capital markets. It conducts a broad range of transactions – from raising debt instruments to transacting foreign exchange. Treasury centres in London, Singapore and Rio de Janeiro support these activities.

Headquarters and central functions provide business support in the areas of communications, finance, health, human resources, information technology, legal services, real estate and security. They also provide support for the shareholder-related activities of the Company. The central functions are supported by business service centres located around the world, which process transactions, manage data and produce statutory returns, among other services. The majority of the headquarters and central-function costs are recovered from the business segments. Those costs that are not recovered are retained in Corporate.

### SELF-INSURANCE

Shell mainly relies on self-insurance for many of its risk exposures and capital is set aside to meet self-insurance obligations (see "Risk factors" on page 15). We seek to ensure that the capital held to support the self-insurance obligations is at a level at least equivalent to what would be held in the third-party insurance market. Periodically, surveys of key assets are undertaken that provide risk engineering knowledge and best practices to Shell subsidiaries with the aim to reduce their exposure to hazard risks. Actions identified during these surveys are monitored to completion.

### INFORMATION TECHNOLOGY

Given our reliance on information technology systems for our operations, we continuously monitor external developments and share information on threats and security incidents. Shell employees and contract staff are subject to mandatory courses and regular awareness campaigns, aimed at protecting us against cyber threats. We periodically review and adapt our disaster recovery plans and security response processes, and seek to enhance our security monitoring capability. See "Risk factors" on page 12.

### EARNINGS 2016-2014

Segment earnings in 2016 were a loss of \$1,751 million, compared with a loss of \$425 million in 2015 and a loss of \$156 million in 2014.

Net interest and investment expense increased by \$829 million between 2015 and 2016. Interest expense was significantly higher, driven by additional bond issuances for the BG acquisition and additional debt, including finance leases, assumed on the acquisition (see Note 15 to the "Consolidated Financial Statements" on pages 136-138). In 2015, net interest and investment expense increased by \$82 million compared with 2014. Interest expense was higher, mostly driven by new bond issuances in 2015, partly offset by an improvement in the liquidity premium associated with currency swaps, and an increase in the amount of interest capitalised.

Foreign exchange gains of \$3 million in 2016, and losses of \$731 million in 2015 and \$263 million in 2014, were mainly due to the impact of changes in exchange rates on non-functional currency loans and cash balances in operating units. In 2016, foreign exchange gains from the strengthening of the Brazilian real against the dollar were offset by losses due to the strengthening of the dollar against most other currencies to which Shell has exposure from these loans and cash balances.

Taxation and other earnings decreased by \$1,231 million in 2016 compared with 2015, mainly due to additional costs in connection with the BG acquisition and integration, lower tax credits and a gain in 2015 on the sale of an office building in the UK. Taxation and other earnings in 2015 were \$281 million higher than in 2014, mainly due to the gain on the sale of an office building in 2015, partly offset by lower tax credits.

## LIQUIDITY AND CAPITAL RESOURCES

We manage our businesses to deliver strong cash flows to fund investment for profitable growth. Our aim is that, across the business cycle, "cash in" (including cash from operations and divestments) at least equals "cash out" (including capital expenditure, interest and dividends), while maintaining a strong balance sheet. Our priorities for applying our cash are the servicing and reduction of debt commitments, payment of dividends, followed by a balance of capital investment and share buybacks.

### FINANCIAL CONDITION AND LIQUIDITY

As a result of the acquisition of BG Group plc (BG) in February 2016 and an average Brent crude oil price of \$44 per barrel in 2016, compared with \$52/b in 2015, gearing increased to 28.0% at December 31, 2016 (2015: 14.0%). There was an increase of 9.7% on the acquisition of BG. Gearing, defined as net debt (total debt less cash and cash equivalents) as a percentage of total capital (net debt plus total equity), is a key measure of our capital structure. Across the business cycle, we aim to manage gearing within a range of 0-30%. Note 15 to the "Consolidated Financial Statements" on pages 136-138 provides information on our debt arrangements, including gearing.

We are affected by the global macroeconomic environment as well as financial and commodity market conditions. This exposes us to treasury and trading risks, including liquidity risk, market risk (interest rate risk, foreign exchange risk and commodity price risk) and credit risk. See "Risk factors" on page 14 and Note 20 to the "Consolidated Financial Statements" on pages 143-148. The size and scope of our businesses require a robust financial control framework and effective management of our various risk exposures.

### LIQUIDITY

We satisfy our funding and working capital requirements from the cash generated from our operations, the issuance of debt and divestments. Despite an increase in our levels of debt due to lower commodity prices and the BG acquisition, we have continued to have good access to the international debt capital markets. Our debt is principally financed from these markets through central debt programmes consisting of:

- a \$10 billion global commercial paper (CP) programme, with maturities not exceeding 270 days;
- a \$10 billion US CP programme, with maturities not exceeding 397 days;
- an unlimited Euro medium-term note (EMTN) programme (also referred to as the Multi-currency Debt Securities Programme); and
- an unlimited US universal shelf (US shelf) registration.

All these CP, EMTN and US shelf issuances are issued by Shell International Finance B.V., the issuance company for Shell, with its debt being guaranteed by Royal Dutch Shell plc (the Company).

We also maintained a \$7.48 billion committed credit facility which was undrawn at December 31, 2016, and expires in 2020. During February 2017, the facility was increased to \$8.5 billion. This facility and internally available liquidity provide back-up coverage for our CP programme. Other than certain borrowing by local subsidiaries, we do not have any other committed credit facilities.

Our debt increased by \$34.1 billion in 2016 to \$92.5 billion at December 31, 2016. Debt of \$21.2 billion was assumed on acquisition of BG. See Note 4 to the "Consolidated Financial Statements" on page 128.

Excluding finance leases, our debt at December 31, 2016, will mature as follows: 11% in 2017; 12% in 2018; 11% in 2019; 8% in 2020; and 58% in 2021 and beyond. The portion of debt maturing in 2017 is expected to be repaid from a combination of cash balances, cash generated from operations, divestments and the issuance of new debt.

In 2016, we issued \$12.0 billion of bonds under our US shelf registration, and \$4.5 billion equivalent of bonds under our EMTN programme. Periodically, for working capital purposes, we issued CP. We believe our current working capital is sufficient for our present requirements.

In accordance with the UK City Code on Takeovers and Mergers, we maintained sufficient certain funds for the estimated £13.2 billion cash consideration portion of the BG acquisition from the date of announcement in April 2015 until the date of completion in February 2016. We entered into a £10.07 billion bridge credit facility on May 1, 2015, which was cancelled unused on February 10, 2016, once funds had been accumulated and the completion date was certain. The funds were raised through long-term debt issuance in 2015.

While our subsidiaries are subject to restrictions, such as foreign withholding taxes on the transfer of funds in the form of cash dividends, loans or advances, such restrictions are not expected to have a material impact on our ability to meet our cash obligations.

### MARKET RISK AND CREDIT RISK

In the normal course of business, financial instruments of various kinds are used for the purposes of managing exposure to commodity price, foreign exchange and interest rate movements. Our treasury and trading operations are highly centralised, and seek to manage credit exposures associated with our substantial cash, commodity, foreign exchange and interest rate positions. Our portfolio of cash investments is diversified to avoid concentrating risk in any one instrument, country, or counterparty. We monitor our investments and adjust them in light of new market information. Exposure to failed financial and trading counterparties was not material in 2016. Treasury standards are applicable to all our subsidiaries, and each subsidiary is required to adopt a treasury policy consistent with these standards. Other than in exceptional cases, the use of external derivative instruments is confined to specialist trading and central treasury organisations that have appropriate skills, experience, supervision, control and reporting systems.

### PENSION COMMITMENTS

We have substantial pension commitments, whose funding is subject to capital market risks (see "Risk factors" on page 14). We address key pension risks in a number of ways. Principal among these is the Pensions Forum, chaired by the Chief Financial Officer, which provides guidance on Shell's input to pension strategy, policy and operation. The forum is supported by a risk committee in reviewing the results of assurance processes with respect to pension risks. In general, local trustees manage the funded defined benefit pension plans and set the required contributions based on independent actuarial valuations in accordance with local regulations. Our total employer contributions to defined benefit pension plans were \$1.3 billion in 2016 and are estimated to be \$1.4 billion in 2017.

### Capitalisation table

	\$ million	
	Dec 31, 2016	Dec 31, 2015
Equity attributable to Royal Dutch Shell plc shareholders	186,646	162,876
Current debt	9,484	5,530
Non-current debt	82,992	52,849
Total debt [A]	92,476	58,379
Total capitalisation	279,122	221,255

[A] Of total debt, \$77.7 billion (2015: \$52.4 billion) was unsecured and \$14.8 billion (2015: \$6.0 billion) was secured. See Note 15 to the "Consolidated Financial Statements" on pages 136-138 for further disclosure on debt.

The consolidated ratio of earnings to fixed charges of Shell for each of the five years ended December 31, 2012-2016, is as follows:

### Ratio of earnings to fixed charges [A]

	2016	2015	2014	2013	2012
Ratio of earnings to fixed charges	2.47	1.93	14.41	20.11	31.12

[A] See "Exhibit 7.1" on page E1 for the calculation of the ratio of earnings to fixed charges.

## Liquidity and capital resources *Continued*

### STATEMENT OF CASH FLOWS

Cash flow from operating activities in 2016 was an inflow of \$20.6 billion. The decrease from \$29.8 billion in 2015 was mainly due to unfavourable working capital impacts. The decrease in cash flow from operating activities in 2015 compared with \$45.0 billion in 2014 mainly reflected lower income, which was principally a result of the significant decline in oil and gas prices.

Cash flow from investing activities in 2016 was an outflow of \$31.0 billion. The increased outflow from \$22.4 billion in 2015 was mainly due to the acquisition of BG. The increased cash outflow from investing activities in 2015 compared with \$19.7 billion in 2014 was mainly the result of lower proceeds from sale of assets, which more than offset a reduction in capital expenditure.

Cash flow from financing activities in 2016 was an outflow of \$0.8 billion compared with an inflow of \$3.8 billion in 2015 and an outflow of \$12.8 billion in 2014. In 2016, this included net debt issued of \$11.1 billion (2015: \$14.9 billion; 2014: \$0.4 billion), more than offset by payment of dividends to Royal Dutch Shell plc shareholders of \$9.7 billion (2015: \$9.4 billion; 2014: \$9.4 billion) and interest paid of \$2.9 billion (2015: \$1.7 billion; 2014: \$1.5 billion).

Cash and cash equivalents were \$19.1 billion at December 31, 2016 (2015: \$31.8 billion; 2014: \$21.6 billion).

### CASH FLOW FROM OPERATING ACTIVITIES

The most significant factors affecting our cash flow from operating activities are earnings, which are mainly impacted by: realised prices for crude oil, natural gas and liquefied natural gas (LNG); production levels of crude oil, natural gas and LNG; and refining and marketing margins, and movements in working capital.

The impact on earnings from changes in market prices depends on: the extent to which contractual arrangements are tied to market prices; the dynamics of production-sharing contracts; the existence of agreements with governments or state-owned oil and gas companies that have limited sensitivity to crude oil and natural gas prices; tax impacts; and the extent to which changes in commodity prices flow through into operating costs. Changes in benchmark prices of crude oil and natural gas in any particular period therefore provide only a broad

indicator of changes in our Integrated Gas and Upstream earnings in that period. In the longer term, replacement of proved oil and gas reserves will affect our ability to maintain or increase production levels, which in turn will affect our earnings and cash flows.

Changes in any one of a range of factors derived from either within the industry or the broader economic environment can influence refining and marketing margins. The precise impact of any such changes depends on how the oil markets respond to them. The market response is affected by factors such as: whether the change affects all crude oil types or only a specific grade; regional and global crude-oil and refined-products inventories; and the collective speed of response of refiners and product marketers in adjusting their operations. As a result, margins fluctuate from region to region and from period to period.

### CAPITAL INVESTMENT

The reduction in organic capital investment in 2016 compared with 2015, and in 2015 compared with 2014, reflects our decision to curtail spending by reducing the number of new investment decisions and designing lower-cost development solutions. The increase in inorganic capital investment in 2016 compared with 2015 was mainly due to the BG acquisition.

Capital investment [A]	\$ million		
	2016	2015	2014
Integrated Gas	26,214	5,178	9,124
Upstream	47,507	18,349	22,169
Downstream	6,057	5,119	5,910
Corporate	99	215	136
Total capital investment	79,877	28,861	37,339
Of which:			
Organic capital investment	26,913	28,403	34,082
Inorganic capital investment	52,964	458	3,257

[A] See "Non-GAAP measures reconciliations" on page 195.

### Cash flow information [A]

	\$ billion		
	2016	2015	2014
Cash from operating activities excluding working capital movements			
Integrated Gas	6.3	8.2	15.0
Upstream	10.5	5.0	18.3
Downstream	9.8	10.6	4.5
Corporate	0.3	0.5	0.8
Total	26.9	24.3	38.6
(Increase)/decrease in inventories	(5.6)	2.8	8.0
Decrease/(increase) in current receivables	2.0	9.9	(1.6)
Decrease in current payables	(2.7)	(7.2)	—
(Increase)/decrease in working capital	(6.3)	5.5	6.4
Cash flow from operating activities	20.6	29.8	45.0
Cash flow from investing activities	(31.0)	(22.4)	(19.7)
Cash flow from financing activities	(0.8)	3.8	(12.8)
Currency translation differences relating to cash and cash equivalents	(1.5)	(1.0)	(0.6)
(Decrease)/increase in cash and cash equivalents	(12.7)	10.2	11.9
Cash and cash equivalents at the beginning of the year	31.8	21.6	9.7
Cash and cash equivalents at the end of the year	19.1	31.8	21.6

[A] See the "Consolidated Statement of Cash Flows" on page 121.



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## DIVESTMENTS

In 2016, we continued to divest assets that fail to deliver competitive performance or no longer meet our longer-term strategic objectives, including assets in Japan and the USA. Divestments in 2016 also included the sale of interests in Shell Midstream Partners, L.P. and Pilipinas Shell Petroleum Corporation, while we retained control of both.

Divestments [A]	\$ million		
	2016	2015	2014
Integrated Gas	352	269	4,819
Upstream	1,451	2,478	5,770
Downstream	2,889	2,282	4,410
Corporate	17	511	20
<b>Total</b>	<b>4,709</b>	<b>5,540</b>	<b>15,019</b>

[A] See "Non-GAAP measures reconciliations" on page 195.

## DIVIDENDS

Our policy is to grow the dollar dividend through time, in line with our view of our underlying earnings and cash flow. When setting the dividend, the Board of Directors looks at a range of factors, including the macroeconomic environment, the current balance sheet and future investment plans.

We returned \$15.0 billion to our shareholders through dividends in 2016. Some of those dividends were paid out in 219.3 million shares issued to shareholders who had elected to receive new shares instead of cash, under our Scrip Dividend Programme.

The fourth quarter 2016 interim dividend of \$0.47 per share will be payable to shareholders on the register at February 17, 2017. See Note 24 to the "Consolidated Financial Statements" on page 150. The Board expects that the first quarter 2017 interim dividend will be \$0.47 per share, equal to the US dollar dividend for the same quarter in 2016.

## PURCHASES OF SECURITIES

At the 2016 Annual General Meeting (AGM), shareholders granted an authority, which expires at the end of the 2017 AGM, for the Company to repurchase up to a maximum of 795 million of its shares (excluding purchases for employee share plans). While no share repurchases for cancellation were made during 2016, the Board continues to regard the ability to repurchase issued shares in suitable circumstances as an important part of the financial management of the Company. A resolution will be proposed at the 2017 AGM to renew the authority for the Company to purchase its own share capital up to specified limits for a further year. This proposal will be described in more detail in the Notice of Annual General Meeting.

Shares are also purchased by the employee share ownership trusts and trust-like entities (see the "Directors' Report" on page 66) to meet delivery commitments under employee share plans. All share purchases are made in open-market transactions.

The table below provides information on purchases of shares in 2016 by the issuer and affiliated purchasers. Purchases in euros and sterling are converted into dollars using the exchange rate on each transaction date.

## Purchases of equity securities by issuer and affiliated purchasers in 2016 [A]

Purchase period	A shares		B shares		A ADSs [B]	
	Number purchased for employee share plans	Weighted average price (\$) [C]	Number purchased for employee share plans	Weighted average price (\$) [C]	Number purchased for employee share plans	Weighted average price (\$) [C]
January	—	—	—	—	1,578,318	45.17
February	—	—	—	—	—	—
March	—	—	—	—	—	—
April	—	—	161,958	24.78	—	—
May	—	—	—	—	—	—
June	—	—	113,460	26.10	—	—
July	—	—	—	—	—	—
August	—	—	—	—	—	—
September	—	—	114,636	24.82	—	—
October	—	—	—	—	—	—
November	—	—	—	—	—	—
December	5,898,433	27.68	102,875	28.79	—	—
<b>Total 2016</b>	<b>5,898,433</b>	<b>27.68</b>	<b>492,929</b>	<b>25.93</b>	<b>1,578,318</b>	<b>45.17</b>

[A] Excludes shares issued to affiliated purchasers pursuant to the Scrip Dividend Programme.

[B] American Depository Shares.

[C] Includes stamp duty and brokers' commission.

## Liquidity and capital resources *Continued*

### CONTRACTUAL OBLIGATIONS

The table below summarises our principal contractual obligations at December 31, 2016, by expected settlement period. The amounts presented have not been offset by any committed third-party revenue in relation to these obligations.

Contractual obligations	\$ billion				
	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	5 years and later	Total
Debt [A]	8.3	17.5	11.3	40.1	77.2
Finance leases [A]	2.2	3.9	3.8	14.3	24.2
Operating leases [A]	4.8	7.5	6.5	7.2	26.0
Purchase obligations [B]	101.8	69.3	46.1	159.2	376.4
Other long-term contractual liabilities [C]	–	0.6	0.3	1.0	1.9
<b>Total</b>	<b>117.1</b>	<b>98.8</b>	<b>68.0</b>	<b>221.8</b>	<b>505.7</b>

[A] See Note 15 to the "Consolidated Financial Statements" on page 137. Debt contractual obligations exclude interest, which is estimated to be \$2.2 billion payable in less than one year, \$3.8 billion between one and three years, \$3.0 billion between three and five years, and \$23.2 billion in five years and later. For this purpose, we assume that interest rates with respect to variable interest rate debt remain constant at the rates in effect at December 31, 2016, and that there is no change in the aggregate principal amount of debt other than repayment at scheduled maturity as reflected in the table. Finance lease contractual obligations include interest.

[B] A purchase obligation is an agreement to purchase goods or services that is enforceable and legally binding and specifies terms such as: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction.

[C] Includes all obligations included in "Trade and other payables" in "Non-current liabilities" on the "Consolidated Balance Sheet" that are contractually fixed as to timing and amount. In addition to these amounts, Shell has certain obligations that are not contractually fixed as to timing and amount, including contributions to defined benefit pension plans (see Note 18 to the "Consolidated Financial Statements" on pages 141-142) and obligations associated with decommissioning and restoration (see Note 19 to the "Consolidated Financial Statements" on page 143).

### GUARANTEES AND OTHER OFF-BALANCE SHEET ARRANGEMENTS

There were no off-balance sheet arrangements at December 31, 2016, or 2015, reasonably likely to have a material effect on Shell.

### FINANCIAL INFORMATION RELATING TO THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

The results of operations and financial position of the Royal Dutch Shell Dividend Access Trust (the Trust) are included in the consolidated results of operations and financial position of Shell. Certain condensed financial information in respect of the Trust is given below. See "Royal Dutch Shell Dividend Access Trust Financial Statements" on pages 183-186.

A dividend access share has been issued by Shell Transport to Computershare Trustees (Jersey) Limited (the Trustee) and on February 15, 2016, a dividend access share was issued by BG to the Trustee.

For the years 2016, 2015 and 2014, the Trust recorded income before tax of £3,879 million, £2,726 million and £2,470 million respectively. In each period, this reflected the amount of dividends received on the dividend access shares.

At December 31, 2016, the Trust had total equity of £nil (2015: £nil; 2014: £nil), reflecting cash of £2 million (2015: £2 million; 2014: £1 million) and unclaimed dividends of £2 million (2015: £2 million; 2014: £1 million). The Trust only records a liability for an unclaimed dividend, and a corresponding amount of cash, to the extent that dividend cheque payments have not been presented within 12 months, have expired or have been returned unrepresented.

## ENVIRONMENT AND SOCIETY

Our success in business depends on our ability to meet a range of environmental and social challenges. We must operate safely and manage the effect our activities can have on neighbouring communities and society as a whole. If we fail to do this, we may incur liabilities or sanctions, lose business opportunities, harm our reputation, or our licence to operate may be impacted (see "Risk factors" on page 13).

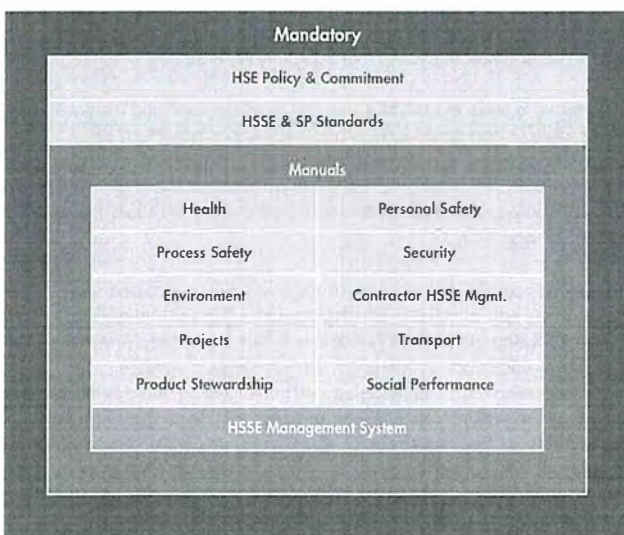
Data in this section are reported on a 100% basis in respect of activities where we are the operator. Reporting on this operational control basis differs from that applied for financial reporting purposes in the "Consolidated Financial Statements" on pages 117-152. The data includes BG with effect from February 1, 2016. Detailed data and information on our 2016 environmental and social performance will be published in the Shell Sustainability Report in April 2017.

### CONTROL FRAMEWORK

The Shell General Business Principles set out our responsibilities to shareholders, customers, employees, business partners and society. They set the standards for the way we conduct business, with integrity and respect for people, the environment and communities. All ventures that we operate must conduct their activities in line with our business principles.

We aim to minimise the environmental impact of new projects and existing operations and we engage with local communities and non-governmental organisations to understand and respond to their concerns. We have standards and a clear governance structure in place to help manage potential impacts. Our standards are defined in our Health, Safety, Security, Environment and Social Performance (HSSE&SP) Control Framework (Control Framework), in line with our Commitment and Policy and the Shell Code of Conduct, and are supported by a number of guidance documents. They apply to every Shell entity, including all employees and contract staff, and to Shell-operated ventures. The Control Framework defines standards and accountabilities at each level of the organisation, and sets out the procedures and processes people are required to follow. We manage HSSE&SP risks to "As Low As Reasonably Practicable" (ALARP), which is a business responsibility, supported by the HSSE&SP function. The process safety and HSSE&SP assurance team provides assurance on the effectiveness of HSSE&SP controls.

### HSSE & SP Control Framework



BG HSSE&SP plans for all former BG assets have been reviewed against the Control Framework, and now comply with its requirements or have risk-based plans in place to close gaps within two years.

Our three Golden Rules require our employees and contract staff to comply with laws and regulations as well as our standards and procedures, to intervene in unsafe or non-compliant situations, and to respect our neighbours.

In ventures not operated by us, Shell-appointed representatives encourage our partners to apply standards and principles similar to our own. We support these ventures in their implementation of our HSSE&SP Control Framework, or of a similar framework, and offer to review the effectiveness of their implementation. Even if such a review is not carried out, we periodically evaluate health, safety, security, environment and community risks faced by our ventures which we do not operate. If one of these ventures falls below expectations, we work to put plans in place, in agreement with our partners, to improve performance. Former BG joint ventures must comply with the Control Framework Joint Venture HSSE Requirements Manual.

### SAFETY

Safety is central to the responsible delivery of energy. We develop and operate our facilities with the aim of preventing any incidents that may harm our employees, contract staff or nearby communities, or cause damage to our assets or adversely impact the environment. We manage safety risks across our businesses through clear standards, controls and compliance systems combined with a safety-focused culture.

Our global standards and operating procedures define the controls and physical barriers we require to prevent incidents. For example, our offshore wells are designed with at least two independent barriers to mitigate the risk of an uncontrolled release of hydrocarbons. We regularly inspect, test and maintain these barriers to ensure they meet our standards. We also routinely prepare and practise our emergency response to potential incidents such as an oil spill or a fire. This involves working closely with local services and regulatory agencies to jointly test our plans and procedures. These tests continually improve our readiness to respond. If an incident does occur, we have procedures in place to reduce the impact on people and the environment.

We continue to strengthen the safety culture and leadership among our employees and contract staff, with the focus on caring for people. Our safety goal is to achieve no harm and no leaks across all of our operations. We refer to this as our Goal Zero ambition. We expect everyone working for us to intervene and stop work that may appear to be unsafe. In addition to our ongoing safety awareness programmes, we hold an annual global safety day to give employees and contract staff time to reflect on how to prevent incidents. We expect everyone working for us to comply with our 12 mandatory Life-Saving Rules. If employees break these rules, they face disciplinary action up to and including termination of employment. If contract staff break the Life-Saving Rules, they can be removed from the worksite.

Process safety involves making sure the right precautions are in place to prevent unplanned releases of hydrocarbons or chemicals. We use structured processes to manage our asset integrity and prevent spills, leaks and any other technical failures or breakdowns. In the event of a loss of containment such as a spill or a leak, we employ independent recovery measures to prevent the release from becoming catastrophic. This system of barriers and recovery measures is known as a "bow-tie", a model that visually represents a system where process safety hazards are managed through prevention and response barriers.

### Risk management approach



## Environment and society *Continued*

While we continually work to minimise the likelihood of incidents, some do occur. We investigate all incidents to understand the underlying causes and translate these into improvements in standards or ways of working that can be applied broadly across similar facilities in Shell. As set out in "Performance indicators" on pages 20-21, our total recordable case frequency (injuries per million working hours) was 1.00 in 2016, compared with 0.94 in 2015, and there were 39 operational Tier 1 process safety events in 2016, compared with 51 in 2015. Detailed information on our 2016 safety performance will be published in the Shell Sustainability Report in April 2017.

### ENVIRONMENT

We seek to comply with environmental regulations, to continually improve our performance, and to prepare to respond to future challenges and opportunities. We use external standards and guidelines, such as those developed by the World Bank and International Finance Corporation, to inform our approach. We have global environmental standards, which we believe meet all regulatory requirements and often exceed them. Our standards cover our environmental performance, including managing emissions of greenhouse gases (GHG), using energy more efficiently, flaring less gas during oil production, preventing spills and leaks of hazardous materials, using less fresh water and conserving biodiversity wherever we operate. For example, the availability of fresh water is a growing challenge in some parts of the world. A combination of increasing demand for water resources, growing stakeholder expectations and concerns, and water-related legislation may drive actions that affect our ability to secure access to fresh water and to discharge water from our operations. We design and operate our facilities to help reduce their fresh water use. In some cases, we use alternatives to fresh water in our operations; these include recycled water, processed sewage water and desalinated water. For example, at our gas-to-liquids (GTL) plant in the Qatari desert, we clean and reuse industrial process water. This means that we avoid using the country's scarce natural water resources. An assessment of risks to water availability is required to be undertaken for each of our assets and projects and, in areas of water scarcity, we develop water-management action plans that identify ways to use less fresh water, recycle water and closely monitor its use.

### CLIMATE CHANGE

#### Our approach to climate change

We have long recognised that GHG emissions from the use of fossil fuels are contributing to warming of the climate system. In December 2015, 195 nations adopted the Paris Agreement and we welcomed the efforts made by governments to reach this global climate agreement, which entered into force in November 2016. It provides a framework which is intended to enable governments to implement effective measures to reduce GHG emissions. Shell agrees with the International Energy Agency (IEA) that the goal of limiting the increase in global temperatures to well below 2°C will be extremely challenging.

We believe that, in the future, growth in energy demand and the need to reduce GHG emissions means that major improvements in energy efficiency and new sources of energy, such as renewables, will be needed over the longer term. All forms of GHG reduction measures must be accelerated and increased in scale, including significant growth in carbon capture and storage (CCS) and sustained reductions in demand, combined with the use of cleaner hydrocarbons, such as replacing coal with natural gas. The management of GHG emissions will become increasingly important as concerns over climate change lead to tighter environmental regulations. Policies and regulations designed to limit the increase in global temperatures to well below 2°C could have a material adverse effect on Shell. While we fully support efforts to reduce GHG emissions, when adopting rules and regulations governments should balance the need to limit increases in temperature with society's need for energy to power development.

Some governments have introduced carbon pricing mechanisms, which can be an effective measure to reduce GHG emissions across the economy at lowest overall cost to society, and we expect more governments to follow. Governments may also require companies to apply technical measures to reduce their GHG emissions. This could result in increased investments and higher project costs for us and higher energy and product costs for consumers (see "Risk Factors" on page 13). Our portfolio exposure is reviewed annually against changing GHG

regulatory regimes and physical conditions to identify emerging risks. We test the resilience of our portfolio against externally published future pathways, including a low emissions pathway.

To test the resilience of new projects, we assess potential costs associated with GHG emissions when evaluating all new investments. Our approach applies a uniform project screening value (PSV) of \$40 (real terms) per tonne of carbon dioxide (CO<sub>2</sub>) equivalent to the total GHG emissions of each investment. This PSV is generally applied when evaluating our new projects around the world to test their resilience across a range of future scenarios. The project development process features a number of checks that may require development of detailed GHG and energy management plans. High-emitting projects undergo additional sensitivity testing, including the potential for later retrofitting of CCS facilities. Projects in the most GHG-exposed asset classes have GHG intensity targets that reflect standards sufficient to allow them to compete and prosper in a more GHG-regulated future. These processes can lead to projects being stopped, designs being changed, and potential GHG mitigation investments being identified, in preparation for when regulation would make these investments commercially compelling.

As part of the Paris Agreement, governments set out national plans (in their Nationally Determined Contributions, or NDCs) to drive action across the energy system as a whole. The emissions resulting from energy consumers using Shell products are for a large part covered by these NDCs. The Agreement acknowledges that emissions will continue and even grow in some parts of the world. It does not stipulate that emissions will fall in all sectors or countries simultaneously, or that all actors within the system will reduce their emissions. What is important is that emissions fall overall.

While monitoring emerging climate policy plans, Shell considers the robustness of its activities against a range of scenarios including the IEA 450 Scenario. We believe our business strategy is resilient to the envisaged implementation of the Paris Agreement, which is now progressing through the NDCs. As specific examples, the emissions reductions being seen in the USA and the more recent emissions plateau in China have been helped by the increased use of natural gas in place of coal. Natural gas now makes up over half of the Shell portfolio.

At this stage, industry is still facing significant uncertainties as to how government policy and consumer behaviour will ultimately shape the evolution of the energy system and which technologies and business models will prevail. We believe we are unique in having a broader set of business options under technical and commercial development than any other company in our sector.

While we aspire to reduce our GHG intensity, as energy demand increases and easily accessible oil and gas resources decline, we may potentially be developing resources that require more energy and advanced technologies to produce. If our production becomes more energy intensive, this could result in an associated increase in direct GHG emissions from our upstream facilities. See "Risk factors" on page 13.

We are seeking cost-effective ways to manage GHG emissions and see potential business opportunities in developing such solutions. We seek to contribute to reducing global GHG emissions in four areas: supplying more natural gas to replace coal for power generation; developing alternative energies; progressing CCS technologies; and implementing energy-efficiency measures in our operations where reasonably practical. To support this, we continue to advocate the introduction of effective government-led carbon pricing mechanisms.

According to the IEA, over 40% of global emissions in 2014 came from electricity and heat generation. For many countries, using more gas in power generation instead of coal can make the largest contribution, at lowest cost, to meeting their GHG emission reduction objectives. We expect that, in combination with renewables and use of CCS, natural gas will be essential for significantly lower CO<sub>2</sub> emissions. With our leadership in liquefied natural gas (LNG), our portfolio of conventional gas assets and our technologies for recovering gas from tight-rock formations, we can supply natural gas to replace

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coal for power generation. Natural gas can also act as a partner for intermittent renewable energy, such as solar and wind, to maintain a steady supply of electricity, because gas-fired plants can start and stop relatively quickly.

We believe that low-carbon biofuels will continue to play a valuable part in reducing CO<sub>2</sub> emissions in the transport sector in the coming decades. Our Raizen joint venture (Shell interest 50%) in Brazil produces low-carbon biofuel from sugar cane. We are also investing in research to help develop and commercialise advanced biofuels.

CCS is a technology used for capturing CO<sub>2</sub> before it is emitted into the atmosphere, then transporting it through pipelines and injecting it into a deep geological formation for long-term storage. In the IEA 450 Scenario, CCS contributes around 12% of the CO<sub>2</sub> mitigation effort required by 2040, assuming that use of CCS technology grows in accordance with the IEA scenario. In November 2015, we launched our Quest CCS project in Canada, which has captured and safely stored more than 1 million tonnes of CO<sub>2</sub> since its start-up. We are also involved in a CCS test centre in Mongstad, Norway, the Gorgon CO<sub>2</sub> injection project in Australia and the Qatar Carbonates and Carbon Storage Research Centre. We also have technology that can remove both CO<sub>2</sub> and sulphur dioxide from industrial flue gases. It is being used at Boundary Dam, a third-party coal-fired power plant in Canada.

We continue to work on improving energy efficiency at our oil and gas production facilities, refineries and chemical plants. Measures include our GHG and energy management programme that focuses on the efficient operation of existing equipment by using monitoring systems which give us instant information that we can use to make energy-saving changes.

In addition, we work to help our customers conserve energy and reduce their GHG emissions, including through the development and sale of advanced fuels and lubricants.

## Our performance

Our direct GHG emissions decreased from 72 million tonnes of CO<sub>2</sub> equivalent in 2015 to 70 million in 2016. The level of flaring in our Integrated Gas and Upstream businesses combined reduced by about 35% in 2016 compared with 2015. Our overall direct GHG emissions also decreased as a result of the Quest CCS project operating for the full year 2016, divestments (for example, in Nigeria and the UK) and a higher level of maintenance shutdowns. These decreases were partly offset by the inclusion of BG assets.

In 2015, we signed up to the World Bank's "Zero Routine Flaring by 2030" initiative. This is an important initiative to ensure all stakeholders, including governments and companies, work together to address routine flaring. Flaring, or burning off, of gas in our Upstream and Integrated Gas businesses contributed around 11% of our overall GHG emissions in 2016. Almost half of this flaring takes place at facilities where there is no infrastructure to capture the gas produced with oil, known as associated gas. Gas flaring from these operations may rise in coming years if oil production increases before the related gas-gathering equipment is in place. Our flaring levels decreased in 2016 compared with 2015 following the start-up of gas capturing facilities at the Majnoon oil field in Iraq and gas reinjection in Malaysia.

Our involvement in Basrah Gas Company (BGC), a joint venture between Shell, South Gas Company and Mitsubishi Corporation in the south of Iraq, continues to reduce flaring in that country. It is the largest gas project in Iraq's history and the world's largest flaring reduction project. BGC captures associated gas that would otherwise be flared from three non-Shell-operated oil fields in southern Iraq (Rumaila, West Qurna 1 and Zubair) for use in the domestic market. In 2016, BGC processed on average of 574 million standard cubic feet of gas per day.

Around 16% of flaring in our Upstream and Integrated Gas facilities in 2016 took place in assets operated by Shell Petroleum Development Company (SPDC) in Nigeria. Flaring intensity levels in SPDC decreased by about 35% in 2016 compared with 2015, due to production outages and work to improve asset reliability. Progress was also made on several gas-gathering projects. However, the planned start-up dates for two other gas-gathering projects continued to be delayed by security issues throughout 2016 and a lack of adequate joint-venture funding from our government partner for most of the year.

Methane is a more potent GHG than CO<sub>2</sub>: it has 34 times the global warming potential of CO<sub>2</sub> on a 100-year timeframe according to the Intergovernmental Panel on Climate Change AR5 report. Natural gas emits less GHG emissions than coal when burnt at a power plant, but methane leakage in the natural gas supply chain could reduce this benefit. We recognise the importance of reducing methane emissions and take our responsibilities seriously. Methane from the flaring and venting of gas (including equipment venting) in our upstream oil and gas operations was the largest contributor to our reported methane emissions in 2016. We are working to reduce methane emissions from these sources by reducing the overall level of flaring and venting. In addition, we continue to implement leak detection and repair programmes across our sites to identify unintended losses (for example, small leaks sometimes called fugitives) and high-emission equipment, such as high-bleed pneumatic devices, so they can be replaced or repaired. We continue to work to confirm that we have identified all potential methane sources and have reported our emissions from these sources in line with regulations and industry standards. In 2016, we announced our joining of the Climate and Clean Air Coalition (CCAC) Oil & Gas Methane Partnership from the start of 2017. The partnership brings together industry, governments and non-governmental organisations to improve understanding of methane emissions and work towards reducing them. Detailed information on our approach to managing methane emissions will be published in the Shell Sustainability Report in April 2017.

GHG emissions data are provided below in accordance with UK regulations. GHG emissions comprise CO<sub>2</sub>, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride. The data are calculated using locally regulated methods where they exist. Where there is no locally regulated method, the data are calculated using the 2009 API Compendium, which is the recognised industry standard under the GHG Protocol Corporate Accounting and Reporting Standard. There are inherent limitations to the accuracy of such data. Oil and gas industry guidelines (IPIECA/API/IOGP) indicate that a number of sources of uncertainty can contribute to the overall uncertainty of a corporate emissions inventory.

## Greenhouse gas emissions

	2016	2015
Emissions (million tonnes of CO <sub>2</sub> equivalent)		
Direct [A]	70	72
Energy indirect [B]	11	9
Intensity ratio (tonne/tonne)		
All facilities [C]	0.22	0.23

[A] Emissions from the combustion of fuel and the operation of facilities, calculated using GWPs from the IPCC's Fourth Assessment Report.

[B] Emissions from the purchase of electricity, heat, steam and cooling for our own use using a market-based method.

[C] In tonnes of total direct and energy indirect GHG emissions per tonne of crude oil and feedstocks processed and petrochemicals produced in Downstream manufacturing, oil and gas produced and gas processed by liquefaction and GTL facilities in Integrated Gas and Upstream. Additional information by segment will be published on our website ([www.shell.com/ghg](http://www.shell.com/ghg)).

As set out in "Performance indicators" on page 21, our Refining Energy Intensity Index (EII<sup>RM</sup>) was 95.4 in 2016, the same as in 2015. Detailed information on our 2016 environmental performance will be published in the Shell Sustainability Report in April 2017.

## BIOFUELS

The international market for biofuels is growing, driven largely by the introduction of new energy policies in Europe and the USA that call for more renewable, lower-carbon fuels for transport. According to the IEA, sustainable biofuels are expected to play a bigger role in helping to meet customers' fuel needs and reduce CO<sub>2</sub> emissions.

From cultivation to use, some biofuels emit significantly less CO<sub>2</sub> compared with conventional gasoline. But this depends on several factors, such as the feedstock used and the way biofuels are produced. Other challenges include concerns over land competing with food crops, labour rights, and the water used in the production process.

In 2016, we used around 9.5 billion litres of biofuel in our gasoline and diesel blends worldwide to comply with applicable mandates and targets in the markets where we operate.

## Environment and society *Continued*

We include our own long-established sustainability clauses in our supply contracts. These clauses are designed to prevent the sourcing of biofuels from suppliers that may not abide by human rights guidelines, or that may have cleared land rich in biodiversity. In addition, where possible, we source biofuels that have been certified against internationally recognised sustainability standards. We also continue to work with industry, governments and voluntary organisations towards the development and adoption of global sustainability standards for biofuels.

Shell also produces biofuels through our Raízen joint venture. Raízen produces approximately 2 billion litres of ethanol from sugar cane annually. This Brazilian sugar-cane ethanol can emit around 70% less CO<sub>2</sub> compared with gasoline, from cultivation of the sugar cane to using the ethanol as fuel.

The Raízen joint-venture agreement includes developing joint sustainability principles, standards and operating procedures that also apply to third-party suppliers. We also continue to work with industry, governments and voluntary organisations towards the development of global sustainability standards for biofuels.

In 2015, Raízen opened its first advanced biofuels plant at the Costa Pinto mill in Brazil. The technology was first developed from our funding of the Logen Energy venture, which was subsequently transferred to Raízen. In 2016, the plant produced 6.9 million litres of cellulosic ethanol from sugarcane residues. It is expected to produce 40 million litres a year once fully operational.

Outside Brazil, we continue to invest in new ways of producing biofuels from sustainable feedstocks, such as biofuels made from waste products or cellulosic biomass. These advanced biofuels could potentially emit less CO<sub>2</sub> in the production process than the biofuels available today. We are working on three routes to develop advanced biofuels and now have three pilot plants at various stages of completion in the USA and India.

### SPILLS

Large spills of crude oil, oil products and chemicals associated with our operations can adversely impact the environment and result in major clean-up costs as well as fines and other damages. They can also affect our licence to operate and harm our reputation. We have clear requirements and procedures designed to prevent spills, and our asset integrity programmes include the design, maintenance and operation of spill containment facilities.

Our business units are responsible for organising and executing oil-spill responses in line with Shell guidelines as well as with relevant legal and regulatory requirements. All our offshore installations have plans in place to respond to spills. These plans detail response strategies and techniques, available equipment, and trained personnel and contracts. We are able to call upon significant resources such as containment booms, collection vessels and aircraft. We are also able to draw upon the contracted services of oil-spill response organisations, if required. We conduct regular exercises that seek to ensure these plans remain effective. We have further developed our capability to respond to spills to water, and maintain a Global Response Support Network to support our worldwide response capability. This is also supported by our global Oil Spill Expertise Centre, which tests local capability, and maintains our capability globally to respond to a significant incident.

We are a founding member of the Marine Well Containment Company, a non-profit industry consortium providing a well-containment response system for the Gulf of Mexico. In addition, we were a founding member of the Subsea Well Response Project, an industry cooperative effort to enhance global well-containment capabilities. The additional well-containment capability developed by this project is now managed by an industry consortium via Oil Spill Response Limited.

We also maintain site-specific emergency response plans in the event of an onshore spill. Like the offshore response plans, these are designed to meet Shell guidelines as well as relevant legal and regulatory requirements. They also provide for the initial assessment of incidents and the mobilisation of resources needed to manage them.

In 2016, the number of operational spills of more than 100 kilograms decreased to 71 from 108 in 2015 (see "Performance indicators" on page 21). At the end of February 2017, there were five spills under investigation in Nigeria that may result in adjustments.

### Spills in Nigeria

Most oil spills in the Niger Delta region of Nigeria continue to be caused by crude oil theft or sabotage of facilities, as well as illegal oil refining. In 2016, 90% of the number of oil spills of more than 100 kilograms from SPDC joint venture facilities was due to illegal activities by third parties. However, there are instances where spills occur due to operational reasons. Irrespective of the cause, SPDC cleans up and remediates areas impacted by spills originating from its facilities. In the case of operational spills, SPDC also pays compensation to people and communities impacted by the spill. Once clean-up is completed, the work is inspected, and, once satisfactory, approved and certified by Nigerian government regulators.

To reduce the number of operational spills, SPDC continues to implement its ongoing work programme to appraise, maintain and replace key sections of pipeline. Over the last five years, more than 950 kilometres of pipelines and flow lines have been replaced.

SPDC continues to undertake initiatives to prevent and minimise spills caused by theft and sabotage of its facilities in the Niger Delta. In 2016, we continued on-ground surveillance efforts on the SPDC joint venture's areas of operations, including its pipeline network, to mitigate incidences of third-party interference and ensure that spills are detected and responded to as quickly as possible. There are also daily overflights of the pipeline network to identify any new spill incidents or activities. We have also implemented anti-theft protection mechanisms on key infrastructure.

SPDC also collaborates with a range of stakeholders in the Niger Delta to build greater trust in spill response and clean-up processes. For example, wherever possible, local communities take part in the remedial work and in certain instances NGOs are invited to participate in joint investigation visits along with government regulators and SPDC, to establish the cause and volume of oil spilled.

In addition, SPDC has implemented several initiatives and partnerships to raise awareness on the negative impact of crude oil theft and illegal oil refining. For example, community-based pipeline surveillance and the promotion of alternative livelihoods through Shell's flagship youth entrepreneurship programme, Shell LiveWIRE.

In 2015, SPDC, on behalf of the SPDC joint venture and the Bodo community, signed a memorandum of understanding (MOU) granting access to SPDC to begin the clean-up of areas affected by two operational spills in 2008. The MOU also provided for the selection of two international contractors to conduct the clean-up, which will be overseen by an independent project director. Contractors for the first phase of the clean-up were mobilised to the location in September 2015 and they trained 400 Bodo youths on clean-up techniques. Unfortunately, contractor crews were subsequently denied access by the community beginning in late September 2015. In 2016, discussions continued with the community to allow contractors to proceed with clean-up, but no resolution had been achieved by the end of February 2017. SPDC remains fully committed to the clean-up of identified areas of Bodo when access is granted.

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In 2016, Nigeria's President Buhari initiated action on the implementation of the 2011 United Nations Environmental Programme (UNEP) Report on Ogoniland with a ground-breaking ceremony in June followed by the inauguration of two governance bodies in August to oversee the clean-up process. SPDC is represented on these bodies and will continue to actively support the process within the framework established by the Nigerian government. The UNEP report recommended the creation of an Ogoni Restoration Fund (ORF) with capital of \$1 billion, to be co-funded by the Nigerian government, the Nigerian National Petroleum Corporation and the SPDC joint venture, as well as other operators in the area. SPDC remains fully committed to supporting and contributing its share to the ORF once the appropriate framework and governance structures are fully established by the government. We believe the inauguration of the two governance bodies is a key step in this direction. Over the last five years, SPDC has taken action on all the UNEP recommendations addressed specifically to it as operator of the joint venture and has completed a majority of these recommendations. SPDC remains fully committed to supporting the Nigerian government in the clean-up of Ogoniland.

## HYDRAULIC FRACTURING

Over the last decade, we have expanded our onshore oil and gas portfolio using advances in technology to access previously uneconomic tight-oil and tight-gas resources, including those locked in shale formations. We believe this energy resource plays an important role in meeting global energy demand.

One of the key technologies applied in tight-oil and tight-gas fields is known as hydraulic fracturing, a technique that has been used since the 1950s. It involves pumping fluids that are typically 99% water and sand and around 1% chemical additives into tight sand or shale rock at high pressure. This creates thread-like fissures, typically the diameter of a human hair, through which oil and gas can flow.

Shell developed and publicly shares a set of five global principles that govern the onshore tight/shale oil and gas activities where hydraulic fracturing is used. The principles cover safety, air quality, water production and use, land use, and engagement with local communities. We support regulations consistent with these principles, which are designed to reduce risks to the environment and seek to ensure the safety of those living near our operations. Each of our projects takes into account the local context, including the geology of the area and impacts such as noise and traffic, and we then design our activities with the aim to suit the local conditions. As new technologies, challenges and regulatory requirements emerge, we review and update these principles.

Examples of topics which our principles cover include groundwater protection, chemicals used for hydraulic fracturing and water use.

To protect and isolate potable groundwater from hydraulic-fracturing fluids in the wellbore, we line all our wells with steel casing and cement. All of our wells are expected to have two or more subsurface barriers to protect groundwater. We monitor a wellbore's integrity before, during and after hydraulic fracturing. When we acquire assets, we evaluate the assets' wells for conformity with our safety and operating principles, and put in place a plan with a timeline for rectifying any inconsistencies as far as reasonably practical.

To the extent allowed by our suppliers, we support full disclosure of the chemicals used in hydraulic-fracturing fluids for Shell-operated wells. Material Safety Data Sheet information is available on site where wells are being hydraulically fractured. We support regulation to require suppliers to release such information. The chemicals used in hydraulic fracturing will vary from well to well and from contractor to contractor, but some can be toxic. For that reason, we have stringent procedures for handling hydraulic-fracturing chemicals in accordance with the design and assurance processes described above. The formations into which these additives may be injected are typically more than a kilometre below freshwater aquifers. Our procedures require that potable groundwater must be isolated from well completion and production activities. Moreover, we only use air, water or a water-based liquid while drilling through the potable groundwater aquifer to a depth below the aquifer. The casing and cement are then put in place before drilling is resumed and hydraulic fracturing is initiated.

We recycle or reuse as much water as we believe is reasonably practical. We store, treat or dispose of water in accordance with regulatory requirements and Shell standards, which meet or exceed those regulatory requirements.

Some jurisdictions are considering more stringent permitting, well-construction and other regulations relating to fracturing, as well as local bans and other land use restrictions. Such regulations could subject our operations to delays, increased costs or prohibitions. We believe our current standards meet or exceed the existing regulatory requirements of the jurisdictions where we operate. We believe we can safely and responsibly explore, develop and produce tight-oil and tight-gas where hydraulic fracturing technology is used – and we support regulation, as long as it is workable and effective.

## OIL SANDS

We are developing mineable oil sands resources in Alberta, Canada. We use warm water to extract bitumen, which is a heavy oil. Tailings are the residual by-products that remain after the bitumen is separated from the mined oil sands ore. They are composed of sand, clay, water, silts, some residual bitumen and other hydrocarbons, salts and trace metals, some of which are toxic. Tailings are initially stored in an above-ground tailings facility adjacent to the mined pit until the mined-out pit area is ready for tailings materials and fluids placement. This in-pit backfilling process begins approximately eight to ten years after mining has started. This period allows for mining to progress enough to allow dykes to be built within the mined pit to provide areas for tailings containment as mining continues to advance. We take active measures to prevent wildlife from interacting with the tailings facilities, and have barriers to prevent tailings water from seeping into groundwater. We regularly monitor the local groundwater and surface water bodies to confirm that these barriers are effective at preventing contamination.

In addition, tailings facilities allow water to be recycled, minimising the amount of water intake from the river. Over 75% of the water used in our oil sands mining operations is recycled from the tailings facilities at our mines.

The tailings management areas at the Athabasca Oil Sands Project's Muskeg River and Jackpine mines covered an area of approximately 46 square kilometres at the end of 2016. We estimate that the active tailings' footprint will start to decrease between 2020 and 2025 as the Muskeg River Mine external tailings facility is reclaimed and tailings materials are deposited in a pit as part of the in-pit backfilling process.

In 2015, the government of Alberta introduced the Tailings Management Framework (TMF) to manage existing and new tailings pond accumulation and remediation. The TMF and associated regulation manages tailings throughout a project life cycle and includes limits on tailings accumulation. The framework also ensures that tailings are treated and progressively reclaimed and that all fluid tailings meet the TMF's definition of "ready to reclaim" within 10 years of the end of mine life. We continue to work with the government of Alberta and are committed to improving tailings treatment technologies to treat fluid fine tailings that have a high percentage of fine particles.

In May 2016, a wildfire spread across approximately 5,900 square kilometres in northern Alberta, destroying portions of the Regional Municipality of Wood Buffalo, including parts of Fort McMurray near our oil sands operations, and prompting the provincial government to declare a state of emergency. We temporarily suspended our mining operations for five days to focus our resources on the safety of our people and the wider community. This included feeding and sheltering thousands of people and their pets at our Albion Village work camp, and the safe evacuation of 9,920 displaced employees, contract staff and community members from the Albion Aerodrome. At about 80 kilometres north of the city, our mine site remained safe from the wildfire. We continue to work with the community in the effort to re-build the Regional Municipality of Wood Buffalo.

## SEISMICITY

As oil and gas fields mature, it is possible in certain circumstances for seismic activity to increase based on the unique geology of individual fields. For example, in recent years, public concern about gas production in Groningen, the Netherlands has grown as a result of an increase in the number and severity of induced earthquakes in the area (see "Upstream" on page 29). The field is operated by Nederlandse Aardolie Maatschappij B.V. (NAM, Shell interest 50%) and is one of the largest onshore gas fields in Europe. A range of actions have been taken to improve safety, liveability and economic prospects in the region. NAM is working together with all relevant parties to fulfil commitments to the residents of the area.

## Environment and society *Continued*

There also have been reports linking hydraulic fracturing to earth tremors. Most seismic events occur naturally due to motion along faults under stress in the earth's crust. Some areas are more seismically active than others. We analyse publicly available seismic, geologic and geophysical data to determine historical seismicity in areas where we plan to operate. If seismic activity beyond historic levels is detected, we will investigate and review our operations. We are supportive of local regulations that are fit-for-purpose, based on local geology and surface conditions, in managing the risk of induced seismicity in our operating areas. In addition to adhering to local regulations, we have our own guidelines, which outline monitoring, mitigation and response procedures to avoid or minimise seismicity associated with hydraulic fracturing.

### ENVIRONMENTAL COSTS

We are subject to a variety of environmental laws, regulations and reporting requirements in the countries where we operate. Infringing any of these laws, regulations and requirements could result in significant costs, including clean-up costs, fines, sanctions and third-party claims, as well as harm our reputation and our ability to do business.

Our ongoing operating expenses include the costs of avoiding unauthorised discharges into the air and water, and the safe disposal and handling of waste.

We place a premium on developing effective technologies that are also safe for the environment. However, when operating at the forefront of technology, there is always the possibility that a new technology brings with it environmental impacts that have not been assessed, foreseen or determined to be harmful, when originally implemented. While we believe we take all reasonable precautions to limit these risks, we are subject to additional remedial environmental and litigation costs as a result of our operations' unknown and unforeseen impacts on the environment. Although these costs have so far not been material to us, no assurance can be given that this will always be the case.

### SECURITY

Our operations expose us to social instability, civil unrest, terrorism, piracy, acts of war and risks of pandemic diseases that could have a material adverse effect on our business (see "Risk factors" on page 13). We seek to obtain the best possible information to enable us to assess threats and risks. We conduct detailed assessments for all sites and activities, and implement appropriate risk mitigation measures to detect, deter and respond to security threats. This includes building strong and open relationships with government security agencies, the physical hardening of sites, journey management, and information risk management. We conduct training and awareness campaigns, including travel advice and medical assistance before travel. The identities of our employees and contract staff and their access to our sites and activities, both physical and logical, are consistently verified and controlled. We manage and exercise crisis response and management plans.

### NEIGHBOURING COMMUNITIES

Earning the trust of local communities is essential to the success of our projects and operations. We have global requirements for social performance, which aim to ensure that we operate in a responsible way, deliver projects without delay and minimise the social impacts of our operations. Our requirements also help us to better share the benefits of our activities, such as employment and contractual opportunities that help develop local economies.

Specifically, the requirements set clear rules and expectations for how we engage with and respect communities that may be impacted by our operations. Shell-operated major projects and facilities are required to have a social performance plan and an effective community feedback mechanism. This helps the business to understand the social context in which we plan to operate, identify potential negative effects on the community and manage impacts. In addition, we have specific requirements intended to minimise our impact on indigenous peoples' traditional lifestyles and on handling involuntary resettlement.

### HUMAN RIGHTS

Respect for human rights is embedded in our Business Principles and in our Code of Conduct. Our approach is informed by the Universal Declaration of Human Rights, the core conventions of the International Labour Organization and the United Nations' Guiding Principles on Business and Human Rights.

We work closely with other companies and non-governmental organisations to continuously improve the way we apply these principles. Our focus is on four key areas: communities, security, labour rights, and supply chain. We have systems and processes in place for managing projects, contracting and procurement, recruitment and employment, and environmental and social performance. We require all our companies and our contractors to respect and protect the human rights of our workforce and our neighbouring communities.



## OUR PEOPLE

Performing competitively in the evolving energy landscape requires competent and empowered people working safely together across Shell. We recruit, train and recompense people according to a strategy that aims to organise our businesses effectively; accelerate development of our people; grow and strengthen our leadership capabilities; and enhance employee performance through strong engagement.

### EMPLOYEE OVERVIEW

Employee numbers are presented on the basis described in "Performance indicators" on page 21.

At December 31, 2016, we employed 89,000 people, compared with 90,000 at December 31, 2015, and 94,000 at December 31, 2014. The reduction in 2016 was driven by our continued effort to improve operational efficiency and reduce costs, mainly through redundancy programmes, which more than offset the impact of the acquisition of BG Group plc (BG), the insourcing of specific skill sets into the organisation (predominantly into our business service centres) and other external recruitment to build our talent pipeline.

During 2016, we employed an average of 92,000 people, shown by geographical area in the table below and by business segment in Note 27 to the "Consolidated Financial Statements" on page 151. The average number of employees in 2016 is higher than the number of employees at the beginning and end of the year because BG employees were included with effect from February and the impact of our redundancy programmes mostly took effect in the last three months of 2016.

#### Average number of employees by geographical area

	Thousand		
	2016	2015	2014
Europe	25	25	25
Asia	28	29	28
Oceania	2	1	2
Africa	4	3	3
North America	29	31	32
South America	4	4	4
Total	92	93	94

### EMPLOYEE COMMUNICATION AND INVOLVEMENT

We strive to maintain a healthy industrial relations environment in which dialogue between management and employees – both directly and, where appropriate, through employee representative bodies – is embedded in our work practices. On a quarterly basis, management briefs employees on our operational and financial results through various channels, including team meetings, face-to-face gatherings, an email from the Chief Executive Officer, webcasts and online publications.

Strong employee engagement is especially significant in maintaining strong business delivery in times of great change. The Shell People Survey is one of the principal tools used to measure employee engagement: the degree of affiliation and commitment to Shell. It provides insights into employees' views and has had a consistently high response rate. The average employee engagement score in 2016 was 79% compared with 80% in 2015 and in 2014.

We promote safe reporting of views about our processes and practices. In addition to local channels, the Shell Global Helpline enables employees to report potential breaches of the Shell General Business Principles and Shell Code of Conduct, confidentially and anonymously, in a variety of languages. See "Corporate governance" on page 68.

### DIVERSITY AND INCLUSION

We aim for a diverse workforce and an inclusive environment that respects and supports all of our people and helps improve our business performance. Our diversity and inclusion (D&I) approach focuses on talent acquisition, progression and retention, inclusive leadership and on differentiating our external reputation. Our leaders aim to be role models for D&I and assume accountability for continuous progress. We believe that diverse teams led by inclusive leaders are more engaged, and therefore deliver better business performance. By embedding D&I in our operations, we have a better understanding of the needs of our employees as well as the needs of our varied customers, partners and stakeholders throughout the world. We can also benefit from a wider talent pool. We provide equal opportunity in recruitment, career development, promotion, training and rewards for all employees, including those with disabilities. Where possible, we make reasonable adjustments in job design and provide appropriate training for employees who have become disabled.

We actively monitor representation of women and local nationals in senior leadership positions, and have talent-development processes to support us in delivering more diverse representation.

At the end of 2016, the proportion of women in senior leadership positions was 20% compared with 19% at the end of 2015. Senior leadership positions is a Shell measure based on senior salary group levels and is distinct from the term "senior manager" in the statutory disclosures set out below.

#### Gender diversity data at December 31, 2016

	Number	
	Men	Women
Directors of the Company	8	3
Senior managers [A]	791	249
Employees (thousand)	62	27

[A] Senior manager is defined in section 414C(9) of the Companies Act 2006 and accordingly the number disclosed comprises the Executive Committee members who were not Directors of the Company, as well as other directors of Shell subsidiaries.

The local national coverage is the number of senior local nationals (both those working in their respective base country and those expatriated) as a percentage of the number of senior leadership positions in their base country.

#### Local national coverage at December 31

	Number of selected key business countries		
	2016	2015	2014
Greater than 80%	10	12	12
Less than 80%	10	8	8
Total	20	20	20

### EMPLOYEE SHARE PLANS

We have a number of share plans designed to align employees' interests with our performance through share ownership. For information on the share-based compensation plans for Executive Directors, see the "Directors' Remuneration Report" on pages 82-103.

## Our people *Continued*

### PERFORMANCE SHARE PLAN, LONG-TERM INCENTIVE PLAN AND EXCHANGED AWARDS UNDER THE BG LONG-TERM INCENTIVE PLAN

Conditional awards of the Company's shares are made under the terms of the Performance Share Plan (PSP) to around 17,000 employees each year. Senior executives receive conditional awards of the Company's shares under the terms of the Long-term Incentive Plan (LTIP) rather than under the terms of the PSP. The extent to which the awards vest under both plans is determined over a three-year performance period but the performance conditions applicable to each plan are different. Under the PSP, half of the award is linked to the key performance indicators described in "Performance indicators" on page 20, averaged over the period. The other half of the award is linked to a comparative performance condition which involves a comparison with four of our main competitors over the period, based on four relative performance measures. Under the LTIP, the award is solely linked to the comparative performance condition described above.

Separately, following the BG acquisition, certain employee share awards made in 2015 under BG's Long-Term Incentive Plan were automatically exchanged for equivalent awards over shares in the Company. These awards either do not have performance conditions or have the same performance conditions applied as the Company's LTIP. Awards take the form of either conditional awards or nil cost options.

Under all plans, all shares that vest are increased by an amount equal to the notional dividends accrued on those shares during the period from the award date to the vesting date. In certain circumstances, awards may be adjusted before delivery or reclaimed after delivery. None of the awards results in beneficial ownership until the shares vest.

See Note 22 to the "Consolidated Financial Statements" on pages 148-149.

### RESTRICTED SHARE PLAN

Under the Restricted Share Plan, awards are made on a highly selective basis to senior staff. Shares are awarded subject to a three-year retention period. All shares that vest are increased by an amount equal to the notional dividends accrued on those shares during the period from the award date to the vesting date. In certain circumstances, awards may be adjusted before delivery or reclaimed after delivery.

### GLOBAL EMPLOYEE SHARE PURCHASE PLAN

Eligible employees in participating countries may participate in the Global Employee Share Purchase Plan. This plan enables them to make contributions from net pay towards the purchase of the Company's shares at a 15% discount to the market price, either at the start or at the end of an annual cycle, whichever date offers the lower market price.

### UK SHARES AVE SCHEME

Eligible employees of participating Shell companies in the UK may participate in the UK Sharesave Scheme. Options are granted over the Company's shares at market value on the invitation date. These options are normally exercisable after completion of a three-year or five-year contractual savings period.

Separately, following the acquisition of BG, certain participants in the BG Sharesave Scheme chose to roll over their outstanding BG share options into options over the Company's shares. The BG option price (at a discount of 20% to market value) was converted to an equivalent Company option price at a ratio agreed with Her Majesty's Revenue and Customs. These options are normally exercisable after completion of a three-year contractual savings period.

### UK SHELL ALL EMPLOYEE SHARE OWNERSHIP PLAN

Eligible employees of participating Shell companies in the UK may participate in the Shell All Employee Share Ownership Plan, under which monthly contributions from gross pay are made towards the purchase of the Company's shares.

Strategic Report signed on behalf of the Board

/s/ Linda M. Szymanski

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Linda M. Szymanski  
Company Secretary  
March 8, 2017

# GOVERNANCE

## THE BOARD OF ROYAL DUTCH SHELL PLC

### **CHARLES O. HOLLIDAY**

#### **Chair**

Born March 9, 1948. A US national, appointed Chair of the Company with effect from May 2015, having previously served as a Non-executive Director since September 2010.

He was Chief Executive Officer of DuPont from 1998 to 2009, and Chairman from 1999 to 2009. He joined DuPont in 1970 after receiving a B.S. in industrial engineering from the University of Tennessee and held various manufacturing and business assignments, including a six-year, Tokyo-based posting as President of DuPont Asia/Pacific. He has previously served as Chairman of the Bank of America Corporation, The Business Council, Catalyst, the National Academy of Engineering, the Society of Chemical Industry – American Section, the World Business Council for Sustainable Development and as a Director of Deere & Company. He is a founding member of the International Business Council.

He is a Director of HCA Holdings, Inc.

#### **Chair of the Nomination and Succession Committee**

### **HANS WIJERS**

#### **Deputy Chair and Senior Independent Director**

Born January 11, 1951. A Dutch national, appointed a Non-executive Director of the Company with effect from January 2009.

He was Chief Executive Officer and Chairman of the Board of Management of AkzoNobel N.V. from 2003 to 2012, having become a Board member in 2002. From 1999 to 2002, he was Senior Partner at The Boston Consulting Group. He was Minister of Economic Affairs of the Netherlands from 1994 to 1998, and was previously Managing Partner of The Boston Consulting Group. He obtained a PhD in economics from Erasmus University Rotterdam while teaching there. From 2012 to 2016 he was Chairman of the Supervisory Board of AFC Ajax N.V. and from 2013 to 2016 he was a Non-executive Director of GlaxoSmithKline plc.

He is Chairman of the Supervisory Board of Heineken N.V., a member of the Supervisory Board of HAL Holding N.V. and a trustee of various charities.

#### **Chair of the Corporate and Social Responsibility Committee and member of the Nomination and Succession Committee**

### **BEN VAN BEURDEN**

#### **Chief Executive Officer**

Born April 23, 1958. A Dutch national, appointed Chief Executive Officer of the Company with effect from January 2014.

He was Downstream Director from January to September 2013. Before that, he was Executive Vice President Chemicals from 2006 to 2012. In this period, he also served on the boards of a number of leading industry associations, including the International Council of Chemicals Associations and the European Chemical Industry Council. Prior to this, he held a number of operational and commercial roles in both Upstream and Downstream, including Vice President Manufacturing Excellence. He joined Shell in 1983, after graduating with a Master's Degree in Chemical Engineering from Delft University of Technology, the Netherlands.

### **SIMON HENRY [A]**

#### **Chief Financial Officer**

Born July 13, 1961. A British national, he was appointed Chief Financial Officer of the Company with effect from May 2009.

He was Chief Financial Officer for Exploration & Production from 2004 to 2009, and was Head of Group Investor Relations from 2001 to 2004. Prior to these roles, he held various finance posts including Finance Manager of Marketing in Egypt, Controller for the Upstream business in Egypt, Oil Products Finance Adviser for Asia-Pacific, Finance Director for the Mekong Cluster, and General Manager Finance for the South East Asian Retail business. He joined Shell in 1982 as an engineer at the Stanlow refinery in the UK and qualified as a member of the Chartered Institute of Management Accountants in 1989.

He is a Non-executive Director of Lloyds Banking Group plc [B].

[A] As announced on December 15, 2016, Simon Henry stands down as Chief Financial Officer on March 9, 2017.

[B] As announced on February 10, 2017, Simon Henry was appointed a Non-executive Director of Rio Tinto plc with effect from July 1, 2017.

### **GUY ELLIOTT**

#### **Non-executive Director**

Born December 26, 1955. A British national, appointed a Non-executive Director of the Company with effect from September 2010.

He was Chief Financial Officer of Rio Tinto plc and Rio Tinto Limited from 2002 to April 2013, and remained Senior Executive Director until he retired at the end of 2013. From 2007 to 2010, he was a Non-executive Director of Cadbury plc, serving as Chairman of its Audit Committee from 2008 to 2009 and as Senior Independent Director from 2008 to 2010, and from July 2013 to 2016 he was a Non-executive Director of SABMiller plc, serving as Deputy Chairman and Senior Independent Director from December 2013 to 2016.

He is a member of the UK Takeover Panel and Chairman of the Code Committee of the Panel.

#### **Member of the Corporate and Social Responsibility Committee and member of the Nomination and Succession Committee**

### **EULEEN GOH**

#### **Non-executive Director**

Born April 20, 1955. A Singaporean national, appointed a Non-executive Director of the Company with effect from September 2014.

She is a chartered accountant and also has professional qualifications in banking and taxation. She held various senior management positions with Standard Chartered Bank and was Chief Executive Officer of Standard Chartered Bank, Singapore, from 2001 until 2006.

She has also held non-executive appointments on various boards including Aviva plc, MediaCorp Pte Limited, Singapore Airlines Limited, Singapore Exchange Limited, Standard Chartered Bank Malaysia Berhad and Standard Chartered Bank Thai ptd. She was previously Non-executive Chairman of the Singapore International Foundation and Chairman of International Enterprise Singapore and the Accounting Standards Council, Singapore.

She is Chairman of SATS Limited, a Non-executive Director of CapitaLand Limited, DBS Bank Limited and DBS Group Holdings Limited and a Trustee of the Singapore Institute of International Affairs Endowment Fund and the Temasek Trust. She is also a Non-executive Director of Singapore Health Services Pte Limited, a not-for-profit organisation.

#### **Chair of the Audit Committee**

### **GERARD KLEISTERLEE**

#### **Non-executive Director**

Born September 28, 1946. A Dutch national, appointed a Non-executive Director of the Company with effect from November 2010.

He was President/Chief Executive Officer and Chairman of the Board of Management of Koninklijke Philips N.V. from 2001 to 2011. Having joined Philips in 1974, he held several positions before being appointed as Chief Executive Officer of Philips' Components division in 1999 and Executive Vice-President of Philips in 2000. From 2010 to 2013, he was a member of the board of Directors of Dell Inc., from 2009 to 2014, he was a member of the Supervisory Board of Daimler AG and, from 2014 to 2016, he was a Non-executive Director of IBEX Global Solutions plc.

He is Chairman of Vodafone Group plc and Chairman of the Supervisory Board of ASML Holding N.V.

#### **Chair of the Remuneration Committee and member of the Audit Committee**

## The Board of Royal Dutch Shell plc *Continued*

### **SIR NIGEL SHEINWALD GCMG**

#### **Non-executive Director**

Born June 26, 1953. A British national, appointed a Non-executive Director of the Company with effect from July 2012.

He was a senior British diplomat who served as British Ambassador to the USA from 2007 to 2012, before retiring from the Diplomatic Service. Prior to this, he served as Foreign Policy and Defence Adviser to the Prime Minister and Head of the Cabinet Office Defence and Overseas Secretariat. He served as British Ambassador and Permanent Representative to the European Union in Brussels from 2000 to 2003. He joined the Diplomatic Service in 1976 and served in Brussels, Washington, Moscow and in a wide range of policy roles in London.

He is a Non-executive Director of Invesco Limited and Raytheon UK, a Senior Adviser to the Universal Music Group and a Visiting Professor and Council Member of King's College, London.

#### **Member of the Corporate and Social Responsibility Committee and member of the Remuneration Committee [A]**

[A] Member of the Remuneration Committee with effect from May 24, 2017.

### **LINDA G. STUNTZ**

#### **Non-executive Director**

Born September 11, 1954. A US national, appointed a Non-executive Director of the Company with effect from June 2011.

She is a founding partner of the law firm of Stuntz, Davis & Staffier, P.C., based in Washington, DC. Her law practice includes energy and environmental regulation, as well as matters relating to government support of technology development and transfer. She was a member of the US Secretary of Energy Advisory Board from 2015 to January 2017, she chaired the Electricity Advisory Committee to the US Department of Energy from 2008 to 2009, and was a member of the board of Directors of Schlumberger Limited from 1993 to 2010 and Raytheon Company from 2004 to 2015. From 1989 to 1993, she held senior policy positions at the US Department of Energy, including Deputy Secretary. She played a principal role in the development and enactment of the Energy Policy Act of 1992. From 1981 to 1987, she was an Associate Minority Counsel and Minority Counsel to the Energy and Commerce Committee of the US House of Representatives.

She is a Director of Edison International.

#### **Member of the Audit Committee and member of the Nomination and Succession Committee**

### **PATRICIA A. WOERTZ [A]**

#### **Non-executive Director**

Born March 17, 1953. A US national, appointed a Non-executive Director of the Company with effect from June 2014.

She is former Chairman and Chief Executive Officer of Archer Daniels Midland Company in the USA, which she joined in 2006. She began her career as a certified public accountant with Ernst & Ernst in Pittsburgh, USA before joining Gulf Oil Corporation in 1977 where she held various positions in refining, marketing, strategic planning and finance. Following the merger of Gulf and Chevron in 1987, she led international operations as President of Chevron Canada and, later, Chevron International Oil Company. With the merger of Chevron and Texaco in 2001, she became Executive Vice President responsible for global refining, marketing, lubricant and supply and trading operations until 2006. She served on the US President's Export Council from 2010 to 2015, chaired the US section of the US-Brazil CEO Forum from 2013 to 2015 and was a Director of UI LABS and World Business Chicago between 2014 and 2016.

She is a Director of 3M Company and The Procter & Gamble Company and is a member of The Business Council.

#### **Member of the Corporate and Social Responsibility Committee and member of the Remuneration Committee**

[A] Patricia A. Woertz stands down as a Director of the Company at the close of business of the 2017 Annual General Meeting.

### **GERRIT ZALM**

#### **Non-executive Director**

Born May 6, 1952. A Dutch national, appointed a Non-executive Director of the Company with effect from January 2013.

He was an adviser to PricewaterhouseCoopers during 2007, Chairman of the trustees of the International Accounting Standards Board from 2007 to 2010, an adviser to Permira from 2007 to 2008, Chief Economist from July 2007 to January 2008, and Chief Financial Officer from January 2008 to December 2008 of DSB Bank, and Chairman of the Managing Board of ABN AMRO Bank N.V. from 2010 to 2016. He was Minister of Finance of the Netherlands twice, from 1994 to 2002 and from 2003 to 2007. In between, he was Chairman of the parliamentary party of the VVD. Prior to 1994, he was head of the Netherlands Bureau for Economic Policy Analysis, a professor at Vrije Universiteit Amsterdam and held various positions at the Ministry of Finance and the Ministry of Economic Affairs. He studied General Economics at Vrije Universiteit Amsterdam and received an Honorary Doctorate in Economics from that university.

#### **Member of the Audit Committee and member of the Remuneration Committee**

### **LINDA M. SZYMANSKI**

#### **Company Secretary**

Born April 7, 1967. A US national, appointed General Counsel Corporate with effect from August 2016 and Company Secretary with effect from January 1, 2017.

Previously, she was General Counsel of the Upstream Americas business and Head of Legal US based in the USA from 2014 to 2016, and was Group Chief Ethics & Compliance Officer based in the Netherlands from 2011 to 2014. She joined Shell in 1995 and has held a variety of legal positions within Shell Oil Company in the USA, including Chemicals Legal Managing Counsel and other senior roles in employment, litigation, and commercial practice.

Appointed with effect from March 9, 2017:

### **JESSICA UHL**

#### **Chief Financial Officer [A]**

Born January 29, 1968. A US national, appointed Chief Financial Officer of the Company with effect from March 9, 2017.

She was Executive Vice President Finance for the Integrated Gas business from January 2016 to March 2017. Previously, she was Executive Vice President Finance for Upstream Americas from 2014 to 2015, Vice President Finance for Upstream Americas Unconventionals from 2013 to 2014, Vice President Controller for Upstream and Projects & Technology from 2010 to 2012, Vice President Finance for the global Lubricants business from 2009 to 2010, and Head of External Reporting from 2007 to 2009. She joined Shell in 2004 in finance and business development, supporting the Renewables business.

Prior to joining Shell, she worked for Enron in the USA and Panama from 1997 to 2003 and for Citibank in San Francisco, USA from 1990 to 1996. She obtained an MBA at INSEAD in 1997.

[A] As announced on December 15, 2016, Jessica Uhl succeeds Simon Henry as Chief Financial Officer with effect from March 9, 2017.

### **BOARD COMMITTEE MEMBERSHIP**

On March 8, 2017, the Board approved a number of changes to the membership of the Board Committees. The memberships shown above are in accordance with the new appointments.

## SENIOR MANAGEMENT

The Senior Management of the Company comprises the Executive Directors and those listed below. All are members of the Executive Committee (see "Corporate Governance" on page 70).

### **JOHN ABBOTT**

#### **Downstream Director**

Born March 24, 1960. A British national, appointed Downstream Director with effect from October 2013. Previously, he was Executive Vice President Manufacturing, responsible for oil refineries and petrochemicals plants worldwide. He joined Shell in 1981, and has held various management positions in refining, chemicals and upstream heavy oil, working in Canada, the Netherlands, Singapore, Thailand, the UK and the USA.

### **HARRY BREKELMANS**

#### **Projects & Technology Director**

Born June 11, 1965. A Dutch national, appointed Projects & Technology Director with effect from October 2014. Previously, he was Executive Vice President for Upstream International Operated based in the Netherlands. He joined Shell in 1990 and has held various management positions in Exploration and Production, Internal Audit, and Group Strategy and Planning. From 2011 to 2013, he was Country Chair – Russia and Executive Vice President for Russia and the Caspian region.

### **ANDREW BROWN**

#### **Upstream Director**

Born January 29, 1962. A British national, appointed Upstream Director with effect from January 1, 2016, having served on the Executive Committee as Upstream International Director from 2012. Previously, he was Executive Vice President for Shell's activities in Qatar and a member of the Upstream International leadership Team. He was awarded the Order of the British Empire in 2012 for his services to British-Qatari business relations.

### **RONAN CASSIDY**

#### **Chief Human Resources & Corporate Officer**

Born February 10, 1967. A British national, appointed Chief Human Resources & Corporate Officer with effect from January 1, 2016. Previously, he was Executive Vice President Human Resources, Upstream International. He joined Shell in 1988 and has held various human resources positions in the Upstream and Downstream businesses.

### **DONNY CHING**

#### **Legal Director**

Born February 14, 1964. A Malaysian national, appointed Legal Director with effect from February 2014. Previously, he was General Counsel for the Project & Technology business based in the Netherlands. He joined Shell in 1988 based in Australia and then moved to Hong Kong and later to London. In 2008, he was appointed Head of Legal at Shell Singapore, having served as Associate General Counsel for the Gas & Power business in Asia-Pacific.

### **MAARTEN WETSELAAR**

#### **Integrated Gas and New Energies Director**

Born December 30, 1968. A Dutch national, appointed Integrated Gas Director with effect from January 1, 2016 [A]. Previously, he was Executive Vice President of Integrated Gas based in Singapore. He joined Shell in 1995 and has held various financial, commercial and general management roles in Downstream, Trading and Upstream.

[A] The title of this role was changed to Integrated Gas and New Energies Director with effect from June 1, 2016.

## DIRECTORS' REPORT

### MANAGEMENT REPORT

This Directors' Report, together with the "Strategic Report" on pages 06-60, serves as the Management Report for the purpose of Disclosure Guidance and Transparency Rule 4.1.8R.

### FINANCIAL STATEMENTS AND DIVIDENDS

The "Consolidated Statement of Income" and "Consolidated Balance Sheet" can be found on pages 118 and 119 respectively.

The table below sets out the dividends on each class of share and each class of American Depositary Share (ADS [A]). The Company announces its dividends in dollars and, at a later date, announces the euro and sterling equivalent amounts using a market exchange rate. Dividends on Royal Dutch Shell plc A shares (A shares) are paid by default in euros, although holders may elect to receive dividends in sterling. Dividends on Royal Dutch Shell plc B shares (B shares) are paid by default in sterling, although holders may elect to receive dividends in euros. Dividends on ADSs are paid in dollars.

[A] ADSs are listed on the New York Stock Exchange under the symbols RDS.A and RDS.B. Each ADS represents two shares – two A shares in the case of RDS.A or two B shares in the case of RDS.B.

The Company has a Scrip Dividend Programme which enables shareholders to increase their shareholding by choosing to receive new shares instead of cash dividends (if approved by the Board). Only new A shares are issued under the programme, including to shareholders who hold B shares. More information can be found at [www.shell.com/scrip](http://www.shell.com/scrip).

The Directors have announced a fourth-quarter interim dividend as set out in the table below, payable on March 27, 2017, to shareholders on the Register of Members at close of business on February 17, 2017. The closing date for scrip and dividend currency elections was March 3, 2017 [A]. The euro and sterling equivalents announcement date is March 10, 2017.

[A] Both a different scrip and dividend currency election date may apply to shareholders holding shares in a securities account with a bank or financial institution ultimately holding through Euroclear Nederland. This may also apply to other shareholders who do not hold their shares either directly on the Register of Members or in the corporate sponsored nominee arrangement. Shareholders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies. A different scrip election date may also apply to registered and non-registered ADS holders. Registered ADS holders can contact The Bank of New York Mellon for the election deadline that applies. Non-registered ADS holders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies.

### DIRECTORS' RESPONSIBILITIES IN RESPECT OF THE PREPARATION OF THE ANNUAL REPORT AND ACCOUNTS

The Directors are responsible for preparing the Annual Report, including the financial statements, in accordance with applicable laws and regulations. Company law requires the Directors to prepare financial statements for each financial year. Under that law, the Directors have prepared the Consolidated and Parent Company Financial Statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU). In preparing these financial statements, the Directors have also elected to comply with IFRS as issued by the International Accounting Standards Board (IASB). Under company law, the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of Shell and the Company and of the profit or loss of Shell and the Company for that period. In preparing these financial statements, the Directors are required to:

- adopt the going concern basis unless it is inappropriate to do so;
- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent; and
- state whether IFRS as adopted by the EU and IFRS as issued by the IASB have been followed.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the transactions of Shell and the Company and disclose with reasonable accuracy, at any time, the financial position of Shell and the Company and to enable them to ensure that the financial statements comply with the Companies Act 2006 (the Act) and, as regards the Consolidated Financial Statements, with Article 4 of the IAS Regulation and therefore are in accordance with IFRS as adopted by the EU. The Directors are also responsible for safeguarding the assets of Shell and the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Each of the Directors, whose names and functions can be found on pages 61-62, confirms that, to the best of their knowledge:

- the financial statements, which have been prepared in accordance with IFRS as adopted by the EU and with IFRS as issued by the IASB give a true and fair view of the assets, liabilities, financial position and profit of Shell and the Company; and
- the Management Report includes a fair review of the development and performance of the business and the position of Shell, together with a description of the principal risks and uncertainties that it faces.

Furthermore, so far as each of the Directors is aware, there is no relevant audit information of which the auditors are unaware, and each of the Directors has taken all the steps that ought to have been taken in order to become aware of any relevant audit information and to establish that the auditors are aware of that information.

### Dividends

	2016						2016	
	A shares			B shares[A]			A ADSs	B ADSs
	\$	€	pence	\$	Pence	€	\$	\$
Q1	0.47	0.4172	32.98	0.47	32.98	0.4172	0.94	0.94
Q2	0.47	0.4218	35.27	0.47	35.27	0.4218	0.94	0.94
Q3	0.47	0.4413	37.16	0.47	37.16	0.4413	0.94	0.94
Q4	0.47	[B]	[B]	0.47	[B]	[B]	0.94	0.94
Total announced in respect of the year	1.88	[B]	[B]	1.88	[B]	[B]	3.76	3.76
Amount paid during the year		1.7024	138.19		138.19	1.7024	3.76	3.76

[A] It is expected that holders of B shares will receive dividends through the dividend access mechanism applicable to such shares. The dividend access mechanism is described more fully on page 177.

