Sample Tracking Log

Sample Tracking Logs

The Sample Tracking Logs serve as the "table of contents" for finding each sample's Sample Information Sheet within the logbook and will provide a quick and easy means of keeping track of all the samples that we've collected and have yet to collect.

Instructions

Collect up to 108 samples for the OU 7-13/14 program, and up to 10 interstitial soils for the EPA, as delineated below, and record the date and page number of the Sample Information Sheet in the Sample Tracking Log tables that follow. Sample numbers are provided in the STL; for each sample number, fill in the date the sample was collected and the page number of the associated Sample Information Sheet where details about the sample are recorded.

Summary of Samples to be Collected

Sample	Characteristics	OU 7-13/14 Project			TOTAL OU 7-13/14	EPA
		PRDT	RWSC	OCVZ		
Inorganic sludge (741/742)	Reddish, layered with Portland cement	10 (same tray OK)	3 (from 3 trays)		**13**	
Organic Sludge (743)	Yellow/white, granular/crystalline, or flakes, top has Oil-Dri, oil	45 (same tray OK)	3 (from 3 trays)	11 (from 10 trays, 1 duplicate)	**59**	
Interstitial soils	Soil showing evidence of historical leakage		36		**36**	**0-10***
TOTAL		**55**	**42**	**11**	**108**	

*Each EPA sample consists of 2-250 mL jars.

Note: For interstitial soils, record the sample number of any sludge samples collected nearby, and the sample number of any co-located EPA interstitial soils.

741/742 (INORGANIC) SLUDGE SAMPLE TRACKING LOG

Sample #	Date collected	Project (P/R)[1]	Page #
P9GP01015G	2/1/04	P	134
P9GP02015G	2/1/04	P	134
P9GP03015G	2/1/04	P	138
P9GP04015G	2/1/04	P	138
P9GP05015G	2/1/04	P	138
~~P9GP06015G~~	~~2/2/04~~	~~P~~	~~140~~
~~P9GP07015G~~	~~2/5/04~~	~~P~~	~~154~~
P9GP08015G			
P9GP09015G			
P9GP10015G			
P9GP11015G			
P9GP12015G			
P9GP13015G			
P96P06015G	2/5/04	P	154
P96P07015G	2/5/04	P	154

~~2/5/04 P 154~~

erroneously labeled as 741 sludge

These are 743 sludges

P = PRDT (Gretchen Matthern). 10 inorganic samples needed; can be collected from one tray.

R = RWSC (Larry Hull). 3 inorganic samples needed; should be collected from different trays.

NOTE: PAGE 22
has NOT yet been
collected gp 2-5-04

P= 45 R= 3 O = 11

41 P's
3 R's
10

743 (ORGANIC) SLUDGE SAMPLE TRACKING LOG

Sample #	Date collected	Project (P/R/O)[1]	Page #
P9GR01012G	1/31/04	P	~~125~~ 126
P9GR02012G	1/31/04	P	126
P9GR03012G	1/31/04	P	126
P9GR04012G	2-1-04	R	130
P9GR05012G	2-1-04	P	130
P9GR06012G	2-1-04	P	132
P9GR07012G	2-1-04	P	132
P9GR08012G	2-1-04	P	132
P9GR09012G	2-1-04	P	132
P9GR10012G	2-1-04	P	132
P9GR11012G	2-1-04	P	132
P9GR12012G	2-1-04	P	132
P9GR13012G	2-1-04	P	132
P9GR14012G	2-1-04	P	132
P9GR15012G	2-1-04	P	132
P9GR16012G	2-2-04	P	148
P9GR17012G	2-2-04	P	148
P9GR18012G	2-2-04	P	148
P9GR19012G	2/2/04	P	146
P9GR20012G	2/2/04	R	142
P9GR21012G	02/05/04	P	151-2
P9GR22012G	~~2/5/04~~ 2/12/04	P	168
P9GR23012G	2/12/04	R	170
P9GR24012G	2/13/04		?
P9GR25012G	2/15/04	O #1	184
P9GR26012G	2/15/04	~~P~~ O	185
P9GR27012G	2/15/04	~~P~~ O	185
P9GR28012G	2/15/04	~~P~~ O	185
P9GR29012G	2/15/04	~~P~~ O	185
P9GR30012G	2/15/04	~~P~~ O	185

Sample #	Date collected	Project (P/R/O)[1]	Page #
P9GR31012G	2/15/04	~~P~~ O	185
P9GR32012G	2/15/04	~~P~~ O	185
P9GR33012G	2/15/04	~~P~~ O	185
P9GR34012G	2/15/04	~~P~~ O	185
P9GR35012G	2/15/04	~~P~~ O	185
P9GR36012G	2/15/04	P	185
P9GR37012G	2/15/04	P	185
P9GR38012G	2/15/04	P	185
P9GR39012G	2/15/04	P	185
P9GR40012G	2/15/04	P	185
P9GR41012G	2/15/04	P	185
P9GR42012G	2/15/04	P	185
P9GR43012G	2/15/04	P	185
P9GR44012G	2/15/04	P	185
P9GR45012G	2/16/04	P	188
P9GR46012G	2/16/04	P	188
P9GR47012G	2/16/04	P	188
P9GR48012G	2/16/04	P	188
P9GR49012G	2/16/04	~~O~~ P	188
P9GR50012G	2/16/04	~~O~~ P	188
P9GR51012G	2/16/04	~~O~~ P	188
P9GR52012G	2/16/04	~~O~~ P	188
P9GR53012G	2/16/04	~~O~~ P	188
P9GR54012G	2/16/04	~~O~~ P	188
P9GR55012G	2/16/04	~~O~~ P	188
P9GR56012G	2/16/04	~~O~~ P	188
P9GR57012G	2/16/04	~~O~~ P	188
P9GR58012G	2/16/04	~~O~~ P	188
P9GR59012G			
No sample			
label?	For	#59	

1. P=PRDT (Gretchen Matthern). 45 organic samples needed; can be collected from one tray.
✓ R=RWSC (Larry Hull). 3 organic samples needed; should be collected from different trays.
O=OCVZ (Jeff Sondrup). 11 organic samples needed; 10 from different trays, 1 dup.

