



Rev 1 10/18/15

Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: LUDLUM 2241-2 Serial No. 262737 Cal. Due Date: 9/2/16
 Detector 1: Make/Model: LUDLUM 44-10 Serial No. PR 111127
 Bicon MicroRem Meter: Serial No. A224U Cal. Due Date: 8/4/16

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 116 Activity: <0.1 units: µci Assay Date: 12/30/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 22926 net cpm -20% 15284
 Source 2 Isotope: Cs-137 Serial No.: 87E13-48 Activity: 0.02 units: µci Assay Date: 1/20/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 13375 net cpm -20% 8919

3. Technician/Worker Performing Checks:

Name: STEVE KINSMAN Title: RCT Date: 11/18/15 Time: 1000

4. Site or Location:

Site/Job: 4.3 Location Description: FIELD
 GPS Coordinates (when required): X-Coord: N42° 32.425 Y-Coord: W 79° 02.930

Instrument Field Response ²					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l info: inst. Condition, etc.)
temeter	1 MIN	8680	1 MIN	20839	Y	Y	Y	1000	57.7	Th232 SK
temeter	1 MIN	8680	1 MIN	12256	Y	Y	Y	1000	57.7	Cs137 SK
temeter	1 MIN	8533	1 MIN	20704	Y	Y	Y	1330	61.8	Th232 SK
temeter	1 MIN	8533	1 MIN	11946	Y	Y	Y	1330	61.8	Cs137 SK
temeter	1 MIN	8563	1 MIN	20124	Y	Y	Y	1540	60.2	Th232 SK
temeter	1 MIN	8563	1 MIN	12006	Y	Y	Y	1540	60.2	Cs137 SK
ron	NA	6	NA	17	Y	Y	Y	1000	57.7	Th232 SK
ron	NA	8	NA	18	Y	Y	Y	1330	61.8	Th232 SK
ron	NA	6	NA	17	Y	Y	Y	1540	60.2	Th232 SK

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability.



Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: Ludlum 2241-2 Serial No. 206098 Cal. Due Date: 09/01/16
 Detector 1: Make/Model: Ludlum 44-10 Serial No. PR112642
 Detector 2: Make/Model: _____ Serial No. _____

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 0.1 units: µCi Assay Date: 12/24/10
 Instrument Response Acceptance Range (source cpm - bkg +/-20%): net cpm + 20% 53798 net cpm - 20% 35866

Source 2 Isotope: Cs-137 Serial No.: 1195254 Activity: 0.02 units: µCi Assay Date: NA
 Instrument Response Acceptance Range (source cpm - bkg +/-20%): net cpm + 20% 3273 net cpm - 20% 8849

3. Technician/Worker Performing Checks:

Name: J. Edwards Title: RCF

Date: 1008 Time: 11/18/15

4. Site or Location:

Site/Job: Area 43

Location Description: Woods

GPS Coordinates (when required): X-Coord: N 42° 32.427 Y-Coord: W 79° 02.926

Instrument Field Response ²					Use Acceptance Criteria					Remarks
Det. No. (1/2)	BKg Cnt Time	Bkg (avg of 3) (cpm)	Source Cnt Time	Source Response (cpm - bkg) Net cpm	+/- 20% of source Net cpm (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (F)	Initials and Comments (add'l Info: temperature, inst. Condition, etc.)
1	1min	9765	—	—	—	Y	Y	1010	57.9°	JE
1	1min	—	1min	11466	Y	Y	Y	1013	59.9°	JE Th-232 Cs-137
1	1min	—	1min	46783	Y	Y	Y	1016	57.9°	JE Cs-137 Th-232
1	1min	9956	—	46305	Y	Y	Y	1350	62.2°	JE
1	—	—	1min	46305	Y	Y	Y	1338	62.0°	JE Th-232
1	—	—	1min	11694	Y	Y	Y	1341	62.6°	JE Cs-137
1	1min	—	—	9824	Y	Y	Y	1530	60.2°	JE
1	—	—	1min	46665	Y	Y	Y	1538	60.0°	JE Th-232
1	—	—	1min	11835	Y	Y	Y	1543	60.0°	JE Cs-137