[B] The euro and sterling equivalents announcement date is March 10, 2017, which therefore is also the date when the total announced in respect of the year can be calculated.

# Preliminary Public Copy

The Directors consider that the Annual Report, including the financial statements, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy.

The Directors consider it appropriate to continue to adopt the going concern basis of accounting in preparing the financial statements.

The Directors are responsible for the maintenance and integrity of the Shell website ([www.shell.com](http://www.shell.com)). Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

## VIABILITY STATEMENT

The "Strategic Report" includes information about Shell's strategy, financial condition, cash flows and liquidity, as well as the factors, including the principal risks, likely to affect Shell's future development. The Directors assess Shell's prospects both at an operating and strategic level, each involving different time horizons. On an annual basis the Directors approve a detailed three-year operating plan, which forecasts Shell's cash flows and ability to service financing requirements, pay dividends and fund investing activities during the period, having taken into consideration upward and downward sensitivities. This period is considered appropriate for operating purposes because it allows for credible detailed forecasts. The Directors also receive regular updates on Shell's funding position and consider significant investment, divestment and financing proposals. At least biannually, the Directors discuss changes to Shell's principal risks and assess the potential impact and any related mitigations.

Taking account of Shell's position and principal risks at December 31, 2016, the Directors have a reasonable expectation that Shell will be able to continue in operation and meet its liabilities as they fall due over its three-year operating plan period. Annually, the Directors also review Shell's strategic plan which takes account of longer-term forecasts including external environment factors and Shell's business portfolio developments and endorse any updates required. This aims to preserve Shell's long-term viability and ability to meet longer-term commitments such as debt and contractual obligations which can extend over several decades.

## REPURCHASES OF SHARES

At the 2016 Annual General Meeting (AGM), shareholders granted an authority, which expires at the end of the 2017 AGM, for the Company to repurchase up to a maximum of 795 million of its shares (excluding purchases for employee share plans). While no share repurchases for cancellation were made during 2016, the Board continues to regard the ability to repurchase issued shares in suitable circumstances as an important part of the financial management of the Company. A resolution will be proposed at the 2017 AGM to renew the authority for the Company to purchase its own share capital, up to specified limits, for a further year. This proposal will be described in more detail in the Notice of Annual General Meeting.

## BOARD OF DIRECTORS

The Directors during the year were Ben van Beurden, Guy Elliott, Euleen Goh, Simon Henry, Charles O. Holliday, Gerard Kleisterlee, Sir Nigel Sheinwald, Linda G. Stuntz, Hans Wijers, Patricia A. Woertz and Gerrit Zalm.

## RETIREMENT AND REAPPOINTMENT OF DIRECTORS

In line with the UK Corporate Governance Code (Code), all Directors will retire at the 2017 AGM and seek reappointment by shareholders, except for Simon Henry who stands down as a Director of the Company on March 9, 2017, and Patricia Woertz, who stands down as a Director of the Company at the close of business of the AGM [A][B].

[A] Simon Henry has confirmed that there are no circumstances in connection with his ceasing to hold office that need to be brought to the attention of members or creditors of the Company.

[B] Patricia Woertz has confirmed that there are no circumstances in connection with her ceasing to hold office that need to be brought to the attention of members or creditors of the Company.

Shareholders will also be asked to vote on the reappointment of Jessica Uhl, who was appointed as a Director of the Company with effect from March 9, 2017, in succession to Simon Henry, and the appointment of Catherine Hughes and Roberto Setubal with effect from June 1, 2017, and October 1, 2017, respectively.

The biographies of all current Directors are given on pages 61-62 and biographies for those seeking appointment or reappointment will also be included in the Notice of Annual General Meeting [C]. Details of the Executive Directors' contracts can be found on pages 102-103 and copies are available for inspection from the Company Secretary. Furthermore, a copy of the form of these contracts has been filed with the US Securities and Exchange Commission as an exhibit.

[C] The biography of Jessica Uhl is also given on page 62.

The terms and conditions of appointment of Non-executive Directors are set out in their letters of appointment with the Company which, in accordance with the Code, are available for inspection from the Company Secretary.

No Director is, or was, materially interested in any contract subsisting during or at the end of the year that was significant in relation to the Company's business. See also "Related party transactions" below.

## DIRECTORS' INTERESTS

The interests (in shares of the Company or calculated equivalents) of the Directors in office at the end of the year, including any interests of a "connected person" (as defined in the Disclosure Guidance and Transparency Rules of the UK's Financial Conduct Authority), can be found in the "Directors' Remuneration Report" on pages 92-93.

Changes in Directors' share interests during the period from December 31, 2016, to March 8, 2017, including changes in the interests in shares awarded under the Long-term Incentive Plan and the Deferred Bonus Plan, can also be found in the "Directors' Remuneration Report" on page 92.

## QUALIFYING THIRD-PARTY INDEMNITIES

The Company has entered into a deed of indemnity with each Director who served during the year under identical terms. The deeds indemnify the Directors to the widest extent permitted by the applicable laws of England against all liability incurred as a Director or employee of the Company or of certain other entities.

## RELATED PARTY TRANSACTIONS

Other than disclosures given in Notes 10 and 28 to the "Consolidated Financial Statements" on pages 134 and 152 respectively, there were no transactions or proposed transactions that were material to either the Company or any related party. Nor were there any transactions with any related party that were unusual in their nature or conditions.

## POLITICAL CONTRIBUTIONS

No donations were made by the Company or any of its subsidiaries to political parties or organisations during the year. Shell Oil Company administers the non-partisan Shell Oil Company Employees' Political Awareness Committee (SEPAC), a political action committee registered with the US Federal Election Commission. Eligible employees may make voluntary personal contributions to the SEPAC.

## RECENT DEVELOPMENTS AND POST-BALANCE SHEET EVENTS

Material recent developments and post-balance sheet events can be found in Note 30 to the "Consolidated Financial Statements" on page 152.

## LIKELY FUTURE DEVELOPMENTS

Information relating to likely future developments can be found in the "Strategic Report" on pages 06-60.

## RESEARCH AND DEVELOPMENT

Information relating to Shell's research and development, including expenditure, can be found in "Business overview" on page 11.

## DIVERSITY AND INCLUSION

Information concerning diversity and inclusion can be found in "Our people" on page 59.

## Directors' Report Continued

### EMPLOYEE COMMUNICATION AND INVOLVEMENT

Information concerning employee communication and involvement can be found in "Our people" on page 59.

### CORPORATE SOCIAL RESPONSIBILITY

A summary of Shell's approach to corporate social responsibility can be found in "Environment and society" on pages 53-58. Further details will be available in the Shell Sustainability Report 2016.

### GREENHOUSE GAS EMISSIONS

Information relating to greenhouse gas emissions can be found in "Environment and society" on pages 55-56.

### FINANCIAL RISK MANAGEMENT, OBJECTIVES AND POLICIES

Descriptions of the use of financial instruments and Shell's financial risk management objectives and policies, and exposure to market risk (including price risk), credit risk and liquidity risk can be found in Note 20 to the "Consolidated Financial Statements" on pages 143-148.

### SHARE CAPITAL

The Company's issued share capital on December 31, 2016, is set out in Note 8 to the "Parent Company Financial Statements" on pages 176-177. The percentage of the total issued share capital represented by each class of share is given below.

Share capital percentage	%
Share class	
A ordinary	54.18
B ordinary	45.82
Sterling deferred	de minimis

### TRANSFER OF SECURITIES

There are no significant restrictions on the transfer of securities.

### SHARE OWNERSHIP TRUSTS AND TRUST-LIKE ENTITIES

Shell has three primary employee share ownership trusts and trustlike entities: a Dutch foundation (stichting) and two US Rabbi Trusts. The shares held by the Dutch foundation are voted by its Board and the shares in the US Rabbi Trusts are voted by the Voting Trustee, Evercore Trust Company, N.A. Both the Board of the Dutch foundation and the Voting Trustee are independent of Shell.

The UK Shell All Employee Share Ownership Plan has a separate related share ownership trust. Shares held by the trust are voted by its trustee, Computershare Trustees Limited, as directed by the participants.

### SIGNIFICANT SHAREHOLDINGS

Information concerning significant shareholdings can be found on page 188.

### ARTICLES OF ASSOCIATION

Information concerning the Articles of Association can be found on pages 72-78.

### LISTING RULE INFORMATION [A]

Information concerning the amount of interest capitalised by Shell can be found in Note 7 to the "Consolidated Financial Statements" on page 131.

[A] This information is given in accordance with Listing Rule 9.8.4R.

### AUDITOR

A resolution relating to the appointment of Ernst & Young LLP as auditor for the financial year 2017 will be proposed at the 2017 AGM.

### CORPORATE GOVERNANCE

The Company's statement on corporate governance is included in the "Corporate governance" report on pages 67-78 and is incorporated in this Directors' Report by way of reference.

### ANNUAL GENERAL MEETING

The AGM will be held on May 23, 2017, at the Circustheater, Circusstraat 4, 2586 CW, The Hague, The Netherlands. The Notice of Annual General Meeting will include details of the business to be put to shareholders at the AGM.

Signed on behalf of the Board

/s/ Linda M. Szymanski

Linda M. Szymanski  
Company Secretary  
March 8, 2017



## CORPORATE GOVERNANCE

Dear Shareholders,

I am pleased to introduce this Corporate Governance Report following my first full year as Chair of your Company. While it has been a year of significant change and challenge, we have continued to ensure we maintain the highest standards of corporate governance. We have again applied the main principles and relevant provisions of the Financial Reporting Council's (FRC) UK Corporate Governance Code (Code) and this report explains in detail the operation of our governance arrangements and control framework.

As mentioned in my introduction to last year's Corporate Governance Report, we engaged an external facilitator to undertake an independent evaluation of the effectiveness of the Board and its committees during 2016. The evaluation was conducted by Boardroom Review Limited and ran from January through to June. It involved one-to-one interviews lasting up to two hours with each of the Directors, as well as an observer sitting in on Board meetings and Board committee meetings. At the end of the review process, we received a detailed report with numerous recommendations, some short-term and some which would take longer to implement. We identified those which we believed to be of higher priority and implemented a number of these before the end of the year. It is our intention to continue to implement other recommendations during the course of 2017.

The Nomination and Succession Committee has been very busy during 2016 and one of its highest priorities is succession planning. Following a thorough search and benchmarking exercise of internal and external candidates, we were delighted to announce in December the appointment of Jessica Uhl as a Director and Chief Financial Officer (CFO) with effect from March 9, 2017. Jessica is currently Executive Vice President Finance in our Integrated Gas business and succeeds Simon Henry who stands down as CFO after more than seven years in the role. We also announced the appointment of Linda Szymanski as Company Secretary with effect from January 1, 2017. Linda succeeds Michiel Brandjes who retired at the end of the year.

During the year, the Nomination and Succession Committee has also given particular attention to the Executive Committee talent pipeline and has had a series of meetings with prospective candidates with future senior leadership appointments in mind.

More recently, we were delighted that two distinguished international business leaders, Catherine Hughes and Roberto Setubal, have agreed to join the Board as Non-executive Directors, subject to shareholder approval at the forthcoming Annual General Meeting (AGM). I believe Catherine and Roberto will bring valuable experience to our Board and I hope you will support their appointment. In addition, Patricia Woertz has confirmed she will not be standing for reappointment at the AGM, having served as a Non-executive Director since 2014. I would like to take this opportunity to thank Patricia for her commitment and valuable contribution to the Board, the Corporate and Social Responsibility Committee and the Remuneration Committee over the last three years.

We believe it is important to have an appropriate balance of experience, skills, knowledge and background in both the Boardroom and at senior leadership levels of the Company, and are mindful of the reports from Sir Philip Hampton and Dame Helen Alexander and from Sir John Parker in the areas of women in leadership positions and ethnic diversity, respectively. We are committed to staffing diverse Board and senior leadership teams, including strong female leaders, as we firmly believe diversity improves our performance.

As part of our aim to communicate how the Board and its committees operate on a day-to-day basis, we held our first Board Engagement day in November. During this presentation, I explained how the Board engages with the executive team and invited each of the chairs of the Board committees to explain their committee's responsibilities, how they operated and their key short- and long-term priorities. The presentation seemed to be very well received and the question and answer session was an interesting and stimulating experience for us all. We will continue to implement effective means to listen to our shareholders in 2017.

It is imperative that we continue to strive for the highest standards of corporate governance and adhere to our governance and control framework. We are keenly aware we have stakeholders that go beyond our shareholders, including employees, customers, suppliers and the communities where we operate. We are living in dynamic times and the pace of change seems to be forever increasing. We are committed to ensuring our high standards are maintained since this is key to the continued long-term success of your Company.

I hope you find this report interesting and informative.

**Chad Holliday**  
Chair  
March 8, 2017

### STATEMENT OF COMPLIANCE

The Board confirms that throughout the year the Company has applied the main principles and complied with the relevant provisions set out in the Code issued by the FRC in September 2014 [A][B]. In addition to complying with applicable corporate governance requirements in the UK, the Company must follow the rules of Euronext Amsterdam as well as Dutch securities laws because of its listing on that exchange. The Company must likewise follow US securities laws and the New York Stock Exchange (NYSE) rules and regulations because its securities are registered in the USA and listed on the NYSE.

[A] A copy of the Code can be found on the FRC's website ([frc.org.uk](http://frc.org.uk)).

[B] In April 2016, the FRC issued an updated version of the Code which applies to accounting periods beginning on or after June 17, 2016.

### NYSE GOVERNANCE STANDARDS

In accordance with the NYSE rules for foreign private issuers, the Company follows home-country practice in relation to corporate governance. However, foreign private issuers are required to have an audit committee that satisfies the requirements of the US Securities and Exchange Commission's (SEC) Rule 10A-3. The Company's Audit Committee satisfies such requirements. The NYSE also requires a foreign private issuer to provide certain written affirmations and notices to the NYSE, as well as a summary of the significant ways in which its corporate governance practices differ from those followed by domestic US companies under NYSE listing standards (see Section 303A.11 of the NYSE Listed Company Manual). The Company's summary of its corporate governance differences is given below and on the following page and can be found at [www.shell.com/investor](http://www.shell.com/investor).

### NON-EXECUTIVE DIRECTOR INDEPENDENCE

The Board follows the provisions of the Code in determining Non-executive Director independence, which states that at least half of the Board, excluding the Chair, should comprise Non-executive Directors determined by the Board to be independent. In the case of the Company, the Board has determined that all the Non-executive Directors at the end of 2016 are wholly independent.

### NOMINATING/CORPORATE GOVERNANCE COMMITTEE AND COMPENSATION COMMITTEE

The NYSE listing standards require that a listed company maintain a nominating/corporate governance committee and a compensation committee, both composed entirely of independent directors and with certain specific responsibilities. The Company's Nomination and Succession Committee and Remuneration Committee both comply with these requirements, except that the terms of reference of the Nomination and Succession Committee require only a majority of the committee members to be independent.

### AUDIT COMMITTEE

As required by NYSE listing standards, the Company maintains an Audit Committee for the purpose of assisting the Board's oversight of its financial statements, its internal audit function and its independent auditors. The Company's Audit Committee is in full compliance with the SEC's Rule 10A-3 and Section 303A.06 of the NYSE Listed Company Manual. However, in accordance with English law, the Company's Audit Committee makes

## Corporate governance *Continued*

recommendations to the Board for it to put to shareholders for approval in general meeting regarding the appointment, reappointment and removal of independent auditors. Consequently, the Company's Audit Committee is not directly responsible for the appointment of independent auditors.

### SHAREHOLDER APPROVAL OF SHARE-BASED COMPENSATION PLANS

The Company complies with the listing rules of the UK Listing Authority (UKLA), which require shareholder approval for the adoption of share-based compensation plans which are either long-term incentive plans in which one or more Directors can participate or plans which involve or may involve the issue of new shares or the transfer of treasury shares. Under the UKLA rules, such plans cannot be changed to the advantage of participants without shareholder approval, except for certain minor amendments, for example to benefit the administration of the plan or to take account of tax benefits. The rules on the requirements to seek shareholder approval for share-based compensation plans, including those in respect of material revisions to such plans, may deviate from the NYSE listing standards.

### CODE OF BUSINESS CONDUCT AND ETHICS

The NYSE listing standards require that listed companies adopt a code of business conduct and ethics for all directors, officers and employees and promptly disclose any waivers of the code for directors or executive officers. The Company has adopted the Shell General Business Principles (see below), which satisfy the NYSE requirements. The Company also has internal procedures in place by which any employee can raise in confidence accounting, internal accounting controls and auditing concerns. Additionally, any employee can report concerns to management by telephone or over the internet without jeopardising their position (see below).

### SHELL GENERAL BUSINESS PRINCIPLES

The Shell General Business Principles define how Shell subsidiaries are expected to conduct their affairs. These principles include, among other things, Shell's commitment to support fundamental human rights in line with the legitimate role of business and to contribute to sustainable development. They are designed to mitigate the risk of damage to our business reputation and to prevent violations of local and international legislation. They can be found at [www.shell.com/sgbp](http://www.shell.com/sgbp). See "Risk factors" on page 14.

### SHELL CODE OF CONDUCT

Directors, officers, employees and contract staff are required to comply with the Shell Code of Conduct, which is intended to help them put Shell's business principles into practice. This code clarifies the basic rules and standards they are expected to follow and the behaviour expected of them. These individuals must also complete mandatory Code of Conduct training. Designated individuals are required to complete additional mandatory training on antitrust and competition laws, anti-bribery and corruption laws, anti-money laundering laws, data protection laws and trade compliance requirements (see "Risk factors" on pages 14-15). The Shell Code of Conduct can be found at [www.shell.com/codeofconduct](http://www.shell.com/codeofconduct).

### CODE OF ETHICS

Executive Directors and Senior Financial Officers of Shell must also comply with a Code of Ethics. This code is specifically intended to meet the requirements of Section 406 of the Sarbanes-Oxley Act and the listing requirements of the NYSE (see above). It can be found at [www.shell.com/codeofethics](http://www.shell.com/codeofethics).

### SHELL GLOBAL HELPLINE

Employees, contract staff, third parties with whom Shell has a business relationship (such as customers, suppliers and agents), and any member of the public (including shareholders) may raise ethics and compliance concerns through the Shell Global Helpline. This is a worldwide confidential reporting mechanism, operated by an external third party, which is available 24 hours a day, seven days a week by telephone and at [www.shell.com](http://www.shell.com) or <https://shell.alertline.eu>.

### BOARD STRUCTURE AND COMPOSITION

During 2016, the Board comprised the Chair; two Executive Directors, namely the Chief Executive Officer (CEO) and the Chief Financial Officer (CFO); and eight Non-executive Directors, including the Deputy Chair and Senior Independent Director.

A list of current Directors, including their biographies, can be found on pages 61-62.

The Board recognises its collective responsibility for the long-term success of the Company. Generally it meets eight times a year [A] and has a formal schedule of matters reserved to it. This includes: overall strategy and management; corporate structure and capital structure; financial reporting and control, including approval of the Annual Report and Form 20-F, and interim dividends; oversight and review of risk management and internal control; significant contracts; and succession planning and new Board appointments. The full list of matters reserved to the Board for decision can be found at [www.shell.com/investor](http://www.shell.com/investor).

[A] See page 69 for the number of meetings held in 2016.

### ROLE OF DIRECTORS

The roles of the Chair, a non-executive role, and the CEO are separate, and the Board has agreed their respective responsibilities.

The Chair is responsible for the leadership and management of the Board and for ensuring that the Board and its committees function effectively. One way in which this is achieved is by ensuring Directors receive accurate, timely and clear information. He is also responsible for agreeing and regularly reviewing the training and development needs of each Director (see "Induction and training" on page 69) which he does with the assistance of the Company Secretary.

The CEO bears overall responsibility for the implementation of the strategy agreed by the Board, the operational management of the Company and the business enterprises connected with it. He is supported in this by the Executive Committee which he chairs (see page 70).

### NON-EXECUTIVE DIRECTORS

Non-executive Directors are appointed by the Board or by shareholders at general meetings and, in accordance with the Code, must seek re-election by shareholders on an annual basis. Their letter of appointment refers to a specific term of office, such term being subject to the provisions of the Code and the Company's Articles of Association (the Articles). Upon appointment, Non-executive Directors confirm they are able to allocate sufficient time to meet the expectations of the role. Appointments are subject to a minimum of three months' notice of termination, and there is no compensation provision for early termination.

The Non-executive Directors bring a wide range and balance of skills and international business experience to Shell. Through their contribution to Board meetings and to Board committee meetings, they are expected to challenge constructively and help develop proposals on strategy and bring independent judgement on issues of performance and risk. Generally, prior to each meeting of the Board, the Chair and the Non-executive Directors meet without the Executive Directors to discuss, among other things, the performance of individual Executive Directors. A number of Non-executive Directors also meet major shareholders from time to time.

The role of the Senior Independent Director is to provide a sounding board for the Chair and to serve as an intermediary for the other Directors when necessary. The Senior Independent Director is available to shareholders if they have concerns which contact through the normal channels of Chair, CEO or CFO has failed to resolve or for which such contact is inappropriate.

All the Non-executive Directors are considered by the Board to be wholly independent.

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## CONFLICTS OF INTEREST

Certain statutory duties with respect to directors' conflicts of interest are in force under the Companies Act 2006 (the Act). In accordance with the Act and the Articles, the Board may authorise any matter that otherwise may involve any of the Directors breaching their duty to avoid conflicts of interest. The Board has adopted a procedure to address these requirements. It includes the Directors completing detailed conflict of interest questionnaires. The matters disclosed in the questionnaires are reviewed by the Board and, if considered appropriate, authorised in accordance with the Act and the Articles. Conflicts of interest as well as any gifts and hospitality received by and provided by Directors are kept under review by the Board. Further information relating to conflicts of interest can be found on page 74.

## SIGNIFICANT COMMITMENTS OF THE CHAIR

The Chair's other significant commitments are given in his biography on page 61.

## INDEPENDENT PROFESSIONAL ADVICE

All Directors may seek independent professional advice in connection with their role as a Director. All Directors have access to the advice and services of the Company Secretary. The Company has provided both indemnities and directors' and officers' insurance to the Directors in connection with the performance of their responsibilities. Copies of these indemnities and the directors' and officers' insurance policies are open to inspection. Copies of these indemnities have been previously filed with the SEC and are incorporated by reference as an exhibit to this Report.

## BOARD ACTIVITIES DURING THE YEAR

The Board generally meets eight times a year; however in 2016, there was an additional meeting to discuss a specific project-related matter. The meetings were held in The Hague, the Netherlands, except for one meeting which was held at the Shell Technology Centre in Amsterdam, the Netherlands.

In relation to the scheduled meetings, the agenda included a number of regular items, including reports from the CEO, the CFO and other members of the Executive Committee, from each of the Board committees and from the various

functions, including finance (which includes investor relations), health and security, human resources, and legal (which includes the Company Secretary). The Board also considered and approved the quarterly, half-year and full-year financial results and dividend announcements and, at most meetings, considered a number of investment, divestment and financing proposals.

In June, it held a full-day session which focused on strategy implementation and included an assessment of progress made against the strategic plan agreed in 2015. During the session, the Board considered the Company's financial framework, the shape of the portfolio and the changing global energy market.

During 2016, the Board also received reports and presentations on certain of Shell's activities (including those in Canada, the Netherlands, Nigeria, South America and the USA), and on asset integrity and process safety, BG integration, cyber security, litigation, risk management, safety and environmental performance, and senior management succession. In addition, it received reports on other matters of interest, including the global economic outlook, Brexit, Shell pension arrangements and corporate governance developments.

## INDUCTION AND TRAINING

Following appointment to the Board, Directors receive a comprehensive induction tailored to their individual needs. This includes site visits and meetings with senior management to enable them to build up a detailed understanding of Shell's business and strategy, and the key risks and issues which they face.

Throughout the year, regular updates on developments in legal matters, governance and accounting are provided to Directors. The Board regards site visits as an integral part of ongoing Director training, and during the year the locations visited by Directors, individually or in groups, included: Aberdeen in Scotland, Groningen and Moerdijk in the Netherlands, Karachaganak in Kazakhstan, Krakow in Poland and the Rhineland in Germany. Additional training is available so that Directors can update their skills and knowledge as appropriate.

## ATTENDANCE AT BOARD AND BOARD COMMITTEE MEETINGS

Attendance during 2016 for all Board and Board committee meetings is given in the table below.

### Attendance at Board and Board committee meetings [A]

	Board	Audit Committee	Corporate and Social Responsibility Committee	Nomination and Succession Committee	Remuneration Committee
Ben van Beurden	9/9				
Guy Elliott	9/9	7/7		9/9	
Euleen Goh	9/9	7/7			
Simon Henry	9/9				
Charles O. Holliday	9/9			9/9	
Gerard Kleisterlee	9/9	6/7			7/7
Sir Nigel Sheinwald	9/9		5/5		
Linda G. Stuntz	8/9	7/7		6/6	
Hans Wijers	9/9		5/5	9/9	
Patricia A. Woertz	8/9		4/5		6/7
Gerrit Zalm	9/9				7/7

[A] The first figure represents attendance and the second figure the possible number of meetings. For example, 9/9 signifies attendance at nine out of nine possible meetings. Where a Director stood down from a Board committee during the year, or was appointed during the year, only meetings before standing down or after the date of appointment are shown.

## Corporate governance Continued

### BOARD EVALUATION

During 2016, an independent external evaluation was conducted by Boardroom Review Limited [A]. The evaluation was commissioned by the Nomination and Succession Committee and was conducted between January and June. It consisted of Boardroom Review holding in depth one-to-one interviews with the Chair and each of the Executive and Non-executive Directors, as well as sitting in as an observer at a number of Board and Board committee meetings. At the end of the evaluation process, a report was produced for the Committee and which was later discussed by the full Board.

[A] Boardroom Review Limited does not have any other connection with the Company.

The report produced by Boardroom Review was detailed and consisted of three main areas: strengths, challenges and recommendations. The Committee discussed the numerous recommendations in depth and agreed to focus initially on those where it had been suggested that a follow-up review could be conducted in the near term. These included matters related to performance reporting, risk management and internal control, Director development, investment evaluation and the Boardroom environment. During discussion with the Board, it was agreed to include an additional item, namely a review of the role of the Board in the event of a major Shell crisis.

Since the initial review and discussion of the report, the Committee has continued to monitor progress of the agreed action points, and it is intended that such monitoring will continue during 2017.

Separately, each of the Board committees conducted its own performance self-evaluation by way of a questionnaire returned by committee members to the respective committee chair, and each chair reported the outcome to the full Board. In addition, the Deputy Chair conducted a review of the Chair's performance, which involved each Director completing a questionnaire specifically related to this matter.

### EXECUTIVE COMMITTEE

The Executive Committee operates under the direction of the CEO in support of his responsibility for the overall management of the Company's business. The CEO has final authority in all matters of management that are not within the duties and authorities of the Board or of the shareholders' general meeting.

The current composition of the Executive Committee is as follows:

#### Executive Committee

Ben van Beurden	CEO [A][B]
Simon Henry	CFO [A][B][C]
John Abbott	Downstream Director [B]
Harry Brekermans	Projects & Technology Director [B]
Andrew Brown	Upstream Director [B][D]
Ronan Cassidy	Chief Human Resources & Corporate Officer [B][E]
Donny Ching	Legal Director [B]
Maarten Wetselaar	Integrated Gas and New Energies Director [B][F]

[A] Director of the Company.

[B] Designated on Executive Officer pursuant to US Exchange Act Rule 3b-7. Beneficially owns less than 1% of outstanding classes of securities.

[C] Simon Henry stands down as a Director of the Company and a member of the Executive Committee on March 9, 2017, and is succeeded by Jessica Uhl with effect from March 9, 2017.

[D] Andrew Brown was appointed Upstream Director with effect from January 1, 2016. He was previously Upstream International Director.

[E] Ronan Cassidy was appointed Chief Human Resources & Corporate Officer with effect from January 1, 2016.

[F] Maarten Wetselaar was appointed Integrated Gas Director with effect from January 1, 2016. The title of this role was changed to Integrated Gas and New Energies Director with effect from June 1, 2016.

Marvin Odum was a member of the Executive Committee until March 31, 2016, when the position of Unconventional Resources Director ceased to exist.

### BOARD COMMITTEES

There are four Board committees made up of Non-executive Directors. These are the:

- Audit Committee;
- Corporate and Social Responsibility Committee;
- Nomination and Succession Committee; and
- Remuneration Committee.

Each of these Board committees has produced a report which has been approved by the relevant chair. A copy of each committee's terms of reference is available from the Company Secretary and can be found at [www.shell.com/investor](http://www.shell.com/investor).

#### AUDIT COMMITTEE

The Audit Committee Report, which sets out the composition and work of the Audit Committee during 2016, is on pages 79-81.

#### CORPORATE AND SOCIAL RESPONSIBILITY COMMITTEE

During 2016, the members of the Corporate and Social Responsibility Committee were Hans Wijers (Chair of the Committee), Sir Nigel Sheinwald and Patricia A. Woertz. The Committee met five times during the year; the Committee members' attendances are shown on page 69.

The Committee has a mandate to maintain a comprehensive overview of the policies and performance of the subsidiaries of the Company with respect to the Shell General Business Principles and the Shell Code of Conduct, as well as major issues of public concern. Conclusions and recommendations made by the Committee are reported directly to executive management and the Board.

The Committee fulfils its responsibilities by reviewing a wide range of areas, including the management of health, safety, security, environmental and social impacts of projects and operations. It does this through a series of reviews of performance, audit findings and other specific areas, such as process safety. It also monitors major issues of public concern and Shell's strategy to address them, especially in respect of environmental and social issues. In addition, it provides input into the Shell Sustainability Report and reviews a draft of the report before publication.

The key topics discussed by the Committee in 2016 were climate change and greenhouse gas targets, induced seismic activity in Groningen, the Netherlands, asset integrity, and process safety. It also received regular reports in connection with Nigeria, as well as dedicating a half-day session to this topic.

In addition to holding regular formal meetings, the Committee visits Shell locations and meets with local staff and external stakeholders to hear their perspectives and observe how Shell's standards regarding health, safety, security, the environment and social performance are being implemented. In 2016, the Committee visited the Karachaganak facilities in Kazakhstan where it engaged with employees, government representatives and local stakeholders. Individual Committee members also visited the Moerdijk and Nederlandse Aardolie Maatschappij (NAM) sites in the Netherlands.

#### NOMINATION AND SUCCESSION COMMITTEE

During 2016, the members of the Nomination and Succession Committee were Charles O. Holliday (Chair of the Committee), Guy Elliott, Linda G. Stuntz (with effect from June 1, 2016) and Hans Wijers. The Committee met nine times during the year; the Committee members' attendances are shown on page 69.

The Committee keeps under review the leadership needs of the Company and identifies and nominates suitable candidates for the Board's approval to fill vacancies when they arise. In addition, it makes recommendations on who should be appointed Chair of the Audit Committee, the Corporate and Social Responsibility Committee and the Remuneration Committee and, in consultation with the relevant chair, recommends who should sit on the Board committees. It also makes recommendations on corporate governance guidelines, monitors compliance with corporate governance requirements and makes

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recommendations on disclosures connected with corporate governance of its appointment processes.

During 2016, the Committee dealt with the appointment of the new CFO and, following a thorough search and benchmarking exercise of internal and external candidates, made a recommendation to the Board in December that Jessica Uhl be appointed a Director and succeed Simon Henry as CFO with effect from March 9, 2017. The Board did not make any new Non-executive Director appointments, however the Committee continued its ongoing programme of succession planning. The Board takes the issue of boardroom diversity very seriously and believes that maintaining an appropriate balance of skills, knowledge, experience and backgrounds is key to its effective performance. It believes gender diversity is an important element of this mix, and indeed the Board meets the recommendation of the Davies Report, published in 2011, that at least 25% of the Directors be women.

As part of its role in identifying and nominating suitable candidates for the Board's approval, the Committee will continue to review candidates from a variety of backgrounds and will seek to produce a list of candidates that fully reflects the Board's goal of becoming more diverse. In this regard, the Committee is mindful of external developments in this area, including the publication in November 2016 of the Hampton-Alexander Review [A] and a report from the Parker Review Committee [B], and maintains contact with leading global search firms, including Egan Zehnder [C], to identify and consider suitable candidates.

[A] The Hampton-Alexander Review builds on the work of Lord Davies with particular focus on improving the representation of women in senior leadership positions below Board level. A number of recommendations were made, including that FTSE 350 companies should aim for a minimum of 33% of the directors to be women, and a minimum of 33% of the executive committee and its direct reports to be women, by 2020.

[B] The Parker Review Committee published for consultation its report into the ethnic diversity of UK boards, with final recommendations to be published following the consultation.

[C] Egan Zehnder does not have any connection with the Company other than that of search consultant.

During 2016, the Committee considered the Executive Committee talent pipeline and scheduled a series of meetings with prospective candidates with future senior leadership appointments in mind. It also reviewed the recommendations of the independent external evaluation, considered Board committee membership, potential conflicts of interest and the independence of the Non-executive Directors, and reviewed its terms of reference.

## REMUNERATION COMMITTEE

The Directors' Remuneration Report, which sets out the composition and work of the Remuneration Committee, the Directors' remuneration for 2016 and the Directors' Remuneration Policy to be presented for shareholder approval at the 2017 AGM, is on pages 82-103.

## SHAREHOLDER COMMUNICATIONS

The Board recognises the importance of two-way communication with the Company's shareholders. The Chair, the Deputy Chair and Senior Independent Director, the CEO, the CFO and the Executive Vice President Investor Relations each meet regularly with major shareholders and report the views of such shareholders to the Board. As well as the Company giving a balanced report of results and progress at each AGM, all shareholders have an opportunity to ask questions in person. Shareholders are also free to contact the Company directly at any time of the year via dedicated shareholder email addresses or via dedicated shareholder telephone numbers as given on the inside back cover of this Report. Shell's website at [www.shell.com/investor](http://www.shell.com/investor) has information for institutional and retail shareholders alike.

The Company's Registrar, Equiniti, operates an internet access facility for registered shareholders, providing details of their shareholdings at [www.shareview.co.uk](http://www.shareview.co.uk). Facilities are also provided for shareholders to lodge proxy appointments electronically. The Company's Corporate Nominee provides a facility for investors to hold their shares in the Company in paperless form.

## RESULTS PRESENTATIONS AND ANALYSTS' MEETINGS

The quarterly, half-yearly and annual results presentations as well as all major analysts' meetings are announced in advance on the Shell website and through a regulatory release. These presentations are broadcast live via webcast and teleconference. Other meetings with analysts or investors are not normally announced in advance, nor can they be followed remotely by webcast or any other means. Procedures are in place to ensure that discussions in such meetings

are always limited to non-material information or information already in the public domain.

Results and meeting presentations can be found at [www.shell.com](http://www.shell.com). This is in line with the requirement to ensure that all shareholders and other parties in the financial market have equal and simultaneous access to information that may influence the price of the Company's securities.

## NOTIFICATION OF MAJOR SHAREHOLDINGS

Information concerning notifications of major shareholdings can be found on page 188.

## RESPONSIBILITY FOR PREPARING THE ANNUAL REPORT AND ACCOUNTS

Information concerning the responsibility for preparing the Annual Report and Accounts can be found on page 64.

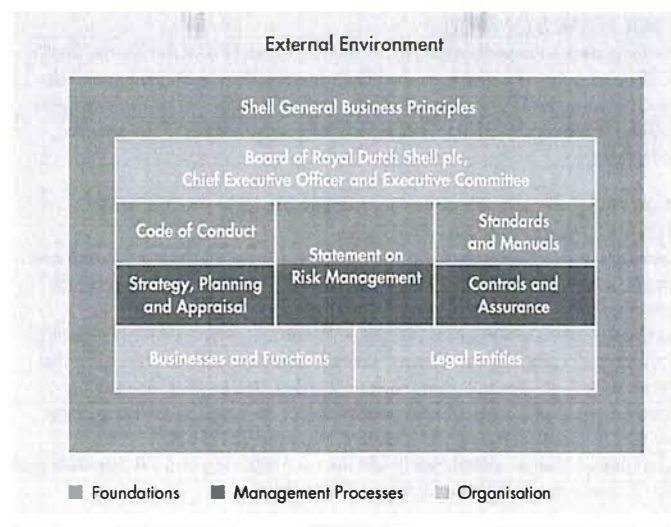
## CONTROLS AND PROCEDURES

The Board is responsible for maintaining a sound system of risk management and internal control, and for regularly reviewing its effectiveness. It has delegated authority to the Audit Committee to assist it in fulfilling its responsibilities in relation to internal control and financial reporting (see "Audit Committee Report" on pages 79-81).

A single overall control framework is in place for the Company and its subsidiaries that is designed to manage rather than eliminate the risk of failure to achieve business objectives. It therefore only provides a reasonable and not an absolute assurance against material misstatement or loss.

The diagram below illustrates the control framework's key components: "Foundations", "Management Processes" and "Organisation". "Foundations" comprises the objectives, principles and rules that underpin and establish boundaries for Shell's activities. "Management Processes" refers to the more material management processes, including how strategy, planning and appraisal are used to improve performance and how risks are to be managed through effective controls and assurance. "Organisation" sets out how the various legal entities relate to each other and how their business activities are organised and managed, and how authority is delegated.

## Control framework



The system of risk management and internal control over financial reporting is an integral part of the control framework. Regular reviews are performed to identify the significant risks to financial reporting and the key controls designed to address them. These controls are documented, responsibility is assigned, and they are monitored for design and operating effectiveness. Controls found not to be effective are remediated. The principal risks faced by Shell are set out in "Risk factors" on pages 12-15.

## Corporate governance Continued

The Board has conducted its annual review of the effectiveness of Shell's system of risk management and internal control, including financial, operational and compliance controls.

Shell has a variety of processes for obtaining assurance on the adequacy of risk management and internal control and implements a broad array of measures to manage its various risks which are set out in the relevant sections of this Report. There are also risks that Shell accepts or does not seek to fully mitigate. The Executive Committee and the Board regularly consider group-level risks and associated control mechanisms.

Many of our major projects and operations are conducted in joint arrangements or associates, which may reduce the degree of control and ability to identify and manage risks (see "Risk factors" on page 15). In each case, Shell appoints a representative to manage its interests who seeks to ensure that such projects operate under equivalent standards to Shell.

We operate in more than 70 countries that have differing degrees of political, legal and fiscal stability. This exposes us to a wide range of political developments that could result in changes to contractual terms, laws and regulations. In addition, we and our joint arrangements and associates face the risk of litigation and disputes worldwide (see "Risk factors" on page 13). We continuously monitor geopolitical developments and societal issues relevant to our interests. Employees who engage with government officials are subject to specific training programmes, procedures and regular communications, in addition to Shell General Business Principles and Shell Code of Conduct compliance. We are prepared to exit a country if we believe we can no longer operate in that country in accordance with our standards, and we have done so in the past.

The Board confirms that there is a robust process for identifying, evaluating and managing the principal risks to the achievement of Shell's objectives. This has been in place throughout 2016 and up to the date of this Report and is regularly reviewed by the Board and accords with the Internal Control: Guidance to Directors (formerly known as the Turnbull Guidance).

### MANAGEMENT'S EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES OF SHELL

As indicated in the certifications in Exhibits 12.1 and 12.2 of this Report, Shell's CEO and CFO have evaluated the effectiveness of Shell's disclosure controls and procedures at December 31, 2016. On the basis of that evaluation, these officers have concluded that Shell's disclosure controls and procedures are effective.

### MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING OF SHELL

Management, including the CEO and CFO, is responsible for establishing and maintaining adequate internal control over Shell's financial reporting and the preparation of the "Consolidated Financial Statements". It conducted an evaluation of the effectiveness of Shell's internal control over financial reporting and the preparation of the "Consolidated Financial Statements" based on the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. On the basis of this evaluation, management concluded that, at December 31, 2016, the Company's internal control over Shell's financial reporting and the preparation of the "Consolidated Financial Statements" was effective.

Ernst & Young LLP, the independent registered public accounting firm that audited the "Consolidated Financial Statements", has issued an attestation report on the Company's internal control over financial reporting, as stated in its report on pages 115-116.

### THE TRUSTEE'S AND MANAGEMENT'S EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES FOR THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

The Trustee of the Royal Dutch Shell Dividend Access Trust (the Trustee) and Shell's CEO and CFO have evaluated the effectiveness of the disclosure controls and

procedures in respect of the Dividend Access Trust (the Trust) at December 31, 2016. On the basis of this evaluation, these officers have concluded that the disclosure controls and procedures of the Trust are effective.

### THE TRUSTEE'S AND MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

The Trustee is responsible for establishing and maintaining adequate internal control over the Trust's financial reporting. The Trustee and the Company's management conducted an evaluation of the effectiveness of internal control over financial reporting based on the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. On the basis of this evaluation, the Trustee and management concluded that, at December 31, 2016, the Trust's internal control over financial reporting was effective.

Ernst & Young LLP, the independent registered public accounting firm that audited the "Consolidated Financial Statements", has issued an attestation report on the Trustee's and management's internal control over financial reporting, as stated in its report on page 181.

### CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There has not been any change in the internal control over financial reporting of Shell or the Trust that occurred during the period covered by this Report that has materially affected, or is reasonably likely to materially affect, the internal control over financial reporting. Material financial information of the Trust is included in the "Consolidated Financial Statements" and is therefore subject to the same disclosure controls and procedures as Shell. See the "Royal Dutch Shell Dividend Access Trust Financial Statements" on pages 183-186 for additional information.

### ARTICLES OF ASSOCIATION

The following summarises certain provisions of the Articles [A] and of the applicable legislation (the legislation). This summary is qualified in its entirety by reference to the Articles and the Act.

[A] Copies of the Articles have been previously filed with the SEC and are incorporated by reference as exhibits to this Report. They can be found at [www.shell.com](http://www.shell.com).

### MANAGEMENT AND DIRECTORS

The Company has a single tier Board of Directors headed by a Chairman, with management led by a CEO. See "Board structure and composition" on page 68.

### Number of Directors

The Articles provide that the Company must have a minimum of three and can have a maximum of 20 Directors (disregarding alternate directors), but these restrictions can be changed by the Board.

### Directors' shareholding qualification

The Directors are not required to hold any shares in the Company [A].

[A] While the Articles do not require Directors to hold shares in the Company, the Remuneration Committee believes that Executive Directors should align their interests with those of shareholders by holding shares in the Company. The CEO is expected to build up a shareholding of seven times his base salary over five years from appointment and other Executive Directors are expected to build up a shareholding of four times their base salary over the same period. All Directors hold shares and such interests can be found in the "Directors' Remuneration Report" on pages 92-93.

### Appointment of Directors

The Company can, by passing an ordinary resolution, appoint any willing person to be a Director.

The Board can appoint any willing person to be a Director. Any Director appointed in this way must retire from office at the first AGM after his appointment. A Director who retires in this way is then eligible for reappointment.

At the general meeting at which a Director retires, shareholders can pass an ordinary resolution to reappoint the Director or to appoint some other eligible person in their place.

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The only people who can be appointed as Directors at a general meeting are the following: (i) Directors retiring at the meeting; (ii) anyone recommended by a resolution of the Board; and (iii) anyone nominated by a shareholder (not being a person to be nominated), where the shareholder is entitled to vote at the meeting and delivers to the Company's registered office, not less than six but not more than 21 days before the day of the meeting, a letter stating that he intends to nominate another person for appointment as a Director and written confirmation from that person that he is willing to be appointed.

## Retirement of Directors

Under the Articles, at every AGM, the following Directors must retire from office: (i) any Director who has been appointed by the Board since the last AGM, (ii) any Director who held office at the time of the two preceding AGMs and who did not retire at either of them, and (iii) any Director who has been in office, other than as a Director holding an executive position, for a continuous period of nine years or more at the date of the meeting.

Notwithstanding the Articles, the Company complies with the Code which contains, among other matters, provisions regarding the composition of the Board and re-election of the Directors. As a result, the Company's current policy is that Directors are subject to annual re-election by shareholders.

Any Director who retires at an AGM may offer himself for reappointment by the shareholders.

## Removal of Directors

In addition to any power to remove Directors conferred by the legislation, the Company can pass a special resolution to remove a Director from office, even though his time in office has not ended, and can appoint a person to replace a Director who has been removed in this way by passing an ordinary resolution.

## Vacation of office by Directors

Any Director automatically stops being a Director if: (i) he gives the Company a written notice of resignation; (ii) he gives the Company a written notice in which he offers to resign and the Board decides to accept this offer; (iii) all of the other Directors (who must comprise at least three people) pass a resolution or sign a written notice requiring the Director to resign; (iv) he is or has been suffering from mental or physical ill-health and the Board passes a resolution removing the Director from office; (v) he has missed Directors' meetings (whether or not an alternate director appointed by him attends those meetings) for a continuous period of six months without permission from the Board and the Board passes a resolution removing the Director from office; (vi) a bankruptcy order is made against him or he makes any arrangement or composition with his creditors generally; (vii) he is prohibited from being a Director under the legislation; or (viii) he ceases to be a Director under the legislation or he is removed from office under the Articles. If a Director stops being a Director for any reason, he will also automatically cease to be a member of any committee or sub-committee of the Board.

## Alternate directors

Any Director can appoint any person (including another Director) to act in his place as an alternate director. That appointment requires the approval of the Board, unless previously approved by the Board or unless the appointee is another Director.

## Proceedings of the Board

Meetings of the Board will usually be held in the Netherlands but the Board may decide in each case when and where to have meetings and how they will be conducted. The Board can also adjourn its meetings. If no other quorum is fixed by the Board, two Directors are a quorum. A Directors' meeting at which a quorum is present can exercise all the powers and discretions of the Board.

All or any of the Directors can take part in a meeting of the Directors by way of a conference telephone or any communication equipment which allows everybody to take part in the meeting by being able to hear each of the other people at the meeting and by being able to speak to all of them at the same time. A person taking part in this way will be treated as being present at the meeting and will be entitled to vote and be counted in the quorum. Any such meeting will be deemed to take place where the largest group of Directors participating is assembled or, if there is no such group, where the chairman of the meeting then is.

The Board can appoint any Director as chairman or as deputy chairman and can remove him from that office at any time. Matters to be decided at a Directors' meeting will be decided by a majority vote. If votes are equal, the chairman of the meeting has a second, casting vote.

The Board will manage the Company's business. It can use all the Company's powers except where the Articles or the legislation say that powers can only be used by shareholders voting to do so at a general meeting. The Board is, however, subject to the provisions of the legislation, the requirements of the Articles and any regulations laid down by the shareholders by passing a special resolution at a general meeting.

The Board can exercise the Company's powers: (i) to borrow money; (ii) to guarantee; (iii) to indemnify; (iv) to mortgage or charge all or any of the Company's undertaking, property and assets (present and future) and uncalled capital; (v) to issue debentures and other securities; and (vi) to give security, either outright or as collateral security, for any debt, liability or obligation of the Company or of any third party. The Board must limit the borrowings of the Company and exercise all voting and other rights or powers of control exercisable by the Company in relation to its subsidiary undertakings so as to ensure that no money is borrowed if the total amount of the group's borrowings (as defined in the Articles) then exceeds, or would as a result of such borrowing exceed, two times the Company's adjusted capital and reserves (as defined in the Articles). Shareholders may pass an ordinary resolution allowing borrowings to exceed such limit.

The Board can delegate any of its powers or discretions to committees of one or more persons. Any committee must comply with any regulations laid down by the Board. These regulations can require or allow people who are not Directors to be members of the committee, and can give voting rights to such people but there must be more Directors on a committee than persons who are not Directors and a resolution of the committee is only effective if a majority of the members of the committee present at the time of the resolution were Directors.

## Fees

The total fees paid to all of the Directors (excluding any payments made under any other provision of the Articles) must not exceed €4,000,000 a year or any higher sum decided on by an ordinary resolution at a general meeting. It is for the Board to decide how much to pay each Director by way of fees.

The Board, or any committee authorised by the Board, can award extra fees to any Director who, in its view, performs any special or extra services for the Company. The extra fees can take the form of salary, commission, profit-sharing or other benefits (and can be paid partly in one way and partly in another).

The Company can pay the reasonable travel, hotel and incidental expenses of each Director incurred in attending and returning from general meetings, meetings of the Board or committees of the Board or any other meetings which, as a Director, he is entitled to attend. The Company will pay all other expenses properly and reasonably incurred by each Director in connection with the Company's business or in the performance of his duties as a Director. The Company can also fund a Director's or former Director's expenditure and that of a Director or former Director of any holding company of the Company for the purposes permitted by the legislation and can do anything to enable a Director or former Director of the Company or any holding company of the Company to avoid incurring such expenditure as provided in the legislation.

## Pensions and gratuities

The Board or any committee authorised by the Board can decide whether to provide pensions, annual payments or other benefits to any Director or former Director, or any relation or dependant of, or person connected to, such a person. The Board can also decide to contribute to a scheme or fund or to pay premiums to a third party for these purposes. The Company can only provide pensions and other benefits to people who are or were Directors but who have not been employed by or held an office or executive position in the Company or any of its subsidiary undertakings or former subsidiary undertakings or any predecessor in business of the Company or any such other company or to relations or dependants of, or persons connected to, these Directors or former Directors if the shareholders approve this by passing an ordinary resolution.

## Corporate governance *Continued*

### Directors' interests

Conflicts of interest requiring authorisation by Directors

The Board may, subject to the relevant quorum and voting requirements, authorise any matter which would otherwise involve a Director breaching his duty under the legislation to avoid conflicts of interest. A Director seeking authorisation in respect of such a conflict of interest must tell the Board the nature and extent of his interest in the conflict of interest as soon as possible. The Director must give the Board sufficient details of the relevant matter to enable it to decide how to address the conflict of interest, together with any additional information which it may request.

Any Director (including the relevant Director) may propose that the relevant Director be authorised in relation to any matter which is the subject of such a conflict of interest. Such proposal and any authority given by the Board shall be effected in the same way as any other matter may be proposed to and resolved upon by the Board except that: (i) the relevant Director and any other Director with a similar interest will not count in the quorum and will not vote on a resolution giving such authority; and (ii) the conflicted Director and any other Director with a similar interest may, if the other members of the Board so decide, be excluded from any meeting of the Board while the conflict of interest is under consideration.

Where the Board gives authority in relation to a conflict of interest or where any of the situations described in (i) to (v) of "Other conflicts of interest" below applies in relation to a Director: (i) the Board may (whether at the relevant time or subsequently) (a) require that the relevant Director is excluded from the receipt of information, the participation in discussion and/or the making of decisions related to the conflict or the situation and (b) impose upon the relevant Director such other terms for the purpose of dealing with the conflict or situation as they think fit; (ii) the relevant Director will be obliged to conduct himself in accordance with any terms imposed by the Board in relation to the conflict or situation; (iii) the Board may also provide that, where the relevant Director obtains (other than through his position as a Director of the Company) information that is confidential to a third party, the Director will not be obliged to disclose that information to the Company, or to use or apply the information in relation to the Company's affairs, where to do so would amount to a breach of that confidence; (iv) the terms of the authority shall be recorded in writing (but the authority shall be effective whether or not the terms are so recorded); and (v) the Board may revoke or vary such authority at any time but this will not affect anything done by the relevant Director prior to such revocation in accordance with the terms of such authority.

### Other conflicts of interest

If a Director knows that he is in any way directly or indirectly interested in a proposed contract with the Company or a contract that has been entered into by the Company, he must tell the other Directors of the nature and extent of that interest in accordance with the legislation. If he has so disclosed the nature and extent of his interest, a Director can do one or more of the following: (i) have any kind of interest in a contract with or involving the Company or another company in which the Company has an interest; (ii) hold any other office or place of profit with the Company (except that of auditor) in conjunction with his office of Director for such period and upon such terms, including as to remuneration, as the Board may decide; (iii) alone, or through a firm with which he is associated, do paid professional work for the Company or another company in which the Company has an interest (other than as auditor); (iv) be or become a Director or other officer of, or employed by or otherwise be interested in, any holding company or subsidiary company of the Company or any other company in which the Company has an interest; and (v) be or become a Director of any other company in which the Company does not have an interest and which cannot reasonably be regarded as giving rise to a conflict of interest at the time of his appointment as a Director of that other company.

### Benefits

A Director does not have to hand over to the Company or its shareholders any benefit he receives or profit that he makes as a result of any matter which would otherwise involve a direct breach of his duty under the legislation to avoid conflicts of interest but which has been authorised or anything allowed under (i) to (v) of "Other conflicts of interest" above, nor is any type of contract so authorised or so allowed liable to be avoided.

### Quorum and voting requirements

Subject to certain exceptions, a Director cannot vote or be counted in the quorum on a resolution of the Board relating to appointing that Director to a position with the Company or a company in which the Company has an interest or the terms or the termination of the appointment and a Director cannot vote or be counted in the quorum on a resolution of the Board about a contract in which he has an interest and, if he does vote, his vote will not be counted.

The Company can, by ordinary resolution, suspend or relax the provisions of the relevant article in the Articles to any extent or ratify any contract which has not been properly authorised in accordance with that relevant article.

### Directors' indemnities

As far as the legislation allows this, the Company can indemnify any Director or former Director of the Company, of any associated company or of any affiliate against any liability and can purchase and maintain insurance against any liability for any Director or former Director of the Company, of any associated company or of any affiliate. A Director or former Director of the Company, of any associated company or of any affiliate will not be accountable to the Company or the shareholders for any benefit so provided. Anyone receiving such a benefit will not be disqualified from being or becoming a Director of the Company.

### RIGHTS ATTACHING TO SHARES

The Company can issue shares with any rights or restrictions attached to them as long as this is not restricted by any rights attached to existing shares. These rights or restrictions can be decided either by an ordinary resolution passed by the shareholders or by the Board as long as there is no conflict with any resolution passed by the shareholders.

### Dividends

Currently, only A shares and B shares are entitled to a dividend.

Under the legislation, dividends are payable only out of profits available for distribution, as determined in accordance with the Act and under IFRS.

Subject to the Act, if the Directors consider that the Company's financial position justifies the payment of a dividend, the Company can pay a fixed or other dividend on any class of shares on the dates prescribed for the payments of those dividends and pay interim dividends on shares of any class of any amounts and on any dates and for any periods which it decides. Shareholders can declare dividends in accordance with the rights of shareholders by passing an ordinary resolution, although such dividends cannot exceed the amount recommended by the Board.

Dividends are payable to persons registered as the holder(s) of shares, or to anyone entitled in any other way, at a particular time on a particular day selected by the Board. All dividends will be declared and paid in proportions based on the amounts paid up on the relevant shares during any period for which that dividend is paid.

Any dividend or other money payable in cash relating to a share can be paid by sending a cheque, warrant or similar financial instrument payable to the shareholder entitled to the dividend by post to the shareholder's registered address. Alternatively, it can be made payable to someone else named in a written instruction from the shareholder (or all joint shareholders) and sent by post to the address specified in that instruction. A dividend can also be paid by interbank transfer or by other electronic means (including payment through CREST) directly to an account with a bank or other financial institution (or another organisation operating deposit accounts if allowed by the Company) named in a written instruction from the person entitled to receive the payment under the Articles. Such an account must be held at an institution based in the UK, unless the share on which the payment is to be made is held by Euroclear Nederland and is subject to the Dutch Securities Giro Act ("Wet giraal effectenverkeer"). Alternatively, a dividend can be paid in some other way if requested in writing by a shareholder (or all joint shareholders) and agreed with the Company. The Company will not be responsible for a payment which is lost or delayed. Unless the rights attached to any shares, the terms of any shares or the Articles say



otherwise, a dividend or any other money payable in respect of a share can be declared and paid in whatever currency or currencies the Board decides using an exchange rate or exchange rates selected by the Board for any currency conversions required. The Board can also decide how any costs relating to the choice of currency will be met. The Board can offer shareholders the choice to receive dividends and other money payable in respect of their shares in alternative currencies on such terms and conditions as the Board may prescribe from time to time. Where any dividends or other amounts payable on a share have not been claimed, the Board can invest them or use them in any other way for the Company's benefit until they are claimed. The Company will not be a trustee of the money and will not be liable to pay interest on it. If a dividend or other money has not been claimed for 12 years after being declared or becoming due for payment, it will be forfeited and go back to the Company, unless the Board decides otherwise.

The Company expects that dividends in respect of B shares will be paid under the dividend access mechanism described below. Currently, the Articles provide that if any amount paid by way of dividend by a subsidiary of the Company is received by the dividend access trustee on behalf of any holder of B shares and paid by the dividend access trustee to such holder, the entitlement of such holder of B shares to be paid any dividend declared pursuant to the Articles will be reduced by the corresponding amount that has been paid by the dividend access trustee to such holder. If a dividend is declared pursuant to the Articles and the entitlement of any holder of B shares to be paid his pro rata share of such dividend is not fully extinguished on the relevant payment date by virtue of a payment made by the dividend access trustee, the Company has a full and unconditional obligation to make payment in respect of the outstanding part of such dividend entitlement immediately. Where amounts are paid by the dividend access trustee in one currency and a dividend is declared by the Company in another currency, the amounts so paid by the dividend access trustee will, for the purposes of the comparison required by the two immediately preceding sentences, be converted into the currency in which the Company has declared the dividend at such rate as the Board shall consider appropriate. For the purposes of the provisions referred to in this paragraph, the amount that the dividend access trustee has paid to any holder of B shares in respect of any particular dividend paid by a subsidiary of the Company (a "specified dividend") will be deemed to include: (i) any amount that the dividend access trustee may be compelled by law to withhold; (ii) a pro rata share of any tax that the subsidiary paying the specified dividend is obliged to withhold or to deduct from the same; and (iii) a pro rata share of any tax that is payable by the dividend access trustee in respect of the specified dividend.

The Board can offer shareholders of ordinary shares (excluding any shareholder holding shares as treasury shares) the right to choose to receive extra ordinary shares, which are credited as fully paid up, instead of some or all of their cash dividend. Before the Board can do this, shareholders must have passed an ordinary resolution authorising the Board to make this offer [A].

[A] At the 2015 AGM, shareholders granted an authority for the Board to offer the choice of receiving some or all of their cash dividends as fully paid-up ordinary shares by way of a scrip dividend. More information can be found on [www.shell.com/scrip](http://www.shell.com/scrip).

## Dividend access mechanism for B shares

### General

A and B shares are identical, except for the dividend access mechanism, which will only apply to B shares. Dividends paid on A shares have a Dutch source for tax purposes and are subject to Dutch withholding tax.

It is the expectation and the intention, although there can be no certainty, that holders of B shares will receive dividends through the dividend access mechanism. Any dividends paid on the dividend access shares will have a UK source for UK and Dutch tax purposes. There will be no Dutch withholding tax on such dividends. Until April 6, 2016, certain holders (not including US holders) of B shares or B American Depositary Shares (ADSs) will be entitled to a UK tax credit in respect of their proportional share of such dividends. From April 6, 2016, there were changes to the UK taxation of dividends. The dividend tax credit has been abolished, and a taxfree dividend allowance of £5,000 introduced. For further details regarding the tax treatment of dividends paid on the A and B shares and ADSs, refer to "Taxation" on pages 192-193.

### Description of dividend access mechanism

A dividend access share has been issued by The Shell Transport and Trading Company Limited (Shell Transport) to Computershare Trustees (Jersey) Limited as

Trustee and, with effect from the Company's acquisition on February 15, 2016, of BG Group plc (the Acquisition), now BG Group Limited, (BG), a dividend access share has been issued by BG to the Trustee. Pursuant to a declaration of trust, the Trustee will hold any dividends paid in respect of the dividend access shares on trust for the holders of B shares and will arrange for prompt disbursement of such dividends to holders of B shares. Interest and other income earned on unclaimed dividends will be for the account of Shell Transport and BG and any dividends which are unclaimed after 12 years will revert to Shell Transport and BG (as applicable). Holders of B shares will not have any interest in either dividend access share and will not have any rights against Shell Transport and BG as issuers of the dividend access shares. The only assets held on trust for the benefit of the holders of B shares will be dividends paid to the Trustee in respect of the dividend access shares.

The declaration and payment of dividends on the dividend access shares will require board action by Shell Transport and BG (as applicable) and will be subject to any applicable limitations in law or in the Shell Transport or BG (as appropriate) articles of association in effect. In no event will the aggregate amount of the dividend paid by Shell Transport and BG under the dividend access mechanism for a particular period exceed the aggregate of the dividend announced by the Board of the Company on B shares in respect of the same period (after giving effect to currency conversions).

In particular, under their respective articles of association, Shell Transport and BG are each only able to pay a dividend on their respective dividend access shares which represents a proportional amount of the aggregate of any dividend announced by the Company on the B shares in respect of the relevant period, where such proportions are calculated by reference to, in the case of Shell Transport, the number of B shares in existence prior to completion of the Acquisition and, in the case of BG, the number of B shares issued as part of the Acquisition, in each case as against the total number of B shares in issue immediately following completion of the Acquisition.

### Operation of the dividend access mechanism

If, in connection with the announcement of a dividend by the Company on B shares, the Board of Shell Transport and/or the Board of BG elects to declare and pay a dividend on their respective dividend access shares to the Trustee, the holders of B shares will be beneficially entitled to receive their share of those dividends pursuant to the declaration of trust (and arrangements will be made to ensure that the dividend is paid in the same currency in which they would have received a dividend from the Company).

If any amount is paid by Shell Transport or BG by way of a dividend on the dividend access shares and paid by the Trustee to any holder of B shares, the dividend which the Company would otherwise pay on B shares will be reduced by an amount equal to the amount paid to such holders of B shares by the Trustee.

The Company will have a full and unconditional obligation, in the event that the Trustee does not pay an amount to holders of B shares on a cash dividend payment date (even if that amount has been paid to the Trustee), to pay immediately the dividend announced on B shares. The right of holders of B shares to receive distributions from the Trustee will be reduced by an amount equal to the amount of any payment actually made by the Company on account of any dividend on B shares.

If for any reason no dividend is paid on the dividend access shares, holders of B shares will only receive dividends from the Company directly. Any payment by the Company will be subject to Dutch withholding tax (unless an exemption is obtained under Dutch law or under the provisions of an applicable tax treaty).

The Dutch tax treatment of dividends paid under the dividend access mechanism has been confirmed by the Dutch Revenue Service in an agreement ("vaststellingsovereenkomst") with the Company and N.V. Koninklijke Nederlandsche Petroleum Maatschappij (Royal Dutch Petroleum Company) dated October 26, 2004, as supplemented and amended by an agreement between the same parties dated April 25, 2005, and a final settlement agreement in connection with the Acquisition dated November 9, 2015. The agreements state, among other things, that dividend distributions on the dividend access shares by Shell Transport and/or BG will not be subject to Dutch withholding tax provided that the dividend access mechanism is structured and operated substantially as set out above.

## Corporate governance *Continued*

The Company may not extend the dividend access mechanism to any future issuances of B shares without prior consultation with the Dutch Revenue Service.

Accordingly, the Company would not expect to issue additional B shares unless confirmation from the Dutch Revenue Service was obtained or the Company were to determine that the continued operation of the dividend access mechanism was unnecessary. Any further issue of B shares is subject to advance consultation with the Dutch Revenue Service.

The dividend access mechanism may be suspended or terminated at any time by the Company's Directors or the Directors of Shell Transport or BG, for any reason and without financial recompense. This might, for instance, occur in response to changes in relevant tax legislation.

The daily operations of the Trust are administered on behalf of Shell by the Trustee. Material financial information of the Trust is included in the "Consolidated Financial Statements" and is therefore subject to the same disclosure controls and procedures as Shell.

### Pre-emption rights

Subject to the Act and the Listing Rules, any equity securities allotted by the Company for cash must first be offered to shareholders in proportion to their holdings. The Act and the Listing Rules allow for the disapplication of pre-emption rights which may be waived by a special resolution of the shareholders, either generally or specifically.

### Voting

Currently, only the A and B shares have voting rights.

### Changing the rights attached to the shares

The Act provides that the Articles can be amended by a special resolution.

The Articles provide that, if the legislation allows this, the rights attached to any class of shares can be changed if this is approved either in writing by shareholders holding at least three-quarters of the issued shares of that class by amount (excluding any shares of that class held as treasury shares) or by a special resolution passed at a separate meeting of the relevant shareholders. At each such separate meeting, all of the provisions of the Articles relating to proceedings at a general meeting apply, except that: (i) a quorum will be present if at least one shareholder who is entitled to vote is present in person or by proxy who owns at least one-third in amount of the issued shares of the relevant class; (ii) any shareholder who is present in person or by proxy and entitled to vote can demand a poll; and (iii) at an adjourned meeting, one person entitled to vote and who holds shares of the class, or his proxy, will be a quorum. These provisions are not more restrictive than required by law in England.

If new shares are created or issued which rank equally with any other existing shares, the rights of the existing shares will not be regarded as changed or abrogated unless the terms of the existing shares expressly say otherwise.

### Redemption provisions

The Company's shares are not subject to any redemption provisions.

### Rights attaching to the sterling deferred shares

The sterling deferred shares are (unlike the A and B shares) not ordinary shares and, therefore, they have different rights and restrictions.

The sterling deferred shares have the following rights and restrictions: (i) on a distribution of assets of the Company among its shareholders on a winding-up, the holders of the sterling deferred shares will be entitled (such entitlement ranking in priority to the rights of holders of ordinary shares) to receive an amount equal to the aggregate of the capital paid up or credited as paid up on each sterling deferred share; (ii) save as provided in (i), the holders of the sterling deferred shares will not be entitled to any participation in the profits or assets of Shell; (iii) the holders of sterling deferred shares will not be entitled to receive notice of or to attend and/or speak or vote (whether on a show of hands or on a poll) at general meetings of the Company; (iv) the written consent of the holders of

three-quarters in nominal value of the issued sterling deferred shares or the sanction of a special resolution passed at a separate general meeting of the holders of the sterling deferred shares is required if the special rights and privileges attaching to the sterling deferred shares are to be abrogated, or adversely varied or otherwise directly adversely affected in any way (the creation, allotment or issue of shares or securities which rank in priority to or equally with the sterling deferred shares, or of any right to call for the allotment or issue of such shares or securities, is for these purposes deemed not to be an abrogation or variation or to have an effect on the rights and privileges attaching to sterling deferred shares); (v) all provisions of the Articles relating to general meetings of the Company will apply, with necessary modifications, to every general meeting of the holders of the sterling deferred shares; (vi) subject to the legislation, the Company will have the right at any time to redeem any such sterling deferred shares (provided that it is credited as fully paid) at a price not exceeding £1 for all the sterling deferred shares redeemed at any one time (to be paid on such date as the Board shall select as the date of redemption to such one of the holders, if more than one, as may be selected by lot) without the requirement to give notice to the holder(s) of the sterling deferred shares; (vii) if any holder of a sterling deferred share to be redeemed fails or refuses to surrender the share certificate(s) or indemnity for such sterling deferred share or if the holder selected by lot to receive the redemption monies fails or refuses to accept the redemption monies payable in respect of it, such sterling deferred share will, notwithstanding the foregoing, be redeemed and cancelled by the Company and, in the event of a failure or refusal to accept the redemption monies, the Company will retain such money and hold it on trust for the selected holder without interest, and, in each case, the Company will have no further obligation whatsoever to the holder of such sterling deferred share; and (viii) no sterling deferred share will be redeemed otherwise than out of distributable profits or the proceeds of a fresh issue of shares made for the purposes of the redemption or out of capital to the extent permitted by the legislation.

### Calls on shares

The Board can call on shareholders to pay any money which has not yet been paid to the Company for their shares. This includes the nominal value of the shares and any premium which may be payable on those shares. The Board can also make calls on people who are entitled to shares by law.

### Winding-up of Shell

If the Company is voluntarily wound up, the liquidator can distribute to shareholders any assets remaining after the liquidator's fees and expenses have been paid and all sums due to prior-ranking creditors (as defined under the laws of England) have been paid.

### Sinking fund provisions

The shares are not subject to any sinking fund provision under the Articles or as a matter of the laws of England.

### Discriminating provisions

There are no provisions in the Articles discriminating against a shareholder because of his ownership of a particular number of shares.

### Limitations on rights to own shares

There are no limitations imposed by the Articles or the legislation on the rights to own shares, including the right of non-residents or foreign persons to hold or vote shares, other than limitations that would generally apply to all shareholders.

### Transfer of shares

There are no significant restrictions on the transfer of shares.

Except as set out below, any shareholder can transfer some or all of his certificated shares to another person. A transfer of certificated shares must be made in writing and either in the usual standard form or in any other form approved by the Board.

Except as set out below, any shareholder can transfer some or all of his CREST shares to another person. A transfer of CREST shares must be made through CREST and must comply with the uncertificated securities rules.

# Preliminary Public Copy

The Board can refuse to register the transfer of any shares which are not fully paid. Further rights to decline registration are as follows:

## Certificated shares

A share transfer form cannot be used to transfer more than one class of share. Each class needs a separate form. Transfers cannot be in favour of more than four joint holders. The share transfer form must be properly stamped to show payment of any applicable stamp duty or certified or otherwise shown to the satisfaction of the Board to be exempt from stamp duty and must be delivered to the Company's registered office, or any other place decided on by the Board. The transfer form must be accompanied by the share certificate relating to the share being transferred, unless the transfer is being made by a person to whom the Company was not required to, and did not send, a certificate. The Board can also ask (acting reasonably) for any other evidence to show that the person wishing to transfer the share is entitled to do so and, if the share transfer form is signed by another person on behalf of the person making the transfer, evidence of the authority of that person to do so.

## CREST shares

Registration of a transfer of CREST shares can be refused in the circumstances set out in the uncertificated securities rules. Transfers cannot be in favour of more than four joint holders.

Where a share has not yet been entered on the register, the Board can recognise a renunciation by that person of his right to the share in favour of some other person. Such renunciation will be treated as a transfer and the Board has the same powers of refusing to give effect to such a renunciation as if it were a transfer.

## Partly paid shares

The Articles provide that, if a shareholder fails to pay the Company any amount due on his partly paid shares, the Board can enforce the Company's lien by selling all or any of the partly paid shares in any way they decide (subject to certain conditions).

## Change of control

There are no provisions in the Articles that would delay, defer or prevent a change of control.

## Capital changes

The conditions imposed by the Articles for changes in capital are not more stringent than those required by the applicable laws of England.

## Disputes between a shareholder or American Depositary Share holder and Royal Dutch Shell plc, any subsidiary, Director or professional service provider

The Articles generally require that, except as noted below, all disputes: (i) between a shareholder in such capacity and the Company and/or its Directors, arising out of or in connection with the Articles or otherwise; (ii) so far as permitted by law, between the Company and any of its Directors in their capacities as such or as the Company's employees, including all claims made by the Company or on behalf of the Company against any or all of its Directors; (iii) between a shareholder in such capacity and the Company's professional service providers (which could include the Company's auditors, legal counsel, bankers and ADS depositories); and/or (iv) between the Company and its professional service providers arising in connection with any claim within the scope of (iii) above, shall be exclusively and finally resolved by arbitration under the Rules of Arbitration of the International Chamber of Commerce (ICC), as amended from time to time. This would include all disputes arising under UK, Dutch or US law (including securities laws), or under any other law, between parties covered by the arbitration provision. Accordingly, the ability of shareholders to obtain monetary or other relief, including in respect of securities law claims, may be determined in accordance with these provisions, and the ability of shareholders to obtain monetary or other relief may therefore be limited and their cost of seeking and obtaining recoveries in a dispute may be higher than otherwise would be the case.

The tribunal shall consist of three arbitrators to be appointed in accordance with the ICC rules. The chairman of the tribunal must have at least 20 years' experience as a lawyer qualified to practise in a common-law jurisdiction which is within the Commonwealth (as constituted on May 12, 2005) and each other arbitrator must have at least 20 years' experience as a qualified lawyer. The

place of arbitration must be The Hague, the Netherlands; and the language of the arbitration must be English.

Pursuant to the exclusive jurisdiction provision in the Articles, if a court or other competent authority in any jurisdiction determines that the arbitration requirement described above is invalid or unenforceable in relation to any particular dispute in that jurisdiction, then that dispute may only be brought in the courts of England and Wales, as is the case with any derivative claim brought under the Act. The governing law of the Articles is the substantive law of England.

Disputes relating to the Company's failure or alleged failure to pay all or part of a dividend which has been announced and which has fallen due for payment will not be subject to the arbitration and exclusive jurisdiction provisions of the Articles. Any derivative claim brought under the Act will not be subject to the arbitration provisions of the Articles.

Pursuant to the relevant depositary agreement, each holder of ADSs is bound by the arbitration and exclusive jurisdiction provisions of the Articles as described in this section as if that holder were a shareholder.

## GENERAL MEETINGS

Under the applicable laws of England, the Company is required in each year to hold an AGM of shareholders in addition to any other meeting of shareholders that may be held. Each AGM must be held in the period six months from the date following the Company's accounting reference date. Additionally, shareholders may submit resolutions in accordance with Section 338 of the Act. Directors have the power to convene a general meeting of shareholders at any time. In addition, Directors are required to call a general meeting once requests to do so have been received by the Company from shareholders representing at least 5% of such paid-up capital of the Company as carries voting rights at general meetings of the Company (excluding any paid-up capital held as treasury shares) pursuant to Section 303 of the Act. A request for a general meeting must state the general nature of the business to be dealt with at the meeting and must be authenticated by the requesting shareholders. If Directors fail to call such a meeting within 21 days from receipt of such requests, and on a date not more than 28 days after the date of the notice convening the meeting, the shareholders that requested the general meeting, or any of them representing more than half of the total voting rights of all shareholders that requested the meeting, may themselves convene a general meeting which must be called for a date not more than three months after the date upon which the Directors became subject to the requirement to call a general meeting. Any such meeting must be convened in the same manner, as nearly as possible, as that in which meetings are required to be convened by the Directors of the Company.

Under the Act, the Company is required to give at least 21 clear days' notice of any AGM or, except where the conditions in Section 307A of the Act apply, any other general meeting of the Company. In addition, the Company complies with the Code which currently states that notices of AGMs should be sent to shareholders at least 20 working days before the meeting.

The Articles require that, in addition to any requirements under the legislation, the notice for any general meeting must state where the meeting is to be held (the principal meeting place) and the location of any satellite meeting place, which shall be identified as such in the notice as well as details of any arrangements made for those persons not entitled to attend a general meeting to be able to view and hear the proceedings (making it clear that participation in those arrangements will not amount to attendance at the meeting to which the notice relates). At the same time that notice is given for any general meeting, an announcement of the date, time and place of that meeting will, if practical, be published in a national newspaper in the Netherlands.

A shareholder is entitled to appoint a proxy (who is not required to be another shareholder) to represent and vote on behalf of the shareholder at any general meeting of shareholders, including the AGM, if a duly completed form of proxy has been received by the Company within the relevant deadlines (in general, where a poll is not demanded, 48 hours (or such shorter time as the Board decides) before the meeting).

Before a general meeting starts to do business, there must be a quorum present. Save as in relation to adjourned meetings, a quorum for all purposes is two people who are entitled to vote. They can be shareholders who are personally

## Corporate governance *Continued*

present, proxies for shareholders, or a combination of both. If a quorum is not present, a chairman of the meeting can still be chosen and this will not be treated as part of the business of the meeting.

If a quorum is not present within five minutes of the time fixed for a general meeting to start or within any longer period not exceeding one hour which the chairman of the meeting can decide, or if a quorum ceases to be present during a general meeting: (i) if the meeting was called by shareholders, it will be cancelled; (ii) any other meeting will be adjourned to a day (being not less than 10 days later, excluding the day on which it is adjourned and the day for which it is reconvened) with the time and place decided upon by the chairman of the meeting; and (iii) one shareholder present in person or by proxy and entitled to vote will constitute a quorum at any such adjourned general meeting and any notice of such an adjourned meeting will say this.

Notice of cancellation of a proxy's right to vote must be received at the Company's registered office (or other place specified by the Company for receipt) not later than the last time at which a proxy form should have been received to be valid for use at the meeting or on the holding of the poll at which the vote was given or the poll taken.

### DEEMED DELIVERY OF DOCUMENTS

Under the Articles, if any notice, document or other information is given, sent or supplied by the Company by inland post, it is treated as being received the day after it was posted if first class post (or a service similar to first class post) was used or 72 hours after it was posted if first class post (or a service similar to first class post) was not used. If a notice or document is sent by the Company by airmail, it is treated as being received 72 hours after it was posted. Any notice, document or other information left at a shareholder's registered address or a postal address notified to the Company in accordance with the Articles by a shareholder or a person entitled to a share by law is treated as being received on the day on which it was left.

### THRESHOLD FOR DISCLOSURE OF SHARE OWNERSHIP

The Disclosure Guidance and Transparency Rules of the UK's Financial Conduct Authority impose an obligation on persons (A) to notify the Company of the percentage of voting rights held as a shareholder, or through the direct or indirect holding of financial instruments, if the percentage of voting rights held in the Company reaches, exceeds or falls below 3% or any 1% threshold above 3%. [A] For this purpose "persons" includes companies, natural persons, legal persons and partnerships.

As noted in the Articles, Section 793 of the Act governs the Company's right to investigate who has an interest in its shares. Under that section, a public company may give notice to any person it knows or has reasonable cause to believe is, or was at any time in the preceding three years, interested in its shares in order to obtain certain information about that interest.

The Articles provide that, when a person receives a statutory notice, he has 14 days to comply with it. If he does not do so or if he makes a statement in response to the notice which is false or inadequate in some important way, the Company can decide to restrict the rights relating to the identified shares and send out a further notice to the shareholder, known as a restriction notice, which will take effect when delivered. The restriction notice will state that the identified shares no longer give the shareholder any right to attend or vote either personally or by proxy at a shareholders' meeting or to exercise any right in relation to shareholders' meetings. Where the identified shares make up 0.25% or more (in

amount or in number) of the existing shares of a class at the date of delivery of the restriction notice, the restriction notice can also contain the following further restrictions: (i) the Board can withhold any dividend or part of a dividend (including scrip dividend) or other money which would otherwise be payable in respect of the identified shares without any liability to pay interest when such money is finally paid to the shareholder; and (ii) the Board can refuse to register a transfer of any of the identified shares which are certificated shares unless the Board is satisfied that they have been sold outright to an independent third party (as specified in the Articles). Once a restriction notice has been given, the Board is free to cancel it or exclude any shares from it at any time the Board thinks fit. In addition, the Board must cancel the restriction notice within seven days of being satisfied that all of the information requested in the statutory notice has been given. Also, where any of the identified shares are sold and the Board is satisfied that they were sold outright to an independent third party, it must cancel the restriction notice within seven days of receipt of notification of the sale. The Articles do not restrict in any way the provision of the legislation which applies to failures to comply with notices under the legislation.

The UK City Code on Takeovers and Mergers (the Takeover Code) imposes disclosure obligations on parties subject to the Takeover Code's disclosure regime. The Takeover Code requires that an opening position disclosure be made by: (i) an offeror company after the announcement that first identifies it as an offeror and after the announcement that first identifies a competing securities exchange offeror; and (ii) an offeree company after the commencement of an offer period and, if later, after the announcement that first identifies any securities exchange offeror. An opening position disclosure must be made by any person that is interested in 1% or more of any class of relevant securities of the offeree company or any securities exchange offeror. The Takeover Code also requires any person who is, or becomes, interested in 1% or more of any class of relevant securities of an offeree company or any securities exchange offeror to make a dealing disclosure if the person deals in any relevant securities of the offeree company or any securities exchange offeror during an offer period. Where two or more persons act together pursuant to an agreement or understanding, whether formal or informal, to acquire or control an interest in relevant securities, they will normally be deemed to be a single person for the purpose of the relevant provisions of the Takeover Code.

Rule 13d-1 of the US Securities Exchange Act of 1934 requires that a person or group that acquires beneficial ownership of more than 5% of equity securities registered under the US Securities Exchange Act, and that is not eligible to file a short-form report, disclose such information to the SEC within 10 days after the acquisition.

### FURTHER INFORMATION

The following information can be found at [www.shell.com/investor](http://www.shell.com/investor):

- the terms of reference of the Audit Committee, Corporate and Social Responsibility Committee, Nomination and Succession Committee and Remuneration Committee (these documents explain the Committees' roles and the authority the Board delegates to them);
- the full list of matters reserved to the Board for decision;
- Shell General Business Principles;
- Shell Code of Conduct;
- Code of Ethics for Executive Directors and Senior Financial Officers; and
- Articles of Association.

Signed on behalf of the Board

/s/ Linda M. Szymanski

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Linda M. Szymanski  
Company Secretary  
March 8, 2017

## AUDIT COMMITTEE REPORT

Dear Shareholders,

I am pleased to present our annual Audit Committee Report, which provides insights into our work and the issues we dealt with during 2016.

As the Audit Committee (AC), we assist the Board in fulfilling its oversight responsibilities in areas such as the integrity of financial reporting, the effectiveness of the risk management and internal control system and related governance and compliance matters. We are also responsible for making a recommendation to the Board on the appointment or reappointment of the external auditor. The integration of BG following its acquisition in February, as well as the transition to Ernst & Young LLP (EY) as our new external auditor, required additional focus from the AC in 2016.

In respect of the integration of BG, we spent considerable time reviewing and considering the purchase price allocation; the integration of the BG operations and assets; the integration into our accounting and reporting processes, including consolidation into Shell's financial statements, and the application of Shell's control framework. We are satisfied that this work has been carried out in a rigorous and robust manner. You will find more details later in this report.

Following the completion of the tender process and on the recommendation of the AC, EY was appointed as external auditor of the Company for the financial year 2016. In anticipation of the appointment, the transition activities began on October 1, 2015, when EY started shadowing PricewaterhouseCoopers LLP (PwC) in its audit engagement with the Company. The AC closely monitored the transition from PwC to EY and was satisfied with the process.

The AC also carefully monitored auditor independence in accordance with the conflict of interest and independence protocol established with EY, and further agreed with EY that one of EY's lead partners for each of Shell's businesses would join the lead audit partner at every AC meeting.

