NOTICE

All drawings located at the end of the document.

FINAL INDUSTRIAL AREA SAMPLING AND ANALYSIS PLAN FY03 ADDENDUM #IA-03-01 IHSS GROUPS 300-3, 300-4, 400-8, 700-4, 800-1, and 900-3

December 2002

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ACRONYMS

FY	Fiscal Year
HPGe	high-purity germanium
HRR	Historical Release Report
IA	Industrial Area
IASAP	Industrial Area Sampling and Analysis Plan
IHSS	Individual Hazardous Substance Site
MDL	method detection limit
mg/kg	milligrams per kilogram
N/A	not applicable
NPWL	New Process Waste Lines
PAC	Potential Area of Concern
PCB	polychlorinated biphenyl
pCi/g	picocuries per gram
PCOC	potential contaminant of concern
RLCR	Reconnaissance Level Characterization Report
SAP	Sampling and Analysis Plan
SVOC	semivolatile organic compound
UBC	Under Building Contamination
VOC	volatile organic compound

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1.0 INTRODUCTION

This Industrial Area (IA) Sampling and Analysis Plan (SAP) (IASAP) (DOE 2001) Addendum #IA-03-01 includes Individual Hazardous Substance Site (IHSS) Group-specific information, sampling locations, and potential contaminants of concern (PCOCs) for IHSSs, Potential Areas of Concern (PACs), and Under Building Contamination (UBC) Sites proposed for characterization during Fiscal Year (FY) 03. This IASAP Addendum is a supplement to the IASAP (DOE 2001) and includes data and proposed sampling locations for the IHSS Groups and associated IHSSs, PACs, and UBC Sites listed in Table 1. The locations of the IHSS Groups, and IHSSs, PACs, and UBC Sites proposed for FY03 are shown on Figure 1.

Table 1
IASAP Addendum #IA-03-01 IHSS Groups

IHSS Group	IHSS/PAC/UBC Site
300-3	UBC 371 - New Plutonium Recovery Facility
300-4	UBC 374 - Wastewater Treatment Facility
400-8	UBC 441 – Office Building
	400-122 – Underground Concrete Tank
	000-121 – OPWL Tank 2 – Concrete Waste Storage Tank
	000-121 – OPWL Tank 3 – Concrete and Steel Waste Storage Tanks
700-4	UBC 771 - Plutonium and Americium Recovery Operations
	UBC 774 - Liquid Process Waste Treatment
	700-150.2(N) - Radioactive Site West of Buildings 771/776
	700-163.1 - Radioactive Site 700 North of Building 774 (Area 3) Wash Area
	700-163.2 - Radioactive Site 700 Area 3 Americium (Am) Slab
	700-215 - Abandoned Sump Near Building 774 Unit 55.13 T-40
	700-139(N)(b) - Hydroxide Tank, KOH, NaOH Condensate
	700-124.1 - 30,000-Gallon Tank (68)
	700-124.2 - 14,000-Gallon Tank (66)
	700-124.3 - 14,000-Gallon Tank (67)
	700-125 - Holding Tank
	700-126.1 - Westernmost Out-of-Service Process Waste Tank
	700-126.2 - Easternmost Out-of-Service Process Waste Tank
	000-121 - Tank 8 - OPWL - East and West Process Tanks
	000-121 - Tank 12 - OPWL - Two Abandoned 20,000-Gallon Underground Concrete Tanks
	000-121 - Tank 13 - OPWL - Abandoned Sump - 600 Gallons
	000-121 - Tank 14 - OPWL - 30,000-Gallon Concrete Underground Storage Tank (68)
	000-121 - Tank 15 - OPWL - Two 7,500-Gallon Process Waste Tanks (34W, 34E)
	000-121 - Tank 16 - OPWL - Two 14,000-Gallon Concrete Underground Storage Tanks (66, 67)
	000-121 - Tank 17 - OPWL - Four Concrete Process Waste Tanks (30, 31, 32, 33)
	000-121 - Tank 36 - OPWL - Steel Carbon Tetrachloride Sump
	000-121 - Tank 37 - OPWL - Steel-Lined Concrete Sump
	700-139.2 - Caustic/Acid Spills Hydrofluoric Tank
	700-146.1 - Concrete Process 7,500-Gallon Waste Tank (31)
	700-146.2 - Concrete Process 7,500-Gallon Waste Tank (32)
	700-146.3 - Concrete Process 7,500-Gallon Waste Tank (34W)
	700-146.4 - Concrete Process 7,500-Gallon Waste Tank (34E)
	700-146.5 - Concrete Process 7,500-Gallon Waste Tank (30)
	700-146.6 - Concrete Process 7,500-Gallon Waste Tank (33)
	700-150.1 - Radioactive Site North of Building 771

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IHSS Group	IHSS/PAC/UBC Site
	700-150.3 - Radioactive Site Between Buildings 771 and 774
800-1	UBC 865 - Materials Process Building
	800-1204 - Building 866 Spills
	800-1212 - Building 866 Sump Spill
	000-121 - Tank 23 - OPWL
900-3	IHSS 900-213, 904 Pad Pondcrete Storage

1.1 EXISTING CHARACTERIZATION INFORMATION

Existing concentrations and activities above the background mean plus two standard deviations, or method detection limit (MDL), are presented on tables and maps. Existing data for these IHSSs, PACs, and UBC Sites are available in Appendix C of the IASAP (DOE 2001, the Historical Release Report (HRR) (DOE 1992- 2001), and the Industrial Area Data Summary Report (DOE 2000). PCOCs in the IA include radionuclides, metals, semivolatile organic compounds (SVOCs), volatile organic compounds (VOCs), and occasionally, polychlorinated biphyenls (PCBs).

1.2 SAMPLING

The proposed sampling specifications (number and types of samples) for IHSS Groups are listed in tables and shown on maps. Proposed new sampling locations are the starting point for IHSS Group characterization. After characterization starts, the number and type of samples may change based on sampling results. Changes to sampling specifications will be considered in consultation with the regulatory agencies.

Three types of sampling strategies are used to determine sampling locations: statistical, geostatistical, and biased. Statistical grids have computer-generated random start points and orientations. Additionally, the grids have been extended outside the IHSS, PAC, or UBC Site to provide additional sampling locations if needed. Biased samples are based on existing data and supplement the statistical grid locations.

The IASAP 11-meter statistical grid was not used to determine sampling locations beneath FY03 UBCs and the 904 Pad. Instead, sampling locations were determined based on a expanded grid, and additional biased samples were added as needed. The sampling locations along the expanded grid are considered biased samples, not statistical, to ensure consistency with the IASAP data quality objectives (DQOs). This approach was chosen because of the following:

- FY02 sampling results at UBCs indicated that contaminant concentrations were below RFCA Tier II Action Levels;
- Many FY02 UBC sampling locations were relocated to sample building features; and
- This approach provides sufficient sampling power and achieves a 90% confidence level consistent with the IASAP DQOs.

Statistical confidence in UBC and under pad characterization sample sets at >90% will be maintained with the currently suggested grid-spacing of 72 feet. Use of the appropriate statistical models, such as EPA QA/G-4, lognormal, or nonparametric methods (e.g., the

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MARSSIM, EPA et al., 1997), will corroborate, with better than 90% confidence, that enough samples were acquired to draw final project conclusions.

Additional UBC and 904 Pad sampling details are included in the appropriate sections. Geostatistical methods were not used to determine sampling locations for any IHSS Groups in this Addendum.

Where a new sampling location overlaps or is adjacent to an existing sampling location, the existing sampling location data will be used during evaluation. Statistical sampling locations within a building footprint may be adjusted in the field to collect samples from specific building features.

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2.0 IHSS GROUPS 300-3 AND 300-4

2.1 EXISTING CHARACTERIZATION INFORMATION

Existing concentrations and activities above the background mean plus two standard deviations or MDLs, are presented on Figure 2. Table 2 presents the PCOCs. Existing data for these IHSSs, PACs, and UBC Sites are available in Appendix C of the IASAP (DOE 2001), HRR (DOE 1992-2001), and the Industrial Area Data Summary Report (DOE 2000).

2.2 SAMPLING

The proposed sampling specifications (number and types of samples) for IHSS Groups 300-3 and 300-4 are listed in Table 3 and shown on Figure 3. The IASAP 11-meter grid was not used to determine sampling locations at IHSS Groups 300-3 and 300-4 because Buildings 371 and 374 are relatively new, building slabs are not cracked, process waste lines are not located beneath the building slabs, and there are no floor drains or sumps in the basement and subbasement. Floor drains on the ground floor are connected to tanks. In addition, biased sampling is proposed along and below the foundation drains and the New Process Waste Line. The number of samples proposed provides a high confidence level consistent with the IASAP DQOs.

Proposed new sampling locations are the starting point for IHSS Group characterization. After characterization starts, the number and type of samples may change based on sampling results. Changes to sampling specifications will be considered in consultation with the regulatory agencies.

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Table 2
Potential Contaminants of Concern IHSS Groups 300-3 and 300-4

IHSS Group	IHSS/PAC/UBC Site	PCOCs	Media	Data Source	Sampling Location Method
300-3	UBC 371 – New Plutonium Recovery Facility	Radionuclides Metals SVOCs VOCs	Surface and Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Biased
300-4	UBC 374 – Wastewater Treatment Facility	Radionuclides Metals SVOCs VOCs	Surface and Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Biased

Table 3
Sampling Specifications IHSS Groups 300-3 and 300-4

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
300-3	UBC 371 – New Plutonium Recovery Facility	BW46-000A	2082108.217	750628.596	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BW46-000A	2082108.217	750628.596	Surface Soil	0-0.5'	Metals	6200	6010
		BW46-000A	2082108.217	750628.596	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BW46-000A	2082108.217	750628.596	Surface Soil	0-0.5'	VOCs	8260	8260
		BW46-001A	2082070.001	750568.823	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BW46-001A	2082070.001	750568.823	Surface Soil	0-0.5'	Metals	6200	6010
		BW46-001A	2082070.001	750568.823	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BW46-001A	2082070.001	750568.823	Surface Soil	0-0.5'	VOCs	8260	8260
		BW45-000A	2082104.297	750506.110	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BW45-000A	2082104.297	750506.110	Surface Soil	0-0.5'	Metals	6200	6010
		BW45-000A	2082104.297	750506.110	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BW45-000A	2082104.297	750506.110	Surface Soil	0-0.5'	VOCs	8260	8260
		BW45-001A	2082104.297	750506.110	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BW45-001A	2082104.297	750506.110	Surface Soil	0-0.5'	Metals	6200	6010
		BW45-001A	2082104.297	750506.110	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BW45-001A	2082104.297	750506.110	Surface Soil	0-0.5'	VOCs	8260	8260
		BW45-002A	2082099.398	750381.664	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BW45-002A	2082099.398	750381.664	Surface Soil	0-0.5'	Metals	6200	6010
		BW45-002A	2082099.398	750381.664	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BW45-002A	2082099.398	750381.664	Surface Soil	0-0.5'	VOCs	8260	8260
		BX45-000A	2082137.614	750443.397	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX45-000A	2082137.614	750443.397	Surface Soil	0-0.5'	Metals	6200	6010
		BX45-000A	2082137.614	750443.397	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX45-000A	2082137.614	750443.397	Surface Soil	0-0.5'	VOCs	8260	8260
		BX45-001A	2082170.930	750383.624	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX45-001A	2082170.930	750383.624	Surface Soil	0-0.5'	Metals	6200	6010

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
		BX45-001A	2082170.930	750383.624	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX45-001A	2082170.930	750383.624	Surface Soil	0-0.5'	VOCs	8260	8260
		BX45-002A	2082175.829	750504.150	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX45-002A	2082175.829	750504.150	Surface Soil	0-0.5'	Metals	6200	6010
		BX45-002A	2082175.829	750504.150	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX45-002A	2082175.829	750504.150	Surface Soil	0-0.5'	VOCs	8260	8260
		BX46-000A	2082142.513	750567.843	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX46-000A	2082142.513	750567.843	Surface Soil	0-0.5'	Metals	6200	6010
		BX46-000A	2082142.513	750567.843	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX46-000A	2082142.513	750567.843	Surface Soil	0-0.5'	VOCs	8260	8260
		BX46-001A	2082179.749	750629.576	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX46-001A	2082179.749	750629.576	Surface Soil	0-0.5'	Metals	6200	6010
		BX46-001A	2082179.749	750629.576	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX46-001A	2082179.749	750629.576	Surface Soil	0-0.5'	VOCs	8260	8260
		BX46-002A	2082214.045	750564.904	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX46-002A	2082214.045	750564.904	Surface Soil	0-0.5'	Metals	6200	6010
		BX46-002A	2082214.045	750564.904	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX46-002A	2082214.045	750564.904	Surface Soil	0-0.5'	VOCs	8260	8260
		BX45-003A	2082248.341	750502.191	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX45-003A	2082248.341	750502.191	Surface Soil	0-0.5'	Metals	6200	6010
		BX45-003A	2082248.341	750502.191	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX45-003A	2082248.341	750502.191	Surface Soil	0-0.5'	VOCs	8260	8260
		BX45-004A	2082210.125	750441.438	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX45-004A	2082210.125	750441.438	Surface Soil	0-0.5'	Metals	6200	6010
		BX45-004A	2082210.125	750441.438	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX45-004A	2082210.125	750441.438	Surface Soil	0-0.5'	VOCs	8260	8260
		BX45-005A	2082244.421	750383.624	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX45-005A	2082244.421	750383.624	Surface Soil	0-0.5'	Metals	6200	6010
		BX45-005A	2082244.421	750383.624	Surface Soil	0-0.5'	SVOCs	N/A	8270

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
		BX45-005A	2082244.421	750383.624	Surface Soil	0-0.5'	VOCs	8260	8260
		BX45-006A	2082281.657	750437.518	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX45-006A	2082281.657	750437.518	Surface Soil	0-0.5'	Metals	6200	6010
		BX45-006A	2082281.657	750437.518	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX45-006A	2082281.657	750437.518	Surface Soil	0-0.5'	VOCs	8260	8260
		BX46-003A	2082286.556	750561.964	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX46-003A	2082286.556	750561.964	Surface Soil	0-0.5'	Metals	6200	6010
		BX46-003A	2082286.556	750561.964	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX46-003A	2082286.556	750561.964	Surface Soil	0-0.5'	VOCs	8260	8260
		BX46-004A	2082250.301	750626.636	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX46-004A	2082250.301	750626.636	Surface Soil	0-0.5'	Metals	6200	6010
		BX46-004A	2082250.301	750626.636	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX46-004A	2082250.301	750626.636	Surface Soil	0-0.5'	VOCs	8260	8260
		BX46-005A	2082324.772	750623.697	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX46-005A	2082324.772	750623.697	Surface Soil	0-0.5'	Metals	6200	6010
		BX46-005A	2082324.772	750623.697	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX46-005A	2082324.772	750623.697	Surface Soil	0-0.5'	VOCs	8260	8260
		BX45-007A	2082319.873	750498.271	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX45-007A	2082319.873	750498.271	Surface Soil	0-0.5'	Metals	6200	6010
		BX45-007A	2082319.873	750498.271	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX45-007A	2082319.873	750498.271	Surface Soil	0-0.5'	VOCs	8260	8260
		BX45-008A	2082314.973	750373.825	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BX45-008A	2082314.973	750373.825	Surface Soil	0-0.5'	Metals	6200	6010
		BX45-008A	2082314.973	750373.825	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BX45-008A	2082314.973	750373.825	Surface Soil	0-0.5'	VOCs	8260	8260
		BY45-000A	2082354.169	750435.558	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY45-000A	2082354.169	750435.558	Surface Soil	0-0.5'	Metals	6200	6010
		BY45-000A	2082354.169	750435.558	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY45-000A	2082354.169	750435.558	Surface Soil	0-0.5'	VOCs	8260	8260

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
		BY45-001A	2082387.485	750371.866	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY45-001A	2082387.485	750371.866	Surface Soil	0-0.5'	Metals	6200	6010
		BY45-001A	2082387.485	750371.866	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY45-001A	2082387.485	750371.866	Surface Soil	0-0.5'	VOCs	8260	8260
		BY45-002A	2082427.660	750432.619	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY45-002A	2082427.660	750432.619	Surface Soil	0-0.5'	Metals	6200	6010
		BY45-002A	2082427.660	750432.619	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY45-002A	2082427.660	750432.619	Surface Soil	0-0.5'	VOCs	8260	8260
		BY45-003A	2082390.425	750495.331	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY45-003A	2082390.425	750495.331	Surface Soil	0-0.5'	Metals	6200	6010
		BY45-003A	2082390.425	750495.331	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY45-003A	2082390.425	750495.331	Surface Soil	0-0.5'	VOCs	8260	8260
		BY46-000A	2082356.129	750561.964	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY46-000A	2082356.129	750561.964	Surface Soil	0-0.5'	Metals	6200	6010
		BY46-000A	2082356.129	750561.964	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY46-000A	2082356.129	750561.964	Surface Soil	0-0.5'	VOCs	8260	8260
		BY46-001A	2082396.304	750621.737	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY46-001A	2082396.304	750621.737	Surface Soil	0-0.5'	Metals	6200	6010
		BY46-001A	2082396.304	750621.737	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY46-001A	2082396.304	750621.737	Surface Soil	0-0.5'	VOCs	8260	8260
		BY45-004A	2082431.580	750556.085	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY45-004A	2082431.580	750556.085	Surface Soil	0-0.5'	Metals	6200	6010
		BY45-004A	2082431.580	750556.085	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY45-004A	2082431.580	750556.085	Surface Soil	0-0.5'	VOCs	8260	8260
		BY46-002A	2082468.816	750616.838	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY46-002A	2082468.816	750616.838	Surface Soil	0-0.5'	Metals	6200	6010
		BY46-002A	2082468.816	750616.838	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY46-002A	2082468.816	750616.838	Surface Soil	0-0.5'	VOCs	8260	8260
		BY45-005A	2082462.936	750493.372	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
	UBC 374 – Wastewater Treatment Facility (biased samples)	BY45-005A	2082462.936	750493.372	Surface Soil	0-0.5'	Metals	6200	6010
		BY45-005A	2082462.936	750493.372	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY45-005A	2082462.936	750493.372	Surface Soil	0-0.5'	VOCs	8260	8260
		BY45-006A	2082499.192	750429.679	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY45-006A	2082499.192	750429.679	Surface Soil	0-0.5'	Metals	6200	6010
		BY45-006A	2082499.192	750429.679	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY45-006A	2082499.192	750429.679	Surface Soil	0-0.5'	VOCs	8260	8260
		BY45-007A	2082504.092	750552.165	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY45-007A	2082504.092	750552.165	Surface Soil	0-0.5'	Metals	6200	6010
		BY45-007A	2082504.092	750552.165	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY45-007A	2082504.092	750552.165	Surface Soil	0-0.5'	VOCs	8260	8260
		BY45-008A	2082535.448	750490.432	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BY45-008A	2082535.448	750490.432	Surface Soil	0-0.5'	Metals	6200	6010
		BY45-008A	2082535.448	750490.432	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BY45-008A	2082535.448	750490.432	Surface Soil	0-0.5'	VOCs	8260	8260
		BZ45-000A	2082573.664	750548.245	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BZ45-000A	2082573.664	750548.245	Surface Soil	0-0.5'	Metals	6200	6010
		BZ45-000A	2082573.664	750548.245	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BZ45-000A	2082573.664	750548.245	Surface Soil	0-0.5'	VOCs	8260	8260
		BZ45-001A	2082608.940	75048.8.472	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BZ45-001A	2082608.940	75048.8.472	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BZ45-001A	2082608.940	75048.8.472	Surface Soil	0-0.5'	Metals	6200	6010
		BZ45-001A	2082608.940	75048.8.472	Surface Soil	0-0.5'	VOCs	8260	8260
		BZ45-002A	2082647.155	750549.225	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BZ45-002A	2082647.155	750549.225	Surface Soil	0-0.5'	Metals	6200	6010
		BZ45-002A	2082647.155	750549.225	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BZ45-002A	2082647.155	750549.225	Surface Soil	0-0.5'	VOCs	8260	8260
		BZ45-003A	2082707.908	750548.245	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
		BZ45-003A	2082707.908	750548.245	Surface Soil	0-0.5'	Metals	6200	6010
		BZ45-003A	2082707.908	750548.245	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BZ45-003A	2082707.908	750548.245	Surface Soil	0-0.5'	VOCs	8260	8260
	371/374 Utility Drains	BW46-002C	2082117.036	750658.973	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BW46-002C	2082117.036	750658.973	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BW46-002C	2082117.036	750658.973	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BW46-002C	2082117.036	750658.973	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BW45-003C	2082050.403	750514.929	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BW45-003C	2082050.403	750514.929	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BW45-003C	2082050.403	750514.929	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BW45-003C	2082050.403	750514.929	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BW45-004C	2082050.403	750493.372	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BW45-004C	2082050.403	750493.372	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BW45-004C	2082050.403	750493.372	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BW45-004C	2082050.403	750493.372	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BW45-005C	2082066.082	750433.599	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BW45-005C	2082066.082	750433.599	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BW45-005C	2082066.082	750433.599	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BW45-005C	2082066.082	750433.599	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BX44-000C	2082289.496	7504361.087	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BX44-000C	2082289.496	7504361.087	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BX44-000C	2082289.496	7504361.087	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BX44-000C	2082289.496	7504361.087	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BY46-003C	2082404.143	750628.596	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BY46-003C	2082404.143	750628.596	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BY46-003C	2082404.143	750628.596	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BY46-003C	2082404.143	750628.596	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BY46-004C	2082494.293	750602.139	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BY46-004C	2082494.293	750602.139	Subsurface Soil	2.5'-4.5'	Metals	6200	6010

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
		BY46-004C	2082494.293	750602.139	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BY46-004C	2082494.293	750602.139	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BY45-009C	2082520.750	750430.659	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BY45-009C	2082520.750	750430.659	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BY45-009C	2082520.750	750430.659	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BY45-009C	2082520.750	750430.659	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BZ46-000C	2082659.894	750601.159	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BZ46-000C	2082659.894	750601.159	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BZ46-000C	2082659.894	750601.159	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BZ46-000C	2082659.894	750601.159	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BZ45-004C	2082657.934	750415.961	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BZ45-004C	2082657.934	750415.961	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BZ45-004C	2082657.934	750415.961	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BZ45-004C	2082657.934	750415.961	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
	374 NPWL	BZ45-005E	2082550.260	750448.241	Subsurface Soil	6.5'-8.0'	Radionuclides	HPGe	Alpha Spec
		BZ45-005E	2082550.260	750448.241	Subsurface Soil	6.5'-8.0'	Metals	6200	6010
		BZ45-005E	2082550.260	750448.241	Subsurface Soil	6.5'-8.0'	SVOCs	N/A	8270
		BZ45-005E	2082550.260	750448.241	Subsurface Soil	6.5'-8.0'	VOCs	8260	8260

3.0 IHSS GROUP 400-8

3.1 EXISTING CHARACTERIZATION INFORMATION

Existing concentrations and activities above the background mean plus two standard deviations, or MDLs, are presented on Figure 4. Table 4 presents the PCOCs. Existing data for these IHSSs, PACs, and UBC Sites are available in Appendix C of the IASAP (DOE 2001), HRR (DOE 1992-2001), and the Industrial Area Data Summary Report (DOE 2000).

