NOTICE

All drawings located at the end of the document.

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Data Summary Report
IHSS Group NE/NW

September 2003

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Data Summary Report
IHSS Group NE/NW

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September 2003

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ENCLOSURE

IHSS Group NE/NW Real and Quality Control Data (Compact Disc)

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ACRONYMS AND ABBREVATIONS

AL	action level
ASD	Analytical Services Division
BZ	Buffer Zone
BZSAP	Buffer Zone Sampling and Analysis Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Contaminant of Concern
DL	Detection Limit
DOE	U.S. Department of Energy
DQA	Data Quality Assessment
DQO	Data Quality Objective
EPA	U.S. Environmental Protection Agency
ER	Ecological Receptor
FY	Fiscal Year
HPGe	high-purity germanium detector
HRR	Historical Release Report
IHSS	Individual Hazardous Substance Site
IM/IRA	Interim Measure/Interim Remedial Action
K-H	Kaiser-Hill Company, L.L.C.
LCS	laboratory control spike
mg/kg	milligrams per kilogram
MS	matrix spike
MSD	matrix spike duplicate
NA	not available
NFAA	No Further Accelerated Action
PAC	Potential Area of Concern
PARCCS	precision, accuracy, representativeness, completeness, comparability, and sensitivity
PCBs	polychlorinated biphenyls
pCi/g	picocuries per gram
ppb	parts per billion
ppm	parts per million
PU&D	Property Utilization and Disposal
QC	Quality Control
RFCA	Rocky Flats Cleanup Agreement
RFETS	Rocky Flats Environmental Technology Site
RIN	Report Identification Number
RL	Reporting Limit
SD	standard deviation
SOP	Standard Operation Procedure
SOR	sum of ratio
SSRS	Subsurface Soil Risk Screen
SVOC	semivolatile organic compound
SWD	Soil Water Database
TBD	to be determined
ug/kg	micrograms per kilogram
VOC	volatile organic compound
V&V	Verification and Validation
WRW	Wildlife Refuge Worker

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1.0 INTRODUCTION

This Data Summary Report summarizes characterization activities conducted at Individual Hazardous Substance Site (IHSS) Group NE/NW located in the Buffer Zone (BZ) at the Rocky Flats Environmental Technology Site (RFETS) in Golden, Colorado. Characterization activities were conducted in accordance with the Buffer Zone Sampling and Analysis Plan (BZSAP) (DOE 2002a) and BZSAP Addendum #BZ-02-01 (DOE 2002b).

The IHSSs and Potential Areas of Concern (PACs) included in this report are listed in Table 1 and shown on Figure 1.

Table 1 IHSS Group NE/NW Description

BZ Group	IHSS/PAC Description
NE	IHSS 216.2 – East Spray Field-Center Area
	IHSS 216.3 – East Spray Field-South Area
	PAC NE-1407 – OU 2 Treatment Facility
	PAC NE-1412 – Trench T-12 (located at OU 2 East Trenches)
	PAC NE-1413 – Trench T-13 (located at OU 2 East Trenches)
NW	IHSS 174a – Property Utilization And Disposal (PU&D) Yard - Drum Storage Area

2.0 SITE CHARACTERIZATION

IHSS Group NE/NW information consists of historical knowledge (DOE 1992-2002) and 55 additional sampling locations as described in BZSAP Addendum #BZ-02-01 (DOE 2002b). The sampling specifications for the characterization samples collected are listed in Table 2. The locations of these samples and associated analytical results with Wildlife Refuge Worker (WRW) action levels (ALs) greater than background means plus two standard deviations or detection/reporting limits are presented in Figures 2 through 6 and Tables 3, 3a, 4 and 4a. Seven sample locations were outside the boundaries of their respective IHSS or PAC. This data is specifically mapped on Figure 6 and can be found in Tables 3a and 4a. Figure 7 depicts areas prone to landslides and high erosion. A summary of the analytical results is presented in Tables 5 and 6. Surface and subsurface sum of ratios for radionuclides are presented in Tables 7 and 8. Deviations from planned sampling specifications are presented in Table 9. A summary of validated analytical records is presented in Tables 10 through 17. The real and quality control (QC) data are enclosed on a compact disc.

When the previous characterization data were compared to the PU&D Yard treatability study, IHSS 174a demonstrated a significant reduction in soil contamination.

All samples collected below a non-natural material (i.e., asphalt) are considered subsurface samples.

No Further Accelerated Action (NFAA) for IHSS Group NE/NW is warranted based on surface soils being below action levels and the following Subsurface Soil Risk Screen (SSRS) identified in Figure 3 in Attachment 5 of the RFCA Modification (DOE, et al. 2003).

Screen 1 – Are the contaminant of concern (COC) concentrations below RFCA Table 3 WRW Soil Action Levels?

Yes, all COC concentrations are below the WRW ALs (Screens 2 and 3 are bypassed). It should be noted that plutonium-239/240 at sample locations CW40-003 and CV40-002 were 88 and 133 pCi/g, respectively (see Figure 2 and 6). However, these surface sample locations are close to or overlapped by IHSS 155 and are likely to be associated with wind-blown contamination from the 903 Pad area. As such, CW40-003 will be addressed as part of IHSS 155 and CV40-002 will be addressed as part of the IHSS 155 AOC.

The CW40-003 result of 88 pCi/g of plutonium-239/240 is a "wet" result. No "dry" result is associated with this sample, however its value, after applying the dry weight correction formula, would be greater than 88 pCi/g. In the absence of a dry weight corrected result and since the "wet" result is already above the WRW AL, that value is being reported.

Screen 4 – Is there an environmental pathway and sufficient quantity of COCs that would cause an exceedance of the surface water standard (SWS)?

Contamination migration via erosion and groundwater are the two possible pathways whereby surface water could become contaminated by the East Spray Fields (IHSSs 216.2 and 216.3), Trenches T-12 (PAC NE-1412) and T-13 (PAC NE-1413), and the PU&D Yard (IHSS 174a). Based on the review of Figure 1 of the RFCA Modification Attachment 5 (DOE, et al. 2003), IHSS Group NE/NW is not located in an area prone to landslides or high erosion except for a small portion of the southeast corner of IHSS 216.3 (see Figure 6). In addition, the nearest body of water is South Walnut Creek located approximately 800 feet north of IHSS Group NE. Based on the distance of the nearest body of water and the majority of the IHSS Group being in an area not prone to landslides or high erosion, it appears unlikely that this IHSS Group would cause an exceedance of the SWS.

Groundwater in the area of IHSS Group NE flows in a northeasterly direction and is part of the 903 Pad/East Trenches plume. Analytical data from groundwater monitoring wells in this area were reviewed. Wells 4286 and 07891 were identified with contaminants above groundwater Tier I ALs. The contaminants are carbon tetrachloride, tetrachloroethene, trichloroethene, methylene chloride, dibromo-3-chloropropane 1,2 and plutonium-239/240. These COCs are similar to those compounds detected in the East Sprayfields, however, groundwater at wells 4286 and 07891 would be incapable of being contaminated by the East Sprayfields, since the wells are located significantly west (upgradient) of the East Sprayfields area. Groundwater will be addressed seperately as an Interim Measrue/Interim Remedial Action (IM/IRA).

Wells 4286 and 07891 are located downgradient or crossgradient of IHSS Group NE. Based on the position of the wells, it does not appear that this IHSS Group has caused a groundwater Tier I AL exceedance. Consequently, there does not appear to be a sufficient quantity of COCs that would cause an exceedance of the SWS.

Screen 5 – Are COC concentrations below Table 3 Action Levels for Ecological Receptors?

At this time, ecological ALs are not available for all receptors/chemical combinations; however, draft ALs are available for a small subset of chemicals. Screen 5 currently

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evaluates only this subset. Risk to ecological receptors will be readdressed through the ecological risk assessment portion of the Comprehensive Risk Assessment (CRA).

All COC concentrations are below the ALs for Ecological Receptors except for lead. Lead exceeds the Ecological Receptor AL of 25.6 mg/kg in two surface soil locations. However, these widely spaced locations appear to be anomolies that are not representative of the IHSS Group.

Analytical results and the above Subsurface Soil Risk Screen indicate that an NFAA is justified for IHSS Group NE/NW. Approval of this Data Summary Report constitutes regulatory agency concurrence of this IHSS Group as an NFAA. This information and NFAA determination will be documented in the FY03 Historical Release Report (HRR).

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THIS TARGET SHEET REPRESENTS AN
OVER-SIZED MAP / PLATE FOR THIS DOCUMENT:
(Ref: 03-RF-01625; JLB-112-03)

Draft Buffer Zone Sampling and Analysis Plan Addendum BZ-04-02 IHSS Group 900-12, East Trenches TrenchesT-6.T-8.T-9a, and T-9b IHSSs 111.3, 111.5, 111.6a and 111.6b

October 2003

Figure 2:

Trenches T-6, T-8, T-9a and T-9b, Existing Data Above Background Means Plus Two Standard Deviations, or Reporting Limits

File: w:\projects\2003\trenches\east trenches_092503\sub_trench.apr

October 21, 2003

CERCLA Administrative Record Document, BZ-A-000636

U.S. DEPARTEMENT OF ENERGY
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

GOLDEN, COLORADO

BZ-A-000636

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OVER-SIZED MAP / PLATE FOR THIS DOCUMENT:
(Ref: 03-RF-01476; JLB-096-03)

Data Summary Report
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September 2003

Figure 4:

Subsurface Sampling Locations Above Background Means Plus Two Standard Deviations or Detection/Reporting Limits – Sprayfields

File:
W:\Projects\Fy2003\NENW\NENW_new_080703\nenw_0812/03.apr

August 13, 2003

CERCLA Administrative Record Document, IA-A-001665

U.S. DEPARTEMENT OF ENERGY
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

GOLDEN, COLORADO

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(Ref: 03-RF-01476; JLB-096-03)

Data Summary Report
IHSS Group NE/NW

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Figure 3:

Subsurface Sampling Locations Above Background Means Plus Two Standard Deviations or Detection/Reporting Limits – Trench Area

File:
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August 12, 2003

CERCLA Administrative Record Document, IA-A-001665

U.S. DEPARTEMENT OF ENERGY
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

GOLDEN, COLORADO

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
NE	IHSS 216.2 – East Spray Field-Center Area	DB43-000	2088219.15	750163.83	Surface Soil	0-0.5'	Radionuclides	HPGe
		DB43-000	2088219.15	750163.83	Surface Soil	0-0.5'	Metals	6010A
		DB43-000	2088219.15	750163.83	Surface Soil	0-0.5'	SVOCs	8270C
		DB43-000	2088219.15	750163.83	Surface Soil	0-0.5'	PCBs	8082
		DB43-000	2088219.15	750163.83	Surface Soil	0-0.5'	Pesticides	8081A
		DB44-000	2088317.84	750231.30	Surface Soil	0-0.5'	Radionuclides	HPGe
		DB44-000	2088317.84	750231.30	Surface Soil	0-0.5'	Metals	6010A
		DB44-000	2088317.84	750231.30	Surface Soil	0-0.5'	SVOCs	8270C
		DB44-000	2088317.84	750231.30	Surface Soil	0-0.5'	PCBs	8082
		DB44-000	2088317.84	750231.30	Surface Soil	0-0.5'	Pesticides	8081A
		DC43-000	2088442.46	750152.87	Surface Soil	0-0.5'	Radionuclides	HPGe
		DC43-000	2088442.46	750152.87	Surface Soil	0-0.5'	Metals	6010A
		DC43-000	2088442.46	750152.87	Surface Soil	0-0.5'	SVOCs	8270C
		DC43-000	2088442.46	750152.87	Surface Soil	0-0.5'	PCBs	8082
		DC43-000	2088442.46	750152.87	Surface Soil	0-0.5'	Pesticides	8081A
		DC45-000	2088455.44	750459.28	Surface Soil	0-0.5'	Radionuclides	HPGe
		DC45-000	2088455.44	750459.28	Surface Soil	0-0.5'	Metals	6010A
		DC45-000	2088455.44	750459.28	Surface Soil	0-0.5'	SVOCs	8270C
		DC45-000	2088455.44	750459.28	Surface Soil	0-0.5'	PCBs	8082
		DC45-000	2088455.44	750459.28	Surface Soil	0-0.5'	Pesticides	8081A
		DD43-000	2088438.18	750004.16	Surface Soil	0-0.5'	Radionuclides	HPGe
		DD43-000	2088438.18	750004.16	Surface Soil	0-0.5'	Metals	6010A
		DD43-000	2088438.18	750004.16	Surface Soil	0-0.5'	SVOCs	8270C
		DD43-000	2088438.18	750004.16	Surface Soil	0-0.5'	PCBs	8082
		DD43-000	2088438.18	750004.16	Surface Soil	0-0.5'	Pesticides	8081A
		DD44-000	2088472.83	750275.17	Surface Soil	0-0.5'	Radionuclides	HPGe
		DD44-000	2088472.83	750275.17	Surface Soil	0-0.5'	Metals	6010A
		DD44-000	2088472.83	750275.17	Surface Soil	0-0.5'	SVOCs	8270C

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		DD44-000	2088472.83	750275.17	Surface Soil	0-0.5'	PCBs	8082
		DD44-000	2088472.83	750275.17	Surface Soil	0-0.5'	Pesticides	8081A
	IHSS 216.3 – East Spray Field – South Area	DB43-001	2088225.51	749962.66	Surface Soil	0-0.5'	Radionuclides	HPGe
		DB43-001	2088225.51	749962.66	Surface Soil	0-0.5'	Metals	6010A
		DB43-001	2088225.51	749962.66	Surface Soil	0-0.5'	SVOCs	8270C
		DB43-001	2088225.51	749962.66	Surface Soil	0-0.5'	PCBs	8082
		DB43-001	2088225.51	749962.66	Surface Soil	0-0.5'	Pesticides	8081A
		DB43-001	2088225.51	749962.66	Subsurface Soil	05'-2.5'	VOCs	8260B
		DD43-001	2088548.16	750006.90	Surface Soil	0-0.5'	Radionuclides	HPGe
		DD43-001	2088548.16	750006.90	Surface Soil	0-0.5'	Metals	6010A
		DD43-001	2088548.16	750006.90	Surface Soil	0-0.5'	SVOCcs	8270C
		DD43-001	2088548.16	750006.90	Surface Soil	0-0.5'	PCBs	8082
		DD43-001	2088548.16	750006.90	Surface Soil	0-0.5'	Pesticides	8081A
		DD43-001	2088548.16	750006.90	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DC42-000	2088475.30	749921.03	Surface Soil	0-0.5'	Radionuclides	HPGe
		DC42-000	2088475.30	749921.03	Surface Soil	0-0.5'	Metals	6010A
		DC42-000	2088475.30	749921.03	Surface Soil	0-0.5'	SVOCs	8270C
		DC42-000	2088475.30	749921.03	Surface Soil	0-0.5'	PCBs	8082
		DC42-000	2088475.30	749921.03	Surface Soil	0-0.5'	Pesticides	8081A
		DC42-000	2088475.30	749921.03	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DC41-000	2088420.66	749720.68	Surface Soil	0-0.5'	Radionuclides	HPGe
		DC41-000	2088420.66	749720.68	Surface Soil	0-0.5'	Metals	6010A
		DC41-000	2088420.66	749720.68	Surface Soil	0-0.5'	SVOCcs	8270C
		DC41-000	2088420.66	749720.68	Surface Soil	0-0.5'	PCBs	8082
		DC41-000	2088420.66	749720.68	Surface Soil	0-0.5'	Pesticides	8081A
		DC41-000	2088420.66	749720.68	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DB41-000	2088277.55	749577.57	Surface Soil	0-0.5'	Radionuclides	HPGe
		DB41-000	2088277.55	749577.57	Surface Soil	0-0.5'	Metals	6010A

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		DB41-000	2088277.55	749577.57	Surface Soil	0-0.5'	SVOCs	8270C
		DB41-000	2088277.55	749577.57	Surface Soil	0-0.5'	PCBs	8082
		DB41-000	2088277.55	749577.57	Surface Soil	0-0.5'	Pesticides	8081A
		DB41-000	2088277.55	749577.57	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DC40-000	2088394.64	749416.24	Surface Soil	0-0.5'	Radionuclides	HPGe
		DC40-000	2088394.64	749416.24	Surface Soil	0-0.5'	Metals	6010A
		DC40-000	2088394.64	749416.24	Surface Soil	0-0.5'	SVOCs	8270C
		DC40-000	2088394.64	749416.24	Surface Soil	0-0.5'	PCBs	8082
		DC40-000	2088394.64	749416.24	Surface Soil	0-0.5'	Pesticides	8081A
		DC40-000	2088394.64	749416.24	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DB39-000	2088267.14	749247.11	Surface Soil	0-0.5'	Radionuclides	HPGe
		DB39-000	2088267.14	749247.11	Surface Soil	0-0.5'	Metals	6010A
		DB39-000	2088267.14	749247.11	Surface Soil	0-0.5'	SVOCs	8270C
		DB39-000	2088267.14	749247.11	Surface Soil	0-0.5'	PCBs	8082
		DB39-000	2088267.14	749247.11	Surface Soil	0-0.5'	Pesticides	8081A
		DB39-000	2088267.14	749247.11	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DB39-001	2088319.18	749273.13	Surface Soil	0-0.5'	Radionuclides	HPGe
		DB39-001	2088319.18	749273.13	Surface Soil	0-0.5'	Metals	6010A
		DB39-001	2088319.18	749273.13	Surface Soil	0-0.5'	SVOCs	8270C
		DB39-001	2088319.18	749273.13	Surface Soil	0-0.5'	PCBs	8082
		DB39-001	2088319.18	749273.13	Surface Soil	0-0.5'	Pesticides	8081A
		DB39-001	2088319.18	749273.13	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DD40-000	2088550.76	749551.55	Surface Soil	0-0.5'	Radionuclides	HPGe
		DD40-000	2088550.76	749551.55	Surface Soil	0-0.5'	Metals	6010A
		DD40-000	2088550.76	749551.55	Surface Soil	0-0.5'	SVOCs	8270C
		DD40-000	2088550.76	749551.55	Surface Soil	0-0.5'	PCBs	8082
		DD40-000	2088550.76	749551.55	Surface Soil	0-0.5'	Pesticides	8081A
		DD40-000	2088550.76	749551.55	Subsurface Soil	0.5'-2.5'	VOCs	8260B

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		DD42-000	2088662.65	749783.13	Surface Soil	0-0.5'	Radionuclides	HPGe
		DD42-000	2088662.65	749783.13	Surface Soil	0-0.5'	Metals	6010A
		DD42-000	2088662.65	749783.13	Surface Soil	0-0.5'	SVOCs	8270C
		DD42-000	2088662.65	749783.13	Surface Soil	0-0.5'	PCBs	8082
		DD42-000	2088662.65	749783.13	Surface Soil	0-0.5'	Pesticides	8081A
		DD42-000	2088662.65	749783.13	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DE42-000	2088831.78	749949.65	Surface Soil	0-0.5'	Radionuclides	HPGe
		DE42-000	2088831.78	749949.65	Surface Soil	0-0.5'	Metals	6010A
		DE42-000	2088831.78	749949.65	Surface Soil	0-0.5'	SVOCs	8270C
		DE42-000	2088831.78	749949.65	Surface Soil	0-0.5'	PCBs	8082
		DE42-000	2088831.78	749949.65	Surface Soil	0-0.5'	Pesticides	8081A
		DE42-000	2088831.78	749949.65	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DF42-000	2089123.21	749910.62	Surface Soil	0-0.5'	Radionuclides	HPGe
		DF42-000	2089123.21	749910.62	Surface Soil	0-0.5'	Metals	6010A
		DF42-000	2089123.21	749910.62	Surface Soil	0-0.5'	SVOCs	8270C
		DF42-000	2089123.21	749910.62	Surface Soil	0-0.5'	PCBs	8082
		DF42-000	2089123.21	749910.62	Surface Soil	0-0.5'	Pesticides	8081A
		DF42-000	2089123.21	749910.62	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DH43-000	2089362.59	749991.29	Surface Soil	0-0.5'	Radionuclides	HPGe
		DH43-000	2089362.59	749991.29	Surface Soil	0-0.5'	Metals	6010A
		DH43-000	2089362.59	749991.29	Surface Soil	0-0.5'	SVOCs	8270C
		DH43-000	2089362.59	749991.29	Surface Soil	0-0.5'	PCBs	8082
		DH43-000	2089362.59	749991.29	Surface Soil	0-0.5'	Pesticides	8081A
		DH43-000	2089362.59	749991.29	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DG41-000	2089307.95	749744.10	Surface Soil	0-0.5'	Radionuclides	HPGe
		DG41-000	2089307.95	749744.10	Surface Soil	0-0.5'	Metals	6010A
		DG41-000	2089307.95	749744.10	Surface Soil	0-0.5'	SVOCs	8270C
		DG41-000	2089307.95	749744.10	Surface Soil	0-0.5'	PCBs	8082

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		DG41-000	2089307.95	749744.10	Surface Soil	0-0.5'	Pesticides	8081A
		DG41-000	2089307.95	749744.10	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DF41-000	2088998.31	749741.49	Surface Soil	0-0.5'	Radionuclides	HPGe
		DF41-000	2088998.31	749741.49	Surface Soil	0-0.5'	Metals	6010A
		DF41-000	2088998.31	749741.49	Surface Soil	0-0.5'	SVOCs	8270C
		DF41-000	2088998.31	749741.49	Surface Soil	0-0.5'	PCBs	8082
		DF41-000	2088998.31	749741.49	Surface Soil	0-0.5'	Pesticides	8081A
		DF41-000	2088998.31	749741.49	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DF40-000	2089086.78	749483.89	Surface Soil	0-0.5'	Radionuclides	HPGe
		DF40-000	2089086.78	749483.89	Surface Soil	0-0.5'	Metals	6010A
		DF40-000	2089086.78	749483.89	Surface Soil	0-0.5'	SVOCs	8270C
		DF40-000	2089086.78	749483.89	Surface Soil	0-0.5'	PCBs	8082
		DF40-000	2089086.78	749483.89	Surface Soil	0-0.5'	Pesticides	8081A
		DF40-000	2089086.78	749483.89	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DE40-000	2088805.76	749554.15	Surface Soil	0-0.5'	Radionuclides	HPGe
		DE40-000	2088805.76	749554.15	Surface Soil	0-0.5'	Metals	6010A
		DE40-000	2088805.76	749554.15	Surface Soil	0-0.5'	SVOCs	8270C
		DE40-000	2088805.76	749554.15	Surface Soil	0-0.5'	PCBs	8082
		DE40-000	2088805.76	749554.15	Surface Soil	0-0.5'	Pesticides	8081A
		DE40-000	2088805.76	749554.15	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DD39-000	2088639.23	749288.74	Surface Soil	0-0.5'	Radionuclides	HPGe
		DD39-000	2088639.23	749288.74	Surface Soil	0-0.5'	Metals	6010A
		DD39-000	2088639.23	749288.74	Surface Soil	0-0.5'	SVOCs	8270C
		DD39-000	2088639.23	749288.74	Surface Soil	0-0.5'	PCBs	8082
		DD39-000	2088639.23	749288.74	Surface Soil	0-0.5'	Pesticides	8081A
		DD39-000	2088639.23	749288.74	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DG41-001	2089248.22	749647.97	Surface Soil	0-0.5'	Radionuclides	HPGe
		DG41-001	2089248.22	749647.97	Surface Soil	0-0.5'	Metals	6010A

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		DG41-001	2089248.22	749647.97	Surface Soil	0-0.5'	SVOCs	8270C
		DG41-001	2089248.22	749647.97	Surface Soil	0-0.5'	PCBs	8082
		DG41-001	2089248.22	749647.97	Surface Soil	0-0.5'	Pesticides	8081A
		DG41-001	2089248.22	749647.97	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		DC39-000	2088448.69	749186.93	Surface Soil	0-0.5'	Radionuclides	HPGe
		DC39-000	2088448.69	749186.93	Surface Soil	0-0.5'	Metals	6010A
		DC39-000	2088448.69	749186.93	Surface Soil	0-0.5'	SVOCs	8270C
		DC39-000	2088448.69	749186.93	Surface Soil	0-0.5'	PCBs	8082
		DC39-000	2088448.69	749186.93	Surface Soil	0-0.5'	Pesticides	8081A
		DC39-000	2088448.69	749186.93	Subsurface Soil	0.5'-2.5'	VOCs	8260B
	PAC NE-1413 – Trench T-13	CV41-000	2086966.71	749584.29	Surface Soil	0-0.5'	Radionuclides	HPGe
		CV41-000	2086966.71	749584.29	Surface Soil	0-0.5'	Metals	6010A
		CV41-000	2086966.71	749584.29	Surface Soil	0-0.5'	SVOCs	8270C
		CV41-000	2086966.71	749584.29	Surface Soil	0-0.5'	PCBs	8082
		CV41-000	2086966.71	749584.29	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe
		CV41-000	2086966.71	749584.29	Subsurface Soil	0.5'-2.5'	Metals	6010A
		CV41-000	2086966.71	749584.29	Subsurface Soil	0.5'-2.5'	SVOCs	8270C
		CV41-000	2086966.71	749584.29	Subsurface Soil	0.5'-2.5'	VOCs	8260B
		CV41-000	2086966.71	749584.29	Subsurface Soil	0.5'-2.5'	PCBs	8082
		CV41-000	2086966.71	749584.29	Subsurface Soil	2.5-4.5'	Radionuclides	HPGe
		CV41-000	2086966.71	749584.29	Subsurface Soil	2.5-4.5'	Metals	6010A
		CV41-000	2086966.71	749584.29	Subsurface Soil	2.5-4.5'	SVOCs	8270C
		CV41-000	2086966.71	749584.29	Subsurface Soil	2.5-4.5'	VOCs	8260B
		CV41-000	2086966.71	749584.29	subsurface soil	2.5-4.5'	PCBs	8082
		CV41-000	2086966.71	749584.29	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CV41-000	2086966.71	749584.29	subsurface soil	4.5-6.5'	Metals	6010A
		CV41-000	2086966.71	749584.29	subsurface soil	4.5-6.5'	SVOCs	8270C
		CV41-000	2086966.71	749584.29	subsurface soil	4.5-6.5'	VOCs	8260B

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CV41-000	2086966.71	749584.29	subsurface soil	4.5-6.5'	PCBs	8082
		CV41-000	2086966.71	749584.29	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CV41-000	2086966.71	749584.29	subsurface soil	6.5-8.5'	Metals	6010A
		CV41-000	2086966.71	749584.29	subsurface soil	6.5-8.5'	SVOCs	8270C
		CV41-000	2086966.71	749584.29	subsurface soil	6.5-8.5'	VOCs	8260B
		CV41-000	2086966.71	749584.29	subsurface soil	6.5-8.5'	PCBs	8082
		CV41-000	2086966.71	749584.29	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CV41-000	2086966.71	749584.29	subsurface soil	8.5-10.5'	Metals	6010A
		CV41-000	2086966.71	749584.29	subsurface soil	8.5-10.5'	SVOCs	8270C
		CV41-000	2086966.71	749584.29	subsurface soil	8.5-10.5'	VOCs	8260B
		CV41-000	2086966.71	749584.29	subsurface soil	8.5-10.5'	PCBs	8082
		CV41-001	2086994.24	749570.86	surface soil	0-0.5'	Radionuclides	HPGe
		CV41-001	2086994.24	749570.86	surface soil	0-0.5'	Metals	6010A
		CV41-001	2086994.24	749570.86	surface soil	0-0.5'	SVOCs	8270C
		CV41-001	2086994.24	749570.86	surface soil	0-0.5'	PCBs	8082
		CV41-001	2086994.24	749570.86	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CV41-001	2086994.24	749570.86	subsurface soil	0.5'-2.5'	Metals	6010A
		CV41-001	2086994.24	749570.86	subsurface soil	0.5'-2.5'	SVOCs	8270C
		CV41-001	2086994.24	749570.86	subsurface soil	0.5'-2.5'	VOCs	8260B
		CV41-001	2086994.24	749570.86	subsurface soil	0.5'-2.5'	PCBs	8082
		CV41-001	2086994.24	749570.86	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CV41-001	2086994.24	749570.86	subsurface soil	2.5-4.5'	Metals	6010A
		CV41-001	2086994.24	749570.86	subsurface soil	2.5-4.5'	SVOCs	8270C
		CV41-001	2086994.24	749570.86	subsurface soil	2.5-4.5'	VOCs	8260B
		CV41-001	2086994.24	749570.86	subsurface soil	2.5-4.5'	PCBs	8082
		CV41-001	2086994.24	749570.86	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CV41-001	2086994.24	749570.86	subsurface soil	4.5-6.5'	Metals	6010A
		CV41-001	2086994.24	749570.86	subsurface soil	4.5-6.5'	SVOCs	8270C

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CV41-001	2086994.24	749570.86	subsurface soil	4.5-6.5'	VOCs	8260B
		CV41-001	2086994.24	749570.86	subsurface soil	4.5-6.5'	PCBs	8082
		CV41-001	2086994.24	749570.86	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CV41-001	2086994.24	749570.86	subsurface soil	6.5-8.5'	Metals	6010A
		CV41-001	2086994.24	749570.86	subsurface soil	6.5-8.5'	SVOCs	8270C
		CV41-001	2086994.24	749570.86	subsurface soil	6.5-8.5'	VOCs	8260B
		CV41-001	2086994.24	749570.86	subsurface soil	6.5-8.5'	PCBs	8082
		CV41-001	2086994.24	749570.86	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CV41-001	2086994.24	749570.86	subsurface soil	8.5-10.5'	Metals	6010A
		CV41-001	2086994.24	749570.86	subsurface soil	8.5-10.5'	SVOCs	8270C
		CV41-001	2086994.24	749570.86	subsurface soil	8.5-10.5'	VOCs	8260B
		CV41-001	2086994.24	749570.86	subsurface soil	8.5-10.5'	PCBs	8082
		CV41-002	2087015.06	749599.73	surface soil	0-0.5'	Radionuclides	HPGe
		CV41-002	2087015.06	749599.73	surface soil	0-0.5'	Metals	6010A
		CV41-002	2087015.06	749599.73	surface soil	0-0.5'	SVOCs	8270C
		CV41-002	2087015.06	749599.73	surface soil	0-0.5'	PCBs	8082
		CV41-002	2087015.06	749599.73	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CV41-002	2087015.06	749599.73	subsurface soil	0.5'-2.5'	Metals	6010A
		CV41-002	2087015.06	749599.73	subsurface soil	0.5'-2.5'	SVOCs	8270C
		CV41-002	2087015.06	749599.73	subsurface soil	0.5'-2.5'	VOCs	8260B
		CV41-002	2087015.06	749599.73	subsurface soil	0.5'-2.5'	PCBs	8082
		CV41-002	2087015.06	749599.73	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CV41-002	2087015.06	749599.73	subsurface soil	2.5-4.5'	Metals	6010A
		CV41-002	2087015.06	749599.73	subsurface soil	2.5-4.5'	SVOCs	8270C
		CV41-002	2087015.06	749599.73	subsurface soil	2.5-4.5'	VOCs	8260B
		CV41-002	2087015.06	749599.73	subsurface soil	2.5-4.5'	PCBs	8082
		CV41-002	2087015.06	749599.73	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CV41-002	2087015.06	749599.73	subsurface soil	4.5-6.5'	Metals	6010A

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CV41-002	2087015.06	749599.73	subsurface soil	4.5-6.5'	SVOCs	8270C
		CV41-002	2087015.06	749599.73	subsurface soil	4.5-6.5'	VOCs	8260B
		CV41-002	2087015.06	749599.73	subsurface soil	4.5-6.5'	PCBs	8082
		CV41-002	2087015.06	749599.73	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CV41-002	2087015.06	749599.73	subsurface soil	6.5-8.5'	Metals	6010A
		CV41-002	2087015.06	749599.73	subsurface soil	6.5-8.5'	SVOCs	8270C
		CV41-002	2087015.06	749599.73	subsurface soil	6.5-8.5'	VOCs	8260B
		CV41-002	2087015.06	749599.73	subsurface soil	6.5-8.5'	PCBs	8082
		CV41-002	2087015.06	749599.73	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CV41-002	2087015.06	749599.73	subsurface soil	8.5-10.5'	Metals	6010A
		CV41-002	2087015.06	749599.73	subsurface soil	8.5-10.5'	SVOCs	8270C
		CV41-002	2087015.06	749599.73	subsurface soil	8.5-10.5'	VOCs	8260B
		CV41-002	2087015.06	749599.73	subsurface soil	8.5-10.5'	PCBs	8082
		CV41-003	2087050.64	749597.05	surface soil	0-0.5'	Radionuclides	HPGe
		CV41-003	2087050.64	749597.05	surface soil	0-0.5'	Metals	6010A
		CV41-003	2087050.64	749597.05	surface soil	0-0.5'	SVOCs	8270C
		CV41-003	2087050.64	749597.05	surface soil	0-0.5'	PCBs	8082
		CV41-003	2087050.64	749597.05	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CV41-003	2087050.64	749597.05	subsurface soil	0.5'-2.5'	Metals	6010A
		CV41-003	2087050.64	749597.05	subsurface soil	0.5'-2.5'	SVOCs	8270C
		CV41-003	2087050.64	749597.05	subsurface soil	0.5'-2.5'	VOCs	8260B
		CV41-003	2087050.64	749597.05	subsurface soil	0.5'-2.5'	PCBs	8082
		CV41-003	2087050.64	749597.05	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CV41-003	2087050.64	749597.05	subsurface soil	2.5-4.5'	Metals	6010A
		CV41-003	2087050.64	749597.05	subsurface soil	2.5-4.5'	SVOCs	8270C
		CV41-003	2087050.64	749597.05	subsurface soil	2.5-4.5'	VOCs	8260B
		CV41-003	2087050.64	749597.05	subsurface soil	2.5-4.5'	PCBs	8082
		CV41-003	2087050.64	749597.05	subsurface soil	4.5-6.5'	Radionuclides	HPGe

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CV41-003	2087050.64	749597.05	subsurface soil	4.5-6.5'	Metals	6010A
		CV41-003	2087050.64	749597.05	subsurface soil	4.5-6.5'	SVOCs	8270C
		CV41-003	2087050.64	749597.05	subsurface soil	4.5-6.5'	VOCs	8260B
		CV41-003	2087050.64	749597.05	subsurface soil	4.5-6.5'	PCBs	8082
		CV41-003	2087050.64	749597.05	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CV41-003	2087050.64	749597.05	subsurface soil	6.5-8.5'	Metals	6010A
		CV41-003	2087050.64	749597.05	subsurface soil	6.5-8.5'	SVOCs	8270C
		CV41-003	2087050.64	749597.05	subsurface soil	6.5-8.5'	VOCs	8260B
		CV41-003	2087050.64	749597.05	subsurface soil	6.5-8.5'	PCBs	8082
		CV41-003	2087050.64	749597.05	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CV41-003	2087050.64	749597.05	subsurface soil	8.5-10.5'	Metals	6010A
		CV41-003	2087050.64	749597.05	subsurface soil	8.5-10.5'	SVOCs	8270C
		CV41-003	2087050.64	749597.05	subsurface soil	8.5-10.5'	VOCs	8260B
		CV41-003	2087050.64	749597.05	subsurface soil	8.5-10.5'	PCBs	8082
		CV41-004	2087073.47	749619.88	surface soil	0-0.5'	Radionuclides	HPGe
		CV41-004	2087073.47	749619.88	surface soil	0-0.5'	Metals	6010A
		CV41-004	2087073.47	749619.88	surface soil	0-0.5'	SVOCs	8270C
		CV41-004	2087073.47	749619.88	surface soil	0-0.5'	PCBs	8082
		CV41-004	2087073.47	749619.88	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CV41-004	2087073.47	749619.88	subsurface soil	2.5-4.5'	Metals	6010A
		CV41-004	2087073.47	749619.88	subsurface soil	2.5-4.5'	SVOCs	8270C
		CV41-004	2087073.47	749619.88	subsurface soil	2.5-4.5'	PCBs	8082
		CV41-004	2087073.47	749619.88	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CV41-004	2087073.47	749619.88	subsurface soil	4.5-6.5'	Metals	6010A
		CV41-004	2087073.47	749619.88	subsurface soil	4.5-6.5'	SVOCs	8270C
		CV41-004	2087073.47	749619.88	subsurface soil	4.5-6.5'	VOCs	8260B
		CV41-004	2087073.47	749619.88	subsurface soil	4.5-6.5'	PCBs	8082
		CV41-004	2087073.47	749619.88	subsurface soil	6.5-8.5'	Radionuclides	HPGe

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CV41-004	2087073.47	749619.88	subsurface soil	6.5-8.5'	Metals	6010A
		CV41-004	2087073.47	749619.88	subsurface soil	6.5-8.5'	SVOCs	8270C
		CV41-004	2087073.47	749619.88	subsurface soil	6.5-8.5'	VOCs	8260B
		CV41-004	2087073.47	749619.88	subsurface soil	6.5-8.5'	PCBs	8082
		CV41-004	2087073.47	749619.88	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CV41-004	2087073.47	749619.88	subsurface soil	8.5-10.5'	Metals	6010A
		CV41-004	2087073.47	749619.88	subsurface soil	8.5-10.5'	SVOCs	8270C
		CV41-004	2087073.47	749619.88	subsurface soil	8.5-10.5'	VOCs	8260B
		CV41-004	2087073.47	749619.88	subsurface soil	8.5-10.5'	PCBs	8082
		CV41-005	2087086.22	749593.02	surface soil	0-0.5'	Radionuclides	HPGe
		CV41-005	2087086.22	749593.02	surface soil	0-0.5'	Metals	6010A
		CV41-005	2087086.22	749593.02	surface soil	0-0.5'	SVOCs	8270C
		CV41-005	2087086.22	749593.02	surface soil	0-0.5'	PCBs	8082
		CV41-005	2087086.22	749593.02	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CV41-005	2087086.22	749593.02	subsurface soil	2.5-4.5'	Metals	6010A
		CV41-005	2087086.22	749593.02	subsurface soil	2.5-4.5'	SVOCs	8270C
		CV41-005	2087086.22	749593.02	subsurface soil	2.5-4.5'	PCBs	8082
		CV41-005	2087086.22	749593.02	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CV41-005	2087086.22	749593.02	subsurface soil	4.5-6.5'	Metals	6010A
		CV41-005	2087086.22	749593.02	subsurface soil	4.5-6.5'	SVOCs	8270C
		CV41-005	2087086.22	749593.02	subsurface soil	4.5-6.5'	VOCs	8260B
		CV41-005	2087086.22	749593.02	subsurface soil	4.5-6.5'	PCBs	8082
		CV41-005	2087086.22	749593.02	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CV41-005	2087086.22	749593.02	subsurface soil	6.5-8.5'	Metals	6010A
		CV41-005	2087086.22	749593.02	subsurface soil	6.5-8.5'	SVOCs	8270C
		CV41-005	2087086.22	749593.02	subsurface soil	6.5-8.5'	VOCs	8260B
		CV41-005	2087086.22	749593.02	subsurface soil	6.5-8.5'	PCBs	8082
		CV41-005	2087086.22	749593.02	subsurface soil	8.5-10.5'	Radionuclides	HPGe