In 2016, we held six AC meetings where we were briefed on and discussed a variety of topics including certain special topics such as information risk management and tax transparency reporting. We received briefings from the Chief Internal Auditor on audit outcomes and considered recommended remedial actions thereof, as well as completion of such actions. Specific attention was given to issues we considered significant in relation to Shell's 2016 Consolidated Financial Statements, as discussed in more detail later in this report together with how we addressed them. In January 2016, we held one extraordinary meeting relating to the publication of an update on Shell's fourth quarter 2015 and full year unaudited results in respect of the completion of the BG acquisition.

We supported the first viability statement made in the 2015 Director's Report, in accordance with new best practice from the UK Corporate Governance Code (the Code) effective from 2015. In 2016 we considered whether the three-year period selected by the Board for the review of Shell's prospects, in line with the operating plan, was appropriate. We concluded that this was the case; prevailing peer practice is also to focus on the operating plan period, which generally led to use of a three-year term. The factors which we further considered in support of the viability statement are discussed later in this report.

Finally, we conducted our annual performance evaluation, internally facilitated by the Secretary to the AC and supplemented by a questionnaire circulated to the AC members. We concluded that the AC was effective and able to fulfil its role in accordance with its terms of reference, which can be found at [www.shell.com/investor](http://www.shell.com/investor). As part of the evaluation session the AC discussed the priorities, in addition to the standing items, for its 2017 agenda, including further discussions on risk, BG integration, information risk management, trading and supply, and governance of non-Shell-operated joint ventures.

**Euleen Goh**  
Chair of the Audit Committee  
March 8, 2017

### COMPOSITION OF THE AUDIT COMMITTEE

During 2016, the members of the AC were Euleen Goh (Chair of the AC), Guy Elliott, Gerard Kleisterlee and Linda G. Stuntz, all of whom are financially literate, independent, Non-executive Directors. Guy Elliott stepped down as Chair of the AC with effect from January 1, 2016, with Euleen Goh succeeding him as of this date. In respect of the year ended December 31, 2016, for the purposes of the Code, both Euleen Goh and Guy Elliott qualify as persons with "recent and relevant financial experience" and, for the purposes of US securities laws, each is an "audit committee financial expert". The AC had six ordinary meetings and one extraordinary meeting during the year; the AC members' attendances are shown on page 69.

### RESPONSIBILITIES

The key responsibilities of the AC are to assist the Board in fulfilling its oversight responsibilities in relation to: financial reporting; the effectiveness of the system of risk management and internal control; compliance with applicable external legal and regulatory requirements; monitoring the qualifications, expertise, resources and independence of both the internal and external auditors; and assessing the internal and external auditors' performance and effectiveness each year. The AC keeps the Board informed of its activities and recommendations. Where the AC is not satisfied with, or if it considers that action or improvement is required concerning any aspect of financial reporting, risk management and internal control, compliance or audit-related activities, it promptly reports these concerns to the Board.

### ACTIVITIES

The AC covers a variety of topics in its meetings. These include both standing items that the AC considers as a matter of course, typically in relation to the quarterly unaudited financial statements, control issues, accounting policies and judgements and reporting matters, and a range of specific topics relevant to Shell's control framework. The AC invites the Chief Executive Officer, the Chief Financial Officer, the Legal Director, the Chief Internal Auditor, the Executive Vice President Controller, the Vice President Accounting and Reporting and the external auditor to attend each meeting. The Chair of the Board also regularly attends the meetings. Other members of management attend when requested. At every meeting, the AC holds private sessions separately with the external auditor and the Chief Internal Auditor without members of management, except for the Legal Director, being present.

During 2016, the AC received comprehensive reports from management and the internal and external auditors. In particular, it discussed with the Chief Financial Officer, the Executive Vice President Controller, the Vice President Accounting and Reporting and the external auditor issues that arose on accounting policies, practices and reporting, and reviewed aggregated whistle-blowing reports, internal audit reports and analyses of financial reporting matters. The AC further assessed the robustness of information and risk management, security measures including cyber security, and the effectiveness of financial controls, and discussed with the Chief Ethics and Compliance Officer her annual report on compliance matters including regulatory developments and compliance risks. The AC also discussed the Company's Annual Report and Accounts, half-year report and quarterly unaudited financial statements with management and the external auditor. The AC reviewed and discussed the internal audit function's annual audit plan. It also reviewed the internal audit's performance self-assessment report focusing on impact of the audits, audit quality and compliance, and operational excellence. The AC assessed the performance of the internal audit function as effective. The AC also reviewed, considered and approved the external audit plan including the audit scope and materiality levels. In addition to the items discussed under significant issues on pages 80-81, the AC also requested reports on matters that it deemed appropriate, for example: BG's proved oil and gas reserves; the recoverability of receivables from certain governments; the implementation of a new systems platform for products trading in the USA; litigation matters including the review of the provisions taken; tax transparency; and new and impending regulatory requirements. It also discussed the status of information risk management with the Chief Information Officer to receive assurance on the appropriate levels of controls and activities undertaken.

## Audit Committee Report *Continued*

As requested by the Board, the AC advised the Board of its view that the Annual Report including the financial statements for the year ended December 31, 2016, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy (see the "Directors' Report" on page 65). To arrive at this conclusion, the AC critically assessed drafts of the Annual Report including the financial statements and discussed with management the process undertaken to ensure that these requirements were met. This process included: verifying that the contents of the Annual Report are consistent with the information shared with the Board and management during the year to support their assessment of Shell's position and performance; ensuring that consistent materiality thresholds are applied for favourable and unfavourable items; taking into account comments from the external auditor; and receiving assurance from the Executive Committee. The AC further reviewed and considered the Directors' half-year and full-year statements with respect to the going concern basis of accounting. The AC considered and concluded that the three-year time horizon selected by the Board in 2015 for the assessment of Shell's longer-term viability was still appropriate. As noted in the viability statement, the Board also reviews the strategic plan which takes account of longer-term forecasts. Factors considered included: external environment factors such as oil and gas prices; the

financial framework; Shell's business portfolio developments; and the project funnel to support future growth. The AC endorsed the statement in the "Directors' Report" on page 65.

### SYSTEM OF RISK MANAGEMENT AND INTERNAL CONTROL

In 2016, the AC reviewed, discussed and briefed the Board on the regular reports on risks, controls and assurance, including the annual assessment of the system of risk management and internal control, in order to monitor the effectiveness of the procedures for internal control over financial reporting, compliance and operational matters. This included the Company's evaluation of the internal control system as required under Section 404 of the Sarbanes-Oxley Act.

### SIGNIFICANT ISSUES

The AC assessed the following significant accounting and reporting issues that arose in relation to Shell's 2016 Consolidated Financial Statements. The AC was satisfied with how each of these issues was addressed. As part of this assessment, the AC received reports, requested and received clarification from management, and sought assurance and received input from the internal and external auditors.

### Significant issues

Subject	Issue	How the AC addressed the issue
ACQUISITION OF BG GROUP PLC See Notes 4, 8 and 9 to the "Consolidated Financial Statements" on pages 128, 131-132 and 132-134.	Shell is required to recognise BG's net assets at their acquisition-date fair values. Determining these values (the "purchase price allocation") is a significant exercise and under IFRS there is a window of 12 months for them to be finalised. The provisional fair values were disclosed in the Unaudited Condensed Consolidated Interim Financial Statements for the first quarter, updated in the third quarter and finalised in the fourth quarter.  BG results must be reported within Shell's Consolidated Financial Statements from the date of acquisition. This requires the application of Shell's control framework, and reporting in accordance with Shell's accounting policies.	The AC received information to explain the basis for the purchase price allocation, with a focus on property, plant and equipment and intangible assets' valuations, and supported management's conclusions including the final amount of goodwill recognised on the acquisition.  The AC also reviewed the integration of BG into Shell's accounting and reporting processes, and satisfied itself with the information included within Shell's Consolidated Financial Statements post acquisition. The AC reviewed the judgements made which, for example, resulted in the recognition of certain leases as finance leases on Shell's balance sheet, whereas BG had treated them as operating leases, therefore off balance sheet.
IMPAIRMENTS See Notes 2 and 9 to the "Consolidated Financial Statements" on pages 122-127, and 132-134.	The carrying amount of an asset should be tested for impairment when there is a change in circumstances such as a reduction in performance, other than short-term, or being classified as held for sale.  Oil and gas prices were on average lower in 2016 than in 2015. Management reflected these lower prices in the short term but did not change the long-term price forecasts. A downward revision in forecasts would be a trigger for impairment testing.	The AC reviewed various impairment charges in respect of Upstream, Integrated Gas, and Downstream assets. These impairments were mainly triggered by asset performance, disposals and project cancellations. In the context of potential impairment triggers, Shell's oil and gas price outlook was reviewed against market developments, benchmarks and the potential impact of certain price sensitivities were considered.
DEPRECIATION, DEPLETION AND AMORTISATION See Note 2 to the "Consolidated Financial Statements" on pages 122-127.	Upstream production assets are generally depreciated on a unit-of-production basis over proved developed reserves, which are calculated in accordance with requirements based on yearly average prices. In the current price environment it was considered necessary to apply other approaches for certain assets, in order that the periodic depreciation charges more appropriately reflect the expected utilisation of those assets.	The AC reviewed the justification to use alternatives to determine the reserves base applied in calculating unit of production depreciation for certain Upstream assets, such as using management's expectations of future oil and gas prices rather than yearly average prices. It agreed that this provides a more appropriate phasing of periodic depreciation charges.

## Significant issues

Subject	Issue	How the AC addressed the issue
<b>PROVISIONS FOR REDUNDANCY AND ONEROUS CONTRACTS</b> See Note 19 to the "Consolidated Financial Statements" on page 143.	Management's effort to reduce costs, particularly following the BG acquisition, has included redundancy programmes and rationalisation of facilities. In the continuing lower oil and gas price environment, it is also necessary to review whether the future costs of certain other contracts are expected to exceed the benefits. Judgement is necessary in each case in determining when a provision should be recognised and, if so, in estimating the amount.	The AC received information on and accepted the amounts and timing of recognition of provisions for redundancy in the second and third quarters. The AC also discussed and accepted the outcome of the onerous contracts review, specifically provisions for idle rigs in Upstream and tolling contracts in Europe and the USA in Integrated Gas and Downstream and for real estate leases as a result of the rationalisation of office space in various locations.
<b>TAXATION</b> See Notes 2 and 17 to the "Consolidated Financial Statements" on pages 122-127 and 139-140.	The determination of tax assets and liabilities requires the application of judgement as to the ultimate outcome, which can change over time depending on facts and circumstances. In particular the recognition of deferred tax assets requires management to make assumptions regarding future profitability and is therefore inherently uncertain.	The AC reviewed management updates and external auditor assessments on certain tax matters. The AC discussed the recoverability of deferred tax assets and accepted the resulting assessments of the deferred tax positions.
<b>DISPOSALS</b> See Note 6 to the "Consolidated Financial Statements" on page 131.	Shell has announced a major disposal programme for 2016-2018. Prior to expected disposal, judgement is required in determining when an asset has reached held for sale status, which has accounting consequences.  Judgement may also be required in the accounting on disposal, for example in estimating the amount of any liabilities which have been retained by Shell.	The AC examined the accounting for assets held for sale and consequential disposals, including Downstream assets in Denmark and Malaysia, Upstream assets in Canada, Egypt, the UK and the USA, and Integrated Gas assets in New Zealand. Particular attention was given to the accounting for any retained obligations, the assumptions used in determining any resulting charges and the tax treatment.

## EXTERNAL AUDITOR

At the AGM in May 2016, the tender process [A] for the appointment of the external auditor for the financial year 2016, which had started in mid-2014, was concluded by shareholder approval for the appointment of EY as the Company's external auditor for the year ending December 31, 2016. This approval ratified the appointment of EY by the Board in April 2016 to fill the casual vacancy created by the resignation of PwC following the completion of its audit of the Company's 2015 financial statements. The tender was carried out in compliance with The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014 effective January 1, 2015, as issued by the Competition & Markets Authority in the UK.

[A] In October 2015, Shell published a disclosure on its website providing a detailed overview of the auditor tender process, which can be found on [www.shell.com/investor](http://www.shell.com/investor).

During 2016, the AC considered the outcome of the Financial Reporting Council's Audit Quality Inspection Annual Report 2015/16 on EY. The AC monitored the transition from PwC to EY as the new external auditor and evaluated the effectiveness of EY and the external audit process in its first year as auditor, taking into account the results of Shell management's internal survey relating to EY's performance over the financial year 2016 as well as management's review and recommendations and its own experiences with the external auditor. Key criteria of the evaluation included: professionalism in areas including competence, integrity and objectivity; efficiency, covering aspects such as service level, cost efficiency and innovation in the audit process; thought leadership and value added; and compliance with relevant legislative, regulatory and professional requirements. The AC concluded that EY had performed effectively.

Following due consideration, the AC will recommend to the Board to propose to the 2017 AGM that EY be re-appointed as the external auditor of the Company for the year ended December 31, 2017. There are no contractual obligations that restrict the AC's ability to make such a recommendation.

As required under UK and US auditing standards, the AC received a letter from EY confirming its independence.

EY presented its views on the Annual Report including the financial statements for the year ended December 31, 2016, to the AC and to the Board.

## NON-AUDIT SERVICES

The AC has a policy on the engagement of the external auditor to supply non-audit services. This policy, designed to safeguard auditor objectivity and independence, includes guidelines on permitted and non-permitted services, and on services requiring specific approval by the AC.

Examples of non-permitted services are actuarial services, bookkeeping services, valuation services (unless the services are unrelated to financial reporting), management or recruitment services, legal services and expert services unrelated to the audit, tax advice and broker or dealer, investment adviser or banking services.

For other services, because of their knowledge, experience and/or for reasons of confidentiality, it can be more efficient or prudent to engage the external auditor rather than another party. Under the policy, permitted services must not present a conflict of interest. The AC reviews quarterly reports from management on the extent of the permitted non-audit services provided in accordance with the policy or for which specific approval is being sought. Non-audit services in the following categories can be contracted without further individual prior approval provided the fee value for each contract does not exceed \$500,000:

- tax compliance work that is part of the assurance process for the audit of the Consolidated or Parent Company Financial Statements or the accounts of subsidiaries;
- regulatory compliance audits; and
- verification of non-financial data for public disclosure.

Any other non-audit services must be specifically approved by the AC before the external auditor is contracted.

The scope of the permitted non-audit services contracted with the external auditor in 2016 consisted mainly of interim reviews and other audit-related assurance services and the associated compensation amounted to 6% of total auditor's remuneration.

The AC has adopted an amended policy on the engagement of the external auditor to supply non-audit services effective January 1, 2017, in accordance with the Revised Ethical Standard 2016, issued by the Financial Reporting Council in June 2016.

## FEES

Note 29 to the "Consolidated Financial Statements" on page 152 provides a specification of the auditor's remuneration.

## DIRECTORS' REMUNERATION REPORT

### PRINCIPLES

The principles underpinning the Remuneration Committee's (REMCO) approach to executive remuneration serve as the foundation for everything we do, and are listed below.

- Alignment with Shell's strategy: the Executive Directors' compensation package should be strongly linked to the achievement of stretch targets that are seen as indicators of the execution of Shell's strategy.
- Pay for performance: the majority of the Executive Directors' compensation (excluding benefits and pensions) should be linked directly to Shell's performance through variable pay instruments.
- Competitiveness: remuneration levels should be determined by reference internally against Shell Senior Management and externally against companies of comparable size, complexity and global scope.
- Long-term creation of shareholder value: Executive Directors should align their interests with those of shareholders by holding shares in Royal Dutch Shell plc (the Company).
- Consistency: the remuneration structure for Executive Directors should generally be consistent with the remuneration structure for Shell's Senior Management. This consistency builds a culture of alignment with Shell's purpose and a common approach to sharing in Shell's success.
- Compliance: decisions should be made in the context of the Shell General Business Principles and REMCO should ensure compliance with applicable laws and corporate governance requirements when designing and implementing policies and plans.
- Risk assessment: the remuneration structures and rewards should meet risk assessment tests to ensure that shareholder interests are safeguarded and that inappropriate actions are avoided.

### STATEMENT BY THE CHAIR OF THE REMUNERATION COMMITTEE

Dear Shareholders,

I am pleased to present the Directors' Remuneration Report for the year ended December 31, 2016. This includes: (i) our Annual Report on Remuneration for 2016 as well as implementation of the proposed Directors' Remuneration Policy in 2017, in accordance with the principles above; and (ii) the proposed Directors' Remuneration Policy which, subject to shareholder approval at the 2017 Annual General Meeting (AGM), will take effect from May 23, 2017, and will be effective until the 2020 AGM, unless a further policy is proposed by the Company and approved by shareholders in the meantime. At the 2017 AGM, the proposed Directors' Remuneration Policy will be put to a binding shareholder vote and the Annual Report on Remuneration for 2016 will be put to an advisory shareholder vote.

In 2016, REMCO performed a wide-ranging review as part of the three-year cycle required by law. The timing has been helpful in allowing us to ensure our remuneration structure is effective in the context of Shell's new strategic direction and the acquisition of BG Group plc (BG).

We as REMCO believe that Shell's overall remuneration policy must strongly support Shell's strategy. The Board sets the strategy and REMCO decides how to reward its successful delivery. It is an important principle that remuneration does not lead change. It is strategy that drives change and remuneration that follows. We also believe in remuneration structures that are consistent with those of the wider workforce and align all staff with Shell's purpose and performance. As a result, we have maintained a remuneration policy that is consistent with how we pay people across Shell. This consistent remuneration landscape includes paying at competitive market levels. It also includes a mixture of fixed and variable pay for most, shared performance metrics and common benefit plans. At Executive Director level, we are committed to additional elements, notably the requirement to maintain a personal shareholding. In our conversations with you, the shareholders, you made clear that, like us, you wish to see the new strategic direction reflected in pay. You also encouraged further simplicity in remuneration. Overall, your input suggests that our existing policy is generally appropriate and we have therefore built upon this as a starting point.

### HOW THE NEW STRATEGY HAS UNDERPINNED THE REMUNERATION REVIEW

During its Capital Markets Day 2016, Shell outlined its new direction and how the acquisition of BG fitted into it. Shell intends to be a world-class investment. Achieving this requires sustained focus on generating higher returns and free cash flow (FCF), which is the sum of cash flow from operating activities and cash flow from investing activities, underpinned by a conservative balance sheet. This strategy is designed to finance the dividend and provide the funds Shell needs to invest in its growth. As always, safety and environmental stewardship are central to all Shell does.

To ensure alignment with Shell's strategy to be a world-class investment, we have made some key changes with effect from January 1, 2017, within the boundaries of the existing policy approved by shareholders at the 2014 AGM:

- New emphasis on FCF – this replaces earnings per share (EPS) as a measure in the Long-term Incentive Plan (LTIP). One specific priority that flows from Shell's acquisition of BG is the need to optimise the expanded portfolio. Cash generated from divestments will be used to help reduce debt and pay dividends. While Shell is using divestments to move towards its intended mix of assets following the acquisition, FCF will be measured on an absolute basis. Once the portfolio is optimised FCF may be measured against BP, Chevron, ExxonMobil and Total ("the other oil majors").
- New metrics for greenhouse gas (GHG) management – these now form 10% of the annual bonus scorecard. To support the efforts Shell is already making, and based on recommendations from the Corporate and Social Responsibility Committee, we have selected scorecard measures focused on three specific business areas: refining, chemical plants and flaring in upstream assets. This goes beyond carbon dioxide (CO<sub>2</sub>) to include other GHGs such as methane.
- Re-balancing of operational excellence measures in the scorecard – the acquisition of BG means there are fewer new projects and, as a result, the weighting for this area will fall. It is worth noting, however, that targets were made more challenging. We will also now include non-Shell-operated joint ventures as part of this measure because more of Shell's capital is invested in such projects than in those it operates. The new strategy also underlines the importance of liquefied natural gas (LNG). As a result, we will raise the weighting of the LNG measure from 6% to 12.5%.
- Governance strengthened – the bonus will be removed from the termination policy for Executive Directors appointed on or after January 1, 2017.

Shareholders often ask me about the energy transition. We have thought hard about the points you raised and considered at length how best to reflect this in remuneration. This was also a theme of the 2015 "Aiming for A" shareholder resolution. As I have outlined above, we have moved to ensure the bonus reflects progress in managing Shell's GHG emissions. But the energy transition is wider than that and Shell's role as an energy provider also goes further. The Board discussed Shell's energy transition approach and approved a proposal from management to create a "New Energies" business, dedicated to finding attractive business opportunities for Shell in the context of energy transition. We will embed the progress in New Energies into the personal performance agreement with the CEO. The energy transition however, still is in its early phase and for the coming decade(s) energy supply will continue to depend for a significant portion on fossil fuels. For Shell, consistent high volume production of oil and gas will be the driver of cash flow generation. Therefore operational excellence, expressed in oil and gas production, LNG liquefaction volumes and project delivery, remain important in Shell's performance reward structure.



## LISTENING TO YOUR FEEDBACK

We have taken on board your view that the remuneration structure should be simplified and share ownership is one area where we have acted. Our approach here is designed to help maintain executive focus on the long term and to ensure that the interests of our senior management are aligned with those of shareholders. Significant shareholding requirements remain in place. Furthermore, subject to shareholder approval of the proposed Directors' Remuneration Policy at the 2017 AGM, the bonus scheme will be streamlined so that there is no separate plan to defer the proportion paid in shares, with the effect that the bonus would simply be paid half in cash, and half in shares subject to a three-year holding period. The LTIP, after a three-year performance period, is delivered entirely in shares subject to a three-year holding period. The LTIP holding period will now align with the bonus holding period in applying even after leaving Shell, to further encourage a long-term approach to decision-making.

Some shareholders have asked us to consider awarding "restricted shares", which have no performance conditions attached, to bolster long-term alignment of executive interests with those of shareholders. We will keep listening to feedback from you but, at this time, there is no consensus on this among shareholders. As things stand, REMCO believes in tying variable pay to performance with rewards linked to delivery. We also feel that the high shareholding requirements for Shell's Executive Directors fulfil the intent behind restricted share schemes: creating long-term shareholder value.

Some of you have highlighted the ongoing public debate over levels of executive remuneration and I assure you that REMCO is sensitive to that discussion. We have changed the benchmarking comparator group for our executive remuneration, but that does not create an upward pressure. Also, when making pay decisions for Executive Directors, REMCO considers a number of factors related to pay and conditions for the wider workforce. In our view the important point is that all employees are fairly and competitively paid and we benchmark this at all levels and by market. Also remuneration for Executive Directors must make sense and show consistency in the internal hierarchy. As a consequence REMCO has been careful with pay increases. In fact, REMCO has maintained similar starting base salaries for each new CEO over the past decade and also bonus and LTIP opportunities have remained at similar levels.

REMCO will continue to actively monitor evolving market practice and provide information to shareholders that is helpful in assessing the appropriateness of pay. However, with a workforce spread around the globe and an executive remuneration structure designed to have significant variability depending on performance, we feel that reporting a single figure based pay ratio will not be helpful in steering the debate.

Finally, Shell has for some time adopted a "no adjustments" philosophy to remuneration performance metrics: we do not move the target goalposts when the broader business context changes. Most shareholders I have spoken to tell me they appreciate the transparency this creates, particularly when oil prices are decreasing. We continue to believe in this "no adjustments" philosophy.

## 2016 PERFORMANCE CONTEXT

2016 was a challenging year given the external environment. It was also a major transition year within Shell following the acquisition of BG, with many parts of the organisation having to juggle change and challenges. Within this context, Shell delivered strongly on change and operations, underpinned by solid sustainable development outcomes, but cash flow was lower than expected. This performance context has resulted in the annual bonus scorecard outcomes described below.

The Board is committed to delivering the value from the BG acquisition and REMCO supported this by introducing a synergy target in the bonus scorecard for 2016. We completed the BG acquisition and integration, capturing more value than anticipated, and this is reflected in the synergies scorecard outcome.

By the end of 2016 we had made good progress against our strategy to become a world-class investment case. However, cash flow from operating activities was below threshold for the year. This was mainly due to the impact of lower oil, gas and LNG prices in Upstream and Integrated Gas. Downstream cash flow was also lower, mainly due to weaker refining margins and higher working capital.

The project delivery score was outstanding, reflecting the organisation's extra efforts to deliver projects within budget and on schedule. Our production volumes achieved a score of outstanding supported by strong operational performance across various assets and higher entitlement from production-sharing contracts. Our LNG liquefaction volumes scored above target although they were impacted by lower feedgas availability. Our combined refinery and chemicals plant availability measure was below target due to increased planned and unplanned maintenance.

Sustainable development was on target with our process safety performance in particular making a step-change improvement.

## DECISIONS MADE

Against the above-mentioned background, REMCO made the following decisions regarding the remuneration of the Executive Directors.

REMCO approved an annual bonus scorecard outcome of 1.11. This was the mathematical outcome and no discretion was applied by REMCO.

We believe individual performance targets are very important. They reinforce and drive a company-wide culture of individual performance and behaviour. The Chair reviewed the CEO's performance with REMCO, and the CEO discussed the Chief Financial Officer's (CFO) performance with REMCO. Having considered this input, REMCO determined to award each of the CEO and CFO an on-target individual performance factor of 1.0.

We are constantly looking at whether our remuneration structure is delivering its intended outcome. Nevertheless, some of you made it clear last year that you felt the bonus was too high. As part of this process of ongoing review, we have examined the target-setting landscape. We looked at bonus payments made over the last decade and observed that two areas were consistently delivering high outcomes: project delivery and sustainability. We concluded that Shell would be better served by more stretching targets in those areas. We had a discussion with the Corporate and Social Responsibility Committee and worked with them to apply more ambitious aims. We also consulted with the project delivery team and tightened the "on schedule" performance target for 2016 and beyond.

The 2014 LTIP award vested below target at 84% (or 42% of maximum). I am confident that our strategy provides the clarity and focus needed to help reshape Shell into a world-class investment case. We need to continue to focus on delivering higher returns on capital employed, higher free cash flow and, of course, reducing debt. Shell has improved its competitive position against the other oil majors, with strong relative three-year performance in cash flow from operating activities and return on average capital employed (ROACE), along with median EPS performance, but lagging three-year total shareholder return (TSR).

There were no significant changes made to the remuneration structure during 2016 and all awards were made in line with the policy approved by shareholders at the 2014 AGM.

## CFO TRANSITION

As previously announced, Simon Henry stands down as CFO on March 9, 2017, and details of his termination payments are summarised on page 87.

REMCO determined the remuneration arrangements for Jessica Uhl who is appointed an Executive Director and CFO with effect from March 9, 2017. These arrangements are set out on page 88.

## LOOKING AHEAD

We were grateful for all your constructive feedback in 2016 and glad to have taken it on board in our final proposals. We were also pleased that the vast majority of you indicated your support of Shell's philosophy and policy on remuneration. With your continued input, we will review Shell's remuneration policy regularly to ensure it continues to reinforce Shell's long-term strategy and remains closely aligned with your interests.

## Directors' Remuneration Report *Continued*

The start of 2017 has been characterised by finalising the proposed Directors' Remuneration Policy which is subject to shareholder approval at the 2017 AGM and implementing certain elements within the boundaries of the existing Directors' Remuneration Policy. We will then move into a phase of monitoring its performance. We want to see evidence that, through the measures I have outlined, we have a pay structure that rewards performance in line with delivery of the strategy.

### THIS REPORT

This Directors' Remuneration Report for 2016 has been prepared in accordance with relevant UK corporate governance and legal requirements, in particular Schedule 8 of The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended). The Board has approved this report.

This report consists of two further sections:

- the Annual Report on Remuneration (describing 2016 remuneration as well as implementation of the proposed Directors' Remuneration Policy in 2017) which will be subject to an advisory vote at the 2017 AGM; and
- the proposed Directors' Remuneration Policy which will be subject to a binding vote at the 2017 AGM.

**Gerard Kleisterlee**  
Chair of REMCO  
March 8, 2017

## ANNUAL REPORT ON REMUNERATION

The Annual Report on Remuneration sets out:

- REMCO and its responsibilities and activities;
- a summary of our policy (as approved by shareholders at the 2014 AGM) in place in 2016, alongside a summary of the planned implementation of the proposed policy in 2017 which, subject to shareholder approval at the 2017 AGM, will take effect from May 23, 2017, and will be effective until the 2020 AGM, unless a further policy is proposed by the Company and approved by shareholders in the meantime;
- the statement of implementation of the planned policy in 2017; and
- Directors' remuneration for 2016.

The base currency in this Annual Report on Remuneration is the euro, as this is the currency of the base salary of the Executive Directors. Where amounts are shown in other currencies, an average exchange rate for the relevant year is used, unless a specific date is stated, in which case the average exchange rate for the specific date is used.

### REMUNERATION COMMITTEE

The following Directors were members of REMCO during 2016:

- Gerard Kleisterlee (Chair of REMCO);
- Patricia A. Woertz; and
- Gerrit Zalm.

Their biographies are given on pages 61-62; REMCO meeting attendance is given on page 69.

REMCO's key responsibilities in respect of Executive Directors include:

- setting the remuneration policy;
- agreeing performance frameworks, setting targets and reviewing performance;
- determining actual remuneration and benefits; and
- determining contractual terms.

In addition, REMCO has the responsibility for the Chair of the Board's remuneration and for recommending and monitoring the level and structure of remuneration for Senior Management.

REMCO operates within its terms of reference, which are regularly reviewed. They were last updated on January 28, 2015, and are available at [www.shell.com](http://www.shell.com).

Advice from within Shell on various subjects, including the Executive Directors' annual bonus scorecard architecture and the remuneration of Senior Management, was provided by:

- Ben van Beurden, CEO;
- Ronan Cassidy, Chief Human Resources & Corporate Officer and Secretary to REMCO; and
- Stephanie Boyde, Executive Vice President Remuneration, Benefits & Services.

The Chair of the Board and the CEO were consulted on remuneration proposals affecting the CFO.

REMCO requested TSR data against a number of indices and comparator groups from Kepler. The fees were £14,800 and Kepler did not provide any other advice.

During 2016, REMCO met seven times and its activities included:

- approving the 2015 Directors' Remuneration Report;
- reviewing the Directors' Remuneration Policy and alignment with strategy;
- consulting with major shareholders;
- setting annual bonus performance measures and targets;
- deciding on base salaries for the CEO and the CFO;
- determining the 2015 annual bonus outcomes;
- determining vesting of the 2013 LTIP award for the CEO and LTIP and Deferred Bonus Plan (DBP) awards for the CFO; and
- tracking external developments and assessing their impact on Shell's remuneration policy.

## Annual Report on Remuneration *Continued*

### Remuneration policy and practice at a glance

Summary of the policy approved by shareholders at the 2014 AGM (effective January 1, 2015). This policy is set out in full on pages 98-105 of the 2015 Royal Dutch Shell plc Annual Report and Form 20-F.

Implementation of the policy approved by shareholders at the 2014 AGM in 2016.

Planned implementation of the proposed policy (which is subject to shareholder approval at the 2017 AGM) in 2017[A]. This policy is set out on pages 96-103.

#### Base salary and pensionable salary

- Reviewed annually after considering a range of factors including market positioning, tenure and experience, planned increases for other employees, Shell's performance and individual performance. Maximum: €2,000,000.

- CEO base salary and pensionable salary: €1,460,000 (+2.1%).
- CFO base salary: €1,040,000 (+1.0%); pensionable salary: £780,000 (+2.0%).

- CEO base salary and pensionable salary: €1,490,000 (+2.1%).
- CFO (Simon Henry) base salary: €1,040,000 (unchanged); pensionable salary: £780,000 (unchanged).
- CFO (Jessica Uhl) base salary: €980,000.

#### Benefits

- Typically include car allowance, transport between home and office, medical insurance. Mobility policies and tax equalisation related to expatriate employment before Board appointment or to offset double taxation may also apply.

- CEO and CFO received standard benefits.

- No change in standard benefits.

#### Annual bonus

- Target bonus as a % of base salary: CEO 150%; CFO 120%.
- Maximum: CEO 250%; CFO 240%.
- Calculated as base salary x target bonus % x scorecard result (0-2) against short-term strategic targets, adjusted for individual performance with a 0-1.2 multiplier.
- 50% delivered in cash, 50% deferred into shares and released after three years, together with dividend shares accrued over the deferral period.
- Subject to malus and clawback provisions.
- Scorecard measures: cash flow from operating activities (30%); operational excellence (50%); and sustainable development (20%).

- Scorecard mathematical outcome: 1.11. Individual performance multiplier: 1.0.
- Bonus paid in respect of 2016: CEO 164% of base salary, CFO 130% of base salary. This represents around 109% of their respective target bonuses.

- Same bonus opportunities as in 2016.
- In order to align with the refreshed strategy, measures under operational excellence have been rebalanced and are equally weighted. Sustainable development now includes GHG metrics.
- 50% is delivered in cash and 50% is delivered in shares. Shares are subject to a three-year holding period which applies beyond an Executive Director's tenure.

#### LTIP

- Maximum award: 400% of base salary. Between 0% and 200% of the initial award may vest, depending on relative performance over a three-year period.
- Vesting capped at 50% of the maximum payout if there is no vesting on the TSR element.
- Additional shares are released representing the value of dividends payable on vested shares.
- Vested shares must be held for a further two years.
- Subject to malus and clawback provisions.
- Performance measures: TSR (30%), EPS (30%), ROACE (20%) and cash flow from operating activities (20%).

- Award as a % of base salary: CEO 340%; CFO 270%.
- Vesting of 2014 award: 84% of target (42% of maximum). The performance measures of the 2014 award were the same as those applying to the 2016 award.

- Same award opportunities as in 2016.
- FCF replaces EPS, and the weighting of the four measures has been set at 25% each.
- Vested LTIP shares are subject to a three-year holding period post-vesting which applies beyond an Executive Director's tenure.

#### Pension

- Retirement benefits maintained in base country pension arrangements.
- CEO: Dutch defined benefit and net pay defined contribution pension plans.
- CFO: UK defined benefit pension plans.

- CEO: maximum pensionable salary for future defined benefit accruals of €91,269. Net pay defined contribution pension plan: employer contribution: 24% of salary in excess of €91,269.
- CFO: no change to the pension plans.

- No changes to the pension plans in which the CEO and CFO (Simon Henry) participate.
- CFO (Jessica Uhl): continued membership of the Shell US retirement benefit arrangements.

#### Shareholding

- Requirement as a % of base salary: CEO: 700%; CFO: 400%.
- Expected to be reached through retention of vested shares, within five years of appointment and maintained for the full period of appointment.

- Actual holding at year end: CEO: 213% of base salary; CFO: 1,090% of base salary.

- No change in shareholding requirements.

[A] See CFO transition arrangements on page 88 for further details of the remuneration terms for Jessica Uhl, who is appointed an Executive Director and CFO with effect from March 9, 2017.

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## STATEMENT OF 2017 PLANNED POLICY IMPLEMENTATION

The proposed Directors' Remuneration Policy as outlined on pages 96-103 will, subject to shareholder approval at the 2017 AGM, take effect from May 23, 2017, and will be effective until the 2020 AGM, unless a further policy is proposed by the Company and approved by shareholders in the meantime. The existing Directors' Remuneration Policy is similar and this section generally describes elements that apply for 2017 and/or have changed within the boundaries of the current policy.

## COMPARATOR GROUP

The 2017 benchmarking comparator group consists of the other oil majors as well as a selection of major Europe-based companies. The European comparator group has been updated to ensure the companies included remain comparable to Shell in size and complexity, and to exclude industries where the pay structure is driven by regulatory requirements, such as banking. Daimler and Nestle have been added, while Anglo American, BG Group, Philips, SABMiller, and banks (Barclays, Deutsche Bank and HSBC), have been removed.

### 2017 European comparator group

Allianz	Daimler	Rio Tinto
AstraZeneca	Diageo	Roche
BAT	GlaxoSmithKline	Siemens
Bayer	Nestle	Unilever
BHP Billiton	Novartis	Vodafone

## EXECUTIVE DIRECTORS

### Salaries

Effective from January 1, 2017, the base salary and pensionable base salary were set at €1,490,000 (+2.1%) for Ben van Beurden, CEO. The base salary set for Simon Henry, CFO, was unchanged at €1,040,000 and his pensionable base salary remains at £780,000.

When determining base salaries, REMCO considered: the external market positioning of the Executive Directors' compensation packages; Senior Management salaries; the planned average increases for 2017 for other employees across three major countries (the Netherlands, the UK and the USA); the impact of the increase on other elements of the package; the current economic conditions and Shell's own performance; and the conservative positioning of the CEO's base salary on appointment (his 2017 salary remains below that of his predecessor on appointment in 2009).

### Annual bonus

The 2017 performance measures will remain aligned with a number of our performance indicators set out on pages 20-21 and comprise cash flow from operating activities, operational excellence and sustainable development measures. In order to align with the refreshed strategy, measures under operational excellence have been rebalanced and are equally weighted and sustainable development now includes GHG metrics. Synergies were included as a one-off measure in 2016 and will not be included in the 2017 scorecard.

Annual bonus scorecard targets are not disclosed prospectively because to do so in a meaningful manner would require the disclosure of commercially sensitive information. As in previous years, scorecard targets will be disclosed in a subsequent Directors' Remuneration Report when they are no longer deemed to be commercially sensitive. Disclosure of detailed personal targets is inappropriate as these are deemed commercially sensitive. However, the basis for the determination of the individual multiplier will be disclosed.

50% of the annual bonus awarded for the 2017 performance year will, subject to shareholder approval of the proposed Directors' Remuneration Policy at the 2017 AGM, be delivered in shares and subject to a three-year holding period which remains in force beyond an Executive Director's tenure.

## Long-term Incentive Plan

On February 3, 2017, a conditional award of performance shares under the LTIP was made to the CEO. The award had a face value of 340% of the base salary, resulting in 198,900 Royal Dutch Shell plc A shares (A shares) being awarded conditionally to Ben van Beurden.

For LTIP awards made in 2017, performance is assessed over a three-year period based on four financial measures. FCF (25%) is based on absolute performance and relative performance is compared with the other oil majors on the following measures:

- TSR, calculated in dollars using a 90-day averaging period around the start and end of the performance period (25%);
- ROACE growth (25%). For this purpose, in order to facilitate the comparison, the calculation of ROACE differs from that described in "Performance indicators" on page 21 as there is no adjustment for aftertax interest expense; and
- Cash flow from operating activities growth (25%).

The vesting schedule for the relative measures is unchanged from 2016. The target for FCF, along with the ranges for threshold and outstanding performance, will be set by reference to Shell's operating plan, being the aggregate of our plan FCF targets over the three-year performance period. As a result, targets will only be disclosed retrospectively after the three-year period. Updates will be provided in each Annual Report on Remuneration. 20% of the maximum available under this measure will be payable for threshold performance rising to full vesting of that measure for outstanding performance. A straight-line vesting schedule will apply for performance between threshold and outstanding.

Vested LTIP shares are subject to a three-year holding period which remains in force beyond an Executive Director's tenure.

## CFO transition arrangements

Simon Henry stands down from the Board and his role as CFO with effect from March 9, 2017. In accordance with Shell's policy for employees who work outside their base country, he will repatriate to his base country, which is the UK, and will become an employee of Shell International Limited with effect from April 1, 2017. He remains available to the incoming CFO and to the Board to assist with the transition and will leave employment with Shell on June 30, 2017. The end of employment arrangements set out below are in accordance with the policy approved by shareholders at the 2014 AGM:

- Payment for loss of office: a gross payment of €2,288,000, equivalent to one times annual pay (base salary plus target bonus). The payment will be phased in six equal monthly instalments, and outstanding payments will be reduced by 50% if Simon Henry resumes an equivalent full-time executive role in that period.
- Annual bonus: an annual bonus in relation to performance year 2016 is disclosed on page 90. 50% of this bonus was deferred into the Deferred Bonus Plan (DBP). The annual bonus in relation to performance year 2017 will be determined by REMCO and will be prorated for all service in 2017. In accordance with the proposed policy (which is subject to shareholder approval at the 2017 AGM), 50% of the bonus will be delivered in cash and 50% will be delivered in shares; and the shares will be subject to a three-year holding period which remains in force after Simon Henry leaves the employment of Shell International Limited.
- LTIP and DBP:
  - No 2017 LTIP award will be made.
  - Outstanding LTIP awards will not vest early and will be prorated for service.
  - Outstanding DBP awards will not vest early and are not prorated. The applicable holding periods remain in force post-leaving employment.
  - The conditional LTIP awards and outstanding DBP awards described above are subject to adjustment events (malus and clawback) and these provisions remain in force.
- Pension: accrued pension benefits for 2017 will be reported in the 2017 Director's Remuneration Report.
- Benefits: standard Shell provisions apply in respect of tax return assistance and relocation support (such as movement of household goods, transportation and temporary accommodation).

## Annual Report on Remuneration Continued

Jessica Uhl is appointed an Executive Director and CFO with effect from March 9, 2017. Her remuneration for 2017 will be reported in the 2017 Directors' Remuneration Report, as appropriate. The remuneration policies for the CFO role remain unchanged and key elements are summarised below:

- Annual base salary: €980,000.
- 2017 target bonus: 120% of base salary. For performance year 2017, the bonus will be prorated for service as CFO.
- Conditional LTIP award: 270% of base salary.
- Shareholding guideline: 400% of base salary.
- Pension: continued membership of the Shell US retirement benefit arrangements, which include the Shell Pension Plan, a defined benefit plan, and the Shell Provident Fund, a defined contribution plan. REMCO has determined that, exceptionally under US arrangements, no element of bonus will be included in determining pensionable compensation. As for all other pre-2013 members of the Shell Pension Plan, Jessica Uhl has an annual choice of two accrual options with different forms of benefits, one in the form of a lifetime pension annuity and the other normally in the form of a lump sum.

Prior to her appointment as CFO, Jessica Uhl was on expatriate terms and conditions in the Netherlands and her employment arrangements were governed by Shell's mobility policies, which include tax equalisation. These terms and conditions cease upon her appointment as CFO with effect from March 9, 2017. However, as a consequence of her expatriate assignment, any tax liability arising in respect of prior assignment income, pension benefits or future vesting of past share plan awards will be settled by Shell in accordance with Shell's mobility policies and appropriate disclosures will be made in future Directors' Remuneration Reports.

### Adjustment (malus) and recovery (clawback)

Bonus, DBP and LTIP are subject to adjustment (malus) and recovery (clawback) provisions, which may apply in case of direct responsibility or supervisory accountability.

REMCO may adjust an award, for example by lapsing part or all of it, reducing the number of shares which would otherwise vest, by imposing additional conditions on it, or imposing a new holding period. Award adjustments may be made as a result of: Shell restating the relevant year(s)' financial statements due to material non-compliance with any financial reporting requirement; an individual's misconduct or misconduct through the individual's direction or non-direction, which influenced the metrics and outcomes used in determining the individual's annual bonus or LTIP outcome; any material breach of health and safety or environment regulations; serious reputational damage to Shell; material failure of risk management; and other exceptional events at the discretion of REMCO.

Adjustment may also apply after employment ends if the individual: (a) breaches any provision of his/her employment contract which applies after cessation of employment or any provision of an agreement entered into on termination of employment; (b) is found to have committed fraud or dishonesty with respect to Shell; (c) wilfully damaged the assets of or engaged in misconduct which, in any material respect, is or was injurious to Shell; (d) wrongfully disclosed or used any proprietary or confidential information which is related to the business, properties or affairs of Shell and the release of which is detrimental, in any material respect, to the competitive position or goodwill of Shell; (e) engaged in any activity which, in any material respect, reasonably constituted a conflict with the interests of Shell; or (f) breached any business principle or a term of any code of conduct applicable to employees or former employees of Shell.

Clawback applies in case of restatement of financial statements due to material non-compliance with any financial reporting requirement or as a result of the individual's misconduct or misconduct through the individual's direction or non-direction, which influenced the metrics and outcomes used in determining his/her annual bonus or LTIP outcome.

### Pension

There are no changes to the pension plans in which the CEO and CFO participate.

### NON-EXECUTIVE DIRECTORS' FEES

The Chair's fee is determined by REMCO and the annual fee for Charles O. Holliday was set at €850,000 upon appointment in 2015. REMCO reviewed the Chair's fee in 2016 and determined that it would remain unchanged for 2017.

A Non-executive Director receives a basic fee, and there are additional fees for the Senior Independent Director, a Board committee chair or a Board committee membership for each committee. Non-executive Directors receive an additional fee of €5,000 for any Board meeting involving intercontinental travel, except for one meeting a year held in a location other than The Hague. Business expenses (including transport between home and office and occasional business-required spouse travel) and associated tax are paid or reimbursed by Shell. The Chair has use of Shell-provided accommodation in The Hague.

The Board reviews Non-executive Directors' fees periodically to ensure that they are aligned with those of other major listed companies. A review was carried out in 2016, which resulted in an increase in the basic fee from €130,000 to €135,000, an increase in the Audit Committee Chair fee from €55,000 to €60,000, and an increase in the Remuneration Committee Chair fee from €35,000 to €40,000, effective January 1, 2017.

Annual fees for 2017 are indicated in the "Non-executive Directors' fees 2017" table.

### Non-executive Directors' fees 2017

	€	Other fees
Chair of the Board	850,000	Non-executive
Non-executive Director	135,000	Directors receive
Senior Independent Director	55,000	an additional fee
Audit Committee		of €5,000 for any
Chair [A]	60,000	Board meeting
Member	25,000	involving
Corporate and Social Responsibility		intercontinental
Committee		travel – except
Chair [A]	35,000	for one meeting
Member	17,250	a year held in
Nomination and Succession Committee		a location other
Chair [A]	25,000	than The Hague
Member	12,000	
Remuneration Committee		
Chair [A]	40,000	
Member	17,250	

[A] The chair of a committee does not receive an additional fee for membership of that committee.

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## DIRECTORS' REMUNERATION FOR 2016 NON-EXECUTIVE DIRECTORS' REMUNERATION FOR 2016

### Single total figure of remuneration for Non-executive Directors (audited)

	Fees		Taxable benefits[A]		€ thousand Total	
	2016	2015	2016	2015	2016	2015
Guy Elliott	167	197	–	–	167	197
Euleen Goh	225	190	–	–	225	190
Charles O. Holliday [B]	850	616	77	121	927	737
Gerard Kleisterlee	190	190	–	–	190	190
Sir Nigel Sheinwald	147	147	–	1	147	148
Linda G. Stuntz	197	190	–	–	197	190
Hans Wijers	232	219	–	–	232	219
Patricia A. Waertz	195	183	–	19	195	202
Gerit Zalm	147	165	–	–	147	165

[A] UK regulations require the inclusion of benefits where these would be taxable in the UK, on the assumption that Directors are tax residents in the UK. On this premise, the taxable benefits include the cost of Non-executive Director's occasional business-required spouse travel. Shell also pays for travel between home and the head office in The Hague, where Board and committee meetings are typically held, as well as related hotel and subsistence costs. For consistency, these business expenses are not reported as taxable benefits as for most Non-executive Directors this is international travel and hence would not be taxable in the UK.

[B] Including the use of an apartment (2016: €70,157; 2015: €93,467).

## EXECUTIVE DIRECTORS' REMUNERATION FOR 2016

### Single total figure of remuneration for Executive Directors (audited)

	Ben van Beurden		€ thousand Simon Henry	
	2016	2015	2016	2015
Salaries	1,460	1,430	1,040	1,030
Taxable benefits	22	42	24	24
Total fixed remuneration	1,482	1,472	1,064	1,054
Annual bonus [A]	2,400	3,500	1,350	2,050
LTIP and DBP [B]	4,381	163	2,644	427
Total variable remuneration	6,781	3,663	3,994	2,477
<b>Total direct remuneration</b>	<b>8,263</b>	<b>5,135</b>	<b>5,058</b>	<b>3,531</b>
Pension [C]	330	441	524	428
Tax equalisation [D]	–	–	374	408
<b>Total remuneration including pension and tax equalisation</b>	<b>8,593</b>	<b>5,576</b>	<b>5,956</b>	<b>4,367</b>
in dollars	9,515	6,190	6,595	4,848
in sterling	7,046	4,049	4,884	3,171

[A] The full value of the bonus, comprising both the non-deferred and deferred value. For 2016, 50% is deferred into the DBP. For 2016, the market price of A and B shares on February 3, 2017 (€25.47 and £22.85 respectively), was used to determine the number of deferred bonus shares, resulting in 47,114 A shares for Ben van Beurden and 25,339 B shares for Simon Henry.

[B] Remuneration for performance periods of more than one year, comprising the value of released LTIP awards and DBP performance matching shares. The amounts reported for 2016 relate to the 2014 awards, which vested on March 1, 2017, at the market price of €24.78 and £22.28 for A and B shares respectively. The value in respect of the LTIP and DBP is calculated as the product of: the number of shares of the original award in the case of the LTIP plus accrued dividend shares; the vesting percentage; and the closing market price of A or B shares at the vesting date. The market price of B shares is converted into euros using the exchange rate on the respective date. The original deferred bonus share awards, which are those represented by the deferred bonus and dividend shares accrued on these shares, are not considered as long-term remuneration, as they relate to the short-term annual bonus value.

[C] The accrual for the period (net of inflation) multiplied by 20 in accordance with UK reporting regulations.

[D] As Simon Henry spent over 10 years in the Netherlands, tax relief on employee and employer contributions to the Shell Overseas Contributory Pension Fund under the terms of the UK/Netherlands double tax agreement ceased on May 1, 2014. Tax equalisation of the pension contributions for Simon Henry has applied since then.

### NOTES TO THE SINGLE TOTAL FIGURE OF REMUNERATION FOR EXECUTIVE DIRECTORS TABLE (AUDITED)

#### Salaries

As disclosed in the 2015 Directors' Remuneration Report, REMCO set Ben van Beurden's base salary and pensionable salary for 2016 at €1,460,000 (+2.1%) and Simon Henry's base salary at €1,040,000 (+1.0%) and pensionable salary at £780,000 (+2.0%), effective from January 1, 2016.

#### Taxable benefits

Executive Directors received car allowances or lease cars, transport between home and office, occasional business-required spouse travel, as well as employer contributions to life and medical insurance plans.

#### Annual bonus

The scorecard contains independent business measures grouped in three sections: financial, operational excellence and sustainable development. At the beginning of the year, REMCO sets a target range and weighting for each scorecard measure. The actual outcome for each measure results in a score of between zero and two, with a score of one representing "on target". These scores are multiplied by the respective weighting of each measure and aggregated, resulting in a mathematical scorecard outcome of between zero and two. REMCO may then make an adjustment to the overall scorecard outcome in view of the wider business performance for the year.

An Executive Director's individual performance is also taken into account in determining their annual bonus through the application of a multiplier between zero and 1.2. Individual performance is assessed against personal targets. Retrospective disclosure of detailed personal targets is inappropriate as these are deemed to be commercially sensitive.

50% of the annual bonus is deferred into shares, which are to be retained for three years.

## Annual Report on Remuneration Continued

### Determination of the 2016 annual bonus

The mathematical scorecard outcome for 2016 was 1.11 and REMCO approved this outcome without exercising discretion. REMCO noted that the outcome was positively impacted by strong performance on operational excellence measures, with the exception of refinery and chemical plant availability due to increased planned and unplanned maintenance, as well as the accelerated delivery of synergies. Sustainable development was on target with our process safety performance in particular making a step-change improvement. However, these scores were offset by the impact of low oil and gas prices and weaker refining margins on cash flow from operating activities, which was below threshold.

The CEO delivered strongly on a range of fronts. He provided hands-on leadership in the delivery and integration of BG and led the reshaping of Shell, during a transformative year, towards the goal of being world-class investment. A clear strategy was put in place which will help Shell to move to a more focused and resilient company. This strategy included the creation of a New Energies business in order to position Shell as a key player in the world's energy future.

The CFO made a strong personal contribution to closing the BG deal and led the exceptionally successful integration. The synergy opportunities and deal value drivers from BG were well identified and are delivering. Good progress was also made in reducing capital investment and operating expenses, which required some tough decisions. Some successful divestments against a tough industry backdrop were also delivered.

REMCO was satisfied with the delivery of individual performance targets and determined no discretionary performance adjustment for the CEO and CFO. The CEO and CFO received an on-target individual performance factor of 1.0.

The final, rounded, 2016 bonus outcomes for the Executive Directors were: €2,400,000 or 164% of base salary for the CEO and €1,350,000 or 130% of base salary for the CFO. Half of the bonus is deferred into shares under the DBP. The table below summarises the 2016 annual bonus scorecard measures including their weightings, targets and outcomes. Charts illustrating the calculation of the final 2016 bonus payable to the CEO and CFO are also provided.

### 2016 annual bonus outcome (audited)

Measures	Weight (% of scorecard)	Threshold	Target set	Outstanding	Result achieved	Score (0-2)
<b>Cash flow from operating activities (\$ billion) [A]</b>	<b>20%</b>	23.0	29.0	35.0	21.3	<b>0.00</b>
<b>Synergies (\$ billion)</b>	<b>10%</b>	1.2	1.4	1.6	2.8	<b>2.00</b>
<b>Operational excellence</b>	<b>50%</b>					<b>1.44</b>
Project delivery: identified projects on time and budget (%)	20%	60%	80%	100%	94%	1.70
Production (kboe/d)	12%	3,437	3,543	3,649	3,668	2.00
LNG liquefaction volumes (mtpa)	6%	29.6	30.5	31.4	30.9	1.42
Refinery and chemical plant availability (%)	12%	89.4	91.4	93.4	90.3	0.44
<b>Sustainable development</b>	<b>20%</b>					<b>0.98</b>
Total recordable case frequency (injuries/million hours)	5%	1.20	0.96	0.72	1.00	0.83
Operational Tier 1 process safety events (number)	5%	68	54	40	39	2.00
Volume of operational spills (thousand tonnes)	4%	0.9	0.7	0.5	0.7	1.00
Refining Energy Intensity Index (EII™) (indexed to 2002)	4%	96.8	92.2	87.6	95.4	0.31
Fresh water intensity (cubic metres per tonne of production) oil sands	2%	2.80	2.25	1.70	2.74	0.11
	<b>100%</b>					<b>1.11</b>

### Mathematical scorecard outcome

**1.11**

[A] Excluding tax on divestments.

### 2016 bonus outcome calculation

#### BEN VAN BEURDEN

##### Target bonus:

€1,460,000 (base salary)  
x 150% =  
€2,190,000



2016 scorecard  
result = 1.11



Individual performance  
factor = 1.0



**€2,400,000 [A]**  
(164% of base salary)

#### SIMON HENRY

##### Target bonus:

€1,040,000 (base salary)  
x 120% =  
€1,248,000



2016 scorecard  
result = 1.11



Individual performance  
factor = 1.0



**€1,350,000 [A]**  
(130% of base salary)

[A] Rounded downwards to the nearest €50,000.



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## Long-term Incentive Plan vesting

In 2014, Ben van Beurden and Simon Henry were each granted a conditional award of performance shares under the LTIP. For Ben van Beurden, this award was based on 300% of his base salary, with a maximum vesting of 600%. For Simon Henry, this award was based on 240% of his base salary, with a maximum vesting of 480%.

The LTIP vesting outcome at the end of the performance period (January 1, 2014 to December 31, 2016) is illustrated in the following LTIP vesting outcome table. REMCO also considered the underlying financial performance of Shell and decided to vest 84% of shares under the LTIP, using no discretion, resulting in 170,321 A shares for Ben van Beurden and 92,523 B shares for Simon Henry. At vesting, these shares (including accrued dividend shares) had a value of €4,220,554 and €2,419,143 respectively. These vested shares from the LTIP are subject to a further two-year holding period.

### LTIP vesting outcome

Measure	Weighting	Rank versus peers	Vesting
TSR	30%	12345	0%
EPS growth [A]	30%	12345	24%
ROACE growth	20%	12345	30%
Cash flow from operating activities growth	20%	12345	30%
<b>Total</b>			<b>84%</b>

[A] Diluted EPS growth on a current cost of supplies basis.

## Deferred Bonus Plan vesting

In 2014, Ben van Beurden and Simon Henry were each granted performance matching shares under the DBP. The performance period was January 1, 2014, to December 31, 2016. Given that the performance condition of the DBP is the same as for the 2014 LTIP, REMCO decided to vest 84% of the performance matching shares under the DBP, resulting in 6,469 A shares for Ben van Beurden and 8,588 B shares for Simon Henry. At vesting, these shares (including accrued dividend shares) had a value of €160,302 and €224,545 respectively. DBP awards no longer attract matching shares with effect from 2015.

## Pension

The CEO's pension arrangements comprise a defined benefit plan with a maximum pensionable salary of €91,269, and a net pay defined contribution pension plan with an employer contribution of 24% of salary in excess of €91,269, with the option to take cash as an alternative to pension contributions (in either case subject to income tax). The CEO has elected to take his benefit in the form of contributions throughout 2016.

The CFO's pension is in the form of defined benefit plans. See further details on pension arrangements on page 94.

## Annual Report on Remuneration Continued

### Scheme interests awarded to Executive Directors in 2016 (audited)

Scheme interest type	Type of interest awarded	End of performance period	Target award[A]	Potential amount vesting	
				Minimum performance (% of shares awarded)[B]	Maximum performance (% of shares of the target award)[A][C]
LTIP	Performance shares	December 31, 2018	Ben van Beurden: 236,302 A shares, equivalent to 3.4 x base salary or €4,964,000. Simon Henry: 141,465 B shares, equivalent to 2.7 x base salary or €2,808,000.	0%	Maximum number of shares vesting is 200% of the number of shares awarded, equivalent to €9,928,000 for Ben van Beurden and €5,616,000 for Simon Henry.

[A] Having considered the volatility of the A and B share prices during 2015, REMCO determined to use averages of the closing market prices over the three months leading up to the award date to determine the number of shares. This method was used instead of the standard approach of using the closing prices on the award date. Therefore, 2016 LTIP awards were based on three-month average market closing prices from November 5, 2015, to February 5, 2016, for A and B shares of €21.01 and €15.29 respectively.

[B] Minimum performance relates to the lowest level of achievement, for which no reward is given.

[C] The equivalent values exclude share price movements and accrued dividend shares.

The measures and weightings applying to LTIP awards made in 2016 were: TSR (30%); diluted EPS growth on a current cost of supplies basis (30%); ROACE growth (20%) and cash flow from operating activities growth (20%).

The LTIP will vest on the basis of the relative performance rankings as indicated in the table below.

### Relative performance rankings

Shell's rank against peers on each of the four performance measures	Number of conditional performance shares ultimately awarded, taking into account the weightings of the four performance measures
1st	200% of initial LTIP award
2nd	150% of initial LTIP award
3rd	80% of initial LTIP award
4th or 5th	Nil

If the TSR ranking is fourth or fifth, the level of the award that can vest on the basis of the three other measures will be capped at 50% of the maximum.

To deliver the shares under the LTIP, market-purchased shares are used rather than the issuing of new shares.

### STATEMENT OF DIRECTORS' SHAREHOLDING AND SHARE INTERESTS (AUDITED)

#### SHAREHOLDING GUIDELINES

REMCO believes that Executive Directors should align their interests with those of shareholders by holding shares in the Company. The CEO is expected to build a shareholding with a value of 700% of base salary, and other Executive Directors 400% of base salary. Only unfettered shares count. The bonus deferred into shares under the DBP (net of tax) and the vested LTIP shares (subject to holding requirements) count towards the guidelines. Ben van Beurden has not yet met the required shareholding level. Simon Henry has done so. Non-executive Directors (NEDs) are encouraged to hold shares with a value equivalent to 100% of their fixed annual fee and maintain that holding during their tenure.

### Executive Directors' shareholding (audited)

Executive Director	Shareholding guideline (% of base salary)	Value of shares counting towards guideline (% of base salary at December 31, 2016)[A]
Ben van Beurden	700%	213%
Simon Henry	400%	1,090%

[A] Representing the value of share interests and the estimated after-tax value of DBP shares (not subject to performance conditions).

### DIRECTORS' SHARE INTERESTS

The interests (in shares of the Company or calculated equivalents) of the Directors in office during 2016, including any interests of their connected persons, are set out in the table below.

### Directors' share interests [A] (audited)

	January 1, 2016		December 31, 2016	
	A shares	B shares	A shares	B shares
Ben van Beurden	28,062	–	33,703	–
Guy Elliott	–	5,777	–	5,825
Euleen Goh	–	5,000	–	12,895
Simon Henry	54,368	306,844	54,368	305,959
Charles O. Holliday	–	50,000 [B]	–	50,000 [B]
Gerard Kleisterlee	5,254	–	5,254	–
Sir Nigel Sheinwald	–	1,000	–	1,124
Linda G. Stuntz	–	12,400 [C]	–	12,400 [C]
Hans Wijers	5,251	–	5,251	–
Patricia A. Woertz	–	6,000 [D]	–	6,000 [D]
Gerrit Zalm	2,026	–	2,026	–

[A] Includes vested LTIP awards subject to holding conditions. Excludes unvested interests in shares awarded under the LTIP and DBP.

[B] Held as 25,000 ADSs (RDS.B ADS). Each RDS.B ADS represents two B shares.

[C] Held as 6,200 ADSs (RDS.B ADS). Each RDS.B ADS represents two B shares.

[D] Held as 3,000 ADSs (RDS.B ADS). Each RDS.B ADS represents two B shares.

The only changes in Directors' share interests during the period from December 31, 2016, to March 8, 2017, were that Simon Henry sold 50,000 B shares on February 15, 2017, and Ben van Beurden's interests increased by 96,735 A shares and Simon Henry's by 58,148 B shares resulting from the release of the 2014 LTIP and DBP awards, which vested on March 1, 2017.

At March 8, 2017, the Directors and Senior Management (pages 61-63) of the Company beneficially owned, individually and in aggregate (including shares under option), less than 1% of the total shares of each class of the Company shares outstanding.

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## DIRECTORS' SCHEME INTERESTS

The table below shows the aggregate position for Directors' interests under share schemes at December 31. These are A shares for Ben van Beurden and B shares for Simon Henry. During the period from December 31, 2016, to March 8, 2017, scheme interests have changed as a result of the vesting of the 2014 LTIP and DBP awards on March 1, 2017, and the 2017 LTIP and DBP awards made on February 3, 2017, as described on pages 91, 87 and 89 respectively.

### Directors' scheme interests (audited)

	Share plan interests[A]						Total	
	LTIP subject to performance conditions[B]		DBP not subject to performance conditions[C]		DBP subject to performance conditions[D]			
	2016	2015	2016	2015	2016	2015		
Ben van Beurden	662,359	425,817	179,621	79,839	7,564	7,025	849,544	512,681
Simon Henry	374,671	315,122	114,390	89,291	10,052	26,420	499,113	430,833

[A] Includes unvested long-term incentive awards and national dividend shares accrued at December 31. Interests are shown on the basis of the original awards. The shares subject to performance conditions can vest at between 0% and 200%. Dividend shares accumulate each year on an assumed national LTIP/DBP award. Such dividend shares are disclosed and recorded on the basis of the number of shares conditionally awarded but, when an award vests, dividend shares will be awarded only in relation to vested shares as if the vested shares were held from the award date. Shares released during the year are included in the "Directors' share interests" table.

[B] Total number of unvested LTIP shares at December 31, including dividend shares accrued on the original LTIP award.

[C] The number of shares deferred from the bonus (original DBP award) and the dividend shares accrued on these at December 31. Delivery of the original DBP award and the related accrued dividend shares is not subject to performance conditions.

[D] The target number of performance matching shares, which corresponds to the original DBP award. In accordance with the operation of the DBP until 2014, half of the shares from the bonus deferral are matchable with performance matching shares. The actual number of performance matching shares will be determined at vesting on the same basis as the LTIP vesting. DBP no longer attract matching shares with effect from 2015 awards.

## DILUTION

In any 10-year period, no more than 5% of the issued ordinary share capital of the Company may be issued or issuable under executive (discretionary) share plans adopted by the Company. To date, no shareholder dilution has resulted from these plans, although it is permitted under the rules of the plans subject to these limits.

## PAYMENTS TO PAST DIRECTORS (AUDITED)

On March 1, 2017, Peter Voser's 2014 DBP award vested at 84%. The value at vesting of the performance matching DBP shares was €452,210.

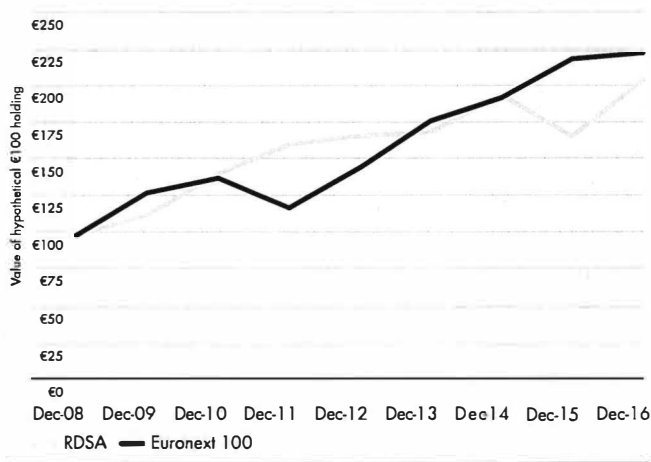
Payments below €5,000 are not reported as they are considered de minimis.

## TSR PERFORMANCE AND CEO PAY PERFORMANCE GRAPHS

The graphs below compare the TSR performance of the Company over the past eight financial years with that of the companies comprising the Euronext 100 and the FTSE 100 share indices. The Board regards these indices as appropriate broad market equity indices for comparison, as they are the leading market indices in the Company's home markets.

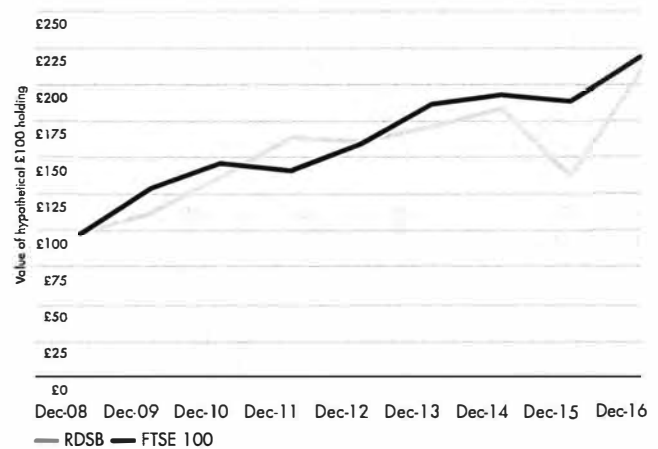
### Historical TSR performance (RDSA)

growth in the value of a hypothetical €100 holding over eight years  
Euronext 100 comparison based on 30 trading day average values



### Historical TSR performance (RDSB)

growth in the value of a hypothetical £100 holding over eight years  
FTSE 100 comparison based on 30 trading day average values



## Annual Report on Remuneration Continued

### CEO PAY OUTCOMES

The following table sets out the single total figure of remuneration, and the annual bonus payout and long-term incentive (LTI) vesting rates compared with the respective maximum opportunity, for the CEO for the last eight years.

#### CEO pay outcomes

Year	CEO	Single total figure of remuneration (€000)	Annual bonus payout against maximum opportunity	LTI vesting rates against maximum opportunity
2016	Ben van Beurden	8,593	66%	42%
2015	Ben van Beurden	5,576	98%	8%
2014	Ben van Beurden	24,198	94%	49%
2013	Peter Voser	8,456	44%	30%
2012	Peter Voser	18,246	83%	88%
2011	Peter Voser	9,941	90%	30%
2010	Peter Voser	10,611	100%	75%
2009	Peter Voser	6,228	50%	0%
2009	Jeroen van der Veer	3,748	66%	0%

Peter Voser stood down on December 31, 2013, and was succeeded by Ben van Beurden. Ben van Beurden's single figure for 2014 was impacted by the increase in pension accrual calculated under the UK reporting regulations and tax equalisation as a result of his promotion and prior assignment to the UK. Jeroen van der Veer stood down on July 1, 2009, and Peter Voser took over from that date. Only remuneration relating to their position as CEO is included.

### CHANGE IN REMUNERATION OF CEO AND EMPLOYEES FROM 2015 TO 2016

The CEO data compares the remuneration of Ben van Beurden for 2016 with 2015. The comparator group consists of local employees in the Netherlands, the UK and the USA. This is considered to be a suitable employee comparator group, because: these are countries with a significant Shell employee base; a large proportion of senior managers come from these countries; and REMCO considers remuneration levels in these countries when setting base salaries for Executive Directors.

Taxable benefits are those that align with the definition of taxable benefits applying in the respective country. In line with the "Single total figure of remuneration for Executive Directors" table, the annual bonus is included in the year in which it was earned.

#### Change in remuneration of CEO and employees

	CEO	Employees
Salaries	2.1%	1.8%
Taxable benefits	-46.4%	3.2%
Annual bonus	-31.4%	-7.1%

### RELATIVE IMPORTANCE OF SPEND ON PAY

Distributions to shareholders by way of dividends and share buybacks and remuneration paid to or receivable by employees for the last five years are set out below, together with annual percentage changes.

#### Relative importance of spend on pay

Year	Dividends and share buybacks[A]		Spend on pay (all employees)[B]	
	\$ billion	Annual change	\$ billion	Annual change
2016	15.0	25%	15.7	-8%
2015	12.0	-18%	17.1	5%
2014	14.6	-14%	16.4	0%
2013	17.1	35%	16.4	9%
2012	12.7	9%	15.1	3%

[A] Dividends paid, which includes the dividends settled in shares via our Scrip Dividend Programme, and repurchases of shares as reported in the "Consolidated Statement of Changes in Equity".

[B] Employee costs, excluding redundancy costs, as reported in Note 27 to the "Consolidated Financial Statements".

Spend on pay can be compared with the major costs associated with generating income by referring to the "Consolidated Statement of Income". Over the last five years, the average spend on pay was 5% of the major costs of generating income. These costs are considered to be the sum of: purchases; production and manufacturing expenses; selling, distribution and administrative expenses; research and development; exploration; and depreciation, depletion and amortisation.

### TOTAL PENSION ENTITLEMENTS (AUDITED)

During 2016, Ben van Beurden and Simon Henry accrued retirement benefits under defined benefit plans. The pension accrued under these plans at December 31, 2016, is set out below. The exchange rates used for conversion into euros and dollars are at December 31, 2016.

#### Accrued pension (audited)

	Thousand		
	Local	€	\$
Ben van Beurden	€1,174	€1,174	\$1,235
Simon Henry	£496	€579	\$609

The ages at which Ben van Beurden and Simon Henry can receive any pension benefit without actuarial reduction are 67 and 60 respectively. Any pension benefits on early retirement are reduced using actuarial factors to reflect early payment. No payments were made in 2016 regarding early retirement or in lieu of retirement benefits.

#### BEN VAN BEURDEN

Ben van Beurden is a member of the "Stichting Shell Pensioenfond", the pension plan for Shell employees in the Netherlands who joined before July 2013 that provides benefits in defined benefit form. Ben van Beurden is also a member of the Shell net pay defined contribution pension plan in the Netherlands with effect from January 1, 2015.

#### SIMON HENRY

Simon Henry is a member of the Shell Overseas Contributory Pension Fund (SOCPF) and the Shell Contributory Pension Fund (SCPF), with both these funded pension plans providing benefits in defined benefit form. The SOCPF provides benefits in respect of his periods of employment outside the UK, while the SCPF provides benefits in respect of his periods of employment in the UK. Simon Henry has elected to have his benefits from the SCPF restricted to the UK lifetime allowance with any excess provided from an unfunded arrangement, the Shell Supplementary Pension Plan.

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## EXTERNAL APPOINTMENTS

The Board considers external appointments to be valuable in broadening Executive Directors' knowledge and experience. The number of outside directorships is generally limited to one. Exceptions to this are considered in the final year of employment. The Board must explicitly approve such appointments. Executive Directors are allowed to retain any cash or share-based compensation they receive from such external board directorships.

Simon Henry was appointed a Non-executive Director of (i) Lloyds Banking Group plc with effect from June 2014 and his fee in 2016 was £135,000; and (ii) Rio Tinto plc with effect from July 1, 2017, as announced in February 2017.

## STATEMENT OF VOTING AT 2016 AGM

The Company's 2016 AGM was held on May 24, 2016, in the Netherlands. The results of the polls in respect of Directors' remuneration were as follows:

### Approval of Directors' Remuneration Report

Votes	Number	Percentage
For	3,469,740,309	85.83%
Against	573,049,761	14.17%
Total cast	4,042,790,070 [A]	100.00%
Withheld [B]	191,483,188	

[A] Representing 50.40% of issued share capital.

[B] A vote "withheld" is not a vote under English law and is not counted in the calculation of the proportion of the votes "for" and "against" a resolution.

The results of the polls in respect of the Directors' Remuneration Policy approved at the 2014 AGM were as follows:

### Approval of Directors' Remuneration Policy

Votes	Number	Percentage
For	3,167,299,751	92.90%
Against	242,225,203	7.10%
Total cast	3,409,524,954 [A]	100.00%
Withheld [B]	63,756,314	

[A] Representing 53.47% of issued share capital.

[B] A vote "withheld" is not a vote under English law and is not counted in the calculation of the proportion of the votes "for" and "against" a resolution.

## DIRECTORS' EMPLOYMENT ARRANGEMENTS AND LETTERS OF APPOINTMENT

Executive Directors are employed for an indefinite period. Non-executive Directors, including the Chair, have letters of appointment. Details of Executive Directors' employment arrangements can be found in the Directors' Remuneration Policy on pages 102-103. Further details of Non-executive Director terms of appointment can be found in the "Directors' Report" on page 65 and the "Corporate governance" report on page 68.

## COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT

During the year ended December 31, 2016, Shell paid and/or accrued compensation totalling \$43 million (2015: \$44 million) to Directors and Senior Management for services in all capacities while serving as a Director or member of Senior Management, including \$3 million (2015: \$4 million) accrued to provide pension, retirement and similar benefits. The amounts stated are those recognised in Shell's income on an IFRS basis. Personal loans or guarantees were not provided to Directors or Senior Management. See Note 28 to the "Consolidated Financial Statements".

## DIRECTORS' REMUNERATION POLICY

This section describes the Directors' Remuneration Policy (Policy) which, subject to shareholder approval at the 2017 Annual General Meeting (AGM), will take effect from May 23, 2017, and will be effective until the 2020 AGM, unless a further policy is proposed by the Company and approved by shareholders in the meantime.

The Policy has evolved over time, to align with: Shell's strategy, market practice and shareholders' views. A consistent and competitive structure, which applies across the workforce, is also a core principle. This consistency allows for a culture of shared purpose and performance.

The Executive Directors' remuneration structure is made up of a fixed element of basic pay and the majority of the package is tied to two variable elements: the annual bonus (50% delivered in shares) and the Long-term Incentive Plan (LTIP). Variable pay outcomes are conditional on the successful execution of the operating plan in the short term and financial out-performance over the longer term. Furthermore, the award of shares under the bonus and LTIP, along with significant shareholding requirements, is intended to ensure executives build up a sizeable shareholding stake in Royal Dutch Shell plc (the Company) and experience the same outcomes as shareholders.

The main aspects of the Policy, as approved by shareholders at the 2014 AGM, have been maintained. There are no changes to maximum opportunity levels for base salary, annual bonus and LTIP. Certain key updates made within the boundaries of the existing policy approved by shareholders at the 2014 AGM have been implemented with effect from January 1, 2017, including:

- Alignment with new strategy – updated performance measures for the bonus and LTIP.
- Long-term horizons – the holding period for LTIP vested shares has been extended to three years and continues to apply after Executive Directors leave employment.
- Strengthened governance – bonus removed from termination payment policy for Executive Directors appointed on or after January 1, 2017.

Subject to shareholder approval of the Policy at the 2017 AGM, the Deferred Bonus Plan (DBP) will be removed and instead 50% of the annual bonus will be delivered in cash and 50% will be delivered in shares. Shares are subject to a three-year holding period, which continues to apply after Executive Directors leave employment.

### EXECUTIVE DIRECTORS

#### Executive Directors' remuneration policy table

Element	Purpose and link to strategy	Maximum opportunity	Operation and performance measurement
Base salary and pensionable base salary	Provides a fixed level of earnings to attract and retain Executive Directors.	We have retained a maximum of €2,000,000, for both base salary and pensionable base salary, in the context of current peer group base salary levels.	<p>Base salary and pensionable base salary (where different) are reviewed annually with salary adjustments effective from January 1 each year.</p> <p>In making salary determinations, the Remuneration Committee (REMCO) will consider:</p> <ul style="list-style-type: none"> <li>■ the market positioning of the Executive Directors' compensation packages;</li> <li>■ comparison with Senior Management salaries;</li> <li>■ the employee context, and planned average salary increase for other employees across three major countries – the Netherlands, the UK and the USA;</li> <li>■ the experience, skills and performance of the Executive Director, or any change in the scope and responsibility of their role;</li> <li>■ general economic conditions, Shell's financial performance, and governance trends; and</li> <li>■ the impact of salary increases on pension benefits and other elements of the package.</li> </ul> <p>For Executive Directors employed outside their base country, euro base salaries are translated into their home currencies for pension plan purposes. Pensionable base salaries are maintained in line with euro base salaries taking into account exchange rate fluctuations and other factors as determined by REMCO.</p>
Benefits	Provides benefits, in line with those applicable to the wider workforce, in order to attract and retain Executive Directors.	The maximum opportunity is the cost to the Company of providing the relevant benefit as specified in Shell's standard policies. These costs can vary.	<p>Benefits that Executive Directors typically receive include car allowances and transport to and from home and office, risk benefits (for example ill-health, disability or death-in-service), as well as employer contributions to insurance plans (such as medical). Precise benefits will depend on the Executive Director's specific circumstances such as nationality, country of residence, length of service, and family status. Post-retirement benefits such as healthcare may be applicable under their country specific policies. Shell's mobility policies may apply, such as for relocation and tax return preparation support, as may tax equalisation related to expatriate employment prior to Board appointment, or in other limited circumstances to offset double taxation. REMCO may adjust the range and scope of the benefits offered in the context of developments for other employees in relevant countries. Personal loans or guarantees are not provided to Executive Directors.</p> <p>In relation to the maximum opportunity, and by way of example, maximum relocation and tax equalisation settlement benefits will be the grossed-up cost of meeting the specific Executive Director's costs incurred as a result of appointment and any associated relocation (in line with Shell's policy), and will depend on a variety of factors such as length of service, salary increase on appointment and the tax regime in place at the time.</p>

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## Executive Directors' remuneration policy table (continued)

Element	Purpose and link to strategy	Maximum opportunity	Operation and performance measurement
Annual bonus	<p>Rewards the delivery of short-term operational targets as derived from Shell's operating plan as well as individual contribution to Shell.</p> <p>To reinforce alignment with shareholder interests, 50% is delivered in cash and 50% is delivered in shares. Shares are subject to a three-year holding period, which applies beyond an Executive Director's tenure.</p>	<p>Maximum bonus (as a percentage of base salary):</p> <ul style="list-style-type: none"> <li>■ Chief Executive Officer (CEO): 250%</li> <li>■ Other Executive Directors: 240%</li> </ul> <p>Target levels (as a percentage of base salary):</p> <ul style="list-style-type: none"> <li>■ CEO: 150%</li> <li>■ Other Executive Directors: 120%</li> </ul>	<ul style="list-style-type: none"> <li>■ The bonus is determined by reference to performance from January 1 to December 31 each year.</li> <li>■ Annual bonus = base salary x target bonus % x scorecard result (0–2); adjusted for individual performance with a 0–1.2 multiplier.</li> <li>■ Taking the Shell operating plan into consideration, REMCO sets stretching scorecard targets and weightings which support the delivery of the strategy. Measures are related to financial performance, operational excellence and sustainable development. Indicative weightings are 30%, 50% and 20% respectively. This balance ensures that the achievement of short-term financial performance does not undermine future shareholder value creation. Stretching individual targets are also set.</li> <li>■ Scorecard targets will be disclosed in a subsequent Directors' Remuneration Report when they are no longer deemed to be commercially sensitive.</li> <li>■ Individual performance is reflected by adjusting the bonus outcome. Upward adjustment is capped at 20% and subject to the overall maximum bonus cap. The CEO's maximum bonus is asymmetrically capped at 250%. There is no limit to downward adjustment.</li> <li>■ There are no prescribed thresholds or minimum levels of performance that equate to a prescribed payment under the Policy and this structure can result in no bonus being awarded.</li> <li>■ The annual bonus is subject to malus provisions before it is delivered and to clawback provisions thereafter.</li> <li>■ REMCO retains the ability to adjust performance measure targets and weightings year by year within the overall target and maximum payouts approved in the Policy.</li> </ul>
LTIP	<p>Rewards longer-term value creation linked to Shell's strategy. The measures predominantly focus on financial growth and increases in value compared with the other oil majors.</p> <p>To reinforce alignment with shareholder interests, shares delivered from vested LTIP awards are subject to a three-year holding period, which applies beyond an Executive Director's tenure.</p>	<p>Awards may be made up to a value of 400% of base salary.</p> <p>2017 Award levels:</p> <ul style="list-style-type: none"> <li>■ CEO: 340%</li> <li>■ Other Executive Directors: 270%</li> </ul> <p>Awards may vest at up to 200% of the shares originally awarded, plus dividends.</p>	<ul style="list-style-type: none"> <li>■ Award levels are determined annually by REMCO and are set within the maximum approved in the Policy.</li> <li>■ Awards may vest between 0% and 200% of the initial award level depending on Shell's performance on either an absolute basis, or on a relative basis against the other oil majors.</li> <li>■ For 2017, performance is assessed over a three-year period based on absolute free cash flow (FCF), which is the sum of cash flow from operating activities and cash flow from investing activities (25%) and the following relative performance measures: total shareholder return (TSR) (25%), return on average capital employed (ROACE) growth (25%) and cash flow from operating activities growth (25%). Each measure can vest independently, but if the TSR measure does not result in vesting, then the total vesting level will be capped at 50% of the maximum payout.</li> <li>■ Although it is possible for no LTIP shares to vest, on current measures and weightings, 5% of the maximum LTIP award would vest if there was a threshold vesting outcome in respect of FCF and no vesting on the other measures.</li> <li>■ Additional shares are released representing the value of dividends payable on the vested shares, as if these had been owned from the award date.</li> <li>■ Following payment of taxes, delivered shares from LTIP awards must be held for a further three years to align with Shell's longer-term time horizon and strategy.</li> <li>■ The LTIP award is subject to malus provisions before it is delivered and to clawback provisions thereafter.</li> <li>■ REMCO may adjust or change the LTIP measures, targets and weightings to ensure continued alignment with Shell's strategy.</li> </ul>

## Directors' Remuneration Policy *Continued*

### Executive Directors' remuneration policy table (continued)

Element	Purpose and link to strategy	Maximum opportunity	Operation and performance measurement
Pension	Provides a competitive retirement provision in line with the individual's base country benefits policy, to attract and retain Executive Directors.	By reference to pensionable base salary, pension accrual and contribution rates and other pensionable elements, as determined by the rules of the base country pension plan of which the Executive Director is a member.	Executive Directors' retirement benefits are maintained in line with those of the wider workforce in their base country. Only base salary is pensionable, unless country plan regulations specify otherwise. The rules of the relevant plans detail the pension benefits which members can receive on retirement (including on ill-health), death or leaving service. REMCO retains the right to amend the form of any Executive Director's pension arrangements where appropriate, for example in response to changes in legislation to ensure the original objective of this element of remuneration is preserved.
Shareholding	Aligns interests of Executive Directors with those of shareholders by creating a connection between individual wealth and Shell's long-term performance.	Shareholding (% of base salary): <ul style="list-style-type: none"> <li>■ CEO: 700%</li> <li>■ Other Executive Directors: 400%</li> </ul>	Executive Directors are expected to build up their shareholding to the required level over a period of five years from appointment and, once reached, to maintain this level for the full period of their appointment. The intention is for the shareholding guideline to be reached through retention of vested shares from share plans. REMCO will monitor individual progress and retains the ability to adjust the guideline in special circumstances on an individual basis.