<over>

02/16/04 9:52 TEB — discussion w/ Jean N.
decided to reassign O & P
jars from 02/15/04.
#25 — 44 were from presumed
bottom of drum and with
sheen — "wet". #45 — 58
were from presumed ~~bottom of~~
top of drum and dry but of
same color and consistency.
All believed to be of same
sludge mass. Decided that
wet samples were better
candidates for OCVZ, get
all from single drum.

INTERSTITIAL SOIL SAMPLE TRACKING LOG

Sample #	Date collected	Page #	Sludge Sample #[1]	EPA Sample #[2]
P9GT01016G	2/2/04	144	P96R200126	
P9GT02016G	2/2/04	150	N/A	N/A
P9GT03016G	2/8/04 POS1	156	P9GT03016G	
P9GT04016G	2/8/04 POS2	160	PGT 04016G	
P9GT05016G	2/8/04 POS1	158	P9GT05016G	
P9GT06016G	2/8/04 POS2	164	P9GT06016G	
P9GT07016G	2/12/04 POS1	166	N/A	N/A
P9GT08016G	2/13/04	174	P9GT08016G	
P9GT09016G	2/13/04	174	P9GT09016G	
P9GT10016G	2/14/04	178	P9GT10016G	
P9GT11016G	2/14/04	180	P9GT11016G	
P9GT12016G	2/14/04	182	P9GT12016G	
P9GT13016G	2/17/04	~~190~~ 191		NA
P9GT14016G	2/17/04	190		
P9GT15016G	2/17/04	190		
P9GT16016G	2/17/04	190		
P9GT17016G	2/17/04	190		
P9GT18016G	2/17/04	190		
P9GT19016G	2/17/04	190		
P9GT20016G	2/17/04	190		
P9GT21016G	2/17/04	190		
P9GT22016G	2/17/04	192		
P9GT23016G	2/17/04	192		
P9GT24016G	2/17/04	192		
P9GT25016G	2/17/04	192		
P9GT26016G	2/17/04	192		
P9GT27016G	2/17/04	194		
P9GT28016G	2/19/04	196		NA
P9GT29016G	2/19/04	196		
P9GT30016G	2/19/04	196		
P9GT31016G	2/19/04	196		

1. Provide the sample number of the associated sludge sample, if applicable.
2. Up to 10 interstitial soil samples will be co-located with samples collected for EPA. Provide the EPA-supplied sample number for the associated duplicate.

INTERSTITIAL SOIL SAMPLE TRACKING LOG

Sample #	Date collected	Page #	Sludge Sample #	EPA Sample #[1]
✓ P9GT32016G	2/19/04	196		
✓ P9GT33016G	2/19/04	196		
✓ P9GT34016G	2/19/04	196		
✓ P9GT35016G	2/19/04	196		
✓ P9GT36016G	2/19/04	196		

1. 10 of the 36 interstitial soil samples will be duplicates of samples collected for the EPA. Provide the EPA-supplied sample number for the associated duplicate.

