



**Department of Energy**

**Ohio Field Office  
Fernald Closure Project  
175 Tri-County Parkway  
Springdale, Ohio 45246**



SEP 5 2006

Mr. James A. Saric, Remedial Project Manager  
United States Environmental Protection Agency  
Region V-SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0193-06

Mr. Thomas Schneider, Project Manager  
Ohio Environmental Protection Agency  
Southwest District Office  
401 East Fifth Street  
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

**TRANSMITTAL OF THE ADDENDUM TO THE CERTIFICATION DESIGN LETTER  
AND CERTIFICATION PROJECT SPECIFIC PLAN FOR AREA 6 GENERAL AREA  
EAST**

- References:
- 1) Certification Design Letter and Certification Project Specific Plan for Area 6 General Area East (Document 20600-PSP-0018, Revision 0) dated May 2006
  - 2) Email, J. Chiou to T. Schneider, "Per your Request - OEPA RTC 7 on Draft Area 6 General Area East Certification Report," dated August 9, 2006
  - 3) Email, T. Schneider to J. Chiou, "Re: Per your Request - OEPA RTC 7 on Draft Area 6 General Area East Certification Report," dated August 10, 2006

This letter and enclosures are being submitted for your review as a draft addendum to the Certification Design Letter (CDL) and Certification Project Specific Plan (PSP) for Area 6 General Area East (Document 20600-PSP-0018). The scope of this addendum is a small strip of land to the south of Soil Stockpile 7 (SP-7), to the north of Area 3B, and included as part of Area 6B and Area 3B Main Drainage Corridor (see Figure 1). This addendum is being submitted as outlined in Ohio Environmental Protection Agency Comment Response 7 emailed on August 9, 2006 and agreed upon by the OEPA on August 10, 2006 (References 2 and 3).

On April 26, 2006, a U.S. Department of Energy owned 5,000-gallon tank trailer overturned during filling operations. Water, sediment and resin beads spilled onto the road and into a ditch line that runs around the north side of Area 3B. The area affected by the spill was cleaned up as required. Once this activity had been completed, there was a necessity to re-certify the affected area. Real-time scanning of the road and the ditch line produced results within acceptable

Mr. James Saric  
Mr. Thomas Schneider

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parameters (see Figures 3 through 9) and based on these results, it has been determined that no further remedial actions are required prior to beginning certification activities. The footprint will be restored immediately after the recertification.

As with other certification units (CUs) in Area 6 General Area East, the certification design follows the general approach outlined in Section 3.4 of the Sitewide Excavation Plan. The scope of this addendum consists of one Group 1 CU for the footprint of the area affected by the spill. This CU design is shown in Figure 2. The overall certification design, sampling, analysis, and validation necessary to demonstrate that soil in this area has met the final remediation levels for all area-specific constituents of concern is presented in the CDL and Certification PSP. Specific information for the CU design of the area affected by the spill is contained in this addendum. The sub-CUs and sample locations presented in Figure 2 and Attachment 1 include the area affected by the tanker spill in Area 6 General Area East. The Sampling and Analytical Requirements as well as the Target Analyte List are included in Attachments 2 and 3 respectively. The Target Analyte Lists from both Area 6 General Area East as well as that of SP-7 will be used for this sampling event.

Upon your approval of this addendum, certification sampling will begin. The results of certification activities for this area will be presented in the final Certification Report for Area 6 General Area East.

If you have any questions or require additional information, please contact me at (513) 648-3139.

Sincerely,

  
Johnny W. Reising  
Director

Enclosures

cc w/enclosures:

J. Desormeau, OH/FCP  
T. Schneider, OEPA-Dayton (three copies of enclosures)  
G. Jablonowski, USEPA-V, SRF-5J  
M. Cullerton, Tetra Tech  
M. Shupe, HSI GeoTrans  
S. Helmer, ODH  
AR Coordinator, Fluor Fernald, Inc./MS6

cc w/o enclosures:

J. Chiou, Fluor Fernald, Inc./MS88  
F. Johnston, Fluor Fernald, Inc./MS12  
C. Murphy, Fluor Fernald, Inc./MS1  
T. Terry, Fluor Fernald, Inc./MS1

## ATTACHMENT 1

## AREA 6 GENERAL AREA EAST TANKER TRUCK SPILL CU SAMPLE LOCATIONS AND IDENTIFIERS

CU	Location	Depth	Sample ID	TALs	Northing	Easting
A6GAE-CSP	CSP-01	0 - 0.5'	A6GAE-CSP-01^RMPS	ABLPQR	481757.165	1348630.47
			A6GAE-CSP-01^L	HI		
	CSP-02	0 - 0.5'	A6GAE-CSP-02^RMPS	ABLPQR	481773.012	1348633.81
			A6GAE-CSP-02^L	HI		
	CSP-03	0 - 0.5'	A6GAE-CSP-03^RMPS	ABLPQR	481788.153	1348636.04
			A6GAE-CSP-03^L	HI		
	CSP-04	0 - 0.5'	A6GAE-CSP-04^RMPS	ABLPQR	481814.702	1348635.87
			A6GAE-CSP-04^L	HI		
	CSP-05	0 - 0.5'	A6GAE-CSP-05^RMPS	ABLPQR	481736.824	1348866.06
			A6GAE-CSP-05^L	HI		
	CSP-06	0 - 0.5'	A6GAE-CSP-06^RMPS	ABLPQR	481751.615	1348659.87
			A6GAE-CSP-06^L	HI		
	CSP-07	0 - 0.5'	A6GAE-CSP-07^RMPS	ABLPQR	481752.1	1348593.16
			A6GAE-CSP-07^L	HI		
	CSP-08	0 - 0.5'	A6GAE-CSP-08^RMPS	ABLPQR	481693.71	1348460.94
			A6GAE-CSP-08^L	HI		
	CSP-09D	0 - 0.5'	A6GAE-CSP-09^RMPS	ABLPQR	481733.13	1348525.78
			A6GAE-CSP-09^RMPS-D	ABLPQR		
			A6GAE-CSP-09^L	HI		
			A6GAE-CSP-09^L-D	HI		
	CSP-10	0 - 0.5'	A6GAE-CSP-10^RMPS	ABLPQR	481738.68	1348692.17
			A6GAE-CSP-10^L	HI		
	CSP-11	0 - 0.5'	A6GAE-CSP-11^RMPS	ABLPQR	481764.49	1348731.67
			A6GAE-CSP-11^L	HI		
CSP-12	0 - 0.5'	A6GAE-CSP-12^RMPS	ABLPQR	481722.55	1348795.17	
		A6GAE-CSP-12^L	HI			