### NOTES TO THE EXECUTIVE DIRECTORS' REMUNERATION POLICY TABLE

#### Benefits

Benefits for Executive Directors deemed taxable in the UK are included as taxable benefits in the single total figure of remuneration table. These elements may include transport to and from home and office, the provision of home security, and occasional business-required spouse travel, which are generally considered legitimate business expenses rather than components of remuneration.

#### Annual bonus

For the 2017 performance year, the scorecard framework will consist of cash flow from operating activities (30% weight), operational excellence (50% weight) and sustainable development (20% weight). REMCO believes it is important for annual variable pay to remain balanced, with operational and environmental components, complementing the LTIP's focus on longer-term financial outcomes. The same annual bonus scorecard approach applies to Senior Management and other senior executives, supporting consistency of remuneration and alignment of objectives.

### 2017 annual bonus scorecard measures and weightings

PERFORMANCE MEASURE AND WEIGHTING	LINK TO OPERATING PLAN
<b>Cash flow from operating activities (30%)</b>	This reflects our business performance.
<b>Operational excellence (50%)</b>	Project delivery: Indicator of our ability to deliver projects, on time, and on budget.  Operations: Maximising oil and gas production, LNG liquefaction volumes, and the availability of refineries and chemical plants are indicators of the full and effective use of our resources; which in turn generate cash flow.
<b>Sustainable development (20%)</b>	Safety and environmental performance are both core to how we operate.  Safety: Is implicit in all our activities. A safe work environment has been, and will always be, an important indicator of Shell's commitment to its employees and contractor staff.  Environmental performance: We are managing Shell's carbon intensity as part of the long-term transition to a lower carbon energy system. Therefore greenhouse gas measures are now included.



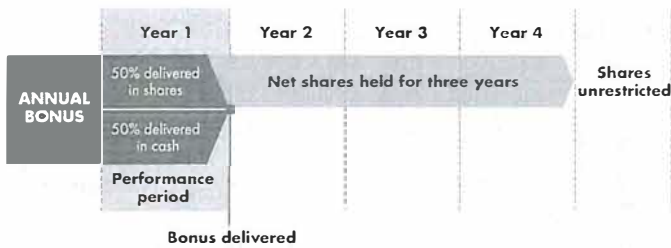
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For future years, the specific measures and weightings for the annual bonus scorecard will be reviewed annually by REMCO and adjusted accordingly to evolve with Shell's strategy and circumstances. The annual review will also consider the scorecard target and outcome history over a decade to ensure that the targets set remain stretching but realistic. REMCO retains the right to exercise its judgement to adjust the mathematical bonus scorecard outcome to ensure that the bonus scorecard outcome for Executive Directors reflects other aspects of Shell's performance which REMCO deems appropriate for the reported year. REMCO is aware that the simple application of arithmetic performance targets may lead to anomalies between business performance and shareholder experience and therefore careful consideration is given to formulaic outcomes. REMCO has a track record of using its discretion to make downward adjustments where appropriate.

REMCO strengthens the Executive Directors' individual accountability by increasing or decreasing their annual bonuses to take account of how well they have delivered against their individual performance targets. Shell operates this approach for most of its employees. These individual targets typically relate to qualitative differentiators not already covered by the scorecard. Examples for the Executive Directors have included management of transformative portfolio changes, portfolio development, and organisational and financial leadership. This individual performance element preserves consistency with the wider workforce and reinforces and drives a company-wide culture of performance and behaviour.

At the end of the one-year performance period, 50% of the annual bonus is delivered in cash and 50% is delivered in shares. Shares are subject to a three-year holding period, which remains in force beyond an Executive Director's tenure.

## Bonus time horizon



## Long-term Incentive Plan

The LTIP rewards longer-term performance linked to Shell's strategy, which includes cash generation and capital discipline, as well as value created for shareholders.

The LTIP measures are predominantly based on relative outperformance compared with the other oil majors, in line with our strategic intent to be a leader in the oil and gas industry. For 2017, the measures will consist of absolute FCF and relative growth compared with our peers based on the following: TSR, ROACE and cash flow from operating activities. REMCO will regularly review the measures, weightings and comparator group, and retains the right to adjust these to ensure that the LTIP continues to serve its intended purpose and level of challenge.

FCF performance is measured by aggregating annual absolute FCF performance over the three-year performance period and then comparing the outcome to the aggregate of our plan FCF targets over three years. The outstanding (maximum), target and threshold (minimum) levels are declared at the end of the performance period and will be the aggregate respective annual outstanding, target and threshold levels for each year of the performance period. A straight-line vesting schedule will apply for performance between threshold and outstanding. The target, along with the ranges for threshold and outstanding performance, is set by reference to our operating plan and is in line with our cash flow priorities, namely: to service and reduce debt, pay dividends, buy back shares and make future capital investments.

For relative measures, we measure and rank growth based on the data points at the end of the performance period compared with those at the beginning of the period, using publicly reported data. When comparing performance against the other oil majors, the relative performance ranking is as indicated in the table below.

## 2017 LTIP measures and vesting schedule

PERFORMANCE MEASURE AND WEIGHTING	LINK TO STRATEGY	VESTING SCHEDULE (% OF INITIAL LTIP AWARD)
<b>Free cash flow (25%)</b>	Recognition of the importance of generating cash after net capital expenditure to service and reduce debt, pay dividends, buy back shares and make future capital investments.	Maximum – 200% Target – 100% Threshold – 40% Below threshold – 0%
<b>TSR (25%)</b>	Assessment of actual wealth created for shareholders.	1st – 200% 2nd – 150% 3rd – 80% 4th or 5th – nil
<b>ROACE growth (25%)</b>	Indicator of capital discipline.	
<b>Cash flow from operating activities growth (25%)</b>	Source of capital expenditure commitments which support sustainable growth based on portfolio and cost management.	

### TSR underpin

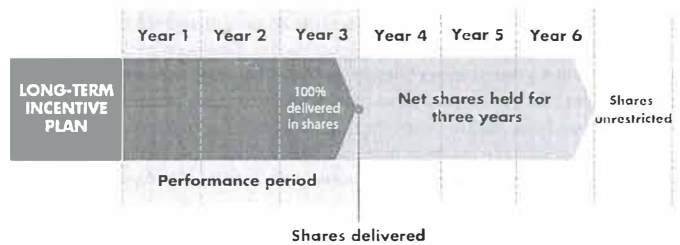
If the TSR ranking is fourth or fifth, the level of the award that can vest on the basis of the three other measures will be capped at 50% of the maximum payout for the LTIP.

### Performance outcomes

REMCO retains discretion to adjust the mathematical outcome if it believes that this is distorted by circumstances which are unrelated to performance, for example, reporting changes, ranking clustering, or corporate events in the comparator group. Upward adjustment would only be considered after consultation with major shareholders. An explanation of any such adjustment would be set out in the relevant Directors' Remuneration Report.

LTIP performance is assessed over a three-year period. Vested shares from the LTIP are subject to a further three-year holding period post vesting, which remains in force beyond an Executive Director's tenure. This time horizon has been extended and is deemed to be suitable for incentive purposes, but is recognised as short relative to some of Shell's operations. However REMCO believes that it provides for broad alignment with shareholder interests when coupled with significant shareholding requirements.

## LTIP time horizon



## Directors' Remuneration Policy *Continued*

### Treatment of outstanding awards

Awards granted prior to the approval and implementation of this Policy and/or prior to an individual becoming an Executive Director will continue to vest and be delivered in accordance with the terms of the original award even if this is not consistent with the terms of this Policy.

As at March 8, 2017, this applies to Executive Directors Ben van Beurden and Simon Henry who each have outstanding awards under the LTIP and DBP. Jessica Uhl, who is appointed an Executive Director with effect from March 9, 2017, has outstanding awards under the LTIP.

### Shareholding

REMCO believes significant shareholding by Executive Directors is an important way of ensuring that shareholders and Executive Directors share the same priorities. Shareholding is one of Shell's core remuneration principles as it creates a balanced connection between individual wealth and Shell's long-term performance. This will support effective governance and an ownership mindset. Significant shareholding requirements reflect the performance timescales of Shell and are aligned with absolute shareholder return.

The CEO is expected to build up a shareholding of seven times their base salary over five years from appointment. Other Executive Directors are expected to build up a shareholding of four times their base salary over the same period. In the event of an increase to the guideline multiple of salary, for every additional multiple of salary required, the director will have one extra year to reach the increased guideline, subject to a maximum of five years from the date of the change.

The holding periods for LTIP vested shares and shares delivered as part of the annual bonus continue to apply after Executive Directors leave employment. This is to ensure departing executives continue to have their interests aligned with those of shareholders.

### DIFFERENCES FOR EXECUTIVE DIRECTORS FROM OTHER EMPLOYEES

The remuneration structure and approach to setting remuneration levels is consistent across Shell, with consideration given to location, seniority and responsibilities. However, a higher proportion of total remuneration is tied to variable pay for Executive Directors and members of Senior Management.

The salary for each Executive Director is determined based on the indicators in the "Executive Directors' remuneration policy table", which reflect the international nature of the Executive Directors' labour market. The salary for other employees is normally set on a country basis.

Executive Directors are eligible to receive the standard benefits and allowances provided to other staff. The provisions which are not generally available for other employees are described in "Benefits".

The methodology used for determining the annual bonus for Executive Directors is broadly consistent with the approach for Shell employees generally. However, the individual performance factor for Executive Directors is capped at 1.2 and the scorecard used for the majority of Shell staff may differ in the make-up and weighting of the metrics used. Like Executive Directors, members of Senior Management receive 50% of their annual bonus in shares.

Executive Directors are not eligible to receive new awards under employee share plans other than the LTIP, although awards previously granted will continue to vest in accordance with the terms of the original award. Selected employees participate in the Performance Share Plan (PSP). The operation of the PSP is similar to the LTIP, but currently differs, for example, in some performance measures and their relative weightings. As at March 2017, around 55,000 employees participate in one or more of Shell's global share plans and/or incentive plans, further supporting alignment with shareholder interests.

Executive Directors' retirement benefits are maintained in line with those of the wider workforce in their base country. There are no special pension arrangements exclusive to Executive Directors.

### ILLUSTRATION OF POTENTIAL REMUNERATION OUTCOMES

The charts on page 101 represent estimates under three performance scenarios ("Minimum", "On-target", and "Maximum") of the potential remuneration outcomes for each Executive Director resulting from the application of 2017 base salaries to awards, expected to be made in 2017 in accordance with the Policy.

#### Performance scenarios

SCENARIO	OUTCOME		
<b>Minimum</b>	Fixed remuneration includes 2017 base salaries, 2016 benefits (as reported in the single total figure of remuneration table), with an estimate for the incoming CFO, and a projection of 2017 pension for the CEO and incoming CFO. There is no annual bonus or vesting of the LTIP award.		
<b>On-target</b>	Reflects fixed remuneration, plus on-target 2017 annual bonus and vesting of LTIP award, as percentages of base salary, as follows:		
		CEO	CFO
	<b>Annual incentive</b>	150%	120%
	<b>Long-term incentive</b>	340%	270%
<b>Maximum</b>	Reflects fixed remuneration, plus maximum pay-out of 2017 annual bonus and vesting of 200% of original LTIP award, as percentages of base salary, as follows:		
		CEO	CFO
	<b>Annual incentive</b>	250%	240%
	<b>Long-term incentive</b>	680%	540%

The majority of Executive Directors' remuneration is delivered through variable pay elements, which are conditional on the achievement of stretching targets.

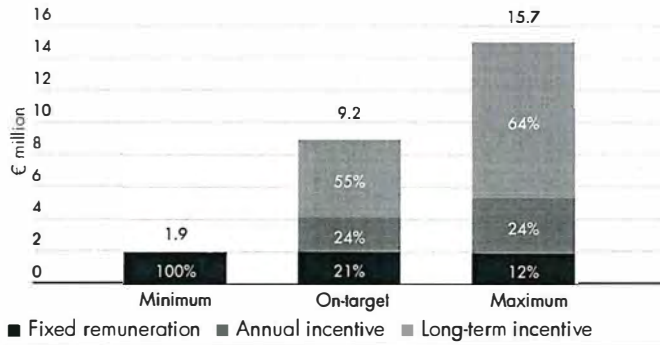
The scenario charts are based on future Policy award levels and are combined with projected single total figures of remuneration. The pay scenarios are forward-looking and only serve to illustrate the future Policy.

For simplicity, the scenarios assume no share price movement and exclude dividend accrual, for the portion of the bonus paid in shares and the LTIP, although dividend accrual during the performance and holding period applies.

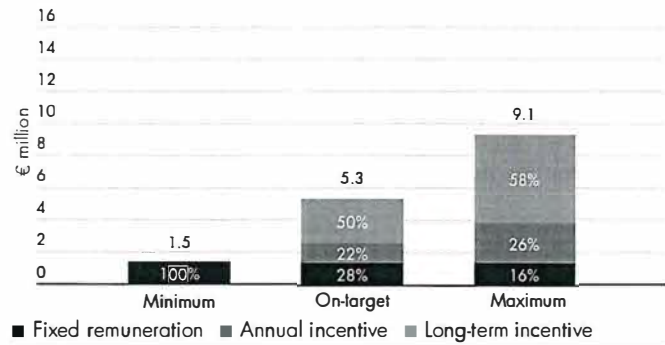
The scenarios are based on the current CEO (Ben van Beurden) and incoming CFO (Jessica Uhl) roles.

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## CEO pay scenarios



## CFO pay scenarios



## NON-EXECUTIVE DIRECTORS

### Non-executive Directors' remuneration policy table

#### Fee structure

Non-executive Directors (NEDs) receive a fixed annual fee for their directorship. The size of the fee will differ based on the position on the Board: Chair of the Board fee or standard Non-executive Director fee.

Additional annual fee(s) are payable to any director who serves as Senior Independent Director, a Board committee chair, or a Board committee member.

A NED receives either a chair or member fee for each committee. This means that a chair of a committee does not receive both fees.

NEDs receive an additional fee for any Board meeting involving intercontinental travel – except for one meeting a year held in a location other than The Hague.

#### Approach to setting fees

The Chair's fee is determined by REMCO. The Board determines the fees payable to NEDs. The maximum aggregate annual fees will be within the limit specified by the Articles of Association and in accordance with the NEDs' responsibilities and time commitments.

The Board reviews NED fees periodically to ensure that they are aligned with those of other major listed companies.

#### Other remuneration

Business expenses incurred in respect of the performance of their duties as a NED will be paid or reimbursed by Shell. Such expenses could include transport between home and office and occasional business-required spouse travel. Where required, the Chair is offered Shell-provided accommodation in The Hague. REMCO has the discretion to offer other benefits to the Chair as appropriate to their circumstances. Where business expenses or benefits create a personal tax liability to the director, Shell may cover the associated tax.

The Chair and the other NEDs cannot receive awards under any incentive or performance-based remuneration plans, and personal loans or guarantees are not granted to them.

NEDs do not accrue any retirement benefits as a result of their non-executive directorships with Shell.

NEDs are encouraged to hold shares with a value equivalent to 100% of their fixed annual fee and maintain that holding during their tenure.

### MALUS AND CLAWBACK

Variable pay awards may be made subject to adjustment events. At the discretion of REMCO, such an award may be adjusted before delivery (malus) or reclaimed after delivery (clawback) if an adjustment event occurs. Adjustment events will be specified in award documentation and it is intended that they will, for example, relate to restatement of financial results due to: non-compliance with a financial reporting requirement; or misconduct by an Executive Director or misconduct through their direction or non-direction. REMCO retains the right to alter the list of adjustment events in respect of future awards.

In addition, REMCO will retain discretion in assuring itself that there is satisfactory underlying performance before releasing any variable pay to Executive Directors and may withhold all or some of the bonus or shares awarded if it considers that the underlying performance (financial, environmental, safety or other) of Shell is inadequate.

### RECRUITMENT

#### EXECUTIVE DIRECTORS

REMCO determines the remuneration package for new Executive Director appointments. These appointments may involve external or internal recruitment or reflect a change in role of a current Executive Director.

When determining remuneration packages for new Executive Directors, REMCO will seek a balanced outcome which allows Shell to:

- attract and motivate candidates of the right quality;
- take into account the individual's current remuneration package and other contractual entitlements;
- seek a competitive pay position relative to our comparator group, without overpaying;
- encourage relocation if required; and
- honour entitlements (for example, variable remuneration) of internal candidates before their promotion to the Board.

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## Directors' Remuneration Policy *Continued*

REMCO will follow the approach set out in the table below when determining the remuneration package for a new Executive Director.

Remuneration package Component	Approach	Maximum
Ongoing remuneration	The salary, benefits, annual bonus, long-term incentives and pension benefits will be positioned and delivered within the framework of the Executive Directors' remuneration policy.	As stated in the "Executive Directors' remuneration policy table".
Compensation for the forfeiture of any awards under variable remuneration arrangements	To facilitate external recruitment, one-off compensation in consideration for forfeited awards under variable remuneration arrangements entered into with a previous employer may be required. REMCO will use its judgement to determine the appropriate level of compensation by matching the value of any lost awards under variable remuneration arrangements with the candidate's previous employer. This compensation may take the form of a one-off cash payment or an additional award under the LTIP. The compensation can alternatively be based on a newly created long-term incentive plan arrangement where the only participant is the new director.	An amount equal to the value of the forfeited variable remuneration awards, as assessed by REMCO. Consideration will be given to appropriate performance conditions, performance periods and clawback arrangements.
Replacement of forfeited entitlements other than any awards under variable remuneration arrangements	There may also be a need to compensate a new Executive Director in respect of forfeited entitlements other than any awards under variable remuneration arrangements. This could include, for example, pension or contractual entitlements, or other benefits. On recruitment, these entitlements may be replicated within the Executive Directors' remuneration policy or valued by REMCO and compensated in cash.  In cases of internal promotion to the Board, any commitments made which cannot be effectively replaced within the Executive Directors' remuneration policy may, at REMCO's discretion, continue to be honoured.	An amount equal to the value of the forfeited entitlements, as assessed by REMCO.
Exceptional recruitment incentive	Apart from the ongoing annual remuneration package and any compensation in respect of the replacement of forfeited entitlements, there may be circumstances in which REMCO needs to offer a one-off recruitment incentive in the form of cash or shares to ensure the right external candidate is attracted. REMCO recognises the importance of internal succession planning but it must also have the ability to compete for talent with other global companies. The necessity and level of this incentive will depend on the individual's circumstances.	One times the LTIP award level, subject to the limits set out in the "Executive Directors' remuneration policy table".

### NON-EXECUTIVE DIRECTORS

REMCO's approach to setting the remuneration package for NEDs is to offer fee levels and specific benefits (where appropriate) in line with the "Non-executive Directors' remuneration policy table" and subject to the Articles of Association. NEDs are not offered variable remuneration or retention awards.

When determining the benefits for a new Chair, the individual circumstances of the future Chair will be taken into account.

### DIRECTORS' EMPLOYMENT ARRANGEMENTS AND LETTERS OF APPOINTMENT

Executive Directors are employed for an indefinite period. Executive Directors with the Netherlands as their base country will be employed on the basis of a contract of employment governed by Dutch employment law. For Executive Directors with a base country other than the Netherlands, REMCO will determine their employment arrangements based on a number of considerations, including Dutch immigration requirements and base country retirement benefits. NEDs, including the Chair, have letters of appointment. Executive Directors' employment arrangements and NEDs' letters of appointment are available for inspection at the AGM or on request. For further details on appointment and re-appointment of Directors, see the "Directors' Report" on page 65.

### END OF EMPLOYMENT

#### EXECUTIVE DIRECTORS

##### Notice period

Employment arrangements of Executive Directors can generally end by either the employee or the employer providing one month's notice, or the applicable statutory notice period. For example, under Dutch law, the statutory notice period

for the employer will vary in line with the length of service, with the maximum being four months' notice. Under Dutch law, termination payments are not linked to the contract's notice period.

#### The Netherlands statutory end-of-employment compensation

With effect from July 1, 2015, new employment legislation in the Netherlands introduced statutory end-of-employment compensation. Under this legislation, every termination (other than following retirement or for cause) of a Dutch employment contract that has continued for a minimum of two years will give rise to an obligation to pay the departing employee transition compensation ("transitievergoeding"). The statutory compensation is capped at one times the annual salary, which is deemed to include variable pay such as the annual bonus. Executive Directors are expected not to claim transition compensation or any other applicable statutory compensation over and above the agreed compensation for loss of office as set out in the "End of employment" table on page 103.

#### Outstanding entitlements

In cases of resignation or dismissal for cause, fixed remuneration (base salary, benefits, and employer pension contributions) will cease on the last day of employment, variable remuneration elements will generally lapse and the Executive Director is not eligible for compensation for loss of office.

The information on page 103 generally applies to termination of employment by Shell giving notice, by mutual agreement, or in situations where the employment terminates because of retirement with Shell consent at a date other than the normal retirement date, redundancy or in other similar circumstances at REMCO's discretion.

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## End of employment

Provision	Policy
Compensation for loss of office	<p>For Executive Directors appointed prior to 2011, REMCO may offer a termination payment of up to one times annual pay (base salary plus target bonus).</p> <p>For Executive Directors appointed between January 1, 2011 and December 31, 2016, employment contracts include a cap on termination payments of one times annual pay (base salary plus target bonus). Delivery of compensation is mitigated by a contractual obligation for the Executive Director to seek alternative employment and the Company's ability to implement phased payment terms.</p> <p>For Executive Directors appointed on or after January 1, 2017, REMCO may offer a termination payment of up to one times base salary (target bonus will not be included). However, REMCO may be obligated to pay statutory compensation over and above the compensation for loss of office to a departing Executive Director who asserts a statutory claim thereto. Delivery of compensation is mitigated by a contractual obligation for the Executive Director to seek alternative employment and the Company's ability to implement phased payment terms.</p> <p>The reimbursement of standard end-of-employment benefits such as repatriation costs and outplacement support may also be included, as deemed reasonable by REMCO.</p> <p>REMCO may adjust the termination payment for any situation where a full payment is inappropriate, taking into consideration applicable law, corporate governance provisions and the best interests of the Company and shareholders as a whole.</p>
Annual bonus	<p>Any annual bonus in the year of departure is prorated based on service. Depending on the timing of the departure, REMCO may consider the latest scorecard position or defer payment until the full-year scorecard result is known.</p> <p>DBP shares and bonus delivered in shares represent the bonus which a participant has already earned and carry no further performance conditions; therefore these shares will be unrestricted at the conclusion of the normal deferral or holding period respectively and no proration will apply.</p>
LTIP	<p>Outstanding awards are prorated on a monthly basis, by reference to the Executive Director's service within the performance period. They will generally survive the end of employment and will remain subject to the same vesting performance conditions, and malus and clawback provisions, as if the Executive Director had remained in employment. The three-year holding period will also remain in force for any awards made on or after January 1, 2017. If the participant dies before the end of the performance period, the award will vest at the target level on the date of death. In case of death after the end of the performance period, the award will vest as described in this Policy.</p>

## NON-EXECUTIVE DIRECTORS

No payments for loss of office will be made to NEDs.

## CONSIDERATION OF OVERALL PAY AND EMPLOYMENT CONDITIONS

When setting the Policy, no specific employee groups were consulted. However, Shell seeks to promote and maintain good relations with employee representative bodies as part of its employee engagement strategy, and consults on matters affecting employees and business performance as required.

When determining Executive Directors' remuneration structure and outcomes, REMCO reviews a set of information, including relevant reference points and trends, which includes internal data on employee remuneration (for example, employee relations matters in respect of remuneration and average salary increases applying in the Netherlands, UK and the USA). During the Policy review, pay and employment conditions of the wider Shell employee population were taken into account by adhering to the same performance, rewards and benefits philosophy for the Executive Directors, as well as overall benchmarking principles. Furthermore, any potential differences from other employees (see "Differences for Executive Directors from other employees") were taken into account when providing REMCO with advice in the formation of this Policy.

Dialogue between management and staff is important, with the annual Shell People Survey being one of the principal means of gathering employee views on a range of matters. The Shell People Survey includes questions inviting employees' views on their pay and benefit arrangements. The Company also encourages share ownership among employees, and many are shareholders who are able to participate in the vote on the Policy at the AGM.

REMCO is kept informed by the CEO, the Chief Human Resources & Corporate Officer and the Executive Vice President Remuneration, Benefits & Services on the bonus scorecard and any relevant remuneration matters affecting Senior Management and other senior executives, extending to multiple levels below the Board.

## CONSIDERATION OF SHAREHOLDER VIEWS

REMCO engages with major shareholders on a regular basis throughout the year and this allows it to hear views on Shell's remuneration approach and test proposals when developing or evolving the Policy. Recent examples of REMCO responding to shareholder views include introducing greenhouse gas management to variable pay and setting FCF as an absolute measure in the LTIP performance conditions.

REMCO will review the Policy regularly to ensure it continues to reinforce Shell's long-term strategy and remains closely aligned with shareholders' interests.

## ADDITIONAL POLICY STATEMENT

REMCO reserves the right to make payments outside the Policy in limited exceptional circumstances, such as for regulatory, tax or administrative purposes or to take account of a change in legislation or exchange controls, and only where REMCO considers such payments are necessary to give effect to the intent of the Policy.

Signed on behalf of the Board

/s/ Linda M. Szymanski

Linda M. Szymanski  
Company Secretary  
March 8, 2017

# FINANCIAL STATEMENTS AND SUPPLEMENTS

## INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC

### REPORT ON THE FINANCIAL STATEMENTS

#### 1. OUR OPINIONS AND CONCLUSIONS ARISING FROM OUR AUDIT

##### 1.1 Our opinion on the financial statements

In our opinion, the financial statements of Royal Dutch Shell plc (the Company) and its subsidiaries (collectively, Shell):

- give a true and fair view of Shell's and of the Company's affairs as at December 31, 2016, and of Shell's and the Company's income for the year then ended;
- have been properly prepared both in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) and IFRS as issued by the International Accounting Standards Board (IASB); and
- have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards Shell's financial statements, Article 4 of the IAS Regulation.

##### 1.2 Our opinion on other matters prescribed by the Companies Act

We report that, in our opinion:

- the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006; and
- based on the work undertaken in the course of our audit:
  - the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
  - the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

##### 1.3 Matters on which we are required to report by exception

Our confirmations that we have nothing to report by exception, in relation to those matters where we are required so to report, are set out in section 9 below.

#### 2. WHAT WE HAVE AUDITED

Royal Dutch Shell plc's financial statements for the year ended December 31, 2016, included in the Annual Report and Form 20-F (the Annual Report) comprise:

#### Shell

Consolidated Balance Sheet as at December 31, 2016  
 Consolidated Statement of Income for the year then ended  
 Consolidated Statement of Comprehensive Income for the year then ended  
 Consolidated Statement of Changes in Equity for the year then ended  
 Consolidated Statement of Cash Flows for the year then ended  
 Notes to the Consolidated Financial Statements on pages 122-152, which include a summary of significant accounting policies and other explanatory information

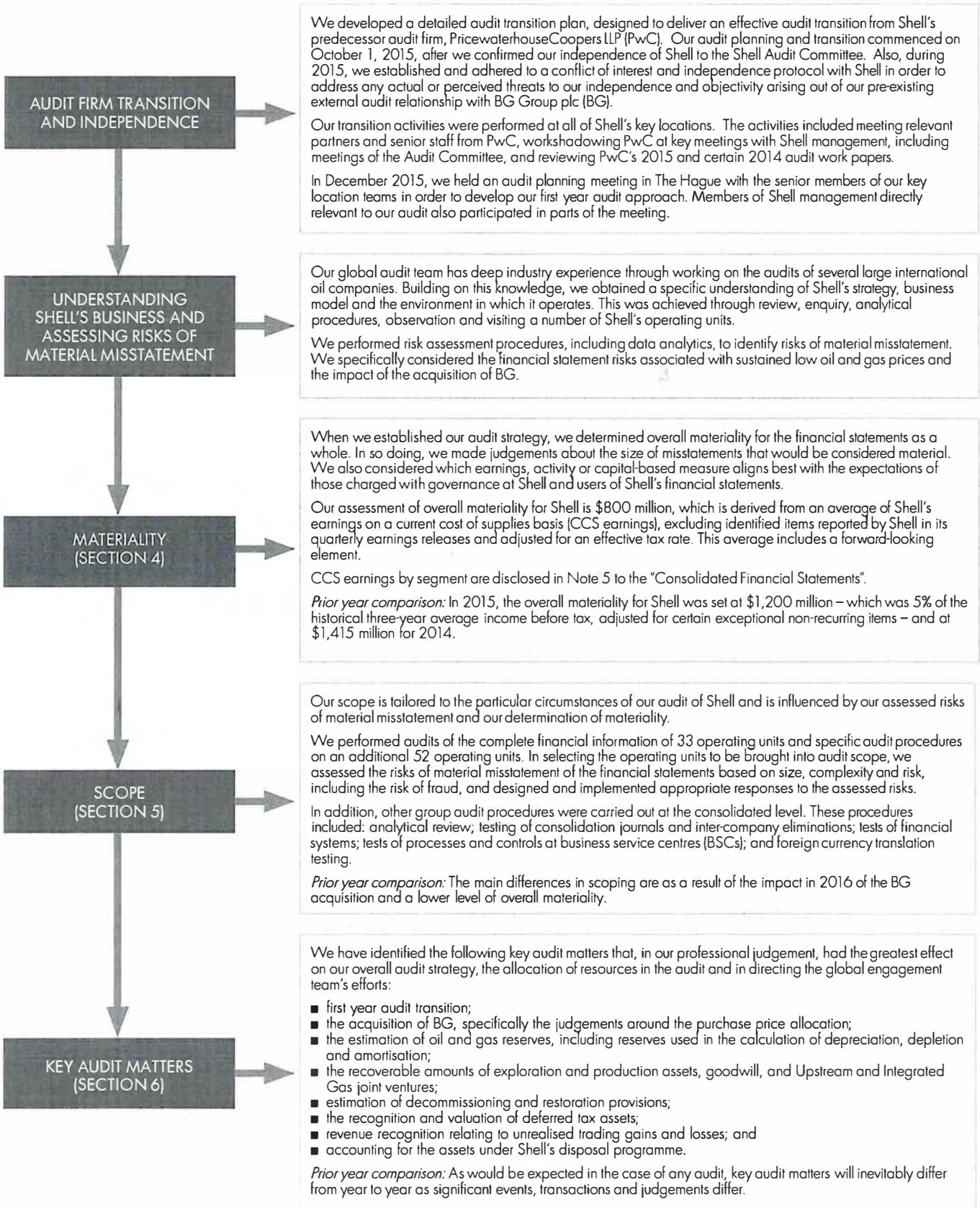
#### The Company

Balance Sheet as at December 31, 2016  
 Statement of Income for the year then ended  
 Statement of Comprehensive Income for the year then ended  
 Statement of Changes in Equity for the year then ended  
 Statement of Cash Flows for the year then ended  
 Notes to the Parent Company Financial Statements on pages 174-179

The financial reporting framework that has been applied in the preparation of the financial statements is applicable law and both IFRS as adopted by the EU and IFRS as issued by the IASB.

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## 3. OVERVIEW OF OUR AUDIT APPROACH



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## 4. OUR APPLICATION OF MATERIALITY

The scope of our work is influenced by our view of materiality. As we develop our audit strategy, we determine materiality at the overall level and at the individual account level (referred to as our 'performance materiality').



### Overall materiality

What we mean	<p>We apply the concept of materiality both in planning and performing our audit, and in evaluating the effect of misstatements on our audit and on Shell's financial statements. For the purposes of determining whether the financial statements are free from material misstatement, we define materiality as the magnitude of misstatement that makes it probable that the economic decisions of a reasonably knowledgeable person, relying on the financial statements, would be changed or influenced.</p> <p>Our overall materiality provides a basis for identifying and assessing the risk of material misstatement and determining the nature, timing and extent of audit procedures. Our evaluation of materiality requires professional judgement and necessarily takes into account qualitative as well as quantitative considerations. It also takes into account our assessment of the expectations of those charged with governance at Shell and users of Shell's financial statements.</p> <p>As required by auditing standards, we reassess materiality throughout the audit.</p>
Level set	<p>We set our preliminary overall materiality for Shell at \$900 million. We kept this under review throughout the year and reassessed the appropriateness of our original assessment in the light of Shell's results and the external market conditions. In the third quarter 2016 we reduced our overall materiality to \$800 million and amended our audit scope and extent of testing accordingly.</p> <p>In the case of prior years, materiality was set at \$1,200 million for 2015 and \$1,415 million for 2014.</p>
Our basis for determining materiality for 2016	<p>Our revised assessment of overall materiality is \$800 million. This is derived from an average of Shell's CCS earnings, excluding identified items reported by Shell in its quarterly earnings releases and adjusted for an effective tax rate. This average included a forward-looking element. The \$800 million is determined by applying a percentage to the calculated average CCS earnings. When using an earnings-related measure to determine overall materiality, the norm is to apply a benchmark percentage of 5%. In the case of Shell, because our earnings estimate includes a forward-looking element, we have applied a more prudent rate that is below the 5% benchmark.</p> <p>In determining materiality, auditing standards require us to use benchmarks, such as pre-tax income, gross profit and total revenue. Nevertheless, we have to exercise considerable judgement, including the need to take account of the volatility of the benchmarks applied and to consider which earnings, activity or capital based measure aligns best with the expectations of users of Shell's financial statements and the Audit Committee.</p> <p>We considered Shell's business updates, the levels of activity in the business and the associated financial performance of 2016 relative to historic performance and expected future performance. We also considered current and forecast commodity prices for oil and natural gas, the impact of Shell's acquisition of BG as well as the basis on which overall materiality was determined in previous years, which was 5% of the historical three-year average income before tax, adjusted for certain exceptional non-recurring items.</p> <p>In our view, including a forward-looking element in the calculation of average earnings is more appropriate at this time, due to the sustained low oil price environment. It is also common for auditors to use the most prominent earnings measure discussed in quarterly results announcements, rather than income before tax, as the benchmark.</p> <p>Shell's results announcements feature CCS earnings as the primary measure for earnings, Shell's earnings forecasts are based on CCS earnings, and it is the earnings measure used by Shell's Chief Executive Officer for the purposes of making decisions about allocating resources and assessing performance. Furthermore, analyst reports on forecasts predominately feature CCS earnings as the basis for earnings.</p> <p>CCS earnings excluding identified items both removes the effects of changes in oil price on inventory carrying amounts and items disclosed as identified items that can significantly distort Shell's results in any one particular year. The identified items, reported by Shell in its quarterly earnings releases, that we excluded from the 2016 CCS earnings used in our determination of overall materiality were: net divestment gains (\$1.6 billion), impairments (\$2.0 billion charge), fair value accounting of commodity derivatives and certain gas contracts (\$0.6 billion loss), redundancy and restructuring (\$1.4 billion charge); differences in exchange on deferred tax (\$0.3 billion gain); and the aggregate of other individually small items (\$1.5 billion charge).</p> <p>On the basis of our analysis of these factors, we concluded that we should focus on Shell's CCS earnings, excluding identified items reported by Shell in its quarterly earnings releases and adjusted for an effective tax rate.</p>



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## Performance materiality

What we mean	<p>Having established overall materiality, we determined performance materiality, which represents our tolerance for misstatement in an individual account or balance. It is calculated as a fraction of overall materiality in order to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality of \$800 million for Shell's financial statements as a whole.</p> <p>Once we determined our audit scope, we then assigned performance materiality to our various in-scope operating units. They used this assigned performance materiality in performing their group audit procedures. The performance materiality allocation is dependent on the size of the operating unit, measured by its contribution of earnings to Shell, or other appropriate metric, and risk associated with the operating unit. In 2016, the range of performance materiality allocated to operating units was \$40 million to \$220 million. This is set out in more detail in section 5 below.</p>
Level set	\$400 million, which is 50% of overall materiality. Our determination that performance materiality should be 50% of overall materiality reflects our normal practice in the case of a first year audit.

## Audit difference reporting threshold

What we mean	This is the level above which we collate and report audit differences to the Audit Committee. We also report differences below that threshold that, in our view, warrant reporting on qualitative grounds. We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in the light of other relevant qualitative considerations in forming our opinion.
Level set	We agreed with the Audit Committee that we would report to the Committee all differences in excess of \$40 million. The reporting threshold for both 2015 and 2014 was set at \$75 million.

## 5. OUR SCOPE OF THE AUDIT OF SHELL'S FINANCIAL STATEMENTS

What we mean	We are required to establish an overall audit strategy that sets the scope, timing and direction of our audit, and that guides the development of our audit plan. Audit scope comprises the physical locations, operating units, activities and processes to be audited that, in aggregate, are expected to provide sufficient coverage of the financial statements in order for us to express an audit opinion.
Criteria for determining our audit scope	<p>Our assessment of audit risk and our evaluation of materiality determined our audit scope for each entity within Shell which, when taken together, enabled us to form an opinion on the financial statements under International Standards on Auditing (UK and Ireland). Our audit effort was focused towards higher risk areas, such as management judgements and on operating units that are considered significant based upon size, complexity or risk.</p> <p>The factors that we considered when assessing the scope of the Shell audit, and the level of work to be performed at the operating units that are in scope for group reporting purposes, included the following:</p> <ul style="list-style-type: none"><li>■ the financial significance of an operating unit to Shell's consolidated earnings, total assets or total liabilities, including consideration of the financial significance of specific account balances or transactions;</li><li>■ the significance of specific risks relating to an operating unit: history of unusual or complex transactions, identification of significant audit issues or the potential for, or a history of, material misstatements;</li><li>■ findings and observations from the work that we performed to confirm opening balances;</li><li>■ the effectiveness of the control environment and monitoring activities, including entity-level controls;</li><li>■ our assessment of locations that carry a higher than normal audit risk in relation to fraud, bribery or corruption. Where this was determined to be the case, we deployed appropriate forensic data interrogation techniques; and</li><li>■ the results of prior year audits that we were able to determine from our review of PwC's 2015 and certain 2014 work papers.</li></ul>

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## 5. OUR SCOPE OF THE AUDIT OF SHELL'S FINANCIAL STATEMENTS *Continued*

Selection of in-scope operating units

We selected 85 operating units across 13 countries and performed an audit of the complete financial information of 33 operating units (full scope), which were selected based on their size or risk characteristics. For the remaining 52 selected operating units (specific scope) we performed audit procedures on specific selected accounts within the operating unit based on the size of these accounts or their risk profile. These 85 operating units accounted for 63% of Shell's CCS earnings\* and 69% of Shell's total assets.

In addition to the 85 operating units discussed above, we selected a further 32 operating units where we performed procedures at the operating unit level that were specified by the primary team in response to specific risk factors. Also, we performed review procedures at an additional 11 operating units.

The remaining 601 operating units together represented 24% of CCS earnings\* and 19% of total assets. None of these was individually greater than 1.0% of CCS earnings\* or 0.3% of total assets. For these operating units, we performed other group procedures, including analytical review, testing of consolidation journals and inter-company eliminations, tests of financial systems, process and controls at BSCs and foreign currency translation recalculations to respond to any potential significant risks of material misstatement to Shell's Consolidated Financial Statements.

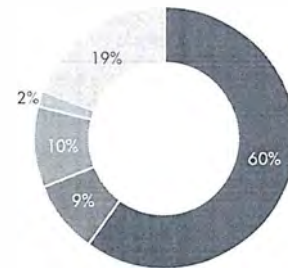
We revised our audit scope throughout the year in order to reflect changes in Shell's underlying business and risks and our reassessment of materiality.

Our final coverage is summarised below:

### CCS earnings\*



### Total assets



■ Full scope ■ Specific scope ■ Specified procedures ■ Review procedures ■ Other group procedures

\* CCS earnings, excluding identified items reported by Shell in its quarterly earnings releases and adjusted for an effective tax rate.

Allocation of performance materiality to the in-scope operating units

Audit work at the operating unit level is undertaken using a percentage of our performance materiality. This percentage is based on the size of the operating unit relative to Shell as a whole and our assessment of the risk of material misstatement at that operating unit. In 2016 the range of performance materiality allocated to operating units was \$40 million to \$220 million. The operating units selected, together with the ranges of allocated performance materiality, were:

	Countries	No. of operating units	Allocation \$ million
<b>Full scope Segments</b>			
Integrated Gas	Australia, Qatar	4	60-100
Upstream	Brazil, Canada, Nigeria, UK, USA	10	40-100
Downstream	Canada, Germany, Singapore, USA	5	60-120
Corporate	UK	1	80
<b>Full scope Function</b>			
Trading and supply	UK, USA	13	40-220
<b>Total full scope</b>		<b>33</b>	
<b>Specific scope Segments</b>			
Upstream	Kazakhstan, Malaysia, Netherlands, Norway, UK	6	60-80
Downstream	Germany, Netherlands, Singapore, USA	15	60-80
Corporate	Germany, UK, USA	23	60-80
<b>Specific scope Function</b>			
Trading and supply	UK, USA	8	40-80
<b>Total specific scope</b>		<b>52</b>	
<b>Total full and specific scope</b>		<b>85</b>	

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## Integrated group team structure

The overall audit strategy is determined by the Senior Statutory Auditor, Allister Wilson. During 2016 he personally visited nine countries to meet with local EY teams and Shell local management (in some cases more than once). The Senior Statutory Auditor is supported by 24 segment and function partners and directors, who are based in the Netherlands and the UK. They are responsible for directing, supervising and reviewing the work of local EY audit teams to evaluate whether:

- the work was performed and documented to a sufficiently high standard;
- the local EY audit team demonstrated that they had challenged management sufficiently and had executed their audit procedures with a sufficient level of scepticism; and
- there is sufficient appropriate audit evidence to support the conclusions reached.

## Involvement with local EY teams

Shell has centralised processes and controls over key areas within a number of BSCs. We have a central team who provide direct oversight, review, and coordination of our BSC audit teams. Our teams performed centralised testing in the BSCs for certain accounts, including revenue, cash and payroll. In establishing our overall approach to the group audit we determined the type of work that needed to be undertaken at each of the operating units or BSCs by the group audit team or by auditors from other EY global network firms operating under our instruction.

The group audit team performed procedures directly on 57 of the in-scope operating units. For the operating units where the work was performed by local EY auditors, we determined the appropriate level of involvement to enable us to determine that sufficient appropriate audit evidence had been obtained as a basis for our opinion on Shell as a whole.

The group audit team interacted regularly with the local EY teams during each stage of the audit, were responsible for the scope and direction of the audit process and reviewed key working papers. This, together with the additional procedures performed at the group level, gave us sufficient appropriate audit evidence for our opinion on the Consolidated Financial Statements. We maintained continuous and open dialogue with our local EY teams in addition to holding formal meetings quarterly to ensure that we were fully aware of their progress and results of their procedures.

We met with all of our local EY teams at our global team meetings in December 2015 and November 2016. Also during 2016, the Senior Statutory Auditor and other group audit partners and directors visited operating units across 10 countries and each of Shell's BSCs. This allowed us to gain a greater understanding of the business and issues faced in each location. The visits also promote deeper engagement with our local EY audit teams, ensuring that a consistent and cohesive audit approach is adopted, and that a high quality audit is executed. The countries and the BSC locations visited were as follows:

Countries visited			BSCs	
Australia	Nigeria	UK	Chennai, India	Kuala Lumpur, Malaysia
Brazil	Qatar	USA	Glasgow, UK	Manila, Philippines
Germany	Singapore		Krakow, Poland	
Netherlands	Malaysia			

## 6. OUR ASSESSMENT OF KEY AUDIT MATTERS

As Shell's auditors, we are required to determine – from the matters communicated by us to the Audit Committee during the year – those matters that required significant attention from us in performing our audit of Shell's 2016 Consolidated Financial Statements. In making this determination we took the following into account:

- the risks that we believed were significant to our audit and therefore required special audit consideration;
- areas of higher assessed risk of material misstatement that influenced our audit focus;
- significant audit judgements relating to areas in Shell's financial statements that involved significant management judgement, including accounting estimates that we identified as having high estimation uncertainty;
- the effect on our audit of significant events or transactions that occurred during the period; and
- those assessed risks of material misstatement that had the greatest effect on the allocation of resources in the audit and directing the efforts of the engagement team.

On this basis, we have identified the following key audit matters that, in our professional judgement, were of most significance in our audit of Shell's 2016 Consolidated Financial Statements. The key audit matters had the greatest effect on our overall audit strategy, the allocation of resources in the audit and in directing the global engagement team's efforts.

The key audit matters have been addressed in the context of the audit of Shell's Consolidated Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

The table below describes the key audit matters, a summary of our procedures carried out and our key observations that we communicated to the Shell Audit Committee. We presented to the May 2016 meeting of the Audit Committee the procedures that we planned to undertake in response to the risks that we identified.

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## 6. OUR ASSESSMENT OF KEY AUDIT MATTERS *Continued*

### Our key audit matters

Description of the key audit matters	Summary of our response to the key audit matters	Key observations communicated to the Shell Audit Committee
<b>First year audit transition</b>		
<p>In our first year as auditors we have to:</p> <ul style="list-style-type: none"> <li>■ build on our knowledge of Shell by understanding Shell's specific risks, controls, policies and processes. This enables us to identify the risks of material misstatement within Shell's financial statements and to determine the scope of our audit. For a company the size of Shell, with the global spread of operations and its use of BSCs, understanding the organisational structure and how this impacts on processes has been critical;</li> <li>■ establish the appropriateness of corresponding amounts and the account balances at the beginning of the period being audited; and</li> <li>■ understand accounting policies applied by Shell to ensure that these are consistently applied between periods.</li> </ul>	<p>The principal procedures performed included:</p> <ul style="list-style-type: none"> <li>■ shadowing PwC during the third quarter of 2015 and the 2015 yearend at group and key locations during closing and technical meetings with management. This provided us with insights on key issues and PwC's audit approach;</li> <li>■ holding a global audit planning meeting in December 2015 at which members of Shell management briefed senior members of our group audit and key location teams on Shell's organisation and processes;</li> <li>■ engaging with management at a group and local level in order to obtain a detailed understanding of Shell, including its processes and internal controls. This exercise covered over 300 processes across 67 operating units before the first quarter 2016 results announcement;</li> <li>■ understanding accounting policies and historic accounting judgements by reviewing accounting policy manuals and technical documentation on specific accounting topics;</li> <li>■ reviewing key elements of PwC's 2014 audit files at the group level, and their 2015 audit files both at the group level and for key operating units in scope for the group audit. This built on our knowledge gained through shadowing PwC; and</li> <li>■ site visits by the group audit team (see section 5).</li> </ul> <p>We built upon the knowledge gained through these procedures as we undertook our audit work and refined our views on risks and scope accordingly. We considered the results of our 2016 audit, as it progressed, to provide further evidence in respect of opening balances.</p>	<p>In our audit planning report presented to the Audit Committee in May 2016, we communicated the procedures that we had carried out in order to establish our audit base. We also presented our initial views of risks of material misstatement, the procedures we planned to undertake in response thereto and our proposed audit scope.</p> <p>We presented our updated views on risks and scoping to the December 2016 meeting of the Audit Committee.</p> <p>We formally confirmed to the Audit Committee in March 2017 that nothing had come to our attention that materially impacted on the opening balances and corresponding amounts.</p>

*Cross-reference:* See the Audit Committee Report on page 79 for further details.

### **The acquisition of BG, specifically the judgements around the purchase price allocation (PPA)**

<p>The consideration for the BG acquisition was \$54 billion. Net assets acquired were valued at \$43 billion and goodwill of \$11 billion was recognised.</p> <p>Shell was required to recognise BG's assets acquired and liabilities assumed at the acquisition-date fair values. The valuation of oil and gas assets is highly judgemental and complex, requiring significant judgement in applying forecasts and assumptions to complex valuation models.</p> <p>Given the extent of the judgement in valuing some of the assets – in particular deep-water and LNG assets – we believed that the fair value calculation exercise carried with it significant risk of material misstatement.</p>	<p>Shell management engaged third-party experts to provide valuation, tax and business modelling support with respect to the determination of the fair values of BG's assets and liabilities under IFRS 3. We deployed a specialist team to audit the PPA. Our team included valuation and business modelling specialists who have extensive experience in the valuation of oil and gas assets and liabilities.</p> <p>Our procedures – which were performed by our group team, local teams and specialists as appropriate – focused primarily on the risks relating to the valuation model, assumptions and judgements associated with the estimation of the fair value measurements. These included:</p> <ul style="list-style-type: none"> <li>■ gaining an understanding through enquiry and review of the valuation methodology adopted by Shell, and comparing the approach with accepted industry practice;</li> <li>■ assessing the appropriateness of key assumptions, including oil and gas prices and discount rates, by comparing them with external benchmarks;</li> <li>■ confirming consistency of assumptions with other areas of the financial statements;</li> <li>■ using our modelling team to audit the integrity of the models used in the valuations;</li> <li>■ understanding the value attributed to the cash flow benefits of integrating BG's assets and operations with those of Shell and validating that these benefits had been attributed appropriately to the asset valuations;</li> <li>■ recalculating the consideration and goodwill; and</li> <li>■ testing the internal controls over accounting and reporting for the business combination.</li> </ul> <p>These procedures were carried out primarily by the group team, including valuation and business modelling specialists, with input from local EY teams in Australia, Brazil and the USA.</p>	<p>We presented a separate report to the Audit Committee in May 2016 that addressed the audit work we carried out on the provisional PPA exercise. Subsequently, each quarter we reported to the Audit Committee on our progress in auditing the PPA.</p> <p>At the January 2017 meeting of the Audit Committee, we confirmed that we had audited the final adjustments to the PPA and were satisfied that management had followed a robust process in completing the PPA exercise and that it reflected appropriately the facts and circumstances that existed at the acquisition date.</p>
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*Cross-reference:* See the Audit Committee report on page 80 for details on how the Audit Committee considered the acquisition of BG. Also see Notes 4, 8 and 9 to the "Consolidated Financial Statements".

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Description of the key audit matters	Summary of our response to the key audit matters	Key observations communicated to the Shell Audit Committee
<b>The estimation of oil and gas reserves, including reserves used in the calculation of depreciation, depletion and amortisation (DD&amp;A)</b>		
<p>At December 31, 2016, Shell reported 13,248 million barrels of oil equivalent of proved developed and undeveloped reserves.</p> <p>The estimation and measurement of oil and gas reserves impacts a number of material elements of the financial statements including DD&amp;A, impairments, decommissioning and restoration provisions and acquisition accounting. There is technical uncertainty in assessing reserve quantities and complex contractual arrangements that determine Shell's share of reserves.</p> <p>Proved reserves estimates, calculated pursuant to SEC rules, have declined in recent years due to continued low prices. Their usage in determining DD&amp;A for certain fields with phased development or where volumes are not reflective of expected future production would accelerate depreciation charges in a way not reflective of their useful life. In these cases, Shell has used an alternative reserves base for DD&amp;A purposes so as to reflect better their expected useful life.</p>	<p>Our reserves team comprises auditors with substantial oil and gas reserves expertise, valuation experience and relevant qualifications in energy economics.</p> <p>We carried out the following procedures:</p> <ul style="list-style-type: none"> <li>■ confirmed our understanding of Shell's oil and gas reserves estimation process;</li> <li>■ tested significant controls in Shell's reserves framework;</li> <li>■ confirmed significant additions or reductions in proved reserves have been made in the period in which the new information became available;</li> <li>■ tested Shell's internal certification process and controls for technical and commercial experts responsible for reserves estimation;</li> <li>■ assessed the reasonableness of proved undeveloped reserves recognised. Where volumes recognised remain undeveloped for more than five years from the date they were booked, or where development is not expected for at least five years, we ensured that Shell was still working towards development by corroborating with future development plans, including capital expenditure plans as appropriate; and</li> <li>■ where SEC proved developed reserves were not used for DD&amp;A purposes, we challenged management to provide evidence to ensure that the reserves base used better reflected the expected useful life of the field or facilities and was applied consistently.</li> </ul> <p>Our procedures were led by the group team, with input from our teams in Australia, Brazil, Canada, Kazakhstan, Netherlands, Nigeria, Norway, Qatar, the UK and USA.</p>	<p>In January 2017 we communicated to the Audit Committee that, based on our testing performed, we had not identified any significant errors in the oil and gas reserves and concluded that the inputs and assumptions used to estimate proved reserves were reasonable.</p> <p>We also confirmed our conclusion that the changes in estimate of reserves used in the DD&amp;A calculation to reflect better the expected useful life of the field or facilities are appropriately and consistently applied. We noted that the approaches used are also in line with other international oil companies.</p>
<i>Crossreference:</i> See the Audit Committee Report on page 80 for details on how the Audit Committee considered DD&A. Also, see Note 2 to the "Consolidated Financial Statements", and Supplementary information – oil and gas (unaudited) – on page 153.		
<b>The recoverable amounts of exploration and production assets, goodwill, and Upstream and Integrated Gas joint ventures and associates</b>		
<p>At December 31, 2016, Shell recognised \$13 billion of goodwill, primarily relating to the BG acquisition, \$188 billion of property, plant and equipment and \$33 billion of investments in joint ventures and associates.</p> <p>A sustained low oil and gas price environment could have a significant impact on the recoverable amounts of Shell's Upstream and Integrated Gas assets and goodwill.</p> <p>In view of the generally long-lived nature of Shell's assets, the most critical assumption in forecasting future cash flows is management's view on the long-term oil and gas price outlook beyond the next three to four years.</p> <p>Other key inputs used in assessing recoverable amounts are the discount rate used, future expected production volumes and capital and operating expenditures. Shell uses a discount rate that reflects the fact that risks are adjusted in the cash flows.</p>	<p>We carried out procedures in all full and certain specific scope locations, including testing for indicators of impairment and validating the appropriateness of the level at which the testing took place.</p> <p>We confirmed that Shell's asset methodology was appropriate. Our modelling experts tested the integrity of the models used, where applicable.</p> <p>For price assumptions, we corroborated future short and long-term commodity prices to consensus analysts' forecasts and those adopted by other international oil companies, confirmed prices were used consistently across Shell and that pricing differentials were reasonable.</p> <p>For discount rates used, we engaged our oil and gas valuations team to calculate independently what an acceptable discount rate would be.</p> <p>For cash flow inputs where impairment tests were undertaken, we:</p> <ul style="list-style-type: none"> <li>■ confirmed that operating expenditure profiles and capital costs to complete construction could be supported by approved operator budgets and management forecasts;</li> <li>■ reconciled reserves volumes and confirmed that life-of-field assumptions were consistent with those applied in decommissioning and restoration provisions' models; and</li> <li>■ performed sensitivity analyses on certain key variables in the base case cash flow models to understand the impact of changes in certain assumptions (including oil and gas prices, production and operating expenditure levels).</li> </ul> <p>We assessed the reasonableness of the probability-weighting applied to the scenario risk factors used in the models and the basis for the risking of the cash flows applied to each individual asset. In doing so, we considered the stage of the life of the asset, country risk and consistency across similar developments and fields.</p> <p>Where impairment tests were undertaken, we stress tested the models using risked discount rates that we considered reasonable when taking account of the nature of the asset, its location, its stage of development and associated risks.</p> <p>In assessing the recoverable amount of goodwill, we tested a sample of Shell's largest assets in order to establish whether or not any reasonably possible change in a key assumption would result in an impairment of the goodwill.</p>	<p>We reported to the October 2016 meeting of the Audit Committee that, on the basis of our analysis of future commodity prices used in the impairment models versus other international oil companies and consensus analysts' forecasts, there is sufficient external evidence to support the reasonableness of Shell's price assumptions – both in the short and long term.</p> <p>We concluded that the impairments recorded are reasonable. Where potential indicators of impairment reversals were present, we were satisfied that the decisions not to reverse previously recorded impairments were appropriate.</p> <p>We concluded that the goodwill balance, which primarily relates to the BG acquisition, is not impaired. We reported to the Audit Committee that, in our view, no reasonably possible change in a key assumption would result in an impairment of the goodwill.</p>
<i>Crossreference:</i> See the Audit Committee Report on page 80 for details on how the Audit Committee considered impairments. Also, see Notes 2 and 9 to the "Consolidated Financial Statements".		

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## Our key audit matters *Continued*

Description of the key audit matters	Summary of our response to the key audit matters	Key observations communicated to the Shell Audit Committee
<b>Estimation of decommissioning and restoration provisions (D&amp;R)</b>		
<p>At December 31, 2016, Shell had recognised D&amp;R provisions of \$25 billion.</p> <p>D&amp;R provisions are highly judgemental, as they are calculated using cost models based on assumptions that are impacted by future activities and the legislative environment in which Shell operates.</p> <p>D&amp;R provisions are also affected by changes in the estimated date on which production will cease.</p> <p>The cost models are managed at a country level with certain key assumptions derived centrally. Shell discounts future estimated D&amp;R costs at a discount rate that is consistent with the rate applied in 2015.</p>	<p>In auditing the D&amp;R provisions we:</p> <ul style="list-style-type: none"> <li>■ identified the cost assumptions that have the most significant impact on the provisions and tested the appropriateness of these assumptions using third-party evidence, including rig and vessel rates;</li> <li>■ used our valuations experts to evaluate the reasonableness of the discount rate applied to the provisions by comparing it with the US Treasury Bond rate for a similar period;</li> <li>■ audited the integrity of the underlying models, engaging our modelling team where appropriate;</li> <li>■ verified the completeness of the cost estimate data by comparing it with work performed on oil and gas reserves and testing of property, plant and equipment;</li> <li>■ tested the consistency of, and rationale for, the contingent factors applied in the cost estimate model, which are derived from location specific analysis;</li> <li>■ performed a detailed review at the field level to ensure that all key movements were understood, corroborated and recorded correctly;</li> <li>■ agreed cost estimates for non-Shell-operated ventures to information provided by third parties. We investigated any significant differences between this information and the amount provided by Shell; and</li> <li>■ assessed whether D&amp;R movements should be expensed or capitalised by understanding the reason for the change and by comparing the movement with the carrying amount of the related asset.</li> </ul>	<p>We reported to the Audit Committee in December 2016 that we had challenged the discount rate applied by management, and that we were satisfied that the rate was appropriate.</p> <p>In January 2017, we communicated to the Audit Committee that, on the basis of the audit work performed, we had concluded that the D&amp;R provisions recorded are appropriate.</p> <p>We also reported that the movements over the year had been expensed appropriately in the Statement of Income or capitalised as part of property, plant and equipment.</p>

*Cross-reference:* See Note 19 to the "Consolidated Financial Statements".

### The recognition and valuation of deferred tax assets (DTA)

<p>At December 31, 2016, Shell recognised gross DTAs totalling \$34 billion, which are recognised within two balance sheet line items, deferred tax assets and as an offset against deferred tax liabilities, depending on the overall tax position in a particular jurisdiction.</p> <p>A significant proportion of DTA balances are supported by forecast future taxable profits, which are underpinned by Shell's commodity price assumptions and business plans.</p> <p>Estimating DTAs therefore requires significant judgement, including the timing of reversals and the availability of future profits against which tax deductions represented by the DTAs can be offset.</p> <p>In some cases the DTA will be utilised in a period substantially beyond the period of the operating plan. Sustained low commodity prices increase the risk to the recoverability of the DTA due to the fact that sufficient future taxable profits may not be achieved.</p>	<p>We determined the expected timing of reversal of the DTA and the relevant country tax laws that apply to the utilisation of tax losses. This included the ability to carry tax losses forward or back and any restrictions arising from ring fencing tax losses to particular projects.</p> <p>We established whether the DTA was expected to be used against deferred tax liabilities unwinding, future taxable profits or was reliant on tax planning opportunities.</p> <p>For DTAs that are reliant on future taxable profits or tax planning opportunities being available we:</p> <ul style="list-style-type: none"> <li>■ stress tested the commodity price and/or other key assumptions that underpin Shell's assessment of forecast probable taxable profits;</li> <li>■ ensured that the length of time over which the DTA would be recovered was appropriately supported by probable future taxable profits; and</li> <li>■ determined the extent to which sufficient profits would arise in the period and within the assets where the losses would be available for utilisation, considering, for example, limits on the length of time that losses can be carried forward (applicable to the USA, the Netherlands and China) or are ring fenced for tax purposes (including the UK and Nigeria).</li> </ul> <p>We evaluated whether the tax planning strategies proposed to recover any remaining DTAs are in line with current tax law and so available to Shell having considered their impact on other entities within Shell in light of their respective tax positions.</p>	<p>We reported to the January 2017 meeting of the Audit Committee that we had challenged the robustness of the following judgements:</p> <ul style="list-style-type: none"> <li>■ DTAs recognised on the basis of profits forecast to arise beyond the period of the operating plan;</li> <li>■ the expected utilisation of DTAs for assets that are ring-fenced for tax purposes; and</li> <li>■ the impact of projected business improvements including whether it is probable a loss-making business will become profitable in the future or an existing business will experience a significant increase in levels of profit.</li> </ul> <p>We concluded to the Audit Committee that DTAs are appropriately recognised and valued in the yearend Balance Sheet.</p>
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*Cross-reference:* See the Audit Committee Report on page 81 for details on how the Audit Committee reviewed certain tax matters, in particular the recoverability of deferred tax assets. Also see Notes 2 and 17 to the "Consolidated Financial Statements".

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## Key observations communicated to the Shell Audit Committee

### Description of the key audit matters

### Summary of our response to the key audit matters

#### Revenue recognition relating to unrealised trading gains and losses

Shell's trading and supply function is integrated within the Integrated Gas, Downstream and Upstream segments and is spread across multiple regions. It is inherently complex and exposes Shell to risks that are not normally associated with core oil and gas activities. Whilst trading is not uncommon amongst international oil and gas companies, it does require a robust internal control environment that is commensurate with that of a financial institution.

In our audit we have considered the risk of unrealised trading gains and losses recognised as a result of unauthorised trading activity or deliberate misstatement of Shell's trading positions and the inappropriate valuation of open trading positions.

The deliberate misstatement of Shell's trading positions or mis-marking of positions could result in understated trading losses, overstated trading profits and/or individual bonuses being manipulated through inappropriate inter-period profit/loss allocations.

*Cross-reference:* See Note 20 to the "Consolidated Financial Statements".

In order to address the specific risks associated with a trading and supply function, our trading audit teams comprised individuals who have significant experience of auditing both large commodity trading organisations and financial institutions.

Our audit procedures focused on:

- discussions with management on whether there were any breakdowns of trading controls or instances of rogue trading reported or known or suspected frauds;
- testing controls across the trading and supply function, including IT general and IT application controls;
- independently obtaining confirmation of a sample of open trading positions with brokers and counterparties, or performing alternative procedures as necessary;
- performing valuation testing of derivative positions, including confirming the appropriateness of price curves used;
- performing independent testing of valuation models, focusing on validating, contract terms and key assumptions; and
- testing the completeness of the amounts recorded in the financial statements through procedures to detect unrecorded liabilities as well as detailed cut-off procedures around sales, purchases, trade receivables and trade payables.

We confirmed that we tested the valuation of derivative contracts as at December 31, 2016, and that our testing – through a combination of controls testing and expanded substantive audit procedures – confirmed the models used to value contracts were appropriate for the purposes of the valuations included in the Consolidated Financial Statements.

#### Accounting for the assets under Shell's disposal programme

Shell's disposal programme continues and there are a number of assets where negotiations with potential buyers are progressing. It is important that Shell actively monitors the progress of each material asset to assess whether or not the criteria for the asset to be classified as an asset held for sale are met. This re-classification may have impairment and/or disclosure implications.

Assessing whether or not an asset should be classified as held for sale is a highly judgemental area.

For an asset to be classified as held for sale the following two criteria must be met:

- it must be available for immediate sale in its present condition; and
- the sale must be "highly probable".

*Cross-reference:* See Note 2 to the "Consolidated Financial Statements".

The most significant judgements for 2016 of whether or not a sale is "highly probable" relate to potential material disposals within Upstream and Downstream. Management have concluded that the criteria have not been met in respect of these transactions and therefore have not classified the assets as held for sale.

Our audit procedures for these potential disposals included:

- monitoring the progress of these transactions and obtaining regular status updates;
- assessing how committed Shell is to a plan with respect to the sale of each asset;
- assessing the likelihood of any sales being completed within one year;
- considering whether or not actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn;
- understanding what substantive matters were still under discussion with regard to potential disposals; and
- corroborating, where possible, the factors influencing management's conclusion.

We communicated to the January 2017 meeting of the Audit Committee that we agreed with management's assessment that, as at the year end, the criteria to classify the assets as assets held for sale had not been met.

In reaching our conclusion, in the case of each asset we took account of the substantive matters that were still under discussion and the number of commercial factors that remained unresolved at the year-end.

## 7. SCOPE OF THE AUDIT OF THE FINANCIAL STATEMENTS

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to Shell's and the Company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Directors; and the overall presentation of the financial statements. In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

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## 8. RESPECTIVE RESPONSIBILITIES OF DIRECTORS AND AUDITOR

As explained more fully in the statement of Directors' responsibilities set out on page 64, the Directors are responsible for the preparation of the Consolidated Financial Statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the Consolidated Financial Statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

## 9. MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION

### ISAs (UK and Ireland) reporting

We are required to report to you if, in our opinion, financial and non-financial information in the Annual Report is:

- materially inconsistent with the information in the audited financial statements; or
- apparently materially incorrect based on, or materially inconsistent with, our knowledge of Shell acquired in the course of performing our audit; or
- otherwise misleading.

In particular, we are required to report whether we have identified any inconsistencies between our knowledge acquired in the course of performing the audit and the Directors' statement that they consider the Annual Report and Accounts taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the entity's position and performance, business model and strategy; and whether the Annual Report appropriately addresses those matters that we communicated to the Audit Committee that we consider should have been disclosed.

We have no exceptions to report.

### Companies Act 2006 reporting

We are required to report to you if, in our opinion:

- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company Financial Statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of Directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have no exceptions to report.

### Listing Rules review requirements

We are required to review:

- the Directors' statement in relation to going concern, set out on page 65, and longer-term viability, set out on page 65; and
- the part of the corporate governance statement relating to the Company's compliance with the provisions of the UK Corporate Governance Code specified for our review.

We have no exceptions to report.

### ISAs (UK and Ireland) reporting, Statement on the directors' assessment of the principal risks that would threaten the solvency or liquidity of the entity

We are required to give a statement as to whether we have anything material to add or to draw attention to in relation to:

- the Directors' confirmation in the Annual Report that they have carried out a robust assessment of the principal risks facing the entity, including those that would threaten its business model, future performance, solvency or liquidity;
- the disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated;
- the Directors' statement in the Directors' Report (page 65) about whether they considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements, and their identification of any material uncertainties to the entity's ability to continue to do so over a period of at least 12 months from the date of approval of the financial statements; and
- the Directors' explanation in the Annual Report as to how they have assessed the prospects of the entity, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the entity will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We have nothing material to add or to draw attention to.

/s/ Allister Wilson (Senior Statutory Auditor)

for and on behalf of Ernst & Young LLP,

Statutory Auditor

London

March 8, 2017

1. The maintenance and integrity of the Shell website are the responsibility of the Directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the website.
2. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The report set out above is included for the purposes of Royal Dutch Shell plc's Annual Report and Accounts for 2016 only and does not form part of Royal Dutch Shell plc's Annual Report on Form 20-F for 2016.



## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

### **TO THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ROYAL DUTCH SHELL PLC**

We have audited the accompanying consolidated balance sheet of Royal Dutch Shell plc as of December 31, 2016, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Royal Dutch Shell plc at December 31, 2016, and the consolidated results of its operations and its cash flows for the year then ended, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union.

As discussed in Note 5 to the Consolidated Financial Statements, in 2016 Royal Dutch Shell plc elected to change the composition of its reportable segments. We also audited the adjustments to the 2015 and 2014 Consolidated Financial Statements to retrospectively reflect the change in composition of reportable segments. In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review or apply any procedures to the 2015 and 2014 Consolidated Financial Statements of the Company other than with respect to the adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2015 and 2014 Consolidated Financial Statements taken as a whole.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Royal Dutch Shell plc's internal control over financial reporting as of December 31, 2016, based on criteria established in the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 8, 2017, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP  
London, United Kingdom  
March 8, 2017

### **TO THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ROYAL DUTCH SHELL PLC**

We have audited Royal Dutch Shell plc's internal control over financial reporting as of December 31, 2016, based on criteria established in the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Royal Dutch Shell plc's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting as set out on page 72. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Royal Dutch Shell plc maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of Royal Dutch Shell plc as of December 31, 2016, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended and our report dated March 8, 2017, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP  
London, United Kingdom  
March 8, 2017

1. The maintenance and integrity of the Shell website are the responsibility of the Directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the website.
2. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The reports set out above are included for the purposes of Royal Dutch Shell plc's Annual Report on Form 20-F for 2016 only and do not form part of Royal Dutch Shell plc's Annual Report and Accounts for 2016.

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## Report of Independent Registered Public Accounting Firm *Continued*

### TO THE BOARD OF DIRECTORS AND ROYAL DUTCH SHELL PLC SHAREHOLDERS

In our opinion, the accompanying Consolidated Statement of Income, the Consolidated Statement of Comprehensive Income, the Consolidated Balance Sheet, the Consolidated Statement of Changes in Equity, the Consolidated Statement of Cash Flows and the related Notes to the Consolidated Financial Statements before the effects of the adjustments to retrospectively reflect the change in the composition of reportable segments described in Note 5 present fairly, in all material respects, the financial position of Royal Dutch Shell plc (the Company) and its subsidiaries (collectively Shell) at December 31, 2015 and the results of their operations and cash flows for each of the two years in the period ended December 31, 2015, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union.

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits, before the effects of the adjustments described above, of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

We were not engaged to audit, review, or apply any procedures to the adjustments to retrospectively reflect the change in the composition of reportable segments described in Note 5 and accordingly, we do not express an opinion or any other form of assurance about whether such adjustments are appropriate and have been properly applied. Those adjustments were audited by other auditors.

/s/ PricewaterhouseCoopers LLP  
London, United Kingdom  
March 9, 2016

Note that the report set out above is included for the purposes of Royal Dutch Shell plc's Annual Report on Form 20-F for 2016 only and does not form part of Royal Dutch Shell plc's Annual Report and Accounts for 2016.

## CONSOLIDATED FINANCIAL STATEMENTS

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## Consolidated Financial Statements *Continued*

### Consolidated Statement of Income

		\$ million		
	Notes	2016	2015	2014
Revenue	5	233,591	264,960	421,105
Share of profit of joint ventures and associates	10	3,545	3,527	6,116
Interest and other income	6	2,897	3,669	4,123
Total revenue and other income		240,033	272,156	431,344
Purchases		162,574	194,644	327,278
Production and manufacturing expenses		28,434	28,095	30,038
Selling, distribution and administrative expenses		12,101	11,956	13,965
Research and development		1,014	1,093	1,222
Exploration		2,108	5,719	4,224
Depreciation, depletion and amortisation	5	24,993	26,714	24,499
Interest expense	7	3,203	1,888	1,804
Total expenditure		234,427	270,109	403,030
Income before taxation		5,606	2,047	28,314
Taxation charge/(credit)	17	829	(153)	13,584
Income for the period	5	4,777	2,200	14,730
Income/(loss) attributable to non-controlling interest		202	261	(144)
Income attributable to Royal Dutch Shell plc shareholders		4,575	1,939	14,874
Basic earnings per share (\$)	25	0.58	0.31	2.36
Diluted earnings per share (\$)	25	0.58	0.30	2.36

### Consolidated Statement of Comprehensive Income

		\$ million		
	Notes	2016	2015	2014
Income for the period		4,777	2,200	14,730
Other comprehensive income/(loss), net of tax	23			
Items that may be reclassified to income in later periods:				
Currency translation differences		703	(7,121)	(5,321)
Unrealised losses on securities		(214)	(707)	(797)
Cash flow hedging (losses)/gains		(617)	61	528
Net investment hedging losses		(2,024)	-	-
Share of other comprehensive loss of joint ventures and associates	10	(28)	(40)	(156)
Total		(2,180)	(7,807)	(5,746)
Items that are not reclassified to income in later periods:				
Retirement benefits remeasurements		(3,817)	4,951	(6,482)
Other comprehensive loss for the period		(5,997)	(2,856)	(12,228)
Comprehensive (loss)/income for the period		(1,220)	(656)	2,502
Comprehensive income/(loss) attributable to non-controlling interest		154	155	(190)
Comprehensive (loss)/income attributable to Royal Dutch Shell plc shareholders		(1,374)	(811)	2,692

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## Consolidated Balance Sheet

		\$ million	
	Notes	Dec 31, 2016	Dec 31, 2015
<b>Assets</b>			
Non-current assets			
Intangible assets	8	23,967	6,283
Property, plant and equipment	9	236,098	182,838
Joint ventures and associates	10	33,255	30,150
Investments in securities	11	5,952	3,416
Deferred tax	17	14,425	11,033
Retirement benefits	18	1,456	4,362
Trade and other receivables	12	9,553	8,717
		324,706	246,799
Current assets			
Inventories	13	21,775	15,822
Trade and other receivables	12	45,664	45,784
Cash and cash equivalents	14	19,130	31,752
		86,569	93,358
Total assets		411,275	340,157
<b>Liabilities</b>			
Non-current liabilities			
Debt	15	82,992	52,849
Trade and other payables	16	6,925	4,528
Deferred tax	17	15,274	8,976
Retirement benefits	18	14,130	12,587
Decommissioning and other provisions	19	29,618	26,148
		148,939	105,088
Current liabilities			
Debt	15	9,484	5,530
Trade and other payables	16	53,417	52,770
Taxes payable	17	6,685	8,233
Retirement benefits	18	455	350
Decommissioning and other provisions	19	3,784	4,065
		73,825	70,948
Total liabilities		222,764	176,036
<b>Equity</b>			
Share capital	21	683	546
Shares held in trust	22	(901)	(584)
Other reserves	23	11,298	(17,186)
Retained earnings		175,566	180,100
Equity attributable to Royal Dutch Shell plc shareholders		186,646	162,876
Non-controlling interest		1,865	1,245
Total equity		188,511	164,121
Total liabilities and equity		411,275	340,157

Signed on behalf of the Board

/s/ Simon Henry

Simon Henry  
Chief Financial Officer  
March 8, 2017

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## Consolidated Financial Statements *Continued*

### Consolidated Statement of Changes in Equity

\$ million

	Equity attributable to Royal Dutch Shell plc shareholders						Total equity
	Share capital (see Note 21)	Shares held in trust (see Note 22)	Other reserves (see Note 23)	Retained earnings	Total	Non- controlling interest	
<b>At January 1, 2016</b>	546	(584)	(17,186)	180,100	162,876	1,245	164,121
Comprehensive loss for the period	–	–	(5,949)	4,575	(1,374)	154	(1,220)
Dividends paid (see Note 24)	–	–	–	(14,959)	(14,959)	(180)	(15,139)
Scrip dividends (see Note 24)	17	–	(17)	5,282	5,282	–	5,282
Shares issued (see Note 4)	120	–	33,930	–	34,050	–	34,050
Share-based compensation [A]	–	(317)	520	141	344	–	344
Other changes in non-controlling interest [B]	–	–	–	427	427	646	1,073
<b>At December 31, 2016</b>	683	(901)	11,298	175,566	186,646	1,865	188,511
<b>At January 1, 2015</b>	540	(1,190)	(14,365)	186,981	171,966	820	172,786
Comprehensive loss for the period	–	–	(2,750)	1,939	(811)	155	(656)
Dividends paid (see Note 24)	–	–	–	(11,972)	(11,972)	(117)	(12,089)
Scrip dividends (see Note 24)	7	–	(7)	2,602	2,602	–	2,602
Repurchases of shares	(1)	–	1	1	1	–	1
Share-based compensation	–	606	(65)	48	589	–	589
Other changes in non-controlling interest [B]	–	–	–	501	501	387	888
<b>At December 31, 2015</b>	546	(584)	(17,186)	180,100	162,876	1,245	164,121
<b>At January 1, 2014</b>	542	(1,932)	(2,037)	183,474	180,047	1,101	181,148
Comprehensive income for the period	–	–	(12,182)	14,874	2,692	(190)	2,502
Dividends paid (see Note 24)	–	–	–	(11,843)	(11,843)	(116)	(11,959)
Scrip dividends (see Note 24)	6	–	(6)	2,399	2,399	–	2,399
Repurchases of shares	(8)	–	8	(2,787)	(2,787)	–	(2,787)
Share-based compensation	–	742	(148)	137	731	–	731
Other changes in non-controlling interest [B]	–	–	–	727	727	25	752
<b>At December 31, 2014</b>	540	(1,190)	(14,365)	186,981	171,966	820	172,786

[A] Includes a reclassification of \$534 million between shares held in trust and other reserves, with no impact on total equity, in order to appropriately reflect the carrying amount of shares held in trust at cost.

[B] Mainly relates to public offerings of limited partner units in Shell Midstream Partners, L.P. The difference between the proceeds after tax and the increase in non-controlling interest, measured by reference to the carrying amount of the entity's net assets at the date of each transaction, was recognised in retained earnings.

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## Consolidated Statement of Cash Flows

	Notes	2016	2015	2014
				\$ million
Income for the period		4,777	2,200	14,730
Adjustment for:				
Current tax		2,731	7,058	13,757
Interest expense (net)		2,752	1,529	1,598
Depreciation, depletion and amortisation		24,993	26,714	24,499
Net gains on sale and revaluation of non-current assets and businesses		(2,141)	(3,460)	(3,212)
(Increase)/decrease in inventories		(5,658)	2,827	7,958
Decrease/(increase) in current receivables		2,038	9,852	(1,541)
Decrease in current payables		(2,669)	(7,158)	(12)
Share of profit of joint ventures and associates		(3,545)	(3,527)	(6,116)
Dividends received from joint ventures and associates		3,820	4,627	6,902
Deferred tax, retirement benefits, decommissioning and other provisions		(823)	(5,827)	(1,720)
Other		(1,226)	2,648	2,500
Tax paid		(4,434)	(7,673)	(14,299)
<b>Cash flow from operating activities</b>		<b>20,615</b>	<b>29,810</b>	<b>45,044</b>
Capital expenditure		(22,116)	(26,131)	(31,676)
Acquisition of BG Group plc, net of cash and cash equivalents acquired	4	(11,421)	-	-
Investments in joint ventures and associates		(1,330)	(896)	(1,426)
Proceeds from sale of property, plant and equipment and businesses		2,072	4,720	9,873
Proceeds from sale of joint ventures and associates		1,565	276	4,163
Interest received		470	288	174
Other		(203)	(664)	(765)
<b>Cash flow from investing activities</b>		<b>(30,963)</b>	<b>(22,407)</b>	<b>(19,657)</b>
Net decrease in debt with maturity period within three months		(360)	(586)	(3,332)
Other debt:				
New borrowings		18,144	21,500	7,778
Repayments		(6,710)	(6,023)	(4,089)
Interest paid		(2,938)	(1,742)	(1,480)
Change in non-controlling interest		1,110	598	989
Cash dividends paid to:				
Royal Dutch Shell plc shareholders	24	(9,677)	(9,370)	(9,444)
Non-controlling interest		(180)	(117)	(116)
Repurchases of shares		-	(409)	(3,328)
Shares held in trust: net (purchases)/sales and dividends received		(160)	(39)	232
<b>Cash flow from financing activities</b>		<b>(771)</b>	<b>3,812</b>	<b>(12,790)</b>
Currency translation differences relating to cash and cash equivalents		(1,503)	(1,070)	(686)
(Decrease)/increase in cash and cash equivalents		(12,622)	10,145	11,911
Cash and cash equivalents at January 1		31,752	21,607	9,696
Cash and cash equivalents at December 31	14	19,130	31,752	21,607

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 1 BASIS OF PREPARATION

The Consolidated Financial Statements of Royal Dutch Shell plc (the Company) and its subsidiaries (collectively referred to as Shell) have been prepared in accordance with the provisions of the Companies Act 2006 (the Act) and Article 4 of the IAS Regulation, and therefore in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. As applied to Shell, there are no material differences from IFRS as issued by the International Accounting Standards Board (IASB); therefore, the Consolidated Financial Statements have been prepared in accordance with IFRS as issued by the IASB.

As described in the accounting policies in Note 2, the Consolidated Financial Statements have been prepared under the historical cost convention except for certain items measured at fair value. Those accounting policies have been applied consistently in all periods.

The Consolidated Financial Statements were approved and authorised for issue by the Board of Directors on March 8, 2017.

### 2 KEY ACCOUNTING POLICIES, JUDGEMENTS AND ESTIMATES

#### NATURE OF THE CONSOLIDATED FINANCIAL STATEMENTS

The Consolidated Financial Statements are presented in US dollars (dollars) and comprise the financial statements of the Company and its subsidiaries, being those entities over which the Company has control, either directly or indirectly, through exposure or rights to their variable returns and the ability to affect those returns through its power over the entities. Information about subsidiaries at December 31, 2016, can be found in Exhibit 8.

