ISRA 009 – CTLI-1.
Soil Sampling for Radionuclides.
Results and Statistical Analysis.
Waste Certification.

This data package provides the laboratory results and statistical analysis of the 12 samples taken at the ISRA Outfall 009, CTLI-1 area. This analysis and data interpretation complies with the procedure approved by the California Department of Public Health[1].

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 ~0.39 pCi/g and ~0.042 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.

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.

Conclusions

Cesium-137 - Based on the results of the statistical analysis of Appendix 1, soil to be excavated from CTLI-1 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 0.27 +/- 0.057 pCi/g which is similar to the highest background result of 0.213 +/- 0.04 pCi/g. The highest non-background subtracted Cs-137 result is equivalent to an effective dose of 0.19 mrem/y[6].

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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/.

Strontium-90 - Based on the results of the statistical analysis of Appendix 1, soil to be excavated from CTL-1 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 0.038 pCi/g which is non-detect and less than the highest background result of 0.13 pCi/g. The highest non-background subtracted, non-detect Sr-90 result is equivalent to an effective dose of 0.012 mrem/y[6].

Tritium - All tritium results are non-detect, the average tritium result is -0.408 pCi/g and the highest tritium result is 0.318 pCi/g. The highest non-detected, non-background subtracted tritium result is equivalent to an effective dose of 0.0045 mrem/y[6].

This waste is certified to be "radiologically" acceptable for shipment to, and disposal at, any waste disposal facility. The waste requires no further radiological controls.

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 CTLI-1 is 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 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].

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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

[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*

Phil Rutherford
Manager, Health, Safety & Radiation Services

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:	12
Z-value for Alpha	1.645
Critical Value	1726
Sum of Reference Ranks	1759

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	0.062
Max	0.213	0.270
Min	0.015	-0.012
σ	0.062	0.093
m-1.96*σ	-0.035	-0.119
m+1.96*σ	0.210	0.244

No.	Soil ID	Cs-137	Adjusted Cs-137	Area	Ranks	Reference Ranks
1		0.092	0.092	R	37	37
2		0.020	0.020	R	14	14
3		0.020	0.020	R	14	14
4		0.100	0.100	R	41.5	41.5
5		0.020	0.020	R	14	14
6		0.158	0.158	R	53.5	53.5
7		0.175	0.175	R	55	55
8		0.209	0.209	R	60	60
9		0.180	0.180	R	56	56
10		0.030	0.030	R	22	22
11		0.213	0.213	R	61	61
12		0.025	0.025	R	19	19
13		0.020	0.020	R	14	14
14		0.020	0.020	R	14	14
15		0.074	0.074	R	33	33
16		0.147	0.147	R	49	49
17		0.100	0.100	R	41.5	41.5

No.	Soil ID	Cs-137	Adjusted Cs-137	Area	Ranks	Reference Ranks
18		0.067	0.067	R	31.5	31.5
19		0.099	0.099	R	40	40
20		0.101	0.101	R	43	43
21		0.148	0.148	R	50	50
22		0.153	0.153	R	52	52
23		0.025	0.025	R	19	19
24		0.188	0.188	R	57	57
25		0.198	0.198	R	59	59
26		0.030	0.030	R	22	22
27		0.079	0.079	R	34	34
28		0.158	0.158	R	53.5	53.5
29		0.109	0.109	R	44	44
30		0.059	0.059	R	29	29
31		0.067	0.067	R	31.5	31.5
32		0.113	0.113	R	45	45
33		0.015	0.015	R	8	8
34		0.031	0.031	R	24	24
35		0.042	0.042	R	28	28
36		0.097	0.097	R	38.5	38.5
37		0.015	0.015	R	8	8
38		0.020	0.020	R	14	14
39		0.085	0.085	R	36	36
40		0.080	0.080	R	35	35
41		0.015	0.015	R	8	8
42		0.020	0.020	R	14	14
43		0.035	0.035	R	26.5	26.5
44		0.035	0.035	R	26.5	26.5
45		0.025	0.025	R	19	19
46		0.150	0.150	R	51	51
47		0.140	0.140	R	47.5	47.5
48		0.190	0.190	R	58	58
49		0.097	0.097	R	38.5	38.5
50		0.030	0.030	R	22	22
51		0.140	0.140	R	47.5	47.5
52	C1WC0001S001	0.013	0.013	S	6	0
53	C1WC0002S001	0.015	0.015	S	10	0
54	C1WC0003S001	-0.012	-0.012	S	1	0
55	C1WC0004S001	0.126	0.126	S	46	0
56	C1WC0005S001	0.067	0.067	S	30	0
57	C1WC0006S001	0.000	0.000	S	2	0
58	C1WC0007S001	0.004	0.004	S	3	0
59	C1WC0008S001	0.011	0.011	S	5	0
60	C1WC0009S001	0.033	0.033	S	25	0
61	C1WC0010S001	0.006	0.006	S	4	0
62	C1WC0011S001	0.215	0.215	S	62	0
63	C1WC0012S001	0.270	0.270	S	63	0
				Sum	2016	1759