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the **average of three static counts** at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability

Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: LUDLUM 2241-2 Serial No. 262737 Cal. Due Date: 9/2/16
 Detector 1: Make/Model: LUDLUM 44-10 Serial No. PR111127
 Bicron MicroRem Meter: Serial No. A224U Cal. Due Date: 8/4/16

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 116 Activity: <0.1 units: µCi Assay Date: 12/30/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 22926 net cpm -20% 15284
 Source 2 Isotope: Cs-137 Serial No.: 87E13-48 Activity: 0.02 units: µCi Assay Date: 1/20/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 13375 net cpm -20% 8919

3. Technician/Worker Performing Checks:

Name: STEVE KINSMAN Title: RCT Date: 11/19/15 Time: 0950

4. Site or Location:

Site/Job: AREN 4, 3 Location Description: PARKING LOT
 GPS Coordinates (when required): X-Coord: N 42° 32' 28.7 Y-Coord: W 078° 59' 51.2

Instrument Field Response ²					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l Info: inst. Condition, etc.)
Ratemeter	1min	7507	1min	19866	Y	Y	Y	0950	63.5	Th232 SK
Ratemeter	1min	7507	1min	11046	Y	Y	Y	0950	63.5	Cs137 SK
Ratemeter	1min	8111	1min	20602	Y	Y	Y	1300	64.5	Th232 SK
Ratemeter	1min	8111	1min	11365	Y	Y	Y	1300	64.5	Cs137 SK
Ratemeter	1min	7810	1min	20072	Y	Y	Y	1515	67.4	Th232 SK
Ratemeter	1min	7810	1min	11300	Y	Y	Y	1515	67.4	Th232 SK Cs137
Bicron	NA	5	NA	18	Y	Y	Y	0950	63.5	Th232 SK
Bicron	NA	7	NA	17	Y	Y	Y	1300	64.5	Th232 SK
Bicron	NA	6	NA	17	Y	Y	Y	1515	67.4	Th232 SK

1. Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
 2. Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability



Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: Ludlum 224-2 Serial No. 206098 Cal. Due Date: 09/01/16
 Detector 1: Make/Model: Ludlum 44-10 Serial No. PR112642
 Detector 2: Make/Model: _____ Serial No. _____

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 20.1 units: µCi Assay Date: 12/5/10
 Instrument Response Acceptance Range (source cpm - bkg +/-20%): net cpm + 20% 53798 net cpm -20% 35806
 Source 2 Isotope: Cs-137 Serial No.: 119E2312 Activity: 0.02 units: µCi Assay Date: NA
 Instrument Response Acceptance Range (source cpm - bkg +/-20%): net cpm + 20% 13273 net cpm -20% 8849

3. Technician/Worker Performing Checks:

Name: J Edwards Title: RCT Date: 11/19/15 Time: 1000
 4. Site or Location: Site/Job: Avea 4.3 Location Description: woods
 GPS Coordinates (when required): X-Coord: N 42° 32.427 Y-Coord: W 79° 02.926

Instrument Field Response ²					Use Acceptance Criteria					Remarks
Det. No. (1/2)	BKg Cnt Time	Bkg (avg of 3) (cpm)	Source Cnt Time	Source Response (cpm - bkg) Net cpm	+/- 20% of source Net cpm (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (F)	Initials and Comments (add'l Info: temperature, inst. Condition, etc.)
1	1min	9368	-	-	-	Y	Y	1005	62.9°	JE
1	-	-	1min	47358	Y	Y	Y	1008	62.9°	Th-232 JE
1	-	-	1min	11261	Y	Y	Y	1012	63.8°	Cs-137 JE
1	1min	9200	-	-	Y	Y	Y	1308	64.9°	JE
1	-	-	1min	45493	Y	Y	Y	1313	62.0°	Th-232 JE
1	-	-	1min	11263	Y	Y	Y	1318	62.0°	Cs-137 JE
1	1min	9258	-	-	Y	Y	Y	1518	65.3°	JE
1	-	-	1min	46811	Y	Y	Y	1520	64.7°	Th-232 JE
1	-	-	1min	11246	Y	Y	Y	1528	64.0°	Cs-137 JE