Sample information Sheets

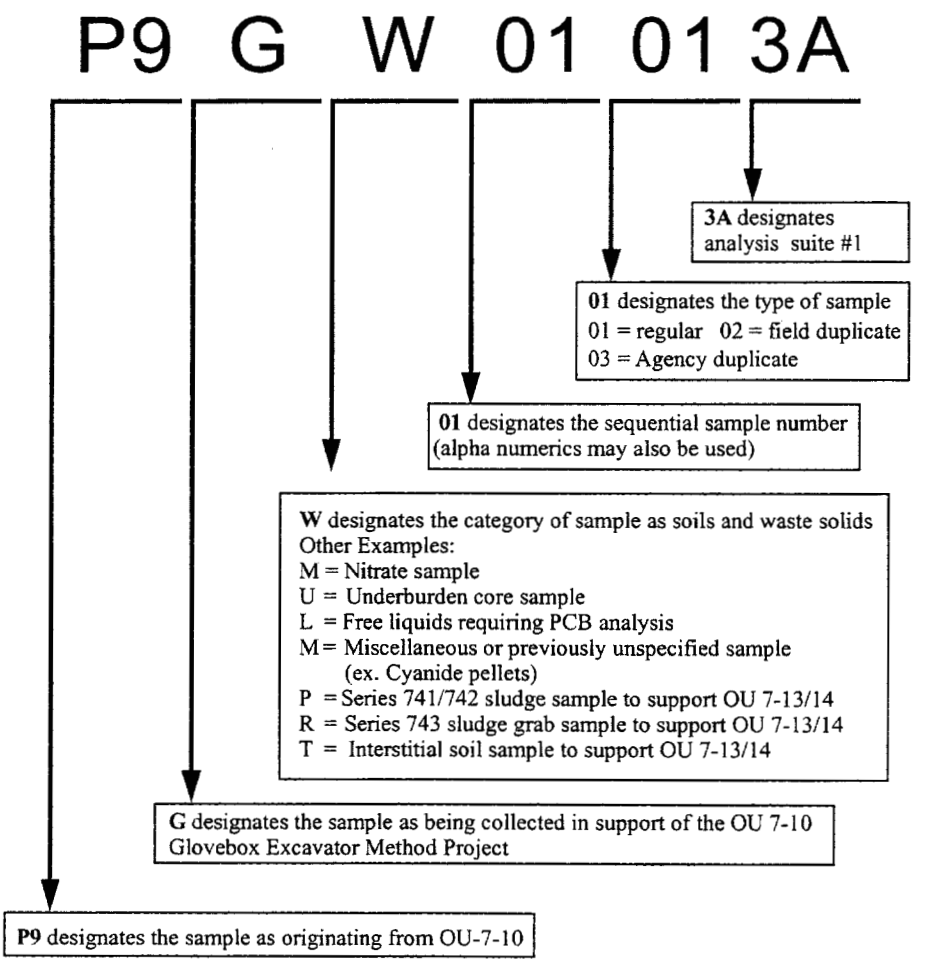
pg. 124

520-1741

Sample Information Sheet

Sample Information Sheets are used to record the lineage and characteristics of a sample, i.e., the in situ environment, characteristics of the bulk material in the cartload, and the characteristics and unique identifiers of the sample placed in the jar. Field Representatives use standardized colors from the Earth Colors color chart to achieve objectivity in describing colors.

Note 1: When describing waste material in the carts, use the following guidance: Condition of items: describe how much surface area of drums is gone, evidence of corrosion, degraded filters
Note 2: When multiple samples are collected from the same cartload (as allowed for the PRDT samples), one information sheet can be used to represent multiple samples.
Note 3: Record the sample collection date and the page number of the Sample Information Sheet on the Sample Tracking Log.
Note 4: Sample Numbers look like this:



03-GA50134-02

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Note: Sample collected by ops under direction over phone, i.e. FRs not present

Sample Information Sheet

Sample Number(s): P9 G B 0 1 01 2 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 3

Date: 1/31/04 **Time (24 hr):** ~900 **Sample Weight:** ND **Rad Reading:** ND

DDTC Number: 15 **New Drum Bar Code:** 30216

Location: Reach (ft): 7.78 Angle (degrees): 4 Depth (ft): 12.13 Scoop #: 3067

Justification for interstitial soil sample NA

Description of Waste Material in Cart:

Identifiable items, materials: NO INFO. ASSUME MOSTLY SOIL some plastic + corr. metal

Condition of items: Plastic OK, metal corroded

Bags/bag pieces (color, condition): color = clear condition = good

Sludge characteristics: Described as putty-like; grey

Interstitial soil characteristics: SL, 7.5 YR

Free liquid: NO Absorbed? — Sampled by OU 7-10? — Other —

Distinguishable markings on anything —

Comments:

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): NO INFO

Color(s): Sheen present?

Texture/consistency:

Comment:

Description of Dig Face (e.g., after our scoop has been removed): Note: described from memory at 1500

Drum organization/orientation (stacked or dumped): can't tell

Waste characteristics: white fluff, corroded metal, plastic bag pieces

Color (drum/bag/waste): bag = clear waste ?

Container Markings:

Drum Integrity (corrosion?):

Bag Integrity:

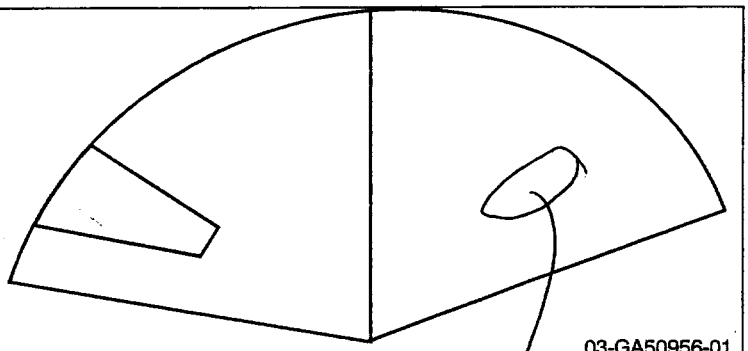
Moisture:

Soil Stain:

Comments:

Other:

Signature: [signature] **Date:** 1/31/04



03-GA50956-01

Somewhere in here ~7 ft deep (HED depth = 11 ft)

Sample Information Sheet

Sample Number(s): P9 G R 02 01 2G - P9GR03012G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 1

Date: 1/31/04 **Time (24 hr):** 1508 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: 15 **New Drum Bar Code:** _____

Location: Reach (ft): 6.71 Angle (degrees): 5 Depth (ft): 12.23 Scoop #: 1124

Justification for interstitial soil sample —

Description of Waste Material in Cart:

Identifiable items, materials: mostly soil, <1% anything else incl sludge

Condition of items: corroded metal chunks, intact plastic pieces

Bags/bag pieces (color, condition): clear, good cond.