3.2 SAMPLING

The proposed sampling specifications (number and types of samples) for IHSS Group 400-8 are listed in Table 5 and shown on Figure 5. The IASAP 11-meter statistical grid was not used to determine sampling locations because Building 441 was an office building.

Proposed new sampling locations are the starting point for IHSS Group characterization. After characterization starts, the number and type of samples may change based on sampling results. Changes to sampling specifications will be considered in consultation with the regulatory agencies. If surface soil samples are collected in the area of the utility disconnect, the samples will be collected from beneath the clean fill.

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Table 4
Potential Contaminants of Concern IHSS Group 400-8

IHSS Group	IHSS/PAC/UBC Site	PCOCs	Media	Data Source	Sampling Location Method
400-8	UBC 441 – Office Building including associated OPWL	Radionuclides Metals Nitrate VOCs SVOCs	Surface and Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	IHSS 400-122 – Underground Concrete Tank and the OPWL located on the eastern side of the tank	Metals Nitrate VOCs SVOCs PCBs	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	IHSS 000-121 – Tank 2 Concrete Waste Storage Tank and Tank 3 – Steel Waste Storage Tank	Metals Nitrate VOCs SVOCs	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased

Table 5
Sampling Specifications IHSS Group 400-8

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
400-8	UBC 441– Office Building including associated OPWL	BW39-000A	2081948.38	749244.68	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BW39-000A	2081948.38	749244.68	Surface Soil	0-0.5'	Metals	6200	6010
		BW39-000A	2081948.38	749244.68	Surface Soil	0-0.5'	Nitrate	N/A	9056
		BW39-000A	2081948.38	749244.68	Surface Soil	0-0.5'	VOCs	8260	8260
		BW39-000A	2081948.38	749244.68	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BW39-000C	2081948.38	749244.68	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BW39-000C	2081948.38	749244.68	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BW39-000C	2081948.38	749244.68	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BW39-000C	2081948.38	749244.68	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BW39-000C	2081948.38	749244.68	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BW39-001A	2081948.39	749199.51	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BW39-001A	2081948.39	749199.51	Surface Soil	0-0.5'	Metals	6200	6010
		BW39-001A	2081948.39	749199.51	Surface Soil	0-0.5'	Nitrate	N/A	9056
		BW39-001A	2081948.39	749199.51	Surface Soil	0-0.5'	VOCs	8260	8260
		BW39-001A	2081948.39	749199.51	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BW39-001C	2081948.39	749199.51	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BW39-001C	2081948.39	749199.51	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BW39-001C	2081948.39	749199.51	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BW39-001C	2081948.39	749199.51	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BW39-001C	2081948.39	749199.51	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BW38-003A	2081948.75	749114.08	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BW38-003A	2081948.75	749114.08	Surface Soil	0-0.5'	Metals	6200	6010
		BW38-003A	2081948.75	749114.08	Surface Soil	0-0.5'	Nitrate	N/A	9056
		BW38-003A	2081948.75	749114.08	Surface Soil	0-0.5'	VOCs	8260	8260
		BW38-003A	2081948.75	749114.08	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BW38-003C	2081948.75	749114.08	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
	IHSS 000-121 – Tank 2 Concrete Waste Storage Tank and Tank 3 – Steel Waste Storage Tank	BW38-003C	2081948.75	749114.08	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BW38-003C	2081948.75	749114.08	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BW38-003C	2081948.75	749114.08	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BW38-003C	2081948.75	749114.08	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BV38-002C	2081890.49	749050.50	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BV38-002C	2081890.49	749050.50	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BV38-002C	2081890.49	749050.50	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BV38-002C	2081890.49	749050.50	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BV38-003C	2081890.49	749036.70	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BV38-003C	2081890.49	749036.70	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BV38-003C	2081890.49	749036.70	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BV38-003C	2081890.49	749036.70	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BV38-004C	2081897.97	749038.42	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BV38-004C	2081890.49	749036.70	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BV38-004C	2081890.49	749036.70	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BV38-004C	2081890.49	749036.70	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BV38-005A	2081932.20	749108.94	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BV38-005A	2081932.20	749108.94	Surface Soil	0-0.5'	Metals	6200	6010
		BV38-005A	2081932.20	749108.94	Surface Soil	0-0.5'	Nitrate	N/A	9056
		BV38-005A	2081932.20	749108.94	Surface Soil	0-0.5'	VOCs	8260	8260
		BV38-005A	2081932.20	749108.94	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BV38-005C	2081932.20	749108.94	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BV38-005C	2081932.20	749108.94	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BV38-005C	2081932.20	749108.94	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BV38-005C	2081932.20	749108.94	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BV38-005C	2081932.20	749108.94	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BV38-006A	2081890.67	749114.08	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		BV38-006A	2081890.67	749114.08	Surface Soil	0-0.5'	Metals	6200	6010

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
		BV38-006A	2081890.67	749114.08	Surface Soil	0-0.5'	Nitrate	N/A	9056
		BV38-006A	2081890.67	749114.08	Surface Soil	0-0.5'	VOCs	8260	8260
		BV38-006A	2081890.67	749114.08	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BV38-006C	2081890.67	749114.08	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BV38-006C	2081890.67	749114.08	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BV38-006C	2081890.67	749114.08	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BV38-006C	2081890.67	749114.08	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BV38-006C	2081890.67	749114.08	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BV38-007A	2081868.09	749059.51	Surface Soil	0-0.5'	Metals	6200	6010
		BV38-007A	2081868.09	749059.51	Surface Soil	0-0.5'	Nitrate	N/A	9056
		BV38-007A	2081868.09	749059.51	Surface Soil	0-0.5'	VOCs	8260	8260
		BV38-007A	2081868.09	749059.51	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BV38-007C	2081868.09	749059.51	Subsurface Soil	0-0.5'	Metals	6200	6010
		BV38-007C	2081868.09	749059.51	Subsurface Soil	0-0.5'	Nitrate	N/A	9056
		BV38-007C	2081868.09	749059.51	Subsurface Soil	0-0.5'	VOCs	8260	8260
		BV38-007C	2081868.09	749059.51	Subsurface Soil	0-0.5'	SVOCs	N/A	8270
		BV39-002A	2081889.34	749182.76	surface Soil	0-0.5'	Metals	6200	6010
		BV39-002A	2081889.34	749182.76	surface Soil	0-0.5'	Nitrate	N/A	9056
		BV39-002A	2081889.34	749182.76	surface Soil	0-0.5'	VOCs	8260	8260
		BV39-002A	2081889.34	749182.76	surface Soil	0-0.5'	SVOCs	N/A	8270
		BV39-002C	2081889.34	749182.76	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BV39-002C	2081889.34	749182.76	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BV39-002C	2081889.34	749182.76	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BV39-002C	2081889.34	749182.76	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BV39-003A	2081890.65	749221.06	Surface Soil	0-0.5'	Metals	6200	6010
		BV39-003A	2081890.65	749221.06	Surface Soil	0-0.5'	Nitrate	N/A	9056
		BV39-003A	2081890.65	749221.06	Surface Soil	0-0.5'	VOCs	8260	8260
		BV39-003A	2081890.65	749221.06	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BV39-003C	2081890.65	749221.06	Subsurface Soil	2.5'-4.5'	Metals	6200	6010

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Laboratory Method	Offsite Laboratory Method
		BV39-003C	2081890.65	749221.06	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BV39-003C	2081890.65	749221.06	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BV39-003C	2081890.65	749221.06	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BV39-004A	2081922.15	749182.29	Surface Soil	0-0.5'	Metals	6200	6010
		BV39-004A	2081922.15	749182.29	Surface Soil	0-0.5'	Nitrate	N/A	9056
		BV39-004A	2081922.15	749182.29	Surface Soil	0-0.5'	VOCs	8260	8260
		BV39-004A	2081922.15	749182.29	Surface Soil	0-0.5'	SVOCs	N/A	8270
		BV39-004C	2081922.15	749182.29	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BV39-004C	2081922.15	749182.29	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BV39-004C	2081922.15	749182.29	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BV39-004C	2081922.15	749182.29	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BV39-002C	2081889.344	749182.762	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BV39-002C	2081889.344	749182.762	Subsurface Soil	2.5'-4.5'	PCBs	NA	8082
	IHSS 400-122 – Underground Concrete Tank and and the OPWL located on the eastern side of the tank.	BW38-001C	2081949.725	749032.098	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		BW38-001C	2081949.725	749032.098	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BW38-001C	2081949.725	749032.098	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BW38-001C	2081949.725	749032.098	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BW38-001C	2081949.725	749032.098	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BW38-001C	2081949.725	749032.098	Subsurface Soil	2.5'-4.5'	PCBs	NA	8082
		BW38-002C	2081984.228	749031.523	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		BW38-002C	2081984.228	749031.523	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		BW38-002C	2081984.228	749031.523	Subsurface Soil	2.5'-4.5'	SVOCs	N/A	8270
		BW38-002C	2081984.228	749031.523	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		BW38-002C	2081984.228	749031.523	Subsurface Soil	2.5'-4.5'	PCBs	NA	8082

4.0 IHSS GROUP 700-4

4.1 EXISTING CHARACTERIZATION INFORMATION

Existing concentrations and activities above the background mean plus two standard deviations, or MDL, are presented on Figures 6 and 7. There are 16 existing sampling locations at UBC 771 (DOE 2001b). Table 6 presents the PCOCs. Existing data for these IHSSs, PACs, and UBC Sites are available in Appendix C of the IASAP (DOE 2001), HRR (DOE 1992-2001), and the Industrial Area Data Summary Report (DOE 2000).

4.2 SAMPLING

The proposed sampling specifications (number and types of samples) for IHSS Group 700-4 are listed in Table 7 and shown on Figures 8 and 9. The IASAP 11-meter statistical grid was not used to determine sampling locations at UBCs 771 and 774 because more emphasis was placed on biased sampling at sumps and tanks.

Proposed new sampling locations are the starting point for IHSS Group characterization. After characterization starts, the number and type of samples may change based on sampling results. Changes to sampling specifications will be considered in consultation with the regulatory agencies. Sump sampling locations will be field checked and the locations adjusted through the consultative process.

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Table 6
Potential Contaminants of Concern for IHSS Group 700-4

IHSS Group	IHSS/PAC/UBC Site	PCOCs	Media	Data Source	Sampling Location Method
700-4	UBC 771 - Plutonium and Americium Recovery Operations	Radionuclides Metals SVOCs	Surface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Biased
	UBC 774 - Liquid Process Waste Treatment	Radionuclides Metals SVOCs	Surface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Biased
	700-150.2(N) - Radioactive Site West of Buildings 771/776	Radionuclides Metals SVOCs	Surface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Statistical
	700-163.1 - Radioactive Site 700 North of Building 774 (Area 3) Wash Area	Radionuclides Metals SVOCs PCBs	Surface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Statistical
	700-163.2 - Radioactive Site 700 Area 3 Americium (Am) Slab	Radionuclides	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	700-215 - Abandoned Sump Near Building 774 Unit 55.13 T-40	Radionuclides Metals SVOCs Nitrate	Surface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	700-139.1(N)(b) - Hydroxide Tank, KOH, NaOH Condensate	Radionuclides Metals Nitrate	Surface and Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Biased
	700-124.1 - Tank 14 - OPWL - 30,000-Gallon Concrete Underground Storage Tank (68)	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	700-124.2 and 700-124.3 - Tank 16 - OPWL - Two 14,000-Gallon Concrete Underground Storage Tanks (66, 67)	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	700-125 - Holding Tank	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	700-126.1 - Westernmost Out-of-Service Process Waste Tank	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased

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IHSS Group	IHSS/PAC/UBC Site	PCOCs	Media	Data Source	Sampling Location Method
	700-126.2 - Easternmost Out-of-Service Process Waste Tank	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	000-121 - Tank 8 - OPWL - East and West Process Tanks	Radionuclides Metals Nitrate SVOCs VOCs PCBs	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Biased
	000-121 - Tank 12 - OPWL - Two Abandoned 20,000-Gallon Underground Concrete Tanks	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	000-121 - Tank 13 - OPWL - Abandoned Sump - 600 Gallons	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	700-146.3 and 700-146.4 - 2 - Tank 15 - OPWL - Two 7,500-Gallon Process Waste Tanks (34W, 34E)	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	700-146.1, 700-146.2, 700-146.5, 700-146.6 - Tank 17 - OPWL - Four Concrete Process Waste Tanks (30, 31, 32, 33)	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	000-121 - Tank 36 - OPWL - Steel Carbon Tetrachloride Sump	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	000-121 - Tank 37 - OPWL - Steel-Lined Concrete Sump	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased
	700-139.2 - Caustic/Acid Spills Hydrofluoric Tank	Radionuclides Metals SVOCs	Surface	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Biased
	700-150.1 - Radioactive Site North of Building 771	Radionuclides Metals	Surface	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Statistical
	700-150.3 - Radioactive Site Between Buildings 771 and 774	Radionuclides Metals VOCs	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) IA Data Summary Report (DOE 2000)	Biased
	IHSS 121 – Potential OPWL Leaks	Radionuclides Metals Nitrate	Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001])	Biased

Table 7
Sampling Specifications IHSS Group 700-4

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
700-4	UBC 771 - Plutonium and Americium Recovery Operations (Figure 9)	CE47-000A	2083724.010	750861.638	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-000A	2083724.010	750861.638	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-000A	2083724.010	750861.638	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-000A	2083724.010	750861.638	Surface Soil	0-0.5'	VOCs	8260	8260
		CE47-001A	2083652.650	750871.216	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-001A	2083652.650	750871.216	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-001A	2083652.650	750871.216	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-001A	2083652.650	750871.216	Surface Soil	0-0.5'	VOCs	8260	8260
		CE47-002A	2083696.625	750928.227	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-002A	2083696.625	750928.227	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-002A	2083696.625	750928.227	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-002A	2083696.625	750928.227	Surface Soil	0-0.5'	VOCs	8260	8260
		CE48-000A	2083669.240	750994.815	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-000A	2083669.240	750994.815	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-000A	2083669.240	750994.815	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-000A	2083669.240	750994.815	Surface Soil	0-0.5'	VOCs	8260	8260
		CE48-001A	2083597.880	751004.394	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-001A	2083597.880	751004.394	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-001A	2083597.880	751004.394	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-001A	2083597.880	751004.394	Surface Soil	0-0.5'	VOCs	8260	8260
		CE48-002A	2083713.215	751051.826	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-002A	2083713.215	751051.826	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-002A	2083713.215	751051.826	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-002A	2083713.215	751051.826	Surface Soil	0-0.5'	VOCs	8260	8260
		CE48-003A	2083641.855	751061.404	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CE48-003A	2083641.855	751061.404	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-003A	2083641.855	751061.404	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-003A	2083641.855	751061.404	Surface Soil	0-0.5'	VOCs	8260	8260
		CF47-000A	2083795.370	750852.059	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF47-000A	2083795.370	750852.059	Surface Soil	0-0.5'	Metals	6200	6010
		CF47-000A	2083795.370	750852.059	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF47-000A	2083795.370	750852.059	Surface Soil	0-0.5'	VOCs	8260	8260
		CF47-001A	2083910.705	750899.491	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF47-001A	2083910.705	750899.491	Surface Soil	0-0.5'	Metals	6200	6010
		CF47-001A	2083910.705	750899.491	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF47-001A	2083910.705	750899.491	Surface Soil	0-0.5'	VOCs	8260	8260
		CF47-002A	2083839.345	750909.070	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF47-002A	2083839.345	750909.070	Surface Soil	0-0.5'	Metals	6200	6010
		CF47-002A	2083839.345	750909.070	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF47-002A	2083839.345	750909.070	Surface Soil	0-0.5'	VOCs	8260	8260
		CF47-003A	2083767.985	750918.648	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF47-003A	2083767.985	750918.648	Surface Soil	0-0.5'	Metals	6200	6010
		CF47-003A	2083767.985	750918.648	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF47-003A	2083767.985	750918.648	Surface Soil	0-0.5'	VOCs	8260	8260
		CF48-000A	2083883.320	750966.080	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-000A	2083883.320	750966.080	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-000A	2083883.320	750966.080	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-000A	2083883.320	750966.080	Surface Soil	0-0.5'	VOCs	8260	8260
		CF48-001A	2083811.960	750975.659	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-001A	2083811.960	750975.659	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-001A	2083811.960	750975.659	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-001A	2083811.960	750975.659	Surface Soil	0-0.5'	VOCs	8260	8260
		CF48-001B	2083811.960	750975.659	Subsurface Soil	0.5-2.5'	Radionuclides	HPGe	Alpha Spec
		CF48-001C	2083811.960	750975.659	Subsurface Soil	2.5-4.5'	Radionuclides	HPGe	Alpha Spec

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CF48-002A	2083740.600	750985.237	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-002A	2083740.600	750985.237	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-002A	2083740.600	750985.237	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-002A	2083740.600	750985.237	Surface Soil	0-0.5'	VOCs	8260	8260
		CF48-002B	2083740.600	750985.237	Subsurface Soil	0.5-2.5'	Radionuclides	HPGe	Alpha Spec
		CF48-002C	2083740.600	750985.237	Subsurface Soil	2.5-4.5'	Radionuclides	HPGe	Alpha Spec
		CF48-003A	2083855.935	751032.669	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-003A	2083855.935	751032.669	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-003A	2083855.935	751032.669	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-003B	2083855.935	751032.669	Surface Soil	0-0.5'	VOCs	8260	8260
		CF48-004A	2083784.575	751042.247	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-004A	2083784.575	751042.247	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-004A	2083784.575	751042.247	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-004A	2083784.575	751042.247	Surface Soil	0-0.5'	VOCs	8260	8260
		CF48-005A	2083899.910	751089.679	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-005A	2083899.910	751089.679	Surface Soil	0-0.5'	VOCs	8260	8260
		CF48-006A	2083828.550	751099.258	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-006A	2083828.550	751099.258	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-006A	2083828.550	751099.258	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-006A	2083828.550	751099.258	Surface Soil	0-0.5'	VOCs	8260	8260
		CF48-007A	2083757.190	751108.836	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-007A	2083757.190	751108.836	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-007A	2083757.190	751108.836	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-007A	2083757.190	751108.836	Surface Soil	0-0.5'	VOCs	8260	8260
		CF48-008A	2083872.525	751156.268	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-008A	2083872.525	751156.268	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-008A	2083872.525	751156.268	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-008A	2083872.525	751156.268	Surface Soil	0-0.5'	VOCs	8260	8260
		CG48-002A	2083971.270	751080.101	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CG48-002A	2083971.270	751080.101	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-002A	2083971.270	751080.101	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-002A	2083971.270	751080.101	Surface Soil	0-0.5'	VOCs	8260	8260
	UBC 774 - Liquid Process Waste Treatment (Figure 9)	CG48-000A	2084113.990	751060.944	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-000A	2084113.990	751060.944	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-000A	2084113.990	751060.944	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-000A	2084113.990	751060.944	Surface Soil	0-0.5'	VOCs	8260	8260
		CG48-001A	2084042.630	751070.523	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-001A	2084042.630	751070.523	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-001A	2084042.630	751070.523	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-001A	2084042.630	751070.523	Surface Soil	0-0.5'	VOCs	8260	8260
		CH48-001A	2084185.350	751051.366	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-001A	2084185.350	751051.366	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-001A	2084185.350	751051.366	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-001A	2084185.350	751051.366	Surface Soil	0-0.5'	VOCs	8260	8260
		CG48-020A	2084068.182	751120.168	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-020A	2084068.182	751120.168	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-020A	2084068.182	751120.168	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-020A	2084068.182	751120.168	Surface Soil	0-0.5'	VOCs	8260	8260
		CG48-021A	2084071.658	751050.640	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-021A	2084071.658	751050.640	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-021A	2084071.658	751050.640	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-021A	2084071.658	751050.640	Surface Soil	0-0.5'	VOCs	8260	8260
		CG48-022A	2084098.600	750984.589	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-022A	2084098.600	750984.589	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-022A	2084098.600	750984.589	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-022A	2084098.600	750984.589	Surface Soil	0-0.5'	VOCs	8260	8260
	Building Sumps (Figure 9)	CE47-003	2083722.762	750923.295	Subsurface Soil	TBD	Radionuclides	HPGe	Alpha Spec

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CE47-003	2083722.762	750923.295	Subsurface Soil	TBD	Metals	6200	6010
		CE47-003	2083722.762	750923.295	Subsurface Soil	TBD	SVOCs	N/A	8270
		CE47-003	2083722.762	750923.295	Subsurface Soil	TBD	VOCs	8260	8260
		CE47-004A	2083675.837	750918.963	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-004A	2083675.837	750918.963	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-004A	2083675.837	750918.963	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-005A	2083640.462	750937.011	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-005A	2083640.462	750937.011	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-005A	2083640.462	750937.011	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-006A	2083669.339	750854.712	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-006A	2083669.339	750854.712	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-006A	2083669.339	750854.712	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-007A	2083638.297	750868.428	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-007A	2083638.297	750868.428	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-007A	2083638.297	750868.428	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-008A	2083677.281	750866.984	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-008A	2083677.281	750866.984	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-008A	2083677.281	750866.984	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-009A	2083639.019	750921.129	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-009A	2083639.019	750921.129	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-009A	2083639.019	750921.129	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-010A	2083638.297	750947.840	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-010A	2083638.297	750947.840	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-010A	2083638.297	750947.840	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-006A	2083658.511	750966.610	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-006A	2083658.511	750966.610	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-006A	2083658.511	750966.610	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-007	2083683.056	750986.102	Subsurface Soil	TBD	Radionuclides	HPGe	Alpha Spec
		CE48-007	2083683.056	750986.102	Subsurface Soil	TBD	Metals	6200	6010

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		CE48-007	2083683.056	750986.102	Subsurface Soil	TBD	SVOCs	N/A	8270
		CE48-007	2083683.056	750986.102	Subsurface Soil	TBD	VOCs	8260	8260
		CF47-004	2083919.125	750890.086	Subsurface Soil	TBD	Radionuclides	HPGe	Alpha Spec
		CF47-004	2083919.125	750890.086	Subsurface Soil	TBD	Metals	6200	6010
		CF47-004	2083919.125	750890.086	Subsurface Soil	TBD	SVOCs	N/A	8270
		CF47-004	2083919.125	750890.086	Subsurface Soil	TBD	VOCs	8260	8260
		CF47-005A	2083781.238	750890.086	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF47-005A	2083781.238	750890.086	Surface Soil	0-0.5'	Metals	6200	6010
		CF47-005A	2083781.238	750890.086	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-009	2083764.633	751092.947	Subsurface Soil	TBD	Radionuclides	HPGe	Alpha Spec
		CF48-009	2083764.633	751092.947	Subsurface Soil	TBD	Metals	6200	6010
		CF48-009	2083764.633	751092.947	Subsurface Soil	TBD	SVOCs	N/A	8270
		CF48-009	2083764.633	751092.947	Subsurface Soil	TBD	VOCs	8260	8260
		CF48-010	2083755.248	751037.359	Subsurface Soil	TBD	Radionuclides	HPGe	Alpha Spec
		CF48-010	2083755.248	751037.359	Subsurface Soil	TBD	Metals	6200	6010
		CF48-010	2083755.248	751037.359	Subsurface Soil	TBD	SVOCs	N/A	8270
		CF48-010	2083755.248	751037.359	Subsurface Soil	TBD	VOCs	8260	8260
		CF48-011A	2083769.687	751003.428	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-011A	2083769.687	751003.428	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-011A	2083769.687	751003.428	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-011B	2083769.687	751003.428	Subsurface Soil	05'-2.5'	Radionuclides	HPGe	Alpha Spec
		CF48-011C	2083769.687	751003.428	Subsurface Soil	25'-4.5'	Radionuclides	HPGe	Alpha Spec
		CF48-012A	2083754.526	750974.551	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-012A	2083754.526	750974.551	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-012A	2083754.526	750974.551	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-012B	2083754.526	750974.551	Subsurface Soil	05'-2.5'	Radionuclides	HPGe	Alpha Spec
		CF48-012C	2083754.526	750974.551	Subsurface Soil	25'-4.5'	Radionuclides	HPGe	Alpha Spec
		CF48-012C	2083754.526	750974.551	Subsurface Soil	25'-4.5'	VOCs	8260	8260
		CF48-013A	2083748.751	750966.610	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CF48-013A	2083748.751	750966.610	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-013A	2083748.751	750966.610	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF48-023C	2083906.620	751003.466	Subsurface Soil	25'-4.5'	Radionuclides	HPGe	Alpha Spec
		CF48-023C	2083906.620	751003.466	Subsurface Soil	25'-4.5'	Metals	6200	6010
		CF48-023C	2083906.620	751003.466	Subsurface Soil	25'-4.5'	SVOCs	N/A	8270
		CF48-023C	2083906.620	751003.466	Subsurface Soil	25'-4.5'	VOCs	8260	8260
	Tank 8 - OPWL - East and West Process Tanks (Figure 9)	CE49-008A	2083704.813	751196.300	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE49-008A	2083704.813	751196.300	Surface Soil	0-0.5'	Metals	6200	6010
		CE49-008A	2083704.813	751196.300	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE49-008A	2083704.813	751196.300	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CE49-008A	2083704.813	751196.300	Surface Soil	0-0.5'	PCBs	8082	8082
		CE49-008B	2083704.813	751196.300	Subsurface Soil	.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CE49-008B	2083704.813	751196.300	Subsurface Soil	.5'-2.5'	Metals	6200	6010
		CE49-008B	2083704.813	751196.300	Subsurface Soil	.5'-2.5'	SVOCs	N/A	8270
		CE49-008B	2083704.813	751196.300	Subsurface Soil	.5'-2.5'	Nitrate	N/A	9056
		CE49-008B	2083704.813	751196.300	Subsurface Soil	.5'-2.5'	PCBs	8082	8082
		CE49-008B	2083704.813	751196.300	Subsurface Soil	.5'-2.5'	VOCs	8260	8260
		CE49-008G	2083704.813	751196.300	Subsurface Soil	10.5'-12.5'	Radionuclides	HPGe	Alpha Spec
		CE49-008G	2083704.813	751196.300	Subsurface Soil	10.5'-12.5'	Metals	6200	6010
		CE49-008G	2083704.813	751196.300	Subsurface Soil	10.5'-12.5'	SVOCs	N/A	8270
		CE49-008G	2083704.813	751196.300	Subsurface Soil	10.5'-12.5'	Nitrate	N/A	9056
		CE49-008G	2083704.813	751196.300	Subsurface Soil	10.5'-12.5'	PCBs	8082	8082
		CE49-008G	2083704.813	751196.300	Subsurface Soil	10.5'-12.5'	VOCs	8260	8260
		CE49-009A	2083727.530	751192.893	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE49-009A	2083727.530	751192.893	Surface Soil	0-0.5'	Metals	6200	6010
		CE49-009A	2083727.530	751192.893	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE49-009A	2083727.530	751192.893	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CE49-009A	2083727.530	751192.893	Surface Soil	0-0.5'	PCBs	8082	8082
		CE49-009B	2083727.530	751192.893	Subsurface Soil	.5'-2.5'	Radionuclides	HPGe	Alpha Spec

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CE49-009B	2083727.530	751192.893	Subsurface Soil	.5'-2.5'	Metals	6200	6010
		CE49-009B	2083727.530	751192.893	Subsurface Soil	.5'-2.5'	SVOCs	N/A	8270
		CE49-009B	2083727.530	751192.893	Subsurface Soil	.5'-2.5'	Nitrate	N/A	9056
		CE49-009B	2083727.530	751192.893	Subsurface Soil	.5'-2.5'	PCBs	8082	8082
		CE49-009B	2083727.530	751192.893	Subsurface Soil	.5'-2.5'	VOCs	8260	8260
		CE49-009G	2083727.530	751192.893	Subsurface Soil	10.5'-12.5'	Radionuclides	HPGe	Alpha Spec
		CE49-009G	2083727.530	751192.893	Subsurface Soil	10.5'-12.5'	Metals	6200	6010
		CE49-009G	2083727.530	751192.893	Subsurface Soil	10.5'-12.5'	SVOCs	N/A	8270
		CE49-009G	2083727.530	751192.893	Subsurface Soil	10.5'-12.5'	Nitrate	N/A	9056
		CE49-009G	2083727.530	751192.893	Subsurface Soil	10.5'-12.5'	PCBs	8082	8082
		CE49-009G	2083727.530	751192.893	Subsurface Soil	10.5'-12.5'	VOCs	8260	8260
	Miscellaneous Tanks (Figure 9)	CG48-011C	2084113.720	751032.738	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG48-011C	2084113.720	751032.738	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG48-012C	2084114.856	751013.428	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG48-012C	2084114.856	751013.428	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG48-013C	2083979.689	751086.123	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG48-013C	2083979.689	751086.123	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
	Tanks 14 and 16 (Figure 9)	CH48-017F	2084148.576	751041.784	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	Alpha Spec
		CH48-017F	2084148.576	751041.784	Subsurface Soil	8.5'-10.5'	Metals	6200	6010
		CH48-017F	2084148.576	751041.784	Subsurface Soil	8.5'-10.5'	Nitrate	N/A	9056
		CH48-018F	2084142.382	751018.202	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	Alpha Spec
		CH48-018F	2084142.382	751018.202	Subsurface Soil	8.5'-10.5'	Metals	6200	6010
		CH48-018F	2084142.382	751018.202	Subsurface Soil	8.5'-10.5'	Nitrate	N/A	9056
		CH48-019F	2084155.960	751017.487	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	Alpha Spec
		CH48-019F	2084155.960	751017.487	Subsurface Soil	8.5'-10.5'	Metals	6200	6010
		CH48-019F	2084155.960	751017.487	Subsurface Soil	8.5'-10.5'	Nitrate	N/A	9056
	IHSS 700-215 - Abandoned Sump Near Building 774 Unit 55.13 T-40 (Figure 9)	CG48-006A	2084095.604	751097.309	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-006A	2084095.604	751097.309	Surface Soil	0-0.5'	Metals	6200	6010

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CG48-006A	2084095.604	751097.309	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CG48-006A	2084095.604	751097.309	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-007A	2084126.123	751097.231	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-007A	2084126.123	751097.231	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-007A	2084126.123	751097.231	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CG48-007A	2084126.123	751097.231	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-008A	2084126.045	751068.741	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-008A	2084126.045	751068.741	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-008A	2084126.045	751068.741	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CG48-008A	2084126.045	751068.741	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-009A	2084095.838	751069.053	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-009A	2084095.838	751069.053	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-009A	2084095.838	751069.053	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CG48-009A	2084095.838	751069.053	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CG48-010A	2084110.200	751082.557	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-010A	2084110.200	751082.557	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-010A	2084110.200	751082.557	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CG48-010A	2084110.200	751082.557	Surface Soil	0-0.5'	SVOCs	N/A	8270
	Potential OPWL Leaks (Figure 9)	CE49-000D	2083705.409	751183.646	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CE49-000D	2083705.409	751183.646	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CE49-000D	2083705.409	751183.646	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CH48-D003	2084147.496	751023.055	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CH48-D003	2084147.496	751023.055	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CH48-D003	2084147.496	751023.055	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CH48-004D	2084184.413	750994.444	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CH48-004D	2084184.413	750994.444	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CH48-004D	2084184.413	750994.444	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CG48-004C	2084014.593	751119.964	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CG48-004C	2084014.593	751119.964	Subsurface Soil	4.5'-6.5'	Metals	6200	6010

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CG48-004C	2084014.593	751119.964	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CG48-005C	2084095.811	751012.903	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CG48-005C	2084095.811	751012.903	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CG48-005C	2084095.811	751012.903	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CG48-004C	2084014.593	751119.964	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG48-004C	2084014.593	751119.964	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG48-004C	2084014.593	751119.964	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		CG48-005C	2084095.811	751012.903	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG48-005C	2084095.811	751012.903	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG48-005C	2084095.811	751012.903	Subsurface Soil	2.5'-4.5'	Nitrate	N/A	9056
		CE49-000D	2083705.409	751183.646	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CE49-000D	2083705.409	751183.646	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CE49-000D	2083705.409	751183.646	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CH48-003D	2084147.496	751023.055	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CH48-003D	2084147.496	751023.055	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CH48-003D	2084147.496	751023.055	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CH48-004D	2084184.413	750994.444	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CH48-004D	2084184.413	750994.444	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CH48-004D	2084184.413	750994.444	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CE48-022D	2083554.235	751130.839	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CE48-022D	2083554.235	751130.839	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CE48-022D	2083554.235	751130.839	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CE47-021D	2083556.465	750949.102	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CE47-021D	2083556.465	750949.102	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CE47-021D	2083556.465	750949.102	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CG47-002D	2084093.873	750890.009	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CG47-002D	2084093.873	750890.009	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CG47-002D	2084093.873	750890.009	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CG47-003D	2084102.793	750900.044	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CG47-003D	2084102.793	750900.044	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CG47-003D	2084102.793	750900.044	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CE49-012D	2083609.849	751178.113	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CE48-023D	2083571.940	750964.042	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CE48-024D	2083606.504	751119.021	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CG49-006D	2084024.612	751207.102	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CF48-018D	2083930.956	751112.331	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CF49-017D	2083781.552	751200.413	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CG49-007D	2084092.625	751168.079	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CG48-019D	2084129.418	751121.251	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
	Buidlings 771 and 776 Tunnel	CE47-022A	2083735.310	750843.609	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-022A	2083735.310	750843.609	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-022A	2083735.310	750843.609	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-022A	2083735.310	750843.609	Surface Soil	0-0.5'	VOCs	8260	8260
		CE47-023A	2083725.533	750766.477	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-023A	2083725.533	750766.477	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-023A	2083725.533	750766.477	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-023A	2083725.533	750766.477	Surface Soil	0-0.5'	VOCs	8260	8260
		CE46-001A	2083707.065	750662.186	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE46-001A	2083707.065	750662.186	Surface Soil	0-0.5'	Metals	6200	6010
		CE46-001A	2083707.065	750662.186	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE46-001A	2083707.065	750662.186	Surface Soil	0-0.5'	VOCs	8260	8260
	700-150.2(N) - Radioactive Site West of Buildings 771/776 (Figure 8)	CE48-008A	2083694.258	751140.525	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-008A	2083694.258	751140.525	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-008A	2083694.258	751140.525	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-009A	2083632.898	751129.436	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-009A	2083632.898	751129.436	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-009A	2083632.898	751129.436	Surface Soil	0-0.5'	SVOCs	N/A	8270

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CE48-010A	2083599.017	751141.604	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-010A	2083599.017	751141.604	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-010A	2083599.017	751141.604	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-011A	2083605.419	751106.178	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-011A	2083605.419	751106.178	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-011A	2083605.419	751106.178	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-012A	2083631.029	750964.474	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-012A	2083631.029	750964.474	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-012A	2083631.029	750964.474	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-011A	2083637.431	750929.048	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-011A	2083637.431	750929.048	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-011A	2083637.431	750929.048	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-013A	2083571.538	751118.347	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-013A	2083571.538	751118.347	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-013A	2083571.538	751118.347	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-014A	2083577.941	751082.921	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-014A	2083577.941	751082.921	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-014A	2083577.941	751082.921	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-015A	2083597.148	750976.642	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-015A	2083597.148	750976.642	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-015A	2083597.148	750976.642	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-012A	2083603.550	750941.216	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-012A	2083603.550	750941.216	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-012A	2083603.550	750941.216	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-013A	2083609.952	750905.790	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-013A	2083609.952	750905.790	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-013A	2083609.952	750905.790	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-014A	2083616.355	750870.364	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-014A	2083616.355	750870.364	Surface Soil	0-0.5'	Metals	6200	6010

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CE47-014A	2083616.355	750870.364	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-016A	2083537.657	751130.515	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-016A	2083537.657	751130.515	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-016A	2083537.657	751130.515	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-017A	2083544.060	751095.089	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-017A	2083544.060	751095.089	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-017A	2083544.060	751095.089	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-018A	2083550.462	751059.663	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-018A	2083550.462	751059.663	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-018A	2083550.462	751059.663	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE48-019A	2083556.864	751024.237	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-019A	2083556.864	751024.237	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-019A	2083556.864	751024.237	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-015A	2083569.669	750953.385	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-015A	2083569.669	750953.385	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-015A	2083569.669	750953.385	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-016A	2083576.071	750917.958	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-016A	2083576.071	750917.958	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-016A	2083576.071	750917.958	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-017A	2083582.474	750882.532	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-017A	2083582.474	750882.532	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-017A	2083582.474	750882.532	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CD48-000A	2083529.385	751000.979	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CD48-000A	2083529.385	751000.979	Surface Soil	0-0.5'	Metals	6200	6010
		CD48-000A	2083529.385	751000.979	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CD48-001A	2083535.788	750965.553	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CD48-001A	2083535.788	750965.553	Surface Soil	0-0.5'	Metals	6200	6010
		CD48-001A	2083535.788	750965.553	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-018A	2083542.190	750930.127	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CE47-018A	2083542.190	750930.127	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-018A	2083542.190	750930.127	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-019A	2083548.593	750894.701	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-019A	2083548.593	750894.701	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-019A	2083548.593	750894.701	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CE47-020A	2083554.995	750859.275	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE47-020A	2083554.995	750859.275	Surface Soil	0-0.5'	Metals	6200	6010
		CE47-020A	2083554.995	750859.275	Surface Soil	0-0.5'	SVOCs	N/A	8270
	700-163.1 - Radioactive Site 700 North of Building 774 (Area 3) Wash Area (Figure 8)	CH48-005A	2084304.082	751091.925	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-005A	2084304.082	751091.925	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-005A	2084304.082	751091.925	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-005A	2084304.082	751091.925	Surface Soil	0-0.5'	PCBs	8082	8082
		CH48-006A	2084268.301	751087.955	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-006A	2084268.301	751087.955	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-006A	2084268.301	751087.955	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-006A	2084268.301	751087.955	Surface Soil	0-0.5'	PCBs	8082	8082
		CH48-007A	2084232.521	751083.986	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-007A	2084232.521	751083.986	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-007A	2084232.521	751083.986	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-007A	2084232.521	751083.986	Surface Soil	0-0.5'	PCBs	8082	8082
		CH48-008A	2084282.754	751120.927	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-008A	2084282.754	751120.927	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-008A	2084282.754	751120.927	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-008A	2084282.754	751120.927	Surface Soil	0-0.5'	PCBs	8082	8082
		CH48-009A	2084246.973	751116.957	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-009A	2084246.973	751116.957	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-009A	2084246.973	751116.957	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-009A	2084246.973	751116.957	Surface Soil	0-0.5'	PCBs	8082	8082

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CH48-010A	2084211.193	751112.988	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-010A	2084211.193	751112.988	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-010A	2084211.193	751112.988	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-010A	2084211.193	751112.988	Surface Soil	0-0.5'	PCBs	8082	8082
		CH48-011A	2084297.207	751153.898	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-011A	2084297.207	751153.898	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-011A	2084297.207	751153.898	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-011A	2084297.207	751153.898	Surface Soil	0-0.5'	PCBs	8082	8082
		CH48-012A	2084261.426	751149.929	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-012A	2084261.426	751149.929	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-012A	2084261.426	751149.929	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-012A	2084261.426	751149.929	Surface Soil	0-0.5'	PCBs	8082	8082
		CH48-013A	2084225.646	751145.960	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-013A	2084225.646	751145.960	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-013A	2084225.646	751145.960	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-013A	2084225.646	751145.960	Surface Soil	0-0.5'	PCBs	8082	8082
		CH48-014A	2084189.865	751141.990	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-014A	2084189.865	751141.990	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-014A	2084189.865	751141.990	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-014A	2084189.865	751141.990	Surface Soil	0-0.5'	PCBs	8082	8082
		CH48-015A	2084154.085	751138.021	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH48-015A	2084154.085	751138.021	Surface Soil	0-0.5'	Metals	6200	6010
		CH48-015A	2084154.085	751138.021	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH48-015A	2084154.085	751138.021	Surface Soil	0-0.5'	PCBs	8082	8082
		CH49-000A	2084311.659	751186.870	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH49-000A	2084311.659	751186.870	Surface Soil	0-0.5'	Metals	6200	6010
		CH49-000A	2084311.659	751186.870	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH49-000A	2084311.659	751186.870	Surface Soil	0-0.5'	PCBs	8082	8082
		CH49-001A	2084275.879	751182.900	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CH49-001A	2084275.879	751182.900	Surface Soil	0-0.5'	Metals	6200	6010
		CH49-001A	2084275.879	751182.900	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH49-001A	2084275.879	751182.900	Surface Soil	0-0.5'	PCBs	8082	8082
		CH49-002A	2084240.098	751178.931	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH49-002A	2084240.098	751178.931	Surface Soil	0-0.5'	Metals	6200	6010
		CH49-002A	2084240.098	751178.931	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH49-002A	2084240.098	751178.931	Surface Soil	0-0.5'	PCBs	8082	8082
		CH49-003A	2084204.318	751174.962	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH49-003A	2084204.318	751174.962	Surface Soil	0-0.5'	Metals	6200	6010
		CH49-003A	2084204.318	751174.962	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH49-003A	2084204.318	751174.962	Surface Soil	0-0.5'	PCBs	8082	8082
		CH49-004A	2084218.771	751207.933	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH49-004A	2084218.771	751207.933	Surface Soil	0-0.5'	Metals	6200	6010
		CH49-004A	2084218.771	751207.933	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CH49-004A	2084218.771	751207.933	Surface Soil	0-0.5'	PCBs	8082	8082
	700-150.1 - Radioactive Site North of Building 771 (Figure 8)	CE48-020A	2083638.997	751148.995	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-020A	2083638.997	751148.995	Surface Soil	0-0.5'	Metals	6200	6010
		CE49-001A	2083624.756	751182.058	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE49-001A	2083624.756	751182.058	Surface Soil	0-0.5'	Metals	6200	6010
		CE48-021A	2083674.751	751144.796	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE48-021A	2083674.751	751144.796	Surface Soil	0-0.5'	Metals	6200	6010
		CE49-002A	2083660.510	751177.859	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE49-002A	2083660.510	751177.859	Surface Soil	0-0.5'	Metals	6200	6010
		CE49-003A	2083646.270	751210.923	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE49-003A	2083646.270	751210.923	Surface Soil	0-0.5'	Metals	6200	6010
		CE49-004A	2083696.265	751173.660	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE49-004A	2083696.265	751173.660	Surface Soil	0-0.5'	Metals	6200	6010
		CE49-005A	2083682.024	751206.724	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE49-005A	2083682.024	751206.724	Surface Soil	0-0.5'	Metals	6200	6010

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CE49-006A	2083732.019	751169.461	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE49-006A	2083732.019	751169.461	Surface Soil	0-0.5'	Metals	6200	6010
		CE49-007A	2083717.778	751202.525	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CE49-007A	2083717.778	751202.525	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-000A	2083767.773	751165.262	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-000A	2083767.773	751165.262	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-001A	2083753.533	751198.326	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-001A	2083753.533	751198.326	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-014A	2083803.528	751161.063	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-014A	2083803.528	751161.063	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-002A	2083789.287	751194.127	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-002A	2083789.287	751194.127	Surface Soil	0-0.5'	Metals	6200	6010
		CF48-015A	2083839.282	751156.864	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF48-015A	2083839.282	751156.864	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-003A	2083825.041	751189.928	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-003A	2083825.041	751189.928	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-004A	2083860.795	751185.729	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-004A	2083860.795	751185.729	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-005A	2083896.550	751181.530	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-005A	2083896.550	751181.530	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-006A	2083882.309	751214.593	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-006A	2083882.309	751214.593	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-007A	2083932.304	751177.331	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-007A	2083932.304	751177.331	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-008A	2083918.063	751210.394	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-008A	2083918.063	751210.394	Surface Soil	0-0.5'	Metals	6200	6010
		CF49-009A	2083903.823	751243.458	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-009A	2083903.823	751243.458	Surface Soil	0-0.5'	Metals	6200	6010
		CG49-000A	2083968.058	751173.132	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CG49-000A	2083968.058	751173.132	Surface Soil	0-0.5'	Metals	6200	6010
		CG49-001A	2083953.818	751206.195	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG49-001A	2083953.818	751206.195	Surface Soil	0-0.5'	Metals	6200	6010
	700-163.2 - Radioactive Site 700 Area 3 Americium (Am) Slab (Figure 8)	CF49-012A	2083812.847	751253.869	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-012B	2083812.847	751253.869	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CF49-012C	2083812.847	751253.869	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CF49-012D	2083812.847	751253.869	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CF49-012E	2083812.847	751253.869	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	Alpha Spec
		CF49-012F	2083812.847	751253.869	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	Alpha Spec
		CF49-013A	2083851.879	751255.171	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-013B	2083851.879	751255.171	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CF49-013C	2083851.879	751255.171	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CF49-013D	2083851.879	751255.171	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CF49-013E	2083851.879	751255.171	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	Alpha Spec
		CF49-013F	2083851.879	751255.171	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	Alpha Spec
		CF49-014A	2083853.181	751233.052	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-014B	2083853.181	751233.052	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CF49-014C	2083853.181	751233.052	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CF49-014D	2083853.181	751233.052	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CF49-014E	2083853.181	751233.052	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	Alpha Spec
		CF49-014F	2083853.181	751233.052	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	Alpha Spec
		CF49-015A	2083812.847	751233.052	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF49-015B	2083812.847	751233.052	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CF49-015C	2083812.847	751233.052	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CF49-015D	2083812.847	751233.052	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CF49-015E	2083812.847	751233.052	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	Alpha Spec
		CF49-015F	2083812.847	751233.052	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	Alpha Spec
		CF49-016A	2083833.664	751240.858	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CF49-016B	2083833.664	751240.858	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CF49-016C	2083833.664	751240.858	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CF49-016D	2083833.664	751240.858	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CF49-016E	2083833.664	751240.858	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	Alpha Spec
		CF49-016F	2083833.664	751240.858	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	Alpha Spec
	700-139.1(N)(b) - Hydroxide Tank, KOH, NaOH Condensate (Figure 8)	CG48-015A	2084126.411	751119.857	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG48-015A	2084126.411	751119.857	Surface Soil	0-0.5'	Metals	6200	6010
		CG48-015A	2084126.411	751119.857	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CG48-015B	2084126.411	751119.857	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG48-015B	2084126.411	751119.857	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG48-015B	2084126.411	751119.857	Subsurface Soil	0.5'-2.5'	Nitrate	N/A	9056
	IHSS 139.2 – Caustic/Acid Spills Hydrofluoric Tank (Figure 8)	CF47-006A	2083896.117	750802.389	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF47-006A	2083896.117	750802.389	Surface Soil	0-0.5'	Metals	6200	6010
		CF47-006A	2083896.117	750802.389	Surface Soil	0-0.5'	SVOCs	N/A	8270
		CF47-007A	2083914.332	750788.077	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CF47-007A	2083914.332	750788.077	Surface Soil	0-0.5'	Metals	6200	6010
		CF47-007A	2083914.332	750788.077	Surface Soil	0-0.5'	SVOCs	N/A	8270
	700-150.3 - Radioactive Site Between Buildings 771 and 774 (Figure 8)	CF48-017B	2083924.220	751018.267	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CF48-017B	2083924.220	751018.267	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CF48-017B	2083924.220	751018.267	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG48-016B	2083956.696	751017.434	Subsurface Soil	0.5'-2.5'	Nitrate	N/A	9056
		CG48-016B	2083956.696	751017.434	Subsurface Soil	0.5'-2.5'	PCBs	8082	8082
		CG48-016B	2083956.696	751017.434	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG48-017B	2084026.643	751016.602	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG48-017B	2084026.643	751016.602	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG48-017B	2084026.643	751016.602	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG48-018B	2084064.947	751049.910	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG48-018B	2084064.947	751049.910	Subsurface Soil	0.5'-2.5'	Metals	6200	6010

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CG48-018B	2084064.947	751049.910	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
	IHSS 149.1 (Solar Evaporation Ponds) (Figure 8)	CH48-020D	2084187.354	751051.575	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CH48-020D	2084187.354	751051.575	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CH48-020D	2084187.354	751051.575	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056
		CH48-021D	2084253.970	751015.769	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	Alpha Spec
		CH48-021D	2084253.970	751015.769	Subsurface Soil	4.5'-6.5'	Metals	6200	6010
		CH48-021D	2084253.970	751015.769	Subsurface Soil	4.5'-6.5'	Nitrate	N/A	9056

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5.0 IHSS GROUP 800-1

5.1 EXISTING CHARACTERIZATION INFORMATION

Existing concentrations and activities above the background mean plus two standard deviations, or method detection limit (MDL), are presented on Figure 10. Table 8 presents the PCOCs. Existing data for these IHSSs, PACs, and UBC Sites are available in Appendix C of the IASAP (DOE 2001), HRR (DOE 1992-2001), and the Industrial Area Data Summary Report (DOE 2000).

5.2 SAMPLING

The proposed sampling specifications (number and types of samples) for IHSS Group 800-1 are listed in Table 9 and shown on Figure 11. The IASAP 11-meter grid was not used to determine sampling locations because previous UBC sampling in the 800 area did not indicate that contaminant concentrations were greater than RFCA Tier II ALs.

Proposed new sampling locations are the starting point for IHSS Group characterization. After characterization starts, the number and type of samples may change based on sampling results. Changes to sampling specifications will be considered in consultation with the regulatory agencies.

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Table 8
Potential Contaminants of Concern IHSS Group 800-1

IHSS Group	IHSS/PAC/UBC Site	PCOCs	Media	Data Source	Sampling Location Method
800-1	UBC 865 – Materials Process Building and associated OPWL	Radionuclides Metals VOCs	Surface and Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) Reconnaissance Level Characterization Report (RLCR) (K-H 2001)	Biased
	PAC 800-1204 – Building 866 Spills	Radionuclides Metals VOCs	Surface and Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) RLCR (K-H 2001)	Biased
	PAC 800-1212 – Building 866 Sump Spill	Radionuclides Metals VOCs	Surface and Subsurface Soil	HRR (DOE 1992-2001) Process knowledge (IASAP [DOE 2001]) RLCR (K-H 2001)	Biased
	IHSS 000-121 – Tank 23 - OPWL	Radionuclides Metals VOCs	Subsurface Soil	Final Phase I RFI/RI Work Plan OPWL (OU 9) (DOE 1992a) RLCR (K-H 2001)	Biased
	PAC 800-1210 – Transformers 865-1 and 865-2	Radionuclides PCBs	Surface Soil	HRR (DOE 1992-2001)	Biased

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Table 9
Sampling Specifications IHSS Group 800-1

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
800-1	UBC 865 – Materials Process Building	CH38-000A	2084264.62	748988.31	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-000A	2084264.62	748988.31	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-000A	2084264.62	748988.31	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-001A	2084249.69	749021.07	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-001A	2084249.69	749021.07	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-001A	2084249.69	749021.07	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-002A	2084228.76	748991.77	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-002A	2084228.76	748991.77	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-002A	2084228.76	748991.77	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-003A	2084207.88	748962.46	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-003A	2084207.88	748962.46	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-003A	2084207.88	748962.46	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-004A	2084234.77	749053.83	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-004A	2084234.77	749053.83	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-004A	2084234.77	749053.83	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-005A	2084213.86	749024.53	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-005A	2084213.86	749024.53	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-005A	2084213.86	749024.53	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-006A	2084192.95	748995.22	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-006A	2084192.95	748995.22	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-006A	2084192.95	748995.22	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-007A	2084172.04	748965.91	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-007A	2084172.04	748965.91	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-007A	2084172.04	748965.91	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-008A	2084219.84	749086.59	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-008A	2084219.84	749086.59	Surface Soil	0-0.5'	Metals	6200	6010

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CH38-008A	2084219.84	749086.59	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-009A	2084198.93	749057.29	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-009A	2084198.93	749057.29	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-009A	2084198.93	749057.29	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-010A	2084178.02	749027.98	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-010A	2084178.02	749027.98	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-010A	2084178.02	749027.98	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-011A	2084157.12	748998.67	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-011A	2084157.12	748998.67	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-011A	2084157.12	748998.67	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-000A	2084136.21	748969.37	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-000A	2084136.21	748969.37	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-000A	2084136.21	748969.37	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-012A	2084225.82	749148.66	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-012A	2084225.82	749148.66	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-012A	2084225.82	749148.66	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-013A	2084204.91	749119.35	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-013A	2084204.91	749119.35	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-013A	2084204.91	749119.35	Surface Soil	0-0.5'	VOCs	8260	8260
	Beneath OPWL	CH38-013C	2084204.91	749119.35	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH38-013C	2084204.91	749119.35	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH38-013C	2084204.91	749119.35	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CH38-014A	2084184.01	749090.05	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-014A	2084184.01	749090.05	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-014A	2084184.01	749090.05	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-015A	2084163.10	749060.74	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-015A	2084163.10	749060.74	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-015A	2084163.10	749060.74	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-016A	2084142.19	749031.43	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CH38-016A	2084142.19	749031.43	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-016A	2084142.19	749031.43	Surface Soil	0-0.5'	VOCs	8260	8260
	Beneath OPWL	CH38-016C	2084142.19	749031.43	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH38-016C	2084142.19	749031.43	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH38-016C	2084142.19	749031.43	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CG38-001A	2084121.28	749002.13	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-001A	2084121.28	749002.13	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-001A	2084121.28	749002.13	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-002A	2084100.38	748972.82	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-002A	2084100.38	748972.82	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-002A	2084100.38	748972.82	Surface Soil	0-0.5'	VOCs	8260	8260
		CH39-000A	2084210.89	749181.42	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH39-000A	2084210.89	749181.42	Surface Soil	0-0.5'	Metals	6200	6010
		CH39-000A	2084210.89	749181.42	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-017A	2084189.99	749152.12	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-017A	2084189.99	749152.12	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-017A	2084189.99	749152.12	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-018A	2084169.08	749122.81	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-018A	2084169.08	749122.81	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-018A	2084169.08	749122.81	Surface Soil	0-0.5'	VOCs	8260	8260
	Beneath OPWL	CH38-018C	2084169.08	749122.81	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH38-018C	2084169.08	749122.81	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH38-018C	2084169.08	749122.81	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CH38-019A	2084148.17	749093.50	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-019A	2084148.17	749093.50	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-019A	2084148.17	749093.50	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-023A	2084208.90	749139.29	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-023A	2084208.90	749139.29	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-023A	2084208.90	749139.29	Surface Soil	0-0.5'	VOCs	8260	8260

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CH38-023C	2084208.90	749139.29	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH38-023C	2084208.90	749139.29	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH38-023C	2084208.90	749139.29	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CH38-025A	2084169.78	748993.65	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-025A	2084169.78	748993.65	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-025A	2084169.78	748993.65	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-025C	2084169.78	748993.65	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH38-025C	2084169.78	748993.65	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH38-025C	2084169.78	748993.65	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CH38-026A	2084175.44	749081.80	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-026A	2084175.44	749081.80	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-026A	2084175.44	749081.80	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-026C	2084175.44	749081.80	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH38-026C	2084175.44	749081.80	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH38-026C	2084175.44	749081.80	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CG38-003A	2084127.26	749064.19	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-003A	2084127.26	749064.19	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-003A	2084127.26	749064.19	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-004A	2084106.36	749034.89	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-004A	2084106.36	749034.89	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-004A	2084106.36	749034.89	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-004C	2084106.36	749034.89	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG38-004C	2084106.36	749034.89	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG38-004C	2084106.36	749034.89	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CH38-005A	2084085.45	749005.58	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-005A	2084085.45	749005.58	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-005A	2084085.45	749005.58	Surface Soil	0-0.5'	VOCs	8260	8260
		CH39-001A	2084175.06	749184.88	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH39-001A	2084175.06	749184.88	Surface Soil	0-0.5'	Metals	6200	6010

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CH39-001A	2084175.06	749184.88	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-020A	2084154.15	749155.57	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-020A	2084154.15	749155.57	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-020A	2084154.15	749155.57	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-021A	2084144.54	748986.23	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-021A	2084144.54	748986.23	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-021A	2084144.54	748986.23	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-021C	2084144.54	748986.23	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH38-021C	2084144.54	748986.23	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH38-021C	2084144.54	748986.23	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CH38-022A	2084180.64	749105.54	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-022A	2084180.64	749105.54	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-022A	2084180.64	749105.54	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-022C	2084180.64	749105.54	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH38-022C	2084180.64	749105.54	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH38-022C	2084180.64	749105.54	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CH38-024A	2084215.96	748977.60	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH38-024A	2084215.96	748977.60	Surface Soil	0-0.5'	Metals	6200	6010
		CH38-024A	2084215.96	748977.60	Surface Soil	0-0.5'	VOCs	8260	8260
		CH38-024C	2084215.96	748977.60	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH38-024C	2084215.96	748977.60	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH38-024C	2084215.96	748977.60	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CG38-006A	2084133.25	749126.26	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-006A	2084133.25	749126.26	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-006A	2084133.25	749126.26	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-006C	2084133.25	749126.26	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG38-006C	2084133.25	749126.26	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG38-006C	2084133.25	749126.26	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CG38-008A	2084091.43	749067.65	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CG38-008A	2084091.43	749067.65	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-008A	2084091.43	749067.65	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-009A	2084070.52	749038.34	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-009A	2084070.52	749038.34	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-009A	2084070.52	749038.34	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-009C	2084070.52	749038.34	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG38-009C	2084070.52	749038.34	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG38-009C	2084070.52	749038.34	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CH39-002A	2084139.23	749188.33	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH39-002A	2084139.23	749188.33	Surface Soil	0-0.5'	Metals	6200	6010
		CH39-002A	2084139.23	749188.33	Surface Soil	0-0.5'	VOCs	8260	8260
		CH39-002C	2084139.23	749188.33	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH39-002C	2084139.23	749188.33	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH39-002C	2084139.23	749188.33	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CH39-003A	2084223.03	749166.76	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CH39-003A	2084223.03	749166.76	Surface Soil	0-0.5'	Metals	6200	6010
		CH39-003A	2084223.03	749166.76	Surface Soil	0-0.5'	VOCs	8260	8260
	Beneath OPWL	CH39-003C	2084223.03	749166.76	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CH39-003C	2084223.03	749166.76	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CH39-003C	2084223.03	749166.76	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CG38-010A	2084118.32	749159.02	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-010A	2084118.32	749159.02	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-010B	2084118.32	749159.02	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-011A	2084097.41	749129.71	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-011A	2084097.41	749129.71	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-011A	2084097.41	749129.71	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-012A	2084076.50	749100.41	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-012A	2084076.50	749100.41	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-012A	2084076.50	749100.41	Surface Soil	0-0.5'	VOCs	8260	8260

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
	UBC 865 – Materials Process Building and IHSS 000-121 – Tank 23 - OPWL	CG38-013A	2084055.60	749071.10	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-013A	2084055.60	749071.10	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-013A	2084055.60	749071.10	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-016A	2084114.71	749136.93	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-016A	2084114.71	749136.93	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-016A	2084114.71	749136.93	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-016C	2084114.71	749136.93	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG38-016C	2084114.71	749136.93	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG38-016C	2084114.71	749136.93	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CG39-000A	2084082.48	749162.47	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG39-000A	2084082.48	749162.47	Surface Soil	0-0.5'	Metals	6200	6010
		CG39-000A	2084082.48	749162.47	Surface Soil	0-0.5'	VOCs	8260	8260
		CG38-007C	2084112.34	749096.95	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG38-007C	2084112.34	749096.95	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG38-007C	2084112.34	749096.95	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CG38-014C	2084124.13	749105.54	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG38-014C	2084124.13	749105.54	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG38-014C	2084124.13	749105.54	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
		CG38-015C	2084125.70	749082.78	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	Alpha Spec
		CG38-015C	2084125.70	749082.78	Subsurface Soil	2.5'-4.5'	Metals	6200	6010
		CG38-015C	2084125.70	749082.78	Subsurface Soil	2.5'-4.5'	VOCs	8260	8260
	PAC 800-1204 – Building 866 Spills	CG39-001A	2084018.95	749190.31	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG39-001A	2084018.95	749190.31	Surface Soil	0-0.5'	Metals	6200	6010
		CG39-001B	2084018.95	749190.31	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG39-001B	2084018.95	749190.31	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG39-001B	2084018.95	749190.31	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG38-017A	2084018.95	749152.63	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-017A	2084018.95	749152.63	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-017B	2084018.95	749152.63	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CG38-017B	2084018.95	749152.63	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG38-017B	2084018.95	749152.63	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG38-018A	2084018.95	749119.67	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG39-018A	2084018.95	749119.67	Surface Soil	0-0.5'	Metals	6200	6010
		CG39-018B	2084018.95	749119.67	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG39-018B	2084018.95	749119.67	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG39-018B	2084018.95	749119.67	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG38-019A	2084039.36	749107.11	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG39-019A	2084039.36	749107.11	Surface Soil	0-0.5'	Metals	6200	6010
		CG39-019B	2084039.36	749107.11	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG39-019B	2084039.36	749107.11	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG39-019B	2084039.36	749107.11	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG38-020A	2084020.52	749084.35	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG39-020A	2084020.52	749084.35	Surface Soil	0-0.5'	Metals	6200	6010
		CG39-020B	2084020.52	749084.35	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG39-020B	2084020.52	749084.35	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG39-020B	2084020.52	749084.35	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
	PAC 800-1212 – Building 866 Sump Spill Sample beneath sump in Building 866 (PAC 800-1212)	CG38-021A	2084047.21	749092.19	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-021A	2084047.21	749092.19	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-021B	2084047.21	749092.19	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG38-021B	2084047.21	749092.19	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG38-021B	2084047.21	749092.19	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG38-027A	2084048.86	749100.67	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-027A	2084048.86	749100.67	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-027B	2084048.86	749100.67	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG38-027B	2084048.86	749100.67	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG38-027B	2084048.86	749100.67	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG38-028A	2084049.56	749082.61	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CG38-028A	2084049.56	749082.61	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-028B	2084049.56	749082.61	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG38-028B	2084049.56	749082.61	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG38-028B	2084049.56	749082.61	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
		CG38-029A	2084032.57	749092.58	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-029A	2084032.57	749092.58	Surface Soil	0-0.5'	Metals	6200	6010
		CG38-029B	2084032.57	749092.58	Subsurface Soil	0.5'-2.5'	Radionuclides	HPGe	Alpha Spec
		CG38-029B	2084032.57	749092.58	Subsurface Soil	0.5'-2.5'	Metals	6200	6010
		CG38-029B	2084032.57	749092.58	Subsurface Soil	0.5'-2.5'	VOCs	8260	8260
	PAC 800-1210 - Transformers 865-1 and 865-2	CG38-022A	2084068.43	749159.70	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-022A	2084068.43	749159.70	Surface Soil	0-0.5'	PCBs	NA	8082
		CG38-023A	2084056.30	749149.46	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-023A	2084056.30	749149.46	Surface Soil	0-0.5'	PCBs	NA	8082
		CG38-024A	2084071.12	749136.25	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-024A	2084071.12	749136.25	Surface Soil	0-0.5'	PCBs	NA	8082
		CG38-025A	2084076.51	749125.47	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-025A	2084076.51	749125.47	Surface Soil	0-0.5'	PCBs	NA	8082
		CG38-026A	2084057.10	749125.20	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG38-026A	2084057.10	749125.20	Surface Soil	0-0.5'	PCBs	NA	8082
		CG39-002A	2084055.76	749172.91	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG39-002A	2084055.76	749172.91	Surface Soil	0-0.5'	PCBs	NA	8082
		CG39-003A	2084071.93	749173.99	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CG39-003A	2084071.93	749173.99	Surface Soil	0-0.5'	PCBs	NA	8082

6.0 IHSS GROUP 900-3

6.1 EXISTING CHARACTERIZATION INFORMATION

Table 10 presents the PCOCs. Existing data for these IHSSs, PACs, and UBC Sites are available in Appendix C of the IASAP (DOE 2001), HRR (DOE 1992-2001), and the Industrial Area Data Summary Report (DOE 2000).

6.2 SAMPLING

The proposed sampling specifications (number and types of samples) for IHSS Group 900-3 are listed in Table 11 and shown on Figure 12. The IASAP 11-meter grid was not used to determine sampling locations at IHSS Group 900-3 because of the following:

- The asphalt at the 904 Pad is relatively new;
- All waste is stored in tents;
- The 904 Pad is bermed; and
- All spills were cleaned up.

Proposed new sampling locations are the starting point for IHSS Group characterization. After characterization starts, the number and type of samples may change based on sampling results. Changes to sampling specifications will be considered in consultation with the regulatory agencies.

