

Health Physics Sample Records

Sample ID: 142485

Type: RLSSS

Type Detail: SAND

Status: APPROVED

Rasterized: ☒

Description: 140603BD 14 CAMP MESA # 16

Common

Resp Org: P4000 - PROJECT MANAGEMENT

Cross Ref Sample ID:

Priority: N

Contact: COOPER, TERRY L

Survey No:

Reference ID:

Accounting Subcode:

Unknown Mat: NO

Hazardous Mat: NO

Comments: COUNT TO MDA

Reviewed: DYNES, WILLIAM J

Date: 06/05/14 11:14

Comments:

Origin

Mat. Size/Volume: 1384 GRAMS

Docmnt/MO/Act #:

Proposed Ship Date: 00/00/00 00:00

Description: CAMP MESA # 16

Collection

Sample Tech: DYNES, WILLIAM J

Sample Date: 06/03/14 13:24

Count Time: 900 (secs.)

Tritium Req: No

Sample Size/Volume: 1384 GRAMS

Instructions: COUNT TO MDA

Comments: COUNT TO MDA

RLSSS

Exempt: No

Evaluated: No

Chem Notification: No

State Permit: No

Offsite Analysis: No

Effluent Permit: No

Container Surveyed: No

Cleared For Release: Yes

Container Evaluated: Yes

Form 212 Ready: ☒

Location

Unit: NON-UNIT RE

Area: MS

Elev: 100

Room:

Depth: (in.)

Equip ID:

Stored By: ,

Date: 00/00/00 00:00

Sample Loc:

Other:

Material Loc:


Health Physics Sample Records

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Type: RLSSS
















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Status: APPROVED

Rasterized: 

Description: 140603BD 14 CAMP MESA # 16

Analysis

Geometry	MCA ID	Quant.	Units	Method	FP/AP	Lab	Analysis By	Date	Mod ID	Mod Date
A_1L_marinelli_sand_	30375	1384	GR		.000		PARK, MICHAEL C	06/05/14 16:28		
Isotope	Mode	Activity	Activity Uncert.	LLD/MDA	% Abund.	Atom. No.	Comments		Mod Id	Mod Date
0 K-40	NT	0.00001571	1.76E-6		89.755%	40				
0 TL-208	NT	2.773E-7	7.76E-8		1.584%	208				
0 PB-212	NT	6.49E-7	1.588E-7		3.708%	212				
0 BI-214	NT	3.46E-7	1.177E-7		1.977%	214				
0 PB-214	NT	5.209E-7	1.304E-7		2.976%	214				
0 BE-7	AP	9.3678E-7			0.000%	7				
0 MN-54	AP	2.1128E-7			0.000%	54				
0 MN-56	AP	3.7864E-8			0.000%	56				
0 CO-57	AP	9.3818E-8			0.000%	57				
0 CO-58	AP	1.2255E-7			0.000%	58				
0 CO-60	AP	1.427E-7			0.000%	60				
0 SB-124	AP	5.8514E-8			0.000%	124				
0 SB-125	FP	2.7566E-7			0.000%	125				
0 CS-134	FP	4.0837E-8			0.000%	134				
0 CS-137	FP	1.3612E-7			0.000%	137				

Analysis Review

Re-Analyze: No

Lic Rad Mat Present: No

Reviewed: COOPER, TERRY L

Date: 06/10/14 15:43

Hp Eng Rvw Req'd: Yes

Rad Mat Present: Yes

HP Notified Name:

Comments:


Health Physics Sample Records

Sample ID: **142485**

Type: RLSSS

Type Detail: SAND

Status: APPROVED

Rasterized: 

Description: 140603BD 14 CAMP MESA # 16

Review/Approve

HP Eng Review

Reviewed: COOPER, TERRY L

Date: 06/10/14 15:43

Comments:

Disposition

Disposition: OTHER

Result: Sample contains only natural isotopes

Remarks:

Final Approval

Approved: COOPER, TERRY L

Date: 06/10/14 15:43

Comments:

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*****
*          SONGS                      HEALTH PHYSICS REPORT          5-JUN-2014 16:24  *
*-----*
*          >>>> SAMPLE  PARAMETERS <<<<          *
*-----*
* Title      : 140603BD 14 CAMP MESA # 16          *
* ID         : 30375                               Acquisition date: 5-JUN-2014 16:21:45. *
* Start Time: 5-JUN-2014 16:21:00.                  *
* Stop Time: 5-JUN-2014 16:21:00.                  Counting System   : U2GSP          *
* Quantity  : 1.38400E+03 GR                        IHPS Sample Number: 142485      *
* Geometry  : A_1L_marinelli_sand_1                 Analysis Library  : HP_NATURAL   *
*                               Operator: MICHAEL PARK                               *
*-----*
*          >>>> A #41-TP11679B  PARAMETERS <<<<          *
*-----*
* Elapsed Live Time : 0 00:03:00.41  Calibration      : 5-JUN-2014 08:09:          *
* Elapsed Real Time  : 0 00:03:00.45  Energy Offset   : 2.12659E-01          *
* Deadtime           : 0.0%           Energy Slope    : 4.99528E-01          *
* Activity Mult Factor: 1.00000E+00    Energy Tolerance: 1.00000          *
* Half Life Ratio    : 8.00000         Sensitivity     : 5.00000          *
*-----*
*****

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Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	238.73	54	27	1.65	477.48	472	13	24.5	2.66E+00	PB-212
1	351.71	28	6	1.33	703.66	698	9	25.0	4.01E-01	PB-214
1	583.13	15	2	1.60	1166.95	1163	7	28.0	4.97E-01	TL-208
1	609.46	15	3	1.44	1219.64	1215	10	34.0	3.44E-01	BI-214
1	1460.67	82	0	1.84	2923.70	2917	13	11.2	6.05E-01	K-40

Summary of Nuclide Activity
Sample ID : 30375

Page : 2
Acquisition date : 5-JUN-2014 16:21:45

Total number of lines in spectrum 5
Number of unidentified lines 0
Number of lines tentatively identified by NID 5 100.00%

Nuclide Type : natural

Nuclide	Hlife	Decay	Uncorrected uCi/GR	Decay Corr uCi/GR	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	1.571E-05	1.571E-05	0.176E-05	11.21	A
TL-208	3.05M	1.64	1.694E-07	2.773E-07	0.776E-07	28.00	A
PB-212	10.64H	1.00	6.474E-07	6.490E-07	1.588E-07	24.47	A
BI-214	19.90M	1.08	3.200E-07	3.460E-07	1.177E-07	34.02	A
PB-214	26.80M	1.06	4.915E-07	5.209E-07	1.304E-07	25.04	KA
Total Activity :			1.733E-05	1.750E-05			