**ATTACHMENT 2  
SAMPLING AND ANALYTICAL REQUIREMENTS**

Analyte	Method	Sample Matrix	ASL	Preservation	Hold Time	TAT	Container <sup>b</sup>	Minimum Mass/ Volume
<u>Rads, Metals, PCBs, Pesticides and/or SVOCs</u> (TALs A, B, L, P, Q and R)	Gamma Spec and LSC or GPC	Solid	D/E <sup>a</sup>	Cool to 4°C	12 months	EDD gamma 10 days Final gamma 14 days <sup>c</sup> All other Rads 10 days	Glass with Teflon-lined lid	700 g (2100 g) <sup>c</sup>
	ICP-AES or ICP-MS					10 days		
	GC					10 days		
	GC					10 days		
<u>Metals</u> (TAL Q)	ICP-AES or ICP-MS	Liquid <sup>d</sup>	D/E <sup>a</sup>	HNO <sub>3</sub> to pH<2	6 months	10 days	Polyethylene	500 mL
<u>VOCs</u> (TALs H and I)	GC-MS	Solid	D/E <sup>a</sup>	Cool to 4°C	48 hours	10 days	3 x 1-Encore Sampler <sup>c</sup> plus 1 x 2-oz. Jar for % moisture	Each full Encore Sampler <sup>c</sup> will hold approx. 5 g.
<u>VOCs</u> (TALs H and I)	GC-MS	Liquid (trip blank)	D/E <sup>a</sup>	H <sub>2</sub> SO <sub>4</sub> to pH<2 Cool to 4°C	14 days	10 days	3 x 40-mL glass with Teflon-lined septa	120 mL (no head space)

Special instructions (Samplers):

<sup>a</sup> Samples will be analyzed according to Analytical Support Level (ASL) D requirements but the minimum detection level may cause some analyses to be considered ASL E.

<sup>b</sup> Sample container types may be changed at the direction of the Field Sampling Lead, as long as the volume requirements, container compatibility requirements, and Sitewide CERCLA Quality Assurance Project Plan (SCQ) requirements are met.

<sup>c</sup> At the direction of the Field Sampling Lead, triple the specified volume must be collected for all samples at one location in the CU in order for the contract laboratory to perform the required quality control analysis. The samples shall be identified on the Chain of Custody/Request for Analysis forms as "designated for laboratory QC".

<sup>d</sup> If "push tubes" are used for sampling, the off-site laboratories will be sent container blanks. If an alternative sample method is used, a rinsate will be collected by the Field Technicians.

<sup>e</sup> One sample per CU will be selected for radium-226 analysis utilizing a 21-day in-growth with a 25-day turnaround time (TAT). Samples with a 7-day in-growth will be denoted by a "7DAY" suffix, while the sample chosen as a 21-day in-growth will be denoted by a "21DAY" suffix attached to the laboratory data.

EDD - electronic data deliverable

GC-MS - gas chromatography/mass spectroscopy

GPC - gas proportional counting

ICP-AES - inductively coupled plasma - atomic emission spectrometry

ICP-MS - inductively coupled plasma - mass spectrometry

LSC - liquid scintillation counting

SVOC - semi-volatile compound

VOC - volatile organic compound

**ATTACHMENT 2  
SAMPLING AND ANALYTICAL REQUIREMENTS**

Special Instructions (SPL/Lab):

Field QC will be collected as part of this sampling effort.

Analytical data validation is required - Validation Support Level D.

Data package requirement - Certificates of Analysis within 10 days. Full Analytical Support Level D/E data package within 14 days.

Historical Data for shipping: 3510 mg/kg total uranium from boring A6WP-B-61.

Additional data that may be needed for shipping is below:

<b>Boring</b>	<b>FACTS_ID</b>	<b>Parameter</b>	<b>Result</b>	<b>VQ</b>	<b>Units</b>
A7-SWRBC-S-3	200505173	Radium-228	3.53	-	pCi/g
A7-SWRBC-S-4	200505174	Radium-226	1230	-	pCi/g
A7-SWRBC-S-4	200505174	Thorium-230	118	-	pCi/g
A7-SWRBC-S-4	200505174	Thorium-232	4.49	-	pCi/g
A6WP-CWS-11	200498010	Technetium-99	7030	NV	pCi/g

**ATTACHMENT 3  
TARGET ANALYTE LISTS**

**20600-PSP-0018-A  
(Radiological - ASL D/E<sup>1</sup>)  
(estimated 13 analyses)**

<b>Analyte</b>	<b>FRL</b>	<b>MDL</b>
Total Uranium	82 mg/kg	8.2 mg/kg
Total Uranium (hi-leach)	20 mg/kg	2.0 mg/kg
Radium-226	1.7 pCi/g	0.17 pCi/g
Radium-228	1.8 pCi/g	0.18 pCi/g
Thorium-228	1.7 pCi/g	0.17 pCi/g
Thorium-232	1.5 pCi/g	0.15 pCi/g

**20600-PSP-0018-B  
(PCBs - ASL D/E<sup>1</sup>)  
(estimated 13 analyses)**

<b>Analyte</b>	<b>FRL</b>	<b>MDL</b>
Aroclor-1254	0.13 mg/kg	0.013 mg/kg
Aroclor-1260	0.13 mg/kg	0.013 mg/kg

**20600-PSP-0018-H  
(VOCs - ASL D/E<sup>1</sup>)  
(estimated 13 analyses)**

<b>Analyte</b>	<b>FRL</b>	<b>MDL</b>	<b>MDL (water)</b>
Bromodichloromethane	4.0 mg/kg	0.4 mg/kg	10 µg/L
1,1-Dichloroethene	0.41 mg/kg	0.041 mg/kg	10 µg/L
1,2-Dichloroethene	0.16 mg/kg	0.016 mg/kg	10 µg/L
Tetrachloroethene	3.6 mg/kg	0.36 mg/kg	10 µg/L
Trichloroethene	25.0 mg/kg	2.5 mg/kg	10 µg/L

**20600-PSP-0018-I  
(VOCs - ASL D/E<sup>1</sup>)  
(estimated 13 analyses)**

<b>Analyte</b>	<b>FRL</b>	<b>MDL</b>	<b>MDL (water)</b>
Methylene Chloride	37 mg/kg	3.7 mg/kg	10 µg/L
Toluene	100,000 mg/kg	10,000 mg/kg	10 µg/L
1,1,1-Trichloroethane <sup>3</sup>	4.3 mg/kg	0.43 mg/kg	10 µg/L
Xylenes	920,000 mg/kg	92,000 mg/kg	10 µg/L

**20600-PSP-0018-L  
(Pesticides - ASL D/E<sup>1</sup>)  
(estimated 13 analyses)**

<b>Analyte</b>	<b>FRL</b>	<b>MDL</b>
Dieldrin	0.015 mg/kg	0.0015 mg/kg

**ATTACHMENT 3  
TARGET ANALYTE LISTS**

**20600-PSP-0018-P  
(ASL D/E<sup>1</sup>)  
(estimated 13 analyses)**

<b>Analyte</b>	<b>FRL</b>	<b>MDL</b>
Cesium-137	1.4 pCi/g	0.14 pCi/g
Lead-210	38 pCi/g	3.8 pCi/g
Neptunium-237	3.2 pCi/g	0.32 pCi/g
Technetium-99	29.1 mg/kg <sup>2</sup>	2.91 mg/kg <sup>2</sup>
Thorium-230	280 pCi/g	28.0 pCi/g

**20600-PSP-0018-Q  
(ASL D/E<sup>1</sup>)  
(estimated 13 analyses)**

<b>Analyte</b>	<b>FRL</b>	<b>MDL</b>	<b>MDL (water)</b>
Antimony	96 mg/kg	9.6 mg/kg	1.5 mg/L
Arsenic	12 mg/kg	1.2 mg/kg	1.8 mg/L
Barium	68000 mg/kg	6800 mg/kg	10,200 mg/L
Beryllium	1.5 mg/kg	0.15 mg/kg	0.22 mg/L
Cadmium	82 mg/kg	8.2 mg/kg	0.75 mg/L
Chromium	300 mg/kg	30.0 mg/kg	45 mg/L
Lead	400 mg/kg	40.0 mg/kg	30 mg/L
Mercury	7.5 mg/kg	0.75 mg/kg	0.75 mg/L
Molybdenum	2900 mg/kg	290 mg/kg	1.5 mg/L
Selenium	5400 mg/kg	540 mg/kg	810 mg/L
Silver	29000 mg/kg	2900 mg/kg	1.5 mg/L

**20600-PSP-0018-R  
(ASL D/E<sup>1</sup>)  
(estimated 13 analyses)**

<b>Analyte</b>	<b>FRL/BTV</b>	<b>MDL<sup>4</sup></b>
Benzo(a)pyrene	2.0 mg/kg / 1.0 mg/kg	0.1 mg/kg
Benzo(b)fluoranthene	20 mg/kg / 1.0 mg/kg	0.1 mg/kg
Dibenzo(a,h)anthracene	2.0 mg/kg / 0.088 mg/kg	0.01 mg/kg <sup>4</sup>
Indeno(1,2,3-cd)pyrene	20 mg/kg / 1.0 mg/kg	0.1 mg/kg

<sup>1</sup> Analytical requirements will meet ASL D but the MDL may cause some analyses to be considered ASL E.

<sup>2</sup> Where the WAC is less than the FRL (as with technetium-99), the WAC will be used for data evaluation purposes.

<sup>3</sup> The FRL sited is actually for 1,1,2-trichloroethane. This was used because there is no FRL for 1,1,1-trichloroethane.

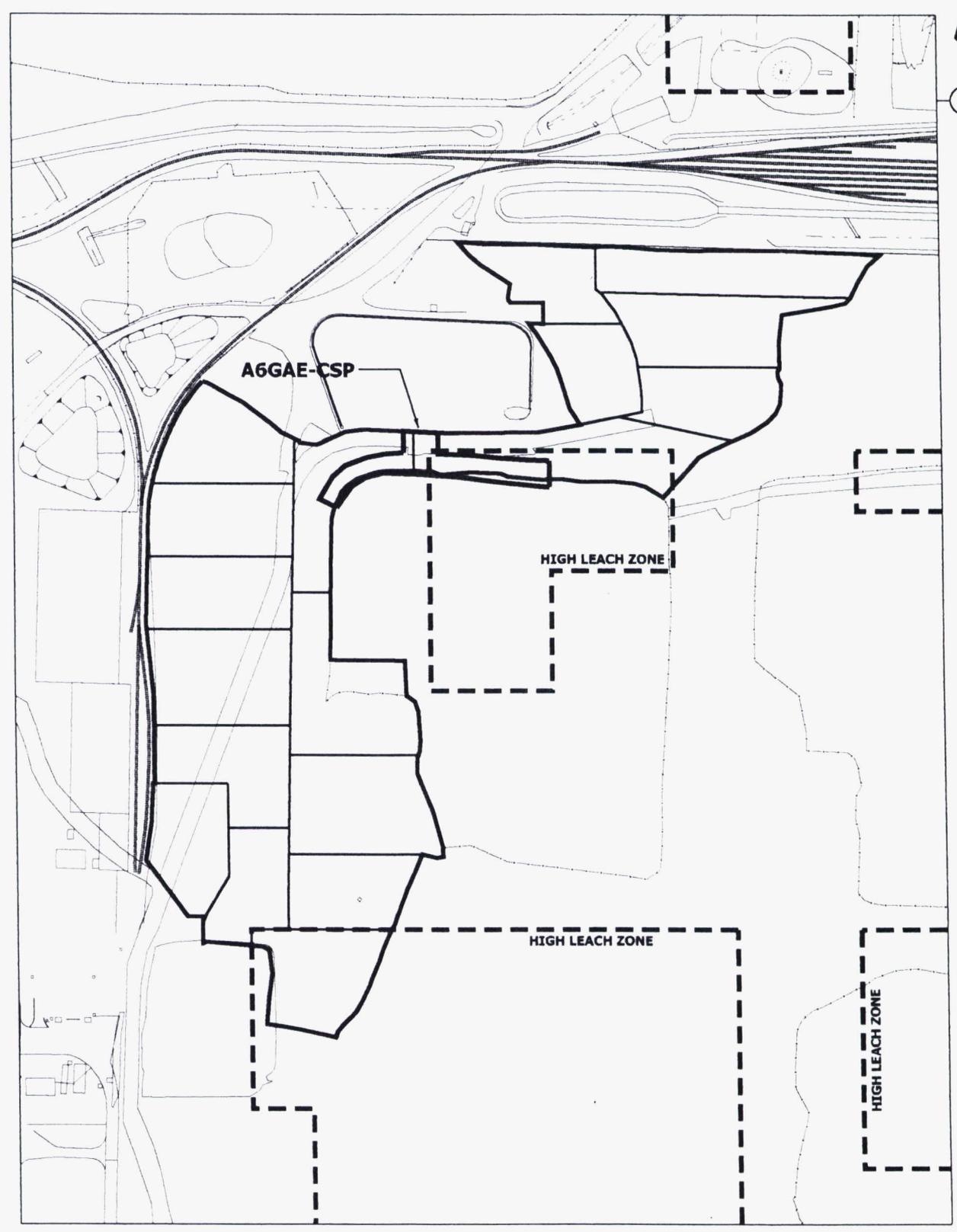
<sup>4</sup> Where both the FRL and the BTV are present, the MDL is based on the lower of the two values given.

µg/L - micrograms per liter  
mg/L - milligrams per liter  
pCi/L - picoCuries per liter

V:\2006\m1\2\2006\2006\_08\_202.dgn

STATE PLANNING COORDINATE SYSTEM 1983

30-AUG-2006



LEGEND:

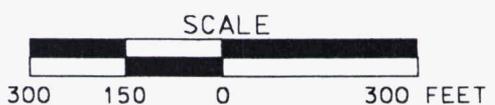
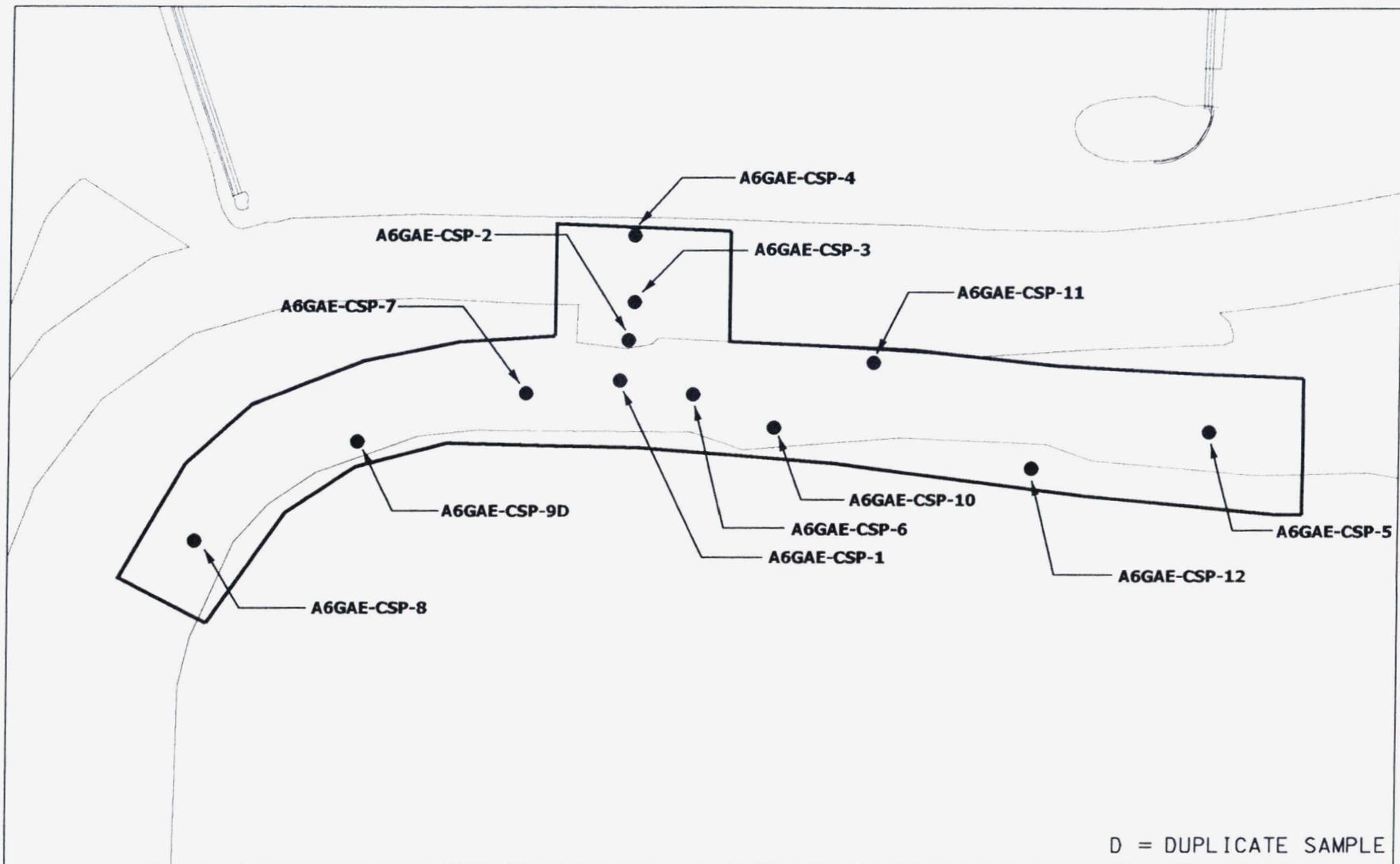


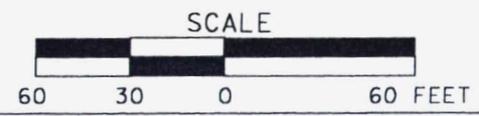
FIGURE 1. AREA 6 GENERAL AREA EAST TANKER TRUCK SPILL CU LOCATION MAP



v:\#2fm12\dgn#a6\_ge\_203.dgn  
 STATE PLANAR COORDINATE SYSTEM 1983

LEGEND:

● PROPOSED SAMPLE



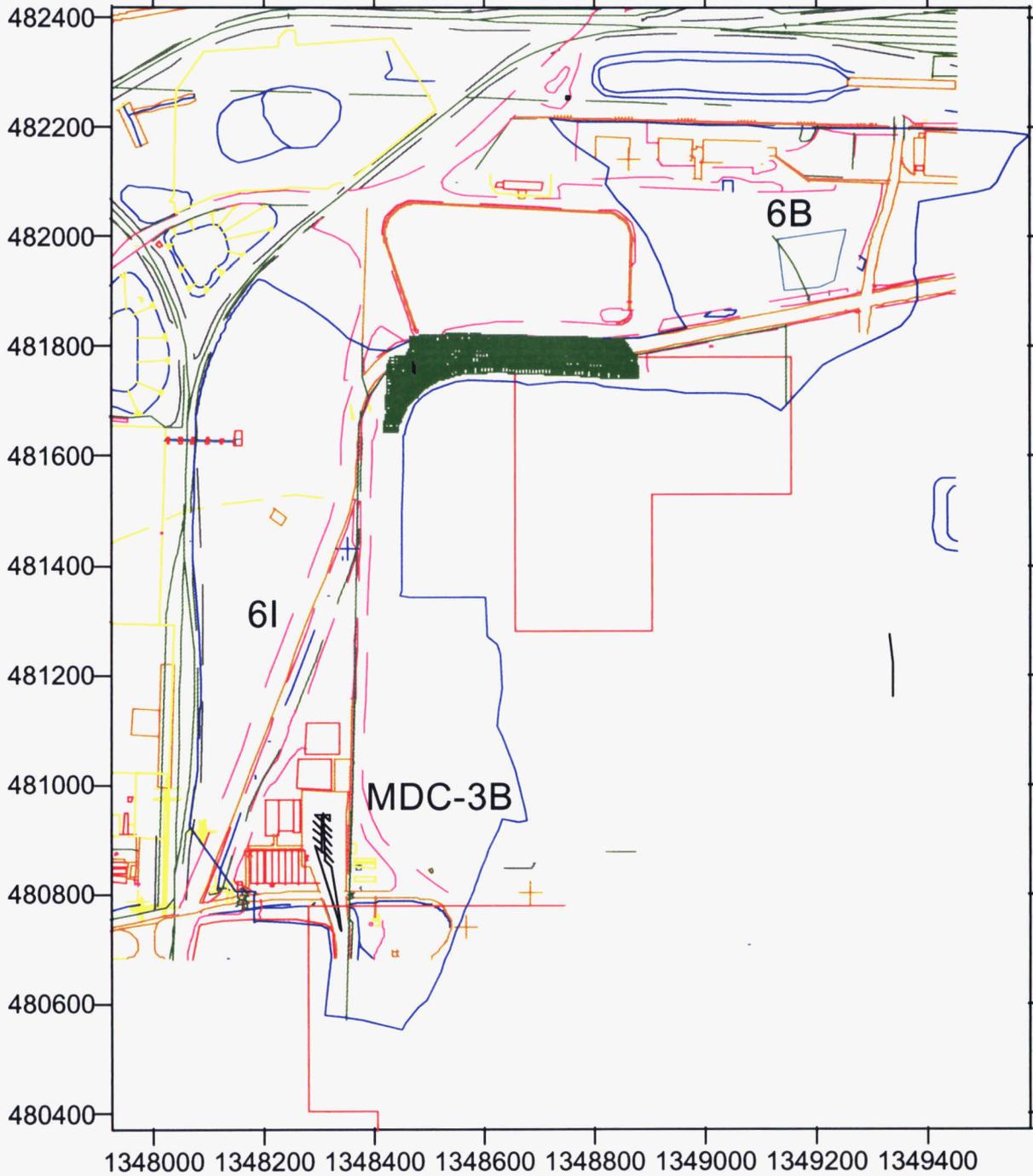
DRAFT

FIGURE 2. CU, SUB-CU & SAMPLE LOCATIONS FOR CERTIFICATION OF TANKER SPILL AREA

# Figure 3 Area 6 Gen. Area East - Precertification of Tanker Spill Area Phase 1 Total Gross Counts per Second

Data Group: RSS4\_1093\_05-10-2006

Measurement Date: 05-10-2006



High Leachability boundary      CDL Boundary      Sub Area Boundary

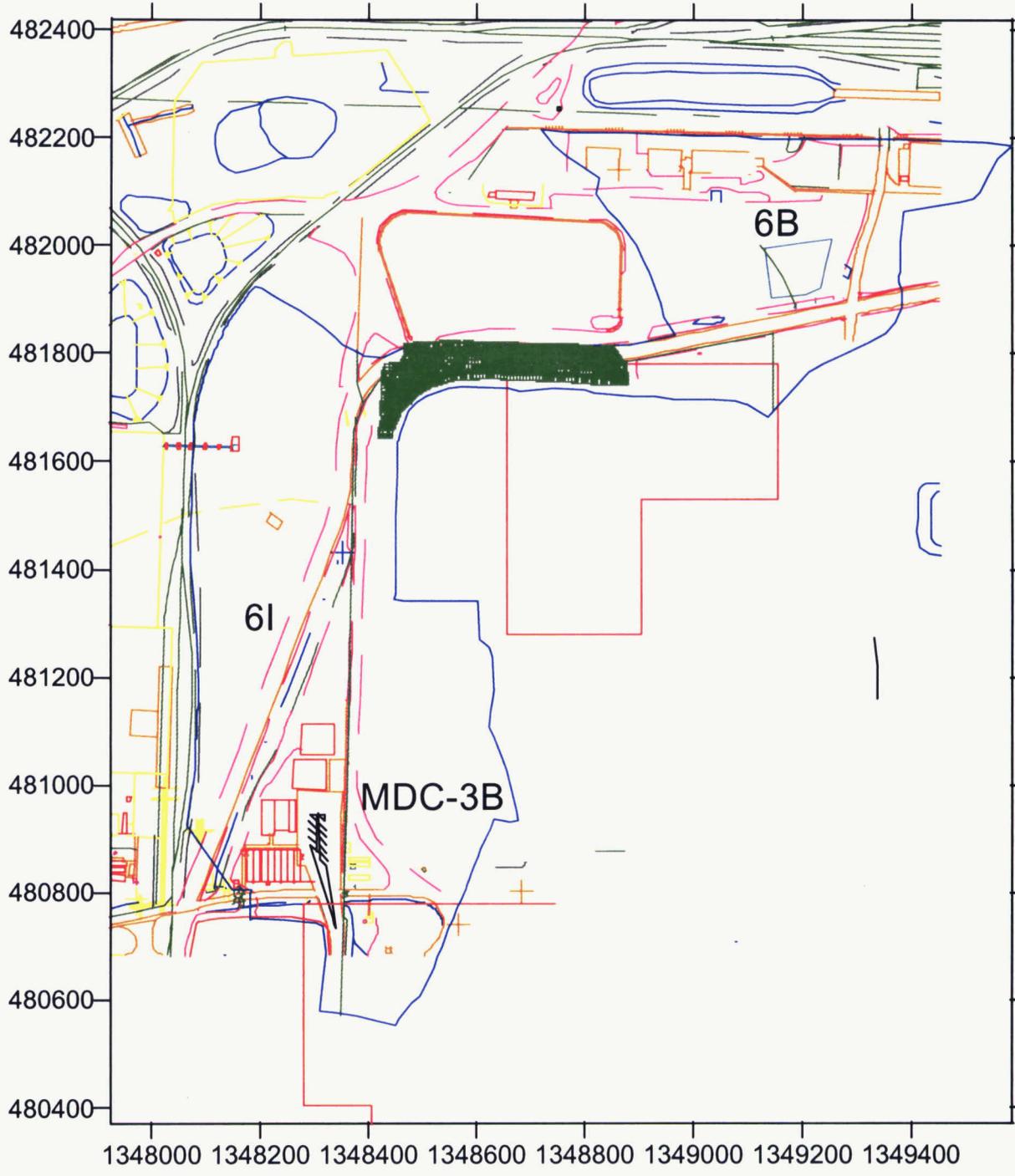
Nal Tcps	
0 to 3000	(lightest green)
3000 to 5000	(light green)
5000 to 15000	(medium green)
15000 to 18000	(dark green)
18000 to 99999	(darkest green)

RTIMP DWG ID: GAE\_CONF\_P1\_TC\_Spill.srf  
Project ID: Gen Char for Site Soil Remed 20300-PSP-0011  
Prepared: D.Seiller 08-29-2006  
Support Data: GAE\_CONF\_P1\_Spill.xls

# Figure 4 Area 6 Gen. Area East - Precertification of Tanker Spill Area Phase 1 Moisture Corrected Radium-226

Data Group: RSS4\_1093\_05-10-2006

Measurement Date: 05-10-2006



— High Leachability boundary      — CDL Boundary      — Sub Area Boundary

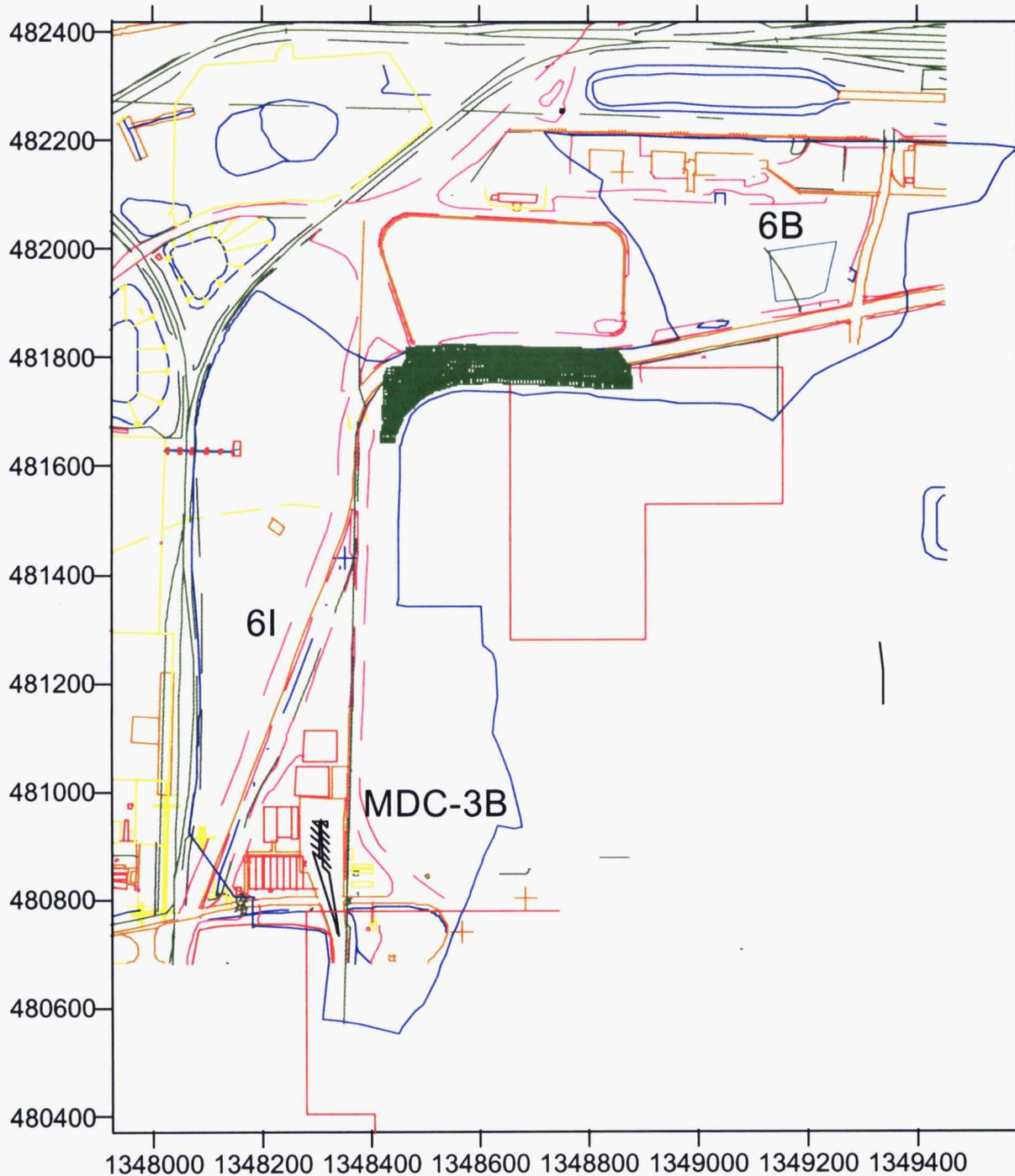
Nal Ra-226 pCi/g	
□	-9999 to 5.1
□	5.1 to 9999

RTIMP DWG ID: GAE\_CONF\_P1\_RA\_Spill.srf  
Project ID: Gen Char for Site Soil Remed 20300-PSP-0011  
Prepared: D.Seiller 08-29-2006  
Support Data: GAE\_CONF\_P1\_Spill.xls

# Figure 5 Area 6 Gen. Area East - Precertification of Tanker Spill Area Phase 1 Moisture Corrected Thorium-232

Data Group: RSS4\_1093\_05-10-2006

Measurement Date: 05-10-2006



— High Leachability boundary    
 — CDL Boundary    
 — Sub Area Boundary

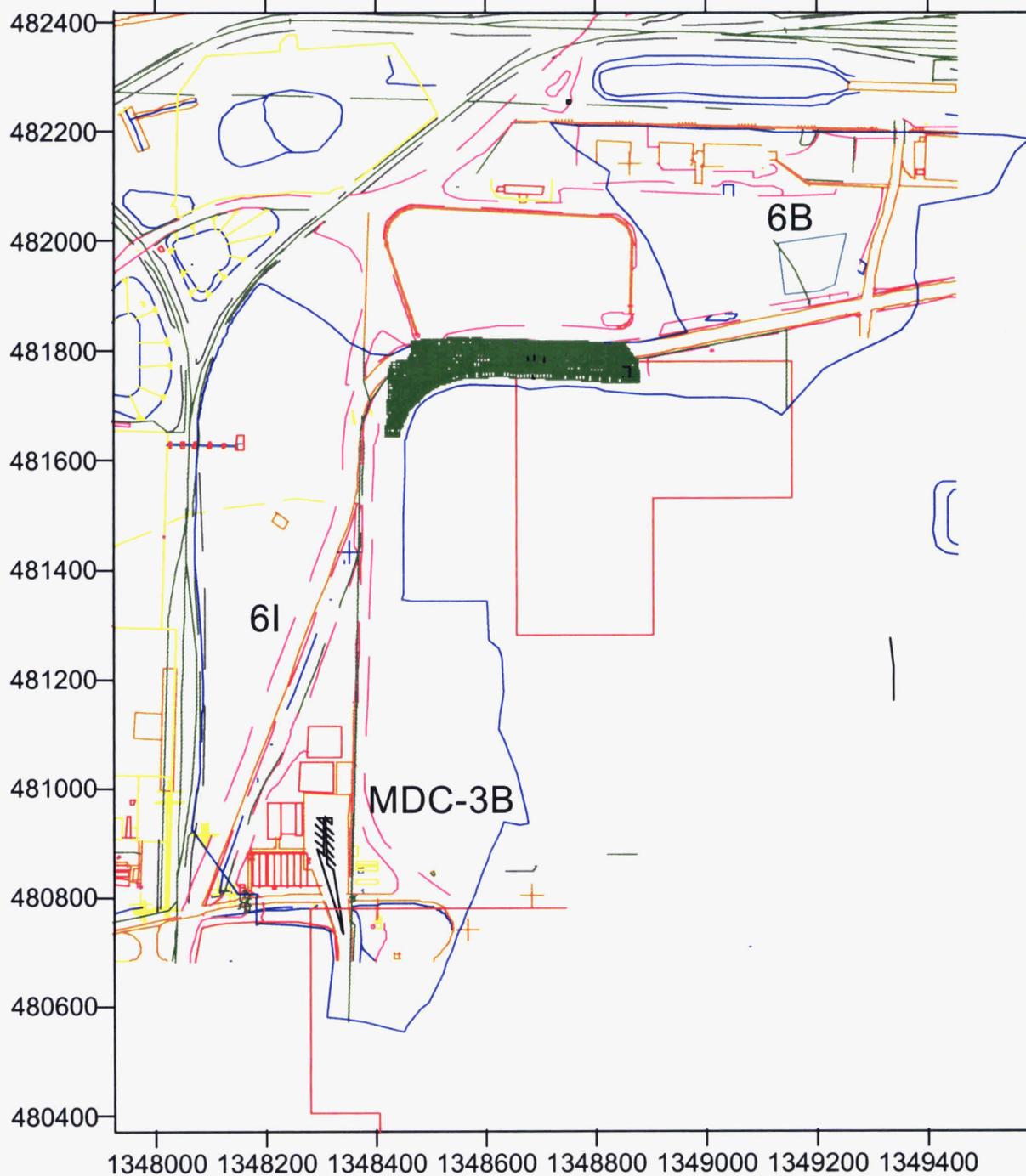
Nal Th-232 pCi/g	
	-9999 to 4.5
	4.5 to 9999

RTIMP DWG ID: GAE\_CONF\_P1\_TH\_Spill.srf  
 Project ID: Gen Char for Site Soil Remed 20300-PSP-0011  
 Prepared: D.Seiller 08-29-2006  
 Support Data: GAE\_CONF\_P1\_Spill.xls

# Figure 6 Area 6 Gen. Area East - Precertification of Tanker Spill Area Phase 1 Moisture Corrected Total Uranium

Data Group: RSS4\_1093\_05-10-2006

Measurement Date: 05-10-2006



— High Leachability boundary    
 — CDL Boundary    
 — Sub Area Boundary

Nal TU ppm Non Hi Leachability Area	
	-9999 to 246
	246 to 875
	875 to 9999

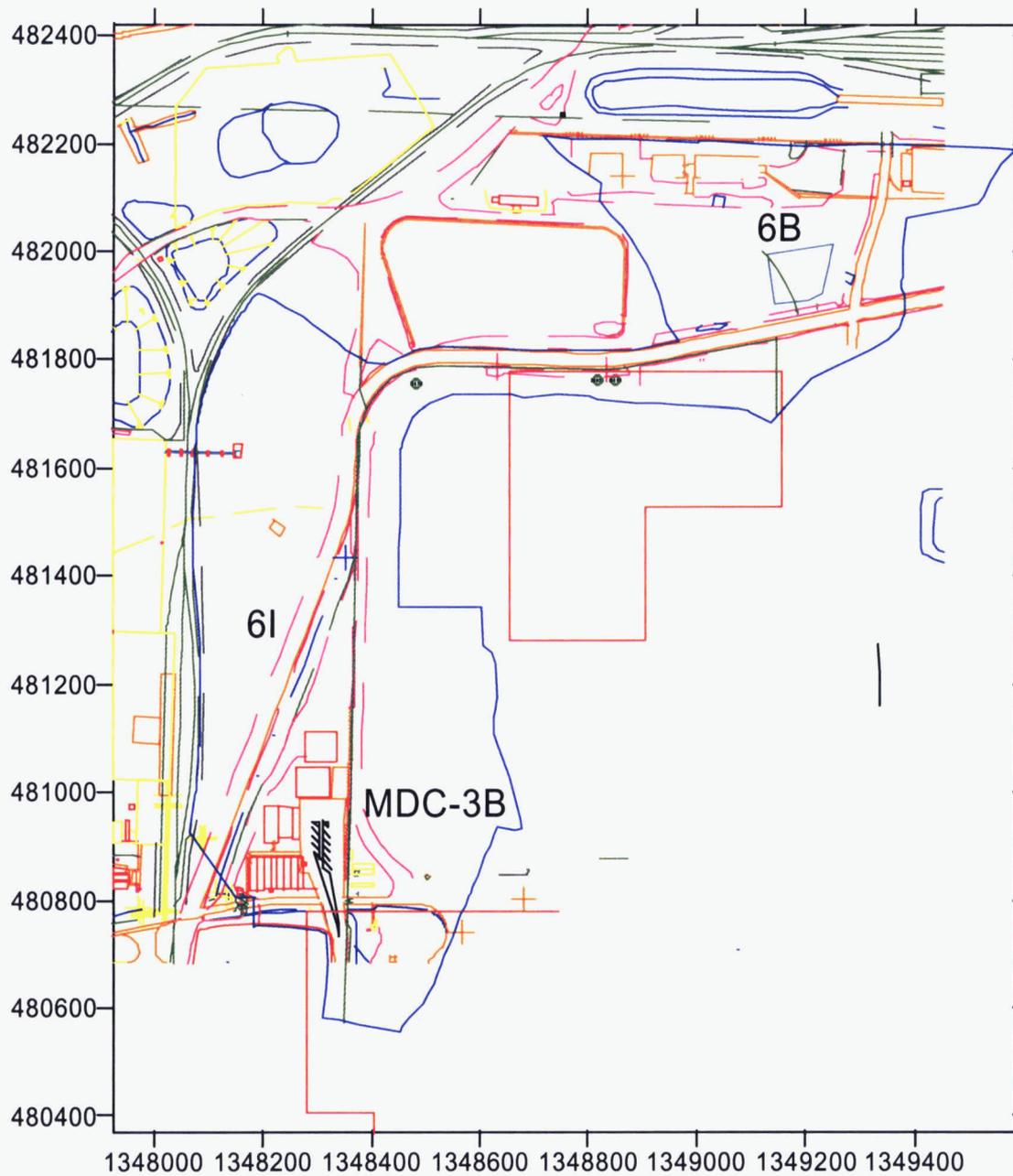
Nal TU ppm Hi Leachability Area	
	-9999 to 60
	60 to 875
	875 to 9999

RTIMP DWG ID: GAE\_CONF\_P1\_TU\_Spill.srf  
 Project ID: Gen Char for Site Soil Remed 20300-PSP-0011  
 Prepared: D.Seiller 08-29-2006  
 Support Data: GAE\_CONF\_P1\_Spill.xls

# Figure 7 Area 6 Gen. Area East - Precertification of Tanker Spill Area Phase 2 Moisture Corrected Radium-226

Data Groups: 40743\_05-10-2006,40743\_05-15-2006

Measurement Period:05-10-2006 thru 05-15-2006



— High Leachability boundary      — CDL Boundary      — Sub Area Boundary

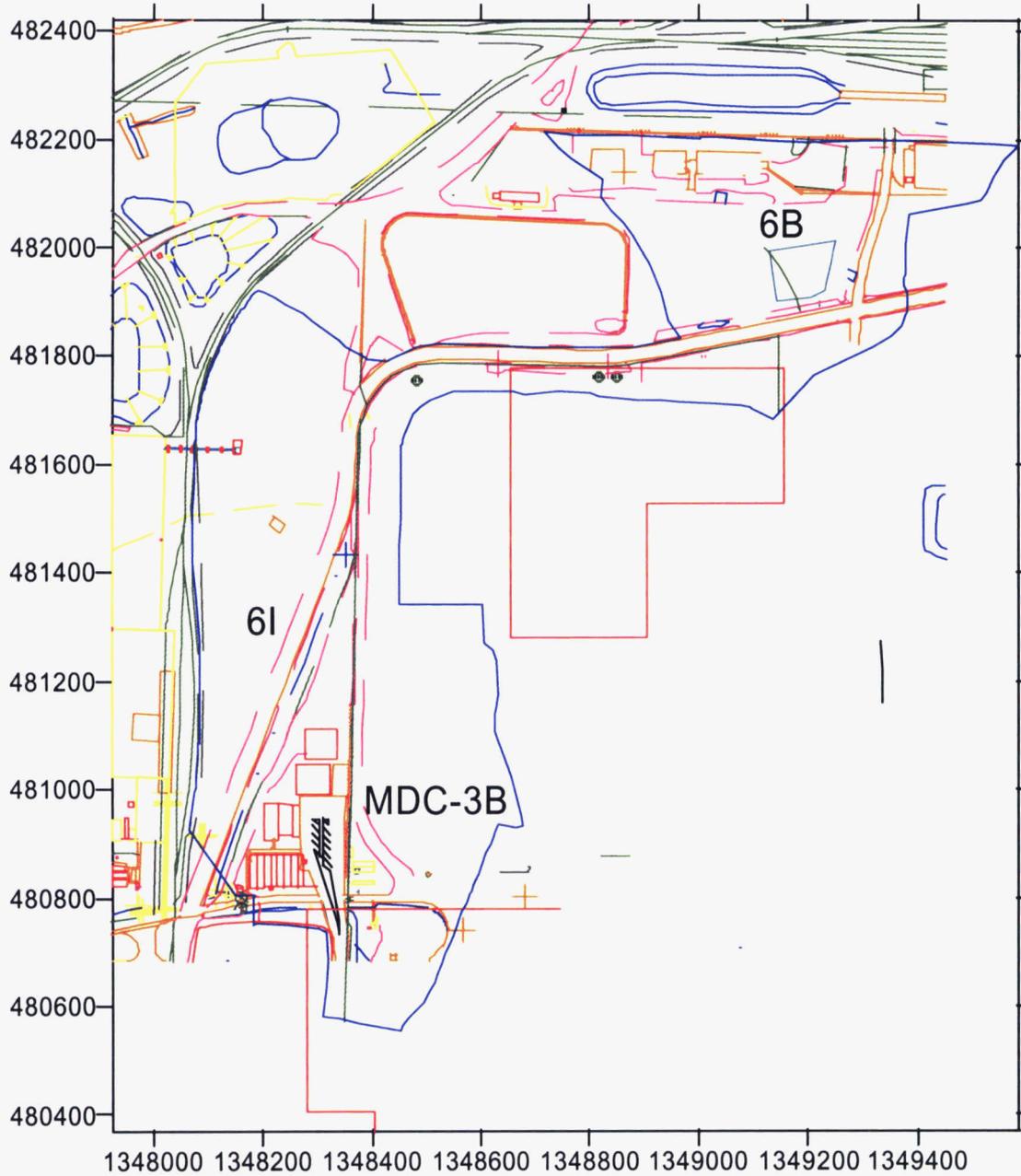
HPGe Ra-226 pCi/g	
○	-999 to 5.1
○	5.1 to 999

