REF: 03-RF-00885; JLB-049-03

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Data Summary Report
IHSS Group NE/NW

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ENCLOSURE

IHSS Group NE/NW Raw 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
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
OU	Operable Unit
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 mean plus two standard deviations or detection/reporting limits are presented in Figures 2 through 6 and Tables 3 and 4. Figure 7 depicts areas prone to landslides and high erosion. A summary of the analytical results is presented in Tables 5 and 6. Deviations from planned sampling specifications are presented in Table 7. A summary of validated analytical records is presented in Tables 8 through 14. The raw data, including real and quality control, are enclosed on a compact disc.

No Further Accelerated Action (NFAA) for IHSS Group NE/NW is warranted based on 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).

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 7). However, this small area did not have any COC concentrations above WRW ALs. Surface and subsurface soil analytical results in all of these areas are below WRW ALs, thus the erosion pathway can be eliminated.

The groundwater contamination pathway can be eliminated because analytical results indicate that all COC subsurface results are below WRW soil ALs (see Figures 4-6 and Tables 4 and 6) and 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?

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, but the results are well below the WRW AL. The Ecological Receptor for lead is the Kestrel. However, this bird does not borrow and is unlikely to be adversely impacted by relatively low concentrations of lead in surface soil.

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).

THIS TARGET SHEET REPRESENTS AN
OVER-SIZED MAP / PLATE FOR THIS DOCUMENT:
(Ref: 03-RF-00885; JLB-049-03)

Draft Data Summary Report
IHSS Group NE/NW

June 2003

Figure 4:

NE Surface Soil Sample Results Greater than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit

File: W:\Projects\Fy2003\NENW\characterization\nenw_close-jb.apr

April 3, 2003

CERCLA Administrative Record Document, BZ-A-000596

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

GOLDEN, COLORADO

Figure 7 Areas Prone to Landslides and High Erosion

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

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'	Metals	6010A
		DD44-000	2088472.83	750275.17	Surface Soil	0-0.5'	SVOCs	8270C
		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

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
		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
		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

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
		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
		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

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
		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
		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

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
		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
		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-1412 – Trench T-12	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

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	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
		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

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	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
		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

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	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
		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

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	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
		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

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	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
		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

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	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
		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

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
		CV41-006	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
		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

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'	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

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'	Metals	6010A
		CW41-002	2087178.88	749622.56	subsurface soil	4.5-6.5'	SVOCs	8270C
		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-1413 – Trench T-13	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

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	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
		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

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	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
		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

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		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
		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

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		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
		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

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Laboratory Method
		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
		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

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	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
		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

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
		CW40-004	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
		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

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
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 With RFCA ALs Greater Than Background Mean Plus Two Standard Deviations or Detection/Reporting Limits

