Happy Valley Interim Source Removal Action (ISRA).
Soil Sampling for Radionuclides.
Results and Statistical Analysis.
Waste Certification.

This data package provides the laboratory results and statistical analysis of pre-excavation samples taken from the Happy Valley Interim Source Removal Action (ISRA) area. This analysis and data interpretation complies with procedures approved by the California Department of Public Health[1].

Forty eight (48) samples taken for waste disposal characterization were analyzed for strontium-90, tritium and gamma emitting radionuclides by gamma spectroscopy, using an off-site laboratory. Minimum detectable activity (MDA) for cesium-137 and strontium-90 averaged ~0.04 pCi/g and ~0.04 pCi/g respectively. Minimum detectable activity for tritium averaged ~1.0 pCi/g. The gamma spectroscopy library also included the following contaminants-of-concern: Na-22, K-40, Mn-54, Co-60, Cs-134, Cs-137, Eu-152, Eu-154, Th-228, Th-232, U-235, U-238 and Am-241. Laboratory data packages are available on request.

Statistical evaluation of sample analytical results to determine whether or not the sampled waste contains Cs-137 or Sr-90 activity elevated above local background was conducted using the Wilcoxon Rank Sum Test using protocols described in NUREG-1505[2] and DTSC guidance[3] (See Appendix 1). Appendix 2 shows the complete analytical results for all radionuclides. Complete laboratory data packages are available on request.

Local background data for cesium-137 and strontium-90 was taken from Table 20 of the 1995 McLaren/Hart report[4]. Background for tritium in soil is not well established, and is not reported in the 1995 McLaren/Hart report, therefore tritium background in soil is conservatively assumed to be zero. Tritium data is therefore compared to the MDA of the analysis and the EPA preliminary remediation goal (PRG)[5] for residential 10^{-6} risk.

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[1] Boeing, “Northern Drainage Waste Sampling for Radionuclides.” Revision 9, November 5, 2007. (Attachment 3 to Northern Drainage Work Plan) and “ISRA Waste Sampling for Radionuclides”, Attachment A to the ISRA Soil Management Plan.

[2] NUREG-1505, Nuclear Regulatory Commission, “A Non-parametric Statistical Methodology for the Design and Analysis of Final Status Decommissioning Surveys.” January 1998. http://www.philrutherford.com/Radiation_Cleanup_Standards/NUREG-1505.pdf

[3] DTSC, “Selecting Inorganic Constituents as Chemicals of Concern at Risk Assessments at Hazardous Waste Sites and Permitted Facilities.” February 1997.

[4] McLaren/Hart, "Additional Soil and Water Sampling at the Brandeis-Bardin Institute and Santa Monica Mountains Conservancy." Jan 19, 1995. http://www.etec.energy.gov/Health-and-Safety/Documents/BrandeisBardin/AddSoilandWaterSamp.pdf

[5] EPA preliminary remediation goals for radionuclides - http://epa-prgs.ornl.gov/radionuclides/.

Conclusions

Cesium-137 - Based on the results of the statistical analysis of Appendix 1, soil to be excavated from the Happy Valley ISRA area does not exceed the local background for Cs-137. The incremental dose from Cs-137 above background is therefore zero mrem/y. The highest Cs-137 result is 0.113 pCi/g which is less than the highest background result. The highest non-background subtracted Cs-137 result is less than an effective dose of 0.08 mrem/y[6].

Strontium-90 - Based on the results of the statistical analysis of Appendix 1, soil to be excavated from the Happy Valley ISRA area does not exceed the local background for Sr-90. The incremental dose from Sr-90 above background is therefore zero mrem/y. The highest Sr-90 result is 0.042 pCi/g which is less than the highest background result. The highest non-background subtracted Sr-90 result is less than an effective dose of 0.013 mrem/y[6].

Tritium - All tritium results are non-detect, the average tritium result is -0.22 pCi/g and the highest non-detect tritium result is 0.39 pCi/g. The highest non-detect, non-background subtracted tritium result is less than an effective dose of 0.0055 mrem/y[6].

This waste is certified to be "radiologically" acceptable for shipment to, and disposal at, any Class 1, 2 or 3 disposal facility. There are no radiological controls or restrictions imposed on future disposition or use of this soil.

This waste meets the requirements of disposal facility permits[7,8] and complies with the California Health & Safety Code[9].

The Governor's Executive Order D-62-02 prohibits the *"disposal of decommissioned materials to Class III landfills or unclassified management units."* The soil from the Happy Valley ISRA area is

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[6] EPA dose compliance concentrations for radionuclides - http://epa-dccs.ornl.gov/.
Soil concentrations that meet the 10^{-6} residential risk PRG are < 0.1 mrem/y. The Cs-137 residential PRG of 0.0597 pCi/g is equivalent to 0.042 mrem/y. The Sr-90 residential PRG of 0.231 pCi/g is equivalent to 0.071 mrem/y. The tritium residential PRG of 2.28 pCi/g is equivalent to 0.032 mrem/y.

[7] This waste is exempt from regulation and licensing or is expressly authorized for disposal under the Radiation Control Law (Division 104, Part 9, Chapter 8 of the California Health & Safety Code).

[8] This waste is not prohibited from disposal by any government agency with jurisdictional authority over this waste.

[9] Division 104, Part 9, Chapter 5, Article 1, Section 114715, "No person shall bury, throw away, or in any manner dispose of radioactive wastes within the state except in a manner and at locations as will result in no significant radioactive contamination of the environment." For the purposes of this requirement, "significant" is defined in Section 114710 as amounts of radioactive materials that are likely to expose persons to ionizing radiation greater than the guide levels published by the Federal Radiation Council (FRC). The FRC no longer exists, but the applicable guide level last published by the FRC was 500 mrem per year to a member of the public. Because the regulatory dose limit to members of the public has since been lowered to 100 mrem per year, CDPH/RHB conservatively utilizes the lower dose for purposes of defining "significant" radioactive contamination in this Article of the California Health and Safety Code.
http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=114001-115000&file=114705-114780

not decommissioned material, and does not originate from the proximity of any radiological facility. The sampling in this certification has therefore been conducted as a best management practice that also complies with the requirements of D-62-02. Verification sampling and/or approval by the California Department of Public Health (CDPH) Radiologic Health Branch (RHB) are not required for the off-site disposal of decommissioned material or of the subject material[10].

Phil Rutherford
Manager, Health, Safety & Radiation Services

[10] The California Department of Public Health (CDPH) Radiologic Health Branch (RHB) has stated in a November 9, 2007 email to Phil Rutherford (Boeing) … *"The Governor's Executive Order D-62-02, does not specifically require the Department of Health Services (now the Department of Public Health) to perform verification sampling of decommissioned material or to provide approval for disposal of specific decommissioned material shipped offsite (e.g., to Class I or II landfills). The California DPH has not imposed a requirement that Boeing or the Department of Energy (DOE) seek DPH verification sampling or approval of all decommissioned material destined for Class I or II landfills in compliance with the Governor's Executive Order."*

Appendix 1

Wilcoxon Rank Sum Statistical Test for Cesium-137 and Strontium-90

Wilcoxon Rank Sum Test -- (Cesium-137)

General Information:
The WRS tests whether or not measurements of samples from a survey area (S)
tend to be consistently larger than those from a background reference area (R) by more than the DCGL.

The null hypothesis, Ho, is: Survey sample concentrations exceed those in the background
The alternative hypothesis, Ha, is: Survey sample concentrations do not exceed those in the background

Instruction on how to use this template:
1) Enter analysis results in pCi/gram
2) Enter number of samples for background and survey data sets, m and n.
3) The WRS test is calculated using the method prescribed in
NUREG-1505, Nuclear Regulatory Commission, "A Non-parametric Statistical Methodology for the Design and Analysis of Final Status Decommissioning Surveys." January 1998.

DCGL (pCi/g)	0.00
Type I Error Rate, Alpha:	0.05
Type II Error Rate, Beta:	0.05
Number of Background Samples, m:	51
Number of Survey Samples, n:	48
Z-value for Alpha	1.645
Critical Value	2785
Sum of Reference Ranks	3286

If the sum of the reference ranks is larger than the critical value, there is enough evidence to reject the null hypothesis and accept the alterrnative hypothesis. Otherwise the null hypothesis is accepted.

