

Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: Ludlum 274-2 Serial No. 206098 Cal. Due Date: 09/01/16
 Detector 1: Make/Model: Ludlum 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: 0.1 units: uCi Assay Date: 12/30/15
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 53798 net cpm -20% 35860
 Source 2 Isotope: Cs-137 Serial No.: 119E03-12 Activity: 0.02 units: uCi 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: 12/11/15 Time: 0858

4. Site or Location:

Site/Job: SED / Area 5.2 Location Description: parking lot / woods
 GPS Coordinates (when required): X-Coord: N 42° 32' 27.172" Y-Coord: W 78° 59' 50.352"

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 min	8844 cpm	1 min	45233 cpm	Y	Y	Y	0903	54.1°	Th-232 JE
Ratemeter			1 min	10775 cpm	Y	Y	Y	0909	54.2°	Cs-137 JE
Ratemeter	1 min	8435 cpm	1 min	42589 cpm	Y	Y	Y	1304	57.3°	Th-232 JE
Ratemeter			1 min	10451 cpm	Y	Y	Y	1308	57.5°	Cs-137 JE
Ratemeter	1 min	7749 cpm	1 min	45076 cpm	Y	Y	Y	1440	59.1°	Th-232 JE
Ratemeter			1 min	9475 cpm	Y	Y	Y	1449	59.1°	Cs-137 JE
Bicron	NA	6 uRem/hr	NA	30 uRem/hr	Y	Y	Y	0905	54.2°	Th-232 JE
Bicron	NA	6 uRem/hr	NA	25 uRem/hr	Y	Y	Y	1257	57.3°	Th-232 JE
Bicron	NA	5 uRem/hr	NA	30 uRem/hr	Y	Y	Y	1445	59.0°	Th-232 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. 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.: 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 KUSMAN Title: RET Date: 12/11/15 Time: 0900

4. Site or Location:

Site/job: S-2 Location Description: WOODS

GPS Coordinates (when required): X-Coord. N 42°32'30.6" Y-Coord. W 79°59'74.9"

Instrument Field Response ²					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time (min)	Bkg Counts (cpm) or uRem/hr	Source Cnt Time (min)	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	1.0	7770	1	19788	Y	Y	Y	0900	53.0	Th 232 SK
Ratemeter	1	7770	1	11315	Y	Y	Y	0900	53.0	Cs 137 SK
Ratemeter	1	7874	1	20148	Y	Y	Y	1300	61.3	Th 232 SK
Ratemeter	1	7874	1	11267	Y	Y	Y	1300	61.3	Cs 137 SK
Ratemeter	1	6915	1	19544	Y	Y	Y	1500	59.0	Th 232 SK
Ratemeter	1	6915	1	10359	Y	Y	Y	1500	59.0	Cs 137 SK
Bicron	NA	6	NA	18	Y	Y	Y	0900	53.0	Th 232 SK
Bicron	NA	6	NA	17	Y	Y	Y	1300	61.3	Th 232 SK
Bicron	NA	5	NA	17	Y	Y	Y	1500	59.0	Th 232 SK

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Instrument Field Response Check Log

1. Instrument Information¹

Ratemeter: Make/Model: Ludlum 2041-2 Serial No. 200098 Cal. Due Date: 09/01/16
 Detector 1: Make/Model: Ludlum 44-10 Serial No. PR112692
 Bicron MicroRem Meter: Serial No. _____ Cal. Due Date: _____

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 0.1 units: uCi Assay Date: 12/30/10
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 53795 net cpm -20% 35866
 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% 3273 net cpm -20% 5849

3. Technician/Worker Performing Checks:

Name: J. Edwards Title: RCT Date: 12/15/15 Time: 0804

4. Site or Location: Site/Job: Area 5-2 Location Description: woods
 GPS Coordinates (when required): X-Coord: N 42° 31' 8.683" Y-Coord: W 78° 58' 41.777"

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	8333cpm	1min	44189cpm	Y	Y	Y	0808	47.1°	TH-232 JJE
Ratemeter			1min	10364cpm	Y	Y	Y	0812	47.3°	Cs-137 JJE
Ratemeter	1min	8944cpm	1min	46517cpm	Y	Y	Y	1145	48.5°	TH-232 JJE
Ratemeter			1min	10964cpm	Y	Y	Y	1150	48.5°	Cs-137 JJE
Ratemeter	1min	1118cpm	1min	46862cpm	Y	Y	Y	1456	47.0°	TH-232 JJE
Ratemeter			1min	13164cpm	Y	Y	Y	1449	47.0°	Cs-137 JJE
Bicron	NA	8 uRem/hr	NA	40 uRem/hr	Y	Y	Y	1142	48.5°	TH-232 JJE
Bicron	NA	8 uRem/hr	NA	30 uRem/hr	Y	Y	Y	1445	47.0°	TH-232 JJE
Bicron	NA		NA		Y	Y	Y			

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