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-004	2087073.47	749619.88	Fluoranthene	0	0.5	620	93	NA	27200000	—	ug/kg
CV41-004	2087073.47	749619.88	Pyrene	0	0.5	640	44	NA	22100000	—	ug/kg
DB44-000	2088317.84	750231.30	Silver	0	0.5	0.16	0.069	NA	5110	—	mg/kg
DB44-000	2088317.84	750231.30	Antimony	0	0.5	0.84	0.44	NA	409	—	mg/kg
DC45-000	2088455.44	750459.28	Zinc	0	0.5	121	0.62	73.76	307000	—	mg/kg
DC45-000	2088455.44	750459.28	Silver	0	0.5	2	0.071	NA	5110	—	mg/kg
DC43-000	2088442.46	750152.87	Silver	0	0.5	0.09	0.07	NA	5110	—	mg/kg
DD44-000	2088472.83	750275.17	Antimony	0	0.5	0.51	0.45	NA	409	—	mg/kg
DH43-000	2089365.30	749991.19	Aroclor-1260	0	0.5	32	5	NA	12400	—	ug/kg
DC39-000	2088448.57	749186.75	Antimony	0	0.5	0.45	0.44	NA	409	—	mg/kg
DD43-000	2088554.95	750249.97	Antimony	0	0.5	0.64	0.45	NA	409	—	mg/kg
DD43-000	2088554.95	750249.97	Silver	0	0.5	1.1	0.07	NA	5110	—	mg/kg
DD43-000	2088554.95	750249.97	Zinc	0	0.5	101	0.62	73.76	307000	—	mg/kg
CW40-004	2087204.29	749479.75	Molybdenum	0	0.5	0.29	0.14	NA	5110	—	mg/kg
CW40-004	2087204.29	749479.75	Antimony	0	0.5	0.48	0.46	NA	409	—	mg/kg
CW41-001	2087163.44	749648.07	Silver	0	0.5	0.38	0.056	NA	5110	—	mg/kg
CW41-001	2087163.44	749648.07	Lithium	0	0.5	15.1	0.17	11.55	20400	—	mg/kg
CW41-002	2087178.88	749622.56	Tin	0	0.5	1.3	0.39	NA	613000	—	mg/kg
CW41-002	2087178.88	749622.56	Silver	0	0.5	0.081	0.055	NA	5110	—	mg/kg
CV43-000	2087134.60	749980.95	Chromium	0	0.5	31.1	0.054	16.99	268	—	mg/kg
CV43-000	2087134.60	749980.95	Silver	0	0.5	0.27	0.056	NA	5110	—	mg/kg
CV43-001	2087135.47	749967.93	Silver	0	0.5	0.7	0.055	NA	5110	—	mg/kg
CW43-000	2087145.35	749981.91	Silver	0	0.5	1.8	0.056	NA	5110	—	mg/kg
CW43-000	2087145.35	749981.91	Antimony	0	0.5	0.46	0.44	NA	409	—	mg/kg
CW43-000	2087145.35	749981.91	Chromium	0	0.5	23	0.054	16.99	268	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW43-001	2087140.61	749975.88	Chromium	0	0.5	23.4	0.053	16.99	268	—	mg/kg
CW43-001	2087140.61	749975.88	Antimony	0	0.5	0.48	0.43	NA	409	—	mg/kg
CW43-001	2087140.61	749975.88	Silver	0	0.5	1.6	0.055	NA	5110	—	mg/kg
CW43-002	2087147.12	749969.73	Antimony	0	0.5	0.46	0.42	NA	409	—	mg/kg
CW43-002	2087147.12	749969.73	Silver	0	0.5	0.4	0.054	NA	5110	—	mg/kg
CV40-002	2087119.05	749442.72	Lead	0	0.5	93.5	0.19	54.62	1000	25.6	mg/kg
CV40-002	2087119.05	749442.72	Aroclor-1260	0	0.5	100	4.9	NA	12400	—	ug/kg
CW40-001	2087145.33	749448.88	Strontium	0	0.5	170	0.0065	48.94	613000	—	mg/kg
CW40-002	2087173.08	749468.30	Strontium	0	0.5	362	0.0064	48.94	613000	—	mg/kg
CW40-003	2087207.75	749457.21	Strontium	0	0.5	136	0.0062	48.94	613000	—	mg/kg
CW40-004	2087204.29	749479.75	Strontium	0	0.5	169	0.0065	48.94	613000	—	mg/kg
DB44-000	2088317.84	750231.30	Aluminum	0	0.5	17000	1.9	16902.00	228000	—	mg/kg
DB44-000	2088317.84	750231.30	Lithium	0	0.5	13.6	0.25	11.55	20400	—	mg/kg
DB44-000	2088317.84	750231.30	Pyrene	0	0.5	46	43	NA	22100000	—	ug/kg
DB44-000	2088317.84	750231.30	Bis(2-Ethylhexyl)Phthalate	0	0.5	190	74	NA	1970000	—	ug/kg
DC43-000	2088442.46	750152.87	Bis(2-Ethylhexyl)Phthalate	0	0.5	470	76	NA	1970000	—	ug/kg
DC45-000	2088455.44	750459.28	Nickel	0	0.5	20.9	0.47	14.91	20400	—	mg/kg
DC45-000	2088455.44	750459.28	Chromium	0	0.5	21.6	0.38	16.99	268	—	mg/kg
DC45-000	2088455.44	750459.28	Copper	0	0.5	19	0.2	18.06	40900	—	mg/kg
DC45-000	2088455.44	750459.28	Strontium	0	0.5	60.9	0.016	48.94	613000	—	mg/kg
DC45-000	2088455.44	750459.28	Aluminum	0	0.5	27400	2	16902.00	228000	—	mg/kg
DC45-000	2088455.44	750459.28	Lithium	0	0.5	23.5	0.26	11.55	20400	—	mg/kg
DC45-000	2088455.44	750459.28	Iron	0	0.5	19800	1.7	18037.00	307000	—	mg/kg
DC45-000	2088455.44	750459.28	Aroclor-1254	0	0.5	47	6.5	NA	12400	371000.00	ug/kg
DC45-000	2088455.44	750459.28	Aroclor-1260	0	0.5	53	5.1	NA	12400	—	ug/kg
DC45-000	2088455.44	750459.28	Fluoranthene	0	0.5	190	90	NA	27200000	—	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DC45-000	2088455.44	750459.28	Chrysene	0	0.5	86	57	NA	3490000	—	ug/kg
DC45-000	2088455.44	750459.28	Benzo(A)Anthracene	0	0.5	62	42	NA	34900	800000.00	ug/kg
DC45-000	2088455.44	750459.28	Pyrene	0	0.5	170	43	NA	22100000	—	ug/kg
DG41-000	2089312.89	749743.20	Pyrene	0	0.5	43	42	NA	22100000	—	ug/kg
DC43-000	2088442.46	750152.87	Strontium	0	0.5	63.4	0.016	48.94	613000	—	mg/kg
DC43-000	2088442.46	750152.87	Nickel	0	0.5	15.6	0.47	14.91	20400	—	mg/kg
DC43-000	2088442.46	750152.87	Aluminum	0	0.5	17900	1.9	16902.00	228000	—	mg/kg
DC43-000	2088442.46	750152.87	Lithium	0	0.5	14.8	0.26	11.55	20400	—	mg/kg
DC43-000	2088442.46	750152.87	Pyrene	0	0.5	60	44	NA	22100000	—	ug/kg
DD44-000	2088472.83	750275.17	Chromium	0	0.5	18.5	0.37	16.99	268	—	mg/kg
DD44-000	2088472.83	750275.17	Aluminum	0	0.5	21600	1.9	16902.00	228000	—	mg/kg
DD44-000	2088472.83	750275.17	Lithium	0	0.5	16.7	0.26	11.55	20400	—	mg/kg
DD44-000	2088472.83	750275.17	Pyrene	0	0.5	130	43	NA	22100000	—	ug/kg
DD44-000	2088472.83	750275.17	Chrysene	0	0.5	74	57	NA	3490000	—	ug/kg
DD44-000	2088472.83	750275.17	Bis(2-Ethylhexyl)Phthalate	0	0.5	330	74	NA	1970000	—	ug/kg
DD44-000	2088472.83	750275.17	Benzo(A)Anthracene	0	0.5	55	42	NA	34900	800000.00	ug/kg
DG41-000	2089312.89	749743.20	Manganese	0	0.5	380	0.044	365.08	3480	—	mg/kg
DG41-000	2089312.89	749743.20	Lithium	0	0.5	12.2	0.25	11.55	20400	—	mg/kg
DG41-000	2089312.89	749743.20	Aluminum	0	0.5	17000	1.9	16902.00	228000	—	mg/kg
DG41-000	2089312.89	749743.20	Silver	0	0.5	0.13	0.069	NA	5110	—	mg/kg
DH43-000	2089365.30	749991.19	Aluminum	0	0.5	17100	1.9	16902.00	228000	—	mg/kg
DH43-000	2089365.30	749991.19	Lithium	0	0.5	12.6	0.25	11.55	20400	—	mg/kg
DH43-000	2089365.30	749991.19	Aroclor-1254	0	0.5	190	6.3	NA	12400	371000.00	ug/kg
DC39-000	2088448.57	749186.75	Nickel	0	0.5	20.8	0.45	14.91	20400	—	mg/kg
DC39-000	2088448.57	749186.75	Aluminum	0	0.5	18000	1.9	16902.00	228000	—	mg/kg
DC39-000	2088448.57	749186.75	Lithium	0	0.5	23.3	0.25	11.55	20400	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DC39-000	2088448.57	749186.75	Barium	0	0.5	143	0.056	141.26	26400	—	mg/kg
DC39-000	2088448.57	749186.75	Strontium	0	0.5	113	0.016	48.94	613000	—	mg/kg
DC39-000	2088448.57	749186.75	Iron	0	0.5	20200	1.7	18037.00	307000	—	mg/kg
DC39-000	2088448.57	749186.75	Chromium	0	0.5	28.7	0.37	16.99	268	—	mg/kg
DD43-000	2088554.95	750249.97	Nickel	0	0.5	18.8	0.46	14.91	20400	—	mg/kg
DD43-000	2088554.95	750249.97	Lead	0	0.5	67.8	0.22	54.62	1000	25.6	mg/kg
DD43-000	2088554.95	750249.97	Lithium	0	0.5	25.1	0.26	11.55	20400	—	mg/kg
DD43-000	2088554.95	750249.97	Strontium	0	0.5	57.5	0.016	48.94	613000	—	mg/kg
DD43-000	2088554.95	750249.97	Aluminum	0	0.5	27400	1.9	16902.00	228000	—	mg/kg
DD43-000	2088554.95	750249.97	Barium	0	0.5	149	0.057	141.26	26400	—	mg/kg
DD43-000	2088554.95	750249.97	Chromium	0	0.5	21.7	0.38	16.99	268	—	mg/kg
DD43-000	2088554.95	750249.97	Copper	0	0.5	18.7	0.19	18.06	40900	—	mg/kg
DD43-000	2088554.95	750249.97	Aroclor-1260	0	0.5	16	5.4	NA	12400	—	ug/kg
DD43-000	2088554.95	750249.97	Aroclor-1254	0	0.5	74	6.8	NA	12400	371000.00	ug/kg
DD43-000	2088554.95	750249.97	Benzo(A)Anthracene	0	0.5	55	43	NA	34900	800000.00	ug/kg
DD43-000	2088554.95	750249.97	Bis(2-Ethylhexyl)Phthalate	0	0.5	390	76	NA	1970000	—	ug/kg
DD43-000	2088554.95	750249.97	Chrysene	0	0.5	61	59	NA	3490000	—	ug/kg
DD43-000	2088554.95	750249.97	Fluoranthene	0	0.5	150	93	NA	27200000	—	ug/kg
DD43-000	2088554.95	750249.97	Pyrene	0	0.5	130	44	NA	22100000	—	ug/kg
STEP OUT 1 - A	2087034.21	749626.36	Pyrene	0	0.5	87	59	NA	22100000	—	ug/kg
STEP OUT 1 - A	2087034.21	749626.36	Benzo(A)Anthracene	0	0.5	43	41	NA	34900	800000.00	ug/kg
STEP OUT 1 - A	2087034.21	749626.36	Chrysene	0	0.5	46	36	NA	3490000	—	ug/kg
STEP OUT 1 - A	2087034.21	749626.36	Fluoranthene	0	0.5	86	41	NA	27200000	—	ug/kg
STEP OUT 2 - A	2087079.97	749636.97	Fluoranthene	0	0.5	45	41	NA	27200000	—	ug/kg
DB41-000	2088280.51	749574.27	Aroclor-1254	0	0.5	11	6.3	NA	12400	371000.00	ug/kg
DB41-000	2088280.51	749574.27	Aroclor-1260	0	0.5	9.1	5	NA	12400	—	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DG41-001	2089248.07	749648.40	Aroclor-1254	0	0.5	8.2	7.8	NA	12400	371000.00	ug/kg
DB39-001	2088323.82	749287.21	Aroclor-1254	0	0.5	17	6.3	NA	12400	371000.00	ug/kg
DB39-001	2088323.82	749287.21	Pyrene	0	0.5	110	41	NA	22100000	—	ug/kg
DB39-001	2088323.82	749287.21	Chrysene	0	0.5	67	55	NA	3490000	—	ug/kg
DB39-001	2088323.82	749287.21	Fluoranthene	0	0.5	140	86	NA	27200000	—	ug/kg
DB39-001	2088323.82	749287.21	Benzo(A)Anthracene	0	0.5	56	40	NA	34900	800000.00	ug/kg
DB41-000	2088280.51	749574.27	Fluoranthene	0	0.5	99	87	NA	27200000	—	ug/kg
DB41-000	2088280.51	749574.27	Pyrene	0	0.5	100	42	NA	22100000	—	ug/kg
DB43-000	2088219.15	750163.83	Pyrene	0	0.5	87	42	NA	22100000	—	ug/kg
DB43-001	2088226.91	749963.51	Aroclor-1254	0	0.5	39	6.4	NA	12400	371000.00	ug/kg
DB43-001	2088226.91	749963.51	Chrysene	0	0.5	84	57	NA	3490000	—	ug/kg
DB43-001	2088226.91	749963.51	Fluoranthene	0	0.5	160	90	NA	27200000	—	ug/kg
DB43-001	2088226.91	749963.51	Pyrene	0	0.5	170	43	NA	22100000	—	ug/kg
DB43-001	2088226.91	749963.51	Benzo(A)Anthracene	0	0.5	76	42	NA	34900	800000.00	ug/kg
DC41-000	2088426.17	749715.79	Pyrene	0	0.5	50	45	NA	22100000	—	ug/kg
DC42-000	2088478.64	749918.10	Aroclor-1254	0	0.5	7.6	6.5	NA	12400	371000.00	ug/kg
DC42-000	2088478.64	749918.10	Pyrene	0	0.5	53	42	NA	22100000	—	ug/kg
DD40-000	2088585.28	749572.23	Aroclor-1254	0	0.5	11	6.6	NA	12400	371000.00	ug/kg
DD40-000	2088585.28	749572.23	Pyrene	0	0.5	54	44	NA	22100000	—	ug/kg
DD42-000	2088664.41	749777.16	Aroclor-1254	0	0.5	6.8	6.4	NA	12400	371000.00	ug/kg
DD42-000	2088664.41	749777.16	Pyrene	0	0.5	130	42	NA	22100000	—	ug/kg
DD42-000	2088664.41	749777.16	Fluoranthene	0	0.5	130	88	NA	27200000	—	ug/kg
DD42-000	2088664.41	749777.16	Benzo(A)Anthracene	0	0.5	46	41	NA	34900	800000.00	ug/kg
DD42-000	2088664.41	749777.16	Chrysene	0	0.5	64	56	NA	3490000	—	ug/kg
DD43-001	2088550.71	750003.07	Aroclor-1254	0	0.5	27	6.5	NA	12400	371000.00	ug/kg
DE40-000	2088809.06	749552.11	Aroclor-1254	0	0.5	9.1	6.4	NA	12400	371000.00	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DE40-000	2088809.06	749552.11	Pyrene	0	0.5	93	42	NA	22100000	—	ug/kg
DE40-000	2088809.06	749552.11	Fluoranthene	0	0.5	91	89	NA	27200000	—	ug/kg
DF41-000	2089000.19	749737.05	Aroclor-1260	0	0.5	6.2	5.2	NA	12400	—	ug/kg
DF41-000	2089000.19	749737.05	Pyrene	0	0.5	51	43	NA	22100000	—	ug/kg
DE42-000	2088837.41	749946.42	Lithium	0	0.5	15.4	0.26	11.55	20400	—	mg/kg
DE42-000	2088837.41	749946.42	Chromium	0	0.5	19.7	0.38	16.99	268	—	mg/kg
DE42-000	2088837.41	749946.42	Molybdenum	0	0.5	0.19	0.14	NA	5110	—	mg/kg
DE42-000	2088837.41	749946.42	Aluminum	0	0.5	21600	1.9	16902.00	228000	—	mg/kg
DE42-000	2088837.41	749946.42	Silver	0	0.5	0.19	0.07	NA	5110	—	mg/kg
DE42-000	2088837.41	749946.42	Pyrene	0	0.5	81	43	NA	22100000	—	ug/kg
DF42-000	2089129.65	749906.57	Silver	0	0.5	1.3	0.068	NA	5110	—	mg/kg
DF42-000	2089129.65	749906.57	Lithium	0	0.5	15.4	0.25	11.55	20400	—	mg/kg
DF42-000	2089129.65	749906.57	Aluminum	0	0.5	17100	1.9	16902.00	228000	—	mg/kg
DF42-000	2089129.65	749906.57	Copper	0	0.5	36.7	0.19	18.06	40900	—	mg/kg
DF42-000	2089129.65	749906.57	Pyrene	0	0.5	67	43	NA	22100000	—	ug/kg
DB39-001	2088323.82	749287.21	Aluminum	0	0.5	18800	1.9	16902.00	228000	—	mg/kg
DB39-001	2088323.82	749287.21	Chromium	0	0.5	17	0.36	16.99	268	—	mg/kg
DB39-001	2088323.82	749287.21	Zinc	0	0.5	79	0.59	73.76	307000	—	mg/kg
DB39-001	2088323.82	749287.21	Lithium	0	0.5	15.2	0.25	11.55	20400	—	mg/kg
DB39-001	2088323.82	749287.21	Silver	0	0.5	1.1	0.067	NA	5110	—	mg/kg
DB41-000	2088280.51	749574.27	Silver	0	0.5	2.6	0.067	NA	5110	—	mg/kg
DB41-000	2088280.51	749574.27	Molybdenum	0	0.5	0.17	0.13	NA	5110	—	mg/kg
DB41-000	2088280.51	749574.27	Lithium	0	0.5	16.2	0.25	11.55	20400	—	mg/kg
DB41-000	2088280.51	749574.27	Chromium	0	0.5	17.1	0.36	16.99	268	—	mg/kg
DB41-000	2088280.51	749574.27	Aluminum	0	0.5	18700	1.9	16902.00	228000	—	mg/kg
DB43-000	2088219.15	750163.83	Lithium	0	0.5	11.7	0.26	11.55	20400	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DB43-001	2088226.91	749963.51	Molybdenum	0	0.5	0.15	0.14	NA	5110	—	mg/kg
DB43-001	2088226.91	749963.51	Silver	0	0.5	0.26	0.069	NA	5110	—	mg/kg
DB43-001	2088226.91	749963.51	Aluminum	0	0.5	17000	1.9	16902.00	228000	—	mg/kg
DB43-001	2088226.91	749963.51	Lithium	0	0.5	13.6	0.25	11.55	20400	—	mg/kg
DC40-000	2088396.73	749412.32	Lithium	0	0.5	13.2	0.26	11.55	20400	—	mg/kg
DC40-000	2088396.73	749412.32	Silver	0	0.5	0.75	0.071	NA	5110	—	mg/kg
DC41-000	2088426.17	749715.79	Iron	0	0.5	23800	1.8	18037.00	307000	—	mg/kg
DC41-000	2088426.17	749715.79	Nickel	0	0.5	48.4	0.47	14.91	20400	—	mg/kg
DC41-000	2088426.17	749715.79	Molybdenum	0	0.5	0.62	0.14	NA	5110	—	mg/kg
DC41-000	2088426.17	749715.79	Zinc	0	0.5	104	0.63	73.76	307000	—	mg/kg
DC41-000	2088426.17	749715.79	Cobalt	0	0.5	21.6	0.37	10.91	1550	—	mg/kg
DC41-000	2088426.17	749715.79	Beryllium	0	0.5	1.3	0.055	0.97	921	2.15	mg/kg
DC41-000	2088426.17	749715.79	Barium	0	0.5	154	0.058	141.26	26400	—	mg/kg
DC41-000	2088426.17	749715.79	Silver	0	0.5	0.28	0.071	NA	5110	—	mg/kg
DC42-000	2088478.64	749918.10	Molybdenum	0	0.5	0.53	0.14	NA	5110	—	mg/kg
DC42-000	2088478.64	749918.10	Silver	0	0.5	0.7	0.07	NA	5110	—	mg/kg
DC42-000	2088478.64	749918.10	Aluminum	0	0.5	18100	1.9	16902.00	228000	—	mg/kg
DC42-000	2088478.64	749918.10	Chromium	0	0.5	17.8	0.38	16.99	268	—	mg/kg
DC42-000	2088478.64	749918.10	Lithium	0	0.5	16	0.26	11.55	20400	—	mg/kg
DD40-000	2088585.28	749572.23	Lithium	0	0.5	23.7	0.26	11.55	20400	—	mg/kg
DD40-000	2088585.28	749572.23	Nickel	0	0.5	22.6	0.47	14.91	20400	—	mg/kg
DD40-000	2088585.28	749572.23	Iron	0	0.5	19000	1.8	18037.00	307000	—	mg/kg
DD40-000	2088585.28	749572.23	Chromium	0	0.5	28.6	0.39	16.99	268	—	mg/kg
DD40-000	2088585.28	749572.23	Copper	0	0.5	27.8	0.2	18.06	40900	—	mg/kg
DD40-000	2088585.28	749572.23	Aluminum	0	0.5	21200	2	16902.00	228000	—	mg/kg
DD40-000	2088585.28	749572.23	Silver	0	0.5	2.3	0.072	NA	5110	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DD43-001	2088550.71	750003.07	Silver	0	0.5	0.16	0.071	NA	5110	—	mg/kg
DD43-001	2088550.71	750003.07	Strontium	0	0.5	194	0.016	48.94	613000	—	mg/kg
DD43-001	2088550.71	750003.07	Barium	0	0.5	158	0.058	141.26	26400	—	mg/kg
DE40-000	2088809.06	749552.11	Nickel	0	0.5	15.3	0.45	14.91	20400	—	mg/kg
DE40-000	2088809.06	749552.11	Iron	0	0.5	18400	1.7	18037.00	307000	—	mg/kg
DE40-000	2088809.06	749552.11	Lithium	0	0.5	19.5	0.25	11.55	20400	—	mg/kg
DE40-000	2088809.06	749552.11	Copper	0	0.5	20.3	0.19	18.06	40900	—	mg/kg
DE40-000	2088809.06	749552.11	Molybdenum	0	0.5	0.52	0.14	NA	5110	—	mg/kg
DE40-000	2088809.06	749552.11	Silver	0	0.5	4.4	0.068	NA	5110	—	mg/kg
DE40-000	2088809.06	749552.11	Zinc	0	0.5	75.4	0.6	73.76	307000	—	mg/kg
DE40-000	2088809.06	749552.11	Beryllium	0	0.5	0.99	0.053	0.97	921	2.15	mg/kg
DE40-000	2088809.06	749552.11	Chromium	0	0.5	20.1	0.37	16.99	268	—	mg/kg
DE40-000	2088809.06	749552.11	Aluminum	0	0.5	22500	1.9	16902.00	228000	—	mg/kg
DF41-000	2089000.19	749737.05	Lithium	0	0.5	11.6	0.26	11.55	20400	—	mg/kg
DF41-000	2089000.19	749737.05	Silver	0	0.5	1.6	0.07	NA	5110	—	mg/kg
DG41-A01	2089248.07	749648.40	Nickel	0	0.5	21.3	0.52	14.91	20400	—	mg/kg
DG41-A01	2089248.07	749648.40	Aluminum	0	0.5	18800	2.2	16902.00	228000	—	mg/kg
DG41-A01	2089248.07	749648.40	Lithium	0	0.5	15.4	0.29	11.55	20400	—	mg/kg
DG41-A01	2089248.07	749648.40	Silver	0	0.5	1.6	0.079	NA	5110	—	mg/kg
DG41-A01	2089248.07	749648.40	Manganese	0	0.5	438	0.05	365.08	3480	—	mg/kg
CV41-001	2086994.24	749570.86	Aroclor-1254	0	0.5	38	6.8	NA	12400	371000.00	ug/kg
CV41-001	2086994.24	749570.86	Aroclor-1260	0	0.5	24	5.4	NA	12400	—	ug/kg
CV41-001	2086994.24	749570.86	Fluoranthene	0	0.5	160	94	NA	27200000	—	ug/kg
CV41-001	2086994.24	749570.86	Benzo(A)Anthracene	0	0.5	54	44	NA	34900	—	ug/kg
CV41-001	2086994.24	749570.86	Chrysene	0	0.5	89	60	NA	3490000	—	ug/kg
CV41-001	2086994.24	749570.86	Pyrene	0	0.5	160	45	NA	22100000	—	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-001	2086994.24	749570.86	Indeno(1,2,3-Cd)Pyrene	0	0.5	72	54	NA	34900	—	ug/kg
CV41-001	2086994.24	749570.86	Benzoic Acid	0	0.5	920	640	NA	1000000000	—	ug/kg
CV41-004	2087073.47	749619.88	Nickel	0	0.5	19.3	0.7	14.91	20400	—	mg/kg
CV41-004	2087073.47	749619.88	Beryllium	0	0.5	1	0.033	0.97	921	2.15	mg/kg
CV41-004	2087073.47	749619.88	Uranium	0	0.5	4.3	1.5	NA	2750	67.8	mg/kg
CV41-004	2087073.47	749619.88	Aluminum	0	0.5	23700	1.3	16902.00	228000	—	mg/kg
CV41-004	2087073.47	749619.88	Lithium	0	0.5	16.5	0.19	11.55	20400	—	mg/kg
CV41-004	2087073.47	749619.88	Aroclor-1254	0	0.5	28	6.7	NA	12400	371000.00	ug/kg
CV41-004	2087073.47	749619.88	Aroclor-1260	0	0.5	37	5.3	NA	12400	—	ug/kg
CV41-004	2087073.47	749619.88	Indeno(1,2,3-Cd)Pyrene	0	0.5	180	53	NA	34900	—	ug/kg
CV41-004	2087073.47	749619.88	Chrysene	0	0.5	300	59	NA	3490000	—	ug/kg
CV41-004	2087073.47	749619.88	Benzo(B)Fluoranthene	0	0.5	230	110	NA	34900	1010000.00	ug/kg
CV41-004	2087073.47	749619.88	Benzo(A)Pyrene	0	0.5	290	100	NA	3490	25700.00	ug/kg
CV41-004	2087073.47	749619.88	Benzo(K)Fluoranthene	0	0.5	210	100	NA	349000	1010000.00	ug/kg
CV41-004	2087073.47	749619.88	Acenaphthene	0	0.5	71	51	NA	40800000	—	ug/kg
CV41-004	2087073.47	749619.88	Benzo(A)Anthracene	0	0.5	220	43	NA	34900	800000.00	ug/kg
CV41-006	2087106.37	749621.22	Aluminum	0	0.5	17400	1.2	16902.00	228000	—	mg/kg
CV41-006	2087106.37	749621.22	Aroclor-1260	0	0.5	9	4.9	NA	12400	—	ug/kg
CV41-006	2087106.37	749621.22	Pyrene	0	0.5	230	41	NA	22100000	—	ug/kg
CV41-006	2087106.37	749621.22	Chrysene	0	0.5	120	55	NA	3490000	—	ug/kg
CV41-006	2087106.37	749621.22	Fluoranthene	0	0.5	230	86	NA	27200000	—	ug/kg
CV41-006	2087106.37	749621.22	Benzo(K)Fluoranthene	0	0.5	110	96	NA	349000	1010000.00	ug/kg
CV41-006	2087106.37	749621.22	Benzo(A)Pyrene	0	0.5	110	97	NA	3490	25700.00	ug/kg
CV41-006	2087106.37	749621.22	Benzo(A)Anthracene	0	0.5	91	40	NA	34900	800000.00	ug/kg
CW40-004	2087204.29	749479.75	Strontium	0	0.5	165	0.0066	48.94	613000	—	mg/kg
CW40-004	2087204.29	749479.75	Silver	0	0.5	42.8	0.059	NA	5110	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW40-004	2087204.29	749479.75	Nickel	0	0.5	15.1	0.69	14.91	20400	—	mg/kg
CW40-004	2087204.29	749479.75	Uranium	0	0.5	8	1.5	NA	2750	—	mg/kg
CW40-004	2087204.29	749479.75	Mercury	0	0.5	0.16	0.0013	0.13	25200	—	mg/kg
CW40-004	2087204.29	749479.75	Barium	0	0.5	160	0.042	141.26	26400	—	mg/kg
CW40-004	2087204.29	749479.75	Pyrene	0	0.5	48	44	NA	22100000	—	ug/kg
CW41-001	2087163.44	749648.07	Mercury	0	0.5	0.15	0.0012	0.13	25200	—	mg/kg
CW41-001	2087163.44	749648.07	Strontium	0	0.5	69.6	0.0062	48.94	613000	—	mg/kg
CW41-001	2087163.44	749648.07	Cadmium	0	0.5	2.6	0.047	1.61	962	—	mg/kg
CW41-001	2087163.44	749648.07	Aluminum	0	0.5	18300	1.2	16902.00	228000	—	mg/kg
CW41-001	2087163.44	749648.07	Nickel	0	0.5	15.7	0.65	14.91	20400	—	mg/kg
CW41-001	2087163.44	749648.07	Aroclor-1260	0	0.5	7.5	4.9	NA	12400	—	ug/kg
CW41-001	2087163.44	749648.07	Pyrene	0	0.5	79	41	NA	22100000	—	ug/kg
CW41-001	2087163.44	749648.07	Fluoranthene	0	0.5	89	86	NA	27200000	—	ug/kg
CW41-002	2087178.88	749622.56	Molybdenum	0	0.5	0.53	0.13	NA	5110	—	mg/kg
CV43-000	2087134.60	749980.95	Vanadium	0	0.5	58.1	0.25	45.59	7150	433.00	mg/kg
CV43-000	2087134.60	749980.95	Iron	0	0.5	21900	1.5	18037.00	307000	—	mg/kg
CV43-000	2087134.60	749980.95	Copper	0	0.5	36.9	0.16	18.06	40900	—	mg/kg
CV43-000	2087134.60	749980.95	Manganese	0	0.5	436	0.033	365.08	3480	—	mg/kg
CV43-000	2087134.60	749980.95	Nickel	0	0.5	28.3	0.66	14.91	20400	—	mg/kg
CV43-000	2087134.60	749980.95	Molybdenum	0	0.5	0.26	0.14	NA	5110	—	mg/kg
CV43-000	2087134.60	749980.95	Strontium	0	0.5	84.2	0.0063	48.94	613000	—	mg/kg
CV43-001	2087135.47	749967.93	Lithium	0	0.5	12	0.17	11.55	20400	—	mg/kg
CW43-000	2087145.35	749981.91	Molybdenum	0	0.5	0.16	0.14	NA	5110	—	mg/kg
CW43-000	2087145.35	749981.91	Nickel	0	0.5	20.5	0.66	14.91	20400	—	mg/kg
CW43-000	2087145.35	749981.91	Strontium	0	0.5	53.1	0.0063	48.94	613000	—	mg/kg
CW43-000	2087145.35	749981.91	Aluminum	0	0.5	17300	1.3	16902.00	228000	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW43-000	2087145.35	749981.91	Iron	0	0.5	18600	1.5	18037.00	307000	—	mg/kg