Test Result:
Survey sample concentrations do not exceed those in the background by more than the DCGL

	Bkgd Ref (R)	Survey (S)
Mean	0.087	0.027
Max	0.213	0.113
Min	0.015	-0.023
σ	0.062	0.034
m-1.96*σ	-0.035	-0.040
m+1.96*σ	0.210	0.094

No.	Soil ID	Cs-137	Adjusted Cs-137	Area	Ranks	Reference Ranks
1		0.092	0.092	R	74	74
2		0.020	0.020	R	32	32
3		0.020	0.020	R	32	32
4		0.100	0.100	R	78.5	78.5
5		0.020	0.020	R	32	32
6		0.158	0.158	R	91.5	91.5
7		0.175	0.175	R	93	93
8		0.209	0.209	R	98	98
9		0.180	0.180	R	94	94
10		0.030	0.030	R	43	43
11		0.213	0.213	R	99	99
12		0.025	0.025	R	38	38
13		0.020	0.020	R	32	32
14		0.020	0.020	R	32	32
15		0.074	0.074	R	66	66
16		0.147	0.147	R	87	87
17		0.100	0.100	R	78.5	78.5
18		0.067	0.067	R	63.5	63.5
19		0.099	0.099	R	77	77

No.	Soil ID	Cs-137	Adjusted Cs-137	Area	Ranks	Reference Ranks
20		0.101	0.101	R	80	80
21		0.148	0.148	R	88	88
22		0.153	0.153	R	90	90
23		0.025	0.025	R	38	38
24		0.188	0.188	R	95	95
25		0.198	0.198	R	97	97
26		0.030	0.030	R	43	43
27		0.079	0.079	R	69	69
28		0.158	0.158	R	91.5	91.5
29		0.109	0.109	R	82	82
30		0.059	0.059	R	60	60
31		0.067	0.067	R	63.5	63.5
32		0.113	0.113	R	83.5	83.5
33		0.015	0.015	R	25	25
34		0.031	0.031	R	45	45
35		0.042	0.042	R	54	54
36		0.097	0.097	R	75.5	75.5
37		0.015	0.015	R	25	25
38		0.020	0.020	R	32	32
39		0.085	0.085	R	71	71
40		0.080	0.080	R	70	70
41		0.015	0.015	R	25	25
42		0.020	0.020	R	32	32
43		0.035	0.035	R	48.5	48.5
44		0.035	0.035	R	48.5	48.5
45		0.025	0.025	R	38	38
46		0.150	0.150	R	89	89
47		0.140	0.140	R	85.5	85.5
48		0.190	0.190	R	96	96
49		0.097	0.097	R	75.5	75.5
50		0.030	0.030	R	43	43
51		0.140	0.140	R	85.5	85.5
52	ISWC0001S001	-0.010	-0.010	S	6	0
53	ISWC0002S001	0.008	0.008	S	20	0
54	ISWC0003S001	0.000	0.000	S	11.5	0
55	ISWC0004S001	0.018	0.018	S	27	0
56	ISWC0005S001	0.040	0.040	S	51	0
57	ISWC0006S001	0.052	0.052	S	57	0
58	ISWC0009S001	0.087	0.087	S	72	0
59	ISWC0010S001	0.087	0.087	S	73	0
60	ISWC0011S001	0.065	0.065	S	62	0
61	ISWC0012S001	0.034	0.034	S	47	0
62	ISWC0013S001	0.023	0.023	S	36	0
63	ISWC0014S001	0.070	0.070	S	65	0
64	ISWC0015S001	0.113	0.113	S	83.5	0
65	ISWC0016S001	0.029	0.029	S	40	0
66	ISWC0019S001	0.001	0.001	S	14	0
67	ISWC0020S001	0.042	0.042	S	55	0
68	ISWC0023S001	0.041	0.041	S	52	0
69	ISWC0024S001	-0.001	-0.001	S	10	0
70	ISWC0028S001	0.036	0.036	S	50	0
71	ISWC0041S001	0.001	0.001	S	15	0
72	ISWC0042S001	-0.022	-0.022	S	2	0
73	ISWC0043S001	0.000	0.000	S	13	0
74	ISWC0044S001	-0.002	-0.002	S	9	0
75	ISWC0045S001	0.031	0.031	S	46	0
76	ISWC0046S001	0.102	0.102	S	81	0
77	ISWC0047S001	-0.003	-0.003	S	8	0
78	ISWC0048S001	0.018	0.018	S	28	0
79	ISWC0077RadS001	0.047	0.047	S	56	0
80	ISWC0078RadS001	0.007	0.007	S	19	0
81	ISWC0079RadS001	-0.013	-0.013	S	4	0

No.	Soil ID	Cs-137	Adjusted Cs-137	Area	Ranks	Reference Ranks
82	ISWC0080RadS001	0.003	0.003	S	18	0
83	ISWC0081RadS001	-0.010	-0.010	S	5	0
84	ISWC0084RadS001	0.010	0.010	S	21	0
85	ISWC0085RadS001	0.001	0.001	S	16	0
86	ISWC0086RadS001	0.010	0.010	S	22	0
87	ISWC0087RadS001	0.042	0.042	S	53	0
88	ISWC0088RadS001	-0.019	-0.019	S	3	0
89	ISWC0089RadS001	0.002	0.002	S	17	0
90	ISWC0090RadS001	0.058	0.058	S	59	0
91	ISWC0091RadS001	0.061	0.061	S	61	0
92	ISWC0092RadS001	0.074	0.074	S	67	0
93	ISWC0093RadS001	0.012	0.012	S	23	0
94	ISWC0082RadS001	0.076	0.076	S	68	0
95	ISWC0083RadS001	0.000	0.000	S	11.5	0
96	ISWC0094RadS001	-0.005	-0.005	S	7	0
97	ISWC0095RadS001	-0.023	-0.023	S	1	0
98	ISWC0112S001	0.030	0.030	S	41	0
99	ISWC0113S001	0.054	0.054	S	58	0
				Sum	4950	3285.5

Wilcoxon Rank Sum Test -- (Strontium-90)

General Information:
The WRS tests whether or not measurements of samples from a survey area (S)
tend to be consistently larger than those from a background reference area (R) by more than the DCGL.

The null hypothesis, Ho, is: Survey sample concentrations exceed those in the background
The alternative hypothesis, Ha, is: Survey sample concentrations do not exceed those in the background

Instruction on how to use this template:
1) Enter analysis results in pCi/gram
2) Enter number of samples for background and survey data sets, m and n.
3) The WRS test is calculated using the method prescribed in
NUREG-1505, Nuclear Regulatory Commission, "A Non-parametric Statistical Methodology for the Design and Analysis of Final Status Decommissioning Surveys." January 1998.

DCGL (pCi/g)	0.00
Type I Error Rate, Alpha:	0.05
Type II Error Rate, Beta:	0.05
Number of Background Samples, m:	51
Number of Survey Samples, n:	48
Z-value for Alpha	1.645
Critical Value	2785
Sum of Reference Ranks	3471

If the sum of the reference ranks is larger than the critical value, there is enough evidence to reject the null hypothesis and accept the alterrnative hypothesis. Otherwise the null hypothesis is accepted.

Test Result:
Survey sample concentrations do not exceed those in the background by more than the DCGL

	Bkgd Ref (R)	Survey (S)
Mean	0.051	0.016
Max	0.130	0.042
Min	0.005	-0.018
σ	0.030	0.016
m-1.96*σ	-0.008	-0.015
m+1.96*σ	0.109	0.048

No.	Soil ID	Sr-90	Adjusted Sr-90	Area	Ranks	Reference Ranks
1		0.030	0.030	R	49	49
2		0.010	0.010	R	22.5	22.5
3		0.045	0.045	R	74.5	74.5
4		0.045	0.045	R	74.5	74.5
5		0.050	0.050	R	84	84
6		0.040	0.040	R	64	64
7		0.035	0.035	R	54.5	54.5
8		0.050	0.050	R	84	84
9		0.050	0.050	R	84	84
10		0.130	0.130	R	98.5	98.5
11		0.120	0.120	R	97	97
12		0.040	0.040	R	64	64
13		0.045	0.045	R	74.5	74.5
14		0.130	0.130	R	98.5	98.5
15		0.050	0.050	R	84	84
16		0.088	0.088	R	92	92
17		0.080	0.080	R	89	89
18		0.100	0.100	R	96	96
19		0.069	0.069	R	88	88
20		0.097	0.097	R	94	94
21		0.084	0.084	R	91	91