Subsidiaries are consolidated from the date on which control is obtained until the date that such control ceases, using consistent accounting policies. All inter-company balances and transactions, including unrealised profits arising from such transactions, are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Non-controlling interest represents the proportion of income, other comprehensive income and net assets in subsidiaries that is not attributable to the Company's shareholders.

#### CURRENCY TRANSLATION

Foreign currency transactions are translated using the exchange rate at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at quarter-end exchange rates of monetary assets and liabilities denominated in foreign currencies (including those in respect of inter-company balances unless related to loans of a long-term investment nature) are recognised in income, except when recognised in other comprehensive income in respect of cash flow or net investment hedges, and presented within interest and other income or within purchases where not related to financing. Share capital issued in currencies other than the dollar is translated at the exchange rate at the date of issue.

On consolidation, assets and liabilities of non-dollar entities are translated to dollars at year-end rates of exchange, while their statements of income, other comprehensive income and cash flows are translated at quarterly average rates. The resulting translation differences are recognised as currency translation differences within other comprehensive income. Upon sale of all or part of an interest in, or upon liquidation of, an entity, the appropriate portion of cumulative currency translation differences related to that entity are generally recognised in income.

#### REVENUE RECOGNITION

Revenue from sales of oil, natural gas, chemicals and other products is recognised at the fair value of consideration received or receivable, after deducting sales taxes, excise duties and similar levies, when the significant risks and rewards of ownership have been transferred, which is when title passes to the customer. For sales by Integrated Gas and Upstream operations, this generally occurs when product is physically transferred into a vessel, pipe or other delivery mechanism; for sales by refining operations it is either when product is placed onboard a vessel or offloaded from the vessel, depending on the contractually agreed terms; and for sales of oil products and chemicals it is either at the point of delivery or the point of receipt, depending on contractual conditions.

Revenue resulting from hydrocarbon production from properties in which Shell has an interest with partners in joint arrangements is recognised on the basis of Shell's working interest (entitlement method). Revenue resulting from the production of oil and natural gas under production-sharing contracts (PSCs) is recognised for those amounts relating to Shell's cost recoveries and Shell's share of the remaining production. Gains and losses on derivative contracts and the revenue and costs associated with other contracts that are classified as held for trading purposes are reported on a net basis in the Consolidated Statement of Income. Purchases and sales of hydrocarbons under exchange contracts that are necessary to obtain or reposition feedstocks for refinery operations are presented net in the Consolidated Statement of Income.

#### RESEARCH AND DEVELOPMENT

Development costs that are expected to generate probable future economic benefits are capitalised as intangible assets. All other research and development expenditure is recognised in income as incurred.

#### EXPLORATION COSTS

Hydrocarbon exploration costs are accounted for under the successful efforts method: exploration costs are recognised in income when incurred, except that exploratory drilling costs, including in respect of operating leases, are included in property, plant and equipment pending determination of proved reserves. Exploration costs capitalised in respect of exploration wells that are more than 12 months old are written off unless: (a) proved reserves are booked; or (b) (i) they have found commercially producible quantities of reserves and (ii) they are subject to further exploration or appraisal activity in that either drilling of additional exploratory wells is underway or firmly planned for the near future or other activities are being undertaken to sufficiently progress the assessing of reserves and the economic and operating viability of the project.



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## PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS

### Recognition

Property, plant and equipment comprise assets owned by Shell, assets held by Shell under finance leases and assets operated by Shell as contractor in PSCs. They include rights and concessions in respect of properties with proved reserves (proved properties) and with no proved reserves (unproved properties). Property, plant and equipment, including expenditure on major inspections, and intangible assets are initially recognised in the Consolidated Balance Sheet at cost where it is probable that they will generate future economic benefits. This includes capitalisation of decommissioning and restoration costs associated with provisions for asset retirement (see "Provisions"), certain development costs (see "Research and development") and the effects of associated cash flow hedges (see "Financial instruments and other derivative contracts") as applicable. The accounting for exploration costs is described separately (see "Exploration costs"). Intangible assets include goodwill, LNG off-take and soles contracts obtained through acquisition, software costs and trademarks. Interest is capitalised, as an increase in property, plant and equipment, on major capital projects during construction.

Property, plant and equipment and intangible assets are subsequently carried at cost less accumulated depreciation, depletion and amortisation (including any impairment). Gains and losses on sale are determined by comparing the proceeds with the carrying amounts of assets sold and are recognised in income, within interest and other income.

An asset is classified as held for sale if its carrying amount will be recovered principally through sale rather than through continuing use, which is when the sale is highly probable and it is available for immediate sale. Assets classified as held for sale are measured at the lower of the carrying amount upon classification and the fair value less costs to sell.

### Depreciation, depletion and amortisation

Property, plant and equipment related to hydrocarbon production activities are in principle depreciated on a unit-of-production basis over the proved developed reserves of the field concerned, other than assets whose useful lives differ from the lifetime of the field which are depreciated applying the straight-line method. However, for certain Upstream assets, other approaches are applied to determine the reserves base for the purpose of calculating depreciation, such as using management's expectations of future oil and gas prices rather than yearly average prices, to provide a phasing of periodic depreciation charges that more appropriately reflects the expected utilisation of the assets concerned.

Rights and concessions in respect of proved properties are depleted on the unit-of-production basis over the total proved reserves of the relevant area. Where individually insignificant, unproved properties may be grouped and depreciated based on factors such as the average concession term and post experience of recognising proved reserves.

Property, plant and equipment held under finance leases and capitalised LNG off-take and soles contracts are depreciated or amortised over the term of the respective contract. Other property, plant and equipment and intangible assets are depreciated or amortised on a straight-line basis over their estimated useful lives, except for goodwill, which is not amortised. They include refineries and chemical plants (for which the useful life is generally 20 years), retail service stations (15 years), upgraders (30 years) and major inspection costs, which are depreciated over the estimated period before the next planned major inspection (three to five years).

On classification held for sale, depreciation on the asset ceases.

Estimates of the useful lives and residual values of property, plant and equipment and intangible assets are reviewed annually and adjusted if appropriate.

### Impairment

The carrying amount of goodwill is tested for impairment annually; in addition, assets other than unproved properties (see "Exploration costs") are tested for impairment whenever events or changes in circumstances indicate that the carrying amounts for those assets may not be recoverable. On classification as held for sale, the carrying amounts of property, plant and equipment and intangible assets are also reviewed. If assets are determined to be impaired, the carrying amounts of those assets are written down to their recoverable amount, which is the higher of fair value less costs to sell (see "Fair value measurements") and value in use.

Value in use is determined as the amount of estimated risk-adjusted discounted future cash flows. For this purpose, assets are grouped into cash-generating units based on separately identifiable and largely independent cash inflows. Estimates of future cash flows used in the evaluation of impairment of assets are made using management's forecasts of commodity prices, market supply and demand, product margins and, in the case of exploration and production assets, expected production volumes. The latter takes into account assessments of field and reservoir performance and includes expectations about both proved reserves and volumes that are expected to constitute proved reserves in the future (unproved volumes), which are risk-weighted utilising geological, production, recovery and economic projections. Cash flow estimates are risk-adjusted to reflect local conditions as appropriate and discounted at a rate based on Shell's marginal cost of debt.

Impairments, except those related to goodwill, are reversed as applicable to the extent that the events or circumstances that triggered the original impairment have changed.

Impairment losses and reversals are reported within depreciation, depletion and amortisation.

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[Note 2 continued]

## Key accounting judgements and estimates

### Proved oil and gas reserves

Unit-of-production depreciation, depletion and amortisation charges are principally measured based on management's estimates of proved developed oil and gas reserves. Also, exploration drilling costs are capitalised pending the results of further exploration or appraisal activity, which may take several years to complete and before any related proved reserves can be booked.

Proved reserves are estimated by reference to available geological and engineering data and only include volumes for which access to market is assured with reasonable certainty. Yearly average oil and gas prices are applied in the determination of proved reserves. Estimates of proved reserves are inherently imprecise, require the application of judgement and are subject to regular revision, either upward or downward, based on new information such as from the drilling of additional wells, observation of long-term reservoir performance under producing conditions and changes in economic factors, including product prices, contract terms or development plans.

Changes to estimates of proved developed reserves affect prospectively the amounts of depreciation, depletion and amortisation charged and, consequently, the carrying amounts of exploration and production assets. It is expected, however, that in the normal course of business the diversity of the asset portfolio will limit the effect of such revisions. The outcome of, or assessment of plans for, exploration or appraisal activity may result in the related capitalised exploration drilling costs being recognised in income in that period.

Judgement is involved in determining when to use an alternative reserves base in order to appropriately reflect the expected utilisation of the assets concerned (see "Depreciation, depletion and amortisation").

Information about the carrying amounts of exploration and production assets and the amounts charged to income, including depreciation, depletion and amortisation, is presented in Note 9.

### Impairment

For the purposes of determining whether impairment of assets has occurred, and the extent of any impairment loss or its reversal, the key assumptions management uses in estimating risk-adjusted future cash flows for value-in-use measures are future oil and gas prices, expected production volumes and refining margins appropriate to the local circumstances and environment. These assumptions and the judgements of management that are based on them are subject to change as new information becomes available. Changes in economic conditions can also affect the rate used to discount future cash flow estimates.

Future price assumptions tend to be stable because management does not consider short-term increases or decreases in prices as being indicative of long-term levels, but they are nonetheless subject to change. Expected production volumes, which comprise proved reserves and unproved volumes, are used for impairment testing because management believes this to be the most appropriate indicator of expected future cash flows. As discussed in "Proved oil and gas reserves" above, reserves estimates are inherently imprecise. Furthermore, projections about unproved volumes are based on information that is necessarily less robust than that available for mature reservoirs. Due to the nature and geographical spread of the business activity in which those assets are used, it is typically not practicable to estimate the likelihood or extent of impairments under different sets of assumptions for Shell overall.

Changes in assumptions could affect the carrying amounts of assets, and any impairment losses and reversals will affect income.

Judgement, which is subject to change as new information becomes available, can be required in determining when an asset is classified as held for sale. A change in that judgement could result in impairment charges affecting income, depending on whether classification requires a write down of the asset to its fair value less costs to sell.

Information about the carrying amounts of assets and impairments is presented in Notes 8 and 9.

## LEASES

Agreements under which payments are made to owners in return for the right to use an asset for a period are accounted for as leases. Leases that transfer substantially all the risks and rewards of ownership are recognised at the commencement of the lease term as finance leases within property, plant and equipment and debt at the fair value of the leased asset or, if lower, at the present value of the minimum lease payments. Finance lease payments are apportioned between interest expense and repayments of debt. All other leases are classified as operating leases and the cost is recognised in income on a straight-line basis, except where capitalised as exploration drilling costs (see "Exploration costs").

## JOINT ARRANGEMENTS AND ASSOCIATES

Arrangements under which Shell has contractually agreed to share control (see "Nature of the Consolidated Financial Statements") with another party or parties are joint ventures where the parties have rights to the net assets of the arrangement, or joint operations where the parties have rights to the assets and obligations for the liabilities relating to the arrangement. Investments in entities over which Shell has the right to exercise significant influence but neither control nor joint control are classified as associates. Information about incorporated joint arrangements and associates at December 31, 2016, can be found in Exhibit 8.

Investments in joint ventures and associates are accounted for using the equity method, under which the investment is initially recognised at cost and subsequently adjusted for the Shell share of post-acquisition income less dividends received and the Shell share of other comprehensive income and other movements in equity, together with any loans of a long-term investment nature. Where necessary, adjustments are made to the financial statements of joint ventures and associates to bring the accounting policies used into line with those of Shell. In an exchange of assets and liabilities for an interest in a joint venture, the non-Shell share of any excess of the fair value of the assets and liabilities transferred over the pre-exchange carrying amounts is recognised in income. Unrealised gains on other transactions between Shell and its joint ventures and associates are eliminated to the extent of Shell's interest in them; unrealised losses are treated similarly but may also result in an assessment of whether the asset transferred is impaired.

Shell recognises its assets and liabilities relating to its interests in joint operations, including its share of assets held jointly and liabilities incurred jointly with other partners.

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## INVENTORIES

Inventories are stated at cost or net realisable value, whichever is lower. Cost comprises direct purchase costs (including transportation), and associated costs incurred in bringing inventories to their present condition and location, and is determined using the first-in, first-out (FIFO) method for oil, gas and chemicals and by the weighted average cost method for materials.

## TAXATION

The charge for current tax is calculated based on the income reported by the Company and its subsidiaries, as adjusted for items that are non-taxable or disallowed and using rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is determined, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the Consolidated Balance Sheet and on unused tax losses and credits carried forward.

Deferred tax assets and liabilities are calculated using the enacted or substantively enacted rates that are expected to apply when an asset is realised or a liability is settled. They are not recognised where they arise on the initial recognition of goodwill or of an asset or liability in a transaction (other than in a business combination) that, at the time of the transaction, affects neither accounting nor taxable profit, or in respect of taxable temporary differences associated with subsidiaries, joint ventures and associates where the reversal of the respective temporary difference can be controlled by Shell and it is probable that it will not reverse in the foreseeable future.

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences, unused tax losses and credits carried forward can be utilised.

Income taxes are recognised in income except when they relate to items recognised in other comprehensive income, in which case the tax is recognised in other comprehensive income. Income tax assets and liabilities are presented separately in the Consolidated Balance Sheet except where there is a right of offset within fiscal jurisdictions and an intention to settle such balances on a net basis.

### Key accounting judgements and estimates

Tax liabilities are recognised when it is considered probable that there will be a future outflow of funds to a taxing authority. In such cases, provision is made for the amount that is expected to be settled, where this can be reasonably estimated. This requires the application of judgement as to the ultimate outcome, which can change over time depending on facts and circumstances. A change in estimate of the likelihood of a future outflow and/or in the expected amount to be settled would be recognised in income in the period in which the change occurs.

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in respect of deferred tax assets as well as in the amounts recognised in income in the period in which the change occurs.

Taxation information, including charges and deferred tax assets and liabilities, is presented in Note 17. Income taxes include taxes at higher rates levied on income from certain Integrated Gas and Upstream activities.

## RETIREMENT BENEFITS

Benefits in the form of retirement pensions and healthcare and life insurance are provided to certain employees and retirees under defined benefit and defined contribution plans.

Obligations under defined benefit plans are calculated annually by independent actuaries using the projected unit credit method, which takes into account employees' years of service and, for pensions, average or final pensionable remuneration, and are discounted to their present value using interest rates of high-quality corporate bonds denominated in the currency in which the benefits will be paid and of a duration consistent with the plan obligations. Where plans are funded, payments are made to independently managed trusts; assets held by those trusts are measured at fair value.

The amounts recognised in income in respect of defined benefit plans mainly comprise service cost and net interest. Service cost comprises principally the increase in the present value of the obligation for benefits resulting from employee service during the period (current service cost) and also amounts relating to past service and settlements or amendments of plans. Plan amendments are changes to benefits and are generally recognised when all legal and regulatory approvals have been received and the effects have been communicated to members. Net interest is calculated using the net defined benefit liability or asset matched against the discount rate yield curve at the beginning of each year for each plan. Remeasurements of the net defined benefit liability or asset resulting from actuarial gains and losses and the return on plan assets excluding the amount recognised in income are recognised in other comprehensive income.

For defined contribution plans, pension expense represents the amount of employer contributions payable for the period.

### Key accounting judgements and estimates

Defined benefit obligations and plan assets, and the resulting liabilities and assets that are recognised, are subject to significant volatility as actuarial assumptions regarding future outcomes and market values change. Substantial judgement is required in determining the actuarial assumptions, which vary for the different plans to reflect local conditions but are determined under a common process in consultation with independent actuaries. The assumptions applied in respect of each plan are reviewed annually and adjusted where necessary to reflect changes in experience and actuarial recommendations.

Information about the amounts reported in respect of defined benefit pension plans, assumptions applicable to the principal plans and their sensitivity to changes are presented in Note 18.

## PROVISIONS

Provisions are recognised at the balance sheet date at management's best estimate of the expenditure required to settle the present obligation. Non-current amounts are discounted at a rate intended to reflect the time value of money. Specific details for decommissioning and restoration costs are described below. The carrying amounts of provisions are regularly reviewed and adjusted for new facts or changes in law or technology.

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[Note 2 continued]

Provisions for decommissioning and restoration costs, which arise principally in connection with hydrocarbon production facilities and pipelines, are measured on the basis of current requirements, technology and price levels; the present value is calculated using amounts discounted over the useful economic life of the assets. The liability is recognised (together with a corresponding amount as part of the related property, plant and equipment) once an obligation crystallises in the period when a reasonable estimate can be made. The effects of changes resulting from revisions to the timing or the amount of the original estimate of the provision are reflected on a prospective basis, generally by adjustment to the carrying amount of the related property, plant and equipment. However, where there is no related asset, or the change reduces the carrying amount to nil, the effect, or the amount in excess of the reduction in the related asset to nil, is recognised in income.

Redundancy provisions are recognised when a detailed formal plan identifies the business or part of the business concerned, the location and number of employees affected, a detailed estimate of the associated costs and an appropriate timeline, and the employees affected have been notified of the plan's main features.

Other provisions are recognised in income in the period in which an obligation arises and the amount can be reasonably estimated. Provisions are measured based on current legal requirements and existing technology where applicable. Recognition of any joint and several liability is based on management's best estimate of the final pro rata share of the liability. Provisions are determined independently of expected insurance recoveries. Recoveries are recognised when virtually certain of realisation.

## Key accounting judgements and estimates

Provisions are recognised for the future decommissioning and restoration of hydrocarbon production facilities and pipelines at the end of their economic lives. The estimated cost is recognised in income over the life of the proved developed reserves on a unit-of-production basis or on a straight-line basis, as applicable. Changes in the estimates of costs to be incurred, proved developed reserves or the rate of production will therefore impact income, generally over the remaining economic life of the related assets.

Estimates of the amounts of provisions recognised are based on current legal and constructive requirements, technology and price levels. Because actual outflows can differ from estimates due to changes in laws, regulations, public expectations, technology, prices and conditions, and can take place many years in the future, the carrying amounts of provisions are regularly reviewed and adjusted to take account of such changes. The discount rate applied is reviewed annually.

Information about decommissioning and restoration provisions is presented in Note 19.

## FINANCIAL INSTRUMENTS AND OTHER DERIVATIVE CONTRACTS

Financial assets and liabilities are presented separately in the Consolidated Balance Sheet except where there is a legally enforceable right of offset and net settlement is regularly applied.

### Financial assets

#### Investments in securities

Investments in securities (also referred to as "securities") comprise equity and debt securities classified on initial recognition as available-for-sale and are carried at fair value, except where their fair value cannot be measured reliably, in which case they are carried at cost, less any impairment. Unrealised holding gains and losses other than impairments are recognised in other comprehensive income, except for translation differences arising on foreign currency debt securities, which are recognised in income. On maturity or sale, net gains and losses previously deferred in accumulated other comprehensive income are recognised in income.

Interest income on debt securities is recognised in income using the effective interest method. Dividends on equity securities are recognised in income when receivable.

#### Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and in hand, including offsetting bank overdrafts, short-term bank deposits, money market funds, reverse repos and similar instruments that have a maturity of three months or less at the date of purchase.

#### Trade receivables

Trade receivables are recognised initially at fair value based on amounts exchanged and subsequently at amortised cost less any impairment.

### Financial liabilities

Debt and trade payables are recognised initially at fair value based on amounts exchanged, net of transaction costs, and subsequently at amortised cost except for fixed rate debt subject to fair value hedging which is remeasured for the hedged risk (see below). Interest expense on debt is accounted for using the effective interest method and, other than interest capitalised, is recognised in income.

### Derivative contracts and hedges

Derivative contracts are used in the management of interest rate risk, foreign exchange risk and commodity price risk, and in the management of foreign currency cash balances. These contracts are recognised at fair value.

Certain derivative contracts qualify and are designated either as a "fair value" hedge of the change in fair value of a recognised asset or liability or an unrecognised firm commitment or as a "cash flow" hedge of the change in cash flows to be received or paid relating to a recognised asset or liability or a highly probable forecast transaction.

A change in the fair value of a hedging instrument designated as a fair value hedge is recognised in income, together with the consequential adjustment to the carrying amount of the hedged item. The effective portion of a change in fair value of a derivative contract designated as a cash flow hedge is recognised in other comprehensive income until the hedged transaction occurs; any ineffective portion is recognised in income. Where the hedged item is a non-financial asset or liability, the amount in accumulated other comprehensive income is transferred to the initial carrying amount of the asset or liability (reclassified to the balanced sheet); for other hedged items, the amount in accumulated other comprehensive income is reclassified to income when the hedged transaction affects income.

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The effective portion of a change due to retranslation of quarter-end exchange rates in the carrying amount of debt and the principal amount of derivative contracts used to hedge net investments in foreign operations is recognised in other comprehensive income until the related investment is sold or liquidated; any ineffective portion is recognised in income.

All relationships between hedging instruments and hedged items are documented, as well as risk management objectives and strategies for undertaking hedge transactions. The effectiveness of hedges is also continually assessed and hedge accounting is discontinued when a hedge ceases to be highly effective.

Gains and losses on derivative contracts not qualifying and designated as hedges, including forward sale and purchase contracts for commodities in trading operations that may be settled by the physical delivery or receipt of the commodity, are recognised in income.

Unless designated as hedging instruments, contracts to sell or purchase non-financial items that can be settled net as if the contracts were financial instruments and that do not meet expected own use requirements (typically, forward sale and purchase contracts for commodities in trading operations), and contracts that are or contain written options, are recognised at fair value; associated gains and losses are recognised in income.

Derivatives embedded within contracts that are not already required to be recognised at fair value, and that are not closely related to the host contract in terms of economic characteristics and risks, are separated from their host contract and recognised at fair value; associated gains and losses are recognised in income.

## FAIR VALUE MEASUREMENTS

Fair value measurements are estimates of the amounts for which assets or liabilities could be transferred at the measurement date, based on the assumption that such transfers take place between participants in principal markets and, where applicable, taking highest and best use into account. Where available, fair value measurements are derived from prices quoted in active markets for identical assets or liabilities. In the absence of such information, other observable inputs are used to estimate fair value. Inputs derived from external sources are corroborated or otherwise verified, as appropriate. In the absence of publicly available information, fair value is determined using estimation techniques that take into account market perspectives relevant to the asset or liability, in as far as they can reasonably be ascertained, based on predominantly unobservable inputs. For derivative contracts where publicly available information is not available, fair value estimations are generally determined using models and other valuation methods, the key inputs for which include future prices, volatility, price correlation, counterparty credit risk and market liquidity, as appropriate; for other assets and liabilities, fair value estimations are generally based on the net present value of expected future cash flows.

### Key accounting judgements and estimates

The acquisition of BG Group plc required management to estimate the fair value of the assets acquired and liabilities assumed; further information is given in Note 4.

## SHARE-BASED COMPENSATION PLANS

The fair value of share-based compensation expense arising from the Performance Share Plan (PSP) and the Long-term Incentive Plan (LTIP) – Shell's main equity-settled plans – is estimated using a Monte Carlo option pricing model and is recognised in income from the date of grant over the vesting period with a corresponding increase directly in equity. The model projects and averages the results for a range of potential outcomes for the vesting conditions, the principal assumptions for which are the share price volatility and dividend yields for Shell and four of its main competitors over the last three years and the last 10 years. Changes in the fair value of share-based compensation for cash-settled plans are recognised in income with a corresponding change in liabilities.

## SHARES HELD IN TRUST

Shares in the Company, which are held by employee share ownership trusts and trust-like entities, are not included in assets but are reflected at cost as a deduction from equity as shares held in trust.

## ACQUISITIONS AND SALES OF INTERESTS IN A BUSINESS

Assets acquired and liabilities assumed when control is obtained over a business, and, with effect from January 1, 2016, when an interest or an additional interest is acquired in a joint operation which is a business, are recognised at their fair value at the date of the acquisition; the amount of the purchase consideration above this value is recognised as goodwill. When control is obtained, any non-controlling interest is recognised as the proportionate share of the identifiable net assets. The acquisition of a non-controlling interest in a subsidiary and the sale of an interest while retaining control are accounted for as transactions within equity. The difference between the purchase consideration or sale proceeds after tax and the relevant proportion of the non-controlling interest, measured by reference to the carrying amount of the interest's net assets at the date of acquisition or sale, is recognised in retained earnings as a movement in equity attributable to Royal Dutch Shell plc shareholders.

## CONSOLIDATED STATEMENT OF INCOME PRESENTATION

Purchases reflect all costs related to the acquisition of inventories and the effects of the changes therein, and include associated costs incurred in conversion into finished or intermediate products. Production and manufacturing expenses are the costs of operating, maintaining and managing production and manufacturing assets. Selling, distribution and administrative expenses include direct and indirect costs of marketing and selling products.

## 3 CHANGES TO IFRS NOT YET ADOPTED

The final version of IFRS 9 *Financial Instruments* was issued in 2014 and sets out the requirements for recognising and measuring financial assets, financial liabilities and certain contracts to buy or sell non-financial items. It replaces IAS 39 *Financial Instruments: Recognition and Measurement*. IFRS 9 is required to be adopted by 2018. The impact for Shell is under review and IFRS 9 may facilitate further use of hedge accounting and also could result in different income recognition, or timing of recognition, in respect of certain investments in securities.

IFRS 15 *Revenue from Contracts with Customers* was issued in 2014 and replaces IAS 18 *Revenue*. It is required to be adopted by 2018 and is not expected to have a significant effect on Shell's accounting or disclosures.

IFRS 16 *Leases* was issued in 2016 to replace IAS 17 *Leases* and is required to be adopted by 2019. Under the new standard all lease contracts, with limited exceptions, are recognised in financial statements by way of right of use assets and corresponding lease liabilities. Compared with the existing accounting for operating leases, it will also impact the classification and timing of expenses and consequently the classification between cash flow from operating activities and cash flow from financing activities. A key aspect being considered in Shell's review of the new standard is whether to apply any transitional options such as the modified retrospective approach, which would mean that the cumulative effect of initially applying the standard is recognised at the date of initial application and there is no restatement of comparative information.

It is not intended that Shell will early adopt IFRS 9, IFRS 15 or IFRS 16.

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## 4 ACQUISITION OF BG GROUP PLC

On February 15, 2016, the Company acquired all the voting rights in BG Group plc (BG) by means of a Scheme of Arrangement under Part 26 of the Act for a purchase consideration of \$54,034 million. This included cash of \$19,036 million and the fair value (\$34,050 million) of 218.7 million A shares and 1,305.1 million B shares issued in exchange for all BG shares. The fair value of the shares issued was calculated using the market price of the Company's A and B shares of 1,545.0 and 1,538.5 pence respectively on the London Stock Exchange at its opening of business on February 15, 2016.

BG's activities mainly comprised exploration, development, production, liquefaction and marketing of hydrocarbons, the development and use of liquefied natural gas (LNG) import facilities, and the purchase, shipping and sale of LNG and regasified natural gas. The acquisition was to accelerate Shell's growth strategy in global LNG and deep water, with material additions to proved oil and gas reserves and production volumes, and to provide Shell with enhanced positions in competitive new oil and gas projects, particularly in Australia LNG and Brazil deep water.

Goodwill of \$10,997 million was recognised on the acquisition, being the excess of the purchase consideration over the fair value of net assets acquired as set out below. The net asset fair values, in line with accounting standards, were determined, where applicable, and particularly in respect of property, plant and equipment and intangible assets, by reference to oil and gas prices as reflected in the prevailing market view on the day of completion, as well as using estimates of proved oil and gas reserves and unproved volumes including timing of production, discount rates and exchange rates. Oil and gas prices were based on the forward price curve for the first two years, and for subsequent years based on the market consensus price view.

<b>Fair value of net assets acquired</b>	\$ million
<b>Assets</b>	
Non-current assets	
Intangible assets	7,765
Property, plant and equipment	56,067
Joint ventures and associates	4,551
Investments in securities	182
Deferred tax	3,278
Retirement benefits	236
Trade and other receivables	1,550
	73,629
Current assets	
Inventories	712
Trade and other receivables	4,085
Cash and cash equivalents	6,803
	11,600
<b>Total assets</b>	<b>85,229</b>
<b>Liabilities</b>	
Non-current liabilities	
Debt	19,690
Trade and other payables	1,876
Deferred tax	8,441
Decommissioning and other provisions	5,542
	35,549
Current liabilities	
Debt	1,544
Trade and other payables	4,373
Taxes payable	726
	6,643
<b>Total liabilities</b>	<b>42,192</b>
<b>Total</b>	<b>43,037</b>

Acquisition costs of \$391 million (\$47 million in 2015 and \$344 million in 2016) were recognised in the Consolidated Statement of Income in production and manufacturing and selling, distribution and administrative expenses.

The acquired activities of BG were integrated with those of other Shell entities and therefore it is impracticable to identify separately either the amounts of revenue and income since the date of acquisition that BG has contributed to the Consolidated Statement of Income, or the revenue and income of Shell for 2016 had the acquisition date been January 1, 2016.

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## 5 SEGMENT INFORMATION

Shell is engaged in the principal aspects of the oil and gas industry in more than 70 countries. Segmental reporting has been changed with effect from 2016, in line with a change in the way Shell's businesses are managed. Shell now reports its business through the segments Integrated Gas (previously part of Upstream), Upstream, Downstream and Corporate. Comparative information has been reclassified.

Integrated Gas is engaged in the liquefaction and transportation of gas, and the conversion of natural gas to liquids to provide fuels and other products, as well as projects with an integrated activity – from producing to commercialising gas. Upstream combines the operating segments Upstream, which is engaged in the exploration for and extraction of crude oil, natural gas and natural gas liquids, and the marketing and transportation of oil and gas, and Oil Sands, which is engaged in the extraction of bitumen from mined oil sands and conversion into synthetic crude oil. These operating segments have similar economic characteristics because their earnings are significantly dependent on crude oil and natural gas prices and production volumes, and because their projects generally require significant investment, are complex and generate revenues for many years. Downstream is engaged in oil products and chemicals manufacturing and marketing activities. Corporate represents the key support functions, comprising Shell's holdings and treasury organisation, its self-insurance activities and its headquarters and central functions. Integrated within the Integrated Gas, Upstream and Downstream segments are Shell's trading activities, technical services and technology capability, and functions such as safety and environment, and carbon dioxide management. Sales between segments are based on prices generally equivalent to commercially available prices.

Segment earnings are presented on a current cost of supplies basis (CCS earnings), which is the earnings measure used by the Chief Executive Officer (CEO) for the purposes of making decisions about allocating resources and assessing performance. On this basis, the purchase price of volumes sold during the period is based on the current cost of supplies during the same period after making allowance for the tax effect. CCS earnings therefore exclude the effect of changes in the oil price on inventory carrying amounts.

Information by segment on a current cost of supplies basis is as follows:

2016					\$ million
	Integrated Gas	Upstream	Downstream	Corporate	Total
CCS earnings	2,529	(3,674)	6,588	(1,751)	3,692
Revenue and other income					
Revenue					
Third party	25,282	6,412	201,823	74	233,591
Inter-segment	3,908	26,524	1,727	–	
Share of profit/(loss) of joint ventures and associates	1,116	222	2,244	(182)	3,400
Interest and other income	765	839	851	442	2,897
Total					239,888
Depreciation, depletion and amortisation charge, of which:	4,509	16,779	3,681	24	24,993
Impairment losses	72	1,274	588	6	1,940
Impairment reversals	–	–	38	–	38
Interest expense	247	852	91	2,013	3,203
Taxation charge/(credit)	1,254	(938)	1,008	(839)	485

2015					\$ million
	Integrated Gas	Upstream	Downstream	Corporate	Total
CCS earnings	3,170	(8,833)	10,243	(425)	4,155
Revenue and other income					
Revenue					
Third party	21,741	6,739	236,384	96	264,960
Inter-segment	4,248	26,824	1,362	–	
Share of profit/(loss) of joint ventures and associates	1,471	491	2,215	(327)	3,850
Interest and other income	537	1,819	1,156	157	3,669
Total					272,479
Depreciation, depletion and amortisation charge, of which:	2,597	20,404	3,667	46	26,714
Impairment losses	210	8,536	556	27	9,329
Impairment reversals	–	–	3	–	3
Interest expense	106	775	51	956	1,888
Taxation charge/(credit)	937	(927)	1,639	(1,156)	493

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[Note 5 continued]

<b>2014</b>					\$ million
	Integrated Gas	Upstream	Downstream	Corporate	Total
CCS earnings	10,610	5,231	3,411	(156)	19,096
Revenue and other income					
Revenue					
Third party	33,148	12,092	375,752	113	421,105
Inter-segment	6,861	47,838	2,294	–	
Share of profit/(loss) of joint ventures and associates	4,324	1,178	1,693	(346)	6,849
Interest and other income	3,156	873	41	53	4,123
Total					432,077
Depreciation, depletion and amortisation charge, of which:	2,662	15,206	6,619	12	24,499
Impairment losses	92	3,495	3,396	–	6,983
Impairment reversals	–	100	251	–	351
Interest expense	106	847	86	765	1,804
Taxation charge/(credit)	4,008	11,269	1,085	(1,324)	15,038

## Reconciliation of CCS earnings to income for the period

			\$ million
	2016	2015	2014
CCS earnings	3,692	4,155	19,096
Current cost of supplies adjustment:			
Purchases	1,284	(2,278)	(5,087)
Taxation	(344)	646	1,454
Share of profit/(loss) of joint ventures and associates	145	(323)	(733)
Income for the period	4,777	2,200	14,730

Information by geographical area is as follows:

<b>2016</b>					\$ million
	Europe	Asia, Oceania, Africa	USA	Other Americas	Total
Third-party revenue, by origin	81,573	83,103	49,147	19,768	233,591
Intangible assets, property, plant and equipment, joint ventures and associates at December 31	43,901	121,618	60,430	67,371	293,320

<b>2015</b>					\$ million
	Europe	Asia, Oceania, Africa	USA	Other Americas	Total
Third-party revenue, by origin	95,223	95,892	50,666	23,179	264,960
Intangible assets, property, plant and equipment, joint ventures and associates at December 31	33,439	104,949	51,269	29,614	219,271

<b>2014</b>					\$ million
	Europe	Asia, Oceania, Africa	USA	Other Americas	Total
Third-party revenue, by origin	154,709	149,869	80,133	36,394	421,105
Intangible assets, property, plant and equipment, joint ventures and associates at December 31	35,220	105,226	51,124	39,536	231,106



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## 6 INTEREST AND OTHER INCOME

	2016	2015	\$ million 2014
Interest income	451	359	206
Dividend income (from investments in securities)	264	456	888
Net gains on sale and revaluation of non-current assets and businesses	2,141	3,460	3,212
Net foreign exchange gains/(losses) on financing activities	343	(649)	(195)
Other	(302)	43	12
<b>Total</b>	<b>2,897</b>	<b>3,669</b>	<b>4,123</b>

Net gains on sale of non-current assets and businesses in 2016 arose mainly in respect of Upstream assets in North America and Downstream assets in Denmark and Japan. In addition, in respect of Shell's interest in Woodside Petroleum Limited (Woodside) (see Notes 10 and 11) a revaluation gain of \$293 million was recognised and a gain of \$358 million on the related release of cumulative currency translation differences was recognised in net foreign exchange gains on financing activities. Other mainly relates to the write down of an investment in securities.

Net gains on sale of non-current assets and businesses in 2015 arose mainly in respect of interests in Nigeria (Upstream), interests in France and Norway (Downstream) and an office building in the UK (Corporate). In 2014, they arose mainly in respect of Integrated Gas interests in Australia and Upstream interests in Nigeria and the USA.

Other net foreign exchange losses of \$49 million in 2016 (2015: \$197 million; 2014: \$122 million) were included in purchases.

## 7 INTEREST EXPENSE

	2016	2015	\$ million 2014
Interest incurred and similar charges	2,732	1,832	1,517
Less: interest capitalised	(725)	(839)	(757)
Other net losses/(gains) on fair value hedges of debt	4	(37)	5
Accretion expense	1,192	932	1,039
<b>Total</b>	<b>3,203</b>	<b>1,888</b>	<b>1,804</b>

The rate applied in determining the amount of interest capitalised in 2016 was 3% (2015: 3%; 2014: 3%).

## 8 INTANGIBLE ASSETS

				\$ million
	Goodwill	LNG off-take and sales contracts	Other	Total
<b>2016</b>				
<b>Cost</b>				
At January 1	2,604	3,271	4,473	10,348
Additions on acquisition of BG (see Note 4)	10,997	7,158	607	18,762
Other additions	–	–	130	130
Sales, retirements and other movements	(3)	–	–	(3)
Currency translation differences	(6)	–	(125)	(131)
<b>At December 31</b>	<b>13,592</b>	<b>10,429</b>	<b>5,085</b>	<b>29,106</b>
<b>Depreciation, depletion and amortisation, including impairments</b>				
At January 1	594	556	2,915	4,065
Charge for the year	–	919	306	1,225
Sales, retirements and other movements	–	–	(63)	(63)
Currency translation differences	11	–	(99)	(88)
<b>At December 31</b>	<b>605</b>	<b>1,475</b>	<b>3,059</b>	<b>5,139</b>
<b>Carrying amount at December 31</b>	<b>12,987</b>	<b>8,954</b>	<b>2,026</b>	<b>23,967</b>

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[Note 8 continued]

2015	\$ million			
	Goodwill	LNG offtake and sales contracts	Other	Total
Cost				
At January 1	2,712	3,271	4,562	10,545
Additions	–	–	277	277
Sales, retirements and other movements	–	–	(174)	(174)
Currency translation differences	(108)	–	(192)	(300)
At December 31	2,604	3,271	4,473	10,348
Depreciation, depletion and amortisation, including impairments				
At January 1	316	278	2,875	3,469
Charge for the year	315	278	335	928
Sales, retirements and other movements	–	–	(156)	(156)
Currency translation differences	(37)	–	(139)	(176)
At December 31	594	556	2,915	4,065
Carrying amount at December 31	2,010	2,715	1,558	6,283

Goodwill at December 31, 2016, principally related to BG (see Note 4) which was allocated to Integrated Gas (\$4,954 million) and Upstream (\$6,043 million) at the operating segment level, and to Pennzoil-Quaker State Company (PQS), a lubricants business in the Downstream segment based largely in North America.

For impairment testing purposes, the respective carrying amount was compared with the value in use. The nominal pre-tax discount rate applied was 6% (2015: 6%). Cash flow projections for the Integrated Gas and Upstream segments were made using management's forecasts of commodity prices, market supply and demand and expected production volumes, and were risk-adjusted (see Note 2). Cash flow projections for PQS reflected long-term growth rates that were assumed to be equal to the average expected inflation rate for the USA (2016: 2%; 2015: 2%) and were adjusted for a variety of risks, in particular volume and margin deterioration.

## 9 PROPERTY, PLANT AND EQUIPMENT

2016	\$ million				
	Exploration and evaluation	Exploration and production Production	Manufacturing, supply and distribution	Other	Total
Cost					
At January 1	27,728	239,559	73,648	20,988	361,923
Additions on acquisition of BG (see Note 4)	916	54,775	314	62	56,067
Other additions	1,961	17,304	4,818	1,250	25,333
Sales, retirements and other movements	(5,210)	(3,557)	(653)	(1,545)	(10,965)
Currency translation differences	(19)	(5,549)	(841)	(692)	(7,101)
At December 31	25,376	302,532	77,286	20,063	425,257
Depreciation, depletion and amortisation, including impairments					
At January 1	8,095	122,586	38,158	10,246	179,085
Charge for the year	828	18,182	3,842	916	23,768
Sales, retirements and other movements	(2,602)	(3,326)	(1,696)	(1,354)	(8,978)
Currency translation differences	42	(3,842)	(631)	(285)	(4,716)
At December 31	6,363	133,600	39,673	9,523	189,159
Carrying amount at December 31	19,013	168,932	37,613	10,540	236,098

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2015	Exploration and production				Total
	Exploration and evaluation	Production	Manufacturing, supply and distribution	Other	
\$ million					
Cost					
At January 1	29,922	234,725	75,681	23,871	364,199
Additions	3,523	17,425	4,148	1,458	26,554
Sales, retirements and other movements	(4,467)	(442)	(2,975)	(2,357)	(10,241)
Currency translation differences	(1,250)	(12,149)	(3,206)	(1,984)	(18,589)
At December 31	27,728	239,559	73,648	20,988	361,923
Depreciation, depletion and amortisation, including impairments					
At January 1	3,810	116,476	39,347	12,094	171,727
Charge for the year	4,968	16,229	3,654	935	25,786
Sales, retirements and other movements	(427)	(3,912)	(2,792)	(1,748)	(8,879)
Currency translation differences	(256)	(6,207)	(2,051)	(1,035)	(9,549)
At December 31	8,095	122,586	38,158	10,246	179,085
Carrying amount at December 31	19,633	116,973	35,490	10,742	182,838

The carrying amount at December 31, 2016, included \$45,396 million (2015: \$45,701 million) of assets under construction. This amount excludes exploration and evaluation assets. The carrying amount at December 31, 2016, also included \$385 million of assets classified as held for sale (2015: \$1,161 million).

The carrying amount of exploration and production assets at December 31, 2016, included rights and concessions in respect of proved and unproved properties of \$15,610 million (2015: \$17,204 million). Exploration and evaluation assets principally comprise rights and concessions in respect of unproved properties and capitalised exploration drilling costs.

Contractual commitments for the purchase of property, plant and equipment at December 31, 2016, amounted to \$4,825 million (2015: \$3,062 million). In addition, Shell has other commitments for future expenditure that, when incurred, are also expected to be recognised as additions to property, plant and equipment, such as the majority of operating lease payments in respect of drilling and ancillary equipment (see Note 15).

Carrying amount of property, plant and equipment held under finance leases [A]	\$ million	
	Dec 31, 2016	Dec 31, 2015
Exploration and production	7,930	2,080
Manufacturing, supply and distribution	3,108	1,856
Other	227	324
Total	11,265	4,260

[A] See Note 15.

Impairments	\$ million		
	2016	2015	2014
Impairment losses [A]			
Exploration and production	1,324	8,387	3,585
Manufacturing, supply and distribution	567	458	3,099
Other	40	165	299
Total	1,931	9,010	6,983
Impairment reversals [A]			
Exploration and production	–	–	100
Manufacturing, supply and distribution	36	–	–
Other	2	3	244
Total	38	3	344

[A] Presented by segment in Note 5, together with impairment losses and reversals in respect of intangible assets.

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[Note 9 continued]

Impairment losses in 2016 were mainly triggered by asset performance, disposals and project cancellations. They related primarily in Upstream to shale and deep-water properties in North and South America and in Downstream to disposals and assets held for sale in the refining portfolio. Impairment losses in 2015 were principally in Upstream related to North American shale properties, following revisions to Shell's long-term oil and gas price outlook, and to cancelled projects in Alaska and Carmon Creek in Canada. Impairment losses in 2014 were mainly in Upstream in respect of US tight-gas properties, in response to changes to future capital expenditure plans, and in Downstream in the refining portfolio, in response to the continuation of weak industry margins.

## Capitalised exploration drilling costs

	\$ million		
	2016	2015	2014
At January 1	7,835	8,465	8,377
Additions pending determination of proved reserves	1,762	3,276	4,370
Amounts charged to expense	(834)	(2,771)	(1,881)
Reclassifications to productive wells on determination of proved reserves	(1,187)	(991)	(2,116)
Other movements	334	(144)	(285)
At December 31	7,910	7,835	8,465

Exploration drilling costs capitalised for periods greater than one year at December 31, 2016, analysed according to the most recent year of activity, are presented in the table below. They comprise \$1,031 million relating to 14 projects where drilling activities were underway or firmly planned for the future and \$5,063 million relating to 45 projects awaiting development concepts.

	Projects		Wells	
	Number	\$ million	Number	\$ million
Between 1 and 5 years	44	5,306	211	4,355
Between 6 and 10 years	14	763	100	1,552
Between 11 and 15 years	1	25	13	187
Total	59	6,094	324	6,094

## 10 JOINT VENTURES AND ASSOCIATES

### Shell share of comprehensive income of joint ventures and associates

	2016			2015			2014		
	Joint ventures		Total	Joint ventures		Total	Joint ventures		Total
	Associates	Associates		Associates	Associates				
Income for the period	2,332	1,213	3,545	908 [A]	2,619	3,527	1,813	4,303	6,116
Other comprehensive income/(loss) for the period	78	(106)	(28)	(73)	33	(40)	(90)	(66)	(156)
Comprehensive income for the period	2,410	1,107	3,517	835	2,652	3,487	1,723	4,237	5,960

[A] Includes an impairment loss of \$837 million as a result of changes in the outlook in respect of a joint venture in the Oceania region.

### Carrying amount of interests in joint ventures and associates

	Dec 31, 2016			Dec 31, 2015		
	Joint ventures		Total	Joint ventures		Total
	Associates	Associates				
Net assets	20,555	12,700	33,255	19,065	11,085	30,150

Shell has a 13% interest in Woodside, a publicly listed company on the Australian Securities Exchange. During 2016, management concluded that a change in Shell's level of involvement over Woodside's financial and operating policy decisions, due to reduced Board representation and joint-venture relationships, resulted in no longer having significant influence. Shell's interest in Woodside was therefore reclassified from an associate to an investment in securities (see Note 11), resulting in a decrease of \$2,144 million in interests in associates. The consequential revaluation and related release of cumulative currency translation differences were reported in interest and other income in the Consolidated Statement of Income (see Note 6).

### Transactions with joint ventures and associates

	\$ million		
	2016	2015	2014
Sales and charges to joint ventures and associates	24,214	36,548	48,379
Purchases and charges from joint ventures and associates	13,859	26,440	36,567

These transactions principally comprise sales and purchases of goods and services in the ordinary course of business. Related balances outstanding at December 31, 2016 and 2015, are presented in Notes 12 and 16.

### Other arrangements in respect of joint ventures and associates

	\$ million	
	Dec 31, 2016	Dec 31, 2015
Commitments to make purchases from joint ventures and associates	85,333	86,442
Commitments to provide debt or equity funding to joint ventures and associates	2,703	2,711

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## 11 INVESTMENTS IN SECURITIES

Investments in securities	\$ million	
	Dec 31, 2016	Dec 31, 2015
Equity securities	4,784	2,272
Debt securities	1,168	1,144
Total	5,952	3,416
At fair value		
Measured by reference to prices in active markets for identical assets	4,408	1,427
Measured using predominantly unobservable inputs	1,233	1,625
Total	5,641	3,052
At cost	311	364
Total	5,952	3,416

Equity securities at December 31, 2016, principally comprised a 13% interest in Woodside, as a result of its reclassification from an associate in 2016 (see Notes 6 and 10), and a 15% interest in Malaysia LNG Tiga Sendirian Berhad (Tiga). Debt securities principally comprised a portfolio required to be held by Shell's insurance entities as security for their activities.

Investments in securities measured using predominantly unobservable inputs [A]	\$ million	
	2016	2015
At January 1	1,625	2,393
Losses recognised in other comprehensive loss	(333)	(733)
Other movements	(59)	(35)
At December 31	1,233	1,625

[A] Based on expected dividend flows, adjusted for country and other risks as appropriate and discounted to their present value. All are equity securities, mainly comprising Shell's interest in Tiga. Were the oil price assumption used in its valuation to be decreased by \$10 per barrel with no change in other measurement inputs, its carrying amount at December 31, 2016, would decrease by \$110 million (2015: \$149 million).

## 12 TRADE AND OTHER RECEIVABLES

	\$ million			
	Dec 31, 2016		Dec 31, 2015	
	Current	Non-current	Current	Non-current
Trade receivables	25,766	–	20,607	–
Other receivables	7,556	5,231	6,694	4,018
Amounts due from joint ventures and associates	2,175	2,510	2,107	2,260
Derivative contracts (see Note 20)	5,957	405	13,114	744
Prepayments and deferred charges	4,210	1,407	3,262	1,695
Total	45,664	9,553	45,784	8,717

The fair value of financial assets included above approximates the carrying amount and, other than the fair value of certain derivative contracts, was determined from predominantly unobservable inputs.

Other receivables include income tax recoverable (see Note 17), other taxes recoverable and amounts due from joint arrangement partners.

Provisions for impairments deducted from trade and other receivables amounted to \$461 million at December 31, 2016 (2015: \$456 million).

Overdue trade receivables	\$ million	
	Dec 31, 2016	Dec 31, 2015
Overdue 1–30 days	747	569
Overdue 31–180 days	649	480
Overdue more than 180 days	545	224
Total	1,941	1,273

Information about offsetting, collateral and credit risk is presented in Note 20.

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## 13 INVENTORIES

	\$ million	
	Dec 31, 2016	Dec 31, 2015
Oil, gas and chemicals	19,653	14,077
Materials	2,122	1,745
Total	21,775	15,822

Inventories at December 31, 2016, include write-downs to net realisable value of \$566 million (2015: \$1,134 million).

## 14 CASH AND CASH EQUIVALENTS

	\$ million	
	Dec 31, 2016	Dec 31, 2015[A]
Cash	3,426	3,237
Short-term bank deposits	4,084	7,442
Money market funds, reverse repos and other cash equivalents	11,620	21,073
Total	19,130	31,752

[A] See Note 20 in respect of cash flow hedges.

Included in cash and cash equivalents at December 31, 2016, were amounts totalling \$349 million (2015: \$524 million) subject to currency controls or other legal restrictions. Information about credit risk is presented in Note 20.

## 15 DEBT AND LEASE ARRANGEMENTS

Debt	Dec 31, 2016			Dec 31, 2015		
	Debt (excluding finance lease liabilities)	Finance lease liabilities	Total	Debt (excluding finance lease liabilities)	Finance lease liabilities	Total
Short-term debt	1,787	–	1,787	899	–	899
Long-term debt due within 1 year	6,574	1,123	7,697	4,100	531	4,631
Current debt	8,361	1,123	9,484	4,999	531	5,530
Non-current debt	69,256	13,736	82,992	47,195	5,654	52,849
Total	77,617	14,859	92,476	52,194	6,185	58,379

## Net debt

	Current debt	Non-current debt	Cash and cash equivalents (see Note 14)	\$ million Net debt
At January 1, 2016	(5,530)	(52,849)	31,752	(26,627)
Additions on acquisition of BG (see Note 4)	(1,544)	(19,690)	6,803	(14,431)
Cash flow	5,092	(16,166)	(17,922)	(28,996)
Other movements	(7,554)	4,918	–	(2,636)
Currency translation differences	52	795	(1,503)	(656)
At December 31, 2016	(9,484)	(82,992)	19,130	(73,346)
At January 1, 2015	(7,208)	(38,332)	21,607	(23,933)
Cash flow	5,327	(20,218)	11,215	(3,676)
Other movements	(3,849)	5,436	–	1,587
Currency translation differences	200	265	(1,070)	(605)
At December 31, 2015	(5,530)	(52,849)	31,752	(26,627)

Management's financial strategy is to manage Shell's assets and liabilities with the aim that, across the business cycle, "cash in" at least equals "cash out" while maintaining a strong balance sheet.

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Gearing, defined as net debt (total debt less cash and cash equivalents) as a percentage of total capital (net debt plus total equity), is a key measure of Shell's capital structure. Across the business cycle, management aims to manage gearing within a range of 0-30%. At December 31, 2016, gearing was 28.0% (2015: 14.0%).

## Gearing

\$ million, except where indicated

	Dec 31, 2016	Dec 31, 2015
Net debt	73,346	26,627
Total equity	188,511	164,121
Total capital	261,857	190,748
Gearing	28.0%	14.0%

Management's priorities for applying Shell's cash are the servicing and reduction of debt commitments, payment of dividends followed by a balance of capital investment and share buybacks. Management's policy is to grow the dollar dividend through time, in line with its view of Shell's underlying earnings and cash flow.

Shell has access to international debt capital markets via two commercial paper (CP) programmes, a Euro medium-term note (EMTN) programme and a US universal shelf (US shelf) registration. Issuances under the CP programmes are supported by a committed credit facility and cash.

## Borrowing facilities and amounts undrawn

\$ million

	Facility		Amount undrawn	
	Dec 31, 2016	Dec 31, 2015	Dec 31, 2016	Dec 31, 2015
CP programmes	20,000	20,000	18,982	20,000
EMTN programme	unlimited	unlimited	n/a	n/a
US shelf registration	unlimited	unlimited	n/a	n/a
Committed credit facility	7,480	7,480	7,480	7,480
Bridge credit facility	–	14,932	–	14,932

Under the CP programmes, Shell can issue debt of up to \$10 billion with maturities not exceeding 270 days and \$10 billion with maturities not exceeding 397 days. The EMTN programme is updated each year, most recently in August 2016. \$4,510 million was issued under this programme in 2016 (2015: \$5,285 million). The US shelf registration provides Shell with the flexibility to issue debt securities, ordinary shares, preferred shares and warrants. The registration is updated every three years and was last updated in October 2014. Debt totalling \$12,000 million was issued under this registration in 2016 (2015: \$15,000 million). The committed credit facility is available at pre-agreed margins and expires in 2020. The terms and availability are not conditional on Shell's financial ratios or its financial credit ratings. The bridge credit facility was entered into in 2015 in advance of the acquisition of BG and was cancelled unused on February 10, 2016.

In addition, other subsidiaries have access to short-term bank facilities totalling \$3,835 million at December 31, 2016 (2015: \$4,652 million).

Interest rate swaps were entered into against certain of the fixed rate debt affecting the effective interest rate on these balances (see Note 20).

The following tables compare contractual cash flows for debt excluding finance lease liabilities at December 31, with the carrying amount in the Consolidated Balance Sheet. Contractual amounts reflect the effects of changes in foreign exchange rates; differences from carrying amounts reflect the effects of discounting, premiums and, where hedge accounting is applied, fair value adjustments. Interest is estimated assuming interest rates applicable to variable rate debt remain constant and there is no change in aggregate principal amounts of debt other than repayment at scheduled maturity, as reflected in the table.

## 2016

\$ million

	Contractual payments						Total	Difference from carrying amount	Carrying amount
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later			
Commercial paper	1,018	–	–	–	–	–	1,018	(6)	1,012
Bonds	5,943	8,483	7,964	5,900	4,902	39,566	72,758	321	73,079 [A]
Bank and other borrowings	1,363	595	358	302	213	572	3,403	123	3,526
Total (excluding interest)	8,324	9,078	8,322	6,202	5,115	40,138	77,179	438	77,617
Interest	2,236	2,051	1,790	1,557	1,423	23,230 [B]	32,287		

[A] Including amounts in respect of bonds issued by BG prior to its acquisition.

[B] The increase in contractual payments due in 5 years and later compared with December 31, 2015, is mainly due to the maturity profile of debt assumed on acquisition of BG.

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[Note 15 continued]

	Contractual payments							Difference from carrying amount	Carrying amount
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total		
Bonds	3,365	5,389	7,231	4,052	5,250	24,188	49,475	324	49,799
Bank and other borrowings	1,634	137	475	49	27	73	2,395	–	2,395
Total (excluding interest)	4,999	5,526	7,706	4,101	5,277	24,261	51,870	324	52,194
Interest	1,500	1,394	1,264	1,052	883	11,205	17,298		

The fair value of debt excluding finance lease liabilities at December 31, 2016, was \$80,408 million (2015: \$53,480 million), mainly determined from the prices quoted for those securities.

Additional finance lease liabilities of \$6,861 million mainly in respect of contracts entered into by BG for floating, production, storage and offloading units and subsea equipment, were assumed, and related property, plant and equipment recognised, on acquisition of BG. Operating lease contracts, mainly for LNG vessels, were also assumed on this acquisition. Shell also has lease arrangements as lessee, for: in Upstream and Integrated Gas, principally drilling and ancillary equipment, service vessels, obligations under certain power generation contracts, LNG vessels and land and buildings; in Downstream, principally tankers, storage capacity and retail sites; and in Corporate, principally land and buildings. Finance lease liabilities are secured on the leased assets.

The future minimum lease payments for finance and operating leases and the present value of future minimum finance lease payments at December 31, by payment date are as follows:

	Finance leases			Operating leases
	Future minimum lease payments	Interest	Present value of future minimum lease payments	Future minimum lease payments[A]
Less than 1 year	2,193	1,070	1,123	4,805
Between 1 and 5 years	7,727	3,265	4,462	13,979
5 years and later	14,305	5,031	9,274	7,214
Total	24,225	9,366	14,859	25,998

[A] Including \$6,926 million in respect of drilling and ancillary equipment (see Note 9).

	Finance leases			Operating leases
	Future minimum lease payments	Interest	Present value of future minimum lease payments	Future minimum lease payments[A][B]
Less than 1 year	1,122	591	531	4,687
Between 1 and 5 years	3,462	1,475	1,987	11,443
5 years and later	5,466	1,799	3,667	6,759
Total	10,050	3,865	6,185	22,889

[A] Including \$8,449 million in respect of drilling and ancillary equipment (see Note 9).

[B] Revised following reassessment of contracts.

Future minimum lease payments at December 31, 2016, are stated before deduction of amounts expected to be received under non-cancellable sub-leases of \$418 million (2015: \$485 million) in respect of finance leases and \$252 million (2015: \$169 million) in respect of operating leases.

Operating lease expense in 2016 was \$5,063 million (2015: \$4,751 million; 2014: \$4,572 million).



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## 16 TRADE AND OTHER PAYABLES

	Dec 31, 2016		\$ million Dec 31, 2015	
	Current	Non-current	Current	Non-current
	Trade payables	28,069	–	23,795
Other payables	5,007	3,035	4,406	2,062
Amounts due to joint ventures and associates	1,973	26	2,503	24
Derivative contracts (see Note 20)	6,418	3,315	10,757	1,687
Accruals and deferred income	11,950	549	11,309	755
<b>Total</b>	<b>53,417</b>	<b>6,925</b>	<b>52,770</b>	<b>4,528</b>

The fair value of financial liabilities included above approximates the carrying amount and, other than the fair value of certain derivative contracts, was determined from predominantly unobservable inputs.

Other payables include amounts due to joint arrangement partners and in respect of other project-related items and cash-settled share-based compensation plans.

Information about offsetting, collateral and liquidity risk is presented in Note 20.

## 17 TAXATION

Taxation charge/(credit)	\$ million		
	2016	2015	2014
Current tax			
Charge in respect of current period	3,936	6,886	14,044
Adjustments in respect of prior periods	(1,205)	172	(287)
<b>Total</b>	<b>2,731</b>	<b>7,058</b>	<b>13,757</b>
Deferred tax			
Relating to the origination and reversal of temporary differences, tax losses and credits	(2,688)	(6,833)	(318)
Relating to changes in tax rates	(200)	(526)	19
Adjustments in respect of prior periods	986	148	126
<b>Total</b>	<b>(1,902)</b>	<b>(7,211)</b>	<b>(173)</b>
<b>Total taxation charge/(credit)</b>	<b>829</b>	<b>(153)</b>	<b>13,584</b>

The adjustments in respect of prior periods relate to events in the current period and reflect the effects of changes in rules, facts or other factors compared with those used in establishing the current tax position or deferred tax balance in prior periods. The amounts in 2016 principally related to the release of a current tax liability and related deferred tax asset.

The deferred tax net credit relating to temporary differences, tax losses and credits in 2015 was mainly due to impairment charges, additional provisions, operating losses and sales of non-current assets and businesses.

Reconciliation of applicable tax (credit)/charge at statutory tax rates to taxation charge/(credit)	\$ million		
	2016	2015	2014
Income before taxation	5,606	2,047	28,314
Less: share of profit of joint ventures and associates	(3,545)	(3,527)	(6,116)
Income/(loss) before taxation and share of profit of joint ventures and associates	2,061	(1,480)	22,198
Applicable tax (credit)/charge at statutory tax rates	(344)	930	11,206
Adjustments in respect of prior periods	(219)	320	(161)
Tax effects of:			
Expenses not deductible for tax purposes	2,066	1,452	2,271
Income not subject to tax at statutory rates	(1,740)	(2,597)	(1,864)
Derecognition of deferred tax assets	1,575	108	1,015
Deductible items not expensed	(516)	(418)	(401)
Taxable income not recognised	509	384	526
Other	(502)	(332)	992
<b>Taxation charge/(credit)</b>	<b>829</b>	<b>(153)</b>	<b>13,584</b>

The weighted average of statutory tax rates was 17% in 2016 (2015: 63%; 2014: 50%). The negative rate in 2016 (tax credit on pre-tax income) was mainly due to losses incurred in jurisdictions with a higher weighted average statutory rate than jurisdictions in which profits were made. The negative rate in 2015 (tax charge on a pre-tax loss) was mainly due to impairment charges, and other charges related to ceasing activities in Alaska and the Carmon Creek project.

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[Note 17 continued]

## Taxes payable

	\$ million	
	Dec 31, 2016	Dec 31, 2015
Income taxes	4,082	5,653
Sales taxes, excise duties and similar levies	2,603	2,580
<b>Total</b>	<b>6,685</b>	<b>8,233</b>

Included in other receivables at December 31, 2016 (see Note 12), was income tax receivable of \$1,037 million (2015: \$1,244 million).

## Deferred tax

	\$ million					
	Decommissioning and other provisions	Losses carried forward	Property, plant and equipment	Retirement benefits	Other	Total
<b>At January 1, 2016</b>						
Deferred tax assets	3,674	7,688	(6,651)	3,461	2,861	11,033
Deferred tax liabilities	5,307	3,806	(17,664)	309	(734)	(8,976)
	8,981	11,494	(24,315)	3,770	2,127	2,057
<b>Recognised in the year</b>						
Additions on acquisition of BG	702	1,624	(7,310)	39	(218)	(5,163) [A]
Recognised in income	(1,445)	3,566	144	33	(396)	1,902
Other movements	94	(229)	199	738	(192)	610
Currency translation differences	(599)	(460)	829	(109)	84	(255)
	(1,248)	4,501	(6,138)	701	(722)	(2,906)
<b>At December 31, 2016</b>						
Deferred tax assets	2,944	12,179	(6,607)	3,817	2,092	14,425
Deferred tax liabilities	4,789	3,816	(23,846)	654	(687)	(15,274)
	7,733	15,995	(30,453)	4,471	1,405	(849)
<b>At January 1, 2015</b>						
Deferred tax assets	3,721	6,006	(7,194)	3,787	1,811	8,131
Deferred tax liabilities	5,167	3,310	(21,041)	973	(461)	(12,052)
	8,888	9,316	(28,235)	4,760	1,350	(3,921)
<b>Recognised in the year</b>						
Recognised in income	430	2,888	2,860	295	738	7,211
Other movements	15	(270)	(290)	(967)	82	(1,430)
Currency translation differences	(352)	(440)	1,350	(318)	(43)	197
	93	2,178	3,920	(990)	777	5,978
<b>At December 31, 2015</b>						
Deferred tax assets	3,674	7,688	(6,651)	3,461	2,861	11,033
Deferred tax liabilities	5,307	3,806	(17,664)	309	(734)	(8,976)
	8,981	11,494	(24,315)	3,770	2,127	2,057

[A] Comprising deferred tax assets and liabilities of \$3,278 million and \$8,441 million respectively (see Note 4).

The above deferred tax information takes into consideration offsetting balances within the same tax jurisdiction.

The increase in deferred tax assets and decrease in deferred tax liabilities in 2015 was mainly the result of impairment charges, additional provisions, operating losses and sales of non-current assets and businesses.

Other movements in deferred tax assets and liabilities principally relate to acquisitions (other than of BG), sales of non-current assets and businesses and amounts recognised in other comprehensive income (see Note 23).

Deferred tax assets of \$11,896 million at December 31, 2016 (2015: \$9,110 million) are dependent on future taxable profits not arising from the reversal of existing deferred tax liabilities, and relate to tax jurisdictions where Shell has suffered a loss in the current or preceding year. It is considered probable based on business forecasts that such profits will be available.

Unrecognised deductible temporary differences, unused tax losses and credits carried forward amounted to \$39,589 million at December 31, 2016 (2015: \$27,660 million) including amounts of \$31,669 million (2015: \$21,978 million) that are subject to time limits for utilisation of five years or later or are not time limited.

Retained earnings of subsidiaries, joint ventures and associates amounted to \$211,075 million at December 31, 2016 (2015: \$206,135 million). Provision has been made for withholding and other taxes that would become payable on the distribution of these earnings only to the extent that either Shell does not control the relevant entity or it is expected that these earnings will be remitted in the foreseeable future. For a significant majority of the retained earnings no provision has been made, because either distribution would not be subject to tax or is not expected in the foreseeable future.

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## 18 RETIREMENT BENEFITS

Retirement benefits are provided through a number of funded and unfunded defined benefit plans and defined contribution plans, the most significant of which are in the Netherlands, UK and USA. Benefits comprise principally pensions; retirement healthcare and life insurance are also provided in certain countries.

### Retirement benefit expense

	2016	2015	\$ million 2014
Defined benefit plans:			
Current service cost, net of plan participants' contributions	1,527	1,855	1,844
Interest expense on obligations	2,643	2,944	3,821
Interest income on plan assets	(2,358)	(2,495)	(3,524)
Other	(116)	207	(1,073)
Total	1,696	2,511	1,068
Defined contribution plans	485	473	448
Total retirement benefit expense	2,181	2,984	1,516

Other in 2014 mainly comprises the impact of amendments to the Dutch pension plan following regulatory changes in the Netherlands.

Retirement benefit expense is presented principally within production and manufacturing expenses and selling, distribution and administrative expenses in the Consolidated Statement of Income. Interest income on plan assets is calculated using the rate applied to the related defined benefit obligations for each plan.

### Remeasurements

	2016	2015	\$ million 2014
Actuarial gains/(losses) on obligations:			
Due to changes in demographic assumptions	809	(517)	(663)
Due to changes in financial assumptions [A]	(11,391)	6,381	(14,313)
Due to experience adjustments	642	121	135
Total	(9,940)	5,985	(14,841)
Return on plan assets in excess of interest income	5,106	298	6,139
Other movements	18	55	(18)
Total remeasurements	(4,816)	6,338	(8,720)

[A] Mainly in the discount rates applied.

Experience adjustments arise from differences between the actuarial assumptions made in respect of the year and actual outcomes.

### Defined benefit plans

	\$ million	
	Dec 31, 2016	Dec 31, 2015
Obligations	(94,405)	(89,426)
Plan assets	81,276	80,851
Net liability	(13,129)	(8,575)
Retirement benefits in the Consolidated Balance Sheet:		
Non-current assets	1,456	4,362
Non-current liabilities	(14,130)	(12,587)
Current liabilities	(455)	(350)
Total	(13,129)	(8,575)

### Defined benefit plan obligations

	\$ million, except where indicated	
	2016	2015
At January 1	89,426	101,331
Current service cost	1,585	1,919
Interest expense	2,643	2,944
Actuarial losses/(gains)	9,940	(5,985)
Benefit payments	(3,847)	(3,508)
Other movements	1,006 [A]	(491)
Currency translation differences	(6,348)	(6,784)
At December 31	94,405	89,426
Comprising:		
Funded pension plans	85,357	80,603
Weighted average duration	18 years	17 years
Unfunded pension plans	4,463	4,496
Weighted average duration	11 years	12 years
Other unfunded plans	4,585	4,327
Weighted average duration	13 years	14 years

[A] Includes additions to obligations on acquisition of BG of \$1,958 million.

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[Note 18 continued]

Defined benefit plan assets	\$ million, except where indicated	
	2016	2015
At January 1	80,851	86,318
Return on plan assets (in excess of interest income)	5,106	298
Interest income	2,358	2,495
Employer contributions	1,341	1,296
Plan participants' contributions	58	64
Benefit payments	(3,560)	(3,254)
Other movements	1,211 [A]	(515)
Currency translation differences	(6,089)	(5,851)
At December 31	81,276	80,851
Comprising:		
Quoted in active markets:		
Equities	29%	34%
Debt securities	46%	47%
Real estate	1%	–
Investment funds	1%	1%
Other	1%	1%
Other:		
Equities	9%	6%
Debt securities	3%	2%
Real estate	6%	5%
Investment funds	2%	2%
Other	2%	2%

[A] Includes additions to plan assets on acquisition of BG of \$2,194 million.

Long-term investment strategies of plans are generally determined by the relevant pension plan trustees using a structured asset liability modelling approach to define the asset mix that best meets the objectives of optimising returns within agreed risk levels while maintaining adequate funding levels.

Employer contributions to defined benefit pension plans are set by local trustees based on actuarial valuations in accordance with local regulations and are estimated to be \$1.4 billion in 2017.

The principal assumptions applied in determining the present value of defined benefit obligations and their bases were as follows:

- rates of increase in pensionable remuneration, pensions in payment and healthcare costs: historical experience and management's long-term expectation;
- discount rates: prevailing long-term AA corporate bond yields, chosen to match the currency and duration of the relevant obligation; and
- mortality rates: published standard mortality tables for the individual countries concerned adjusted for Shell experience where statistically significant.

The weighted averages for those assumptions and related sensitivity information at December 31 are presented below. Sensitivity information indicates by how much the defined benefit obligations would increase or decrease if a given assumption were to increase or decrease with no change in other assumptions.

	\$ million, except where indicated				
	Assumptions used		Range of assumptions	Effect of using alternative assumptions	
	2016	2015		Increase/(decrease) in defined benefit obligations	
	2016	2015		2016	2015
Rate of increase in pensionable remuneration	5%	5%	-1% to +1%	(1,895) to 2,504	(2,015) to 2,557
Rate of increase in pensions in payment	2%	2%	-1% to +1%	(8,850) to 11,271	(7,666) to 9,639
Rate of increase in healthcare costs	7%	7%	-1% to +1%	(455) to 555	(451) to 552
Discount rate for pension plans	3%	4%	-1% to +1%	16,904 to (12,912)	14,679 to (11,568)
Discount rate for healthcare plans	4%	4%	-1% to +1%	662 to (528)	651 to (518)
Expected age at death for persons aged 60:					
Men	87 years	87 years	-1 year to +1 year	(1,743) to 1,797	(1,497) to 1,527
Women	89 years	89 years	-1 year to +1 year	(1,484) to 1,530	(1,207) to 1,228

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## 19 DECOMMISSIONING AND OTHER PROVISIONS

			\$ million
	Decommissioning and restoration	Other	Total
At January 1, 2016			
Current	1,239	2,826	4,065
Non-current	23,008	3,140	26,148
	24,247	5,966	30,213
Additions on acquisition of BG (see Note 4)	3,965	1,577 [A]	5,542
Other additions	816	3,997 [B]	4,813
Amounts charged against provisions	(880)	(2,562)	(3,442)
Accretion expense	1,013	103	1,116
Remeasurements and other movements	(2,846)	(694)	(3,540)
Currency translation differences	(1,150)	(150)	(1,300)
	918	2,271	3,189
At December 31, 2016			
Current	797	2,987	3,784
Non-current	24,368	5,250	29,618
	25,165	8,237	33,402
At January 1, 2015			
Current	1,275	2,691	3,966
Non-current	20,612	3,222	23,834
	21,887	5,913	27,800
Additions	522	2,999	3,521
Amounts charged against provisions	(913)	(2,410)	(3,323)
Accretion expense	881	51	932
Remeasurements and other movements	2,863	(305)	2,558
Currency translation differences	(993)	(282)	(1,275)
	2,360	53	2,413
At December 31, 2015			
Current	1,239	2,826	4,065
Non-current	23,008	3,140	26,148
	24,247	5,966	30,213

[A] Includes \$950 million representing the fair value of contingent liabilities assumed, mainly in relation to litigation costs.

[B] Mainly relating to onerous contracts and redundancy costs (see Note 27).

The amount and timing of settlement in respect of these provisions are uncertain and dependent on various factors that are not always within management's control. Additions to provisions are stated net of reversals of provisions recognised in prior periods.

Reviews of estimated decommissioning and restoration costs and the discount rate applied are carried out annually. In 2016 there was a decrease of \$2,361 million in the provision resulting from changes in cost estimates reported within remeasurements and other movements (2015: an increase of \$3,620 million resulting from changes in cost estimates and a decrease in the discount rate).

Of the decommissioning and restoration provision at December 31, 2016, an estimated \$4,747 million is expected to be utilised within one to five years, \$6,069 million within six to 10 years, and the remainder in later periods.

Other provisions principally comprise amounts recognised in respect of environmental costs (\$1,482 million at December 31, 2016; 2015 \$1,545 million), litigation costs, redundancy costs, employee benefits and onerous contracts.

## 20 FINANCIAL INSTRUMENTS AND OTHER DERIVATIVE CONTRACTS

Financial instruments and other derivative contracts in the Consolidated Balance Sheet comprise investments in securities (see Note 11), cash and cash equivalents (see Note 14), debt (see Note 15) and certain amounts (including derivative contracts) reported within trade and other receivables (see Note 12) and trade and other payables (see Note 16).

### RISKS

In the normal course of business, financial instruments of various kinds are used for the purposes of managing exposure to interest rate, foreign exchange and commodity price movements.

Treasury standards are applicable to all subsidiaries and each subsidiary is required to adopt a treasury policy consistent with these standards. These policies cover: financing structure; interest rate and foreign exchange risk management; insurance; counterparty risk management; and use of derivative contracts. Wherever possible, treasury operations are carried out through specialist regional organisations without removing from each subsidiary the responsibility to formulate and implement appropriate treasury policies.

Apart from forward foreign exchange contracts to meet known commitments, the use of derivative contracts by most subsidiaries is not permitted by their treasury policy.

Other than in exceptional cases, the use of external derivative contracts is confined to specialist trading and central treasury organisations that have appropriate skills, experience, supervision, control and reporting systems.

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[Note 20 continued]

Shell's operations expose it to market, credit and liquidity risk, as described below.

## Market risk

Market risk is the possibility that changes in interest rates, foreign exchange rates or the prices of crude oil, natural gas, LNG, refined products, chemical feedstocks, power and carbon-emission rights will adversely affect the value of assets, liabilities or expected future cash flows.

## Interest rate risk

Most debt is raised from central borrowing programmes. Shell's policy continues to be to have debt principally denominated in dollars and to maintain a largely floating interest rate exposure profile; however, Shell has issued a significant amount of fixed rate debt in recent years, taking advantage of historically low interest rates available in US debt markets. As a result, a substantial portion of the debt portfolio at December 31, 2016, is at fixed rates and this reduces Shell's exposure to the dollar LIBOR interest rate.

The financing of most subsidiaries is structured on a floating-rate basis and, except in special cases, further interest rate risk management is discouraged.

On the basis of the floating rate net debt position at December 31, 2016, (both issued and hedged), and assuming other factors (principally foreign exchange rates and commodity prices) remained constant and that no further interest rate management action was taken, an increase in interest rates of 1% would have decreased 2016 income before taxation by \$210 million (2015: \$36 million increase, based on the floating rate position at December 31, 2015).

The carrying amounts and maturities of debt and borrowing facilities are presented in Note 15. Interest expense is presented in Note 7.

## Foreign exchange risk

Many of the markets in which Shell operates are priced, directly or indirectly, in dollars. As a result, the functional currency of most Integrated Gas and Upstream entities and those with significant cross-border business is the dollar. For Downstream entities, the functional currency is typically the local currency. Consequently, Shell is exposed to varying levels of foreign exchange risk when an entity enters into transactions that are not denominated in its functional currency, when foreign currency monetary assets and liabilities are translated at the balance sheet date and as a result of holding net investments in operations that are not dollar-functional. Each entity is required to adopt treasury policies that are designed to measure and manage its foreign exchange exposures by reference to its functional currency.

Foreign exchange gains and losses arise in the normal course of business from the recognition of receivables and payables and other monetary items in currencies other than an entity's functional currency. Foreign exchange risk may also arise in connection with capital expenditure. For major projects, an assessment is made at the final investment decision stage whether to hedge any resulting exposure.

Assuming other factors (principally interest rates and commodity prices) remained constant and that no further foreign exchange risk management action were taken, a 10% appreciation against the dollar at December 31 of the main currencies to which Shell is exposed would have the following effects:

	\$ million			
	Increase/(decrease) in income before taxation		Increase in net assets	
	2016	2015	2016	2015
10% appreciation against the dollar of:				
Canadian dollar	(53)	(99)	1,666	1,701
Euro	(75)	63	845	1,185
Australian dollar	45	31	669	6
Sterling	(141)	35	549	2,951

The above sensitivity information was calculated by reference to carrying amounts of assets and liabilities at December 31 only. The effect on income before taxation arises in connection with monetary balances denominated in currencies other than an entity's functional currency; the effect on net assets arises principally from the translation of assets and liabilities of entities that are not dollar-functional.

Foreign exchange gains and losses included in income are presented in Note 6.

## Commodity price risk

Certain subsidiaries have a mandate to trade crude oil, natural gas, LNG, refined products, chemical feedstocks, power and carbon-emission rights, and to use commodity derivative contracts (forwards, futures, swaps and options) as a means of managing price and timing risks arising from this trading activity. In effecting these transactions, the entities concerned operate within procedures and policies designed to ensure that risks, including those relating to the default of counterparties, are managed within authorised limits.

Risk management systems are used for recording and valuing instruments. Commodity price risk exposure is monitored, and the acceptable level of exposure determined, by market risk committees. There is regular reviewing of mandated trading limits by senior management, daily monitoring of market risk exposure using value-at-risk (VAR) techniques, daily monitoring of trading positions against limits, marking-to-fair value of trading exposures with a department independent of traders reviewing the market values applied. Although trading losses can and do occur, the nature of the trading portfolio and its management are considered adequate mitigants against the risk of significant losses.

VAR techniques based on variance/covariance or Monte Carlo simulation models are used to make a statistical assessment of the market risk arising from possible future changes in market values over a 24-hour period and within a 95% confidence level. The calculation of the range of potential changes in fair value takes into account positions, the history of price movements and the correlation of these price movements. Models are regularly reviewed against actual fair value movements to ensure integrity is maintained. All VAR ranges and yearend positions in respect of commodities traded in active markets, which are presented in the table below, are calculated on a diversified basis in order to reflect the effect of offsetting risk within combined portfolios.

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## Value-at-risk (pre-tax)

	\$ million							
	2016				2015			
	High	Low	Average	Year-end	High	Low	Average	Year-end
Global oil	40	13	23	29	39	10	18	26
North America gas and power	17	4	10	12	18	4	7	8
Europe gas and power	8	1	2	2	4	–	1	1
Carbon-emission rights	7	1	2	3	2	–	1	1

## Credit risk

Policies are in place to ensure that sales of products are made to customers with appropriate creditworthiness. These policies include detailed credit analysis and monitoring of trading partners against counterparty credit limits. Credit information is regularly shared between business and finance functions, with dedicated teams in place to quickly identify and respond to cases of credit deterioration. Mitigation measures are defined and implemented for high-risk business partners and customers, and include shortened payment terms, collateral or other security posting and vigorous collections. In addition, policies limit the amount of credit exposure to any individual financial institution. There are no material concentrations of credit risk, with individual customers or geographically, and there has been no significant level of counterparty default in recent years.

Surplus cash is invested in a range of short-dated, secure and liquid instruments including short-term bank deposits, money market funds, reverse repos and similar instruments. The portfolio of these investments is diversified to avoid concentrating risk in any one instrument, country or counterparty. Management monitors the investments regularly and adjusts the investment portfolio in light of new market information where necessary to ensure credit risk is effectively diversified.

In commodity trading, counterparty credit risk is managed within a framework of credit limits with utilisation being regularly reviewed. Credit risk exposure is monitored and the acceptable level is determined by a credit committee. Credit checks are performed by a department independent of traders, and are undertaken before contractual commitment. Where appropriate, netting arrangements, credit insurance, prepayments and collateral are used to manage specific risks.

Shell routinely enters into offsetting, master netting and similar arrangements with trading and other counterparties to manage credit risk. Where there is a legally enforceable right of offset under such arrangements and net settlement is regularly applied, the net asset or liability is recognised in the Consolidated Balance Sheet, otherwise assets and liabilities are presented gross. These amounts, as presented net and gross within trade and other receivables and trade and other payables in the Consolidated Balance Sheet at December 31, were as follows:

## 2016

	\$ million					
	Gross amounts before offset	Amounts offset		Amounts not offset		Net amounts
		Amounts offset	Net amounts as presented	Cash collateral received/pledged	Other offsetting instruments	
Assets:						
Within trade receivables	9,844	6,539	3,305	1	12	3,292
Within derivative contracts	6,309	2,197	4,112	107	1,272	2,733
Liabilities:						
Within trade payables	9,489	6,535	2,954	–	12	2,942
Within derivative contracts	9,434	2,197	7,237	86	1,272	5,879

## 2015

	\$ million					
	Gross amounts before offset[A]	Amounts offset		Amounts not offset		Net amounts
		Amounts offset[A]	Net amounts as presented	Cash collateral received/pledged	Other offsetting instruments	
Assets:						
Within trade receivables	9,629	6,252	3,377	1	209	3,167
Within derivative contracts	13,234	3,069	10,165	162	7,562	2,441
Liabilities:						
Within trade payables	8,861	6,137	2,724	–	210	2,514
Within derivative contracts	12,777	3,069	9,708	98	7,538	2,072

[A] Revised to align with the netting methodology for the variation margin applied from 2016.

Amounts not offset principally relate to contracts where the intention to settle on a net basis was not clearly established at December 31.

The carrying amount of financial assets pledged as collateral for liabilities or contingent liabilities at December 31, 2016, presented within trade and other receivables, was \$1,815 million (2015: \$1,824 million). The carrying amount of collateral held at December 31, 2016, presented within trade and other payables, was \$173 million (2015: \$541 million). Collateral mainly relates to initial margins held with commodity exchanges and over-the-counter counterparty variation margins.

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[Note 20 continued]

## Liquidity risk

Liquidity risk is the risk that suitable sources of funding for Shell's business activities may not be available. Management believes that it has access to sufficient debt funding sources (capital markets), and to undrawn committed borrowing facilities to meet foreseeable requirements. Information about borrowing facilities is presented in Note 15.

## DERIVATIVE CONTRACTS AND HEDGES

Derivative contracts are used principally as hedging instruments, however, because hedge accounting is not always applied, movements in the carrying amounts of derivative contracts that are recognised in income are not always matched in the same period by the recognition of the income effects of the related hedged items.