Sludge characteristics: gooey, yellowish grey (5Y 7/2)

Interstitial soil characteristics: 7.5YR 4/4 (moist) loam - sandy loam

Free liquid: — Absorbed? — Sampled by OU 7-10? — Other —

Distinguishable markings on anything —

Comments: —

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): moist soil no pooled

Color(s): ~~7~~ 5Y 7/2 Sheen present? _____

Texture/consistency: gooey,

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): dumped

Waste characteristics: _____

Color (drum/bag/waste): clear bag

Container Markings: _____

Drum Integrity (corrosion?): corroded

Bag Integrity: good

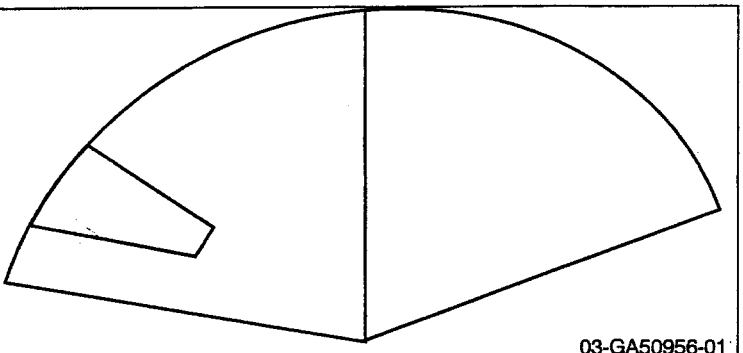
Moisture: slightly moist soil

Soil Stain: no

Comments: —

Other: _____

Signature: [signature] **Date:** 1/31/04



03-GA50956-01

Sample Information Sheet

Sample Number(s): P9 G R 04 01 2 G P9GR05012G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 1

Date: 2-1-04 **Time (24 hr):** 0123 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: 24 **New Drum Bar Code:** _____

Location: Reach (ft): 9.94 Angle (degrees): 6 Depth (ft): 12.47 Scoop #: 1128

Justification for interstitial soil sample _____

Description of Waste Material in Cart:

Identifiable items, materials: Almost entirely light tan sludge - some red

Condition of items: - A little soil mixed in but almost all 790b sludge

Bags/bag pieces (color, condition): PVC liner busted when backhoe hit drum

Sludge characteristics: Moderate Yellow 5Y 7/6 Moist clumps + moderate

Interstitial soil characteristics: Reddish Brown 10R 4/6

Free liquid: No Absorbed? _____ Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything _____

Comments: PVC Liner was fairly intact + in good shape until backhoe hit it

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): _____

Color(s): See above Sheen present? _____

Texture/consistency: See Above

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): Backhoe went through drum - very corroded drum in section 6 - see back ☒

Waste characteristics: _____

Color (drum/bag/waste): drum was corroded severely - bag was intact

Container Markings: None

Drum Integrity (corrosion?): _____

Bag Integrity: _____

Moisture: _____

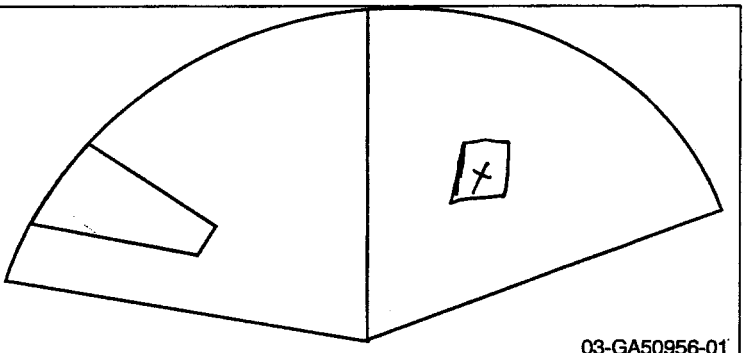
Soil Stain: _____

Comments: _____

Other: _____

Signature: [signature] **Date:** 2-1-04

04-05



Sample Information Sheet

Sample Number(s): P9 G R 0 6 01 2 G — P9GR 15012G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 3

Date: 2-1-04 **Time (24 hr):** 0243 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 9.39 Angle (degrees): 7 Depth (ft): 11.86 Scoop #: 3073

Justification for interstitial soil sample _____

Description of Waste Material in Cart:

Identifiable items, materials: Backhoe went through corroded drum

Condition of items: Looks like 5 to 6 intact chunks of 743 sludge

Bags/bag pieces (color, condition): Plastic bag was in good condition prior to backhoe rupture - Bag enveloped & protected some intact pieces of sludge

Sludge characteristics: - yellow to Brown 5YR 5/6 to 5Y 7/6 colors + striations

Interstitial soil characteristics: _____

Free liquid: NO Absorbed? _____ Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything _____

Comments: This was an excellent sample opportunity for a 743 sludge - large intact pieces

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): - sludge is organic wet

Color(s): 5Y 7/6 to 5YR 5/6 Sheen present? _____

Texture/consistency: Sticks together nicely like custard or peanut butter

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): Drum on its side & buried when backhoe sliced through

Waste characteristics: _____

Color (drum/bag/waste): Very Corroded

Container Markings: None

Drum Integrity (corrosion?): very corroded

Bag Integrity: Bag intact until backhoe rupture

Moisture: _____

Soil Stain: _____

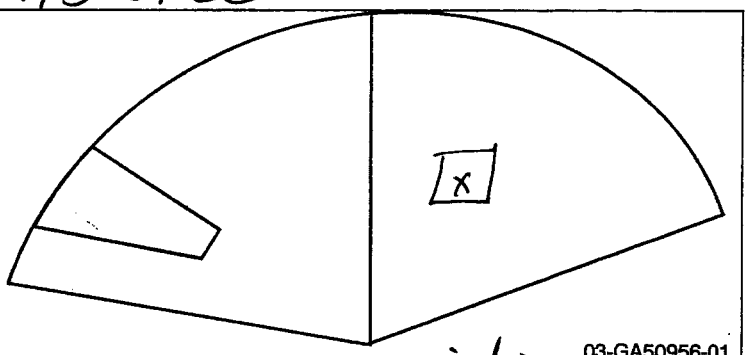
Comments: Taking at least 10 Samples

Other: _____

Signature: [signature] **Date:** 2-1-04

P9GR060126 – P9GR150126

~10000 cpm (10X1K) ~~at a~~ in gloves



03-GA50956-01

Note (GLO 2-1-04) elevated reading at GB window.

Notes (GLO 2-1-04) taken from OU 7-10 Samp Trk Log

S#	wt	COC	FGE	Isotopes? (mCi)
06	1.08	23242	0	
07	1.13	23243	0	Am-241? 1.18 ± .45 @ 662.42 Adj = 1.63E-03 ± 1.24E-3
08	1.15	23244	0	
09	1.08	23245	0	—
10	1.17	23246	0	Am-241 .51 ± .3 @ 662.42 Adj total Am-241 = 1.00E-04 ± 0
11	0.99	23247	0	Adj total Am241 = 2.61E-3 ± 1.14E-3
12	1.23	23248	0	Am-241 .33 ± .24 @ 662.42 Pu-239 .08 ± .08 @ 345.01
	Adj Am-241: 2.41E-3 ± 2.19E-3 Adj Pu-239: 0			
13	1.09	23249	0	Am-241 .51 ± .30 @ 662.42 Pu-239 .03 ± .03 @ 375.04
	Adj Am-241: 1.0E-4 ± 0 Adj Pu-239: (2.87 ± 2.87)E-2			
14	1.21	23250	0	—
	Adj Am- (4.9 ± 7.25)E-5			Am-241 1.00 ± .42 @ 662.42
15	1.12	23251	0	Pu-239 .13 ± .06 @ 375.04 Pu-239 .02 ± .03 @ 413.71
	Ad Am-241: (4.33 ± 3.05)E-03 Adj Pu-239 (1.34E-01 ± 5.98E-02 U-233 Adj: (9.00 ± 8.56)E-03			

Gail Olson 2-1-04

Note: Samples taken by Telecon w/ Ron Holm when we arrived (Greg S + Gal O) Tray still in GB#1

COC # 23252

Sample Information Sheet

Sample Number(s): P9 G P 0 1 01 5G — ~~P6~~ P9GP02015G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 1

Date: 2/1/04 **Time (24 hr):** 1303 1313 **Sample Weight:** 0.76 **Rad Reading:** (over)

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft) 9.44 Angle (degrees): 3.5 Depth (ft): 12.82 Scoop #: 1132

Justification for interstitial soil sample _____

Description of Waste Material in Cart:

Identifiable items, materials: Soil 1-5% ~~17%~~ ~~other~~ sludge

Condition of items: (Plastic only)

Bags/bag pieces (color, condition): torn, pliable, some rust-colored stains 5YR 5/6

Sludge characteristics: hard, grey inside - surr. by aggregate-looking coating

Interstitial soil characteristics: also some clods - orange + yel orange. One white clod has fibrous threads

Free liquid: ND Absorbed? — Sampled by OU 7-10? — Other —

Distinguishable markings on anything —

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): ~~dry~~ dry

Color(s): Can't see Sheen present? _____

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

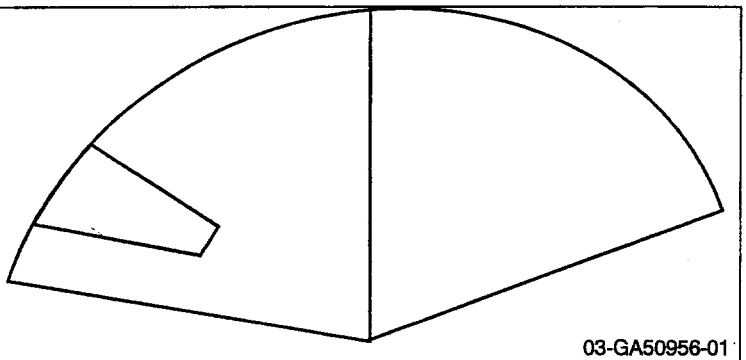
Moisture: _____

Soil Stain: _____

Comments: _____

Other: _____

Signature: [signature] **Date:** 2/1/04



03-GA50956-01

2-1-04

	wt	COC	FGE	Isotopes
P96P0101 5G	0.76	23252	0	Am-241 .75 ± .47 @ 146.00 –
				Pu-241 .82 ± .80 @ 148.86
P96P 0201 5G	0.99	( )	0	Am-241 .79 ± .10 @ 125.29
				Am-241 .72 ± .52 @ 146.00
				Am-241 1.25 ± .97 @ 169.62
				Adj tot Am-241 2.21 ± 253
				Pu-239 adj total = 1.00E-04 ± 0 mCi

~2K x1 at 6B window

Note: adj totals

Am-241 5.31E-02 ± 3.90E-01 mCi

Pu-241 8.17E-01 ± 8.03E-01 mCi

Note: Start pairing up pages which face each other. 2-1-04

137	138

pp 137 + 138 are same sample

Sample Information Sheet

Sample Number(s): P9 G__ __ __ 01 __ __

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:**_____

Date:_____ **Time (24 hr):**_____ **Sample Weight:** _____ **Rad Reading:**_____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft):____ Angle (degrees):____ Depth (ft):_____ Scoop #:_____

Justification for interstitial soil sample_____

Description of Waste Material in Cart:

Identifiable items, materials:_____

Condition of items: _____

Bags/bag pieces (color, condition):_____

Sludge characteristics:_____

Interstitial soil characteristics:_____

Free liquid: _____ Absorbed? _____ Sampled by OU 7-10? _____ Other_____

Distinguishable markings on anything: _____

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled):_____

Color(s):_____Sheen present? _____

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings:_____

Drum Integrity (corrosion?):_____

Bag Integrity:_____

Moisture: _____

Soil Stain: _____

Comments:_____

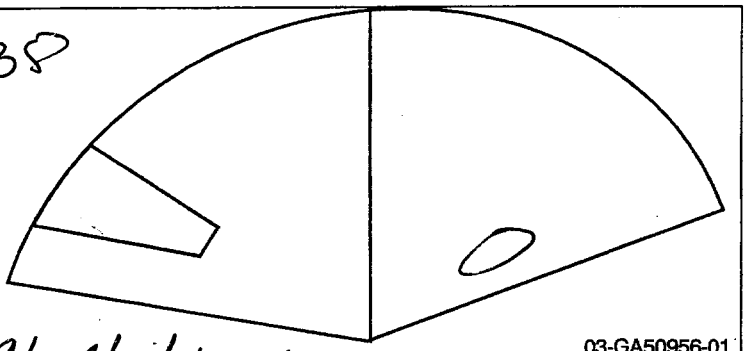
Other:_____

_____

Signature: _____ **Date:**_____

2-1-04 03-05

This page goes w/ p. 138



This tray was the last one we saw before heading out. At shift close, there were several issues to tend to — cracks in the pit + crapped up RadCon glovebox.

P96P050156 1132 9.44 3.5 12.82

2/1/04

Sample Information Sheet

Sample Number(s): P9 G P 03 **01** 5G — 05

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 1

Date: ~~2/1/04~~ 2/2/04 **Time (24 hr):** ~~1830~~ 1255 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 9.44 Angle (degrees): 3.5 Depth (ft): 12.82 Scoop #: 1132

Justification for interstitial soil sample —

Description of Waste Material in Cart:

Identifiable items, materials: Same as 02

Condition of items: _____

Bags/bag pieces (color, condition): _____

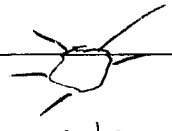
Sludge characteristics: Couple of ~~loose~~ chunks. w/in soil matrix

Interstitial soil characteristics: _____

Free liquid: NO Absorbed? — Sampled by OU 7-10? — Other —

Distinguishable markings on anything —

Comments: _____



Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): _____

Color(s): Orange clod, white clod w/fibers Sheen present? NO

Texture/consistency: _____

Comment: Fibers were ~ 1/4" long, sticking out from mass (asbestos? like)

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): Random. ~11 drum ring parts showing

Waste characteristics: Mostly soil; bags and drum pieces showing (~10%)

Color (drum/bag/waste): _____

Container Markings: NO

Drum Integrity (corrosion?): No (limited) integrity. Just pieces

Bag Integrity: Good

Moisture: Little

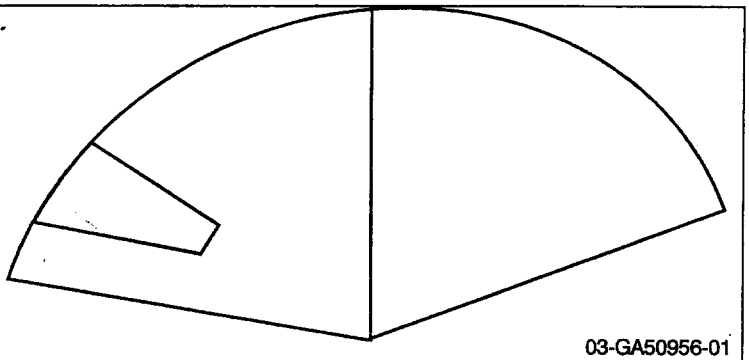
Soil Stain: Yes

Comments: _____

Other: _____

Signature: April Olson **Date:** 2-1-04

THIS PAGE GOES with 140.



03-GA50956-01

See pg 15

This sample was not collected, or if it was, it didn't have a label on the jar. The label is still in the Cabinet GLO 2-5-04

Sample Information Sheet

Sample Number(s): P9 GP 0 6 01 5 G

Inorganic: Type=P ~~Suffix=5G~~ **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** #1

Date: 2/2/04 **Time (24 hr):** 1323 **Sample Weight:** .96# **Rad Reading:** ?

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 9.44 Angle (degrees): 3.5 Depth (ft): 12.82 Scoop #: 1132

Justification for interstitial soil sample N/A

Description of Waste Material in Cart:

Identifiable items, materials: Tray is ≈ 98% soil with small clumps of

Condition of items: hard & soft sludge. Left hard material

Bags/bag pieces (color, condition): is tray & sampled soft material

Sludge characteristics: Small Clumps, red & white mixed

Interstitial soil characteristics: fine, loose

Free liquid: no Absorbed? N/A Sampled by OU 7-10? No Other _____

Distinguishable markings on anything No

Comments: Small bits of corrosion

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): dry

Color(s): White & Rust Sheen present? No

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): Same as all the rest

Container Markings: _____

Drum Integrity (corrosion?): Very little left of drum

Bag Integrity: _____

Moisture: _____

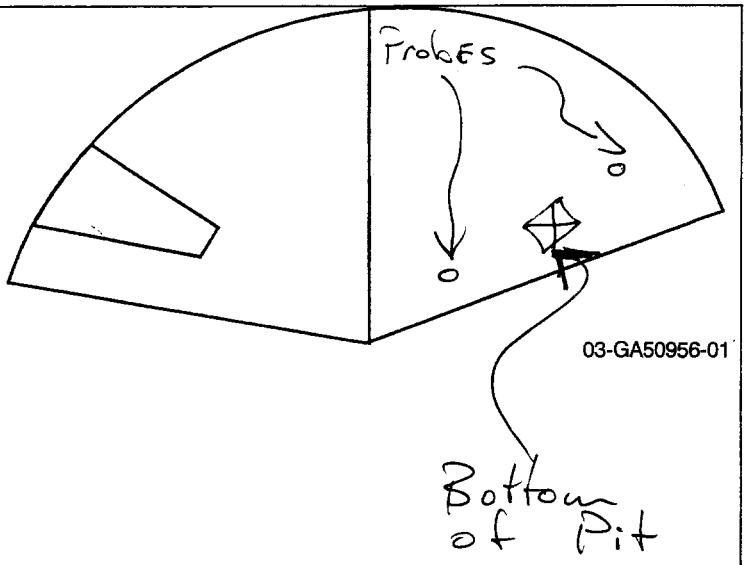
Soil Stain: _____

Comments: Sample jar is FULL - FMM = .001 Pu MDA (g)

Other: BGM Confirmed sample # on jar - 3.49 mCu Am-241

Signature: [signature] **Date:** 2/2/04

2/2/04



Sample Information Sheet

Sample Number(s): P9 G R 2 0 01 2 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** # 1

Date: 2/2/04 **Time (24 hr):** 1420 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 11.02 Angle (degrees): 4 Depth (ft): 13.02 Scoop #: 1133

Justification for interstitial soil sample N/A

Description of Waste Material in Cart:

Identifiable items, materials: Small bits of corroded drum, 98% soil

Condition of items: loose soil like all others

Bags/bag pieces (color, condition): _____

Sludge characteristics: Very orange/red ⇒ Hue 10R 4/6

Interstitial soil characteristics: Normal appearance

Free liquid: NA Absorbed? N/A Sampled by OU 7-10? No Other _____

Distinguishable markings on anything No

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): No

Color(s): Very Orange Sheen present? No

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): No way to tell

Waste characteristics: loose, not confined to drum

Color (drum/bag/waste): _____

Container Markings: None

Drum Integrity (corrosion?): All but rings are gone

Bag Integrity: _____

Moisture: _____

Soil Stain: _____

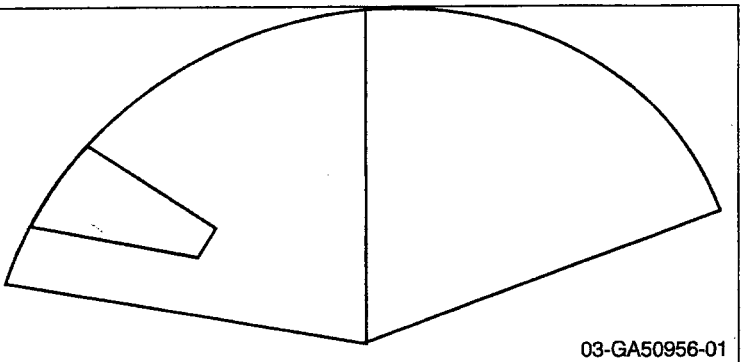
Comments: See Excavator log for details on location

Other: _____

Signature: _____ **Date:** 2/2/04

2-2-04 Interstitial Soil

14:43



03-GA50956-01

Interstitial

Sample Information Sheet

Sample Number(s): P9 G T 0 1 **01** 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil:** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** _____

Date: 2/2/04 **Time (24 hr):** 1644 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 11.02 Angle (degrees): 4 Depth (ft): 13.02 Scoop #: 1133

Justification for interstitial soil sample Associated with 743 Sample P9GR 20012G

Description of Waste Material in Cart:

Identifiable items, materials: See pg 142

Condition of items: _____

Bags/bag pieces (color, condition): _____

Sludge characteristics: _____

Interstitial soil characteristics: _____

Free liquid: N Absorbed? N Sampled by OU 7-10? N Other —

Distinguishable markings on anything —

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): dry - moist no vis sheen

Color(s): 10YR 4/2 Sheen present? _____

Texture/consistency: Sandy loam - loam

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): See p. 142

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

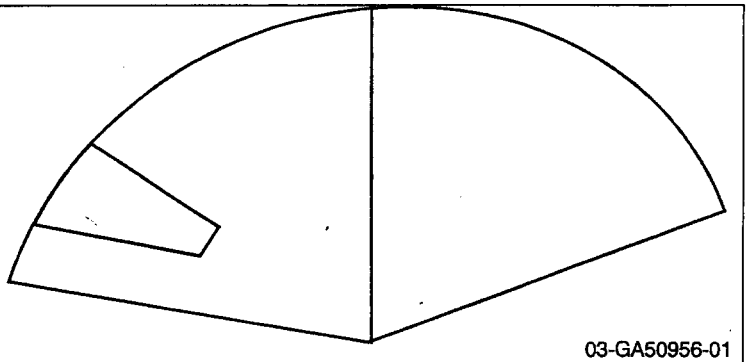
Moisture: _____

Soil Stain: _____

Comments: _____

Other: _____

Signature: [signature] **Date:** 2/2/04



03-GA50956-01

FMM results - per copy.

SWIPES

1. $\beta\gamma$ < 1000
   α 133

2. $\beta\gamma$ < 1000
   α 105

Note: D crew collected some samples when we weren't here, which is why this pg is out of sequence.