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:	12
Z-value for Alpha	1.645
Critical Value	1726
Sum of Reference Ranks	1870

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	0.038
Min	0.005	-0.017
σ	0.030	0.017
m-1.96*σ	-0.008	-0.018
m+1.96*σ	0.109	0.049

No.	Soil ID	Sr-90	Adjusted Sr-90	Area	Ranks	Reference Ranks
1		0.030	0.030	R	21	21
2		0.010	0.010	R	6.5	6.5
3		0.045	0.045	R	38.5	38.5
4		0.045	0.045	R	38.5	38.5
5		0.050	0.050	R	48	48
6		0.040	0.040	R	30	30
7		0.035	0.035	R	25.5	25.5
8		0.050	0.050	R	48	48
9		0.050	0.050	R	48	48
10		0.130	0.130	R	62.5	62.5
11		0.120	0.120	R	61	61
12		0.040	0.040	R	30	30
13		0.045	0.045	R	38.5	38.5
14		0.130	0.130	R	62.5	62.5
15		0.050	0.050	R	48	48
16		0.088	0.088	R	56	56
17		0.080	0.080	R	53	53
18		0.100	0.100	R	60	60
19		0.069	0.069	R	52	52
20		0.097	0.097	R	58	58

No.	Soil ID	Sr-90	Adjusted Sr-90	Area	Ranks	Reference Ranks
21		0.084	0.084	R	55	55
22		0.098	0.098	R	59	59
23		0.045	0.045	R	38.5	38.5
24		0.045	0.045	R	38.5	38.5
25		0.020	0.020	R	13	13
26		0.045	0.045	R	38.5	38.5
27		0.089	0.089	R	57	57
28		0.050	0.050	R	48	48
29		0.045	0.045	R	38.5	38.5
30		0.050	0.050	R	48	48
31		0.045	0.045	R	38.5	38.5
32		0.040	0.040	R	30	30
33		0.045	0.045	R	38.5	38.5
34		0.045	0.045	R	38.5	38.5
35		0.045	0.045	R	38.5	38.5
36		0.025	0.025	R	17.5	17.5
37		0.082	0.082	R	54	54
38		0.045	0.045	R	38.5	38.5
39		0.040	0.040	R	30	30
40		0.035	0.035	R	25.5	25.5
41		0.025	0.025	R	17.5	17.5
42		0.005	0.005	R	5	5
43		0.020	0.020	R	13	13
44		0.010	0.010	R	6.5	6.5
45		0.020	0.020	R	13	13
46		0.020	0.020	R	13	13
47		0.050	0.050	R	48	48
48		0.030	0.030	R	21	21
49		0.030	0.030	R	21	21
50		0.020	0.020	R	13	13
51		0.040	0.040	R	30	30
52	C1WC0001S001	0.002	0.002	S	4	0
53	C1WC0002S001	0.029	0.029	S	19	0
54	C1WC0003S001	-0.017	-0.017	S	1	0
55	C1WC0004S001	0.025	0.025	S	16	0
56	C1WC0005S001	0.031	0.031	S	23	0
57	C1WC0006S001	0.038	0.038	S	27	0
58	C1WC0007S001	0.015	0.015	S	8	0
59	C1WC0008S001	0.000	0.000	S	3	0
60	C1WC0009S001	-0.006	-0.006	S	2	0
61	C1WC0010S001	0.020	0.020	S	10	0
62	C1WC0011S001	0.017	0.017	S	9	0
63	C1WC0012S001	0.032	0.032	S	24	0
				Sum	2016	1870

Soil Data from ISRA 009 - CTL-1

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	C1WC0001S001	N/A	4/27/2010	251899	0.0126	0.0184	0.0332	NDA	0.00238	0.0214	0.0423	NDA	-0.614	0.501	0.907	NDA
2	C1WC0002S001	N/A	4/27/2010	251899	0.0151	0.0244	0.0431	NDA	0.0291	0.0272	0.0438	NDA	-0.61	0.518	0.936	NDA
3	C1WC0003S001	N/A	4/27/2010	251899	-0.012	0.0271	0.0464	NDA	-0.0174	0.0167	0.0427	NDA	-0.633	0.526	0.952	NDA
4	C1WC0004S001	N/A	4/27/2010	251899	0.126	0.0373	0.0345		0.0247	0.0253	0.0416	NDA	-0.177	0.526	0.923	NDA
5	C1WC0005S001	N/A	4/27/2010	251899	0.0669	0.0407	0.0447		0.0307	0.0222	0.0336	NDA	-0.441	0.536	0.958	NDA
6	C1WC0006S001	N/A	4/27/2010	251899	0.000307	0.0181	0.0318	NDA	0.0384	0.0277	0.0421	NDA	-0.462	0.518	0.926	NDA
7	C1WC0007S001	N/A	4/28/2010	251961	0.00436	0.0276	0.0478	NDA	0.0154	0.0239	0.0418	NDA	-0.635	0.507	0.92	NDA
8	C1WC0008S001	N/A	4/28/2010	251961	0.0108	0.0238	0.0423	NDA	0.000206	0.0207	0.0405	NDA	-0.533	0.809	1.44	NDA
9	C1WC0009S001	N/A	4/27/2010	251899	0.0333	0.0287	0.0351	NDA	-0.00579	0.0206	0.0419	NDA	-0.812	0.633	1.13	NDA
10	C1WC0010S001	N/A	4/27/2010	251899	0.00592	0.0155	0.0281	NDA	0.0196	0.0236	0.0399	NDA	-0.337	0.64	1.12	NDA
11	C1WC0011S001	N/A	6/17/2010	255148	0.215	0.0447	0.0431		0.0167	0.0269	0.0466	NDA	0.318	0.376	0.633	NDA
12	C1WC0012S001	N/A	6/17/2010	255148	0.27	0.0572	0.037		0.0321	0.0261	0.0426	NDA	0.0348	0.354	0.641	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	0.062		0.039		0.016		0.042		-0.408		0.957	
Maximum	0.270		0.048		0.038		0.047		0.318		1.440	
Minimum	-0.012		0.028		-0.017		0.034		-0.812		0.633	
Count				12				12				12
Number of Non-Detects				8				12				12
% Non-Detects				67%				100%				100%

