

Health Physics Sample Records

Sample ID: 142459

Type: RLSSS

Type Detail: SAND

Status: APPROVED

Rasterized: ☒

Description: 140529BD 25 STARYARD SURVEY PT 25

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:

Reviewed: DYNES, WILLIAM J

Date: 06/04/14 07:28

Comments:

Origin

Mat. Size/Volume: 2037 GRAMS

Docmnt/MO/Act #:

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

Description: STARYARD SURVEY PT 25

Collection

Sample Tech: DYNES, WILLIAM J

Sample Date: 05/29/14 12:05

Count Time: 900 (secs.)

Tritium Req: No

Sample Size/Volume: 2072 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: 140529BD 25 STARYARD SURVEY PT 25

Analysis

Geometry	MCA ID	Quant.	Units	Method	FP/AP	Lab	Analysis By	Date	Mod ID	Mod Date
A_1L_marinelli_sand_	30340	2072	GR		.000		PARK, MICHAEL C	06/04/14 15:48		
Isotope	Mode	Activity	Activity Uncert.	LLD/MDA	% Abund.	Atom. No.	Comments		Mod Id	Mod Date
0 K-40	NT	0.00001438	1.44E-6		83.711%	40				
0 TL-208	NT	3.465E-7	7.6E-8		2.017%	208				
0 PB-212	NT	6.664E-7	1.009E-7		3.879%	212				
0 BI-214	NT	5.6E-7	1.158E-7		3.260%	214				
0 PB-214	NT	5.543E-7	2.099E-7		3.227%	214				
0 AC-228	NT	6.71E-7	2.07E-7		3.906%	228				
0 BE-7	AP	5.4442E-7			0.000%	7				
0 MN-54	AP	1.4326E-7			0.000%	54				
0 MN-56	AP	6.8611E-8			0.000%	56				
0 CO-57	AP	7.3798E-8			0.000%	57				
0 CO-58	AP	2.3842E-8			0.000%	58				
0 CO-60	AP	1.0901E-7			0.000%	60				
0 SB-124	AP	7.703E-8			0.000%	124				
0 SB-125	FP	1.5715E-7			0.000%	125				
0 CS-134	FP	8.1451E-8			0.000%	134				
0 CS-137	FP	9.1721E-8			0.000%	137				

Analysis Review

Re-Analyze: No

Lic Rad Mat Present: No

Reviewed: COOPER, TERRY L

Date: 06/10/14 13:26

Hp Eng Rvw Req'd: Yes

Rad Mat Present: Yes

HP Notified Name:

Comments:

Health Physics Sample Records

Sample ID: 142459

Type: RLSSS

Type Detail: SAND

Status: APPROVED

Rasterized: 

Description: 140529BD 25 STARYARD SURVEY PT 25

Review/Approve

HP Eng Review

Reviewed: COOPER, TERRY L

Date: 06/10/14 13:26

Comments:

Disposition

Disposition: OTHER

Result: Sample contains only natural isotopes

Remarks:

Final Approval

Approved: COOPER, TERRY L

Date: 06/10/14 13:26

Comments:

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*****
*          SONGS                      HEALTH PHYSICS REPORT          4-JUN-2014 15:42  *
*-----*
*          >>>> SAMPLE  PARAMETERS <<<<          *
*
* Title      : 140529BD 25 STARYARD SURVEY PT 25          *
*
* ID         : 30340                      Acquisition date: 4-JUN-2014 15:39:08. *
* Start Time: 4-JUN-2014 15:39:00.          *
* Stop Time: 4-JUN-2014 15:39:00.          Counting System   : U2GSP          *
* Quantity   : 2.07200E+03 GR              IHPS Sample Number: 142459          *
* Geometry   : A_1L_marinelli_sand_1      Analysis Library  : HP_NATURAL          *
*          Operator: MICHAEL PARK          *
*-----*
*          >>>> A #41-TP11679B  PARAMETERS <<<<          *
*
* Elapsed Live Time : 0 00:03:00.43      Calibration       : 3-JUN-2014 20:38: *
* Elapsed Real Time  : 0 00:03:00.49      Energy Offset      : 2.22491E-01      *
* Deadtime           : 0.0%              Energy Slope       : 4.99526E-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	76.95	34	69	1.61	153.61	151	8	45.9	4.36E+00	BI-214 PB-212 PB-214
1	238.44	84	30	0.94	476.90	473	7	15.1	5.77E+00	PB-212
1	295.07	26	20	1.76	590.26	586	11	37.9	9.35E-01	PB-214
1	338.73	28	7	2.77	677.67	673	14	28.4	8.13E-01	AC-228
1	351.78	53	5	1.61	703.80	699	9	15.7	9.22E-01	PB-214
1	583.23	33	6	1.16	1167.15	1163	8	21.9	5.54E-01	TL-208
1	609.25	37	6	1.53	1219.23	1214	11	20.7	4.41E-01	BI-214
1	911.27	20	3	1.51	1823.89	1817	12	30.9	7.21E-01	AC-228
1	1460.79	113	4	2.36	2924.06	2917	14	10.0	3.51E-01	K-40

Summary of Nuclide Activity
Sample ID : 30340

Page : 2
Acquisition date : 4-JUN-2014 15:39:08

Total number of lines in spectrum 9
Number of unidentified lines 0
Number of lines tentatively identified by NID 9 100.00%

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	1.438E-05	1.438E-05	0.144E-05	10.04	A
TL-208	3.05M	1.43	2.428E-07	3.465E-07	0.760E-07	21.92	A
PB-212	10.64H	1.00	6.652E-07	6.664E-07	1.009E-07	15.14	A
BI-214	19.90M	1.06	5.289E-07	5.600E-07	1.158E-07	20.67	A
PB-214	26.80M	1.04	5.312E-07	5.543E-07	2.099E-07	37.87	A
AC-228	6.13H	1.00	6.689E-07	6.710E-07	2.070E-07	30.85	A
Total Activity :			1.702E-05	1.718E-05			

Grand Total Activity : 1.702E-05 1.718E-05

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Unidentified Energy Lines
Sample ID : 30340

Page : 3
Acquisition date : 4-JUN-2014 15:39:08

None

Flags: "T" = Tentatively associated

Interference Report
Sample ID : 30340

Page : 4
Acquisition date : 4-JUN-2014 15:39:08

No interference correction performed

Nuclide Type: natural

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected Decay Corr		1-Sigma
					uCi/GR	uCi/GR	
K-40	1460.83	113	10.67*	5.314E-01	1.438E-05	1.438E-05	10.04
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	-----
PB-212	583.02	33	86.00*	1.128E+00	2.428E-07	3.465E-07	21.92
	763.06	-----	1.64	8.744E-01	-----	Line Not Found	-----
	860.30	-----	12.00	7.770E-01	-----	Line Not Found	-----
	74.81	-----	10.50	1.685E+00	-----	Line Not Found	-----
	77.11	34	17.70	1.776E+00	7.884E-07	7.899E-07	45.93
	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	84	43.60*	2.083E+00	6.652E-07	6.664E-07	15.14
	300.03	-----	3.34	1.834E+00	-----	Line Not Found	-----
BI-214	76.86	34	0.58	1.776E+00	2.406E-05	2.547E-05	45.93
	79.29	-----	0.97	1.869E+00	-----	Line Not Found	-----
	609.31	37	46.10*	1.084E+00	5.289E-07	5.600E-07	20.67
	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	-----
PB-214	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	-----
	53.17	-----	1.10	5.543E-01	-----	Line Not Found	-----
	74.81	-----	6.52	1.685E+00	-----	Line Not Found	-----
	77.11	34	11.00	1.776E+00	1.269E-06	1.324E-06	45.93
	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	26	19.20*	1.852E+00	5.312E-07	5.543E-07	37.87
	351.87	53	37.10	1.662E+00	6.181E-07	6.449E-07	15.65
	785.83	-----	1.09	8.495E-01	-----	Line Not Found	-----
	839.00	-----	0.59	7.964E-01	-----	Line Not Found	-----