CW43-000	2087145.35	749981.91	Copper	0	0.5	27.3	0.16	18.06	40900	—	mg/kg
CW43-000	2087145.35	749981.91	Lithium	0	0.5	13.4	0.18	11.55	20400	—	mg/kg
CW43-001	2087140.61	749975.88	Molybdenum	0	0.5	0.4	0.13	NA	5110	—	mg/kg
CW43-001	2087140.61	749975.88	Manganese	0	0.5	392	0.033	365.08	3480	—	mg/kg
CW43-001	2087140.61	749975.88	Lithium	0	0.5	12.5	0.17	11.55	20400	—	mg/kg
CW43-001	2087140.61	749975.88	Iron	0	0.5	20300	1.4	18037.00	307000	—	mg/kg
CW43-001	2087140.61	749975.88	Copper	0	0.5	31.3	0.15	18.06	40900	—	mg/kg
CW43-001	2087140.61	749975.88	Vanadium	0	0.5	46.1	0.25	45.59	7150	433.00	mg/kg
CW43-001	2087140.61	749975.88	Strontium	0	0.5	56.1	0.0061	48.94	613000	—	mg/kg
CW43-001	2087140.61	749975.88	Nickel	0	0.5	21.7	0.64	14.91	20400	—	mg/kg
CW43-002	2087147.12	749969.73	Lithium	0	0.5	12	0.17	11.55	20400	—	mg/kg
BW52-000	2082012.80	751772.30	Tetrachloroethene	0	0.5	10	0.99	NA	615000	37500.00	ug/kg
CV40-002	2087119.05	749442.72	Silver	0	0.5	0.79	0.055	NA	5110	—	mg/kg
CV40-002	2087119.05	749442.72	Aroclor-1254	0	0.5	230	4.4	NA	12400	371000.00	ug/kg
CV40-002	2087119.05	749442.72	Fluoranthene	0	0.5	180	86	NA	27200000	—	ug/kg
CV40-002	2087119.05	749442.72	N-Nitroso-Di-N-Propylamine	0	0.5	400	90	NA	5470	—	ug/kg
CV40-002	2087119.05	749442.72	Benzo(A)Anthracene	0	0.5	65	40	NA	34900	800000.00	ug/kg
CV40-002	2087119.05	749442.72	Anthracene	0	0.5	81	80	NA	204000000	—	ug/kg
CV40-002	2087119.05	749442.72	Chrysene	0	0.5	87	54	NA	3490000	—	ug/kg
CV40-002	2087119.05	749442.72	Pyrene	0	0.5	150	41	NA	22100000	—	ug/kg
CW40-001	2087145.33	749448.88	Barium	0	0.5	144	0.041	141.26	26400	—	mg/kg
CW40-001	2087145.33	749448.88	Silver	0	0.5	0.49	0.059	NA	5110	—	mg/kg
CW40-001	2087145.33	749448.88	Aroclor-1254	0	0.5	200	4.7	NA	12400	371000.00	ug/kg
CW40-001	2087145.33	749448.88	Aroclor-1260	0	0.5	180	5.2	NA	12400	—	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW40-002	2087173.08	749468.30	Aroclor-1254	0	0.5	120	4.6	NA	12400	371000.00	ug/kg
CW40-002	2087173.08	749468.30	Aroclor-1260	0	0.5	84	5.1	NA	12400	—	ug/kg
CW40-001	2087145.33	749448.88	Pyrene	0	0.5	65	44	NA	22100000	—	ug/kg
CW40-002	2087173.08	749468.30	Barium	0	0.5	202	0.041	141.26	26400	—	mg/kg
CW40-002	2087173.08	749468.30	Silver	0	0.5	1.5	0.058	NA	5110	—	mg/kg
CW40-002	2087173.08	749468.30	Molybdenum	0	0.5	0.22	0.14	NA	5110	—	mg/kg
CW40-003	2087207.75	749457.21	Silver	0	0.5	7.1	0.056	NA	5110	—	mg/kg
CW40-003	2087207.75	749457.21	Nickel	0	0.5	15.6	0.65	14.91	20400	—	mg/kg
CW40-003	2087207.75	749457.21	Barium	0	0.5	146	0.039	141.26	26400	—	mg/kg
CW40-003	2087207.75	749457.21	Aroclor-1254	0	0.5	110	4.4	NA	12400	371000.00	ug/kg
CW40-003	2087207.75	749457.21	Aroclor-1260	0	0.5	42	5	NA	12400	—	ug/kg
CW40-004	2087204.29	749479.75	Silver	0	0.5	19.9	0.058	NA	5110	—	mg/kg
CW40-004	2087204.29	749479.75	Nickel	0	0.5	17.3	0.68	14.91	20400	—	mg/kg
CW40-004	2087204.29	749479.75	Barium	0	0.5	152	0.041	141.26	26400	—	mg/kg
CW40-004	2087204.29	749479.75	Lithium	0	0.5	11.9	0.18	11.55	20400	—	mg/kg
CW40-004	2087204.29	749479.75	Aroclor-1254	0	0.5	220	4.6	NA	12400	371000.00	ug/kg
CW40-004	2087204.29	749479.75	Aroclor-1260	0	0.5	190	5.2	NA	12400	—	ug/kg
STEP OUT 3 - A	2087116.33	749635.15	Fluoranthene	0	0.5	240	43	NA	27200000	—	ug/kg
STEP OUT 3 - A	2087116.33	749635.15	Anthracene	0	0.5	220	72	NA	204000000	—	ug/kg
STEP OUT 3 - A	2087116.33	749635.15	Pyrene	0	0.5	240	62	NA	22100000	—	ug/kg
STEP OUT 4 - A	2087113.72	749616.62	Fluoranthene	0	0.5	230	42	NA	27200000	—	ug/kg
STEP OUT 4 - A	2087113.72	749616.62	Benzoic Acid	0	0.5	880	300	NA	1000000000	—	ug/kg
STEP OUT 4 - A	2087113.72	749616.62	Pyrene	0	0.5	230	61	NA	22100000	—	ug/kg
STEP OUT 4 - A	2087113.72	749616.62	Anthracene	0	0.5	220	70	NA	204000000	—	ug/kg
BW52-000	2082012.80	751772.30	Methylene Chloride	0	0.5	1.5	0.8	NA	2530000	395000.00	ug/kg
DB44-000	2088317.84	750231.30	Tin	0	0.5	2	0.3	NA	613000	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DB44-000	2088317.84	750231.30	Molybdenum	0	0.5	0.31	0.14	NA	5110	—	mg/kg
DC45-000	2088455.44	750459.28	Tin	0	0.5	2.2	0.3	NA	613000	—	mg/kg
DC43-000	2088442.46	750152.87	Tin	0	0.5	2.2	0.3	NA	613000	—	mg/kg
DD44-000	2088472.83	750275.17	Tin	0	0.5	1.9	0.3	NA	613000	—	mg/kg
DD39-000	2088620.52	749244.49	Tin	0	0.5	1.4	0.3	NA	613000	—	mg/kg
DF40-000	2089088.49	749473.32	Tin	0	0.5	1.4	0.3	NA	613000	—	mg/kg
DG41-000	2089312.89	749743.20	Tin	0	0.5	2.2	0.3	NA	613000	—	mg/kg
DH43-000	2089365.30	749991.19	Tin	0	0.5	1.8	0.29	NA	613000	—	mg/kg
DC39-000	2088448.57	749186.75	Molybdenum	0	0.5	0.36	0.14	NA	5110	—	mg/kg
DC39-000	2088448.57	749186.75	Tin	0	0.5	2.3	0.29	NA	613000	—	mg/kg
DD43-000	2088554.95	750249.97	Tin	0	0.5	2.1	0.3	NA	613000	—	mg/kg
DE42-000	2088837.41	749946.42	Tin	0	0.5	1.8	0.3	NA	613000	—	mg/kg
DF42-000	2089129.65	749906.57	Tin	0	0.5	2	0.29	NA	613000	—	mg/kg
DB39-001	2088323.82	749287.21	Tin	0	0.5	2.4	0.29	NA	613000	—	mg/kg
DB41-000	2088280.51	749574.27	Tin	0	0.5	1.9	0.29	NA	613000	—	mg/kg
DB43-000	2088219.15	750163.83	Tin	0	0.5	1.7	0.3	NA	613000	—	mg/kg
DB43-001	2088226.91	749963.51	Tin	0	0.5	2.2	0.3	NA	613000	—	mg/kg
DC40-000	2088396.73	749412.32	Tin	0	0.5	1.7	0.31	NA	613000	—	mg/kg
DC41-000	2088426.17	749715.79	Tin	0	0.5	1.8	0.31	NA	613000	—	mg/kg
DC42-000	2088478.64	749918.10	Tin	0	0.5	2.4	0.3	NA	613000	—	mg/kg
DD40-000	2088585.28	749572.23	Selenium	0	0.5	1.4	0.44	1.22	5110	—	mg/kg
DD40-000	2088585.28	749572.23	Tin	0	0.5	2.7	0.31	NA	613000	—	mg/kg
DD42-000	2088664.41	749777.16	Tin	0	0.5	1.6	0.3	NA	613000	—	mg/kg
DD42-000	2088664.41	749777.16	Selenium	0	0.5	1.9	0.43	1.22	5110	—	mg/kg
DD43-001	2088550.71	750003.07	Tin	0	0.5	1.5	0.31	NA	613000	—	mg/kg
DE40-000	2088809.06	749552.11	Selenium	0	0.5	1.6	0.42	1.22	5110	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DE40-000	2088809.06	749552.11	Tin	0	0.5	2.7	0.29	NA	613000	—	mg/kg
DF41-000	2089000.19	749737.05	Tin	0	0.5	2.3	0.3	NA	613000	—	mg/kg
DG41-A01	2089248.07	749648.40	Selenium	0	0.5	1.4	0.48	1.22	5110	—	mg/kg
DG41-A01	2089248.07	749648.40	Tin	0	0.5	1.8	0.34	NA	613000	—	mg/kg
CV41-001	2086994.24	749570.86	Tin	0	0.5	1.1	0.43	NA	613000	—	mg/kg
CV41-004	2087073.47	749619.88	Tin	0	0.5	1.3	0.42	NA	613000	—	mg/kg
CV41-006	2087106.37	749621.22	Tin	0	0.5	3.1	0.39	NA	613000	—	mg/kg
CW40-004	2087204.29	749479.75	Tin	0	0.5	2	0.42	NA	613000	—	mg/kg
CW41-000	2087142.62	749618.53	Tin	0	0.5	0.97	0.39	NA	613000	—	mg/kg
CW41-001	2087163.44	749648.07	Tin	0	0.5	3.1	0.39	NA	613000	—	mg/kg
CV43-000	2087134.60	749980.95	Tin	0	0.5	3.2	0.4	NA	613000	—	mg/kg
CV43-001	2087135.47	749967.93	Tin	0	0.5	2.9	0.39	NA	613000	—	mg/kg
CW43-000	2087145.35	749981.91	Tin	0	0.5	3	0.4	NA	613000	—	mg/kg
CW43-001	2087140.61	749975.88	Tin	0	0.5	3	0.39	NA	613000	—	mg/kg
CW43-002	2087147.12	749969.73	Tin	0	0.5	2.7	0.38	NA	613000	—	mg/kg
CV40-002	2087119.05	749442.72	Tin	0	0.5	2.4	0.39	NA	613000	—	mg/kg
CW40-001	2087145.33	749448.88	Tin	0	0.5	2.8	0.41	NA	613000	—	mg/kg
CW40-002	2087173.08	749468.30	Tin	0	0.5	2.7	0.41	NA	613000	—	mg/kg
CW40-003	2087207.75	749457.21	Tin	0	0.5	2.7	0.39	NA	613000	—	mg/kg
CW40-004	2087204.29	749479.75	Tin	0	0.5	3.3	0.41	NA	613000	—	mg/kg
CV41-004	2087073.47	749619.88	Uranium-234	0	0.5	2.04	8	2.00	300	1800.00	pCi/g
CV41-004	2087073.47	749619.88	Uranium-238	0	0.5	2.04	8	2.00	351	1600.00	pCi/g
CV41-006	2087106.37	749621.22	Plutonium-239	0	0.5	10.92	4	0.05	50	3800.00	pCi/g
CV41-006	2087106.37	749621.22	Plutonium-240	0	0.5	10.92	4	0.05	116	3800.00	pCi/g
CV41-006	2087106.37	749621.22	Americium-241	0	0.5	0.952	4	0.02	76	1900.00	pCi/g
CW41-000	2087142.62	749618.53	Uranium-235	0	0.5	0.103	1	0.09	8	1900.00	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-001	2086994.24	749570.86	Uranium-235	0	0.5	0.134	1	0.09	8	1900.00	pCi/g
CW40-004	2087204.29	749479.75	Uranium-235	0	0.5	0.151	1	0.09	8	1900.00	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	0	0.5	2.2	8	2.00	300	1800.00	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	0	0.5	2.2	8	2.00	351	1600.00	pCi/g
CW40-004	2087204.29	749479.75	Plutonium-239	0	0.5	9.62	4	0.05	50	3800.00	pCi/g
CW40-004	2087204.29	749479.75	Plutonium-240	0	0.5	9.62	4	0.05	116	3800.00	pCi/g
CW40-004	2087204.29	749479.75	Americium-241	0	0.5	0.785	4	0.02	76	1900.00	pCi/g
CW41-002	2087178.88	749622.56	Uranium-235	0	0.5	0.146	1	0.09	8	1900.00	pCi/g
CW41-002	2087178.88	749622.56	Uranium-234	0	0.5	4.61	8	2.00	300	1800.00	pCi/g
CW41-002	2087178.88	749622.56	Uranium-238	0	0.5	4.61	8	2.00	351	1600.00	pCi/g
CW40-001	2087145.33	749448.88	Uranium-235	0	0.5	0.313	1	0.09	8	1900.00	pCi/g
CW40-001	2087145.33	749448.88	Uranium-234	0	0.5	4.7	8	2.00	300	1800.00	pCi/g
CW40-001	2087145.33	749448.88	Uranium-238	0	0.5	4.7	8	2.00	351	1600.00	pCi/g
CW40-001	2087145.33	749448.88	Plutonium-239	0	0.5	42.4	4	0.05	50	3800.00	pCi/g
CW40-001	2087145.33	749448.88	Plutonium-240	0	0.5	42.4	4	0.05	116	3800.00	pCi/g
CW40-001	2087145.33	749448.88	Americium-241	0	0.5	4.85	4	0.02	76	1900.00	pCi/g
CW40-004	2087204.29	749479.75	Uranium-235	0	0.5	0.439	1	0.09	8	1900.00	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	0	0.5	4.24	8	2.00	300	1800.00	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	0	0.5	4.24	8	2.00	351	1600.00	pCi/g
CW40-004	2087204.29	749479.75	Plutonium-239	0	0.5	11.72	4	0.05	50	3800.00	pCi/g
CW40-004	2087204.29	749479.75	Plutonium-240	0	0.5	11.72	4	0.05	116	3800.00	pCi/g
CW40-004	2087204.29	749479.75	Americium-241	0	0.5	1.05	4	0.02	76	1900.00	pCi/g
CW40-003	2087207.75	749457.21	Uranium-235	0	0.5	0.169	1	0.09	8	1900.00	pCi/g
CW40-003	2087207.75	749457.21	Plutonium-239	0	0.5	88.0	4	0.05	50	3800.00	pCi/g
CW40-003	2087207.75	749457.21	Plutonium-240	0	0.5	88.0	4	0.05	116	3800.00	pCi/g
CW40-003	2087207.75	749457.21	Americium-241	0	0.5	10.5	4	0.02	76	1900.00	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DD40-000	2088585.28	749572.23	Uranium-235	0	0.5	0.197	1	0.09	8	1900.00	pCi/g
DB39-001	2088323.82	749287.21	Uranium-235	0	0.5	0.171	1	0.09	8	1900.00	pCi/g
DB39-001	2088323.82	749287.21	Plutonium-239	0	0.5	39.03	4	0.05	50	3800.00	pCi/g
DB39-001	2088323.82	749287.21	Plutonium-240	0	0.5	39.03	4	0.05	116	3800.00	pCi/g
DB39-001	2088323.82	749287.21	Americium-241	0	0.5	4.43	4	0.02	76	1900.00	pCi/g
CW41-001	2087163.44	749648.07	Uranium-235	0	0.5	0.132	1	0.09	8	1900.00	pCi/g
DD43-000	2088554.95	750249.97	Uranium-235	0	0.5	0.178	1	0.09	8	1900.00	pCi/g
DD43-000	2088554.95	750249.97	Plutonium-239	0	0.5	18.27	4	0.05	50	3800.00	pCi/g
DD43-000	2088554.95	750249.97	Plutonium-240	0	0.5	18.27	4	0.05	116	3800.00	pCi/g
DD43-000	2088554.95	750249.97	Americium-241	0	0.5	1.86	4	0.02	76	1900.00	pCi/g
DB44-000	2088317.84	750231.30	Uranium-234	0	0.5	2.7	8	2.00	300	1800.00	pCi/g
DB44-000	2088317.84	750231.30	Uranium-238	0	0.5	2.7	8	2.00	351	1600.00	pCi/g
DB44-000	2088317.84	750231.30	Uranium-235	0	0.5	0.174	1	0.09	8	1900.00	pCi/g
DB44-000	2088317.84	750231.30	Plutonium-240	0	0.5	9.3	4	0.05	50	3800.00	pCi/g
DB44-000	2088317.84	750231.30	Plutonium-239	0	0.5	9.3	4	0.05	116	3800.00	pCi/g
DB44-000	2088317.84	750231.30	Americium-241	0	0.5	0.747	4	0.02	76	1900.00	pCi/g
DC43-000	2088442.46	750152.87	Uranium-235	0	0.5	0.125	1	0.09	8	1900.00	pCi/g
DC43-000	2088442.46	750152.87	Plutonium-239	0	0.5	9.78	4	0.05	50	3800.00	pCi/g
DC43-000	2088442.46	750152.87	Plutonium-240	0	0.5	9.78	4	0.05	116	3800.00	pCi/g
DC43-000	2088442.46	750152.87	Americium-241	0	0.5	0.807	4	0.02	76	1900.00	pCi/g
DC45-000	2088455.44	750459.28	Uranium-234	0	0.5	2.84	8	2.00	300	1800.00	pCi/g
DC45-000	2088455.44	750459.28	Uranium-238	0	0.5	2.84	8	2.00	351	1600.00	pCi/g
DD44-000	2088472.83	750275.17	Uranium-235	0	0.5	0.156	1	0.09	8	1900.00	pCi/g
DD44-000	2088472.83	750275.17	Plutonium-239	0	0.5	11.32	4	0.05	50	3800.00	pCi/g
DD44-000	2088472.83	750275.17	Plutonium-240	0	0.5	11.32	4	0.05	116	3800.00	pCi/g
DD44-000	2088472.83	750275.17	Americium-241	0	0.5	1	4	0.02	76	1900.00	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DF40-000	2089088.49	749473.32	Uranium-235	0	0.5	0.11	1	0.09	8	1900.00	pCi/g
DG41-000	2089312.89	749743.20	Uranium-235	0	0.5	0.211	1	0.09	8	1900.00	pCi/g
DH43-000	2089365.30	749991.19	Uranium-235	0	0.5	0.228	1	0.09	8	1900.00	pCi/g
DE42-000	2088837.41	749946.42	Plutonium-239	0	0.5	10.35	4	0.05	50	3800.00	pCi/g
DE42-000	2088837.41	749946.42	Plutonium-240	0	0.5	10.35	4	0.05	116	3800.00	pCi/g
DE42-000	2088837.41	749946.42	Americium-241	0	0.5	0.88	4	0.02	76	1900.00	pCi/g
DF42-000	2089129.65	749906.57	Uranium-234	0	0.5	2.26	8	2.00	300	1800.00	pCi/g
DF42-000	2089129.65	749906.57	Uranium-238	0	0.5	2.26	8	2.00	351	1600.00	pCi/g
DF42-000	2089129.65	749906.57	Uranium-235	0	0.5	0.151	1	0.09	8	1900.00	pCi/g
DF42-000	2089129.65	749906.57	Plutonium-239	0	0.5	14.47	4	0.05	50	3800.00	pCi/g
DF42-000	2089129.65	749906.57	Plutonium-240	0	0.5	14.47	4	0.05	116	3800.00	pCi/g
DF42-000	2089129.65	749906.57	Americium-241	0	0.5	1.39	4	0.02	76	1900.00	pCi/g
DB43-001	2088226.91	749963.51	Uranium-235	0	0.5	0.24	1	0.09	8	1900.00	pCi/g
DB43-001	2088226.91	749963.51	Plutonium-239	0	0.5	8.81	4	0.05	50	3800.00	pCi/g
DB43-001	2088226.91	749963.51	Plutonium-240	0	0.5	8.81	4	0.05	116	3800.00	pCi/g
DB43-001	2088226.91	749963.51	Americium-241	0	0.5	0.687	4	0.02	76	1900.00	pCi/g
DD42-000	2088664.41	749777.16	Uranium-234	0	0.5	2.86	8	2.00	300	1800.00	pCi/g
DD42-000	2088664.41	749777.16	Uranium-238	0	0.5	2.86	8	2.00	351	1600.00	pCi/g
DD42-000	2088664.41	749777.16	Uranium-235	0	0.5	0.0948	1	0.09	8	1900.00	pCi/g
DD42-000	2088664.41	749777.16	Plutonium-239	0	0.5	16.0	4	0.05	50	3800.00	pCi/g
DD42-000	2088664.41	749777.16	Plutonium-240	0	0.5	16.0	4	0.05	116	3800.00	pCi/g
DD42-000	2088664.41	749777.16	Americium-241	0	0.5	1.58	4	0.02	76	1900.00	pCi/g
DB43-000	2088219.15	750163.83	Plutonium-239	0	0.5	6.63	4	0.05	50	3800.00	pCi/g
DB43-000	2088219.15	750163.83	Plutonium-240	0	0.5	6.63	4	0.05	116	3800.00	pCi/g
DB43-000	2088219.15	750163.83	Americium-241	0	0.5	0.423	4	0.02	76	1900.00	pCi/g
DB43-000	2088219.15	750163.83	Uranium-234	0	0.5	2.76	8	2.00	300	1800.00	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	DL/RL	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DB43-000	2088219.15	750163.83	Uranium-238	0	0.5	2.76	8	2.00	351	1600.00	pCi/g
DB43-000	2088219.15	750163.83	Uranium-235	0	0.5	0.211	1	0.09	8	1900.00	pCi/g
DF41-000	2089000.19	749737.05	Plutonium-239	0	0.5	7.68	4	0.05	50	3800.00	pCi/g
DF41-000	2089000.19	749737.05	Plutonium-240	0	0.5	7.68	4	0.05	116	3800.00	pCi/g
DF41-000	2089000.19	749737.05	Americium-241	0	0.5	0.549	4	0.02	76	1900.00	pCi/g
DF41-000	2089000.19	749737.05	Uranium-235	0	0.5	0.161	1	0.09	8	1900.00	pCi/g
DF41-000	2089000.19	749737.05	Uranium-234	0	0.5	2.16	8	2.00	300	1800.00	pCi/g
DF41-000	2089000.19	749737.05	Uranium-238	0	0.5	2.16	8	2.00	351	1600.00	pCi/g
DD43-001	2088550.71	750003.07	Uranium-235	0	0.5	0.15	1	0.09	8	1900.00	pCi/g
DD43-001	2088550.71	750003.07	Uranium-234	0	0.5	2.72	8	2.00	300	1800.00	pCi/g
DD43-001	2088550.71	750003.07	Uranium-238	0	0.5	2.72	8	2.00	351	1600.00	pCi/g
DC42-000	2088478.64	749918.10	Uranium-235	0	0.5	0.233	1	0.09	8	1900.00	pCi/g
DC42-000	2088478.64	749918.10	Uranium-234	0	0.5	2.61	8	2.00	300	1800.00	pCi/g
DC42-000	2088478.64	749918.10	Uranium-238	0	0.5	2.61	8	2.00	351	1600.00	pCi/g
DC41-000	2088426.17	749715.79	Uranium-235	0	0.5	0.148	1	0.09	8	1900.00	pCi/g
DC41-000	2088426.17	749715.79	Plutonium-239	0	0.5	12.61	4	0.05	50	3800.00	pCi/g
DC41-000	2088426.17	749715.79	Plutonium-240	0	0.5	12.61	4	0.05	116	3800.00	pCi/g
DC41-000	2088426.17	749715.79	Americium-241	0	0.5	1.16	4	0.02	76	1900.00	pCi/g
DB41-000	2088280.51	749574.27	Plutonium-239	0	0.5	19.4	4	0.05	50	3800.00	pCi/g
DB41-000	2088280.51	749574.27	Plutonium-239	0	0.5	19.4	4	0.05	116	3800.00	pCi/g
DB41-000	2088280.51	749574.27	Americium-241	0	0.5	2	4	0.02	76	1900.00	pCi/g
DB41-000	2088280.51	749574.27	Uranium-234	0	0.5	2.65	8	2.00	300	1800.00	pCi/g
DB41-000	2088280.51	749574.27	Uranium-238	0	0.5	2.65	8	2.00	351	1600.00	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-006	2087106.37	749621.22	1,1,2,2-Tetrachloroethane	0.5	2.5	72	26	NA	100000	—	ug/kg
BW52-000	2082012.8	751772.3	2-Butanone	0.5	2.5	200	5.5	NA	192000000	433000	ug/kg
BW52-000	2082012.8	751772.3	2-Butanone	0.5	2.5	720	4.8	NA	192000000	433000	ug/kg
BW52-000	2082012.8	751772.3	2-Butanone	0.5	2.5	520	5	NA	192000000	433000	ug/kg
BW52-000	2082012.8	751772.3	2-Butanone	0.5	2.5	16	5.5	NA	192000000	433000	ug/kg
BW52-000	2082012.8	751772.3	2-Butanone	0.5	2.5	400	5.6	NA	192000000	433000	ug/kg
BW52-000	2082012.8	751772.3	2-Butanone	0.5	2.5	560	5.2	NA	192000000	433000	ug/kg
CV41-004	2087073.47	749619.88	2-Butanone	1	3	5400	320	NA	192000000	433000	ug/kg
CV41-006	2087106.37	749621.22	2-Butanone	2.5	4.5	380	340	NA	192000000	433000	ug/kg
CV41-006	2087106.37	749621.22	2-Butanone	2.5	4.5	420	340	NA	192000000	433000	ug/kg
STEP OUT 4-B	2087113.72	749616.62	Acenaphthene	0.5	1	140	50	NA	40800000	—	ug/kg
CV41-005	2087086.22	749593.02	Acetone	0.5	2.5	6	5	NA	102000000	211000	ug/kg
CW40-004	2087204.29	749479.75	Acetone	0.5	2.5	5.3	5	NA	102000000	211000	ug/kg
CW40-004	2087204.29	749479.75	Acetone	0.5	2.5	5.6	5.1	NA	102000000	211000	ug/kg
CW41-002	2087178.88	749622.56	Acetone	0.5	0.667	6	4.8	NA	102000000	211000	ug/kg
CW41-000	2087142.62	749618.53	Acetone	0.5	2.5	6.6	5.1	NA	102000000	211000	ug/kg
BW52-000	2082012.8	751772.3	Acetone	0.5	2.5	510	4.7	NA	102000000	211000	ug/kg
BW52-000	2082012.8	751772.3	Acetone	0.5	2.5	370	4.9	NA	102000000	211000	ug/kg
BW52-000	2082012.8	751772.3	Acetone	0.5	2.5	140	5.4	NA	102000000	211000	ug/kg
BW52-000	2082012.8	751772.3	Acetone	0.5	2.5	690	5.4	NA	102000000	211000	ug/kg
BW52-000	2082012.8	751772.3	Acetone	0.5	2.5	290	5	NA	102000000	211000	ug/kg
CV40-002	2087119.05	749442.72	Acetone	0.5	2.5	5.1	4.7	NA	102000000	211000	ug/kg
CW40-002	2087173.08	749468.3	Acetone	0.5	2.5	20	5.6	NA	102000000	211000	ug/kg
CW40-002	2087173.08	749468.3	Acetone	0.5	2.5	14	5.4	NA	102000000	211000	ug/kg
CW40-001	2087145.33	749448.88	Acetone	0.5	2.5	5	4.7	NA	102000000	211000	ug/kg
CW40-002	2087173.08	749468.3	Acetone	0.5	2.5	5.7	4.9	NA	102000000	211000	ug/kg
CW40-001	2087145.33	749448.88	Acetone	0.5	2.5	5.3	4.8	NA	102000000	211000	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW40-002	2087173.08	749468.3	Acetone	0.5	2.5	5.8	4.7	NA	102000000	211000	ug/kg
CV41-006	2087106.37	749621.22	Acetone	0.5	2.5	11	4.8	NA	102000000	211000	ug/kg
CV41-006	2087106.37	749621.22	Acetone	0.5	2.5	7.7	4.8	NA	102000000	211000	ug/kg
CW41-001	2087163.44	749648.07	Acetone	0.5	2.5	18	5	NA	102000000	211000	ug/kg
STEP OUT 4 - D	2087113.72	749616.62	Acetone	0.5	2.5	8.4	5.3	NA	102000000	211000	ug/kg
CW41-001	2087163.44	749648.07	Aluminum	0.5	1	18300	1.2	16902	228000	—	mg/kg
CW43-000	2087145.35	749981.91	Aluminum	0.5	1	17300	1.3	16902	228000	—	mg/kg
CV41-006	2087106.37	749621.22	Americium-241	4.5	6.5	0.952	4	0.02	76	1900	pCi/g
CV41-006	2087106.37	749621.22	Americium-241	4.5	6.5	0.522	4	0.02	76	1900	pCi/g
CW40-004	2087204.29	749479.75	Americium-241	4.5	6.5	0.785	4	0.02	76	1900	pCi/g
CW40-000	2087139.09	749477.67	Americium-241	5	7	0.113	4	0.02	76	1900	pCi/g
CW40-002	2087173.08	749468.3	Americium-241	6.5	8.5	2.62	4	0.02	76	1900	pCi/g
CW40-002	2087173.08	749468.3	Americium-241	6.5	8.5	0.204	4	0.02	76	1900	pCi/g
CW40-001	2087145.33	749448.88	Americium-241	7	9	4.85	4	0.02	76	1900	pCi/g
CW40-001	2087145.33	749448.88	Americium-241	7	9	0.222	4	0.02	76	1900	pCi/g
CV40-002	2087119.05	749442.72	Americium-241	7	9	2.89	4	0.02	76	1900	pCi/g
CW40-004	2087204.29	749479.75	Americium-241	7	9	1.05	4	0.02	76	1900	pCi/g
CW40-003	2087207.75	749457.21	Americium-241	8.5	10.5	10.5	4	0.02	76	1900	pCi/g
CW40-003	2087207.75	749457.21	Americium-241	8.5	10.5	0.588	4	0.02	76	1900	pCi/g
DB39-001	2088323.82	749287.21	Americium-241	8.5	10.5	4.43	4	0.02	76	1900	pCi/g
DD43-000	2088554.95	750249.97	Americium-241	8.5	10.5	1.86	4	0.02	76	1900	pCi/g
DB44-000	2088317.84	750231.3	Americium-241	8.5	10.5	0.747	4	0.02	76	1900	pCi/g
DC43-000	2088442.46	750152.87	Americium-241	8.5	10.5	0.807	4	0.02	76	1900	pCi/g
DD44-000	2088472.83	750275.17	Americium-241	9	11	1	4	0.02	76	1900	pCi/g
DE42-000	2088837.41	749946.42	Americium-241	9	11	0.88	4	0.02	76	1900	pCi/g
DF42-000	2089129.65	749906.57	Americium-241	9	11	1.39	4	0.02	76	1900	pCi/g
DB43-001	2088226.91	749963.51	Americium-241	9	11	0.687	4	0.02	76	1900	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DD42-000	2088664.41	749777.16	Americium-241	9	11	1.58	4	0.02	76	1900	pCi/g
DB43-000	2088219.15	750163.83	Americium-241	9	11	0.423	4	0.02	76	1900	pCi/g
DF41-000	2089000.19	749737.05	Americium-241	9	11	0.549	4	0.02	76	1900	pCi/g
DC41-000	2088426.17	749715.79	Americium-241	14.5	16.5	1.16	4	0.02	76	1900	pCi/g
DB41-000	2088280.51	749574.27	Americium-241	14.5	16.5	2	4	0.02	76	1900	pCi/g
CV40-002	2087119.05	749442.72	Anthracene	0.5	2.5	81	80	NA	204000000	—	ug/kg
STEP OUT 3 - A	2087116.33	749635.15	Anthracene	0.5	2.5	220	72	NA	204000000	—	ug/kg
STEP OUT 4 - A	2087113.72	749616.62	Anthracene	0.5	1	220	70	NA	204000000	—	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Anthracene	0.5	1	300	72	NA	204000000	—	ug/kg
CW40-004	2087204.29	749479.75	Aroclor-1254	0.5	2.5	130	6.7	NA	12400	—	ug/kg
CV40-002	2087119.05	749442.72	Aroclor-1254	0.5	2.5	230	4.4	NA	12400	371000	ug/kg
CV40-002	2087119.05	749442.72	Aroclor-1254	0.5	2.5	160	4.5	NA	12400	371000	ug/kg
CW40-001	2087145.33	749448.88	Aroclor-1254	0.5	1	200	4.7	NA	12400	371000	ug/kg
CW40-002	2087173.08	749468.3	Aroclor-1254	0.5	1	120	4.6	NA	12400	371000	ug/kg
CW40-003	2087207.75	749457.21	Aroclor-1254	0.5	2.5	110	4.4	NA	12400	371000	ug/kg
CW40-004	2087204.29	749479.75	Aroclor-1254	0.5	2.5	220	4.6	NA	12400	371000	ug/kg
CW40-001	2087145.33	749448.88	Aroclor-1254	0.5	2.5	14	4.9	NA	12400	371000	ug/kg
CW40-002	2087173.08	749468.3	Aroclor-1254	0.5	2.5	35	5	NA	12400	371000	ug/kg
CW40-004	2087204.29	749479.75	Aroclor-1260	0.5	2.5	50	5.3	NA	12400	—	ug/kg
CW41-001	2087163.44	749648.07	Aroclor-1260	0.5	2.5	7.5	4.9	NA	12400	—	ug/kg
CV41-003	2087050.64	749597.05	Aroclor-1260	0.5	2.5	7.2	5.7	NA	12400	—	ug/kg
CV40-002	2087119.05	749442.72	Aroclor-1260	0.5	2.5	120	5.1	NA	12400	—	ug/kg
CW40-001	2087145.33	749448.88	Aroclor-1260	0.5	2.5	180	5.2	NA	12400	—	ug/kg
CW40-002	2087173.08	749468.3	Aroclor-1260	0.5	1	84	5.1	NA	12400	—	ug/kg
CW40-003	2087207.75	749457.21	Aroclor-1260	0.5	2.5	42	5	NA	12400	—	ug/kg
CW40-004	2087204.29	749479.75	Aroclor-1260	0.5	2.5	190	5.2	NA	12400	—	ug/kg
CV41-002	2087015.06	749599.73	Aroclor-1260	3	5	21	5.6	NA	12400	—	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW40-001	2087145.33	749448.88	Arsenic	0.5	2.5	17.8	0.58	13.14	22.2	21.6	mg/kg
CW40-004	2087204.29	749479.75	Barium	0.5	2.5	160	0.042	141.26	26400	—	mg/kg
CW40-001	2087145.33	749448.88	Barium	0.5	1	144	0.041	141.26	26400	—	mg/kg
CW40-002	2087173.08	749468.3	Barium	0.5	2.5	202	0.041	141.26	26400	—	mg/kg
CW40-003	2087207.75	749457.21	Barium	0.5	2.5	146	0.039	141.26	26400	—	mg/kg
CW40-004	2087204.29	749479.75	Barium	0.5	2.5	152	0.041	141.26	26400	—	mg/kg
CW40-001	2087145.33	749448.88	Barium	0.5	2.5	838	0.044	289.38	26400	—	mg/kg
CV40-002	2087119.05	749442.72	Benzo(A)Anthracene	0.5	2.5	65	40	NA	34900	800000	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Benzo(A)Anthracene	0.5	1	290	43	NA	34900	800000	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Benzo(A)Pyrene	0.5	1	270	57	NA	3490	25700	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Benzo(B)Fluoranthene	0.5	1	180	70	NA	34900	1010000	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Benzo(K)Fluoranthene	0.5	1	250	75	NA	349000	1010000	ug/kg
STEP OUT 4 - A	2087113.72	749616.62	Benzoic Acid	0.5	1	880	300	NA	1000000000	—	ug/kg
CW41-001	2087163.44	749648.07	Cadmium	0.5	0.67	2.6	0.047	1.61	962	—	mg/kg
CW41-001	2087163.44	749648.07	Cadmium	0.5	2.5	3.5	0.053	1.7	962	—	mg/kg
CV40-002	2087119.05	749442.72	Chrysene	0.5	2.5	87	54	NA	3490000	—	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Chrysene	0.5	1	340	38	NA	3490000	—	ug/kg
CV43-000	2087134.6	749980.95	Copper	0.5	1	36.9	0.16	18.06	40900	—	mg/kg
CW43-000	2087145.35	749981.91	Copper	0.5	2.5	27.3	0.16	18.06	40900	—	mg/kg
CW43-001	2087140.61	749975.88	Copper	0.5	2.5	31.3	0.15	18.06	40900	—	mg/kg
CW41-001	2087163.44	749648.07	Fluoranthene	0.5	0.667	89	86	NA	27200000	—	ug/kg
CV40-002	2087119.05	749442.72	Fluoranthene	0.5	2.5	180	86	NA	27200000	—	ug/kg
STEP OUT 3 - A	2087116.33	749635.15	Fluoranthene	0.5	2.5	240	43	NA	27200000	—	ug/kg
STEP OUT 4 - A	2087113.72	749616.62	Fluoranthene	0.5	1	230	42	NA	27200000	—	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Fluoranthene	0.5	1	640	43	NA	27200000	—	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Fluorene	0.5	1	98	60	NA	40800000	—	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Indeno(1,2,3-Cd)Pyrene	0.5	1	150	49	NA	34900	—	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV43-000	2087134.6	749980.95	Iron	0.5	1	21900	1.5	18037	307000	—	mg/kg
CW43-000	2087145.35	749981.91	Iron	0.5	1	18600	1.5	18037	307000	—	mg/kg
CW43-001	2087140.61	749975.88	Iron	0.5	2.5	20300	1.4	18037	307000	—	mg/kg
CV43-001	2087135.47	749967.93	Lithium	0.5	1	12	0.17	11.55	20400	—	mg/kg
CW43-000	2087145.35	749981.91	Lithium	0.5	2.5	13.4	0.18	11.55	20400	—	mg/kg
CW43-001	2087140.61	749975.88	Lithium	0.5	2.5	12.5	0.17	11.55	20400	—	mg/kg
CW43-002	2087147.12	749969.73	Lithium	0.5	2.5	12	0.17	11.55	20400	—	mg/kg
CW40-004	2087204.29	749479.75	Lithium	0.5	2.5	11.9	0.18	11.55	20400	—	mg/kg
CV43-000	2087134.6	749980.95	Manganese	0.5	1	436	0.033	365.08	3480	—	mg/kg
CW43-001	2087140.61	749975.88	Manganese	0.5	2.5	392	0.033	365.08	3480	—	mg/kg
CW40-004	2087204.29	749479.75	Mercury	0.5	2.5	0.16	0.0013	0.13	25200	—	mg/kg
CW41-001	2087163.44	749648.07	Mercury	0.5	2.5	0.15	0.0012	0.13	25200	—	mg/kg
DD39-000	2088620.52	749244.49	Methylene Chloride	0.5	2.5	2.1	0.97	NA	2530000	39500	ug/kg
DF40-000	2089088.49	749473.32	Methylene Chloride	0.5	2.5	1.8	0.87	NA	2530000	39500	ug/kg
DG41-000	2089312.89	749743.2	Methylene Chloride	0.5	2.5	2	0.84	NA	2530000	39500	ug/kg
DH43-000	2089365.3	749991.19	Methylene Chloride	0.5	2.5	2	0.81	NA	2530000	39500	ug/kg
DC39-000	2088448.57	749186.75	Methylene Chloride	0.5	2.5	1.8	0.86	NA	2530000	39500	ug/kg
STEP OUT 1 - B	2087034.21	749626.36	Methylene Chloride	0.5	2.5	1.7	0.83	NA	2530000	39500	ug/kg
STEP OUT 1 - C	2087034.21	749626.36	Methylene Chloride	0.5	2.5	1.6	0.88	NA	2530000	39500	ug/kg
STEP OUT 1 - D	2087034.21	749626.36	Methylene Chloride	0.5	2.5	1.6	0.87	NA	2530000	39500	ug/kg
STEP OUT 1 - E	2087034.21	749626.36	Methylene Chloride	0.5	2.5	1.9	0.94	NA	2530000	39500	ug/kg
STEP OUT 2 - B	2087079.97	749636.97	Methylene Chloride	0.5	2.5	1.8	0.84	NA	2530000	39500	ug/kg
STEP OUT 2 - C	2087079.97	749636.97	Methylene Chloride	1	3	1.7	0.83	NA	2530000	39500	ug/kg
DB43-001	2088226.91	749963.51	Methylene Chloride	1	3	3.7	0.87	NA	2530000	39500	ug/kg
DD40-000	2088585.28	749572.23	Methylene Chloride	1	3	2.5	0.85	NA	2530000	39500	ug/kg
DB41-000	2088280.51	749574.27	Methylene Chloride	1	3	2.2	0.88	NA	2530000	39500	ug/kg
DB43-000	2088219.15	750163.83	Methylene Chloride	1	3	3.7	0.86	NA	2530000	39500	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DC40-000	2088396.73	749412.32	Methylene Chloride	1	3	3.1	0.89	NA	2530000	39500	ug/kg
DC41-000	2088426.17	749715.79	Methylene Chloride	1	3	3.6	0.91	NA	2530000	39500	ug/kg
DC42-000	2088478.64	749918.1	Methylene Chloride	1	3	3.8	0.89	NA	2530000	39500	ug/kg
DD42-000	2088664.41	749777.16	Methylene Chloride	1	3	3.1	0.83	NA	2530000	39500	ug/kg
DD43-001	2088550.71	750003.07	Methylene Chloride	1	3	3.4	0.98	NA	2530000	39500	ug/kg
DE40-000	2088809.06	749552.11	Methylene Chloride	1	3	4.2	0.85	NA	2530000	39500	ug/kg
DG41-001	2089248.07	749648.4	Methylene Chloride	1	3	3.1	0.96	NA	2530000	39500	ug/kg
CV41-003	2087050.64	749597.05	Methylene Chloride	1	3	3.7	0.86	NA	2530000	39500	ug/kg
CV41-005	2087086.22	749593.02	Methylene Chloride	1	3	4.6	0.96	NA	2530000	39500	ug/kg
CV41-001	2086994.24	749570.86	Methylene Chloride	1	3	1.1	0.81	NA	2530000	39500	ug/kg
CV41-003	2087050.64	749597.05	Methylene Chloride	1	3	3.9	0.89	NA	2530000	39500	ug/kg
CV41-005	2087086.22	749593.02	Methylene Chloride	1	3	4.9	0.98	NA	2530000	39500	ug/kg
CV41-000	2086966.71	749584.29	Methylene Chloride	1	3	1.4	0.89	NA	2530000	39500	ug/kg
CV41-001	2086994.24	749570.86	Methylene Chloride	1	3	0.87	0.83	NA	2530000	39500	ug/kg
CV41-003	2087050.64	749597.05	Methylene Chloride	1	3	3.6	0.82	NA	2530000	39500	ug/kg
CV41-005	2087086.22	749593.02	Methylene Chloride	1	3	4.3	0.98	NA	2530000	39500	ug/kg
CV41-000	2086966.71	749584.29	Methylene Chloride	1	3	1.4	0.86	NA	2530000	39500	ug/kg
CV41-003	2087050.64	749597.05	Methylene Chloride	1	3	3.2	0.83	NA	2530000	39500	ug/kg
CV41-004	2087073.47	749619.88	Methylene Chloride	1	3	1.1	0.95	NA	2530000	39500	ug/kg
CV41-005	2087086.22	749593.02	Methylene Chloride	1	3	3.7	0.85	NA	2530000	39500	ug/kg
CV41-000	2086966.71	749584.29	Methylene Chloride	1	3	1.3	0.85	NA	2530000	39500	ug/kg
CV41-001	2086994.24	749570.86	Methylene Chloride	1	3	0.99	0.82	NA	2530000	39500	ug/kg
CV41-003	2087050.64	749597.05	Methylene Chloride	1	3	4.5	0.83	NA	2530000	39500	ug/kg
CV41-005	2087086.22	749593.02	Methylene Chloride	1	3	3.5	0.88	NA	2530000	39500	ug/kg
CW40-004	2087204.29	749479.75	Methylene Chloride	1	3	0.93	0.86	NA	2530000	39500	ug/kg
CW41-000	2087142.62	749618.53	Methylene Chloride	1	3	0.99	0.96	NA	2530000	39500	ug/kg
CW41-000	2087142.62	749618.53	Methylene Chloride	2.5	4.5	0.99	0.89	NA	2530000	39500	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW41-002	2087178.88	749622.56	Methylene Chloride	2.5	4.5	1.6	0.89	NA	2530000	39500	ug/kg
CW41-000	2087142.62	749618.53	Methylene Chloride	2.5	4.5	0.93	0.82	NA	2530000	39500	ug/kg
CW41-002	2087178.88	749622.56	Methylene Chloride	2.5	4.5	1.5	0.86	NA	2530000	39500	ug/kg
CW43-000	2087145.35	749981.91	Methylene Chloride	2.5	4.5	0.94	0.82	NA	2530000	39500	ug/kg
BW52-000	2082012.8	751772.3	Methylene Chloride	2.5	4.5	1.5	0.8	NA	2530000	39500	ug/kg
BW52-000	2082012.8	751772.3	Methylene Chloride	2.5	4.5	1.6	0.81	NA	2530000	39500	ug/kg
CW40-001	2087145.33	749448.88	Methylene Chloride	2.5	4.5	0.95	0.9	NA	2530000	39500	ug/kg
CW40-002	2087173.08	749468.3	Methylene Chloride	2.5	4.5	1.1	0.97	NA	2530000	39500	ug/kg
CW40-001	2087145.33	749448.88	Methylene Chloride	2.5	4.5	0.9	0.83	NA	2530000	39500	ug/kg
CV41-006	2087106.37	749621.22	Methylene Chloride	2.5	4.5	2.2	0.87	NA	2530000	39500	ug/kg
CV41-006	2087106.37	749621.22	Methylene Chloride	2.5	4.5	0.84	0.83	NA	2530000	39500	ug/kg
CV41-006	2087106.37	749621.22	Methylene Chloride	2.5	4.5	1	0.84	NA	2530000	39500	ug/kg
CW41-001	2087163.44	749648.07	Methylene Chloride	2.5	4.5	1.1	0.87	NA	2530000	39500	ug/kg
CW41-001	2087163.44	749648.07	Methylene Chloride	2.5	4.5	1.1	0.86	NA	2530000	39500	ug/kg
CW41-001	2087163.44	749648.07	Methylene Chloride	2.5	4.5	1.2	0.83	NA	2530000	39500	ug/kg
CW41-001	2087178.88	749648.07	Methylene Chloride	2.5	4.5	1.2	0.9	NA	2530000	39500	ug/kg
CW41-001	2087163.44	749648.07	Methylene Chloride	2.5	4.5	1.4	0.85	NA	2530000	39500	ug/kg
STEP OUT 3 - B	2087116.33	749635.15	Methylene Chloride	2.5	4.5	1.3	0.86	NA	2530000	39500	ug/kg
STEP OUT 3 - C	2087116.33	749635.15	Methylene Chloride	2.5	4.5	1.7	0.85	NA	2530000	39500	ug/kg
STEP OUT 3 - D	2087116.33	749635.15	Methylene Chloride	2.5	4.5	2	0.88	NA	2530000	39500	ug/kg
STEP OUT 3 - E	2087116.33	749635.15	Methylene Chloride	2.5	4.5	1.5	0.86	NA	2530000	39500	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Methylene Chloride	2.5	4.5	1.5	0.89	NA	2530000	39500	ug/kg
STEP OUT 4 - C	2087113.72	749616.62	Methylene Chloride	2.5	4.5	1.7	0.93	NA	2530000	39500	ug/kg
STEP OUT 4 - D	2087113.72	749616.62	Methylene Chloride	2.5	4.5	1.7	0.92	NA	2530000	39500	ug/kg
STEP OUT 4 - E	2087113.72	749616.62	Methylene Chloride	2.5	4.5	1.7	0.88	NA	2530000	39500	ug/kg
STEP OUT 4 - F	2087113.72	749616.62	Methylene Chloride	2.5	4.5	1.5	0.87	NA	2530000	39500	ug/kg
CW41-002	2087178.88	749622.56	Molybdenum	0.5	1	0.53	0.13	NA	5110	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV43-000	2087134.6	749980.95	Molybdenum	0.5	1	0.26	0.14	NA	5110	—	mg/kg
CW43-000	2087145.35	749981.91	Molybdenum	0.5	1	0.16	0.14	NA	5110	—	mg/kg
CW43-001	2087140.61	749975.88	Molybdenum	0.5	2.5	0.4	0.13	NA	5110	—	mg/kg
CW40-002	2087173.08	749468.3	Molybdenum	0.5	2.5	0.22	0.14	NA	5110	—	mg/kg
DB44-000	2088317.84	750231.3	Molybdenum	2.5	4.5	0.31	0.14	NA	5110	—	mg/kg
DC39-000	2088448.57	749186.75	Molybdenum	2.5	4.5	0.36	0.14	NA	5110	—	mg/kg
CW40-004	2087204.29	749479.75	Nickel	0.5	2.5	15.1	0.69	14.91	20400	—	mg/kg
CW41-001	2087163.44	749648.07	Nickel	0.5	2.5	15.7	0.65	14.91	20400	—	mg/kg
CV43-000	2087134.6	749980.95	Nickel	0.5	1	28.3	0.66	14.91	20400	—	mg/kg
CW43-000	2087145.35	749981.91	Nickel	0.5	1	20.5	0.66	14.91	20400	—	mg/kg
CW43-001	2087140.61	749975.88	Nickel	0.5	2.5	21.7	0.64	14.91	20400	—	mg/kg
CW40-003	2087207.75	749457.21	Nickel	0.5	2.5	15.6	0.65	14.91	20400	—	mg/kg
CW40-004	2087204.29	749479.75	Nickel	0.5	2.5	17.3	0.68	14.91	20400	—	mg/kg
CV40-002	2087119.05	749442.72	N-Nitroso-Di-N-Propylamine	0.5	2.5	400	90	NA	5470	—	ug/kg
CW40-000	2087145.33	749448.88	Plutonium-239	0.5	1	4.13	4	0.05	50	3800	pCi/g
CW40-000	2087145.33	749448.88	Plutonium-240	0.5	1	4.13	4	0.05	116	3800	pCi/g
CW40-004	2087204.29	749479.75	Pyrene	0.5	2.5	48	44	NA	22100000	—	ug/kg
CW41-001	2087163.44	749648.07	Pyrene	0.5	0.667	79	41	NA	22100000	—	ug/kg
CV40-002	2087119.05	749442.72	Pyrene	0.5	2.5	150	41	NA	22100000	—	ug/kg
CV40-002	2087119.05	749442.72	Pyrene	0.5	2.5	46	42	NA	22100000	—	ug/kg
CW40-001	2087145.33	749448.88	Pyrene	0.5	1.25	65	44	NA	22100000	—	ug/kg
STEP OUT 3 - A	2087116.33	749635.15	Pyrene	0.5	2.5	240	62	NA	22100000	—	ug/kg
STEP OUT 4 - A	2087113.72	749616.62	Pyrene	0.5	1	230	61	NA	22100000	—	ug/kg
STEP OUT 4 - B	2087113.72	749616.62	Pyrene	0.5	1	640	62	NA	22100000	—	ug/kg
DD40-000	2088585.28	749572.23	Selenium	2.5	4.5	1.4	0.44	1.22	5110	—	mg/kg
DD42-000	2088664.41	749777.16	Selenium	3	5	1.9	0.43	1.22	5110	—	mg/kg
DE40-000	2088809.06	749552.11	Selenium	3	5	1.6	0.42	1.22	5110	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DG41-A01	2089248.07	749648.4	Selenium	3	5	1.4	0.48	1.22	5110	—	mg/kg
CW40-004	2087204.29	749479.75	Silver	0.5	2.5	42.8	0.059	NA	5110	—	mg/kg
CV40-002	2087119.05	749442.72	Silver	0.5	2.5	0.79	0.055	NA	5110	—	mg/kg
CW40-001	2087145.33	749448.88	Silver	0.5	1	0.49	0.059	NA	5110	—	mg/kg
CW40-002	2087173.08	749468.3	Silver	0.5	1	1.5	0.058	NA	5110	—	mg/kg
CW40-003	2087207.75	749457.21	Silver	0.5	2.5	7.1	0.056	NA	5110	—	mg/kg
CW40-004	2087204.29	749479.75	Silver	0.5	2.5	19.9	0.058	NA	5110	—	mg/kg
CW40-004	2087204.29	749479.75	Strontium	0.5	2.5	165	0.0066	48.94	613000	—	mg/kg
CW41-001	2087163.44	749648.07	Strontium	0.5	2.5	69.6	0.0062	48.94	613000	—	mg/kg
CV43-000	2087134.6	749980.95	Strontium	0.5	1	84.2	0.0063	48.94	613000	—	mg/kg
CW43-000	2087145.35	749981.91	Strontium	0.5	1	53.1	0.0063	48.94	613000	—	mg/kg
CW43-001	2087140.61	749975.88	Strontium	0.5	2.5	56.1	0.0061	48.94	613000	—	mg/kg
CV43-000	2087134.6	749980.95	Tetrachloroethene	0.5	2.5	1.4	1.2	NA	615000	37500	ug/kg
CV43-001	2087135.47	749967.93	Tetrachloroethene	0.5	2.5	3.3	1	NA	615000	37500	ug/kg
CW41-000	2087142.62	749618.53	Tetrachloroethene	0.5	2.5	2.6	1.2	NA	615000	37500	ug/kg
CW41-000	2087142.62	749618.53	Tetrachloroethene	0.5	2.5	1.9	1.2	NA	615000	37500	ug/kg
CW43-001	2087140.61	749975.88	Tetrachloroethene	0.5	2.5	2	1.2	NA	615000	37500	ug/kg
BW52-000	2082012.8	751772.3	Tetrachloroethene	0.5	2.5	10	0.99	NA	615000	37500	ug/kg
BW52-000	2082012.8	751772.3	Tetrachloroethene	0.5	2.5	6.4	1.1	NA	615000	37500	ug/kg
BW52-000	2082012.8	751772.3	Tetrachloroethene	0.5	2.5	140	1.2	NA	615000	37500	ug/kg
CV41-006	2087106.37	749621.22	Tetrachloroethene	0.5	2.5	5600	34	NA	615000	37500	ug/kg
CV41-006	2087106.37	749621.22	Tetrachloroethene	0.5	2.5	140	1.1	NA	615000	37500	ug/kg
CV41-006	2087106.37	749621.22	Tetrachloroethene	0.5	2.5	6100	34	NA	615000	37500	ug/kg
CW41-001	2087163.44	749648.07	Tetrachloroethene	0.5	2.5	17	1.1	NA	615000	37500	ug/kg
STEP OUT 3 - B	2087116.33	749635.15	Tetrachloroethene	0.5	2.5	1.4	1.1	NA	615000	37500	ug/kg
STEP OUT 3 - C	2087116.33	749635.15	Tetrachloroethene	0.5	2.5	75	1.1	NA	615000	37500	ug/kg
STEP OUT 3 - D	2087116.33	749635.15	Tetrachloroethene	0.5	2.5	210	1.1	NA	615000	37500	ug/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
STEP OUT 4 - C	2087113.72	749616.62	Tetrachloroethene	0.5	2.5	1.7	1.2	NA	615000	37500	ug/kg
DB44-000	2088317.84	750231.3	Tin	2.5	4.5	2	0.3	NA	613000	—	mg/kg
DC45-000	2088455.44	750459.28	Tin	2.5	4.5	2.2	0.3	NA	613000	—	mg/kg
DC43-000	2088442.46	750152.87	Tin	2.5	4.5	2.2	0.3	NA	613000	—	mg/kg
DD44-000	2088472.83	750275.17	Tin	2.5	4.5	1.9	0.3	NA	613000	—	mg/kg
DD39-000	2088620.52	749244.49	Tin	2.5	4.5	1.4	0.3	NA	613000	—	mg/kg
DF40-000	2089088.49	749473.32	Tin	2.5	4.5	1.4	0.3	NA	613000	—	mg/kg
DG41-000	2089312.89	749743.2	Tin	2.5	4.5	2.2	0.3	NA	613000	—	mg/kg
DH43-000	2089365.3	749991.19	Tin	2.5	4.5	1.8	0.29	NA	613000	—	mg/kg
DC39-000	2088448.57	749186.75	Tin	2.5	4.5	2.3	0.29	NA	613000	—	mg/kg
DD43-000	2088554.95	750249.97	Tin	2.5	4.5	2.1	0.3	NA	613000	—	mg/kg
DE42-000	2088837.41	749946.42	Tin	2.5	4.5	1.8	0.3	NA	613000	—	mg/kg
DF42-000	2089129.65	749906.57	Tin	2.5	4.5	2	0.29	NA	613000	—	mg/kg
DB39-001	2088323.82	749287.21	Tin	2.5	4.5	2.4	0.29	NA	613000	—	mg/kg
DB41-000	2088280.51	749574.27	Tin	2.5	4.5	1.9	0.29	NA	613000	—	mg/kg
DB43-000	2088219.15	750163.83	Tin	2.5	4.5	1.7	0.3	NA	613000	—	mg/kg
DB43-001	2088226.91	749963.51	Tin	2.5	4.5	2.2	0.3	NA	613000	—	mg/kg
DC40-000	2088396.73	749412.32	Tin	2.5	4.5	1.7	0.31	NA	613000	—	mg/kg
DC41-000	2088426.17	749715.79	Tin	2.5	4.5	1.8	0.31	NA	613000	—	mg/kg
DC42-000	2088478.64	749918.1	Tin	2.5	4.5	2.4	0.3	NA	613000	—	mg/kg
DD40-000	2088585.28	749572.23	Tin	2.5	4.5	2.7	0.31	NA	613000	—	mg/kg
DD42-000	2088664.41	749777.16	Tin	2.5	4.5	1.6	0.3	NA	613000	—	mg/kg
DD43-001	2088550.71	750003.07	Tin	3	5	1.5	0.31	NA	613000	—	mg/kg
DE40-000	2088809.06	749552.11	Tin	3	5	2.7	0.29	NA	613000	—	mg/kg
DF41-000	2089000.19	749737.05	Tin	3	5	2.3	0.3	NA	613000	—	mg/kg
DG41-A01	2089248.07	749648.4	Tin	3	5	1.8	0.34	NA	613000	—	mg/kg
CV41-001	2086994.24	749570.86	Tin	3	5	1.1	0.43	NA	613000	—	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-004	2087073.47	749619.88	Tin	3	5	1.3	0.42	NA	613000	—	mg/kg
CV41-006	2087106.37	749621.22	Tin	3	5	3.1	0.39	NA	613000	—	mg/kg
CW40-004	2087204.29	749479.75	Tin	3	5	2	0.42	NA	613000	—	mg/kg
CW41-000	2087142.62	749618.53	Tin	3	5	0.97	0.39	NA	613000	—	mg/kg
CW41-001	2087163.44	749648.07	Tin	3	5	3.1	0.39	NA	613000	—	mg/kg
CV43-000	2087134.6	749980.95	Tin	3	5	3.2	0.4	NA	613000	—	mg/kg
CV43-001	2087135.47	749967.93	Tin	3	5	2.9	0.39	NA	613000	—	mg/kg
CW43-000	2087145.35	749981.91	Tin	3	5	3	0.4	NA	613000	—	mg/kg
CW43-001	2087140.61	749975.88	Tin	3	5	3	0.39	NA	613000	—	mg/kg
CW43-002	2087147.12	749969.73	Tin	3	5	2.7	0.38	NA	613000	—	mg/kg
CV40-002	2087119.05	749442.72	Tin	3	5	2.4	0.39	NA	613000	—	mg/kg
CW40-001	2087145.33	749448.88	Tin	3	5	2.8	0.41	NA	613000	—	mg/kg
CW40-002	2087173.08	749468.3	Tin	3	5	2.7	0.41	NA	613000	—	mg/kg
CW40-003	2087207.75	749457.21	Tin	3	5	2.7	0.39	NA	613000	—	mg/kg
CW40-004	2087204.29	749479.75	Tin	3	5	3.3	0.41	NA	613000	—	mg/kg
BW52-000	2082012.8	751772.3	Trichloroethene	0.5	2.5	1.6	0.89	NA	19600	—	ug/kg
BW52-000	2082012.8	751772.3	Trichloroethene	0.5	2.5	7.8	0.93	NA	19600	509000	ug/kg
BW52-000	2082012.8	751772.3	Trichloroethene	0.5	2.5	1.1	1	NA	19600	509000	ug/kg
CV41-006	2087106.37	749621.22	Trichloroethene	0.5	2.5	100	34	NA	19600	509000	ug/kg
CV41-006	2087106.37	749621.22	Trichloroethene	0.5	2.5	3.9	0.95	NA	19600	509000	ug/kg
CV41-006	2087106.37	749621.22	Trichloroethene	0.5	0.67	89	34	NA	19600	509000	ug/kg
STEP OUT 3 - C	2087116.33	749635.15	Trichloroethene	0.5	2.5	2.2	0.92	NA	19600	509000	ug/kg
STEP OUT 3 - D	2087116.33	749635.15	Trichloroethene	0.5	2.5	12	0.96	NA	19600	509000	ug/kg
CV41-004	2087073.47	749619.88	Uranium	0.5	1	3.3	1.5	NA	2750	67.8	mg/kg
CV41-005	2087086.22	749593.02	Uranium	0.5	1	5.4	1.5	NA	2750	67.8	mg/kg
CW40-004	2087204.29	749479.75	Uranium	0.5	2.5	8	1.5	NA	2750	67.8	mg/kg
CW40-004	2087204.29	749479.75	Uranium	0.5	2.5	3	1.5	NA	2750	67.8	mg/kg