Appendix 2

Radionuclide Results

ISRA Outfall 009 - CTLI-1

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
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Americium-241	-0.0167	0.0997	0.184	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Americium-241	-0.287	0.119	0.196	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Americium-241	-0.197	0.187	0.328	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Americium-241	0.0345	0.0835	0.14	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Americium-241	-0.259	0.13	0.225	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Americium-241	-0.0418	0.0961	0.175	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Americium-241	0.019	0.0266	0.045	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Americium-241	0.0306	0.118	0.22	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Americium-241	0.0186	0.0591	0.102	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Americium-241	-0.0199	0.086	0.166	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Americium-241	0.119	0.113	0.196	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Americium-241	0.0385	0.0675	0.113	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Cesium-134	0	0.0426	0.0483	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Cesium-134	0	0.0292	0.0579	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Cesium-134	0	0.0521	0.0666	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Cesium-134	0	0.0403	0.0516	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Cesium-134	0	0.0424	0.0627	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Cesium-134	0	0.0317	0.0457	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Cesium-134	0	0.0367	0.053	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Cesium-134	0.0553	0.0421	0.0566	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Cesium-134	0	0.035	0.0511	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Cesium-134	0	0.0318	0.0423	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Cesium-134	0	0.0428	0.0612	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Cesium-134	0	0.0303	0.0569	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Cesium-137	0.0126	0.0184	0.0332	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Cesium-137	0.0151	0.0244	0.0431	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Cesium-137	-0.012	0.0271	0.0464	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Cesium-137	0.126	0.0373	0.0345		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Cesium-137	0.0669	0.0407	0.0447		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Cesium-137	0.000307	0.0181	0.0318	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Cesium-137	0.00436	0.0276	0.0478	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Cesium-137	0.0108	0.0238	0.0423	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Cesium-137	0.0333	0.0287	0.0351	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Cesium-137	0.00592	0.0155	0.0281	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Cesium-137	0.215	0.0447	0.0431		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Cesium-137	0.27	0.0572	0.037		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Cobalt-60	-0.0254	0.0202	0.0308	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Cobalt-60	0.0321	0.0253	0.0469	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Cobalt-60	-0.00696	0.0282	0.0457	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Cobalt-60	0.00486	0.0197	0.0339	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Cobalt-60	-0.0159	0.0254	0.0402	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Cobalt-60	0.00738	0.0179	0.0309	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Cobalt-60	-0.000958	0.0248	0.0418	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Cobalt-60	-0.00821	0.0231	0.0379	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Cobalt-60	0.0106	0.0199	0.0355	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Cobalt-60	-0.00286	0.0157	0.0263	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Cobalt-60	-0.0137	0.0246	0.0394	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Cobalt-60	0.0246	0.0235	0.0431	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Europium-152	-0.0259	0.0514	0.0785	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Europium-152	-0.0371	0.0636	0.1	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Europium-152	-0.0299	0.089	0.125	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Europium-152	-0.0379	0.076	0.0885	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Europium-152	-0.0515	0.0671	0.11	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Europium-152	0.0108	0.0545	0.0815	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Europium-152	-0.025	0.051	0.0866	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Europium-152	-0.0675	0.0758	0.101	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Europium-152	0.0142	0.057	0.0903	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Europium-152	-0.024	0.0522	0.0719	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Europium-152	-0.000634	0.0711	0.11	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Europium-152	-0.0179	0.0615	0.0976	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Europium-154	-0.0661	0.064	0.101	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Europium-154	-0.064	0.0812	0.124	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Europium-154	0.0401	0.0945	0.162	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste

ISRA Outfall 009 - CTLI-1

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
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Europium-154	-0.0277	0.0652	0.109	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Europium-154	-0.0829	0.0871	0.133	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Europium-154	-0.0166	0.0638	0.106	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Europium-154	0.0468	0.0762	0.135	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Europium-154	-0.0183	0.0756	0.126	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Europium-154	-0.0177	0.0663	0.112	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Europium-154	-0.0231	0.0553	0.0925	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Europium-154	-0.0126	0.0777	0.13	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Europium-154	-0.0344	0.0779	0.129	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Manganese-54	-0.000363	0.0191	0.0327	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Manganese-54	0.0119	0.023	0.0413	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Manganese-54	-0.00179	0.0262	0.045	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Manganese-54	0.0301	0.0216	0.0345	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Manganese-54	0.00421	0.0243	0.0431	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Manganese-54	-0.00114	0.0193	0.0328	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Manganese-54	0.0196	0.0221	0.0397	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Manganese-54	-0.000357	0.023	0.0391	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Manganese-54	0.0121	0.0205	0.0365	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Manganese-54	0.00646	0.0163	0.0289	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Manganese-54	0.000603	0.0247	0.0422	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Manganese-54	-0.0178	0.0233	0.0378	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Potassium-40	26.5	2.7	0.256		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Potassium-40	22.7	2.04	0.335		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Potassium-40	25	2.69	0.421		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Potassium-40	24.4	2.35	0.289		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Potassium-40	21.5	1.94	0.342		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Potassium-40	25.6	2.62	0.253		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Potassium-40	24.9	2.32	0.303		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Potassium-40	24.8	2.48	0.301		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Potassium-40	23.3	2.19	0.319		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Potassium-40	23.5	2.38	0.224		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Potassium-40	23.4	2.41	0.352		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Potassium-40	22.7	2.19	0.353		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Sodium-22	-0.0227	0.0224	0.0355	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Sodium-22	-0.022	0.0285	0.0436	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Sodium-22	0.00272	0.0336	0.0563	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Sodium-22	-0.00922	0.0229	0.0383	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Sodium-22	-0.0286	0.0305	0.0467	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Sodium-22	-0.00557	0.0224	0.0372	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Sodium-22	0.0164	0.0267	0.0473	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Sodium-22	-0.00524	0.0266	0.0446	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Sodium-22	-0.0123	0.0236	0.0391	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Sodium-22	-0.00833	0.0194	0.0325	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Sodium-22	-0.00638	0.0273	0.0456	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Sodium-22	-0.00754	0.027	0.0451	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Strontium-90	0.00238	0.0214	0.0423	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Strontium-90	0.0291	0.0272	0.0438	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Strontium-90	-0.0174	0.0167	0.0427	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Strontium-90	0.0247	0.0253	0.0416	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Strontium-90	0.0307	0.0222	0.0336	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Strontium-90	0.0384	0.0277	0.0421	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Strontium-90	0.0154	0.0239	0.0418	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Strontium-90	0.000206	0.0207	0.0405	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Strontium-90	-0.00579	0.0206	0.0419	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Strontium-90	0.0196	0.0236	0.0399	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Strontium-90	0.0167	0.0269	0.0466	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Strontium-90	0.0321	0.0261	0.0426	NDA	pCi/g	2 sigma	EPA 905.0 Modified	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Thorium-228	1.53	0.161	0.0496		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Thorium-228	1.1	0.101	0.0606		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Thorium-228	1.53	0.199	0.0746		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Thorium-228	1.87	0.252	0.0578		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Thorium-228	1.65	0.138	0.0665		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Thorium-228	1.27	0.14	0.061		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste

ISRA Outfall 009 - CTLI-1

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
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Thorium-228	1.47	0.177	0.0499		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Thorium-228	1.49	0.173	0.0606		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Thorium-228	1.28	0.135	0.0529		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Thorium-228	1.43	0.149	0.0452		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Thorium-228	1.46	0.164	0.0641		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Thorium-228	1.5	0.157	0.0566		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Thorium-232	1.59	0.265	0.118		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Thorium-232	1.09	0.205	0.14		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Thorium-232	1.37	0.307	0.177		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Thorium-232	1.79	0.291	0.124		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Thorium-232	1.63	0.272	0.165		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Thorium-232	1.46	0.257	0.126		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Thorium-232	1.56	0.263	0.125		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Thorium-232	1.64	0.287	0.146		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Thorium-232	1.35	0.223	0.125		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Thorium-232	1.52	0.249	0.103		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Thorium-232	1.66	0.28	0.156		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Thorium-232	1.44	0.24	0.124		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Tritium	-0.614	0.501	0.907	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Tritium	-0.61	0.518	0.936	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Tritium	-0.633	0.526	0.952	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Tritium	-0.177	0.526	0.923	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Tritium	-0.441	0.536	0.958	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Tritium	-0.462	0.518	0.926	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Tritium	-0.635	0.507	0.92	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Tritium	-0.533	0.809	1.44	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Tritium	-0.812	0.633	1.13	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Tritium	-0.337	0.64	1.12	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Tritium	0.318	0.376	0.633	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Tritium	0.0348	0.354	0.641	NDA	pCi/g	2 sigma	EPA 906.0 Modified	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Uranium-235	-0.0235	0.114	0.193	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Uranium-235	0.135	0.127	0.218	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Uranium-235	0.137	0.167	0.274	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Uranium-235	-0.0186	0.123	0.214	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Uranium-235	0.0624	0.141	0.245	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Uranium-235	0.106	0.111	0.18	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Uranium-235	0.137	0.123	0.16	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Uranium-235	0.00924	0.127	0.226	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Uranium-235	0.0557	0.112	0.198	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Uranium-235	0.105	0.0977	0.172	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Uranium-235	0.116	0.134	0.232	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Uranium-235	0.111	0.126	0.218	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0001	C1WC0001S001	Soil	Uranium-238	0.736	0.915	1.64	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0002	C1WC0002S001	Soil	Uranium-238	1.43	0.97	1.78	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0003	C1WC0003S001	Soil	Uranium-238	1.88	1.52	2.67	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0004	C1WC0004S001	Soil	Uranium-238	1.35	1.15	1.21		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0005	C1WC0005S001	Soil	Uranium-238	0.687	1.05	1.96	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0006	C1WC0006S001	Soil	Uranium-238	0.768	0.891	1.59	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0007	C1WC0007S001	Soil	Uranium-238	1.22	0.549	0.44		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/27/2010	CTLI-1	C1WC0008	C1WC0008S001	Soil	Uranium-238	0.989	1.07	1.94	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251899	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0009	C1WC0009S001	Soil	Uranium-238	1.31	0.873	0.902		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	4/28/2010	CTLI-1	C1WC0010	C1WC0010S001	Soil	Uranium-238	0.579	0.778	1.47	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	251961	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0011	C1WC0011S001	Soil	Uranium-238	1.41	1.26	1.55	NDA	pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste
2010 ISRA Waste Characterization	MWH	6/17/2010	CTLI-1B	C1WC0012	C1WC0012S001	Soil	Uranium-238	1.01	0.937	1.01		pCi/g	2 sigma	DOE HASL 300, 4.5.2.3/Ga-01-R	GEL	255148	Waste