RTIMP DWG ID: GAE\_CONF\_P2\_RA\_Spill.srf  
 Project ID: Gen Char for Site Soil Remed 20300-PSP-0011  
 Prepared: D.Seiller 08-29-2006  
 Support Data: GAE\_CONF\_P2\_Spill.xls

# Figure 8 Area 6 Gen. Area East - Precertification of Tanker Spill Area Phase 2 Moisture Corrected Thorium-232

Data Groups: 40743\_05-10-2006,40743\_05-15-2006

Measurement Period:05-10-2006 thru 05-15-2006



— High Leachability boundary     
 — CDL Boundary     
 — Sub Area Boundary

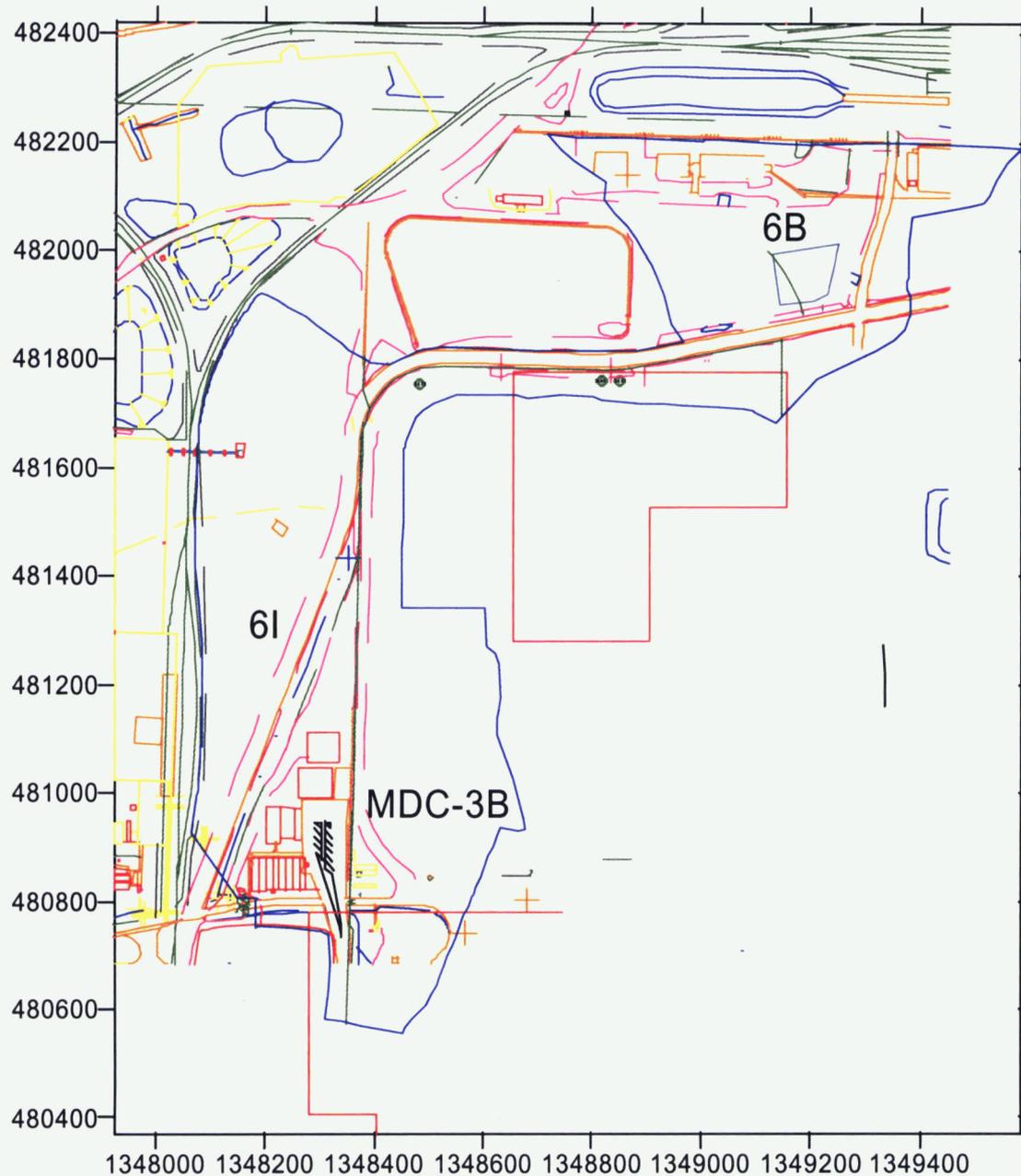
HPGe Th-232 pCi/g	
○	-999 to 4.5
○	4.5 to 999

RTIMP DWG ID: GAE\_CONF\_P2\_TH\_Spill.srf  
 Project ID: Gen Char for Site Soil Remed 20300-PSP-0011  
 Prepared: D.Seiller 08-29-2006  
 Support Data: GAE\_CONF\_P2\_Spill.xls

# Figure 9 Area 6 Gen. Area East - Precertification of Tanker Spill Area Phase 2 Moisture Corrected Total Uranium

Data Groups: 40743\_05-10-2006,40743\_05-15-2006

Measurement Period:05-10-2006 thru 05-15-2006



——— High Leachability boundary    
 ——— CDL Boundary    
 ——— Sub Area Boundary

HPGe TU ppm  
High Leachability Area

- -999 to 60
- 60 to 999

HPGe TU ppm  
Non-High Leachability Area

- -999 to 246
- 246 to 999

RTIMP DWG ID: GAE\_CONF\_P2\_TU\_Spill.srf  
 Project ID: Gen Char for Site Soil Remed 20300-PSP-0011  
 Prepared: D.Seiller 08-29-2006  
 Support Data: GAE\_CONF\_P2\_Spill.xls