

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: STEVE KINSMAN Title: RCT Date: 10/8/12 Time: 0900

4. Site or Location: Site/Job: 4.2

Location Description: WOODS

GPS Coordinates (when required): X-Coord: N 42° 32' 28.4" Y-Coord: W 78° 54' 51.1"

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	7856	1	20132	Y	Y	Y	0900	36.8	Th232 SK
Ratemeter	1	7856	1	11330	Y	Y	Y	0900	36.8	Cs137 SK
Ratemeter	1	7883	1	20382	Y	Y	Y	1230	42.9	Th232 SK
Ratemeter	1	7883	1	11652	Y	Y	Y	1230	42.9	Cs137 SK
Ratemeter	1	8174	1	20873	Y	Y	Y	15:35	46.0	Th232 SK
Ratemeter	1	8174	1	11607	Y	Y	X	15:35	46.0	Cs137 SK
Bicron	NA	6	NA	17	Y	Y	Y	0900	36.8	Th232 SK
Bicron	NA	6	NA	18	Y	Y	Y	1230	42.9	Th232 SK
Bicron	NA	6	NA	17	Y	Y	Y	1230	42.9	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

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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: STEVE KINSMAN Title: RCT Date: 12/2/15 Time: 0815

4. Site or Location:

Site/Job: 4.2

Location Description: WOODS

GPS Coordinates (when required): X-Coord: 78°59'50.9"W Y-Coord: 42°32'28.4"N @ environment dept building

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	7995	1	20278	Y	Y	Y	0830	45.8	Th232 SK
Ratemeter	1	7995	1	11700	Y	Y	Y	0830	45.8	Cs137 SK
Ratemeter	1	7861	1	20365	Y	Y	Y	1230	45.1	Th232 SK
Ratemeter	1	7861	1	11637	Y	Y	Y	1230	45.1	Cs137 SK
Ratemeter	1	6007	1	18677	Y	Y	Y	1530	44.6	Th232 SK
Ratemeter	1	6007	1	9588	Y	Y	Y	1530	44.6	Cs137 SK
Bicron	NA	5	NA	17	Y	Y	Y	0830	45.8	Th232 SK
Bicron	NA	6	NA	17	Y	Y	Y	1230	45.1	Th232 SK
Bicron	NA	4	NA	16	Y	Y	Y	1530	44.6	Th232 SK

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Instrument Field Response Check Log

1. Instrument Information

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: Tan Brown Title: _____ Date: 12-3-15 Time: 0830

4. Site or Location:

Ste/Job: 4/2 Location Description: Field
 GPS Coordinates (when required): X-Coord: N 42°32'46" Y-Coord: W 79°02'09.13

Instrument Field Response*					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: Info: Inst. Condition, etc.)
Ratemeter	1	8212	1	20,321	Y	Y	Y	0830	43.8	Th 232 TB
Ratemeter	1	8212	1	11,887	Y	Y	Y	0830	43.8	Cs 137 TB
Ratemeter	1	8115	1	20522	Y	Y	Y	1115	44.6	Th 232 SK
Ratemeter	1	8115	1	11640	Y	Y	Y	1115	44.6	Cs 137 SK
Ratemeter			N/A			N/A				
Ratemeter			N/A			N/A				
Bicon	NA	6	NA	15	Y	Y	Y	0830	43.8	Th 232 TB
Bicon	NA	5	NA	16	Y	Y	Y	1115	44.6	Th 232 SK
Bicon	NA	N/A	NA	N/A			N/A			

- 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. 246098 Cal. Due Date: 09/01/16
 Detector 1: Make/Model: Ludlum 44-10 Serial No. PR112642
 Bicron MicroRem Meter: Serial No. _____ Cal. Due Date: _____

2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 40.1 units: NC Assay Date: 12/30/10
 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: NC Assay Date: NA
 Response Acceptance Range (+/-20%): uRem/hr +20% _____ uRem/hr -20% _____ net cpm + 20% 13173 net cpm -20% 9849

3. Technician/Worker Performing Checks:

Name: J. Edwards Title: RET Date: 12/03/15 Time: 0830

4. Site or Location:

Site/Job: Area 4.2 Location Description: woods
 GPS Coordinates (when required): X-Coord: N 42° 32.422 " Y-Coord: W 079° 02.917 "

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	9949 cpm	1min	45127 cpm	Y	Y	Y	0839	37.3°	Th-232 JE
Ratemeter			1min	11611 cpm	N	Y	Y	0845	37.5°	Cs-137 JE
Ratemeter	1min	10468 cpm	1min	46522 cpm	Y	Y	Y	1051	42.2°	Th-232 JE
Ratemeter			1min	11951 cpm	Y	Y	Y	1056	42.0°	Cs-137 JE
Ratemeter										
Ratemeter										
Bicron	NA		NA							
Bicron	NA		NA							
Bicron	NA		NA							

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