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the **average of three static counts** at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability

Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: LUDLUM 2241-2 Serial No. 262737 Cal. Due Date: 9/2/16
 Detector 1: Make/Model: LUDLUM 44-10 Serial No. PR111127
 Bicron MicroRem Meter: Serial No. A224U Cal. Due Date: 8/4/16

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 116 Activity: ≤0.1 units: µci Assay Date: 12/30/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 22926 net cpm -20% 15284
 Source 2 Isotope: Cs-137 Serial No.: 87E13-48 Activity: 0.02 units: µci Assay Date: 1/20/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 13375 net cpm -20% 8919

3. Technician/Worker Performing Checks:

Name: STEVE KINSMAN Title: RET Date: 11/20/15 Time: 0930

4. Site or Location:

Site/Job: 4.3 Location Description: WOODS
 GPS Coordinates (when required): X-Coord: 47° 32' 25.3" Y-Coord: W 79° 02' 54.7"

Instrument Field Response ²					Use Acceptance Criteria					Remarks
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l info: inst. Condition, etc.)
Ratemeter	1min	9100	1min	21646	Y	Y	Y	0940	45.1	Th232 SK
Ratemeter	1min	9100	1min	12620	Y	Y	Y	0940	45.1	Cs137 SK
Ratemeter	1min	7626	1min	19986	Y	Y	Y	1300	44.2	Th232 SK
Ratemeter	1min	7626	1min	11304	Y	Y	Y	1300	44.2	Cs137 SK
Ratemeter	1min	7797	1min	19322	Y	Y	Y	1545	45.5	Th232 SK
Ratemeter	1min	7797	1min	11426	Y	Y	Y	1545	45.5	Cs137 SK
Bicron	NA	6	NA	18	Y	Y	Y	0940	45.1	Th232 SK
Bicron	NA	6	NA	17	Y	Y	Y	1300	44.2	Th232 SK
Bicron	NA	6	NA	17	Y	Y	Y	1545	45.5	Th232 SK

1. Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
 2. Source and background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability



Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: Lutron 224-2 Serial No. 206098 Cal. Due Date: 09/01/16
 Detector 1: Make/Model: Lutron 44-10 Serial No. PK912642
 Detector 2: Make/Model: _____ Serial No. _____

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 40.1 units: NL Assay Date: 12/30/10
 Instrument Response Acceptance Range (source cpm - bkg +/-20%): net cpm + 20% 52715 net cpm -20% 35864

 Source 2 Isotope: Cs-137 Serial No.: 119E23-12 Activity: 0.02 units: NL Assay Date: _____
 Instrument Response Acceptance Range (source cpm - bkg +/-20%): net cpm + 20% 13273 net cpm -20% 8549

3. Technician/Worker Performing Checks:

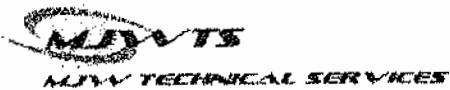
Name: J. Edwards Title: RCT Date: 11/20/15 Time: 0940

4. Site or Location:

Site/Job: Area 4.3 Location Description: woods
 GPS Coordinates (when required): X-Coord: N 72° 32.427 Y-Coord: W 79° 02.920