Grand Total Activity : 1.733E-05 1.750E-05

Flags: "K" = Keyline not found
"E" = Manually edited

"M" = Manually accepted
"A" = Nuclide specific abn. limit

Unidentified Energy Lines
Sample ID : 30375

Page : 3
Acquisition date : 5-JUN-2014 16:21:45

None

Flags: "T" = Tentatively associated

Interference Report
Sample ID : 30375

Page : 4
Acquisition date : 5-JUN-2014 16:21:45

No interference correction performed

Nuclide Type: natural

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected uCi/GR	Decay Corr uCi/GR	1-Sigma %Error
K-40	1460.83	82	10.67*	5.314E-01	1.571E-05	1.571E-05	11.21
TL-208	72.80	-----	2.14	1.594E+00	-----	Line Not Found	-----
	74.97	-----	3.60	1.692E+00	-----	Line Not Found	-----
	84.79	-----	1.27	2.058E+00	-----	Line Not Found	-----
	252.45	-----	0.80	2.021E+00	-----	Line Not Found	-----
	277.28	-----	6.80	1.920E+00	-----	Line Not Found	-----
	510.61	-----	21.60	1.265E+00	-----	Line Not Found	-----
	583.02	15	86.00*	1.128E+00	1.694E-07	2.773E-07	28.00
	763.06	-----	1.64	8.744E-01	-----	Line Not Found	-----
	860.30	-----	12.00	7.770E-01	-----	Line Not Found	-----
PB-212	74.81	-----	10.50	1.685E+00	-----	Line Not Found	-----
	77.11	-----	17.70	1.782E+00	-----	Line Not Found	-----
	87.19	-----	6.27	2.129E+00	-----	Line Not Found	-----
	90.13	-----	1.86	2.206E+00	-----	Line Not Found	-----
	115.12	-----	0.59	2.535E+00	-----	Line Not Found	-----
	238.58	54	43.60*	2.082E+00	6.474E-07	6.490E-07	24.47
	300.03	-----	3.34	1.834E+00	-----	Line Not Found	-----
BI-214	76.86	-----	0.58	1.772E+00	-----	Line Not Found	-----
	79.29	-----	0.97	1.869E+00	-----	Line Not Found	-----
	609.31	15	46.10*	1.084E+00	3.200E-07	3.460E-07	34.02
	665.44	-----	1.56	9.985E-01	-----	Line Not Found	-----
	768.35	-----	4.88	8.685E-01	-----	Line Not Found	-----
	806.16	-----	1.23	8.283E-01	-----	Line Not Found	-----
	934.04	-----	3.16	7.177E-01	-----	Line Not Found	-----
	1120.27	-----	15.00	6.114E-01	-----	Line Not Found	-----
	1155.18	-----	1.69	5.973E-01	-----	Line Not Found	-----
	1238.11	-----	5.92	5.697E-01	-----	Line Not Found	-----
	1280.95	-----	1.47	5.585E-01	-----	Line Not Found	-----
	1377.66	-----	4.02	5.401E-01	-----	Line Not Found	-----
	1385.30	-----	0.78	5.391E-01	-----	Line Not Found	-----
	1401.48	-----	1.39	5.370E-01	-----	Line Not Found	-----
	1407.97	-----	2.48	5.362E-01	-----	Line Not Found	-----
	1509.22	-----	2.19	5.292E-01	-----	Line Not Found	-----
	1583.22	-----	0.72	5.296E-01	-----	Line Not Found	-----
	1661.26	-----	1.15	5.351E-01	-----	Line Not Found	-----
	1729.58	-----	3.05	5.442E-01	-----	Line Not Found	-----
	1764.49	-----	15.90	5.503E-01	-----	Line Not Found	-----
	1847.41	-----	2.12	5.694E-01	-----	Line Not Found	-----
PB-214	53.17	-----	1.10	5.543E-01	-----	Line Not Found	-----
	74.81	-----	6.52	1.685E+00	-----	Line Not Found	-----
	77.11	-----	11.00	1.782E+00	-----	Line Not Found	-----
	87.19	-----	3.88	2.129E+00	-----	Line Not Found	-----
	90.13	-----	1.15	2.206E+00	-----	Line Not Found	-----
	241.92	-----	7.46	2.067E+00	-----	Line Not Found	-----
	258.94	-----	0.55	1.994E+00	-----	Line Not Found	-----
	295.09	-----	19.20*	1.852E+00	-----	Line Not Found	-----
	351.87	28	37.10	1.663E+00	4.915E-07	5.209E-07	25.04
	785.83	-----	1.09	8.495E-01	-----	Line Not Found	-----
	839.00	-----	0.59	7.964E-01	-----	Line Not Found	-----

Nuclide Line Activity Report (continued)
Sample ID : 30375

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Acquisition date : 5-JUN-2014 16:21:45

Flag: "*" = Keyline

Minimum Detectable Activity Report
Sample ID : 30375

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Acquisition date : 5-JUN-2014 16:21:45

Nuclide	Bckgnd Sum	Energy (keV)	MDA (uCi/GR)
BE-7	4.	477.61	9.3678E-07
MN-54	8.	834.83	2.1128E-07
MN-56	0.	846.81	3.7864E-08
CO-57	12.	122.06	9.3818E-08
CO-58	2.	810.79	1.2255E-07
CO-60	1.	1332.50	1.4270E-07
SB-124	0.	602.73	5.8514E-08
SB-125	3.	427.88	2.7566E-07
CS-134	0.	795.87	4.0837E-08
CS-137	3.	661.66	1.3612E-07