### Carrying amounts, maturities and hedges

The carrying amounts of derivative contracts at December 31 (see Notes 12 and 16), designated and not designated as hedging instruments for hedge accounting purposes, were as follows:

	\$ million						
	Assets			Liabilities			Net
	Designated	Not designated	Total	Designated	Not designated	Total	
Interest rate swaps	38	15	53	136	38	174	(121)
Forward foreign exchange contracts	–	469	469	10	348	358	111
Currency swaps and options	3	280	283	3,241	545	3,786	(3,503)
Commodity derivatives	–	5,480	5,480	–	5,230	5,230	250
Other contracts	–	77	77	–	185	185	(108)
<b>Total</b>	<b>41</b>	<b>6,321</b>	<b>6,362</b>	<b>3,387</b>	<b>6,346</b>	<b>9,733</b>	<b>(3,371)</b>

## 2015

	\$ million						
	Assets			Liabilities			Net
	Designated	Not designated	Total	Designated	Not designated	Total	
Interest rate swaps	51	–	51	35	–	35	16
Forward foreign exchange contracts	–	508	508	136	236	372	136
Currency swaps and options	16	361	377	1,637	51	1,688	(1,311)
Commodity derivatives	–	12,611	12,611	–	10,210	10,210	2,401
Other contracts	–	311	311	–	139	139	172
<b>Total</b>	<b>67</b>	<b>13,791</b>	<b>13,858</b>	<b>1,808</b>	<b>10,636</b>	<b>12,444</b>	<b>1,414</b>

Net gains before tax on derivative contracts, excluding realised commodity contracts and those accounted for as hedges, were \$414 million in 2016 (2015: \$4,107 million; 2014: \$6,053 million).

In 2015, certain cash and cash equivalents and forward foreign exchange contracts were designated as cash flow hedges of a significant portion of the forecast cash consideration for the acquisition of BG (see Note 4). The total of cash and cash equivalents and amounts receivable under the forward foreign exchange contracts at December 31, 2015, was \$19,912 million. Related losses of \$411 million were recognised in other comprehensive income in 2016 (2015: \$537 million), and the accumulated losses were reclassified to the balance sheet in 2016 (see Note 23).

In addition, certain contracts, mainly to hedge price risk relating to forecast commodity transactions which mature in 2017-2019, were designated in cash flow hedging relationships. In 2016, no net gains or losses for ineffectiveness were recognised in income (2015: \$1 million net gains; 2014: \$13 million net gains). The net liability carrying amount of commodity derivative contracts designated as cash flow hedging instruments of \$115 million at December 31, 2016 (2015: \$1,050 million net asset), was presented after the offset of related margin balances maintained with exchanges.

Certain interest rate and currency swaps were designated in fair value hedges, principally in respect of debt for which the carrying amount of the related derivative contracts, net of accrued interest, at December 31, 2016, was a net liability of \$3,472 million (2015: \$1,847 million).

In 2016, certain debt and currency swaps were designated as hedges of net investments in foreign operations, relating to the foreign exchange risk arising between certain intermediate holding companies and their subsidiaries. The total carrying amount of the hedging instruments at December 31, 2016, was a net liability of \$5,381 million.

In the course of trading operations, certain contracts are entered into for delivery of commodities that are accounted for as derivatives. The resulting price exposures are managed by entering into related derivative contracts. These contracts are managed on a fair value basis and the maximum exposure to liquidity risk is the undiscounted fair value of derivative liabilities.

For a minority of commodity derivative contracts, carrying amounts cannot be derived from quoted market prices or other observable inputs, in which case fair value is estimated using valuation techniques such as Black-Scholes, option spread models and extrapolation using quoted spreads with assumptions developed internally based on observable market activity.



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Other contracts include certain contracts that are held to sell or purchase commodities and others containing embedded derivatives, which are required to be recognised at fair value because of pricing or delivery conditions, even though they were entered into to meet operational requirements. These contracts are expected to mature in 2017-2025, with certain contracts having early termination rights (for either party). Valuations are derived from quoted market prices for the next six years and, thereafter, from forward gas price formulae used in similar contracts. Future gas price assumptions are the most significant input to this model, and a decrease at December 31, 2016, of 10% in the projected gas price would, assuming other inputs remained unchanged, increase income before taxation by \$33 million (2015: \$59 million).

The contractual maturities of derivative liabilities at December 31 compare with their carrying amounts in the Consolidated Balance Sheet as follows:

	Contractual maturities							Discounting	Carrying amount
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total		
Forward foreign exchange contracts	341	97	56	—	(27)	—	467	(109)	358
Currency swaps and options	1,062	1,269	831	372	701	3,762	7,997	(4,211)	3,786
Commodity derivatives	3,889	706	344	111	47	204	5,301	(71)	5,230
Other contracts	95	130	102	53	20	3	403	(44)	359
<b>Total</b>	<b>5,387</b>	<b>2,202</b>	<b>1,333</b>	<b>536</b>	<b>741</b>	<b>3,969</b>	<b>14,168</b>	<b>(4,435)</b>	<b>9,733</b>

	Contractual maturities							Discounting	Carrying amount
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total		
Forward foreign exchange contracts	334	75	12	8	—	—	429	(57)	372
Currency swaps	162	443	713	292	188	1,771	3,569	(1,881)	1,688
Commodity derivatives	8,770	1,215	230	150	32	102	10,499	(289)	10,210
Other contracts	32	58	65	35	11	—	201	(27)	174
<b>Total</b>	<b>9,298</b>	<b>1,791</b>	<b>1,020</b>	<b>485</b>	<b>231</b>	<b>1,873</b>	<b>14,698</b>	<b>(2,254)</b>	<b>12,444</b>

## Fair value measurements

The net carrying amounts of derivative contracts held at December 31, categorised according to the predominant source and nature of inputs used in determining the fair value of each contract, were as follows:

	Prices in active markets for identical assets/liabilities	Other observable inputs	Unobservable inputs	Total
Interest rate swaps	—	(121)	—	(121)
Forward foreign exchange contracts	—	111	—	111
Currency swaps and options	—	(3,503)	—	(3,503)
Commodity derivatives	12	(153)	391	250
Other contracts	(2)	(183)	77	(108)
<b>Total</b>	<b>10</b>	<b>(3,849)</b>	<b>468</b>	<b>(3,371)</b>

	Prices in active markets for identical assets/liabilities	Other observable inputs	Unobservable inputs	Total
Interest rate swaps	—	16	—	16
Forward foreign exchange contracts	—	136	—	136
Currency swaps and options	—	(1,311)	—	(1,311)
Commodity derivatives	10	2,070	321	2,401
Other contracts	5	(119)	286	172
<b>Total</b>	<b>15</b>	<b>792</b>	<b>607</b>	<b>1,414</b>

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[Note 20 continued]

	Net carrying amounts of derivative contracts measured using predominantly unobservable inputs		\$ million	
	2016	2015	2016	2015
At January 1	607	254		
Net (losses)/gains recognised in revenue	(361)	291		
Purchases	(227)	(129)		
Sales	428	142		
Recategorisations (net)	56	72		
Currency translation differences	(35)	(23)		
At December 31	468	607		

Included in net losses recognised in revenue in 2016 were unrealised net gains totalling \$333 million relating to assets and liabilities held at December 31, 2016 (2015: \$490 million unrealised net losses included in recognised net gains).

## 21 SHARE CAPITAL

### Issued and fully paid ordinary shares of €0.07 each [A]

	Number of shares		Nominal value (\$ million)		
	A	B	A	B	Total
At January 1, 2016	3,990,921,569	2,440,410,614	340	206	546
Scrip dividends	219,253,936	–	17	–	17
Shares issued (see Note 4)	218,728,308	1,305,076,117	17	103	120
At December 31, 2016	4,428,903,813	3,745,486,731	374	309	683
At January 1, 2015	3,907,302,393	2,440,410,614	334	206	540
Scrip dividends	96,336,688	–	7	–	7
Repurchases of shares	(12,717,512)	–	(1)	–	(1)
At December 31, 2015	3,990,921,569	2,440,410,614	340	206	546

[A] Share capital at December 31, 2016, and 2015 also included 50,000 issued and fully paid sterling deferred shares of £1 each.

At the Company's Annual General Meeting (AGM) on May 24, 2016, the Board was authorised to allot ordinary shares in the Company, and to grant rights to subscribe for or to convert any security into ordinary shares in the Company, up to an aggregate nominal amount of €185 million (representing 2,643 million ordinary shares of €0.07 each), and to list such shares or rights on any stock exchange. This authority expires at the earlier of the close of business on August 24, 2017, and the end of the AGM to be held in 2017, unless previously renewed, revoked or varied by the Company in a general meeting.

## 22 SHARE-BASED COMPENSATION PLANS AND SHARES HELD IN TRUST

### Share-based compensation expense

	\$ million		
	2016	2015	2014
Equity-settled plans	488	621	517
Cash-settled plans	205	129	287
Total	693	750	804

The principal share-based employee compensation plans are the PSP and LTIP. Awards of shares and American Depository Shares (ADSs) of the Company under the PSP and LTIP are granted upon certain conditions to eligible employees. The actual amount of shares that may vest ranges from 0% to 200% of the awards, depending on the outcomes of prescribed performance conditions over a three-year period beginning on January 1 of the award year. Shares and ADSs vest for nil consideration.

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## Share awards under the PSP and LTIP

	Number of A shares (million)	Number of B shares (million)	Number of A ADSs (million)	Weighted average remaining contractual life (years)
At January 1, 2016	36	12	10	1.0
Granted	11	4	3	
Vested	(11)	(4)	(3)	
At December 31, 2016	36	12	10	1.0
At January 1, 2015	33	11	9	1.0
Granted	13	5	4	
Vested	(10)	(4)	(3)	
At December 31, 2015	36	12	10	1.0

Other plans offer employees opportunities to acquire shares and ADSs of the Company or receive cash benefits measured by reference to the Company's share price.

Shell employee share ownership trusts and trust-like entities purchase the Company's shares in the open market to meet delivery commitments under employee share plans. At December 31, 2016, they held 13.1 million A shares (2015: 12.7 million), 6.2 million B shares (2015: 8.9 million) and 4.9 million A ADSs (2015: 6.1 million).

## 23 OTHER RESERVES

### Other reserves attributable to Royal Dutch Shell plc shareholders

	Merger reserve	Share premium reserve	Capital redemption reserve	Share plan reserve	Accumulated other comprehensive income	Total
At January 1, 2016	3,398	154	84	1,658	(22,480)	(17,186)
Other comprehensive loss attributable to Royal Dutch Shell plc shareholders	-	-	-	-	(5,949)	(5,949)
Scrip dividends	(17)	-	-	-	-	(17)
Shares issued (see Note 4)	33,930	-	-	-	-	33,930
Share-based compensation	-	-	-	(14)	534	520
At December 31, 2016	37,311	154	84	1,644	(27,895)	11,298
At January 1, 2015	3,405	154	83	1,723	(19,730)	(14,365)
Other comprehensive loss attributable to Royal Dutch Shell plc shareholders	-	-	-	-	(2,750)	(2,750)
Scrip dividends	(7)	-	-	-	-	(7)
Repurchases of shares	-	-	1	-	-	1
Share-based compensation	-	-	-	(65)	-	(65)
At December 31, 2015	3,398	154	84	1,658	(22,480)	(17,186)
At January 1, 2014	3,411	154	75	1,871	(7,548)	(2,037)
Other comprehensive loss attributable to Royal Dutch Shell plc shareholders	-	-	-	-	(12,182)	(12,182)
Scrip dividends	(6)	-	-	-	-	(6)
Repurchases of shares	-	-	8	-	-	8
Share-based compensation	-	-	-	(148)	-	(148)
At December 31, 2014	3,405	154	83	1,723	(19,730)	(14,365)

The merger reserve and share premium reserve were established as a consequence of the Company becoming the single parent company of Royal Dutch Petroleum Company and The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited, in 2005. The increase in the merger reserve in 2016 in respect of the shares issued represents the difference between the fair value and the nominal value of the shares issued for the acquisition of BG. The capital redemption reserve was established in connection with repurchases of shares of the Company. The share plan reserve is in respect of equity-settled share-based compensation plans (see Note 22).

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[Note 23 continued]

Accumulated other comprehensive income comprises the following:

Accumulated other comprehensive income attributable to Royal Dutch Shell plc shareholders					\$ million
	Currency translation differences	Unrealised gains/(losses) on securities	Cash flow hedging gains/(losses)	Retirement benefits remeasurements	Total
At January 1, 2016	(12,940)	1,409	473	(11,422)	(22,480)
Recognised in other comprehensive income	(1,023)[A]	(204)	(727)	(4,816)	(6,770)
Reclassified to income	(277)	1	(939)	–	(1,215)
Reclassified to the balance sheet	–	–	1,044 [B]	–	1,044
Tax on amounts recognised/reclassified	(21)	(11)	5	999	972
Total, net of tax	(1,321)	(214)	(617)	(3,817)	(5,969)
Share of joint ventures and associates	(154)	126	–	–	(28)
Other comprehensive loss for the period	(1,475)	(88)	(617)	(3,817)	(5,997)
Less: non-controlling interest	50	–	–	(2)	48
Attributable to Royal Dutch Shell plc shareholders	(1,425)	(88)	(617)	(3,819)	(5,949)
Reclassification in respect of shares held in trust	534	–	–	–	534
At December 31, 2016	(13,831)	1,321	(144)	(15,241)	(27,895)
At January 1, 2015	(5,931)	2,112	458	(16,369)	(19,730)
Recognised in other comprehensive income	(7,170)	(650)	698	6,338	(784)
Reclassified to income	47	(61)	(610)	–	(624)
Tax on amounts recognised/reclassified	2	4	(27)	(1,387)	(1,408)
Total, net of tax	(7,121)	(707)	61	4,951	(2,816)
Share of joint ventures and associates	2	4	(46)	–	(40)
Other comprehensive (loss)/income for the period	(7,119)	(703)	15	4,951	(2,856)
Less: non-controlling interest	110	–	–	(4)	106
Attributable to Royal Dutch Shell plc shareholders	(7,009)	(703)	15	4,947	(2,750)
At December 31, 2015	(12,940)	1,409	473	(11,422)	(22,480)
At January 1, 2014	(551)	2,929	(46)	(9,880)	(7,548)
Recognised in other comprehensive income	(4,832)	(741)	606	(8,720)	(13,687)
Reclassified to income	(484)	(44)	(56)	–	(584)
Tax on amounts recognised/reclassified	(5)	(12)	(22)	2,238	2,199
Total, net of tax	(5,321)	(797)	528	(6,482)	(12,072)
Share of joint ventures and associates	(112)	(20)	(24)	–	(156)
Other comprehensive (loss)/income for the period	(5,433)	(817)	504	(6,482)	(12,228)
Less: non-controlling interest	53	–	–	(7)	46
Attributable to Royal Dutch Shell plc shareholders	(5,380)	(817)	504	(6,489)	(12,182)
At December 31, 2014	(5,931)	2,112	458	(16,369)	(19,730)

[A] Includes losses of \$2.024 million arising on net investment hedges.

[B] Mainly relating to the acquisition of BG (see Note 20).

## 24 DIVIDENDS

### Interim dividends

	2016	2015	2014
\$ million			
A shares			
Cash: \$1.88 per share (2015: \$1.88; 2014: \$1.86)	4,545	5,203	5,413
Scrip: \$1.88 per share (2015: \$1.88; 2014: \$1.86)	3,491	2,154	1,866
Total – A shares	8,036	7,357	7,279
B shares			
Cash: \$1.88 per share (2015: \$1.88; 2014: \$1.86)	5,132	4,167	4,031
Scrip: \$1.88 per share (2015: \$1.88; 2014: \$1.86)	1,791	448	533
Total – B shares	6,923	4,615	4,564
Total	14,959	11,972	11,843

In addition, on February 2, 2017, the Directors announced a further interim dividend in respect of 2016 of \$0.47 per A share and \$0.47 per B share. The total dividend is estimated to be \$3,842 million and is payable on March 27, 2017, to shareholders on the register at February 17, 2017. Under the Scrip Dividend Programme, shareholders can elect to receive dividends in the form of A shares.

Dividends on A shares are by default paid in euros, although holders may elect to receive dividends in sterling. Dividends on B shares are by default paid in sterling, although holders may elect to receive dividends in euros. Dividends on ADSs are paid in dollars.

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## 25 EARNINGS PER SHARE

	2016	2015	2014
Income attributable to Royal Dutch Shell plc shareholders (\$ million)	4,575	1,939	14,874
Weighted average number of A and B shares used as the basis for determining:			
Basic earnings per share (million)	7,833.7	6,320.3	6,311.5
Diluted earnings per share (million)	7,891.7	6,393.8	6,311.6

Basic earnings per share are calculated by dividing the income attributable to Royal Dutch Shell plc shareholders for the year by the weighted average number of A and B shares outstanding during the year. The weighted average number of shares outstanding excludes shares held in trust.

Diluted earnings per share are based on the same income figures. The weighted average number of shares outstanding during the year is increased by dilutive shares related to share-based compensation plans.

Earnings per share are identical for A and B shares.

## 26 LEGAL PROCEEDINGS AND OTHER CONTINGENCIES

### GENERAL

In the ordinary course of business, Shell subsidiaries are subject to a number of loss contingencies arising from litigation and claims brought by private parties and governments, including tax authorities. The operations and earnings of Shell subsidiaries continue, from time to time, to be affected to varying degrees by political, legislative, fiscal and regulatory developments, including those relating to the protection of the environment and indigenous groups in the countries in which they operate. The industries in which Shell subsidiaries are engaged are also subject to physical risks of various types. The nature and frequency of these developments and events, as well as their effect on future operations and earnings, are unpredictable. While these matters are not expected to have a material impact on Shell, no assurance can be provided.

### PESTICIDE LITIGATION

Shell Oil Company (SOC), along with other agricultural chemical pesticide manufacturers and distributors, has been sued by public and quasi-public water purveyors alleging responsibility for groundwater contamination caused by applications of chemical pesticides. Most of these law suits assert various theories of strict liability and seek to recover actual damages, including water well treatment and remediation costs. All of the suits assert claims for punitive damages. There are approximately 30 such cases pending. Based on the claims asserted and SOC's track record with regard to amounts paid to resolve varying claims, management does not expect that the outcome of these suits pending at December 31, 2016, will have a material impact on Shell, although no assurance can be provided.

### NIGERIAN LITIGATION

Shell subsidiaries and associates operating in Nigeria are parties to various environmental and contractual disputes brought in the courts of Nigeria, England and the Netherlands. These disputes are at different stages in litigation, including at the appellate stage, where judgements have been rendered against Shell entities. If taken at face value, the aggregate amount of these judgements could be seen as material. The management, however, believes that the outcomes of these matters will ultimately be resolved in a manner favourable to Shell. While these matters are not expected to have a material impact on Shell, no assurance can be provided.

Authorities in various countries are investigating Shell's investment in Nigerian oil block OPL 245 and the 2011 settlement of litigation pertaining to that block. On January 27, 2017, the Nigeria Federal High Court issued an Interim Order of Attachment for oil block OPL 245, pending the conclusion of the investigation. Shell has applied to discharge this order on constitutional and procedural grounds. On February 14, 2017, Shell received notice of the request of indictment from the Italian prosecution office in Milan with respect to this matter.

## 27 EMPLOYEES

Employee costs	\$ million		
	2016[A]	2015	2014
Remuneration	11,985	12,558	13,092
Social security contributions	867	830	944
Retirement benefits (see Note 18)	2,181	2,984	1,516
Share-based compensation (see Note 22)	693	750	804
Total	15,726	17,122	16,356

[A] In addition, there were redundancy costs of \$1,441 million.

### Average employee numbers

	Thousand		
	2016	2015	2014
Integrated Gas [A]	13	13	11
Upstream [A]	22	22	22
Downstream	40	43	47
Corporate [B]	17	15	14
Total	92	93	94

[A] Segmental reporting has been changed with effect from 2016 (see Note 5). Comparative information has been reclassified.

[B] Includes all employees working in business services centres irrespective of the segment they support.

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## 28 DIRECTORS AND SENIOR MANAGEMENT

### Remuneration of Directors of the Company

	2016	2015	\$ million 2014
Emoluments	10	12	24
Value of released awards under long-term incentive plans	8	1	5
Employer contributions to pension plans	1	1	1

Emoluments comprise salaries and fees, annual bonuses (for the period for which performance is assessed) and other benefits. Emoluments in 2014 included \$11 million for tax equalisation which arose mainly as a result of the promotion of the CEO. The value of released awards under long-term incentive plans for the period is in respect of the performance period ending in that year. In 2016, retirement benefits were accrued in respect of qualifying services under defined benefit plans by two Directors.

Further information on the remuneration of the Directors can be found in the Directors' Remuneration Report on pages 82-103.

### Directors and Senior Management expense

	2016	2015	\$ million 2014
Short-term benefits	21	21	43
Retirement benefits	3	4	4
Share-based compensation	15	19	18
Termination and related amounts	4	—	5
Total	43	44	70

Directors and Senior Management comprise members of the Executive Committee and the Non-executive Directors of the Company.

Short-term benefits comprise salaries and fees, annual bonuses delivered in cash (for the period for which performance is assessed), other benefits and employer social security contributions. Short-term benefits in 2014 included tax equalisation as described above.

## 29 AUDITOR'S REMUNERATION

	2016	2015	\$ million 2014
Fees in respect of the audit of the Consolidated and Parent Company Financial Statements, including audit of consolidation returns	32	5	5
Other audit fees, principally in respect of audits of accounts of subsidiaries	17	46	45
Total audit fees	49	51	50
Audit-related fees (for other services provided pursuant to legislation)	2	2	2
Fees in respect of non-audit services	1	—	1 [A]
Total	52	53	53

[A] Principally for tax compliance.

In addition, the auditor provided audit services to retirement benefit plans for employees of subsidiaries. Remuneration amounted to \$1 million in 2016 (2015: \$1 million; 2014: \$1 million).

With effect from 2016, Ernst & Young LLP (EY) was appointed as auditor of the Company, replacing PricewaterhouseCoopers LLP (PwC). Auditor's remuneration for 2016 relates to EY and for 2015 and 2014 to PwC. From 2016, fees in respect of the audit of the Consolidated Financial Statements include audit of consolidation returns carried out locally that was previously included within other audit fees.

## 30 POST BALANCE SHEET EVENTS

In January 2017, we agreed to sell our interests in the UK North Sea assets Buzzard, Beryl, Bressay, Elgin-Franklin, J-Block, the Greater Armada cluster, Everest, Lomond and Erskine, as well as a 10% interest in Schiehallion, for a consideration of up to \$3.8 billion, including an initial consideration of \$3.0 billion, a payment of up to \$0.6 billion between 2018 and 2021 subject to commodity price, and potential further payments of up to \$0.2 billion for future discoveries. The transaction is subject to partner and regulatory approvals, with completion expected in 2017.

Subsequent to the release of the fourth quarter and full year 2016 unaudited results, Shell signed binding definitive agreements with Saudi Refining Inc., a wholly owned subsidiary of Saudi Arabian Oil Company, on the separation of assets, liabilities and businesses of Motiva Enterprises LLC, a 50:50 refining and marketing joint venture in the USA. The transaction is expected to be completed in 2017, subject to regulatory approvals. The estimated net assets to be acquired by Shell and a balancing receipt exceed the carrying amount of the investment in the joint venture.

In March 2017, Shell agreed to sell to Canadian Natural Resources Limited (Canadian Natural) its 60% interest in the Athabasca Oil Sands Project (AOSP), accounted for as a joint operation, its 100% interest in the Peace River Complex in-situ assets including Carman Creek, and a number of undeveloped oil sands leases, all in Alberta, Canada. The consideration is approximately \$8.5 billion, comprising \$5.4 billion in cash and around 98 million Canadian Natural shares currently valued at \$3.1 billion. The transaction is estimated to result in a post-tax impairment loss of \$1.3 billion to \$1.5 billion, subject to adjustments. In a related transaction, Shell and Canadian Natural have agreed to jointly (50:50) acquire Marathon Oil Canada Corporation (MOCC), which has a 20% interest in the AOSP, for \$1.25 billion each. Following these transactions, Shell will continue as operator of the Scotford Upgrader and the Quest carbon capture and storage (CCS) project. Subject to regulatory approvals, the transactions are expected to close in mid 2017. Subject to closing of these transactions and additional further conditions, Shell may swap its purchased interest in MOCC for a 20% interest in the Scotford Upgrader and Quest CCS project. If the swap were to occur, Shell would fully exit AOSP mining operations and have a 20% interest in the Scotford Upgrader and Quest CCS project.

## SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED)

The information set out on pages 153-170 is referred to as “unaudited” as a means of clarifying that it is not covered by the audit opinion of the independent registered public accounting firm that has audited and reported on the “Consolidated Financial Statements”.

### **PROVED RESERVES**

Proved reserves estimates are calculated pursuant to the US Securities and Exchange Commission (SEC) Rules and the Financial Accounting Standard Board's Topic 932. Proved reserves can be either developed or undeveloped. The definitions used are in accordance with the SEC Rule 4-10 (a) of Regulation SX. We include proved reserves associated with future production that will be consumed in operations.

Proved reserves shown are net of any quantities of crude oil or natural gas that are expected to be (or could be) taken as royalties in kind. Proved reserves outside North America include quantities that will be settled as royalties in cash. Proved reserves include certain quantities of crude oil or natural gas that will be produced under arrangements that involve Shell subsidiaries, joint ventures and associates in risks and rewards but do not transfer title of the product to those entities.

Subsidiaries' proved reserves at December 31, 2016, were divided into 73% developed and 27% undeveloped on a barrel of oil equivalent basis. For the Shell share of joint ventures and associates, the proved reserves at December 31, 2016, were divided into 83% developed and 17% undeveloped on a barrel of oil equivalent basis.

Proved reserves are recognised under various forms of contractual agreements. Shell's proved reserves volumes at December 31, 2016, present in agreements such as production-sharing contracts (PSC), tax/variable royalty contracts or other forms of economic entitlement contracts, where the Shell share of reserves can vary with commodity prices, were 3,397 million barrels of crude oil and natural gas liquids, and 14,423 thousand million standard cubic feet (scf) of natural gas.

Proved reserves cannot be measured exactly because estimation of reserves involves subjective judgement (see “Risk factors” on page 13 and our “Proved reserves assurance process” below). These estimates remain subject to revision and are unaudited supplementary information.

The impact of the acquisition of BG Group plc (BG) in February 2016 on proved reserves volumes is included in purchases of minerals in place.

Proved reserves in Oceania included Shell's 14% share of Woodside Petroleum Limited (Woodside) from June 2014 to April 2016 (previously 23%, from April 2012 to June 2014). Woodside is a publicly listed company on the Australian Securities Exchange for which we have limited access to data; accordingly, the numbers are based on our best assessment. The accounting classification of Woodside was changed from an associate to an investment in securities in April 2016 and therefore no proved reserves are included with effect from that date.

In March 2017, we agreed to sell, in a series of transactions, all of our in-situ and undeveloped oil sands interests in Canada and reduce our share in the Athabasca Oil Sands Project (AOSP) from 60% to 10%. See Note 30 to the “Consolidated Financial Statements” on page 152. Proved reserves associated with these oil sands interests and our 60% interest in the AOSP were 2 billion barrels at December 31, 2016.

### **PROVED RESERVES ASSURANCE PROCESS**

A central group of reserves experts, who on average have around 29 years' experience in the oil and gas industry, undertake the primary assurance of the proved reserves bookings. This group of experts is part of the Resources Assurance and Reporting (RAR) organisation within Shell. A Vice President with 31 years' experience in the oil and gas industry currently heads the RAR organisation. He is a member of the Society of Petroleum Engineers and holds a BA in mathematics from Oxford University and a MEng in Petroleum Engineering from Heriot Watt University. The RAR organisation reports directly to an Executive Vice President of Finance, who is a member of the Upstream Reserves Committee (URC). The URC is a multidisciplinary committee consisting of senior representatives from the Finance, Legal, Projects & Technology and Upstream organisations. The URC reviews and endorses all major (larger than 20 million barrels of oil equivalent) proved reserves bookings and endorses the total aggregated proved reserves. Final approval of all proved reserves bookings remains with Shell's Executive Committee. The Internal Audit function also provides secondary assurance through audits of the control framework.

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## **CRUDE OIL, NATURAL GAS LIQUIDS, SYNTHETIC CRUDE OIL AND BITUMEN**

Shell subsidiaries' proved reserves of crude oil, natural gas liquids (NGLs), synthetic crude oil and bitumen at the end of the year; their share of the proved reserves of joint ventures and associates at the end of the year; and the changes in such reserves during the year are set out on pages 155-157. Significant changes in these proved reserves are discussed below.

### **PROVED RESERVES 2016-2015**

#### **Shell subsidiaries**

##### Acquisition of BG

Purchases of minerals in place included 1,205 million barrels additions on acquisition of BG, notably 85 million barrels in Europe, 175 million barrels in Asia and 931 million barrels in South America.

##### Asia

The net increase of 100 million barrels in revisions and reclassifications mainly related to Malaysia and Russia.

##### Canada

The increase of 96 million barrels in synthetic crude oil extensions and discoveries was in the Muskeg River Mine.

##### South America

The net increase of 86 million barrels in revisions and reclassifications was mainly due to a transfer of contingent resource to proved reserves in Brazil.

### **PROVED RESERVES 2015-2014**

#### **Shell subsidiaries**

##### Europe

The net decrease of 97 million barrels in revisions and reclassifications resulted from field performance studies and development activities in Italy and the UK.

##### Asia

The net increase of 149 million barrels in revisions and reclassifications resulted mainly from increased PSC entitlement share in Iraq and Qatar due to the lower yearly average price.

##### Africa

The net increase of 50 million barrels in revisions and reclassifications resulted from field performance updates, development activities and increased PSC entitlement share due to the lower yearly average price. The decrease of 76 million barrels from sales of minerals in place resulted from divestment of assets in Nigeria.

##### USA

The net decrease of 61 million barrels in revisions and reclassifications resulted from field performance updates, development activities, and the lower yearly average price (early economic truncation and de-booking of uneconomic prior year proved undeveloped reserves).

##### Canada

The net increase of 204 million barrels in synthetic crude oil revisions and reclassifications resulted from reductions in variable royalties due to the lower yearly average price. The net decrease of 420 million barrels in bitumen revisions and reclassifications resulted from the cessation of the Carmon Creek project.



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## Proved developed and undeveloped reserves 2016

Million barrels

	Europe Oil and NGL	Asia Oil and NGL	Oceania Oil and NGL	Africa Oil and NGL	USA Oil and NGL	North America		South America Oil and NGL	Synthetic crude oil	Total All products			
						Canada Bitumen	Oil and NGL						
Shell subsidiaries													
At January 1	417	1,286	126	579	560	22	1,941	3	56	3,046	1,941	3	4,990
Revisions and reclassifications	24	100	9	21	17	3	33	4	86	260	33	4	297
Improved recovery	-	22	-	-	2	-	-	-	-	24	-	-	24
Extensions and discoveries	-	4	-	-	20	6	96	-	-	30	96	-	126
Purchases of minerals in place	85	175	2	14	-	-	-	-	931	1,207	-	-	1,207
Sales of minerals in place	(5)	-	-	-	(5)	(2)	-	-	-	(12)	-	-	(12)
Production [A]	(86)	(201)	(9)	(85)	(103)	(11)	(56)	(5)	(81)	(576)	(56)	(5)	(637)
At December 31	435	1,386	128	529	491	18	2,014	2	992	3,979	2,014	2	5,995
Shell share of joint ventures and associates													
At January 1	11	290	12	-	-	-	-	-	-	313	-	-	313
Revisions and reclassifications	(3)	1	(11)	-	-	-	-	-	-	(13)	-	-	(13)
Improved recovery	-	-	-	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	-	1	-	-	-	-	-	-	-	1	-	-	1
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-
Production	(1)	(36)	(1)	-	-	-	-	-	-	(38)	-	-	(38)
At December 31	7	256	-	-	-	-	-	-	-	263	-	-	263
Total	442	1,642	128	529	491	18	2,014	2	992	4,242	2,014	2	6,258
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	-	-	-	4	-	-	-	-	-	4	-	-	4

[A] Included 2 million barrels consumed in operations for synthetic crude oil.

## Proved developed reserves 2016

Million barrels

	Europe Oil and NGL	Asia Oil and NGL	Oceania Oil and NGL	Africa Oil and NGL	USA Oil and NGL	North America		South America Oil and NGL	Synthetic crude oil	Total All products			
						Canada Bitumen	Oil and NGL						
Shell subsidiaries													
At January 1	220	972	36	437	455	20	1,405	3	44	2,184	1,405	3	3,592
At December 31	257	1,184	36	461	437	14	1,387	2	543	2,932	1,387	2	4,321
Shell share of joint ventures and associates													
At January 1	5	204	9	-	-	-	-	-	-	218	-	-	218
At December 31	4	215	-	-	-	-	-	-	-	219	-	-	219

## Proved undeveloped reserves 2016

Million barrels

	Europe Oil and NGL	Asia Oil and NGL	Oceania Oil and NGL	Africa Oil and NGL	USA Oil and NGL	North America		South America Oil and NGL	Synthetic crude oil	Total All products			
						Canada Bitumen	Oil and NGL						
Shell subsidiaries													
At January 1	197	314	90	142	105	2	536	-	12	862	536	-	1,398
At December 31	178	202	92	68	54	4	627	-	449	1,047	627	-	1,674
Shell share of joint ventures and associates													
At January 1	6	86	3	-	-	-	-	-	-	95	-	-	95
At December 31	3	41	-	-	-	-	-	-	-	44	-	-	44

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[Crude oil, natural gas liquids, synthetic crude oil and bitumen continued]

## Proved developed and undeveloped reserves 2015

Million barrels

	Europe Oil and NGL	Asia Oil and NGL	Oceania Oil and NGL	Africa Oil and NGL	USA Oil and NGL	North America		South America Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Total All products	
						Canada	USA						
Shell subsidiaries													
At January 1	579	1,306	128	691	711	44	1,763	428	63	3,522	1,763	428	5,713
Revisions and reclassifications	(97)	149	6	50	(61)	(25)	204	(420)	7	29	204	(420)	(187)
Improved recovery	-	-	-	-	4	-	-	-	-	4	-	-	4
Extensions and discoveries	-	-	-	-	10	12	26	-	-	22	26	-	48
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	(76)	-	-	-	-	-	(76)	-	-	(76)
Production [A]	(65)	(169)	(8)	(86)	(104)	(9)	(52)	(5)	(14)	(455)	(52)	(5)	(512)
At December 31	417	1,286	126	579	560	22	1,941	3	56	3,046	1,941	3	4,990
Shell share of joint ventures and associates													
At January 1	29	376	12	-	-	-	-	-	-	417	-	-	417
Revisions and reclassifications	(17)	(49)	1	-	-	-	-	-	-	(65)	-	-	(65)
Improved recovery	-	-	-	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchases of minerals in place	-	-	2	-	-	-	-	-	-	2	-	-	2
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-
Production	(1)	(37)	(3)	-	-	-	-	-	-	(41)	-	-	(41)
At December 31	11	290	12	-	-	-	-	-	-	313	-	-	313
Total	428	1,576	138	579	560	22	1,941	3	56	3,359	1,941	3	5,303
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	-	-	-	7	-	-	-	-	-	7	-	-	7

[A] Included 2 million barrels consumed in operations for synthetic crude oil.

## Proved developed reserves 2015

Million barrels

	Europe Oil and NGL	Asia Oil and NGL	Oceania Oil and NGL	Africa Oil and NGL	USA Oil and NGL	North America		South America Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Total All products	
						Canada	USA						
Shell subsidiaries													
At January 1	350	947	41	534	494	26	1,273	9	51	2,443	1,273	9	3,725
At December 31	220	972	36	437	455	20	1,405	3	44	2,184	1,405	3	3,592
Shell share of joint ventures and associates													
At January 1	22	222	10	-	-	-	-	-	-	254	-	-	254
At December 31	5	204	9	-	-	-	-	-	-	218	-	-	218

## Proved undeveloped reserves 2015

Million barrels

	Europe Oil and NGL	Asia Oil and NGL	Oceania Oil and NGL	Africa Oil and NGL	USA Oil and NGL	North America		South America Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Total All products	
						Canada	USA						
Shell subsidiaries													
At January 1	229	359	87	157	217	18	490	419	12	1,079	490	419	1,988
At December 31	197	314	90	142	105	2	536	-	12	862	536	-	1,398
Shell share of joint ventures and associates													
At January 1	7	154	2	-	-	-	-	-	-	163	-	-	163
At December 31	6	86	3	-	-	-	-	-	-	95	-	-	95

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## Proved developed and undeveloped reserves 2014

Million barrels

	Europe Oil and NGL	Asia Oil and NGL	Oceania Oil and NGL	Africa Oil and NGL	USA Oil and NGL	North America			South America Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Total All products
						Canada Bitumen							
Shell subsidiaries													
At January 1	769	1,343	139	651	991	29	1,731	422	95	4,017	1,731	422	6,170
Revisions and reclassifications	(129)	120	2	126	(169)	3	81	17	(7)	(54)	81	17	44
Improved recovery	-	-	-	9	-	-	-	-	-	9	-	-	9
Extensions and discoveries	-	5	1	8	18	21	-	1	13	66	-	1	67
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	(5)	(15)	(30)	(1)	-	(6)	(21)	(72)	-	(6)	(78)
Production [A]	(61)	(162)	(9)	(88)	(99)	(8)	(49)	(6)	(17)	(444)	(49)	(6)	(499)
At December 31	579	1,306	128	691	711	44	1,763	428	63	3,522	1,763	428	5,713
Shell share of joint ventures and associates													
At January 1	29	381	24	-	-	-	-	-	17	451	-	-	451
Revisions and reclassifications	2	33	-	-	-	-	-	-	(17)	18	-	-	18
Improved recovery	-	-	-	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	-	1	-	-	-	-	-	-	-	1	-	-	1
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	(8)	-	-	-	-	-	-	(8)	-	-	(8)
Production	(2)	(39)	(4)	-	-	-	-	-	-	(45)	-	-	(45)
At December 31	29	376	12	-	-	-	-	-	-	417	-	-	417
Total	608	1,682	140	691	711	44	1,763	428	63	3,939	1,763	428	6,130
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	-	-	-	9	-	-	-	-	-	9	-	-	9

[A] Included 2 million barrels consumed in operations for synthetic crude oil.

## Proved developed reserves 2014

Million barrels

	Europe Oil and NGL	Asia Oil and NGL	Oceania Oil and NGL	Africa Oil and NGL	USA Oil and NGL	North America			South America Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Total All products
						Canada Bitumen							
Shell subsidiaries													
At January 1	396	942	48	453	440	21	1,299	13	59	2,359	1,299	13	3,671
At December 31	350	947	41	534	494	26	1,273	9	51	2,443	1,273	9	3,725
Shell share of joint ventures and associates													
At January 1	22	316	23	-	-	-	-	-	15	376	-	-	376
At December 31	22	222	10	-	-	-	-	-	-	254	-	-	254

## Proved undeveloped reserves 2014

Million barrels

	Europe Oil and NGL	Asia Oil and NGL	Oceania Oil and NGL	Africa Oil and NGL	USA Oil and NGL	North America			South America Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Total All products
						Canada Bitumen							
Shell subsidiaries													
At January 1	373	401	91	198	551	8	432	409	36	1,658	432	409	2,499
At December 31	229	359	87	157	217	18	490	419	12	1,079	490	419	1,988
Shell share of joint ventures and associates													
At January 1	7	65	1	-	-	-	-	-	2	75	-	-	75
At December 31	7	154	2	-	-	-	-	-	-	163	-	-	163

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## **NATURAL GAS**

Shell subsidiaries' proved reserves of natural gas at the end of the year; their share of the proved reserves of joint ventures and associates at the end of the year; and the changes in such reserves during the year are set out on pages 159-161. Significant changes in these proved reserves are discussed below. Volumes are not adjusted to standard heat content. Apart from integrated projects, volumes of gas are reported on an "as-sold" basis. The price used to calculate future revenue and cash flows from proved gas reserves is the contract price or the 12-month average on "as-sold" volumes. Volumes associated with integrated projects are those measured at a designated transfer point between the upstream and downstream portions of the integrated project. Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

### **PROVED RESERVES 2016-2015**

#### **Shell subsidiaries**

##### Acquisition of BG

Purchases of minerals in place included 7,111 thousand million scf additions on acquisition of BG, notably 419 thousand million scf in Europe, 576 thousand million scf in Asia, 3,904 thousand million scf in Oceania, 327 thousand million scf in Africa, 151 thousand million scf in the USA and 1,734 thousand million scf in South America.

##### Asia

The net increase of 554 thousand million scf in revisions and reclassifications was mainly due to technical revisions in Kazakhstan and Thailand and an increased PSC entitlement share in Qatar.

##### Oceania

The purchase of minerals in place of 426 thousand million scf, excluding the increase on acquisition of BG (see above), was from the acquisition of a further interest in the Janszlo field in Australia.

##### USA

The increase of 200 thousand million scf in extensions and discoveries was in shale.

#### **Shell share of joint ventures and associates**

##### Europe

The net decrease of 636 thousand million scf in revisions and reclassifications was mainly due to a reassessment of Groningen compression in the Netherlands.

##### Oceania

The net decrease of 464 thousand million scf in revisions and reclassifications was due to the change of accounting classification for Woodside.

### **PROVED RESERVES 2015-2014**

#### **Shell subsidiaries**

##### Asia

The net increase of 1,385 thousand million scf in revisions and reclassifications resulted mainly from increased PSC entitlement share in Qatar due to the lower yearly average price.

##### USA

The net decrease of 587 thousand million scf in revisions and reclassifications was mainly the result of early economic field cutoff and previously booked proved undeveloped reserves no longer meeting the economic limit test due to the lower yearly average price.

##### Canada

The net decrease of 581 thousand million scf in revisions and reclassifications was mainly the result of early economic field cutoff and previously booked proved undeveloped reserves no longer meeting the economic limit test due to the lower yearly average price.

#### **Shell share of joint ventures and associates**

##### Asia

The net decrease of 214 thousand million scf in revisions and reclassifications resulted mainly from field performance updates and development activities in Brunei.

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## Proved developed and undeveloped reserves 2016

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South	Total
					USA	Canada	America	
Shell subsidiaries								
At January 1	3,848	10,692	5,411	2,236	754	955	43	23,939
Revisions and reclassifications	92	554	(177)	51	(95)	41	66	532
Improved recovery	-	10	-	-	-	-	-	10
Extensions and discoveries	4	162	-	2	200	180	3	551
Purchases of minerals in place	419	576	4,330	327	151	-	1,734	7,537
Sales of minerals in place	(7)	-	-	-	(7)	(63)	-	(77)
Production [A]	(615)	(921)	(513)	(391)	(328)	(269)	(196)	(3,233)
At December 31	3,741	11,073	9,051	2,225	675	844	1,650	29,259
Shell share of joint ventures and associates								
At January 1	7,538	5,363	535	-	-	-	-	13,436
Revisions and reclassifications	(636)	(197)	(464)	-	-	-	-	(1,297)
Improved recovery	-	-	-	-	-	-	-	-
Extensions and discoveries	-	35	-	-	-	-	-	35
Purchases of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-
Production [B]	(405)	(447)	(40)	-	-	-	-	(892)
At December 31	6,497	4,754	31	-	-	-	-	11,282
Total	10,238	15,827	9,082	2,225	675	844	1,650	40,541
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	-	3	-	2	-	-	-	5

[A] Included 197 thousand million standard cubic feet consumed in operations.

[B] Included 44 thousand million standard cubic feet consumed in operations.

## Proved developed reserves 2016

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South	Total
					USA	Canada	America	
Shell subsidiaries								
At January 1	3,471	9,920	1,234	1,386	572	636	37	17,256
At December 31	3,437	10,569	3,966	1,618	563	458	1,172	21,783
Shell share of joint ventures and associates								
At January 1	5,933	4,301	420	-	-	-	-	10,654
At December 31	5,240	4,110	31	-	-	-	-	9,381

## Proved undeveloped reserves 2016

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South	Total
					USA	Canada	America	
Shell subsidiaries								
At January 1	377	772	4,177	850	182	319	6	6,683
At December 31	304	504	5,085	607	112	386	478	7,476
Shell share of joint ventures and associates								
At January 1	1,605	1,062	115	-	-	-	-	2,782
At December 31	1,257	644	-	-	-	-	-	1,901

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[Natural gas continued]

## Proved developed and undeveloped reserves 2015

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	4,430	10,071	5,575	2,621	1,561	1,611	48	25,917
Revisions and reclassifications	(61)	1,385	41	5	(587)	(581)	11	213
Improved recovery	—	—	—	—	1	—	—	1
Extensions and discoveries	—	—	—	4	59	175	—	238
Purchases of minerals in place	—	—	—	—	—	2	—	2
Sales of minerals in place	(19)	—	—	(115)	(5)	—	—	(139)
Production [A]	(502)	(764)	(205)	(279)	(275)	(252)	(16)	(2,293)
At December 31	3,848	10,692	5,411	2,236	754	955	43	23,939
Shell share of joint ventures and associates								
At January 1	7,866	6,030	503	—	—	—	—	14,399
Revisions and reclassifications	92	(214)	23	—	—	—	—	(99)
Improved recovery	6	—	—	—	—	—	—	6
Extensions and discoveries	11	—	—	—	—	—	—	11
Purchases of minerals in place	—	—	84	—	—	—	—	84
Sales of minerals in place	—	—	—	—	—	—	—	—
Production [B]	(437)	(453)	(75)	—	—	—	—	(965)
At December 31	7,538	5,363	535	—	—	—	—	13,436
Total	11,386	16,055	5,946	2,236	754	955	43	37,375
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	—	2	—	3	—	—	—	5

[A] Included 145 thousand million standard cubic feet consumed in operations.

[B] Included 55 thousand million standard cubic feet consumed in operations.

## Proved developed reserves 2015

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	3,774	9,114	1,398	1,162	1,275	939	42	17,704
At December 31	3,471	9,920	1,234	1,386	572	636	37	17,256
Shell share of joint ventures and associates								
At January 1	6,386	4,501	433	—	—	—	—	11,320
At December 31	5,933	4,301	420	—	—	—	—	10,654

## Proved undeveloped reserves 2015

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	656	957	4,177	1,459	286	672	6	8,213
At December 31	377	772	4,177	850	182	319	6	6,683
Shell share of joint ventures and associates								
At January 1	1,480	1,529	70	—	—	—	—	3,079
At December 31	1,605	1,062	115	—	—	—	—	2,782

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## Proved developed and undeveloped reserves 2014

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	4,767	10,170	6,092	2,257	2,199	1,500	74	27,059
Revisions and reclassifications	175	630	(20)	621	(46)	(5)	(11)	1,344
Improved recovery	-	-	-	-	-	-	-	-
Extensions and discoveries	-	82	46	61	73	449	8	719
Purchases of minerals in place	-	-	-	-	287	-	-	287
Sales of minerals in place	-	-	(325)	(10)	(578)	(100)	(8)	(1,021)
Production [A]	(512)	(811)	(218)	(308)	(374)	(233)	(15)	(2,471)
At December 31	4,430	10,071	5,575	2,621	1,561	1,611	48	25,917
Shell share of joint ventures and associates								
At January 1	8,508	5,991	909	-	-	-	6	15,414
Revisions and reclassifications	(60)	455	34	-	-	-	(6)	423
Improved recovery	-	-	-	-	-	-	-	-
Extensions and discoveries	6	26	11	-	-	-	-	43
Purchases of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	(354)	-	-	-	-	(354)
Production [B]	(588)	(442)	(97)	-	-	-	-	(1,127)
At December 31	7,866	6,030	503	-	-	-	-	14,399
Total	12,296	16,101	6,078	2,621	1,561	1,611	48	40,316
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	-	3	-	6	-	-	-	9

[A] Included 162 thousand million standard cubic feet consumed in operations.

[B] Included 58 thousand million standard cubic feet consumed in operations.

## Proved developed reserves 2014

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	3,942	9,132	1,621	946	1,492	908	48	18,089
At December 31	3,774	9,114	1,398	1,162	1,275	939	42	17,704
Shell share of joint ventures and associates								
At January 1	6,856	4,894	806	-	-	-	4	12,560
At December 31	6,386	4,501	433	-	-	-	-	11,320

## Proved undeveloped reserves 2014

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	825	1,038	4,471	1,311	707	592	26	8,970
At December 31	656	957	4,177	1,459	286	672	6	8,213
Shell share of joint ventures and associates								
At January 1	1,652	1,097	103	-	-	-	2	2,854
At December 31	1,480	1,529	70	-	-	-	-	3,079

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## STANDARDISED MEASURE OF DISCOUNTED FUTURE CASH FLOWS

The SEC Form 20-F requires the disclosure of a standardised measure of discounted future net cash flows, relating to proved reserves quantities and based on a 12-month unweighted arithmetic average sales price, calculated on a first-day-of-the-month basis, with cost factors based on those at the end of each year, currently enacted tax rates and a 10% annual discount factor. In our view, the information so calculated does not provide a reliable measure of future cash flows from proved reserves, nor does it permit a realistic comparison to be made of one entity with another because the assumptions used cannot reflect the varying circumstances within each entity. In addition, a substantial but unknown proportion of future real cash flows from oil and gas production activities is expected to derive from reserves which have already been discovered, but which cannot yet be regarded as proved.

### STANDARDISED MEASURE OF DISCOUNTED FUTURE CASH FLOWS RELATING TO PROVED RESERVES AT DECEMBER 31

#### 2016 – Shell subsidiaries

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	33,837	71,019	49,872	26,422	20,239	71,652	41,999	315,040
Future production costs	17,276	25,793	22,842	12,302	17,114	54,966	21,780	172,073
Future development costs	11,630	12,481	16,795	5,533	7,894	11,948	15,053	81,334
Future tax expenses	824	9,059	1,734	5,427	561	1,327	3,700	22,632
Future net cash flows	4,107	23,686	8,501	3,160	(5,330)	3,411	1,466	39,001
Effect of discounting cash flows at 10%	351	10,663	2,889	(231)	(3,423)	2,129	(1,095)	11,283
Standardised measure of discounted future net cash flows	3,756	13,023	5,612	3,391	(1,907)[A]	1,282	2,561	27,718
Non-controlling interest included	–	–	–	(65)[A]	–	–	–	(65)

[A] While proved reserves are economically producible at the 2016 yearly average price, the standardised measure of discounted future net cash flows was negative for those proved reserves at December 31, 2016, due to addition of overhead, tax and abandonment costs and ongoing commitments post production of proved reserves.

#### 2016 – Shell share of joint ventures and associates

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	26,224	28,000	88	–	–	–	–	54,312
Future production costs	18,163	14,060	65	–	–	–	–	32,288
Future development costs	1,367	7,588	41	–	–	–	–	8,996
Future tax expenses	2,526	3,280	–	–	–	–	–	5,806
Future net cash flows	4,168	3,072	(18)	–	–	–	–	7,222
Effect of discounting cash flows at 10%	2,363	692	(9)	–	–	–	–	3,046
Standardised measure of discounted future net cash flows	1,805	2,380	(9)	–	–	–	–	4,176

#### 2015 – Shell subsidiaries

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	46,910	83,549	36,644	35,856	28,755	81,957	2,264	315,935
Future production costs	21,526	25,494	11,690	17,470	21,480	60,449	1,728	159,837
Future development costs	12,003	12,730	12,987	6,344	10,930	17,983	898	73,875
Future tax expenses	7,660	15,926	1,407	6,357	864	1,099	86	33,399
Future net cash flows	5,721	29,399	10,560	5,685	(4,519)	2,426	(448)	48,824
Effect of discounting cash flows at 10%	1,870	14,181	5,894	1,372	(2,394)	2,241	(221)	22,943
Standardised measure of discounted future net cash flows	3,851	15,218	4,666	4,313	(2,125)[A]	185	(227)[A]	25,881
Non-controlling interest included	–	(1)	–	(149)[A]	–	–	–	(150)

[A] While proved reserves are economically producible at the 2015 yearly average price, the standardised measure of discounted future net cash flows was negative for those proved reserves at December 31, 2015, due to addition of overhead, tax and abandonment costs.



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## 2015 – Shell share of joint ventures and associates

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	45,488	43,271	5,261	–	–	–	–	94,020
Future production costs	27,279	19,566	1,055	–	–	–	–	47,900
Future development costs	1,513	7,449	492	–	–	–	–	9,454
Future tax expenses	4,121	6,384	1,121	–	–	–	–	11,626
Future net cash flows	12,575	9,872	2,593	–	–	–	–	25,040
Effect of discounting cash flows at 10%	9,597	3,393	1,087	–	–	–	–	14,077
Standardised measure of discounted future net cash flows	2,978	6,479	1,506	–	–	–	–	10,963

## 2014 – Shell subsidiaries

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	94,201	154,314	59,407	77,122	72,537	190,183	5,573	653,337
Future production costs	37,786	36,742	14,296	29,978	42,784	100,074	3,173	264,833
Future development costs	14,154	15,729	12,629	7,214	15,584	33,495	1,450	100,255
Future tax expenses	25,692	43,303	6,607	25,207	5,299	14,730	778	121,616
Effect of discounting cash flows at 10%	5,493	27,974	14,997	4,825	1,583	33,365	(231)	88,006
Standardised measure of discounted future net cash flows	11,076	30,566	10,878	9,898	7,287	8,519	403	78,627
Non-controlling interest included	–	(5)	–	59	–	–	–	54

## 2014 – Shell share of joint ventures and associates

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Future cash inflows	60,397	92,756	11,370	–	–	–	–	164,523
Future production costs	42,656	37,961	3,021	–	–	–	–	83,638
Future development costs	1,631	10,089	2,580	–	–	–	–	14,300
Future tax expenses	6,005	16,368	1,708	–	–	–	–	24,081
Future net cash flows	10,105	28,338	4,061	–	–	–	–	42,504
Effect of discounting cash flows at 10%	4,953	12,218	1,989	–	–	–	–	19,160
Standardised measure of discounted future net cash flows	5,152	16,120	2,072	–	–	–	–	23,344

## CHANGE IN STANDARDISED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS RELATING TO PROVED RESERVES

### 2016

\$ million

	Shell share of joint ventures and associates		Total
	Shell subsidiaries	Shell share of joint ventures and associates	
At January 1	25,881	10,963	36,844
Net changes in prices and production costs	(21,506)	(6,942)	(28,448)
Revisions of previous reserves estimates	6,175	(1,328)	4,847
Extensions, discoveries and improved recovery	1,268	(17)	1,251
Purchases and sales of minerals in place	24,279	–	24,279
Development cost related to future production	(15,327)	(150)	(15,477)
Sales and transfers of oil and gas, net of production costs	(19,657)	(3,087)	(22,744)
Development cost incurred during the year	15,403	854	16,257
Accretion of discount	4,376	1,363	5,739
Net change in income tax	6,826	2,520	9,346
At December 31	27,718	4,176	31,894

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[Standardised measure of discounted future cash flows continued]

	\$ million		
	Shell subsidiaries	Shell share of joint ventures and associates	Total
2015			
At January 1	78,627	23,344	101,971
Net changes in prices and production costs	(123,966)	(19,098)	(143,064)
Revisions of previous reserves estimates	7,672	(1,255)	6,417
Extensions, discoveries and improved recovery	297	7	304
Purchases and sales of minerals in place	(1,706)	218	(1,488)
Development cost related to future production	4,329	927	5,256
Sales and transfers of oil and gas, net of production costs	(18,930)	(4,383)	(23,313)
Development cost incurred during the year	17,818	1,463	19,281
Accretion of discount	13,837	3,188	17,025
Net change in income tax	47,903	6,552	54,455
At December 31	25,881	10,963	36,844

	\$ million		
	Shell subsidiaries	Shell share of joint ventures and associates	Total
2014			
At January 1	91,299	25,180	116,479
Net changes in prices and production costs	(22,475)	1,025	(21,450)
Revisions of previous reserves estimates	6,451	(28)	6,423
Extensions, discoveries and improved recovery	2,837	191	3,028
Purchases and sales of minerals in place	(2,551)	(1,497)	(4,048)
Development cost related to future production	(9,372)	(1,362)	(10,734)
Sales and transfers of oil and gas, net of production costs	(40,495)	(7,401)	(47,896)
Development cost incurred during the year	22,619	1,350	23,969
Accretion of discount	16,367	3,670	20,037
Net change in income tax	13,947	2,216	16,163
At December 31	78,627	23,344	101,971

## OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES CAPITALISED COSTS

The aggregate amount of property, plant and equipment and intangible assets, excluding goodwill, relating to oil and gas exploration and production activities, and the aggregate amount of the related depreciation, depletion and amortisation at December 31, are shown in the tables below.

### SHELL SUBSIDIARIES

	\$ million	
	2016	2015
Cost [A]		
Proved properties [B]	286,509	231,768
Unproved properties	25,582	27,928
Support equipment and facilities	6,418	5,717
	318,509	265,413
Depreciation, depletion and amortisation		
Proved properties [B]	129,243	118,575
Unproved properties	6,569	8,295
Support equipment and facilities	3,245	3,000
	139,057	129,870
Net capitalised costs	179,452	135,543

[A] There were additions of \$48,430 million on acquisition of BG.

[B] Includes capitalised asset decommissioning and restoration costs and related depreciation.

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## SHELL SHARE OF JOINT VENTURES AND ASSOCIATES

	\$ million	
	2016	2015
Cost		
Proved properties [A]	40,773	44,003
Unproved properties	2,992	3,698
Support equipment and facilities	4,383	3,724
	48,148	51,425
Depreciation, depletion and amortisation		
Proved properties [A]	28,712	25,014
Unproved properties	20	156
Support equipment and facilities	3,054	2,124
	31,786	27,294
Net capitalised costs	16,362	24,131

[A] Includes capitalised asset decommissioning and restoration costs and related depreciation.

## OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES COSTS INCURRED

Costs incurred during the year in oil and gas property acquisition, exploration and development activities, whether capitalised or charged to income currently, are shown in the tables below. Finance leases are excluded. Development costs include capitalised asset decommissioning and restoration costs (including increases or decreases arising from changes to cost estimates or to the discount rate applied to the obligations) and exclude costs of acquiring support equipment and facilities, but include depreciation thereon. Europe includes Greenland.

### SHELL SUBSIDIARIES

2016 [A]									\$ million
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Other [B]			
Acquisition of properties									
Proved	25	59	-	4	-	-	16	104	
Unproved	222	-	2	6	87	17	167	501	
Exploration	396	400	20	598	1,043	418	509	3,384	
Development	4,242	6,632	10,283	2,009	3,629	701	30,575	58,071	

[A] Including \$44,127 million of related costs incurred on acquisition of BG.

[B] Comprises Canada, Honduras and Mexico.

2015									\$ million
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Other [A]			
Acquisition of properties									
Proved	2	3	-	-	2	86	-	93	
Unproved	1	1	-	-	135	30	10	177	
Exploration	360	822	198	376	3,433	554	542	6,285	
Development	3,777	2,703	3,760	2,829	5,720	1,747	80	20,616	

[A] Comprises Canada and Mexico.

2014									\$ million
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Canada			
Acquisition of properties									
Proved	2	57	-	132	36	-	10	237	
Unproved	-	97	-	221	401	37	136	892	
Exploration	680	1,339	415	254	2,546	851	717	6,802	
Development	5,139	3,189	5,111	2,717	6,482	2,437	409	25,484	

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## SHELL SHARE OF JOINT VENTURES AND ASSOCIATES

Joint ventures and associates did not incur costs in the acquisition of oil and gas properties in 2016, 2015 or 2014.

2016									\$ million
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Canada			
Exploration	33	57	101	-	-	-	-	191	
Development	99	2,173	273	-	-	-	-	2,545	

2015									\$ million
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Canada			
Exploration	40	132	125	-	-	-	-	297	
Development	254	2,434	854	-	-	-	-	3,542	

2014									\$ million
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Canada			
Exploration	18	181	162	-	-	-	-	361	
Development	220	3,430	143	-	-	-	-	3,793	

## OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES EARNINGS

The results of operations for oil and gas producing activities are shown in the tables below. Europe includes Greenland and taxes other than income tax include cash-paid royalties to governments outside North America.

### SHELL SUBSIDIARIES

2016									\$ million
	Europe	Asia	Oceania	Africa	North America		South America	Total	
					USA	Other[A]			
Revenue									
Third parties	969	2,656	1,069	1,380	643	41	476	7,234	
Sales between businesses	5,816	7,284	1,438	3,138	3,960	3,789	2,980	28,405	
Total	6,785	9,940	2,507	4,518	4,603	3,830	3,456	35,639	
Production costs excluding taxes	2,565	2,212	805	1,468	3,348	2,230	865	13,493	
Taxes other than income tax	66	421	83	194	70	-	790	1,624	
Exploration	250	408	70	356	438	291	295	2,108	
Depreciation, depletion and amortisation	3,270	3,304	1,130	2,018	4,372	1,953	2,881	18,928	
Other costs/(income)	1,925	1,606	(700)	356	40	680	(173)	3,734	
Earnings before taxation	(1,291)	1,989	1,119	126	(3,665)	(1,324)	(1,202)	(4,248)	
Taxation charge/(credit)	(311)	1,918	559	431	(1,351)	(377)	(1,032)	(163)	
Earnings after taxation	(980)	71	560	(305)	(2,314)	(947)	(170)	(4,085)	

[A] Comprises Canada, Honduras and Mexico.

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**2015**

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Other[A]		
Revenue								
Third parties	1,866	2,577	1,202	1,174	567	53	85	7,524
Sales between businesses	5,707	8,040	418	3,737	4,941	4,045	535	27,423
Total	7,573	10,617	1,620	4,911	5,508	4,098	620	34,947
Production costs excluding taxes	2,490	2,163	541	1,570	3,039	2,612	343	12,758
Taxes other than income tax	128	435	115	347	79	-	63	1,167
Exploration	261	1,255	195	161	3,336	164	347	5,719
Depreciation, depletion and amortisation	2,769	3,047	478	1,733	6,259	6,570	687	21,543
Other costs/(income)	779	1,465	226	(1,441)	668	2,172	232	4,101
Earnings before taxation	1,146	2,252	65	2,541	(7,873)	(7,420)	(1,052)	(10,341)
Taxation charge/(credit)	418	2,516	429	866	(2,907)	(1,815)	278	(215)
Earnings after taxation	728	(264)	(364)	1,675	(4,966)	(5,605)	(1,330)	(10,126)

[A] Comprises Canada and Mexico.

**2014**

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Revenue								
Third parties	2,808	4,914	1,867	3,004	1,078	202	126	13,999
Sales between businesses	7,869	13,973	990	6,516	9,903	7,399	1,376	48,026
Total	10,677	18,887	2,857	9,520	10,981	7,601	1,502	62,025
Production costs excluding taxes	2,831	2,282	599	2,032	3,440	3,367	482	15,033
Taxes other than income tax	264	948	216	836	198	-	165	2,627
Exploration	457	1,331	232	307	1,549	88	260	4,224
Depreciation, depletion and amortisation	1,772	3,341	427	2,037	6,576	1,709	475	16,337
Other costs/(income)	766	2,058	(2,123)	129	845	2,137	78	3,890
Earnings before taxation	4,587	8,927	3,506	4,179	(1,627)	300	42	19,914
Taxation charge/(credit)	3,362	6,800	2,113	2,404	(654)	60	157	14,242
Earnings after taxation	1,225	2,127	1,393	1,775	(973)	240	(115)	5,672

## SHELL SHARE OF JOINT VENTURES AND ASSOCIATES

Oceania included Shell's 14% share of Woodside from June 2014 to April 2016 (previously 23%). Woodside is a publicly listed company on the Australian Securities Exchange for which we have limited access to data; accordingly, the numbers are estimated. The accounting classification of Woodside was changed from an associate to an investment in securities in April 2016.

**2016**

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Third-party revenue	1,705	3,708	197	-	-	-	-	5,610
Total	1,705	3,708	197	-	-	-	-	5,610
Production costs excluding taxes	293	705	123	-	-	-	-	1,121
Taxes other than income tax	706	456	7	-	-	-	-	1,169
Exploration	36	25	27	-	-	-	-	88
Depreciation, depletion and amortisation	208	1,663	237	-	-	-	-	2,108
Other costs/(income)	79	401	(28)	-	-	-	-	452
Earnings before taxation	383	458	(169)	-	-	-	-	672
Taxation charge	91	23	8	-	-	-	-	122
Earnings after taxation	292	435	(177)	-	-	-	-	550

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[Oil and gas exploration and production activities earnings continued]

## 2015

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Third-party revenue	2,764	5,177	632	-	-	-	-	8,573
Total	2,764	5,177	632	-	-	-	-	8,573
Production costs excluding taxes	382	745	215	-	-	-	-	1,342
Taxes other than income tax	1,253	877	31	-	-	-	-	2,161
Exploration	21	20	42	-	-	-	-	83
Depreciation, depletion and amortisation	196	1,463	1,114	-	-	-	-	2,773
Other costs	221	580	11	-	-	-	-	812
Earnings before taxation	691	1,492	(781)	-	-	-	-	1,402
Taxation charge	237	242	19	-	-	-	-	498
Earnings after taxation	454	1,250	(800)	-	-	-	-	904

## 2014

\$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Third-party revenue	4,966	8,811	1,292	-	-	-	-	15,069
Total	4,966	8,811	1,292	-	-	-	-	15,069
Production costs excluding taxes	434	829	272	-	-	-	-	1,535
Taxes other than income tax	2,634	2,518	24	-	-	-	-	5,176
Exploration	22	83	66	-	-	-	18	189
Depreciation, depletion and amortisation	198	1,117	373	-	-	-	-	1,688
Other costs/(income)	(6)	643	96	-	-	-	258	991
Earnings before taxation	1,684	3,621	461	-	-	-	(276)	5,490
Taxation charge	608	1,256	190	-	-	-	-	2,054
Earnings after taxation	1,076	2,365	271	-	-	-	(276)	3,436

## ACREAGE AND WELLS

The tables below reflect acreage and wells of Shell subsidiaries, joint ventures and associates. The term "gross" refers to the total activity in which Shell subsidiaries, joint ventures and associates have an interest. The term "net" refers to the sum of the fractional interests owned by Shell subsidiaries plus the Shell share of joint ventures and associates' fractional interests. Net data below are rounded to the nearest whole number.

### Oil and gas acreage (at December 31)

Thousand acres

	2016				2015				2014			
	Developed		Undeveloped		Developed		Undeveloped		Developed		Undeveloped	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe [A]	6,556	2,197	18,216	10,241	7,152	2,194	14,623	7,732	9,603	2,693	16,161	8,563
Asia	26,003	9,199	58,463	36,298	25,581	9,181	36,658	22,995	25,724	9,252	46,487	25,155
Oceania	1,939	822	37,876	24,109	2,041 [B]	530 [B]	51,740 [C]	16,975 [C]	1,657	433	57,939 [D]	18,991 [D]
Africa	5,083	2,315	41,517	29,152	4,650	2,071	40,435	27,058	5,174	2,232	39,297	26,409
North America – USA	2,002	1,197	4,151	2,577	1,659	1,158	5,033	4,262	1,635	1,131	6,133	5,047
North America – Canada	976	670	26,149	19,402	1,227	745	32,706	25,716	1,132	748	33,094	27,223
South America	1,315	547	17,759	14,643	100	52	7,851	3,621	100	52	8,637	4,081
Total	43,874	16,947	204,131	136,422	42,410	15,931	189,046	108,359	45,025	16,541	207,748	115,469

[A] Includes Greenland.

[B] Corrected from 1,657 gross (434 net).

[C] Corrected from 70,509 gross (26,312 net).

[D] Corrected from 71,941 gross (25,992 net).

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## Number of productive wells [A] (at December 31)

	2016				2015				2014			
	Oil		Gas		Oil		Gas		Oil		Gas	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	1,215	321	1,232	403	1,272	344	1,229	392	1,256	332	1,209	333
Asia	9,261	3,141	656	263	8,271	2,853	334	190	7,529	2,643	353	198
Oceania	-	-	3,257	1,734	-	-	624	234	44	3	625	235
Africa	662	289	191	127	821 [B]	334 [B]	129	86 [C]	887	349	116	79
North America – USA	15,532	7,892	3,046	2,136	15,331	7,893	2,522	2,403	15,313	7,760	2,555	1,849
North America – Canada	283	283	941	781	286	286	1,209	1,059	325	320	1,125	878
South America	73	28	50	26	25	15	7	2	25	15	7	2
<b>Total</b>	<b>27,026</b>	<b>11,954</b>	<b>9,373</b>	<b>5,470</b>	<b>26,006</b>	<b>11,725</b>	<b>6,054</b>	<b>4,366</b>	<b>25,379</b>	<b>11,422</b>	<b>5,990</b>	<b>3,574</b>

[A] The number of productive wells with multiple completions (more than one formation producing into the same well bore) at December 31, 2016, was 1,754 gross (691 net); 2015: 1,811 gross, corrected from 1,733 gross (760 net, corrected from 727 net); 2014: 1,802 gross (762 net).

[B] Corrected from 812 gross (362 net).

[C] Corrected from 87.

## Number of net productive wells and dry holes drilled

	2016		2015		2014	
	Productive	Dry	Productive	Dry	Productive	Dry
<b>Exploratory [A]</b>						
Europe	-	-	1	2	1	2
Asia	2	4	-	11	2	10
Oceania	-	-	-	3	-	1
Africa	4	2	5	-	4	4
North America – USA	40	2	35	8	53	89
North America – Canada	-	-	73	5	39	2
South America	-	-	-	1	-	1
<b>Total</b>	<b>46</b>	<b>8</b>	<b>114</b>	<b>30</b>	<b>99</b>	<b>109 [B]</b>
<b>Development</b>						
Europe	10	1	10	-	8	1
Asia	265	-	252	2	243	9
Oceania	184	-	2	-	6	1
Africa	15	-	24 [C]	-	23	2
North America – USA	137	-	433	-	392	3
North America – Canada	50	-	20	2	22	-
South America	3	-	3	1	3	-
<b>Total</b>	<b>664</b>	<b>1</b>	<b>744</b>	<b>5</b>	<b>697</b>	<b>16</b>

[A] Productive wells are wells with proved reserves allocated. Exploratory wells in the process of drilling are excluded and presented separately below.

[B] Includes 50 net exploratory wells sold in North and South America.

[C] Corrected from 27.

## Number of wells in the process of exploratory drilling [A]

2016

	At January 1		Additions on BG acquisition		Wells in the process of drilling at January 1 and allocated proved reserves during the year		Wells in the process of drilling at January 1 and determined as dry during the year		New wells in the process of drilling at December 31		At December 31	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
	Europe	19	7	4	3	-	-	(1)	-	4	2	26
Asia	107 [B]	43	-	-	(16)	(8)	(14)	(5)	17	7	94	37
Oceania	205 [C]	68 [C]	-	-	(7)	(3)	-	-	-	-	198	65
Africa	27	16	20	12	(2)	(2)	(2)	(2)	3	3	46	27
North America – USA	218 [D]	149 [D]	-	-	(84)	(52)	(3)	(2)	47	31	178	126
North America – Canada	123 [E]	122 [E]	-	-	(54)	(54)	(67)	(66)	9	9	11	11
South America	34 [F]	22 [F]	13	4	(1)	-	-	-	5	1	51	27
<b>Total</b>	<b>733</b>	<b>427</b>	<b>37</b>	<b>19</b>	<b>(164)</b>	<b>(119)</b>	<b>(87)</b>	<b>(75)</b>	<b>85</b>	<b>53</b>	<b>604</b>	<b>305</b>

[A] Wells in the process of drilling includes exploratory wells temporarily suspended.

[B] Corrected from 106.

[C] Corrected from 463 (201 net).

[D] Corrected from 181 (129 net).

[E] Corrected from 117 (107 net).

[F] Corrected from 32 (19 net).

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[Acreage and wells continued]

## Number of wells in the process of development drilling

2016

	At January 1		At December 31	
	Gross	Net	Gross	Net
Europe	13	3	17	6
Asia	80	24	35	11
Oceania	7	3	5	1
Africa	12	5	8	3
North America – USA	37	26	14	11
North America – Canada	36	33	3	2
South America	–	–	9	2
<b>Total</b>	<b>185</b>	<b>94</b>	<b>91</b>	<b>36</b>

In addition to the present activities mentioned above, the following recovery methods are operational in the following countries: water flooding (Brazil, Brunei, Denmark, Malaysia, Nigeria, Norway, Oman, Russia, UK and USA); gas injection (Brunei, Kazakhstan, Malaysia, Nigeria and Oman); steam injection (Canada, Netherlands and Oman); and polymer flooding (Oman).



## PARENT COMPANY FINANCIAL STATEMENTS

The Parent Company Financial Statements have not been audited in accordance with the standards of the Public Company Accounting Oversight Board (United States).

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## Parent Company Financial Statements Continued

### Statement of Income

	Notes	2016	\$ million 2015
Dividend income		14,132	8,167
Interest and other income	3	612	5
Administrative expenses [A]		(488)	(113)
Interest and other expense	3	(25)	(2,029)
Income before taxation		14,231	6,030
Taxation charge	6	(26)	(1)
Income for the period		14,205	6,029

[A] Includes BG acquisition costs

### Statement of Comprehensive Income

		2016	\$ million 2015
Income for the period		14,205	6,029
Comprehensive income for the period		14,205	6,029

### Balance Sheet

	Notes	Dec 31, 2016	\$ million Dec 31, 2015
<b>Assets</b>			
Non-current assets			
Investments in subsidiaries	4	256,583	203,066
Deferred tax	6	352	438
		256,935	203,504
Current assets			
Amounts due from subsidiaries	13	4,680	19,006
Cash and cash equivalents		2	465
		4,682	19,471
Total assets		261,617	222,975
<b>Liabilities</b>			
Non-current liabilities			
Accounts payable and accrued liabilities	5	224	245
		224	245
Current liabilities			
Accounts payable and accrued liabilities	5	4,049	4,465
		4,049	4,465
Total liabilities		4,273	4,710
<b>Equity</b>			
Share capital	8	683	546
Other reserves	9	235,573	201,674
Retained earnings		21,088	16,045
Total equity		257,344	218,265
Total liabilities and equity		261,617	222,975

Signed on behalf of the Board

/s/ Simon Henry

Simon Henry  
Chief Financial Officer  
March 8, 2017

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## Statement of Changes in Equity

	Notes	Share capital	Other reserves	Retained earnings	\$ million Total equity
<b>At January 1, 2016</b>		546	201,674	16,045	218,265
Comprehensive income for the period		–	–	14,205	14,205
Dividends paid	10	–	–	(14,959)	(14,959)
Scrip dividends	10	17	(17)	5,282	5,282
Shares issued	8	120	33,930	–	34,050
Share-based compensation	9	–	(14)	515	501
<b>At December 31, 2016</b>		683	235,573	21,088	257,344
<b>At January 1, 2015</b>		540	201,745	18,703	220,988
Comprehensive income for the period		–	–	6,029	6,029
Dividends paid	10	–	–	(11,972)	(11,972)
Scrip dividends	10	7	(7)	2,602	2,602
Repurchases of shares	8	(1)	1	1	1
Share-based compensation	9	–	(65)	682	617
<b>At December 31, 2015</b>		546	201,674	16,045	218,265

## Statement of Cash Flows

	Notes	2016	\$ million 2015
Income for the period		14,205	6,029
Adjustment for:			
Dividend income		(14,132)	(8,167)
Tax		26	1
Interest and other income		(17)	(5)
Interest and other expense		25	41
Share-based compensation		21	32
Decrease in working capital		13,868	3,607
<b>Cash flow from operating activities</b>		13,996	1,538
Acquisition of BG Group plc	15	(19,036)	–
Dividends received		14,132	8,167
Interest received		17	5
Share-based compensation		130	407
<b>Cash flow from investing activities</b>		(4,757)	8,579
Cash dividends paid	10	(9,677)	(9,370)
Repurchases of shares		–	(409)
Interest and other expense paid		(25)	(41)
<b>Cash flow from financing activities</b>		(9,702)	(9,820)
(Decrease)/increase in cash and cash equivalents		(463)	297
Cash and cash equivalents at January 1		465	168
Cash and cash equivalents at December 31		2	465

## NOTES TO THE PARENT COMPANY FINANCIAL STATEMENTS

### 1 BASIS OF PREPARATION

The Financial Statements of Royal Dutch Shell plc (the Company) have been prepared in accordance with the provisions of the Companies Act 2006 (the Act) and with International Financial Reporting Standards (IFRS) as adopted by the European Union. As applied to the Company, there are no material differences from IFRS as issued by the International Accounting Standards Board (IASB); therefore, the Financial Statements have been prepared in accordance with IFRS as issued by the IASB.

As described in the accounting policies in Note 2, the Financial Statements have been prepared under the historical cost convention except for certain items measured at fair value. Those accounting policies have been applied consistently in all periods presented.

The Financial Statements were approved and authorised for issue by the Board of Directors on March 8, 2017.

The preparation of financial statements in conformity with IFRS requires the use of certain accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. Actual results may differ from those estimates.

The financial results of the Company are included in the Consolidated Financial Statements on pages 117-152. The financial results of the Company incorporate the results of the Dividend Access Trust (the Trust), the financial statements of which are presented on pages 183-186.

The Company's principal activity is being the parent company for Shell, as described in Note 1 to the Consolidated Financial Statements.

### 2 KEY ACCOUNTING POLICIES

The Company's accounting policies follow those of Shell as set out in Note 2 to the Consolidated Financial Statements. The following are Company-specific policies.

#### PRESENTATION AND FUNCTIONAL CURRENCY

The Company's presentation and functional currency is US dollars (dollars).

#### INVESTMENTS

Investments in subsidiaries are stated at cost, net of any impairment. For the purposes of determining whether impairment of investments in subsidiaries has occurred, and the extent of any impairment loss or its reversal, the key assumptions management uses in estimating risk-adjusted future cash flows for value-in-use measures include future oil and gas prices, expected production volumes and refining margins appropriate to the local circumstances and environment. These assumptions and the judgements of management that are based on them are subject to change as new information becomes available. Changes in economic conditions can also affect the rate used to discount future cash flow estimates.

The original cost of the Company's investment in Royal Dutch Petroleum Company (Royal Dutch) was based on the fair value of the shares transferred to the Company by the former shareholders of Royal Dutch in exchange for A shares in the Company during the public exchange offer in 2005. The original cost of the Company's investment in The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited (Shell Transport), was the fair value of the shares held by the former shareholders of The "Shell" Transport and Trading Company, p.l.c. transferred in consideration for the issuance of B shares as part of the Scheme of Arrangement in 2005. The Company's investments in Royal Dutch and Shell Transport now represent an investment in Shell Petroleum N.V. (Shell Petroleum); this change had no impact on the cost of investments in subsidiaries.

#### DIVIDEND INCOME

Dividends are recognised on a paid basis unless the dividend has been confirmed by a general meeting of Shell Petroleum, in which case income is recognised on the date at which receipt is deemed virtually certain.

#### SHARE-BASED COMPENSATION PLANS

The fair value of share-based compensation for equity-settled plans granted to employees of subsidiaries under the Company's plans is recognised as an investment in subsidiaries from the date of grant over the vesting period with a corresponding increase in equity. Changes in the fair value of share-based compensation for cash-settled plans relating to employees of subsidiaries are recognised as an investment in subsidiaries with a corresponding change in liabilities. In the year of vesting of a plan, the costs for the actual deliveries are charged to the relevant employing subsidiaries. This is recognised as a realisation of the investment originally booked. If the actual vesting costs are higher than the cumulatively recognised share-based compensation charge, the difference is recognised in income.

See Note 22 to the Consolidated Financial Statements for information on the Company's principal plan.

#### TAXATION

The Company is taxresident in the Netherlands. For the assessment of corporate income tax in the Netherlands, the Company and certain of its subsidiaries form a fiscal unit, in respect of which the Company recognises any current tax receivable or payable (and deferred tax asset or liability) for the fiscal unit as a whole to the extent such balances have been settled between the Company and other members of the fiscal unit at the balance sheet date.

The Company's tax charge or credit recognised in income is calculated at the statutory tax rate prevailing in the Netherlands for current tax and statutory tax rate substantively enacted in the Netherlands for deferred tax.

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## 3 INTEREST AND OTHER INCOME/EXPENSE

	2016	\$ million 2015
Interest and other income		
Interest income	17	5
Foreign exchange gains	595	—
Total	612	5
Interest and other expense		
Interest expense	(19)	(28)
Other expense	(6)	(13)
Foreign exchange losses	—	(1,988)
Total	(25)	(2,029)

## 4 INVESTMENTS IN SUBSIDIARIES

	2016	\$ million 2015
At January 1	203,066	202,791
Additions (see Note 15)	53,118	—
Share-based compensation	645	715
Recovery of vested share-based compensation	(246)	(440)
At December 31	256,583	203,066

## 5 ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	Dec 31, 2016		\$ million Dec 31, 2015	
	Current	Non-current	Current	Non-current
Amounts due to subsidiaries (see Note 13)	3,593	—	4,178	—
Accruals and other liabilities	302	224	139	245
Withholding tax payable	152	—	145	—
Unclaimed dividends	2	—	3	—
Total	4,049	224	4,465	245

Accruals and other liabilities are principally in respect of cash-settled share-based compensation.

## 6 TAXATION

Taxation charge	2016	\$ million 2015
Deferred tax		
Relating to the origination and reversal of temporary differences	24	1
Adjustments in respect of prior periods	2	—
Taxation charge	26	1

## Reconciliation of applicable tax charge at statutory tax rate to taxation charge

	2016	\$ million 2015
Income before taxation	14,231	6,030
Applicable tax charge at the statutory tax rate of 25.0% (2015: 25.0%)	3,558	1,508
Adjustments in respect of prior periods	2	—
Tax effects of:		
Income not subject to tax at statutory rates	(3,681)	(1,538)
Expenses not deductible for tax purposes	112	8
Other	35	23
Taxation charge	26	1

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## Notes to the Parent Company Financial Statements *Continued*

Taxes payable are reported within accounts payable and accrued liabilities (see Note 5).

### Deferred tax assets

	\$ million	
	2016	2015
At January 1	438	493
Recognised in income	(26)	(1)
Other movements	(60)	(54)
At December 31	352	438

Deferred tax assets are recognised principally in respect of tax losses, which are available for relief against future taxable profits for up to nine years from the year in which the losses were incurred.

### 7 FINANCIAL INSTRUMENTS

Financial assets and liabilities in the Company's Balance Sheet comprise cash and cash equivalents, amounts due from subsidiaries (see Note 13) and certain amounts reported within accounts payable and accrued liabilities (see Note 5). The fair value of financial assets and liabilities at December 31, 2016 and 2015 approximates their carrying amount.