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CV41-005	2087086.22	749593.02	subsurface soil	8.5-10.5'	Metals	6010A
		CV41-005	2087086.22	749593.02	subsurface soil	8.5-10.5'	SVOCs	8270C
		CV41-005	2087086.22	749593.02	subsurface soil	8.5-10.5'	VOCs	8260B
		CV41-005	2087086.22	749593.02	subsurface soil	8.5-10.5'	PCBs	8082
		CV41-006	2087106.37	749621.22	surface soil	0-0.5'	Radionuclides	HPGe
		CV41-006	2087106.37	749621.22	surface soil	0-0.5'	Metals	6010A
		CV41-006	2087106.37	749621.22	surface soil	0-0.5'	SVOCs	8270C
		CV41-006	2087106.37	749621.22	surface soil	0-0.5'	PCBs	8082
		CV41-006	2087106.37	749621.22	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CV41-006	2087106.37	749621.22	subsurface soil	2.5-4.5'	Metals	6010A
		CV41-006	2087106.37	749621.22	subsurface soil	2.5-4.5'	SVOCs	8270C
		CV41-006	2087106.37	749621.22	subsurface soil	2.5-4.5'	PCBs	8082
		CV41-006	2087106.37	749621.22	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CV41-006	2087106.37	749621.22	subsurface soil	4.5-6.5'	Metals	6010A
		CV41-006	2087106.37	749621.22	subsurface soil	4.5-6.5'	SVOCs	8270C
		CV41-006	2087106.37	749621.22	subsurface soil	4.5-6.5'	VOCs	8260B
		CV41-006	2087106.37	749621.22	subsurface soil	4.5-6.5'	PCBs	8082
		CV41-006	2087106.37	749621.22	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CV41-006	2087106.37	749621.22	subsurface soil	6.5-8.5'	Metals	6010A
		CV41-006	2087106.37	749621.22	subsurface soil	6.5-8.5'	SVOCs	8270C
		CV41-006	2087106.37	749621.22	subsurface soil	6.5-8.5'	VOCs	8260B
		CV41-006	2087106.37	749621.22	subsurface soil	6.5-8.5'	PCBs	8082
		CV41-006	2087106.37	749621.22	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CV41-006	2087106.37	749621.22	subsurface soil	8.5-10.5'	Metals	6010A
		CV41-006	2087106.37	749621.22	subsurface soil	8.5-10.5'	SVOCs	8270C
		CV41-006	2087106.37	749621.22	subsurface soil	8.5-10.5'	VOCs	8260B
		CV41-006	2087106.37	749621.22	subsurface soil	8.5-10.5'	PCBs	8082
		CW41-000	2087142.62	749618.53	surface soil	0-0.5'	Radionuclides	HPGe

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CW41-000	2087142.62	749618.53	surface soil	0-0.5'	Metals	6010A
		CW41-000	2087142.62	749618.53	surface soil	0-0.5'	SVOCs	8270C
		CW41-000	2087142.62	749618.53	surface soil	0-0.5'	PCBs	8082
		CW41-000	2087142.62	749618.53	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CW41-000	2087142.62	749618.53	subsurface soil	2.5-4.5'	Metals	6010A
		CW41-000	2087142.62	749618.53	subsurface soil	2.5-4.5'	SVOCs	8270C
		CW41-000	2087142.62	749618.53	subsurface soil	2.5-4.5'	PCBs	8082
		CW41-000	2087142.62	749618.53	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CW41-000	2087142.62	749618.53	subsurface soil	4.5-6.5'	Metals	6010A
		CW41-000	2087142.62	749618.53	subsurface soil	4.5-6.5'	SVOCs	8270C
		CW41-000	2087142.62	749618.53	subsurface soil	4.5-6.5'	VOCs	8260B
		CW41-000	2087142.62	749618.53	subsurface soil	4.5-6.5'	PCBs	8082
		CW41-000	2087142.62	749618.53	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CW41-000	2087142.62	749618.53	subsurface soil	6.5-8.5'	Metals	6010A
		CW41-000	2087142.62	749618.53	subsurface soil	6.5-8.5'	SVOCs	8270C
		CW41-000	2087142.62	749618.53	subsurface soil	6.5-8.5'	VOCs	8260B
		CW41-000	2087142.62	749618.53	subsurface soil	6.5-8.5'	PCBs	8082
		CW41-000	2087142.62	749618.53	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CW41-000	2087142.62	749618.53	subsurface soil	8.5-10.5'	Metals	6010A
		CW41-000	2087142.62	749618.53	subsurface soil	8.5-10.5'	SVOCs	8270C
		CW41-000	2087142.62	749618.53	subsurface soil	8.5-10.5'	VOCs	8260B
		CW41-000	2087142.62	749618.53	subsurface soil	8.5-10.5'	PCBs	8082
		CW41-001	2087163.44	749648.07	surface soil	0-0.5'	Radionuclides	HPGe
		CW41-001	2087163.44	749648.07	surface soil	0-0.5'	Metals	6010A
		CW41-001	2087163.44	749648.07	surface soil	0-0.5'	SVOCs	8270C
		CW41-001	2087163.44	749648.07	surface soil	0-0.5'	PCBs	8082
		CW41-001	2087163.44	749648.07	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CW41-001	2087163.44	749648.07	subsurface soil	2.5-4.5'	Metals	6010A

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CW41-001	2087163.44	749648.07	subsurface soil	2.5-4.5'	SVOCs	8270C
		CW41-001	2087163.44	749648.07	subsurface soil	2.5-4.5'	PCBs	8082
		CW41-001	2087163.44	749648.07	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CW41-001	2087163.44	749648.07	subsurface soil	4.5-6.5'	Metals	6010A
		CW41-001	2087163.44	749648.07	subsurface soil	4.5-6.5'	SVOCs	8270C
		CW41-001	2087163.44	749648.07	subsurface soil	4.5-6.5'	VOCs	8260B
		CW41-001	2087163.44	749648.07	subsurface soil	4.5-6.5'	PCBs	8082
		CW41-001	2087163.44	749648.07	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CW41-001	2087163.44	749648.07	subsurface soil	6.5-8.5'	Metals	6010A
		CW41-001	2087163.44	749648.07	subsurface soil	6.5-8.5'	SVOCs	8270C
		CW41-001	2087163.44	749648.07	subsurface soil	6.5-8.5'	VOCs	8260B
		CW41-001	2087163.44	749648.07	subsurface soil	6.5-8.5'	PCBs	8082
		CW41-001	2087163.44	749648.07	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CW41-001	2087163.44	749648.07	subsurface soil	8.5-10.5'	Metals	6010A
		CW41-001	2087163.44	749648.07	subsurface soil	8.5-10.5'	SVOCs	8270C
		CW41-001	2087163.44	749648.07	subsurface soil	8.5-10.5'	VOCs	8260B
		CW41-001	2087163.44	749648.07	subsurface soil	8.5-10.5'	PCBs	8082
		CW41-002	2087178.88	749622.56	surface soil	0-0.5'	Radionuclides	HPGe
		CW41-002	2087178.88	749622.56	surface soil	0-0.5'	Metals	6010A
		CW41-002	2087178.88	749622.56	surface soil	0-0.5'	SVOCs	8270C
		CW41-002	2087178.88	749622.56	surface soil	0-0.5'	PCBs	8082
		CW41-002	2087178.88	749622.56	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CW41-002	2087178.88	749622.56	subsurface soil	2.5-4.5'	Metals	6010A
		CW41-002	2087178.88	749622.56	subsurface soil	2.5-4.5'	SVOCs	8270C
		CW41-002	2087178.88	749622.56	subsurface soil	2.5-4.5'	PCBs	8082
		CW41-002	2087178.88	749622.56	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CW41-002	2087178.88	749622.56	subsurface soil	4.5-6.5'	Metals	6010A
		CW41-002	2087178.88	749622.56	subsurface soil	4.5-6.5'	SVOCs	8270C

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CW41-002	2087178.88	749622.56	subsurface soil	4.5-6.5'	VOCs	8260B
		CW41-002	2087178.88	749622.56	subsurface soil	4.5-6.5'	PCBs	8082
		CW41-002	2087178.88	749622.56	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CW41-002	2087178.88	749622.56	subsurface soil	6.5-8.5'	Metals	6010A
		CW41-002	2087178.88	749622.56	subsurface soil	6.5-8.5'	SVOCs	8270C
		CW41-002	2087178.88	749622.56	subsurface soil	6.5-8.5'	VOCs	8260B
		CW41-002	2087178.88	749622.56	subsurface soil	6.5-8.5'	PCBs	8082
		CW41-002	2087178.88	749622.56	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CW41-002	2087178.88	749622.56	subsurface soil	8.5-10.5'	Metals	6010A
		CW41-002	2087178.88	749622.56	subsurface soil	8.5-10.5'	SVOCs	8270C
		CW41-002	2087178.88	749622.56	subsurface soil	8.5-10.5'	VOCs	8260B
		CW41-002	2087178.88	749622.56	subsurface soil	8.5-10.5'	PCBs	8082
	PAC NE-1412 – Trench T-12	CV40-000	2087078.06	749463.45	surface soil	0-0.5'	Radionuclides	HPGe
		CV40-000	2087078.06	749463.45	surface soil	0-0.5'	Metals	6010A
		CV40-000	2087078.06	749463.45	surface soil	0-0.5'	PCBs	8082
		CV40-000	2087078.06	749463.45	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CV40-000	2087078.06	749463.45	subsurface soil	0.5'-2.5'	Metals	6010A
		CV40-000	2087078.06	749463.45	subsurface soil	0.5'-2.5'	VOCs	8260B
		CV40-000	2087078.06	749463.45	subsurface soil	0.5'-2.5'	PCBs	8082
		CV40-000	2087078.06	749463.45	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CV40-000	2087078.06	749463.45	subsurface soil	2.5-4.5'	Metals	6010A
		CV40-000	2087078.06	749463.45	subsurface soil	2.5-4.5'	VOCs	8260B
		CV40-000	2087078.06	749463.45	subsurface soil	2.5-4.5'	PCBs	8082
		CV40-000	2087078.06	749463.45	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CV40-000	2087078.06	749463.45	subsurface soil	4.5-6.5'	Metals	6010A
		CV40-000	2087078.06	749463.45	subsurface soil	4.5-6.5'	VOCs	8260B
		CV40-000	2087078.06	749463.45	subsurface soil	4.5-6.5'	PCBs	8082
		CV40-000	2087078.06	749463.45	subsurface soil	6.5-8.5'	Radionuclides	HPGe

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CV40-000	2087078.06	749463.45	subsurface soil	6.5-8.5'	Metals	6010A
		CV40-000	2087078.06	749463.45	subsurface soil	6.5-8.5'	VOCs	8260B
		CV40-000	2087078.06	749463.45	subsurface soil	6.5-8.5'	PCBs	8082
		CV40-000	2087078.06	749463.45	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CV40-000	2087078.06	749463.45	subsurface soil	8.5-10.5'	Metals	6010A
		CV40-000	2087078.06	749463.45	subsurface soil	8.5-10.5'	VOCs	8260B
		CV40-000	2087078.06	749463.45	subsurface soil	8.5-10.5'	PCBs	8082
		CV40-001	2087106.49	749480.09	surface soil	0-0.5'	Radionuclides	HPGe
		CV40-001	2087106.49	749480.09	surface soil	0-0.5'	Metals	6010A
		CV40-001	2087106.49	749480.09	surface soil	0-0.5'	PCBs	8082
		CV40-001	2087106.49	749480.09	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CV40-001	2087106.49	749480.09	subsurface soil	0.5'-2.5'	Metals	6010A
		CV40-001	2087106.49	749480.09	subsurface soil	0.5'-2.5'	VOCs	8260B
		CV40-001	2087106.49	749480.09	subsurface soil	0.5'-2.5'	PCBs	8082
		CV40-001	2087106.49	749480.09	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CV40-001	2087106.49	749480.09	subsurface soil	2.5-4.5'	Metals	6010A
		CV40-001	2087106.49	749480.09	subsurface soil	2.5-4.5'	VOCs	8260B
		CV40-001	2087106.49	749480.09	subsurface soil	2.5-4.5'	PCBs	8082
		CV40-001	2087106.49	749480.09	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CV40-001	2087106.49	749480.09	subsurface soil	4.5-6.5'	Metals	6010A
		CV40-001	2087106.49	749480.09	subsurface soil	4.5-6.5'	VOCs	8260B
		CV40-001	2087106.49	749480.09	subsurface soil	4.5-6.5'	PCBs	8082
		CV40-001	2087106.49	749480.09	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CV40-001	2087106.49	749480.09	subsurface soil	6.5-8.5'	Metals	6010A
		CV40-001	2087106.49	749480.09	subsurface soil	6.5-8.5'	VOCs	8260B
		CV40-001	2087106.49	749480.09	subsurface soil	6.5-8.5'	PCBs	8082
		CV40-001	2087106.49	749480.09	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CV40-001	2087106.49	749480.09	subsurface soil	8.5-10.5'	Metals	6010A

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CV40-001	2087106.49	749480.09	subsurface soil	8.5-10.5'	VOCs	8260B
		CV40-001	2087106.49	749480.09	subsurface soil	8.5-10.5'	PCBs	8082
		CV40-002	2087113.43	749452.35	surface soil	0-0.5'	Radionuclides	HPGe
		CV40-002	2087113.43	749452.35	surface soil	0-0.5'	Metals	6010A
		CV40-002	2087113.43	749452.35	surface soil	0-0.5'	PCBs	8082
		CV40-002	2087113.43	749452.35	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CV40-002	2087113.43	749452.35	subsurface soil	0.5'-2.5'	Metals	6010A
		CV40-002	2087113.43	749452.35	subsurface soil	0.5'-2.5'	VOCs	8260B
		CV40-002	2087113.43	749452.35	subsurface soil	0.5'-2.5'	PCBs	8082
		CV40-002	2087113.43	749452.35	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CV40-002	2087113.43	749452.35	subsurface soil	2.5-4.5'	Metals	6010A
		CV40-002	2087113.43	749452.35	subsurface soil	2.5-4.5'	VOCs	8260B
		CV40-002	2087113.43	749452.35	subsurface soil	2.5-4.5'	PCBs	8082
		CV40-002	2087113.43	749452.35	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CV40-002	2087113.43	749452.35	subsurface soil	4.5-6.5'	Metals	6010A
		CV40-002	2087113.43	749452.35	subsurface soil	4.5-6.5'	VOCs	8260B
		CV40-002	2087113.43	749452.35	subsurface soil	4.5-6.5'	PCBs	8082
		CV40-002	2087113.43	749452.35	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CV40-002	2087113.43	749452.35	subsurface soil	6.5-8.5'	Metals	6010A
		CV40-002	2087113.43	749452.35	subsurface soil	6.5-8.5'	VOCs	8260B
		CV40-002	2087113.43	749452.35	subsurface soil	6.5-8.5'	PCBs	8082
		CV40-002	2087113.43	749452.35	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CV40-002	2087113.43	749452.35	subsurface soil	8.5-10.5'	Metals	6010A
		CV40-002	2087113.43	749452.35	subsurface soil	8.5-10.5'	VOCs	8260B
		CV40-002	2087113.43	749452.35	subsurface soil	8.5-10.5'	PCBs	8082
		CW40-000	2087139.09	749477.67	surface soil	0-0.5'	Radionuclides	HPGe
		CW40-000	2087139.09	749477.67	surface soil	0-0.5'	Metals	6010A
		CW40-000	2087139.09	749477.67	surface soil	0-0.5'	PCBs	8082

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CW40-000	2087139.09	749477.67	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CW40-000	2087139.09	749477.67	subsurface soil	0.5'-2.5'	Metals	6010A
		CW40-000	2087139.09	749477.67	subsurface soil	0.5'-2.5'	VOCs	8260B
		CW40-000	2087139.09	749477.67	subsurface soil	0.5'-2.5'	PCBs	8082
		CW40-000	2087139.09	749477.67	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CW40-000	2087139.09	749477.67	subsurface soil	2.5-4.5'	Metals	6010A
		CW40-000	2087139.09	749477.67	subsurface soil	2.5-4.5'	VOCs	8260B
		CW40-000	2087139.09	749477.67	subsurface soil	2.5-4.5'	PCBs	8082
		CW40-000	2087139.09	749477.67	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CW40-000	2087139.09	749477.67	subsurface soil	4.5-6.5'	Metals	6010A
		CW40-000	2087139.09	749477.67	subsurface soil	4.5-6.5'	VOCs	8260B
		CW40-000	2087139.09	749477.67	subsurface soil	4.5-6.5'	PCBs	8082
		CW40-000	2087139.09	749477.67	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CW40-000	2087139.09	749477.67	subsurface soil	6.5-8.5'	Metals	6010A
		CW40-000	2087139.09	749477.67	subsurface soil	6.5-8.5'	VOCs	8260B
		CW40-000	2087139.09	749477.67	subsurface soil	6.5-8.5'	PCBs	8082
		CW40-000	2087139.09	749477.67	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CW40-000	2087139.09	749477.67	subsurface soil	8.5-10.5'	Metals	6010A
		CW40-000	2087139.09	749477.67	subsurface soil	8.5-10.5'	VOCs	8260B
		CW40-000	2087139.09	749477.67	subsurface soil	8.5-10.5'	PCBs	8082
		CW40-001	2087145.33	749448.88	surface soil	0-0.5'	Radionuclides	HPGe
		CW40-001	2087145.33	749448.88	surface soil	0-0.5'	Metals	6010A
		CW40-001	2087145.33	749448.88	surface soil	0-0.5'	PCBs	8082
		CW40-001	2087145.33	749448.88	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CW40-001	2087145.33	749448.88	subsurface soil	0.5'-2.5'	Metals	6010A
		CW40-001	2087145.33	749448.88	subsurface soil	0.5'-2.5'	VOCs	8260B
		CW40-001	2087145.33	749448.88	subsurface soil	0.5'-2.5'	PCBs	8082
		CW40-001	2087145.33	749448.88	subsurface soil	2.5-4.5'	Radionuclides	HPGe

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CW40-001	2087145.33	749448.88	subsurface soil	2.5-4.5'	Metals	6010A
		CW40-001	2087145.33	749448.88	subsurface soil	2.5-4.5'	VOCs	8260B
		CW40-001	2087145.33	749448.88	subsurface soil	2.5-4.5'	PCBs	8082
		CW40-001	2087145.33	749448.88	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CW40-001	2087145.33	749448.88	subsurface soil	4.5-6.5'	Metals	6010A
		CW40-001	2087145.33	749448.88	subsurface soil	4.5-6.5'	VOCs	8260B
		CW40-001	2087145.33	749448.88	subsurface soil	4.5-6.5'	PCBs	8082
		CW40-001	2087145.33	749448.88	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CW40-001	2087145.33	749448.88	subsurface soil	6.5-8.5'	Metals	6010A
		CW40-001	2087145.33	749448.88	subsurface soil	6.5-8.5'	VOCs	8260B
		CW40-001	2087145.33	749448.88	subsurface soil	6.5-8.5'	PCBs	8082
		CW40-001	2087145.33	749448.88	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CW40-001	2087145.33	749448.88	subsurface soil	8.5-10.5'	Metals	6010A
		CW40-001	2087145.33	749448.88	subsurface soil	8.5-10.5'	VOCs	8260B
		CW40-001	2087145.33	749448.88	subsurface soil	8.5-10.5'	PCBs	8082
		CW40-002	2087173.08	749468.30	surface soil	0-0.5'	Radionuclides	HPGe
		CW40-002	2087173.08	749468.30	surface soil	0-0.5'	Metals	6010A
		CW40-002	2087173.08	749468.30	surface soil	0-0.5'	PCBs	8082
		CW40-002	2087173.08	749468.30	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CW40-002	2087173.08	749468.30	subsurface soil	0.5'-2.5'	Metals	6010A
		CW40-002	2087173.08	749468.30	subsurface soil	0.5'-2.5'	VOCs	8260B
		CW40-002	2087173.08	749468.30	subsurface soil	0.5'-2.5'	PCBs	8082
		CW40-002	2087173.08	749468.30	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CW40-002	2087173.08	749468.30	subsurface soil	2.5-4.5'	Metals	6010A
		CW40-002	2087173.08	749468.30	subsurface soil	2.5-4.5'	VOCs	8260B
		CW40-002	2087173.08	749468.30	subsurface soil	2.5-4.5'	PCBs	8082
		CW40-002	2087173.08	749468.30	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CW40-002	2087173.08	749468.30	subsurface soil	4.5-6.5'	Metals	6010A

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CW40-002	2087173.08	749468.30	subsurface soil	4.5-6.5'	VOCs	8260B
		CW40-002	2087173.08	749468.30	subsurface soil	4.5-6.5'	PCBs	8082
		CW40-002	2087173.08	749468.30	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CW40-002	2087173.08	749468.30	subsurface soil	6.5-8.5'	metals	6010A
		CW40-002	2087173.08	749468.30	subsurface soil	6.5-8.5'	VOCs	8260B
		CW40-002	2087173.08	749468.30	subsurface soil	6.5-8.5'	PCBs	8082
		CW40-002	2087173.08	749468.30	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CW40-002	2087173.08	749468.30	subsurface soil	8.5-10.5'	Metals	6010A
		CW40-002	2087173.08	749468.30	subsurface soil	8.5-10.5'	VOCs	8260B
		CW40-002	2087173.08	749468.30	subsurface soil	8.5-10.5'	PCBs	8082
		CW40-003	2087207.75	749457.21	surface soil	0-0.5'	Radionuclides	HPGe
		CW40-003	2087207.75	749457.21	surface soil	0-0.5'	Metals	6010A
		CW40-003	2087207.75	749457.21	surface soil	0-0.5'	PCBs	8082
		CW40-003	2087207.75	749457.21	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CW40-003	2087207.75	749457.21	subsurface soil	0.5'-2.5'	Metals	6010A
		CW40-003	2087207.75	749457.21	subsurface soil	0.5'-2.5'	VOCs	8260B
		CW40-003	2087207.75	749457.21	subsurface soil	0.5'-2.5'	PCBs	8082
		CW40-003	2087207.75	749457.21	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CW40-003	2087207.75	749457.21	subsurface soil	2.5-4.5'	Metals	6010A
		CW40-003	2087207.75	749457.21	subsurface soil	2.5-4.5'	VOCs	8260B
		CW40-003	2087207.75	749457.21	subsurface soil	2.5-4.5'	PCBs	8082
		CW40-003	2087207.75	749457.21	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CW40-003	2087207.75	749457.21	subsurface soil	4.5-6.5'	Metals	6010A
		CW40-003	2087207.75	749457.21	subsurface soil	4.5-6.5'	VOCs	8260B
		CW40-003	2087207.75	749457.21	subsurface soil	4.5-6.5'	PCBs	8082
		CW40-003	2087207.75	749457.21	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CW40-003	2087207.75	749457.21	subsurface soil	6.5-8.5'	Metals	6010A
		CW40-003	2087207.75	749457.21	subsurface soil	6.5-8.5'	VOCs	8260B

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CW40-003	2087207.75	749457.21	subsurface soil	6.5-8.5'	PCBs	8082
		CW40-003	2087207.75	749457.21	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CW40-003	2087207.75	749457.21	subsurface soil	8.5-10.5'	Metals	6010A
		CW40-003	2087207.75	749457.21	subsurface soil	8.5-10.5'	VOCs	8260B
		CW40-003	2087207.75	749457.21	subsurface soil	8.5-10.5'	PCBs	8082
		CW40-004	2087204.29	749479.75	surface soil	0-0.5'	Radionuclides	HPGe
		CW40-004	2087204.29	749479.75	surface soil	0-0.5'	Metals	6010A
		CW40-004	2087204.29	749479.75	surface soil	0-0.5'	PCBs	8082
		CW40-004	2087204.29	749479.75	subsurface soil	0.5'-2.5'	Radionuclides	HPGe
		CW40-004	2087204.29	749479.75	subsurface soil	0.5'-2.5'	Metals	6010A
		CW40-004	2087204.29	749479.75	subsurface soil	0.5'-2.5'	VOCs	8260B
		CW40-004	2087204.29	749479.75	subsurface soil	0.5'-2.5'	PCBs	8082
		CW40-004	2087204.29	749479.75	subsurface soil	2.5-4.5'	Radionuclides	HPGe
		CW40-004	2087204.29	749479.75	subsurface soil	2.5-4.5'	Metals	6010A
		CW40-004	2087204.29	749479.75	subsurface soil	2.5-4.5'	VOCs	8260B
		CW40-004	2087204.29	749479.75	subsurface soil	2.5-4.5'	PCBs	8082
		CW40-004	2087204.29	749479.75	subsurface soil	4.5-6.5'	Radionuclides	HPGe
		CW40-004	2087204.29	749479.75	subsurface soil	4.5-6.5'	Metals	6010A
		CW40-004	2087204.29	749479.75	subsurface soil	4.5-6.5'	VOCs	8260B
		CW40-004	2087204.29	749479.75	subsurface soil	4.5-6.5'	PCBs	8082
		CW40-004	2087204.29	749479.75	subsurface soil	6.5-8.5'	Radionuclides	HPGe
		CW40-004	2087204.29	749479.75	subsurface soil	6.5-8.5'	Metals	6010A
		CW40-004	2087204.29	749479.75	subsurface soil	6.5-8.5'	VOCs	8260B
		CW40-004	2087204.29	749479.75	subsurface soil	6.5-8.5'	PCBs	8082
		CW40-004	2087204.29	749479.75	subsurface soil	8.5-10.5'	Radionuclides	HPGe
		CW40-004	2087204.29	749479.75	subsurface soil	8.5-10.5'	Metals	6010A
	PAC NE-1407 – OU 2 Treatment Facility	CV43-000	2087134.60	749980.95	surface soil	0-0.5'	Metals	6010A
		CV43-000	2087134.60	749980.95	subsurface soil	0-0.5'	VOCs	8260

Table 2 IHSS Group NE/NW Characterization Sampling Specifications

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		CV43-001	2087135.47	749967.93	surface soil	0-0.5'	Metals	6010A
		CV43-001	2087135.47	749967.93	subsurface soil	0-0.5'	VOCs	8260
		CW43-000	2087135.47	749967.93	surface soil	0-0.5'	Metals	6010A
		CW43-000	2087135.47	749967.93	subsurface soil	0-0.5'	VOCs	8260
		CW43-001	2087140.61	749975.88	surface soil	0-0.5'	Metals	6010A
		CW43-001	2087140.61	749975.88	subsurface soil	0-0.5'	VOCs	8260
		CW43-002	2087147.12	749969.73	surface soil	0-0.5'	Metals	6010A
		CW43-002	2087147.12	749969.73	subsurface soil	0-0.5'	VOCs	8260
NW	IHSS 174a – Property Utilization and Disposal (PU&D) Yard and Drum Storage Area	BW52-000	2082020.64	751766.82	subsurface	TBD	Radionuclides	HPGe
							Metals	6010A
							VOCs	8260
							SVOCs	8270C
							Pesticides	8081A
							PCBs	8082

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DB44-000	750231.30	2088317.84	4,4'-DDE	4.3	1.70	-	101000	-	ug/kg
DD43-000	750249.97	2088554.95	4,4'-DDE	5.8	1.80	-	101000	-	ug/kg
DD44-000	750275.17	2088472.83	4,4'-DDE	4	1.70	-	101000	-	ug/kg
CV41-004	749619.88	2087073.47	Acenaphthene	71	51.00	-	40800000	-	ug/kg
CV41-004	749619.88	2087073.47	Aluminum	23700	1.30	16902.00	228000	-	mg/kg
CV41-006	749621.22	2087106.37	Aluminum	17400	1.20	16902.00	228000	-	mg/kg
CW41-001	749648.07	2087163.44	Aluminum	18300	1.20	16902.00	228000	-	mg/kg
CW43-000	749981.91	2087145.35	Aluminum	17300	1.30	16902.00	228000	-	mg/kg
DB41-000	749574.27	2088280.51	Aluminum	18700	1.90	16902.00	228000	-	mg/kg
DB43-001	749963.51	2088226.91	Aluminum	17000	1.90	16902.00	228000	-	mg/kg
DB44-000	750231.30	2088317.84	Aluminum	17000	1.90	16902.00	228000	-	mg/kg
DC42-000	749918.10	2088478.64	Aluminum	18100	1.90	16902.00	228000	-	mg/kg
DC43-000	750152.87	2088442.46	Aluminum	17900	1.90	16902.00	228000	-	mg/kg
DD40-000	749572.23	2088585.28	Aluminum	21200	2.00	16902.00	228000	-	mg/kg
DD43-000	750249.97	2088554.95	Aluminum	27400	1.90	16902.00	228000	-	mg/kg
DD44-000	750275.17	2088472.83	Aluminum	21600	1.90	16902.00	228000	-	mg/kg
DE40-000	749552.11	2088809.06	Aluminum	22500	1.90	16902.00	228000	-	mg/kg
DE42-000	749946.42	2088837.41	Aluminum	21600	1.90	16902.00	228000	-	mg/kg
DF42-000	749906.57	2089129.65	Aluminum	17100	1.90	16902.00	228000	-	mg/kg
DG41-000	749743.20	2089312.89	Aluminum	17000	1.90	16902.00	228000	-	mg/kg
DG41-001	749648.40	2089248.07	Aluminum	18800	2.20	16902.00	228000	-	mg/kg
DH43-000	749991.19	2089365.30	Aluminum	17100	1.90	16902.00	228000	-	mg/kg
CV41-006	749621.22	2087106.37	Americium-241	0.952	0.62	0.02	76	1900	pCi/g
CW40-001	749448.88	2087145.33	Americium-241	5.3	0.72	0.02	76	1900	pCi/g
CW40-002	749468.30	2087173.08	Americium-241	3	0.54	0.02	76	1900	pCi/g
CW40-003	749457.21	2087207.75	Americium-241	10.5	0.21	0.02	76	1900	pCi/g

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW40-004	749479.75	2087204.29	Americium-241	1.05	0.56	0.02	76	1900	pCi/g
DB41-000	749574.27	2088280.51	Americium-241	2	0.68	0.02	76	1900	pCi/g
DB44-000	750231.30	2088317.84	Americium-241	0.747	0.56	0.02	76	1900	pCi/g
DC41-000	749715.79	2088426.17	Americium-241	1.16	0.69	0.02	76	1900	pCi/g
DC43-000	750152.87	2088442.46	Americium-241	0.807	0.73	0.02	76	1900	pCi/g
DD42-000	749777.16	2088664.41	Americium-241	1.58	0.56	0.02	76	1900	pCi/g
DD43-000	750249.97	2088554.95	Americium-241	1.86	0.71	0.02	76	1900	pCi/g
DD44-000	750275.17	2088472.83	Americium-241	1	0.75	0.02	76	1900	pCi/g
DF42-000	749906.57	2089129.65	Americium-241	1.39	0.65	0.02	76	1900	pCi/g
STEP OUT 3 - A	749635.15	2087116.33	Anthracene	220	72.00	-	204000000	-	ug/kg
STEP OUT 4 - A	749616.62	2087113.72	Anthracene	220	70.00	-	204000000	-	ug/kg
CV41-001	749570.86	2086994.24	Aroclor-1254	38	6.80	-	12400	371000	ug/kg
CV41-004	749619.88	2087073.47	Aroclor-1254	28	6.70	-	12400	371000	ug/kg
CW40-001	749448.88	2087145.33	Aroclor-1254	200	4.70	-	12400	371000	ug/kg
CW40-002	749468.30	2087173.08	Aroclor-1254	120	4.60	-	12400	371000	ug/kg
CW40-003	749457.21	2087207.75	Aroclor-1254	110	4.40	-	12400	371000	ug/kg
CW40-004	749479.75	2087204.29	Aroclor-1254	220	4.60	-	12400	371000	ug/kg
DB41-000	749574.27	2088280.51	Aroclor-1254	11	6.30	-	12400	371000	ug/kg
DB43-001	749963.51	2088226.91	Aroclor-1254	39	6.40	-	12400	371000	ug/kg
DC42-000	749918.10	2088478.64	Aroclor-1254	7.6	6.50	-	12400	371000	ug/kg
DD40-000	749572.23	2088585.28	Aroclor-1254	11	6.60	-	12400	371000	ug/kg
DD42-000	749777.16	2088664.41	Aroclor-1254	6.8	6.40	-	12400	371000	ug/kg
DD43-000	750249.97	2088554.95	Aroclor-1254	74	6.80	-	12400	371000	ug/kg
DD43-001	750003.07	2088550.71	Aroclor-1254	27	6.50	-	12400	371000	ug/kg
DE40-000	749552.11	2088809.06	Aroclor-1254	9.1	6.40	-	12400	371000	ug/kg
DG41-001	749648.40	2089248.07	Aroclor-1254	8.2	7.80	-	12400	371000	ug/kg
DH43-000	749991.19	2089365.30	Aroclor-1254	190	6.30	-	12400	371000	ug/kg

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-001	749570.86	2086994.24	Aroclor-1260	24	5.40	-	12400	-	ug/kg
CV41-004	749619.88	2087073.47	Aroclor-1260	37	5.30	-	12400	-	ug/kg
CV41-006	749621.22	2087106.37	Aroclor-1260	9	4.90	-	12400	-	ug/kg
CW40-001	749448.88	2087145.33	Aroclor-1260	180	5.20	-	12400	-	ug/kg
CW40-002	749468.30	2087173.08	Aroclor-1260	84	5.10	-	12400	-	ug/kg
CW40-003	749457.21	2087207.75	Aroclor-1260	42	5.00	-	12400	-	ug/kg
CW40-004	749479.75	2087204.29	Aroclor-1260	190	5.20	-	12400	-	ug/kg
CW41-001	749648.07	2087163.44	Aroclor-1260	7.5	4.90	-	12400	-	ug/kg
DB41-000	749574.27	2088280.51	Aroclor-1260	9.1	5.00	-	12400	-	ug/kg
DD43-000	750249.97	2088554.95	Aroclor-1260	16	5.40	-	12400	-	ug/kg
DF41-000	749737.05	2089000.19	Aroclor-1260	6.2	5.20	-	12400	-	ug/kg
DH43-000	749991.19	2089365.30	Aroclor-1260	32	5.00	-	12400	-	ug/kg
CW40-001	749448.88	2087145.33	Barium	144	0.04	141.26	26400	-	mg/kg
CW40-002	749468.30	2087173.08	Barium	202	0.04	141.26	26400	-	mg/kg
CW40-003	749457.21	2087207.75	Barium	146	0.04	141.26	26400	-	mg/kg
CW40-004	749479.75	2087204.29	Barium	160	0.04	141.26	26400	-	mg/kg
DC41-000	749715.79	2088426.17	Barium	154	0.06	141.26	26400	-	mg/kg
DD43-000	750249.97	2088554.95	Barium	149	0.06	141.26	26400	-	mg/kg
DD43-001	750003.07	2088550.71	Barium	158	0.06	141.26	26400	-	mg/kg
CV41-001	749570.86	2086994.24	Benzo(a)anthracene	54	44.00	-	34900	800000	ug/kg
CV41-004	749619.88	2087073.47	Benzo(a)anthracene	220	43.00	-	34900	800000	ug/kg
CV41-006	749621.22	2087106.37	Benzo(a)anthracene	91	40.00	-	34900	800000	ug/kg
DB43-001	749963.51	2088226.91	Benzo(a)anthracene	76	42.00	-	34900	800000	ug/kg
DD42-000	749777.16	2088664.41	Benzo(a)anthracene	46	41.00	-	34900	800000	ug/kg
DD43-000	750249.97	2088554.95	Benzo(a)anthracene	55	43.00	-	34900	800000	ug/kg
DD44-000	750275.17	2088472.83	Benzo(a)anthracene	55	42.00	-	34900	800000	ug/kg
CV41-004	749619.88	2087073.47	Benzo(a)pyrene	290	100.00	-	3490	25700	ug/kg

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-006	749621.22	2087106.37	Benzo(a)pyrene	110	97.00	-	3490	25700	ug/kg
CV41-004	749619.88	2087073.47	Benzo(k)fluoranthene	210	100.00	-	349000	1010000	ug/kg
CV41-006	749621.22	2087106.37	Benzo(k)fluoranthene	110	96.00	-	349000	1010000	ug/kg
CV41-001	749570.86	2086994.24	Benzoic Acid	920	640.00	-	1000000000	-	ug/kg
STEP OUT 4 - A	749616.62	2087113.72	Benzoic Acid	880	300.00	-	1000000000	-	ug/kg
CV41-004	749619.88	2087073.47	Beryllium	1	0.03	0.97	921	2.15	mg/kg
DC41-000	749715.79	2088426.17	Beryllium	1.3	0.06	0.97	921	2.15	mg/kg
DE40-000	749552.11	2088809.06	Beryllium	0.99	0.05	0.97	921	2.15	mg/kg
DB44-000	750231.30	2088317.84	bis(2-Ethylhexyl)phthalate	190	74.00	-	1970000	-	ug/kg
DC43-000	750152.87	2088442.46	bis(2-Ethylhexyl)phthalate	470	76.00	-	1970000	-	ug/kg
DD43-000	750249.97	2088554.95	bis(2-Ethylhexyl)phthalate	390	76.00	-	1970000	-	ug/kg
DD44-000	750275.17	2088472.83	bis(2-Ethylhexyl)phthalate	330	74.00	-	1970000	-	ug/kg
CW41-001	749648.07	2087163.44	Cadmium	2.6	0.05	1.61	962	-	mg/kg
CV41-004	749619.88	2087073.47	Chromium	21.5	0.06	16.99	268	-	mg/kg
CV43-000	749980.95	2087134.60	Chromium	31.1	0.05	16.99	268	-	mg/kg
CW43-000	749981.91	2087145.35	Chromium	23	0.05	16.99	268	-	mg/kg
CW43-001	749975.88	2087140.61	Chromium	23.4	0.05	16.99	268	-	mg/kg
DB41-000	749574.27	2088280.51	Chromium	17.1	0.36	16.99	268	-	mg/kg
DC42-000	749918.10	2088478.64	Chromium	17.8	0.38	16.99	268	-	mg/kg
DD40-000	749572.23	2088585.28	Chromium	28.6	0.39	16.99	268	-	mg/kg
DD43-000	750249.97	2088554.95	Chromium	21.7	0.38	16.99	268	-	mg/kg
DD44-000	750275.17	2088472.83	Chromium	18.5	0.37	16.99	268	-	mg/kg
DE40-000	749552.11	2088809.06	Chromium	20.1	0.37	16.99	268	-	mg/kg
DE42-000	749946.42	2088837.41	Chromium	19.7	0.38	16.99	268	-	mg/kg

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-001	749570.86	2086994.24	Chrysene	89	60.00	-	3490000	-	ug/kg
CV41-004	749619.88	2087073.47	Chrysene	300	59.00	-	3490000	-	ug/kg
CV41-006	749621.22	2087106.37	Chrysene	120	55.00	-	3490000	-	ug/kg
DB43-001	749963.51	2088226.91	Chrysene	84	57.00	-	3490000	-	ug/kg
DD42-000	749777.16	2088664.41	Chrysene	64	56.00	-	3490000	-	ug/kg
DD43-000	750249.97	2088554.95	Chrysene	61	59.00	-	3490000	-	ug/kg
DD44-000	750275.17	2088472.83	Chrysene	74	57.00	-	3490000	-	ug/kg
DC41-000	749715.79	2088426.17	Cobalt	21.6	0.37	10.91	1550	-	mg/kg
CV43-000	749980.95	2087134.60	Copper	36.9	0.16	18.06	40900	-	mg/kg
CW43-000	749981.91	2087145.35	Copper	27.3	0.16	18.06	40900	-	mg/kg
CW43-001	749975.88	2087140.61	Copper	31.3	0.15	18.06	40900	-	mg/kg
DC41-000	749715.79	2088426.17	Copper	19.7	0.20	18.06	40900	-	mg/kg
DD40-000	749572.23	2088585.28	Copper	27.8	0.20	18.06	40900	-	mg/kg
DD43-000	750249.97	2088554.95	Copper	18.7	0.19	18.06	40900	-	mg/kg
DE40-000	749552.11	2088809.06	Copper	20.3	0.19	18.06	40900	-	mg/kg
DF42-000	749906.57	2089129.65	Copper	36.7	0.19	18.06	40900	-	mg/kg
DB44-000	750231.30	2088317.84	Dieldrin	4.3	2.90	-	1720	-	ug/kg
DD43-000	750249.97	2088554.95	Dieldrin	5.8	3.10	-	1720	-	ug/kg
DB44-000	750231.30	2088317.84	Endrin	4.5	2.00	-	221000	-	ug/kg
DD43-000	750249.97	2088554.95	Endrin	5.1	2.20	-	221000	-	ug/kg
DD44-000	750275.17	2088472.83	Endrin	4.8	2.00	-	221000	-	ug/kg
CV41-001	749570.86	2086994.24	Fluoranthene	160	94.00	-	27200000	-	ug/kg
CV41-004	749619.88	2087073.47	Fluoranthene	620	93.00	-	27200000	-	ug/kg
CV41-006	749621.22	2087106.37	Fluoranthene	230	86.00	-	27200000	-	ug/kg
CW41-001	749648.07	2087163.44	Fluoranthene	89	86.00	-	27200000	-	ug/kg
DB41-000	749574.27	2088280.51	Fluoranthene	99	87.00	-	27200000	-	ug/kg
DB43-001	749963.51	2088226.91	Fluoranthene	160	90.00	-	27200000	-	ug/kg