Instrument Field Response ²					Use Acceptance Criteria					Remarks
Det. No. (1/2)	Bkg Cnt Time	Bkg (avg of 3) (cpm)	Source Cnt Time	Source Response (cpm - bkg) Net cpm	+/- 20% of source Net cpm (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (F)	Initials and Comments (add'l info: temperature, inst. Condition, etc.)
1	1min	9993	—	—	—	Y	Y	0944	48.1°	DE
1	—	—	1min	46849	Y	Y	Y	0949	52.7°	Th-232 DE
1	—	—	1min	11910	Y	Y	Y	0953	53.6°	Cs-137 DE
1	1min	9752	—	—	Y	Y	Y	1114	47.6°	Th-232 DE
1	—	—	1min	46197	Y	Y	Y	1118	47.4°	Cs-137 Th-232 DE
1	—	—	1min	11794	Y	Y	Y	1124	47.4°	Cs-137 DE
1	1min	9815	—	—	Y	Y	Y	1549	44.9°	DE
1	—	—	1min	45538	Y	Y	Y	1553	44.7°	Th-232 DE
1	—	—	1min	11669	Y	Y	Y	1556	44.7°	Cs-137 DE

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the **average of three static counts** at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability



Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: LUDLUM 2241-2 Serial No. 262737 Cal. Due Date: 9/2/16
 Detector 1: Make/Model: LUDLUM 44-10 Serial No. PR 111127
 Bicron MicroRem Meter: Serial No. A224U Cal. Due Date: 8/4/16

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 116 Activity: <0.1 units: µci Assay Date: 12/30/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 22926 net cpm -20% 15284
 Source 2 Isotope: Cs-137 Serial No.: 87F13-48 Activity: 0.02 units: µci Assay Date: 1/20/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 13375 net cpm -20% 8919

3. Technician/Worker Performing Checks:

Name: Scott Brown Title: RET Date: 11-23-15 Time: 10:00

4. Site or Location:

Site/Job: 4.3 Location Description: _____
 GPS Coordinates (when required): X-Coord: N 79° 02' 55.6" Y-Coord: W 42° 32' 25.5"

Instrument Field Response ²					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l Info: Inst. Condition, etc.)
Ratemeter	1	7954	1	20631	Y	Y	Y	1000	37.0	Th-232 SK
Ratemeter	1	7954	1	11485	Y	Y	Y	1000	37.0	Cs-137 SK
Ratemeter	1 MIN	7639	1 MIN	20249	Y	Y	Y	1330	37.5	Th 232 SK
Ratemeter	1 MIN	7639	1 MIN	11450	Y	Y	Y	1320	37.5	Cs 137 SK
Ratemeter	1 MIN	7658	1 MIN	19888	Y	Y	Y	1545	37.2	Th 232 SK
Ratemeter	1 MIN	7658	1 MIN	11424	Y	Y	Y	1545	37.2	Cs 137 SK
Bicron	NA	3	NA	17	Y	Y	Y	1000	37.0	Th-232 SK
Bicron	NA	3	NA	17	Y	Y	Y	1330	37.5	Th 232 SK
Bicron	NA	4	NA	17	Y	Y	Y	1545	37.2	Th 232 SK

1. Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
 2. Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability

Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: LuMin 2241-2 Serial No. 206098 Cal. Due Date: 09/01/16
 Detector 1: Make/Model: LuMin 44-10 Serial No. PR112642
 Bicon MicroRem Meter: Serial No. 1487 Cal. Due Date: 6/19/16

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: CO. 1 units: MC Assay Date: 6/23/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 53798 net cpm -20% 35866
 Source 2 Isotope: Cs-137 Serial No.: 119E23-12 Activity: 0.02 units: MC Assay Date: NA
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 13023 net cpm -20% 8849

3. Technician/Worker Performing Checks:

Name: J Edwards Title: RCT Date: 11/23/15 Time: 1000

4. Site or Location:

Site/Job: Area 4.3 Location Description: Woods
 GPS Coordinates (when required): X-Coord: N 42° 52.427 Y-Coord: W 79° 02.926