No.	Soil ID	Sr-90	Adjusted Sr-90	Area	Ranks	Reference Ranks
22		0.098	0.098	R	95	95
23		0.045	0.045	R	74.5	74.5
24		0.045	0.045	R	74.5	74.5
25		0.020	0.020	R	30	30
26		0.045	0.045	R	74.5	74.5
27		0.089	0.089	R	93	93
28		0.050	0.050	R	84	84
29		0.045	0.045	R	74.5	74.5
30		0.050	0.050	R	84	84
31		0.045	0.045	R	74.5	74.5
32		0.040	0.040	R	64	64
33		0.045	0.045	R	74.5	74.5
34		0.045	0.045	R	74.5	74.5
35		0.045	0.045	R	74.5	74.5
36		0.025	0.025	R	39.5	39.5
37		0.082	0.082	R	90	90
38		0.045	0.045	R	74.5	74.5
39		0.040	0.040	R	64	64
40		0.035	0.035	R	54.5	54.5
41		0.025	0.025	R	39.5	39.5
42		0.005	0.005	R	17	17
43		0.020	0.020	R	30	30
44		0.010	0.010	R	22.5	22.5
45		0.020	0.020	R	30	30
46		0.020	0.020	R	30	30
47		0.050	0.050	R	84	84
48		0.030	0.030	R	49	49
49		0.030	0.030	R	49	49
50		0.020	0.020	R	30	30
51		0.040	0.040	R	64	64
52	ISWC0001S001	0.024	0.024	S	35.5	0
53	ISWC0002S001	0.015	0.015	S	27	0
54	ISWC0003S001	0.001	0.001	S	13	0
55	ISWC0004S001	0.025	0.025	S	38	0
56	ISWC0005S001	0.022	0.022	S	33	0
57	ISWC0006S001	0.042	0.042	S	67	0
58	ISWC0009S001	0.027	0.027	S	42	0
59	ISWC0010S001	-0.002	-0.002	S	5	0
60	ISWC0011S001	0.024	0.024	S	35.5	0
61	ISWC0012S001	0.034	0.034	S	53	0
62	ISWC0013S001	0.030	0.030	S	46	0
63	ISWC0014S001	0.036	0.036	S	57	0
64	ISWC0015S001	0.003	0.003	S	15	0
65	ISWC0016S001	0.009	0.009	S	21	0
66	ISWC0019S001	-0.001	-0.001	S	6	0
67	ISWC0020S001	-0.018	-0.018	S	1	0
68	ISWC0023S001	0.037	0.037	S	59	0
69	ISWC0024S001	0.025	0.025	S	37	0
70	ISWC0028S001	0.033	0.033	S	52	0
71	ISWC0041S001	0.036	0.036	S	56	0
72	ISWC0042S001	0.009	0.009	S	20	0
73	ISWC0043S001	0.005	0.005	S	16	0
74	ISWC0044S001	-0.001	-0.001	S	7	0
75	ISWC0045S001	-0.010	-0.010	S	2	0
76	ISWC0046S001	0.038	0.038	S	60	0
77	ISWC0047S001	0.037	0.037	S	58	0
78	ISWC0048S001	-0.001	-0.001	S	8	0
79	ISWC0077RadS001	0.031	0.031	S	51	0
80	ISWC0078RadS001	0.000	0.000	S	12	0
81	ISWC0079RadS001	0.002	0.002	S	14	0
82	ISWC0080RadS001	0.023	0.023	S	34	0
83	ISWC0081RadS001	0.014	0.014	S	26	0
84	ISWC0084RadS001	0.008	0.008	S	19	0

No.	Soil ID	Sr-90	Adjusted Sr-90	Area	Ranks	Reference Ranks
85	ISWC0085RadS001	0.042	0.042	S	68	0
86	ISWC0086RadS001	0.000	0.000	S	10	0
87	ISWC0087RadS001	0.000	0.000	S	9	0
88	ISWC0088RadS001	0.005	0.005	S	18	0
89	ISWC0089RadS001	0.010	0.010	S	24	0
90	ISWC0090RadS001	0.030	0.030	S	47	0
91	ISWC0091RadS001	0.027	0.027	S	43	0
92	ISWC0092RadS001	0.026	0.026	S	41	0
93	ISWC0093RadS001	0.027	0.027	S	44	0
94	ISWC0082RadS001	0.000	0.000	S	11	0
95	ISWC0083RadS001	0.038	0.038	S	61	0
96	ISWC0094RadS001	-0.004	-0.004	S	4	0
97	ISWC0095RadS001	-0.010	-0.010	S	3	0
98	ISWC0112S001	0.011	0.011	S	25	0
99	ISWC0113S001	0.028	0.028	S	45	0
				Sum	4950	3471

Soil Data from Happy Valley ISRA

No.	Sample ID	Stockpile ID	Sampling Date	Laboratory Batch	Cesium-137 (pCi/g)				Strontium-90 (pCi/g)				Tritium (pCi/g)			
					Activity	+/- 2σ Error	MDA	Non-detect?	Activity	+/- 2σ Error	MDA	Non-detect?	Activity	+/- 2σ Error	MDA	Non-detect?
1	ISWC0001S001	N/A	7/1/2009	233955	-0.0102	0.0289	0.0501	NDA	0.0237	0.0284	0.0479	NDA	-0.271	0.381	0.757	NDA
2	ISWC0002S001	N/A	7/1/2009	233955	0.00772	0.021	0.0372	NDA	0.0154	0.0261	0.0449	NDA	-0.723	0.768	1.37	NDA
3	ISWC0003S001	N/A	7/1/2009	233955	0	0.0561	0.052	NDA	0.000558	0.0236	0.0473	NDA	0.342	0.468	0.798	NDA
4	ISWC0004S001	N/A	7/1/2009	233955	0.0181	0.0229	0.0416	NDA	0.0247	0.027	0.0446	NDA	-0.56	0.784	1.39	NDA
5	ISWC0005S001	N/A	7/1/2009	233955	0.0396	0.0286	0.0507	NDA	0.0217	0.025	0.0421	NDA	-0.883	0.745	1.34	NDA
6	ISWC0006S001	N/A	7/1/2009	233955	0.0524	0.0418	0.0459		0.0415	0.0231	0.0322		-0.946	0.768	1.39	NDA
7	ISWC0009S001	N/A	7/1/2009	233955	0.0865	0.037	0.0343		0.027	0.028	0.0468	NDA	0.387	0.46	0.774	NDA
8	ISWC0010S001	N/A	7/1/2009	233955	0.0868	0.0252	0.0295		-0.00173	0.0272	0.0477	NDA	0.124	0.445	0.765	NDA
9	ISWC0011S001	N/A	7/1/2009	233955	0.0654	0.0389	0.0423		0.0237	0.0279	0.0469	NDA	0	0.437	0.76	NDA
10	ISWC0012S001	N/A	7/1/2009	233955	0.0342	0.0414	0.0482	NDA	0.0344	0.0254	0.0413	NDA	-0.412	0.423	0.762	NDA
11	ISWC0013S001	N/A	7/1/2009	233955	0.0231	0.0247	0.0452	NDA	0.0298	0.0281	0.0468	NDA	-0.164	0.43	0.757	NDA
12	ISWC0014S001	N/A	7/1/2009	233955	0.0704	0.0289	0.0323		0.0361	0.0196	0.0276		-0.297	0.425	0.758	NDA
13	ISWC0015S001	N/A	7/1/2009	233955	0.113	0.0458	0.0383		0.0034	0.0253	0.0456	NDA	-0.164	0.431	0.76	NDA
14	ISWC0016S001	N/A	7/1/2009	233955	0.0291	0.0277	0.0493	NDA	0.00886	0.0183	0.0327	NDA	-0.0409	0.434	0.757	NDA
15	ISWC0019S001	N/A	7/1/2009	233955	0.000785	0.0212	0.0362	NDA	-0.00142	0.0243	0.0454	NDA	-0.343	0.788	1.39	NDA
16	ISWC0020S001	N/A	7/1/2009	233955	0.0421	0.0202	0.0242		-0.0182	0.0257	0.0469	NDA	-0.994	0.75	1.36	NDA
17	ISWC0023S001	N/A	7/1/2009	233955	0.0408	0.0219	0.027		0.0371	0.0289	0.0475	NDA	-0.776	0.776	1.39	NDA
18	ISWC0024S001	N/A	7/1/2009	233955	-0.00101	0.0189	0.0321	NDA	0.0245	0.0284	0.0478	NDA	0.052	0.444	0.768	NDA
19	ISWC0028S001	N/A	7/1/2009	233955	0.0361	0.025	0.0453	NDA	0.0329	0.0269	0.043	NDA	0.174	0.443	0.758	NDA
20	ISWC0041S001	N/A	7/1/2009	233955	0.000885	0.0165	0.0292	NDA	0.0359	0.0232	0.0373	NDA	0.155	0.408	0.723	NDA
21	ISWC0042S001	N/A	7/1/2009	233955	-0.0218	0.025	0.038	NDA	0.00868	0.0256	0.0444	NDA	-0.728	0.773	1.38	NDA
22	ISWC0043S001	N/A	7/1/2009	233955	0.000188	0.0206	0.0362	NDA	0.00492	0.022	0.0381	NDA	-1.08	0.761	1.38	NDA
23	ISWC0044S001	N/A	7/1/2009	233955	-0.00186	0.0209	0.0356	NDA	-0.00133	0.0222	0.0398	NDA	-0.386	0.786	1.39	NDA
24	ISWC0045S001	N/A	7/1/2009	233955	0.0312	0.0345	0.0401	NDA	-0.01	0.0267	0.0481	NDA	-0.509	0.772	1.37	NDA
25	ISWC0046S001	N/A	7/1/2009	233955	0.102	0.0279	0.0283		0.0375	0.0217	0.032		-0.428	0.782	1.38	NDA
26	ISWC0047S001	N/A	7/1/2009	233955	-0.00259	0.0197	0.0346	NDA	0.0365	0.0283	0.0462	NDA	-1.12	0.777	1.41	NDA
27	ISWC0048S001	N/A	7/1/2009	233955	0.0182	0.0286	0.051	NDA	-0.000557	0.0173	0.0334	NDA	-0.435	0.779	1.38	NDA
28	ISWC0077RadS001	N/A	7/29/2009	234325	0.0466	0.0253	0.0324		0.0307	0.0238	0.0372	NDA	-0.202	0.488	0.946	NDA
29	ISWC0078RadS001	N/A	7/29/2009	234325	0.00741	0.0218	0.0384	NDA	0.0004	0.0232	0.0459	NDA	-0.0891	0.508	0.958	NDA
30	ISWC0079RadS001	N/A	7/29/2009	234325	-0.0128	0.0199	0.0342	NDA	0.00167	0.0184	0.0353	NDA	-0.0547	0.524	0.981	NDA
31	ISWC0080RadS001	N/A	7/29/2009	234325	0.00257	0.0275	0.0485	NDA	0.0227	0.019	0.0295	NDA	0.26	0.346	0.588	NDA
32	ISWC0081RadS001	N/A	7/29/2009	234325	-0.0104	0.0237	0.0405	NDA	0.0142	0.017	0.0287	NDA	-0.198	0.479	0.928	NDA
33	ISWC0084RadS001	N/A	7/29/2009	234325	0.00972	0.0292	0.0503	NDA	0.00833	0.0263	0.0455	NDA	0.124	0.529	0.954	NDA
34	ISWC0085RadS001	N/A	7/29/2009	234325	0.00143	0.0315	0.054	NDA	0.0419	0.0261	0.0419	NDA	-0.0553	0.529	0.99	NDA
35	ISWC0086RadS001	N/A	7/29/2009	234325	0.0101	0.0252	0.043	NDA	0.000108	0.0164	0.0334	NDA	-0.0265	0.511	0.951	NDA
36	ISWC0087RadS001	N/A	7/29/2009	234325	0.0416	0.0345	0.0431	NDA	3.85E-05	0.0223	0.0397	NDA	0	0.516	0.955	NDA
37	ISWC0088RadS001	N/A	7/29/2009	234325	-0.0187	0.0256	0.0429	NDA	0.00507	0.0218	0.0381	NDA	0.155	0.342	0.598	NDA
38	ISWC0089RadS001	N/A	7/29/2009	234325	0.00158	0.0276	0.0449	NDA	0.0103	0.0272	0.0471	NDA	-0.0415	0.528	0.943	NDA
39	ISWC0090RadS001	N/A	7/29/2009	234325	0.0578	0.0398	0.0413		0.0299	0.0272	0.0451	NDA	-0.0613	0.484	0.898	NDA
40	ISWC0091RadS001	N/A	7/29/2009	234325	0.0611	0.0403	0.044		0.0272	0.0283	0.0472	NDA	-0.183	0.513	0.987	NDA
41	ISWC0092RadS001	N/A	7/29/2009	234325	0.0743	0.0305	0.0407		0.0264	0.0247	0.041	NDA	0.0279	0.537	0.951	NDA
42	ISWC0093RadS001	N/A	7/29/2009	234325	0.0124	0.0255	0.0441	NDA	0.0273	0.0216	0.0333	NDA	-0.331	0.483	0.963	NDA
43	ISWC0082RadS001	N/A	7/30/2009	234376	0.076	0.0434	0.0391		0.000193	0.0153	0.0306	NDA	0.217	0.391	0.677	NDA
44	ISWC0083RadS001	N/A	7/30/2009	234376	0	0.0279	0.053	NDA	0.0378	0.0236	0.0348		0.0694	0.379	0.677	NDA
45	ISWC0094RadS001	N/A	8/17/2009	235405	-0.00482	0.0288	0.0505	NDA	-0.00381	0.026	0.0476	NDA	-0.0872	0.703	1.25	NDA
46	ISWC0095RadS001	N/A	8/17/2009	235405	-0.023	0.0254	0.0409	NDA	-0.00968	0.0123	0.0296	NDA	-0.423	0.678	1.24	NDA
47	ISWC0112S001	N/A	9/14/2009	237286	0.0299	0.0257	0.0465	NDA	0.0108	0.024	0.0436	NDA	0.187	0.603	1.03	NDA
48	ISWC0113S001	N/A	10/22/2009	239640	0.0537	0.0358	0.0435		0.0276	0.0257	0.0414	NDA	0.182	0.408	0.702	NDA

	Cesium-137 (pCi/g)				Strontium-90 (pCi/g)				Tritium (pCi/g)			
	Activity		MDA	Non-detect?	Activity		MDA	Non-detect?	Activity		MDA	Non-detect?
Average	0.027		0.041		0.016		0.041		-0.220		1.008	
Maximum	0.113		0.054		0.042		0.048		0.387		1.410	
Minimum	-0.023		0.024		-0.018		0.028		-1.120		0.588	

Soil Data from Happy Valley ISRA

No.	Sample ID	Stockpile ID	Sampling Date	Laboratory Batch	Cesium-137 (pCi/g)				Strontium-90 (pCi/g)				Tritium (pCi/g)			
					Activity	+/- 2σ Error	MDA	Non-detect?	Activity	+/- 2σ Error	MDA	Non-detect?	Activity	+/- 2σ Error	MDA	Non-detect?
				Count				48				48				48
				Number of Non-Detects				33				44				48
				% Non-Detects				69%				92%				100%

Appendix 2

Analytical Radionuclide Results

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Americium-241	0.0438	0.0418	0.0699	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Americium-241	0.0763	0.0943	0.159	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Americium-241	0	0.045	0.0779	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Americium-241	0.0361	0.0653	0.111	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Americium-241	0.0356	0.088	0.135	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Americium-241	0.0882	0.12	0.187	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Americium-241	0.041	0.0327	0.0551	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Americium-241	0.0682	0.075	0.121	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Americium-241	0.117	0.15	0.256	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Americium-241	0.0361	0.0433	0.0728	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Americium-241	0.102	0.109	0.202	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Americium-241	-0.00247	0.142	0.237	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Americium-241	0.000668	0.0912	0.154	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Americium-241	0	0.0359	0.064	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Americium-241	0.032	0.0285	0.0492	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Americium-241	0.024	0.0997	0.169	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Americium-241	0.0277	0.0587	0.0903	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Americium-241	0.0735	0.131	0.218	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Americium-241	-0.00721	0.0853	0.134	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Americium-241	-0.00475	0.0946	0.17	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Americium-241	-0.0522	0.108	0.201	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Americium-241	0.0281	0.0606	0.103	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Americium-241	0.0134	0.0753	0.126	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Americium-241	0.0854	0.101	0.172	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Americium-241	0.00218	0.0854	0.139	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Americium-241	0.0723	0.0713	0.121	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Americium-241	0.0194	0.0848	0.129	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Americium-241	0.0444	0.104	0.178	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Americium-241	0.0576	0.0979	0.163	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Americium-241	0.0602	0.072	0.122	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Americium-241	0.0571	0.0393	0.0636	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Americium-241	0.0281	0.114	0.196	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Americium-241	0.0579	0.0415	0.0708	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Americium-241	0.0558	0.0431	0.0655	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Americium-241	0.0995	0.0861	0.14	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Americium-241	0.0587	0.119	0.187	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Americium-241	0.0917	0.115	0.191	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Americium-241	0.0465	0.101	0.166	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Americium-241	0.057	0.0386	0.0635	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Americium-241	0.0361	0.0405	0.0691	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Americium-241	0.00232	0.132	0.235	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Americium-241	0.0458	0.0866	0.142	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Americium-241	0.0519	0.14	0.241	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Americium-241	-0.0451	0.0703	0.112	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Americium-241	0	0.0435	0.0735	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Americium-241	0.00138	0.0376	0.0619	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Americium-241	0.129	0.129	0.217	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Americium-241	-0.03	0.0839	0.129	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Cesium-134	0	0.0634	0.0746	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Cesium-134	0	0.0445	0.0544	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Cesium-134	0	0.0428	0.0722	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Cesium-134	0	0.0444	0.0571	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Cesium-134	0	0.0483	0.0672	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Cesium-134	0	0.0558	0.071	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Cesium-134	0	0.0421	0.0528	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Cesium-134	0	0.0314	0.0396	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Cesium-134	0	0.0453	0.0591	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Cesium-134	0.0628	0.0442	0.069	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Cesium-134	0	0.0413	0.058	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Cesium-134	0	0.0397	0.0557	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Cesium-134	0	0.0351	0.0564	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Cesium-134	0	0.038	0.0632	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Cesium-134	0	0.0351	0.0503	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Cesium-134	0	0.03	0.0419	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Cesium-134	0	0.0331	0.0384	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Cesium-134	0	0.0294	0.0433	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Cesium-134	0	0.0465	0.055	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Cesium-134	0	0.0358	0.0429	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Cesium-134	0	0.0519	0.0602	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Cesium-134	0	0.0346	0.0536	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Cesium-134	0	0.0355	0.054	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Cesium-134	0.0523	0.0339	0.0524	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Cesium-134	0	0.0342	0.042	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Cesium-134	0	0.0388	0.0511	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Cesium-134	0	0.0488	0.0711	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Cesium-134	0	0.029	0.042	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Cesium-134	0.0395	0.0289	0.0527	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Cesium-134	0	0.0347	0.0525	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Cesium-134	0	0.0424	0.0684	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Cesium-134	0	0.0551	0.0598	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Cesium-134	0	0.0369	0.063	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Cesium-134	0	0.0435	0.0793	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Cesium-134	0.0577	0.0324	0.0594	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Cesium-134	0	0.0406	0.064	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Cesium-134	0	0.0419	0.0583	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Cesium-134	0.0371	0.0532	0.0609	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Cesium-134	0	0.0316	0.059	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Cesium-134	0	0.0506	0.0629	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Cesium-134	0	0.0449	0.0542	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Cesium-134	0	0.0395	0.0557	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Cesium-134	0	0.0464	0.0587	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Cesium-134	0	0.0425	0.0616	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Cesium-134	0	0.0701	0.0752	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Cesium-134	0	0.0352	0.063	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Cesium-134	0	0.0612	0.0634	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Cesium-134	0	0.0385	0.0585	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Cesium-137	-0.0102	0.0289	0.0501	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Cesium-137	0.00772	0.021	0.0372	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Cesium-137	0	0.0561	0.052	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Cesium-137	0.0181	0.0229	0.0416	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Cesium-137	0.0396	0.0286	0.0507	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Cesium-137	0.0524	0.0418	0.0459		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Cesium-137	0.0865	0.037	0.0343		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Cesium-137	0.0868	0.0252	0.0295		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Cesium-137	0.0654	0.0389	0.0423		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Cesium-137	0.0342	0.0414	0.0482	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Cesium-137	0.0231	0.0247	0.0452	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Cesium-137	0.0704	0.0289	0.0323		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Cesium-137	0.113	0.0458	0.0383		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Cesium-137	0.0291	0.0277	0.0493	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Cesium-137	0.000785	0.0212	0.0362	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Cesium-137	0.0421	0.0202	0.0242		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Cesium-137	0.0408	0.0219	0.027		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Cesium-137	-0.00101	0.0189	0.0321	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Cesium-137	0.0361	0.025	0.0453	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Cesium-137	0.000885	0.0165	0.0292	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Cesium-137	-0.0218	0.025	0.038	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Cesium-137	0.000188	0.0206	0.0362	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Cesium-137	-0.00186	0.0209	0.0356	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Cesium-137	0.0312	0.0345	0.0401	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Cesium-137	0.102	0.0279	0.0283		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Cesium-137	-0.00259	0.0197	0.0346	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Cesium-137	0.0182	0.0286	0.051	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Cesium-137	0.0466	0.0253	0.0324		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Cesium-137	0.00741	0.0218	0.0384	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Cesium-137	-0.0128	0.0199	0.0342	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Cesium-137	0.00257	0.0275	0.0485	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Cesium-137	-0.0104	0.0237	0.0405	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Cesium-137	0.00972	0.0292	0.0503	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Cesium-137	0.00143	0.0315	0.054	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Cesium-137	0.0101	0.0252	0.043	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Cesium-137	0.0416	0.0345	0.0431	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Cesium-137	-0.0187	0.0256	0.0429	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Cesium-137	0.00158	0.0276	0.0449	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Cesium-137	0.0578	0.0398	0.0413		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Cesium-137	0.0611	0.0403	0.044		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial

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ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Cesium-137	0.0743	0.0305	0.0407		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Cesium-137	0.0124	0.0255	0.0441	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Cesium-137	0.076	0.0434	0.0391		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Cesium-137	0	0.0279	0.053	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Cesium-137	-0.00482	0.0288	0.0505	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Cesium-137	-0.023	0.0254	0.0409	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Cesium-137	0.0299	0.0257	0.0465	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Cesium-137	0.0537	0.0358	0.0435		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Cobalt-60	0.031	0.0293	0.0551	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Cobalt-60	0.0124	0.0206	0.0371	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Cobalt-60	0.014	0.0322	0.0561	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Cobalt-60	0.000528	0.0241	0.0411	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Cobalt-60	-0.0154	0.0309	0.0489	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Cobalt-60	0.00362	0.0326	0.0548	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Cobalt-60	0.0124	0.0215	0.0373	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Cobalt-60	-0.0049	0.0173	0.029	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Cobalt-60	-0.0224	0.0252	0.0397	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Cobalt-60	0.00573	0.0276	0.0467	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Cobalt-60	0.0227	0.0245	0.0451	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Cobalt-60	0.01	0.0268	0.0443	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Cobalt-60	0.00574	0.0238	0.041	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Cobalt-60	0.0232	0.026	0.047	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Cobalt-60	0.0189	0.0207	0.0369	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Cobalt-60	0.00346	0.019	0.0289	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Cobalt-60	0.012	0.0157	0.0276	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Cobalt-60	-0.0233	0.0177	0.027	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Cobalt-60	0.00378	0.0262	0.0446	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Cobalt-60	0.00524	0.0171	0.0296	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Cobalt-60	0.0157	0.0238	0.0424	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Cobalt-60	0.0138	0.0216	0.0388	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Cobalt-60	0.0121	0.0217	0.0381	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Cobalt-60	-0.00392	0.0227	0.0376	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Cobalt-60	-0.00415	0.0169	0.0286	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Cobalt-60	0.0177	0.0219	0.0387	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Cobalt-60	-0.000664	0.0293	0.0479	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Cobalt-60	-0.00887	0.0175	0.0287	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Cobalt-60	0.00771	0.022	0.0388	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Cobalt-60	-0.00895	0.0199	0.0317	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Cobalt-60	-0.00915	0.0287	0.0467	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Cobalt-60	-0.0187	0.0248	0.039	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Cobalt-60	-0.00514	0.0267	0.0436	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Cobalt-60	-0.0157	0.034	0.0534	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Cobalt-60	0.00238	0.0241	0.0404	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Cobalt-60	-0.00714	0.0259	0.0418	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Cobalt-60	0.00462	0.0233	0.0407	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Cobalt-60	0.00226	0.0274	0.0461	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Cobalt-60	-0.0252	0.0295	0.0376	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Cobalt-60	-0.0113	0.0298	0.0432	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Cobalt-60	0.013	0.0244	0.0435	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Cobalt-60	-1.38E-05	0.0259	0.0412	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Cobalt-60	0.0117	0.0248	0.0442	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Cobalt-60	-0.0193	0.0257	0.0409	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Cobalt-60	0.0281	0.0331	0.061	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Cobalt-60	0.000591	0.0233	0.0392	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Cobalt-60	-0.0173	0.0254	0.0395	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Cobalt-60	0.0367	0.0267	0.0491	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Europium-152	-0.079	0.0811	0.109	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Europium-152	-0.0263	0.0906	0.0929	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Europium-152	0.00222	0.0761	0.119	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Europium-152	-0.0132	0.0564	0.0948	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Europium-152	-0.0286	0.071	0.112	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Europium-152	-0.0816	0.0871	0.121	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Europium-152	-0.0203	0.0518	0.0795	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Europium-152	-0.0543	0.0569	0.0729	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Europium-152	-0.0164	0.0584	0.098	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Europium-152	-0.00983	0.0779	0.112	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Europium-152	0.0125	0.0642	0.0993	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Europium-152	0.0161	0.06	0.0944	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Europium-152	-0.0101	0.0618	0.0996	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Europium-152	-0.054	0.0752	0.101	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Europium-152	-0.039	0.0587	0.0825	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Europium-152	0.00197	0.0418	0.0652	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Europium-152	-0.0179	0.05	0.0662	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Europium-152	-0.00356	0.061	0.0825	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Europium-152	-0.00641	0.073	0.098	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Europium-152	0.0195	0.0496	0.0761	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Europium-152	-0.0414	0.0725	0.11	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Europium-152	-0.0291	0.058	0.0919	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Europium-152	-0.0552	0.0597	0.0886	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Europium-152	-0.00271	0.0605	0.0983	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Europium-152	-0.0289	0.0467	0.0697	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Europium-152	0.0212	0.0514	0.0859	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Europium-152	-0.0197	0.0718	0.115	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Europium-152	-0.0127	0.0512	0.0759	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Europium-152	0.0259	0.0755	0.0962	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Europium-152	-0.0146	0.0489	0.0857	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Europium-152	-0.0172	0.0782	0.107	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Europium-152	0.000825	0.0577	0.102	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Europium-152	-0.0612	0.0718	0.109	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Europium-152	-0.011	0.0859	0.117	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Europium-152	0.0103	0.0672	0.103	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Europium-152	-0.0939	0.0866	0.104	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Europium-152	0.0371	0.0645	0.111	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Europium-152	-0.037	0.0663	0.0957	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Europium-152	-0.0256	0.0765	0.0997	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Europium-152	0.0209	0.0685	0.109	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Europium-152	0.0267	0.0564	0.0945	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Europium-152	0.0389	0.0835	0.105	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Europium-152	0.0142	0.0595	0.0944	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Europium-152	-0.0594	0.0702	0.101	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Europium-152	0.0137	0.0983	0.12	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Europium-152	-0.00132	0.0584	0.0998	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Europium-152	-0.0843	0.0883	0.11	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Europium-152	-0.0419	0.0694	0.0993	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Europium-154	-0.138	0.101	0.156	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Europium-154	-0.000749	0.0669	0.115	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Europium-154	-0.0349	0.0906	0.148	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Europium-154	0.0704	0.0724	0.131	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Europium-154	-0.0516	0.0888	0.14	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Europium-154	-0.149	0.111	0.161	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Europium-154	-0.0306	0.0663	0.109	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Europium-154	0.0191	0.0552	0.0959	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Europium-154	0.0217	0.0849	0.149	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Europium-154	-0.0927	0.0959	0.149	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Europium-154	-0.0543	0.075	0.122	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Europium-154	0.0197	0.0692	0.121	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Europium-154	-0.0445	0.0795	0.129	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Europium-154	-0.0337	0.0842	0.142	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Europium-154	-0.0265	0.0662	0.112	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Europium-154	0.00688	0.0494	0.0857	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Europium-154	-0.00506	0.0521	0.0877	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Europium-154	-0.0345	0.0634	0.0922	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Europium-154	-0.0178	0.0754	0.126	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Europium-154	-0.0433	0.0496	0.0794	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Europium-154	-0.0719	0.0747	0.115	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Europium-154	-0.0608	0.0684	0.109	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Europium-154	0.0229	0.0645	0.112	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Europium-154	-0.0234	0.0721	0.119	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Europium-154	-0.0498	0.0523	0.0853	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Europium-154	0.068	0.0651	0.117	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Europium-154	-0.0324	0.0979	0.156	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Europium-154	-0.0034	0.0584	0.0992	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Europium-154	-0.0291	0.071	0.119	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Europium-154	0.039	0.0632	0.11	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Europium-154	-0.051	0.0921	0.148	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Europium-154	0.0143	0.0837	0.144	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Europium-154	0.018	0.0856	0.145	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Europium-154	-0.0414	0.118	0.19	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Europium-154	0.0322	0.0777	0.134	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Europium-154	-0.00591	0.0832	0.137	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Europium-154	0.000284	0.0797	0.138	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Europium-154	0.0414	0.0816	0.143	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Europium-154	0.0491	0.0803	0.138	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Europium-154	-0.0475	0.0897	0.145	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Europium-154	0.0351	0.0722	0.128	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Europium-154	0.0427	0.0726	0.127	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Europium-154	-0.0536	0.0733	0.12	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Europium-154	-0.0204	0.0771	0.129	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Europium-154	-0.00746	0.106	0.176	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Europium-154	0.106	0.084	0.155	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Europium-154	-0.0308	0.0892	0.146	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Europium-154	-0.0456	0.0795	0.128	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Manganese-54	0.0266	0.0315	0.0571	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Manganese-54	0.00706	0.0216	0.0375	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Manganese-54	0.0153	0.0312	0.0562	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Manganese-54	0.011	0.0238	0.0417	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Manganese-54	0	0.041	0.0474	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Manganese-54	-0.0162	0.0316	0.0521	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Manganese-54	0.0294	0.0205	0.0368	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Manganese-54	-0.0135	0.018	0.0293	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Manganese-54	0.00773	0.0237	0.0415	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Manganese-54	-0.00257	0.0278	0.048	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Manganese-54	0.000638	0.0244	0.0419	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Manganese-54	0.0035	0.0231	0.0401	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Manganese-54	-0.00113	0.0262	0.042	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Manganese-54	0.00334	0.028	0.0493	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Manganese-54	0.0254	0.0221	0.0396	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Manganese-54	0.0196	0.0188	0.0271	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Manganese-54	0	0.0216	0.026	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Manganese-54	0.00466	0.0184	0.0325	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Manganese-54	0.00568	0.0237	0.042	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Manganese-54	0.01	0.0171	0.0302	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Manganese-54	0.015	0.0252	0.0457	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Manganese-54	-0.0138	0.0222	0.0364	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Manganese-54	-0.00993	0.0212	0.0363	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Manganese-54	0.00143	0.0229	0.0403	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Manganese-54	-0.00594	0.0172	0.0291	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Manganese-54	0.00601	0.0216	0.038	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Manganese-54	0.0283	0.0294	0.0529	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Manganese-54	0.00456	0.0182	0.0317	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Manganese-54	0.0233	0.0227	0.0407	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Manganese-54	0.000982	0.0198	0.0345	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Manganese-54	0.0234	0.0269	0.0482	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Manganese-54	-0.0107	0.0235	0.039	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Manganese-54	-9.41E-05	0.0263	0.0458	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Manganese-54	0.00229	0.0327	0.0555	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Manganese-54	0.0146	0.0238	0.0423	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Manganese-54	-0.00633	0.0254	0.0429	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Manganese-54	0.0128	0.0249	0.044	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Manganese-54	0.00636	0.0257	0.0438	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Manganese-54	0.0063	0.0235	0.0408	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Manganese-54	0.00143	0.0246	0.043	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Manganese-54	0.0129	0.0202	0.036	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Manganese-54	-0.00855	0.024	0.0408	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Manganese-54	0.00713	0.0221	0.0389	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Manganese-54	0.00748	0.0252	0.0434	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Manganese-54	-0.000916	0.03	0.052	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Manganese-54	0.00139	0.0235	0.0417	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Manganese-54	-0.0215	0.0233	0.0381	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Manganese-54	0.028	0.0253	0.0445	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Potassium-40	24.7	2.41	0.419		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Potassium-40	24.2	2.03	0.24		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Potassium-40	23.3	1.84	0.327		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Potassium-40	24.7	2.3	0.331		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Potassium-40	22.1	2.02	0.338		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Potassium-40	21.4	2.22	0.514		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Potassium-40	23.7	1.66	0.283		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Potassium-40	26.1	2.05	0.232		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Potassium-40	25.5	2.12	0.343		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Potassium-40	25	1.93	0.346		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Potassium-40	24.5	2.31	0.305		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Potassium-40	24.6	2.33	0.326		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Potassium-40	26.6	2.16	0.304		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Potassium-40	22.7	1.66	0.389		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Potassium-40	23.1	1.6	0.292		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Potassium-40	22.7	2.04	0.208		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Potassium-40	23.8	1.84	0.221		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Potassium-40	22.4	1.85	0.247		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Potassium-40	25.7	2.13	0.339		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Potassium-40	21.6	1.77	0.209		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Potassium-40	19.8	1.61	0.279		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Potassium-40	20.3	1.96	0.326		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Potassium-40	21.4	1.66	0.26		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Potassium-40	25.6	2.34	0.328		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Potassium-40	22.5	2.02	0.226		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Potassium-40	25	1.84	0.278		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Potassium-40	22.2	2.16	0.473		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Potassium-40	25.4	2.06	0.207		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Potassium-40	23.9	2.01	0.291		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Potassium-40	26.9	1.97	0.292		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Potassium-40	24.6	2.34	0.372		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Potassium-40	23.6	2.03	0.325		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Potassium-40	21.9	1.76	0.353		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Potassium-40	23.4	2.35	0.478		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Potassium-40	22	1.8	0.335		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Potassium-40	23.4	2.23	0.324		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Potassium-40	22.8	1.95	0.363		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Potassium-40	21.7	1.88	0.388		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Potassium-40	19.1	1.45	0.353		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Potassium-40	23.1	1.79	0.413		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Potassium-40	24.1	2.29	0.337		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Potassium-40	24	1.87	0.338		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Potassium-40	23.9	1.97	0.336		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Potassium-40	26	2.46	0.355		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Potassium-40	21.4	2.19	0.372		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Potassium-40	20.1	1.62	0.383		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Potassium-40	22.5	1.87	0.37		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Potassium-40	22.6	1.9	0.463		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Sodium-22	-0.0494	0.0361	0.0564	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Sodium-22	-0.00381	0.0242	0.0413	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Sodium-22	-0.0136	0.0326	0.0531	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Sodium-22	0.0228	0.0261	0.0472	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Sodium-22	-0.0186	0.032	0.0505	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Sodium-22	-0.0535	0.0398	0.058	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Sodium-22	-0.0108	0.0239	0.0393	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Sodium-22	0.00835	0.0199	0.0347	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Sodium-22	0.013	0.0304	0.0538	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Sodium-22	-0.0272	0.0342	0.0539	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Sodium-22	-0.0185	0.0269	0.0439	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Sodium-22	-0.000413	0.0252	0.0433	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Sodium-22	-0.0155	0.0287	0.0468	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Sodium-22	-0.0123	0.0304	0.0513	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Sodium-22	-0.00966	0.0238	0.0402	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Sodium-22	-0.00351	0.0181	0.0309	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Sodium-22	-0.00216	0.0188	0.0316	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Sodium-22	-0.0127	0.0228	0.0332	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Sodium-22	-0.00556	0.0272	0.0454	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Sodium-22	-0.0166	0.0179	0.0287	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Sodium-22	-0.0267	0.0268	0.0413	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Sodium-22	-0.0241	0.0247	0.0391	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Sodium-22	0.00749	0.0232	0.0401	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Sodium-22	-0.00943	0.0259	0.0426	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Sodium-22	-0.0159	0.0187	0.0308	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Sodium-22	0.0181	0.0239	0.042	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Sodium-22	-0.00901	0.0349	0.056	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Sodium-22	-0.00888	0.0212	0.0352	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Sodium-22	-0.0122	0.0254	0.0423	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Sodium-22	0.0114	0.0226	0.0391	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Sodium-22	-0.0178	0.0328	0.0528	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Sodium-22	0.00471	0.0298	0.0511	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Sodium-22	0.00553	0.0306	0.0517	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Sodium-22	-0.0145	0.042	0.0676	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Sodium-22	0.0121	0.0277	0.0477	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Sodium-22	-0.00146	0.0297	0.0491	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Sodium-22	-0.00158	0.0282	0.0485	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Sodium-22	0.0167	0.0292	0.0512	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Sodium-22	0.0133	0.0288	0.0491	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Sodium-22	-0.0223	0.0324	0.0516	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Sodium-22	0.009	0.026	0.0457	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Sodium-22	0.015	0.0258	0.0451	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Sodium-22	-0.0221	0.0261	0.0423	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Sodium-22	-0.0116	0.0277	0.0458	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Sodium-22	-0.00266	0.0376	0.0626	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Sodium-22	0.0381	0.0299	0.0553	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Sodium-22	-0.0103	0.0318	0.052	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Sodium-22	-0.0168	0.0283	0.0454	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Strontium-90	0.0237	0.0284	0.0479	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Strontium-90	0.0154	0.0261	0.0449	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Strontium-90	0.000558	0.0236	0.0473	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Strontium-90	0.0247	0.027	0.0446	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Strontium-90	0.0217	0.025	0.0421	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Strontium-90	0.0415	0.0231	0.0322		pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Strontium-90	0.027	0.028	0.0468	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Strontium-90	-0.00173	0.0272	0.0477	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Strontium-90	0.0237	0.0279	0.0469	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Strontium-90	0.0344	0.0254	0.0413	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Strontium-90	0.0298	0.0281	0.0468	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Strontium-90	0.0361	0.0196	0.0276		pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Strontium-90	0.0034	0.0253	0.0456	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Strontium-90	0.00886	0.0183	0.0327	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Strontium-90	-0.00142	0.0243	0.0454	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Strontium-90	-0.0182	0.0257	0.0469	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Strontium-90	0.0371	0.0289	0.0475	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Strontium-90	0.0245	0.0284	0.0478	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Strontium-90	0.0329	0.0269	0.043	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Strontium-90	0.0359	0.0232	0.0373	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Strontium-90	0.00868	0.0256	0.0444	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Strontium-90	0.00492	0.022	0.0381	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Strontium-90	-0.00133	0.0222	0.0398	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Strontium-90	-0.01	0.0267	0.0481	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Strontium-90	0.0375	0.0217	0.032		pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Strontium-90	0.0365	0.0283	0.0462	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Strontium-90	-0.000557	0.0173	0.0334	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Strontium-90	0.0307	0.0238	0.0372	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Strontium-90	0.0004	0.0232	0.0459	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Strontium-90	0.00167	0.0184	0.0353	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Strontium-90	0.0227	0.019	0.0295	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Strontium-90	0.0142	0.017	0.0287	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Strontium-90	0.00833	0.0263	0.0455	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Strontium-90	0.0419	0.0261	0.0419	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Strontium-90	0.000108	0.0164	0.0334	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Strontium-90	3.85E-05	0.0223	0.0397	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Strontium-90	0.00507	0.0218	0.0381	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Strontium-90	0.0103	0.0272	0.0471	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Strontium-90	0.0299	0.0272	0.0451	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Strontium-90	0.0272	0.0283	0.0472	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Strontium-90	0.0264	0.0247	0.041	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Strontium-90	0.0273	0.0216	0.0333	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Strontium-90	0.000193	0.0153	0.0306	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Strontium-90	0.0378	0.0236	0.0348		pCi/g	2 sigma	EPA 905.0 Modified	GEL	234376	Pre-remedial