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW40-004	2087204.29	749479.75	Uranium	0.5	2.5	2.7	1.6	NA	2750	67.8	mg/kg
CW41-000	2087142.62	749618.53	Uranium	0.5	1	5.6	1.7	NA	2750	67.8	mg/kg
CW41-002	2087178.88	749622.56	Uranium	0.5	2.5	1.9	1.5	NA	2750	67.8	mg/kg
CW41-000	2087142.62	749618.53	Uranium	0.5	1	2.2	1.6	NA	2750	67.8	mg/kg
CW41-002	2087178.88	749622.56	Uranium	0.5	1	2.8	1.7	NA	2750	67.8	mg/kg
CW41-000	2087142.62	749618.53	Uranium	0.5	1	3.9	1.5	NA	2750	67.8	mg/kg
CW41-002	2087178.88	749622.56	Uranium	0.5	1.25	3.9	1.4	NA	2750	67.8	mg/kg
CW41-000	2087142.62	749618.53	Uranium	0.5	2.5	4.1	1.5	NA	2750	67.8	mg/kg
CW41-002	2087178.88	749622.56	Uranium	0.5	2.5	3	1.5	NA	2750	67.8	mg/kg
CW41-002	2087178.88	749622.56	Uranium	0.5	2.5	1.6	1.5	NA	2750	67.8	mg/kg
CW41-000	2087142.62	749618.53	Uranium-234	3	5	1.99	8	1.49	300	1800	pCi/g
CW41-000	2087142.62	749618.53	Uranium-234	3	5	3.05	8	1.49	300	1800	pCi/g
CW41-000	2087142.62	749618.53	Uranium-234	3	5	1.75	8	1.49	300	1800	pCi/g
CW41-000	2087142.62	749618.53	Uranium-234	3	5	1.63	8	1.49	300	1800	pCi/g
CV41-004	2087073.47	749619.88	Uranium-234	3	5	2.04	8	2	300	1800	pCi/g
CV41-004	2087073.47	749619.88	Uranium-234	3	5	2.31	8	1.49	300	1800	pCi/g
CW41-001	2087163.44	749648.07	Uranium-234	4.5	6.5	2.69	8	1.49	300	1800	pCi/g
CW41-001	2087163.44	749648.07	Uranium-234	4.5	6.5	4.01	8	1.49	300	1800	pCi/g
CV41-006	2087106.37	749621.22	Uranium-234	4.5	6.5	2.31	8	1.49	300	1800	pCi/g
CV41-006	2087106.37	749621.22	Uranium-234	4.5	6.5	2.79	8	1.49	300	1800	pCi/g
CV41-006	2087106.37	749621.22	Uranium-234	4.5	6.5	2.14	8	1.49	300	1800	pCi/g
CV41-006	2087106.37	749621.22	Uranium-234	4.5	6.5	4.2	8	1.49	300	1800	pCi/g
CW41-000	2087142.62	749618.53	Uranium-234	4.5	6.5	2.15	8	1.49	300	1800	pCi/g
CV41-004	2087073.47	749619.88	Uranium-234	4.5	6.5	2.03	8	1.49	300	1800	pCi/g
CV41-004	2087073.47	749619.88	Uranium-234	4.5	6.5	1.68	8	1.49	300	1800	pCi/g
CV41-004	2087073.47	749619.88	Uranium-234	4.5	6.5	2.94	8	1.49	300	1800	pCi/g
CV41-001	2086994.24	749570.86	Uranium-234	4.5	6.5	3.36	8	1.49	300	1800	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-001	2086994.24	749570.86	Uranium-234	4.5	6.5	2.17	8	1.49	300	1800	pCi/g
CV41-001	2086994.24	749570.86	Uranium-234	4.5	6.5	3.61	8	1.49	300	1800	pCi/g
CV41-001	2086994.24	749570.86	Uranium-234	4.5	6.5	2.87	8	1.49	300	1800	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	4.5	6.5	2.2	8	2	300	1800	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	4.5	6.5	2.63	8	1.49	300	1800	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	4.5	6.5	2.22	8	1.49	300	1800	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	4.5	6.5	2.22	8	1.49	300	1800	pCi/g
CW41-002	2087178.88	749622.56	Uranium-234	4.5	6.5	4.61	8	2	300	1800	pCi/g
CW41-002	2087178.88	749622.56	Uranium-234	4.5	6.5	2.6	8	1.49	300	1800	pCi/g
CW41-002	2087178.88	749622.56	Uranium-234	4.5	6.5	3.95	8	1.49	300	1800	pCi/g
CW41-002	2087178.88	749622.56	Uranium-234	4.5	6.5	3	8	1.49	300	1800	pCi/g
CW41-002	2087178.88	749622.56	Uranium-234	4.5	6.5	6.24	8	1.49	300	1800	pCi/g
CW41-002	2087178.88	749622.56	Uranium-234	4.5	6.5	4.29	8	1.49	300	1800	pCi/g
CW41-002	2087178.88	749622.56	Uranium-234	5	7	2.54	8	1.49	300	1800	pCi/g
CV41-000	2086966.71	749584.29	Uranium-234	5	7	5.86	8	1.49	300	1800	pCi/g
CV41-000	2086966.71	749584.29	Uranium-234	5	7	3.95	8	1.49	300	1800	pCi/g
CV41-000	2086966.71	749584.29	Uranium-234	5	7	5.11	8	1.49	300	1800	pCi/g
CV41-000	2086966.71	749584.29	Uranium-234	5	7	3.24	8	1.49	300	1800	pCi/g
CV41-000	2086966.71	749584.29	Uranium-234	5	7	4.11	8	1.49	300	1800	pCi/g
CV41-000	2086966.71	749584.29	Uranium-234	5	7	2.65	8	1.49	300	1800	pCi/g
CV41-002	2087015.06	749599.73	Uranium-234	5	7	7.03	8	1.49	300	1800	pCi/g
CV41-002	2087015.06	749599.73	Uranium-234	5	7	3.03	8	1.49	300	1800	pCi/g
CV41-002	2087015.06	749599.73	Uranium-234	5	7	2.38	8	1.49	300	1800	pCi/g
CV41-002	2087015.06	749599.73	Uranium-234	5	7	8.53	8	1.49	300	1800	pCi/g
CV41-002	2087015.06	749599.73	Uranium-234	5	7	2.56	8	1.49	300	1800	pCi/g
CV40-000	2087080.79	749457.38	Uranium-234	5	7	1.5	8	1.49	300	1800	pCi/g
CV41-002	2087015.06	749599.73	Uranium-234	5	7	2.03	8	1.49	300	1800	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-002	2087015.06	749599.73	Uranium-234	5	7	2.03	8	1.49	351	1800	pCi/g
CV41-003	2087050.64	749597.05	Uranium-234	5	7	2.01	8	1.49	300	1800	pCi/g
CV41-003	2087050.64	749597.05	Uranium-234	5	7	3.31	8	1.49	300	1800	pCi/g
CV41-003	2087050.64	749597.05	Uranium-234	5	7	2.48	8	1.49	300	1800	pCi/g
CV41-003	2087050.64	749597.05	Uranium-234	5	7	3.32	8	1.49	300	1800	pCi/g
CV41-003	2087050.64	749597.05	Uranium-234	6.5	8.5	3.76	8	1.49	300	1800	pCi/g
CV41-003	2087050.64	749597.05	Uranium-234	6.5	8.5	3.45	8	1.49	300	1800	pCi/g
CV41-005	2087086.22	749593.02	Uranium-234	6.5	8.5	1.55	8	1.49	300	1800	pCi/g
CV40-001	2087106.49	749480.09	Uranium-234	6.5	8.5	3.56	8	1.49	300	1800	pCi/g
CV40-001	2087106.49	749480.09	Uranium-234	6.5	8.5	2.77	8	1.49	300	1800	pCi/g
CV40-001	2087106.49	749480.09	Uranium-234	6.5	8.5	5.71	8	1.49	300	1800	pCi/g
CV40-001	2087106.49	749480.09	Uranium-234	6.5	8.5	3.83	8	1.49	300	1800	pCi/g
CV40-000	2087080.79	749457.38	Uranium-234	6.5	8.5	3.75	8	1.49	300	1800	pCi/g
CV40-000	2087080.79	749457.38	Uranium-234	6.5	8.5	3.17	8	1.49	300	1800	pCi/g
CV40-000	2087080.79	749457.38	Uranium-234	6.5	8.5	5.38	8	1.49	300	1800	pCi/g
CV40-000	2087080.79	749457.38	Uranium-234	6.5	8.5	4.38	8	1.49	300	1800	pCi/g
CV40-000	2087080.79	749457.38	Uranium-234	6.5	8.5	2.75	8	1.49	300	1800	pCi/g
CW40-002	2087173.08	749468.3	Uranium-234	6.5	8.5	6.97	8	2	300	1800	pCi/g
CW40-002	2087173.08	749468.3	Uranium-234	6.5	8.5	3.49	8	1.49	300	1800	pCi/g
CW40-002	2087173.08	749468.3	Uranium-234	6.5	8.5	4.33	8	1.49	300	1800	pCi/g
CW40-002	2087173.08	749468.3	Uranium-234	6.5	8.5	4.64	8	1.49	300	1800	pCi/g
CW40-002	2087173.08	749468.3	Uranium-234	6.5	8.5	3.19	8	1.49	300	1800	pCi/g
CW40-002	2087173.08	749468.3	Uranium-234	6.5	8.5	3.78	8	1.49	300	1800	pCi/g
CW40-001	2087145.33	749448.88	Uranium-234	7	9	4.7	8	2	300	1800	pCi/g
CW40-001	2087145.33	749448.88	Uranium-234	7	9	4.37	8	1.49	300	1800	pCi/g
CW40-001	2087145.33	749448.88	Uranium-234	7	9	4.49	8	1.49	300	1800	pCi/g
CW40-001	2087145.33	749448.88	Uranium-234	7	9	7.59	8	1.49	300	1800	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW40-001	2087145.33	749448.88	Uranium-234	7	9	5.13	8	1.49	300	1800	pCi/g
CW40-001	2087145.33	749448.88	Uranium-234	7	9	4.31	8	1.49	300	1800	pCi/g
CV40-002	2087119.05	749442.72	Uranium-234	7	9	4.68	8	1.49	300	1800	pCi/g
CV40-002	2087119.05	749442.72	Uranium-234	7	9	3.89	8	1.49	300	1800	pCi/g
CV40-002	2087119.05	749442.72	Uranium-234	7	9	4.19	8	1.49	300	1800	pCi/g
CV40-002	2087119.05	749442.72	Uranium-234	7	9	2.21	8	1.49	300	1800	pCi/g
CV40-002	2087119.05	749442.72	Uranium-234	7	9	7.18	8	1.49	300	1800	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	7	9	4.24	8	2	300	1800	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	8.5	10.5	2.6	8	1.49	300	1800	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	8.5	10	4.1	8	1.49	300	1800	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	8.5	10.5	2.3	8	1.49	300	1800	pCi/g
CW40-004	2087204.29	749479.75	Uranium-234	8.5	10.5	3.04	8	1.49	300	1800	pCi/g
CW41-001	2087163.44	749648.07	Uranium-234	8.5	10.5	1.6	8	1.49	300	1800	pCi/g
DB44-000	2088317.84	750231.3	Uranium-234	8.5	10.5	2.7	8	2	300	1800	pCi/g
DC45-000	2088455.44	750459.28	Uranium-234	8.5	10.5	2.84	8	2	300	1800	pCi/g
DF42-000	2089129.65	749906.57	Uranium-234	9	11	2.26	8	2	300	1800	pCi/g
DD42-000	2088664.41	749777.16	Uranium-234	9	11	2.86	8	2	300	1800	pCi/g
DB43-000	2088219.15	750163.83	Uranium-234	9	11	2.76	8	2	300	1800	pCi/g
DF41-000	2089000.19	749737.05	Uranium-234	9	11	2.16	8	2	300	1800	pCi/g
DD43-001	2088550.71	750003.07	Uranium-234	10.5	12.5	2.72	8	2	300	1800	pCi/g
DC42-000	2088478.64	749918.1	Uranium-234	12.5	14.5	2.61	8	2	300	1800	pCi/g
DB41-000	2088280.51	749574.27	Uranium-234	24.6	25.6	2.65	8	2	300	1800	pCi/g
CW41-000	2087142.62	749618.53	Uranium-235	3	5	0.131	1	0.12	8	1900	pCi/g
CW41-000	2087142.62	749618.53	Uranium-235	3	5	0.154	1	0.12	8	1900	pCi/g
CW41-000	2087142.62	749618.53	Uranium-235	3	5	0.125	1	0.12	8	1900	pCi/g
CV41-004	2087073.47	749619.88	Uranium-235	3	5	0.203	1	0.12	8	1900	pCi/g
CW41-001	2087163.44	749648.07	Uranium-235	4.5	6.5	0.232	1	0.12	8	1900	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW41-001	2087163.44	749648.07	Uranium-235	4.5	6.5	0.146	1	0.12	8	1900	pCi/g
CV41-006	2087106.37	749621.22	Uranium-235	4.5	6.5	0.231	1	0.12	8	1900	pCi/g
CV41-006	2087106.37	749621.22	Uranium-235	4.5	6.5	0.324	1	0.12	8	1900	pCi/g
CV41-006	2087106.37	749621.22	Uranium-235	4.5	6.5	0.279	1	0.12	8	1900	pCi/g
CV41-006	2087106.37	749621.22	Uranium-235	4.5	6.5	0.176	1	0.12	8	1900	pCi/g
CV41-006	2087106.37	749621.22	Uranium-235	4.5	6.5	0.191	1	0.12	8	1900	pCi/g
CW41-000	2087142.62	749618.53	Uranium-235	4.5	6.5	0.103	1	0.09	8	1900	pCi/g
CW41-000	2087142.62	749618.53	Uranium-235	4.5	6.5	0.124	1	0.12	8	1900	pCi/g
CV41-004	2087073.47	749619.88	Uranium-235	4.5	6.5	0.435	1	0.12	8	1900	pCi/g
CV41-004	2087073.47	749619.88	Uranium-235	4.5	6.5	0.285	1	0.12	8	1900	pCi/g
CV41-004	2087073.47	749619.88	Uranium-235	4.5	6.5	0.257	1	0.12	8	1900	pCi/g
CV41-004	2087073.47	749619.88	Uranium-235	4.5	6.5	0.236	1	0.12	8	1900	pCi/g
CV41-001	2086994.24	749570.86	Uranium-235	4.5	6.5	0.134	1	0.09	8	1900	pCi/g
CV41-001	2086994.24	749570.86	Uranium-235	4.5	6.5	0.168	1	0.12	8	1900	pCi/g
CV41-001	2086994.24	749570.86	Uranium-235	4.5	6.5	0.184	1	0.12	8	1900	pCi/g
CW40-004	2087204.29	749479.75	Uranium-235	4.5	6.5	0.151	1	0.09	8	1900	pCi/g
CW40-004	2087204.29	749479.75	Uranium-235	4.5	6.5	0.145	1	0.12	8	1900	pCi/g
CW40-004	2087204.29	749479.75	Uranium-235	4.5	6.5	0.132	1	0.12	8	1900	pCi/g
CW41-002	2087178.88	749622.56	Uranium-235	4.5	6.5	0.146	1	0.09	8	1900	pCi/g
CW41-002	2087178.88	749622.56	Uranium-235	4.5	6.5	0.246	1	0.12	8	1900	pCi/g
CW41-002	2087178.88	749622.56	Uranium-235	4.5	6.5	0.278	1	0.12	8	1900	pCi/g
CW41-002	2087178.88	749622.56	Uranium-235	4.5	6.5	0.182	1	0.12	8	1900	pCi/g
CW41-002	2087178.88	749622.56	Uranium-235	4.5	6.5	0.395	1	0.12	8	1900	pCi/g
CW41-002	2087178.88	749622.56	Uranium-235	5	7	0.303	1	0.12	8	1900	pCi/g
CV41-000	2086966.71	749584.29	Uranium-235	5	7	0.422	1	0.12	8	1900	pCi/g
CV41-000	2086966.71	749584.29	Uranium-235	5	7	0.244	1	0.12	8	1900	pCi/g
CV41-000	2086966.71	749584.29	Uranium-235	5	7	0.334	1	0.12	8	1900	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-000	2086966.71	749584.29	Uranium-235	5	7	0.276	1	0.12	8	1900	pCi/g
CV41-000	2086966.71	749584.29	Uranium-235	5	7	0.245	1	0.12	8	1900	pCi/g
CV41-000	2086966.71	749584.29	Uranium-235	5	7	0.354	1	0.12	8	1900	pCi/g
CV41-002	2087015.06	749599.73	Uranium-235	5	7	0.248	1	0.12	8	1900	pCi/g
CV41-002	2087015.06	749599.73	Uranium-235	5	7	0.206	1	0.12	8	1900	pCi/g
CV41-002	2087015.06	749599.73	Uranium-235	5	7	0.25	1	0.12	8	1900	pCi/g
CV41-002	2087015.06	749599.73	Uranium-235	5	7	0.162	1	0.12	8	1900	pCi/g
CV41-002	2087015.06	749599.73	Uranium-235	5	7	0.224	1	0.12	8	1900	pCi/g
CV41-002	2087015.06	749599.73	Uranium-235	5	7	0.166	1	0.12	8	1900	pCi/g
CV41-003	2087050.64	749597.05	Uranium-235	5	7	0.182	1	0.12	8	1900	pCi/g
CV41-003	2087050.64	749597.05	Uranium-235	5	7	0.205	1	0.12	8	1900	pCi/g
CV41-003	2087050.64	749597.05	Uranium-235	5	7	0.207	1	0.12	8	1900	pCi/g
CV41-003	2087050.64	749597.05	Uranium-235	6.5	8.5	0.222	1	0.12	8	1900	pCi/g
CV41-003	2087050.64	749597.05	Uranium-235	6.5	8.5	0.239	1	0.12	8	1900	pCi/g
CV41-003	2087050.64	749597.05	Uranium-235	6.5	8.5	0.25	1	0.12	8	1900	pCi/g
CV41-005	2087086.22	749593.02	Uranium-235	6.5	8.5	0.142	1	0.12	8	1900	pCi/g
CV40-001	2087106.49	749480.09	Uranium-235	6.5	8.5	0.124	1	0.12	8	1900	pCi/g
CV40-001	2087106.49	749480.09	Uranium-235	6.5	8.5	0.257	1	0.12	8	1900	pCi/g
CV40-001	2087106.49	749480.09	Uranium-235	6.5	8.5	0.29	1	0.12	8	1900	pCi/g
CV40-001	2087106.49	749480.09	Uranium-235	6.5	8.5	0.351	1	0.12	8	1900	pCi/g
CV40-001	2087106.49	749480.09	Uranium-235	6.5	8.5	0.211	1	0.12	8	1900	pCi/g
CV40-000	2087080.79	749457.38	Uranium-235	6.5	8.5	0.318	1	0.12	8	1900	pCi/g
CV40-000	2087080.79	749457.38	Uranium-235	6.5	8.5	0.192	1	0.12	8	1900	pCi/g
CV40-000	2087080.79	749457.38	Uranium-235	6.5	8.5	0.249	1	0.12	8	1900	pCi/g
CV40-000	2087080.79	749457.38	Uranium-235	6.5	8.5	0.147	1	0.12	8	1900	pCi/g
CV40-000	2087080.79	749457.38	Uranium-235	6.5	8.5	0.263	1	0.12	8	1900	pCi/g
CW40-000	2087139.09	749477.67	Uranium-235	6.5	8.5	0.123	1	0.12	8	1900	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV40-000	2087080.79	749457.38	Uranium-235	6.5	8.5	0.125	1	0.12	8	1900	pCi/g
CW40-000	2087139.09	749477.67	Uranium-235	6.5	8.5	0.128	1	0.12	8	1900	pCi/g
CW40-000	2087139.09	749477.67	Uranium-235	6.5	8.5	0.131	1	0.12	8	1900	pCi/g
CW40-002	2087173.08	749468.3	Uranium-235	6.5	8.5	0.238	1	0.09	8	1900	pCi/g
CW40-002	2087173.08	749468.3	Uranium-235	6.5	8.5	0.354	1	0.12	8	1900	pCi/g
CW40-002	2087173.08	749468.3	Uranium-235	6.5	8.5	0.22	1	0.12	8	1900	pCi/g
CW40-002	2087173.08	749468.3	Uranium-235	6.5	8.5	0.194	1	0.12	8	1900	pCi/g
CW40-002	2087173.08	749468.3	Uranium-235	6.5	8.5	0.218	1	0.12	8	1900	pCi/g
CW40-002	2087173.08	749468.3	Uranium-235	6.8	8.5	0.274	1	0.12	8	1900	pCi/g
CW40-001	2087145.33	749448.88	Uranium-235	7	9	0.313	1	0.09	8	1900	pCi/g
CW40-001	2087145.33	749448.88	Uranium-235	7	9	0.262	1	0.12	8	1900	pCi/g
CW40-001	2087145.33	749448.88	Uranium-235	7	9	0.272	1	0.12	8	1900	pCi/g
CW40-001	2087145.33	749448.88	Uranium-235	7	9	0.173	1	0.12	8	1900	pCi/g
CV40-002	2087119.05	749442.72	Uranium-235	7	9	0.217	1	0.12	8	1900	pCi/g
CV40-002	2087119.05	749442.72	Uranium-235	7	9	0.251	1	0.12	8	1900	pCi/g
CV40-002	2087119.05	749442.72	Uranium-235	7	9	0.314	1	0.12	8	1900	pCi/g
CW40-004	2087204.29	749479.75	Uranium-235	7	9	0.439	1	0.09	8	1900	pCi/g
CW40-004	2087204.29	749479.75	Uranium-235	8.5	10.5	0.397	1	0.12	8	1900	pCi/g
CW40-004	2087204.29	749479.75	Uranium-235	8.5	10.5	0.161	1	0.12	8	1900	pCi/g
CW40-004	2087204.29	749479.75	Uranium-235	8.5	10.5	0.188	1	0.12	8	1900	pCi/g
CW40-003	2087207.75	749457.21	Uranium-235	8.5	10.5	0.169	1	0.09	8	1900	pCi/g
CW40-003	2087207.75	749457.21	Uranium-235	8.5	10	0.122	1	0.12	8	1900	pCi/g
DD40-000	2088585.28	749572.23	Uranium-235	8.5	10.5	0.197	1	0.09	8	1900	pCi/g
DB39-001	2088323.82	749287.21	Uranium-235	8.5	10.5	0.171	1	0.09	8	1900	pCi/g
CW41-001	2087163.44	749648.07	Uranium-235	8.5	10.5	0.132	1	0.09	8	1900	pCi/g
DD43-000	2088554.95	750249.97	Uranium-235	8.5	10.5	0.178	1	0.09	8	1900	pCi/g
DB44-000	2088317.84	750231.3	Uranium-235	8.5	10.5	0.174	1	0.09	8	1900	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
DC43-000	2088442.46	750152.87	Uranium-235	8.5	10.5	0.125	1	0.09	8	1900	pCi/g
DD44-000	2088472.83	750275.17	Uranium-235	8.5	9.5	0.156	1	0.09	8	1900	pCi/g
DF40-000	2089088.49	749473.32	Uranium-235	9	11	0.11	1	0.09	8	1900	pCi/g
DG41-000	2089312.89	749743.2	Uranium-235	9	11	0.211	1	0.09	8	1900	pCi/g
DH43-000	2089365.3	749991.19	Uranium-235	9	11	0.228	1	0.09	8	1900	pCi/g
DF42-000	2089129.65	749906.57	Uranium-235	9	11	0.151	1	0.09	8	1900	pCi/g
DB43-001	2088226.91	749963.51	Uranium-235	9	11	0.24	1	0.09	8	1900	pCi/g
DD42-000	2088664.41	749777.16	Uranium-235	9	11	0.0948	1	0.09	8	1900	pCi/g
DB43-000	2088219.15	750163.83	Uranium-235	9	11	0.211	1	0.09	8	1900	pCi/g
DF41-000	2089000.19	749737.05	Uranium-235	9	11	0.161	1	0.09	8	1900	pCi/g
DD43-001	2088550.71	750003.07	Uranium-235	9	11	0.15	1	0.09	8	1900	pCi/g
DC42-000	2088478.64	749918.1	Uranium-235	10.5	12.5	0.233	1	0.09	8	1900	pCi/g
DC41-000	2088426.17	749715.79	Uranium-235	12.5	14.5	0.148	1	0.09	8	1900	pCi/g
CW41-000	2087142.62	749618.53	Uranium-238	3	5	1.99	8	1.49	351	1600	pCi/g
CW41-000	2087142.62	749618.53	Uranium-238	3	5	3.05	8	1.49	351	1600	pCi/g
CW41-000	2087142.62	749618.53	Uranium-238	3	5	1.75	8	1.49	351	1600	pCi/g
CW41-000	2087142.62	749618.53	Uranium-238	3	5	1.63	8	1.49	351	1600	pCi/g
CV41-004	2087073.47	749619.88	Uranium-238	3	5	2.04	8	2	351	1600	pCi/g
CV41-004	2087073.47	749619.88	Uranium-238	3	5	2.31	8	1.49	351	1600	pCi/g
CW41-001	2087163.44	749648.07	Uranium-238	4.5	6.5	2.69	8	1.49	351	1600	pCi/g
CW41-001	2087163.44	749648.07	Uranium-238	4.5	6.5	4.01	8	1.49	351	1600	pCi/g
CV41-006	2087106.37	749621.22	Uranium-238	4.5	6.5	2.31	8	1.49	351	1600	pCi/g
CV41-006	2087106.37	749621.22	Uranium-238	4.5	6.5	2.79	8	1.49	351	1600	pCi/g
CV41-006	2087106.37	749621.22	Uranium-238	4.5	6.5	2.14	8	1.49	351	1600	pCi/g
CV41-006	2087106.37	749621.22	Uranium-238	4.5	6.5	4.2	8	1.49	351	1600	pCi/g
CW41-000	2087142.62	749618.53	Uranium-238	4.5	6.5	2.15	8	1.49	351	1600	pCi/g
CV41-004	2087073.47	749619.88	Uranium-238	4.5	6.5	2.03	8	1.49	351	1600	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-004	2087073.47	749619.88	Uranium-238	4.5	6.5	1.68	8	1.49	351	1600	pCi/g
CV41-004	2087073.47	749619.88	Uranium-238	4.5	6.5	2.94	8	1.49	351	1600	pCi/g
CV41-001	2086994.24	749570.86	Uranium-238	4.5	6.5	3.36	8	1.49	351	1600	pCi/g
CV41-001	2086994.24	749570.86	Uranium-238	4.5	6.5	2.17	8	1.49	351	1600	pCi/g
CV41-001	2086994.24	749570.86	Uranium-238	4.5	6.5	3.61	8	1.49	351	1600	pCi/g
CV41-001	2086994.24	749570.86	Uranium-238	4.5	6.5	2.87	8	1.49	351	1600	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	4.5	6.5	2.2	8	2	351	1600	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	4.5	6.5	2.63	8	1.49	351	1600	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	4.5	6.5	2.22	8	1.49	351	1600	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	4.5	6.5	2.22	8	1.49	351	1600	pCi/g
CW41-002	2087178.88	749622.56	Uranium-238	4.5	6.5	4.61	8	2	351	1600	pCi/g
CW41-002	2087178.88	749622.56	Uranium-238	4.5	6.5	2.6	8	1.49	351	1600	pCi/g
CW41-002	2087178.88	749622.56	Uranium-238	4.5	6.5	3.95	8	1.49	351	1600	pCi/g
CW41-002	2087178.88	749622.56	Uranium-238	4.5	6.5	3	8	1.49	351	1600	pCi/g
CW41-002	2087178.88	749622.56	Uranium-238	4.5	6.5	6.24	8	1.49	351	1600	pCi/g
CW41-002	2087178.88	749622.56	Uranium-238	4.5	6.5	4.29	8	1.49	351	1600	pCi/g
CW41-002	2087178.88	749622.56	Uranium-238	5	7	2.54	8	1.49	351	1600	pCi/g
CV41-000	2086966.71	749584.29	Uranium-238	5	7	5.86	8	1.49	351	1600	pCi/g
CV41-000	2086966.71	749584.29	Uranium-238	5	7	3.95	8	1.49	351	1600	pCi/g
CV41-000	2086966.71	749584.29	Uranium-238	5	7	5.11	8	1.49	351	1600	pCi/g
CV41-000	2086966.71	749584.29	Uranium-238	5	7	3.24	8	1.49	351	1600	pCi/g
CV41-000	2086966.71	749584.29	Uranium-238	5	7	4.11	8	1.49	351	1600	pCi/g
CV41-000	2086966.71	749584.29	Uranium-238	5	7	2.65	8	1.49	351	1600	pCi/g
CV41-002	2087015.06	749599.73	Uranium-238	5	7	7.03	8	1.49	351	1600	pCi/g
CV41-002	2087015.06	749599.73	Uranium-238	5	7	3.03	8	1.49	351	1600	pCi/g
CV41-002	2087015.06	749599.73	Uranium-238	5	7	2.38	8	1.49	351	1600	pCi/g
CV41-002	2087015.06	749599.73	Uranium-238	5	7	8.53	8	1.49	351	1600	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-002	2087015.06	749599.73	Uranium-238	5	7	2.56	8	1.49	351	1600	pCi/g
CV40-000	2087080.79	749457.38	Uranium-238	5	7	1.5	8	1.49	351	1600	pCi/g
CV41-003	2087050.64	749597.05	Uranium-238	5	7	2.01	8	1.49	351	1600	pCi/g
CV41-003	2087050.64	749597.05	Uranium-238	5	7	3.31	8	1.49	351	1600	pCi/g
CV41-003	2087050.64	749597.05	Uranium-238	5	7	2.48	8	1.49	351	1600	pCi/g
CV41-003	2087050.64	749597.05	Uranium-238	5	7	3.32	8	1.49	351	1600	pCi/g
CV41-003	2087050.64	749597.05	Uranium-238	6.5	8.5	3.76	8	1.49	351	1600	pCi/g
CV41-003	2087050.64	749597.05	Uranium-238	6.5	8.5	3.45	8	1.49	351	1600	pCi/g
CV41-005	2087086.22	749593.02	Uranium-238	6.5	8.5	1.55	8	1.49	351	1600	pCi/g
CV40-001	2087106.49	749480.09	Uranium-238	6.5	8.5	3.56	8	1.49	351	1600	pCi/g
CV40-001	2087106.49	749480.09	Uranium-238	6.5	8.5	2.77	8	1.49	351	1600	pCi/g
CV40-001	2087106.49	749480.09	Uranium-238	6.5	8.5	5.71	8	1.49	351	1600	pCi/g
CV40-001	2087106.49	749480.09	Uranium-238	6.5	8.5	3.83	8	1.49	351	1600	pCi/g
CV40-000	2087080.79	749457.38	Uranium-238	6.5	8.5	3.75	8	1.49	351	1600	pCi/g
CV40-000	2087080.79	749457.38	Uranium-238	6.5	8.5	3.17	8	1.49	351	1600	pCi/g
CV40-000	2087080.79	749457.38	Uranium-238	6.5	8.5	5.38	8	1.49	351	1600	pCi/g
CV40-000	2087080.79	749457.38	Uranium-238	6.5	8.5	4.38	8	1.49	351	1600	pCi/g
CV40-000	2087080.79	749457.38	Uranium-238	6.5	8.5	2.75	8	1.49	351	1600	pCi/g
CW40-002	2087173.08	749468.3	Uranium-238	6.5	8.5	6.97	8	2	351	1600	pCi/g
CW40-002	2087173.08	749468.3	Uranium-238	6.5	8.5	3.49	8	1.49	351	1600	pCi/g
CW40-002	2087173.08	749468.3	Uranium-238	6.5	8.5	4.33	8	1.49	351	1600	pCi/g
CW40-002	2087173.08	749468.3	Uranium-238	6.5	8.5	4.64	8	1.49	351	1600	pCi/g
CW40-002	2087173.08	749468.3	Uranium-238	6.5	8.5	3.19	8	1.49	351	1600	pCi/g
CW40-002	2087173.08	749468.3	Uranium-238	6.5	8.5	3.78	8	1.49	351	1600	pCi/g
CW40-001	2087145.33	749448.88	Uranium-238	7	9	4.7	8	2	351	1600	pCi/g
CW40-001	2087145.33	749448.88	Uranium-238	7	9	4.37	8	1.49	351	1600	pCi/g
CW40-001	2087145.33	749448.88	Uranium-238	7	9	4.49	8	1.49	351	1600	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CW40-001	2087145.33	749448.88	Uranium-238	7	9	7.59	8	1.49	351	1600	pCi/g
CW40-001	2087145.33	749448.88	Uranium-238	7	9	5.13	8	1.49	351	1600	pCi/g
CW40-001	2087145.33	749448.88	Uranium-238	7	9	4.31	8	1.49	351	1600	pCi/g
CV40-002	2087119.05	749442.72	Uranium-238	7	9	4.68	8	1.49	351	1600	pCi/g
CV40-002	2087119.05	749442.72	Uranium-238	7	9	3.89	8	1.49	351	1600	pCi/g
CV40-002	2087119.05	749442.72	Uranium-238	7	9	4.19	8	1.49	351	1600	pCi/g
CV40-002	2087119.05	749442.72	Uranium-238	7	9	2.21	8	1.49	351	1600	pCi/g
CV40-002	2087119.05	749442.72	Uranium-238	7	9	7.18	8	1.49	351	1600	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	7	9	4.24	8	2	351	1600	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	8.5	10.5	2.6	8	1.49	351	1600	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	8.5	10	4.1	8	1.49	351	1600	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	8.5	10.5	2.3	8	1.49	351	1600	pCi/g
CW40-004	2087204.29	749479.75	Uranium-238	8.5	10.5	3.04	8	1.49	351	1600	pCi/g
CW41-001	2087163.44	749648.07	Uranium-238	8.5	10.5	1.6	8	1.49	351	1600	pCi/g
DB44-000	2088317.84	750231.3	Uranium-238	8.5	10.5	2.7	8	2	351	1600	pCi/g
DC45-000	2088455.44	750459.28	Uranium-238	8.5	10.5	2.84	8	2	351	1600	pCi/g
DF42-000	2089129.65	749906.57	Uranium-238	9	11	2.26	8	2	351	1600	pCi/g
DB43-000	2088219.15	750163.83	Uranium-238	9	11	2.76	8	2	351	1600	pCi/g
DF41-000	2089000.19	749737.05	Uranium-238	9	11	2.16	8	2	351	1600	pCi/g
DD43-001	2088550.71	750003.07	Uranium-238	10.5	12.5	2.72	8	2	351	1600	pCi/g
DC42-000	2088478.64	749918.1	Uranium-238	12.5	14.5	2.61	8	2	351	1600	pCi/g
DB41-000	2088280.51	749574.27	Uranium-238	24.6	25.6	2.65	8	2	351	1600	pCi/g
DD42-000	2088664.41	749777.16	Uranium-238	9	11	2.86	8	2	351	1600	pCi/g
CV40-001	2087106.49	749480.09	Uranium-234	6.5	8.5	4.79	8	1.49	300	1800	pCi/g
CV40-001	2087106.49	749480.09	Uranium-238	6.5	8.5	4.79	8	1.49	351	1600	pCi/g
CV40-001	2087106.49	749480.09	Uranium-234	6.5	8.5	4.79	8	1.49	300	1800	pCi/g
CV40-001	2087106.49	749480.09	Uranium-238	6.5	8.5	4.79	8	1.49	351	1600	pCi/g