Instrument Field Response ²					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l Info: Inst. Condition, etc.)
Ratemeter	1min	10172cpm	1min	46597cpm	Y	Y	Y	1009	37.4°	Th-232 DE
Ratemeter		499	1min	11970cpm	Y	Y	Y	1015	37.7°	Cs-137 DE
Ratemeter	1min	9841	1min	46371cpm	Y	Y	Y	1349	35.9°	Th-232 DE
Ratemeter			1min	11841cpm	Y	Y	Y	1345	36.8°	Cs-137 DE
Bicon	NA	5 uRem	NA	40 uRem/hr	Y	Y	Y	1005	37.2°	Th-232 DE
Bicon	NA	9 uRem	NA	30 uRem/hr	Y	Y	Y	1540	37.0°	Th-232 DE
Bicon	NA		NA	11/23/15 DE						
Bicon	NA		NA							

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability



Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: Lu 16in 221-2 Serial No. 206098 Cal. Due Date: 09/01/16
 Detector 1: Make/Model: Lu 44-10 Serial No. PR112642
 Bicron MicroRem Meter: Serial No. 1487 Cal. Due Date: 06/18/16

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 20.1 units: uCi Assay Date: 12/30/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 5374.8 net cpm -20% 3585.6
 Source 2 Isotope: Cs-137 Serial No.: 119E23-12 Activity: 0.02 units: uCi Assay Date: NA
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 1327.3 net cpm -20% 889.9

3. Technician/Worker Performing Checks:

Name: J. Edwards Title: RCT Date: 11/23/15 Time: 1545

4. Site or Location:

Site/Job: Area 4.3 Location Description: woods
 GPS Coordinates (when required): X-Coord: N 42° 32.427 Y-Coord: W 79° 02.926

Instrument Field Response ²					Use Acceptance Criteria					Remarks
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l Info: inst. Condition, etc.)
Ratemeter	1min	9855 cpm	1min	46724 cpm	Y	Y	Y	1553	37.7°	Th-232 DE
Ratemeter			1min	11834 cpm	Y	Y	Y	1557	37.5°	Cs-137 DE
Ratemeter										
Bicron	NA	2 uRem/hr	NA	30 cpm/hr	Y	Y	Y	1548	37.5°	Th-232 DE
Bicron	NA		NA	11/25/15 DE						
Bicron	NA		NA							
Bicron	NA		NA							

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability



Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: Lydium 2241-2 Serial No. 206098 Cal. Due Date: 09/01/16
 Detector 1: Make/Model: Lydium 44-10 Serial No. RR112642
 Bicron MicroRem Meter: Serial No. _____ Cal. Due Date: _____

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: CO.1 units: MC Assay Date: 12/30/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 53798 net cpm -20% 3556.6
 Source 2 Isotope: Cs-137 Serial No.: 119E23-12 Activity: 0.02 units: MC Assay Date: NA
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 13273 net cpm -20% 8849

3. Technician/Worker Performing Checks:

Name: J. Edwards Title: RCT Date: 11/24/15 Time: 0933

4. Site or Location:

Site/Job: Area 4c3 Location Description: gravel piles
 GPS Coordinates (when required): X-Coord: N 42° 32' 28.1" Y-Coord: W 079° 03' 04.7"

Instrument Field Response ²					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l info: inst. Condition, etc.)
Ratemeter	1min	9746cpm	1min	466.9cpm	Y	Y	Y	0937	41.1°	Th-232 JE
Ratemeter			1min	11067cpm	Y	Y	Y	0947	41.0°	Cs-137 JE
Ratemeter	1min	9726cpm	1min	46309cpm	Y	Y	Y	1114	40.2°	Th-232 JE
Ratemeter			1min	11729cpm	Y	Y	Y	1126	40.0°	Cs-137 JE
Ratemeter	1min	9562cpm	1min	45652cpm	Y	Y	Y	1450	44.4°	Th-232 JE
Ratemeter			1min	11514cpm	Y	Y	Y	1457	43.8°	Cs-137 JE
Bicron	NA		NA							
Bicron	NA		NA							
Bicron	NA		NA							

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability