

**Industrial Area  
Sampling and Analysis Plan  
Fiscal Year 2002  
Addendum #IA-02-01**

**November 2001**

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the U. S. Environmental Protection Agency

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## **ATTACHMENT**

Response to Comments

## ACRONYMS

Am	americium
As	arsenic
Ba	barium
Be	beryllium
Ca	calcium
Cd	cadmium
Co	cobalt
Cr	chromium
Cu	copper
Fe	iron
FY	Fiscal Year
HCl	hydrochloric acid
HF	hydrofluoric acid
Hg	mercury
HNO <sub>3</sub>	nitric acid
HPGe	high-purity germanium
HRR	Historical Release Report
IA	Industrial Area
IASAP	Industrial Area Sampling and Analysis Plan
IHSS	Individual Hazardous Substance Site
K	potassium
Li	lithium
Mg	magnesium
Mg/Kg	milligrams per kilograms
Mn	manganese
Mo	molybdenum
Na	sodium
Ni	nickel
NO <sub>2</sub>	nitrite
NO <sub>3</sub>	nitrate
NPWL	New Process Waste Lines
OPWL	Original Process Waste Lines
PAC	Potential Area of Concern
Pb	lead
PCB	polychlorinated biphenyl
pCi/g	picocuries per gram
PCOC	potential contaminant of concern
Pu	plutonium
Ra	radium
SAP	Sampling and Analysis Plan
Se	selenium
Sr	strontium
SVOC	semivolatile organic compound

Ti	titanium
U	uranium
UBC	Under Building Contamination
$\mu\text{g}/\text{kg}$	micrograms per kilogram
V	vanadium
VOC	volatile organic compound
Zn	zinc

## **1.0 INTRODUCTION**

This Industrial Area (IA) Sampling and Analysis Plan (SAP) (IASAP) (DOE 2001a) Addendum #IA-02-01 includes IA Group-specific information, sampling locations, and potential contaminants of concern (PCOCs) for Individual Hazardous Substance Sites (IHSSs), Potential Areas of Concern (PACs), and Under Building Contamination (UBC) Sites proposed for characterization during Fiscal Year (FY)02. This IASAP Addendum is a supplement to the IASAP (DOE 2001a). The location of the IA Groups and IHSSs, PACs, and UBC Sites proposed for FY02 are shown on Figure 1.

The FY02 IASAP Addendum includes data and proposed sampling locations for the IA Groups and associated IHSSs, PACs, and UBC Sites listed in Table 1.

**Table 1**  
**FY02 IA Groups**

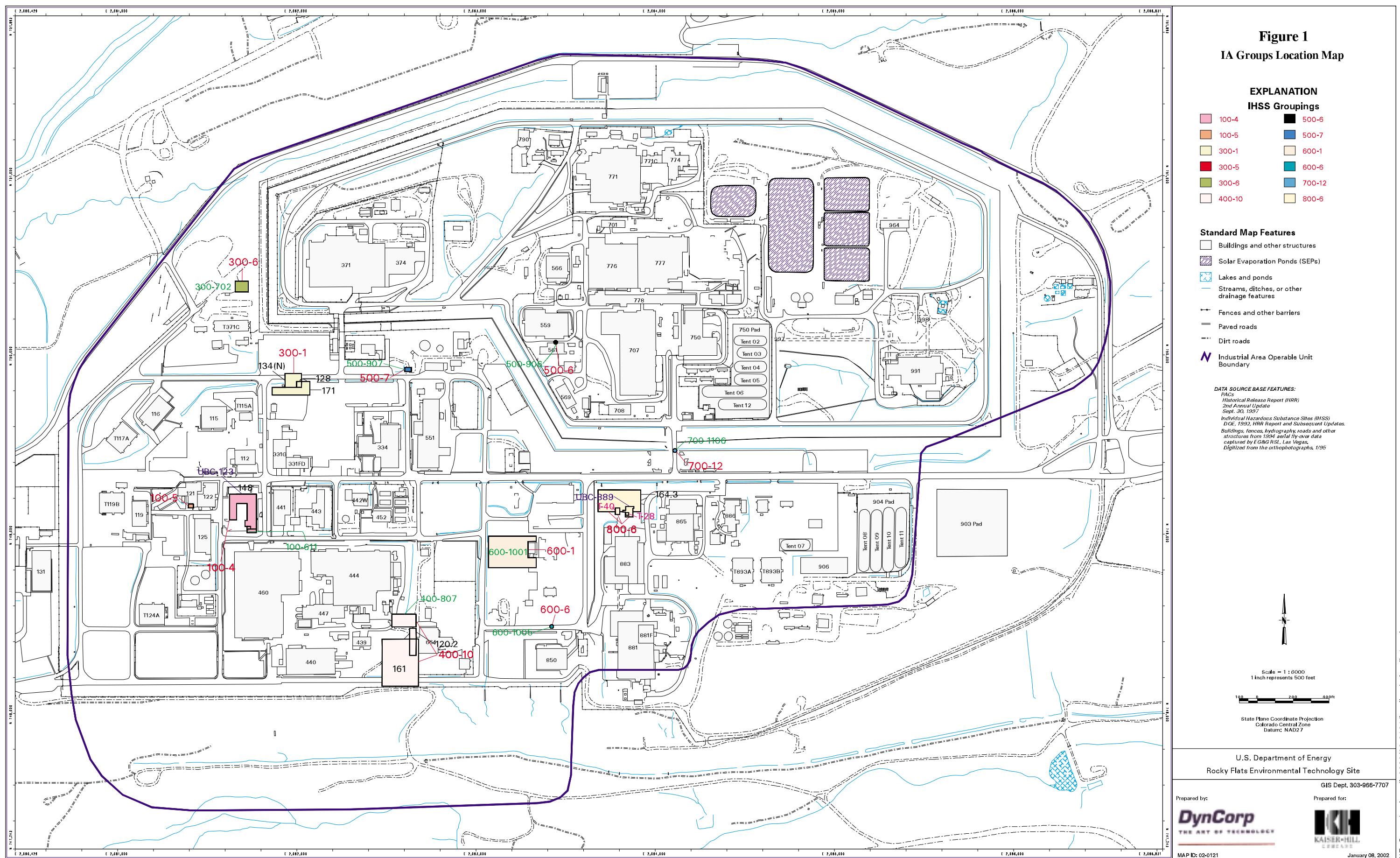
<b>IA Group</b>	<b>IHSS/PAC/UBC Site</b>
100-4	100-611 – Building 123 Scrubber Solution Spill
100-5	100-609 – Building 121 Security Incinerator
300-1	300-128 – Oil Burn Pit #1
	300-134(N) – Lithium Metal Site
	300-171 – Solvent Burning Grounds
300-6	300-702 – Pesticide Shed
400-10	400-807 – Sandblasting Area
	120.2 – Fiberglass Area West of Building 664
	600-160 – Radioactive Site West of Building 664
500-6	500-906 – Asphalt Surface Near Building 559
500-7	500-907 – Tanker Truck Release of Hazardous Waste from Tank 231B
600-1	600-1001 – Temporary Waste Storage Building 663
600-6	600-1005 – Former Pesticide Storage Area
700-12	700-1106 – Process Waste Spill – Portal 1
800-6	UBC 889 – Decontamination and Waste Reduction
	800-164.3 – Radioactive Site 800 Area Site #2 Building 889 Storage Pad
	000-121 – OPWL Tank 28 - Two 1,000-Gallon Concrete Sumps
	000-121 – OPWL Tank 40 - Two 400-Gallon Underground Concrete Tanks

## **2.0 EXISTING CHARACTERIZATION INFORMATION**

Existing data for the IHSSs, PACs, and UBC Sites are available in Appendix C to the IASAP (DOE 2001a). Existing concentrations and activities above the background mean plus two standard deviations or method detection limits are shown on maps in Section 5.0, where available. Table 2 presents the PCOCs by IA Group as well as IHSS, PAC, and UBC Site.

**Figure 1**

**IA Groups Location Map**



### **3.0 SAMPLING**

The proposed sampling specifications (number and type of samples) for each IHSS, PAC, and UBC Site are listed in Table 3. Proposed new sampling locations are the starting point for IA 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 geostatistical analysis was used where possible.

Where a new sampling location overlaps or is adjacent to an existing sampling location, the existing sampling location data will be used during evaluation.

### **4.0 MAPS**

Maps in this section are organized by IA Group and IHSS. All existing sampling locations and existing data, where available, are presented, followed by the proposed new sampling locations. Geostatistical analysis data, where available, are included with the maps.

### **5.0 REFERENCES**

DOE, 1992 – 2000, Historical Release Report for the Rocky Flats Plant, Golden, Colorado.

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

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

DOE, 2001b, Final Data Summary Report for the Characterization of UBC's 123 and 886, Rocky Flats Environmental Technology Site, Golden, Colorado, August.

**Table 2**  
**Potential Contaminants of Concern**

IA Group	IHSS/PAC/UBC Site	PCOCs	Media	Data Source	Sampling Location Method
100-4	100-611 – Building 123 Scrubber Solution Spill	HCl HF HNO <sub>3</sub>	Surface Soil	Historical Release Report (HRR) (DOE 1992 - 2000) Data Summary Report for the Characterization of UBCs 123 and 886 (DOE 2001b)	Biased – Area too small for grid sampling. Follows IASAP sampling methodology.
100-5	100-609 – Building 121 Security Incinerator	PCBs Dioxins Furans	Surface Soil	HRR	Biased – Area too small for grid sampling. Three samples in each of two concrete pads.
300-1	300-128 – Oil Burn Pit #1	U-238 Depleted U VOC	Surface Soil Beneath Asphalt	HRR	Statistical Grid
	300-134(N) – Lithium Metal Site	Radionuclides Li Mg VOCs	Surface and Subsurface Soil	HRR	Statistical Grid
	300-171 – Solvent Burning Grounds	Mg SVOCs VOCs	Surface Subsurface Soil	HRR	Statistical Grid
300-6	300-702 – Pesticide Shed	Pesticides Herbicides	Surface Soil	HRR	Biased – Area too small for grid sampling. Follows IASAP sampling methodology.
400-10	400-807 – Sandblasting Area	Aluminum	Surface Soil	HRR	Statistical Grid
	120.2 – Fiberglass Area West of Building 664	Radionuclides (Pu-239/240, U-235, U-238) Metals (Be, Cd, Cr, Cu, Zn)	Surface Soil	HRR IA Data Summary Report (DOE 2000)	Statistical Grid
	600-161 – Radioactive Site West of Building 664	Radionuclides (Pu, U) Metals (As, Be) VOCs (acetone, carbon disulfide, methylene chloride, toluene, 4-methyl-2-pentanone)	Surface Soil Subsurface Soil	HRR IA Data Summary Report	Statistical Grid Statistical Grid

<b>IA Group</b>	<b>IHSS/PAC/UBC Site</b>	<b>PCOCs</b>	<b>Media</b>	<b>Data Source</b>	<b>Sampling Location Method</b>
500-6	500-906 – Asphalt Surface Near Building 559	VOCs (carbon tetrachloride, trichloroethene, 1,1-dichloroethene)	Surface Soil	HRR	Biased because of small spill area. Because the spill was only 1 gallon, one sample will be collected in the middle of the IHSS and an additional sample will be collected in a randomly chosen location.
500-7	500-907 – Tanker Truck Release of Hazardous Waste from Tank 231B	Radionuclides Metals VOCs SVOCs PCBs pH	Surface Soil	HRR	Biased because of small spill area. Follows IASAP sampling methodology.
600-1	600-1001 – Temporary Waste Storage – Building 663	Radionuclides  VOCs (monoaromatic hydrocarbons, chlorinated solvents, methylene chloride, acetone) SVOCs	Surface and Subsurface Soil  Subsurface Soil	HRR IA Data Summary Report	Statistical Grid
600-6	600-1005 – Former Pesticide Storage Area	Pesticides	Surface Soil	HRR	Biased – Area too small for grid sampling. Because the spill area is small, one sample will be collected in the middle of the IHSS and an additional sample will be collected in a randomly chosen location.
700-12	700-1106 – Process Waste Spill – Portal 1	Radionuclides (U-238)	Surface Soil	HRR	Biased – Area too small for grid sampling. Because the spill area is small, one sample will be collected in the middle of the IHSS and an additional sample will be collected in a randomly chosen location.

<b>IA Group</b>	<b>IHSS/PAC/UBC Site</b>	<b>PCOCs</b>	<b>Media</b>	<b>Data Source</b>	<b>Sampling Location Method</b>
800-6	UBC 889 – Decontamination and Waste Reduction	Radionuclides (Am-241, Pu-239/240, U) Metals (As, Ba, Be, Ca, Cu, Co, Fe, Hg, K], Li, Mg, Mn, Mo, Na, Ni, Sr, Ti, Zn) SVOC (bis, 2-ethylhexyl-phthalate) VOCs (1,2-dichloropropane, 1,2-dichloroethene, acetone, carbon tetrachloride, toluene, vinyl chloride)	Subsurface Soil  Surface and Subsurface Soil  Subsurface Soil	IA Data Summary Report	Statistical Grid
	800-164.3 – Radioactive Site, 800 Area Site #2 Building 889 Storage Pad	Radionuclides (Am-241, Pu-239/240, U) Metals (As, Ba, Be, Ca, Co, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, Sr, Ti, Zn) SVOC (bis, 2-ethylhexyl-phthalate) VOCs (1,2-dichloropropane, 1,2-dichloroethene, acetone, carbon tetrachloride, toluene, vinyl chloride)	Subsurface Soil  Surface and Subsurface Soil  Subsurface Soil	IA Data Summary Report	Statistical Grid (metals, SVOCs, VOCs)  Biased locations along Original Process Waste Lines (OPWL) and New Process Waste Lines (NPWL0 (actinides, metals, VOCs, and SVOCs)
	000-121 – OPWL Tank 28 – Two 1,000-Gallon Concrete Sumps	Radionuclides (U and Ra-226) Metals (As, Ba, Be, Ca, Co, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, Sr, Ti, Zn) SVOC (bis, 2-ethylhexyl-phthalate) VOCs (1,2-dichloropropane, 1,2-dichloroethene, acetone, carbon tetrachloride, toluene, vinyl chloride)	Subsurface Soil	HRR IA Data Summary Report	Biased locations below and near tank

IA Group	IHSS/PAC/UBC Site	PCOCs	Media	Data Source	Sampling Location Method
	000-121 – OPWL Tank 40 – Two 400-Gallon Underground Concrete Tanks	Radionuclides (U, Ra-226) Metals (As, Ba, Be, Ca, Co, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, Sr, Ti, Zn) SVOCs VOCs (1,2-dichloropropane, 1,2- dichloroethene, acetone, carbon tetrachloride, toluene, vinyl chloride)	Subsurface Soil	HRR IA Data Summary Report	Biased location near tank

Am	americium	Na	sodium
As	arsenic	Ni	
Ba	barium	NO <sub>2</sub>	nitrite
Be	beryllium	NO <sub>3</sub>	nitrate
Ca	calcium	Pb	lead
Cd	cadmium	PCB	polychlorinated biphenyl
Co	cobalt	PCOC	potential contaminant of concern
Cr	chromium	Pu	plutonium
Cu	copper	Ra	radium
Fe	iron	Se	selenium
HCl	hydrochloric acid	Sr	strontium
HF	hydrofluoric acid	SVOC	semi-volatile organic compound
Hg	mercury	Ti	titanium
HNO <sub>3</sub>	nitric acid	U	uranium
K	potassium	V	vanadium
Li	lithium	VOC	volatile organic compound
Mg	magnesium	Zn	zinc
Mn	manganese		
Mo	molybdenum		

**Table 3**  
**Sampling Specifications**

IA Group	IHSS/PAC/UBC Site	No. of Samples	Media	Depth Interval	Analyte	Method	Duplicates	Rinsates	Field Blanks (VOCs only)	Trip Blanks (VOCs only)
100-4	100-611 - Building 123 Scrubber Solution Spill	5	Surface Soil	0-0.5'	Acids (HCl, HNO <sub>3</sub> , HF)	pH				
100-5	100-609 – Building 121 Security Incinerator	6	Surface Soil	0-0.5'	PCBs	8082	≥ 5%	≥ 5%		
		6	Surface Soil	0-0.5'	Dioxins	8270C	≥ 5%	≥ 5%		
		6	Surface Soil	0-0.5'	Furans	8270C	≥ 5%	≥ 5%		
300-1	300-128 - Oil Burn Pit #1	3	Surface Soil	0-0.5'	Radionuclides	High-Purity Germanium (HPGe)	≥ 5%	≥ 5%		
		3	Surface Soil	0-0.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
	300-134(N) - Lithium Metal Site	6	Surface Soil	0-0.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		6	Surface Soil	0-0.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		6	Surface Soil	0-0.5'	Metals	6010A	≥ 5%	≥ 5%		
	300-171 - Solvent Burning Grounds	11	Surface Soil	0-0.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		11	Surface Soil	0-0.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		11	Surface Soil	0-0.5'	Metals	6010A	≥ 5%	≥ 5%		
		11	Subsurface Soil	.5'-2.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		11	Subsurface Soil	.5'-2.5'	Metals	6010A	≥ 5%	≥ 5%		
		11	Subsurface Soil	4.5'-6.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		11	Subsurface Soil	4.5'-6.5'	Metals	6010A	≥ 5%	≥ 5%		
		11	Subsurface Soil	6.5'-8.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		11	Subsurface Soil	6.5'-8.5'	Metals	6010A	≥ 5%	≥ 5%		
		11	Subsurface Soil	8.5'-10'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		11	Subsurface	8.5'-10'	Metals	6010A	≥ 5%	≥ 5%		
300-6	300-702 – Pesticide Shed	5	Surface Soil	0-0.5'	Pesticides/Herbicides	8081A	≥ 5%	≥ 5%		
400-10	400-807 – Sandblasting Area	10	Surface Soil	0-0.5'	Aluminum	6020	≥ 5%	≥ 5%		

IA Group	IHSS/PAC/UBC Site	No. of Samples	Media	Depth Interval	Analyte	Method	Duplicates	Rinsates	Field Blanks (VOCs only)	Trip Blanks (VOCs only)
120.2 – Fiberglass Area West of Building 664	120.2 – Fiberglass Area West of Building 664	8	Surface Soil	0-0.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		8	Surface Soil	0-0.5'	Metals	6020	≥ 5%	≥ 5%		
		8	Subsurface Soil	.5'-2.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
	120.2 – Fiberglass Area West of Building 664	8	Subsurface Soil	.5'-2.5'	Metals	6020	≥ 5%	≥ 5%		
		8	Subsurface Soil	.5'-2.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		8	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		8	Subsurface Soil	2.5'-4.5'	Metals	6020	≥ 5%	≥ 5%		
		8	Subsurface Soil	2.5'-4.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		8	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		8	Subsurface Soil	4.5'-6.5'	Metals	6020	≥ 5%	≥ 5%		
		8	Subsurface Soil	4.5'-6.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		8	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		8	Subsurface Soil	6.5'-8.5'	Metals	6020	≥ 5%	≥ 5%		
		8	Subsurface Soil	6.5'-8.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		8	Subsurface Soil	8.5'-10'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		8	Subsurface Soil	8.5'-10'	Metals	6020	≥ 5%	≥ 5%		
		8	Subsurface Soil	8.5 -10'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
600-160 – Radioactive Site West of Building 664	600-160 – Radioactive Site West of Building 664	44	Surface Soil	0-0.5'	Metals	6020	≥ 5%	≥ 5%		
		44	Subsurface Soil	.5'-2.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		44	Subsurface Soil	.5'-2.5'	Metals	6020	≥ 5%	≥ 5%		
		44	Subsurface Soil	.5'-2.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
500-6	500-906 – Asphalt Surface Near Building 559	2	Asphalt	0-0.5'	VOCs	8260B	≥ 5%	≥ 5%		1/shipment
500-7	500-907 – Tanker Truck Release of Hazardous Waste from Tank 231B	5	Surface Soil	0-0.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		5	Surface Soil	0-0.5'	Metals	6010A	≥ 5%	≥ 5%		
		5	Surface Soil	0-0.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		5	Surface Soil	0-0.5'	SVOCs	8270C	≥ 5%	≥ 5%		

IA Group	IHSS/PAC/UBC Site	No. of Samples	Media	Depth Interval	Analyte	Method	Duplicates	Rinsates	Field Blanks (VOCs only)	Trip Blanks (VOCs only)
		5	Surface Soil	0-0.5'	PCBs	8082	≥ 5%	≥ 5%		
		5	Surface Soil	0-0.5'	pH		≥ 5%	≥ 5%		
600-1	600-1001 – Temporary Waste Storage - Building 663	39	Surface Soil	0-0.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		39	Surface Soil	0-0.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		39	Subsurface Soil	.5'-2.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		39	Subsurface Soil	.5'-2.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		39	Subsurface Soil	.5'-2.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		39	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		39	Subsurface Soil	2.5'-4.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		39	Subsurface Soil	2.5'-4.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		39	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		39	Subsurface Soil	4.5'-6.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		39	Subsurface Soil	4.5'-6.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		39	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		39	Subsurface Soil	6.5'-8.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		39	Subsurface Soil	6.5'-8.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		39	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		39	Subsurface Soil	8.5'-10.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		39	Subsurface Soil	8.5'-10.5'	SVOCs	8270C	≥ 5%	≥ 5%		
600-6	600-1005 – Former Pesticide Storage Area	2	Surface Soil	0-0.5'	Pesticides/Herbicides	8081	≥ 5%	≥ 5%		
700-12	700-1106 – Process Waste Spill, Portal 1	2	Surface Soil	0-0.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
800-6	UBC889 – Decontamination and Waste Reduction	3	Surface Soil	0-0.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		3	Surface Soil	0-0.5'	Metals	6010A	≥ 5%	≥ 5%		
		3	Subsurface Soil	.5'-2.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		3	Subsurface Soil	.5'-2.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		3	Subsurface Soil	.5'-2.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		3	Subsurface Soil	.5'-2.5'	Metals	6010A	≥ 5%	≥ 5%		

IA Group	IHSS/PAC/UBC Site	No. of Samples	Media	Depth Interval	Analyte	Method	Duplicates	Rinsates	Field Blanks (VOCs only)	Trip Blanks (VOCs only)
		3	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		3	Subsurface Soil	2.5'-4.5'	VOCs	8270C	≥ 5%	≥ 5%	≥ 5%	1/shipment
		3	Subsurface Soil	2.5'-4.5'	SVOCs	8260B	≥ 5%	≥ 5%		
		3	Subsurface Soil	2.5'-4.5'	Metals	6010A	≥ 5%	≥ 5%		
		3	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		3	Subsurface Soil	4.5'-6.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		3	Subsurface Soil	4.5'-6.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		3	Subsurface Soil	4.5'-6.5'	Metals	6010A	≥ 5%	≥ 5%		
		3	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		3	Subsurface Soil	6.5'-8.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		3	Subsurface Soil	6.5'-8.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		3	Subsurface Soil	6.5'-8.5'	Metals	6010A	≥ 5%	≥ 5%		
		3	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		3	Subsurface Soil	8.5'-10.5'	VOCs	8270C	≥ 5%	≥ 5%	≥ 5%	1/shipment
		3	Subsurface Soil	8.5'-10.5'	SVOCs	8260B	≥ 5%	≥ 5%		
		3	Subsurface Soil	8.5'-10.5'	Metals	6010A	≥ 5%	≥ 5%		
800-164.3 – Radioactive Site 800 Area Site #2 Building 889 Storage Pad		26	Surface Soil	0-0.5'	Metals	6010A	≥ 5%	≥ 5%		
		26	Subsurface Soil	.5'-2.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		26	Subsurface Soil	.5'-2.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		26	Subsurface Soil	.5'-2.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		26	Subsurface Soil	.5'-2.5'	Metals	6010A	≥ 5%	≥ 5%		
		26	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		26	Subsurface Soil	2.5'-4.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		26	Subsurface Soil	2.5'-4.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		26	Subsurface Soil	2.5'-4.5'	Metals	6010A	≥ 5%	≥ 5%		
		26	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		26	Subsurface Soil	4.5'-6.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		26	Subsurface Soil	4.5'-6.5'	SVOCs	8270C	≥ 5%	≥ 5%		

IA Group	IHSS/PAC/UBC Site	No. of Samples	Media	Depth Interval	Analyte	Method	Duplicates	Rinsates	Field Blanks (VOCs only)	Trip Blanks (VOCs only)
	000-121 – OPWL Tank 28 - Two 1,000-Gallon Concrete Sumps	26	Subsurface Soil	4.5'-6.5'	Metals	6010A	≥ 5%	≥ 5%		
		26	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		26	Subsurface Soil	6.5'-8.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		26	Subsurface Soil	6.5'-8.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		26	Subsurface Soil	6.5'-8.5'	Metals	6010A	≥ 5%	≥ 5%		
		26	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		26	Subsurface Soil	8.5'-10.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		26	Subsurface Soil	8.5'-10.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		26	Subsurface Soil	8.5'-10.5'	Metals	6010A	≥ 5%	≥ 5%		
		4	Subsurface Soil	.5'-2.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
	000-121 – OPWL Tank 28 - Two 1,000-Gallon Concrete Sumps	4	Subsurface Soil	.5'-2.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		4	Subsurface Soil	.5'-2.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		4	Subsurface Soil	.5'-2.5'	Metals	6010A	≥ 5%	≥ 5%		
		4	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		4	Subsurface Soil	2.5'-4.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		4	Subsurface Soil	2.5'-4.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		4	Subsurface Soil	2.5'-4.5'	Metals	6010A	≥ 5%	≥ 5%		
		4	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		4	Subsurface Soil	4.5'-6.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		4	Subsurface Soil	4.5'-6.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		4	Subsurface Soil	4.5'-6.5'	Metals	6010A	≥ 5%	≥ 5%		
		4	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		4	Subsurface Soil	6.5'-8.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		4	Subsurface Soil	6.5'-8.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		4	Subsurface Soil	6.5'-8.5'	Metals	6010A	≥ 5%	≥ 5%		
		4	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		4	Subsurface Soil	8.5'-10.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		4	Subsurface Soil	8.5'-10.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		4	Subsurface Soil	8.5'-10.5'	Metals	6010A	≥ 5%	≥ 5%		

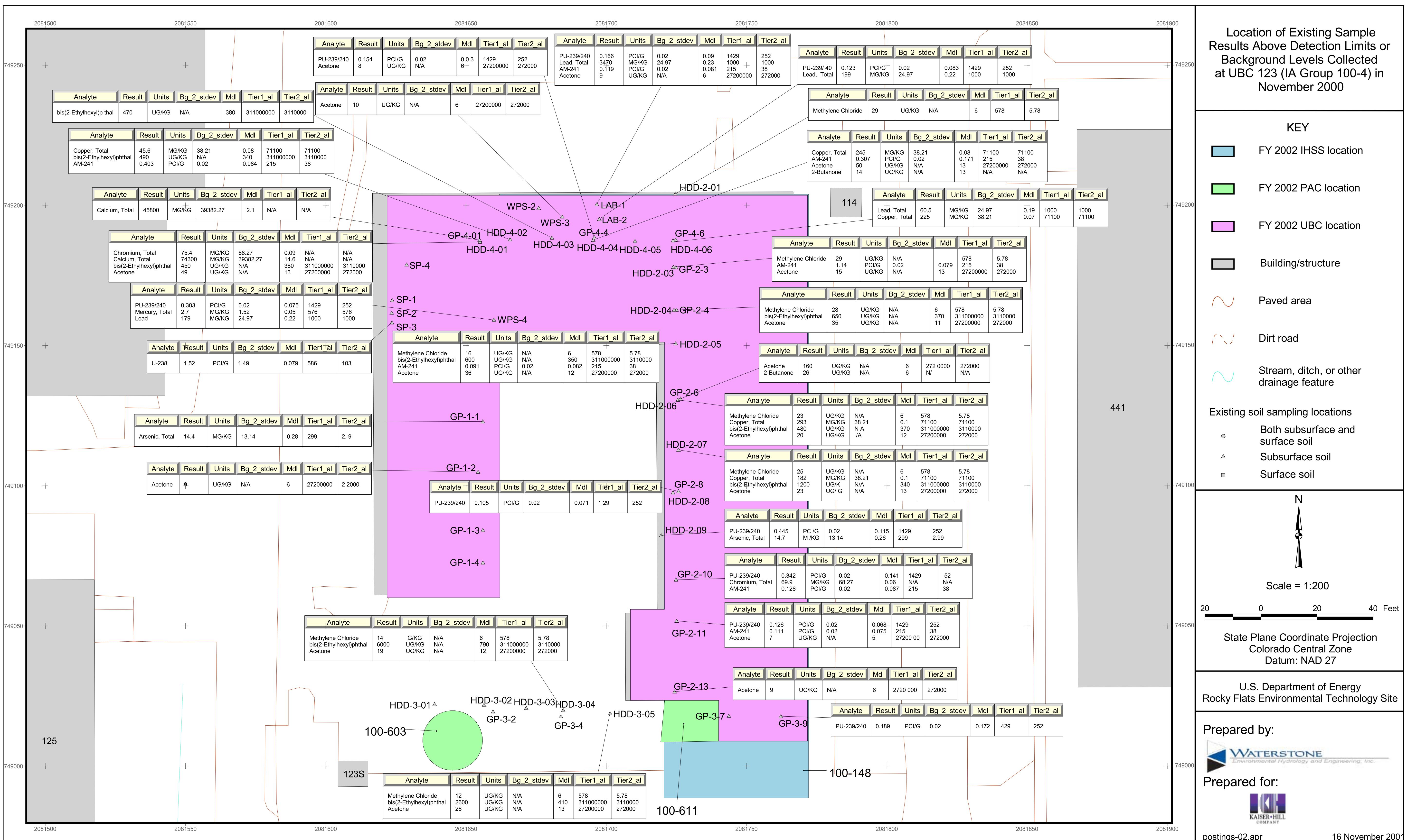
IA Group	IHSS/PAC/UBC Site	No. of Samples	Media	Depth Interval	Analyte	Method	Duplicates	Rinsates	Field Blanks (VOCs only)	Trip Blanks (VOCs only)
000-121 – OPWL Tank 40 - Two 400-Gallon Underground Concrete Tanks		1	Subsurface Soil	.5'-2.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		1	Subsurface Soil	.5'-2.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		1	Subsurface Soil	.5'-2.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		1	Subsurface Soil	.5'-2.5'	Metals	6010A	≥ 5%	≥ 5%		
		1	Subsurface Soil	2.5'-4.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		1	Subsurface Soil	2.5'-4.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		1	Subsurface Soil	2.5'-4.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		1	Subsurface Soil	2.5'-4.5'	Metals	6010A	≥ 5%	≥ 5%		
		1	Subsurface Soil	4.5'-6.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		1	Subsurface Soil	4.5'-6.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		1	Subsurface Soil	4.5'-6.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		1	Subsurface Soil	4.5'-6.5'	Metals	6010A	≥ 5%	≥ 5%		
		1	Subsurface Soil	6.5'-8.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		1	Subsurface Soil	6.5'-8.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		1	Subsurface Soil	6.5'-8.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		1	Subsurface Soil	6.5'-8.5'	Metals	6010A	≥ 5%	≥ 5%		
		1	Subsurface Soil	8.5'-10.5'	Radionuclides	HPGe	≥ 5%	≥ 5%		
		1	Subsurface Soil	8.5'-10.5'	VOCs	8260B	≥ 5%	≥ 5%	≥ 5%	1/shipment
		1	Subsurface Soil	8.5'-10.5'	SVOCs	8270C	≥ 5%	≥ 5%		
		1	Subsurface Soil	8.5'-10.5'	Metals	6010A	≥ 5%	≥ 5%		

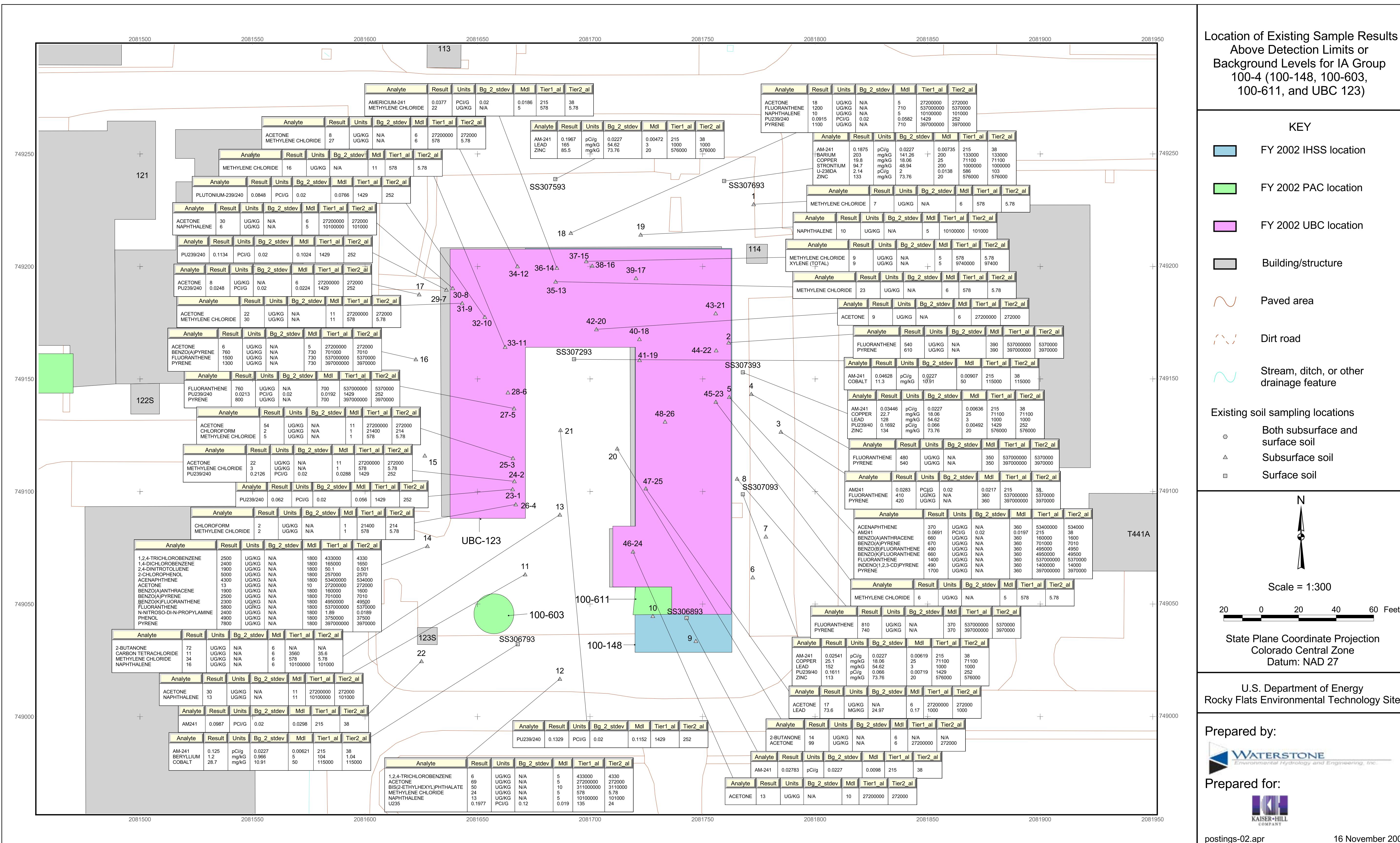
## **IA Group 100-4 Maps**

Location of Existing Sample Results Above Detection Limits or Background Levels  
Collected at UBC 123 (IA Group 100-4) in November 2000

Location of Existing Sample Results Above Detection Limits or Background Levels for IA  
Group 100-4 (100-148, 100-603, 100-611, and UBC 123)

FY2002 Sampling Locations for IA Group 100-4 (100-611)





# Location of Existing Sample Results Above Detection Limits or Background Levels for IA Group 100-4 (100-148, 100-603, 100-611, and UBC 123)

KEY

- ## 2002 IHSS location

- ## 2002 PAC location

- ## 2002 UBC location

- ## Building/structure

- ### Used areas

- ream, ditch, or other

- ### with subsurface and

- # bsurface soil



scale = 1:300

Call = 1.500

20 40 60

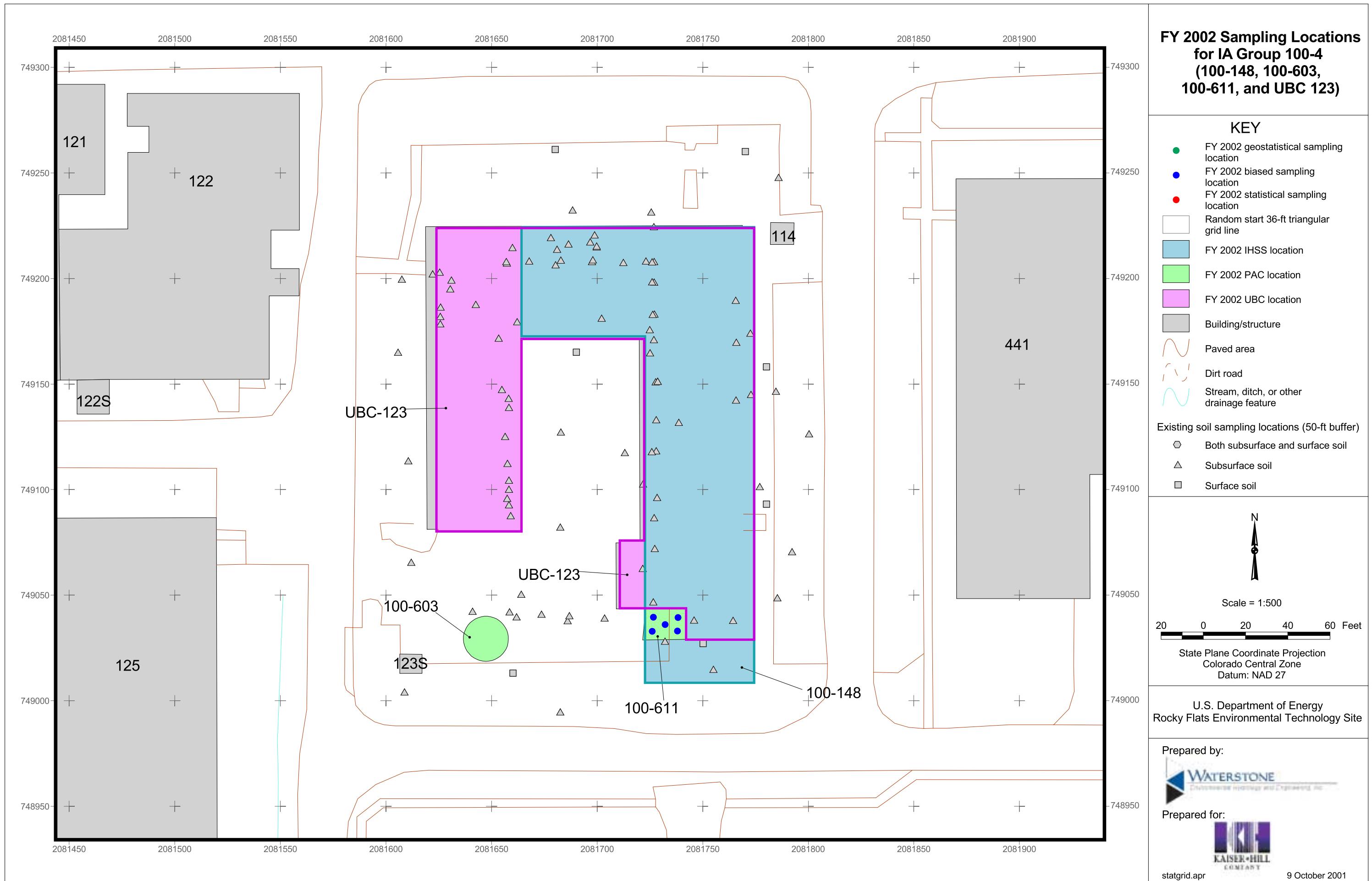
106

Coordinate Projection  
Colorado Central Zone  
Datum: NAD 27

Department of Energy  
Environmental Technologies

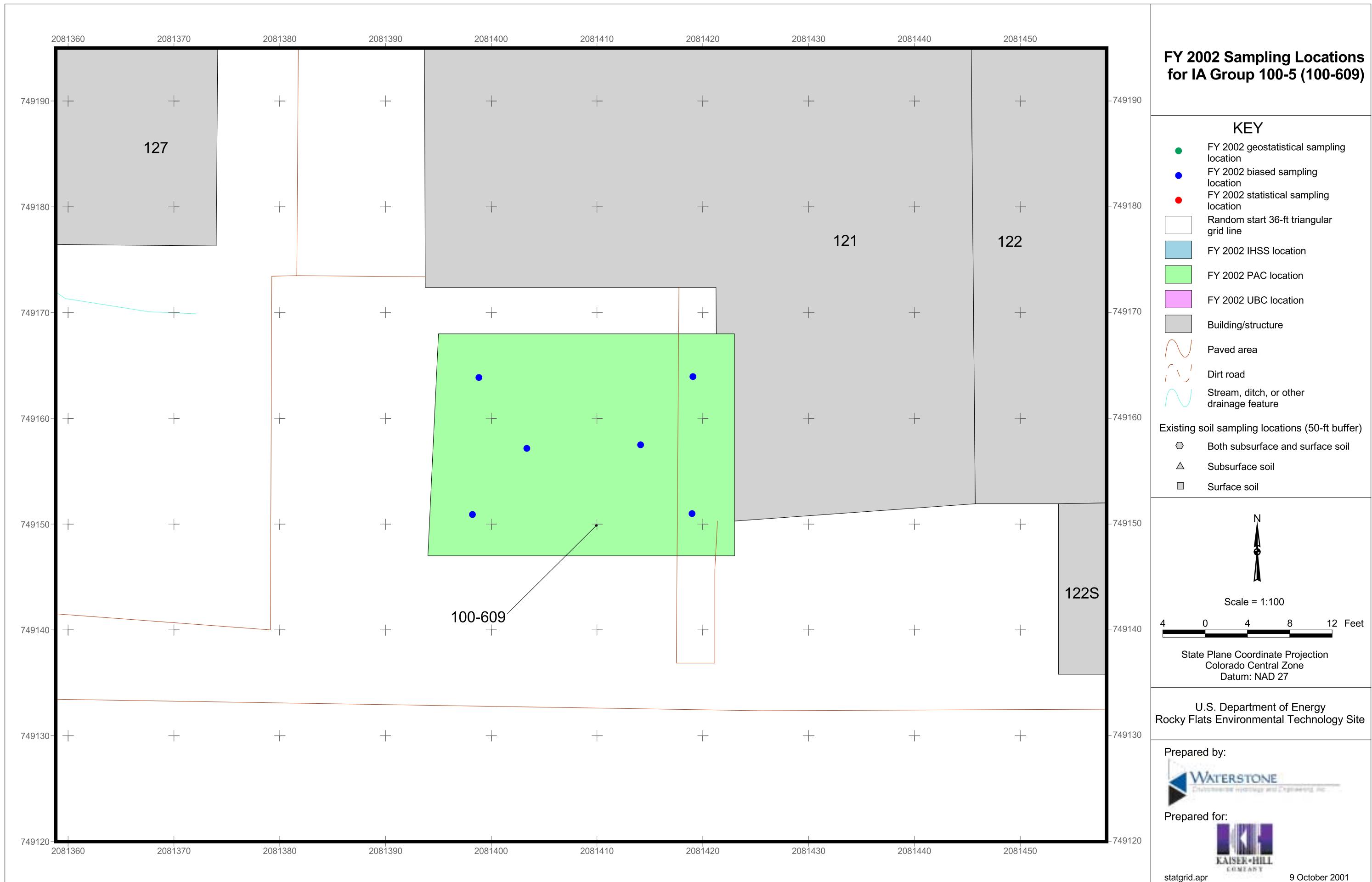


19-3



## **IA Group 100-5 Maps**

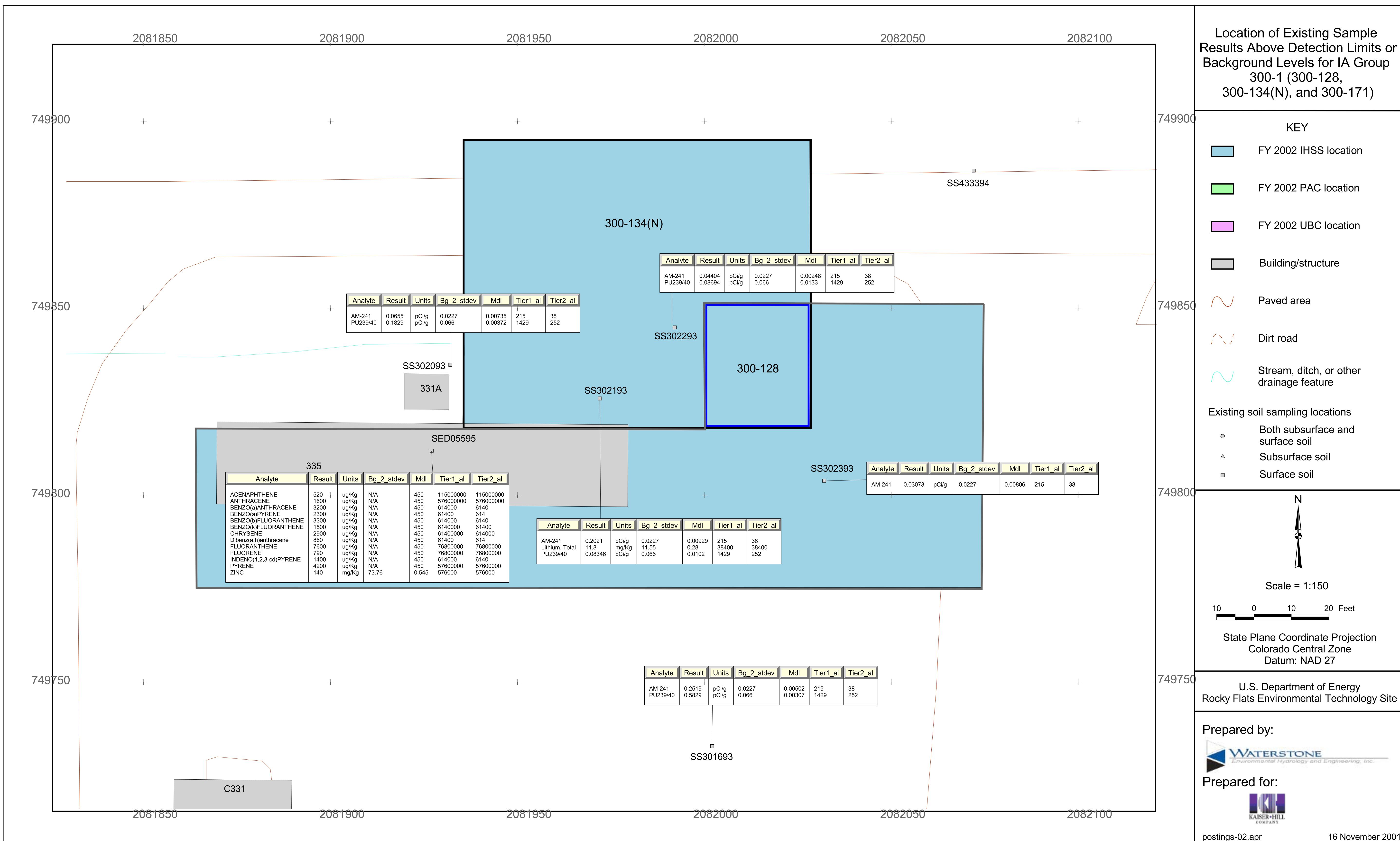
FY2002 Sampling Locations for IA Group 100-5 (100-609)



### **IA Group 300-1 Maps**

Location of Existing Sample Results Above Detection Limits or Background Levels for IA Group 300-1 (300-128, 300-134(N), and 300-171)

FY2002 Sampling Locations for IA Group 300-1 (300-128, 300-134(N), and 300-171)



**FY 2002 Sampling Locations  
for IA Group 300-1  
(300-128, 300-134(N),  
and 300-171)**

**KEY**

- FY 2002 geostatistical sampling location
- FY 2002 biased sampling location
- FY 2002 statistical sampling location
- Random start 36-ft triangular grid line
- FY 2002 IHSS location
- FY 2002 PAC location
- FY 2002 UBC location
- Building/structure
- Paved area
- Dirt road
- Stream, ditch, or other drainage feature

- Existing soil sampling locations (50-ft buffer)
- Both subsurface and surface soil
  - △ Subsurface soil
  - Surface soil

N

Scale = 1:300

10 0 10 20 30 40 Feet

State Plane Coordinate Projection  
Colorado Central Zone  
Datum: NAD 27

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

Prepared by:

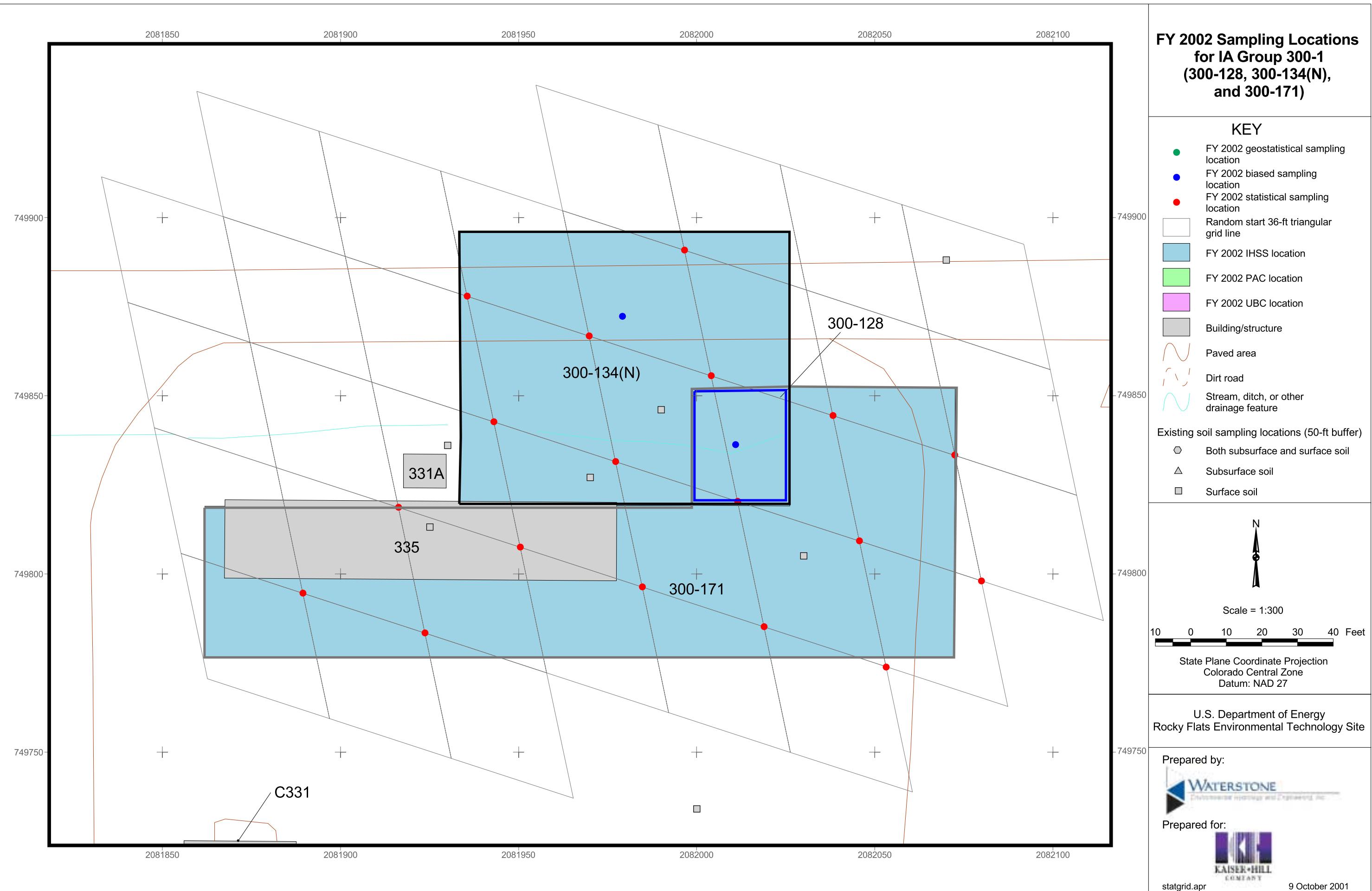


Prepared for:



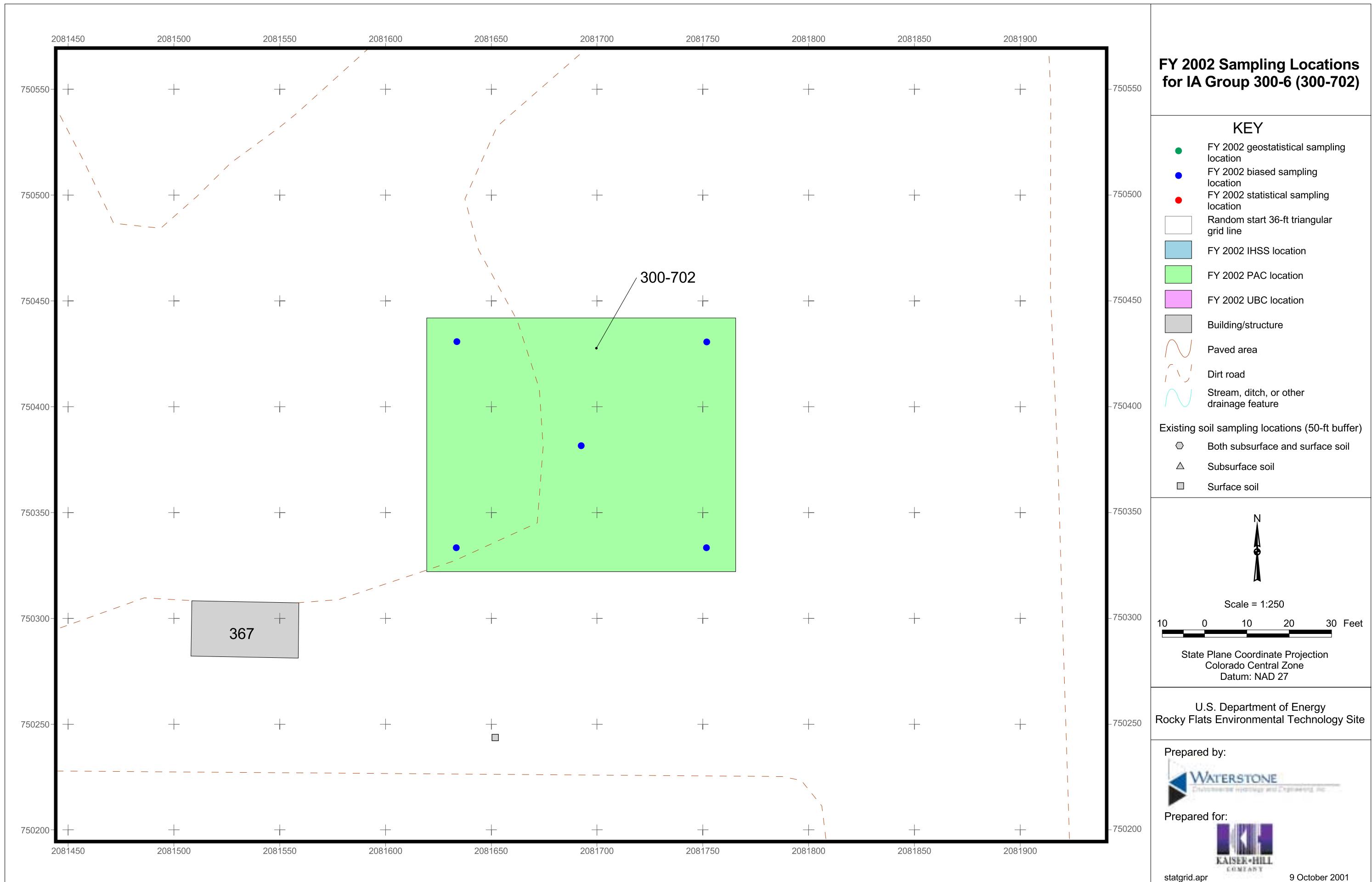
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9 October 2001



### **IA Group 300-6 Maps**

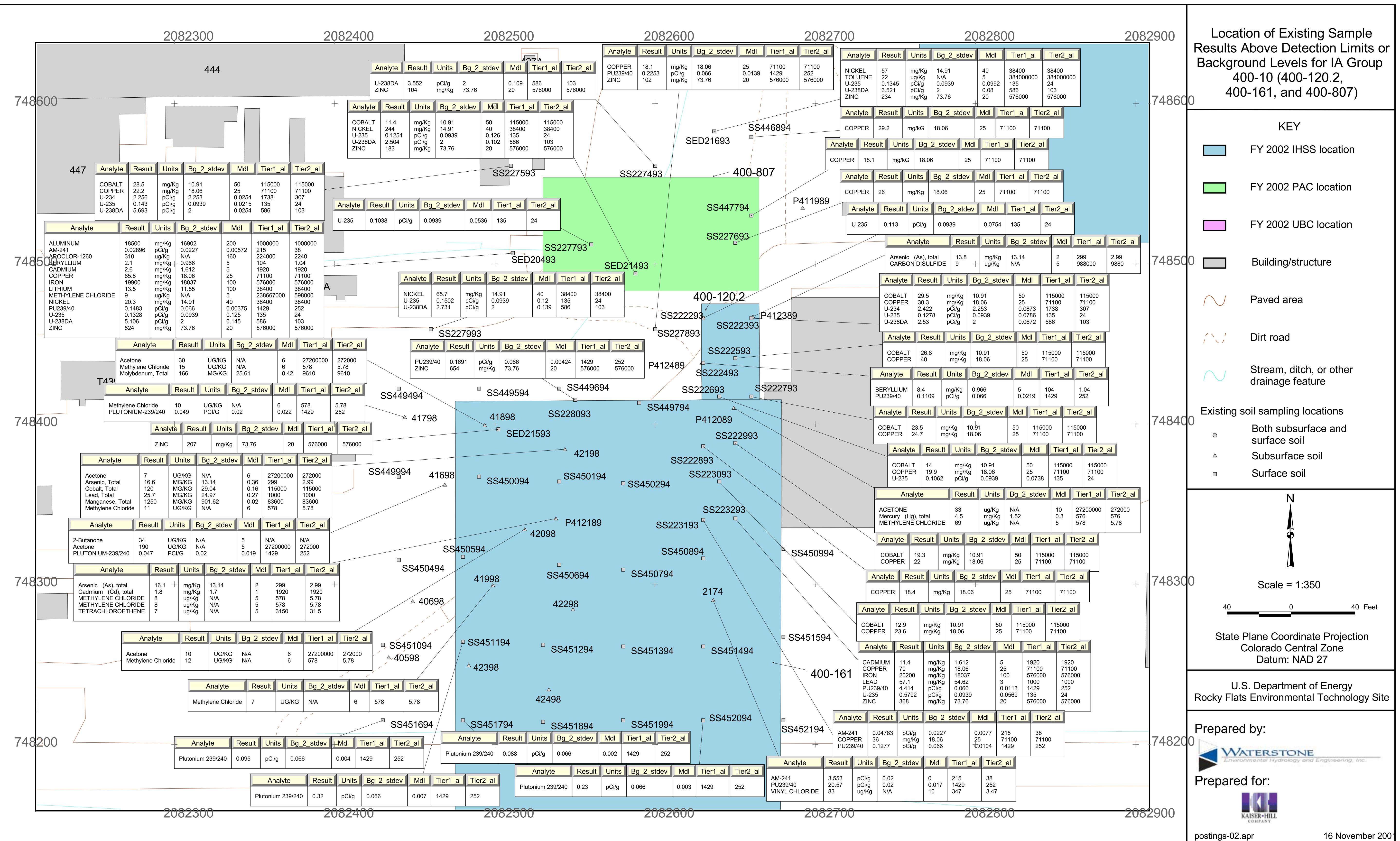
FY2002 Sampling Locations for IA Group 300-6 (300-702)



## **IA Group 400-10 Maps**

Location of Existing Sample Results Above Detection Limits or Background Levels for IA Group 400-10 (400-120.2, 400-161, and 400-807)

FY2002 Sampling Locations for IA Group 400-10 (400-120.2, 400-161, and 400-807)



# Location of Existing Sample Results Above Detection Limits or Background Levels for IA Group

400-10 (400-120.2,  
400-161, and 400-807)

KEY

## Y 2002 IHSS location

## Y 2002 PAC location

## Y 2002 UBC location

## Building/structure

aved area

irt road

stream, ditch, or other  
drainage feature

### Sampling locations

## Both subsurface and surface soil

## Surface soil

1

1

A horizontal scale with a black bar at the bottom. The number '0' is at the left end, and '40' is at the right end. The letter 'F' is positioned to the right of the '40' label.

# One Coordinate Projection Colorado Central Zone Datum: NAD 27

Prepared by:-



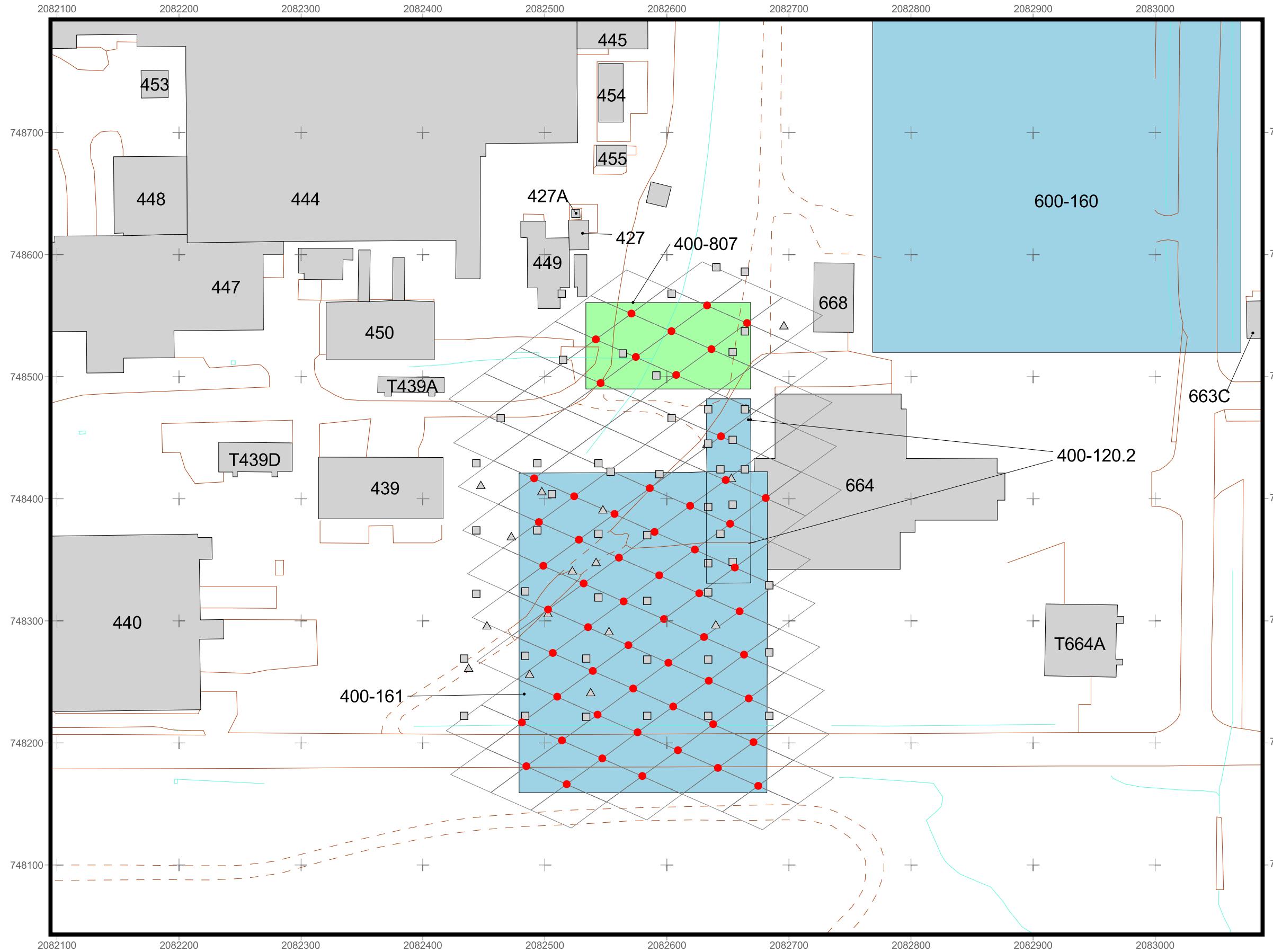
▶ [Resumen de año](#)



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**FY 2002 Sampling Locations  
for IA Group 400-10  
(400-120.2, 400-161  
and 400-807)**

**KEY**



N  
Scale = 1:1000  
50 0 50 100 Feet

State Plane Coordinate Projection  
Colorado Central Zone  
Datum: NAD 27

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

Prepared by:

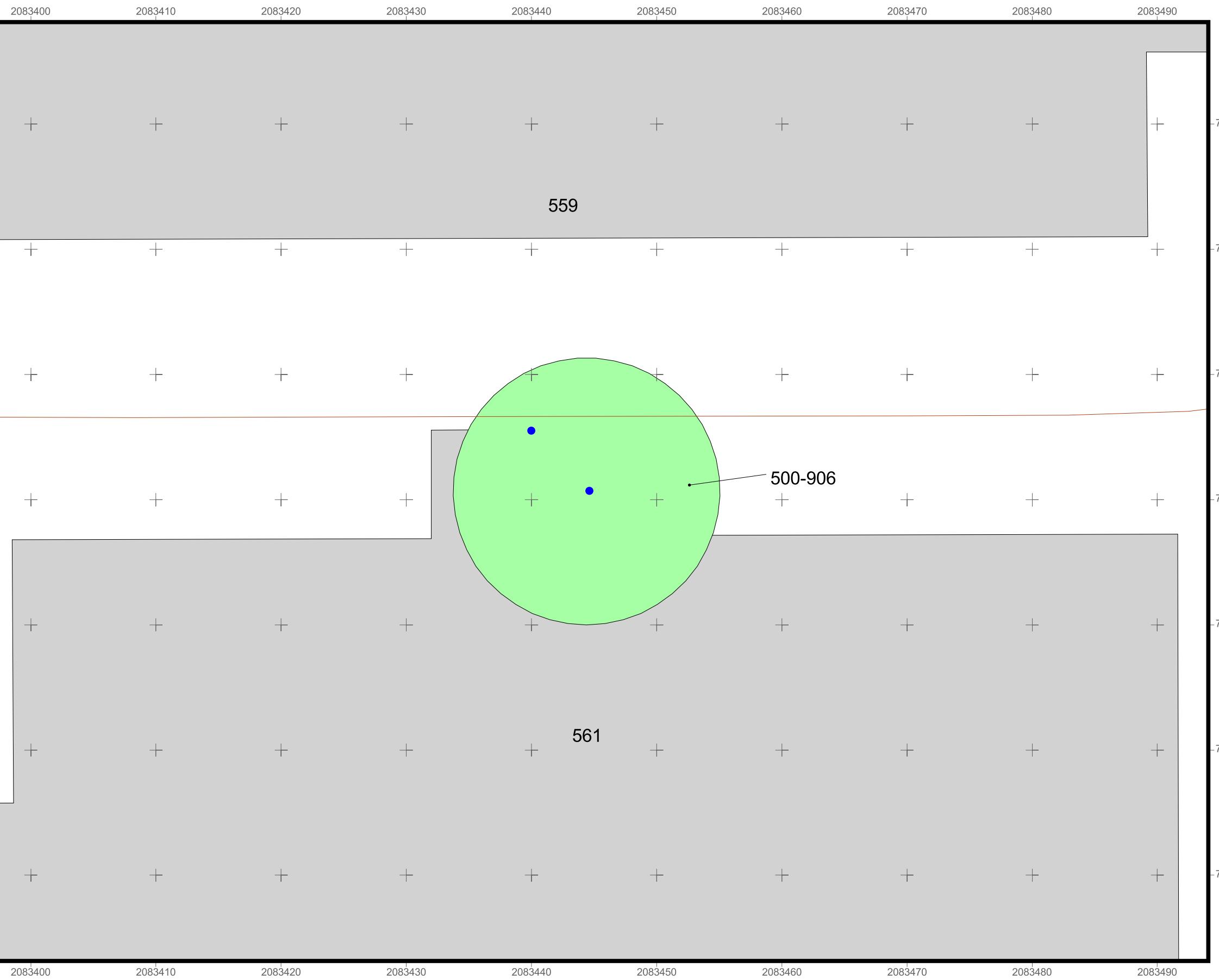


Prepared for:



## **IA Group 500-6 Maps**

FY2002 Sampling Locations for IA Group 500-6 (500-906)



### FY 2002 Sampling Locations for IA Group 500-6 (500-906)

#### KEY

- FY 2002 geostatistical sampling location
- FY 2002 biased sampling location
- FY 2002 statistical sampling location
- Random start 36-ft triangular grid line
- FY 2002 IHSS location
- FY 2002 PAC location
- FY 2002 UBC location
- Building/structure
- Paved area
- Dirt road
- Stream, ditch, or other drainage feature

Existing soil sampling locations (50-ft buffer)

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



Scale = 1:100

4 0 4 8 12 Feet

State Plane Coordinate Projection  
Colorado Central Zone  
Datum: NAD 27

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

Prepared by:

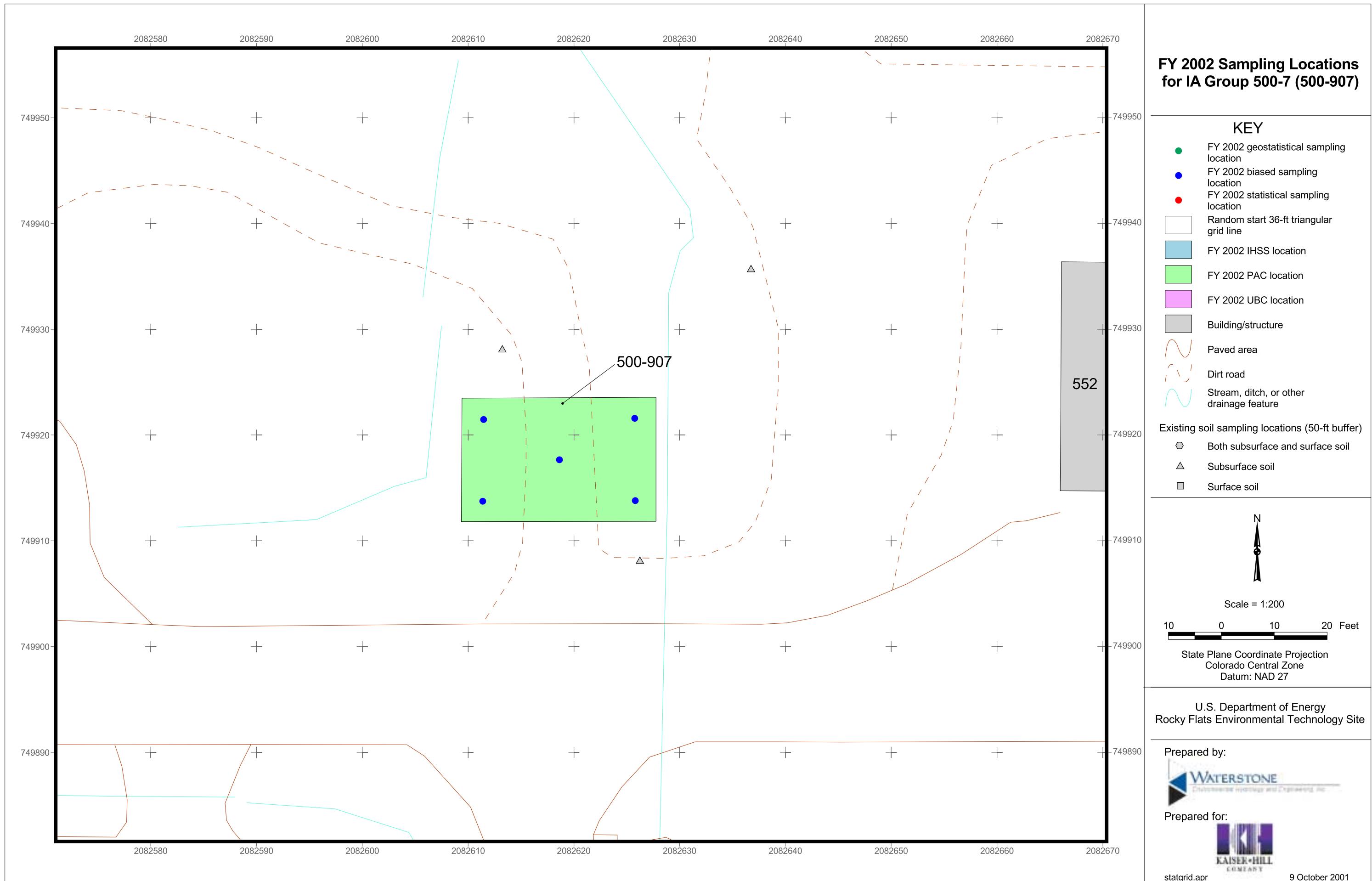


Prepared for:



**IA Group 500-7 Maps**

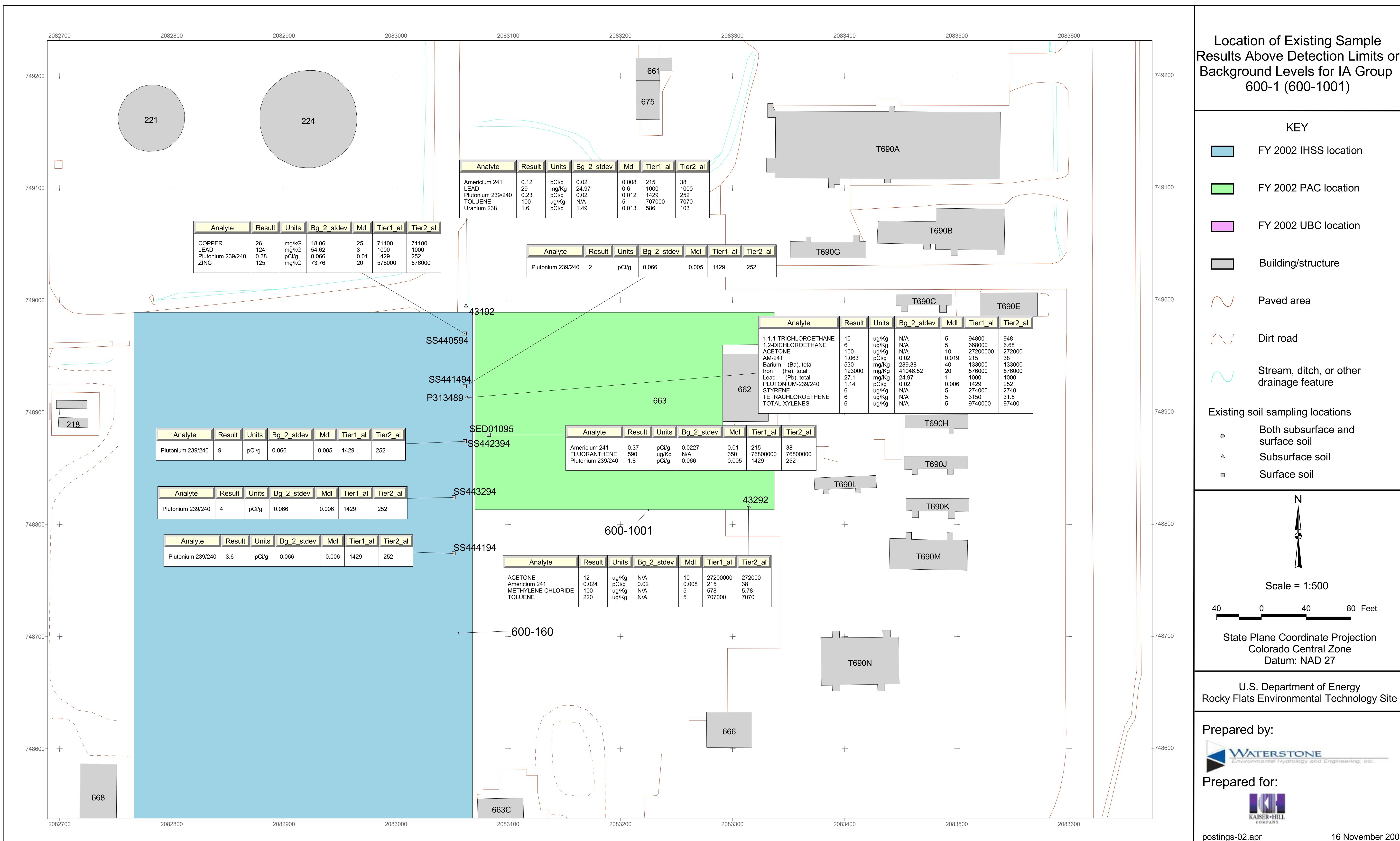
FY2002 Sampling Locations for IA Group 500-7 (500-907)



### **IA Group 600-1 Maps**

Location of Existing Sample Results Above Detection Limits or Background Levels for IA Group 600-1 (600-1001)

FY2002 Sampling Locations for IA Group 600-1 (600-1001)



**FY 2002 Sampling Locations  
for IA Group 600-1 (600-1001)**

**KEY**

- FY 2002 geostatistical sampling location
- FY 2002 biased sampling location
- FY 2002 statistical sampling location
- Random start 36-ft triangular grid line
- FY 2002 IHSS location
- FY 2002 PAC location
- FY 2002 UBC location
- Building/structure
- Paved area
- Dirt road
- Stream, ditch, or other drainage feature
- Existing soil sampling locations (50-ft buffer)
  - Both subsurface and surface soil
  - △ Subsurface soil
  - Surface soil

N  
Scale = 1:1000  
50 0 50 100 Feet

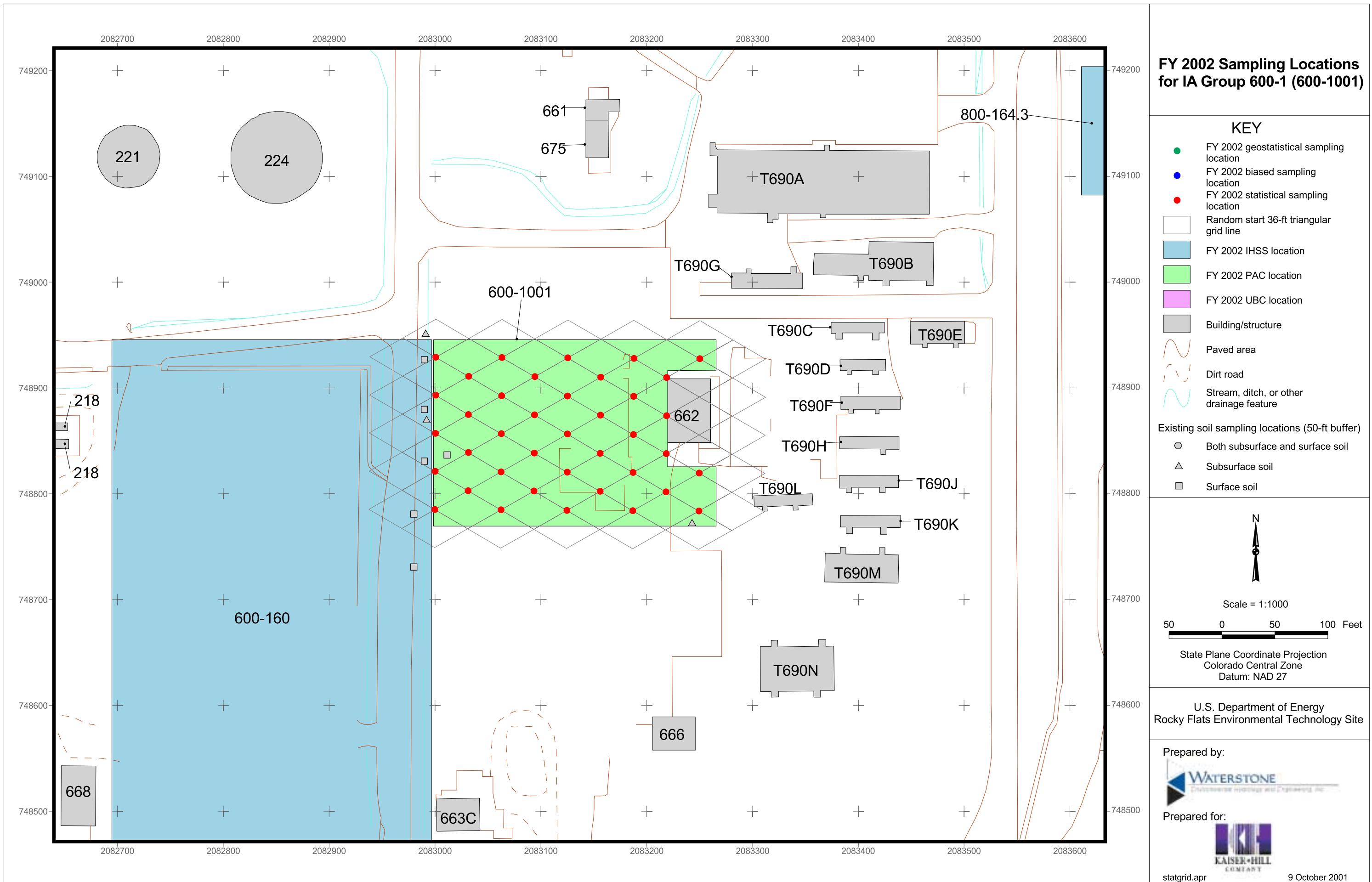
State Plane Coordinate Projection  
Colorado Central Zone  
Datum: NAD 27

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

Prepared by:  

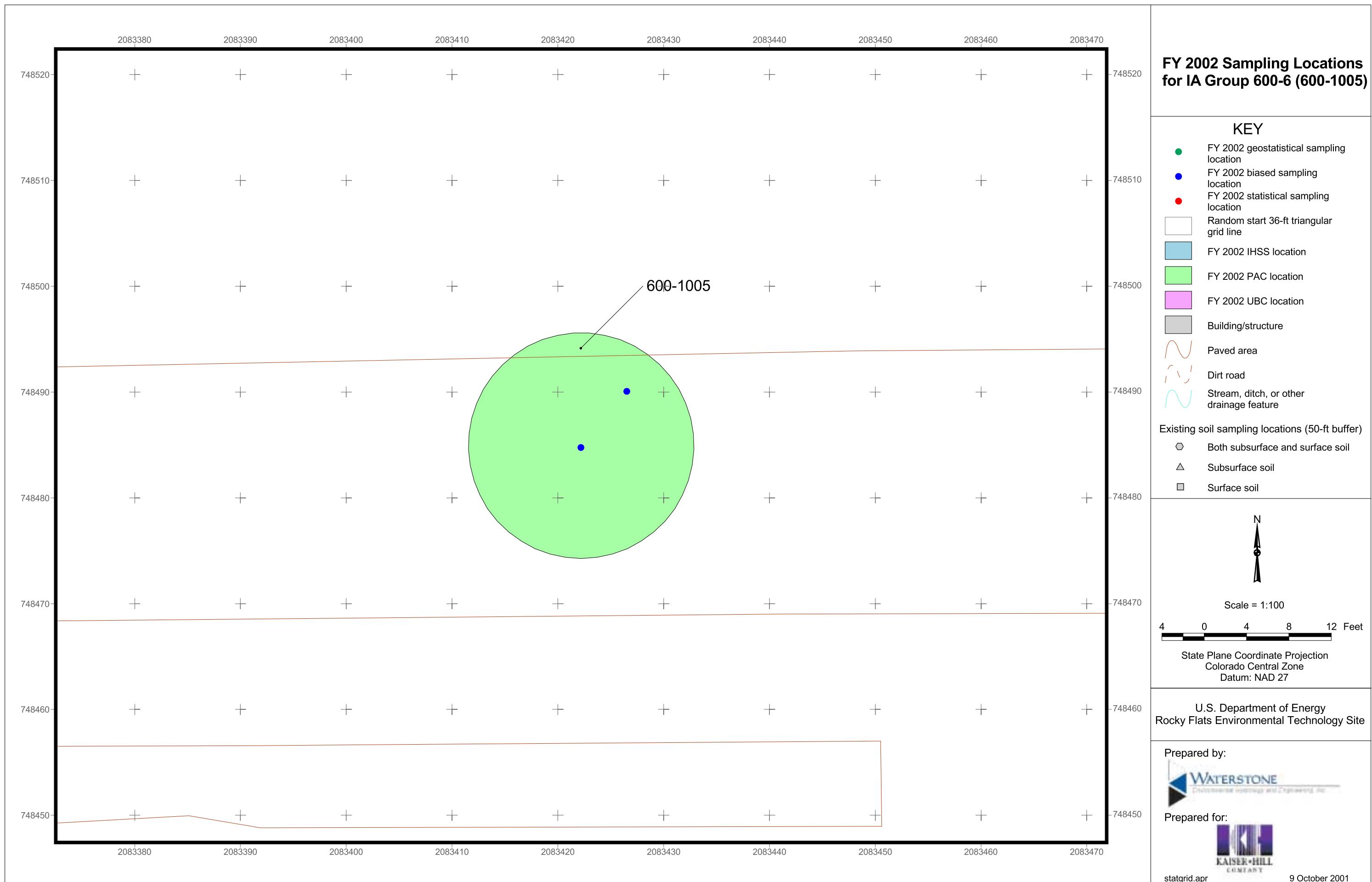

Prepared for:  


statgrid.apr 9 October 2001



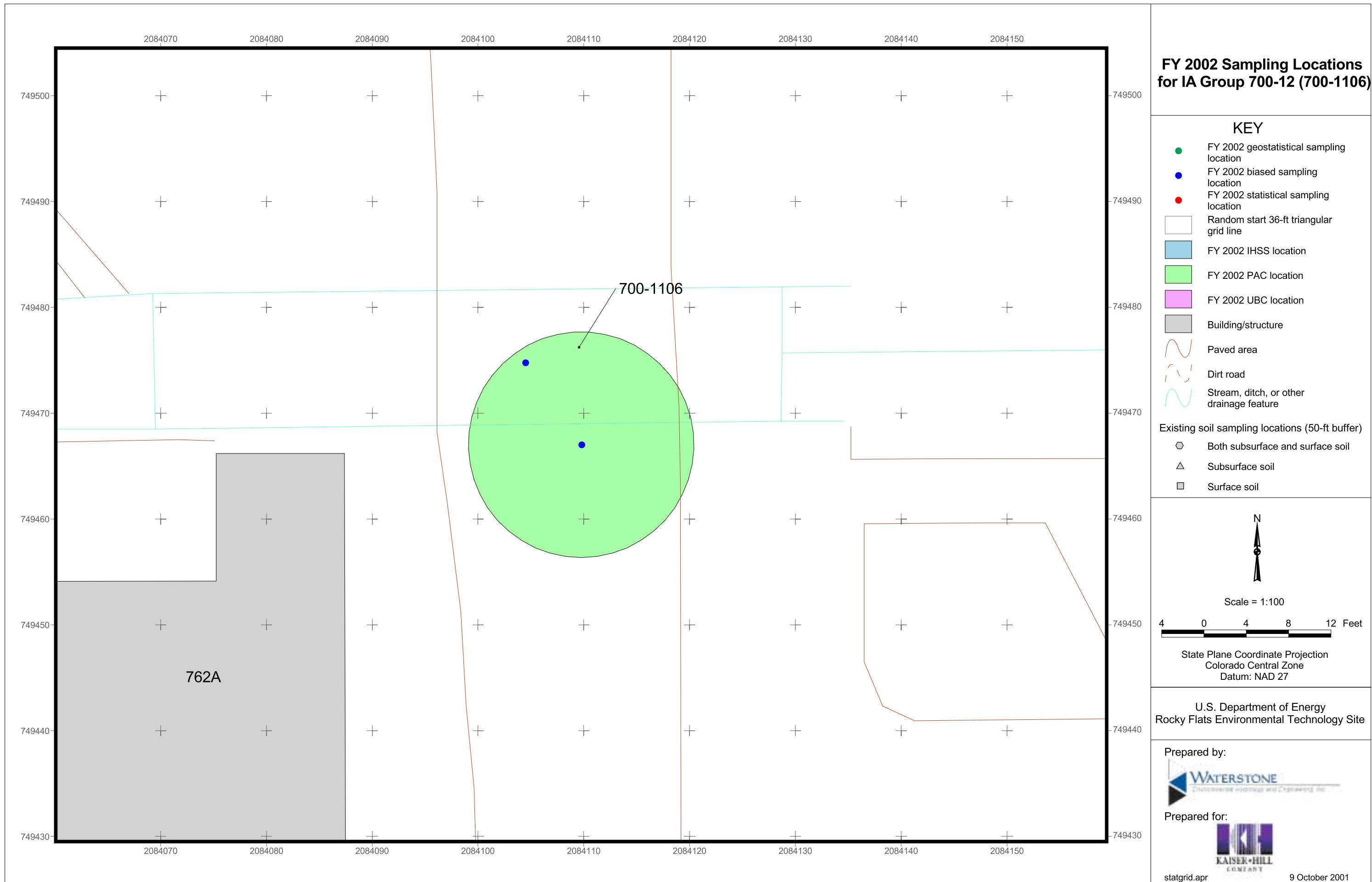
**IA Group 600-6 Maps**

FY 2002 Sampling Locations for IA Group 600-6 (600-1005)



**IA Group 700-12 Maps**

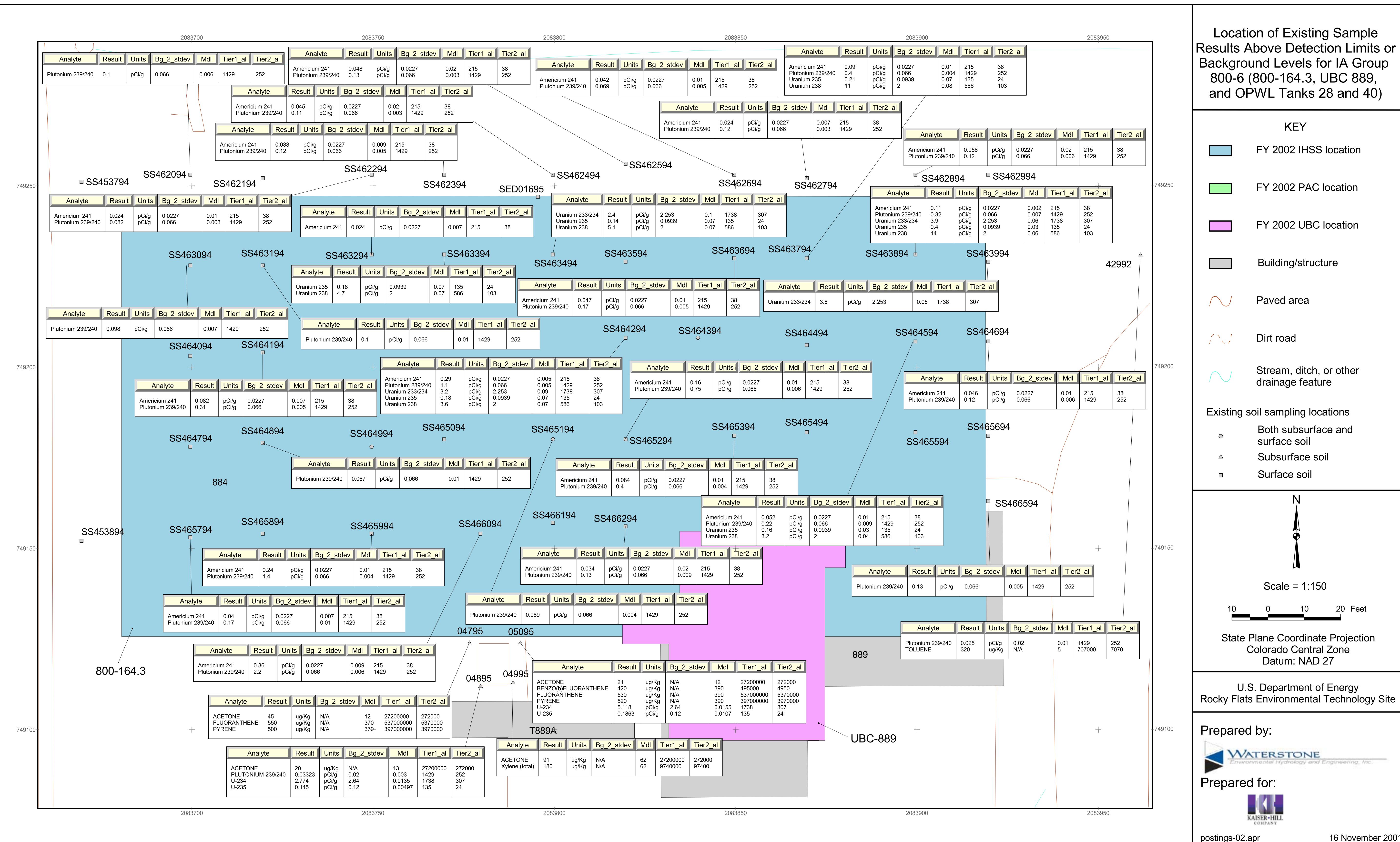
FY2002 Sampling Locations for IA Group 700-12 (700-1106)



## **IA Group 800-6 Maps**

Location of Existing Sample Results Above Detection Limits or Background Levels for IA Group 800-6 (800-164.3, UBC 889, and OPWL Tanks 28 and 40)

FY2002 Sampling Locations for IA Group 800-6 (800-164.3, UBC 889, and OPWL Tanks 28 and 40)



**FY 2002 Sampling Locations  
for IA Group 800-6  
(800-164.3, UBC 889, and  
OPWL Tanks 28 and 40)**

**KEY**

- FY 2002 geostatistical sampling location
- FY 2002 biased sampling location
- FY 2002 statistical sampling location
- Random start 36-ft triangular grid line
- FY 2002 IHSS location
- FY 2002 PAC location
- FY 2002 UBC location
- Building/structure
- Paved area
- Dirt road
- Stream, ditch, or other drainage feature
- OPWL location (estimated)
- OPWL tank location (estimated)
- Existing soil sampling locations (50-ft buffer)
- Both subsurface and surface soil
- △ Subsurface soil
- Surface soil

N

Scale = 1:500

20 0 20 40 60 Feet  
State Plane Coordinate Projection  
Colorado Central Zone  
Datum: NAD 27

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

Prepared by:

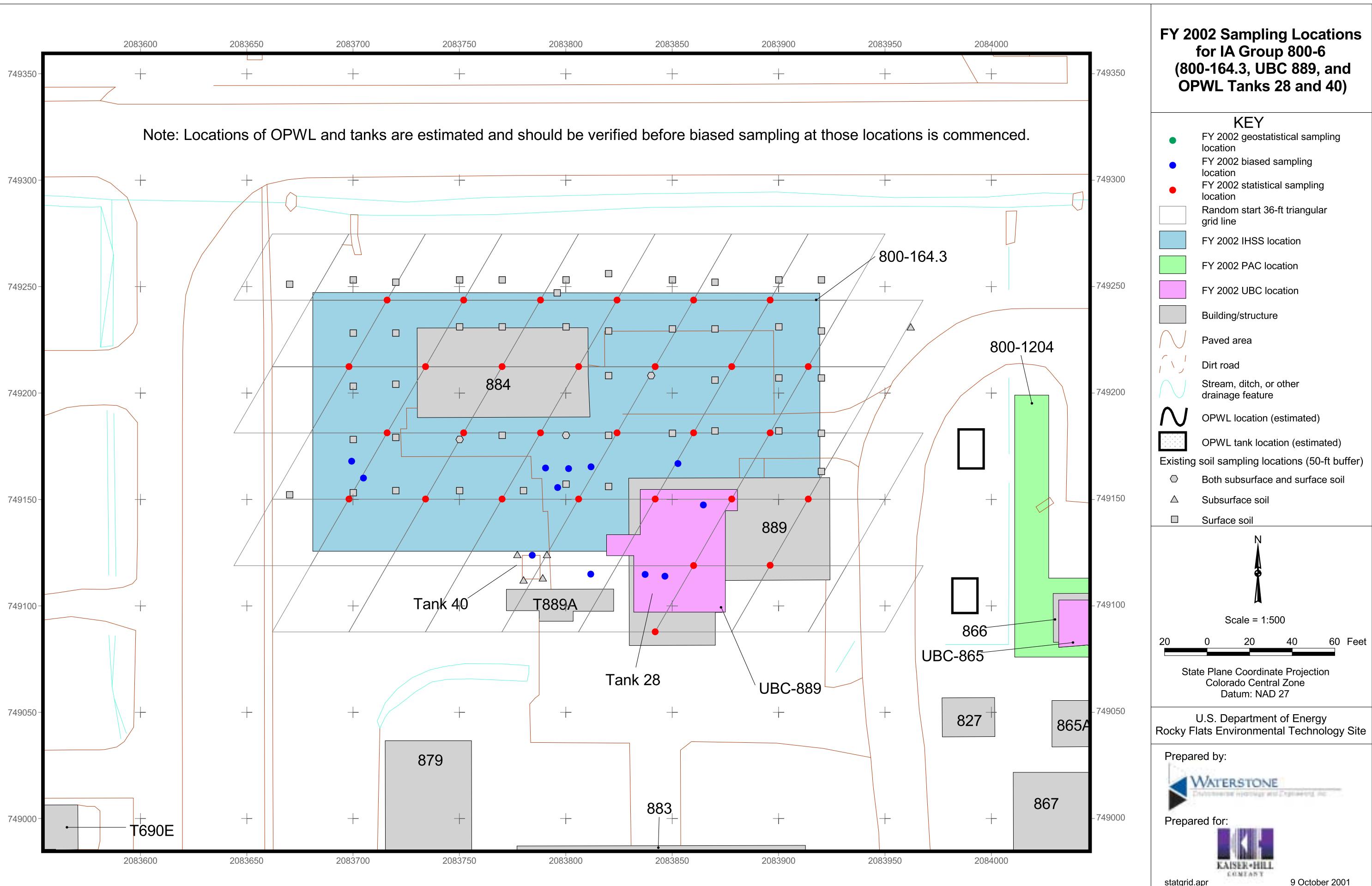


Prepared for:



statgrid.apr

9 October 2001



**ATTACHMENTS**

	<b>CDPHE and EPA Comments, November 2, 2001</b>	<b>Response</b>
	<b><u>General Comments</u></b>	
<b>1</b>	<p>This document could be easier to review if more of the pertinent information were provided in the document itself, so that reviewers are not required to pull tables and text from a number of different sources. This would not involve much additional work and would not make the addendum much more lengthy. Specifically, add the text for each IA Group from Appendix C of the IASAP to the packets. The maps entitled <i>Location of Existing Sample Results above Detection Limits or Background Levels for IA Group XX</i> should provide background levels, detection limits, and action levels for all results that are posted on the maps for easy side-by-side comparison. Providing these values is preferable to merely indicating whether or not the sample results are above action levels.</p>	<p>The background levels plus two standard deviations, detection limits, and ALs have been added to the existing data maps.</p> <p>Because both Appendix C and the Addendum are part of the of the IASAP adding the text from Appendix C to the Addendum would result in two versions of the same text in the document.</p> <p>DOE will provide a searchable PDF version of Appendix C to the regulatory agencies and a copy of the IASAP will be available at the regulatory agency onsite offices.</p>
	<b><u>IA Group 900-4&amp;5</u></b>	
<b>1</b>	<p>The text accompanying the geostatistical data needs to include an explanation of how these data were used to select sampling locations, as discussed in a conference call. The table entitled <i>IHSS Group 900-4&amp;5 Input Parameters DATA Values</i> needs some explanation. Are these SOR values, and if so, are they for the existing sample locations? The SOR calculation for at least a few should be included. How are analytes that have no action level, such as phenanthrene, pentadecane, and heptacecane2,6,10, 15-tetrame included in the SOR calculation? The parameters provided on the following</p>	<p>This text and accompanying maps and tables have been deleted. Please see Industrial Area Sampling and Analysis Plan Fiscal Year 2002, Addendum #IA-02-02 for IHSS Group 900-4&amp;5 sampling strategy.</p> <p>There is no historical evidence that radionuclides were stored at this site. Additionally, drums stored at this site were sampled and radionculides were not detected. Sampling for radionuclides was conducted in 1988 and these data are summarized in the Phase I RFI/RI Work Plan Rocky Flats Plant Other Outside Closures, Operable Unit 10, Rocky Flats Plant, Golden, Colorado, May.</p>

	<p>pages need some explanation as well. Finally, radionuclide analysis should be added to the list for this group since radionuclides have been detected above background and have historically been stored at this location.</p>	<p>Samples from four locations were analyzed for radionuclides. One location indicated that plutonium and americium were above background. Americium was detected at <math>0.15 \pm 0.08</math> (vs. background of 0.045) and plutonium was detected at <math>0.42 \pm 0.18</math> (vs. background of 0.066)</p> <p>Both of these are well below Tier II ALs. These data are not included in the IA Data Summary because they did not pass the Data Quality Filter. Radionuclides will be included in Addendum #IA-02-02.</p>
2	<p>The <i>Probability Map of Non-Radionuclides Sum of Ratios Indicator Kriging Results</i> is distorted with respect to other maps and should either be deleted or provided in the same perspective as the other maps. A QC check of the results posted on the map Location of Existing Sample Results above Background Levels or Detection Limits found that results are missing (but are available from the Data Summary Report CD). Missing are Pu and Am results for locations 99A9500-004 thru 008, which are above background levels for surface soils. SS011993 is missing at least phenanthrene (350 µg/kg); SS012193 is missing at least Ni (35.3 µg/kg) and Ag (1.2 µg/kg).</p>	<p>The kriging results map has been deleted.</p> <p>The existing sample results maps have been replotted to more correctly capture information from the database. Specific changes include the following:</p> <ul style="list-style-type: none"> <li>• The algorithm in RADMS was changed so that the first sort routine is the routine that compares the value to background and the second sort is detection limit. Now, all analytes above background are shown on the map even if they are non-detected analytes.</li> <li>• SWD/GIS listed some location codes as groundwater, even though they had borehole samples associated with them. If there were associated soil samples they were included.</li> </ul> <p>Review of the IA database is summarized in Table 1, below. These data are from the IA Data Summary Report. Sample numbers with the 99A9500 prefix were collected from borings drilled at the 980 Pad not IHSS Group 900-4&amp;5. The value of</p>

		350 ug/kg for phenanthrene was not included because it is a nondetected value. The value for silver (Ag) was not included because it is less than the corresponding background value of 1.224 mg/kg. The value for nickel (Ni) is now on the map because it is above background, but is a non-detected analyte.
	<b>Comments from EPA</b>	
	<b>General Comments</b>	
1	This document could be made more user friendly by providing more of the pertinent information in the document itself, so that reviewers are not required to pull tables and text from a number of different sources. This would not involve much additional work and would not make the addendum much more lengthy either. Specifically, add the text for each IA Group from Appendix C of the IASAP to the packets. The maps entitled Location of Existing Sample Results above Detection Limits or Background Levels for IA Group XX should also provide on the map, the background levels, detection limits, and action levels for all results that are posted on the map for easy comparison. (Some maps show columns that provide yes or no response to questions of > Tier 1 or Tier II levels. Just post the level and reviewers can have a better understanding of the comparison).	The background levels plus two standard deviations, detection limits, and ALs have been added to the existing data maps.  Because both Appendix C and the Addendum are part of the of the IASAP adding the text from Appendix C to the Addendum would result in two versions of the same text in the document.  DOE will provide a searchable PDF version of Appendix C to the regulatory agencies and a copy of the IASAP will be available at the regulatory agency onsite offices.
	<b>Specific Comments</b>	
1	A QC check of the results posted on the map Location of Existing Sample Results above Background Levels or	The existing sample results maps have been replotted to more correctly capture information from the database. Specific

	<p>Detection Limits found that results are missing (but available from the Data Summary Report CD). Missing are Pu and Am results for locations 99A9500-004 thru 008; these are above background levels for surface soils. SS011993 missing at least Phenanthrene 350 ug/kg, SS012193 missing at least Ni 35.3 and Ag 1.2.</p>	<p>changes include the following:</p> <ul style="list-style-type: none"> <li>• The algorithm in RADMS was changed so that the first sort routine is the routine that compares the value to background and the second sort is detection limit. Now, all analytes above background are shown on the map even if they are non-detected analytes.</li> <li>• SWD/GIS listed some location codes as groundwater, even though they had borehole samples associated with them. If there were associated soil samples they were included.</li> </ul> <p>Review of the IA database is summarized in Table 1, below. These data are from the IA Data Summary Report. Sample numbers with the 99A9500 prefix were collected from borings drilled at the 980 Pad not IHSS Group 900-4&amp;5. The value of 350 ug/kg for phenanthrene was not included because it is a non detected value. The value for silver (Ag) was not included because it is less than the corresponding background value of 1.224 mg/kg. The value for nickel (Ni) is now on the map because it is above background, but is a non-detected analyte.</p>
2	<p>The table entitled IHSS Group 900-4&amp;5 Input Parameters DATA Values needs some explanation. Are these SOR values, and if so, are they for the existing sample locations. The calculation for at least a few should be shown as well. How is SOR calculated for analytes that have no action level such as phenanthrene, pentadecane, and heptacecane 2, 6, 10, 15-tetrame...? The parameters provided on the following page need some explanation as well. Finally, radionuclide analysis should be added to the list for this group since rads have been detected above</p>	<p>This table and all associated text and maps have been deleted. Please see Industrial Area Sampling and Analysis Plan Fiscal Year 2002, Addendum #IA-02-02.</p> <p>There is no historical evidence that radionuclides were stored at this site. Additionally, drums stored at this site were sampled and radionuclides were not detected. Sampling for radionuclides was conducted in 1988 and these data are summarized in the Phase I RFI/RI Work Plan Rocky Flats Plant Other Outside Closures, Operable Unit 10, Rocky Flats Plant, Golden, Colorado, May.</p>

	<p>background and have historically be stored at this location.</p>	<p>(DOE 1992). Samples from four locations were analyzed for radionuclides. One location indicated that plutonium and americium were above background. Americium was detected at <math>0.15 \pm 0.08</math> (vs. background of 0.045) and plutonium was detected at <math>0.42 \pm 0.18</math> (vs. background of 0.066)</p> <p>Both of these are well below Tier II ALs. These data are not included in the IA Data Summary because they did not pass the Data Quality Filter. Radionuclides will be included in Addendum #IA-02-02.</p>
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**Table 1**

LOCID	DESCRIPTION	CASNO	ANALYTE	RESULT	UNITS	LAB QUALIFIER	COMMENTS
99A9500-004	Borehole 980 Pad	10-12-8	Pu-239	0.185	pCi/g	J	
99A9500-004	Borehole 980 Pad	14596-10-2	Am-241	0.258	pCi/g	J	
99A9500-005	Borehole 980 Pad	10-12-8	Pu-239	0.121	pCi/g	J	
99A9500-005	Borehole 980 Pad	14596-10-2	Am-241	0.075	pCi/g	J	
99A9500-006	Borehole 980 Pad	10-12-8	Pu-239	0.28	pCi/g	J	
99A9500-006	Borehole 980 Pad	14596-10-2	Am-241	0.155	pCi/g	J	
99A9500-007	Borehole 980 Pad	10-12-8	Pu-239	0.106	pCi/g	J	
99A9500-008	Borehole 980 Pad	10-12-8	Pu-239	0.086	pCi/g	J	
99A9500-010	Borehole 980 Pad	14596-10-2	Am-241	0.26	pCi/g	J	
SS012193	IHSS 175 (Paint Shop)	7440-02-0	Nickel	35..3	mg/kg		Greater than background but less than MDL (40 mg/kg)
SS012193	IHSS 175 (Paint Shop)	7440-22-4	Silver	1.2	mg/kg	B	Greater than background (1.224 mg/kg)
SS011993	IHSS 175 (Paint Shop)	85-01-8	Phenanthrene	350	ug/kg	U	Non Detect