Outfall 009
Waste Characterization
Sample Locations for CTLI-1A

Base Map Legend

- Administrative Area Boundary
- RFI Site Boundary
- Report Group Boundary
- NPDES Outfall
- A/C Paving
- Drainage
- Non Jurisdictional Surface Water Pathway
- Surface Water Divide
- Elevation Contour

Base Map Legend

- ISRA Excavation Boundary
- Waste Characterization Sample Location

Note:

1. Sample locations and depths were randomly selected. The 3ft x 3ft grid used in the sample location selection process is shown.
2. Aerial imagery from Google Earth, 2010.
3. Topographic contours from Lidar data, 2008.

Document: ISRA_Plots_SP_CTL-1A_SampleLocations_062110_WC.mxd Date: Jun 21, 2010

1 inch = 15 feet

0 15 30 Feet

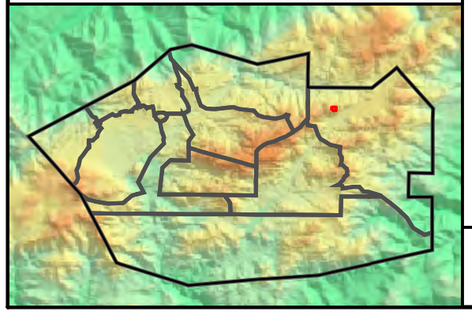

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FIGURE 1

Outfall 009
Waste Characterization
Sample Locations for CTLI-1B

Base Map Legend

- Administrative Area Boundary
- RFI Site Boundary
- Report Group Boundary
- NPDES Outfall
- A/C Paving
- Drainage
- Non Jurisdictional Surface Water Pathway
- Surface Water Divide
- Elevation Contour

Base Map Legend

- ISRA Excavation Boundary
- Waste Characterization Sample Location

Note:

1. Sample locations and depths were randomly selected. The 3ft x 3ft grid used in the sample location selection process is shown.
2. Aerial imagery from Google Earth, 2010.
3. Topographic contours from Lidar data, 2008.

Document: ISRA_Plots_SP_CTL-1B_SampleLocations_062110_WC.mxd Date: Jun 21, 2010

1 inch = 15 feet

0 15 30 Feet

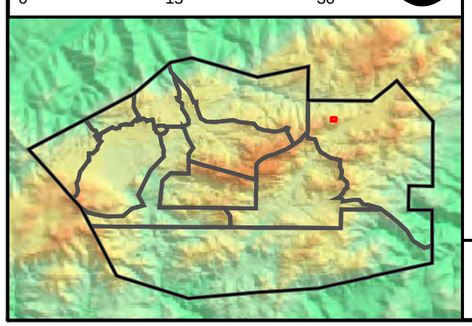

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FIGURE 1