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

Location	Easting	Northing	Analyte	Soil Begin Depth (feet)	Soil End Depth (feet)	Result	Detection/ Reporting Limit	Background Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
CV41-004	2087073.47	749619.88	Urranium-234	4.5	6.5	1.93	8	1.49	300	1800	pCi/g
CV41-004	2087073.47	749619.88	Urranium-238	4.5	6.5	1.93	8	1.49	351	1600	pCi/g
CV43-000	2087134.6	749980.95	Vanadium	0.5	2.5	58.1	0.25	45.59	7150	433	mg/kg
CW43-001	2087140.61	749975.88	Vanadium	0.5	2.5	46.1	0.25	45.59	7150	433	mg/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	Bckgd Mean +2SD	Wildlife Refuge Worker	Ecological Receptor Action Level	Unit
1,1,1,2-Tetrachloroethane	1	0	2.5	2.5	NA	NA	—	ug/kg
1,1,1-Trichloroethane	1	0	2.5	2.5	NA	79700000	—	ug/kg
1,1,2,2-Tetrachloroethane	1	0	2.5	2.5	NA	100000	—	ug/kg
1,1,2-Trichloro-1,2,2-Trifluor	1	0	2.5	2.5	NA	NA	—	ug/kg
1,1,2-Trichloroethane	1	0	2.5	2.5	NA	236000	—	ug/kg
1,1-Dichloroethane	1	0	2.5	2.5	NA	22500000	—	ug/kg
1,1-Dichloroethene	1	0	2.5	2.5	NA	17000	—	ug/kg
1,1-Dichloropropene	1	0	2.5	2.5	NA	NA	—	ug/kg
1,2,3-Trichlorobenzene	1	0	2.5	2.5	NA	NA	—	ug/kg
1,2,3-Trichloropropane	1	0	2.5	2.5	NA	NA	—	ug/kg
1,2,4-Trichlorobenzene	42	0	172.92	210	NA	9230000	—	ug/kg
1,2,4-Trimethylbenzene	1	0	2.5	2.5	NA	NA	—	ug/kg
1,2-Dibromo-3-Chloropropane	1	0	2.5	2.5	NA	NA	—	ug/kg
1,2-Dibromoethane	1	0	2.5	2.5	NA	NA	—	ug/kg
1,2-Dichlorobenzene	42	0	172.92	210	NA	31200000	—	ug/kg
1,2-Dichloroethane	1	0	2.5	2.5	NA	106000	—	ug/kg
1,2-Dichloropropane	1	0	2.5	2.5	NA	345000	—	ug/kg
1,3,5-Trimethylbenzene	1	0	2.5	2.5	NA	NA	—	ug/kg
1,3-Dichloropropane	1	0	2.5	2.5	NA	NA	—	ug/kg
1-Dotriacontanol	1	100	1900	1900	NA	NA	—	ug/kg
1-Eicosanol	3	100	540	1100	NA	NA	—	ug/kg
2,2-Dichloropropane	1	0	2.5	2.5	NA	NA	—	ug/kg
2,2'-Oxybis(1-Chloropropane)	41	0	177.07	210	NA	547000	—	ug/kg
2,4,5-Trichlorophenol	41	0	177.07	210	NA	102000000	—	ug/kg
2,4,6-Trichlorophenol	41	0	177.07	210	NA	3470000	—	ug/kg
2,4-Dichlorophenol	41	0	177.07	210	NA	3070000	—	ug/kg
2,4-Dimethylphenol	41	0	177.07	210	NA	20400000	—	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	Bckgd Mean +2SD	Wildlife Refuge Worker	Ecological Receptor Action Level	Unit
2,4-Dinitrophenol	41	0	858.54	1000	NA	2040000	—	ug/kg
2,4-Dinitrotoluene	41	0	177.07	210	NA	56300	—	ug/kg
2,6-Dinitrotoluene	41	0	177.07	210	NA	56300	—	ug/kg
2-Butanone	1	0	10	10	NA	192000000	433,000.00	ug/kg
2-Chloronaphthalene	41	0	177.07	210	NA	81800000	—	ug/kg
2-Chlorophenol	41	0	177.07	210	NA	5110000	—	ug/kg
2-Chlorotoluene	1	0	2.5	2.5	NA	NA	—	ug/kg
2h-1-Benzopyran-2-One	1	100	600	600	NA	NA	—	ug/kg
2-Hexanone	1	0	10	10	NA	NA	—	ug/kg
2-Methylnaphthalene	41	0	177.07	210	NA	20400000	—	ug/kg
2-Methylphenol	41	0	177.07	210	NA	36900000	—	ug/kg
2-Nitroaniline	41	0	858.54	1000	NA	16700000	—	ug/kg
2-Propanol, 1-Butoxy-	1	100	250	250	NA	NA	—	ug/kg
3,3'-Dichlorobenzidine	41	0	695.12	800	NA	61300	—	ug/kg
3-Nitroaniline	41	0	858.54	1000	NA	NA	—	ug/kg
3-Penten-2-One, 4-Methyl-	12	100	220	470	NA	NA	—	ug/kg
4,6-Dinitro-O-Cresol	41	0	858.54	1000	NA	1020000	—	ug/kg
4-Bromophenyl Phenyl Ether	41	0	177.07	210	NA	NA	—	ug/kg
4-Chloro-3-Methylphenol	41	0	177.07	210	NA	NA	—	ug/kg
4-Chloroaniline	41	0	177.07	210	NA	2950000	—	ug/kg
4-Chlorophenyl-Phenyl Ether	41	0	177.07	210	NA	NA	—	ug/kg
4-Chlorotoluene	1	0	2.5	2.5	NA	NA	—	ug/kg
4-Isopropyltoluene	1	0	2.5	2.5	NA	NA	—	ug/kg
4-Methyl-2-Pentanone	1	0	10	10	NA	16400000	—	ug/kg
4-Methylphenol	41	0	177.07	210	NA	3690000	—	ug/kg
9,10-Anthracenedione	1	100	260	260	NA	NA	—	ug/kg
Acenaphthene	41	2.44	174.29	210	NA	40800000	—	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	Bckgd Mean +2SD	Wildlife Refuge Worker	Ecological Receptor Action Level	Unit
Acenaphthylene	41	0	177.07	210	NA	NA	—	ug/kg
Acetone	1	0	10	10	NA	102000000	211,000.00	ug/kg
Actinium-228	36	100	1.05	1.6	NA	NA	—	pCi/g
Aluminum	42	100	15706.9	27400	16902	228000	—	mg/kg
Americium-241	36	100	1.06	10.5	0.02	76	1,900.00	pCi/g
Anthracene	41	7.32	176.85	220	NA	204000000	—	ug/kg
Antimony	42	28.57	0.34	0.88	NA	409	—	mg/kg
Aroclor-1016	36	0	17.72	21	NA	46400	—	ug/kg
Aroclor-1221	36	0	17.72	21	NA	12400	—	ug/kg
Aroclor-1232	36	0	17.72	21	NA	12400	—	ug/kg
Aroclor-1242	36	0	17.72	21	NA	12400	—	ug/kg
Aroclor-1248	36	0	17.72	21	NA	12400	—	ug/kg
Aroclor-1254	36	52.78	47.03	230	NA	12400	371,000.00	ug/kg
Aroclor-1260	36	38.89	32.81	190	NA	12400	—	ug/kg
Arsenic	42	100	5.18	8.3	10.09	22.2	21.60	mg/kg
Barium	42	100	108.17	202	141.26	26400	—	mg/kg
Benyzl Alcohol	41	0	177.07	210	NA	307000000	—	ug/kg
Benzene	1	0	2.5	2.5	NA	205000	—	ug/kg
Benzo(A)Anthracene	41	26.83	149.83	220	NA	34900	800,000.00	ug/kg
Benzo(A)Pyrene	41	4.88	178.17	290	NA	3490	25,700.00	ug/kg
Benzo(B)Fluoranthene	41	2.44	178.17	230	NA	34900	1,010,000.00	ug/kg
Benzo(K)Fluoranthene	41	4.88	176.22	210	NA	349000	1,010,000.00	ug/kg
Benzo[Ghi]Perylene	41	2.44	177.68	210	NA	NA	—	ug/kg
Benzoic Acid	41	4.88	859.76	1000	NA	1000000000	—	ug/kg
Beryllium	42	100	0.63	1.3	0.97	921	2.15	mg/kg
Bis(2-Chloroethoxy) Methane	41	0	177.07	210	NA	NA	—	ug/kg
Bis(2-Chloroethyl) Ether	41	0	177.07	210	NA	34800	—	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	Bckgd Mean +2SD	Wildlife Refuge Worker	Ecological Receptor Action Level	Unit
Bis(2-Ethylhexyl)Phthalate	41	9.76	193.17	470	NA	1970000	—	ug/kg
Bismuth-212	36	100	0.77	1.72	NA	NA	—	pCi/g
Bismuth-214	36	100	0.53	0.86	NA	NA	—	pCi/g
Boron	42	90.48	4.98	10.4	NA	NA	—	mg/kg
Bromobenzene	1	0	2.5	2.5	NA	NA	—	ug/kg
Bromochloromethane	1	0	2.5	2.5	NA	NA	—	ug/kg
Bromodichloromethane	1	0	2.5	2.5	NA	617000	—	ug/kg
Bromoform	1	0	2.5	2.5	NA	3730000	—	ug/kg
Bromomethane	1	0	2.5	2.5	NA	193000	—	ug/kg
Butylbenzylphthalate	41	0	177.07	210	NA	147000000	—	ug/kg
Cadmium	42	78.57	0.41	2.6	1.61	962	—	mg/kg
Calcium	42	100	38949.52	185000	4467	NA	—	mg/kg
Carbon Disulfide	1	0	2.5	2.5	NA	15100000	—	ug/kg
Carbon Tetrachloride	1	0	2.5	2.5	NA	81500	83,200.00	ug/kg
Cesium-137	36	100	0.3	1.09	0.31	NA	—	pCi/g
Chlorobenzene	1	0	2.5	2.5	NA	6090000	—	ug/kg
Chloroethane	1	0	2.5	2.5	NA	13200000	—	ug/kg
Chloroform	1	0	2.5	2.5	NA	19200	101,000.00	ug/kg
Chloromethane	1	0	2.5	2.5	NA	371000	—	ug/kg
Chromium	42	100	16.18	31.1	16.99	268	—	mg/kg
Chrysene	41	26.83	156.05	300	NA	3490000	—	ug/kg
Cis-1,2-Dichloroethene	1	0	1.25	1.25	NA	NA	—	ug/kg
Cis-1,3-Dichloropropene	1	0	2.5	2.5	NA	250000	—	ug/kg
Cobalt	42	100	5.46	21.6	10.91	1550	—	mg/kg
Copper	42	100	15.05	36.9	18.06	40900	—	mg/kg
Dibenz(A,H)Anthracene	41	0	177.07	210	NA	3490	—	ug/kg
Dibenzofuran	41	0	177.07	210	NA	2950000	—	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	Bckgd Mean +2SD	Wildlife Refuge Worker	Ecological Receptor Action Level	Unit
Dibromochloromethane	1	0	2.5	2.5	NA	329000	—	ug/kg
Dibromomethane	1	0	2.5	2.5	NA	NA	—	ug/kg
Dichlorodifluoromethane	1	0	2.5	2.5	NA	NA	—	ug/kg
Diethyl Phthalate	41	0	354.02	420	NA	590000000	—	ug/kg
Dimethyl Phthalate	41	0	177.07	210	NA	1000000000	—	ug/kg
Di-N-Butyl Phthalate	41	0	177.07	210	NA	73700000	—	ug/kg
Di-N-Octyl Phthalate	41	0	177.07	210	NA	14700000	—	ug/kg
Eicosane	5	100	1028	1800	NA	NA	—	ug/kg
Ethanol, 2-(2-Methoxyethoxy)-	2	100	860	1100	NA	NA	—	ug/kg
Ethylbenzene	1	0	2.5	2.5	NA	4250000	—	ug/kg
Fluoranthene	41	41.46	177.07	620	NA	27200000	—	ug/kg
Fluorene	41	0	177.07	210	NA	40800000	—	ug/kg
Heptacosane	1	100	1200	1200	NA	NA	—	ug/kg
Hexachlorobenzene	41	0	177.07	210	NA	17200	—	ug/kg
Hexachlorobutadiene	42	0	172.92	210	NA	147000	—	ug/kg
Hexachlorocyclopentadiene	41	0	354.02	420	NA	3500000	—	ug/kg
Hexachloroethane	41	0	177.07	210	NA	737000	1,990,000.00	ug/kg
Hexadecane	1	100	790	790	NA	NA	—	ug/kg
Hexanedioic Acid, Bis(2-Ethylh	4	100	1120	1700	NA	NA	—	ug/kg
Indeno(1,2,3-Cd)Pyrene	41	4.88	174.2	210	NA	34900	—	ug/kg
Iron	42	100	13355.24	23800	18037	307000	—	mg/kg
Isophorone	41	0	177.07	210	NA	29100000	—	ug/kg
Isopropylbenzene	1	0	2.5	2.5	NA	NA	—	ug/kg
Lead	42	100	29.7	93.5	54.62	1000	25.60	mg/kg
Lead-212	36	100	0.96	1.65	NA	NA	—	pCi/g
Lead-214	36	100	0.6	0.93	NA	NA	—	pCi/g
Lithium	42	100	13.18	25.1	11.55	20400	—	mg/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	Bckgd Mean +2SD	Wildlife Refuge Worker	Ecological Receptor Action Level	Unit
Magnesium	42	100	3735.24	12200	2849.3	NA	—	mg/kg
Manganese	42	100	215.24	438	365.08	3480	—	mg/kg
M-Dichlorobenzene	42	0	172.92	210	NA	NA	—	ug/kg
Mercury	39	100	0.04	0.16	0.13	25200	—	mg/kg
Methylene Chloride	2	100	110.75	220	NA	2530000	39,500.00	ug/kg
Molybdenum	42	33.33	0.16	0.62	NA	5110	—	mg/kg
Naphthalene	42	0	172.92	210	NA	3090000	—	ug/kg
N-Butylbenzene	1	0	2.5	2.5	NA	NA	—	ug/kg
Nickel	42	100	14.66	48.4	14.91	20400	—	mg/kg
Nitrobenzene	41	0	177.07	210	NA	332000	—	ug/kg
N-Nitroso-Di-N-Propylamine	41	2.44	182.68	400	NA	5470	—	ug/kg
N-Nitrosodiphenylamine	41	0	177.07	210	NA	7810000	—	ug/kg
N-Propylbenzene	1	0	2.5	2.5	NA	NA	—	ug/kg
Octadecane	2	100	445	680	NA	NA	—	ug/kg
O-Nitrophenol	41	0	177.07	210	NA	NA	—	ug/kg
P-Dichlorobenzene	42	0	172.92	210	NA	840000	—	ug/kg
Pentachlorophenol	41	0	858.54	1000	NA	162000	—	ug/kg
Pentacosane	1	100	890	890	NA	NA	—	ug/kg
Pentatriacontane	2	100	225	230	NA	NA	—	ug/kg
Phenanthrene	41	36.59	156.05	420	NA	NA	—	ug/kg
Phenol	41	0	177.07	210	NA	613000000	—	ug/kg
P-Nitroaniline	41	0	858.54	1000	NA	NA	—	ug/kg
P-Nitrophenol	41	0	858.54	1000	NA	8180000	—	ug/kg
Polonium-210	36	100	473.61	5550	NA	NA	—	pCi/g
Potassium	42	100	2974.52	5310	2967.2	NA	—	mg/kg
Potassium-40	36	100	11.08	22	NA	NA	—	pCi/g
Propanoic Acid	1	100	370	370	NA	NA	—	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	Bckgd Mean +2SD	Wildlife Refuge Worker	Ecological Receptor Action Level	Unit
Protactinium-234	36	100	0	0	NA	NA	—	pCi/g
Protactinium-234m	36	100	0.14	5.16	NA	NA	—	pCi/g
Pyrene	41	68.29	143.02	640	NA	22100000	—	ug/kg
Radium-226	36	100	0.78	3.88	NA	NA	—	pCi/g
Sec-Butylbenzene	1	0	2.5	2.5	NA	NA	—	ug/kg
Selenium	42	57.14	0.57	1.9	1.22	5110	—	mg/kg
Silica As Sio2, Dissolved	42	100	453.17	689	NA	NA	—	mg/kg
Silver	42	78.57	2.36	42.8	NA	5110	—	mg/kg
Sodium	42	23.81	162.25	1260	91.84	NA	—	mg/kg
Strontium	42	100	60.59	362	48.94	613000	—	mg/kg
Styrene	1	0	2.5	2.5	NA	123000000	—	ug/kg
Tert-Butylbenzene	1	0	2.5	2.5	NA	NA	—	ug/kg
Tetrachloroethene	1	100	10	10	NA	615000	37,500.00	ug/kg
Thallium	42	38.1	0.54	1.3	NA	NA	—	mg/kg
Thallium-208	36	100	0.33	0.54	NA	NA	—	pCi/g
Thorium-230	36	100	0	0	NA	NA	—	pCi/g
Thorium-231	36	100	0.12	1.13	NA	NA	—	pCi/g
Tin	42	100	2.18	3.3	NA	613000	—	mg/kg
Titanium	42	100	255.14	844	NA	NA	—	mg/kg
Toluene	1	0	2.5	2.5	NA	31300000	128,000.00	ug/kg
Trans-1,2-Dichloroethene	1	0	1.25	1.25	NA	NA	—	ug/kg
Trans-1,3-Dichloropropene	1	0	2.5	2.5	NA	250000	—	ug/kg
Trichloroethene	1	0	2.5	2.5	NA	19600	509,000.00	ug/kg
Trichlorofluoromethane	1	0	2.5	2.5	NA	NA	—	ug/kg
Unknown	36	100	8532.78	110000	NA	NA	—	ug/kg
Uranium	42	4.76	2.34	8	NA	2750	67.80	mg/kg
Uranium-234	36	100	2.15	6.97	2	300	1,800.00	pCi/g

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	Bckgd Mean +2SD	Wildlife Refuge Worker	Ecological Receptor Action Level	Unit
Uranium-235	36	100	0.14	0.44	0.09	8	1,900.00	pCi/g
Uranium-238	36	100	2.15	6.97	2	351	1,600.00	pCi/g
Vanadium	42	100	29.94	58.1	45.59	7150	433.00	mg/kg
Vinyl Chloride	1	0	2.5	2.5	NA	41200	166.00	ug/kg
Xylenes (Total)	1	0	2.5	2.5	NA	1000000000	—	ug/kg
Zinc	42	100	49.65	121	73.76	307000	—	mg/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 Concen-tration	Bckgd Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
1,1,1,2-Tetrachloroethane	131	0	5.87	145	NA	NA	—	ug/kg
1,1,1-Trichloroethane	131	0	5.87	145	NA	79,700,000.00	—	ug/kg
1,1,2,2-Tetrachloroethane	131	0.76	5.31	140	NA	100,000.00	—	ug/kg
1,1,2-Trichloro-1,2,2-Trifluor	131	0	5.87	145	NA	NA	—	ug/kg
1,1,2-Trichloroethane	131	0	5.87	145	NA	236,000.00	—	ug/kg
1,1-Dichloroethane	131	0	5.87	145	NA	22,500,000.00	—	ug/kg
1,1-Dichloroethene	131	0	5.87	145	NA	17,000.00	—	ug/kg
1,1-Dichloropropene	131	0	5.87	145	NA	NA	—	ug/kg
1,2,3-Trichlorobenzene	131	0	5.87	145	NA	NA	—	ug/kg
1,2,3-Trichloropropane	131	0	5.87	145	NA	NA	—	ug/kg
1,2,4-Trichlorobenzene	239	0	85.29	220	NA	9,230,000.00	—	ug/kg
1,2,4-Trimethylbenzene	131	0	5.87	145	NA	NA	—	ug/kg
1,2-Dibromo-3-Chloropropane	131	0	5.87	145	NA	NA	—	ug/kg
1,2-Dibromoethane	131	0	5.87	145	NA	NA	—	ug/kg
1,2-Dichlorobenzene	239	0	85.29	220	NA	31,200,000.00	—	ug/kg
1,2-Dichloroethane	131	0	5.87	145	NA	106,000.00	—	ug/kg
1,2-Dichloropropane	131	0	5.87	145	NA	345,000.00	—	ug/kg
1,3,5-Trimethylbenzene	131	0	5.87	145	NA	NA	—	ug/kg
1,3-Dichloropropane	131	0	5.87	145	NA	NA	—	ug/kg
1-Hexanol, 2-Ethyl-	24	100	19.6	140	NA	NA	—	ug/kg
2,2-Dichloropropane	131	0	5.87	145	NA	NA	—	ug/kg
2,2'-Oxybis(1-Chloropropane)	108	0	181.62	220	NA	547,000.00	—	ug/kg
2,4,5-Trichlorophenol	108	0	181.62	220	NA	102,000,000.00	—	ug/kg
2,4,6-Trichlorophenol	108	0	181.62	220	NA	3,470,000.00	—	ug/kg
2,4-Dichlorophenol	108	0	181.62	220	NA	3,070,000.00	—	ug/kg
2,4-Dimethylphenol	108	0	181.62	220	NA	20,400,000.00	—	ug/kg
2,4-Dinitrophenol	108	0	879.63	1050	NA	2,040,000.00	—	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 Concen-tration	Bckgd Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
2,4-Dinitrotoluene	108	0	181.62	220	NA	56,300.00	—	ug/kg
2,6-Dinitrotoluene	108	0	181.62	220	NA	56,300.00	—	ug/kg
2,8-Dimethyldibenzo(B,D)Thioph	3	100	216.67	250	NA	NA	—	ug/kg
2-Butanone	130	10.77	77.43	5400	NA	192,000,000.00	433,000.00	ug/kg
2-Chloronaphthalene	108	0	181.62	220	NA	81,800,000.00	—	ug/kg
2-Chlorophenol	108	0	181.62	220	NA	5,110,000.00	—	ug/kg
2-Chlorotoluene	131	0	5.87	145	NA	NA	—	ug/kg
2-Hexanone	131	1.53	23.37	550	NA	NA	—	ug/kg
2-Methylnaphthalene	108	0.93	181.06	220	NA	20,400,000.00	—	ug/kg
2-Methylphenol	108	0	181.62	220	NA	36,900,000.00	—	ug/kg
2-Nitroaniline	108	0	879.63	1050	NA	16,700,000.00	—	ug/kg
2-Propanol, 1-Butoxy-	1	100	190	190	NA	NA	—	ug/kg
3,3'-Dichlorobenzidine	108	0	716.67	850	NA	61,300.00	—	ug/kg
3-Methylheptyl Acetate	2	100	16.5	19	NA	NA	—	ug/kg
3-Nitroaniline	108	0	879.63	1050	NA	NA	—	ug/kg
3-Penten-2-One, 4-Methyl-	10	100	179.5	310	NA	NA	—	ug/kg
4,6-Dinitro-O-Cresol	108	0	879.63	1050	NA	1,020,000.00	—	ug/kg
4-Bromophenyl Phenyl Ether	108	0	181.62	220	NA	NA	—	ug/kg
4-Chloro-3-Methylphenol	108	0	181.62	220	NA	NA	—	ug/kg
4-Chloroaniline	108	0	181.62	220	NA	2,950,000.00	—	ug/kg
4-Chlorophenyl-Phenyl Ether	108	0	181.62	220	NA	NA	—	ug/kg
4-Chlorotoluene	131	0	5.87	145	NA	NA	—	ug/kg
4-Isopropyltoluene	131	0	5.87	145	NA	NA	—	ug/kg
4-Methyl-2-Pentanone	131	0	23.24	550	NA	16,400,000.00	—	ug/kg
4-Methylphenol	108	0	181.62	220	NA	3,690,000.00	—	ug/kg
Acenaphthene	108	1.85	180.46	220	NA	40,800,000.00	—	ug/kg
Acenaphthylene	108	0	181.62	220	NA	NA	—	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 Concen-tration	Bckgd Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
Acetic Acid, 2-Ethylhexyl Este	4	100	39.5	94	NA	NA	—	ug/kg
Acetone	131	35.11	43.15	690	NA	102,000,000.00	211,000.00	ug/kg
Actinium-228	99	100	0.81	2.09	NA	NA	—	pCi/g
Aluminum	96	100	11572.4	38000	35373.17	228,000.00	1,900.00	mg/kg
Americium-241	96	100	0.05	2.89	0.02	76.00	—	pCi/g
Anthracene	108	2.78	181.38	300	NA	204,000,000.00	—	ug/kg
Anthracene, 1-Methyl-	1	100	160	160	NA	NA	—	ug/kg
Anthracene, 2-Methyl-	2	100	280	320	NA	NA	—	ug/kg
Antimony	97	9.28	3.88	350	16.97	409.00	—	mg/kg
Aroclor-1016	88	0	18.19	22	NA	46,400.00	—	ug/kg
Aroclor-1221	88	0	18.19	22	NA	12,400.00	—	ug/kg
Aroclor-1232	88	0	18.19	22	NA	12,400.00	—	ug/kg
Aroclor-1242	88	0	18.19	22	NA	12,400.00	—	ug/kg
Aroclor-1248	88	0	18.19	22	NA	12,400.00	—	ug/kg
Aroclor-1254	88	10.23	22.93	160	NA	12,400.00	371,000.00	ug/kg
Aroclor-1260	88	5.68	19.56	120	NA	12,400.00	—	ug/kg
Arsenic	97	100	4.49	17.8	13.14	22.20	21.60	mg/kg
Barium	97	100	76.99	838	289.38	26,400.00	—	mg/kg
Benyzl Alcohol	108	0	181.62	220	NA	307,000,000.00	—	ug/kg
Benzene	131	0	5.87	145	NA	205,000.00	—	ug/kg
Benzene, 1,3-Diethyl-5-Methyl-	1	100	15	15	NA	NA	—	ug/kg
Benzene, 4-Ethyl-1,2-Dimethyl-	1	100	8.7	8.7	NA	NA	—	ug/kg
Benzo(A)Anthracene	108	8.33	179.41	290	NA	34,900.00	800,000.00	ug/kg
Benzo(A)Pyrene	108	7.41	184.31	490	NA	3,490.00	25,700.00	ug/kg
Benzo(B)Fluoranthene	108	3.7	183.98	410	NA	34,900.00	1,010,000.00	ug/kg
Benzo(K)Fluoranthene	108	3.7	184.63	380	NA	349,000.00	1,010,000.00	ug/kg
Benzo[Ghi]Perylene	108	5.56	182.42	450	NA	NA	—	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 Concen-tration	Bckgd Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
Benzoic Acid	108	0	879.63	1050	NA	1,000,000,000.00	—	ug/kg
Beryllium	97	90.72	0.39	1.5	14.2	921.00	2.15	mg/kg
Bis(2-Chloroethoxy) Methane	108	0	181.62	220	NA	NA	—	ug/kg
Bis(2-Chloroethyl) Ether	108	0	181.62	220	NA	34,800.00	—	ug/kg
Bis(2-Ethylhexyl)Phthalate	108	0.93	181.34	220	NA	1,970,000.00	—	ug/kg
Bismuth-212	99	100	0.52	2.8	NA	NA	—	pci/g
Bismuth-214	99	100	0.43	0.91	NA	NA	—	pci/g
Boron	96	60.42	1.58	6.4	NA	NA	—	mg/kg
Bromobenzene	131	0	5.87	145	NA	NA	—	ug/kg
Bromochloromethane	131	0	5.87	145	NA	NA	—	ug/kg
Bromodichloromethane	131	0	5.87	145	NA	617,000.00	—	ug/kg
Bromoform	131	0	5.87	145	NA	3,730,000.00	—	ug/kg
Bromomethane	131	0	5.87	145	NA	193,000.00	—	ug/kg
Butanal	1	100	15	15	NA	NA	—	ug/kg
Butylated Hydroxytoluene	2	100	6.65	7	NA	NA	—	ug/kg
Butylbenzylphthalate	108	0	181.62	220	NA	147,000,000.00	—	ug/kg
Cadmium	97	45.36	1.14	58.7	1.7	962.00	—	mg/kg
Calcium	96	100	53946.46	220000	39382.27	NA	—	mg/kg
Carbon Disulfide	131	0	5.87	145	NA	15,100,000.00	—	ug/kg
Carbon Tetrachloride	131	0	5.87	145	NA	81,500.00	83,200.00	ug/kg
Cesium-137	96	100	0	0.1	NA	NA	—	pCi/g
Chlorobenzene	131	0	5.87	145	NA	6,090,000.00	—	ug/kg
Chloroethane	131	0	5.87	145	NA	13,200,000.00	—	ug/kg
Chloroform	131	0	5.87	145	NA	19,200.00	101,000.00	ug/kg
Chloromethane	131	0	5.87	145	NA	371,000.00	—	ug/kg
Chromium	97	100	16.25	191	68.27	268.00	—	mg/kg
Chrysene	108	10.19	187.98	580	NA	3,490,000.00	—	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 Concen-tration	Bckgd Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
Cis-1,2-Dichloroethene	131	6.11	3.89	170	NA	NA	—	ug/kg
Cis-1,3-Dichloropropene	131	0	5.87	145	NA	250,000.00	—	ug/kg
Cobalt	97	100	3.77	9.1	29.04	1,550.00	—	mg/kg
Copper	97	100	9.39	53	38.21	40,900.00	—	mg/kg
Cyclotetrasiloxane, Octamethyl	2	100	6.3	7.2	NA	NA	—	ug/kg
D-Friedoolean-14-Ene, 3-Methox	5	100	3602	11000	NA	NA	—	ug/kg
Dibenz(A,H)Anthracene	108	0.93	181.53	220	NA	3,490.00	—	ug/kg
Dibenzofuran	108	0	181.62	220	NA	2,950,000.00	—	ug/kg
Dibromochloromethane	131	0	5.87	145	NA	329,000.00	—	ug/kg
Dibromomethane	131	0	5.87	145	NA	NA	—	ug/kg
Dichlorodifluoromethane	131	0	5.87	145	NA	NA	—	ug/kg
Diethyl Phthalate	108	0	363.33	440	NA	590,000,000.00	—	ug/kg
Dimethyl Phthalate	108	0	181.62	220	NA	1,000,000,000.00	—	ug/kg
Di-N-Butyl Phthalate	108	0	181.62	220	NA	73,700,000.00	—	ug/kg
Di-N-Octyl Phthalate	108	0	181.62	220	NA	14,700,000.00	—	ug/kg
Eicosane	2	100	1450	1600	NA	NA	—	ug/kg
Ethylbenzene	131	0	5.87	145	NA	4,250,000.00	—	ug/kg
Fluoranthene	108	6.48	193.24	640	NA	27,200,000.00	—	ug/kg
Fluorene	108	0.93	180.81	220	NA	40,800,000.00	—	ug/kg
Heneicosane	1	100	23	23	NA	NA	—	ug/kg
Heptacosane	1	100	270	270	NA	NA	—	ug/kg
Hexachlorobenzene	108	0	181.62	220	NA	17,200.00	—	ug/kg
Hexachlorobutadiene	239	0	85.29	220	NA	147,000.00	—	ug/kg
Hexachlorocyclopentadiene	108	0	363.33	440	NA	3,500,000.00	—	ug/kg
Hexachloroethane	108	0	181.62	220	NA	737,000.00	1,990,000.00	ug/kg
Hexanedioic Acid, Bis(2-Ethylh	53	100	969.15	7900	NA	NA	—	ug/kg
Hexanedioic Acid, Dioctyl Este	1	100	310	310	NA	NA	—	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 Concen-tration	Bckgd Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
Hexanedioic Acid, Mono(2-Ethyl	3	100	503.33	810	NA	NA	—	ug/kg
Hexanoic Acid, 2-Ethyl-	1	100	490	490	NA	NA	—	ug/kg
Indeno(1,2,3-Cd)Pyrene	108	5.56	180.75	360	NA	34,900.00	—	ug/kg
Iron	96	100	9833.33	25000	41046.52	307,000.00	—	mg/kg
Isophorone	108	0	181.62	220	NA	29,100,000.00	—	ug/kg
Isopropylbenzene	131	0	5.87	145	NA	NA	—	ug/kg
Lead	97	100	7.75	195	24.97	1,000.00	25.60	mg/kg
Lead-212	99	100	0.8	2.14	NA	NA	—	pCi/g
Lead-214	99	100	0.44	0.93	NA	NA	—	pCi/g
Lithium	96	100	9.85	26.9	34.66	20,400.00	—	mg/kg
Magnesium	96	100	2649.97	8520	9315.44	NA	—	mg/kg
Manganese	97	100	112.17	387	901.62	3,480.00	—	mg/kg
M-Dichlorobenzene	239	0	85.29	220	NA	NA	—	ug/kg
Mercury	94	97.87	0.04	0.58	1.52	25,200.00	—	mg/kg
Methylene Chloride	131	54.2	5.51	145	NA	2,530,000.00	39,500.00	ug/kg
Molybdenum	97	49.48	1.21	37.7	25.61	5,110.00	—	mg/kg
Naphthalene	239	0.42	85.28	220	NA	3,090,000.00	—	ug/kg
Naphthalene, 1,7-Dimethyl-	1	100	180	180	NA	NA	—	ug/kg
Naphthalene, 2,7-Dimethyl-	1	100	150	150	NA	NA	—	ug/kg
N-Butylbenzene	131	0	5.87	145	NA	NA	—	ug/kg
Nickel	97	98.97	12.33	47.9	62.21	20,400.00	—	mg/kg
Nitrobenzene	108	0	181.62	220	NA	332,000.00	—	ug/kg
N-Nitroso-Di-N-Propylamine	108	0	181.62	220	NA	5,470.00	—	ug/kg
N-Nitrosodiphenylamine	108	0	181.62	220	NA	7,810,000.00	—	ug/kg
Nonadecane	1	100	190	190	NA	NA	—	ug/kg
N-Propylbenzene	131	0	5.87	145	NA	NA	—	ug/kg
Octadecane	2	100	1790	3300	NA	NA	—	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 Concen-tration	Bckgd Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
O-Nitrophenol	108	0	181.62	220	NA	NA	—	ug/kg
P-Dichlorobenzene	239	0	85.29	220	NA	840,000.00	—	ug/kg
Pentachlorophenol	108	0.93	879.07	1050	NA	162,000.00	—	ug/kg
Pentadecane	1	100	250	250	NA	NA	—	ug/kg
Pentatriacontane	1	100	1400	1400	NA	NA	—	ug/kg
Phenanthrene	108	9.26	185.45	590	NA	NA	—	ug/kg
Phenanthrene, 1-Methyl-	1	100	180	180	NA	NA	—	ug/kg
Phenol	108	0	181.62	220	NA	613,000,000.00	—	ug/kg
P-Nitroaniline	108	0	879.63	1050	NA	NA	—	ug/kg
P-Nitrophenol	108	0	879.63	1050	NA	8,180,000.00	—	ug/kg
Polonium-210	97	100	217.22	6480	NA	NA	—	pCi/g
Potassium	96	100	1528.79	4230	6196.81	NA	—	mg/kg
Potassium-40	99	100	10.49	25.5	NA	NA	—	pCi/g
Protactinium-234	96	100	0	0	NA	NA	—	pCi/g
Protactinium-234m	96	100	0.05	4.64	NA	NA	—	pCi/g
Pyrene	108	12.96	196.02	640	NA	22,100,000.00	—	ug/kg
Radium-226	97	100	1.57	6.42	NA	NA	—	pCi/g
Sec-Butylbenzene	131	0	5.87	145	NA	NA	—	ug/kg
Selenium	97	11.34	0.28	0.77	4.8	5,110.00	—	mg/kg
Silica As Sio2, Dissolved	96	100	475.5	947	NA	NA	—	mg/kg
Silver	97	36.08	0.56	12.7	24.54	5,110.00	—	mg/kg
Sodium	96	14.58	133.86	2780	1251.24	NA	—	mg/kg
Strontium	97	100	62.65	368	211.38	613,000.00	—	mg/kg
Styrene	131	0	5.87	145	NA	123,000,000.00	—	ug/kg
Tert-Butylbenzene	131	0	5.87	145	NA	NA	—	ug/kg
Tetrachloroethene	128	32.81	122.49	6100	NA	615,000.00	37,500.00	ug/kg
Tetradecanoic Acid	1	100	150	150	NA	NA	—	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 Concen-tration	Bckgd Mean +2SD	Wildlife Refuge Worker Action Level	Ecological Receptor Action Level	Unit
Thallium	97	23.71	0.56	1.6	1.84	NA	—	mg/kg
Thallium-208	99	100	0.29	0.7	NA	NA	—	pCi/g
Thorium-230	96	100	0.27	11.2	NA	NA	—	pCi/g
Thorium-231	99	100	0.19	1.37	NA	NA	—	pCi/g
Tin	97	100	1.94	4.6	286.31	613,000.00	—	mg/kg
Titanium	97	100	190.17	414	NA	NA	—	mg/kg
Toluene	131	0	5.87	145	NA	31,300,000.00	128,000.00	ug/kg
Trans-1,2-Dichloroethene	131	0	2.9	70	NA	NA	—	ug/kg
Trans-1,3-Dichloropropene	131	0	5.87	145	NA	250,000.00	—	ug/kg
Trichloroethene	131	7.63	5.23	135	NA	19,600.00	509,000.00	ug/kg
Trichlorofluoromethane	131	0	5.87	145	NA	NA	—	ug/kg
Tridecane	1	100	220	220	NA	NA	—	ug/kg
Unknown	172	100	8010.17	140000	NA	NA	—	ug/kg
Uranium	97	48.45	2.38	7.4	NA	2,750.00	67.80	mg/kg
Uranium-234	99	100	2.91	8.53	1.49	300.00	1,800.00	pCi/g
Uranium-235	99	100	0.18	0.44	0.12	8.00	1,900.00	pCi/g
Uranium-238	99	100	2.91	8.53	1.49	351.00	1,600.00	pCi/g
Vanadium	97	100	21.63	67.2	88.49	7,150.00	433.00	mg/kg
Vinyl Chloride	131	0	5.87	145	NA	41,200.00	166.00	ug/kg
Xylenes (Total)	131	0	5.87	145	NA	1,000,000,000.00	—	ug/kg
Zinc	97	100	18.88	53.1	139.1	307,000.00	—	mg/kg

3.0 DEVIATIONS FROM PLANNED SAMPLING SPECIFICATIONS

Deviations from the planned sampling specifications described in BZSAP Addendum #BZ-02-01 (DOE 2002b) are presented in Table 7.

Table 7
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.
	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-1412	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-1413	CV40-000	2087078.06	749463.45	2087080.79	749457.38	Sample location deviation was based on topography.
174a	BW52-000	2082020.64	751766.82	2082012.80	751772.30	Sample location deviation was due to existing well in planned location.

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-v1, 1997a.
- V&V Guidelines for Isotopic Determinations by Alpha Spectrometry, DA-RC01-v1, 1998.
- V&V Guidelines for Volatile Organics, DA-SS01-v1, 1997b.
- V&V Guidelines for Semivolatile Organics, DA-SS02-v1, 1997c.

- V&V Guidelines for Metals, DA-SS05-v1, 1997d.
- Lockheed-Martin, 1997, Evaluation of Radiochemical Data Usability, ES/ER/MS-5.

This report will be submitted to the Comprehensive Environmental, Response, Compensation and Liability Act (CERCLA) Administrative Record (AR) for permanent storage 30 days after being provided to CDPHE and/or U.S. EPA.

4.1.2 Verification and Validation of Results

Verification ensures that data produced and used by the project are documented and traceable in accordance with quality requirements. Validation consists of a technical review of all data that directly support the project decisions so that any limitations of the data relative to project goals are delineated and the associated data are qualified accordingly. The V&V process defines the criteria that constitute data quality, namely PARCCS parameters. Data traceability and archival are also addressed. V&V criteria include the following:

- Chain-of-custody;
- Preservation and hold-times;
- Instrument calibrations;
- Preparation blanks;
- Interference check samples (metals);
- Matrix spikes/matrix spike duplicates (MS/MSD);
- Laboratory control samples (LCS);
- Field duplicate measurements;
- Chemical yield (radiochemistry);
- Required quantitation limits/minimum detectable activities (sensitivity of chemical and radiochemical measurements, respectively); and
- Sample analysis and preparation methods.

Evaluation of V&V criteria ensures that PARCCS parameters are satisfactory (i.e., within tolerances acceptable to the project). Satisfactory V&V of laboratory quality controls are captured through application of validation "flags"or qualifiers to individual records.

Raw hardcopy data (e.g., individual analytical data packages) are currently filed by RIN and are maintained by Kaiser-Hill Analytical Services Division; older hardcopies may reside in the Federal Center in Lakewood, Colorado. Electronic data are stored in the RFETS Soil and Water Database (SWD).

Both quality control (QC) and real data, as of May 22, 2003, are included on the enclosed CD.

4.1.3 Accuracy

The following measures of accuracy were evaluated:

- Laboratory Control Sample Evaluation;
- Surrogate Evaluation;
- Field Blanks; and
- Sample Matrix Spike Evaluation.

Results are compared to method requirements and project goals. The results of these comparisons are summarized for RFCA COCs where the result could impact project decisions. Particular attention is paid to those values near ALs when quality control (QC) results could indicate unacceptable levels of uncertainty for decision-making purposes.

Laboratory Control Sample Evaluation

The frequency of Laboratory Control Sample (LCS) measurements, relative to each laboratory batch, is given in Table 8. LCS frequency was adequate based on at least one LCS per batch. The minimum and maximum LCS results are also tabulated, by chemical, for the entire project. While not all LCS results are within tolerances, project decisions based on AL exceedances were not affected. Any qualifications of results due to LCS performance exceeding upper or lower tolerance limits are captured in the V&V flags, described in the Completeness Section.

Surrogate Evaluation

The frequency of surrogate measurements, relative to each laboratory batch, is given in Table 9. Surrogate frequency was adequate based on at least one set per sample. The minimum and maximum surrogate results are also tabulated, by chemical, for the entire project. Any qualifications of results due to surrogate results are captured in the V&V flags, described in the Completeness Section.

Field Blank Evaluation

Detectable amounts of contaminants within the blanks, which could indicate possible cross-contamination of samples, are evaluated if the same contaminant is detected in the associated real samples. When the real result is less than 10 times the blank result for laboratory contaminants and 5 times the result for non-laboratory contaminants, the real result is eliminated. None of the chemicals detected in blanks were detected at concentrations greater than ALs, therefore no significant blank contamination is indicated.

Table 8
Laboratory Control Sample Evaluation

CAS Number	Analyte	Result Type	Minimum	Maximum	Number of Laboratory Samples	Number of Laboratory Batches	Unit	Test Method
75-35-4	1,1-DICHLOROETHENE	LC	74	102	28	28	%REC	SW-846 8260
120-82-1	1,2,4-TRICHLOROBENZENE	LC	53	73	12	12	%REC	SW-846 8270B
121-14-2	2,4-DINITROTOLUENE	LC	54	80	12	12	%REC	SW-846 8270B
95-57-8	2-CHLOROPHENOL	LC	57	77	12	12	%REC	SW-846 8270B
83-32-9	ACENAPHTHENE	LC	55	74	12	12	%REC	SW-846 8270B
7429-90-5	ALUMINUM	LC	91	99	8	8	%REC	SW-846 6010/6010B
7440-36-0	ANTIMONY	LC	89	97	8	8	%REC	SW-846 6010/6010B
12674-11-2	AROCLOR-1016	LC	81	122	10	10	%REC	SW-846 8082
11096-82-5	AROCLOR-1260	LC	88	110	10	10	%REC	SW-846 8082
7440-38-2	ARSENIC	LC	91	101	8	8	%REC	SW-846 6010/6010B
7440-39-3	BARIUM	LC	94	105	8	8	%REC	SW-846 6010/6010B
71-43-2	BENZENE	LC	83	110	28	28	%REC	SW-846 8260
7440-41-7	BERYLLIUM	LC	89	102	8	8	%REC	SW-846 6010/6010B
7440-43-9	CADMIUM	LC	88	100	8	8	%REC	SW-846 6010/6010B
108-90-7	CHLOROBENZENE	LC	86	105	28	28	%REC	SW-846 8260
7440-48-4	COBALT	LC	88	99	8	8	%REC	SW-846 6010/6010B
7440-50-8	COPPER	LC	93	104	8	8	%REC	SW-846 6010/6010B
7439-89-6	IRON	LC	93	100	8	8	%REC	SW-846 6010/6010B
7439-92-1	LEAD	LC	91	103	8	8	%REC	SW-846 6010/6010B
7439-93-2	LITHIUM	LC	91	100	8	8	%REC	SW-846 6010/6010B
7439-96-5	MANGANESE	LC	91	101	8	8	%REC	SW-846 6010/6010B
7439-97-6	MERCURY	LC	97	102	9	9	%REC	SW-846 6010/6010B
7439-98-7	MOLYBDENUM	LC	88	96	8	8	%REC	SW-846 6010/6010B
7440-02-0	NICKEL	LC	89	102	8	8	%REC	SW-846 6010/6010B
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	LC	54	79	12	12	%REC	SW-846 8270B
106-46-7	P-DICHLOROBENZENE	LC	54	72	12	12	%REC	SW-846 8270B
87-86-5	PENTACHLOROPHENOL	LC	42	69	12	12	%REC	SW-846 8270B
108-95-2	PHENOL	LC	55	77	12	12	%REC	SW-846 8270B

Table 8
Laboratory Control Sample Evaluation

CAS Number	Analyte	Result Type	Minimum	Maximum	Number of Laboratory Samples	Number of Laboratory Batches	Unit	Test Method
100-02-7	P-NITROPHENOL	LC	49	68	12	12	%REC	SW-846 8270B
129-00-0	PYRENE	LC	53	75	12	12	%REC	SW-846 8270B
7782-49-2	SELENIUM	LC	94	103	8	8	%REC	SW-846 6010/6010B
7440-22-4	SILVER	LC	91	109	8	8	%REC	SW-846 6010/6010B
7440-24-6	STRONTIUM	LC	92	103	8	8	%REC	SW-846 6010/6010B
7440-31-5	TIN	LC	88	98	8	8	%REC	SW-846 6010/6010B
108-88-3	TOLUENE	LC	83	104	28	28	%REC	SW-846 8260
79-01-6	TRICHLOROETHENE	LC	86	107	28	28	%REC	SW-846 8260
7440-62-2	VANADIUM	LC	91	100	8	8	%REC	SW-846 6010/6010B
7440-66-6	ZINC	LC	86	102	8	8	%REC	SW-846 6010/6010B

Table 9
Surrogate Recovery Summary

VOC Surrogate Recoveries				
Number of Samples	Analyte	Minimum	Maximum	Unit Code
132	1,2-DICHLOROETHANE-D4	84	126	%REC
132	4-BROMOFLUOROBENZENE	90	126	%REC
132	TOLUENE-D8	92	118	%REC
Svoc Surrogate Recoveries				
Number of Samples	Analyte	Minimum	Maximum	Unit Code
134	TERPHENYL-D14	20	86	%REC
134	2-FLUOROBIPHENYL	24	78	%REC
134	2-FLUOROPHENOL	22	75	%REC
134	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 10. While some of the recoveries appear to be low, they would not result in rejection of data that affects the project decision.

Table 10
Sample Matrix Spike Evaluation

CAS Number	Analyte	Result Type	Minimum	Maximum	Number of Laboratory Samples	Number of Laboratory Batches	Unit	Test Method
7429-90-5	ALUMINUM	MS	312	4230	8	8	%REC	SW-846 6010/6010B
7439-89-6	IRON	MS	0	1820	8	8	%REC	SW-846 6010/6010B
7439-92-1	LEAD	MS	78	127	8	8	%REC	SW-846 6010/6010B
7439-93-2	LITHIUM	MS	86	99	8	8	%REC	SW-846 6010/6010B
7439-96-5	MANGANESE	MS	0	242	8	8	%REC	SW-846 6010/6010B
7439-97-6	MERCURY	MS	91	102	8	8	%REC	SW-846 6010/6010B
7439-98-7	MOLYBDENUM	MS	80	91	8	8	%REC	SW-846 6010/6010B
7440-02-0	NICKEL	MS	79	98	8	8	%REC	SW-846 6010/6010B
7440-22-4	SILVER	MS	85	142	8	8	%REC	SW-846 6010/6010B
7440-24-6	STRONTIUM	MS	0	108	8	8	%REC	SW-846 6010/6010B
7440-31-5	TIN	MS	71	96	8	8	%REC	SW-846

Table 10
Sample Matrix Spike Evaluation

CAS Number	Analyte	Result Type	Minimum	Maximum	Number of Laboratory Samples	Number of Laboratory Batches	Unit	Test Method
								6010/6010B
7440-36-0	ANTIMONY	MS	26	58	8	8	%REC	SW-846 6010/6010B
7440-38-2	ARSENIC	MS	85	100	8	8	%REC	SW-846 6010/6010B
7440-39-3	BARIUM	MS	75	106	8	8	%REC	SW-846 6010/6010B
7440-41-7	BERYLLIUM	MS	78	101	8	8	%REC	SW-846 6010/6010B
7440-43-9	CADMIUM	MS	75	96	8	8	%REC	SW-846 6010/6010B
7440-48-4	COBALT	MS	82	96	8	8	%REC	SW-846 6010/6010B
7440-50-8	COPPER	MS	86	109	8	8	%REC	SW-846 6010/6010B
7440-62-2	VANADIUM	MS	83	108	8	8	%REC	SW-846 6010/6010B
7440-66-6	ZINC	MS	69	101	8	8	%REC	SW-846 6010/6010B
7782-49-2	SELENIUM	MS	89	100	8	8	%REC	SW-846 6010/6010B
11096-82-5	AROCLOR-1260	MS	55	124	9	9	%REC	SW-846 8082
12674-11-2	AROCLOR-1016	MS	57	138	9	9	%REC	SW-846 8082
108-88-3	TOLUENE	MS	57	107	13	13	%REC	SW-846 8260
108-90-7	CHLOROBENZENE	MS	49	106	13	13	%REC	SW-846 8260
71-43-2	BENZENE	MS	63	111	13	13	%REC	SW-846 8260
75-35-4	1,1-DICHLOROETHENE	MS	60	100	13	13	%REC	SW-846 8260
79-01-6	TRICHLOROETHENE	MS	58	111	13	13	%REC	SW-846 8260
100-02-7	P-NITROPHENOL	MS	45	73	10	10	%REC	SW-846 8270B
106-46-7	P-DICHLOROBENZENE	MS	43	60	10	10	%REC	SW-846 8270B
108-95-2	PHENOL	MS	53	68	10	10	%REC	SW-846 8270B
120-82-1	1,2,4-TRICHLOROBENZENE	MS	48	63	10	10	%REC	SW-846 8270B
121-14-2	2,4-DINITROTOLUENE	MS	48	71	10	10	%REC	SW-846 8270B
129-00-0	PYRENE	MS	50	70	10	10	%REC	SW-846 8270B

Table 10
Sample Matrix Spike Evaluation

CAS Number	Analyte	Result Type	Minimum	Maximum	Number of Laboratory Samples	Number of Laboratory Batches	Unit	Test Method
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	MS	53	67	10	10	%REC	SW-846 8270B
83-32-9	ACENAPHTHENE	MS	49	65	10	10	%REC	SW-846 8270B
87-86-5	PENTACHLOROPHENOL	MS	20	61	10	10	%REC	SW-846 8270B
95-57-8	2-CHLOROPHENOL	MS	52	69	10	10	%REC	SW-846 8270B

4.1.4 Precision

Matrix Spike Duplicate Evaluation

Laboratory precision is measured through use of MSD. Adequate frequency of MSD measurements is indicated by at least one MSD in each laboratory batch. Table 11 indicates that MSD frequencies were adequate. While some of the recoveries appear to be low, they would not result in rejection of data that affects the project decision.

Table 11
Sample Matrix Spike Duplicate Evaluation

Analyte Name	Number of Sample Pairs	Number of Laboratory Batches	Max RPD (%)
P-NITROPHENOL	10	10	43.48
P-DICHLOROBENZENE	10	10	22.95
TOLUENE	13	13	11.46
CHLOROBENZENE	13	13	10.78
PHENOL	10	10	21.21
AROCLOR-1260	9	9	38.24
1,2,4-TRICHLOROBENZENE	10	10	15.63
2,4-DINITROTOLUENE	10	10	23.85
AROCLOR-1016	9	9	33.58
PYRENE	10	10	58.06
N-NITROSO-DI-N-PROPYLAMINE	10	10	20.16
BENZENE	13	13	9.41
ALUMINUM	7	7	127.56
IRON	4	4	109.83
LEAD	8	8	84.57
LITHIUM	8	8	6.74
MANGANESE	7	7	67.59
MERCURY	8	8	14.12
MOLYBDENUM	8	8	10.53
NICKEL	8	8	4.40

Table 11
Sample Matrix Spike Duplicate Evaluation

Analyte Name	Number of Sample Pairs	Number of Laboratory Batches	Max RPD (%)
LITHIUM	8	8	6.74
MANGANESE	7	7	67.59
MERCURY	8	8	14.12
MOLYBDENUM	8	8	10.53
NICKEL	8	8	4.40
BARIUM	8	8	9.26
BERYLLIUM	8	8	17.51
CADMIUM	8	8	4.49
COBALT	8	8	7.59
COPPER	8	8	29.55
VANADIUM	8	8	14.29
ZINC	8	8	25.53
1,1-DICHLOROETHENE	13	13	12.66
SELENIUM	8	8	5.78
TRICHLOROETHENE	13	13	12.72
ACENAPHTHENE	10	10	13.33
PENTACHLOROPHENOL	10	10	71.70
2-CHLOROPHENOL	10	10	20.59

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 12 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 13. Ideally, RPDs of less than 35 percent (in soil) indicate satisfactory precision. Values exceeding 35 percent only affect project decisions if the imprecision is great enough to cause contradictory decisions relative to the COC (i.e., one sample indicates clean soil whereas the QC partner does not). As indicated by the data in Table 13, a number of analytes, generally metals, VOCs and SVOCs, have RPDs greater than 35 percent. Values exceeding 35 percent only affect project decisions if the imprecision is great enough to cause contradictory decisions relative to the COC (i.e., one sample indicates clean soil whereas the QC partner does not). This scenario is possible for lead and arsenic; however, the elevated concentrations above Ecological Receptor ALs are considered.

Table 12
Field Duplicate Sample Frequency

Test Method Name	Sample Code	Number of Samples	% Duplicate Samples
GAMMA SPECTROSCOPY	REAL	12	25
GAMMA SPECTROSCOPY	DUP	3	
SW-846 6010/6010B	REAL	23	26
SW-846 6010/6010B	DUP	6	
SW-846 6200	REAL	2	—
SW-846 8082	REAL	18	28
SW-846 8082	DUP	5	
SW-846 8260	REAL	39	21
SW-846 8260	DUP	8	
SW-846 8270B	REAL	37	16
SW-846 8270B	DUP	6	

Table 13
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-DICHLOROETHANE	17.86
1,2-DICHLOROPROPANE	17.86
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-NITROANILINE	17.14
4-CHLOROANILINE	13.70
4-METHYL-2-PENTANONE	18.18
ACENAPHTHENE	98.04
ACETONE	193.16
ALUMINUM	85.97

Table 13
RPD Evaluation

Analyte	Max of RPD %
ANTHRACENE	98.04
ANTIMONY	77.14
ARSENIC	113.90
BARIUM	146.53
BENZENE	17.86
BENZO(A)ANTHRACENE	49.18
BENZO(A)PYRENE	33.85
BENZO(B)FLUORANTHENE	66.67
BENZO(K)FLUORANTHENE	41.27
BENZOIC ACID	17.14
BERYLLIUM	155.87
BIS(2-ETHYLHEXYL)PHTHALATE	13.70
BROMODICHLOROMETHANE	17.86
BROMOFORM	17.86
BROMOMETHANE	17.86
BUTYLBENZYLPHTHALATE	13.70
CARBON DISULFIDE	17.86
CARBON TETRACHLORIDE	17.86
CHLOROBENZENE	17.86
CHLOROETHANE	17.86
CHLOROFORM	17.86
CHLOROMETHANE	17.86
CHRYSENE	23.53
CIS-1,3-DICHLOROPROPENE	17.86
COBALT	110.56
COPPER	110.81
DIBENZ(A,H)ANTHRACENE	13.70
DIBENZOFURAN	13.70
DIBROMOCHLOROMETHANE	17.86
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

Table 13
RPD Evaluation

Analyte	Max of RPD %
METHYLENE CHLORIDE	147.32
MOLYBDENUM	187.73
NAPHTHALENE	194.87
NICKEL	105.26
NITROBENZENE	13.70
N-NITROSODIPHENYLAMINE	13.70
PENTACHLOROPHENOL	17.14
PHENOL	13.70
PYRENE	172.09
SELENIUM	65.65
SILVER	181.74
STRONTIUM	170.92
TETRACHLOROETHENE	173.28
TIN	66.67
TOLUENE	17.86
TRANS-1,3-DICHLOROPROPENE	17.86
TRICHLOROETHENE	130.16
VANADIUM	118.72
VINYL CHLORIDE	17.86
ZINC	111.36

Completeness

Based on original project DQOs, a minimum of 25 percent of ER Program analytical (and radiological) results must be formally verified and 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 14 shows the number and percentage of validated records (codes without "1"), the number and percentage of verified records (codes with "1"), and the percentage of rejected records for each analyte group. Frequency of validation did not meet project goals for any of the anaytical suites. However, programmatic goals, shown in Table 15 indicate the DQO of 25% frequency is attained for PCBs, ICP metals, and radionuclides via alpha spectroscopy.

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

The RPD values greater than 35 percent indicate that the sampling precision limits some analytes has been exceeded. However, the imprecision does not affect project decisions because the only AL exceedances are Ecologoical Receptor ALs for arsenic and lead. No records were rejected. 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.