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DC43-000	750152.87	2088442.46	Fluoranthene	160	-	-	27200000	-	ug/kg
DD42-000	749777.16	2088664.41	Fluoranthene	130	88.00	-	27200000	-	ug/kg
DD43-000	750249.97	2088554.95	Fluoranthene	150	93.00	-	27200000	-	ug/kg
DE40-000	749552.11	2088809.06	Fluoranthene	91	89.00	-	27200000	-	ug/kg
STEP OUT 3 - A	749635.15	2087116.33	Fluoranthene	240	43.00	-	27200000	-	ug/kg
STEP OUT 4 - A	749616.62	2087113.72	Fluoranthene	230	42.00	-	27200000	-	ug/kg
CV41-001	749570.86	2086994.24	Indeno(1,2,3-cd)pyrene	72	54.00	-	34900	-	ug/kg
CV41-004	749619.88	2087073.47	Indeno(1,2,3-cd)pyrene	180	53.00	-	34900	-	ug/kg
CV43-000	749980.95	2087134.60	Iron	21900	1.50	18037.00	307000	-	mg/kg
CW43-000	749981.91	2087145.35	Iron	18600	1.50	18037.00	307000	-	mg/kg
CW43-001	749975.88	2087140.61	Iron	20300	1.40	18037.00	307000	-	mg/kg
DC41-000	749715.79	2088426.17	Iron	23800	1.80	18037.00	307000	-	mg/kg
DD40-000	749572.23	2088585.28	Iron	19000	1.80	18037.00	307000	-	mg/kg
DE40-000	749552.11	2088809.06	Iron	18400	1.70	18037.00	307000	-	mg/kg
CV41-001	**749570.86**	**2086994.24**	**Lead**	**35.3**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
CW40-001	**749448.88**	**2087145.33**	**Lead**	**44.3**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
CW40-002	**749468.30**	**2087173.08**	**Lead**	**35**	**0.20**	**54.62**	**1000**	**25.6**	**mg/kg**
CW40-003	**749457.21**	**2087207.75**	**Lead**	**39.7**	**0.20**	**54.62**	**1000**	**25.6**	**mg/kg**
CW40-004	**749479.75**	**2087204.29**	**Lead**	**43.6**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
DB41-000	**749574.27**	**2088280.51**	**Lead**	**26.4**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
DB43-001	**749963.51**	**2088226.91**	**Lead**	**44.6**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
DB44-000	**750231.30**	**2088317.84**	**Lead**	**34**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
DC42-000	**749918.10**	**2088478.64**	**Lead**	**39.1**	**0.22**	**54.62**	**1000**	**25.6**	**mg/kg**
DD42-000	**749777.16**	**2088664.41**	**Lead**	**29.9**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
DD43-000	**750249.97**	**2088554.95**	**Lead**	**67.8**	**0.22**	**54.62**	**1000**	**25.6**	**mg/kg**
DD43-001	**750003.07**	**2088550.71**	**Lead**	**33.4**	**0.22**	**54.62**	**1000**	**25.6**	**mg/kg**
DD44-000	**750275.17**	**2088472.83**	**Lead**	**32**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DE40-000	**749552.11**	**2088809.06**	**Lead**	**34.2**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
DE42-000	**749946.42**	**2088837.41**	**Lead**	**45**	**0.22**	**54.62**	**1000**	**25.6**	**mg/kg**
DF42-000	**749906.57**	**2089129.65**	**Lead**	**39.1**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
DG41-001	**749648.40**	**2089248.07**	**Lead**	**26.6**	**0.24**	**54.62**	**1000**	**25.6**	**mg/kg**
DH43-000	**749991.19**	**2089365.30**	**Lead**	**38.8**	**0.21**	**54.62**	**1000**	**25.6**	**mg/kg**
CV41-004	749619.88	2087073.47	Lithium	16.5	0.19	11.55	20400	-	mg/kg
CV41-006	749621.22	2087106.37	Lithium	13.3	0.17	11.55	20400	-	mg/kg
CV43-001	749967.93	2087135.47	Lithium	12	0.17	11.55	20400	-	mg/kg
CW40-004	749479.75	2087204.29	Lithium	11.9	0.18	11.55	20400	-	mg/kg
CW41-001	749648.07	2087163.44	Lithium	15.1	0.17	11.55	20400	-	mg/kg
CW43-000	749981.91	2087145.35	Lithium	13.4	0.18	11.55	20400	-	mg/kg
CW43-001	749975.88	2087140.61	Lithium	12.5	0.17	11.55	20400	-	mg/kg
CW43-002	749969.73	2087147.12	Lithium	12	0.17	11.55	20400	-	mg/kg
DB41-000	749574.27	2088280.51	Lithium	16.2	0.25	11.55	20400	-	mg/kg
DB43-000	750163.83	2088219.15	Lithium	11.7	0.26	11.55	20400	-	mg/kg
DB43-001	749963.51	2088226.91	Lithium	13.6	0.25	11.55	20400	-	mg/kg
DB44-000	750231.30	2088317.84	Lithium	13.6	0.25	11.55	20400	-	mg/kg
DC40-000	749412.32	2088396.73	Lithium	13.2	0.26	11.55	20400	-	mg/kg
DC42-000	749918.10	2088478.64	Lithium	16	0.26	11.55	20400	-	mg/kg
DC43-000	750152.87	2088442.46	Lithium	14.8	0.26	11.55	20400	-	mg/kg
DD40-000	749572.23	2088585.28	Lithium	23.7	0.26	11.55	20400	-	mg/kg
DD43-000	750249.97	2088554.95	Lithium	25.1	0.26	11.55	20400	-	mg/kg
DD44-000	750275.17	2088472.83	Lithium	16.7	0.26	11.55	20400	-	mg/kg
DE40-000	749552.11	2088809.06	Lithium	19.5	0.25	11.55	20400	-	mg/kg
DE42-000	749946.42	2088837.41	Lithium	15.4	0.26	11.55	20400	-	mg/kg
DF41-000	749737.05	2089000.19	Lithium	11.6	0.26	11.55	20400	-	mg/kg
DF42-000	749906.57	2089129.65	Lithium	15.4	0.25	11.55	20400	-	mg/kg

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DG41-000	749743.20	2089312.89	Lithium	12.2	0.25	11.55	20400	-	mg/kg
DG41-001	749648.40	2089248.07	Lithium	15.4	0.29	11.55	20400	-	mg/kg
DH43-000	749991.19	2089365.30	Lithium	12.6	0.25	11.55	20400	-	mg/kg
CV43-000	749980.95	2087134.60	Manganese	436	0.03	365.08	3480	-	mg/kg
CW43-001	749975.88	2087140.61	Manganese	392	0.03	365.08	3480	-	mg/kg
DG41-000	749743.20	2089312.89	Manganese	380	0.04	365.08	3480	-	mg/kg
DG41-001	749648.40	2089248.07	Manganese	438	0.05	365.08	3480	-	mg/kg
CW40-004	749479.75	2087204.29	Mercury	0.16	0.00	0.13	25200	-	mg/kg
CW41-001	749648.07	2087163.44	Mercury	0.15	0.00	0.13	25200	-	mg/kg
DB44-000	750231.30	2088317.84	Methoxychlor	3.4	0.91	-	5110000	-	ug/kg
DD43-000	750249.97	2088554.95	Methoxychlor	9.4	0.98	-	5110000	-	ug/kg
DD44-000	750275.17	2088472.83	Methoxychlor	3	0.91	-	5110000	-	ug/kg
BW52-000	751772.30	2082012.80	Methylene chloride	1.5	0.80	-	2530000	39500	ug/kg
DD44-000	750275.17	2088472.83	Methylene chloride	220	-	-	2530000	39500	ug/kg
CV41-004	749619.88	2087073.47	Nickel	19.3	0.70	14.91	20400	-	mg/kg
CV43-000	749980.95	2087134.60	Nickel	28.3	0.66	14.91	20400	-	mg/kg
CW40-003	749457.21	2087207.75	Nickel	15.6	0.65	14.91	20400	-	mg/kg
CW40-004	749479.75	2087204.29	Nickel	17.3	0.68	14.91	20400	-	mg/kg
CW41-001	749648.07	2087163.44	Nickel	15.7	0.65	14.91	20400	-	mg/kg
CW43-000	749981.91	2087145.35	Nickel	20.5	0.66	14.91	20400	-	mg/kg
CW43-001	749975.88	2087140.61	Nickel	21.7	0.64	14.91	20400	-	mg/kg
DC41-000	749715.79	2088426.17	Nickel	48.4	0.47	14.91	20400	-	mg/kg
DC43-000	750152.87	2088442.46	Nickel	15.6	0.47	14.91	20400	-	mg/kg
DD40-000	749572.23	2088585.28	Nickel	22.6	0.47	14.91	20400	-	mg/kg
DD43-000	750249.97	2088554.95	Nickel	18.8	0.46	14.91	20400	-	mg/kg
DE40-000	749552.11	2088809.06	Nickel	15.3	0.45	14.91	20400	-	mg/kg
DG41-001	749648.40	2089248.07	Nickel	21.3	0.52	14.91	20400	-	mg/kg

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-006	749621.22	2087106.37	Plutonium-239/240	10.93216	0.62	0.07	50	3800	pCi/g
CW40-001	749448.88	2087145.33	Plutonium-239/240	46.064	0.72	0.07	50	3800	pCi/g
CW40-002	749468.30	2087173.08	Plutonium-239/240	27.48	0.54	0.07	50	3800	pCi/g
CW40-003	**749457.21**	**2087207.75**	**Plutonium-239/240**	**88.08**	**0.21**	**0.07**	**50**	**3800**	**pCi/g**
CW40-004	749479.75	2087204.29	Plutonium-239/240	11.724	0.56	0.07	50	3800	pCi/g
DB41-000	749574.27	2088280.51	Plutonium-239/240	19.4	0.68	0.07	50	3800	pCi/g
DB44-000	750231.30	2088317.84	Plutonium-239/240	9.27576	0.56	0.07	50	3800	pCi/g
DC41-000	749715.79	2088426.17	Plutonium-239/240	12.6128	0.69	0.07	50	3800	pCi/g
DC43-000	750152.87	2088442.46	Plutonium-239/240	9.76056	0.73	0.07	50	3800	pCi/g
DD42-000	749777.16	2088664.41	Plutonium-239/240	16.0064	0.56	0.07	50	3800	pCi/g
DD43-000	750249.97	2088554.95	Plutonium-239/240	18.2688	0.71	0.07	50	3800	pCi/g
DD44-000	750275.17	2088472.83	Plutonium-239/240	11.32	0.75	0.07	50	3800	pCi/g
DF42-000	749906.57	2089129.65	Plutonium-239/240	14.4712	0.65	0.07	50	3800	pCi/g
CV41-001	749570.86	2086994.24	Pyrene	160	45.00	-	22100000	-	ug/kg
CV41-004	749619.88	2087073.47	Pyrene	640	44.00	-	22100000	-	ug/kg
CV41-006	749621.22	2087106.37	Pyrene	230	41.00	-	22100000	-	ug/kg
CW40-001	749448.88	2087145.33	Pyrene	65	44.00	-	22100000	-	ug/kg
CW40-004	749479.75	2087204.29	Pyrene	48	44.00	-	22100000	-	ug/kg
CW41-001	749648.07	2087163.44	Pyrene	79	41.00	-	22100000	-	ug/kg
DB41-000	749574.27	2088280.51	Pyrene	100	42.00	-	22100000	-	ug/kg
DB43-000	750163.83	2088219.15	Pyrene	87	42.00	-	22100000	-	ug/kg
DB43-001	749963.51	2088226.91	Pyrene	170	43.00	-	22100000	-	ug/kg
DB44-000	750231.30	2088317.84	Pyrene	46	43.00	-	22100000	-	ug/kg
DC41-000	749715.79	2088426.17	Pyrene	50	45.00	-	22100000	-	ug/kg
DC42-000	749918.10	2088478.64	Pyrene	53	42.00	-	22100000	-	ug/kg
DC43-000	750152.87	2088442.46	Pyrene	60	44.00	-	22100000	-	ug/kg
DD40-000	749572.23	2088585.28	Pyrene	54	44.00	-	22100000	-	ug/kg

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DD42-000	749777.16	2088664.41	Pyrene	130	42.00	-	22100000	-	ug/kg
DD43-000	750249.97	2088554.95	Pyrene	130	44.00	-	22100000	-	ug/kg
DD44-000	750275.17	2088472.83	Pyrene	130	43.00	-	22100000	-	ug/kg
DE40-000	749552.11	2088809.06	Pyrene	93	42.00	-	22100000	-	ug/kg
DE42-000	749946.42	2088837.41	Pyrene	81	43.00	-	22100000	-	ug/kg
DF41-000	749737.05	2089000.19	Pyrene	51	43.00	-	22100000	-	ug/kg
DF42-000	749906.57	2089129.65	Pyrene	67	43.00	-	22100000	-	ug/kg
DG41-000	749743.20	2089312.89	Pyrene	43	42.00	-	22100000	-	ug/kg
STEP OUT 3 - A	749635.15	2087116.33	Pyrene	240	62.00	-	22100000	-	ug/kg
STEP OUT 4 - A	749616.62	2087113.72	Pyrene	230	61.00	-	22100000	-	ug/kg
DD40-000	749572.23	2088585.28	Selenium	1.4	0.44	1.22	5110	-	mg/kg
DD42-000	749777.16	2088664.41	Selenium	1.9	0.43	1.22	5110	-	mg/kg
DE40-000	749552.11	2088809.06	Selenium	1.6	0.42	1.22	5110	-	mg/kg
DG41-001	749648.40	2089248.07	Selenium	1.4	0.48	1.22	5110	-	mg/kg
CV43-000	749980.95	2087134.60	Strontium	84.2	0.01	48.94	613000	-	mg/kg
CW40-001	749448.88	2087145.33	Strontium	170	0.01	48.94	613000	-	mg/kg
CW40-002	749468.30	2087173.08	Strontium	362	0.01	48.94	613000	-	mg/kg
CW40-003	749457.21	2087207.75	Strontium	136	0.01	48.94	613000	-	mg/kg
CW40-004	749479.75	2087204.29	Strontium	169	0.01	48.94	613000	-	mg/kg
CW41-001	749648.07	2087163.44	Strontium	69.6	0.01	48.94	613000	-	mg/kg
CW43-000	749981.91	2087145.35	Strontium	53.1	0.01	48.94	613000	-	mg/kg
CW43-001	749975.88	2087140.61	Strontium	56.1	0.01	48.94	613000	-	mg/kg
DC40-000	749412.32	2088396.73	Strontium	87.7	0.02	48.94	613000	-	mg/kg
DC43-000	750152.87	2088442.46	Strontium	63.4	0.02	48.94	613000	-	mg/kg
DD40-000	749572.23	2088585.28	Strontium	50.5	0.02	48.94	613000	-	mg/kg
DD43-000	750249.97	2088554.95	Strontium	57.5	0.02	48.94	613000	-	mg/kg
DD43-001	750003.07	2088550.71	Strontium	194	0.02	48.94	613000	-	mg/kg

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
BW52-000	751772.30	2082012.80	Tetrachloroethene	10	0.99	-	615000	37500	ug/kg
BW52-000	751772.30	2082012.80	Uranium-234	3.917	2.03	2.25	300	1800	pCi/g
CV41-006	749621.22	2087106.37	Uranium-234	3.771	2.03	2.25	300	1800	pCi/g
CW40-001	749448.88	2087145.33	Uranium-234	5	2.28	2.25	300	1800	pCi/g
CW40-002	749468.30	2087173.08	Uranium-234	8	3.75	2.25	300	1800	pCi/g
CW40-004	749479.75	2087204.29	Uranium-234	5	2.18	2.25	300	1800	pCi/g
CW41-002	749622.56	2087178.88	Uranium-234	4.7	2.14	2.25	300	1800	pCi/g
DB41-000	749574.27	2088280.51	Uranium-234	4.067	1.73	2.25	300	1800	pCi/g
DB43-000	750163.83	2088219.15	Uranium-234	2.76	1.31	2.25	300	1800	pCi/g
DB44-000	750231.30	2088317.84	Uranium-234	2.7	1.27	2.25	300	1800	pCi/g
DC42-000	749918.10	2088478.64	Uranium-234	2.61	1.59	2.25	300	1800	pCi/g
DD42-000	749777.16	2088664.41	Uranium-234	2.86	1.78	2.25	300	1800	pCi/g
DD43-000	750249.97	2088554.95	Uranium-234	4.546	1.68	2.25	300	1800	pCi/g
DD43-001	750003.07	2088550.71	Uranium-234	2.72	2.08	2.25	300	1800	pCi/g
DF42-000	749906.57	2089129.65	Uranium-234	2.26	1.42	2.25	300	1800	pCi/g
BW52-000	751772.30	2082012.80	Uranium-235	0.2594	0.17	0.09	8	1900	pCi/g
CV41-001	749570.86	2086994.24	Uranium-235	0.134	0.13	0.09	8	1900	pCi/g
CV41-006	749621.22	2087106.37	Uranium-235	0.2087	0.13	0.09	8	1900	pCi/g
CW40-001	749448.88	2087145.33	Uranium-235	0.313	0.23	0.09	8	1900	pCi/g
CW40-002	749468.30	2087173.08	Uranium-235	0.3	0.23	0.09	8	1900	pCi/g
CW40-003	749457.21	2087207.75	Uranium-235	0.169	0.10	0.09	8	1900	pCi/g
CW40-004	749479.75	2087204.29	Uranium-235	0.5	0.24	0.09	8	1900	pCi/g
DB41-000	749574.27	2088280.51	Uranium-235	0.2294	0.15	0.09	8	1900	pCi/g
DB43-000	750163.83	2088219.15	Uranium-235	0.211	0.09	0.09	8	1900	pCi/g
DB43-001	749963.51	2088226.91	Uranium-235	0.24	0.14	0.09	8	1900	pCi/g
DB44-000	750231.30	2088317.84	Uranium-235	0.174	0.09	0.09	8	1900	pCi/g
DC41-000	749715.79	2088426.17	Uranium-235	0.148	0.10	0.09	8	1900	pCi/g

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DC42-000	749918.10	2088478.64	Uranium-235	0.233	0.11	0.09	8	1900	pCi/g
DC43-000	750152.87	2088442.46	Uranium-235	0.125	0.08	0.09	8	1900	pCi/g
DD40-000	749572.23	2088585.28	Uranium-235	0.197	0.11	0.09	8	1900	pCi/g
DD43-000	750249.97	2088554.95	Uranium-235	0.2208	0.14	0.09	8	1900	pCi/g
DD43-001	750003.07	2088550.71	Uranium-235	0.15	0.09	0.09	8	1900	pCi/g
DD44-000	750275.17	2088472.83	Uranium-235	0.156	0.14	0.09	8	1900	pCi/g
DF41-000	749737.05	2089000.19	Uranium-235	0.161	0.09	0.09	8	1900	pCi/g
DF42-000	749906.57	2089129.65	Uranium-235	0.151	0.10	0.09	8	1900	pCi/g
BW52-000	751772.30	2082012.80	Uranium-238	3.917	2.03	2.00	351	1600	pCi/g
CV41-004	749619.88	2087073.47	Uranium-238	2.04	1.56	2.00	351	1600	pCi/g
CV41-006	749621.22	2087106.37	Uranium-238	3.771	2.03	2.00	351	1600	pCi/g
CW40-001	749448.88	2087145.33	Uranium-238	5	2.28	2.00	351	1600	pCi/g
CW40-002	749468.30	2087173.08	Uranium-238	8	3.75	2.00	351	1600	pCi/g
CW40-004	749479.75	2087204.29	Uranium-238	5	2.18	2.00	351	1600	pCi/g
CW41-002	749622.56	2087178.88	Uranium-238	4.7	2.14	2.00	351	1600	pCi/g
DB41-000	749574.27	2088280.51	Uranium-238	4.067	1.73	2.00	351	1600	pCi/g
DB43-000	750163.83	2088219.15	Uranium-238	2.76	1.31	2.00	351	1600	pCi/g
DB44-000	750231.30	2088317.84	Uranium-238	2.7	1.27	2.00	351	1600	pCi/g
DC42-000	749918.10	2088478.64	Uranium-238	2.61	1.59	2.00	351	1600	pCi/g
DD42-000	749777.16	2088664.41	Uranium-238	2.86	1.78	2.00	351	1600	pCi/g
DD43-000	750249.97	2088554.95	Uranium-238	4.546	1.68	2.00	351	1600	pCi/g
DD43-001	750003.07	2088550.71	Uranium-238	2.72	2.08	2.00	351	1600	pCi/g
DF41-000	749737.05	2089000.19	Uranium-238	2.16	1.42	2.00	351	1600	pCi/g
DF42-000	749906.57	2089129.65	Uranium-238	2.26	1.42	2.00	351	1600	pCi/g
CV43-000	749980.95	2087134.60	Vanadium	58.1	0.25	45.59	7150	433	mg/kg
CW43-001	749975.88	2087140.61	Vanadium	46.1	0.25	45.59	7150	433	mg/kg
DC41-000	749715.79	2088426.17	Zinc	104	0.63	73.76	307000	-	mg/kg

Table 3
Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DD43-000	750249.97	2088554.95	Zinc	101	0.62	73.76	307000	-	mg/kg
DE40-000	749552.11	2088809.06	Zinc	75.4	0.60	73.76	307000	-	mg/kg

Table 3a
Outside IHSS and PAC Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DB39-001	749287.213	2088323.822	Aluminum	18800	1.9	16902	228000	NA	mg/kg
CV40-002	749442.722	2087119.054	Americium-241	16	0.85	0.023	76	1900	pCi/g
CV41-007	749603.373	2086944.593	Americium-241	1.6	0.493	0.023	76	1900	pCi/g
CW41-003	749651.437	2087200.606	Americium-241	1	0.396	0.023	76	1900	pCi/g
DB39-001	749287.213	2088323.822	Americium-241	4.43	0.74	0.023	76	1900	pCi/g
CV40-002	749442.722	2087119.054	Anthracene	81	80	NA	2.04E+08	NA	ug/kg
CV40-002	749442.722	2087119.054	Aroclor-1254	230	4.4	NA	12400	371000	ug/kg
DB39-001	749287.213	2088323.822	Aroclor-1254	17	6.3	NA	12400	371000	ug/kg
CV40-002	749442.722	2087119.054	Aroclor-1260	100	4.9	NA	12400	NA	ug/kg
CV41-007	749603.373	2086944.593	Arsenic	15.2	5	10.09	22.2	21.6	mg/kg
CW41-003	749651.437	2087200.606	Arsenic	13.7	5	10.09	22.2	21.6	mg/kg
CV41-007	749603.373	2086944.593	Barium	643	98	141.26	26400	NA	mg/kg
CW41-003	749651.437	2087200.606	Barium	672	98	141.26	26400	NA	mg/kg
CV40-002	749442.722	2087119.054	Benzo(a)anthracene	65	40	NA	34900	800000	ug/kg
DB39-001	749287.213	2088323.822	Benzo(a)anthracene	56	40	NA	34900	800000	ug/kg
STEP OUT 1 - A	749626.36	2087034.21	Benzo(a)anthracene	43	41	NA	34900	800000	ug/kg
CV41-007	749603.373	2086944.593	Chromium	60.7	20	16.99	268	NA	mg/kg

Table 3a
Outside IHSS and PAC Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW41-003	749651.437	2087200.606	Chromium	46.1	20	16.99	268	NA	mg/kg
DB39-001	749287.213	2088323.822	Chromium	17	0.36	16.99	268	NA	mg/kg
CV40-002	749442.722	2087119.054	Chrysene	87	54	NA	3490000	NA	ug/kg
DB39-001	749287.213	2088323.822	Chrysene	67	55	NA	3490000	NA	ug/kg
STEP OUT 1 - A	749626.36	2087034.21	Chrysene	46	36	NA	3490000	NA	ug/kg
CV41-007	749603.373	2086944.593	Copper	52.3	4	18.06	40900	NA	mg/kg
CW41-003	749651.437	2087200.606	Copper	67.6	4	18.06	40900	NA	mg/kg
CV40-002	749442.722	2087119.054	Fluoranthene	180	86	NA	27200000	NA	ug/kg
DB39-001	749287.213	2088323.822	Fluoranthene	140	86	NA	27200000	NA	ug/kg
STEP OUT 1 - A	749626.36	2087034.21	Fluoranthene	86	41	NA	27200000	NA	ug/kg
STEP OUT 2 - A	749636.97	2087079.97	Fluoranthene	45	41	NA	27200000	NA	ug/kg
CV41-007	749603.373	2086944.593	Iron	38400	2190	18037	307000	NA	mg/kg
CW41-003	749651.437	2087200.606	Iron	31900	2190	18037	307000	NA	mg/kg
CV40-002	**749442.722**	**2087119.054**	**Lead**	**93.5**	**0.19**	**54.62**	**1000**	**25.6**	**mg/kg**
CW41-003	**749651.437**	**2087200.606**	**Lead**	**74**	**7**	**54.62**	**1000**	**25.6**	**mg/kg**
DB39-001	749287.213	2088323.822	Lithium	15.2	0.25	11.55	20400	NA	mg/kg
CV41-007	749603.373	2086944.593	Manganese	473	158	365.08	3480	NA	mg/kg
CW41-003	749651.437	2087200.606	Manganese	589	158	365.08	3480	NA	mg/kg
BW52-000	751772.302	2082012.803	Methylene chloride	1.5	0.8	NA	2530000	39500	ug/kg
CV41-007	749603.373	2086944.593	Nickel	49.8	12	14.91	20400	NA	mg/kg
CW41-003	749651.437	2087200.606	Nickel	38.6	12	14.91	20400	NA	mg/kg
CV40-002	749442.722	2087119.054	n-Nitrosodipropylamine	400	90	NA	5470	NA	ug/kg
CV40-002	**749442.722**	**2087119.054**	**Plutonium-239/240**	**132.52**	**0.85**	**0.066**	**50/116**	**3800**	**pCi/g**
CV41-007	749603.373	2086944.593	Plutonium-239/240	16.168	0.493	0.066	50/116	3800	pCi/g
CW41-003	749651.437	2087200.606	Plutonium-239/240	11.32	0.396	0.066	50/116	3800	pCi/g
DB39-001	749287.213	2088323.822	Plutonium-239/240	39.034	0.527	0.066	50/116	3800	pCi/g

Table 3a
Outside IHSS and PAC Surface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit with RFCA ALs

Location Code	Easting	Northing	Analyte	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV40-002	749442.722	2087119.054	Pyrene	150	41	NA	22100000	NA	ug/kg
DB39-001	749287.213	2088323.822	Pyrene	110	41	NA	22100000	NA	ug/kg
STEP OUT 1 - A	749626.36	2087034.21	Pyrene	87	59	NA	22100000	NA	ug/kg
CW41-003	749651.437	2087200.606	Selenium	1.48	1	1.224	5110	NA	mg/kg
CV41-007	749603.373	2086944.593	Strontium	179	20	48.94	613000	NA	mg/kg
CW41-003	749651.437	2087200.606	Strontium	201	20	48.94	613000	NA	mg/kg
BW52-000	751772.302	2082012.803	Tetrachloroethene	10	0.99	NA	615000	37500	ug/kg
BW52-000	751772.302	2082012.803	Uranium-234	3.917	2.032	2.253	300	1800	pCi/g
CV40-002	749442.722	2087119.054	Uranium-234	4	2.14	2.253	300	1800	pCi/g
CV41-007	749603.373	2086944.593	Uranium-234	3.6	1.89	2.253	300	1800	pCi/g
CW41-003	749651.437	2087200.606	Uranium-234	3.4	1.89	2.253	300	1800	pCi/g
DB39-001	749287.213	2088323.822	Uranium-234	4.055	1.725	2.253	300	1800	pCi/g
BW52-000	751772.302	2082012.803	Uranium-235	0.259	0.173	0.094	8	1900	pCi/g
CV41-007	749603.373	2086944.593	Uranium-235	0.17	0.13	0.094	8	1900	pCi/g
CW41-003	749651.437	2087200.606	Uranium-235	0.22	0.155	0.094	8	1900	pCi/g
DB39-001	749287.213	2088323.822	Uranium-235	0.233	0.078	0.094	8	1900	pCi/g
BW52-000	751772.302	2082012.803	Uranium-238	3.917	1.95	2	351	1600	pCi/g
CV40-002	749442.722	2087119.054	Uranium-238	4	2.14	2	351	1600	pCi/g
CV41-007	749603.373	2086944.593	Uranium-238	3.6	1.89	2	351	1600	pCi/g
CW41-003	749651.437	2087200.606	Uranium-238	3.4	1.89	2	351	1600	pCi/g
DB39-001	749287.213	2088323.822	Uranium-238	4.055	1.48	2	351	1600	pCi/g
CV41-007	749603.373	2086944.593	Vanadium	127	31	45.59	7150	433	mg/kg
CW41-003	749651.437	2087200.606	Vanadium	108	31	45.59	7150	433	mg/kg
CV41-007	749603.373	2086944.593	Zinc	124	9	73.76	307000	NA	mg/kg
CW41-003	749651.437	2087200.606	Zinc	126	9	73.76	307000	NA	mg/kg
DB39-001	749287.213	2088323.822	Zinc	79	0.59	73.76	307000	NA	mg/kg

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV41-006	749621.22	2087106.37	1,1,2,2-Tetrachloroethane	2.5	4.5	72	26.00	-	100000	-	ug/k
CV40-001	749480.09	2087106.49	2-Butanone	1	3	36	5.30	-	192000000	433000	ug/k
CV41-000	749584.29	2086966.71	2-Butanone	5	7	11	5.20	-	192000000	433000	ug/k
CV41-000	749584.29	2086966.71	2-Butanone	1	3	16	4.60	-	192000000	433000	ug/k
CV41-000	749584.29	2086966.71	2-Butanone	3	5	25	5.20	-	192000000	433000	ug/k
CV41-002	749599.73	2087015.06	2-Butanone	1	3	8.6	5.80	-	192000000	433000	ug/k
CV41-003	749597.05	2087050.64	2-Butanone	1	3	6.9	5.00	-	192000000	433000	ug/k
CV41-004	749619.88	2087073.47	2-Butanone	2.5	4.5	8100	6200.00	-	192000000	433000	ug/k
CV41-004	749619.88	2087073.47	2-Butanone	0.5	2.5	5400	320.00	-	192000000	433000	ug/k
CV41-004	749619.88	2087073.47	2-Butanone	4.5	6.5	7600	6600.00	-	192000000	433000	ug/k
CV41-005	749593.02	2087086.22	2-Butanone	3	5	74	5.80	-	192000000	433000	ug/k
CV41-005	749593.02	2087086.22	2-Butanone	1	3	63	5.60	-	192000000	433000	ug/k
CV41-006	749621.22	2087106.37	2-Butanone	0.5	2.5	420	340.00	-	192000000	433000	ug/k
CV41-006	749621.22	2087106.37	2-Butanone	2.5	4.5	380	340.00	-	192000000	433000	ug/k
CV41-005	749593.02	2087086.22	2-Methylnaphthalene	0.5	1	110	60.00	-	20400000	-	ug/k
CV41-002	749599.73	2087015.06	Acenaphthene	5	7	110	54.00	-	40800000	-	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Acenaphthene	0.5	2.5	140	50.00	-	40800000	-	ug/k
CV40-000	749457.38	2087080.79	Acetone	1	3	8.6	5.50	-	102000000	211000	ug/k
CV40-000	749457.38	2087080.79	Acetone	3	5	5.4	4.90	-	102000000	211000	ug/k
CV40-001	749480.09	2087106.49	Acetone	1	3	140	5.20	-	102000000	211000	ug/k
CV40-001	749480.09	2087106.49	Acetone	9	9.8	4.8	4.80	-	102000000	211000	ug/k
CV40-001	749480.09	2087106.49	Acetone	5	7	9.1	4.80	-	102000000	211000	ug/k
CV41-000	749584.29	2086966.71	Acetone	3	5	95	5.10	-	102000000	211000	ug/k
CV41-000	749584.29	2086966.71	Acetone	5	7	55	5.10	-	102000000	211000	ug/k
CV41-000	749584.29	2086966.71	Acetone	7	9	6	4.90	-	102000000	211000	ug/k
CV41-000	749584.29	2086966.71	Acetone	1	3	72	4.50	-	102000000	211000	ug/k
CV41-001	749570.86	2086994.24	Acetone	6.5	8.5	8.1	4.80	-	102000000	211000	ug/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV41-002	749599.73	2087015.06	Acetone	1	3	55	5.70	-	102000000	211000	ug/k
CV41-002	749599.73	2087015.06	Acetone	9	11	5.1	4.90	-	102000000	211000	ug/k
CV41-002	749599.73	2087015.06	Acetone	7	9	5.3	4.70	-	102000000	211000	ug/k
CV41-003	749597.05	2087050.64	Acetone	1	3	43	4.90	-	102000000	211000	ug/k
CV41-003	749597.05	2087050.64	Acetone	7	9	5.8	4.80	-	102000000	211000	ug/k
CV41-003	749597.05	2087050.64	Acetone	9	11	6.7	4.80	-	102000000	211000	ug/k
CV41-005	749593.02	2087086.22	Acetone	7	9	9.2	4.90	-	102000000	211000	ug/k
CV41-005	749593.02	2087086.22	Acetone	9	11	6	5.00	-	102000000	211000	ug/k
CV41-005	749593.02	2087086.22	Acetone	1	3	270	5.50	-	102000000	211000	ug/k
CV41-005	749593.02	2087086.22	Acetone	3	5	310	5.60	-	102000000	211000	ug/k
CV41-006	749621.22	2087106.37	Acetone	6.5	8.5	11	4.80	-	102000000	211000	ug/k
CV41-006	749621.22	2087106.37	Acetone	8.5	10.5	7.7	4.80	-	102000000	211000	ug/k
CW40-000	749477.67	2087139.09	Acetone	9	11	21	5.40	-	102000000	211000	ug/k
CW40-000	749477.67	2087139.09	Acetone	3	5	9.2	5.30	-	102000000	211000	ug/k
CW40-000	749477.67	2087139.09	Acetone	7	9	7.8	5.00	-	102000000	211000	ug/k
CW40-001	749448.88	2087145.33	Acetone	6.5	8.5	5	4.70	-	102000000	211000	ug/k
CW40-001	749448.88	2087145.33	Acetone	8.5	10.5	5.3	4.80	-	102000000	211000	ug/k
CW40-002	749468.30	2087173.08	Acetone	6.5	8.5	5.7	4.90	-	102000000	211000	ug/k
CW40-002	749468.30	2087173.08	Acetone	2.5	4.5	14	5.40	-	102000000	211000	ug/k
CW40-002	749468.30	2087173.08	Acetone	8.5	10.5	5.8	4.70	-	102000000	211000	ug/k
CW40-002	749468.30	2087173.08	Acetone	0.5	2.5	20	5.60	-	102000000	211000	ug/k
CW40-004	749479.75	2087204.29	Acetone	2.5	4.5	5.3	5.00	-	102000000	211000	ug/k
CW40-004	749479.75	2087204.29	Acetone	4.5	6.5	5.6	5.10	-	102000000	211000	ug/k
CW41-000	749618.53	2087142.62	Acetone	6.5	8.5	6.6	5.10	-	102000000	211000	ug/k
CW41-001	749648.07	2087163.44	Acetone	0.5	2.5	18	5.00	-	102000000	211000	ug/k
CW41-002	749622.56	2087178.88	Acetone	0.5	2.5	6	4.80	-	102000000	211000	ug/k
CW41-002	749622.56	2087178.88	Acetone	6.5	8.5	5	4.80	-	102000000	211000	ug/k
DE42-000	749946.42	2088837.41	Acetone	0.5	2.5	7.9	5.60	-	102000000	211000	ug/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
DF42-000	749906.57	2089129.65	Acetone	0.5	2.5	5.3	4.90	-	102000000	211000	ug/k
STEP OUT 4 - D	749616.62	2087113.72	Acetone	4.5	6.5	8.4	5.30	-	102000000	211000	ug/k
CV41-000	749584.29	2086966.71	Aluminum	1	3	38000	1.40	35373.17	228000	-	mg/k
CW40-003	749457.21	2087207.75	Americium-241	0.5	2.5	0.588	0.15	0.02	76	1900	pCi/
CV41-002	749599.73	2087015.06	Anthracene	5	7	140	91.00	-	204000000	-	ug/k
CV41-004	749619.88	2087073.47	Anthracene	2.5	4.5	2500	850.00	-	204000000	-	ug/k
STEP OUT 3 - B	749635.15	2087116.33	Anthracene	0.5	2.5	430	140.00	-	204000000	-	ug/k
STEP OUT 3 - D	749635.15	2087116.33	Anthracene	4.5	6.5	480	140.00	-	204000000	-	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Anthracene	0.5	2.5	300	72.00	-	204000000	-	ug/k
CV41-004	749619.88	2087073.47	Antimony	0.5	2.5	350	0.46	16.97	409	-	mg/k
CV40-001	749480.09	2087106.49	Aroclor-1254	0.5	1	87	4.90	-	12400	371000	ug/k
CV41-001	749570.86	2086994.24	Aroclor-1254	0.5	2.5	9.4	6.80	-	12400	371000	ug/k
CV41-004	749619.88	2087073.47	Aroclor-1254	2.5	4.5	680	66.00	-	12400	371000	ug/k
CV41-004	749619.88	2087073.47	Aroclor-1254	4.5	6.5	390	67.00	-	12400	371000	ug/k
CV41-004	749619.88	2087073.47	Aroclor-1254	0.5	2.5	190	66.00	-	12400	371000	ug/k
CV41-006	749621.22	2087106.37	Aroclor-1254	2.5	4.5	2500	71.00	-	12400	371000	ug/k
CV41-006	749621.22	2087106.37	Aroclor-1254	0.5	2.5	1100	66.00	-	12400	371000	ug/k
CV41-006	749621.22	2087106.37	Aroclor-1254	4.5	6.5	100	6.60	-	12400	371000	ug/k
CW40-000	749477.67	2087139.09	Aroclor-1254	3	5	15	5.10	-	12400	371000	ug/k
CW40-000	749477.67	2087139.09	Aroclor-1254	1	3	34	4.80	-	12400	371000	ug/k
CW40-001	749448.88	2087145.33	Aroclor-1254	0.5	2.5	14	4.90	-	12400	371000	ug/k
CW40-002	749468.30	2087173.08	Aroclor-1254	0.5	2.5	35	5.00	-	12400	371000	ug/k
CW40-004	749479.75	2087204.29	Aroclor-1254	0.5	2.5	130	6.70	-	12400	371000	ug/k
CV41-002	749599.73	2087015.06	Aroclor-1260	5	7	21	5.60	-	12400	-	ug/k
CV41-003	749597.05	2087050.64	Aroclor-1260	3	5	7.2	5.70	-	12400	-	ug/k
CV41-004	749619.88	2087073.47	Aroclor-1260	2.5	4.5	170	52.00	-	12400	-	ug/k
CV41-006	749621.22	2087106.37	Aroclor-1260	0.5	2.5	320	52.00	-	12400	-	ug/k
CW40-000	749477.67	2087139.09	Aroclor-1260	1	3	15	5.30	-	12400	-	ug/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Un
CW40-004	749479.75	2087204.29	Aroclor-1260	0.5	2.5	50	5.30	-	12400	-	ug/k
CV41-000	749584.29	2086966.71	Arsenic	1	3	14.5	0.65	13.14	22.2	21.6	mg/l
CW40-001	749448.88	2087145.33	Arsenic	6.5	8.5	17.8	0.58	13.14	22.2	21.6	mg/l
CW40-001	749448.88	2087145.33	Barium	4.5	6.5	838	0.04	289.38	26400	-	mg/l
CV41-000	749584.29	2086966.71	Benzo(a)anthracene	3	5	67	45.00	-	34900	800000	ug/k
CV41-002	749599.73	2087015.06	Benzo(a)anthracene	5	7	220	45.00	-	34900	800000	ug/k
CV41-003	749597.05	2087050.64	Benzo(a)anthracene	0.5	1	120	42.00	-	34900	800000	ug/k
CV41-003	749597.05	2087050.64	Benzo(a)anthracene	3	5	110	47.00	-	34900	800000	ug/k
CV41-004	749619.88	2087073.47	Benzo(a)anthracene	0.5	2.5	54	42.00	-	34900	800000	ug/k
CV41-004	749619.88	2087073.47	Benzo(a)anthracene	2.5	4.5	7500	430.00	-	34900	800000	ug/k
CV41-005	749593.02	2087086.22	Benzo(a)anthracene	0.5	1	170	40.00	-	34900	800000	ug/k
CV41-006	749621.22	2087106.37	Benzo(a)anthracene	0.5	2.5	220	42.00	-	34900	800000	ug/k
STEP OUT 3 - D	749635.15	2087116.33	Benzo(a)anthracene	4.5	6.5	270	86.00	-	34900	800000	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Benzo(a)anthracene	0.5	2.5	290	43.00	-	34900	800000	ug/k
CV41-002	749599.73	2087015.06	Benzo(a)pyrene	5	7	220	110.00	-	3490	25700	ug/k
CV41-003	749597.05	2087050.64	Benzo(a)pyrene	0.5	1	120	100.00	-	3490	25700	ug/k
CV41-003	749597.05	2087050.64	Benzo(a)pyrene	3	5	120	110.00	-	3490	25700	ug/k
CV41-004	749619.88	2087073.47	Benzo(a)pyrene	0.5	2.5	110	100.00	-	3490	25700	ug/k
CV41-004	749619.88	2087073.47	Benzo(a)pyrene	2.5	4.5	270	100.00	-	3490	25700	ug/k
CV41-005	749593.02	2087086.22	Benzo(a)pyrene	0.5	1	150	96.00	-	3490	25700	ug/k
CV41-006	749621.22	2087106.37	Benzo(a)pyrene	0.5	2.5	490	100.00	-	3490	25700	ug/k
STEP OUT 3 - D	749635.15	2087116.33	Benzo(a)pyrene	4.5	6.5	440	110.00	-	3490	25700	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Benzo(a)pyrene	0.5	2.5	270	57.00	-	3490	25700	ug/k
CV41-002	749599.73	2087015.06	Benzo(b)fluoranthene	5	7	180	120.00	-	34900	1010000	ug/k
CV41-004	749619.88	2087073.47	Benzo(b)fluoranthene	2.5	4.5	220	110.00	-	34900	1010000	ug/k
CV41-006	749621.22	2087106.37	Benzo(b)fluoranthene	0.5	2.5	410	110.00	-	34900	1010000	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Benzo(b)fluoranthene	0.5	2.5	180	70.00	-	34900	1010000	ug/k
CV41-002	749599.73	2087015.06	Benzo(k)fluoranthene	5	7	200	110.00	-	349000	1010000	ug/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV41-004	749619.88	2087073.47	Benzo(k)fluoranthene	2.5	4.5	8000	1000.00	-	349000	1010000	ug/k
CV41-006	749621.22	2087106.37	Benzo(k)fluoranthene	0.5	2.5	380	100.00	-	349000	1010000	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Benzo(k)fluoranthene	0.5	2.5	250	75.00	-	349000	1010000	ug/k
CV41-004	749619.88	2087073.47	bis(2-Ethylhexyl)phthalate	2.5	4.5	910	750.00	-	1970000	-	ug/k
CV41-004	749619.88	2087073.47	Cadmium	0.5	2.5	10.1	0.05	1.70	962	-	mg/k
CV41-004	749619.88	2087073.47	Cadmium	2.5	4.5	7.8	0.05	1.70	962	-	mg/k
CV41-004	749619.88	2087073.47	Cadmium	4.5	6.5	7.4	0.05	1.70	962	-	mg/k
CV41-004	749619.88	2087073.47	Cadmium	6.5	8.5	2.1	0.05	1.70	962	-	mg/k
CV41-006	749621.22	2087106.37	Cadmium	2.5	4.5	58.7	0.05	1.70	962	-	mg/k
CV41-006	749621.22	2087106.37	Cadmium	4.5	6.5	5.5	0.05	1.70	962	-	mg/k
CV41-006	749621.22	2087106.37	Cadmium	0.5	2.5	5	0.05	1.70	962	-	mg/k
CW41-001	749648.07	2087163.44	Cadmium	0.5	2.5	3.5	0.05	1.70	962	-	mg/k
CV40-000	749457.38	2087080.79	Chromium	5	7	191	0.06	68.27	268	-	mg/k
CV41-000	749584.29	2086966.71	Chromium	9	11	156	0.06	68.27	268	-	mg/k
CV41-000	749584.29	2086966.71	Chromium	7	9	72	0.06	68.27	268	-	mg/k
CV41-000	749584.29	2086966.71	Chrysene	3	5	220	61.00	-	3490000	-	ug/k
CV41-002	749599.73	2087015.06	Chrysene	5	7	270	62.00	-	3490000	-	ug/k
CV41-003	749597.05	2087050.64	Chrysene	0.5	1	400	58.00	-	3490000	-	ug/k
CV41-003	749597.05	2087050.64	Chrysene	1	3	91	55.00	-	3490000	-	ug/k
CV41-003	749597.05	2087050.64	Chrysene	3	5	120	63.00	-	3490000	-	ug/k
CV41-004	749619.88	2087073.47	Chrysene	2.5	4.5	8500	580.00	-	3490000	-	ug/k
CV41-004	749619.88	2087073.47	Chrysene	4.5	6.5	70	59.00	-	3490000	-	ug/k
CV41-004	749619.88	2087073.47	Chrysene	0.5	2.5	81	58.00	-	3490000	-	ug/k
CV41-005	749593.02	2087086.22	Chrysene	0.5	1	580	54.00	-	3490000	-	ug/k
CV41-006	749621.22	2087106.37	Chrysene	0.5	2.5	320	58.00	-	3490000	-	ug/k
STEP OUT 3 - D	749635.15	2087116.33	Chrysene	4.5	6.5	450	75.00	-	3490000	-	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Chrysene	0.5	2.5	340	38.00	-	3490000	-	ug/k
CV41-004	749619.88	2087073.47	Copper	0.5	2.5	53	0.16	38.21	40900	-	mg/l