Information on financial risk management is presented in Note 20 to the Consolidated Financial Statements. Foreign currency derivatives are used by the Company to manage foreign exchange risk, which arises when certain transactions are denominated in a currency that is not the Company's functional currency. There were no derivative financial instruments held at December 31, 2016 or 2015.

### 8 SHARE CAPITAL

#### Issued and fully paid ordinary shares of €0.07 each [A]

	Number of shares		Nominal value (\$ million)		
	A	B	A	B	Total
At January 1, 2016	3,990,921,569	2,440,410,614	340	206	546
Scrip dividends	219,253,936	–	17	–	17
Shares issued (see Note 15)	218,728,308	1,305,076,117	17	103	120
At December 31, 2016	4,428,903,813	3,745,486,731	374	309	683
At January 1, 2015	3,907,302,393	2,440,410,614	334	206	540
Scrip dividends	96,336,688	–	7	–	7
Repurchases of shares [B]	(12,717,512)	–	(1)	–	(1)
At December 31, 2015	3,990,921,569	2,440,410,614	340	206	546

[A] Share capital at December 31, 2016 and 2015 also included 50,000 issued and fully paid sterling deferred shares of £1 each.

[B] Repurchased under the Company's share buyback programme and all cancelled.

At the Company's Annual General Meeting (AGM) on May 24, 2016, the Board was authorised to allot ordinary shares in the Company, and to grant rights to subscribe for or to convert any security into ordinary shares in the Company, up to an aggregate nominal amount of €185 million (representing 2,643 million ordinary shares of €0.07 each), and to list such shares or rights on any stock exchange. This authority expires at the earlier of the close of business on August 24, 2017, and the end of the AGM to be held in 2017, unless previously renewed, revoked or varied by the Company in a general meeting.

B shares rank equally in all respects with A shares except for the dividend access mechanism described below. The Company, Shell Transport and BG can procure the termination of the dividend access mechanism at any time. Upon such termination, B shares will form one class with A shares ranking equally in all respects and A and B shares will be known as ordinary shares without further distinction.

The sterling deferred shares are redeemable only at the discretion of the Company for £1 each and carry no voting rights. There are no further rights to participate in profits or assets, including the right to receive dividends. Upon winding up or liquidation, the shares carry a right to repayment of paid-up nominal value, ranking ahead of A and B shares.

For information on the number of shares in the Company held by Shell employee share ownership trusts and trust-like entities to meet delivery commitments under employee share plans, see Note 22 to the Consolidated Financial Statements.

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## DIVIDEND ACCESS MECHANISM FOR B SHARES

### General

Dividends paid on A shares have a Dutch source for tax purposes and are subject to Dutch withholding tax.

It is the expectation and the intention, although there can be no certainty, that holders of B shares will receive dividends through the dividend access mechanism. Any dividends paid on the dividend access shares will have a UK source for UK and Dutch tax purposes. There will be no Dutch withholding tax on such dividends. Until April 6, 2016, certain holders (not including US holders) of B shares or B American Depositary Shares (ADSs) will be entitled to a UK tax credit in respect of their proportional share of such dividends. From April 6, 2016, there were changes to the UK taxation of dividends. The dividend tax credit has been abolished, and a new tax-free dividend allowance of £5,000 introduced.

### Description of dividend access mechanism

A dividend access share has been issued by Shell Transport and, with effect from the Company's acquisition on February 15, 2016 of BG Group plc (the Acquisition), now BG Group Limited, (BG), a dividend access share has been issued by BG to Computershare Trustees (Jersey) Limited as Trustee. Pursuant to a declaration of trust, the Trustee will hold any dividends paid in respect of the dividend access shares on trust for the holders of B shares and will arrange for prompt disbursement of such dividends to holders of B shares. Interest and other income earned on unclaimed dividends will be for the account of Shell Transport and BG and any dividends which are unclaimed after 12 years will revert to Shell Transport and BG (as applicable). Holders of B shares will not have any interest in either dividend access share and will not have any rights against Shell Transport and BG as issuers of the dividend access shares. The only assets held on trust for the benefit of the holders of B shares will be dividends paid to the Trustee in respect of the dividend access shares.

The declaration and payment of dividends on the dividend access shares will require board action by Shell Transport and BG (as applicable) and will be subject to any applicable limitations in law or in the Shell Transport or BG (as appropriate) articles of association in effect. In no event will the aggregate amount of the dividend paid by Shell Transport and BG under the dividend access mechanism for a particular period exceed the aggregate of the dividend announced by the Board of the Company on B shares in respect of the same period (after giving effect to currency conversions).

In particular, under their respective articles of association, Shell Transport and BG are each only able to pay a dividend on their respective dividend access shares which represents a proportional amount of the aggregate of any dividend announced by the Company on the B shares in respect of the relevant period, where such proportions are calculated by reference to, in the case of Shell Transport, the number of B shares in existence prior to completion of the Acquisition and, in the case of BG, the number of B shares issued as part of the Acquisition, in each case as against the total number of B shares in issue immediately following completion of the Acquisition.

### Operation of the dividend access mechanism

If, in connection with the announcement of a dividend by the Company on B shares, the Board of Shell Transport and/or the Board of BG elects to declare and pay a dividend on their respective dividend access shares to the Trustee, the holders of B shares will be beneficially entitled to receive their share of those dividends pursuant to the declaration of trust (and arrangements will be made to ensure that the dividend is paid in the same currency in which they would have received a dividend from the Company).

If any amount is paid by Shell Transport or BG by way of a dividend on the dividend access shares and paid by the Trustee to any holder of B shares, the dividend which the Company would otherwise pay on B shares will be reduced by an amount equal to the amount paid to such holders of B shares by the Trustee.

The Company will have a full and unconditional obligation, in the event that the Trustee does not pay an amount to holders of B shares on a cash dividend payment date (even if that amount has been paid to the Trustee), to pay immediately the dividend announced on B shares. The right of holders of B shares to receive distributions from the Trustee will be reduced by an amount equal to the amount of any payment actually made by the Company on account of any dividend on B shares.

If for any reason no dividend is paid on the dividend access shares, holders of B shares will only receive dividends from the Company directly. Any payment by the Company will be subject to Dutch withholding tax (unless an exemption is obtained under Dutch law or under the provisions of an applicable tax treaty).

The Dutch tax treatment of dividends paid under the dividend access mechanism has been confirmed by the Dutch Revenue Service in an agreement ("vaststellingsovereenkomst") with the Company and N.V. Koninklijke Nederlandsche Petroleum Maatschappij (Royal Dutch Petroleum Company) dated October 26, 2004, as supplemented and amended by an agreement between the same parties dated April 25, 2005, and a final settlement agreement in connection with the Acquisition dated November 9, 2015. The agreements state, among other things, that dividend distributions on the dividend access shares by Shell Transport and/or BG will not be subject to Dutch withholding tax provided that the dividend access mechanism is structured and operated substantially as set out above.

The Company may not extend the dividend access mechanism to any future issuances of B shares without prior consultation with the Dutch Revenue Service.

Accordingly, the Company would not expect to issue additional B shares unless confirmation from the Dutch Revenue Service was obtained or the Company were to determine that the continued operation of the dividend access mechanism was unnecessary. Any further issue of B shares is subject to advance consultation with the Dutch Revenue Service.

The dividend access mechanism may be suspended or terminated at any time by the Company's Directors or the Directors of Shell Transport or BG, for any reason and without financial recompense. This might, for instance, occur in response to changes in relevant tax legislation.

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## Notes to the Parent Company Financial Statements *Continued*

### 9 OTHER RESERVES

					\$ million
	Merger reserve	Share premium reserve	Capital redemption reserve	Share plan reserve	Total
At January 1, 2016	200,331	154	84	1,105	201,674
Scrip dividends	(17)	–	–	–	(17)
Shares issued (see Note 15)	33,930	–	–	–	33,930
Share-based compensation	–	–	–	(14)	(14)
At December 31, 2016	234,244	154	84	1,091	235,573
At January 1, 2015	200,338	154	83	1,170	201,745
Scrip dividends	(7)	–	–	–	(7)
Repurchases of shares	–	–	1	–	1
Share-based compensation	–	–	–	(65)	(65)
At December 31, 2015	200,331	154	84	1,105	201,674

The merger reserve was established as a consequence of the Company becoming the single parent company of Royal Dutch and Shell Transport and represented the difference between the cost of the investment in those companies and the nominal value of shares issued in exchange for those investments as required by the prevailing legislation at that time, section 131 of the Companies Act 1985. The increase in the merger reserve in 2016 in respect of the shares issued represents the difference between the fair value and the nominal value of the shares issued for the Acquisition.

On January 6, 2006, loan notes were converted into 4,827,974 A shares. The difference between the carrying value of the loan notes and the nominal value of the new shares issued was credited to the share premium reserve. The capital redemption reserve was established in connection with repurchases of shares of the Company. The share plan reserve is in respect of equity-settled share-based compensation plans (see Note 22 to the Consolidated Financial Statements).

### 10 DIVIDENDS

See Note 24 to the Consolidated Financial Statements.

### 11 LEGAL PROCEEDINGS AND OTHER CONTINGENCIES

See Note 26 to the Consolidated Financial Statements.

### 12 DIRECTORS AND SENIOR MANAGEMENT

See Note 28 to the Consolidated Financial Statements for the remuneration of Directors of the Company. In 2016, the Company recognised \$22 million (2015: \$25 million) in administrative expenses for the compensation of Directors and Senior Management.

### 13 RELATED PARTIES

Information about the Company's subsidiaries, and whether these are held directly or indirectly, and other related undertakings (all of which are held indirectly) at December 31, 2016, is set out in Exhibit 8.

	Amounts due from subsidiaries		Amounts due to subsidiaries (See Note 5)		\$ million
	2016	2015	2016	2015	
Shell Petroleum	4,201	19,002	409	425	
Shell Treasury Luxembourg Sarl	–	–	3,163	3,738	
Shell Treasury Centre Limited	476	–	–	–	
Other	3	4	21	15	
Total	4,680	19,006	3,593	4,178	

The amount due from Shell Petroleum, which is denominated in dollars, is repayable on demand. Interest is calculated at US LIBOR less 0.103% and interest income in 2016 was \$12 million (2015: \$5 million).

The net amount due to Shell Treasury Luxembourg Sarl at December 31, 2016, comprises an interest-bearing receivable of €1,183 million (2015: €14,278 million) and an interest-bearing payable of \$4,408 million (2015: \$19,334 million). Interest on euro balances is calculated at Euro OverNight Index Average (EONIA) less 0.1% (2015: EONIA less 0.1%) and on dollar balances at US LIBOR (2015: US LIBOR). Net interest expense on these balances in 2016 was \$19 million (2015: \$28 million).

The amount due from Shell Treasury Centre Limited comprises call deposits in euros, sterling and dollars, which has been reclassified from cash and cash equivalents to amounts due from subsidiaries during the year.



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## OTHER TRANSACTIONS AND BALANCES

The Company enters into forward and spot foreign currency contracts with Treasury companies, which are subsidiaries. There were no open foreign currency contracts at December 31, 2016 or 2015.

The Company settles general and administrative expenses of the Trust, including the auditor's remuneration.

The Company has guaranteed contractual payments totalling \$61,684 million at December 31, 2016 (2015: \$49,475 million), and related interest in respect of listed debt issued by Shell International Finance B.V.

## 14 AUDITOR'S REMUNERATION

See Note 29 to the Consolidated Financial Statements.

## 15 ACQUISITION OF BG GROUP PLC

On February 15, 2016, the Company acquired all the voting rights in BG Group plc by means of a Scheme of Arrangement under Part 26 of the Act, via the issuance of 218.7 million A shares and 1,305.1 million B shares with a fair value of \$34,050 million and cash payments of \$19,036 million in exchange for all BG Group plc shares. The fair value of the shares issued was calculated using the market price of the Company's A and B shares of 1,545.0 and 1,538.5 pence respectively on the London Stock Exchange at its opening of business on February 15, 2016. The cash payments were funded by amounts previously held on deposit with Shell Petroleum. In September 2016, the Company's shares in BG Group Limited (formerly BG Group plc) were exchanged for an increased investment in Shell Petroleum.

## INDEPENDENT AUDITOR'S REPORT TO COMPUTERSHARE TRUSTEES (JERSEY) LIMITED AS TRUSTEE OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

We have audited the non-statutory financial statements of the Royal Dutch Shell Dividend Access Trust (the Financial Statements) for the year ended December 31, 2016, which comprise the Statement of Income, the Statement of Comprehensive Income, the Balance Sheet, the Statement of Changes in Equity, the Statement of Cash Flows) and the related Notes 1 to 8. The financial reporting framework that has been applied in their preparation is International Financial Reporting Standards (IFRS) as adopted by the European Union (EU).

This report is made solely to the Trustee of the Royal Dutch Shell Dividend Access Trust (the Trust), as a body, in accordance with our engagement letter. Our audit work has been undertaken so that we might state to the Trustee those matters we are required to state to the Trustee in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Trustee as a body, for our audit work, for this report, or for the opinions we have formed.

### RESPECTIVE RESPONSIBILITIES OF TRUSTEE AND AUDITOR

The Trustee is responsible for the preparation of the Financial Statements and for being satisfied that they give a true and fair view. In preparing the Financial Statements the Trustee is required to: present fairly the financial position, financial performance and cash flows of the Trust; select suitable accounting policies in accordance with IAS 8: Accounting Policies, Changes in Accounting Estimates and Errors and then apply them consistently; present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information; make judgements that are reasonable; provide additional disclosures when compliance with the specific requirements in IFRS as adopted by the EU is insufficient to enable users to understand the impact of particular transactions, other events and conditions on the Trust's financial position and financial performance; and state whether the Financial Statements have been prepared in accordance with IFRS as adopted by the EU.

Our responsibility is to audit and express an opinion on the Financial Statements in accordance with International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

### SCOPE OF THE AUDIT OF THE FINANCIAL STATEMENTS

An audit involves obtaining evidence about the amounts and disclosures in the Financial Statements sufficient to give reasonable assurance that the Financial Statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Trust's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Trustee; and the overall presentation of the Financial Statements. In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited Financial Statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

### OPINION ON THE FINANCIAL STATEMENTS

In our opinion the Financial Statements:

- give a true and fair view of the state of the Trust's affairs as at December 31, 2016, and of its income for the year then ended; and
- have been properly prepared in accordance with IFRS as adopted by the EU.

### SEPARATE OPINION IN RELATION TO IFRS AS ISSUED BY THE INTERNATIONAL ACCOUNTING STANDARDS BOARD (IASB)

As explained in Note 2 to the Financial Statements, the Trust, in addition to complying with its legal obligation to apply IFRS as adopted by the EU, has also applied IFRS as issued by the IASB.

In our opinion the Financial Statements comply with IFRS as issued by the IASB.

/s/ Ernst & Young LLP  
London  
March 8, 2017

1. The maintenance and integrity of the Shell website are the responsibility of the Directors of Royal Dutch Shell plc; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the Financial Statements since they were initially presented on the website.
2. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The report set out above is included for the purposes of Royal Dutch Shell plc's Annual Report and Accounts for 2016 only and does not form part of Royal Dutch Shell plc's Annual Report on Form 20-F for 2016.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

### **TO COMPUTERSHARE TRUSTEES (JERSEY) LIMITED AS TRUSTEE OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST AND THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ROYAL DUTCH SHELL PLC**

We have audited the accompanying balance sheet of the Royal Dutch Shell Dividend Access Trust (the Trust) as at December 31, 2016, and the related statements of income, comprehensive income, changes in equity and cash flows for the year then ended. These financial statements are the responsibility of the Trustee of the Trust and the management of Royal Dutch Shell plc. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by Trustee and management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the Financial Statements referred to above present fairly, in all material respects, the financial position of the Trust at December 31, 2016, and the results of its operations and its cash flows for the year then ended in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards adopted by the European Union.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Trust's internal control over financial reporting as of December 31, 2016, based on criteria established in the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 8, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP  
London  
March 8, 2017

### **TO COMPUTERSHARE TRUSTEES (JERSEY) LIMITED AS TRUSTEE OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST AND THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ROYAL DUTCH SHELL PLC**

We have audited the Royal Dutch Shell Dividend Access Trust's (the Trust) internal control over financial reporting as at December 31, 2016, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). The Trustee of the Trust and the management of Royal Dutch Shell plc are responsible for maintaining effective internal control over financial reporting, and for their assessment of the effectiveness of internal control over financial reporting included in the accompanying Trustee's and Management's Report on Internal Control over Financial Reporting as set out on page 72. Our responsibility is to express an opinion on the Trust's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Trust maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the balance sheet of the Trust as of December 31, 2016, and the related statements of income, comprehensive income, changes in equity and cash flows for the year then ended, and our report dated March 8, 2017, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP  
London  
March 8, 2017

1. The maintenance and integrity of the Shell website are the responsibility of the Directors of Royal Dutch Shell plc; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the website.
2. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The reports set out above are included for the purposes of Royal Dutch Shell plc's Annual Report on Form 20-F for 2016 only and do not form part of Royal Dutch Shell plc's Annual Report and Accounts for 2016.

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## Report of Independent Registered Public Accounting Firm *Continued*

### **TO COMPUTERSHARE TRUSTEES (JERSEY) LIMITED AS TRUSTEE OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST AND THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ROYAL DUTCH SHELL PLC**

In our opinion, the accompanying Statement of Income, the Statement of Comprehensive Income, the Balance Sheet, the Statement of Changes in Equity, the Statement of Cash Flows, and the related Notes to the Royal Dutch Shell Dividend Access Trust Financial Statements present fairly, in all material respects, the financial position of the Royal Dutch Shell Dividend Access Trust (the Trust) at December 31, 2015 and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2015, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union.

These financial statements are the responsibility of the Trustee and the management of Royal Dutch Shell plc. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits on these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers CI LLP  
Jersey, Channel Islands  
March 9, 2016

Note that the report set out above is included for the purposes of Royal Dutch Shell plc's Annual Report on Form 20-F for 2016 only and does not form part of Royal Dutch Shell plc's Annual Report and Accounts for 2016.

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## ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST FINANCIAL STATEMENTS

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## Royal Dutch Shell Dividend Access Trust Financial Statements *Continued*

### Statement of Income

	2016	2015	£ million 2014
Dividend income	3,879	2,726	2,470
Income before taxation and for the period	3,879	2,726	2,470

### Statement of Comprehensive Income

	2016	2015	£ million 2014
Income for the period	3,879	2,726	2,470
Comprehensive income for the period	3,879	2,726	2,470

### Balance Sheet

	Notes	Dec 31, 2016	£ million Dec 31, 2015
<b>Assets</b>			
Current assets			
Cash and cash equivalents		2	2
Total assets		2	2
<b>Liabilities</b>			
Current liabilities			
Unclaimed dividends	4	2	2
Total liabilities		2	2
<b>Equity</b>			
Capital account	5	–	–
Revenue account		–	–
Total equity		–	–
Total liabilities and equity		2	2

Signed on behalf of Computershare Trustees (Jersey) Limited  
as Trustee of the Royal Dutch Shell Dividend Access Trust

/s/ Karen Kurys

Karen Kurys  
March 8, 2017

/s/ Martin Fish

Martin Fish

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## Statement of Changes in Equity

	Notes	Capital account	Revenue account	£ million Total equity
<b>At January 1, 2016</b>		–	–	–
Comprehensive income for the period		–	3,879	3,879
Distributions made	6	–	(3,879)	(3,879)
<b>At December 31, 2016</b>		–	–	–
<b>At January 1, 2015</b>		–	–	–
Comprehensive income for the period		–	2,726	2,726
Distributions made	6	–	(2,726)	(2,726)
<b>At December 31, 2015</b>		–	–	–
<b>At January 1, 2014</b>		–	–	–
Comprehensive income for the period		–	2,470	2,470
Distributions made	6	–	(2,470)	(2,470)
<b>At December 31, 2014</b>		–	–	–

## Statement of Cash Flows

	2016	2015	£ million 2014
Income for the period	3,879	2,726	2,470
Adjustment for:			
Dividends received	(3,879)	(2,726)	(2,470)
<b>Cash flow from operating activities</b>	–	–	–
Dividends received	3,879	2,726	2,470
<b>Cash flow from investing activities</b>	3,879	2,726	2,470
Cash distributions made	(3,879)	(2,725)	(2,470)
<b>Cash flow from financing activities</b>	(3,879)	(2,725)	(2,470)
Change in cash and cash equivalents	–	1	–
Cash and cash equivalents at January 1	2	1	1
Cash and cash equivalents at December 31	2	2	1

## NOTES TO THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST FINANCIAL STATEMENTS

### 1 THE TRUST

The Royal Dutch Shell Dividend Access Trust (the Trust) was established on May 19, 2005, by The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited (Shell Transport), and Royal Dutch Shell plc (the Company). The Trust is governed by the applicable laws of England and Wales and is resident and domiciled in Jersey. The Trust is not subject to taxation. The Trustee of the Trust is Computershare Trustees (Jersey) Limited, registration number 92182 (the Trustee), Queensway House, Hilgrove Street, St Helier, Jersey, JE1 1ES. The Trust was established as part of a dividend access mechanism.

A dividend access share has been issued by Shell Transport to the Trustee and on February 15, 2016, a dividend access share was issued by BG Group plc, now BG Group Limited, (BG) to the Trustee. Following the announcement of a dividend by the Company on the B shares, Shell Transport and BG may declare a dividend on their dividend access shares.

The primary purposes of the Trust are to receive, on behalf of the B shareholders of the Company and in accordance with their respective holdings of B shares in the Company, any amounts paid by way of dividend on the dividend access shares and to pay such amounts to the B shareholders on the same pro rata basis. The Trust is not subject to significant market risk, credit risk or liquidity risk.

The Trust shall not endure for a period in excess of 80 years from May 19, 2005, being the date on which the Trust Deed was executed.

### 2 BASIS OF PREPARATION

The Financial Statements of the Trust have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. As applied to the Trust, there are no material differences from IFRS as issued by the International Accounting Standards Board (IASB); therefore, the Financial Statements have been prepared in accordance with IFRS as issued by the IASB.

The Financial Statements have been prepared under the historical cost convention. The accounting policies described in Note 3 have been applied consistently in all periods presented.

The Financial Statements were approved and authorised for issue by the Trustee on March 8, 2017.

The financial results of the Trust are included in the Consolidated and Parent Company Financial Statements on pages 117-152 and pages 171-179 respectively.

### 3 ACCOUNTING POLICIES

The Trust's accounting policies follow those of Shell as set out in Note 2 to the Consolidated Financial Statements. The following are Trust-specific policies.

#### PRESENTATION AND FUNCTIONAL CURRENCY

The Trust's presentation and functional currency is sterling. The Trust's dividend income and dividends paid are principally in sterling.

#### DIVIDEND INCOME

Dividends on the dividend access shares are recognised on a paid basis unless the dividend has been confirmed by a general meeting of Shell Transport or BG, in which case income is recognised on the date on which receipt is deemed virtually certain.

#### DISTRIBUTIONS MADE

Amounts are recorded as distributed once a wire transfer or cheque is issued. To the extent that cheques expire or are returned unrepresented, the Trust records a liability for unclaimed dividends and a corresponding amount of cash.

### 4 UNCLAIMED DIVIDENDS

Unclaimed dividends of £1,972,676 (2015: £1,725,047) include any dividend cheque payments that have not been presented within 12 months, have expired or have been returned unrepresented.

### 5 CAPITAL ACCOUNT

The capital account is represented by the dividend access share of 25 pence settled in the Trust by Shell Transport and the dividend access share of 10 pence settled in the Trust by BG.

### 6 DISTRIBUTIONS MADE

Distributions are made to the B shareholders of the Company in accordance with the Trust Deed. See Note 24 to the Consolidated Financial Statements for information about dividends per share. Any wire transfers that are not completed are replaced by cheques.

### 7 RELATED PARTIES

The Trust received dividend income of £2,533 million (2015: £2,726 million; 2014: £2,470 million) in respect of the dividend access share from Shell Transport and £1,346 million in respect of the dividend access share from BG. The Trust made distributions of £3,879 million (2015: £2,726 million; 2014: £2,470 million) to the B shareholders of the Company.

The Company pays the general and administrative expenses of the Trust, including the auditor's remuneration.

### 8 AUDITOR'S REMUNERATION

Auditor's remuneration for 2016 audit services was £33,750 (2015: £33,750; 2014: £33,750).



# ADDITIONAL INFORMATION

## SHAREHOLDER INFORMATION

Royal Dutch Shell plc (the Company) was incorporated in England and Wales on February 5, 2002, as a private company under the Companies Act 1985, as amended. On October 27, 2004, the Company was re-registered as a public company limited by shares and changed its name from Forthdeal Limited to Royal Dutch Shell plc. The Company is registered at Companies House, Cardiff, under company number 4366849, and at the Chamber of Commerce, The Hague, under company number 34179503. The Legal Entity Identifier (LEI) issued by the London Stock Exchange is 21380068P1DRHMJ8KU70. The business address for the Directors and Senior Management is: Carel van Bylandtlaan 30, 2596 HR, The Hague, The Netherlands.

The Company is resident in the Netherlands for Dutch and UK tax purposes and its primary objective is to carry on the business of a holding company. It is not directly or indirectly owned or controlled by another corporation or by any government and does not know of any arrangements that may result in a change of control of the Company.

### NATURE OF TRADING MARKET

The Company has two classes of ordinary shares: A and B shares. The principal trading market for A shares is Euronext Amsterdam and the principal trading market for B shares is the London Stock Exchange. Ordinary shares are traded in registered form.

A and B American Depositary Shares (ADSs) are listed on the New York Stock Exchange [A]. A depositary receipt is a certificate that evidences ADSs. Depositary receipts are issued, cancelled and exchanged at the office of The Bank of New York Mellon, 101 Barclay Street, New York, NY 10286, USA, as depositary (the Depositary) under a deposit agreement between the Company, the Depositary and the holders of ADSs. Each ADS represents two €0.07 shares of Royal Dutch Shell plc deposited under the agreement. More information relating to ADSs is given on page 191.

[A] At February 10, 2017, 469,921,197 A ADSs and 275,706,542 B ADSs were outstanding, representing 21% and 15% of the respective share capital class, held by 6,019 and 902 holders of record with an address in the USA, respectively. In addition to holders of ADSs, at February 10, 2017, 49,698 A shares and 1,083,827 B shares of €0.07 each were outstanding, representing 0.001% and 0.029% of the respective share capital class, held by 330 and 3,179 holders of record registered with an address in the USA, respectively

### Listing information

	A shares	B shares
Ticker symbol London	RDSA	RDSB
Ticker symbol Amsterdam	RDSA	RDSB
Ticker symbol New York (ADS [A])	RDS.A	RDS.B
ISIN Code	GB00B03MLX29	GB00B03MM408
CUSIP	G7690A100	G7690A118
SEDOL Number London	B03MLX2	B03MM40
SEDOL Number Euronext	B09CBL4	B09CBN6
Weighting on FTSE at 31/12/16	5.43%	4.89%
Weighting on AEX at 31/12/16	15.95%	not included

[A] Each A ADS represents two A shares of €0.07 each and each B ADS represents two B shares of €0.07 each.

### SHARE CAPITAL

The issued and fully paid share capital of the Company at February 10, 2017, was as follows:

#### Share capital

	Issued and fully paid	
	Number	Nominal value
Ordinary shares of €0.07 each		
A shares	4,428,903,813	€310,023,267
B shares	3,745,486,731	€262,184,071
Sterling deferred shares of £1 each	50,000	£50,000

The Directors may only allot new ordinary shares if they have authority from shareholders to do so. The Company seeks to renew this authority annually at its Annual General Meeting (AGM). Under the resolution passed at the Company's 2016 AGM, the Directors were granted authority to allot ordinary shares up to an aggregate nominal amount equivalent to approximately one-third of the issued ordinary share capital of the Company (in line with the guidelines issued by institutional investors).

The following is a summary of the material terms of the Company's ordinary shares, including brief descriptions of the provisions contained in the Articles of Association (the Articles) and applicable laws of England and Wales in effect on the date of this document. This summary does not purport to include complete statements of these provisions:

- upon issuance, A and B shares are fully paid and free from all liens, equities, charges, encumbrances and other interest of the Company and not subject to calls of any kind;
- all A and B shares rank equally for all dividends and distributions on ordinary share capital; and
- A and B shares are admitted to the Official List of the UK Listing Authority and to trading on the market for listed securities of the London Stock Exchange. A and B shares are also admitted to trading on Euronext Amsterdam. A and B ADSs are listed on the New York Stock Exchange.

At December 31, 2016, trusts and trust-like entities holding shares for the benefit of employee share plans of Shell held (directly and indirectly) 29 million shares of the Company with an aggregate market value of \$801 million and an aggregate nominal value of €2 million.

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## Shareholder information *Continued*

### SIGNIFICANT SHAREHOLDINGS

The Company's A and B shares have identical voting rights, and accordingly the Company's major shareholders do not have different voting rights.

#### SIGNIFICANT DIRECT SHAREHOLDINGS

Direct holdings of 3% or more of A and B shares combined held by registered members representing the interests of underlying investors at December 31, 2016, are given below.

#### Direct shareholdings

	A shares		B shares		Total	
	Number	%	Number	%	Number	%
Euroclear Nederland	1,973,493,109	44.56	14,873,962	0.40	1,988,367,071	24.32
BNY (Nominees) Limited	767,914,512	17.34	534,603,272	14.27	1,302,517,784	15.93
Chase Nominees Limited	87,963,932	1.99	240,805,556	6.43	328,769,488	4.02
State Street Nominees Limited (OMO2)	117,372,417	2.65	166,027,530	4.43	283,399,947	3.47

#### SIGNIFICANT INDIRECT SHAREHOLDINGS

Interests of investors with 3% or more of A and B shares combined at December 31, 2016, are given below.

#### Indirect shareholdings

	A shares		B shares		Total	
	Number	%	Number	%	Number	%
Blackrock, Inc.	301,845,972	6.82	263,950,866	7.05	565,796,838	6.92
The Capital Group Companies, Inc.	93,692,575	2.12	352,152,243	9.40	445,844,818	5.45

#### NOTIFICATION OF MAJOR SHAREHOLDINGS

As at December 31, 2016, the Company had been notified by the following investors of their interests in the Company's shares pursuant to Disclosure Guidance and Transparency Rule 5.

#### Investor [A]

	A shares		B shares		Total	
	Number	%	Number	%	Number	%
Blackrock, Inc.	267,808,127	6.13	232,232,862	6.20	500,040,989	6.16
The Capital Group Companies, Inc.	76,174,196	1.76	328,093,875	8.76	404,268,071	5.01

[A] The percentages given are calculated at the time of the relevant notification.

The Company did not receive any further notifications pursuant to Disclosure Guidance and Transparency Rule 5 in the period from December 31, 2016, to February 10, 2017 (being a date not more than one month prior to the date of the Company's Notice of Annual General Meeting).

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## DIVIDENDS

The following tables show the dividends on each class of share and each class of ADS for the years 2012-2016.

### A and B shares

	2016	2015	2014	2013	2012
Q1	0.47	0.47	0.47	0.45	0.43
Q2	0.47	0.47	0.47	0.45	0.43
Q3	0.47	0.47	0.47	0.45	0.43
Q4	0.47	0.47	0.47	0.45	0.43
Total announced in respect of the year	1.88	1.88	1.88	1.80	1.72

### A shares

	2016	2015	2014	2013	2012
Q1	0.42	0.42	0.35	0.34	0.35
Q2	0.42	0.42	0.36	0.34	0.34
Q3	0.44	0.43	0.38	0.33	0.33
Q4	[B]	0.42	0.43	0.32	0.33
Total announced in respect of the year	[B]	1.69	1.53	1.34	1.35
Amount paid during the year	1.70	1.71	1.42	1.34	1.34

[A] Euro equivalent, rounded to the nearest euro cent.

[B] The euro equivalent announcement date is March 10, 2017, which therefore is also the date when the total announced in respect of the year can be calculated.

### B shares

	2016	2015	2014	2013	2012
Q1	32.98	30.75	28.03	28.99	27.92
Q2	35.27	30.92	29.09	28.67	27.08
Q3	37.16	31.07	30.16	27.51	26.86
Q4	[B]	32.78	31.20	26.88	28.79
Total announced in respect of the year	[B]	125.52	118.48	112.05	110.65
Amount paid during the year	138.19	123.94	114.16	113.96	108.60

[A] Sterling equivalent.

[B] The sterling equivalent announcement date is March 10, 2017, which therefore is also the date when the total announced in respect of the year can be calculated.

### A and B ADSs

	2016	2015	2014	2013	2012
Q1	0.94	0.94	0.94	0.90	0.86
Q2	0.94	0.94	0.94	0.90	0.86
Q3	0.94	0.94	0.94	0.90	0.86
Q4	0.94	0.94	0.94	0.90	0.86
Total announced in respect of the year	3.76	3.76	3.76	3.60	3.44
Amount paid during the year	3.76	3.76	3.72	3.56	3.42

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## Shareholder information *Continued*

### HIGH, LOW AND YEAR-END SHARE PRICES

The following tables show the high, low and year-end prices, taken directly from the respective securities exchange, of the Company's registered ordinary shares:

- of €0.07 nominal value on the London Stock Exchange;
- of €0.07 nominal value on Euronext Amsterdam; and
- in the form of ADSs on the New York Stock Exchange (ADSs do not have a nominal value).

### Annual share prices

	Euronext Amsterdam A shares			New York Stock Exchange A ADSs		
	High €	Low €	Year-end €	High \$	Low \$	Year-end \$
2012	29.18	24.30	25.98	74.51	60.62	68.95
2013	27.06	23.40	25.91	73.00	62.65	71.27
2014	31.13	24.30	27.66	83.42	60.84	66.95
2015	29.59	19.58	21.10	67.16	43.26	45.79
2016	26.39	16.53	25.99	56.29	35.80	54.38

	London Stock Exchange B shares			New York Stock Exchange B ADSs		
	High pence	Low pence	Year-end pence	High \$	Low \$	Year-end \$
2012	2,499	2,020	2,175	77.52	63.05	70.89
2013	2,375	2,070	2,280	75.18	65.02	75.11
2014	2,614	1,985	2,233	88.13	62.11	69.56
2015	2,315	1,423	1,543	70.15	43.51	46.04
2016	2,359	1,261	2,354	58.49	35.96	57.97

### Quarterly share prices

	Euronext Amsterdam A shares		London Stock Exchange B shares		New York Stock Exchange A ADSs		New York Stock Exchange B ADSs	
	High €	Low €	High pence	Low pence	High \$	Low \$	High \$	Low \$
2015								
Q1	29.59	25.75	2,315	2,004	67.16	56.82	70.15	59.33
Q2	29.50	25.37	2,210	1,807	64.46	56.50	65.98	56.85
Q3	27.14	20.27	1,920	1,503	59.16	45.81	59.52	45.92
Q4	25.51	19.58	1,864	1,423	56.41	43.26	57.28	43.51
2016								
Q1	22.29	16.53	1,757	1,261	50.32	35.80	50.78	35.96
Q2	24.78	20.33	2,062	1,634	55.22	46.42	56.92	47.08
Q3	25.40	20.81	2,163	1,869	56.29	46.57	57.88	49.56
Q4	26.39	22.17	2,359	2,006	54.98	48.07	58.49	50.94

### Monthly share prices

	Euronext Amsterdam A shares		London Stock Exchange B shares		New York Stock Exchange A ADSs		New York Stock Exchange B ADSs	
	High €	Low €	High pence	Low pence	High \$	Low \$	High \$	Low \$
2016								
September	22.92	20.81	2,022	1,869	51.32	46.57	54.17	49.56
October	23.66	22.17	2,252	2,010	52.42	49.34	55.93	52.15
November	24.26	22.41	2,218	2,006	52.20	48.07	55.09	50.94
December	26.39	24.11	2,359	2,127	54.98	51.44	58.49	54.77
2017								
January	26.87	25.04	2,404	2,232	56.39	53.55	59.56	56.73
February	25.86	24.21	2,298	2,149	55.22	51.54	58.30	54.73

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## **METHOD OF HOLDING SHARES OR AN INTEREST IN SHARES**

There are several ways in which Royal Dutch Shell plc registered shares or an interest in these shares can be held, including:

- directly as registered shares either in uncertificated form or in certificated form in a shareholder's own name;
- indirectly through Euroclear Nederland (in respect of which the Dutch Securities Giro Act ("Wet giraal effectenverkeer") is applicable);
- through the Royal Dutch Shell Corporate Nominee; and
- as a direct or indirect holder of either an A or a B ADS with the Depository.

## **AMERICAN DEPOSITARY SHARES**

The Depository is the registered shareholder of the shares underlying the A or B ADSs and enjoys the rights of a shareholder under the Articles. Holders of ADSs will not have shareholder rights. The rights of the holder of an A or a B ADS are specified in the respective Depository agreements with the Depository and are summarised below.

The Depository will receive all cash dividends and other cash distributions made on the deposited shares underlying the ADSs and, where possible and on a reasonable basis, will distribute such dividends and distributions to holders of ADSs. Rights to purchase additional shares will also be made available to the Depository who may make such rights available to holders of ADSs. All other distributions made on the Company's shares will be distributed by the Depository in any means that the Depository thinks is equitable and practical. The Depository may deduct its fees and expenses and the amount of any taxes owed from any payments to holders and it may sell a holder's deposited shares to pay any taxes owed. The Depository is not responsible if it decides that it is unlawful or impractical to make a distribution available to holders of ADSs.

The Depository will notify holders of ADSs of shareholders' meetings of the Company and will arrange to deliver voting materials to such holders of ADSs if requested by the Company. Upon request by a holder, the Depository will endeavour to appoint such holder as proxy in respect of such holder's deposited shares entitling such holder to attend and vote at shareholders' meetings. Holders of ADSs may also instruct the Depository to vote their deposited securities and the Depository will try, as far as practical and lawful, to vote deposited shares in accordance with such instructions. The Company cannot ensure that holders will receive voting materials or otherwise learn of an upcoming shareholders' meeting in time to ensure that holders can instruct the Depository to vote their shares.

Upon payment of appropriate fees, expenses and taxes: (i) shareholders may deposit their shares with the Depository and receive the corresponding class and amount of ADSs; and (ii) holders of ADSs may surrender their ADSs to the Depository and have the corresponding class and amount of shares credited to their account.

Further, subject to certain limitations, holders may, at any time, cancel ADSs and withdraw their underlying shares or have the corresponding class and amount of shares credited to their account. The Depository may also deliver ADSs prior to deposit of the underlying securities subject to certain conditions, including, without limitation, that such pre-released ADSs are fully collateralised and that the underlying securities are assigned to and held for the account of the Depository.

## **FEES PAID BY HOLDERS OF ADSs**

The Depository collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depository collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depository may generally refuse to provide fee-attracting services until its fees for those services are paid. (See page 192.)

## **REIMBURSEMENTS TO THE COMPANY**

The Bank of New York Mellon, as Depository, has agreed to reimburse the Company for expenses it incurs that are related maintenance expenses of the ADS programme. The Depository has agreed to reimburse the Company for its continuing annual stock exchange listing fees. The Depository has also agreed to pay certain legal expenses and the standard out-of-pocket maintenance costs for the ADSs, which consist of the expenses of postage and envelopes for mailing annual and interim financial reports, printing and distributing dividend cheques, electronic filing of US federal tax information, mailing required tax forms, stationery, postage, facsimile and telephone calls. It has also agreed to reimburse the Company annually for certain costs associated with the AGM, investor relationship programmes and special investor relations promotional activities. There are limits on the amount of expenses for which the Depository will reimburse the Company, but the amount of reimbursement available to the Company is not necessarily tied to the amount of fees the Depository collects from investors. From January 1, 2016, to February 10, 2017, the Company received \$8,017,634 from the Depository.

## **SCRIP DIVIDEND PROGRAMME**

The Company has a Scrip Dividend Programme which enables shareholders to increase their shareholding by choosing to receive new shares instead of cash dividends (if approved by the Board). Only new A shares are issued under the programme, including to shareholders who hold B shares. More information can be found at [www.shell.com/scrip](http://www.shell.com/scrip).

## Shareholder information *Continued*

Persons depositing or withdrawing shares must pay: \$5.00 or less per 100 ADSs (or portion of 100 ADSs)	For: Issuance of ADSs, including those resulting from a distribution of shares, rights or other property; Cancellation of ADSs for the purpose of their withdrawal, including if the deposit agreement terminates; and Distribution of securities to holders of deposited securities by the Depository to ADS registered holders.
Registration and transfer fees	Registration and transfer of shares on the share register to or from the name of the Depository or its agent when they deposit or withdraw shares.
Expenses of the Depository	Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement); and Converting foreign currency into dollars.
Taxes and other governmental charges the Depository or the custodian has to pay on any ADS or share underlying an ADS, for example, share transfer taxes, stamp duty or withholding taxes	As necessary.

### EXCHANGE CONTROLS AND OTHER LIMITATIONS AFFECTING SECURITY HOLDERS

Other than those individuals, entities, government bodies, corporations or agencies that are subject to European Union (EU) sanctions, for example, regarding Syria, and the general EU prohibition to transfer funds to and from North Korea, we are not aware of any other legislative or other legal provision currently in force in the UK, the Netherlands or arising under the Articles restricting remittances to non-resident holders of the Company's ordinary shares or affecting the import or export of capital for use by the Company.

### TAXATION GENERAL

The Company is incorporated in England and Wales and tax-resident in the Netherlands. As a tax resident of the Netherlands, it is generally required by Dutch law to withhold tax at a rate of 15% on dividends on its ordinary shares and ADSs, subject to the provisions of any applicable tax convention or domestic law. Based on a policy statement issued by the Ministry of Finance of the Netherlands on April 29, 2016, (which has been formalised in law), and depending on their particular circumstances, non-Dutch tax-resident holders may be entitled to a full or partial refund of Dutch withholding tax. The following sets forth the operation of other provisions on dividends on the Company's various ordinary shares and ADSs to UK and US holders, as well as certain other tax rules pertinent to holders. Holders should consult their own tax adviser if they are uncertain as to the tax treatment of any dividend.

#### DIVIDENDS PAID ON THE DIVIDEND ACCESS SHARE

There is no Dutch withholding tax on dividends on B shares or B ADSs, provided that such dividends are paid on the dividend access share pursuant to the dividend access mechanism (see "Dividend access mechanism for B shares" on pages 75-76). Dividends paid on the dividend access share are treated as UK-source for tax purposes and there is no UK withholding tax on them. Until April 5, 2016, individual shareholders resident in the UK were entitled to a UK tax credit on dividends paid on the dividend access share. The amount of the UK tax credit was 10/90ths of the cash dividend; it was not repayable when it exceeded the individual's UK tax liability. From April 6, 2016, the dividend tax credit has been abolished and a tax-free dividend allowance of £5,000 has been introduced.

In 2016, all dividends with respect to B shares and B ADSs were paid on the dividend access share pursuant to the dividend access mechanism.

#### DUTCH WITHHOLDING TAX

When Dutch withholding tax applies on dividends paid to a US holder (that is, dividends on A shares or A ADSs, or on B shares or B ADSs that are not paid on the dividend access share pursuant to the dividend access mechanism), the US holder will be subject to Dutch withholding tax at the rate of 15%. A US holder who is entitled to the benefits of the 1992 Double Taxation Convention (the

Convention) between the USA and the Netherlands as amended by the protocol signed on March 8, 2004, will be entitled to a reduction in the Dutch withholding tax, either by way of a full or a partial exemption at source or by way of a partial refund or a credit as follows:

- if the US holder is an exempt pension trust as described in article 35 of the Convention, or an exempt organisation as described in article 36 thereof, the US holder will be exempt from Dutch withholding tax; or
- if the US holder is a company that holds directly at least 10% of the voting power in the Company, the US holder will be subject to Dutch withholding tax at a rate not exceeding 5%.

In general, the entire dividend (including any amount withheld) will be dividend income to the US holder and the withholding tax will be treated as a foreign income tax that is eligible for credit against the US holder's income tax liability or a deduction subject to certain limitations. A "US holder" includes, but is not limited to, a citizen or resident of the USA, or a corporation or other entity organised under the laws of the USA or any of its political subdivisions.

When Dutch withholding tax applies on dividends paid to UK tax-resident holders (that is, dividends on A shares or A ADSs, or on B shares or B ADSs that are not paid on the dividend access share pursuant to the dividend access mechanism), the dividend will typically be subject to withholding tax at a rate of 15%. Such UK tax-resident holder may be entitled to a credit (not repayable) for withholding tax against their UK tax liability. However, certain corporate shareholders are, subject to conditions, exempt from UK tax on dividends. Withholding tax suffered cannot be offset against such exempt dividends. UK tax-resident holders should also be entitled to claim a refund of one-third of the Dutch withholding tax from the Dutch tax authorities in reliance on the tax convention between the Netherlands and the UK. Pension plans meeting certain defined criteria can, however, be entitled to claim a full refund or exemption at source of the dividend tax withheld. Also, UK tax-resident corporate shareholders holding at least a 5% shareholding and meeting other defined criteria are exempted at source from dividend tax.

For holders who are tax-resident in any other country, the availability of a whole or partial exemption or refund of Dutch withholding tax is governed by Dutch tax law and/or the tax convention, if any, between the Netherlands and the country of the holder's residence.

There may be other grounds on which holders who are tax-resident in the UK, the USA or any other country can obtain a full or partial refund of the Dutch withholding tax, depending on their particular circumstances; see Taxation: General above.

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## SCRIP DIVIDEND PROGRAMME

The Company's Scrip Dividend Programme enables shareholders to increase their shareholding by choosing to receive new shares instead of cash dividends (if approved by the Board). Only new A shares are issued under the programme, including to shareholders who hold B shares. The tax consequences of electing to receive new A shares in place of a cash dividend depend on individual circumstances. More information about the programme, including the taxation consequences, can be found at [www.shell.com/scrip](http://www.shell.com/scrip).

## DUTCH CAPITAL GAINS TAXATION

Capital gains on the sale of shares of a Dutch tax-resident company by a US holder are generally not subject to taxation by the Netherlands unless the US holder has a permanent establishment therein and the capital gain is derived from the sale of shares that are part of the business property of the permanent establishment.

## DUTCH SUCCESSION DUTY AND GIFT TAXES

Shares of a Dutch tax-resident company held by an individual who is not a resident or a deemed resident of the Netherlands will generally not be subject to succession duty in the Netherlands on the individual's death.

A gift of shares of a Dutch tax-resident company by an individual who is not a resident or a deemed resident of the Netherlands is generally not subject to Dutch gift tax.

## UK STAMP DUTY AND STAMP DUTY RESERVE TAX

Sales or transfers of the Company's ordinary shares within a clearance service (such as Euroclear Nederland) or of the Company's ADSs within the ADS depository receipts system will not give rise to a stamp duty reserve tax (SDRT) liability and should not in practice require the payment of UK stamp duty.

The transfer of the Company's ordinary shares to a clearance service (such as Euroclear Nederland) or to an issuer of depository shares (such as ADSs) will generally give rise to a UK stamp duty or SDRT liability at the rate of 1.5% of consideration given or, if none, of the value of the shares. A sale of the Company's ordinary shares that are not held within a clearance service (for example, settled through the UK's CREST system of paperless transfers) will generally be subject to UK stamp duty or SDRT at the rate of 0.5% of the amount of the consideration, normally paid by the purchaser.

## CAPITAL GAINS TAX

For the purposes of UK capital gains tax, the market values [A] of the shares of the former public parent companies of the Royal Dutch/Shell Group at the relevant dates were:

	March 31, 1982	July 20, 2005
Royal Dutch Petroleum Company (N.V. Koninklijke Nederlandsche Petroleum Maatschappij) which ceased to exist on December 21, 2005	1.1349	17.6625
The "Shell" Transport and Trading Company, p.l.c. which delisted on July 19, 2005	1.4502	Not applicable

[A] Restated where applicable to reflect all capitalisation issues since the relevant date. This includes the change in the capital structure in 2005, when Royal Dutch Shell plc became the single parent company of Royal Dutch Petroleum Company and of The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited, and one share in Royal Dutch Petroleum Company was exchanged for two Royal Dutch Shell plc A shares and one share in The "Shell" Transport and Trading Company, p.l.c. was exchanged for 0.287333066 Royal Dutch Shell plc B shares.

## SECTION 13(R) OF THE US SECURITIES EXCHANGE ACT OF 1934 DISCLOSURE

In accordance with our General Business Principles and Code of Conduct, Shell seeks to comply with all applicable international trade laws including applicable sanctions and embargoes.

The activities listed below have been conducted outside the USA by non-US Shell subsidiaries. None of the payments disclosed below were made in US dollars, nor are any of the balances disclosed below held in US dollars; however, for disclosure purposes, all have been converted into US dollars at the appropriate exchange rate. We do not believe that any of the transactions or activities listed below violated US sanctions.

As a result of the suspension of US and European Union (EU) sanctions, we are considering potential opportunities in Iran and, in September 2016, we opened an office in Iran. We have made a payment of \$101,566 through our bank account at Bank Karafarin for the rent of the office and incidental office support.

In October 2016, we signed a non-binding letter of intent with the National Iranian Petrochemical Company to cover a joint review of opportunities in the Iran petrochemicals sector. In November 2016, we signed a memorandum of understanding and confidentiality agreement with the National Iranian Oil Company (NIOC) to cover a joint review of a number of oil and gas opportunities. Also in November, we signed a confidentiality agreement with the National Iranian Gas Export Company, together with other international participants, with respect to a potential gas export opportunity. In December 2016, we entered into a technology licence agreement with Hamedan Ib Sina Petrochemical Company for a Shell ethylene process. The expected gross revenue from this agreement is \$7.6 million and the net profit is unknown at this time.

We maintain accounts with Bank Karafarin where our cash deposits (balance of \$2.8 million at December 31, 2016) generated non-taxable interest income of \$0.5 million in 2016 and we paid \$22 in bank charges in 2016.

After the suspension of US and EU sanctions, we made a series of payments in February and March 2016, totalling \$1,942 million, to settle the payable amount for oil cargoes purchased from NIOC prior to EU sanctions.

At December 31, 2016, we have a receivable of \$10.5 million outstanding with NIOC associated with our previous Upstream activities conducted prior to the EU sanctions.

On May 31, 2016, through our subsidiary Shell Eastern Trading (Pte) Ltd (SETL), we purchased a cargo of crude oil from NIOC for \$4.5 million. The cargo was sold to a Shell refinery, with a net profit of \$1.1 million resulting from this transaction. On December 22, 2016, SETL purchased another cargo of crude oil from NIOC for \$103 million, which was paid for in February 2017. The cargo is in transit, no profit has yet been recognised and the freight for the cargo is still to be paid. On December 30, 2016, SETL entered into an agreement to purchase another cargo of crude oil from NIOC. SETL took ownership of this cargo in January 2017 for which \$106 million was paid in February 2017. The cargo is in transit, no profit has yet been recognised and the freight for the cargo is still to be paid. Shell intends to continue to consider business opportunities with NIOC, including the purchase and trading of crude oil.

In 2016, we paid \$32,922 for a 2012 value-added tax claim, \$224 in stamp duties and a \$92 penalty fee related to a 2011 income tax claim to the Iranian Ministry of Finance, through our Iranian accountant Bayat Rayan. We also paid \$168 to the Consulate of Iran in the Netherlands to notarise documents, through travel visa agent CIBT Visumdienst BV. There was no gross revenue or net profit associated with these transactions.

In 2016, we paid \$12,593 to the Iranian Civil Aviation Authority for the clearance of overflight permits for Shell aircraft over Iranian airspace. There was no gross revenue or net profit associated with these transactions. On occasion, our aircraft may be routed over Iran and therefore these payments may continue in the future.

During 2016, Shell employees met with Iranian officials in Iran. In relation to these travelling Shell employees, \$11,954 was paid to Iranian authorities for visas, airport services and exit fees, \$123 was paid to Bimeh Insurance Company for travel insurance and \$592 was paid to Iranian airlines for flight tickets. There was no gross revenue or net profit associated with these transactions. We expect to continue discussions with Iranian officials and therefore similar payments may continue in the future.

In 2016, through our subsidiary Deheza S.A.I.C.F.el., we provided Downstream retail services to the Iranian Embassy in Argentina. This transaction generated gross revenue of \$296 and an estimated net profit of \$23. We have no contractual agreement with this embassy.



## NON-GAAP MEASURES RECONCILIATIONS

### EARNINGS ON A CURRENT COST OF SUPPLIES BASIS

Segment earnings are presented on a current cost of supplies basis (CCS earnings), which is the earnings measure used by the Chief Executive Officer for the purposes of making decisions about allocating resources and assessing performance. On this basis, the purchase price of volumes sold during the period is based on the current cost of supplies during the same period after making allowance for the tax effect. CCS earnings therefore exclude the effect of changes in the oil price on inventory carrying amounts. The current cost of supplies adjustment does not impact our cash flow from operating activities in the "Consolidated Statement of Cash Flows".

### Reconciliation of CCS earnings to income for the period

	\$ million		
	2016	2015	2014
Earnings on a current cost of supplies basis (CCS earnings)	3,692	4,155	19,096
Attributable to non-controlling interest	(159)	(313)	(55)
Earnings on a current cost of supplies basis attributable to Royal Dutch Shell plc shareholders	3,533	3,842	19,041
Current cost of supplies adjustment	1,085	(1,955)	(4,366)
Non-controlling interest	(43)	52	199
Income attributable to Royal Dutch Shell plc shareholders	4,575	1,939	14,874
Non-controlling interest	202	261	(144)
Income for the period	4,777	2,200	14,730

### CAPITAL INVESTMENT

Capital investment is a measure used to make decisions about allocating resources and assessing performance.

### Reconciliation of capital investment to capital expenditure

	\$ million		
	2016	2015	2014
Capital investment			
Integrated Gas	26,214	5,178	9,124
Upstream	47,507	18,349	22,169
Downstream	6,057	5,119	5,910
Corporate	99	215	136
Total	79,877	28,861	37,339
Capital investment related to the acquisition of BG Group plc	(52,904)	-	-
Investments in joint ventures and associates	(1,330)	(896)	(1,426)
Exploration expense, excluding exploration wells written off	(1,274)	(2,948)	(2,244)
Finance leases	(2,343)	(91)	(808)
Other	90	1,205	(1,185)
Capital expenditure	22,116	26,131	31,676

Organic capital investment includes capital expenditure and new finance leases of existing subsidiaries, investments in existing joint ventures and associates, and exploration expense (excluding well write-offs). Inorganic capital investment includes investments related to the acquisition of businesses, investments in new joint ventures and associates, and new acreage.

### Organic and inorganic capital investment

	\$ million		
	2016	2015	2014
Organic capital investment	26,913	28,403	34,082
Inorganic capital investment	52,964	458	3,257
Total capital investment	79,877	28,861	37,339

### DIVESTMENTS

Divestments is a measure used to monitor the progress of our divestment programme. This measure comprises proceeds from sale of property, plant and equipment and businesses, joint ventures and associates, and other Integrated Gas, Upstream and Downstream investments, adjusted onto an accruals basis, and proceeds from sale of interests in entities while retaining control (for example, proceeds from sale of interests in Shell Midstream Partners, L.P.).

### Divestments

	\$ million		
	2016	2015	2014
Proceeds from sale of property, plant and equipment and businesses [A]	2,072	4,720	9,873
Proceeds from sale of joint ventures and associates [A]	1,565	276	4,163
Other [A]	(203)	(664)	(765)
Proceeds from sale of interests in entities while retaining control [B]	1,108	595	1,012
Other [C]	167	613	736
Total	4,709	5,540	15,019
Of which			
Integrated Gas	352	269	4,819
Upstream	1,451	2,478	5,770
Downstream	2,889	2,282	4,410
Corporate	17	511	20

[A] Included within Cash flow from investing activities in the "Consolidated Statement of Cash Flows".

[B] Included within "Change in non-controlling interest" in Cash flow from financing activities in the "Consolidated Statement of Cash Flows".

[C] Mainly changes in non-current receivables included within Other (above), which are not considered to be divestments.

## Non-GAAP measures reconciliations *Continued*

### OPERATING EXPENSES

Operating expenses	\$ million		
	2016	2015	2014
Production and manufacturing expenses	28,434	28,095	30,038
Selling, distribution and administrative expenses	12,101	11,956	13,965
Research and development	1,014	1,093	1,222
Total	41,549	41,144	45,225
Of which			
Integrated Gas	6,479	4,088	4,609
Upstream	14,501	15,740	17,394
Downstream	19,681	20,816	22,701
Corporate	888	500	521

### RETURN ON AVERAGE CAPITAL EMPLOYED

Return on average capital employed (ROACE) measures the efficiency of our utilisation of the capital that we employ. In this calculation, ROACE is defined as income for the period, adjusted for after-tax interest expense, as a percentage of the average capital employed for the period. Capital employed consists of total equity, current debt and non-current debt.

### Calculation of return on average capital employed

	\$ million		
	2016	2015	2014
Income for the period	4,777	2,200	14,730
Interest expense after tax	2,730	2,030	938
Income before interest expense	7,507	4,230	15,668
Capital employed – opening	222,500	218,326	225,710
Capital employed – closing	280,988	222,500	218,326
Capital employed – average	251,744	220,413	222,018
ROACE	3.0%	1.9%	7.1%

### FREE CASH FLOW

Free cash flow is used to evaluate cash available for financing activities, including dividend payments, after investment in maintaining and growing our business. It is defined as follows.

Free cash flow	\$ million		
	2016	2015	2014
Cash flow from operating activities	20,615	29,810	45,044
Cash flow from investing activities	(30,963)	(22,407)	(19,657)
Free cash flow	(10,348)	7,403	25,387

## INDEX TO THE EXHIBITS

Exhibit No.	Description	Page
1.1	Memorandum of Association of Royal Dutch Shell plc, together with a special resolution of Royal Dutch Shell plc dated May 18, 2010, (incorporated by reference to Exhibit 4.12 to the Registration Statement on Form F-3 (No. 333-177588) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on October 28, 2011).	
1.2	Articles of Association of Royal Dutch Shell plc, together with a special resolution of Royal Dutch Shell plc dated May 18, 2010, (incorporated by reference to Exhibit 4.11 to the Registration Statement on Form F-3 (No. 333-177588) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on October 28, 2011).	
2	Amended and Restated Dividend Access Trust Deed.	
4.1	Shell Provident Fund Regulations and Trust Agreement (incorporated by reference to Exhibit 4.7 to the Post-Effective Amendment to Registration Statement on Form S-8 (No. 333-126715) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on June 18, 2007).	
4.2	Form of Director Indemnity Agreement (incorporated by reference to Exhibit 4.3 to the Annual Report for the fiscal year ended December 31, 2005, on Form 20-F (File No. 001-32575) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on March 13, 2006).	
4.3	Senior Debt Securities Indenture dated June 27, 2006, among Shell International Finance B.V., as issuer, Royal Dutch Shell plc, as guarantor, and Deutsche Bank Trust Company Americas, as trustee (incorporated by reference to Exhibit 4.3 to the Registration Statement on Form F-3 (No. 333-126726) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on July 20, 2005, amended from then to be dated as of June 27, 2006, and with the parties signatures).	
4.4	Form of contract of employment for Executive Directors (incorporated by reference to Exhibit 4.5 to the Annual Report for fiscal year ended December 31, 2013, on Form 20-F (File No. 001-32575) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on March 13, 2014).	
4.5	Form of letter of appointments for Non-executive Directors (incorporated by reference to Exhibit 4.11 to the Annual Report for fiscal year ended December 31, 2006, on Form 20-F (File No. 001-32575) of Royal Dutch Shell plc filed with the US Securities and Exchange Commission on March 13, 2007).	
7.1	Calculation of Ratio of Earnings to Fixed Charges.	E1
7.2	Calculation of Return on Average Capital Employed (ROACE) (incorporated by reference to page 196 herein).	
7.3	Calculation of gearing (incorporated by reference to page 21 and Note 15 to the Consolidated Financial Statements on page 137 herein).	
8	Significant Shell subsidiaries at December 31, 2016.	E1
12.1	Section 302 Certification of Royal Dutch Shell plc.	E20
12.2	Section 302 Certification of Royal Dutch Shell plc.	E21
13.1	Section 906 Certification of Royal Dutch Shell plc.	E22
99.1	Consent of Ernst & Young LLP, London, United Kingdom.	E23
99.2	Consent of PricewaterhouseCoopers LLP, London, United Kingdom.	E24
99.3	Consent of Ernst & Young LLP, London, United Kingdom, relating to the Royal Dutch Shell Dividend Access Trust.	E25
99.4	Consent of PricewaterhouseCoopers CI LLP, Jersey, Channel Islands, relating to the Royal Dutch Shell Dividend Access Trust.	E26

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## SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorised the undersigned to sign the Annual Report on Form 20-F on its behalf.

Royal Dutch Shell plc

/s/ Ben van Beurden

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**Ben van Beurden**  
Chief Executive Officer  
March 8, 2017

## EXHIBIT 7.1

### Calculation of ratio of earnings to fixed charges

	2016	2015	2014	2013	\$ million 2012
Pre-tax income from continuing operations before income from equity investees	2,061	(1,480)	22,198	26,317	41,564
Total fixed charges	3,508	2,495	2,113	1,710	1,712
Distributed income from equity investees	3,820	4,627	6,902	7,117	10,573
Interest capitalised	(725)	(839)	(757)	(762)	(567)
Total earnings	8,664	4,803	30,456	34,382	53,282
Interest expensed and capitalised	2,736	1,795	1,522	1,412	1,461
Interest within rental expense	772	700	591	298	251
Total fixed charges	3,508	2,495	2,113	1,710	1,712
Ratio of earnings to fixed charges	2.47	1.93	14.41	20.11	31.12

For the purposes of the table above, earnings consist of pre-tax income from continuing operations (before adjustment for non-controlling interest) plus fixed charges (excluding capitalised interest) less undistributed income of joint ventures and associates. Fixed charges consist of expensed and capitalised interest (excluding accretion expense) plus interest within rental expenses (for operating leases).

## EXHIBIT 8

### SIGNIFICANT SUBSIDIARIES AND OTHER RELATED UNDERTAKINGS (AUDITED)

Significant subsidiaries and other related undertakings at December 31, 2016, are set out below. Significant subsidiaries are shaded and each meets the threshold specified under rule 1-02(w) of Regulation S-X. Shell's percentage of share capital is shown to the nearest whole number. All subsidiaries have been included in the "Consolidated Financial Statements" on pages 117-152, and those held directly by the Company are marked with an asterisk (\*). A number of the entities listed are dormant or not yet operational. Shell-owned shares are ordinary (voting) shares unless identified with one of the following footnotes against the company name: [a] Membership interest; [b] Partnership capital; [c] Non-redeemable; [d] Ordinary, Membership interest; [e] Ordinary, Non-redeemable; [f] Ordinary, Partnership capital; [g] Ordinary, Redeemable; [h] Ordinary, Redeemable, Non-redeemable; and [i] Redeemable, Non-redeemable.

Company by country of incorporation	Address of registered office	%
<b>ARGENTINA</b>		
Deheza S.A.I.C.F. e I.	Av. Pte. Roque Sáenz Peña 788, 4th floor, Buenos Aires, 1383	100
Energina Compañía Argentina de Petróleo S.A.	Av. Pte. Roque Sáenz Peña 788, 4th floor, Buenos Aires, 1383	100
Estación Limó S.A.	Av. Pte. Roque Sáenz Peña 788, 4th floor, Buenos Aires, 1383	100
O & G Developments Ltd S.A.	Av. Pte. Roque Sáenz Peña 788, 4th floor, Buenos Aires, 1383	100
Shell Compañía Argentina de Petróleo S.A.	Av. Pte. Roque Sáenz Peña 788, 4th floor, Buenos Aires, 1383	100
Shell Gas S.A.	Av. Pte. Roque Sáenz Peña 788, 4th floor, Buenos Aires, 1383	100
<b>AUSTRALIA</b>		
A.C.N. 081 118 292 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
Arrow Energy Holdings Pty Ltd	Level 39, 111 Eagle Street, Brisbane, QLD 4000	50
Austen & Buta Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Australian Oil & Gas Corporation Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
BC 789 Holdings Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG CPS Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) 1 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) 2 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) 3 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) 4 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) 5 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) 6 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) 7 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) 8 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) 9 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG International (AUS) Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
BG Pacific Holdings Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
BNG (Sural) Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
Coims Airport Refuelling Service Pty Ltd	Level 12 MLC Centre, 19-29 Martin Place, Sydney, 2000	25
Condamine 1 Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
Condamine 2 Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
Condamine 3 Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100

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Company by country of incorporation	Address of registered office	%
Condomine 4 Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
Condomine Power Station Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
Fuelink Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Interstate Pipelines Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
Monash Energy Pty Ltd	Level 14, 390 St Kilda Road, South Melbourne, VIC, 3004	50
New South Oil Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
North West Shelf LNG Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
OME Resources Australia Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
Petroleum Exploration Australia Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
Petroleum Resources (Thailand) Pty. Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
Provident & Pensions Holdings Proprietary Limited	Shell House, 562 Wellington Street, Perth, WA 6000	100
Pure Energy Resources Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
QCING Operating Company Pty Ltd [g]	Level 30, 275 George Street, Brisbane, QLD 4000	75
QCING Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC (B7) Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC (Exploration) Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC (Infrastructure) Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Common Facilities Company Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Midstream Investments Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Midstream Land Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Midstream Limited Partnership	Level 42, Bourke Place, 600 Bourke Street, Melbourne, VIC 3000	100
QGC Midstream Services Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Northern Forestry Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Sales Qld Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Train 1 Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Train 1 Tolling Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Train 1 UJV Manager Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Train 2 Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Train 2 Tolling No.2 Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Train 2 Tolling Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Train 2 UJV Manager Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Upstream Finance Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Upstream Investments Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
QGC Upstream Limited Partnership	Level 42, Bourke Place, 600 Bourke Street, Melbourne, VIC 3000	100
Queensland Gas Company Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
Rama Petroleum Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
SASF Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
SGA (Queensland) Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
Sgai Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
Shell Australia FLNG Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Australia Lubricants Production Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Australia Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Australia Services Company Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Aviation Australia Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Custodian Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Development (PSC19) Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Development (PSC20) Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Eastern Australia Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Energy Holdings Australia Limited	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Energy Investments Australia Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Global Solutions Australia Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Shell Tankers Australia Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Starzap Pty Ltd	Level 30, 275 George Street, Brisbane, QLD 4000	100
Sunshine 685 Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
Sunshine Gas Pty Limited	Level 30, 275 George Street, Brisbane, QLD 4000	100
Trident LNG Shipping Services Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Trident Shipping Services Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
Walloons Coal Seam Gas Company Pty Limited [g]	Level 30, 275 George Street, Brisbane, QLD 4000	75
Zip Airport Services Pty Ltd	Shell House, 562 Wellington Street, Perth, WA 6000	100
<b>AUSTRIA</b>		
Salzburg Fuelling GmbH	Innsbrucker Bundesstrasse 95, Salzburg, 5020	33
Shell Austria Gesellschaft mbH	Tech Gate, Donau-City-Str. 1, Vienna, 1220	100
Shell Brazil Holding GmbH	Tech Gate, Donau-City-Str. 1, Vienna, 1220	100
Shell China Holding GmbH	Schulhof 6/1, Vienna, 1010	100
TBG Tanklager Betriebsgesellschaft m.b.H.	Rettenlackstrasse 3, Salzburg, 5020	50
Transalpine Ölleitung in Österreich GmbH	Kienburg 11, Matrei in Osttirol, 9971	19
<b>BAHAMAS</b>		
Shell E & P Ireland Offshore Inc.	P.O. Box N4805, St. Andrew's Court, Frederick Street Steps, Nassau	100
<b>BARBADOS</b>		
Shell Western Supply & Trading Ltd	Mahogany Court, Wildey Business Park, Wildey, St. Michael, BB11000	100

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Company by country of incorporation	Address of registered office	%
<b>BELGIUM</b>		
Belgian Shell S.A.	Av. Arnaud Fraiteur 15-23, Brussels, 1050	100
CRI Catalyst Company Belgium N.V.	Panierschipsstraat 331, Gent, 9000	100
Eihylen Pijpleiding Maatschappij (Belgie) N.V.	Av. Arnaud Fraiteur 15-23, Brussels, 1050	100
New Market Belgium	Av. Arnaud Fraiteur 15-23, Brussels, 1050	100
<b>BERMUDA</b>		
Egypt LNG Shipping Limited	Clarendon House, 2 Church Street, Hamilton, HM 11	25
Gas Investments & Services Company Ltd	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	85
Kuwait Shell Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Pecten Middle East Services Company Ltd	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Pecten Somalia Company Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Qatar Shell GTL Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Sakhalin Energy Investment Company Ltd	Clarendon House, 2 Church Street, Third Floor, Hamilton, HM 11	28
Shell Australia Natural Gas Shipping Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Bermuda (Overseas) Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Caribbean & Central America Ltd	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Cuiaba Holdings Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Deepwater Borneo Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell EP International Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Exploration and Production Guyana Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Gabon Holdings Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Holdings (Bermuda) Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell International Trading Middle East Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Markets (Middle East) Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Mexico Exploration and Production Investment Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Offshore Central Gabon Ltd	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Oman Trading Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Overseas Holdings (Oman) Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Petroleum (Malaysia) Ltd	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Saudi Arabia (Refining) Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell South Syria Exploration Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Trading (M.E.) Private Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Trust (Bermuda) Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Shell Trust (U.K. Property) Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Salen Insurance Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Solen Life Insurance Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
Tacoma Company Limited	3rd Floor Continental Building, 25 Church Street, Hamilton, HM 12	100
<b>BRAZIL</b>		
BG Comercio e Importacao Ltda.	Av. República do Chile 330, 23o andar, Torre 2, Centro, Rio de Janeiro, 20031-170	100
BG do Brasil Ltda.	Av. República do Chile 330, 23o andar, Torre 2, sala 2309, Centro, Rio de Janeiro, 20031-170	100
BG E&P Brasil Ltda.	Av. República do Chile 330, 25o andar, Torre 2, Centro, Rio de Janeiro, 20031-170	100
BG Petroleo & Gas Brasil Ltda	Av. República do Chile 330, 23o andar, Torre 2, sala 2309, Centro, Rio de Janeiro, 20031-170	100
Companhia de Gas de São Paulo - Comgás	Avenida Presidente Juscelino Kubitschek, 1327, 14º andar, Vila Nova Conceição, São Paulo, 04543-011	21
Fusus Comercio e Participacoes Ltda.	Calçada Das Orquideas 40, 1 E 2 Andares, Centro Comercial 1, Alphaville, Barueri - SP, 06453-017	100
Icolub - Industria de Lubrificantes S.A.	Praia Intendente Bittencourt, 2 (Porte), Ilha Do Governador, Rio de Janeiro, 21930-030	100
Pecten do Brasil Servicos de Petroleo Ltda	Av.das Americas 4200, Bloco 6, 4th Floor (parte), Barra da Tijuca, Rio de Janeiro, 22640-102	100
Raizen Combustíveis S.A.	Victor Civita, 77, Block 1, Edifício: Rio Office Park, 4 floor, Barra da Tijuca, Rio de Janeiro, 22775-044	50
Raizen Energia S.A.	Av. Juscelino Kubitschek, 1327, 5º andar, Vila Nova Conceição, São Paulo, 04543-011	50
Seapros Ltda.	Av.das Americas 4200, Bloco 6, sala 301 (parte), Barra da Tijuca, Rio de Janeiro, 22640-102	100
Shell Brasil Petroleo Ltda.	Av.das Americas 4200, Bloco 6, salas 101,201,301,401,501,601, Barra da Tijuca, Rio de Janeiro, 22640-102	100
Shell Energy Brasil Ltda.	Alameda Madeira, 162, sala 601, Centro Industrial e Empresarial Alphaville, Barueri - SP, 06453-010	100
<b>BRUNEI</b>		
Brunei LNG Sendirian Berhad	Lumut, Seria, KC2935	25
Brunei Shell Marketing Company Sendirian Berhad	Brunei Shell Petroleum Company, Sendirian Berhad, Seria, KB2933	50
Brunei Shell Petroleum Company Sendirian Berhad	Jalan Utara, Panaga, Seria, KB3534	50
Brunei Shell Tankers Sendirian Berhad	Jalan Utara, Panaga, Seria, KB3534	25
Shell Borneo Sendirian Berhad	13th Floor PGGMB Building, Jalan Kianggeh, Bandar Seri Begawan, BS 8111	100
<b>BULGARIA</b>		
Shell Bulgaria Ead	48, Sitnyakovo Blvd., Serdika Offices, 8th floor, Sofia, 1505	100
<b>CAMBODIA</b>		
Angkor Resources Co Ltd	Office No. 186 C, Street 155 Sangkat Toul Tumpoung I, Khan Chamkamorn, Phnom Penh	49
<b>CANADA</b>		
3095381 Nova Scotia Company	1959 Upper Water Street, Suite 1100, Halifax, Nova Scotia, B3J 3E5	100
6581528 Canada Ltd.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
7026609 Canada Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Alberta Products Pipe Line Ltd.	5305 McCall Way N.E., Calgary, Alberta, T2E 7N7	20
BG Canada Ltd.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
BG Energy Merchants Canada, limited	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
BlackRock Ventures Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
BR Oil Sands Corporation	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Cansolv Technologies Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100

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Company by country of incorporation	Address of registered office	%
Coral Cibola Canada Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Criterion Catalysts & Technologies Canada, Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
FP Solutions Corporation	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	33
Jackpine Mine Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
LNG Canada Development Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	50
Prince Rupert LNG Exports Limited	885 West Georgia Street, Suite 900, Vancouver, BC, V6C 3H1	100
Prince Rupert LNG Limited	885 West Georgia Street, Suite 900, Vancouver, BC, V6C 3H1	100
Sable Offshore Energy Inc.	1701 Hollis Street, Suite 1400, Halifax, Nova Scotia, B3J 3M8	33
SCL Pipeline Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
SFJ Inc.	199 Bay Street, Suite 5300, Commerce Court West, Toronto, Ontario, M5L 1B9	50
Shell Americas Funding (Canada) Limited	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Canada Energy [a]	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Canada Exploration [a]	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Canada Limited	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Canada OP Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Canada Products	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Canada Resources [a]	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Canada Services Limited	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Chemicals Canada [a]	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Energy North America (Canada) Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Global Solutions Canada Inc.	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Shell Quebec Limitée	400 boul de Maisonneuve Ouest, Montreal, Quebec, H3A 1L4	100
Shell Trading Canada [a]	400 4th Avenue S.W., Calgary, Alberta, T2P 0J4	100
Sun-Canadian Pipe Line Company Limited	830 Highway No.6 North, Flamborough, Ontario, L0R 2H0	45
Trans-Northern Pipelines Inc.	45 Vogel Road, Suite 310, Richmond Hill, Ontario, L4B 3P6	33
Westcoast Connector Gas Transmission Ltd.	4529 Melrose Street, Port Alberni, BC, V9Y 1K7	50
<b>CAYMAN ISLANDS</b>		
Beryl North Sea Limited	Caledonian Trust (Cayman), Caledonian House, 69 Dr Roy's Drive, P.O. Box 1043, George Town, KY1-1102	100
BG Egypt S.A.	5th Floor, Bermuda House, Dr Roy's Drive, George Town, Grand Cayman, KY1-1102	100
BG Exploration and Production India Limited	Floor 4, Willow House, Cricket Square, George Town, P.O. Box 268, Grand Cayman, KY1-1104	100
Gas Resources Limited	PricewaterhouseCoopers Services, Strathvale House, P.O. Box 258, Grand Cayman, KY1-1104	100
Schiehallion Oil & Gas Limited	Caledonian Trust (Cayman), Caledonian House, 69 Dr Roy's Drive, P.O. Box 1043, George Town, KY1-1102	100
Shell Bolivia Corporation	PricewaterhouseCoopers Services, Strathvale House, P.O. Box 258, Grand Cayman, KY1-1104	100
Shell North Sea Holdings Limited	Maples Corporate Services Limited, Ugland House, P.O. Box 309, Grand Cayman, KY1-1104	100
Shell Upstream Gabon Cayman Holdings No. 1	Maples Corporate Services Limited, Ugland House, P.O. Box 309, Grand Cayman, KY1-1104	100
Shell Upstream Gabon Cayman Holdings No. 2	Maples Corporate Services Limited, Ugland House, P.O. Box 309, Grand Cayman, KY1-1104	100
Shell Upstream Gabon Cayman Holdings No. 3	Maples Corporate Services Limited, Ugland House, P.O. Box 309, Grand Cayman, KY1-1104	100
<b>CHINA</b>		
Beijing Shell Petroleum Company Ltd.	Unit 1103, Level 11, Jialong Internation, No.19 Chaoyang Park Road, Chaoyang District, Beijing, 100025	49
Consalv Technologies (Beijing) Company Limited	Unit 25, Level 55/F, Tower 1, China World Trade Center, No. 1 Jian Guo Men Wai Avenue, Beijing, 100004	100
Chongqing Dayen Shell Petroleum and Chemical Co. Ltd.	No 196, Shuang Yuan Street, Beibei Zone, Chongqing, 400700	49
CNOOC and Shell Petrochemicals Company Limited	Dayawan Petrochemical Industrial Park, Huizhou, Guangdong, 516086	50
Guangdong GSZ Shell Service Stations Company Ltd.	Unit 02, 8/F, Intl. Financial Place, No. 8 Huaxia Road, Zhujiang New Town, Guangzhou, Guangdong, 510060	100
Hangzhou Natural Gas Company Limited	Meiqi Mansion, No. 30 Tianmushan Road, Xihu District, Hangzhou (Zhejiang Province)	25
Infineum (China) Co. Ltd.	No. 1 Dongxin Road, Jiangsu Yangtze River International, Chemical Industry Park, Zhangjiagang, Jiangsu	50
Shell (Beijing) Real Estate Consulting Ltd.	Unit 3, Level 33, Phase 2, No.1 Jian Guo Men Wai Avenue, China World Trade Center, Beijing, 100004	100
Shell (China) Limited	Unit 03-18, Level 32, China World Tower 2, No. 1 Jian Guo Men Wai Avenue, Beijing, 100004	100
Shell (China) Projects & Technology Limited	Unit 2, Level 33, Phase 2, No.1 Jian Guo Men Wai Avenue, China World Trade Center, Beijing, 100004	100
Shell (Shanghai) Technology Limited	Building 4, Jin Chuang Building, No. 4560, Jin Ke Road, Pilot Free Trade Zone, Shanghai	100
Shell (Tianjin) Lubricants Company Limited	Nangang Industrial Zone, Tianjin Economic Technological Development Area, Tianjin, 300280	100
Shell (Tianjin) Oil and Petrochemical Company Limited	No. 286 Nansan Road, Tianjin Harbour, Nanjiang Development Zone, Tanggu District, Tianjin, 300452	100
Shell (Zhuhai) Lubricants Company Limited	Nanjin Wan, Gaolan Dao, Zhuhai Harbour Industrial Zone, Guangdong, 519050	100
Shell Energy (China) Limited	Rm 619, 6/F, No. 26 Jia Feng Avenue, China (Shanghai) Pilot Free Trade Zone	100
Shell North China Petroleum Group Co., Ltd.	5th Floor, Administrative Commission, Building, Wuqing Development Area, No.18, Fuyuan Road, Wuqing District, Tianjin, 300203	49
Shell Road Solutions (Xi'an) Co. Ltd.	No. 3 East Section, Huanzhan Nan Road, Xinfeng Street, Lintong District, Xi'an, Shaanxi, 710608	100
Shell Road Solutions (Zhenjiang) Co. Ltd.	Dagang District, New Zone, Zhenjiang, Jiangsu, 212132	100
Shell Road Solutions Xinyue (Foshan) Co. Ltd.	Baisha, Hekou, Sanshui District, Foshan, Guangdong, 528133	60
Sinopec and Shell (Jiangsu) Petroleum Marketing Company Limited	No. 100, Xingang Dodao, Nanjing Economic and Technological Development Zone, Nanjing, Jiangsu, 210000	40
Suzhou Liyuan Retail Site Management Co., Ltd.	No. 358 Zhuhui Road, Suzhou, 215000	50
Yanchong and Shell (Guangdong) Petroleum Co., Ltd.	Unit 02, 8/F, Intl. Financial Place, No. 8 Huaxia Road, Zhujiang New Town, Guangzhou, Guangdong, 510060	49
Yanchang and Shell (Sichuan) Petroleum Company Limited	23F, Yanlord Square, Section 2, Renmin South Road, Chengdu, Sichuan, 610016	45
Yanchang and Shell Petroleum Company Limited	Room 1801 Building B, 18F City Gateway, No. 1 Jinye Road, Hi-Tech Zone, Xi'an, 710075	45
Yueyang Sinopec and Shell Coal Gasification Company Limited	Qilishan, Yueyang, Hunan, 414003	50
Zhejiang Shell Fuels Company Limited	Room 2103, North Tower, Yefeng Modern Center, No. 161, Shaoxing Road, Xiacheng District, Hangzhou City (Zhejiang Province)	100
Zhejiang Shell Oil and Petrochemical Company Limited	The Port of Zhapu, Jiaxing Municipality, Zhejiang, 314201	100
<b>COLOMBIA</b>		
C.I. Shell Comercializadora Colombia, S.A.S	Calle 100 No. 7 - 33, Piso 20, Edificio "Capital Tower", Bogotá, 452	100
Shell Colombia S.A.	Calle 100 No. 7 - 33, Piso 20, Edificio "Capital Tower", Bogotá, 452	100