Table 14
Validation and Verification Summary

Validation Code	Number of Records	Radionuclides	Metals	PCBs	SVOCs	VOCs
No V& V	928	928	0	0	0	0
1	158	0	3	7	144	4
J	126	0	126	0	0	0
J1	1208	0	1173	1	31	3
R1	2	0	2	0	0	0
V	3511	0	371	119	1646	1375
V1	15258	0	1730	510	6685	6333
J1	1	0	1	0	0	0
JB	6	0	0	0	0	6
JB1	61	0	0	0	0	61
UJ	63	0	30	0	27	6
UJ1	561	0	138	133	162	128
Total	21883	928	3574	770	8695	7916
Total Validated	3637	0	497	119	1646	1375
% Validated	17%	0%	14%	15%	19%	17%
Total Verified	20955	0	3574	770	8695	7916
% Verified	96%	0%	100%	100%	100%	100%
% Rejected	0.01%	0.00%	0.06%	0.00%	0.00%	0.00%

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

Table 15

DQA Completeness Versus Prgrammatic Goals

Validation Code	Total Number of Reecords	Radionuclides		Cyanide/ Sulfides	TCLP Metals	Metals ICP	Metals XRF	Pesticides	PCBs	Organo-phosphorus Compounds	Chlorinated Herbicides	VOCs	SVOCs	Nitroaro-matics	Anions
EPA Laboratory Method:		Alpha Spec	Gamma Spec	SW9010/ 9012/903 0/9040	SW1311,60 10,7470	SW6010	SW6200	SW8081	SW8082	SW8141	SW8151	SW8260	SW827 0	SW8330	SW9056 or E300
Null	42540	145	25761			985	60					15039	545		5
I	420					3			14			69	332		2
J1	3782	2		4	21	3047	598	5	8			14	33		50
U1	2						1					1			
V1	58575	172	7	22	85	6853	6111	870	1059	140	120	14423	28707		6
J1	1					1									
JB1	124							4				120			
UJ1	1726	1	9	25	6	635	50	33	151		10	428	336		42
R1	89					55							31		3
SubTotal:	107259	320	25777	51	112	11579	6820	912	1232	140	130	30094	29984	0	108
Validation															
J	1482	11				1340	69	19	5			20	18		
U	5											5			
JB	48											48			
UJ	920					293	61	5				304	256		1
V	18077	115	18			2720	1370	660	548			5842	6712	80	12
V	1												1		
R	72	5				29						38			
SubTotal:	20533	126	18	0	0	4353	1500	684	553	0	0	6219	6987	80	13
Total:	127792	446	25795	51	112	15932	8320	1596	1785	140	130	36313	36971	80	121
Percent	51%	39%	0%	100%	100%	66%	81%	57%	69%	100%	100%	41%	80%	0%	85%

Table 15

DQA Completeness Versus Prgrammatic Goals

Validation Code	Total Number of Reecords	Radionuclides		Cyanide/ Sulfides	TCLP Metals	Metals ICP	Metals XRF	Pesticides	PCBs	Organo-phosphorus Compounds	Chlorinated Herbicides	VOCs	SVOCs	Nitroaro-matics	Anions
Verified:															
Percent Validated:	16%	29%	0%	0%	0%	28%	18%	43%	31%	0%	0%	17%	19%	100%	11%
Percent Rejected:	0.2%	1.6%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	2.6%

Note: Validation frequency less than programmatic goal of 25% are shaded gray.

5.0 REFERENCES

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DOE, 1999, Order 414.1A, Quality Assurance.

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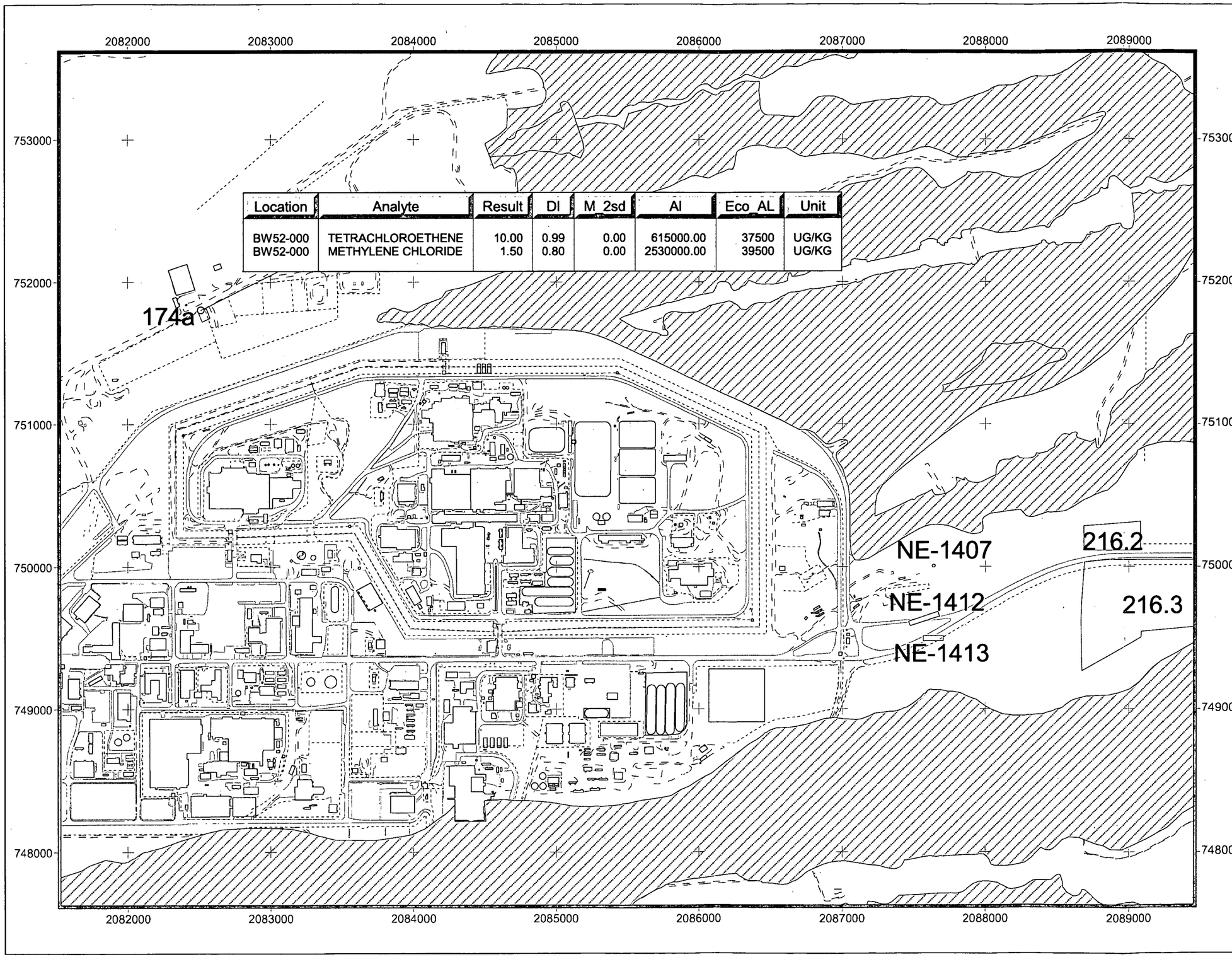
ENCLOSURE

IHSS GROUP NE/NW RAW DATA
(Compact Disc)

112
112



Location	Analyte	Result	DI	M_2sd	AI	Eco_AL	Unit
BW52-000	TETRACHLOROETHENE	10.00	0.99	0.00	615000.00	37500	UG/KG
BW52-000	METHYLENE CHLORIDE	1.50	0.80	0.00	2530000.00	39500	UG/KG

Figure 3
NW Surface Soil Sample Results Greater than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit

KEY

- Sample Location (Below Action Level)
- IHSS
- PAC
- Area Prone to Landslides or High Erosion
- Dirt Road
- Paved Road

Notes:
Only results with Wildlife Refuge Worker (WRW) Action Levels (ALs) are shown.

m_2sd = 0.00 indicates no background values are available
Sbd = Sample begin depth
Sed = Sample end depth
DI = Detection/Reporting Limit
AI = WRW AL
Eco_AI = Ecological Receptor AL

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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: 6.10.03

RADMS

Prepared for:

KAISER•HILL COMPANY

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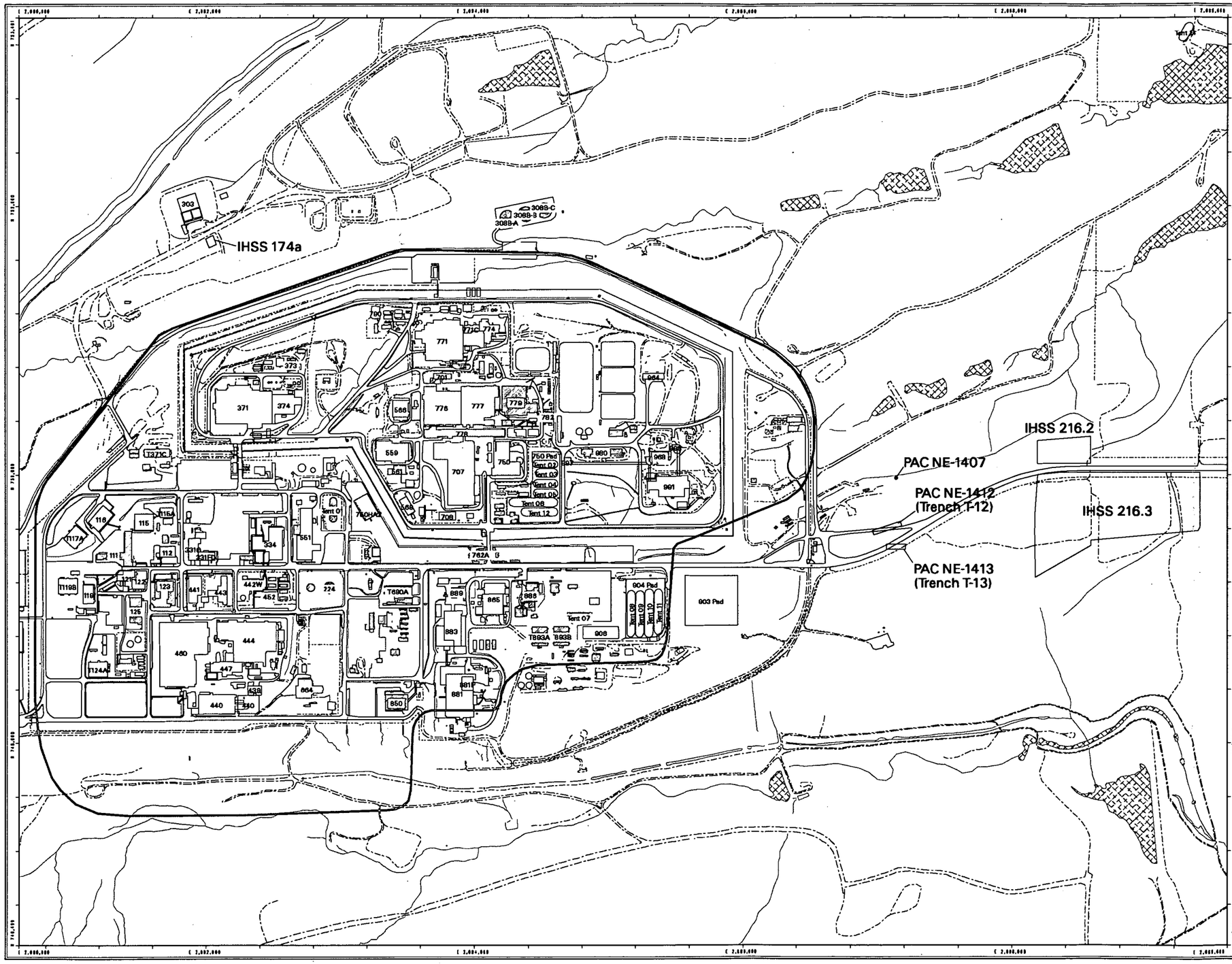

Figure 1
IHSS Group NE/NW Location Map

EXPLANATION

NE/NW

Standard Map Features

- Buildings and other structures
- Demolished buildings
- 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)
3rd Annual Update
Sept. 30, 1997
Individual Hazardous Substance Sites (IHSS)
D.O.E. 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

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GIS Dept. 303-966-7707

Prepared by: DynCorp — THE ART OF TECHNOLOGY

Prepared for: KAISER-HILL

December 23, 2002

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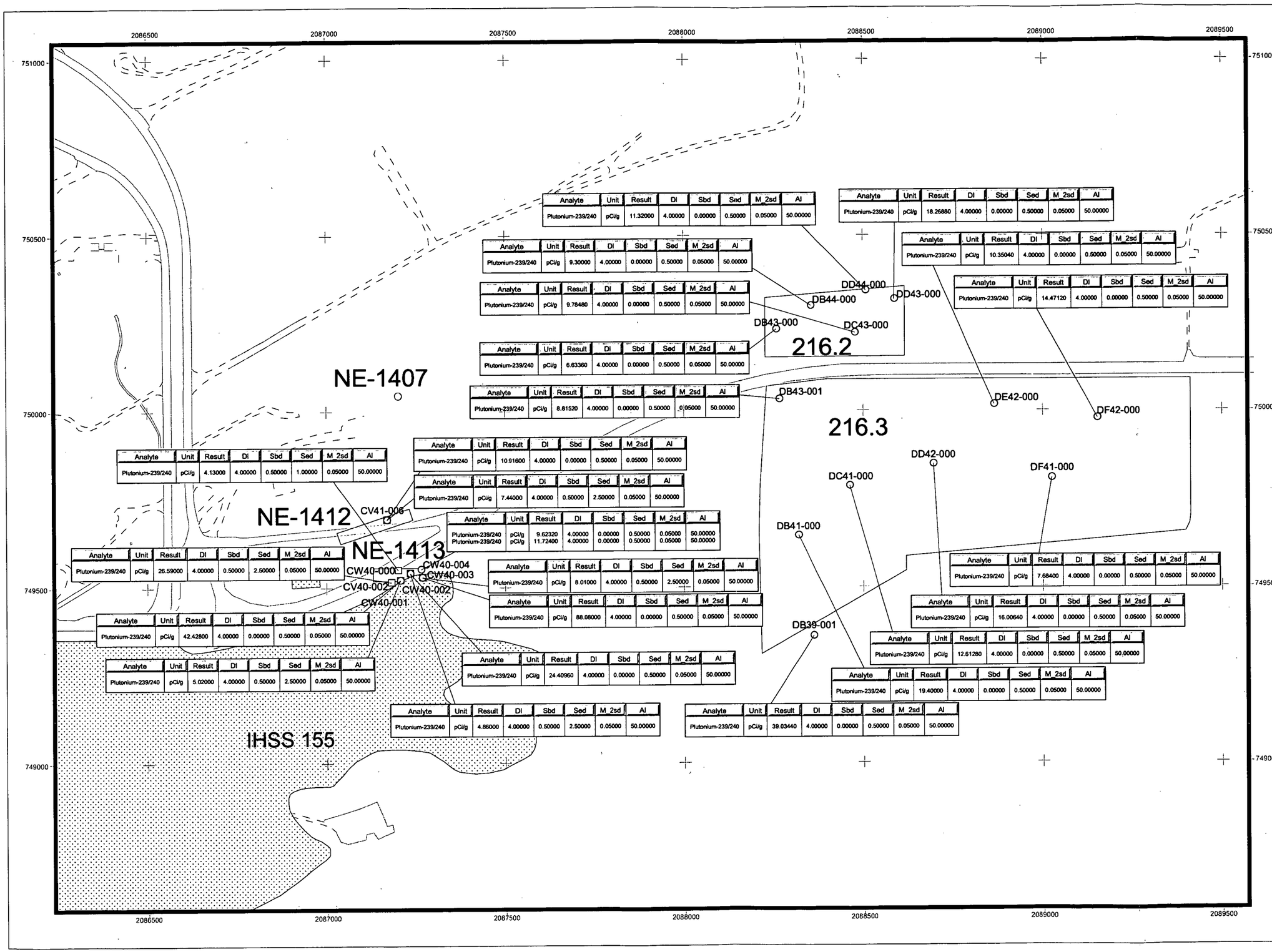

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	11.32000	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	18.26880	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	9.30000	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	10.35040	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	9.78480	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	14.47120	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	6.63360	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	8.81520	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	4.13000	4.00000	0.50000	1.00000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	10.91600	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	7.44000	4.00000	0.50000	2.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	9.62320	4.00000	0.00000	0.50000	0.05000	50.00000
Plutonium-239/240	pCi/g	11.72400	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	26.59000	4.00000	0.50000	2.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	8.01000	4.00000	0.50000	2.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	88.08000	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	7.68400	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	16.00640	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	42.42800	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	12.61280	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	5.02000	4.00000	0.50000	2.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	24.40960	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	19.40000	4.00000	0.00000	0.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	4.86000	4.00000	0.50000	2.50000	0.05000	50.00000

Analyte	Unit	Result	DI	Sbd	Sed	M_2sd	AI
Plutonium-239/240	pCi/g	39.03440	4.00000	0.00000	0.50000	0.05000	50.00000

Figure 6
Surface and Subsurface Plutonium Results Greater than Background Mean Plus Two Standard Deviations

KEY

- IHSS
- IHSS 155
- PAC
- Dirt road
- Paved area
- Surface Soil Sampling Location
- Subsurface Soil Sampling Location

Notes:
Sbd = Soil Begin Depth
Sed = Soil End Depth
M_2sd = Background Mean Plus Two Standard Deviations
AI = Wildlife Refuge Worker (WRW) Action Level (AL)

Ecological Receptor AL for Plutonium-239/240 is 3,800 pCi/g.

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N

100 0 100 200 Feet

Scale = 1:4,400

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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

Prepared by: Date: 6.10.03

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Prepared for:

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12

Location	Analyte	Result	DI	Sbd	Sed	M_2sd	AI	Eco_al	Unit
BW52-000	ACETONE	7.60	4.70	0.5	2.5	0.00	102000000.00	211000	UG/KG
BW52-000	TETRACHLOROETHENE	50.00	1.00	0.5	2.5	0.00	615000.00	37500	UG/KG
BW52-000	2-BUTANONE	200.00	5.50	24.6	25.6	0.00	192000000.00	433000	UG/KG
BW52-000	TETRACHLOROETHENE	6.40	1.10	2.5	4.5	0.00	615000.00	37500	UG/KG
BW52-000	2-BUTANONE	720.00	4.80	4.5	6.5	0.00	192000000.00	433000	UG/KG
BW52-000	TRICHLOROETHENE	1.60	0.89	4.5	6.5	0.00	19600.00	509000	UG/KG
BW52-000	ACETONE	510.00	4.70	4.5	6.5	0.00	102000000.00	211000	UG/KG
BW52-000	2-BUTANONE	520.00	5.00	6.5	8.5	0.00	192000000.00	433000	UG/KG
BW52-000	ACETONE	370.00	4.90	6.5	8.5	0.00	102000000.00	211000	UG/KG
BW52-000	TRICHLOROETHENE	7.80	0.93	6.5	8.5	0.00	19600.00	50900	UG/KG
BW52-000	2-BUTANONE	16.00	5.50	8.5	10.5	0.00	192000000.00	433000	UG/KG
BW52-000	TRICHLOROETHENE	1.10	1.00	8.5	10.5	0.00	19600.00	50900	UG/KG
BW52-000	TETRACHLOROETHENE	140.00	1.20	10.5	12.5	0.00	615000.00	37500	UG/KG
BW52-000	ACETONE	140.00	5.40	10.5	12.5	0.00	102000000.00	211000	UG/KG
BW52-000	ACETONE	690.00	5.40	12.5	14.5	0.00	102000000.00	211000	UG/KG
BW52-000	2-BUTANONE	400.00	5.60	12.5	14.5	0.00	192000000.00	433000	UG/KG
BW52-000	ACETONE	290.00	5.00	14.5	16.5	0.00	102000000.00	211000	UG/KG
BW52-000	2-BUTANONE	560.00	5.20	14.5	16.5	0.00	192000000.00	433000	UG/KG
BW52-000	METHYLENE CHLORIDE	1.60	0.81	0.5	2.5	0.00	2530000.00	39500	UG/KG

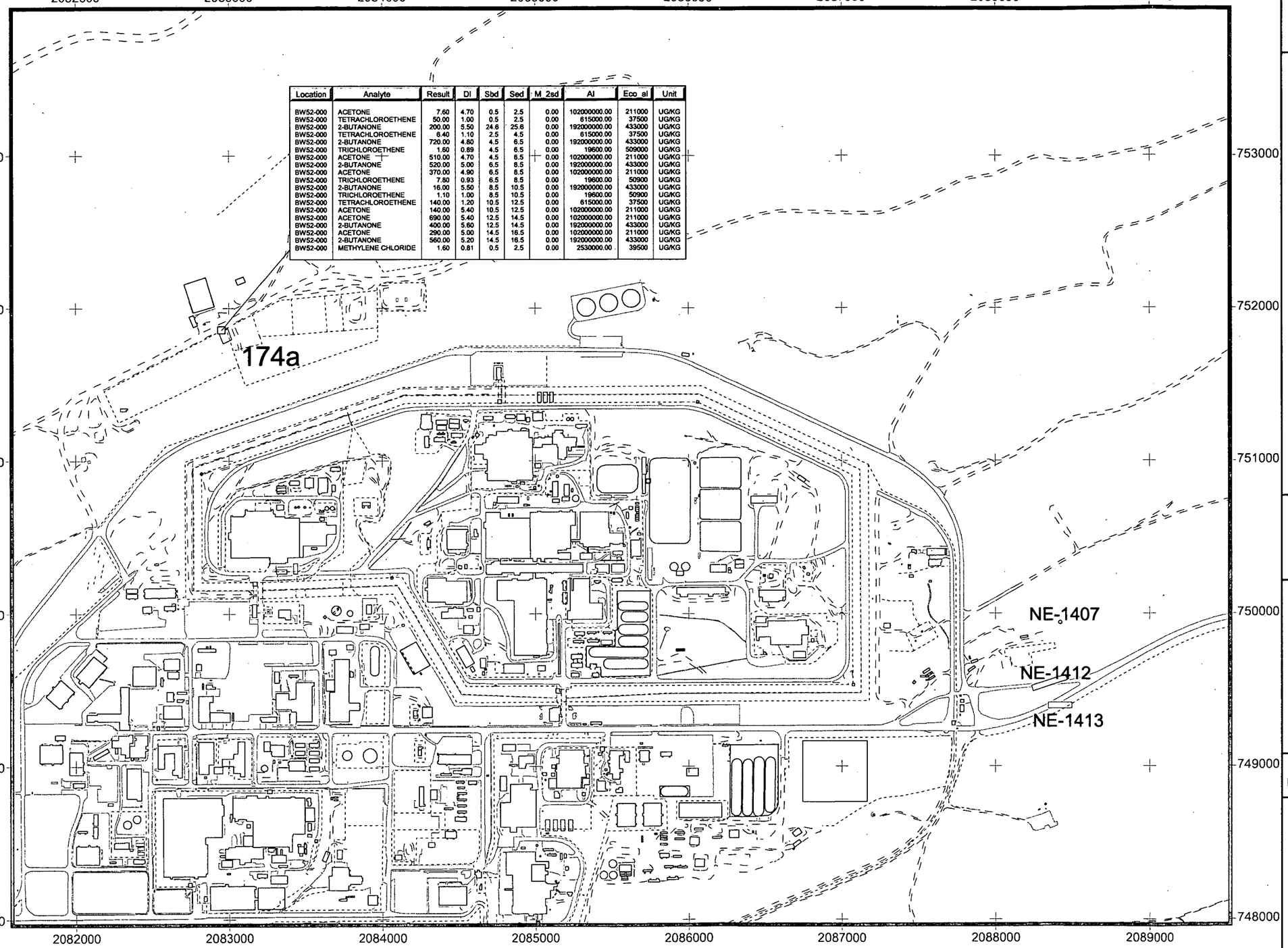

Figure 5
NW Subsurface Soil Sample Results Greater than Background Mean Plus Two Standard Deviations or Detection/Reporting Limit

KEY

- Below Action Level
- Dirt Road
- Paved Road
- IHSS
- PAC

Notes:
Only results with RFCA Action Levels (ALs) are shown.

m_2sd = 0.00 indicates no background values are available
Sbd = Sample begin depth
Sed = Sample end depth
DI = Detection/Reporting limit

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N W E S

500 0 500 Feet

Scale = 1:7,500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
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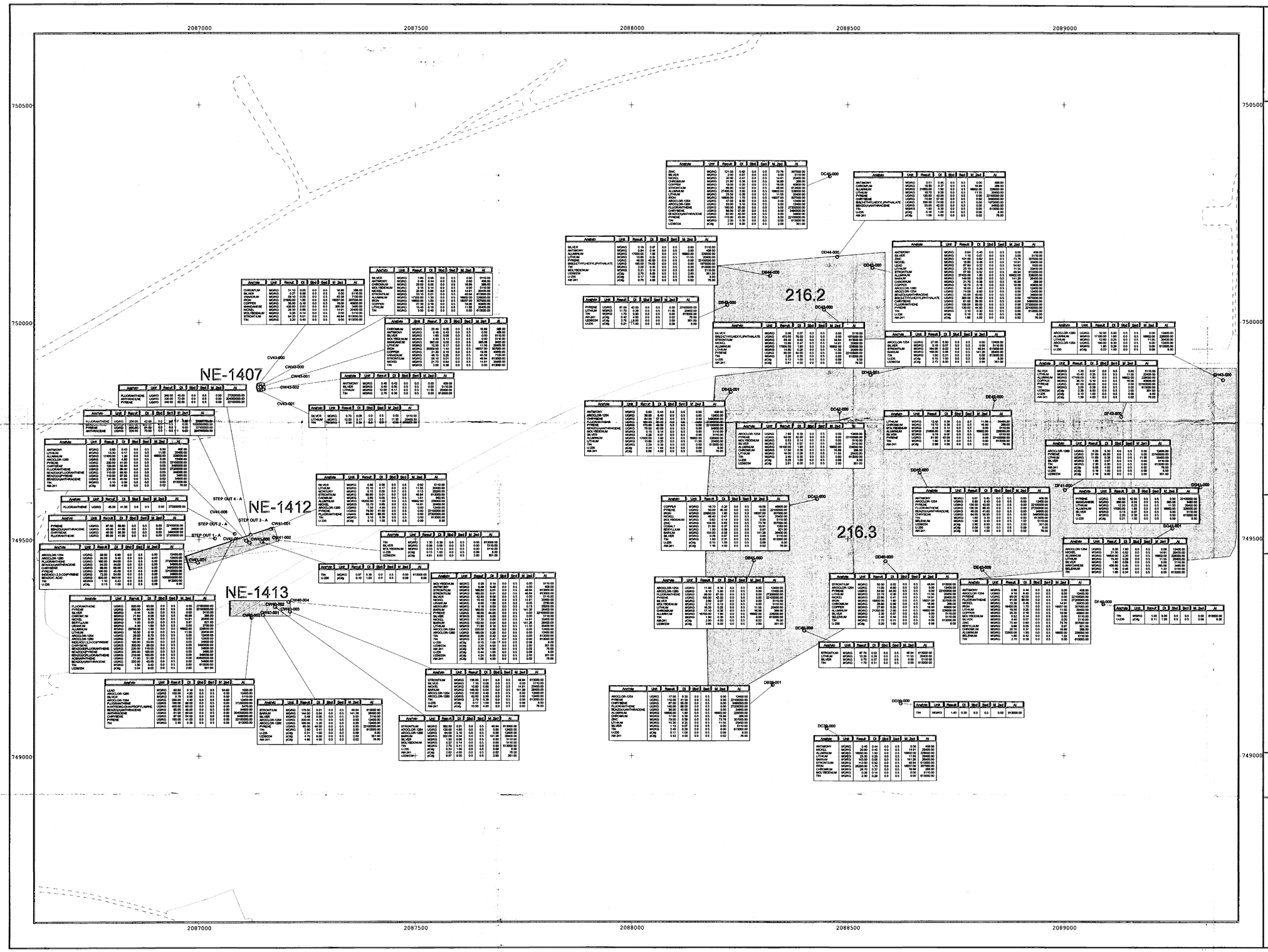

Figure 2
NE Surface Soil Sample
Results Greater than Background
Mean Plus Two Standard Deviations
or Detection/Reporting Limit

KEY

- Below Action Level
- Dirt Road
- Paved Road
- PAC
- IHSS

Notes:
Only results with WRW Action Levels (ALs) are shown.

Soil ALs have been proposed as modifications to RFCA Attachment 5.

m_2sd = 0.00 indicates no background values are available
Sbd = Sample begin depth
Sed = Sample end depth
Dl = Detection/Reporting limit

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N

Scale = 1: 1240

200 0 200 Feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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