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV41-006	749621.22	2087106.37	Copper	2.5	4.5	43.2	0.18	38.21	40900	-	mg/k
CV41-004	749619.88	2087073.47	Dibenz(a,h)anthracene	2.5	4.5	1700	510.00	-	3490	-	ug/k
CV41-006	749621.22	2087106.37	Dibenz(a,h)anthracene	0.5	2.5	170	51.00	-	3490	-	ug/k
CV41-002	749599.73	2087015.06	Fluoranthene	5	7	640	98.00	-	27200000	-	ug/k
CV41-003	749597.05	2087050.64	Fluoranthene	3	5	230	100.00	-	27200000	-	ug/k
CV41-003	749597.05	2087050.64	Fluoranthene	0.5	1	110	91.00	-	27200000	-	ug/k
CV41-004	749619.88	2087073.47	Fluoranthene	6.5	8.5	120	89.00	-	27200000	-	ug/k
CV41-004	749619.88	2087073.47	Fluoranthene	0.5	2.5	120	91.00	-	27200000	-	ug/k
CV41-004	749619.88	2087073.47	Fluoranthene	2.5	4.5	18000	920.00	-	27200000	-	ug/k
CV41-006	749621.22	2087106.37	Fluoranthene	0.5	2.5	450	91.00	-	27200000	-	ug/k
STEP OUT 3 - D	749635.15	2087116.33	Fluoranthene	4.5	6.5	710	86.00	-	27200000	-	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Fluoranthene	0.5	2.5	640	43.00	-	27200000	-	ug/k
CV41-004	749619.88	2087073.47	Fluorene	2.5	4.5	840	830.00	-	40800000	-	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Fluorene	0.5	2.5	98	60.00	-	40800000	-	ug/k
CV41-002	749599.73	2087015.06	Indeno(1,2,3-cd)pyrene	5	7	130	56.00	-	34900	-	ug/k
CV41-003	749597.05	2087050.64	Indeno(1,2,3-cd)pyrene	3	5	72	57.00	-	34900	-	ug/k
CV41-004	749619.88	2087073.47	Indeno(1,2,3-cd)pyrene	0.5	2.5	94	52.00	-	34900	-	ug/k
CV41-004	749619.88	2087073.47	Indeno(1,2,3-cd)pyrene	2.5	4.5	3000	520.00	-	34900	-	ug/k
CV41-006	749621.22	2087106.37	Indeno(1,2,3-cd)pyrene	0.5	2.5	360	52.00	-	34900	-	ug/k
STEP OUT 3 - D	749635.15	2087116.33	Indeno(1,2,3-cd)pyrene	4.5	6.5	300	97.00	-	34900	-	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Indeno(1,2,3-cd)pyrene	0.5	2.5	150	49.00	-	34900	-	ug/k
CV41-004	**749619.88**	**2087073.47**	**Lead**	**0.5**	**2.5**	**195**	**0.21**	**24.97**	**1000**	**25.6**	**mg/**
CV41-004	749619.88	2087073.47	Mercury	2.5	4.5	3.2	0.01	1.52	25200	-	mg/
CV41-004	749619.88	2087073.47	Mercury	4.5	6.5	2	0.01	1.52	25200	-	mg/
CV41-006	749621.22	2087106.37	Mercury	2.5	4.5	3.4	0.01	1.52	25200	-	mg/
CV41-000	749584.29	2086966.71	Methylene chloride	1	3	1.4	0.79	-	2530000	39500	ug/k
CV41-000	749584.29	2086966.71	Methylene chloride	5	7	1.4	0.89	-	2530000	39500	ug/k
CV41-000	749584.29	2086966.71	Methylene chloride	9	11	1.3	0.85	-	2530000	39500	ug/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV41-000	749584.29	2086966.71	Methylene chloride	3	5	1.5	0.89	-	2530000	39500	ug/k
CV41-000	749584.29	2086966.71	Methylene chloride	7	9	1.4	0.86	-	2530000	39500	ug/k
CV41-001	749570.86	2086994.24	Methylene chloride	0.5	2.5	0.83	0.83	-	2530000	39500	ug/k
CV41-001	749570.86	2086994.24	Methylene chloride	2.5	4.5	1.1	0.81	-	2530000	39500	ug/k
CV41-001	749570.86	2086994.24	Methylene chloride	8.5	10.5	0.99	0.82	-	2530000	39500	ug/k
CV41-001	749570.86	2086994.24	Methylene chloride	4.5	6.5	0.87	0.83	-	2530000	39500	ug/k
CV41-002	749599.73	2087015.06	Methylene chloride	9	11	1.5	0.85	-	2530000	39500	ug/k
CV41-002	749599.73	2087015.06	Methylene chloride	1	3	1.8	0.98	-	2530000	39500	ug/k
CV41-002	749599.73	2087015.06	Methylene chloride	7	9	1.7	0.82	-	2530000	39500	ug/k
CV41-002	749599.73	2087015.06	Methylene chloride	5	7	2	0.97	-	2530000	39500	ug/k
CV41-002	749599.73	2087015.06	Methylene chloride	3	5	1.2	0.89	-	2530000	39500	ug/k
CV41-003	749597.05	2087050.64	Methylene chloride	1	3	3.7	0.86	-	2530000	39500	ug/k
CV41-003	749597.05	2087050.64	Methylene chloride	5	7	3.6	0.82	-	2530000	39500	ug/k
CV41-003	749597.05	2087050.64	Methylene chloride	3	5	3.9	0.89	-	2530000	39500	ug/k
CV41-003	749597.05	2087050.64	Methylene chloride	7	9	3.2	0.83	-	2530000	39500	ug/k
CV41-003	749597.05	2087050.64	Methylene chloride	9	11	4.5	0.83	-	2530000	39500	ug/k
CV41-004	749619.88	2087073.47	Methylene chloride	6.5	8.5	1.1	0.95	-	2530000	39500	ug/k
CV41-005	749593.02	2087086.22	Methylene chloride	3	5	4.9	0.98	-	2530000	39500	ug/k
CV41-005	749593.02	2087086.22	Methylene chloride	9	11	3.5	0.88	-	2530000	39500	ug/k
CV41-005	749593.02	2087086.22	Methylene chloride	7	9	3.7	0.85	-	2530000	39500	ug/k
CV41-005	749593.02	2087086.22	Methylene chloride	1	3	4.6	0.96	-	2530000	39500	ug/k
CV41-005	749593.02	2087086.22	Methylene chloride	5	7	4.3	0.98	-	2530000	39500	ug/k
CV41-006	749621.22	2087106.37	Methylene chloride	6.5	8.5	0.84	0.83	-	2530000	39500	ug/k
CV41-006	749621.22	2087106.37	Methylene chloride	4.5	6.5	2.2	0.87	-	2530000	39500	ug/k
CV41-006	749621.22	2087106.37	Methylene chloride	8.5	10.5	1	0.84	-	2530000	39500	ug/k
CW40-001	749448.88	2087145.33	Methylene chloride	0.5	2.5	0.95	0.90	-	2530000	39500	ug/k
CW40-001	749448.88	2087145.33	Methylene chloride	4.5	6.5	0.9	0.83	-	2530000	39500	ug/k
CW40-002	749468.30	2087173.08	Methylene chloride	0.5	2.5	1.1	0.97	-	2530000	39500	ug/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CW40-004	749479.75	2087204.29	Methylene chloride	0.5	2.5	0.93	0.86	-	2530000	39500	ug/k
CW41-000	749618.53	2087142.62	Methylene chloride	0.5	2.5	0.99	0.96	-	2530000	39500	ug/k
CW41-000	749618.53	2087142.62	Methylene chloride	4.5	6.5	0.99	0.89	-	2530000	39500	ug/k
CW41-000	749618.53	2087142.62	Methylene chloride	8.5	10.5	0.93	0.82	-	2530000	39500	ug/k
CW41-001	749648.07	2087163.44	Methylene chloride	6.5	8.5	1.2	0.90	-	2530000	39500	ug/k
CW41-001	749648.07	2087163.44	Methylene chloride	8.5	10.5	1.4	0.85	-	2530000	39500	ug/k
CW41-001	749648.07	2087163.44	Methylene chloride	2.5	4.5	1.1	0.86	-	2530000	39500	ug/k
CW41-001	749648.07	2087163.44	Methylene chloride	4.5	6.5	1.2	0.83	-	2530000	39500	ug/k
CW41-001	749648.07	2087163.44	Methylene chloride	0.5	2.5	1.1	0.87	-	2530000	39500	ug/k
CW41-002	749622.56	2087178.88	Methylene chloride	2.5	4.5	2	0.92	-	2530000	39500	ug/k
CW41-002	749622.56	2087178.88	Methylene chloride	4.5	6.5	1.6	0.89	-	2530000	39500	ug/k
CW41-002	749622.56	2087178.88	Methylene chloride	8.5	10	1.5	0.86	-	2530000	39500	ug/k
CW41-002	749622.56	2087178.88	Methylene chloride	6.5	8.5	1.8	0.84	-	2530000	39500	ug/k
CW43-000	749981.91	2087145.35	Methylene chloride	0.5	2.5	0.94	0.82	-	2530000	39500	ug/k
DB41-000	749574.27	2088280.51	Methylene chloride	0.5	1	2.2	0.88	-	2530000	39500	ug/k
DB43-000	750163.83	2088219.15	Methylene chloride	0.5	2.5	3.7	0.86	-	2530000	39500	ug/k
DB43-001	749963.51	2088226.91	Methylene chloride	0.5	1	3.7	0.87	-	2530000	39500	ug/k
DC40-000	749412.32	2088396.73	Methylene chloride	0.5	1	3.1	0.89	-	2530000	39500	ug/k
DC41-000	749715.79	2088426.17	Methylene chloride	0.5	1	3.6	0.91	-	2530000	39500	ug/k
DC42-000	749918.10	2088478.64	Methylene chloride	0.5	1.25	3.8	0.89	-	2530000	39500	ug/k
DD40-000	749572.23	2088585.28	Methylene chloride	0.5	1	2.5	0.85	-	2530000	39500	ug/k
DD42-000	749777.16	2088664.41	Methylene chloride	0.5	2.5	3.1	0.83	-	2530000	39500	ug/k
DD43-001	750003.07	2088550.71	Methylene chloride	0.5	1	3.4	0.98	-	2530000	39500	ug/k
DE40-000	749552.11	2088809.06	Methylene chloride	0.5	2.5	4.2	0.85	-	2530000	39500	ug/k
DF41-000	749737.05	2089000.19	Methylene chloride	0.5	2.5	1.1	0.85	-	2530000	39500	ug/k
DG41-000	749743.20	2089312.89	Methylene chloride	0.5	2.5	2	0.84	-	2530000	39500	ug/k
DG41-001	749648.40	2089248.07	Methylene chloride	0.5	2.5	3.1	0.96	-	2530000	39500	ug/k
DH43-000	749991.19	2089365.30	Methylene chloride	0.5	2.5	2	0.81	-	2530000	39500	ug/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
STEP OUT 3 - B	749635.15	2087116.33	Methylene chloride	0.5	2.5	1.3	0.86	-	2530000	39500	ug/k
STEP OUT 3 - C	749635.15	2087116.33	Methylene chloride	2.5	4.5	1.7	0.85	-	2530000	39500	ug/k
STEP OUT 3 - D	749635.15	2087116.33	Methylene chloride	4.5	6.5	2	0.88	-	2530000	39500	ug/k
STEP OUT 3 - E	749635.15	2087116.33	Methylene chloride	6.5	8.5	1.5	0.86	-	2530000	39500	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Methylene chloride	0.5	2.5	1.5	0.89	-	2530000	39500	ug/k
STEP OUT 4 - C	749616.62	2087113.72	Methylene chloride	2.5	4.5	1.7	0.93	-	2530000	39500	ug/k
STEP OUT 4 - D	749616.62	2087113.72	Methylene chloride	4.5	6.5	1.7	0.92	-	2530000	39500	ug/k
STEP OUT 4 - E	749616.62	2087113.72	Methylene chloride	6.5	8.5	1.7	0.88	-	2530000	39500	ug/k
STEP OUT 4 - F	749616.62	2087113.72	Methylene chloride	8.5	10.5	1.5	0.87	-	2530000	39500	ug/k
CV40-000	749457.38	2087080.79	Molybdenum	5	7	37.7	0.15	25.61	5110	-	mg/k
CV41-000	749584.29	2086966.71	Molybdenum	9	11	30.4	0.14	25.61	5110	-	mg/k
CV41-004	749619.88	2087073.47	Naphthalene	6.5	8.5	1	1.00	-	3090000	-	ug/k
CV41-006	749621.22	2087106.37	Pentachlorophenol	4.5	6.5	790	400.00	-	162000	-	ug/k
CW40-003	749457.21	2087207.75	Plutonium-239/240	0.5	2.5	7.99104	0.15	0.02	50	3800	pCi/
CV41-000	749584.29	2086966.71	Pyrene	3	5	170	46.00	-	22100000	-	ug/k
CV41-002	749599.73	2087015.06	Pyrene	5	7	600	47.00	-	22100000	-	ug/k
CV41-002	749599.73	2087015.06	Pyrene	0.5	1	54	41.00	-	22100000	-	ug/k
CV41-003	749597.05	2087050.64	Pyrene	1	3	50	41.00	-	22100000	-	ug/k
CV41-003	749597.05	2087050.64	Pyrene	3	5	230	48.00	-	22100000	-	ug/k
CV41-003	749597.05	2087050.64	Pyrene	0.5	1	280	43.00	-	22100000	-	ug/k
CV41-004	749619.88	2087073.47	Pyrene	0.5	2.5	200	44.00	-	22100000	-	ug/k
CV41-004	749619.88	2087073.47	Pyrene	6.5	8.5	160	43.00	-	22100000	-	ug/k
CV41-004	749619.88	2087073.47	Pyrene	2.5	4.5	26000	440.00	-	22100000	-	ug/k
CV41-004	749619.88	2087073.47	Pyrene	4.5	6.5	360	44.00	-	22100000	-	ug/k
CV41-005	749593.02	2087086.22	Pyrene	0.5	1	410	41.00	-	22100000	-	ug/k
CV41-006	749621.22	2087106.37	Pyrene	0.5	2.5	370	44.00	-	22100000	-	ug/k
STEP OUT 3 - B	749635.15	2087116.33	Pyrene	0.5	2.5	790	120.00	-	22100000	-	ug/k
STEP OUT 3 - C	749635.15	2087116.33	Pyrene	2.5	4.5	590	120.00	-	22100000	-	ug/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
STEP OUT 3 - D	749635.15	2087116.33	Pyrene	4.5	6.5	1000	120.00	-	22100000	-	ug/k
STEP OUT 4 - B	749616.62	2087113.72	Pyrene	0.5	2.5	640	62.00	-	22100000	-	ug/k
CV41-005	749593.02	2087086.22	Strontium	7	9	220	0.01	211.38	613000	-	mg/k
CW40-001	749448.88	2087145.33	Strontium	0.5	2.5	368	0.01	211.38	613000	-	mg/k
CW40-002	749468.30	2087173.08	Strontium	2.5	4.5	237	0.01	211.38	613000	-	mg/k
CW40-002	749468.30	2087173.08	Strontium	0.5	2.5	220	0.01	211.38	613000	-	mg/k
CV41-000	749584.29	2086966.71	Tetrachloroethene	3	5	1.9	1.10	-	615000	37500	ug/k
CV41-001	749570.86	2086994.24	Tetrachloroethene	0.5	2.5	2.4	1.00	-	615000	37500	ug/k
CV41-002	749599.73	2087015.06	Tetrachloroethene	3	5	1.3	1.10	-	615000	37500	ug/k
CV41-002	749599.73	2087015.06	Tetrachloroethene	1	3	1.5	1.20	-	615000	37500	ug/k
CV41-003	749597.05	2087050.64	Tetrachloroethene	3	5	11	1.10	-	615000	37500	ug/k
CV41-004	749619.88	2087073.47	Tetrachloroethene	6.5	8.5	4.2	1.20	-	615000	37500	ug/k
CV41-004	749619.88	2087073.47	Tetrachloroethene	0.5	2.5	3000	32.00	-	615000	37500	ug/k
CV41-005	749593.02	2087086.22	Tetrachloroethene	5	7	2.8	1.20	-	615000	37500	ug/k
CV41-005	749593.02	2087086.22	Tetrachloroethene	3	5	2.3	1.20	-	615000	37500	ug/k
CV41-005	749593.02	2087086.22	Tetrachloroethene	1	3	2	1.20	-	615000	37500	ug/k
CV41-006	749621.22	2087106.37	Tetrachloroethene	0.5	2.5	6100	34.00	-	615000	37500	ug/k
CV41-006	749621.22	2087106.37	Tetrachloroethene	4.5	6.5	140	1.10	-	615000	37500	ug/k
CV41-006	749621.22	2087106.37	Tetrachloroethene	2.5	4.5	5600	34.00	-	615000	37500	ug/k
CV43-000	749980.95	2087134.60	Tetrachloroethene	0.5	2.5	1.4	1.20	-	615000	37500	ug/k
CV43-001	749967.93	2087135.47	Tetrachloroethene	0.5	2.5	3.3	1.00	-	615000	37500	ug/k
CW40-000	749477.67	2087139.09	Tetrachloroethene	1	3	1.2	1.10	-	615000	37500	ug/k
CW41-000	749618.53	2087142.62	Tetrachloroethene	2.5	4.5	1.9	1.20	-	615000	37500	ug/k
CW41-000	749618.53	2087142.62	Tetrachloroethene	0.5	2.5	2.6	1.20	-	615000	37500	ug/k
CW41-001	749648.07	2087163.44	Tetrachloroethene	0.5	2.5	17	1.10	-	615000	37500	ug/k
CW43-001	749975.88	2087140.61	Tetrachloroethene	0.5	2.5	2	1.20	-	615000	37500	ug/k
DB41-000	749574.27	2088280.51	Tetrachloroethene	0.5	1	2.8	1.10	-	615000	37500	ug/k
DB43-000	750163.83	2088219.15	Tetrachloroethene	0.5	2.5	7.8	1.10	-	615000	37500	ug/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
DB43-001	749963.51	2088226.91	Tetrachloroethene	0.5	1	2.9	1.10	-	615000	37500	ug/k
DC40-000	749412.32	2088396.73	Tetrachloroethene	0.5	1	2.2	1.10	-	615000	37500	ug/k
DC41-000	749715.79	2088426.17	Tetrachloroethene	0.5	1	1.2	1.10	-	615000	37500	ug/k
DC42-000	749918.10	2088478.64	Tetrachloroethene	0.5	1.25	3.6	1.10	-	615000	37500	ug/k
DD40-000	749572.23	2088585.28	Tetrachloroethene	0.5	1	2.8	1.10	-	615000	37500	ug/k
DD42-000	749777.16	2088664.41	Tetrachloroethene	0.5	2.5	2.7	1.00	-	615000	37500	ug/k
DE40-000	749552.11	2088809.06	Tetrachloroethene	0.5	2.5	4.9	1.10	-	615000	37500	ug/k
DE42-000	749946.42	2088837.41	Tetrachloroethene	0.5	2.5	3.1	1.20	-	615000	37500	ug/k
DF41-000	749737.05	2089000.19	Tetrachloroethene	0.5	2.5	7.9	1.10	-	615000	37500	ug/k
DF42-000	749906.57	2089129.65	Tetrachloroethene	0.5	2.5	2.8	1.10	-	615000	37500	ug/k
DG41-001	749648.40	2089248.07	Tetrachloroethene	0.5	2.5	2.5	1.20	-	615000	37500	ug/k
DH43-000	749991.19	2089365.30	Tetrachloroethene	0.5	2.5	2	1.00	-	615000	37500	ug/k
STEP OUT 3 - B	749635.15	2087116.33	Tetrachloroethene	0.5	2.5	1.4	1.10	-	615000	37500	ug/k
STEP OUT 3 - C	749635.15	2087116.33	Tetrachloroethene	2.5	4.5	75	1.10	-	615000	37500	ug/k
STEP OUT 3 - D	749635.15	2087116.33	Tetrachloroethene	4.5	6.5	210	1.10	-	615000	37500	ug/k
STEP OUT 4 - C	749616.62	2087113.72	Tetrachloroethene	2.5	4.5	1.7	1.20	-	615000	37500	ug/k
CV41-004	749619.88	2087073.47	Trichloroethene	4.5	6.5	1400	660.00	-	19600	509000	ug/k
CV41-004	749619.88	2087073.47	Trichloroethene	2.5	4.5	1900	620.00	-	19600	509000	ug/k
CV41-006	749621.22	2087106.37	Trichloroethene	4.5	6.5	3.9	0.95	-	19600	509000	ug/k
CV41-006	749621.22	2087106.37	Trichloroethene	2.5	4.5	100	34.00	-	19600	509000	ug/k
CV41-006	749621.22	2087106.37	Trichloroethene	0.5	2.5	89	34.00	-	19600	509000	ug/k
DF41-000	749737.05	2089000.19	Trichloroethene	0.5	2.5	3.9	0.93	-	19600	509000	ug/k
STEP OUT 3 - C	749635.15	2087116.33	Trichloroethene	2.5	4.5	2.2	0.92	-	19600	509000	ug/k
STEP OUT 3 - D	749635.15	2087116.33	Trichloroethene	4.5	6.5	12	0.96	-	19600	509000	ug/k
CV40-000	749457.38	2087080.79	Uranium, Total	7	9	9.504	6.95	3.04	2750	67.8	mg/l
CV40-000	749457.38	2087080.79	Uranium, Total	0.5	1	11.583	7.41	3.04	2750	67.8	mg/l
CV40-000	749457.38	2087080.79	Uranium, Total	3	5	18.414	7.25	3.04	2750	67.8	mg/l
CV40-000	749457.38	2087080.79	Uranium, Total	5	7	13.5491	6.28	3.04	2750	67.8	mg/l

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV40-000	749457.38	2087080.79	Uranium, Total	9	11	4.455	1.80	3.04	2750	67.8	mg/k
CV40-001	749480.09	2087106.49	Uranium, Total	3	5	14.85	7.14	3.04	2750	67.8	mg/k
CV40-001	749480.09	2087106.49	Uranium, Total	1	3	9.801	6.50	3.04	2750	67.8	mg/k
CV40-001	749480.09	2087106.49	Uranium, Total	0.5	1	10.989	7.18	3.04	2750	67.8	mg/k
CV40-001	749480.09	2087106.49	Uranium, Total	7	9	15.147	10.81	3.04	2750	67.8	mg/k
CV40-001	749480.09	2087106.49	Uranium, Total	5	7	24.948	12.29	3.04	2750	67.8	mg/k
CV41-000	749584.29	2086966.71	Uranium, Total	0.5	1	11.7315	6.71	3.04	2750	67.8	mg/k
CV41-000	749584.29	2086966.71	Uranium, Total	1	3	15.1767	7.69	3.04	2750	67.8	mg/k
CV41-000	749584.29	2086966.71	Uranium, Total	7	9	12.2067	4.84	3.04	2750	67.8	mg/k
CV41-000	749584.29	2086966.71	Uranium, Total	9	11	8.91	7.30	3.04	2750	67.8	mg/k
CV41-001	749570.86	2086994.24	Uranium, Total	2.5	4.5	6.4449	3.74	3.04	2750	67.8	mg/k
CV41-001	749570.86	2086994.24	Uranium, Total	0.5	2.5	9.9792	4.43	3.04	2750	67.8	mg/k
CV41-001	749570.86	2086994.24	Uranium, Total	6.5	8.5	8.5239	4.48	3.04	2750	67.8	mg/k
CV41-001	749570.86	2086994.24	Uranium, Total	4.5	6.5	10.7217	5.49	3.04	2750	67.8	mg/k
CV41-002	749599.73	2087015.06	Uranium, Total	7	9	8.91	5.79	3.04	2750	67.8	mg/k
CV41-002	749599.73	2087015.06	Uranium, Total	9	11	6.0291	6.36	3.04	2750	67.8	mg/k
CV41-002	749599.73	2087015.06	Uranium, Total	3	5	8.91	6.52	3.04	2750	67.8	mg/k
CV41-002	749599.73	2087015.06	Uranium, Total	0.5	1	20.8791	6.12	3.04	2750	67.8	mg/k
CV41-002	749599.73	2087015.06	Uranium, Total	5	7	28.215	16.52	3.04	2750	67.8	mg/k
CV41-002	749599.73	2087015.06	Uranium, Total	1	3	8.9991	4.84	3.04	2750	67.8	mg/k
CV41-003	749597.05	2087050.64	Uranium, Total	0.5	1	5.9697	6.09	3.04	2750	67.8	mg/k
CV41-003	749597.05	2087050.64	Uranium, Total	3	5	8.91	6.76	3.04	2750	67.8	mg/k
CV41-003	749597.05	2087050.64	Uranium, Total	9	11	11.88	6.14	3.04	2750	67.8	mg/k
CV41-003	749597.05	2087050.64	Uranium, Total	1	3	11.88	6.12	3.04	2750	67.8	mg/k
CV41-003	749597.05	2087050.64	Uranium, Total	7	9	11.88	6.04	3.04	2750	67.8	mg/k
CV41-003	749597.05	2087050.64	Uranium, Total	5	7	9.8604	6.71	3.04	2750	67.8	mg/k
CV41-004	749619.88	2087073.47	Uranium, Total	8.5	10.5	8.7318	8.35	3.04	2750	67.8	mg/k
CV41-004	749619.88	2087073.47	Uranium, Total	4.5	6.5	5.7321	5.23	3.04	2750	67.8	mg/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV41-004	749619.88	2087073.47	Uranium, Total	6.5	8.5	4.9896	4.63	3.04	2750	67.8	mg/k
CV41-004	749619.88	2087073.47	Uranium, Total	0.5	2.5	6.8607	5.44	3.04	2750	67.8	mg/k
CV41-005	749593.02	2087086.22	Uranium, Total	0.5	1	4.6035	1.99	3.04	2750	67.8	mg/k
CV41-006	749621.22	2087106.37	Uranium, Total	0.5	2.5	6.8607	5.67	3.04	2750	67.8	mg/k
CV41-006	749621.22	2087106.37	Uranium, Total	6.5	8.5	6.3558	4.51	3.04	2750	67.8	mg/k
CV41-006	749621.22	2087106.37	Uranium, Total	8.5	10.5	12.474	4.63	3.04	2750	67.8	mg/k
CV41-006	749621.22	2087106.37	Uranium, Total	2.5	4.5	8.2863	5.67	3.04	2750	67.8	mg/k
CW40-000	749477.67	2087139.09	Uranium, Total	3	5	4.0689	1.75	3.04	2750	67.8	mg/k
CW40-001	749448.88	2087145.33	Uranium, Total	8.5	10.5	14.85	6.41	3.04	2750	67.8	mg/k
CW40-001	749448.88	2087145.33	Uranium, Total	4.5	6.5	23.76	6.80	3.04	2750	67.8	mg/k
CW40-001	749448.88	2087145.33	Uranium, Total	0.5	2.5	14.85	6.67	3.04	2750	67.8	mg/k
CW40-001	749448.88	2087145.33	Uranium, Total	2.5	4.5	14.85	6.74	3.04	2750	67.8	mg/k
CW40-001	749448.88	2087145.33	Uranium, Total	6.5	8.5	17.82	7.07	3.04	2750	67.8	mg/k
CW40-002	749468.30	2087173.08	Uranium, Total	0.5	2.5	11.88	7.74	3.04	2750	67.8	mg/k
CW40-002	749468.30	2087173.08	Uranium, Total	4.5	6.5	14.85	5.72	3.04	2750	67.8	mg/k
CW40-002	749468.30	2087173.08	Uranium, Total	6.5	8.5	9.4743	6.65	3.04	2750	67.8	mg/k
CW40-002	749468.30	2087173.08	Uranium, Total	8.5	10.5	11.88	7.02	3.04	2750	67.8	mg/k
CW40-002	749468.30	2087173.08	Uranium, Total	2.5	4.5	14.85	6.76	3.04	2750	67.8	mg/k
CW40-003	749457.21	2087207.75	Uranium, Total	4.5	6.5	3.5343	2.09	3.04	2750	67.8	mg/k
CW40-003	749457.21	2087207.75	Uranium, Total	6.5	8.5	3.5343	2.27	3.04	2750	67.8	mg/k
CW40-004	749479.75	2087204.29	Uranium, Total	0.5	2.5	7.8111	5.14	3.04	2750	67.8	mg/k
CW40-004	749479.75	2087204.29	Uranium, Total	2.5	4.5	14.85	6.47	3.04	2750	67.8	mg/k
CW40-004	749479.75	2087204.29	Uranium, Total	4.5	6.5	6.831	3.80	3.04	2750	67.8	mg/k
CW40-004	749479.75	2087204.29	Uranium, Total	6.5	8.5	9.0288	5.02	3.04	2750	67.8	mg/k
CW41-000	749618.53	2087142.62	Uranium, Total	4.5	6.5	9.0585	4.07	3.04	2750	67.8	mg/k
CW41-000	749618.53	2087142.62	Uranium, Total	6.5	8.5	5.1975	4.31	3.04	2750	67.8	mg/k
CW41-000	749618.53	2087142.62	Uranium, Total	0.5	2.5	6.3855	4.96	3.04	2750	67.8	mg/k
CW41-000	749618.53	2087142.62	Uranium, Total	2.5	4.5	5.9103	3.56	3.04	2750	67.8	mg/k

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CW41-000	749618.53	2087142.62	Uranium, Total	8.5	10.5	4.8411	3.89	3.04	2750	67.8	mg/l
CW41-001	749648.07	2087163.44	Uranium, Total	2.5	4.5	7.9893	4.99	3.04	2750	67.8	mg/l
CW41-001	749648.07	2087163.44	Uranium, Total	8.5	10.5	11.9097	3.80	3.04	2750	67.8	mg/l
CW41-001	749648.07	2087163.44	Uranium, Total	0.5	2.5	4.752	4.31	3.04	2750	67.8	mg/l
CW41-002	749622.56	2087178.88	Uranium, Total	6.5	8.5	7.5438	7.45	3.04	2750	67.8	mg/l
CW41-002	749622.56	2087178.88	Uranium, Total	4.5	6.5	18.5328	6.03	3.04	2750	67.8	mg/l
CW41-002	749622.56	2087178.88	Uranium, Total	0.5	2.5	8.019	6.90	3.04	2750	67.8	mg/l
CW41-002	749622.56	2087178.88	Uranium, Total	2.5	4.5	16.335	7.86	3.04	2750	67.8	mg/l
CV40-000	749457.38	2087080.79	Uranium-234	3	5	6.2	2.44	2.64	300	1800	pCi/
CV40-000	749457.38	2087080.79	Uranium-234	5	7	4.562	2.11	2.64	300	1800	pCi/
CV40-000	749457.38	2087080.79	Uranium-234	7	9	3.2	2.34	2.64	300	1800	pCi/
CV40-000	749457.38	2087080.79	Uranium-234	0.5	1	3.9	2.50	2.64	300	1800	pCi/
CV40-001	749480.09	2087106.49	Uranium-234	3	5	5	2.41	2.64	300	1800	pCi/
CV40-001	749480.09	2087106.49	Uranium-234	0.5	1	3.7	2.42	2.64	300	1800	pCi/
CV40-001	749480.09	2087106.49	Uranium-234	7	9	5.1	3.64	2.64	300	1800	pCi/
CV40-001	749480.09	2087106.49	Uranium-234	5	7	8.4	4.14	2.64	300	1800	pCi/
CV40-001	749480.09	2087106.49	Uranium-234	1	3	3.3	2.19	2.64	300	1800	pCi/
CV41-000	749584.29	2086966.71	Uranium-234	7	9	4.11	1.63	2.64	300	1800	pCi/
CV41-000	749584.29	2086966.71	Uranium-234	9	11	3	2.46	2.64	300	1800	pCi/
CV41-000	749584.29	2086966.71	Uranium-234	0.5	1	3.95	2.26	2.64	300	1800	pCi/
CV41-000	749584.29	2086966.71	Uranium-234	1	3	5.11	2.59	2.64	300	1800	pCi/
CV41-001	749570.86	2086994.24	Uranium-234	0.5	2.5	3.36	1.49	2.64	300	1800	pCi/
CV41-001	749570.86	2086994.24	Uranium-234	6.5	8.5	2.87	1.51	2.64	300	1800	pCi/
CV41-001	749570.86	2086994.24	Uranium-234	4.5	6.5	3.61	1.85	2.64	300	1800	pCi/
CV41-002	749599.73	2087015.06	Uranium-234	1	3	3.03	1.63	2.64	300	1800	pCi/
CV41-002	749599.73	2087015.06	Uranium-234	3	5	3	2.20	2.64	300	1800	pCi/
CV41-002	749599.73	2087015.06	Uranium-234	0.5	1	7.03	2.06	2.64	300	1800	pCi/
CV41-002	749599.73	2087015.06	Uranium-234	7	9	3	1.95	2.64	300	1800	pCi/