Nuclide Type: natural

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected uCi/GR	Decay Corr uCi/GR	1-Sigma %Error
AC-228	89.96	-----	3.40	2.201E+00	-----	Line Not Found	-----
	93.35	-----	5.60	2.279E+00	-----	Line Not Found	-----
	99.55	-----	1.30	2.389E+00	-----	Line Not Found	-----
	105.36	-----	2.00	2.463E+00	-----	Line Not Found	-----
	108.99	-----	0.67	2.496E+00	-----	Line Not Found	-----
	129.03	-----	2.90	2.562E+00	-----	Line Not Found	-----
	153.89	-----	0.84	2.496E+00	-----	Line Not Found	-----
	209.39	-----	4.10	2.221E+00	-----	Line Not Found	-----
	216.24	-----	0.80	2.187E+00	-----	Line Not Found	-----
	270.26	-----	3.80	1.948E+00	-----	Line Not Found	-----
	328.07	-----	3.50	1.738E+00	-----	Line Not Found	-----
	338.42	28	12.40	1.703E+00	9.466E-07	9.496E-07	28.36
	340.94	-----	0.52	1.696E+00	-----	Line Not Found	-----
	409.62	-----	2.20	1.499E+00	-----	Line Not Found	-----
	463.10	-----	4.60	1.368E+00	-----	Line Not Found	-----
	562.65	-----	1.01	1.164E+00	-----	Line Not Found	-----
	581.52	-----	3.00	1.131E+00	-----	Line Not Found	-----
	726.63	-----	0.87	9.173E-01	-----	Line Not Found	-----
	755.28	-----	1.32	8.833E-01	-----	Line Not Found	-----
	772.28	-----	1.09	8.641E-01	-----	Line Not Found	-----
	782.12	-----	0.59	8.534E-01	-----	Line Not Found	-----
	794.79	-----	4.60	8.400E-01	-----	Line Not Found	-----
	830.59	-----	0.63	8.043E-01	-----	Line Not Found	-----
	835.60	-----	1.71	7.996E-01	-----	Line Not Found	-----
	840.44	-----	0.94	7.951E-01	-----	Line Not Found	-----
	904.29	-----	0.89	7.403E-01	-----	Line Not Found	-----
	911.16	20	29.00*	7.348E-01	6.689E-07	6.710E-07	30.85
	964.64	-----	5.80	6.962E-01	-----	Line Not Found	-----
	968.97	-----	17.40	6.933E-01	-----	Line Not Found	-----
	1246.60	-----	0.57	5.673E-01	-----	Line Not Found	-----
	1459.19	-----	1.06	5.315E-01	-----	Line Not Found	-----
	1496.00	-----	1.05	5.296E-01	-----	Line Not Found	-----
	1501.44	-----	0.58	5.294E-01	-----	Line Not Found	-----
	1580.30	-----	0.71	5.295E-01	-----	Line Not Found	-----
	1588.23	-----	3.60	5.298E-01	-----	Line Not Found	-----
	1630.47	-----	1.95	5.324E-01	-----	Line Not Found	-----
	1638.10	-----	0.54	5.330E-01	-----	Line Not Found	-----

Flag: "*" = Keyline

Minimum Detectable Activity Report
Sample ID : 30340

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Acquisition date : 4-JUN-2014 15:39:08

Nuclide	Bckgnd Sum	Energy (keV)	MDA (uCi/GR)
BE-7	3.	477.61	5.4442E-07
MN-54	8.	834.83	1.4326E-07
MN-56	1.	846.81	6.8611E-08
CO-57	18.	122.06	7.3798E-08
CO-58	0.	810.79	2.3842E-08
CO-60	2.	1173.24	1.0901E-07
SB-124	0.	1690.98	7.7030E-08
SB-125	2.	427.88	1.5715E-07
CS-134	4.	604.71	8.1451E-08
CS-137	3.	661.66	9.1721E-08