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Table 10
Potential Contaminants of Concern IHSS Group 900-3

IHSS Group	IHSS/PAC/UBC Site	PCOCs	Media	Data Source	Sampling Location Method
900-3	IHSS 900-213 – 904 Pad Pondcrete Storage	Radionuclides Metals Nitrate VOCs Cyanide	Surface and Subsurface Soil	Process knowledge (IASAP [DOE 2001]) Final Phase I RFI/RI Work Plan, Other Outside Closures (Operable Unit No. 10) (DOE 1992b)	Biased

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Table 11
Sampling Specifications IHSS Group 900-3

IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
900-3	IHSS 900-213 – 904 Pad Pondcrete Storage	CL37-000A	2085107.08	748832.02	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CL37-000A	2085107.08	748832.02	Surface Soil	0-0.5'	Metals	6200	6010
		CL37-000A	2085107.08	748832.02	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CL37-000A	2085107.08	748832.02	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CL37-000A	2085107.08	748832.02	Surface Soil	0-0.5'	VOCs	8260	8260
		CL37-001A	2085108.19	748940.18	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CL37-001A	2085108.19	748940.18	Surface Soil	0-0.5'	Metals	6200	6010
		CL37-001A	2085108.19	748940.18	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CL37-001A	2085108.19	748940.18	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CL37-001A	2085108.19	748940.18	Surface Soil	0-0.5'	VOCs	8260	8260
		CL38-000A	2085109.31	749041.66	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CL38-000A	2085109.31	749041.66	Surface Soil	0-0.5'	Metals	6200	6010
		CL38-000A	2085109.31	749041.66	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CL38-000A	2085109.31	749041.66	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CL38-000A	2085109.31	749041.66	Surface Soil	0-0.5'	VOCs	8260	8260
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	Metals	6200	6010
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	VOCs	8260	8260
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	Metals	6200	6010
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CL39-000A	2085107.08	749162.09	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-003A	2085202.28	748819.05	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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		CM37-003A	2085202.28	748819.05	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-003A	2085202.28	748819.05	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-003A	2085202.28	748819.05	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-003A	2085202.28	748819.05	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-005A	2085139.72	748854.70	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM37-005A	2085139.72	748854.70	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-005A	2085139.72	748854.70	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-005A	2085139.72	748854.70	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-005A	2085139.72	748854.70	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-012A	2085326.98	748819.76	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM37-013A	2085326.98	748819.76	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-012A	2085326.98	748819.76	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-012A	2085326.98	748819.76	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-012A	2085326.98	748819.76	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-014A	2085264.42	748855.40	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM37-014A	2085264.42	748855.40	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-014A	2085264.42	748855.41	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-014A	2085264.42	748855.41	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-014A	2085264.42	748855.41	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-016A	2085201.87	748891.05	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM37-016A	2085201.87	748891.05	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-016A	2085201.87	748891.05	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-016A	2085201.87	748891.05	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-016B	2085201.87	748891.05	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-018A	2085139.31	748926.69	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM37-018A	2085139.31	748926.69	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-018A	2085139.31	748926.69	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-018A	2085139.31	748926.69	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-018A	2085139.31	748926.69	Surface Soil	0-0.5'	VOCs	8260	8260
		CN37-003A	2085389.13	748856.12	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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		CN37-003A	2085389.13	748856.12	Surface Soil	0-0.5'	Metals	6200	6010
		CN37-003A	2085389.13	748856.12	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CN37-003A	2085389.13	748856.12	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN37-003A	2085389.13	748856.12	Surface Soil	0-0.5'	VOCs	8260	8260
		CN37-012A	2085443.84	748911.19	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN37-012A	2085443.84	748911.19	Surface Soil	0-0.5'	Metals	6200	6010
		CN37-012A	2085443.84	748911.19	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CN37-012A	2085443.84	748911.19	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN37-012A	2085443.84	748911.19	Surface Soil	0-0.5'	VOCs	8260	8260
		CN37-013A	2085422.66	748804.14	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN37-013A	2085422.66	748804.14	Surface Soil	0-0.5'	Metals	6200	6010
		CN37-013A	2085422.66	748804.14	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CN37-013A	2085422.66	748804.14	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN37-013A	2085422.66	748804.14	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-025A	2085326.57	748891.76	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM37-025A	2085326.57	748891.76	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-025A	2085326.57	748891.76	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-025A	2085326.57	748891.76	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-025A	2085326.57	748891.76	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-027A	2085264.01	748927.41	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM37-027A	2085264.01	748927.41	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-027A	2085264.01	748927.41	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-027A	2085264.01	748927.41	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-027A	2085264.01	748927.41	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-031A	2085322.30	748766.23	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM37-031A	2085322.30	748766.23	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-031A	2085322.30	748766.23	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-031A	2085322.30	748766.23	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-031A	2085322.30	748766.23	Surface Soil	0-0.5'	VOCs	8260	8260
		CM37-032A	2085200.75	748769.57	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec

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		CM37-032A	2085200.75	748769.57	Surface Soil	0-0.5'	Metals	6200	6010
		CM37-032A	2085200.75	748769.57	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM37-032A	2085200.75	748769.57	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM37-032A	2085200.75	748769.57	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-001A	2085201.46	748963.05	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-001A	2085201.46	748963.05	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-001A	2085201.46	748963.05	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-001A	2085201.46	748963.05	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-001A	2085201.46	748963.05	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-003A	2085138.90	748998.69	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-003A	2085138.90	748998.69	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-003A	2085138.90	748998.69	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-003A	2085138.90	748998.69	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-003A	2085138.90	748998.69	Surface Soil	0-0.5'	VOCs	8260	8260
		CN37-009A	2085388.72	748928.12	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN37-009A	2085388.72	748928.12	Surface Soil	0-0.5'	Metals	6200	6010
		CN37-009A	2085388.72	748928.12	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CN37-009A	2085388.72	748928.12	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-009A	2085326.16	748963.76	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-009A	2085326.16	748963.76	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-009A	2085326.16	748963.76	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-009A	2085326.16	748963.76	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-011A	2085263.60	748999.40	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-011A	2085263.60	748999.40	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-011A	2085263.60	748999.40	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-011A	2085263.60	748999.40	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-011A	2085263.60	748999.40	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-013A	2085201.05	749035.05	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-013A	2085201.05	749035.05	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-013A	2085201.05	749035.05	Surface Soil	0-0.5'	Nitrate	N/A	9056

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		CM38-013A	2085201.05	749035.05	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-013A	2085201.05	749035.05	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-015A	2085138.49	749070.69	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-015A	2085138.49	749070.69	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-015A	2085138.49	749070.69	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-015A	2085138.49	749070.69	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-015A	2085138.49	749070.69	Surface Soil	0-0.5'	VOCs	8260	8260
		CN38-003A	2085388.31	749000.12	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN38-003A	2085388.31	749000.12	Surface Soil	0-0.5'	Metals	6200	6010
		CN38-003A	2085388.31	749000.12	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CN38-003A	2085388.31	749000.12	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN38-003A	2085388.31	749000.12	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-023A	2085325.75	749035.76	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-023A	2085325.75	749035.76	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-023A	2085325.75	749035.76	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-023A	2085325.75	749035.76	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-023A	2085325.75	749035.76	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-025A	2085263.19	749071.40	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-025A	2085263.19	749071.40	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-025A	2085263.19	749071.40	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-025A	2085263.19	749071.40	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-025A	2085263.19	749071.40	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-027A	2085200.63	749107.05	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-027A	2085200.63	749107.05	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-027A	2085200.63	749107.05	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-027A	2085200.63	749107.05	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-027A	2085200.63	749107.05	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-029A	2085138.08	749142.69	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-029A	2085138.08	749142.69	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-029A	2085138.08	749142.69	Surface Soil	0-0.5'	Nitrate	N/A	9056

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		CM38-029A	2085138.08	749142.69	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-029A	2085138.08	749142.69	Surface Soil	0-0.5'	VOCs	8260	8260
		CN38-009A	2085387.90	749072.11	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN38-009A	2085387.90	749072.11	Surface Soil	0-0.5'	Metals	6200	6010
		CN38-009A	2085387.90	749072.11	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CN38-009A	2085387.90	749072.11	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN38-009A	2085387.90	749072.11	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-036A	2085325.34	749107.76	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-036A	2085325.34	749107.76	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-036A	2085325.34	749107.76	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-036A	2085325.34	749107.76	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-036A	2085325.34	749107.76	Surface Soil	0-0.5'	VOCs	8260	8260
		CM38-038A	2085262.78	749143.40	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM38-038A	2085262.78	749143.40	Surface Soil	0-0.5'	Metals	6200	6010
		CM38-038A	2085262.78	749143.40	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM38-038A	2085262.78	749143.40	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM38-038A	2085262.78	749143.40	Surface Soil	0-0.5'	VOCs	8260	8260
		CN38-015A	2085387.49	749144.11	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN38-015A	2085387.49	749144.11	Surface Soil	0-0.5'	Metals	6200	6010
		CN38-015A	2085387.49	749144.11	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CN38-015A	2085387.49	749144.11	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN38-015A	2085387.49	749144.11	Surface Soil	0-0.5'	VOCs	8260	8260
		CN38-016A	2085441.61	749117.49	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN38-016A	2085441.61	749117.49	Surface Soil	0-0.5'	Metals	6200	6010
		CN38-016A	2085441.61	749117.49	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CN38-016A	2085441.61	749117.49	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN38-016A	2085441.61	749117.49	Surface Soil	0-0.5'	VOCs	8260	8260
		CN38-017A	2085442.73	749022.70	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN38-017A	2085442.73	749022.70	Surface Soil	0-0.5'	Metals	6200	6010
		CN38-017A	2085442.73	749022.70	Surface Soil	0-0.5'	Nitrate	N/A	9056

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		CN38-017A	2085442.73	749022.70	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN38-017A	2085442.73	749022.70	Surface Soil	0-0.5'	VOCs	8260	8260
		CM39-008A	2085324.93	749179.76	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM39-008A	2085324.93	749179.76	Surface Soil	0-0.5'	Metals	6200	6010
		CM39-008A	2085324.93	749179.76	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM39-008A	2085324.93	749179.76	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM39-008A	2085324.93	749179.76	Surface Soil	0-0.5'	VOCs	8260	8260
		CM39-010A	2085262.37	749215.40	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM39-010A	2085262.37	749215.40	Surface Soil	0-0.5'	Metals	6200	6010
		CM39-010A	2085262.37	749215.40	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM39-010A	2085262.37	749215.40	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM39-010A	2085262.37	749215.40	Surface Soil	0-0.5'	VOCs	8260	8260
		CM39-012A	2085169.53	749244.61	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM39-012A	2085169.53	749244.61	Surface Soil	0-0.5'	Metals	6200	6010
		CM39-012A	2085169.53	749244.61	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM39-012A	2085169.53	749244.61	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM39-012A	2085169.53	749244.61	Surface Soil	0-0.5'	VOCs	8260	8260
		CM39-013A	2085296.65	749246.84	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CM39-013A	2085296.65	749246.84	Surface Soil	0-0.5'	Metals	6200	6010
		CM39-013A	2085296.65	749246.84	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CM39-013A	2085296.65	749246.84	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CM39-013A	2085296.65	749246.84	Surface Soil	0-0.5'	VOCs	8260	8260
		CN39-005A	2085387.08	749216.11	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN39-005A	2085387.08	749216.112	Surface Soil	0-0.5'	Metals	6200	6010
		CN39-005A	2085387.08	749216.11	Surface Soil	0-0.5'	Nitrate	N/A	9056
		CN39-005A	2085387.08	749216.11	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN39-005A	2085387.08	749216.11	Surface Soil	0-0.5'	VOCs	8260	8260
		CN39-006A	2085436.04	749242.38	Surface Soil	0-0.5'	Radionuclides	HPGe	Alpha Spec
		CN39-006A	2085436.04	749242.38	Surface Soil	0-0.5'	Metals	6200	6010
		CN39-006A	2085436.04	749242.38	Surface Soil	0-0.5'	Nitrate	N/A	9056

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IHSS Group	IHSS/PAC/UBC Site	Location Code	Easting	Northing	Media	Depth Interval	Analyte	Onsite Method	Offsite Laboratory Method
		CN39-006A	2085436.04	749242.38	Surface Soil	0-0.5'	Cyanide	N/A	9010B
		CN39-006A	2085436.04	749242.38	Surface Soil	0-0.5'	VOCs	8260	8260

77

7.0 REFERENCES

DOE, 1992-2001, Historical Release Reports for the Rocky Flats Plant, Golden, Colorado.

DOE, 1992a, Final Phase I RFI/RI Work Plan Original Process Waste Lines (Operable Unit No. 9) Rocky Flats Environmental Technology Site, Golden, Colorado, February.

DOE, 1992b, Final Phase I RFI/RI Work Plan Other Outside Closures (Operable Unit No. 10) Volumes I/II, Golden, Colorado, May.

DOE, 2000, Rocky Flats Environmental Technology Site Industrial Area Data Summary Report, Golden, Colorado, September.

DOE, 2001, Industrial Area Sampling and Analysis Plan, Rocky Flats Environmental Technology Site, Golden, Colorado, June.

Kaiser-Hill (K-H), LLC, 2001, Reconnaissance Level Characterization Report (RLCR), 865 Cluster Closure Project (Buildings 865, 866, 867 and 868), Rocky Flats Environmental Technology Site, Golden, Colorado, September.

79/79

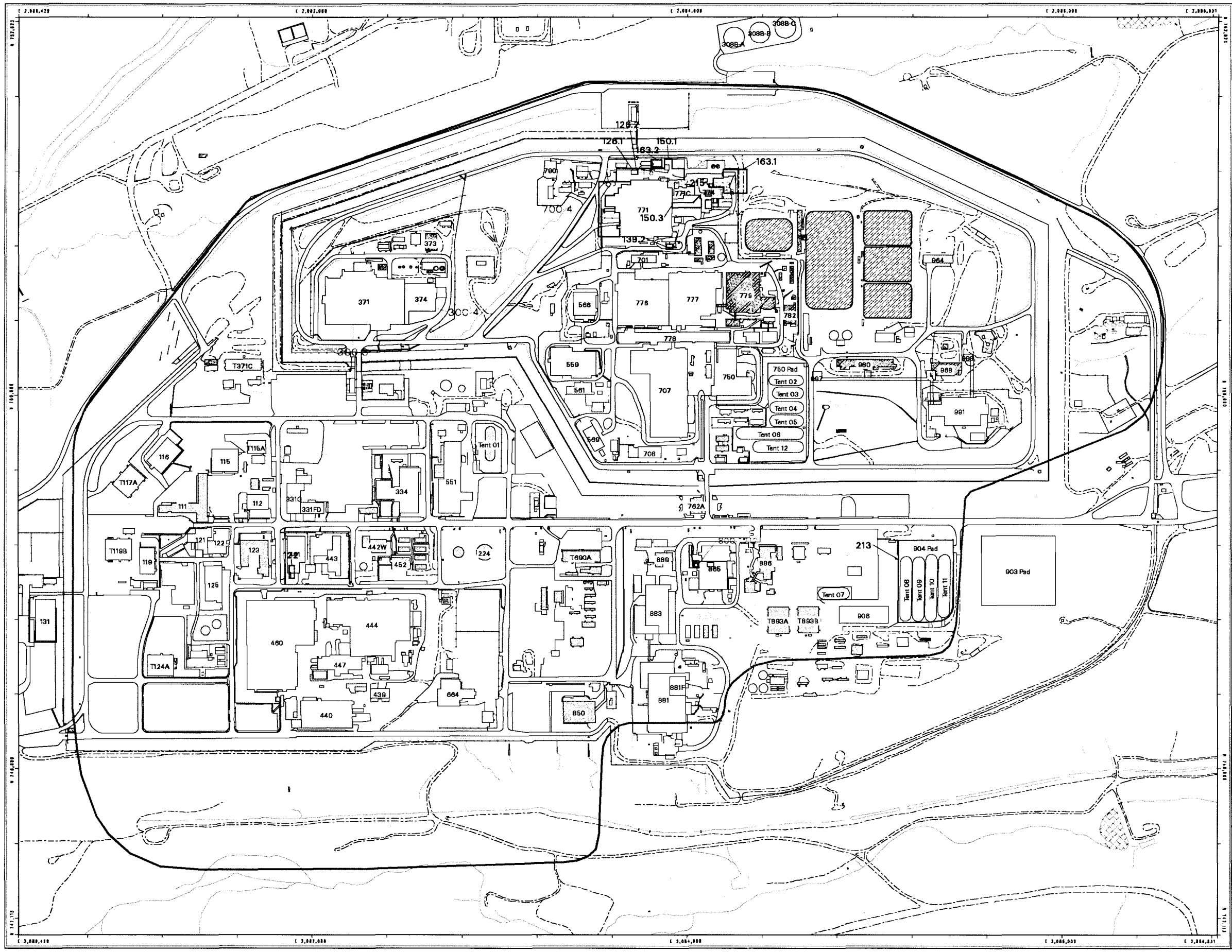

Figure 1
IA Groups Location Map

EXPLANATION

IHSS Groupings

- 300-3
- 300-4
- 400-B
- 700-4
- 800-1
- 900-3

Standard Map Features

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

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

Scale = 1 : 6330
1 inch represents approximately 528 feet

150 0 300 600ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

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

GIS Dept. 303-966-7707

Prepared by: DynCorp

Prepared for: KH

September 03, 2002

NT_Svr w:/projects/fy2002/02-0473/ia_group_map2.aml

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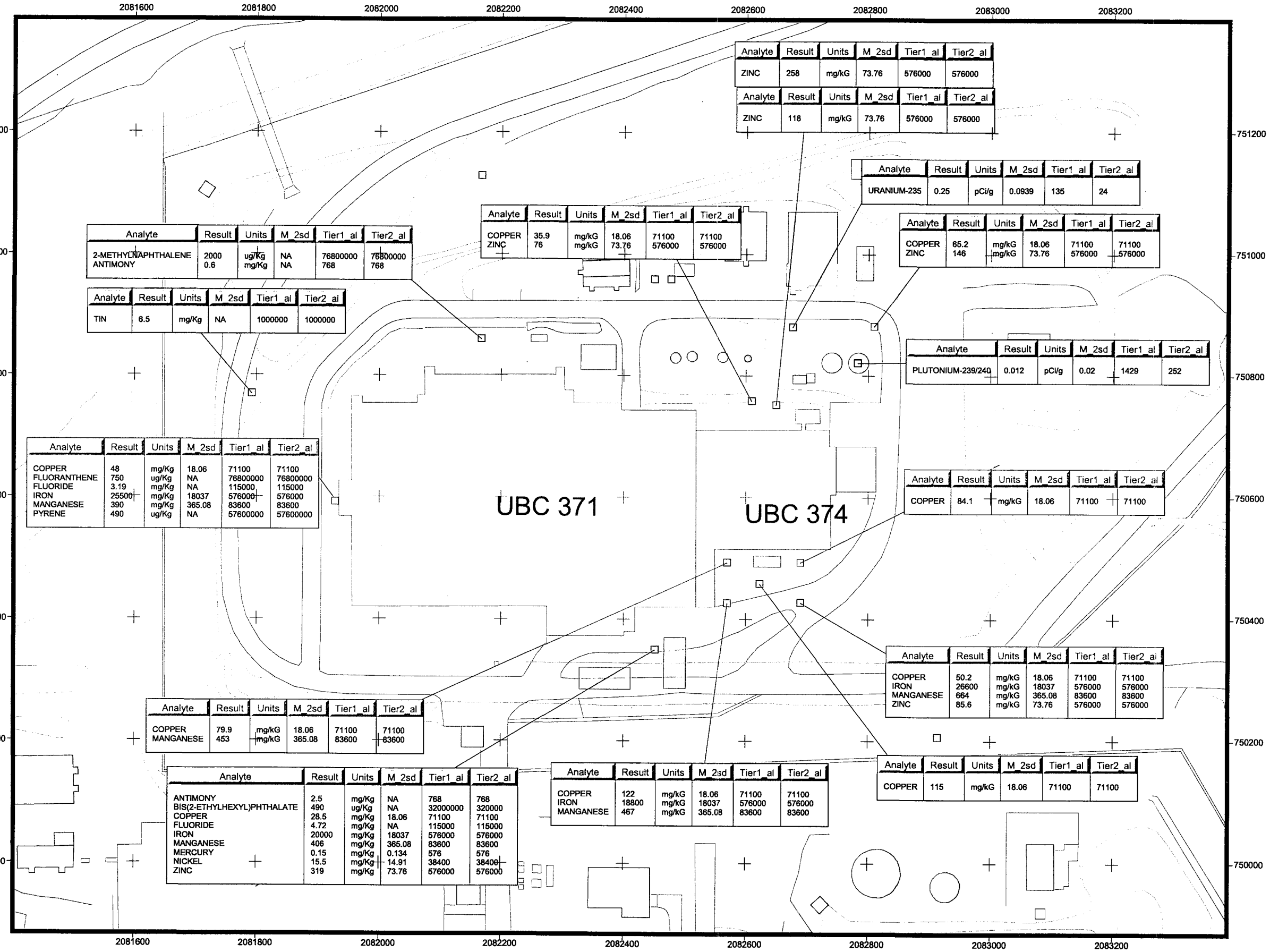

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ZINC	258	mg/kG	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ZINC	118	mg/kG	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
URANIUM-235	0.25	pCi/g	0.0939	135	24

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	35.9	mg/kG	18.06	71100	71100
ZINC	76	mg/kG	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	65.2	mg/kG	18.06	71100	71100
ZINC	146	mg/kG	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
2-METHYLNAPHTHALENE	2000	ug/Kg	NA	76800000	76800000
ANTIMONY	0.6	mg/Kg	NA	768	768

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
TIN	6.5	mg/Kg	NA	1000000	1000000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
PLUTONIUM-239/240	0.012	pCi/g	0.02	1429	252

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	48	mg/Kg	18.06	71100	71100
FLUORANTHENE	750	ug/Kg	NA	76800000	76800000
FLUORIDE	3.19	mg/Kg	NA	115000	115000
IRON	25500	mg/Kg	18037	576000	576000
MANGANESE	390	mg/Kg	365.08	83600	83600
PYRENE	490	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	84.1	mg/kG	18.06	71100	71100

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	50.2	mg/kG	18.06	71100	71100
IRON	26600	mg/kG	18037	576000	576000
MANGANESE	664	mg/kG	365.08	83600	83600
ZINC	85.6	mg/kG	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	79.9	mg/kG	18.06	71100	71100
MANGANESE	453	mg/kG	365.08	83600	83600

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ANTIMONY	2.5	mg/Kg	NA	768	768
BIS(2-ETHYLHEXYL)PHTHALATE	490	ug/Kg	NA	32000000	320000
COPPER	28.5	mg/Kg	18.06	71100	71100
FLUORIDE	4.72	mg/Kg	NA	115000	115000
IRON	20000	mg/Kg	18037	576000	576000
MANGANESE	406	mg/Kg	365.08	83600	83600
MERCURY	0.15	mg/Kg	0.134	576	576
NICKEL	15.5	mg/Kg	14.91	38400	38400
ZINC	319	mg/Kg	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	122	mg/kG	18.06	71100	71100
IRON	18800	mg/kG	18037	576000	576000
MANGANESE	467	mg/kG	365.08	83600	83600

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	115	mg/kG	18.06	71100	71100

Figure 2
Existing Surface Soil Sampling Results Greater Than Background Mean Plus Two Standard Deviations or MDLs for IHSS Groups 300-3 and 300-4

KEY

- UBC
- Building
- Stream, ditch, or other drainage
- Paved Area
- Dirt road
- Surface Soil Sampling Location

N

40 0 40 80 120 Feet

Scale = 1:1,500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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

Prepared by: RADMS

Prepared for: KAISER•HILL COMPANY

File: 300-3.apr

Date: September 2002

10

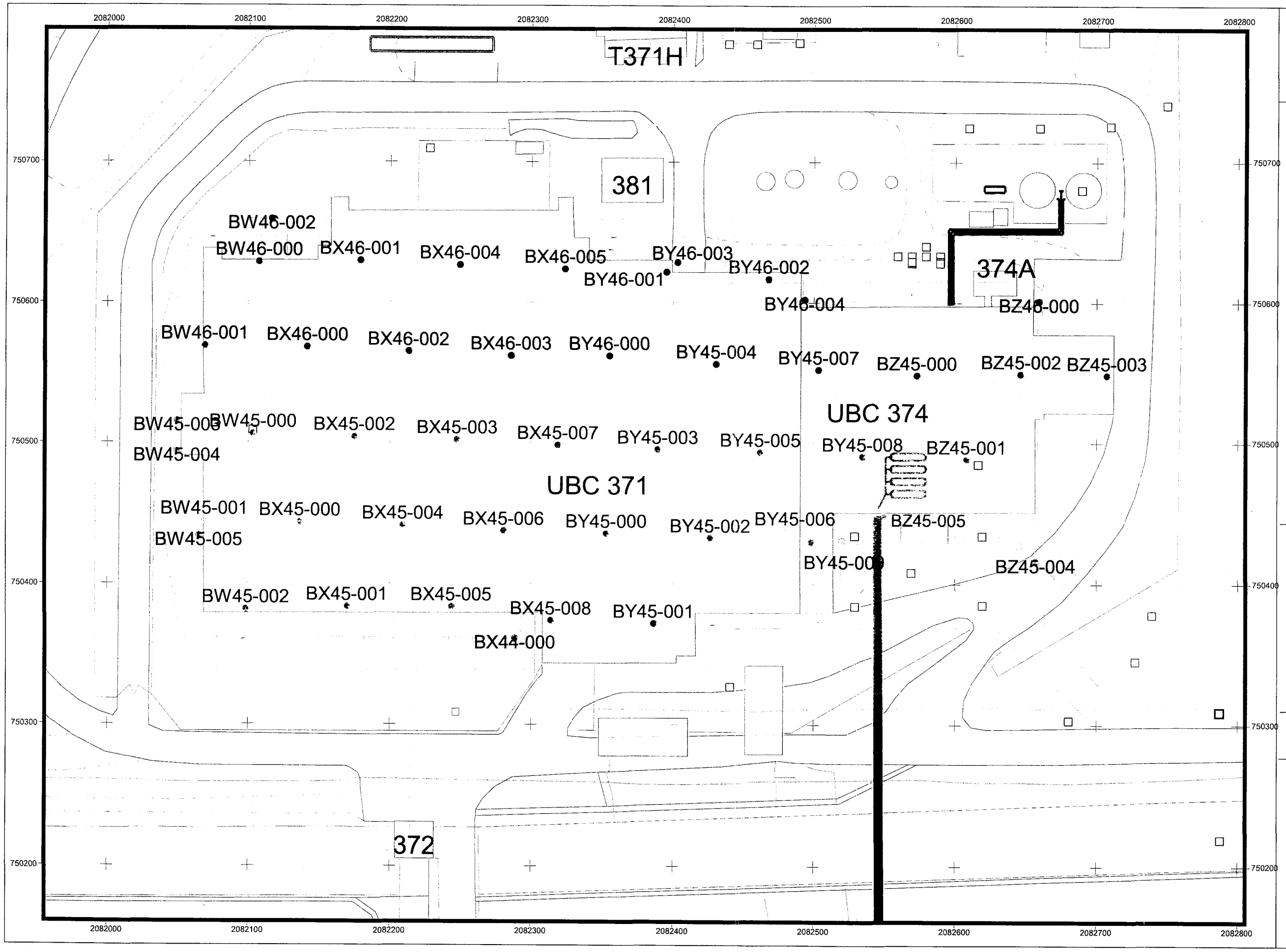

Figure 3
Proposed Sampling Locations for IHSS Groups 300-3 and 300-4

KEY

- UBC
- NPWL
- Drains
- Storm drain
- Sewer
- Paved area
- Dirt road
- Stream, ditch, or other drainage
- Fence
- Proposed sampling location
- Existing sampling location

N

20 0 20 40 60 Feet

Scale = 1:800

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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

Prepared by:

KAISER•HILL COMPANY

300-3,300-4.apr
November 2002

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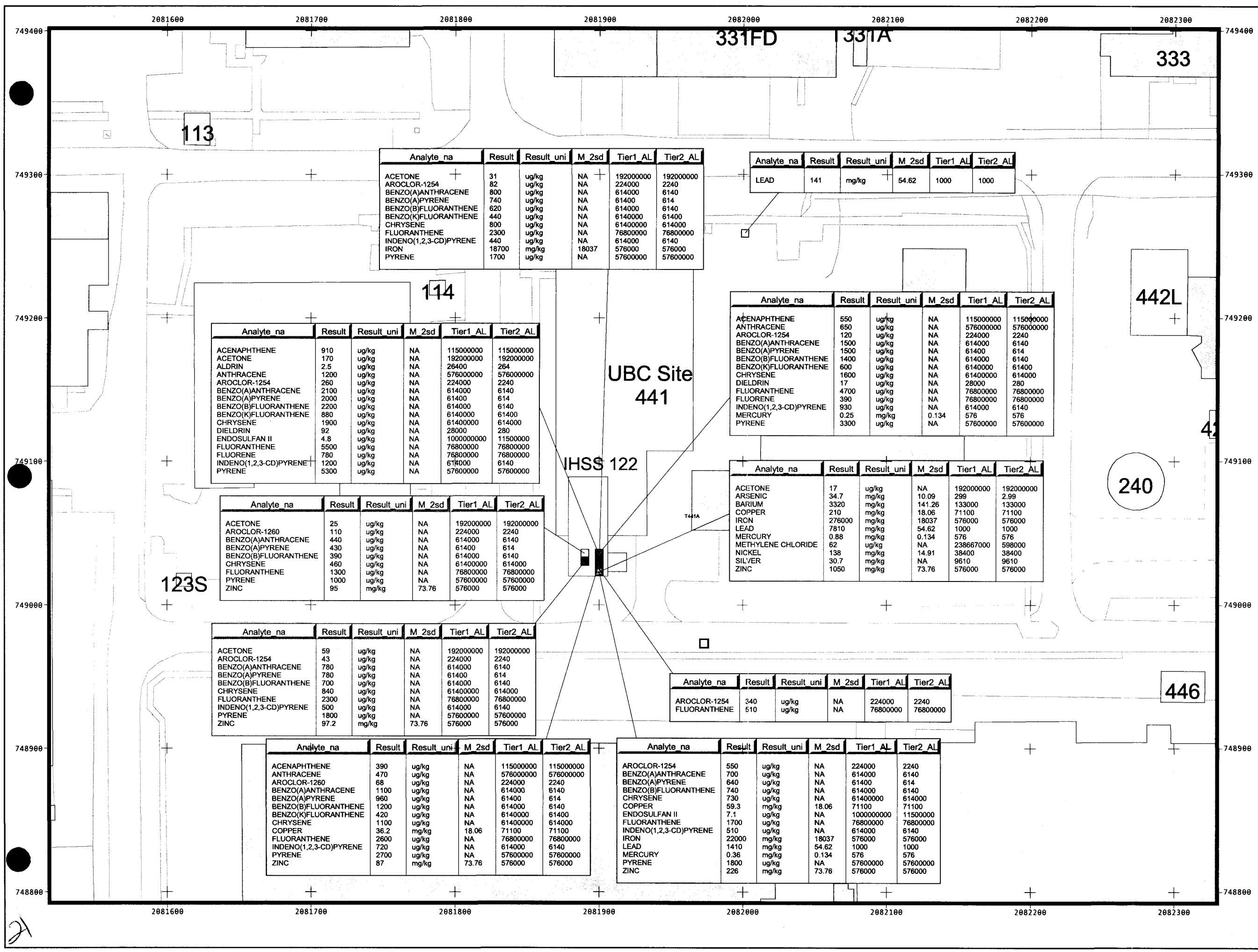

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
ACETONE	31	ug/kg	NA	192000000	192000000
AROCLOR-1254	82	ug/kg	NA	224000	2240
BENZO(A)ANTHRACENE	800	ug/kg	NA	614000	6140
BENZO(A)PYRENE	740	ug/kg	NA	61400	614
BENZO(B)FLUORANTHENE	620	ug/kg	NA	614000	6140
BENZO(K)FLUORANTHENE	440	ug/kg	NA	6140000	61400
CHRYSENE	800	ug/kg	NA	61400000	614000
FLUORANTHENE	2300	ug/kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	440	ug/kg	NA	614000	6140
IRON	18700	mg/kg	18037	576000	576000
PYRENE	1700	ug/kg	NA	57600000	57600000

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
LEAD	141	mg/kg	54.62	1000	1000

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
ACENAPHTHENE	910	ug/kg	NA	115000000	115000000
ACETONE	170	ug/kg	NA	192000000	192000000
ALDRIN	2.5	ug/kg	NA	26400	264
ANTHRACENE	1200	ug/kg	NA	576000000	576000000
AROCLOR-1254	260	ug/kg	NA	224000	2240
BENZO(A)ANTHRACENE	2100	ug/kg	NA	614000	6140
BENZO(A)PYRENE	2000	ug/kg	NA	61400	614
BENZO(B)FLUORANTHENE	2200	ug/kg	NA	614000	6140
BENZO(K)FLUORANTHENE	880	ug/kg	NA	6140000	61400
CHRYSENE	1900	ug/kg	NA	61400000	614000
DIELDRIN	92	ug/kg	NA	28000	280
ENDOSULFAN II	4.8	ug/kg	NA	1000000000	11500000
FLUORANTHENE	5500	ug/kg	NA	76800000	76800000
FLUORENE	780	ug/kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	1200	ug/kg	NA	614000	6140
PYRENE	5300	ug/kg	NA	57600000	57600000

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
ACENAPHTHENE	550	ug/kg	NA	115000000	115000000
ANTHRACENE	650	ug/kg	NA	576000000	576000000
AROCLOR-1254	120	ug/kg	NA	224000	2240
BENZO(A)ANTHRACENE	1500	ug/kg	NA	614000	6140
BENZO(A)PYRENE	1500	ug/kg	NA	61400	614
BENZO(B)FLUORANTHENE	1400	ug/kg	NA	614000	6140
BENZO(K)FLUORANTHENE	600	ug/kg	NA	6140000	61400
CHRYSENE	1600	ug/kg	NA	61400000	614000
DIELDRIN	17	ug/kg	NA	28000	280
FLUORANTHENE	4700	ug/kg	NA	76800000	76800000
FLUORENE	390	ug/kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	930	ug/kg	NA	614000	6140
MERCURY	0.25	mg/kg	0.134	576	576
PYRENE	3300	ug/kg	NA	57600000	57600000

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
ACETONE	17	ug/kg	NA	192000000	192000000
ARSENIC	34.7	mg/kg	10.09	299	2.99
BARIUM	3320	mg/kg	141.26	133000	133000
COPPER	210	mg/kg	18.06	71100	71100
IRON	276000	mg/kg	18037	576000	576000
LEAD	7810	mg/kg	54.62	1000	1000
MERCURY	0.88	mg/kg	0.134	576	576
METHYLENE CHLORIDE	62	ug/kg	NA	238667000	598000
NICKEL	138	mg/kg	14.91	38400	38400
SILVER	30.7	mg/kg	NA	9610	9610
ZINC	1050	mg/kg	73.76	576000	576000

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
ACETONE	25	ug/kg	NA	192000000	192000000
AROCLOR-1260	110	ug/kg	NA	224000	2240
BENZO(A)ANTHRACENE	440	ug/kg	NA	614000	6140
BENZO(A)PYRENE	430	ug/kg	NA	61400	614
BENZO(B)FLUORANTHENE	390	ug/kg	NA	614000	6140
CHRYSENE	460	ug/kg	NA	61400000	614000
FLUORANTHENE	1300	ug/kg	NA	76800000	76800000
PYRENE	1000	ug/kg	NA	57600000	57600000
ZINC	95	mg/kg	73.76	576000	576000

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
ACETONE	59	ug/kg	NA	192000000	192000000
AROCLOR-1254	43	ug/kg	NA	224000	2240
BENZO(A)ANTHRACENE	780	ug/kg	NA	614000	6140
BENZO(A)PYRENE	780	ug/kg	NA	61400	614
BENZO(B)FLUORANTHENE	700	ug/kg	NA	614000	6140
CHRYSENE	840	ug/kg	NA	61400000	614000
FLUORANTHENE	2300	ug/kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	500	ug/kg	NA	614000	6140
PYRENE	1800	ug/kg	NA	57600000	57600000
ZINC	97.2	mg/kg	73.76	576000	576000

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
AROCLOR-1254	340	ug/kg	NA	224000	2240
FLUORANTHENE	510	ug/kg	NA	76800000	76800000

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
ACENAPHTHENE	390	ug/kg	NA	115000000	115000000
ANTHRACENE	470	ug/kg	NA	576000000	576000000
AROCLOR-1260	68	ug/kg	NA	224000	2240
BENZO(A)ANTHRACENE	1100	ug/kg	NA	614000	6140
BENZO(A)PYRENE	960	ug/kg	NA	61400	614
BENZO(B)FLUORANTHENE	1200	ug/kg	NA	614000	6140
BENZO(K)FLUORANTHENE	420	ug/kg	NA	6140000	61400
CHRYSENE	1100	ug/kg	NA	61400000	614000
COPPER	36.2	mg/kg	18.06	71100	71100
FLUORANTHENE	2600	ug/kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	720	ug/kg	NA	614000	6140
PYRENE	2700	ug/kg	NA	57600000	57600000
ZINC	87	mg/kg	73.76	576000	576000

Analyte_na	Result	Result_uni	M_2sd	Tier1_AL	Tier2_AL
AROCLOR-1254	550	ug/kg	NA	224000	2240
BENZO(A)ANTHRACENE	700	ug/kg	NA	614000	6140
BENZO(A)PYRENE	640	ug/kg	NA	61400	614
BENZO(B)FLUORANTHENE	740	ug/kg	NA	614000	6140
CHRYSENE	730	ug/kg	NA	61400000	614000
COPPER	59.3	mg/kg	18.06	71100	71100
ENDOSULFAN II	7.1	ug/kg	NA	1000000000	11500000
FLUORANTHENE	1700	ug/kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	510	ug/kg	NA	614000	6140
IRON	22000	mg/kg	18037	576000	576000
LEAD	1410	mg/kg	54.62	1000	1000
MERCURY	0.36	mg/kg	0.134	576	576
PYRENE	1800	ug/kg	NA	57600000	57600000
ZINC	226	mg/kg	73.76	576000	576000

Figure 4
Existing Surface Soil Sampling Results Greater Than Background Means Plus Two Standard Deviations or MDLs for IHSS Group 400-8

KEY

- Surface Soil Tier I AL exceedance
- Surface Soil Tier II AL exceedance
- Surface Soil Less Than Tier II ALs
- IHSS
- UBC Site
- Paved area
- Dirt road
- Stream, ditch, or other drainage
- Building

N W E S

30 0 30 60 Feet

Scale = 1:750

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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

Prepared by: Date: 12-17-02

RADMS

Prepared for:

KAISER•HILL COMPANY

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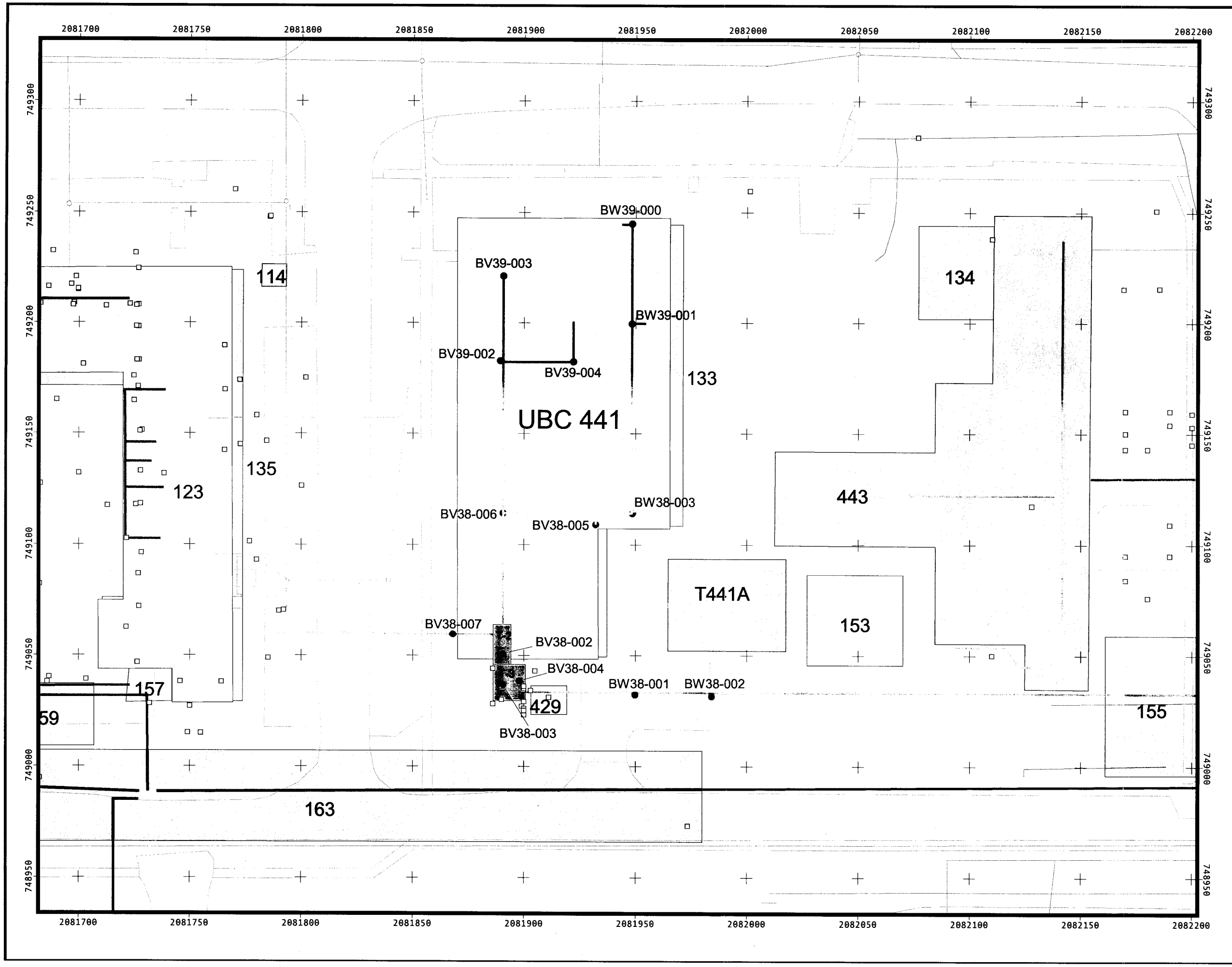

Figure 5
Proposed Sampling Lcoations for IA Group 400-8 (UBC 441 and tanks T-2 and T-3)

KEY

- Biased Sampling Location
- IHSS location
- PAC location
- UBC location
- Building/structure
- Paved area
- Dirt road
- Stream, ditch, or other drainage feature
- OPWL location (estimated)
- NPWL location (estimated)
- OPWL tank location (estimated)

Existing soil sampling locations (50-ft buffer)

- Both subsurface and surface soil
- Subsurface soil
- Surface soil

N W E S

20 0 20 40 60 Feet

Scale = 1:500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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

Prepared By: Date: 12-16-02

RADMS

Prepared For:

KAISER•HILL COMPANY

File: w:\projects\fy2003\400-8\400-8samplinglayout

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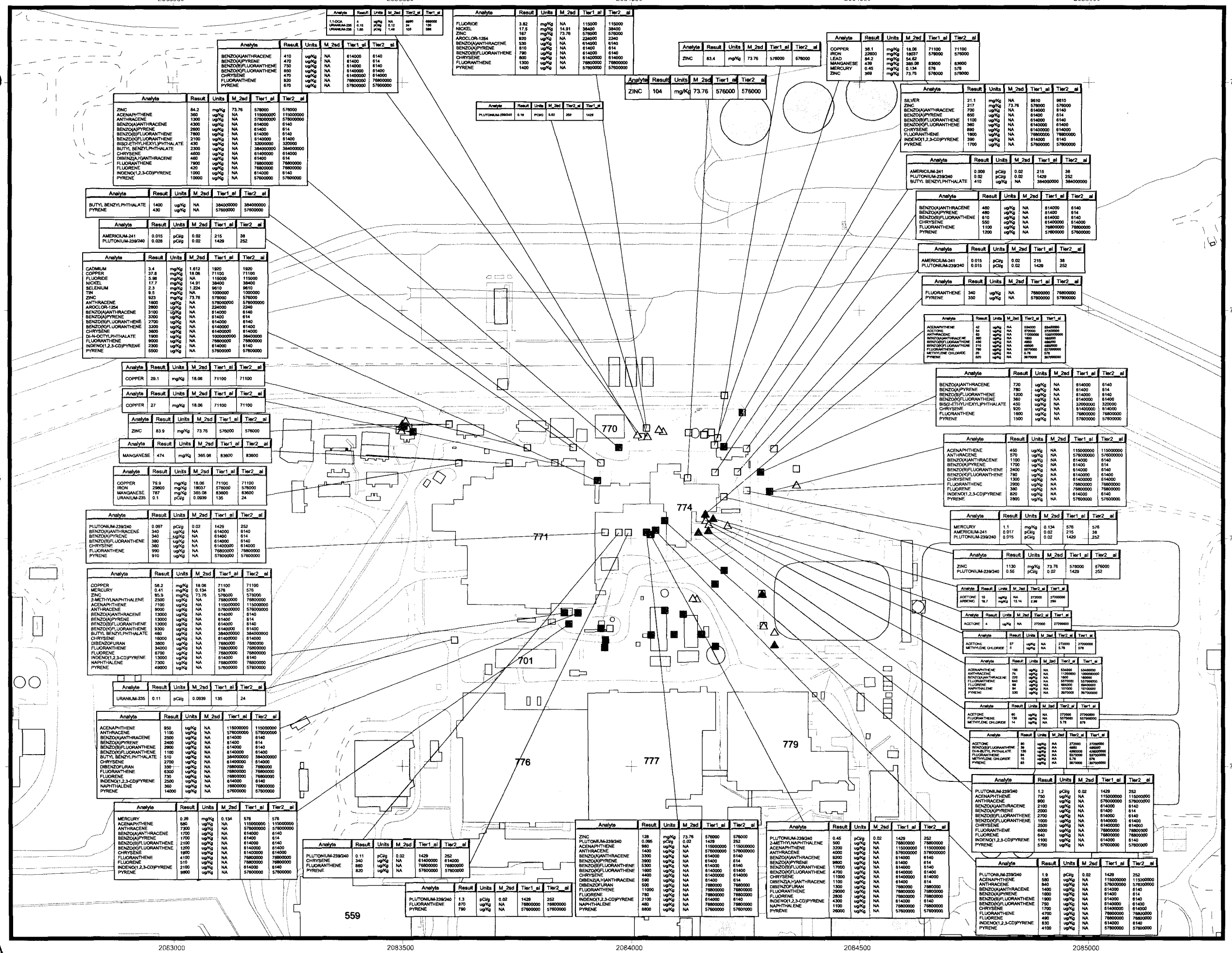
Figure 6
Existing Soil Sampling Results Greater Than Background Means Plus Two Standard Deviations or MDLs for IHSS Group 700-4



Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
1,1-DCA	4	ug/Kg	NA	2000	680000
URANIUM-238	0.15	pCi/g	0.12	34	126
URANIUM-238	1.85	pCi/g	1.48	103	386

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
BENZO(A)ANTHRACENE	410	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	470	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	750	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	850	ug/Kg	NA	6140000	61400
CHRYSENE	470	ug/Kg	NA	61400000	614000
FLUORANTHENE	920	ug/Kg	NA	76800000	76800000
PYRENE	870	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
FLUORIDE	3.82	mg/Kg	NA	115000	115000
NICKEL	17.5	mg/Kg	14.91	38400	38400
ZINC	167	mg/Kg	73.76	576000	576000
AROCLOR-1254	920	ug/Kg	NA	224000	2240
BENZO(A)ANTHRACENE	530	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	610	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	790	ug/Kg	NA	614000	6140
CHRYSENE	800	ug/Kg	NA	61400000	614000
FLUORANTHENE	1300	ug/Kg	NA	76800000	76800000
PYRENE	1400	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ZINC	63.4	mg/Kg	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ZINC	104	mg/Kg	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	38.1	mg/Kg	18.06	71100	71100
IRON	22600	mg/Kg	18037	576000	576000
LEAD	84.2	mg/Kg	54.62		
MANGANESE	439	mg/Kg	365.06	83600	83600
MERCURY	0.45	mg/Kg	0.134	576	576
ZINC	369	mg/Kg	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
PLUTONIUM-239/240	0.18	PCi/G	0.02	252	1429

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ZINC	84.2	mg/Kg	73.76	576000	576000
ACENAPHTHENE	360	ug/Kg	NA	115000000	115000000
ANTHRACENE	1300	ug/Kg	NA	576000000	576000000
BENZO(A)ANTHRACENE	4300	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	2600	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	7850	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	2100	ug/Kg	NA	6140000	61400
BIS(2-ETHYLHEXYL)PHTHALATE	430	ug/Kg	NA	32000000	320000
BUTYL BENZYLPHTHALATE	2300	ug/Kg	NA	384000000	384000000
CHRYSENE	4600	ug/Kg	NA	61400000	614000
DIBENZ(A,H)ANTHRACENE	460	ug/Kg	NA	61400	614
FLUORANTHENE	7900	ug/Kg	NA	76800000	76800000
FLUORENE	420	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	1000	ug/Kg	NA	614000	6140
PYRENE	10000	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
BUTYL BENZYLPHTHALATE	1400	ug/Kg	NA	384000000	384000000
PYRENE	430	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
AMERICIUM-241	0.015	pCi/g	0.02	215	38
PLUTONIUM-239/240	0.028	pCi/g	0.02	1429	252

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
CADMIUM	3.4	mg/Kg	1.612	1920	1920
COPPER	37.8	mg/Kg	18.06	71100	71100
FLUORIDE	5.96	mg/Kg	NA	115000	115000
NICKEL	17.7	mg/Kg	14.91	38400	38400
SELENIUM	2.3	mg/Kg	1.224	9610	9610
TIN	9.5	mg/Kg	NA	1000000	1000000
ZINC	923	mg/Kg	73.76	576000	576000
ANTHRACENE	1600	ug/Kg	NA	576000000	576000000
AROCLOR-1254	2800	ug/Kg	NA	224000	2240
BENZO(A)ANTHRACENE	3100	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	3300	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	2700	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	3200	ug/Kg	NA	6140000	61400
CHRYSENE	3600	ug/Kg	NA	61400000	614000
DI-N-OCTYLPHTHALATE	1900	ug/Kg	NA	1000000000	38400000
FLUORANTHENE	9000	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	2300	ug/Kg	NA	614000	6140
PYRENE	5500	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	29.1	mg/Kg	18.06	71100	71100

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	27	mg/Kg	18.06	71100	71100

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ZINC	83.9	mg/Kg	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
MANGANESE	474	mg/Kg	365.06	83600	83600

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	79.9	mg/Kg	18.06	71100	71100
IRON	29800	mg/Kg	18037	576000	576000
MANGANESE	787	mg/Kg	365.06	83600	83600
URANIUM-235	0.1	pCi/g	0.0939	135	24

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
PLUTONIUM-239/240	0.097	pCi/g	0.02	1429	252
BENZO(A)ANTHRACENE	340	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	340	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	380	ug/Kg	NA	614000	6140
CHRYSENE	360	ug/Kg	NA	61400000	614000
FLUORANTHENE	990	ug/Kg	NA	76800000	76800000
PYRENE	910	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
COPPER	58.2	mg/Kg	18.06	71100	71100
MERCURY	0.41	mg/Kg	0.134	576	576
ZINC	85.9	mg/Kg	73.76	576000	576000
2-METHYLNAPHTHALENE	2500	ug/Kg	NA	76800000	76800000
ACENAPHTHENE	7100	ug/Kg	NA	115000000	115000000
ANTHRACENE	9000	ug/Kg	NA	576000000	576000000
BENZO(A)ANTHRACENE	13000	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	13000	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	13000	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	9300	ug/Kg	NA	6140000	61400
BUTYL BENZYLPHTHALATE	460	ug/Kg	NA	384000000	384000000
CHRYSENE	16000	ug/Kg	NA	61400000	614000
DIBENZOFURAN	3800	ug/Kg	NA	76800000	76800000
FLUORANTHENE	34000	ug/Kg	NA	76800000	76800000
FLUORENE	6700	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	13000	ug/Kg	NA	614000	6140
NAPHTHALENE	7300	ug/Kg	NA	76800000	76800000
PYRENE	49000	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
URANIUM-235	0.11	pCi/g	0.0939	135	24

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ACENAPHTHENE	950	ug/Kg	NA	115000000	115000000
ANTHRACENE	1100	ug/Kg	NA	576000000	576000000
BENZO(A)ANTHRACENE	2500	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	2400	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	2900	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	1100	ug/Kg	NA	6140000	61400
BUTYL BENZYLPHTHALATE	510	ug/Kg	NA	384000000	384000000
CHRYSENE	2700	ug/Kg	NA	61400000	614000
DIBENZOFURAN	350	ug/Kg	NA	76800000	76800000
FLUORANTHENE	6300	ug/Kg	NA	76800000	76800000
FLUORENE	750	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	2500	ug/Kg	NA	614000	6140
NAPHTHALENE	360	ug/Kg	NA	76800000	76800000
PYRENE	14000	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
MERCURY	0.28	mg/Kg	0.134	576	576
ACENAPHTHENE	580	ug/Kg	NA	115000000	115000000
ANTHRACENE	7300	ug/Kg	NA	576000000	576000000
BENZO(A)ANTHRACENE	1700	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	1700	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	2100	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	1200	ug/Kg	NA	6140000	61400
CHRYSENE	1900	ug/Kg	NA	61400000	614000
FLUORANTHENE	4100	ug/Kg	NA	76800000	76800000
FLUORENE	510	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	2100	ug/Kg	NA	614000	6140
PYRENE	9800	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
PLUTONIUM-239/240	0.11	pCi/g	0.02	1429	252
CHRYSENE	340	ug/Kg	NA	61400000	614000
FLUORANTHENE	880	ug/Kg	NA	76800000	76800000
PYRENE	820	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
PLUTONIUM-239/240	1.3	pCi/g	0.02	1429	252
FLUORANTHENE	870	ug/Kg	NA	76800000	76800000
PYRENE	790	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ZINC	128	mg/Kg	73.76	576000	576000
PLUTONIUM-239/240	0.095	pCi/g	0.02	1429	252
ACENAPHTHENE	980	ug/Kg	NA	115000000	115000000
ANTHRACENE	1400	ug/Kg	NA	576000000	576000000
BENZO(A)ANTHRACENE	3300	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	3900	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	5300	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	1600	ug/Kg	NA	6140000	61400
CHRYSENE	4400	ug/Kg	NA	61400000	614000
DIBENZ(A,H)ANTHRACENE	590	ug/Kg	NA	61400	614
DIBENZOFURAN	500	ug/Kg	NA	76800000	76800000
FLUORANTHENE	11000	ug/Kg	NA	76800000	76800000
FLUORENE	780	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	2100	ug/Kg	NA	614000	6140
NAPHTHALENE	460	ug/Kg	NA	76800000	76800000
PYRENE	8800	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
PLUTONIUM-239/240	0.45	pCi/g	0.02	1429	252
2-METHYLNAPHTHALENE	300	ug/Kg	NA	76800000	76800000
ACENAPHTHENE	3200	ug/Kg	NA	115000000	115000000
ANTHRACENE	4000	ug/Kg	NA	576000000	576000000
BENZO(A)ANTHRACENE	9200	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	9900	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	17000	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	4700	ug/Kg	NA	6140000	61400
CHRYSENE	11000	ug/Kg	NA	61400000	614000
DIBENZ(A,H)ANTHRACENE	1100	ug/Kg	NA	61400	614
DIBENZOFURAN	1300	ug/Kg	NA	76800000	76800000
FLUORANTHENE	29000	ug/Kg	NA	76800000	76800000
FLUORENE	2800	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	4300	ug/Kg	NA	614000	6140
NAPHTHALENE	1100	ug/Kg	NA	76800000	76800000
PYRENE	26000	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
SILVER	21.1	mg/Kg	NA	9610	9610
ZINC	217	mg/Kg	73.76	576000	576000
BENZO(A)ANTHRACENE	700	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	850	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	1100	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	360	ug/Kg	NA	6140000	61400
CHRYSENE	890	ug/Kg	NA	61400000	614000
FLUORANTHENE	1800	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	390	ug/Kg	NA	614000	6140
PYRENE	1700	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
AMERICIUM-241	0.009	pCi/g	0.02	215	38
PLUTONIUM-239/240	0.02	pCi/g	0.02	1429	252
BUTYL BENZYLPHTHALATE	410	ug/Kg	NA	384000000	384000000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
BENZO(A)ANTHRACENE	480	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	480	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	610	ug/Kg	NA	614000	6140
CHRYSENE	550	ug/Kg	NA	61400000	614000
FLUORANTHENE	1100	ug/Kg	NA	76800000	76800000
PYRENE	1200	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
AMERICIUM-241	0.015	pCi/g	0.02	215	38
PLUTONIUM-239/240	0.015	pCi/g	0.02	1429	252

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
FLUORANTHENE	340	ug/Kg	NA	76800000	76800000
PYRENE	350	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier2_al	Tier1_al
ACENAPHTHENE	42	ug/Kg	NA	534000	53400000
ACETONE	54	ug/Kg	NA	272000	27200000
ANTHRACENE	63	ug/Kg	NA	11200000	1000000000
BENZO(A)ANTHRACENE	280	ug/Kg	NA	1800	160000
BENZO(B)FLUORANTHENE	430	ug/Kg	NA	4800	480000
BENZO(K)FLUORANTHENE	210	ug/Kg	NA	48000	4800000
CHRYSENE	310	ug/Kg	NA	1600000	160000000
METHYLENE CHLORIDE	26	ug/Kg	NA	5.78	578
PYRENE	820	ug/Kg	NA	3670000	367000000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
BENZO(A)ANTHRACENE	720	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	780	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	1200	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	360	ug/Kg	NA	6140000	61400
BIS(2-ETHYLHEXYL)PHTHALATE	450	ug/Kg	NA	32000000	320000
CHRYSENE	920	ug/Kg	NA	61400000	614000
FLUORANTHENE	1600	ug/Kg	NA	76800000	76800000
PYRENE	1500	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ACENAPHTHENE	450	ug/Kg	NA	115000000	115000000
ANTHRACENE	570	ug/Kg	NA	576000000	576000000
BENZO(A)ANTHRACENE	1100	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	1700	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	2400	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	780	ug/Kg	NA	6140000	61400
CHRYSENE	1300	ug/Kg	NA	61400000	614000
FLUORANTHENE	2900	ug/Kg	NA	76800000	76800000
FLUORENE	380	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	820	ug/Kg	NA	614000	6140
PYRENE	2800	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
MERCURY	1.1	mg/Kg	0.134	576	576
AMERICIUM-241	0.017	pCi/g	0.02	215	38
PLUTONIUM-239/240	0.015	pCi/g	0.02	1429	252

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
ZINC	1130	mg/Kg	73.76	576000	576000
PLUTONIUM-239/240	0.55	pCi/g	0.02	1429	252

Analyte	Result	Units	M_2sd	Tier2_al	Tier1_al
ACETONE	18	ug/Kg	NA	272000	27200000
ARSENIC	18.7	mg/Kg	13.14	2.68	290

Analyte	Result	Units	M_2sd	Tier2_al	Tier1_al
ACETONE	4	ug/Kg	NA	272000	27200000

Analyte	Result	Units	M_2sd	Tier2_al	Tier1_al
ACETONE	57	ug/Kg	NA	272000	27200000
METHYLENE CHLORIDE	3	ug/Kg	NA	5.78	578

Analyte	Result	Units	M_2sd	Tier2_al	Tier1_al
ACENAPHTHENE	190	ug/Kg	NA	534000	53400000
ANTHRACENE	74	ug/Kg	NA	11200000	1000000000
BENZO(A)ANTHRACENE	220	ug/Kg	NA	1800	160000
FLUORANTHENE	68	ug/Kg	NA	5870000	587000000
PYRENE	64	ug/Kg	NA	4800000	480000000
NAPHTHALENE	94	ug/Kg	NA	101000	101000000
PYRENE	330	ug/Kg	NA	3670000	367000000

Analyte	Result	Units	M_2sd	Tier2_al	Tier1_al
ACETONE	60	ug/Kg	NA	272000	27200000
FLUORANTHENE	130	ug/Kg	NA	5370000	537000000
METHYLENE CHLORIDE	14	ug/Kg	NA	5.78	578

Analyte	Result	Units	M_2sd	Tier2_al	Tier1_al
ACETONE	80	ug/Kg	NA	272000	27200000
BENZO(B)FLUORANTHENE	38	ug/Kg	NA	4800	480000
DI-N-BUTYL PHTHALATE	130	ug/Kg	NA	4800000	480000000
FLUORANTHENE	84	ug/Kg	NA	5370000	537000000
METHYLENE CHLORIDE	15	ug/Kg	NA	5.78	578
PYRENE	83	ug/Kg	NA	3670000	367000000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
PLUTONIUM-239/240	1.2	pCi/g	0.02	1429	252
ACENAPHTHENE	750	ug/Kg	NA	115000000	115000000
ANTHRACENE	900	ug/Kg	NA	576000000	576000000
BENZO(A)ANTHRACENE	2100	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	2000	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	2700	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	1000	ug/Kg	NA	6140000	61400
CHRYSENE	2500	ug/Kg	NA	61400000	614000
FLUORANTHENE	6000	ug/Kg	NA	76800000	76800000
FLUORENE	640	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	1100	ug/Kg	NA	614000	6140
PYRENE	5700	ug/Kg	NA	57600000	57600000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
PLUTONIUM-239/240	1.9	pCi/g	0.02	1429	252
ACENAPHTHENE	580	ug/Kg	NA	115000000	115000000
ANTHRACENE	840	ug/Kg	NA	576000000	576000000
BENZO(A)ANTHRACENE	1400	ug/Kg	NA	614000	6140
BENZO(A)PYRENE	1600	ug/Kg	NA	61400	614
BENZO(B)FLUORANTHENE	1900	ug/Kg	NA	614000	6140
BENZO(K)FLUORANTHENE	750	ug/Kg	NA	6140000	61400
CHRYSENE	1700	ug/Kg	NA	61400000	614000
FLUORANTHENE	4700	ug/Kg	NA	76800000	76800000
FLUORENE	480	ug/Kg	NA	76800000	76800000
INDENO(1,2,3-CD)PYRENE	830	ug/Kg	NA	614000	6140
PYRENE	4100	ug/Kg	NA	57600000	57600000

KEY

- Surface Soil Tier II AL exceedance
- Subsurface Soil Tier II AL exceedance
- Surface Soil Less Than Tier II ALs
- Subsurface Soil Less Than Tier II ALs
- UBC Site
- Building/structure
- Stream, ditch, or other drainage
- Paved area
- Dirt road

N

100 0 100 200 Feet

Scale = 1:2,450

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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

Prepared by: December 17, 2002

RADMS

Prepared for:

KAISER•HILL COMPANY

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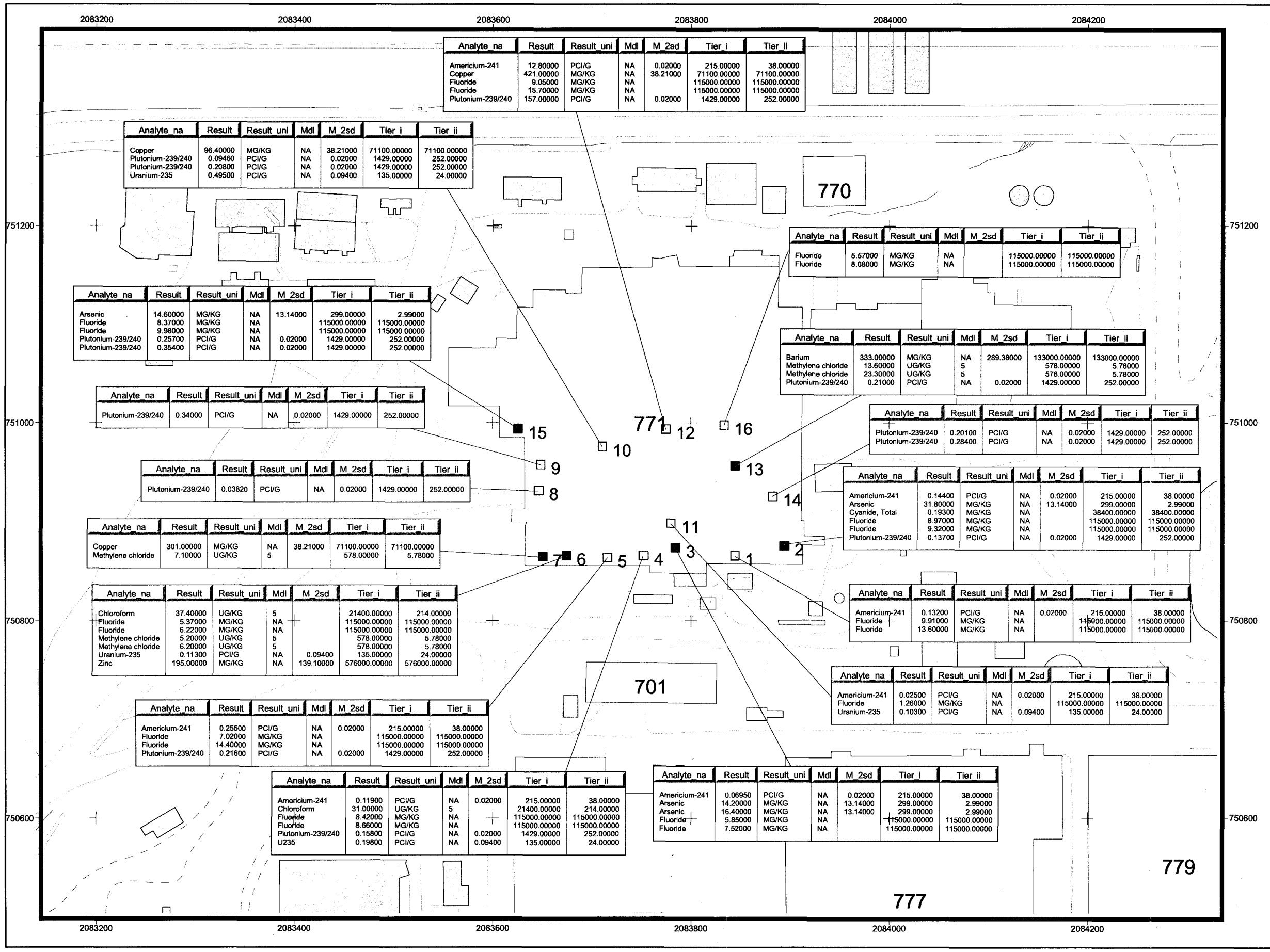

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Americium-241	12.80000	PCI/G	NA	0.02000	215.00000	38.00000
Copper	421.00000	MG/KG	NA	38.21000	71100.00000	71100.00000
Fluoride	9.05000	MG/KG	NA		115000.00000	115000.00000
Fluoride	15.70000	MG/KG	NA		115000.00000	115000.00000
Plutonium-239/240	157.00000	PCI/G	NA	0.02000	1429.00000	252.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Copper	96.40000	MG/KG	NA	38.21000	71100.00000	71100.00000
Plutonium-239/240	0.09460	PCI/G	NA	0.02000	1429.00000	252.00000
Plutonium-239/240	0.20800	PCI/G	NA	0.02000	1429.00000	252.00000
Uranium-235	0.49500	PCI/G	NA	0.09400	135.00000	24.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Fluoride	5.57000	MG/KG	NA		115000.00000	115000.00000
Fluoride	8.08000	MG/KG	NA		115000.00000	115000.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Arsenic	14.60000	MG/KG	NA	13.14000	299.00000	2.99000
Fluoride	8.37000	MG/KG	NA		115000.00000	115000.00000
Fluoride	9.98000	MG/KG	NA		115000.00000	115000.00000
Plutonium-239/240	0.25700	PCI/G	NA	0.02000	1429.00000	252.00000
Plutonium-239/240	0.35400	PCI/G	NA	0.02000	1429.00000	252.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Barium	333.00000	MG/KG	NA	289.38000	133000.00000	133000.00000
Methylene chloride	13.60000	UG/KG	5		578.00000	5.78000
Methylene chloride	23.30000	UG/KG	5		578.00000	5.78000
Plutonium-239/240	0.21000	PCI/G	NA	0.02000	1429.00000	252.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Plutonium-239/240	0.34000	PCI/G	NA	0.02000	1429.00000	252.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Plutonium-239/240	0.20100	PCI/G	NA	0.02000	1429.00000	252.00000
Plutonium-239/240	0.28400	PCI/G	NA	0.02000	1429.00000	252.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Plutonium-239/240	0.03820	PCI/G	NA	0.02000	1429.00000	252.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Americium-241	0.14400	PCI/G	NA	0.02000	215.00000	38.00000
Arsenic	31.80000	MG/KG	NA	13.14000	299.00000	2.99000
Cyanide, Total	0.19300	MG/KG	NA		38400.00000	38400.00000
Fluoride	8.97000	MG/KG	NA		115000.00000	115000.00000
Fluoride	9.32000	MG/KG	NA		115000.00000	115000.00000
Plutonium-239/240	0.13700	PCI/G	NA	0.02000	1429.00000	252.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Copper	301.00000	MG/KG	NA	38.21000	71100.00000	71100.00000
Methylene chloride	7.10000	UG/KG	5		578.00000	5.78000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Americium-241	0.13200	PCI/G	NA	0.02000	215.00000	38.00000
Fluoride	9.91000	MG/KG	NA		115000.00000	115000.00000
Fluoride	13.60000	MG/KG	NA		115000.00000	115000.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Chloroform	37.40000	UG/KG	5		21400.00000	214.00000
Fluoride	5.37000	MG/KG	NA		115000.00000	115000.00000
Fluoride	6.22000	MG/KG	NA		115000.00000	115000.00000
Methylene chloride	5.20000	UG/KG	5		578.00000	5.78000
Methylene chloride	6.20000	UG/KG	5		578.00000	5.78000
Uranium-235	0.11300	PCI/G	NA	0.09400	135.00000	24.00000
Zinc	195.00000	MG/KG	NA	139.10000	576000.00000	576000.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Americium-241	0.02500	PCI/G	NA	0.02000	215.00000	38.00000
Fluoride	1.26000	MG/KG	NA		115000.00000	115000.00000
Uranium-235	0.10300	PCI/G	NA	0.09400	135.00000	24.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Americium-241	0.25500	PCI/G	NA	0.02000	215.00000	38.00000
Fluoride	7.02000	MG/KG	NA		115000.00000	115000.00000
Fluoride	14.40000	MG/KG	NA		115000.00000	115000.00000
Plutonium-239/240	0.21600	PCI/G	NA	0.02000	1429.00000	252.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Americium-241	0.11900	PCI/G	NA	0.02000	215.00000	38.00000
Chloroform	31.00000	UG/KG	5		21400.00000	214.00000
Fluoride	8.42000	MG/KG	NA		115000.00000	115000.00000
Fluoride	8.66000	MG/KG	NA		115000.00000	115000.00000
Plutonium-239/240	0.15800	PCI/G	NA	0.02000	1429.00000	252.00000
U235	0.19800	PCI/G	NA	0.09400	135.00000	24.00000

Analyte_na	Result	Result_uni	Mdl	M_2sd	Tier_i	Tier_ii
Americium-241	0.06950	PCI/G	NA	0.02000	215.00000	38.00000
Arsenic	14.20000	MG/KG	NA	13.14000	299.00000	2.99000
Arsenic	16.40000	MG/KG	NA	13.14000	299.00000	2.99000
Fluoride	5.85000	MG/KG	NA		115000.00000	115000.00000
Fluoride	7.52000	MG/KG	NA		115000.00000	115000.00000

Figure 7
Existing Soil Sampling Results Greater Than Background Means Plus Two Standard Deviations or MDLs for IHSS Group 700-4 UBC Site 771

KEY

- Approximate Soil Locations Tier II AL exceedance
- Approximate Soil Locations Less Than Tier II ALs
- Paved area
- Dirt road
- Stream, ditch, or other drainage
- UBC
- Building/structure

N

50 0 50 100 Feet

Scale = 1: 1200

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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

Prepared by: RADMS

Prepared for: KAISER•HILL COMPANY

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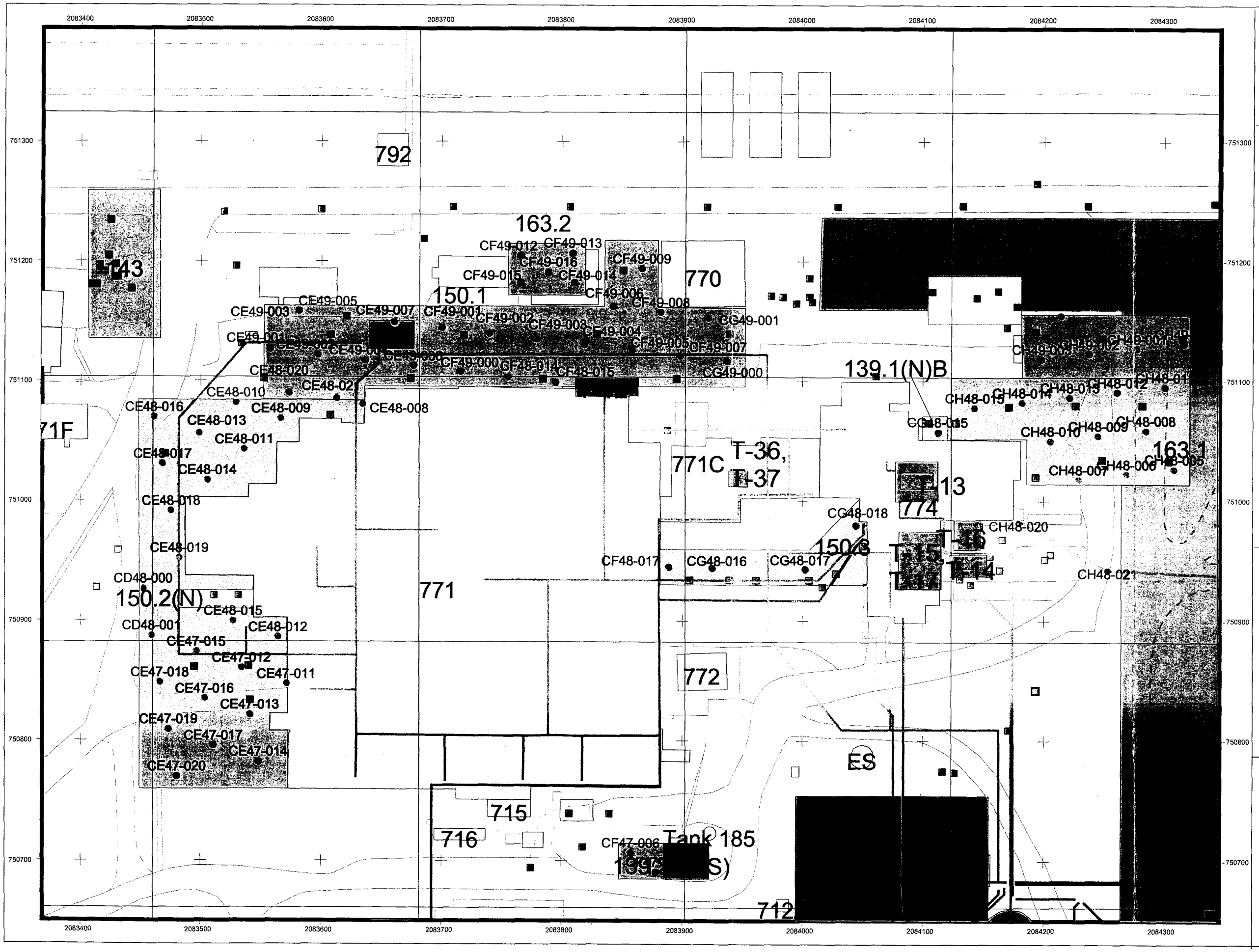

Figure 8
Proposed Sampling Locations For IHSS Group 700-4 IHSSs

KEY

IHSS

- 700-4
- Building
- Tank
- OPWL
- NPWL
- Paved area
- Dirt road
- Existing sampling location
- Biased sampling location
- Statistical sampling location

N

20 0 20 40 60 80 100 Feet

Scale = 1:850

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

Prepared by: RADMS

Prepared for: KAISER-HILL COMPANY

characterization.apr

September 2002

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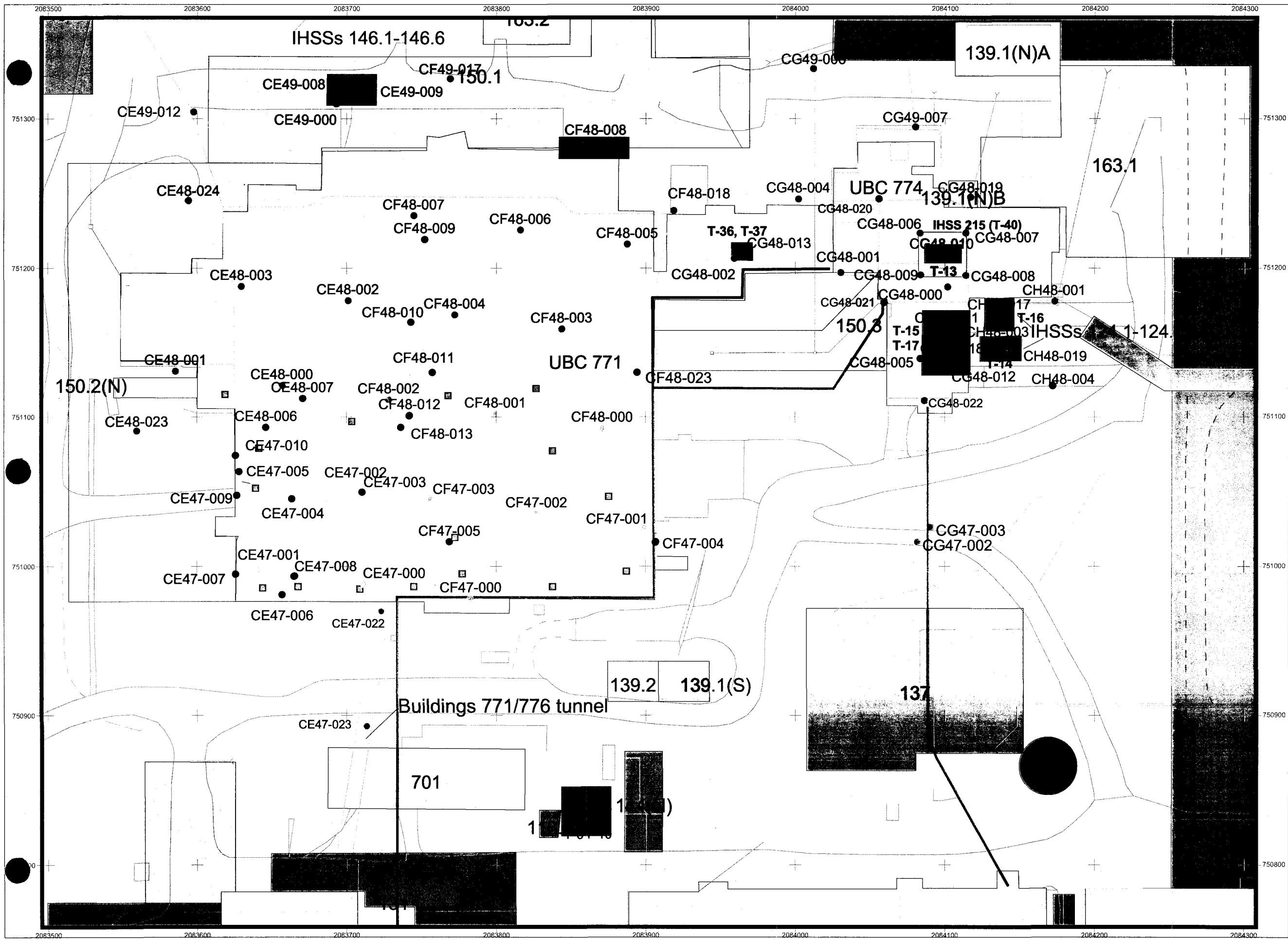

Figure 9
Proposed Sampling Locations for IHSS Group 700-4 UBC Sites

KEY

- IHSS Group 700-4
- UBC Site
- IHSS 215 Tank
- Drain
- Storm drain
- Sewer line
- Stream, ditch, or other drainage
- Dirt road
- Paved area
- Tunnel
- NPWL
- OPWL

UBCs 771 and 774 sampling location

- Drain sampling location
- Tank sampling location
- OPWL sampling location
- Sump sampling location
- Existing sampling location

N

20 0 20 40 60 80 Feet

Scale = 1:750

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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

Prepared by:

KAISER•HILL COMPANY

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December 2002

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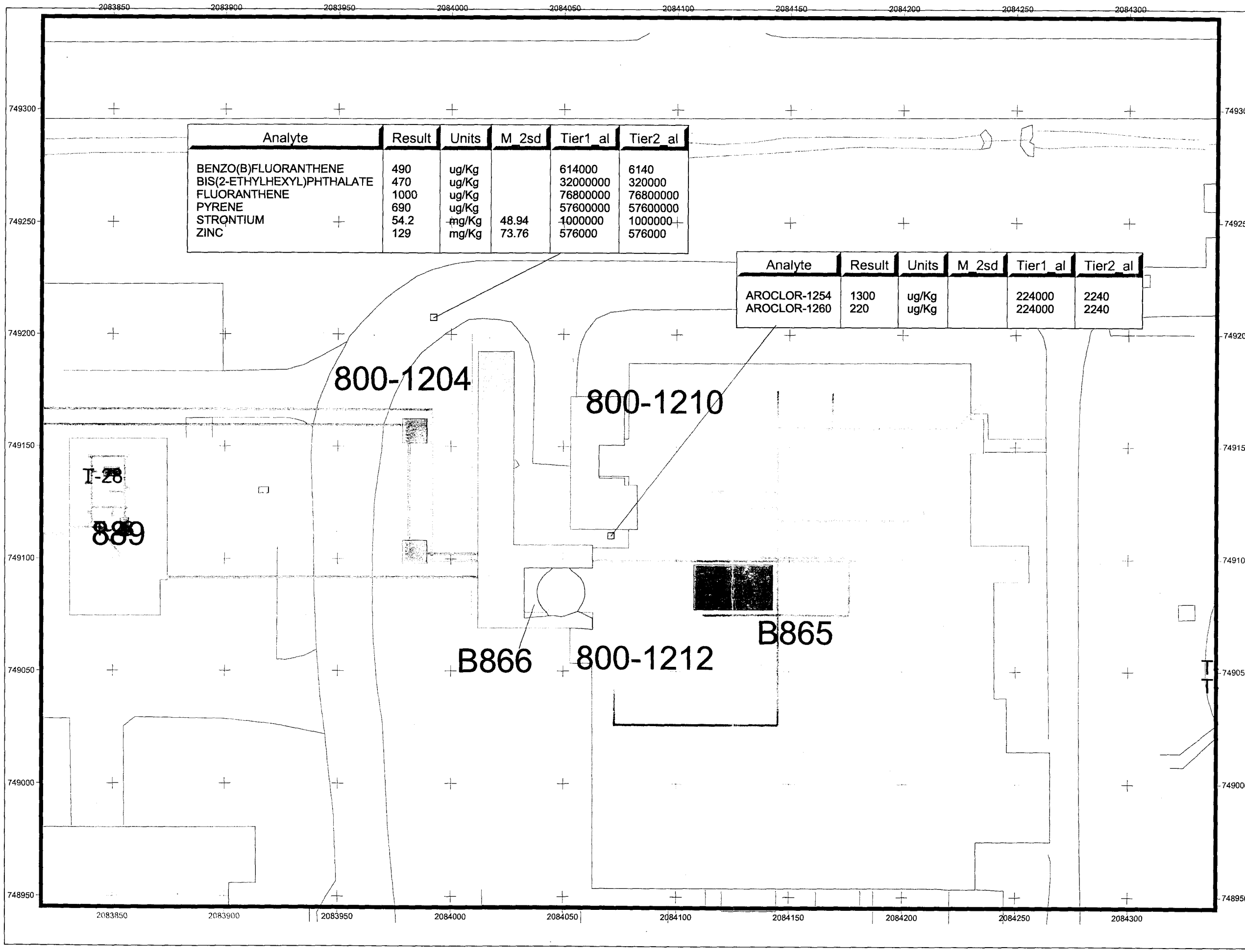

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
BENZO(B)FLUORANTHENE	490	ug/Kg		614000	6140
BIS(2-ETHYLHEXYL)PHTHALATE	470	ug/Kg		32000000	320000
FLUORANTHENE	1000	ug/Kg		76800000	76800000
PYRENE	690	ug/Kg		57600000	57600000
STRONTIUM	54.2	mg/Kg	48.94	1000000	1000000
ZINC	129	mg/Kg	73.76	576000	576000

Analyte	Result	Units	M_2sd	Tier1_al	Tier2_al
AROCLOR-1254	1300	ug/Kg		224000	2240
AROCLOR-1260	220	ug/Kg		224000	2240

Figure 10
Existing Sampling Results Greater Than Background Means Plus Two Standard Deviations or MDLs IHSS Group 800-1

KEY

- IHSS
- PAC
- UBC
- OPWL
- NPWL
- Tanks
- Valve vault
- Paved areas
- Dirt road
- Stream, ditch, or other drainage
- Existing Sampling Locations

N

9 0 9 18 27 36 45 Feet

Scale = 1:500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

Prepared by:

RADMS

Prepared for:

KAISER+HILL COMPANY

800-1existing.apr

September 2002

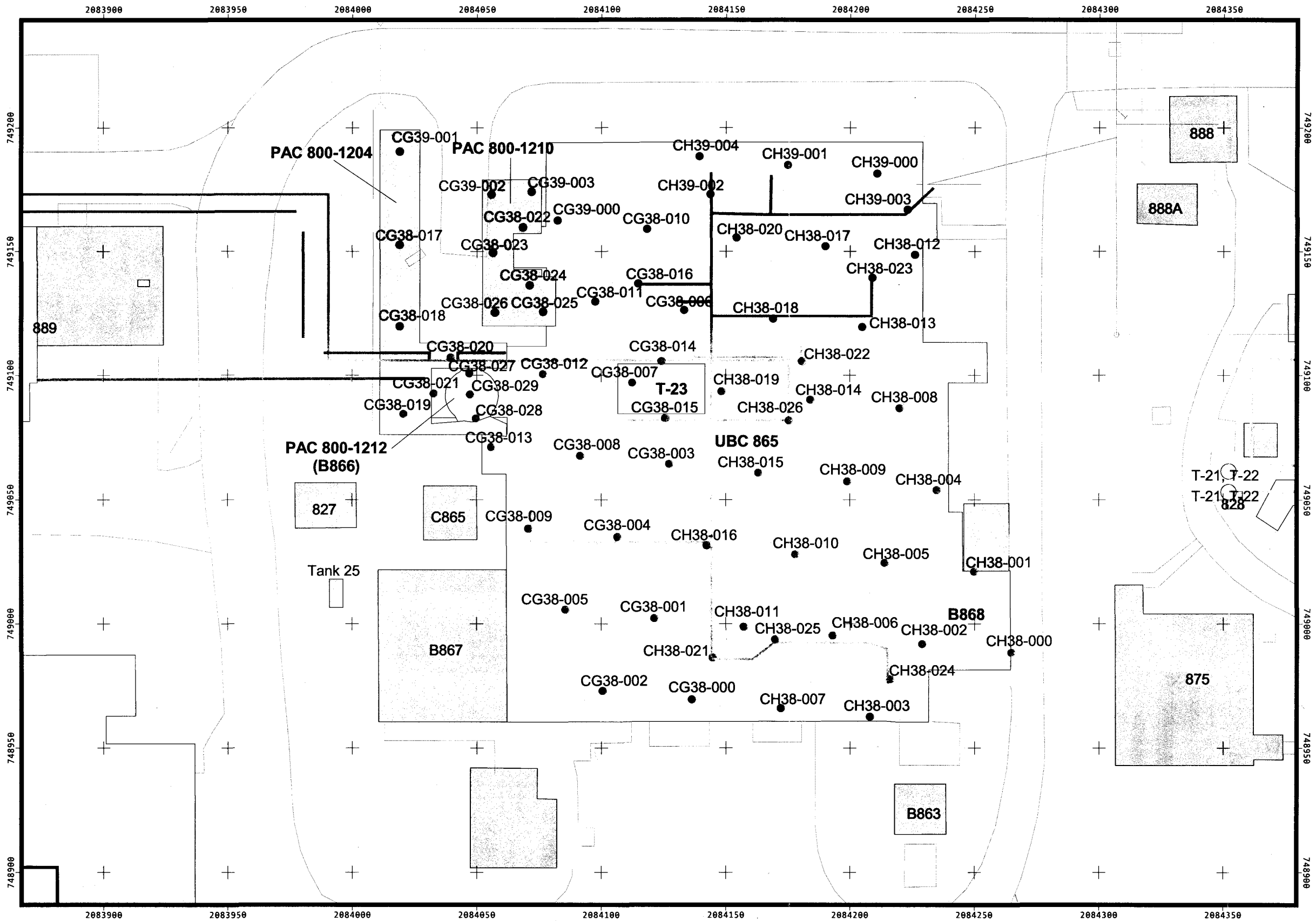

Figure 11
Proposed Sampling Locations for IHSS Group 800-1

KEY

- Sampling location
- PAC location
- UBC location
- Building/structure
- OPWL tank location (estimated)
- Paved area
- Dirt road
- Stream, ditch, or other drainage feature
- OPWL location (estimated)
- NPWL location (estimated)

N W E S

20 0 20 40 60 Feet

Scale = 1:500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

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

Prepared by: Date: 12-17-02

RADMS

Prepared for:

KAISER•HILL COMPANY

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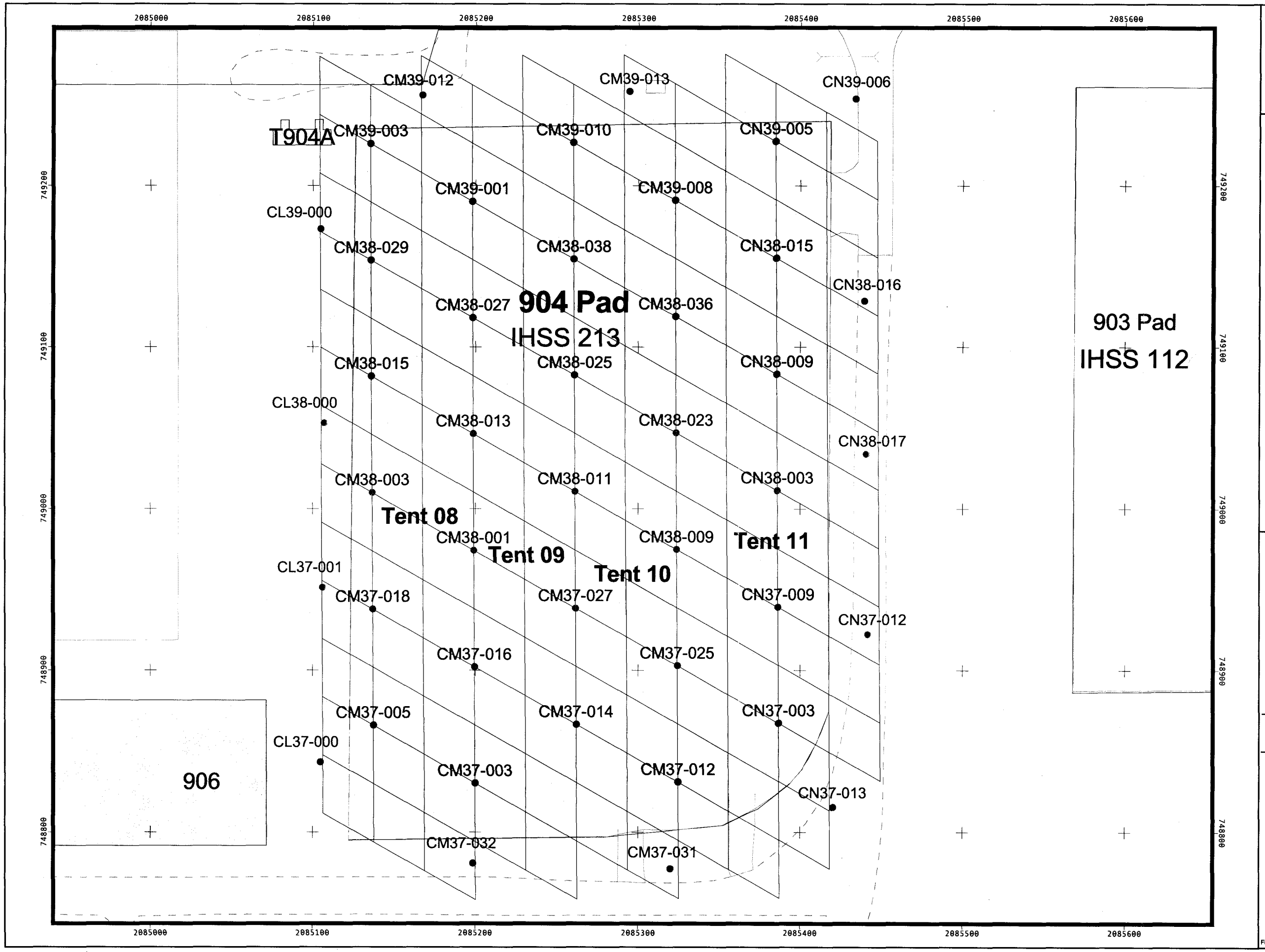

Figure 12
Proposed Sampling Locations
IHSS Group 900-3

KEY

- IHSS
- Building
- Paved area
- Dirt road
- Stream, ditch, or other drainage
- Sampling location

N
W E
S

30 0 30 60 Feet

Scale = 1:700

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Protection Agency

Prepared by: Date: December 2002

RADMS

Prepared for:

KAISER•HILL COMPANY

File: w:\projects\fy2003\900-3\characterization\903Characterization.apr

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