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV41-002	749599.73	2087015.06	Uranium-234	5	7	9.5	5.56	2.64	300	1800	pCi/
CV41-003	749597.05	2087050.64	Uranium-234	1	3	4	2.06	2.64	300	1800	pCi/
CV41-003	749597.05	2087050.64	Uranium-234	7	9	4	2.03	2.64	300	1800	pCi/
CV41-003	749597.05	2087050.64	Uranium-234	9	11	4	2.07	2.64	300	1800	pCi/
CV41-003	749597.05	2087050.64	Uranium-234	3	5	3	2.28	2.64	300	1800	pCi/
CV41-003	749597.05	2087050.64	Uranium-234	5	7	3.32	2.26	2.64	300	1800	pCi/
CV41-004	749619.88	2087073.47	Uranium-234	8.5	10.5	2.94	2.81	2.64	300	1800	pCi/
CV41-006	749621.22	2087106.37	Uranium-234	2.5	4.5	2.79	1.91	2.64	300	1800	pCi/
CV41-006	749621.22	2087106.37	Uranium-234	8.5	10.5	4.2	1.56	2.64	300	1800	pCi/
CW40-001	749448.88	2087145.33	Uranium-234	4.5	6.5	8	2.29	2.64	300	1800	pCi/
CW40-001	749448.88	2087145.33	Uranium-234	0.5	2.5	5	2.25	2.64	300	1800	pCi/
CW40-001	749448.88	2087145.33	Uranium-234	8.5	10.5	5	2.16	2.64	300	1800	pCi/
CW40-001	749448.88	2087145.33	Uranium-234	6.5	8.5	6	2.38	2.64	300	1800	pCi/
CW40-001	749448.88	2087145.33	Uranium-234	2.5	4.5	5	2.27	2.64	300	1800	pCi/
CW40-002	749468.30	2087173.08	Uranium-234	2.5	4.5	5	2.28	2.64	300	1800	pCi/
CW40-002	749468.30	2087173.08	Uranium-234	8.5	10.5	4	2.36	2.64	300	1800	pCi/
CW40-002	749468.30	2087173.08	Uranium-234	4.5	6.5	5	1.92	2.64	300	1800	pCi/
CW40-002	749468.30	2087173.08	Uranium-234	6.5	8.5	3.19	2.24	2.64	300	1800	pCi/
CW40-002	749468.30	2087173.08	Uranium-234	0.5	2.5	4	2.61	2.64	300	1800	pCi/
CW40-004	749479.75	2087204.29	Uranium-234	4.5	6.5	3	1.45	2.64	300	1800	pCi/
CW40-004	749479.75	2087204.29	Uranium-234	6.5	8.5	3.04	1.69	2.64	300	1800	pCi/
CW40-004	749479.75	2087204.29	Uranium-234	2.5	4.5	5	2.18	2.64	300	1800	pCi/
CW41-000	749618.53	2087142.62	Uranium-234	6.5	8.5	1.75	1.45	2.64	300	1800	pCi/
CW41-000	749618.53	2087142.62	Uranium-234	0.5	2.5	2.15	1.67	2.64	300	1800	pCi/
CW41-000	749618.53	2087142.62	Uranium-234	8.5	10.5	1.63	1.31	2.64	300	1800	pCi/
CW41-000	749618.53	2087142.62	Uranium-234	2.5	4.5	1.99	1.20	2.64	300	1800	pCi/
CW41-000	749618.53	2087142.62	Uranium-234	4.5	6.5	3.05	1.37	2.64	300	1800	pCi/
CW41-001	749648.07	2087163.44	Uranium-234	0.5	2.5	1.6	1.45	2.64	300	1800	pCi/

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Un
CW41-001	749648.07	2087163.44	Uranium-234	2.5	4.5	2.69	1.68	2.64	300	1800	pCi
CW41-001	749648.07	2087163.44	Uranium-234	8.5	10.5	4.01	1.28	2.64	300	1800	pCi
CW41-002	749622.56	2087178.88	Uranium-234	4.5	6.5	6.24	2.03	2.64	300	1800	pCi
CW41-002	749622.56	2087178.88	Uranium-234	0.5	2.5	2.7	2.32	2.64	300	1800	pCi
CW41-002	749622.56	2087178.88	Uranium-234	2.5	4.5	5.5	2.65	2.64	300	1800	pCi
CW41-002	749622.56	2087178.88	Uranium-234	6.5	8.5	2.54	2.51	2.64	300	1800	pCi
CV40-000	749457.38	2087080.79	Uranium-235	0.5	1	0.33	0.25	0.12	8	1900	pCi
CV40-000	749457.38	2087080.79	Uranium-235	9	11	0.125	0.08	0.12	8	1900	pCi
CV40-000	749457.38	2087080.79	Uranium-235	1	3	0.22	0.18	0.12	8	1900	pCi
CV40-000	749457.38	2087080.79	Uranium-235	7	9	0.31	0.25	0.12	8	1900	pCi
CV40-000	749457.38	2087080.79	Uranium-235	3	5	0.29	0.25	0.12	8	1900	pCi
CV40-001	749480.09	2087106.49	Uranium-235	7	9	0.28	0.27	0.12	8	1900	pCi
CV40-001	749480.09	2087106.49	Uranium-235	1	3	0.3	0.23	0.12	8	1900	pCi
CV40-001	749480.09	2087106.49	Uranium-235	0.5	1	0.13	0.11	0.12	8	1900	pCi
CV40-001	749480.09	2087106.49	Uranium-235	5	7	0.52	0.31	0.12	8	1900	pCi
CV40-001	749480.09	2087106.49	Uranium-235	3	5	0.3	0.22	0.12	8	1900	pCi
CV41-000	749584.29	2086966.71	Uranium-235	9	11	0.4	0.16	0.12	8	1900	pCi
CV41-000	749584.29	2086966.71	Uranium-235	7	9	0.3	0.19	0.12	8	1900	pCi
CV41-000	749584.29	2086966.71	Uranium-235	0.5	1	0.244	0.22	0.12	8	1900	pCi
CV41-000	749584.29	2086966.71	Uranium-235	3	5	0.276	0.16	0.12	8	1900	pCi
CV41-000	749584.29	2086966.71	Uranium-235	1	3	0.334	0.27	0.12	8	1900	pCi
CV41-001	749570.86	2086994.24	Uranium-235	0.5	2.5	0.168	0.13	0.12	8	1900	pCi
CV41-001	749570.86	2086994.24	Uranium-235	4.5	6.5	0.184	0.14	0.12	8	1900	pCi
CV41-002	749599.73	2087015.06	Uranium-235	3	5	0.3	0.22	0.12	8	1900	pCi
CV41-002	749599.73	2087015.06	Uranium-235	0.5	1	0.3	0.24	0.12	8	1900	pCi
CV41-002	749599.73	2087015.06	Uranium-235	1	3	0.206	0.18	0.12	8	1900	pCi
CV41-002	749599.73	2087015.06	Uranium-235	5	7	0.2	0.14	0.12	8	1900	pCi
CV41-002	749599.73	2087015.06	Uranium-235	7	9	0.224	0.18	0.12	8	1900	pCi

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV41-002	749599.73	2087015.06	Uranium-235	9	11	0.2	0.21	0.12	8	1900	pCi/
CV41-003	749597.05	2087050.64	Uranium-235	5	7	0.222	0.17	0.12	8	1900	pCi/
CV41-003	749597.05	2087050.64	Uranium-235	7	9	0.3	0.20	0.12	8	1900	pCi/
CV41-003	749597.05	2087050.64	Uranium-235	1	3	0.205	0.16	0.12	8	1900	pCi/
CV41-003	749597.05	2087050.64	Uranium-235	3	5	0.207	0.21	0.12	8	1900	pCi/
CV41-003	749597.05	2087050.64	Uranium-235	9	11	0.3	0.19	0.12	8	1900	pCi/
CV41-003	749597.05	2087050.64	Uranium-235	0.5	1	0.2	0.17	0.12	8	1900	pCi/
CV41-004	749619.88	2087073.47	Uranium-235	6.5	8.5	0.257	0.17	0.12	8	1900	pCi/
CV41-004	749619.88	2087073.47	Uranium-235	2.5	4.5	0.435	0.24	0.12	8	1900	pCi/
CV41-004	749619.88	2087073.47	Uranium-235	4.5	6.5	0.285	0.16	0.12	8	1900	pCi/
CV41-004	749619.88	2087073.47	Uranium-235	8.5	10.5	0.236	0.17	0.12	8	1900	pCi/
CV41-005	749593.02	2087086.22	Uranium-235	5	7	0.142	0.08	0.12	8	1900	pCi/
CV41-006	749621.22	2087106.37	Uranium-235	6.5	8.5	0.176	0.16	0.12	8	1900	pCi/
CV41-006	749621.22	2087106.37	Uranium-235	0.5	2.5	0.231	0.21	0.12	8	1900	pCi/
CV41-006	749621.22	2087106.37	Uranium-235	2.5	4.5	0.324	0.19	0.12	8	1900	pCi/
CV41-006	749621.22	2087106.37	Uranium-235	4.5	6.5	0.279	0.22	0.12	8	1900	pCi/
CV41-006	749621.22	2087106.37	Uranium-235	8.5	10.5	0.191	0.16	0.12	8	1900	pCi/
CW40-000	749477.67	2087139.09	Uranium-235	0.5	1	0.128	0.09	0.12	8	1900	pCi/
CW40-000	749477.67	2087139.09	Uranium-235	5	7	0.131	0.06	0.12	8	1900	pCi/
CW40-000	749477.67	2087139.09	Uranium-235	3	5	0.123	0.07	0.12	8	1900	pCi/
CW40-001	749448.88	2087145.33	Uranium-235	4.5	6.5	0.3	0.20	0.12	8	1900	pCi/
CW40-001	749448.88	2087145.33	Uranium-235	6.5	8.5	0.3	0.18	0.12	8	1900	pCi/
CW40-001	749448.88	2087145.33	Uranium-235	8.5	10.5	0.2	0.18	0.12	8	1900	pCi/
CW40-002	749468.30	2087173.08	Uranium-235	6.5	8.5	0.218	0.14	0.12	8	1900	pCi/
CW40-002	749468.30	2087173.08	Uranium-235	2.5	4.5	0.22	0.16	0.12	8	1900	pCi/
CW40-002	749468.30	2087173.08	Uranium-235	8.5	10.5	0.3	0.20	0.12	8	1900	pCi/
CW40-002	749468.30	2087173.08	Uranium-235	0.5	2.5	0.4	0.27	0.12	8	1900	pCi/
CW40-002	749468.30	2087173.08	Uranium-235	4.5	6.5	0.2	0.16	0.12	8	1900	pCi

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CW40-003	749457.21	2087207.75	Uranium-235	6.5	8.5	0.122	0.08	0.12	8	1900	pCi/
CW40-004	749479.75	2087204.29	Uranium-235	4.5	6.5	0.2	0.14	0.12	8	1900	pCi/
CW40-004	749479.75	2087204.29	Uranium-235	2.5	4.5	0.132	0.11	0.12	8	1900	pCi/
CW40-004	749479.75	2087204.29	Uranium-235	6.5	8.5	0.2	0.17	0.12	8	1900	pCi/
CW40-004	749479.75	2087204.29	Uranium-235	0.5	2.5	0.5	0.25	0.12	8	1900	pCi/
CW41-000	749618.53	2087142.62	Uranium-235	4.5	6.5	0.154	0.11	0.12	8	1900	pCi/
CW41-000	749618.53	2087142.62	Uranium-235	0.5	2.5	0.124	0.11	0.12	8	1900	pCi/
CW41-000	749618.53	2087142.62	Uranium-235	2.5	4.5	0.131	0.12	0.12	8	1900	pCi/
CW41-000	749618.53	2087142.62	Uranium-235	6.5	8.5	0.125	0.12	0.12	8	1900	pCi/
CW41-001	749648.07	2087163.44	Uranium-235	4.5	6.5	0.232	0.15	0.12	8	1900	pCi/
CW41-002	749622.56	2087178.88	Uranium-235	0.5	2.5	0.246	0.20	0.12	8	1900	pCi/
CW41-002	749622.56	2087178.88	Uranium-235	2.5	4.5	0.39	0.26	0.12	8	1900	pCi/
CW41-002	749622.56	2087178.88	Uranium-235	6.5	8.5	0.303	0.21	0.12	8	1900	pCi/
CW41-002	749622.56	2087178.88	Uranium-235	4.5	6.5	0.182	0.16	0.12	8	1900	pCi/
CV40-000	749457.38	2087080.79	Uranium-238	7	9	3.2	2.34	1.49	351	1600	pCi/
CV40-000	749457.38	2087080.79	Uranium-238	0.5	1	3.9	2.50	1.49	351	1600	pCi/
CV40-000	749457.38	2087080.79	Uranium-238	3	5	6.2	2.44	1.49	351	1600	pCi/
CV40-000	749457.38	2087080.79	Uranium-238	5	7	4.562	2.11	1.49	351	1600	pCi/
CV40-000	749457.38	2087080.79	Uranium-238	9	11	1.5	0.61	1.49	351	1600	pCi/
CV40-001	749480.09	2087106.49	Uranium-238	1	3	3.3	2.19	1.49	351	1600	pCi/
CV40-001	749480.09	2087106.49	Uranium-238	3	5	5	2.41	1.49	351	1600	pCi/
CV40-001	749480.09	2087106.49	Uranium-238	0.5	1	3.7	2.42	1.49	351	1600	pCi/
CV40-001	749480.09	2087106.49	Uranium-238	5	7	8.4	4.14	1.49	351	1600	pCi/
CV40-001	749480.09	2087106.49	Uranium-238	7	9	5.1	3.64	1.49	351	1600	pCi/
CV41-000	749584.29	2086966.71	Uranium-238	0.5	1	3.95	2.26	1.49	351	1600	pCi/
CV41-000	749584.29	2086966.71	Uranium-238	1	3	5.11	2.59	1.49	351	1600	pCi/
CV41-000	749584.29	2086966.71	Uranium-238	9	11	3	2.46	1.49	351	1600	pCi/
CV41-000	749584.29	2086966.71	Uranium-238	7	9	4.11	1.63	1.49	351	1600	pCi/

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV41-001	749570.86	2086994.24	Uranium-238	0.5	2.5	3.36	1.49	1.49	351	1600	pCi/
CV41-001	749570.86	2086994.24	Uranium-238	6.5	8.5	2.87	1.51	1.49	351	1600	pCi/
CV41-001	749570.86	2086994.24	Uranium-238	2.5	4.5	2.17	1.26	1.49	351	1600	pCi/
CV41-001	749570.86	2086994.24	Uranium-238	4.5	6.5	3.61	1.85	1.49	351	1600	pCi/
CV41-002	749599.73	2087015.06	Uranium-238	5	7	9.5	5.56	1.49	351	1600	pCi/
CV41-002	749599.73	2087015.06	Uranium-238	0.5	1	7.03	2.06	1.49	351	1600	pCi/
CV41-002	749599.73	2087015.06	Uranium-238	3	5	3	2.20	1.49	351	1600	pCi/
CV41-002	749599.73	2087015.06	Uranium-238	7	9	3	1.95	1.49	351	1600	pCi/
CV41-002	749599.73	2087015.06	Uranium-238	9	11	2.03	2.14	1.49	351	1600	pCi/
CV41-002	749599.73	2087015.06	Uranium-238	1	3	3.03	1.63	1.49	351	1600	pCi/
CV41-003	749597.05	2087050.64	Uranium-238	9	11	4	2.07	1.49	351	1600	pCi/
CV41-003	749597.05	2087050.64	Uranium-238	0.5	1	2.01	2.05	1.49	351	1600	pCi/
CV41-003	749597.05	2087050.64	Uranium-238	7	9	4	2.03	1.49	351	1600	pCi/
CV41-003	749597.05	2087050.64	Uranium-238	1	3	4	2.06	1.49	351	1600	pCi/
CV41-003	749597.05	2087050.64	Uranium-238	5	7	3.32	2.26	1.49	351	1600	pCi/
CV41-003	749597.05	2087050.64	Uranium-238	3	5	3	2.28	1.49	351	1600	pCi/
CV41-004	749619.88	2087073.47	Uranium-238	8.5	10.5	2.94	2.81	1.49	351	1600	pCi/
CV41-004	749619.88	2087073.47	Uranium-238	6.5	8.5	1.68	1.56	1.49	351	1600	pCi/
CV41-004	749619.88	2087073.47	Uranium-238	4.5	6.5	1.93	1.76	1.49	351	1600	pCi/
CV41-004	749619.88	2087073.47	Uranium-238	0.5	2.5	2.31	1.83	1.49	351	1600	pCi/
CV41-005	749593.02	2087086.22	Uranium-238	0.5	1	1.55	0.67	1.49	351	1600	pCi/
CV41-006	749621.22	2087106.37	Uranium-238	0.5	2.5	2.31	1.91	1.49	351	1600	pCi/
CV41-006	749621.22	2087106.37	Uranium-238	6.5	8.5	2.14	1.52	1.49	351	1600	pCi/
CV41-006	749621.22	2087106.37	Uranium-238	8.5	10.5	4.2	1.56	1.49	351	1600	pCi/
CV41-006	749621.22	2087106.37	Uranium-238	2.5	4.5	2.79	1.91	1.49	351	1600	pCi/
CW40-001	749448.88	2087145.33	Uranium-238	4.5	6.5	8	2.29	1.49	351	1600	pCi/
CW40-001	749448.88	2087145.33	Uranium-238	8.5	10.5	5	2.16	1.49	351	1600	pCi/
CW40-001	749448.88	2087145.33	Uranium-238	0.5	2.5	5	2.25	1.49	351	1600	pCi/

Table 4
Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Un
CW40-001	749448.88	2087145.33	Uranium-238	2.5	4.5	5	2.27	1.49	351	1600	pCi
CW40-001	749448.88	2087145.33	Uranium-238	6.5	8.5	6	2.38	1.49	351	1600	pCi
CW40-002	749468.30	2087173.08	Uranium-238	4.5	6.5	5	1.92	1.49	351	1600	pCi
CW40-002	749468.30	2087173.08	Uranium-238	6.5	8.5	3.19	2.24	1.49	351	1600	pCi
CW40-002	749468.30	2087173.08	Uranium-238	0.5	2.5	4	2.61	1.49	351	1600	pCi
CW40-002	749468.30	2087173.08	Uranium-238	2.5	4.5	5	2.28	1.49	351	1600	pCi
CW40-002	749468.30	2087173.08	Uranium-238	8.5	10.5	4	2.36	1.49	351	1600	pCi
CW40-004	749479.75	2087204.29	Uranium-238	0.5	2.5	2.63	1.73	1.49	351	1600	pCi
CW40-004	749479.75	2087204.29	Uranium-238	2.5	4.5	5	2.18	1.49	351	1600	pCi
CW40-004	749479.75	2087204.29	Uranium-238	4.5	6.5	3	1.45	1.49	351	1600	pCi
CW40-004	749479.75	2087204.29	Uranium-238	6.5	8.5	3.04	1.69	1.49	351	1600	pCi
CW41-000	749618.53	2087142.62	Uranium-238	6.5	8.5	1.75	1.45	1.49	351	1600	pCi
CW41-000	749618.53	2087142.62	Uranium-238	4.5	6.5	3.05	1.37	1.49	351	1600	pCi
CW41-000	749618.53	2087142.62	Uranium-238	0.5	2.5	2.15	1.67	1.49	351	1600	pCi
CW41-000	749618.53	2087142.62	Uranium-238	8.5	10.5	1.63	1.31	1.49	351	1600	pCi
CW41-000	749618.53	2087142.62	Uranium-238	2.5	4.5	1.99	1.20	1.49	351	1600	pCi
CW41-001	749648.07	2087163.44	Uranium-238	8.5	10.5	4.01	1.28	1.49	351	1600	pCi
CW41-001	749648.07	2087163.44	Uranium-238	2.5	4.5	2.69	1.68	1.49	351	1600	pCi
CW41-001	749648.07	2087163.44	Uranium-238	0.5	2.5	1.6	1.45	1.49	351	1600	pCi
CW41-002	749622.56	2087178.88	Uranium-238	4.5	6.5	6.24	2.03	1.49	351	1600	pCi
CW41-002	749622.56	2087178.88	Uranium-238	6.5	8.5	2.54	2.51	1.49	351	1600	pCi
CW41-002	749622.56	2087178.88	Uranium-238	0.5	2.5	2.7	2.32	1.49	351	1600	pCi
CW41-002	749622.56	2087178.88	Uranium-238	0.5	2.5	2.6	2.26	1.49	351	1600	pCi

Table 4a
Outside IHSS and PAC Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
BW52-000	751772.3	2082013	2-Butanone	4.5	6.5	720	4.8	NA	1.92E+08	433000	ug/
BW52-000	751772.3	2082013	2-Butanone	6.5	8.5	520	5	NA	1.92E+08	433000	ug/
BW52-000	751772.3	2082013	2-Butanone	8.5	10.5	16	5.5	NA	1.92E+08	433000	ug/
BW52-000	751772.3	2082013	2-Butanone	10.5	12.5	1600	27	NA	1.92E+08	433000	ug/
BW52-000	751772.3	2082013	2-Butanone	12.5	14.5	400	5.6	NA	1.92E+08	433000	ug/
BW52-000	751772.3	2082013	2-Butanone	14.5	16.5	560	5.2	NA	1.92E+08	433000	ug/
BW52-000	751772.3	2082013	2-Butanone	24.6	25.6	200	5.5	NA	1.92E+08	433000	ug/
BW52-000	751772.3	2082013	Acetone	0.5	2.5	7.6	4.7	NA	1.02E+08	211000	ug/
BW52-000	751772.3	2082013	Acetone	4.5	6.5	510	4.7	NA	1.02E+08	211000	ug/
BW52-000	751772.3	2082013	Acetone	6.5	8.5	370	4.9	NA	1.02E+08	211000	ug/
BW52-000	751772.3	2082013	Acetone	10.5	12.5	140	5.4	NA	1.02E+08	211000	ug/
BW52-000	751772.3	2082013	Acetone	12.5	14.5	690	5.4	NA	1.02E+08	211000	ug/
BW52-000	751772.3	2082013	Acetone	14.5	16.5	290	5	NA	1.02E+08	211000	ug/
CV40-002	749442.7	2087119	Acetone	4.5	6.5	5.1	4.7	NA	1.02E+08	211000	ug
STEP OUT 1 - B	749626.4	2087034	Acetone	0.5	2.5	8.4	4.8	NA	1.02E+08	211000	ug
STEP OUT 1 - C	749626.4	2087034	Acetone	2.5	4.5	5.9	5	NA	1.02E+08	211000	ug
STEP OUT 1 - D	749626.4	2087034	Acetone	4.5	6.5	5.6	5	NA	1.02E+08	211000	ug
STEP OUT 1 - E	749626.4	2087034	Acetone	6.5	8.5	8.4	5.4	NA	1.02E+08	211000	ug
STEP OUT 2 - C	749637	2087080	Acetone	2.5	4.5	6.1	4.8	NA	1.02E+08	211000	ug
CV40-002	749442.7	2087119	Americium-241	0.5	2.5	3	0.732	0.02	76	1900	pC
CV40-002	749442.7	2087119	Aroclor-1254	0.5	2.5	160	4.5	NA	12400	371000	ug
CV40-002	749442.7	2087119	Aroclor-1260	0.5	2.5	120	5.1	NA	12400	NA	ug
CV40-002	749442.7	2087119	Lead	0.5	2.5	25	0.2	24.97	1000	25.6	mg
BW52-000	751772.3	2082013	Methylene chloride	0.5	2.5	1.6	0.81	NA	2530000	39500	ug
DB39-001	749287.2	2088324	Methylene chloride	0.5	0.667	1	0.85	NA	2530000	39500	ug
STEP OUT 1 - B	749626.4	2087034	Methylene chloride	0.5	2.5	1.7	0.83	NA	2530000	39500	ug

Table 4a
Outside IHSS and PAC Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Un
STEP OUT 1 - C	749626.4	2087034	Methylene chloride	2.5	4.5	1.6	0.88	NA	2530000	39500	ug
STEP OUT 1 - D	749626.4	2087034	Methylene chloride	4.5	6.5	1.6	0.87	NA	2530000	39500	ug
STEP OUT 1 - E	749626.4	2087034	Methylene chloride	6.5	8.5	1.9	0.94	NA	2530000	39500	ug
STEP OUT 2 - B	749637	2087080	Methylene chloride	0.5	2.5	1.8	0.84	NA	2530000	39500	ug
STEP OUT 2 - C	749637	2087080	Methylene chloride	2.5	4.5	1.7	0.83	NA	2530000	39500	ug
CV40-002	749442.7	2087119	Plutonium-239/240	0.5	2.5	27.48	0.732	0.02	50/116	3800	pC
CV40-002	749442.7	2087119	Pyrene	0.5	2.5	46	42	NA	22100000	NA	ug
CV40-002	749442.7	2087119	Strontium	0.5	2.5	219	0.006	211.38	613000	NA	mg
BW52-000	751772.3	2082013	Tetrachloroethene	0.5	2.5	50	1	NA	615000	37500	ug
BW52-000	751772.3	2082013	Tetrachloroethene	2.5	4.5	6.4	1.1	NA	615000	37500	ug
BW52-000	751772.3	2082013	Tetrachloroethene	4.5	6.5	550	5.1	NA	615000	37500	ug
BW52-000	751772.3	2082013	Tetrachloroethene	6.5	8.5	120	5.3	NA	615000	37500	ug
BW52-000	751772.3	2082013	Tetrachloroethene	8.5	10.5	950	5.8	NA	615000	37500	ug
BW52-000	751772.3	2082013	Tetrachloroethene	10.5	12.5	140	1.2	NA	615000	37500	ug
DB39-001	749287.2	2088324	Tetrachloroethene	0.5	0.667	1.8	1.1	NA	615000	37500	ug
STEP OUT 2 - B	749637	2087080	Tetrachloroethene	0.5	2.5	14	1	NA	615000	37500	ug
BW52-000	751772.3	2082013	Trichloroethene	4.5	6.5	1.6	0.89	NA	19600	509000	ug
BW52-000	751772.3	2082013	Trichloroethene	6.5	8.5	7.8	0.93	NA	19600	509000	ug
BW52-000	751772.3	2082013	Trichloroethene	8.5	10.5	1.1	1	NA	19600	509000	ug
DB39-001	749287.2	2088324	Trichloroethene	0.5	0.667	0.98	0.93	NA	19600	509000	ug
CV40-002	749442.7	2087119	Uranium, Total	0.5	2.5	17.82	7.227	3.04	2750	67.8	mg
CV40-002	749442.7	2087119	Uranium, Total	2.5	4.5	14.85	6.917	3.04	2750	67.8	mg
CV40-002	749442.7	2087119	Uranium, Total	4.5	6.5	14.85	8.583	3.04	2750	67.8	mg
CV40-002	749442.7	2087119	Uranium, Total	6.5	8.5	6.564	6.356	3.04	2750	67.8	mg
CV40-002	749442.7	2087119	Uranium, Total	8.5	9.5	23.76	7.277	3.04	2750	67.8	mg
CV40-002	749442.7	2087119	Uranium-234	0.5	2.5	6	2.433	2.64	300	1800	pC
CV40-002	749442.7	2087119	Uranium-234	2.5	4.5	5	2.01	2.64	300	1800	pC

Table 4a
Outside IHSS and PAC Subsurface Soil Results Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits with RFCA ALs

Location Code	Latitude	Longitude	Analyte	Start Depth (feet)	End Depth (feet)	Result	Detection or Reporting Limit	Background Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Uni
CV40-002	749442.7	2087119	Uranium-234	4.5	6.5	5	3.144	2.64	300	1800	pC
CV40-002	749442.7	2087119	Uranium-234	6.5	8.5	2.21	2.14	2.64	300	1800	pC
CV40-002	749442.7	2087119	Uranium-234	8.5	9.5	8	2.606	2.64	300	1800	pC
CV40-002	749442.7	2087119	Uranium-235	4.5	6.5	0.3	0.165	0.12	8	1900	pC
CV40-002	749442.7	2087119	Uranium-235	6.5	8.5	0.314	0.194	0.12	8	1900	pC
CV40-002	749442.7	2087119	Uranium-238	0.5	2.5	6	2.02	1.49	351	1600	pC
CV40-002	749442.7	2087119	Uranium-238	2.5	4.5	5	2.329	1.49	351	1600	pC
CV40-002	749442.7	2087119	Uranium-238	4.5	6.5	5	2.89	1.49	351	1600	pC
CV40-002	749442.7	2087119	Uranium-238	6.5	8.5	2.21	2.14	1.49	351	1600	pC
CV40-002	749442.7	2087119	Uranium-238	8.5	9.5	8	2.45	1.49	351	1600	pC

Table 5
IHSS Group NE/NW Surface Soil Summary of Analytical Results with RFCA Action Levels

Analyte	Total Number Samples Analyzed	Detection Frequency	Average Concentration	Maximum Concentration	Detection or Reporting Limit	Backgound Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
4,4'-DDE	4	75.00%	5.90	9.5	1.75	-	101000	-	ug/kg
Acenaphthene	33	3.03%	346.09	420	49.39	-	40800000	-	ug/kg
Aluminum	36	50.00%	15734.72	27400	1.63	16902.00	228000	-	mg/kg
Americium-241	43	60.47%	1.52	10.5	0.65	0.02	76	1900	pci/g
Anthracene	33	6.06%	346.67	420	83.00	-	204000000	-	ug/kg
Aroclor-1254	31	54.84%	68.51	530	7.15	-	12400	371000	ug/kg
Aroclor-1260	31	41.94%	49.06	240	5.85	-	12400	-	ug/kg
Barium	36	22.22%	111.10	202	0.05	141.26	26400	-	mg/kg
Benzo(a)anthracene	33	21.21%	297.48	420	41.97	-	34900	800000	ug/kg
Benzo(a)pyrene	33	6.06%	345.76	420	97.39	-	3490	25700	ug/kg
Benzo(b)fluoranthene	33	3.03%	350.91	420	105.39	-	34900	1010000	ug/kg
Benzo(k)fluoranthene	33	6.06%	343.33	420	97.70	-	349000	1010000	ug/kg
Benzoic Acid	33	6.06%	1672.73	2000	594.24	-	1000000000	-	ug/kg
Beryllium	36	8.33%	0.63	1.3	0.04	0.97	921	2.15	mg/kg
bis(2-Ethylhexyl)phthalate	33	12.12%	353.33	470	74.27	-	1970000	-	ug/kg
Cadmium	36	2.78%	0.43	2.6	0.04	1.61	962	-	mg/kg
Chromium	36	30.56%	16.03	31.1	0.23	16.99	268	-	mg/kg
Chrysene	33	21.21%	303.39	420	55.94	-	3490000	-	ug/kg
Cobalt	36	2.78%	5.54	21.6	0.24	10.91	1550	-	mg/kg
Copper	36	22.22%	15.42	36.9	0.18	18.06	40900	-	mg/kg
Dieldrin	4	50.00%	7.18	9.5	2.98	-	1720	-	ug/kg
Endrin	4	75.00%	5.98	9.5	2.08	-	221000	-	ug/kg
Fluoranthene	33	36.36%	297.24	620	87.25	-	27200000	-	ug/kg
Indeno(1,2,3-cd)pyrene	33	6.06%	340.36	420	51.36	-	34900	-	ug/kg

Table 5
IHSS Group NE/NW Surface Soil Summary of Analytical Results with RFCA Action Levels

Analyte	Total Number Samples Analyzed	Detection Frequency	Average Concentration	Maximum Concentration	Detection or Reporting Limit	Backgound Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
Iron	36	16.67%	13329.44	23800	1.60	18037.00	307000	-	mg/kg
Lead	36	2.78%	29.26	67.8	0.21	54.62	1000	25.6	mg/kg
Lithium	36	69.44%	13.03	25.1	0.22	11.55	20400	-	mg/kg
Manganese	36	11.11%	215.25	438	0.04	365.08	3480	-	mg/kg
Mercury	36	5.56%	0.04	0.16	0.00	0.13	25200	-	mg/kg
Methoxychlor	4	75.00%	8.45	18	0.94	-	5110000	-	ug/kg
Methylene chloride	2	100.00%	110.75	220	0.80	-	2530000	39500	ug/kg
Nickel	36	38.89%	14.92	48.4	0.55	14.91	20400	-	mg/kg
Plutonium-239/240	43	60.47%	15.54	88.08	0.65	0.07	50/116	3800	pci/g
Pyrene	33	72.73%	189.00	640	44.15	-	22100000	-	ug/kg
Selenium	36	11.11%	0.69	1.9	0.44	1.22	5110	-	mg/kg
Strontium	36	38.89%	63.10	362	0.01	48.94	613000	-	mg/kg
Tetrachloroethene	1	100.00%	10.00	10	0.99	-	615000	37500	ug/kg
Uranium-234	43	60.47%	3.09	8	1.72	2.25	300	1800	pci/g
Uranium-235	43	72.09%	0.20	0.5	0.14	0.09	8	1900	pci/g
Uranium-238	43	67.44%	3.09	8	1.72	2.00	351	1600	pci/g
Vanadium	36	5.56%	29.88	58.1	0.29	45.59	7150	433	mg/kg
Zinc	36	8.33%	48.84	104	0.44	73.76	307000	-	mg/kg

* Plutonium-239/240 result estimated from Americium-241 result via gamma spectrometry.

Table 6
IHSS Group NE/NW Subsurface Soil Summary of Analytical Results with RFCA Action Levels

Analyte	Total Number Samples Analyzed	Detection Frequency	Average Concentration	Maximum Concentration	Standard Deviation	Detection or Reporting Limit	Backgound Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
1,1,2,2-Tetrachloroethane	126	0.79%	95.11	5500	671.18	9.62	-	100000	-	ug/kg
2-Butanone	126	15.87%	225.88	8100	1096.71	114.64	-	192000000	433000	ug/kg
2-Methylnaphthalene	103	0.97%	438.06	3900	473.61	75.50	-	20400000	-	ug/kg
Acenaphthene	103	1.94%	435.44	3900	474.54	61.20	-	40800000	-	ug/kg
Acetone	126	36.51%	406.72	22000	2696.68	144.36	-	102000000	211000	ug/kg
Aluminum	92	1.09%	11612.17	38000	6284.39	1.33	16902.00	228000	-	mg/kg
Americium-241	152	0.66%	0.60	0.969	0.20	0.65	0.02	76	1900	pci/g
Anthracene	103	5.83%	418.83	3900	408.91	102.21	-	204000000	-	ug/kg
Antimony	92	1.09%	4.29	350	36.44	0.46	-	409	-	mg/kg
Aroclor-1254	93	13.98%	101.98	2500	291.18	11.77	-	12400	371000	ug/kg
Aroclor-1260	93	6.45%	65.09	390	92.35	9.90	-	12400	-	ug/kg
Arsenic	92	2.17%	4.45	17.8	2.95	0.63	10.09	22.2	21.6	mg/kg
Barium	92	1.09%	77.12	838	89.41	0.04	141.26	26400	-	mg/kg
Benzo(a)anthracene	103	11.65%	452.33	7500	788.61	52.11	-	34900	800000	ug/kg
Benzo(a)pyrene	103	9.71%	481.46	9300	947.10	119.23	-	3490	25700	ug/kg
Benzo(b)fluoranthene	103	4.85%	469.61	7100	749.01	128.46	-	34900	1010000	ug/kg
Benzo(k)fluoranthene	103	4.85%	479.03	8000	827.89	120.07	-	349000	1010000	ug/kg
bis(2-Ethylhexyl)phthalate	103	1.94%	412.14	3900	357.19	92.04	-	1970000	-	ug/kg
Cadmium	92	8.70%	1.20	58.7	6.29	0.05	1.61	962	-	mg/kg
Chromium	92	3.26%	16.68	191	25.55	0.06	16.99	268	-	mg/kg
Chrysene	103	13.59%	469.59	8500	876.24	68.43	-	3490000	-	ug/kg
Copper	92	2.17%	9.50	53	7.68	0.17	18.06	40900	-	mg/kg
Dibenz(a,h)anthracene	103	1.94%	420.00	3900	375.84	64.57	-	3490	-	ug/kg
Fluoranthene	103	9.71%	577.18	18000	1770.13	106.10	-	27200000	-	ug/kg
Fluorene	103	1.94%	410.85	3900	356.72	98.49	-	40800000	-	ug/kg
Indeno(1,2,3-cd)pyrene	103	7.77%	418.60	3900	439.49	63.45	-	34900	-	ug/kg

Table 6
IHSS Group NE/NW Subsurface Soil Summary of Analytical Results with RFCA Action Levels

Analyte	Total Number Samples Analyzed	Detection Frequency	Average Concentration	Maximum Concentration	Standard Deviation	Detection or Reporting Limit	Backgound Mean Plus 2 Standard Deviations	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
Lead	92	1.09%	7.71	195	20.02	0.21	54.62	1000	25.6	mg/kg
Mercury	92	3.26%	0.14	3.4	0.53	0.00	0.13	25200	-	mg/kg
Methylene chloride	126	54.76%	94.98	5500	671.66	27.40	-	2530000	39500	ug/kg
Molybdenum	92	2.17%	1.30	37.7	5.11	0.14	-	5110	-	mg/kg
Naphthalene	229	0.44%	251.30	5500	613.50	50.72	-	3090000	-	ug/kg
Pentachlorophenol	103	0.97%	2117.38	19000	2272.07	453.48	-	162000	-	ug/kg
Plutonium-239/240	152	0.66%	8.07	11.06952	1.64	0.65	0.07	50/116	3800	pci/g
Pyrene	103	17.48%	651.59	26000	2548.33	55.42	-	22100000	-	ug/kg
Strontium	92	4.35%	61.46	368	63.09	0.01	48.94	613000	-	mg/kg
Tetrachloroethene	126	36.51%	1281.63	72000	9050.93	12.10	-	615000	37500	ug/kg
Trichloroethene	126	8.73%	35.05	1900	209.95	11.87	-	19600	509000	ug/kg
Uranium, Total	456	25.44%	3.31	28.215	5.45	2.02	-	2750	67.8	mg/kg
Uranium-234	152	55.92%	3.31	9.5	1.69	2.01	2.25	300	1800	pci/g
Uranium-235	152	71.71%	0.22	0.52	0.09	0.17	0.09	8	1900	pci/g
Uranium-238	152	73.68%	3.31	9.5	1.69	2.01	2.00	351	1600	pci/g

* Plutonium-239/240 result estimated from Americium-241 result via gamma spectrometry.