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Strontium-90	-0.00381	0.026	0.0476	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Strontium-90	-0.00968	0.0123	0.0296	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Strontium-90	0.0108	0.024	0.0436	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Strontium-90	0.0276	0.0257	0.0414	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Thorium-228	1.38	0.153	0.0622		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Thorium-228	1.41	0.119	0.0551		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Thorium-228	1.27	0.129	0.0626		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Thorium-228	1.44	0.151	0.054		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Thorium-228	1.48	0.145	0.0615		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Thorium-228	1.29	0.123	0.0676		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Thorium-228	1.33	0.125	0.0451		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Thorium-228	1.49	0.117	0.0415		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Thorium-228	1.5	0.139	0.0558		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Thorium-228	1.51	0.177	0.0627		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Thorium-228	1.47	0.128	0.0578		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Thorium-228	1.39	0.122	0.0536		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Thorium-228	1.2	0.104	0.0536		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Thorium-228	1.51	0.149	0.0539		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Thorium-228	1.48	0.142	0.0432		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Thorium-228	1.68	0.135	0.0396		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Thorium-228	1.42	0.112	0.0381		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Thorium-228	1.65	0.146	0.0491		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Thorium-228	1.49	0.127	0.0554		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Thorium-228	1.34	0.109	0.0497		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Thorium-228	1.25	0.112	0.0605		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Thorium-228	1.25	0.133	0.0534		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Thorium-228	1.32	0.12	0.0518		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Thorium-228	1.28	0.106	0.0551		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Thorium-228	1.44	0.115	0.0406		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Thorium-228	1.49	0.164	0.051		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Thorium-228	1.51	0.142	0.0623		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Thorium-228	1.47	0.117	0.0481		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Thorium-228	1.43	0.121	0.0559		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Thorium-228	1.6	0.176	0.0513		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Thorium-228	1.78	0.187	0.0567		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Thorium-228	1.41	0.148	0.0607		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Thorium-228	1.45	0.17	0.0627		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Thorium-228	1.63	0.177	0.0627		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Thorium-228	1.35	0.127	0.0598		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Thorium-228	1.42	0.122	0.0621		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Thorium-228	1.25	0.114	0.0622		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Thorium-228	1.3	0.115	0.0549		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Thorium-228	1.4	0.163	0.0564		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Thorium-228	1.48	0.171	0.0583		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Thorium-228	1.32	0.117	0.054		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Thorium-228	1.53	0.139	0.059		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Thorium-228	1.54	0.141	0.0572		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Thorium-228	1.64	0.17	0.0583		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Thorium-228	1.36	0.152	0.07		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Thorium-228	1.27	0.126	0.0524		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Thorium-228	1.32	0.12	0.0678		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Thorium-228	1.31	0.123	0.0557		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Thorium-232	1.4	0.254	0.165		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Thorium-232	1.64	0.251	0.124		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Thorium-232	1.19	0.234	0.178		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Thorium-232	1.5	0.25	0.119		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Thorium-232	1.71	0.319	0.144		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Thorium-232	1.3	0.294	0.158		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Thorium-232	1.33	0.215	0.117		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Thorium-232	1.69	0.227	0.0965		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Thorium-232	1.4	0.25	0.132		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Thorium-232	1.63	0.283	0.157		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Thorium-232	1.61	0.277	0.139		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Thorium-232	1.48	0.25	0.129		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Thorium-232	1.27	0.236	0.116		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Thorium-232	1.64	0.253	0.15		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Thorium-232	1.4	0.226	0.126		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Thorium-232	1.62	0.235	0.0879		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Thorium-232	1.51	0.211	0.0899		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Thorium-232	1.56	0.217	0.0987		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Thorium-232	1.58	0.262	0.131		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Thorium-232	1.49	0.237	0.0932		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Thorium-232	1.38	0.232	0.141		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Thorium-232	1.34	0.233	0.123		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Thorium-232	1.39	0.212	0.122		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Thorium-232	1.56	0.243	0.123		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Thorium-232	1.47	0.231	0.0894		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Thorium-232	1.64	0.26	0.12		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Thorium-232	1.27	0.257	0.162		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Thorium-232	1.46	0.229	0.106		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Thorium-232	1.46	0.246	0.136		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Thorium-232	1.7	0.267	0.113		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Thorium-232	1.76	0.278	0.156		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Thorium-232	1.18	0.241	0.133		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Thorium-232	1.45	0.259	0.152		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Thorium-232	1.66	0.301	0.183		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Thorium-232	1.41	0.229	0.147		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Thorium-232	1.38	0.274	0.148		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Thorium-232	1.41	0.236	0.144		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Thorium-232	1.19	0.253	0.143		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Thorium-232	1.03	0.201	0.141		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Thorium-232	1.48	0.252	0.14		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Thorium-232	1.43	0.246	0.118		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Thorium-232	1.59	0.237	0.13		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Thorium-232	1.45	0.232	0.13		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Thorium-232	1.47	0.256	0.141		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Thorium-232	1.33	0.245	0.179		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Thorium-232	1.4	0.251	0.144		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Thorium-232	1.46	0.247	0.145		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Thorium-232	1.17	0.221	0.15		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Tritium	-0.271	0.381	0.757	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Tritium	-0.723	0.768	1.37	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Tritium	0.342	0.468	0.798	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Tritium	-0.56	0.784	1.39	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Tritium	-0.883	0.745	1.34	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Tritium	-0.946	0.768	1.39	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Tritium	0.387	0.46	0.774	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Tritium	0.124	0.445	0.765	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Tritium	0	0.437	0.76	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Tritium	-0.412	0.423	0.762	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Tritium	-0.164	0.43	0.757	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Tritium	-0.297	0.425	0.758	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Tritium	-0.164	0.431	0.76	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Tritium	-0.0409	0.434	0.757	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Tritium	-0.343	0.788	1.39	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Tritium	-0.994	0.75	1.36	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Tritium	-0.776	0.776	1.39	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Tritium	0.052	0.444	0.768	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Tritium	0.174	0.443	0.758	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Tritium	0.155	0.408	0.723	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Tritium	-0.728	0.773	1.38	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Tritium	-1.08	0.761	1.38	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Tritium	-0.386	0.786	1.39	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Tritium	-0.509	0.772	1.37	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Tritium	-0.428	0.782	1.38	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Tritium	-1.12	0.777	1.41	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Tritium	-0.435	0.779	1.38	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Tritium	-0.202	0.488	0.946	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Tritium	-0.0891	0.508	0.958	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Tritium	-0.0547	0.524	0.981	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Tritium	0.26	0.346	0.588	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Tritium	-0.198	0.479	0.928	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Tritium	0.124	0.529	0.954	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Tritium	-0.0553	0.529	0.99	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Tritium	-0.0265	0.511	0.951	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Tritium	0	0.516	0.955	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Tritium	0.155	0.342	0.598	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Tritium	-0.0415	0.528	0.943	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Tritium	-0.0613	0.484	0.898	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Tritium	-0.183	0.513	0.987	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Tritium	0.0279	0.537	0.951	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Tritium	-0.331	0.483	0.963	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Tritium	0.217	0.391	0.677	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Tritium	0.0694	0.379	0.677	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Tritium	-0.0872	0.703	1.25	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Tritium	-0.423	0.678	1.24	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Tritium	0.187	0.603	1.03	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Tritium	0.182	0.408	0.702	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Uranium-235	0.131	0.126	0.227	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Uranium-235	0.0664	0.127	0.226	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Uranium-235	0.025	0.135	0.24	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Uranium-235	0.028	0.122	0.208	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Uranium-235	0.0804	0.153	0.244	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Uranium-235	0.0383	0.168	0.267	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Uranium-235	0.0737	0.104	0.179	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Uranium-235	0.121	0.132	0.171	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Uranium-235	0.0514	0.129	0.228	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Uranium-235	0.167	0.143	0.256	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Uranium-235	0.0719	0.128	0.224	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Uranium-235	0.159	0.132	0.228	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Uranium-235	0.117	0.13	0.224	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Uranium-235	0.0882	0.138	0.21	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Uranium-235	0	0.152	0.16	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Uranium-235	0.0771	0.0929	0.155	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Uranium-235	0	0.0954	0.156	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Uranium-235	0.165	0.133	0.186	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Uranium-235	0.0918	0.133	0.229	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Uranium-235	0.066	0.11	0.189	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Uranium-235	-0.105	0.141	0.235	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Uranium-235	-0.00919	0.119	0.202	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Uranium-235	0.154	0.158	0.205	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Uranium-235	-0.0406	0.129	0.222	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Uranium-235	0.0735	0.0942	0.165	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Uranium-235	0.0917	0.121	0.209	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Uranium-235	-0.059	0.152	0.234	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Uranium-235	0.0538	0.111	0.19	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Uranium-235	0.0379	0.129	0.227	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Uranium-235	-0.0533	0.123	0.207	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Uranium-235	0.0529	0.122	0.213	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Uranium-235	0.0242	0.133	0.234	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Uranium-235	0.0773	0.134	0.241	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Uranium-235	0.119	0.137	0.227	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Uranium-235	0.0445	0.137	0.228	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Uranium-235	-0.0782	0.158	0.253	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Uranium-235	0.0915	0.145	0.252	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Uranium-235	0.0389	0.138	0.226	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Uranium-235	0.129	0.169	0.202	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Uranium-235	0.17	0.14	0.243	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Uranium-235	0.0622	0.125	0.216	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Uranium-235	0.0246	0.143	0.244	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Uranium-235	0.0678	0.121	0.218	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Uranium-235	0.125	0.137	0.24	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Uranium-235	-0.118	0.145	0.243	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Uranium-235	0.126	0.121	0.22	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Uranium-235	0.0911	0.15	0.263	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Uranium-235	0.00624	0.142	0.201	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0001	ISWC0001S001	Soil	Uranium-238	0.783	0.508	0.657		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0002	ISWC0002S001	Soil	Uranium-238	1.11	1.12	1.28	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0003	ISWC0003S001	Soil	Uranium-238	0.983	0.619	0.744		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0004	ISWC0004S001	Soil	Uranium-238	1.82	0.942	0.946		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0005	ISWC0005S001	Soil	Uranium-238	1.44	0.967	1.2		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0006	ISWC0006S001	Soil	Uranium-238	0.454	1.14	1.56	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0009	ISWC0009S001	Soil	Uranium-238	0.821	0.43	0.531		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0010	ISWC0010S001	Soil	Uranium-238	1.17	0.819	0.983		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial

ISRA Soil Sample Results for Happy Valley

Project Name	Sampling Organization	Sampling Date	Sampling Location (General)	Sampling Location (Specific)	Sample Serial Number	Media Type	Isotope	Value	Error (+/-)	MDA	Non-Detect?	Units	Error Type	Analysis Protocol	Analysis Organization	Document	Status
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0011	ISWC0011S001	Soil	Uranium-238	1.32	1.41	1.87	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0012	ISWC0012S001	Soil	Uranium-238	1.7	0.686	0.713		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0013	ISWC0013S001	Soil	Uranium-238	0.889	0.947	1.66	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0014	ISWC0014S001	Soil	Uranium-238	1.47	1.47	1.74	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0015	ISWC0015S001	Soil	Uranium-238	1.14	1.15	1.31	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0016	ISWC0016S001	Soil	Uranium-238	1.42	0.661	0.615		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0019	ISWC0019S001	Soil	Uranium-238	1.06	0.533	0.476		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0020	ISWC0020S001	Soil	Uranium-238	1.28	1.05	1.28	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0023	ISWC0023S001	Soil	Uranium-238	0.779	0.701	0.78	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0024	ISWC0024S001	Soil	Uranium-238	0.81	1.67	1.65	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0028	ISWC0028S001	Soil	Uranium-238	1.67	1.05	1.12		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0041	ISWC0041S001	Soil	Uranium-238	0.829	0.885	1.35	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0042	ISWC0042S001	Soil	Uranium-238	0.68	0.927	1.72	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0043	ISWC0043S001	Soil	Uranium-238	1.68	0.899	0.894		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0044	ISWC0044S001	Soil	Uranium-238	1.85	0.92	1.1		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0045	ISWC0045S001	Soil	Uranium-238	2.47	1.24	1.41		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0046	ISWC0046S001	Soil	Uranium-238	1.21	0.83	1.1		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0047	ISWC0047S001	Soil	Uranium-238	0.823	0.929	1.06	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	07/01/2009	Happy Valley	ISWC0048	ISWC0048S001	Soil	Uranium-238	0.811	1	1.11	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	233955	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0077	ISWC0077RadS001	Soil	Uranium-238	1.01	1.08	1.44	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0078	ISWC0078RadS001	Soil	Uranium-238	0.266	1.04	1.36	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0079	ISWC0079RadS001	Soil	Uranium-238	1.53	0.953	1.07		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0080	ISWC0080RadS001	Soil	Uranium-238	1.51	0.569	0.628		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0081	ISWC0081RadS001	Soil	Uranium-238	1.6	1.53	1.57		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0084	ISWC0084RadS001	Soil	Uranium-238	1.71	0.719	0.722		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0085	ISWC0085RadS001	Soil	Uranium-238	1.68	0.616	0.635		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0086	ISWC0086RadS001	Soil	Uranium-238	1.08	0.849	1.23	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0087	ISWC0087RadS001	Soil	Uranium-238	1.01	0.98	1.59	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0088	ISWC0088RadS001	Soil	Uranium-238	1.25	1.22	1.55	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0089	ISWC0089RadS001	Soil	Uranium-238	0.486	1.22	1.33	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0090	ISWC0090RadS001	Soil	Uranium-238	1.66	0.631	0.607		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0091	ISWC0091RadS001	Soil	Uranium-238	1.1	0.648	0.689		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0092	ISWC0092RadS001	Soil	Uranium-238	0.626	1.31	1.8	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/29/2009	Happy Valley	ISWC0093	ISWC0093RadS001	Soil	Uranium-238	1.82	0.954	1.3		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234325	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0082	ISWC0082RadS001	Soil	Uranium-238	0.392	1.47	1.89	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	7/30/2009	Happy Valley	ISWC0083	ISWC0083RadS001	Soil	Uranium-238	2.46	1.23	0.989		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	234376	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0094	ISWC0094RadS001	Soil	Uranium-238	1.43	0.658	0.713		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	8/17/2009	Happy Valley	ISWC0095	ISWC0095RadS001	Soil	Uranium-238	1.75	0.743	0.594		pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	235405	Pre-remedial
ISRA HV Waste Characterization	MWH	9/14/2009	Happy Valley	ISWC0112	ISWC0112S001	Soil	Uranium-238	1.42	1.28	1.69	NDA	pCi/g	2 sigma	EML HASL 300, 4.5.2.3	GEL	237286	Pre-remedial
ISRA HV Waste Characterization	MWH	10/22/2009	Happy Valley	ISWC0113	ISWC0113S001	Soil	Uranium-238	0	1.1	1.09	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	239640	Waste