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Company by country of incorporation	Address of registered office	%
Shell Exploration and Production Colombia GmbH Sucursal Colombia	Calle 100 No. 7 - 33, Pisa 20, Edificio "Capital Tower", Bogotá, 452	100
Unión Temporal Bloque Sin Off 7	Calle 100 No. 7 - 33, Pisa 20, Edificio "Capital Tower", Bogotá, 452	65
COOK ISLANDS		
Branstane (International) Limited [g]	Bermuda House, Tutakimoo Road, Raratanga	100
CYPRUS		
Rosneft-Shell Caspian Ventures Limited [e]	8 Michalaki Karaali Street, Anemomylos Office Building, 4th Floor, Office 401, Nicosia, 1095	49
CZECH REPUBLIC		
Shell Czech Republic A.S.	Antala Staska 2027/77, Praha 4, 140 00	100
DENMARK		
A/S Dansk Shell	Egeskovej 265, Fredericia, 7000	100
Shell EP Holdingselskab Danmark ApS	Midtermolen 3, 4, Copenhagen, 2100	100
Shell Olie-ag Gasudvinding Danmark Pipelines ApS	Midtermolen 3, 4, Copenhagen, 2100	100
EGYPT		
Alam El Shawish Petroleum Company	127 Abdel Aziz Fahmy St., Heliopolis, P.O. Box 5958, Cairo, 5958	20
Badr Petroleum Company	127 Abdel Aziz Fahmy St., Heliopolis, P.O. Box 5958, Cairo, 5958	50
Burullus Gas Company S.A.E. [b]	28 Road 270, Maadi, Cairo	25
El Behera Natural Gas Liquefaction Company S.A.E.	City Of Rashid, El Behera Governorate	36
IDKU Natural Gas Liquefaction Company S.A.E.	City Of Rashid, El Behera Governorate	38
Obaiyed Petroleum Company	127 Abdel Aziz Fahmy St., Heliopolis, P.O. Box 5958, Cairo, 5958	50
Rashid Petroleum Company S.A.E.	38 Street No. 270, Maadi, Cairo	40
Shell Egypt Trading	Business View Building, No.79, 90 Street ( South), Fifth Settlement- New Cairo, Cairo, 11835	100
Shell Lubricants Egypt	Business View Building, No.79, 90 Street ( South), Fifth Settlement- New Cairo, Cairo, 11835	100
Sitra Petroleum Company	127 Abdel Aziz Fahmy St., Heliopolis, P.O. Box 5958, Cairo, 5958	50
The Egyptian LNG Company S.A.E.	City Of Rashid, El Behera Governorate	36
The Egyptian Operating Company for Natural Gas Liquefaction Projects S.A.E.	City Of Rashid, El Behera Governorate	36
Tiba Petroleum Company	127 Abdel Aziz Fahmy St., Heliopolis, P.O. Box 5958, Cairo, 5958	26
West Sitra Petroleum Company	127 Abdel Aziz Fahmy St., Heliopolis, P.O. Box 5958, Cairo, 5958	50
FINLAND		
Shell Aviation Finland Oy	Ayriite 12 A, Vantaa, 01510	100
FRANCE		
Avitair SAS	Immeuble "Les portes de la Défense", 307 rue d'Estienne d'Orves, 92708 Colombes	100
Geovexin S.A.	2 rue Des Marinets, 92569 Rueil-Malmaison	20
Groupement Pétrolier Aviation (G.I.E.)	Aéroport Roissy Charles de Gaulle, Zone De Frêt 1, 3 rue des Vignes, 93290 Tremblay-en-France	20
Infineum France	Chemin départemental 54, 13130 Berre-l'Étang	50
Service Aviation Paris (G.I.E.)	Orly Sud No.144 - Bat. 438, Orly Aerogares, 94541 Orly	33
Shell Exploration and Production France SAS	Immeuble "Les portes de la Défense", 307 rue d'Estienne d'Orves, 92708 Colombes	100
Shell Retraites SAS	Immeuble "Les portes de la Défense", 307 rue d'Estienne d'Orves, 92708 Colombes	100
Société de Gestion Mobilière et Immobilière S.A.	Immeuble "Les portes de la Défense", 307 rue d'Estienne d'Orves, 92708 Colombes	100
Société des Lubrifiants de Nanterre	171 avenue Jules Quentin, Nanterre, 92000	100
Société des Pétroles Shell SAS	Immeuble "Les portes de la Défense", 307 rue d'Estienne d'Orves, 92708 Colombes	100
Société Provençale des Bitumes (S.A.S.)	Immeuble "Les portes de la Défense", 307 rue d'Estienne d'Orves, 92708 Colombes	100
Stie du Pipeline Sud Européen S.A.	7-9 rue des Frères Marane, 75738 Paris Cedex 15	21
Zeller & Cie S.A.R.L.	8 rue Ellenhard, 67000 Strasbourg	50
GABON		
Shell Gabon S.A.	Terminal Shell Gabon de Gamba, Gamba	75
Shell Upstream Gabon S.A.	Terminal Shell Gabon de Gamba, Gamba	100
GERMANY		
AGES Maut System GmbH & Co. KG	Berghausener Straße 96, Langenfeld, 40764	20
BEB Erdgas und Erdoel GmbH & Co. KG	Riethorst 12, Hannover, 30659	50
BEB Holding GmbH	Caffamacherreihe 5, Hamburg, 20355	50
Carissa Einzelhandel-Und Tankstellenservice GmbH & Co. KG	Willinghusener Weg 5 D-E, Oststeinbek, 22113	100
Carissa Verwaltungsgesellschaft mbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
CRI Catalyst Leuna GmbH	Am Haupttar, Bau 8322, Leuna, 06237	100
CRI Deutschland GmbH	Am Haupttar, Bau 8322, Leuna, 06237	100
Deutsche Shell GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Deutsche Shell Holding GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Deutsche Transalpine Oelleitung GmbH	Paul Wassermann Str. 3, Munchen, 81829	19
Erdoel-Raffinerie Deurag-Nerag GmbH	Riethorst 12, Hannover, 30659	50
Euroshell Deutschland GmbH & Co.KG	Suhrenkamp 71 - 77, Hamburg, 22335	100
Euroshell Deutschland Verwaltungsgesellschaft mbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
FBG Ferngasbeteiligungsgesellschaft mbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
H2 Mobility Deutschland GmbH and Co. KG	Linienstrasse 160, Berlin, 10115	28
HPRDS und SPNV Deutschland Oil GmbH & Co. KG	Suhrenkamp 71 - 77, Hamburg, 22335	100
HPRDS und SPNV Deutschland Verwaltungsges. mbH	Suhrenkamp 71 - 77, Hamburg, 22335	90
Mineraloelraffinerie Oberhein Verwaltungs GmbH	Dea - Scholven - Str, Karlsruhe, 76187	32
Nord-West Oelleitung GmbH	Zum Oelhafen 207, Wilhelmshaven, 26384	20
Oberrheinische Mineraloelwerke GmbH	Dea - Scholven - Str, Karlsruhe, 76187	42
PCK Raffinerie GmbH	Passower Chaussee 111, Schwedt/Oder, 16303	38
Rheinland Kraftstoff GmbH	Auf Dem Schollbruch 24-26, Gelsenkirchen, 45899	100

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Company by country of incorporation	Address of registered office	%
Rhein-Main-Rohrleitungstransportgesellschaft mbH	Godorfer Hauptstrasse 186, Koeln, 50997	63
Shell Algeria Zerafa GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Deutschland Oil GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Energy Deutschland GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Erdgas Beteiligungsgesellschaft mbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Erdoel und Erdgas Exploration GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Exploration and Development Libya GmbH I	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Exploration and Production Colombia GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Exploration and Production Libya GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Exploration et Production du Maroc GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Exploration New Ventures One GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Exploration und Produktion Deutschland GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Global Solutions Deutschland GmbH	Hahe Schaar Strasse 36, Hamburg, 21107	100
Shell Grundstücksgesellschaft Wesseling GmbH & Co. KG	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Hydrogen Deutschland GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Tunisia El Jem GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Tunisia Kairouan GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Tunisia Offshore GmbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
Shell Verwaltungsgesellschaft für Erdgasbeteiligungen mbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
SPNV Deutschland Beteiligungsges. mbH	Suhrenkamp 71 - 77, Hamburg, 22335	100
<b>GIBRALTAR</b>		
Shell LNG Gibraltar limited	57/63 Line Wall Road, P.O. Box 199, Gibraltar	51
<b>GREECE</b>		
Atiki Gas Supply Company S.A.	11 Sofakli Venizelou Ave. & Serron Str, 141 23 lykovryssi, Athens, 104 47	49
Shell & MOH Aviation Fuels A.E.	151 Kifisias Ave., Marousi, Athens, 15124	51
<b>GREENLAND</b>		
Shell Greenland A/S	Aqqusinersuaq 48A, P.O.Box 1728, Nuuk, 3900	100
<b>GUAM</b>		
Shell Guam Inc.	643 Chalan San Antonio, Suite 100, Tamuning, GU 96911	100
<b>HONG KONG</b>		
AFSC Management Limited	3 Scenic Road, Chek Lap Kok, Lantau	11
AFSC Operations Limited	3 Scenic Road, Chek Lap Kok, Lantau	11
AFSC Refuelling Limited	3 Scenic Road, Chek Lap Kok, Lantau	11
Aviation Fuel Supply Company - Partnership	3 Scenic Road, Chek Lap Kok, Lantau	11
Branstone Company Limited	35/F AIA Kowloon Tower, Landmark East, 100 How Ming Street, Kwun Tong (Kowloon)	100
Fulmart limited	35/F AIA Kowloon Tower, Landmark East, 100 How Ming Street, Kwun Tong (Kowloon)	100
Hong Kong Response limited	Essa Tsing Yi Terminal, Lot 46 Tsing Yi Road, Tsing Yi Island, New Territories	25
Ocean Century Tf limited [g]	35/F AIA Kowloon Tower, Landmark East, 100 How Ming Street, Kwun Tong (Kowloon)	100
Shell Developments (HK) limited [g]	35/F AIA Kowloon Tower, Landmark East, 100 How Ming Street, Kwun Tong (Kowloon)	100
Shell Gas (LPG) Hong Kong limited	35/F AIA Kowloon Tower, Landmark East, 100 How Ming Street, Kwun Tong (Kowloon)	100
Shell Hong Kong limited	35/F AIA Kowloon Tower, Landmark East, 100 How Ming Street, Kwun Tong (Kowloon)	100
Shell Korea limited	35/F AIA Kowloon Tower, Landmark East, 100 How Ming Street, Kwun Tong (Kowloon)	100
Shell Macau limited	35/F AIA Kowloon Tower, Landmark East, 100 How Ming Street, Kwun Tong (Kowloon)	100
<b>HUNGARY</b>		
Shell Hungary Trading close Company Limited by shares	Bocskai út 134-146., Budapest, 1113	100
<b>INDIA</b>		
Andhra LNG Private limited	Ikeva Venture and Knowledge Advisory, Services Pvt Ltd, Level 1, MB Towers, Road no 10, Banjara Hills, Hyderabad, 50 00 34	100
BG India Energy Private limited	3-C World Trade Tower, New Barakhamba Lane, New Delhi, 110001	100
BG India Energy Services Private limited	3-C World Trade Tower, New Barakhamba Lane, New Delhi, 110001	100
BG India Energy Solutions Private limited	3-C World Trade Tower, New Barakhamba Lane, New Delhi, 110001	100
BG LNG Regas India Private limited	3-C World Trade Tower, New Barakhamba Lane, New Delhi, 110001	100
Hazira LNG Private limited	101-103 Abhijeet-II, Mithakhali Circle, Ahmedabad 380 006, Gujarat, 380006	74
Hazira Port Private limited	101-103 Abhijeet-II, Mithakhali Circle, Ahmedabad 380 006, Gujarat, 380006	74
Mahanagar Gas limited	Mgl House, Block No: G-33, Opp. Icicitowers, Barndra-Kurla Complex, Bandra (East), Mumbai, 400 051	32
Pennzoil Quaker State India limited	Plat No. T-5, MIDC, Taloja Industrial Area, Tal-Panvel, Raigad District, Maharashtra (Mumbai), 410208	100
Shell India Markets Private limited	2nd floor, Campus 4A, RMZ Millenia Business Park, 143 Dr MG Road, Kandanchavady, Perungudi, Chennai, 600096	100
Shell MRPL Aviation Fuels and Services Limited	102, Prestige Sigma, Vittal Mallya Road, Bangalore, 560 001	50
<b>INDONESIA</b>		
PT. Gresik Distribution Terminal	Talavera Office Park 22-27th Floor, Jl. Letjen. TB Simatupang Kav. 22-26, Jakarta Selatan, Jakarta, 12430	100
PT. Shell Indonesia	Talavera Office Park 22-27th Floor, Jl. Letjen. TB Simatupang Kav. 22-26, Jakarta Selatan, Jakarta, 12430	100
PT. Shell Manufacturing Indonesia	Talavera Office Park 22-27th Floor, Jl. Letjen. TB Simatupang Kav. 22-26, Jakarta Selatan, Jakarta, 12430	100
PT. Shell Solar Indonesia	Talavera Office Park 22-27th Floor, Jl. Letjen. TB Simatupang Kav. 22-26, Jakarta Selatan, Jakarta, 12430	100
<b>IRAQ</b>		
Basrah Gas Company	Khor Al Zubair, Basrah	44
<b>IRELAND</b>		
Asiatic Petroleum Company (Dublin) limited	Embassy House, Herbert Park Lane, Ballsbridge, Dublin, D04 H6Y0	100
Irish Shell Trust limited Designated Activity Company	Embassy House, Herbert Park Lane, Ballsbridge, Dublin, D04 H6Y0	100
Shell and Topaz Aviation Ireland limited	Suite 7 Northwood House, Northwood Business Park, Santry, Dublin, 9	50
Shell E&P Ireland limited	Embassy House, Herbert Park Lane, Ballsbridge, Dublin, D04 H6Y0	100

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Company by country of incorporation	Address of registered office	%
<b>ISLE OF MAN</b>		
Petrolon Europe Limited	15-19 Athal Street, Douglas, IM1 1LB	100
Petrolon International Limited	15-19 Athal Street, Douglas, IM1 1LB	100
Shell Marine Personnel (I.O.M.) Limited	Euramonx House, Freeport, Bollosalla, IM9 2AP	100
Shell Ship Management Limited	Euramonx House, Freeport, Bollosalla, IM9 2AP	100
<b>ITALY</b>		
Alle S.R.L.	Via Vittor Pisani 16, Milano, 20124	100
Aquila S.p.A.	Via Vittor Pisani 16, Milano, 20124	100
BG Italia Power S.p.A.	Via Tortona 25, Milano, 20144	100
Brindisi LNG S.p.A.	Via Tortona 25, Milano, 20144	100
Infineum Italia S.R.L.	Strada di Scorrimento 2, Vado Ligure (SA), 17047	50
Shell Energy Italia S.R.L.	Via Vittor Pisani 16, Milano, 20124	100
Shell International Exploration and Development Italia S.p.A.	Piazza dell'Indipendenza 11/B, Rome, 00185	100
Shell Italia E&P S.p.A.	Piazza dell'Indipendenza 11/B, Rome, 00185	100
Shell Italia Holding S.p.A.	Via Vittor Pisani 16, Milano, 20124	100
Shell Italia Oil Products S.R.L.	Via Vittor Pisani 16, Milano, 20124	100
Societa Italiana per l'Oleodotto Transalpino S.p.A.	Via Muggio #1, San Dorligo della Valle, Trieste, 34147	19
Societa' Oleodotti Meridionali S.p.A.	Via Emilio 1, San Donato Milanese, 20097	30
<b>JAPAN</b>		
Brunei Energy Services Company Ltd.	1-1-1, Uchisaiwai-cho, Chiyoda-ku, Tokyo, 100-0011	25
Japan Chemtech Ltd.	3-2 Daibo 2-Chome, Minato-Ku, Tokyo, 135-8074	30
Sakhalin LNG Services Company Ltd.	2-3, Konda, Awaaji-cho, Chiyoda-ku, Tokyo, 101-0063	50
Shell Chemicals Japan Ltd.	3-2 Daibo 2-Chome, Minato-Ku, Tokyo, 135-8074	100
Shell Japan limited	16F Pacific Century Place, 1-1-1, Marunouchi, Chiyoda-ku, Tokyo, 100-6216	100
Shell Japan Trading Ltd.	3-2 Daibo 2-Chome, Minato-Ku, Tokyo, 135-8074	53
<b>JERSEY</b>		
Morzine Limited	Ogier House, The Esplanade, St. Helier, JE4 9WG	33
Shell Service Station Properties Limited	Queensway House, Hilgrove Street, St. Helier, JE1 1ES	100
<b>LUXEMBOURG</b>		
Shell Finance Luxembourg Sarl	7, Rue de l'Industrie, Bertrange, Luxembourg, L-8069	100
Shell Luxembourgeoise Sarl	7, Rue de l'Industrie, Bertrange, Luxembourg, L-8005	100
Shell Treasury Luxembourg Sarl	7, Rue de l'Industrie, Bertrange, Luxembourg, L-8069	100
<b>MACAU</b>		
Shell Gas (LPG) Macau Limited	876 Avenida da Amizade, Edificio Marina Gardens, Room 305, 3rd Floor	100
<b>MALAYSIA</b>		
Bonuskad Loyalty Sdn. Bhd. [g]	Level 8, Symphony House, Block D13, Pusat Dagangan Dono 1, Jalan PJU 1A/46, Petaling Jaya/Selangor Darul Ehsan, 47301	33
IOT Management Sdn. Bhd.	lot 7689 and lot 7690, Section 64, Kuching Town Land District, Jalan Pending, Kuching, Sarawak, 93450	7
Kebabangan Petroleum Operating Company Sdn. Bhd.	Suite 13.03, 13 Floor, Menara Ton & Ton, 207 Tun Razak, Kuala Lumpur/Federal Territory, 50400	30
P S Pipeline Sendirian Berhad	Level 30, Tower 1, Petronas Twin Towers, KLCC, Kuala Lumpur/Federal Territory, 50088	50
P S Terminal Sendirian Berhad	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	35
Pertini Vista Sdn. Bhd.	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	100
Provista Ventures Sdn. Bhd.	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	100
Sarawak Shell Berhad	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	100
Shell Business Service Centre Sdn. Bhd.	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	100
Shell Global Solutions (Malaysia) Sdn. Bhd.	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	100
Shell Malaysia Trading Sendirian Berhad	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	100
Shell MDS (Malaysia) Sendirian Berhad	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	72
Shell New Ventures Malaysia Sdn. Bhd. [g]	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	100
Shell People Services Asia Sdn. Bhd.	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	100
Shell Sabah Selatan Sendirian Berhad	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	100
Shell Timur Sdn. Bhd.	Lot 6.05, Level 6, KPMG Tower, 8 First Avenue Bandar Utama, Petaling Jaya/Selangor Darul Ehsan, 47800	70
Shell Treasury Malaysia (I) Limited	Kensington Gardens, No. U1317, lot 7616, Jalan Jumidar Buyang, Labuan F.T., 87000	100
Tanjung Manis Oil Terminal Management Sdn. Bhd.	lot 7689 and lot 7690, Section 64, Kuching Town Land District, Jalan Pending, Kuching, Sarawak, 93450	14
<b>MAURITIUS</b>		
BG Mauritius LNG Holdings Ltd	6th Floor, Tower A, 1 Cybercity, Ebene, 72201	100
BG Mumbai Holdings Limited	6th Floor, Tower A, 1 Cybercity, Ebene, 72201	100
Pennzoil Products International Company	Cim Corporate Services Ltd, Les Cascades Building, Edith Cavell Street, Port Louis, Mauritius	100
<b>MEXICO</b>		
BG Group Mexico Exploration, S.A. de C.V.	Paseo de las Palmas 425, Piso 3, Colonia Lomas de Chapultepec, Ciudad de México, 11000	100
BG Group Mexico Services, S.A. de C.V.	Paseo de las Palmas 425, Piso 3, Colonia Lomas de Chapultepec, Ciudad de México, 11000	100
Gas Del Litoral, S. de R.L. de C.V.	Paseo de las Palmas 425, Piso 3, Colonia Lomas de Chapultepec, Ciudad de México, 11000	75
Shell Exploración y Extracción de México, S.A. de C.V.	Paseo de las Palmas 425, Piso 3, Colonia Lomas de Chapultepec, Ciudad de México, 11000	100
Shell México Gas Natural, S. de R.L. de C.V.	Paseo de las Palmas 425, Piso 3, Colonia Lomas de Chapultepec, Ciudad de México, 11000	100
Shell México, S.A. de C.V.	Paseo de las Palmas 425, Piso 3, Colonia Lomas de Chapultepec, Ciudad de México, 11000	100
Shell Servicios México, S.A. de C.V.	Paseo de las Palmas 425, Piso 3, Colonia Lomas de Chapultepec, Ciudad de México, 11000	100
Shell Trading México, S. de R.L. de C.V.	Paseo de las Palmas 425, Piso 3, Colonia Lomas de Chapultepec, Ciudad de México, 11000	100
<b>MONGOLIA</b>		
BGMEP, LLC	Suite 403, Floor 4, New Century Plaza, Chinggis Avenue, 1st Khoroo, Sukhbaatar, Ulaanbaatar	100

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Company by country of incorporation	Address of registered office	%
NETHERLANDS		
Amsterdam Schiphol Pijpleiding Beheer B.V.	Amsterdamseweg 55, 1182 GP Amstelveen, P.O. Box 75650, Luchthaven Schiphol, 1118 ZS	40
Atiki Gas B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
B.R.E. B.V.	Lelystad, Deventer, 7425 SB	100
B.V. Dardische Petroleum Maatschappij	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
B.V. Petroleum Assurantie Maatschappij	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BG Gas Atlantic Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BG Gas Brazil E&P 12 B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BG Gas Brazil Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BG Gas Brazilian Investment B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BG Gas Global Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BG Gas International B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BG Gas International Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BG Gas Netherlands Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BG Gas Sao Paulo Investments B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
BJS Oil Operations B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	80
BJSA Exploration and Production B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Caspi Mererity Operating Company B.V.	Prins Bernhardplein 200, 1097JB Amsterdam, Amsterdam, 1077 XX	40
Chasun Shell B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Cicerone Holding B.V.	Herikerbergweg 238, Amsterdam, 1101 CM	51
ELLBA B.V.	Vandelingenweg 601, Vandelingenplaat, Rotterdam, 3196 KK	50
ELLBA C.V.	Vandelingenweg 601, Vandelingenplaat, Rotterdam, 3196 KK	50
Eurashell Cards B.V.	Weena 70, Rotterdam, 3012 CM	100
Gasterra B.V.	P.O. Box 477, Groningen, 9700 AL	25
Guara B.V.	Weena 722, Rotterdam, 3014 DA	30
Infinium Holdings B.V.	Herikerbergweg 238, Amsterdam, 1101 CM	50
Integral Investments B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Jordan Oil Shale Company B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Karachaganak Petroleum Operating B.V.	Strawinskylaan 1725, Amsterdam, 1077 XX	29
Libra Oil & Gas B.V.	Weena 762, Rotterdam, 3014 DA	20
LNG Shipping Operation Services Netherlands B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Loyalty Management Netherlands B.V.	Polaris Avenue 81, P.O. Box 2047, 2130 GE, Hoofddorp, 2132 JH	40
Maasvlakte Olie Terminal C.V. [b]	Eurapoweg 975, Maasvlakte, Rotterdam, 3199 LC	22
Muli Tank Card B.V.	Antareslaan 39, P.O. Box 3068, 2130 KB, Hoofddorp, 2132 JE	30
N.V. Rotterdam-Rijn Pijpleiding Maatschappij	Butaanweg 215, Vandelingplaat-Rotterdam, 3196 KC	56
Nederlandse Aardolie Maatschappij B.V.	Schepersmaat 2, Assen, 9405 TA	50
Netherlands Alng Holding Company B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Naardzeewind B.V.	2e Havenstraat 5b, IJmuiden, 1976 CE	50
Naardzeewind C.V. [a]	2e Havenstraat 5b, IJmuiden, 1976 CE	50
Paqell B.V.	Tjalke de Boerijitte 24, Balk, 8561 EL	50
Raffinaderij Shell Mersin N.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
RESCO B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Rub' Al-Khali Gas Development B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Solym Petroleum Development N.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	50
Shell Abu Dhabi B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Additives Holdings (I) B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Additives Holdings (II) B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell and Viva Lubricants B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	50
Shell Asset Management Company B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Bab Gas Development B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Brazil Holding B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Business Development Central Asia B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Caspian B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Caspian Pipeline Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Chemicals Europe B.V.	Weena 70, Rotterdam, 3012 CM	100
Shell Chemicals Ventures B.V. [i]	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell China B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell China Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Deepwater Tanzania B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Development Iran B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Downstream Services International B.V.	Weena 70, Rotterdam, 3012 CM	100
Shell E and P Offshore Services B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Egypt N.V. [c]	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Energy Europe B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell EP Holdings (EE&ME) B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell EP Middle East Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell EP Russia Investments (III) B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell EP Russia Investments (IV) B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell EP Samalia B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell EP Wells Equipment Services B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (78) B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100

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Shell Exploration and Production (79) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (80) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (81) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (82) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (83) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (84) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (85) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (XI) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (II) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LVII) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LIX) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LX) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXI) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXII) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXIII) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXIV) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXV) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXVI) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXVII) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXXI) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXXIV) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production (LXXX) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production Holdings B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production Investments B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production Services (RF) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production Ukraine I B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production Ukraine Investments (I) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production Ukraine Investments (II) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration and Production Ukraine Investments (IV) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration Company (RF) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration Company (West) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration Company B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Exploration Venture Services B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Finance (Netherlands) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Gas & Power Developments B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Gas (LPG) Holdings B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Gas B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Gas Iraq B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Gas Nigeria B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Gas Venezuela B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Generating (Holding) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Global Solutions (Eastern Europe) B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Global Solutions International B.V.	Kessler Park 1, Rijswijk, 2288 GS	100
Shell Global Solutions Services B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Information Technology International B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell International B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell International Exploration and Production B.V.	Carel van Bylandilaan 16, The Hague, 2596 HR	100
Shell International Finance B.V. *	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Internationale Research Maatschappij B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Internet Ventures B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Iraq B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Iraq Petroleum Development B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Iraq Services B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Kazakhstan B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Kazakhstan Development B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Korea Exploration and Production B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Kuwait Exploration and Production B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell LNG Port Spain B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Lubricants Supply Company B.V.	Weena 70, Rotterdam, 3012 CM	100
Shell Manufacturing Services B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Mozambique B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell MSPO 2 Holding B.V.	Vondelingenweg 601, Vondelingenplaat, Rotterdam, 3196 KK	100
Shell Namibia Upstream B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Nanhai B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Nederland B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Nederland Chemie B.V. [g]	Chemieweg 25, P.O. Box 6060, Moerdijk, 4780 LN	100
Shell Nederland Raffinaderij B.V.	Vondelingenweg 601, Vondelingenplaat, Rotterdam, 3196 KK	100
Shell Nederland Verkoopmaatschappij B.V.	Weena 70, Rotterdam, 3012 CM	100
Shell Nusantora Trading B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100
Shell Offshore (Personnel) Services B.V.	Carel van Bylandilaan 30, The Hague, 2596 HR	100

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Company by country of incorporation	Address of registered office	%
Shell Offshore North Gabon B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Offshore Services B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell OKLING Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Olie - OG Gasudvinding Danmark B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Olie OG Gas Holding B.V. [j]	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Overseas Investments B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Pensioenbureau Nederland B.V.	Postbus 157, The Hague, 2501 CD	100
Shell Petroleum N.V. *	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Philippines Exploration B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Project Development (VIII) B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell RDS Holding B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Sakhalin Holdings B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Sakhalin Services B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Salyng Development B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Services Oman B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Shared Services (Asia) B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell South Africa Upstream B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Technology Ventures B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Technology Ventures Fund 1 B.V.	Teleportboulevard 140, Amsterdam, 1043 EJ	52
Shell Technology Ventures Investments B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Trademark Management B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Trading Rotterdam B.V.	Weena 70, Rotterdam, 3012 CM	100
Shell Trading Russia B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Upstream Albania B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Upstream Development B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Upstream Indonesia Services B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Upstream Spain B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Upstream Turkey B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Western LNG B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Windenergy Netherlands B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Shell Windenergy NZWI B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	100
Snijders Olie B.V.	Weena 70, Rotterdam, 3012 CM	100
Syria Shell Petroleum Development B.V. [h]	Carel van Bylandtlaan 30, The Hague, 2596 HR	65
Tamba B.V.	Carel van Bylandtlaan 30, The Hague, 2596 HR	50
Tankstation Exploitatie Maatschappij Holding B.V.	Weena 70, Rotterdam, 3012 CM	100
TopUp B.V.	Hofplein 20, Rotterdam, 3032 AC	100
Tupi B.V.	Wilhelminatoren, Wilhelminaplein 14, Rotterdam, 3072	25
Vivo Energy Holding B.V.	Teleportboulevard 140, Amsterdam, 1043 EJ	20
Waalbrug Exploitatie Maatschappij B.V.	Henri Berssenbruggestraat 9, Deventer, 7425 SB	100
<b>NEW ZEALAND</b>		
Energy Finance NZ Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Energy Holdings Offshore Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Energy Infrastructure Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Energy Petroleum Holdings Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Energy Petroleum Investments Limited [g]	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Energy Petroleum Taranaki Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Maui Development Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	84
Shell (Petroleum Mining) Company Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Shell Energy Asia Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Shell Exploration NZ Ltd [g]	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Shell GSB Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Shell Investments NZ Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Shell New Zealand (2011) Limited [g]	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Shell New Zealand Pensions Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Shell Tadd Oil Services Limited	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	50
Southern Petroleum No Liability	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
Taranaki Offshore Petroleum Company of New Zealand	Level 10, ASB Tower, 2 Hunter Street, P.O. Box 1873, Wellington, 6011	100
<b>NICARAGUA</b>		
Compañía Química Nicaragüense S.A.	Hospital Militar, 1C al Norte 10, VRS Oeste Cas Bolonia, Managua	100
<b>NIGERIA</b>		
All on Partnerships for Energy Access Limited by Guarantee	44 Bourdillon Road, Ikoyi, Lagos, Nigeria	100
BG Exploration and Production Nigeria Limited	Eko Nominees Limited, 252E Muri Okunola Street, Victoria Island, Lagos	100
BG Upstream A Nigeria Limited	Eko Nominees Limited, 252E Muri Okunola Street, Victoria Island, Lagos	100
Delta Business Development Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Nigeria LNG Limited	Corporate Office, Intels Abu Road Estate, Km16 Abu Expressway, Port Harcourt, 500211	26
NLNG Ship Manning Limited	Corporate Office, Intels Abu Road Estate, Km16 Abu Expressway, Port Harcourt, 500211	20
OKLING Free Zone Enterprise	OKLING Free Zone Enterprise, Kingsway Close, Ikoyi, BP	34
Shell Exploration and Production Africa Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Closed Pension Fund Administrator Ltd	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Exploration and Production Company Ltd	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100

# Preliminary Public Copy

Company by country of incorporation	Address of registered office	%
Shell Nigeria Exploration and Production Delta Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Exploration and Production Echo Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Exploration Properties Alpha Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Exploration Properties Beta Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Exploration Properties Charlie Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Gas Ltd (SNG)	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Infrastructure Development Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Offshore Prospecting Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Oil Products Limited (SNOPL)	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Ultra Deep Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Nigeria Upstream Ventures Limited	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	100
Shell Thrift & Loan Fund Trustees Nig Ltd	Freeman House, 21/22 Marina, P.M.B. 2418, Lagos	99
The Shell Petroleum Development Company of Nigeria Limited	Shell Industrial Area, Port Harcourt, Rivers State, P.O.Box 263, Port Harcourt	100
<b>NORWAY</b>		
A/S Norske Shell	Tankvegen 1, Tananger, 4056	100
Aviation Fuelling Services Norway AS	Karenslyst Allé 2, Oslo, 0278	50
BG Norge AS	Tankvegen 1, Tananger, 4056	100
CO <sub>2</sub> Technology Centre Mongstad DA	Mongstad 71, Mongstad, 5094	2
Energiparken Eiendom AS	Tankvegen 1, Tananger, 4056	100
Gasnor AS	5537 Rong	100
Ormen Lange Eiendom DA	Nyhamna, Aukra, 6480	17
Shell Marine Products AS	Karenslyst Allé 2, Oslo, 0278	100
Vestprosess DA	Forusbeen 50, Sløvanger, 4035	8
<b>OMAN</b>		
Oman LNG LLC	P.O.Box 560, Mina Al Fahal, Muscat, 116	30
Petroleum Development Oman LLC	P.O.Box 81, Mina Al Fahal, Muscat, 113	34
Shell Development Oman LLC	P.O.Box 74, Mina Al Fahal, Muscat, 116	100
Shell Oman Marketing Company SAOG	P.O.Box 38, Mina Al Fahal, Muscat, 116	49
<b>PAKISTAN</b>		
Pak Arab Pipeline Company Limited	House No. 2-B, Nazimuddin Road, F-8/1, Islamabad, 75400	20
Pakistan Refinery Limited	Karang Creek Road, P.O.Box 4612, Karachi, 74000	32
Shell Pakistan Limited	Shell House, 6 Ch. Khaliqzaman Road, P.O.Box 3901, Karachi, 75530	76
<b>PERU</b>		
Shell GNL Peru S.A.C.	Calle Dean Valdivia 111, Oficina 802, San Isidro, Lima, IIMA 27	100
Shell Operaciones Peru S.A.C.	Calle Dean Valdivia 111, Oficina 802, San Isidro, Lima, IIMA 27	100
<b>PHILIPPINES</b>		
Bonifacio Gas Corporation	2nd Floor, Bonifacio Tech. Center, 31st Street cor. 2nd Avenue, Crescent Park West, Bonifacio Global City, Taguig, Metro Manila	24
First Philippine Industrial Corporation	6F, Rockwell Business Center Tower, Ortigas Avenue, Pasig City, 1605	40
Kamayon Realty Corporation	NDC Bldg., 116 Tordesillas St., Salcedo Village, Makati City, Metro Manila, 1227	22
Pilipinas Shell Petroleum Corporation	Shellhouse, 156 Valero Street, Salcedo Village, Brgy. BelAir, Makati City, Metro Manila, 1227	55
SCCP Land, Inc.	Shellhouse, 156 Valero Street, Salcedo Village, Brgy. BelAir, Makati City, Metro Manila, 1227	40
Shell Chemicals Philippines, Inc.	Shellhouse, 156 Valero Street, Salcedo Village, Brgy. BelAir, Makati City, Metro Manila, 1227	100
Shell Gas and Energy Philippines Corporation	Shellhouse, 156 Valero Street, Salcedo Village, Brgy. BelAir, Makati City, Metro Manila, 1227	100
Tabongao Realty, Inc.	Shellhouse, 156 Valero Street, Salcedo Village, Brgy. BelAir, Makati City, Metro Manila, 1227	40
<b>POLAND</b>		
Shell Polska Sp. z o.o.	ul. Bitwy Warszawskiej 1920 r. nr 7A, Warsaw, 02-366	100
<b>PORTUGAL</b>		
Shell Madeira Praia Formosa	Av. dos Combatentes do Grande Guerra n° 17, Freguesia de S. Juliao, Setúbal, 2900-329	100
<b>PUERTO RICO</b>		
BG Puerto Rico, Corp.	403 Munoz Rivera Avenue, (Hato Rey), San Juan, 00918-3345	100
Station Managers of Puerto Rico, Inc.	P.O. Box 186, Yobucoa, PR 00767-0186	100
<b>QATAR</b>		
Qatar Liquefied Gas Company Limited (4)	Qatar Liquefied Gas Company Limited (4), P.O.Box 3212, Doha	30
Qatar Shell Research & Technology Centre QSTP-LLC	Qatar Science & Technology Park Tech1, Office 101, P.O.Box 3747, Doha	100
Qatar Shell Service Company W.L.L.	Al Mirqab Tower, West Bay, P.O.Box 3747, Doha	100
<b>RUSSIA</b>		
Khanty-Mansiysk Petroleum Alliance Closed Joint Stock Company	24 A Yakubovicha ul., Saint Petersburg, 190000	50
Limited Liability Company "Shell Neftegaz Development (IV)"	Novinsky blvd, 31, Moscow, 123242	100
Limited Liability Company "Shell Neftegaz Development (V)"	Novinsky blvd, 31, Moscow, 123242	100
Limited Liability Company "Shell Neft"	24 Bld D Smolnaya street, Moscow, 125445	100
Syrioga Neftegaz Development	Novinsky blvd, 31, Moscow, 123242	100
<b>SAINT KITTS AND NEVIS</b>		
Shell Oil & Gas (Malaysia) LLC	Morning Star Holdings Limited, Main Street, Suite 556, Charlestown, Nevis, West Indies	90
<b>SAINT LUCIA</b>		
BG Atlantic I Holdings Limited	Mercury Court, Choc Estate, Castries	100

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Company by country of incorporation	Address of registered office	%
BG Atlantic 2/3 Holdings Limited	Mercury Court, Choc Estate, Castries	100
BG Atlantic 4 Holdings Limited	Mercury Court, Choc Estate, Castries	100
BG Central Holdings Limited	Mercury Court, Choc Estate, Castries	100
BG West Indies No. 2 Limited	Mercury Court, Choc Estate, Castries	100
<b>SAUDI ARABIA</b>		
AlJomaih and Shell Lubricating Oil Co.Ltd.	P.O. Box 41467, Riyadh, 11521	50
Peninsular Aviation Services Company Limited	P.O. Box 6369, Jeddah, 21442	25
Saudi Aramco Shell Refinery Company	P.O. Box 10088, Madinat AlJubail Al-Sinaiyah, Al Jubail, 31961	50
Saudi Petrochemical Company	P.O. Box 10025, Madinat AlJubail Al-Sinaiyah, Al Jubail, 31961	50
Shell Global Solutions Saudi Arabia LLC	P.O. Box 16996, Riyadh, 11474	100
<b>SINGAPORE</b>		
BG Asia Pacific Holdings Pte. Limited	8 Marina View #11-03, Asia Square Tower I, Singapore, 018960	100
BG Asia Pacific Services Pte. Ltd.	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
BG Exploration & Production Myanmar Pte Ltd	8 Marina View #11-03, Asia Square Tower I, Singapore, 018960	100
BG Insurance Company (Singapore) Pte Ltd	10 Collyer Quay, #10-01 Ocean Financial Centre, Singapore, 049315	100
BG Myanmar Pte Ltd	8 Marina View #11-03, Asia Square Tower I, Singapore, 018960	100
BG Oil Marketing Pte Ltd	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
CRJ/Criterion Marketing Asia Pacific Pte Ltd	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Dawei LNG Terminal Holding Pte. Ltd	24 Raffles Place, #10-05 Clifford Centre, Singapore, 048621	30
Ellba Eastern (Pte) Ltd	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Fueling Pte. Ltd	50 Gul Road, Singapore, 629351	50
Infineum Singapore Pte Ltd	31 International Business Park, #04-08, Creative Resource, Singapore, 609921	50
QPI and Shell Petrochemicals (Singapore) Pte Ltd	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	51
Shell Chemicals Seraya Pte. Ltd.	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Eastern Petroleum (Pte) Ltd [g]	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Eastern Trading (Pte) Ltd [g]	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Gas Marketing Pte. Ltd.	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell India Ventures Pte. Ltd.	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Integrated Gas Thailand Pte.Limited	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell International Shipping Services (Pte) Ltd	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Myanmar Energy Pte. Ltd.	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Myanmar Petroleum Pte. Ltd.	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Pulau Maa Pte Ltd	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Seraya Pioneer (Pte) Ltd	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Singapore Trustees (Pte) Ltd	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Tankers (Singapore) Private Limited	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Shell Treasury Centre East (Pte) Ltd	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	100
Singapore Lube Park Pte. Ltd.	The Metropolis Tower 1, 9 North Buona Vista Drive, #0701, Singapore, 138588	45
Sirius Well Manufacturing Services Pte. Ltd.	83 Clemenceau Avenue #04-00, Singapore, 239920	50
The Polyolefin Company (Singapore) Pte. Limited	One Marina Boulevard, #28-00, Singapore, 018989	15
<b>SLOVAKIA</b>		
SHELL Slovakia s.r.o.	Einsteinova 23, Bratislava, 851 01	100
<b>SLOVENIA</b>		
Shell Adria d.o.o.	Bravnicarjeva ulica 13, ljubljana, 1000	100
<b>SOUTH AFRICA</b>		
Bituguard Southern Africa (Pty) Ltd	Twickenham, The Campus, 57 Sloan Street, Epsom Downs, Bryanston, 2021	36
Blendcor (Pty) Ltd.	Honshu Road, Durban, 4001	36
Sekelo Oil Trading (Pty) Limited	Suite OE/1, The Nautica, The Waterclub, Beach Road, Granger Bay, Cape Town, 8001	43
Shell & BP South African Petroleum Refineries (Pty) Limited	Reunion, Durban, 4001	36
Shell Downstream South Africa (Pty) Ltd	Twickenham, The Campus, 57 Sloan Street, Epsom Downs, Bryanston, 2021	72
Shell Global Customer Services Centre CA	Media City, 10 Rua Vasco Da Gama, Cape Town, 8001	100
Shell South Africa Energy (Pty) Ltd	Twickenham, The Campus, 57 Sloan Street, Epsom Downs, Bryanston, 2021	100
Shell South Africa Exploration (Pty) Limited	Twickenham, The Campus, 57 Sloan Street, Epsom Downs, Bryanston, 2021	100
Shell South Africa Holdings (Pty) Ltd	Twickenham, The Campus, 57 Sloan Street, Epsom Downs, Bryanston, 2021	100
STISA (Pty) Limited	Suite OE/2, The Nautica, The Waterclub, Beach Road, Granger Bay, Cape Town, 8001	72
<b>SOUTH KOREA</b>		
Hankook Shell Oil Company	No. 206-39, Yongdang-Dong, Nam-Ku, Pusan, 608829	54
Hyundai and Shell Base Oil Co., Ltd	640-6, Daejukri, Daesan-eup, Seosan-shi, Chungchongnam-do, 356-713	40
<b>SPAIN</b>		
BG Energy Iberian Holdings, S.L.	Paseo de la Castellana, 257-6º, Madrid, 28046	100
Shell & Disa Aviation Española, S.L.	Ria Bullaque, 2, Madrid, 28034	50
Shell España, S.A.	Paseo de la Castellana, 257-6º, Madrid, 28046	100
Shell Spain LNG, S.A.U.	Paseo de la Castellana, 257-6º, Madrid, 28046	100
<b>SUDAN</b>		
Shell (Sudan) Petroleum Development Company Limited	Shell House, P.O.Box 320, Khartoum	100
<b>SWEDEN</b>		
A Flygbranslehantering Aktiebolag	P.O.Box 135, StockholmArlanda, 190 46	25
BG International Services AB	Deloitte, P.O. Box 450, Ostersund, 831 26	100
Gothenburgh Fuelling Company AB	P.O.Box 2154, Gothenburg, 438 14	33
Malmoe Fuelling Services AB	Sturup Flygplats, P.O.Box 22, Malm, 230 32	33
Shell Aviation Sweden AB	Gustavslundsv 22, Bromma, 16751	100



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Company by country of incorporation	Address of registered office	%
Stockholm Fuelling Services AB	P.O.Box 85, Stockholm-Arlanda, 190 45	25
<b>SWITZERLAND</b>		
Aree di Servizio Autostradali Bellinzona SA	Marché Bellinzona Nord, Autostrada A2 (direzione Chiasso), Bellinzona, 6503	50
Bully 1 (Switzerland) GmbH	Dorfstrasse 19a, Baar, 6340	50
Bully 2 (Switzerland) GmbH	Dorfstrasse 19a, Baar, 6340	50
Saraco SA	Route de Pré-Bois 17, Cointrin, 1216	20
Shell (Switzerland) AG	Baarermatte, Baar, 6340	100
Shell Brands International AG	Baarermatte, Baar, 6340	100
Shell Finance Switzerland AG	Baarermatte, Baar, 6340	100
Shell lubricants Switzerland AG	Steigerhubelstrasse 8, Bern, 3008	100
Shell Trading Switzerland AG	Baarermatte, Baar, 6340	100
SOGEP Société Genevoise des Pétroles SA	Route de Vernier 132, Vernier, 1214	34
Solen Versicherungen AG	Baarermatte, Baar, 6340	100
Stazioni Autostradali Bellinzona SA	Marché Bellinzona Nord, Autostrada A2 (direzione Chiasso), Bellinzona, 6503	50
UBAG - Unterflurbetankungsanlage Flughafen Zürich AG	Zwüscheleich, Rimplong, 8153	20
<b>SYRIA</b>		
Al Badiah Petroleum Company	Damascus New Sham Western Dummar, Island No 1 - Property 2299, P.O.Box 7660, Damascus	22
Al Furat Petroleum Company	Damascus New Sham Western Dummar, Island No 1 - Property 2299, P.O.Box 7660, Damascus	20
<b>TAIWAN</b>		
CPC Shell lubricants Co. Ltd	No 2, Tso-Nan Road, Nan-Tze District, P.O. Box 25-30, Kaohsiung, 811	51
Shell Taiwan Limited	International Trade Building, Room 2001, 20th Floor, 333, Keelung Road Section 1, Taipei, 110	100
<b>TANZANIA</b>		
Fahari Gas Marketing Company Limited	1st Floor Kilwa House, Plot 369, Toure Drive, Oyster Bay, P.O.Box 105833, Dar es Salaam	53
Mzolendo Gos Processing Company Limited	1st Floor Kilwa House, Plot 369, Toure Drive, Oyster Bay, P.O.Box 105833, Dar es Salaam	53
Ruvuma Pipeline Company Limited	1st Floor Kilwa House, Plot 369, Toure Drive, Oyster Bay, P.O.Box 105833, Dar es Salaam	53
Shell Tanzania Limited	De Ocean Plaza, 3rd Floor, Plot 400, Toure Drive, Masaki, P.O.Box 9404, Dar es Salaam	100
Tanzania LNG Limited	1st Floor Kilwa House, Plot 369, Toure Drive, Oyster Bay, P.O.Box 105833, Dar es Salaam	100
<b>THAILAND</b>		
Pattanadhorn Company Limited	10 Soonthornkosa Road, Klongloey, Bangkok, 10110	42
Pattanakij Chemical Company limited	10 Soonthornkosa Road, Klongloey, Bangkok, 10110	71
Sahapanichkijphun Company Limited	10 Soonthornkosa Road, Klongloey, Bangkok, 10110	42
Shell Global Solutions (Thailand) Limited	10 Soonthornkosa Road, Klongloey, Bangkok, 10110	48
Shell Global Solutions Holdings (Thailand) Limited	10 Soonthornkosa Road, Klongloey, Bangkok, 10110	49
Thai Energy Company Limited	10 Soonthornkosa Road, Klongloey, Bangkok, 10110	100
Unitas Company Limited	10 Soonthornkosa Road, Klongloey, Bangkok, 10110	42
<b>TOGO</b>		
Complexe Pétrolier de Lomé S.A.	Route d'Aného, Zone Industrielle, Lomé, BP797	60
Société Togolaise de Stockage de Lomé S.A.	Route d'Aného, Zone Industrielle, Lomé, BP3283	64
Togo et Shell S.A.	Route d'Aného, Zone Industrielle, Lomé, BP797	80
<b>TRINIDAD AND TOBAGO</b>		
BG 2/3 Investments Limited	5 Saint Clair Avenue, Saint Clair, Port of Spain	100
Shell Gas Supply Trinidad Limited	5 Saint Clair Avenue, Saint Clair, Port of Spain	100
Point Fortin LNG Exports Limited	5 Saint Clair Avenue, Saint Clair, Port of Spain	46
Shell LNG T&T Ltd	The New India Assurance Building, 6A, Victoria Avenue, Port of Spain	100
Shell lubricants Caribbean Limited	Atlantic Avenue, Point Lisas Industrial Estate, Point Lisas, Couva	100
Shell Manatee Limited	5 Saint Clair Avenue, Saint Clair, Port of Spain	100
Shell Trinidad Central Block Limited	5 Saint Clair Avenue, Saint Clair, Port of Spain	100
Shell Trinidad Ltd	Atlantic Avenue, Point Lisas Industrial Estate, Point Lisas, Couva	100
The International School of Port of Spain limited	1 International Drive, Westmoorings	25
TRINLING Limited	5 Saint Clair Avenue, Saint Clair, Port of Spain	50
<b>TUNISIA</b>		
Amilcor Petroleum Operations S.A.	Immeuble Mezghenni, Rue Windermere BP36, Les Berges du Lac, Tunis, 1053	50
Shell Tunisia LPG S.A.	Impasse Du Lac De Constance, Les Berges du Lac, Tunis, 1053	100
Tunisian Processing S.A.	Impasse Du Lac De Constance, Les Berges du Lac, Tunis, 1053	100
<b>TURKEY</b>		
Ambarli Depolama Hizmetleri Ltd Sti.	Yakuplu Mah. Gencosman Cad. No:7, Beylikduzu, Istanbul, 34524	35
Atlas Anadolu Tasfiyehanesi A.S.	Degirmen Yolu Cad. No:28 K:3 Asia Ofispark, Icerenkoy, Atosehir, Istanbul, 34752	27
Cekisan Depolama Hizmetleri Ltd. Sti.	Yakuplu Mah. Gencosman Cad. No:3, Beylikduzu, Istanbul, 34524	35
Marmara Depoculuk Hizmetleri A.S.	Eski Buyukdere Cad. No: 33 Maslak, Sariyer, Istanbul, 34398	32
Samsun Akaryokit Depolama A.S.	Inkilap Mah., Untel Sok. Onur Ofis Park Is Merkezi No:10 B1 Blok, Umraniye, Istanbul, 34768	35
Shell & Turcos Petrol A.S.	Gulbahar Mah.Salih Tozan Sok., Karamancilar Is Merkezi B Blok No:18, Esentepe, Sisli, Istanbul, 34394	70
Shell Enerji A.S.	Gulbahar Mah.Salih Tozan Sok., Karamancilar Is Merkezi B Blok No:18, Esentepe, Sisli, Istanbul, 34394	100
Shell Petrol A.S.	Gulbahar Mah.Salih Tozan Sok., Karamancilar Is Merkezi B Blok No:18, Esentepe, Sisli, Istanbul, 34394	70
<b>UKRAINE</b>		
Shell Ukraine Exploration and Production I LLC	4 Mykoly Grinchenko street, Kiev, 03038	100
<b>UNITED ARAB EMIRATES</b>		
Abu Dhabi Gas Industries Limited (GASCO)	P.O. Box 665, Abu Dhabi	15
Emdad Aviation Fuel Storage FZCO	Emdad Aviation Fuel Storage FZCO, P.O.Box 261781, Jebel Ali, Dubai	32
Sharjah Fuelling Services Company Ltd.	P.O.Box 4225, Sharjah, 4225	49

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Company by country of incorporation	Address of registered office	%
UK		
Abu Dhabi Petroleum Company Limited	Salisbury House - 3rd Floor, London Wall, London, EC2M 5QQ	24
Alie Investments Limited	Shell Centre, London, SE1 7NA	100
Angkor Shell Limited	Shell Centre, London, SE1 7NA	100
Aviogas Limited	Athena House, Athena Drive, Tachbrook Park, Warwick, CV34 6RL	50
BG 123 Limited	Shell Centre, London, SE1 7NA	100
BG 456 Limited [g]	Shell Centre, London, SE1 7NA	100
BG 789 Limited [g]	Shell Centre, London, SE1 7NA	100
BG ABC Limited	Shell Centre, London, SE1 7NA	100
BG Aruba Limited	Shell Centre, London, SE1 7NA	100
BG Atlantic Finance Limited	Shell Centre, London, SE1 7NA	100
BG Central Holdings Limited	Shell Centre, London, SE1 7NA	100
BG Central Investments Limited	Shell Centre, London, SE1 7NA	100
BG CSB2 Limited	Shell Centre, London, SE1 7NA	100
BG Cyprus Limited	Shell Centre, London, SE1 7NA	100
BG Delta Limited	Shell Centre, London, SE1 7NA	100
BG Employee Shares Trustees Limited	Shell Centre, London, SE1 7NA	100
BG Energy Capital Plc	Shell Centre, London, SE1 7NA	100
BG Energy Holdings Limited	Shell Centre, London, SE1 7NA	100
BG Energy Marketing Limited	Shell Centre, London, SE1 7NA	100
BG Energy Trading Limited	Shell Centre, London, SE1 7NA	100
BG Equatorial Guinea Limited	Shell Centre, London, SE1 7NA	100
BG EVS1 Limited	Shell Centre, London, SE1 7NA	100
BG Exploration and Production Limited	Shell Centre, London, SE1 7NA	100
BG Finance Investments Limited	Shell Centre, London, SE1 7NA	100
BG Gas Marketing Limited	Shell Centre, London, SE1 7NA	100
BG Gas Services Limited	Shell Centre, London, SE1 7NA	100
BG Gas Supply (UK) Limited	Shell Centre, London, SE1 7NA	100
BG General Holdings Limited	Shell Centre, London, SE1 7NA	100
BG General Investments	Shell Centre, London, SE1 7NA	100
BG General Partner Limited	50 Lothian Road, Festival Square, Edinburgh, EH3 9WJ	100
BG Global Employee Resources Limited	Shell Centre, London, SE1 7NA	100
BG Global Energy Limited	Shell Centre, London, SE1 7NA	100
BG Great Britain Limited	Shell Centre, London, SE1 7NA	100
BG Group Company Secretaries Limited	Shell Centre, London, SE1 7NA	100
BG Group Employee Benefit Trust Limited	Shell Centre, London, SE1 7NA	100
BG Group Employee Shares Trustees Limited	Shell Centre, London, SE1 7NA	100
BG Group Healthcare Trustee Limited	Shell Centre, London, SE1 7NA	100
BG Group Limited	Shell Centre, London, SE1 7NA	100
BG Group Pension Trustees Limited	Shell Centre, London, SE1 7NA	100
BG Group Trustees Limited	Shell Centre, London, SE1 7NA	100
BG Intellectual Property Limited	Shell Centre, London, SE1 7NA	100
BG International (CNS) Limited	Shell Centre, London, SE1 7NA	100
BG International Limited	Shell Centre, London, SE1 7NA	100
BG Iran Limited	Shell Centre, London, SE1 7NA	100
BG Karachaganak Limited	Shell Centre, London, SE1 7NA	100
BG Karachaganak Trading Limited	Shell Centre, London, SE1 7NA	100
BG Kenya L10A Limited	Shell Centre, London, SE1 7NA	100
BG Kenya L10B Limited	Shell Centre, London, SE1 7NA	100
BG LNG Investments Limited	Shell Centre, London, SE1 7NA	100
BG LNG Transport No.5 Limited	Shell Centre, London, SE1 7NA	100
BG Mongolia Holdings Limited	Shell Centre, London, SE1 7NA	100
BG Netherlands	Shell Centre, London, SE1 7NA	100
BG Netherlands Financing Unlimited	Shell Centre, London, SE1 7NA	100
BG Norge Exploration Limited	Shell Centre, London, SE1 7NA	100
BG Norge Limited	Shell Centre, London, SE1 7NA	100
BG North Investments Limited	Shell Centre, London, SE1 7NA	100
BG North Sea Holdings Limited	Shell Centre, London, SE1 7NA	100
BG OKLNG Limited	Shell Centre, London, SE1 7NA	100
BG Omikron Limited	Shell Centre, London, SE1 7NA	100
BG Overseas Holdings Limited	Shell Centre, London, SE1 7NA	100
BG Overseas Investments Limited	Shell Centre, London, SE1 7NA	100
BG Overseas Limited	Shell Centre, London, SE1 7NA	100
BG Pension Funding Scottish Limited Partnership [i]	50 Lothian Road, Festival Square, Edinburgh, EH3 9WJ	100
BG Rosetta Limited	Shell Centre, London, SE1 7NA	100
BG Singapore Limited	Shell Centre, London, SE1 7NA	100
BG South Asia LNG Limited	Shell Centre, London, SE1 7NA	100
BG South East Asia Limited	Shell Centre, London, SE1 7NA	100
BG Subsea Well Project Limited	Shell Centre, London, SE1 7NA	100

[i] Established by BG Group plc and the BG Trustee in 2013 as part of funding agreements associated with the BG pension scheme. Under the exemption conferred by Regulation 7 of the Partnerships (Accounts) Regulations 2008, the accounts of this partnership have not been appended to Shell's Consolidated Financial Statements and have not been filed at Companies House.

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Company by country of incorporation	Address of registered office	%
BG Tanzania Holdings Limited	Shell Centre, London, SE1 7NA	100
BG Tanzania Limited	Shell Centre, London, SE1 7NA	100
BG Thailand Limited	Shell Centre, London, SE1 7NA	100
BG Trinidad LNG limited	Shell Centre, London, SE1 7NA	100
BG UK Capital II Limited	Shell Centre, London, SE1 7NA	100
BG UK Capital Limited	Shell Centre, London, SE1 7NA	100
BG UK Holdings Limited	Shell Centre, London, SE1 7NA	100
BG XYZ Limited	Shell Centre, London, SE1 7NA	100
Brazil Shipping I Limited	Shell Centre, London, SE1 7NA	100
Brazil Shipping II Limited	Shell Centre, London, SE1 7NA	100
British Pipeline Agency Limited	5-7 Alexandro Road, Hemel Hempstead, Herts, HP2 58S	50
CRI Catalyst Company Europe Limited	Shell Centre, York Road, London, SE1 7NA	100
CRI/Criterion Catalyst Company Limited	Shell Centre, York Road, London, SE1 7NA	100
Dragon LNG Group limited	Main Road, Waterston, Milford Haven, Pembrokeshire, SA73 1DR	50
Eastham Refinery Limited	8 York Road, London, SE1 7NA	50
Enterprise Oil Limited	8 York Road, London, SE1 7NA	100
Enterprise Oil Middle East Limited	8 York Road, London, SE1 7NA	100
Enterprise Oil Norge Limited	8 York Road, London, SE1 7NA	100
Enterprise Oil Operations Limited	8 York Road, London, SE1 7NA	100
Enterprise Oil U.K. Limited	8 York Road, London, SE1 7NA	100
Forepilot Limited	7 Stratford Place (room 502) Marylebone, London, WVIC 1AY	100
Fromcroft Limited	Shell Centre, London, SE1 7NA	100
Gainroce Limited	8 York Road, London, SE1 7NA	100
Gatwick Airport Storage and Hydrant Company Limited	8 York Road, London, SE1 7NA	14
Glossop Limited	8 York Road, London, SE1 7NA	100
GOGB Limited	8 York Road, London, SE1 7NA	100
Heathrow Airport Fuel Company Limited	Building 1204, Sandringham Road, Heathrow Airport, Hounslow, Middlesex, TW6 3SH	14
Heathrow Hydrant Operating Company Limited	Building 1204, Sandringham Road, Heathrow Airport, Hounslow, Middlesex, TW6 3SH	10
Holow (619) Limited	Shell Centre, London, SE1 7NA	100
International Inland Waterways, Limited	8 York Road, London, SE1 7NA	100
Korochaganok Project Development Limited	Shell Centre, London, SE1 7NA	38
Khmer Shell Limited	Shell Centre, London, SE1 7NA	100
Lensbury Limited	Broom Road, Teddington, Middlesex, TW11 9NU	100
Manchester Airport Storage and Hydrant Company Limited	50 Broadway, London, SW1H 0BL	25
Meteor Lead Limited	15 Canada Square, London, E14 5GL	100
Methane Services Limited	Shell Centre, London, SE1 7NA	100
Murphy Schiehallion Limited	Shell Centre, London, SE1 7NA	100
Octane Holdings Limited	Shell Centre, London, SE1 7NA	100
Octane Properties Limited	Shell Centre, London, SE1 7NA	100
Peterhead Carbon Capture and Storage Limited	Shell Centre, London, SE1 7NA	100
Private Oil Holdings Oman Limited	8 York Road, London, SE1 7NA	85
Saboh Shell Petroleum Company Limited	Shell Centre, London, SE1 7NA	100
Saxon Oil Limited	8 York Road, London, SE1 7NA	100
Saxon Oil Miller Limited	8 York Road, London, SE1 7NA	100
Schooner Trustees Limited	Shell Centre, London, SE1 7NA	100
SELAP Limited	8 York Road, London, SE1 7NA	100
Shell Aircraft Limited	Shell Centre, London, SE1 7NA	100
Shell Arabia Car Service Limited	Shell Centre, London, SE1 7NA	100
Shell Aviation Limited	Shell Centre, London, SE1 7NA	100
Shell Benin Upstream Ltd	Shell Centre, London, SE1 7NA	100
Shell Business Development Middle East Limited	Shell Centre, London, SE1 7NA	100
Shell Caribbean Investments Limited	Shell Centre, London, SE1 7NA	100
Shell Chemical Company of Eastern Africa Limited	Shell Centre, London, SE1 7NA	100
Shell Chemicals (Hellos) Limited	Shell Centre, London, SE1 7NA	100
Shell Chemicals Limited	Shell Centre, London, SE1 7NA	100
Shell Chemicals Support Services Asia Limited	Shell Centre, London, SE1 7NA	100
Shell Chemicals U.K. Limited	Shell Centre, London, SE1 7NA	100
Shell Chino Exploration and Production Company Limited	Shell Centre, London, SE1 7NA	100
Shell Clair UK Limited	Shell Centre, London, SE1 7NA	100
Shell Club Coringham Limited	Shell Centre, London, SE1 7NA	100
Shell Company (Hellos) Limited	Shell Centre, London, SE1 7NA	100
Shell Company (Pacific Islands) Limited	Shell Centre, London, SE1 7NA	100
Shell Corporate Director Limited	Shell Centre, London, SE1 7NA	100
Shell Corporate Secretary Limited	Shell Centre, London, SE1 7NA	100
Shell Direct (U.K.) Limited	Shell Centre, London, SE1 7NA	100
Shell Distributor (Holdings) Limited	Shell Centre, London, SE1 7NA	100
Shell East Europe Company Limited	Shell Centre, London, SE1 7NA	100
Shell Employee Benefits Trustee Limited	Shell Centre, London, SE1 7NA	100
Shell Energy Europe Limited	Shell Centre, London, SE1 7NA	100
Shell Energy Investments Limited	Shell Centre, London, SE1 7NA	100
Shell EP Offshore Ventures Limited	Shell Centre, London, SE1 7NA	100

# Preliminary Public Copy

Company by country of incorporation	Address of registered office	%
Shell Exploration and Production Oman Limited	Shell Centre, London, SE1 7NA	100
Shell Gas Holdings (Malaysia) limited	Shell Centre, London, SE1 7NA	100
Shell Hasdrubal Limited	Shell Centre, London, SE1 7NA	100
Shell Holdings (U.K.) Limited	Shell Centre, London, SE1 7NA	100
Shell Information Technology International Limited	8 York Road, London, SE1 7NA	100
Shell International Gas Limited	Shell Centre, London, SE1 7NA	100
Shell International Limited	Shell Centre, London, SE1 7NA	100
Shell International Petroleum Company Limited	Shell Centre, London, SE1 7NA	100
Shell International Trading and Shipping Company limited	80 Strand, London, WC2R 0ZA	100
Shell Malaysia Limited	Shell Centre, London, SE1 7NA	100
Shell Marine Products limited	Shell Centre, London, SE1 7NA	100
Shell Overseas Holdings Limited	Shell Centre, London, SE1 7NA	100
Shell Overseas Services Limited	Shell Centre, London, SE1 7NA	100
Shell Pension Reserve Company (SIPP) Limited	Shell Centre, London, SE1 7NA	100
Shell Pension Reserve Company (SOCPF) Limited	Shell Centre, London, SE1 7NA	100
Shell Pension Reserve Company (UK) Limited	Shell Centre, London, SE1 7NA	100
Shell Pensions Trust Limited	Shell Centre, London, SE1 7NA	100
Shell Property Company Limited	Shell Centre, London, SE1 7NA	100
Shell Research Limited	Shell Centre, London, SE1 7NA	100
Shell Response Limited	80 Strand, London, WC2R 0ZA	100
Shell Saudi Ventures Limited	Shell Centre, London, SE1 7NA	100
Shell Shared Service Centre - Glasgow Limited	Shell Centre, London, SE1 7NA	100
Shell Subsidiary Distributors Pension Trustee Limited	Shell Centre, London, SE1 7NA	100
Shell Supplementary Pension Plan Trustees Limited	Shell Centre, London, SE1 7NA	100
Shell Tankers (U.K.) Limited	3 Savoy Place, London, WC2R 0DX	100
Shell Thailand Manufacturing Limited	Shell Centre, London, SE1 7NA	100
Shell Trading International Limited	Shell Centre, London, SE1 7NA	100
Shell Treasury Centre Limited	Shell Centre, London, SE1 7NA	100
Shell Treasury Dollar Company Limited	Shell Centre, London, SE1 7NA	100
Shell Treasury Euro Company Limited	Shell Centre, London, SE1 7NA	100
Shell Treasury UK Limited	Shell Centre, London, SE1 7NA	100
Shell Trinidad S(A) Limited	Shell Centre, London, SE1 7NA	100
Shell Trinidad and Tobago Limited	Shell Centre, London, SE1 7NA	100
Shell Trinidad Block E Limited	Shell Centre, London, SE1 7NA	100
Shell Trustee Solutions Limited	1 Alens Farm Road, Nigg, Aberdeen, AB12 3FY	100
Shell Tunisia Upstream Limited	Shell Centre, London, SE1 7NA	100
Shell U.K. Limited	Shell Centre, London, SE1 7NA	100
Shell U.K. North Atlantic Limited	Shell Centre, London, SE1 7NA	100
Shell U.K. Oil Products Limited	Shell Centre, London, SE1 7NA	100
Shell Upstream Overseas Services (I) Limited	Shell Centre, London, SE1 7NA	100
Shell Ventures New Zealand Limited	Shell Centre, London, SE1 7NA	100
Shell Ventures U.K. Limited	Shell Centre, London, SE1 7NA	100
Shell Windenergy Limited	Shell Centre, London, SE1 7NA	100
ShellMex and B.P. Limited	Shell Centre, London, SE1 7NA	60
Stansted Fuelling Company Limited	Exxonmobil House, Ermyn Way, Leatherhead, KT22 8UX	14
STT (Das Beneficiary) Limited*	Shell Centre, London, SE1 7NA	100
Synthetic Chemicals (Northern) Limited	8 York Road, London, SE1 7NA	100
Telegraph Service Stations Limited	8 York Road, London, SE1 7NA	100
The Anglo-Saxon Petroleum Company Limited	Shell Centre, London, SE1 7NA	100
The Asiatic Petroleum Company Limited	Shell Centre, London, SE1 7NA	100
The Consolidated Petroleum Company Limited	Shell Centre, London, SE1 7NA	50
The Consolidated Petroleum Supply Company limited	Shell Centre, London, SE1 7NA	50
The Mexican Eagle Oil Company limited	8 York Road, London, SE1 7NA	100
The Shell Company (W.I.) Limited	Shell Centre, London, SE1 7NA	100
The Shell Company of Hong Kong Limited	Shell Centre, London, SE1 7NA	100
The Shell Company of India Limited	Shell Centre, London, SE1 7NA	100
The Shell Company of Nigeria Limited	Shell Centre, London, SE1 7NA	100
The Shell Company of Thailand Limited	Shell Centre, London, SE1 7NA	100
The Shell Company of The Philippines Limited	Shell Centre, London, SE1 7NA	75
The Shell Company of Turkey Limited	Shell Centre, London, SE1 7NA	100
The Shell Company of West Africa Limited	Shell Centre, London, SE1 7NA	100
The Shell Marketing Company of Borneo Limited	Shell Centre, London, SE1 7NA	100
The Shell Petroleum Company Limited	Shell Centre, London, SE1 7NA	100
The Shell Transport and Trading Company Limited	Shell Centre, London, SE1 7NA	100
Thermocomfort Limited	8 York Road, London, SE1 7NA	100
UK Shell Pension Plan Trust Limited	Shell Centre, London, SE1 7NA	100
United Kingdom Oil Pipelines Limited	57 Alexandra Road, Hemel Hempstead, Herts, HP2 5BS	48
Walton-Gatwick Pipeline Company Limited	57 Alexandra Road, Hemel Hempstead, Herts, HP2 5BS	52
West London Pipeline and Storage Limited	57 Alexandra Road, Hemel Hempstead, Herts, HP2 5BS	38
Wonderbill Limited	7 Stratford Place (room 406) Marylebone, London, W1C 1AY	100
Woodlea Limited	Shell Centre, London, SE1 7NA	100

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Company by country of incorporation	Address of registered office	%
URUGUAY		
BG (Uruguay) S.A.	La Cumporsita, 1373 4th Floor, Montevideo, 11200	100
Dinarel S.A.	La Cumporsita, 1373 4th Floor, Montevideo, 11200	47
Gasoducto Cruz del Sur S.A.	La Cumporsita, 1373 4th Floor, Montevideo, 11200	40
USA		
Aero Energy LLC	10000 Ming Avenue, Bakersfield, CA 93311	52
Aero Energy Services Company	10000 Ming Avenue, Bakersfield, CA 93311	50
Airbiquity Inc.	1011 Western Avenue, Suite 600, Seattle, WA 98104	26
Amberjack Pipeline Company LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	63
Atlantic 1 Holdings LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	46
Atlantic 2/3 Holdings LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	58
Atlantic 4 Holdings LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	51
Au Energy, LLC	41805 Albrae Street, Fremont, CA, 94538	50
Bacanton Power LLC [a]	1499 38th Boulevard N.W., Coiro, GA 31728	35
Bengal Pipeline Company LLC	1185 Sanctuary Parkway, Suite 100, Alpharetta, GA 30009	32
BG Alaska E&P, Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG Brasilia, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG Energy Finance, Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG Energy Merchants, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG Exploration America, Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG Gulf Coast LNG, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG Lake Charles Operations, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG LNG Services, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG LNG Trading, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG North America, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG Production Company (PA), LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG Production Company (WV), LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG US Gathering Company, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG US Production Company, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
BG US Services, Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Brazil Crude Services, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Brazos Wind Ventures, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	50
Colonial Pipeline Company	P.O. Box 1624, Alpharetta, GA 30009-9934	13
Colorado Wind Ventures, LLC	825 Ne Multnomah, Portland, OR 97232	50
Concho Chemical Pipeline LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
CRI Catalyst Company LP [b]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
CRI Soles and Services Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
CRI U.S. LP [b]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
CRI Zeolites Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
CRI/Criterion, Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Criterion Catalyst Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Criterion Catalysts & Technologies L.P. [b]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Deer Park Refining Limited Partnership [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	50
Enterprise Oil North America Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Equilon Enterprises LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
EXCO Appalachia Midstream, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	50
EXCO Resources (PA), LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	50
Explorer Pipeline Company	P.O. Box 2650, Tulsa, OK 74101	37
Gaviota Terminal Company [b]	(Mail address) 910 Louisiana Street, Houston, TX 77002	20
Infinium USA Inc.	Infinium USA Inc., 1900 East Linden Avenue, Linden, NJ 07036	50
Infinium USA L.P.	Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, DE 19808	50
Jiffy Lube International, Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Lake Charles Exports, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	80
Laurentide E&P, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
LOCAP LLC	111 Veterans Blvd, Suite 600, Metairie, LA 70005	41
LOOP LLC	137 Northpark Blvd., Covington, LA 70433	46
Maple Power Holdings LLC	Bechtel Enterprises, P.O.Box 193965, San Francisco, CA, 94119-3965	68
Mars Oil Pipeline Company [b]	(Mail address) 910 Louisiana Street, Houston, TX 77002	48
Moltax Pipeline Company LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	79
Mertvyi Kultuk LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Mativo Company	One Allen Center, 9th Floor, 500 Dallas, Houston, TX 77002	50
Mativa Enterprises LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	50
Nedpower Mount Storm LLC [d]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	50
Noble Assurance Company	C T Corporation System, 1999 Bryan Street, Suite 900, Dallas, TX 75201	100
Northern Pipeline Company [a]	190 Thorn Hill Road, Warrendale, PA, 15086	55
Odyssey Pipeline L.L.C. [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	47
Oryx Caspian Pipeline, L.L.C. [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pocwest Energy, LLC.	3450 E. Commercial Ct., Meridian, ID 83642	50
Pecten Arabian Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pecten Brazil Exploration Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pecten Midstream LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	51

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Company by country of incorporation	Address of registered office	%
Pecten Orient Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pecten Orient Company LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pecten Producing Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pecten Trading Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pecten Victoria Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pecten Yemen Masila Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pelican Transmission, LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pennzoil-Quaker State Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pennzoil-Quaker State International Corporation	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Pennzoil-Quaker State Nominee Company	The Corporation Trust Company of Nevada, 311 South Division Street, Carson City, NV 89703	100
Peru LNG Company LLC [a]	Tenth and Kings Street, Wilmington, DE 19801	20
Power Limited Partnership [b]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Quaker State Investment Corporation	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
RDK Ventures, LLC	4080 West Jonathan Moore Pike, Columbus, IN 47201	50
Rilette Springs, LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
RK Caspian Shipping Company, LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
S T Exchange, Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Salamander Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
San Pablo Bay Pipeline Company LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Sand Dollar Pipeline LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
SCOGI GP [b]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell (US) Gas & Power M&T Holdings, Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Broadwater Holdings LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell California Pipeline Company LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Catalysts Ventures Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Chemical Appalachia LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Chemical Capital Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Chemical LP [f]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Chemicals Arabia LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Communications, Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Deepwater Royalties Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Downstream Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Energy Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Energy Holding GP LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Energy North America (US), L.P. [b]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Energy Resources Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell EP Holdings Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Expatriate Employment US Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Exploration & Production Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Exploration Company Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Frontier Oil & Gas Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Gas Gathering Corp. #2	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Global Solutions (US) Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell GOM Pipeline Company LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Gulf of Mexico Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Information Technology International Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell International Exploration and Production Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Leasing Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Marine Products (US) Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Midstream LP Holdings LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Midstream Operating LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	51
Shell Midstream Partners GP LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Midstream Partners, L.P. [f]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	51
Shell NA Gas & Power Holding Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell NA LNG LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell North America Gas & Power Services Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Offshore and Chemical Investments Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Offshore Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Offshore Response Company LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Oil Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Oil Company Investments Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Oil Products Company LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Onshore Ventures Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Petroleum Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Pipeline Company LP [b]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Pipeline GP LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Rail Operations Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell RSC Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Technology Ventures LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Thailand E&P Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Trademark Management Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100

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Company by country of incorporation	Address of registered office	%
Shell Trading (US) Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Trading North America Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Trading Risk Management, LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Trading Services Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Transportation Holdings LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell Treasury Center (West) Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell US E&P Investments LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell US Gas & Power LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell US Hosting Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell WindEnergy Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Shell WindEnergy Services Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Ship Shoal Pipeline Company [b]	(Mail address) 910 Louisiana Street, Houston, TX 77002	43
SOI Finance Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
SOPC Holdings East LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
SOPC Holdings West LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
SWEPi LP [b]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Tejas Coral GP, LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Tejas Coral Holding, LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Tejas Power Generation, LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Texas Petroleum Group LLC	11111 Wilcrest Green, Suite 100, Houston, TX 77042	50
Texas-New Mexico Pipe Line Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
The Valley Camp Coal Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Three Wind Holdings LLC	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	50
TMR Company	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Triton Diagnostics Inc.	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
Triton Terminals LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	100
True North Energy LLC	10346 Brecksville Rd, Brecksville, OH 44141	50
URSA Oil Pipeline Company LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	45
Zeolyst International	(Mail address) 910 Louisiana, 29th floor, Houston, TX 77002	50
Zydec0 Pipeline Company LLC [a]	The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801	55
<b>VENEZUELA</b>		
Petroregional del Lago, S.A.	Calle 78 C/AV 3H Sector Dr Portillo, Edificio Centro Empresarial Plaza, #3G-81 Piso 1 a PH Locales 1 a PH, Maracaibo, 4002	40
Shell Venezuela Productos, C.A.	Av Orinoco, Edif Centro Empresarial, Premium, Piso 2 of 2-A y 2-B Urb, Las Mercedes, Caracas - Miranda, 1060	100
Shell Venezuela, S.A.	Torre Financiera BOD, Avenida 5 de Julio can calle 3C y 3D, Piso 4 Oficina Shell Venezuela S.A, Maracaibo, Estado Zulia, 4002	100
Sucre Gas, S.A.	Av, Leonardo Da Vinci., Edificio PDV Servicios, Caracas	30
<b>VIETNAM</b>		
Shell Vietnam Ltd	Go Dau Industrial Zone, Phuoc Thai Commune, Long Thanh District, Dong Nai Province	100
<b>ZIMBABWE</b>		
Central African Petroleum Refineries (Private) Limited	Block 1, Tendeseka Office Park, CNR Samora Machel Avenue, Renfrew Road, Harare	21

## EXHIBIT 12.1

I, Ben van Beurden, certify that:

1. I have reviewed the Annual Report on Form 20-F of Royal Dutch Shell plc (the Company);
2. Based on my knowledge, the report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by the report;
3. Based on my knowledge, the financial statements, and other financial information included in the report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in the report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which the report is being prepared;
  - designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - evaluated the effectiveness of the Company's disclosure controls and procedures and presented in the report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by the report based on such evaluation; and
  - disclosed in the report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's Board of Directors (or persons performing the equivalent functions):
  - all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarise and report financial information; and
  - any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

/s/ Ben van Beurden

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Ben van Beurden  
Chief Executive Officer  
March 8, 2017



## EXHIBIT 12.2

I, Simon Henry, certify that:

1. I have reviewed the Annual Report on Form 20-F of Royal Dutch Shell plc (the Company);
2. Based on my knowledge, the report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by the report;
3. Based on my knowledge, the financial statements, and other financial information included in the report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in the report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which the report is being prepared;
  - designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - evaluated the effectiveness of the Company's disclosure controls and procedures and presented in the report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by the report based on such evaluation; and
  - disclosed in the report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's Board of Directors (or persons performing the equivalent functions):
  - all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarise and report financial information; and
  - any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

/s/Simon Henry

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Simon Henry  
Chief Financial Officer  
March 8, 2017

## EXHIBIT 13.1

In connection with the Annual Report on Form 20-F of Royal Dutch Shell plc (the Company) for the year ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the Report), each of the undersigned officers of the Company certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to such officer's knowledge, that:

1. The Report fully complies, in all material respects, with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of, and for, the periods presented in the Report.

The foregoing certification is provided solely for purposes of complying with the provisions of Section 906 of the Sarbanes-Oxley Act of 2002 and is not intended to be used or relied upon for any other purpose.

/s/Ben van Beurden

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**Ben van Beurden**  
Chief Executive Officer

/s/Simon Henry

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**Simon Henry**  
Chief Financial Officer  
March 8, 2017

## EXHIBIT 99.1

### **CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statement on Form F-3 (No. 333-199736) and the Registration Statements on Form S-8 (No. 333-126715, 333-141397, 333-171206, 333-192821, 333-200953 and 333-215273) of Royal Dutch Shell plc of our reports dated March 8, 2017, relating to the Consolidated Financial Statements and the effectiveness of internal control over financial reporting, included in the Annual Report on Form 20-F for the year ended December 31, 2016.

/s/ Ernst & Young LLP

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Ernst & Young LLP  
London, United Kingdom  
March 8, 2017

## EXHIBIT 99.2

### **CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statement on Form F-3 (No. 333-199736) and the Registration Statements on Form S-8 (No. 333-126715, 333-141397, 333-171206, 333-192821, 333-200953 and 333-215273) of Royal Dutch Shell plc of our report dated March 9, 2016, relating to the Consolidated Financial Statements, which appears in this Annual Report on Form 20-F.

/s/ PricewaterhouseCoopers LLP

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PricewaterhouseCoopers LLP  
London, United Kingdom  
March 8, 2017

## EXHIBIT 99.3

### **CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statement on Form F-3 (No. 333-199736) and the Registration Statements on Form S-8 (Nos. 333-126715, 333-141397, 333-171206, 333-192821, 333-200953 and 333215273) of the Royal Dutch Shell Dividend Access Trust of our reports dated March 8, 2017, with respect to the Royal Dutch Shell Dividend Access Trust Financial Statements, and the effectiveness of internal control over financial reporting of Royal Dutch Shell plc, included in the Annual Report on Form 20-F for the year ended December 31, 2016.

/s/ Ernst & Young LLP

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Ernst & Young LLP  
London, United Kingdom  
March 8, 2017

## EXHIBIT 99.4

### **CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statement on Form F-3 (No. 333-199736) and the Registration Statements on Form S-8 (No. 333-126715, 333-141397, 333-171206, 333-192821, 333200953 and 333-215273) of the Royal Dutch Shell Dividend Access Trust of our report dated March 9, 2016, relating to the Royal Dutch Shell Dividend Access Trust Financial Statements, which appears in this Annual Report on Form 20-F.

/s/ PricewaterhouseCoopers CI LLP

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PricewaterhouseCoopers CI LLP  
Jersey, Channel Islands  
March 8, 2017

# Preliminary Public Copy

## FINANCIAL CALENDAR IN 2017

The Annual General Meeting will be held on May 23, 2017.

	2016 Fourth quarter [A]	2017 First quarter [B]	2017 Second quarter [B]	2017 Third quarter [B]
Results announcements	February 2	May 4	July 27	November 2
Interim dividend timetable				
Announcement date	February 2 [C]	May 4	July 27	November 2
Ex-dividend date A and B ADSs [D]	February 15	May 17	August 9	November 15
Ex-dividend date A and B shares [D]	February 16	May 18	August 10	November 16
Record date	February 17	May 19	August 11	November 17
Script reference share price announcement date	February 23	May 25	August 17	November 23
Closing date for scrip election and currency election [E]	March 3	June 5	August 25	December 1
Euro and sterling equivalents announcement date	March 10	June 12	September 4	December 7
Payment date	March 27	June 26	September 18	December 20

[A] In respect of the financial year ended December 31, 2016

[B] In respect of the financial year ended December 31, 2017

[C] The Directors do not propose to recommend any further distribution in respect of 2016

[D] The London Stock Exchange and Euronext Amsterdam, with effect from October 6, 2014, reduced the standard settlement cycle in accordance with the Regulation of the European Parliament and of the Council on improving securities settlement in the European Union (EU) and on Central Securities Depositories (CSDs) and amending Directive 98/26/EC (the CSD Regulation). The CSD Regulation aims to harmonise EU securities settlement cycles towards a T+2 cycle. As a result, the ex-dividend dates for A and B shares traded on those markets are one trading day later than A and B ADSs traded in the USA. Record dates are not affected.

[E] Both a different scrip and dividend currency election date may apply to shareholders holding shares in a securities account with a bank or financial institution ultimately through Euroclear Nederland. This may also apply to other shareholders who do not hold their shares either directly on the Register of Members or in the corporate sponsored nominee arrangement. Shareholders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies. A different scrip election date may also apply to registered and non-registered ADS holders. Registered ADS holders can contact The Bank of New York Mellon for the election deadline that applies. Non-registered ADS holders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies.

### REGISTERED OFFICE

Royal Dutch Shell plc  
Shell Centre  
London SE1 7NA  
United Kingdom

Registered in England and Wales  
Company number 4366849  
Registered with the Dutch Trade Register  
under number 34179503

### Headquarters

Royal Dutch Shell plc  
Carel van Bylandtlaan 30  
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The Netherlands

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