Table 7
Radionuclides Sum of Ratios for Surface Soil

Location Code	Easting	Northing	Sum of Ratios to Wildlife Refuge Worker Action Level
BW52-000	751772.302	2082012.803	0.11
CV41-001	749570.862	2086994.241	0.02
CV41-004	749619.875	2087073.467	0.01
CV41-006	749621.218	2087106.366	0.37
CW40-001	749448.883	2087145.332	1.72
CW40-002	749468.303	2087173.075	0.68
CW40-003	749457.206	2087207.753	0.92
CW40-004	749479.747	2087204.285	0.70
CW41-002	749622.560	2087178.878	0.06
DB41-000	749574.266	2088280.510	0.49
DB43-000	750163.832	2088219.154	0.04
DB43-001	749963.505	2088226.913	0.03
DB44-000	750231.296	2088317.838	0.13
DC41-000	749715.786	2088426.166	0.14
DC42-000	749918.099	2088478.637	0.05
DC43-000	750152.867	2088442.463	0.11
DD40-000	749572.229	2088585.278	0.02
DD42-000	749777.157	2088664.411	0.18
DD43-000	750249.973	2088554.951	0.51
DD43-001	750003.066	2088550.709	0.04
DD44-000	750275.165	2088472.831	0.13
DF41-000	749737.048	2089000.190	0.03
DF42-000	749906.570	2089129.652	0.18

Table 8
Radionuclides Sum of Ratios for Subsurface Soil

Location Code	Easting	Northing	Start Depth (feet)	End Depth (feet)	Sum of Ratios to Wildlife Refuge Worker Action Level
CV40-000	749457.38	2087080.79	0.5	1	0.13
CV40-000	749457.38	2087080.79	1	3	0.05
CV40-000	749457.38	2087080.79	3	5	0.14
CV40-000	749457.38	2087080.79	5	7	0.06
CV40-000	749457.38	2087080.79	7	9	0.11
CV40-000	749457.38	2087080.79	9	11	0.02
CV40-001	749480.09	2087106.49	0.5	1	0.08
CV40-001	749480.09	2087106.49	1	3	0.11
CV40-001	749480.09	2087106.49	3	5	0.13
CV40-001	749480.09	2087106.49	5	7	0.20
CV40-001	749480.09	2087106.49	7	9	0.12
CV41-000	749584.29	2086966.71	0.5	1	0.05

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Table 8
Radionuclides Sum of Ratios for Subsurface Soil

Location Code	Easting	Northing	Start Depth (feet)	End Depth (feet)	Sum of Ratios to Wildlife Refuge Worker Action Level
CV41-000	749584.29	2086966.71	1	3	0.07
CV41-000	749584.29	2086966.71	3	5	0.03
CV41-000	749584.29	2086966.71	7	9	0.12
CV41-000	749584.29	2086966.71	9	11	0.13
CV41-001	749570.86	2086994.24	0.5	2.5	0.04
CV41-001	749570.86	2086994.24	2.5	4.5	0.01
CV41-001	749570.86	2086994.24	4.5	6.5	0.05
CV41-001	749570.86	2086994.24	6.5	8.5	0.02
CV41-002	749599.73	2087015.06	0.5	1	0.16
CV41-002	749599.73	2087015.06	1	3	0.09
CV41-002	749599.73	2087015.06	3	5	0.09
CV41-002	749599.73	2087015.06	5	7	0.16
CV41-002	749599.73	2087015.06	7	9	0.11
CV41-002	749599.73	2087015.06	9	11	0.06
CV41-003	749597.05	2087050.64	0.5	1	0.06
CV41-003	749597.05	2087050.64	1	3	0.10
CV41-003	749597.05	2087050.64	3	5	0.08
CV41-003	749597.05	2087050.64	5	7	0.09
CV41-003	749597.05	2087050.64	7	9	0.12
CV41-003	749597.05	2087050.64	9	11	0.11
CV41-004	749619.88	2087073.47	0.5	2.5	0.01
CV41-004	749619.88	2087073.47	2.5	4.5	0.05
CV41-004	749619.88	2087073.47	4.5	6.5	0.04
CV41-004	749619.88	2087073.47	6.5	8.5	0.04
CV41-004	749619.88	2087073.47	8.5	10.5	0.05
CV41-005	749593.02	2087086.22	0.5	1	0.00
CV41-005	749593.02	2087086.22	5	7	0.02
CV41-006	749621.22	2087106.37	0.5	2.5	0.04
CV41-006	749621.22	2087106.37	2.5	4.5	0.06
CV41-006	749621.22	2087106.37	4.5	6.5	0.03
CV41-006	749621.22	2087106.37	6.5	8.5	0.03
CV41-006	749621.22	2087106.37	8.5	10.5	0.05
CW40-000	749477.67	2087139.09	0.5	1	0.02
CW40-000	749477.67	2087139.09	3	5	0.02
CW40-000	749477.67	2087139.09	5	7	0.02
CW40-001	749448.88	2087145.33	0.5	2.5	0.06
CW40-001	749448.88	2087145.33	2.5	4.5	0.06
CW40-001	749448.88	2087145.33	4.5	6.5	0.17
CW40-001	749448.88	2087145.33	6.5	8.5	0.14
CW40-001	749448.88	2087145.33	8.5	10.5	0.10
CW40-002	749468.30	2087173.08	0.5	2.5	0.14
CW40-002	749468.30	2087173.08	2.5	4.5	0.16

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Table 8
Radionuclides Sum of Ratios for Subsurface Soil

Location Code	Easting	Northing	Start Depth (feet)	End Depth (feet)	Sum of Ratios to Wildlife Refuge Worker Action Level
CW40-002	749468.30	2087173.08	4.5	6.5	0.16
CW40-002	749468.30	2087173.08	6.5	8.5	0.14
CW40-002	749468.30	2087173.08	8.5	10.5	0.18
CW40-003	749457.21	2087207.75	0.5	2.5	0.08
CW40-003	749457.21	2087207.75	6.5	8.5	0.02
CW40-004	749479.75	2087204.29	0.5	2.5	0.19
CW40-004	749479.75	2087204.29	2.5	4.5	0.10
CW40-004	749479.75	2087204.29	4.5	6.5	0.10
CW40-004	749479.75	2087204.29	6.5	8.5	0.13
CW41-000	749618.53	2087142.62	0.5	2.5	0.02
CW41-000	749618.53	2087142.62	2.5	4.5	0.02
CW41-000	749618.53	2087142.62	4.5	6.5	0.04
CW41-000	749618.53	2087142.62	6.5	8.5	0.02
CW41-000	749618.53	2087142.62	8.5	10.5	0.00
CW41-001	749648.07	2087163.44	0.5	2.5	0.00
CW41-001	749648.07	2087163.44	2.5	4.5	0.02
CW41-001	749648.07	2087163.44	4.5	6.5	0.03
CW41-001	749648.07	2087163.44	8.5	10.5	0.02
CW41-002	749622.56	2087178.88	0.5	2.5	0.09
CW41-002	749622.56	2087178.88	2.5	4.5	0.14
CW41-002	749622.56	2087178.88	4.5	6.5	0.06
CW41-002	749622.56	2087178.88	6.5	8.5	0.05

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3.0 DEVIATIONS FROM PLANNED SAMPLING SPECIFICATIONS

Deviations from the planned sampling specifications described in BZSAP Addendum #BZ-02-01 (DOE 2002b) were approved through the consultative process with EPA and are presented in Table 9

Table 9
IHSS Group NE/NW Deviations From Planned Sampling Specifications

IHSS/PAC	Location Code	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Comments
216.2	No deviations from the planned sampling specifications.					
216.3	DB39-000	unplanned		2088323.82	749287.21	Sample locations were added or moved based on topography and approved by EPA during the presampling field walkdown and consultative process.
	DC39-000	unplanned		2088448.69	749186.93	
	DG41-001	2089312.89	749743.20	2089248.22	749647.97	
	DD43-001	2088438.18	750004.16	2088550.71	750003.07	
	DC40-000	2088394.64	749416.24	2088396.73	749412.32	
	DB39-000	2088267.14	749247.11	2088448.57	749186.75	
	DB39-001	2088319.18	749273.13	2088323.82	749287.21	
	DD40-000	2088550.76	749551.55	2088585.28	749572.23	
	DD42-000	2088664.41	749777.16	2089129.65	749906.57	
	DE42-000	2088880.00	749926.08	2088837.41	749946.42	
	DG41-000	2089312.89	749743.20	2089248.07	749648.40	
	DD39-000	2088604.66	749159.20	2088620.52	749244.49	
NE-1407	No deviations from the planned sampling specifications.					
NE-1413	STEP OUT 1	unplanned		2087034.21	749626.36	Sample locations were added in September 2002 based on VOC results from previous sampling conducted in June 2002.
	STEP OUT 2	unplanned		2087079.97	749636.97	
	STEP OUT 3	unplanned		2087116.33	749635.15	
	STEP OUT 4	unplanned		2087113.72	749616.62	
NE-1412	CV40-000	2087078.06	749463.45	2087080.79	749457.38	Sample location deviation was based on topography to accommodate drill rig.
174a	BW52-000	2082020.64	751766.82	2082012.80	751772.30	Sample location deviation was due to existing well in planned location.

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4.0 DATA QUALITY ASSESSMENT

The Data Quality Objectives (DQOs) for this project are described in the BZSAP (DOE 2002a). All DQOs for this project were achieved based on the following:

- Regulatory agency approved sampling program design (BZSAP Addendum 02-01 [DOE 2002b);
- Collection of samples in accordance with the sampling design;
- Results of the Data Quality Assessment as described in the following sections.

4.1.1 Data Quality Assessment Process

The DQA process ensures that the type, quantity and quality of environmental data used in decision making are defensible, and is based on the following guidance and requirements:

- EPA QA/G-4, 1994a, Guidance for the Data Quality Objective Process;
- EPA QA/G-9, 1998, Guidance for the Data Quality Assessment Process; Practical Methods for Data Analysis; and
- DOE Order 414.1A, 1999, Quality Assurance.

Verification and Validation (V&V) of the data are the primary components of the DQA. The final data are compared with original project DQOs and evaluated with respect to project decisions; uncertainty within the decisions; and quality criteria required for the data, specifically precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS). Validation criteria are consistent with the following RFETS-specific documents and industry guidelines:

- EPA 540/R-94/012, 1994b, USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review;
- EPA 540/R-94/013, 1994c, USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review; and
- Kaiser-Hill Company, L.L.C.(K-H) V&V Guidelines:
- General Guidelines for Data Verification and Validation, DA-GR01-v2, 2002a.
- V&V Guidelines for Isotopic Determinations by Alpha Spectrometry, DA-RC01-v2, 2002b.
- V&V Guidelines for Volatile Organics, DA-SS01-v3, 2002c.
- V&V Guidelines for Semivolatile Organics, DA-SS02-v3, 2002d.
- V&V Guidelines for Metals, DA-SS05-v3, 2002e.
- Lockheed-Martin, 1997, Evaluation of Radiochemical Data Usability, ES/ER/MS-5.

Table 11
Surrogate Recovery Summary

VOC Surrogate Recoveries				
Number of Samples	Analyte	Minimum	Maximum	Unit Code
142	1,2-Dichloroethane-D4	84	126	%REC
142	4-Bromofluorobenzene	81	126	%REC
142	Toluene-D8	87	118	%REC
SVOC Surrogate Recoveries				
Number of Samples	Analyte	Minimum	Maximum	Unit Code
155	TERPHENYL-D14	20	86	%REC
155	2-FLUOROBIPHENYL	24	78	%REC
155	2-FLUOROPHENOL	22	76	%REC
155	NITROBENZENE-D5	21	80	%REC

Sample Matrix Spike Evaluation

The frequency of MS measurements, relative to each laboratory batch, was adequate based on at least one MS per batch. The minimum and maximum of MS results are summarized by chemical, for the entire project in Table 12. An abbreviated list of spike compounds were used for VOC (4 of approximately 33) and SVOC (13 of approximately 64) analyses. Of those analytes used for spikes, all recoveries were within specification except for 2 metals - Mn and Sr. The lowest recovery shown, at 0%, causes a qualification of the following results as potentially low:

Sr – 19 samples at 4 locations (CV40-002, CW40-001, -002, and –004);

Mn – 15 samples at 4 locations (CV40-003, -005, and CW40-004).

Neither validation nor qualification is performed for analytes not included on the abbreviated spike list, relative to MS performance. However, the concentrations of both analytes are well below Als, and the poor recovery does not affect project decisions.

Table 12
Sample Matrix Spike Evaluation

CAS Number	Analyte	Minimum	Maximum	Number of Laboratory Samples	Number of Laboratory Batches	Unit	Laboratory Method
75-35-4	1,1-Dichloroethene	60	116	17	17	%REC	SW-846 8260
120-82-1	1,2,4-Trichlorobenzene	48	63	15	15	%REC	SW-846 8270B
106-46-7	1,4-Dichlorobenzene	43	60	15	15	%REC	SW-846 8270B
121-14-2	2,4-Dinitrotoluene	48	74	15	15	%REC	SW-846 8270B
95-57-8	2-Chlorophenol	52	69	15	15	%REC	SW-846 8270B
100-02-7	4-Nitrophenol	45	73	15	15	%REC	SW-846 8270B

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Table 12
Sample Matrix Spike Evaluation

CAS Number	Analyte	Minimum	Maximum	Number of Laboratory Samples	Number of Laboratory Batches	Unit	Laboratory Method
83-32-9	Acenaphthene	49	67	15	15	%REC	SW-846 8270B
7429-90-5	Aluminum	199	4230	11	11	%REC	SW-846 6010/6010B
7440-36-0	Antimony	23	58	11	11	%REC	SW-846 6010/6010B
12674-11-2	Aroclor-1016	57	138	13	13	%REC	SW-846 8082
11096-82-5	Aroclor-1260	55	124	13	13	%REC	SW-846 8082
7440-38-2	Arsenic	85	100	11	11	%REC	SW-846 6010/6010B
7440-39-3	Barium	75	106	11	11	%REC	SW-846 6010/6010B
71-43-2	Benzene	63	111	17	17	%REC	SW-846 8260
7440-41-7	Beryllium	78	101	11	11	%REC	SW-846 6010/6010B
7440-43-9	Cadmium	75	96	11	11	%REC	SW-846 6010/6010B
108-90-7	Chlorobenzene	49	106	17	17	%REC	SW-846 8260
7440-47-3	Chromium	88	139	11	11	%REC	SW-846 6010/6010B
7440-48-4	Cobalt	81	96	11	11	%REC	SW-846 6010/6010B
7440-50-8	Copper	86	109	11	11	%REC	SW-846 6010/6010B
7439-89-6	Iron	0	1820	11	11	%REC	SW-846 6010/6010B
7439-92-1	Lead	78	127	11	11	%REC	SW-846 6010/6010B
7439-93-2	Lithium	86	106	11	11	%REC	SW-846 6010/6010B
7439-96-5	Manganese	0	242	11	11	%REC	SW-846 6010/6010B
7439-97-6	Mercury	44	102	11	11	%REC	SW-846 6010/6010B
7439-98-7	Molybdenum	79	91	11	11	%REC	SW-846 6010/6010B
7440-02-0	Nickel	79	98	11	11	%REC	SW-846 6010/6010B
621-64-7	n-Nitrosodipropylamine	53	67	15	15	%REC	SW-846 8270B
87-86-5	Pentachlorophenol	20	61	15	15	%REC	SW-846 8270B
108-95-2	Phenol	53	68	15	15	%REC	SW-846 8270B

Table 12
Sample Matrix Spike Evaluation

CAS Number	Analyte	Minimum	Maximum	Number of Laboratory Samples	Number of Laboratory Batches	Unit	Laboratory Method
129-00-0	Pyrene	35	73	15	15	%REC	SW-846 8270B
7782-49-2	Selenium	88	100	11	11	%REC	SW-846 6010/6010B
7440-22-4	Silver	85	142	11	11	%REC	SW-846 6010/6010B
7440-24-6	Strontium	0	116	11	11	%REC	SW-846 6010/6010B
7440-31-5	Tin	71	96	11	11	%REC	SW-846 6010/6010B
108-88-3	Toluene	57	383	17	17	%REC	SW-846 8260
79-01-6	Trichloroethene	58	111	17	17	%REC	SW-846 8260
7440-62-2	Vanadium	83	108	11	11	%REC	SW-846 6010/6010B
7440-66-6	Zinc	69	101	11	11	%REC	SW-846 6010/6010B

4.1.4 Precision

Matrix Spike Duplicate Evaluation

Laboratory precision is measured through use of the MSD. Adequate frequency of MSD measurements is indicated by at least one MSD in each laboratory batch. Table 13 indicates that MSD frequencies were adequate. RPD values were within project goals (35%) for the subset of the abbreviated spike list of analytes detected above Als, except for lead. Overall imprecision of lead results is discussed under Field Duplicate Evaluation. Neither validation nor qualification was performed for analytes not included on the abbreviated spike list, relative to MSD performance.

Table 13
Sample Matrix Spike Duplicate Evaluation

Analyte Name	Number of Sample Pairs	Number of Laboratory Batches	Max RPD (%)
1,1-Dichloroethene	17	17	18.18
1,2,4-Trichlorobenzene	15	15	15.63
1,4-Dichlorobenzene	15	15	22.95
2,4-Dinitrotoluene	15	15	23.85
2-Chlorophenol	15	15	20.59
4-Nitrophenol	15	15	43.48
Acenaphthene	15	15	13.33
Aluminum	10	10	127.56
Antimony	11	11	26.09
Aroclor-1016	13	13	33.58

Table 13
Sample Matrix Spike Duplicate Evaluation

Analyte Name	Number of Sample Pairs	Number of Laboratory Batches	Max RPD (%)
Aroclor-1260	13	13	38.24
Arsenic	11	11	4.82
Barium	11	11	9.26
Benzene	17	17	21.12
Beryllium	11	11	17.51
Cadmium	11	11	4.49
Chlorobenzene	17	17	26.47
Chromium	11	11	49.33
Cobalt	11	11	7.59
Copper	11	11	29.55
Iron	5	5	136.77
Lead	11	11	84.57
Lithium	11	11	6.74
Manganese	10	10	78.65
Mercury	11	11	33.04
Molybdenum	11	11	10.53
Nickel	11	11	4.40
n-Nitrosodipropylamine	15	15	20.16
Pentachlorophenol	15	15	71.70
Phenol	15	15	21.21
Pyrene	15	15	58.06
Selenium	11	11	5.78
Silver	11	11	40.68
Strontium	10	10	7.14
Tin	11	11	4.55
Toluene	17	17	49.51
Trichloroethene	17	17	23.91
Vanadium	11	11	14.29
Zinc	11	11	25.53

Field Duplicate Evaluation

Field duplicate results reflect sampling precision, or overall repeatability of the sampling process. The frequency of field duplicate collection should exceed 1 field duplicate per 20 real samples, or 5 percent. Table 14 indicates that sampling frequencies were adequate. A common metric for evaluating precision is the relative percent difference (RPD) value; RPD values are given in Table 15. Ideally, RPDs of less than 35 percent (in soil) indicate satisfactory precision. As indicated by the data in Table 15, a number of analytes have RPDs greater than 35 percent. Those analytes that exceed 35% RPD, but are otherwise below ALs for all real sample results, do not affect project decisions because concentrations are repeatable below ALs for both real and QC data sets. However, for those contaminant ALs, namely Pb, all values below the ALs should be qualified as low estimates due to variability in the sampling process.

Table 14
Field Duplicate Sample Frequency

Test Method Name	Sample Code	Number of Samples	% Duplicate Samples
GAMMA SPECTROSCOPY	REAL	39	21%
GAMMA SPECTROSCOPY	DUP	8	
SW-846 6010/6010B	REAL	44	20%
SW-846 6010/6010B	DUP	9	
SW-846 8082	REAL	39	21%
SW-846 8082	DUP	8	
SW-846 8260	REAL	55	18%
SW-846 8260	DUP	10	
SW-846 8270B	REAL	55	16%
SW-846 8270B	DUP	9	
ALPHA SPEC	REAL	6	0%
SW-846 6200	REAL	2	0%

Table 15
Field Duplicate RPD Evaluation

Analyte	Max of RPD %
1,1,1-Trichloroethane	17.86
1,1,2,2-Tetrachloroethane	17.86
1,1,2-Trichloroethane	17.86
1,1-Dichloroethane	17.86
1,1-Dichloroethene	17.86
1,2,4-Trichlorobenzene	194.87
1,2-Dichlorobenzene	194.87
1,2-Dichloroethane	17.86
1,2-Dichloropropane	17.86
1,4-Dichlorobenzene	194.87
2,4,5-Trichlorophenol	13.70
2,4,6-Trichlorophenol	13.70
2,4-Dichlorophenol	13.70
2,4-Dimethylphenol	13.70
2,4-Dinitrophenol	17.14
2,4-Dinitrotoluene	13.70
2,6-Dinitrotoluene	13.70
2-Butanone	194.82
2-Chloronaphthalene	13.70
2-Chlorophenol	13.70
2-Methylnaphthalene	13.70
2-Methylphenol	13.70
2-Nitroaniline	17.14
3,3'-Dichlorobenzidine	14.29
4,6-Dinitro-2-methylphenol	17.14

Table 15
Field Duplicate RPD Evaluation

Analyte	Max of RPD %
4-Chloroaniline	13.70
4-Methyl-2-pentanone	18.18
4-Methylphenol	13.70
4-Nitrophenol	17.14
Acenaphthene	98.04
Acetone	193.16
Aluminum	85.97
Americium-241	137.38
Anthracene	98.04
Antimony	77.14
Aroclor-1016	13.70
Aroclor-1221	13.70
Aroclor-1232	13.70
Aroclor-1242	13.70
Aroclor-1248	13.70
Aroclor-1254	117.88
Aroclor-1260	127.71
Arsenic	113.90
Barium	146.53
Benzene	17.86
Benzo(a)anthracene	148.24
Benzo(a)pyrene	33.85
Benzo(b)fluoranthene	66.67
Benzo(k)fluoranthene	41.27
Benzoic Acid	17.14
Benzyl Alcohol	13.70
Beryllium	155.87
bis(2-Chloroethyl)ether	13.70
bis(2-Chloroisopropyl)ether	13.70
bis(2-Ethylhexyl)phthalate	86.96
Bromodichloromethane	17.86
Bromoform	17.86
Bromomethane	17.86
Butylbenzylphthalate	13.70
Cadmium	192.58
Carbon Disulfide	17.86
Carbon Tetrachloride	17.86
Chlorobenzene	17.86
Chloroethane	17.86
Chloroform	17.86
Chloromethane	17.86
Chromium	110.61

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Table 15
Field Duplicate RPD Evaluation

Analyte	Max of RPD %
Chrysene	143.39
cis-1,3-Dichloropropene	17.86
Cobalt	110.56
Copper	110.81
Dibenz(a,h)anthracene	13.70
Dibenzofuran	13.70
Dibromochloromethane	17.86
Diethylphthalate	13.33
Dimethylphthalate	13.70
Di-n-butylphthalate	13.70
Di-n-octylphthalate	13.70
Ethylbenzene	17.86
Fluoranthene	117.02
Fluorene	13.70
Hexachlorobenzene	13.70
Hexachlorobutadiene	194.87
Hexachlorocyclopentadiene	13.33
Hexachloroethane	13.70
Indeno(1,2,3-cd)pyrene	86.79
Iron	95.06
Isophorone	13.70
Lead	134.46
Lithium	80.43
Manganese	134.03
Mercury	190.24
Methylene chloride	147.32
Molybdenum	187.73
Naphthalene	194.87
Nickel	105.26
Nitrobenzene	13.70
n-Nitrosodiphenylamine	13.70
n-Nitrosodipropylamine	13.70
Pentachlorophenol	17.14
Phenol	13.70
Pyrene	172.09
Selenium	65.65
Silver	181.74
Strontium	170.92
Styrene	17.86
Tetrachloroethene	173.28
Tin	66.67
Toluene	17.86

Table 15
Field Duplicate RPD Evaluation

Analyte	Max of RPD %
trans-1,3-Dichloropropene	17.86
Trichloroethene	130.16
Uranium-235	84.54
Uranium-238	123.68
Vanadium	118.72
Vinyl chloride	17.86
Xylene	17.86
Zinc	111.36

Completeness

Based on original project DQOs, a minimum of 25 percent of ER Program analytical results should be formally validated. Of that percentage, no more than 10 percent of the results may be rejected, which ensures that analytical laboratory practices are consistent with quality requirements. Table 16 shows the number and percentage of validated records (codes without "1"), verified records (codes with "1"), and rejected records for each analyte group.

Spot checks on flags documented in hardcopy packages indicate at least a 25% frequency, but those flags have not yet been uploaded to the digital records in the RFETS SWD, and are not reflected reflected in the table. In summary, V&V frequency goals and rejection rates are acceptable for all of the suites shown for the project. Frequency goals were attained for all analytical suites except radionuclides.

4.1.5 Sensitivity

Reporting limits, in units of ug/kg for organics, mg/kg for metals, and pCi/g for radionuclides, were compared with RFCA WRW and Ecological Receptor ALs. Adequate sensitivities of analytical methods were attained for all COCs that affect project decisions. "Adequate" sensitivity is defined as a reporting limit less than an analyte's associated AL, typically less than one-half the AL.

4.1.6 Summary of Data Quality

Data quality is acceptable for project decisions based on the V&V criteria cited and with the qualifications given. Although several RPD values exceed the ideal value of 35%, the imprecision does not affect project decisions because the only AL exceedances are for arsenic and lead and those elevated concentrations are considered real. Compliance with the project quality requirements and RFETS validation goal of 25% of all analytical records indicates that these data are adequate. If additional V&V information is received, IHSS Group NE/NW records will be updated in the Soil Water Database. Data qualified as a result of additional data will be assessed as part of the Comprehensive Risk Assessment process. Data collected and used for IHSS Group NE/NW is adequate for decision-making.

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Table 16
Validation and Verification Summary

Validation Qualifier Code	Total of CAS Number	Alpha Spec	Gamma Spectroscopy	SW-846 6010/6010B	SW-846 6200	SW-846 8082	SW-846 8260	SW-846 8270B
No V&V	405	0	405	0	0	0	0	0
1	71	0	0	0	0	7	4	60
J	113	0	0	112	0	1	0	0
J1	855	0	0	831	0	1	2	21
R	3	0	0	3	0	0	0	0
R1	4	0	0	4	0	0	0	0
V	2874	30	18	363	0	160	820	1483
V1	11848	0	0	1482	36	573	3573	6184
JB	8	0	0	0	0	0	8	0
JB1	61	0	0	0	0	0	61	0
UJ	56	0	0	27	0	0	0	29
UJ1	546	0	0	139	0	105	140	162
Total	16844	30	423	2961	36	847	4608	7939
Total Validated	3054	30	18	505	0	161	828	1512
% Validated	18%	100%	4%	17%	0%	19%	18%	19%
Total Verified	12839	0	0	2317	36	581	3640	6265
% Verified	76%	0%	0%	78%	100%	69%	79%	79%
% Rejected	0.04%	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.00%

KEY: 1, V1 - Verified
J, J1 - Estimated
UJ1 - Estimated detection limit
J, V - Validated

5.0 REFERENCES

DOE, 1992-2002, Historical Release Reports for the Rocky Flats Plant, Rocky Flats Plant, Golden, Colorado.

DOE, 1999, Order 414.1A, Quality Assurance.

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EPA, 1994a, Guidance for the Data Quality Objective Process, QA/G-4.

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K-H, 2002c, V&V Guidelines for Volatile Organics, DA-SS01-v3, October.

K-H, 2002d, V&V Guidelines for Semivolatile Organics, DA-SS02-v3, October.

K-H, 2002e, V&V Guidelines for Metals, DA-SS05-v3, October.

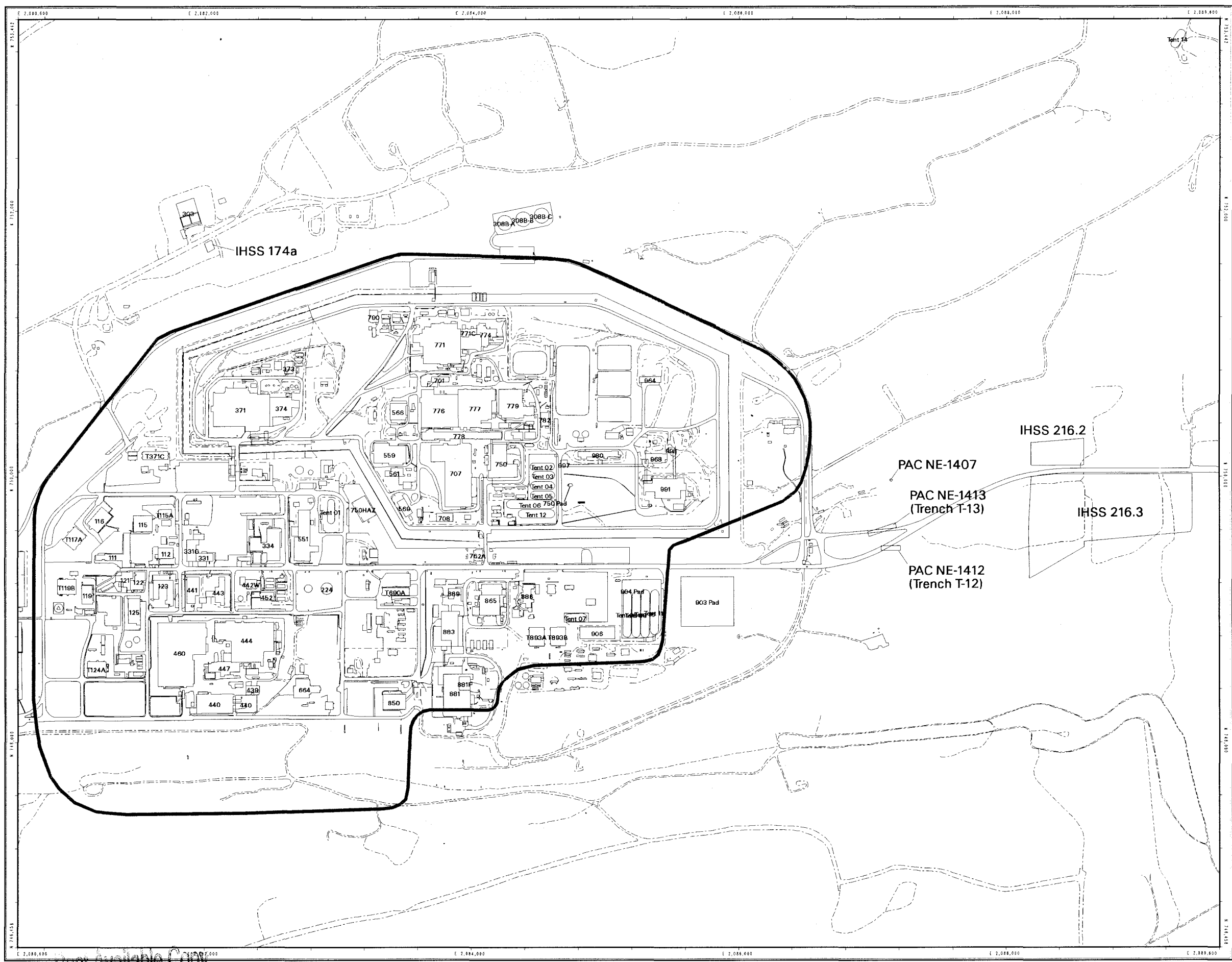
Lockheed-Martin, 1997, Evaluation of Radiochemical Data Usability, ES/ER/MS-5.

ENCLOSURE

IHSS GROUP NE/NW REAL AND QUALITY CONTROL DATA
(Compact Disc)

95
95

Figure 1
IHSS Group NE/NW Location Map



EXPLANATION

NE/NW

Standard Map Features

- Buildings and other structures
- Demolished buildings and Other Structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences and other barriers
- Paved roads
- Dirt roads
- Solar Evaporation Ponds (SEPs)
- Industrial Area Operable Unit Boundary

DATA SOURCE BASE FEATURES:
PACs
Historical Release Report (HRR)
2nd Annual Update
Sept. 30, 1997
Individual Hazardous Substance Sites (IHSS)
DOE, 1992, HRR Report and Subsequent Updates.
Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G RSL, Las Vegas.
Digitized from the orthophotographs. 1/95

250 0 500 1000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

GIS Dept. 303-966-7707

Prepared by: CH2MHILL

Prepared for: KAISER-HILL COMPANY

September 04, 2003

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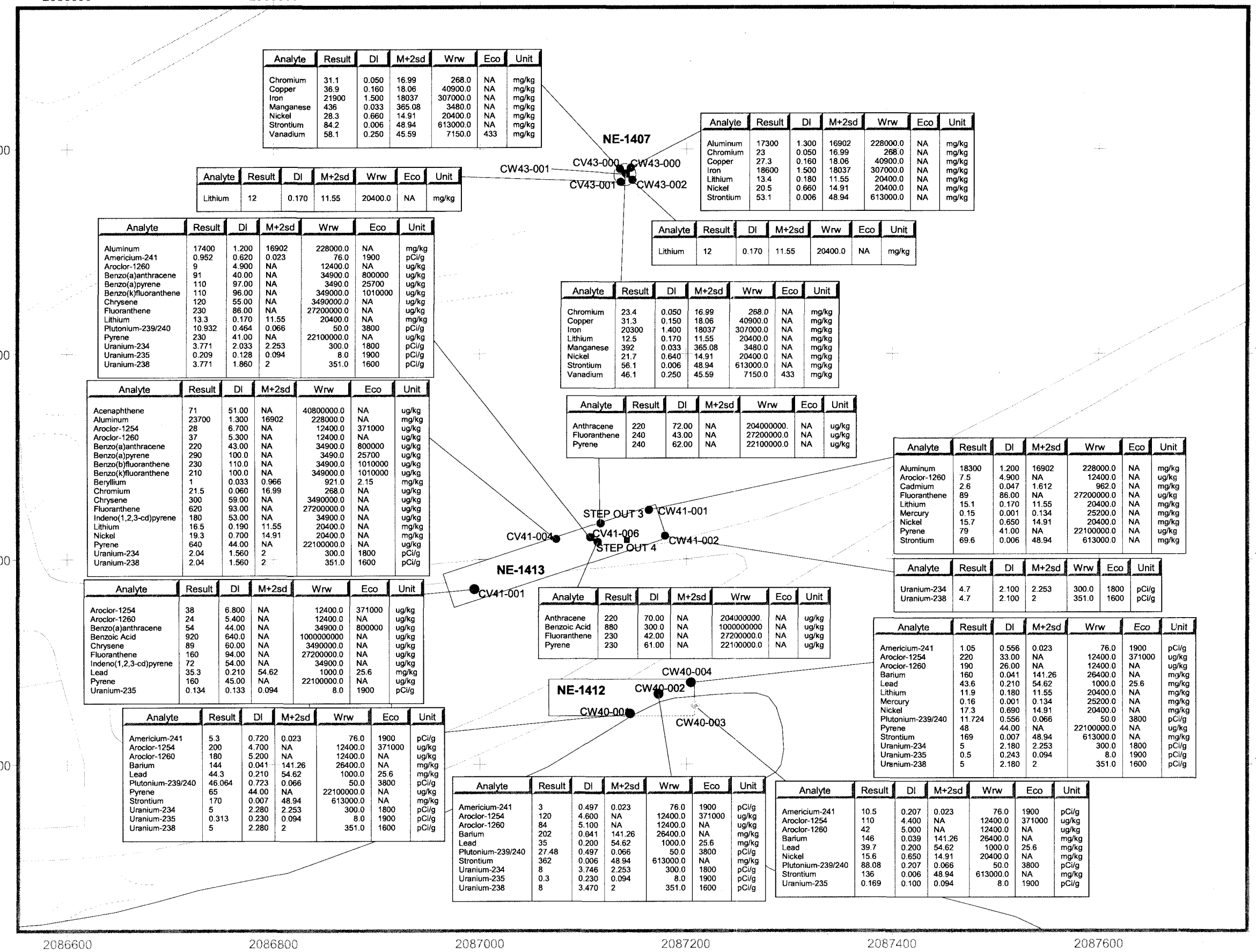
Figure 2
Surface Sampling Locations Above Background Means Plus Two Standard Deviations or Detection/Reporting Limits – Trench Area



Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Chromium	31.1	0.050	16.99	268.0	NA	mg/kg
Copper	36.9	0.160	18.06	40900.0	NA	mg/kg
Iron	21900	1.500	18037	307000.0	NA	mg/kg
Manganese	436	0.033	365.08	3480.0	NA	mg/kg
Nickel	28.3	0.660	14.91	20400.0	NA	mg/kg
Strontium	84.2	0.006	48.94	613000.0	NA	mg/kg
Vanadium	58.1	0.250	45.59	7150.0	433	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Lithium	12	0.170	11.55	20400.0	NA	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	17400	1.200	16902	228000.0	NA	mg/kg
Americium-241	0.952	0.620	0.023	76.0	1900	pCi/g
Aroclor-1260	9	4.900	NA	12400.0	NA	ug/kg
Benzo(a)anthracene	91	40.00	NA	34900.0	800000	ug/kg
Benzo(a)pyrene	110	97.00	NA	3490.0	25700	ug/kg
Benzo(k)fluoranthene	110	96.00	NA	349000.0	1010000	ug/kg
Chrysene	120	55.00	NA	3490000.0	NA	ug/kg
Fluoranthene	230	86.00	NA	27200000.0	NA	ug/kg
Lithium	13.3	0.170	11.55	20400.0	NA	mg/kg
Plutonium-239/240	10.932	0.464	0.066	50.0	3800	pCi/g
Pyrene	230	41.00	NA	22100000.0	NA	ug/kg
Uranium-234	3.771	2.033	2.253	300.0	1800	pCi/g
Uranium-235	0.209	0.128	0.094	8.0	1900	pCi/g
Uranium-238	3.771	1.860	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Acenaphthene	71	51.00	NA	40800000.0	NA	ug/kg
Aluminum	23700	1.300	16902	228000.0	NA	mg/kg
Aroclor-1254	28	6.700	NA	12400.0	371000	ug/kg
Aroclor-1260	37	5.300	NA	12400.0	NA	ug/kg
Benzo(a)anthracene	220	43.00	NA	34900.0	800000	ug/kg
Benzo(a)pyrene	290	100.0	NA	3490.0	25700	ug/kg
Benzo(b)fluoranthene	230	110.0	NA	34900.0	1010000	ug/kg
Benzo(k)fluoranthene	210	100.0	NA	349000.0	1010000	ug/kg
Beryllium	1	0.033	0.966	921.0	2.15	mg/kg
Chromium	21.5	0.060	16.99	268.0	NA	ug/kg
Chrysene	300	59.00	NA	3490000.0	NA	ug/kg
Fluoranthene	620	93.00	NA	27200000.0	NA	ug/kg
Indeno(1,2,3-cd)pyrene	180	53.00	NA	34900.0	NA	ug/kg
Lithium	16.5	0.190	11.55	20400.0	NA	mg/kg
Nickel	19.3	0.700	14.91	20400.0	NA	mg/kg
Pyrene	640	44.00	NA	22100000.0	NA	ug/kg
Uranium-234	2.04	1.560	2	300.0	1800	pCi/g
Uranium-238	2.04	1.560	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aroclor-1254	38	6.800	NA	12400.0	371000	ug/kg
Aroclor-1260	24	5.400	NA	12400.0	NA	ug/kg
Benzo(a)anthracene	54	44.00	NA	34900.0	800000	ug/kg
Benzoic Acid	920	640.0	NA	1000000000	NA	ug/kg
Chrysene	89	60.00	NA	3490000.0	NA	ug/kg
Fluoranthene	160	94.00	NA	27200000.0	NA	ug/kg
Indeno(1,2,3-cd)pyrene	72	54.00	NA	34900.0	NA	ug/kg
Lead	35.3	0.210	54.62	1000.0	25.6	mg/kg
Pyrene	160	45.00	NA	22100000.0	NA	ug/kg
Uranium-235	0.134	0.133	0.094	8.0	1900	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Americium-241	5.3	0.720	0.023	76.0	1900	pCi/g
Aroclor-1254	200	4.700	NA	12400.0	371000	ug/kg
Aroclor-1260	180	5.200	NA	12400.0	NA	ug/kg
Barium	144	0.041	141.26	26400.0	NA	mg/kg
Lead	44.3	0.210	54.62	1000.0	25.6	mg/kg
Plutonium-239/240	46.064	0.723	0.066	50.0	3800	pCi/g
Pyrene	65	44.00	NA	22100000.0	NA	ug/kg
Strontium	170	0.007	48.94	613000.0	NA	mg/kg
Uranium-234	5	2.280	2.253	300.0	1800	pCi/g
Uranium-235	0.313	0.230	0.094	8.0	1900	pCi/g
Uranium-238	5	2.280	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	17300	1.300	16902	228000.0	NA	mg/kg
Chromium	23	0.050	16.99	268.0	NA	mg/kg
Copper	27.3	0.160	18.06	40900.0	NA	mg/kg
Iron	18600	1.500	18037	307000.0	NA	mg/kg
Lithium	13.4	0.180	11.55	20400.0	NA	mg/kg
Nickel	20.5	0.660	14.91	20400.0	NA	mg/kg
Strontium	53.1	0.006	48.94	613000.0	NA	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Lithium	12	0.170	11.55	20400.0	NA	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Chromium	23.4	0.050	16.99	268.0	NA	mg/kg
Copper	31.3	0.150	18.06	40900.0	NA	mg/kg
Iron	20300	1.400	18037	307000.0	NA	mg/kg
Lithium	12.5	0.170	11.55	20400.0	NA	mg/kg
Manganese	392	0.033	365.08	3480.0	NA	mg/kg
Nickel	21.7	0.640	14.91	20400.0	NA	mg/kg
Strontium	56.1	0.006	48.94	613000.0	NA	mg/kg
Vanadium	46.1	0.250	45.59	7150.0	433	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Anthracene	220	72.00	NA	204000000.	NA	ug/kg
Fluoranthene	240	43.00	NA	27200000.0	NA	ug/kg
Pyrene	240	62.00	NA	22100000.0	NA	ug/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	18300	1.200	16902	228000.0	NA	mg/kg
Aroclor-1260	7.5	4.900	NA	12400.0	NA	ug/kg
Cadmium	2.6	0.047	1.612	962.0	NA	mg/kg
Fluoranthene	89	86.00	NA	27200000.0	NA	ug/kg
Lithium	15.1	0.170	11.55	20400.0	NA	mg/kg
Mercury	0.15	0.001	0.134	25200.0	NA	mg/kg
Nickel	15.7	0.650	14.91	20400.0	NA	mg/kg
Pyrene	79	41.00	NA	22100000.0	NA	ug/kg
Strontium	69.6	0.006	48.94	613000.0	NA	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Uranium-234	4.7	2.100	2.253	300.0	1800	pCi/g
Uranium-238	4.7	2.100	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Anthracene	220	70.00	NA	204000000.	NA	ug/kg
Benzoic Acid	880	300.0	NA	1000000000	NA	ug/kg
Fluoranthene	230	42.00	NA	27200000.0	NA	ug/kg
Pyrene	230	61.00	NA	22100000.0	NA	ug/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Americium-241	1.05	0.556	0.023	76.0	1900	pCi/g
Aroclor-1254	220	33.00	NA	12400.0	371000	ug/kg
Aroclor-1260	190	26.00	NA	12400.0	NA	ug/kg
Barium	160	0.041	141.26	26400.0	NA	mg/kg
Lead	43.6	0.210	54.62	1000.0	25.6	mg/kg
Lithium	11.9	0.180	11.55	20400.0	NA	mg/kg
Mercury	0.16	0.001	0.134	25200.0	NA	mg/kg
Nickel	17.3	0.690	14.91	20400.0	NA	mg/kg
Plutonium-239/240	11.724	0.556	0.066	50.0	3800	pCi/g
Pyrene	48	44.00	NA	22100000.0	NA	ug/kg
Strontium	169	0.007	48.94	613000.0	NA	mg/kg
Uranium-234	5	2.180	2.253	300.0	1800	pCi/g
Uranium-235	0.5	0.243	0.094	8.0	1900	pCi/g
Uranium-238	5	2.180	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Americium-241	3	0.497	0.023	76.0	1900	pCi/g
Aroclor-1254	120	4.600	NA	12400.0	371000	ug/kg
Aroclor-1260	84	5.100	NA	12400.0	NA	ug/kg
Barium	202	0.041	141.26	26400.0	NA	mg/kg
Lead	35	0.200	54.62	1000.0	25.6	mg/kg
Plutonium-239/240	27.48	0.497	0.066	50.0	3800	pCi/g
Strontium	362	0.006	48.94	613000.0	NA	mg/kg
Uranium-234	8	3.746	2.253	300.0	1800	pCi/g
Uranium-235	0.3	0.230	0.094	8.0	1900	pCi/g
Uranium-238	8	3.470	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Americium-241	10.5	0.207	0.023	76.0	1900	pCi/g
Aroclor-1254	110	4.400	NA	12400.0	371000	ug/kg
Aroclor-1260	42	5.000	NA	12400.0	NA	ug/kg
Barium	146	0.039	141.26	26400.0	NA	mg/kg
Lead	39.7	0.200	54.62	1000.0	25.6	mg/kg
Nickel	15.6	0.650	14.91	20400.0	NA	mg/kg
Plutonium-239/240	88.08	0.207	0.066	50.0	3800	pCi/g
Strontium	136	0.006	48.94	613000.0	NA	mg/kg
Uranium-235	0.169	0.100	0.094	8.0	1900	pCi/g

KEY

- Action Level Exceedance
- Below Background Mean Plus Two Standard Devations but Above Action Level
- Detected Results
- Undetected Results
- PAC
- Dirt roads
- Paved roads
- IHSS 155

N
W E
S

20 0 20 40 60 Feet

Scale = 1: 1,200

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: RADMS

Date: 8.13.03

Prepared for: KAISER•HILL COMPANY

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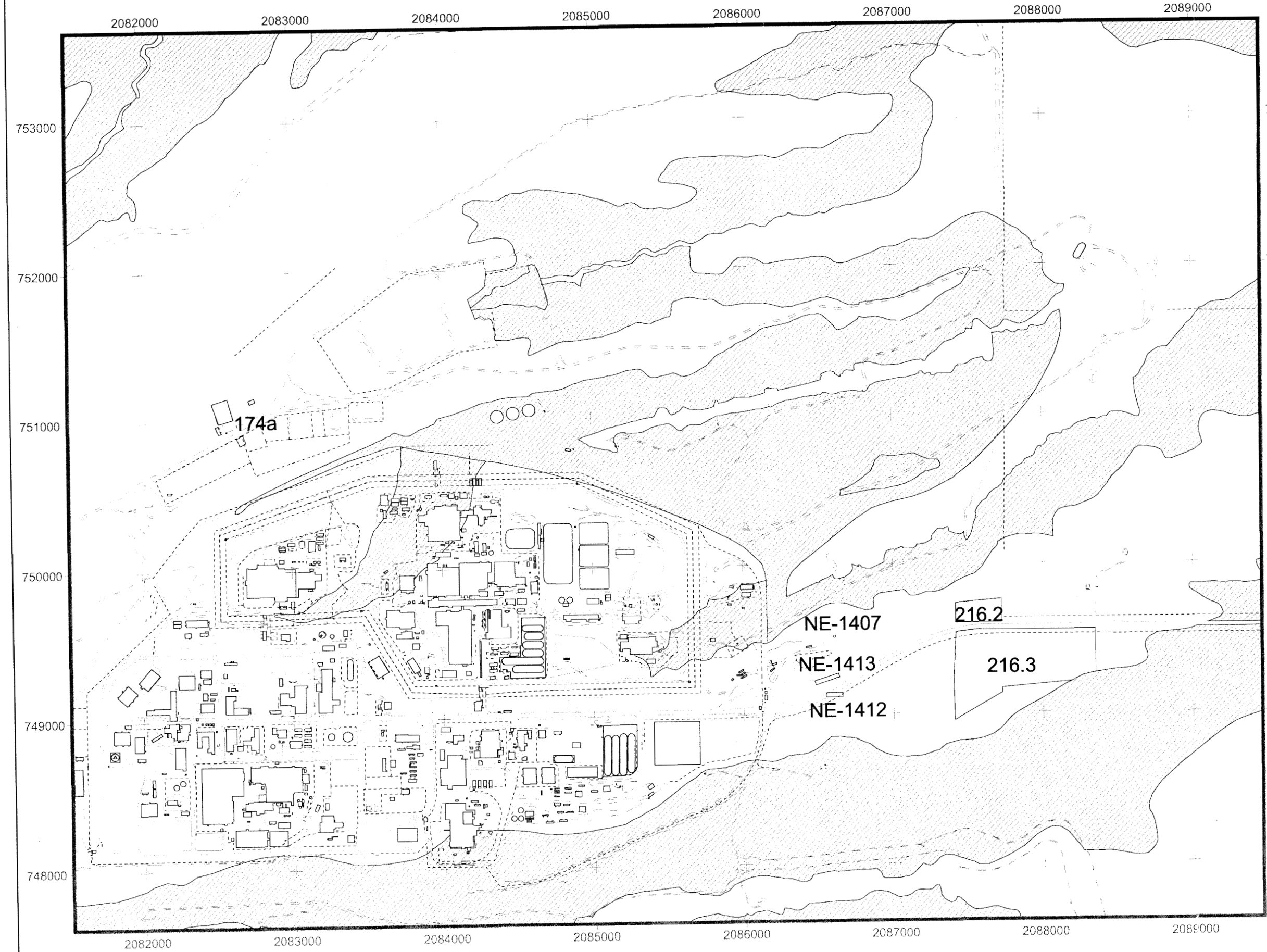
Figure 7
Areas Prone to Landslides and High Erosion



KEY

- Area Prone to Landslides or High Erosion
- IHSS
- PAC
- Paved Road
- Dirt Road

Note:
Areas prone to landslides and high erosion is based on Figure 1 of Attachment 5 of the RFCA Modification (DOE, et. al, 2003).

N
W E
S

500 0 500 Feet

Scale = 1: 8000

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: Date: 4.21.03

RADMS

Prepared for:

KAISER•HILL COMPANY

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Figure 5
Subsurface Sampling Locations Above Background Means Plus Two Standard Deviations or Detection/Reporting Limits – Sprayfields

2088200 2088400 2088600 2088800 2089000 2089200 2089400

750200 750000 749800 749600 749400 749200

DB43-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	3.700	0.860	2530000.0	39500	NA	ug/kg	0.5	2.5
Tetrachloroethene	7.800	1.100	615000.0	37500	NA	ug/kg	0.5	2.5

216.2

DB43-001

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	3.700	0.870	2530000.0	39500	NA	ug/kg	0.5	1.0
Tetrachloroethene	2.900	1.100	615000.0	37500	NA	ug/kg	0.5	1.0

DD43-001

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	3.400	0.980	2530000.0	39500	NA	ug/kg	0.5	1.0

DE42-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Acetone	7.900	5.600	102000000	211000	NA	ug/kg	0.5	2.5
Tetrachloroethene	3.100	1.200	615000.0	37500	NA	ug/kg	0.5	2.5

DH43-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	2.000	0.810	2530000.0	39500	NA	ug/kg	0.5	2.5
Tetrachloroethene	2.000	1.000	615000.0	37500	NA	ug/kg	0.5	2.5

DC42-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	3.800	0.890	2530000.0	39500	NA	ug/kg	0.5	1.3
Tetrachloroethene	3.600	1.100	615000.0	37500	NA	ug/kg	0.5	1.3

216.3

DF42-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Acetone	5.300	4.900	102000000	211000	NA	ug/kg	0.5	2.5
Tetrachloroethene	2.800	1.100	615000.0	37500	NA	ug/kg	0.5	2.5

DD42-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	3.100	0.830	2530000.0	39500	NA	ug/kg	0.5	2.5
Tetrachloroethene	2.700	1.000	615000.0	37500	NA	ug/kg	0.5	2.5

DF41-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	2.000	0.840	2530000.0	39500	NA	ug/kg	0.5	2.5

DG41-000

DC41-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	3.600	0.910	2530000.0	39500	NA	ug/kg	0.5	1.0
Tetrachloroethene	1.200	1.100	615000.0	37500	NA	ug/kg	0.5	1.0

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	1.100	0.850	2530000.0	39500	NA	ug/kg	0.5	2.5
Tetrachloroethene	7.900	1.100	615000.0	37500	NA	ug/kg	0.5	2.5
Trichloroethene	3.900	0.930	19600.0	509000	NA	ug/kg	0.5	2.5

DG41-001

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	2.500	0.850	2530000.0	39500	NA	ug/kg	0.5	1.0
Tetrachloroethene	2.800	1.100	615000.0	37500	NA	ug/kg	0.5	1.0

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	3.100	0.960	2530000.0	39500	NA	ug/kg	0.5	2.5
Tetrachloroethene	2.500	1.200	615000.0	37500	NA	ug/kg	0.5	2.5

DB41-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	2.200	0.880	2530000.0	39500	NA	ug/kg	0.5	1.0
Tetrachloroethene	2.800	1.100	615000.0	37500	NA	ug/kg	0.5	1.0

DD40-000

DE40-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	4.200	0.850	2530000.0	39500	NA	ug/kg	0.5	2.5
Tetrachloroethene	4.900	1.100	615000.0	37500	NA	ug/kg	0.5	2.5

DC40-000

Analyte	Result	DI	Wrw	Eco	M+2sd	Unit	Start depth	End depth
Methylene chloride	3.100	0.890	2530000.0	39500	NA	ug/kg	0.5	1.0
Tetrachloroethene	2.200	1.100	615000.0	37500	NA	ug/kg	0.5	1.0

KEY

- Detected Results
- Undetected Results
- IHSS
- Dirt roads
- Paved roads

N W E S

50 0 50 100 150 Feet

Scale = 1: 1500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: RADMS Date: 8.13.03

Prepared for: KAISER•HILL COMPANY

File: W:\Projects\Fy2003\NENW\NENW_new_080703\nenw_081203.apr

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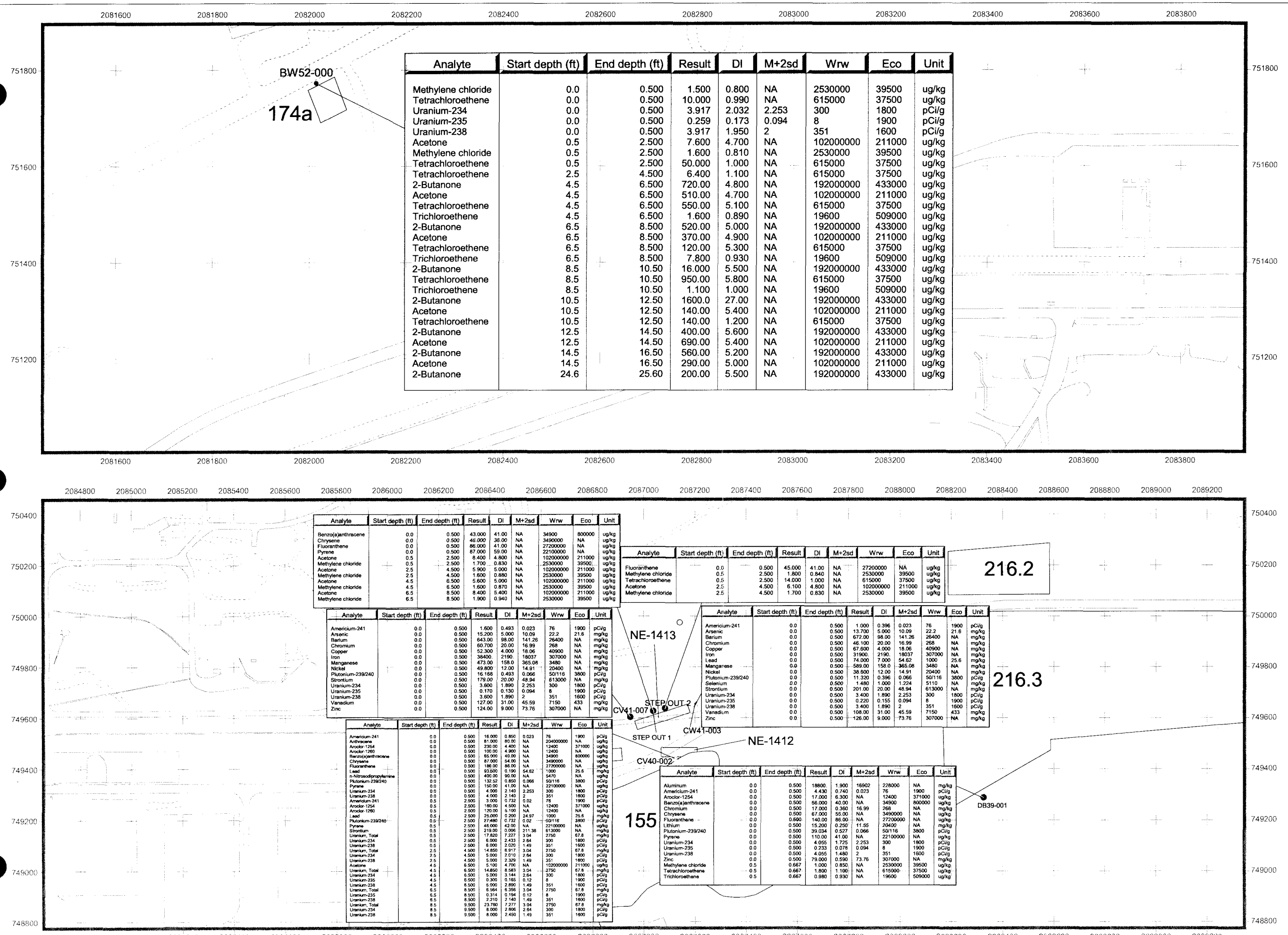
Figure 6
Surface and Subsurface Sampling Locations Above Background Means Plus Two Standard Deviations or Detection/Reporting Limits - Locations Outside IHSS or PAC Boundaries



Analyte	Start depth (ft)	End depth (ft)	Result	DI	M+2sd	Wrw	Eco	Unit
Methylene chloride	0.0	0.500	1.500	0.800	NA	2530000	39500	ug/kg
Tetrachloroethene	0.0	0.500	10.000	0.990	NA	615000	37500	ug/kg
Uranium-234	0.0	0.500	3.917	2.032	2.253	300	1800	pCi/g
Uranium-235	0.0	0.500	0.259	0.173	0.094	8	1900	pCi/g
Uranium-238	0.0	0.500	3.917	1.950	2	351	1600	pCi/g
Acetone	0.5	2.500	7.600	4.700	NA	102000000	211000	ug/kg
Methylene chloride	0.5	2.500	1.600	0.810	NA	2530000	39500	ug/kg
Tetrachloroethene	0.5	2.500	50.000	1.000	NA	615000	37500	ug/kg
Tetrachloroethene	2.5	4.500	6.400	1.100	NA	615000	37500	ug/kg
2-Butanone	4.5	6.500	720.00	4.800	NA	192000000	433000	ug/kg
Acetone	4.5	6.500	510.00	4.700	NA	102000000	211000	ug/kg
Tetrachloroethene	4.5	6.500	550.00	5.100	NA	615000	37500	ug/kg
Trichloroethene	4.5	6.500	1.600	0.890	NA	19600	509000	ug/kg
2-Butanone	6.5	8.500	520.00	5.000	NA	192000000	433000	ug/kg
Acetone	6.5	8.500	370.00	4.900	NA	102000000	211000	ug/kg
Tetrachloroethene	6.5	8.500	120.00	5.300	NA	615000	37500	ug/kg
Trichloroethene	6.5	8.500	7.800	0.930	NA	19600	509000	ug/kg
2-Butanone	8.5	10.50	16.000	5.500	NA	192000000	433000	ug/kg
Tetrachloroethene	8.5	10.50	950.00	5.800	NA	615000	37500	ug/kg
Trichloroethene	8.5	10.50	1.100	1.000	NA	19600	509000	ug/kg
2-Butanone	10.5	12.50	1600.0	27.00	NA	192000000	433000	ug/kg
Acetone	10.5	12.50	140.00	5.400	NA	102000000	211000	ug/kg
Tetrachloroethene	10.5	12.50	140.00	1.200	NA	615000	37500	ug/kg
2-Butanone	12.5	14.50	400.00	5.600	NA	192000000	433000	ug/kg
Acetone	12.5	14.50	690.00	5.400	NA	102000000	211000	ug/kg
2-Butanone	14.5	16.50	560.00	5.200	NA	192000000	433000	ug/kg
Acetone	14.5	16.50	290.00	5.000	NA	102000000	211000	ug/kg
2-Butanone	24.6	25.60	200.00	5.500	NA	192000000	433000	ug/kg

Analyte	Start depth (ft)	End depth (ft)	Result	DI	M+2sd	Wrw	Eco	Unit
Benzo(a)anthracene	0.0	0.500	43.000	41.00	NA	34900	800000	ug/kg
Chrysene	0.0	0.500	46.000	36.00	NA	3490000	NA	ug/kg
Fluoranthene	0.0	0.500	86.000	41.00	NA	27200000	NA	ug/kg
Pyrene	0.0	0.500	87.000	59.00	NA	22100000	NA	ug/kg
Acetone	0.5	2.500	8.400	4.900	NA	102000000	211000	ug/kg
Methylene chloride	0.5	2.500	1.700	0.830	NA	2530000	39500	ug/kg
Acetone	2.5	4.500	5.900	5.000	NA	102000000	211000	ug/kg
Methylene chloride	2.5	4.500	1.600	0.880	NA	2530000	39500	ug/kg
Acetone	4.5	6.500	5.600	5.000	NA	102000000	211000	ug/kg
Methylene chloride	4.5	6.500	1.600	0.870	NA	2530000	39500	ug/kg
Acetone	6.5	8.500	8.400	5.400	NA	102000000	211000	ug/kg
Methylene chloride	6.5	8.500	1.900	0.940	NA	2530000	39500	ug/kg

Analyte	Start depth (ft)	End depth (ft)	Result	DI	M+2sd	Wrw	Eco	Unit
Fluoranthene	0.0	0.500	45.000	41.00	NA	27200000	NA	ug/kg
Methylene chloride	0.5	2.500	1.800	0.840	NA	2530000	39500	ug/kg
Tetrachloroethene	0.5	2.500	14.000	1.000	NA	615000	37500	ug/kg
Acetone	2.5	4.500	6.100	4.800	NA	102000000	211000	ug/kg
Methylene chloride	2.5	4.500	1.700	0.830	NA	2530000	39500	ug/kg

Analyte	Start depth (ft)	End depth (ft)	Result	DI	M+2sd	Wrw	Eco	Unit
Americium-241	0.0	0.500	1.600	0.493	0.023	76	1900	pCi/g
Arsenic	0.0	0.500	15.200	5.000	10.09	22.2	21.6	mg/kg
Barium	0.0	0.500	643.00	98.00	141.26	26400	NA	mg/kg
Chromium	0.0	0.500	60.700	20.00	16.99	268	NA	mg/kg
Copper	0.0	0.500	52.300	4.000	18.06	40900	NA	mg/kg
Iron	0.0	0.500	38400.	2190.	18037	307000	NA	mg/kg
Manganese	0.0	0.500	473.00	158.0	365.08	3480	NA	mg/kg
Nickel	0.0	0.500	49.800	12.00	14.91	20400	NA	mg/kg
Plutonium-239/240	0.0	0.500	16.168	0.493	0.066	50/116	3800	pCi/g
Strontium	0.0	0.500	179.00	20.00	48.94	613000	NA	mg/kg
Uranium-234	0.0	0.500	3.600	1.890	2.253	300	1800	pCi/g
Uranium-235	0.0	0.500	0.170	0.130	0.094	8	1900	pCi/g
Uranium-238	0.0	0.500	3.600	1.890	2	351	1600	pCi/g
Vanadium	0.0	0.500	127.00	31.00	45.59	7150	433	mg/kg
Zinc	0.0	0.500	124.00	9.000	73.76	307000	NA	mg/kg

Analyte	Start depth (ft)	End depth (ft)	Result	DI	M+2sd	Wrw	Eco	Unit
Americium-241	0.0	0.500	1.000	0.396	0.023	76	1900	pCi/g
Arsenic	0.0	0.500	13.700	5.000	10.09	22.2	21.6	mg/kg
Barium	0.0	0.500	672.00	98.00	141.26	26400	NA	mg/kg
Chromium	0.0	0.500	46.100	20.00	16.99	268	NA	mg/kg
Copper	0.0	0.500	67.600	4.000	18.06	40900	NA	mg/kg
Iron	0.0	0.500	31900.	2190.	18037	307000	NA	mg/kg
Lead	0.0	0.500	74.000	7.000	54.62	1000	25.6	mg/kg
Manganese	0.0	0.500	589.00	158.0	365.08	3480	NA	mg/kg
Nickel	0.0	0.500	38.600	12.00	14.91	20400	NA	mg/kg
Plutonium-239/240	0.0	0.500	11.320	0.396	0.066	50/116	3800	pCi/g
Selenium	0.0	0.500	1.480	1.000	1.224	5110	NA	mg/kg
Strontium	0.0	0.500	201.00	20.00	48.94	613000	NA	mg/kg
Uranium-234	0.0	0.500	3.400	1.890	2.253	300	1800	pCi/g
Uranium-235	0.0	0.500	0.220	0.155	0.094	8	1900	pCi/g
Uranium-238	0.0	0.500	3.400	1.890	2	351	1600	pCi/g
Vanadium	0.0	0.500	108.00	31.00	45.59	7150	433	mg/kg
Zinc	0.0	0.500	126.00	9.000	73.76	307000	NA	mg/kg

Analyte	Start depth (ft)	End depth (ft)	Result	DI	M+2sd	Wrw	Eco	Unit
Americium-241	0.0	0.500	16.000	0.850	0.023	76	1900	pCi/g
Anthracene	0.0	0.500	81.000	80.00	NA	2040000000	NA	ug/kg
Aroclor-1254	0.0	0.500	230.00	4.400	NA	12400	371000	ug/kg
Aroclor-1260	0.0	0.500	100.00	4.900	NA	12400	NA	ug/kg
Benzo(a)anthracene	0.0	0.500	65.000	40.00	NA	34900	800000	ug/kg
Chrysene	0.0	0.500	87.000	54.00	NA	3490000	NA	ug/kg
Fluoranthene	0.0	0.500	186.00	86.00	NA	27200000	NA	ug/kg
Lead	0.0	0.500	93.500	0.190	54.62	1000	25.6	mg/kg
n-Nitrosodipropylamine	0.0	0.500	400.00	90.00	NA	5470	NA	ug/kg
Plutonium-239/240	0.0	0.500	132.52	0.850	0.066	50/116	3800	pCi/g
Pyrene	0.0	0.500	150.00	41.00	NA	22100000	NA	ug/kg
Uranium-234	0.0	0.500	4.000	2.140	2.253	300	1800	pCi/g
Uranium-238	0.0	0.500	4.000	2.140	2	351	1600	pCi/g
Americium-241	0.5	2.500	3.000	0.732	0.02	76	1900	pCi/g
Aroclor-1254	0.5	2.500	160.00	4.500	NA	12400	371000	ug/kg
Aroclor-1260	0.5	2.500	120.00	5.100	NA	12400	NA	ug/kg
Lead	0.5	2.500	25.000	0.200	24.97	1000	25.6	mg/kg
Plutonium-239/240	0.5	2.500	27.480	0.732	0.02	50/116	3800	pCi/g
Pyrene	0.5	2.500	46.000	42.00	NA	22100000	NA	ug/kg
Strontium	0.5	2.500	219.00	0.006	211.38	613000	NA	mg/kg
Uranium, Total	0.5	2.500	17.820	7.227	3.04	2750	67.8	mg/kg
Uranium-234	0.5	2.500	6.000	2.433	2.64	300	1800	pCi/g
Uranium-238	0.5	2.500	6.000	2.020	1.49	351	1600	pCi/g
Uranium, Total	2.5	4.500	14.850	5.917	3.04	2750	67.8	mg/kg
Uranium-234	2.5	4.500	5.000	2.010	2.64	300	1800	pCi/g
Uranium-238	2.5	4.500	5.000	2.329	1.49	351	1600	pCi/g
Acetone	4.5	6.500	5.100	4.700	NA	102000000	211000	ug/kg
Uranium, Total	4.5	6.500	14.850	8.583	3.04	2750	67.8	mg/kg
Uranium-234	4.5	6.500	5.000	3.144	2.64	300	1800	pCi/g
Uranium-235	4.5	6.500	0.300	0.185	0.12	8	1900	pCi/g
Uranium-238	4.5	6.500	5.000	2.890	1.49	351	1600	pCi/g
Uranium, Total	6.5	8.500	6.564	6.356	3.04	2750	67.8	mg/kg
Uranium-235	6.5	8.500	0.314	0.194	0.12	8	1900	pCi/g
Uranium-238	6.5	8.500	2.210	2.140	1.49	351	1600	pCi/g
Uranium, Total	8.5	9.500	23.750	7.277	3.04	2750	67.8	mg/kg
Uranium-234	8.5	9.500	8.000	2.606	2.64	300	1800	pCi/g
Uranium-238	8.5	9.500	8.000	2.450	1.49	351	1600	pCi/g

Analyte	Start depth (ft)	End depth (ft)	Result	DI	M+2sd	Wrw	Eco	Unit
Aluminum	0.0	0.500	18800.	1.900	16902	228000	NA	mg/kg
Americium-241	0.0	0.500	4.430	0.740	0.023	76	1900	pCi/g
Aroclor-1254	0.0	0.500	17.000	6.300	NA	12400	371000	ug/kg
Benzo(a)anthracene	0.0	0.500	56.000	40.00	NA	34900	800000	ug/kg
Chromium	0.0	0.500	17.000	0.360	16.99	268	NA	mg/kg
Chrysene	0.0	0.500	67.000	55.00	NA	3490000	NA	ug/kg
Fluoranthene	0.0	0.500	140.00	86.00	NA	27200000	NA	ug/kg
Lithium	0.0	0.500	15.200	0.250	11.55	20400	NA	mg/kg
Plutonium-239/240	0.0	0.500	39.034	0.527	0.066	50/116	3800	pCi/g
Pyrene	0.0	0.500	110.00	41.00	NA	22100000	NA	ug/kg
Uranium-234	0.0	0.500	4.055	1.725	2.253	300	1800	pCi/g
Uranium-235	0.0	0.500	0.233	0.078	0.094	8	1900	pCi/g
Uranium-238	0.0	0.500	4.055	1.480	2	351	1600	pCi/g
Zinc	0.0	0.500	79.000	0.590	73.76	307000	NA	mg/kg
Methylene chloride	0.5	0.667	1.000	0.850	NA	2530000	39500	ug/kg
Tetrachloroethene	0.5	0.667	1.800	1.100	NA	615000	37500	ug/kg
Trichloroethene	0.5	0.667	0.980	0.930	NA	19600	509000	ug/kg

Key

- • Detected Result
- AL Exceedance
- IHSS
- PAC
- Paved Area
- Dirt Road

Upper Map

N

50 0 50 Feet

Scale = 1 : 2,250

Lower Map

N

100 0 100 Feet

Scale = 1 : 4,250

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: September 2003

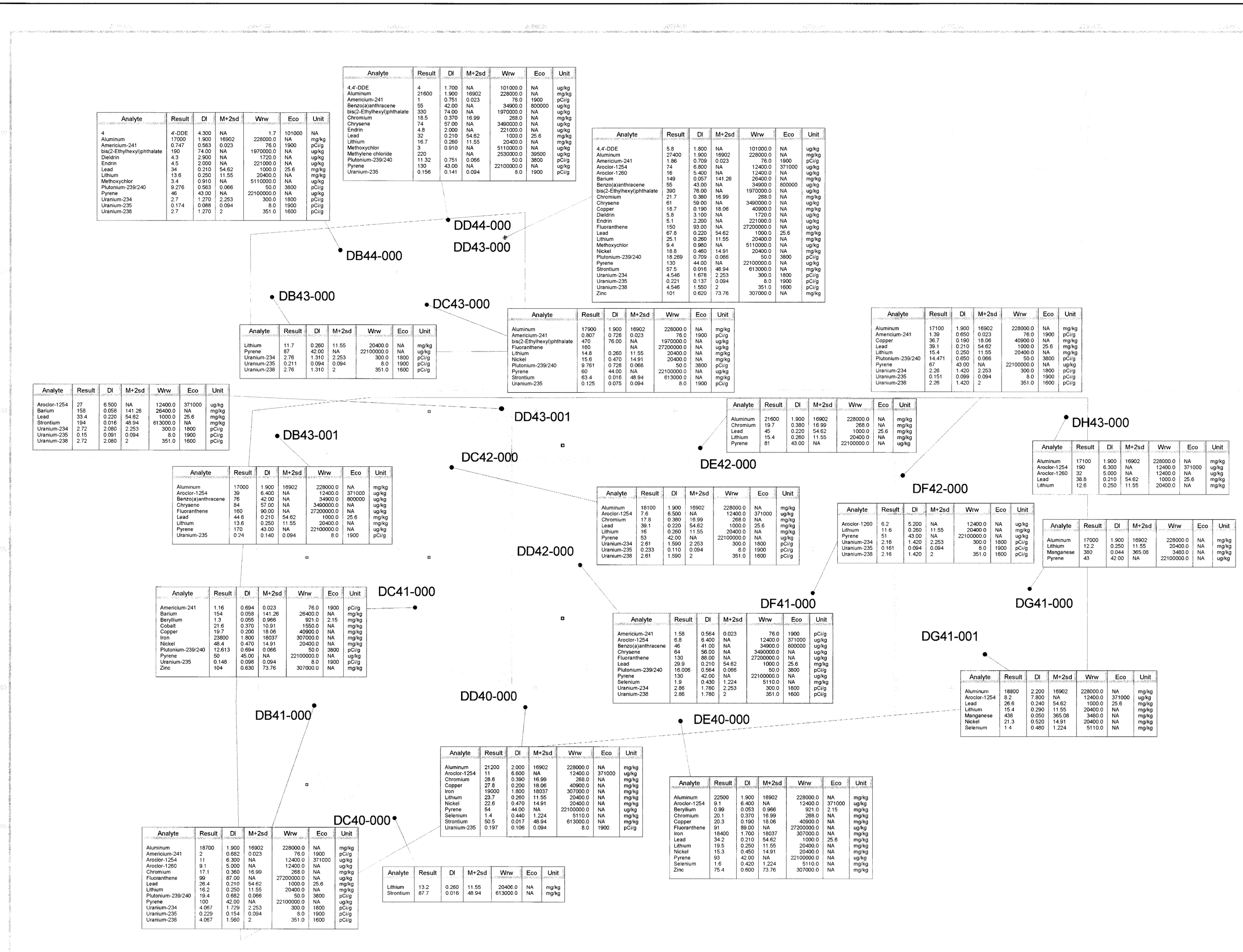
RADMS

Prepared for:

KAISER•HILL COMPANY

File: W:\Projects\Fy2003\NENW\NENW_new_080703\nenw_081203.apr

Figure 4
Surface Sampling Locations Above Background Means Plus Two Standard Deviations or Detection/Reporting Limits -- Sprayfields



Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
4	4'-DDE	4.300	NA	1.7	101000	NA
Aluminum	17000	1.900	16902	228000.0	NA	mg/kg
Americium-241	0.747	0.563	0.023	76.0	1900	pCi/g
bis(2-Ethylhexyl)phthalate	190	74.00	NA	1970000.0	NA	ug/kg
Dieldrin	4.3	2.900	NA	1720.0	NA	ug/kg
Endrin	4.5	2.000	NA	221000.0	NA	ug/kg
Lead	34	0.210	54.62	1000.0	25.6	mg/kg
Lithium	13.6	0.250	11.55	20400.0	NA	mg/kg
Methoxychlor	3.4	0.910	NA	5110000.0	NA	ug/kg
Plutonium-239/240	9.276	0.563	0.066	50.0	3800	pCi/g
Pyrene	46	43.00	NA	22100000.0	NA	ug/kg
Uranium-234	2.7	1.270	2.253	300.0	1800	pCi/g
Uranium-235	0.174	0.088	0.094	8.0	1900	pCi/g
Uranium-238	2.7	1.270	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
4,4'-DDE	4	1.700	NA	101000.0	NA	ug/kg
Aluminum	21600	1.900	16902	228000.0	NA	mg/kg
Americium-241	1	0.751	0.023	76.0	1900	pCi/g
Benzo(a)anthracene	55	42.00	NA	34900.0	800000	ug/kg
bis(2-Ethylhexyl)phthalate	330	74.00	NA	1970000.0	NA	ug/kg
Chromium	18.5	0.370	16.99	268.0	NA	mg/kg
Chrysene	74	57.00	NA	3490000.0	NA	ug/kg
Endrin	4.8	2.000	NA	221000.0	NA	ug/kg
Lead	32	0.210	54.62	1000.0	25.6	mg/kg
Lithium	16.7	0.260	11.55	20400.0	NA	mg/kg
Methoxychlor	3	0.910	NA	5110000.0	NA	ug/kg
Methylene chloride	220		NA	2530000.0	39500	ug/kg
Plutonium-239/240	11.32	0.751	0.066	50.0	3800	pCi/g
Pyrene	130	43.00	NA	22100000.0	NA	ug/kg
Uranium-235	0.156	0.141	0.094	8.0	1900	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
4,4'-DDE	5.8	1.800	NA	101000.0	NA	ug/kg
Aluminum	27400	1.900	16902	228000.0	NA	mg/kg
Americium-241	1.86	0.709	0.023	76.0	1900	pCi/g
Aroclor-1254	74	6.800	NA	12400.0	371000	ug/kg
Aroclor-1260	16	5.400	NA	12400.0	NA	ug/kg
Barium	149	0.057	141.26	26400.0	NA	mg/kg
Benzo(a)anthracene	55	43.00	NA	34900.0	800000	ug/kg
bis(2-Ethylhexyl)phthalate	390	76.00	NA	1970000.0	NA	ug/kg
Chromium	21.7	0.380	16.99	268.0	NA	mg/kg
Chrysene	61	59.00	NA	3490000.0	NA	ug/kg
Copper	18.7	0.190	18.06	40900.0	NA	mg/kg
Dieldrin	5.8	3.100	NA	1720.0	NA	ug/kg
Endrin	5.1	2.200	NA	221000.0	NA	ug/kg
Fluoranthene	150	93.00	NA	27200000.0	NA	ug/kg
Lead	67.8	0.220	54.62	1000.0	25.6	mg/kg
Lithium	25.1	0.260	11.55	20400.0	NA	mg/kg
Methoxychlor	9.4	0.980	NA	5110000.0	NA	ug/kg
Nickel	18.8	0.460	14.91	20400.0	NA	mg/kg
Plutonium-239/240	18.269	0.709	0.066	50.0	3800	pCi/g
Pyrene	130	44.00	NA	22100000.0	NA	ug/kg
Strontium	57.5	0.016	48.94	613000.0	NA	mg/kg
Uranium-234	4.546	1.678	2.253	300.0	1800	pCi/g
Uranium-235	0.221	0.137	0.094	8.0	1900	pCi/g
Uranium-238	4.546	1.550	2	351.0	1600	pCi/g
Zinc	101	0.620	73.76	307000.0	NA	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Lithium	11.7	0.260	11.55	20400.0	NA	mg/kg
Pyrene	87	42.00	NA	22100000.0	NA	ug/kg
Uranium-234	2.76	1.310	2.253	300.0	1800	pCi/g
Uranium-235	0.211	0.094	0.094	8.0	1900	pCi/g
Uranium-238	2.76	1.310	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	17900	1.900	16902	228000.0	NA	mg/kg
Americium-241	0.807	0.726	0.023	76.0	1900	pCi/g
bis(2-Ethylhexyl)phthalate	470	76.00	NA	1970000.0	NA	ug/kg
Fluoranthene	160		NA	27200000.0	NA	ug/kg
Lithium	14.8	0.260	11.55	20400.0	NA	mg/kg
Nickel	15.6	0.470	14.91	20400.0	NA	mg/kg
Plutonium-239/240	9.761	0.726	0.066	50.0	3800	pCi/g
Pyrene	60	44.00	NA	22100000.0	NA	ug/kg
Strontium	63.4	0.016	48.94	613000.0	NA	mg/kg
Uranium-235	0.125	0.075	0.094	8.0	1900	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	17100	1.900	16902	228000.0	NA	mg/kg
Americium-241	1.39	0.650	0.023	76.0	1900	pCi/g
Copper	36.7	0.190	18.06	40900.0	NA	mg/kg
Lead	39.1	0.210	54.62	1000.0	25.6	mg/kg
Lithium	15.4	0.250	11.55	20400.0	NA	mg/kg
Plutonium-239/240	14.471	0.650	0.066	50.0	3800	pCi/g
Pyrene	67	43.00	NA	22100000.0	NA	ug/kg
Uranium-234	2.26	1.420	2.253	300.0	1800	pCi/g
Uranium-235	0.151	0.099	0.094	8.0	1900	pCi/g
Uranium-238	2.26	1.420	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aroclor-1254	27	6.500	NA	12400.0	371000	ug/kg
Barium	158	0.058	141.26	26400.0	NA	mg/kg
Lead	33.4	0.220	54.62	1000.0	25.6	mg/kg
Strontium	194	0.016	48.94	613000.0	NA	mg/kg
Uranium-234	2.72	2.080	2.253	300.0	1800	pCi/g
Uranium-235	0.15	0.091	0.094	8.0	1900	pCi/g
Uranium-238	2.72	2.080	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	21600	1.900	16902	228000.0	NA	mg/kg
Chromium	19.7	0.380	16.99	268.0	NA	mg/kg
Lead	45	0.220	54.62	1000.0	25.6	mg/kg
Lithium	15.4	0.260	11.55	20400.0	NA	mg/kg
Pyrene	81	43.00	NA	22100000.0	NA	ug/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	17100	1.900	16902	228000.0	NA	mg/kg
Aroclor-1254	190	6.300	NA	12400.0	371000	ug/kg
Aroclor-1260	32	5.000	NA	12400.0	NA	ug/kg
Lead	36.8	0.210	54.62	1000.0	25.6	mg/kg
Lithium	12.6	0.250	11.55	20400.0	NA	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	17000	1.900	16902	228000.0	NA	mg/kg
Aroclor-1254	39	6.400	NA	12400.0	371000	ug/kg
Benzo(a)anthracene	76	42.00	NA	34900.0	800000	ug/kg
Chrysene	84	57.00	NA	3490000.0	NA	ug/kg
Fluoranthene	160	99.00	NA	27200000.0	NA	ug/kg
Lead	44.6	0.210	54.62	1000.0	25.6	mg/kg
Lithium	13.6	0.250	11.55	20400.0	NA	mg/kg
Pyrene	170	43.00	NA	22100000.0	NA	ug/kg
Uranium-235	0.24	0.140	0.094	8.0	1900	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	18100	1.900	16902	228000.0	NA	mg/kg
Aroclor-1254	7.6	6.500	NA	12400.0	371000	ug/kg
Chromium	17.8	0.380	16.99	268.0	NA	mg/kg
Lead	39.1	0.220	54.62	1000.0	25.6	mg/kg
Lithium	16	0.260	11.55	20400.0	NA	mg/kg
Pyrene	53	42.00	NA	22100000.0	NA	ug/kg
Uranium-234	2.61	1.590	2.253	300.0	1800	pCi/g
Uranium-235	0.233	0.110	0.094	8.0	1900	pCi/g
Uranium-238	2.61	1.590	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aroclor-1260	6.2	5.200	NA	12400.0	NA	ug/kg
Lithium	11.6	0.260	11.55	20400.0	NA	mg/kg
Pyrene	51	43.00	NA	22100000.0	NA	ug/kg
Uranium-234	2.16	1.420	2.253	300.0	1800	pCi/g
Uranium-235	0.161	0.094	0.094	8.0	1900	pCi/g
Uranium-238	2.16	1.420	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	17000	1.900	16902	228000.0	NA	mg/kg
Lithium	12.2	0.250	11.55	20400.0	NA	mg/kg
Manganese	380	0.044	365.08	3480.0	NA	mg/kg
Pyrene	43	42.00	NA	22100000.0	NA	ug/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Americium-241	1.16	0.694	0.023	76.0	1900	pCi/g
Barium	154	0.058	141.26	26400.0	NA	mg/kg
Beryllium	1.3	0.055	0.966	921.0	2.15	mg/kg
Cobalt	21.6	0.370	10.91	1550.0	NA	mg/kg
Copper	19.7	0.200	18.06	40900.0	NA	mg/kg
Iron	23800	1.800	18037	307000.0	NA	mg/kg
Nickel	48.4	0.470	14.91	20400.0	NA	mg/kg
Plutonium-239/240	12.613	0.694	0.066	50.0	3800	pCi/g
Pyrene	50	45.00	NA	22100000.0	NA	ug/kg
Uranium-235	0.148	0.098	0.094	8.0	1900	pCi/g
Zinc	104	0.630	73.76	307000.0	NA	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Americium-241	1.58	0.564	0.023	76.0	1900	pCi/g
Aroclor-1254	6.8	6.400	NA	12400.0	371000	ug/kg
Benzo(a)anthracene	46	41.00	NA	34900.0	800000	ug/kg
Chrysene	64	56.00	NA	3490000.0	NA	ug/kg
Fluoranthene	130	88.00	NA	27200000.0	NA	ug/kg
Lead	29.9	0.210	54.62	1000.0	25.6	mg/kg
Plutonium-239/240	16.006	0.564	0.066	50.0	3800	pCi/g
Pyrene	130	42.00	NA	22100000.0	NA	ug/kg
Selenium	1.9	0.430	1.224	5110.0	NA	mg/kg
Uranium-234	2.86	1.760	2.253	300.0	1800	pCi/g
Uranium-238	2.86	1.760	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	18800	2.200	16902	228000.0	NA	mg/kg
Aroclor-1254	8.2	7.800	NA	12400.0	371000	ug/kg
Lead	26.6	0.240	54.62	1000.0	25.6	mg/kg
Lithium	15.4	0.290	11.55	20400.0	NA	mg/kg
Manganese	438	0.050	365.08	3480.0	NA	mg/kg
Nickel	21.3	0.520	14.91	20400.0	NA	mg/kg
Selenium	1.4	0.480	1.224	5110.0	NA	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	18700	1.900	16902	228000.0	NA	mg/kg
Americium-241	2	0.682	0.023	76.0	1900	pCi/g
Aroclor-1254	11	6.300	NA	12400.0	371000	ug/kg
Aroclor-1260	9.1	5.000	NA	12400.0	NA	ug/kg
Chromium	17.1	0.360	16.99	268.0	NA	mg/kg
Fluoranthene	99	87.00	NA	27200000.0	NA	ug/kg
Lead	26.4	0.210	54.62	1000.0	25.6	mg/kg
Lithium	16.2	0.250	11.55	20400.0	NA	mg/kg
Plutonium-239/240	19.4	0.682	0.066	50.0	3800	pCi/g
Pyrene	100	42.00	NA	22100000.0	NA	ug/kg
Uranium-234	4.067	1.729	2.253	300.0	1800	pCi/g
Uranium-235	0.229	0.154	0.094	8.0	1900	pCi/g
Uranium-238	4.067	1.560	2	351.0	1600	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	21200	2.000	16902	228000.0	NA	mg/kg
Aroclor-1254	11	6.600	NA	12400.0	371000	ug/kg
Chromium	28.6	0.390	16.99	268.0	NA	mg/kg
Copper	27.8	0.200	18.06	40900.0	NA	mg/kg
Iron	19000	1.800	18037	307000.0	NA	mg/kg
Lithium	23.7	0.260	11.55	20400.0	NA	mg/kg
Nickel	22.6	0.470	14.91	20400.0	NA	mg/kg
Pyrene	54	44.00	NA	22100000.0	NA	ug/kg
Selenium	1.4	0.440	1.224	5110.0	NA	mg/kg
Strontium	50.5	0.017	48.94	613000.0	NA	mg/kg
Uranium-235	0.197	0.106	0.094	8.0	1900	pCi/g

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Lithium	13.2	0.260	11.55	20400.0	NA	mg/kg
Strontium	87.7	0.016	48.94	613000.0	NA	mg/kg

Analyte	Result	Dl	M+2sd	Wrw	Eco	Unit
Aluminum	22500	1.900	16902	228000.0	NA	mg/kg
Aroclor-1254	9.1	6.400	NA	12400.0	371000	ug/kg
Beryllium	0.99	0.053	0.966	921.0	2.15	mg/kg
Chromium	20.1	0.370	16.99	268.0	NA	mg/kg
Copper	20.3	0.190	18.06	40900.0	NA	mg/kg
Fluoranthene	91	89.00	NA	27200000.0	NA	ug/kg
Iron	18400	1.700	18037	307000.0	NA	mg/kg
Lead	34.2	0.210	54.62	1000.0	25.6	mg/kg
Lithium	19.5	0.250	11.55	20400.0	NA	mg/kg
Nickel	15.3	0.450	14.91	20400.0	NA	mg/kg
Pyrene	93	42.00	NA	22100000.0	NA	ug/kg
Selenium	1.6	0.420	1.224	5110.0	NA	mg/kg
Zinc	75.4	0.600	73.76	307000.0	NA	mg/kg

KEY

- Action Level Excedence
- Below Background Mean Plus Two Standard Devations but Above Action Level
- Detected Results
- Undetected Results
- IHSS
- Dirt roads
- Paved roads

N

Scale = 1: 825

60 0 60 120 Feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

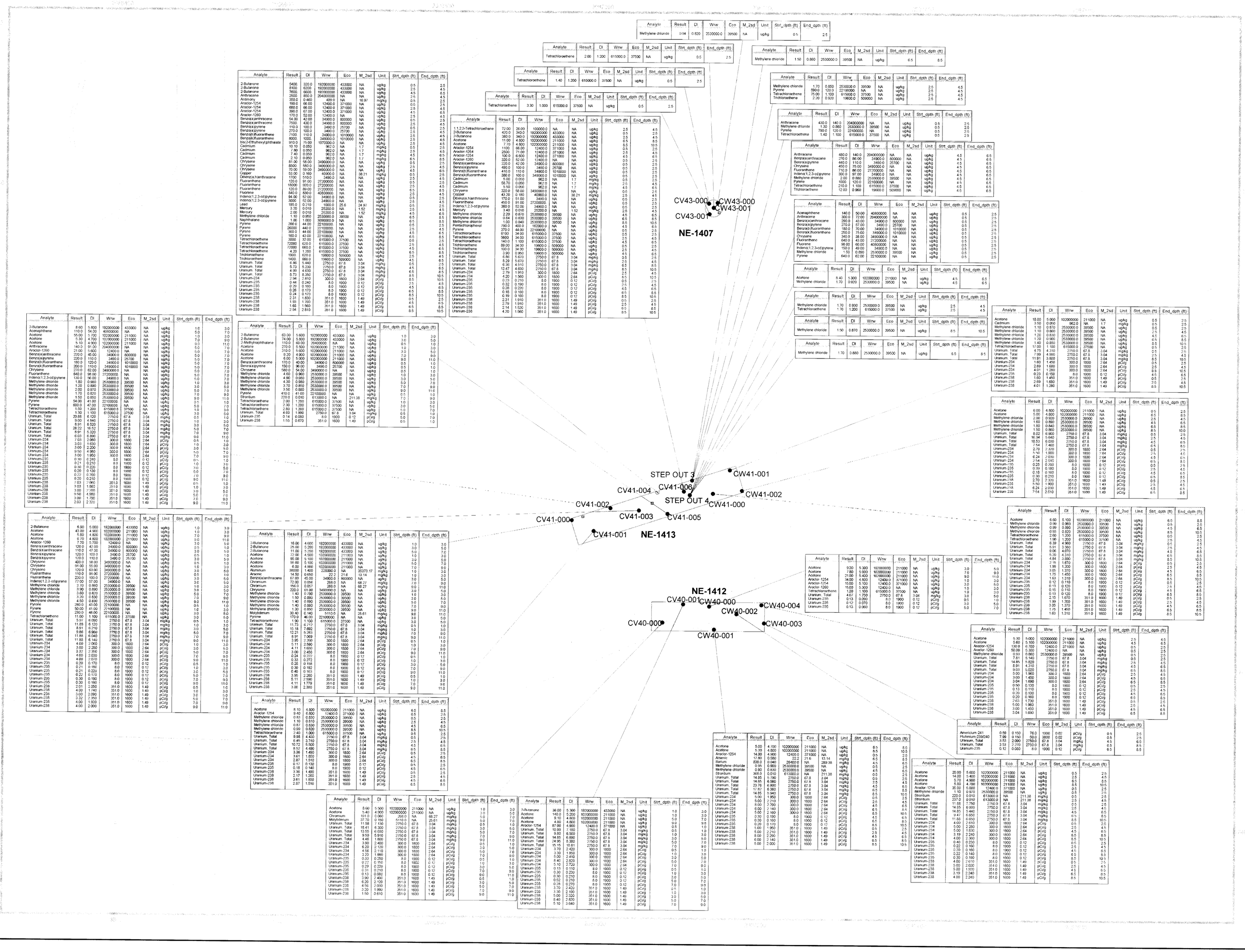
U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: RADMS Date: 8.13.03

Prepared for: KAISER•HILL COMPANY

File: W:\Projects\Fy2003\NENW\NENW_new_080703\nenw_081203.apr

Figure 3
Subsurface Sampling Locations Above Background Means Plus Two Standard Deviations or Detection/Reporting Limits -- Trench Area



KEY

- Action Level Excedence
- Detected Results
- Undetected Results
- PAC
- Dirt roads
- Paved roads

N

Scale = 1: 685

60 0 60 120 Feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

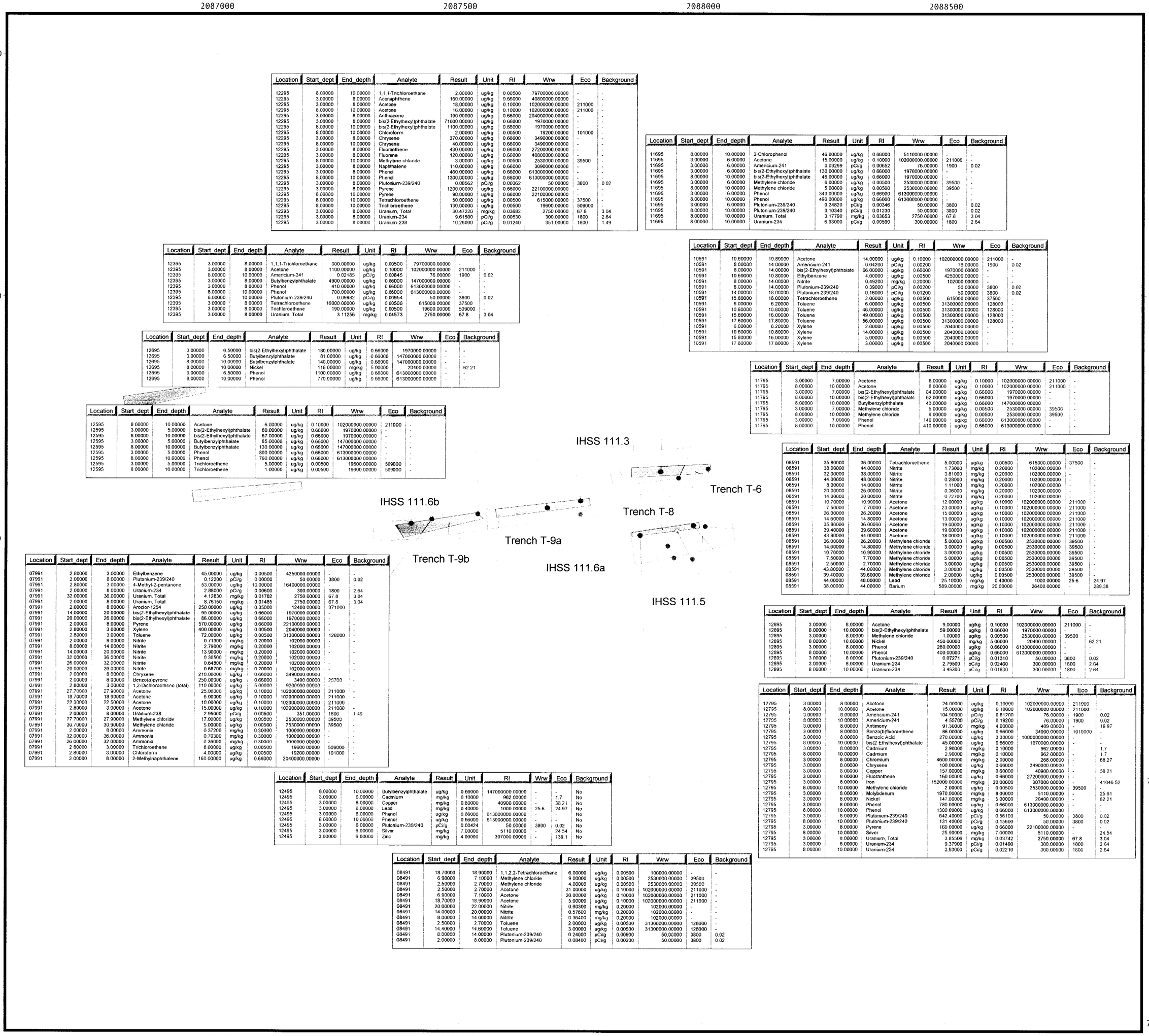
Prepared by: RADMS

Date: 8.12.03

Prepared for: KAISER•HILL COMPANY

File: W:\Projects\Fy2003\NENW\NENW_new_080703\nenw_081203.apr

Figure 2
Trenches T-6, T-8, T-9a, and T-9b, Existing Data Above Background Means Plus Two Standard Deviations, or Reporting Limits



Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
12295	8.00000	10.00000	1,1,1-Trichloroethane	2.00000	ug/kg	0.00500	79700000.00000	-	-
12295	3.00000	8.00000	Acenaphthene	160.00000	ug/kg	0.66000	40800000.00000	-	-
12295	3.00000	8.00000	Acetone	18.00000	ug/kg	0.10000	102000000.00000	211000	-
12295	8.00000	10.00000	Acetone	16.00000	ug/kg	0.10000	102000000.00000	211000	-
12295	3.00000	8.00000	Anthracene	190.00000	ug/kg	0.66000	204000000.00000	-	-
12295	3.00000	8.00000	bis(2-Ethylhexyl)phthalate	71000.00000	ug/kg	0.66000	1970000.00000	-	-
12295	8.00000	10.00000	bis(2-Ethylhexyl)phthalate	1100.00000	ug/kg	0.66000	1970000.00000	-	-
12295	8.00000	10.00000	Chloroform	2.00000	ug/kg	0.00500	19200.00000	101000	-
12295	3.00000	8.00000	Chrysene	370.00000	ug/kg	0.66000	3490000.00000	-	-
12295	8.00000	10.00000	Chrysene	40.00000	ug/kg	0.66000	3490000.00000	-	-
12295	3.00000	8.00000	Fluoranthene	430.00000	ug/kg	0.66000	27200000.00000	-	-
12295	3.00000	8.00000	Fluorene	120.00000	ug/kg	0.66000	40800000.00000	-	-
12295	8.00000	10.00000	Methylene chloride	3.00000	ug/kg	0.00500	2530000.00000	39500	-
12295	3.00000	8.00000	Naphthalene	110.00000	ug/kg	0.66000	3090000.00000	-	-
12295	3.00000	8.00000	Phenol	460.00000	ug/kg	0.66000	613000000.00000	-	-
12295	8.00000	10.00000	Phenol	1300.00000	ug/kg	0.66000	613000000.00000	-	-
12295	3.00000	8.00000	Plutonium-239/240	0.08562	pCi/g	0.00362	50.00000	3800	0.02
12295	3.00000	8.00000	Pyrene	1200.00000	ug/kg	0.66000	22100000.00000	-	-
12295	8.00000	10.00000	Pyrene	90.00000	ug/kg	0.66000	22100000.00000	-	-
12295	8.00000	10.00000	Tetrachloroethene	50.00000	ug/kg	0.00500	615000.00000	37500	-
12295	8.00000	10.00000	Trichloroethene	130.00000	ug/kg	0.00500	19600.00000	509000	-
12295	3.00000	8.00000	Uranium, Total	30.47220	mg/kg	0.03682	2750.00000	67.8	3.04
12295	3.00000	8.00000	Uranium-234	9.61500	pCi/g	0.00530	300.00000	1800	2.64
12295	3.00000	8.00000	Uranium-238	10.26000	pCi/g	0.01240	351.00000	1600	1.49

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
11695	8.00000	10.00000	2-Chlorophenol	46.00000	ug/kg	0.66000	5110000.00000	-	-
11695	3.00000	6.00000	Acetone	15.00000	ug/kg	0.10000	102000000.00000	211000	-
11695	3.00000	6.00000	Americium-241	0.03299	pCi/g	0.00652	76.00000	1900	0.02
11695	3.00000	6.00000	bis(2-Ethylhexyl)phthalate	130.00000	ug/kg	0.66000	1970000.00000	-	-
11695	8.00000	10.00000	bis(2-Ethylhexyl)phthalate	46.00000	ug/kg	0.66000	1970000.00000	-	-
11695	3.00000	6.00000	Methylene chloride	6.00000	ug/kg	0.00500	2530000.00000	39500	-
11695	8.00000	10.00000	Methylene chloride	5.00000	ug/kg	0.00500	2530000.00000	39500	-
11695	3.00000	6.00000	Phenol	340.00000	ug/kg	0.66000	613000000.00000	-	-
11695	8.00000	10.00000	Phenol	490.00000	ug/kg	0.66000	613000000.00000	-	-
11695	3.00000	6.00000	Plutonium-239/240	0.24820	pCi/g	0.00346	50.00000	3800	0.02
11695	8.00000	10.00000	Plutonium-239/240	0.10349	pCi/g	0.01230	50.00000	3800	0.02
11695	8.00000	10.00000	Uranium, Total	3.17790	mg/kg	0.03653	2750.00000	67.8	3.04
11695	8.00000	10.00000	Uranium-234	6.93000	pCi/g	0.00590	300.00000	1800	2.64

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
12395	3.00000	8.00000	1,1,1-Trichloroethane	300.00000	ug/kg	0.00500	79700000.00000	-	-
12395	3.00000	8.00000	Acetone	1100.00000	ug/kg	0.10000	102000000.00000	211000	-
12395	8.00000	10.00000	Americium-241	0.02185	pCi/g	0.00845	76.00000	1900	0.02
12395	3.00000	8.00000	Butylbenzylphthalate	4900.00000	ug/kg	0.66000	147000000.00000	-	-
12395	3.00000	8.00000	Phenol	410.00000	ug/kg	0.66000	613000000.00000	-	-
12395	8.00000	10.00000	Phenol	700.00000	ug/kg	0.66000	613000000.00000	-	-
12395	8.00000	10.00000	Plutonium-239/240	0.09982	pCi/g	0.00954	50.00000	3800	0.02
12395	3.00000	8.00000	Tetrachloroethene	16000.00000	ug/kg	0.00500	615000.00000	37500	-
12395	3.00000	8.00000	Trichloroethene	190.00000	ug/kg	0.00500	19600.00000	509000	-
12395	3.00000	8.00000	Uranium, Total	3.11256	mg/kg	0.04573	2750.00000	67.8	3.04

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
10591	10.60000	10.80000	Acetone	14.00000	ug/kg	0.10000	102000000.00000	211000	-
10591	8.00000	14.00000	Americium-241	0.04200	pCi/g	0.00200	76.00000	1900	0.02
10591	8.00000	14.00000	bis(2-Ethylhexyl)phthalate	66.00000	ug/kg	0.66000	1970000.00000	-	-
10591	10.60000	10.80000	Ethylbenzene	4.00000	ug/kg	0.00500	4250000.00000	-	-
10591	8.00000	14.00000	Nitrite	0.49200	mg/kg	0.20000	102000.00000	-	-
10591	8.00000	14.00000	Plutonium-239/240	0.39000	pCi/g	0.00200	50.00000	3800	0.02
10591	14.00000	16.00000	Plutonium-239/240	0.16000	pCi/g	0.01200	50.00000	3800	0.02
10591	15.80000	16.00000	Tetrachloroethene	2.00000	ug/kg	0.00500	615000.00000	37500	-
10591	6.00000	6.20000	Toluene	6.00000	ug/kg	0.00500	31300000.00000	128000	-
10591	10.60000	10.80000	Toluene	46.00000	ug/kg	0.00500	31300000.00000	128000	-
10591	15.80000	16.00000	Toluene	49.00000	ug/kg	0.00500	31300000.00000	128000	-
10591	17.60000	17.80000	Toluene	56.00000	ug/kg	0.00500	31300000.00000	128000	-
10591	6.00000	6.20000	Xylene	2.00000	ug/kg	0.00500	2040000.00000	-	-
10591	10.60000	10.80000	Xylene	14.00000	ug/kg	0.00500	2040000.00000	-	-
10591	15.80000	16.00000	Xylene	5.00000	ug/kg	0.00500	2040000.00000	-	-
10591	17.60000	17.80000	Xylene	3.00000	ug/kg	0.00500	2040000.00000	-	-

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
12695	3.00000	6.50000	bis(2-Ethylhexyl)phthalate	180.00000	ug/kg	0.66000	1970000.00000	-	-
12695	3.00000	6.50000	Butylbenzylphthalate	81.00000	ug/kg	0.66000	147000000.00000	-	-
12695	8.00000	10.00000	Butylbenzylphthalate	140.00000	ug/kg	0.66000	147000000.00000	-	-
12695	8.00000	10.00000	Nickel	116.00000	mg/kg	5.00000	20400.00000	-	62.21
12695	3.00000	6.50000	Phenol	1100.00000	ug/kg	0.66000	613000000.00000	-	-
12695	8.00000	10.00000	Phenol	770.00000	ug/kg	0.66000	613000000.00000	-	-

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
11795	3.00000	7.00000	Acetone	8.00000	ug/kg	0.10000	102000000.00000	211000	-
11795	8.00000	10.00000	Acetone	8.00000	ug/kg	0.10000	102000000.00000	211000	-
11795	3.00000	7.00000	bis(2-Ethylhexyl)phthalate	84.00000	ug/kg	0.66000	1970000.00000	-	-
11795	8.00000	10.00000	bis(2-Ethylhexyl)phthalate	62.00000	ug/kg	0.66000	1970000.00000	-	-
11795	8.00000	10.00000	Butylbenzylphthalate	43.00000	ug/kg	0.66000	147000000.00000	-	-
11795	3.00000	7.00000	Methylene chloride	5.00000	ug/kg	0.00500	2530000.00000	39500	-
11795	8.00000	10.00000	Methylene chloride	6.00000	ug/kg	0.00500	2530000.00000	39500	-
11795	3.00000	7.00000	Phenol	140.00000	ug/kg	0.66000	613000000.00000	-	-
11795	8.00000	10.00000	Phenol	410.00000	ug/kg	0.66000	613000000.00000	-	-

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
12595	8.00000	10.00000	Acetone	6.00000	ug/kg	0.10000	102000000.00000	211000	-
12595	3.00000	5.00000	bis(2-Ethylhexyl)phthalate	80.00000	ug/kg	0.66000	1970000.00000	-	-
12595	8.00000	10.00000	bis(2-Ethylhexyl)phthalate	67.00000	ug/kg	0.66000	1970000.00000	-	-
12595	3.00000	5.00000	Butylbenzylphthalate	85.00000	ug/kg	0.66000	147000000.00000	-	-
12595	8.00000	10.00000	Butylbenzylphthalate	130.00000	ug/kg	0.66000	147000000.00000	-	-
12595	3.00000	5.00000	Phenol	800.00000	ug/kg	0.66000	613000000.00000	-	-
12595	8.00000	10.00000	Phenol	760.00000	ug/kg	0.66000	613000000.00000	-	-
12595	3.00000	5.00000	Trichloroethene	5.00000	ug/kg	0.00500	19600.00000	509000	-
12595	8.00000	10.00000	Trichloroethene	1.00000	ug/kg	0.00500	19600.00000	509000	-

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
08591	35.80000	36.00000	Tetrachloroethene	5.00000	ug/kg	0.00500	615000.00000	37500	-
08591	38.00000	44.00000	Nitrite	1.73000	mg/kg	0.20000	102000.00000	-	-
08591	32.00000	38.00000	Nitrite	3.81000	mg/kg	0.20000	102000.00000	-	-
08591	44.00000	48.00000	Nitrite	0.28000	mg/kg	0.20000	102000.00000	-	-
08591	8.00000	14.00000	Nitrite	1.11000	mg/kg	0.20000	102000.00000	-	-
08591	20.00000	26.00000	Nitrite	0.36500	mg/kg	0.20000	102000.00000	-	-
08591	14.00000	20.00000	Nitrite	0.72700	mg/kg	0.20000	102000.00000	-	-
08591	10.70000	10.90000	Acetone	12.00000	ug/kg	0.10000	102000000.00000	211000	-
08591	7.50000	7.70000	Acetone	23.00000	ug/kg	0.10000	102000000.00000	211000	-
08591	26.00000	26.20000	Acetone	15.00000	ug/kg	0.10000	102000000.00000	211000	-
08591	14.60000	14.80000	Acetone	13.00000	ug/kg	0.10000	102000000.00000	211000	-
08591	35.80000	36.00000	Acetone	19.00000	ug/kg	0.10000	102000000.00000	211000	-
08591	39.40000	39.60000	Acetone	19.00000	ug/kg	0.10000	102000000.00000	211000	-
08591	43.80000	44.00000	Acetone	18.00000	ug/kg	0.10000	102000000.00000	211000	-
08591	26.00000	26.20000	Methylene chloride	5.00000	ug/kg	0.00500	2530000.00000	39500	-
08591	14.60000	14.80000	Methylene chloride	3.00000	ug/kg	0.00500	2530000.00000	39500	-
08591	10.70000	10.90000	Methylene chloride	3.00000	ug/kg	0.00500	2530000.00000	39500	-
08591	7.50000	7.70000	Methylene chloride	5.00000	ug/kg	0.00500	2530000.00000	39500	-
08591	2.50000	2.70000	Methylene chloride	3.00000	ug/kg	0.00500	2530000.00000	39500	-
08591	43.80000	44.00000	Methylene chloride	3.00000	ug/kg	0.00500	2530000.00000	39500	-
08591	39.40000	39.60000	Methylene chloride	2.00000	ug/kg	0.00500	2530000.00000	39500	-
08591	44.00000	48.00000	Lead	25.10000	mg/kg	0.40000	1000.00000	25.6	24.97
08591	38.00000	44.00000	Barium	589.00000	mg/kg	20.00000	26400.00000	-	289.38

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
07991	2.80000	3.00000	Ethylbenzene	45.00000	ug/kg	0.00500	4250000.00000	-	-
07991	2.00000	8.00000	Plutonium-239/240	0.12200	pCi/g	0.00000	50.00000	3800	0.02
07991	2.80000	3.00000	4-Methyl-2-pentanone	53.00000	ug/kg	10.00000	16400000.00000	-	-
07991	2.00000	8.00000	Uranium-234	2.88000	pCi/g	0.00600	300.00000	1800	2.64
07991	32.00000	36.00000	Uranium, Total	4.12830	mg/kg	0.01782	2750.00000	67.8	3.04
07991	2.00000	8.00000	Uranium, Total	8.76150	mg/kg	0.01485	2750.00000	67.8	3.04
07991	2.00000	8.00000	Aroclor-1254	250.00000	ug/kg	0.35000	12400.00000	371000	-
07991	14.00000	20.00000	bis(2-Ethylhexyl)phthalate	95.00000	ug/kg	0.66000	1970000.00000	-	-
07991	20.00000	26.00000	bis(2-Ethylhexyl)phthalate	86.00000	ug/kg	0.66000	1970000.00000	-	-
07991	2.00000	8.00000	Pyrene	570.00000	ug/kg	0.66000	22100000.00000	-	-
07991	2.80000	3.00000	Xylene	400.00000	ug/kg	0.00500	2040000.00000	-	-
07991	2.80000	3.00000	Toluene	72.00000	ug/kg	0.00500	31300000.00000	128000	-
07991	2.00000	8.00000	Nitrite	0.71300	mg/kg	0.20000	102000.00000	-	-
07991	8.00000	14.00000	Nitrite	2.79900	mg/kg	0.20000	102000.00000	-	-
07991	14.00000	20.00000	Nitrite	13.90000	mg/kg	0.20000	102000.00000	-	-
07991	32.00000	36.00000	Nitrite	0.30500	mg/kg	0.20000	102000.00000	-	-
07991	26.00000	32.00000	Nitrite	0.64800	mg/kg	0.20000	102000.00000	-	-
07991	20.00000	26.00000	Nitrite	0.68700	mg/kg	0.70000	102000.00000	-	-
07991	2.00000	8.00000	Chrysene	210.00000	ug/kg	0.66000	3490000.00000	-	-
07991	2.00000	8.00000	Benzo(a)pyrene	250.00000	ug/kg	0.66000	3490.00000	25700	-
07991	2.80000	3.00000	1,2-Dichloroethene (total)	110.00000	ug/kg	5.00000	9200000.00000	-	-
07991	27.70000	27.90000	Acetone	25.00000	ug/kg	0.10000	102000000.00000	211000	-
07991	18.70000	18.90000	Acetone	6.00000	ug/kg	0.10000	102000000.00000	211000	-
07991	22.30000	22.50000	Acetone	10.00000	ug/kg	0.10000	102000000.00000	211000	-
07991	2.80000	3.00000	Acetone	15.00000	ug/kg	0.10000	102000000.00000	211000	-
07991	2.00000	8.00000	Uranium-238	2.95000	pCi/g	0.00500	351.00000	1600	1.49
07991	27.70000	27.90000	Methylene chloride	17.00000	ug/kg	0.00500	2530000.00000	39500	-
07991	30.70000	30.90000	Methylene chloride	5.00000	ug/kg	0.00500	2530000.00000	39500	-
07991	2.00000	8.00000	Ammonia	0.37200	mg/kg	0.30000	1000000.00000	-	-
07991	32.00000	36.00000	Ammonia	0.70300	mg/kg	0.30000	1000000.00000	-	-
07991	26.00000	32.00000	Ammonia	0.36000	mg/kg	0.30000	1000000.00000	-	-
07991	2.80000	3.00000	Trichloroethene	8.00000	ug/kg	0.00500	19600.00000	509000	-
07991	2.80000	3.00000	Chloroform	4.00000	ug/kg	0.00500	19200.00000	101000	-
07991	2.00000	8.00000	2-Methylnaphthalene	160.00000	ug/kg	0.66000	20400000.00000	-	-

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
12795	3.00000	8.00000	Acetone	74.00000	ug/kg	0.10000	102000000.00000	211000	-
12795	8.00000	10.00000	Acetone	15.00000	ug/kg	0.10000	102000000.00000	211000	-
12795	3.00000	8.00000	Americium-241	104.50000	pCi/g	0.81200	76.00000	1900	0.02
12795	8.00000	10.00000	Americium-241	4.55700	pCi/g	0.19200	76.00000	1900	0.02
12795	3.00000	8.00000	Antimony	91.30000	mg/kg	4.00000	409.00000	-	16.97
12795	3.00000	8.00000	Benzo(b)fluoranthene	86.00000	ug/kg	0.66000	34900.00000	1010000	-
12795	3.00000	8.00000	Benzoic Acid	270.00000	ug/kg	3.30000	10000000.00000	-	-
12795	8.00000	10.00000	bis(2-Ethylhexyl)phthalate	45.00000	ug/kg	0.66000	1970000.00000	-	-
12795	3.00000	8.00000	Cadmium	2.90000	mg/kg	0.10000	962.00000	-	1.7
12795	8.00000	10.00000	Cadmium	2.90000	mg/kg	0.10000	962.00000	-	1.7
12795	3.00000	8.00000	Chromium	4600.00000	mg/kg	2.00000	268.00000	-	68.27
12795	3.00000	8.00000	Chrysene	100.00000	ug/kg	0.66000	3490000.00000	-	-
12795	3.00000	8.00000	Copper	157.00000	mg/kg	0.60000	40900.00000	-	38.21
12795	3.00000	8.00000	Fluoranthene	160.00000	ug/kg	0.66000	27200000.00000	-	-
12795	3.00000	8.00000	Iron	152000.00000	mg/kg	20.00000	307000.00000	-	41046.52
12795	8.00000	10.00000	Methylene chloride	2.00000	ug/kg	0.00500	2530000.00000	39500	-
12795	3.00000	8.00000	Molybdenum	1970.00000	mg/kg	8.00000	5110.00000	-	25.91
12795	3.00000	8.00000	Nickel	147.00000	mg/kg	5.00000	20400.00000	-	62.21
12795	3.00000	8.00000	Phenol	780.00000	ug/kg	0.66000	613000000.00000	-	-
12795	8.00000	10.00000	Phenol	1300.00000	ug/kg	0.66000	613000000.00000	-	-
12795	3.00000	8.00000	Plutonium-239/240	642.40000	pCi/g	0.56100	50.00000	3800	0.02
12795	8.00000	10.00000	Plutonium-239/240	131.40000	pCi/g	0.15600	50.00000	3800	0.02
12795	3.00000	8.00000	Pyrene	160.00000	ug/kg	0.66000	22100000.00000	-	-
12795	3.00000	8.00000	Silver	25.90000	mg/kg	7.00000	5110.00000	-	24.54
12795	3.00000	8.00000	Uranium, Total	3.85595	mg/kg	0.03742	2750.00000	67.8	3.04
12795	3.00000	8.00000	Uranium-234	9.37500	pCi/g	0.01490	300.00000	1800	2.64
12795	8.00000	10.00000	Uranium-234	3.93000	pCi/g	0.02210	300.00000	1800	2.64

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
12895	3.00000	8.00000	Acetone	9.00000	ug/kg	0.10000	102000000.00000	211000	-
12895	8.00000	10.00000	bis(2-Ethylhexyl)phthalate	59.00000	ug/kg	0.66000	1970000.00000	-	-
12895	3.00000	8.00000	Methylene chloride	1.00000	ug/kg	0.00500	2530000.00000	39500	-
12895	8.00000	10.00000	Nickel	450.00000	mg/kg	5.00000	20400.00000	-	62.21
12895	3.00000	8.00000	Phenol	260.00000	ug/kg	0.66000	613000000.00000	-	-
12895	8.00000	10.00000	Phenol	400.00000	ug/kg	0.66000	613000000.00000	-	-
12895	3.00000	8.00000	Plutonium-239/240	0.07271	pCi/g	0.01310	50.00000	3800	0.02
12895	3.00000	8.00000	Uranium-234	2.79500	pCi/g	0.02460	300.00000	1800	2.64
12895	8.00000	10.00000	Uranium-234	3.45360	pCi/g	0.01630	300.00000	1800	2.64

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
12495	8.00000	10.00000	Butylbenzylphthalate	ug/kg	0.66000	147000000.00000	-	-	No
12495	3.00000	6.00000	Cadmium	mg/kg	0.10000	962.00000	-	1.7	No
12495	3.00000	6.00000	Copper	mg/kg	0.60000	40900.00000	-	38.21	No
12495	3.00000	6.00000	Lead	mg/kg	0.40000	1000.00000	25.6	24.97	No
12495	3.00000	6.00000	Phenol	ug/kg	0.66000	613000000.00000	-	-	No
12495	8.00000	10.00000	Phenol	ug/kg	0.66000	613000000.00000	-	-	No
12495	3.00000	6.00000	Plutonium-239/240	pCi/g	0.00424	50.00000	3800	0.02	No
12495	3.00000	6.00000	Silver	mg/kg	7.00000	5110.00000	-	24.54	No
12495	3.00000	6.00000	Zinc	mg/kg	4.00000	307000.00000	-	139.1	No

Location	Start_dept	End_depth	Analyte	Result	Unit	RI	Wrw	Eco	Background
08491	18.70000	18.90000	1,1,2,2-Tetrachloroethane	6.00000	ug/kg	0.00500	100000.00000	-	-
08491	6.90000	7.10000	Methylene chloride	9.00000	ug/kg	0.00500	2530000.00000	39500	-
08491	2.50000	2.70000	Methylene chloride	4.00000	ug/kg	0.00500	2530000.00000	39500	-
08491	2.50000	2.70000	Acetone	31.00000	ug/kg	0.10000	102000000.00000	211000	-
08491	6.90000	7.10000	Acetone	20.00000	ug/kg	0.10000	102000000.00000	211000	-
08491	18.70000	18.90000	Acetone	5.00000	ug/kg	0.10000	102000000.00000	211000	-
08491	20.00000	22.00000	Nitrite	0.60300	mg/kg	0.20000	102000.00000	-	-
08491	14.00000	20.00000	Nitrite	0.57600	mg/kg	0.20000	102000.00000	-	-
08491	8.00000	14.00000	Nitrite	0.36400	mg/kg	0.20000	102000.00000	-	-
08491	2.50000	2.70000	Toluene	2.00000	ug/kg	0.00500	31300000.00000	128000	-
08491	14.40000	14.60000	Toluene	3.00000	ug/kg	0.00500	31300000.00000	128000	-
08491	8.00000	14.00000	Plutonium-239/240	0.24900	pCi/g	0.00900	50.00000	3800	0.02
08491	2.00000	8.00000	Plutonium-239/240	0.08400	pCi/g	0.00200	50.00000	3800	0.02

KEY

Sampling location with a Wildlife Refuge Worker (WRW) Action Level Exceedance

Sampling location with a Ecological Receptor (Eco) Action Level Exceedance

Sampling location with concentrations greater than reporting limits (RLs) and less than action levels

Sampling location with concentrations less than RLs

2003 Updated HRR Trench Boundary

Trench not part of this BZSAP Addendum

2003 Updated HRR IHSS Boundary

Paved road

N
W E
S

60 0 60 120 180 240 Feet

Scale 1:1,650

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: RADMS

Prepared for: KAISER•HILL COMPANY

File: w:\projects\2003\trenches\
east trenches_092503\sub_trench.apr

Date: 10/21/03

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