Sample Information Sheet

Sample Number(s): P9 G R 1 9 01 2 6

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 1

Date: 7/2/04 **Time (24 hr):** 1034 **Sample Weight:** 0.97 **Rad Reading:** 0.001 Pu MDA(g)

DDTC Number: P6DDTCRW01 **New Drum Bar Code:** GEM030418

Location: Reach (ft): 7.50 Angle (degrees): 5 Depth (ft): 12.02 Scoop #: 2089

Justification for interstitial soil sample _____

Description of Waste Material in Cart:

Identifiable items, materials: _____ s <1000

Condition of items: _____

Bags/bag pieces (color, condition): _____

Sludge characteristics: _____ no info

Interstitial soil characteristics: _____

Free liquid: _____ Absorbed? _____ Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything _____

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): _____

Color(s): _____ Sheen present? _____

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

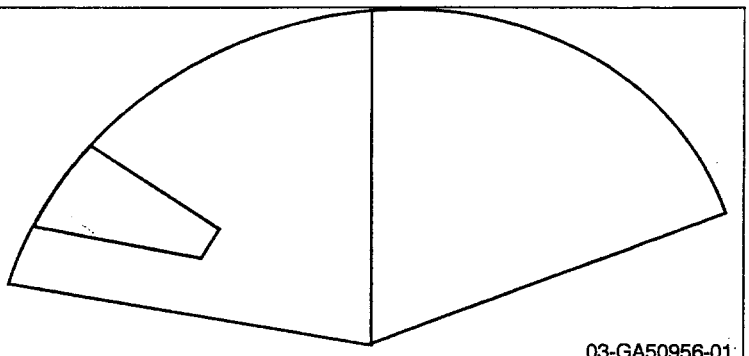
Moisture: _____

Soil Stain: _____

Comments: _____

Other: _____

Signature: _____ **Date:** _____



03-GA50956-01

S#	Wt	COC	time	FGE
16	0.88	23257	0527	0
17	0.76	23258	0531	0
18	0.75	23259	0533	0

Sample Information Sheet

Sample Number(s): P9 G R 1 6 **01** 2G – P9GR18012G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 3

Date: 2/2/04 **Time (24 hr):** 0527 **Sample Weight:** see p. 147 **Rad Reading:** see p 147

DDTC Number: _____ **New Drum Bar Code:** GEM030240

Location: Reach (ft): 5.91 Angle (degrees): 6 Depth (ft): 10.76 Scoop #: 3075

Justification for interstitial soil sample N/A

Description of Waste Material in Cart:

Identifiable items, materials: black rounded stone, hunk of degraded cardboard, "confetti", sludge pieces

Condition of items: _____

Bags/bag pieces (color, condition): don't know

Sludge characteristics: orange 10YR 4/6 – 5YR 5/6

Interstitial soil characteristics: NA

Free liquid: — Absorbed? — Sampled by OU 7-10? — Other —

Distinguishable markings on anything _____

Comments: _____

Sample Characteristics: Don't Know. They sampled this w/o our guidance

Moisture (e.g., dry, visible sheen, pooled): ~~slightly moist – mostly dry~~ N/A - this is rel. to soil!

Color(s): _____ Sheen present? _____

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): dumped;

Waste characteristics: _____

Color (drum/bag/waste): rusty drums, clear bags; orange sludge

Container Markings: —

Drum Integrity (corrosion?): corroded, poked, holey, pieces only.

Bag Integrity: good.

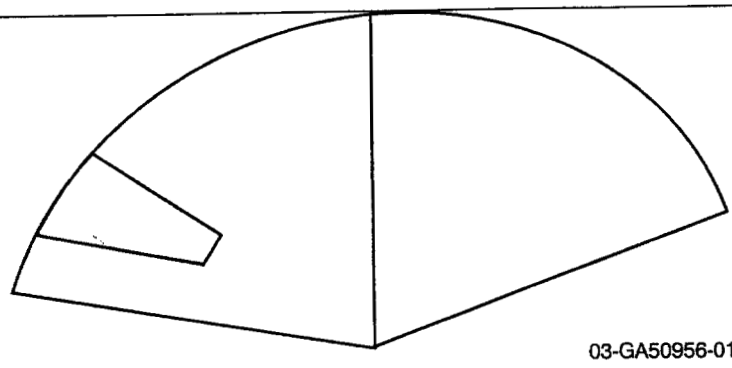
Moisture: moist at bottom of excavation

Soil Stain: —

Comments: _____

Other: _____

Signature: [signature] **Date:** 2/02/04


03-GA50956-01

Sample Information Sheet

Sample Number(s): P9 G T 0 2 01 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** ~~#3~~ BGM #2

Date: 2/2/04 **Time (24 hr):** 1651 **Sample Weight:** 1.10 # **Rad Reading:**

DDTC Number: **New Drum Bar Code:**

Location: Reach (ft): 7.42 Angle (degrees): 6 Depth (ft): 12.24 Scoop #: 2090

Justification for interstitial soil sample STAINED clump -unusual

Description of Waste Material in Cart:

Identifiable items, materials: 99% soil, RUSTED bits of drum

Condition of items: clump surrounded by RANDOM soil in JAR

Bags/bag pieces (color, condition): Bits of cardboard

Sludge characteristics: Clumps of 743 ASSOCIATED WERE NOT SAMPLED

Interstitial soil characteristics: Stained "clump" -tennis ball size

Free liquid: No Absorbed? No Sampled by OU 7-10? No Other

Distinguishable markings on anything

Comments: Other materials in CART STANDARD

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled):

Color(s): Soil w/ STAIN Sheen present? NO

Texture/consistency:

Comment:

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): NOT evident

Waste characteristics: Looks like soil

Color (drum/bag/waste): N/A

Container Markings: N/A

Drum Integrity (corrosion?): GONE

Bag Integrity: shredded Bits

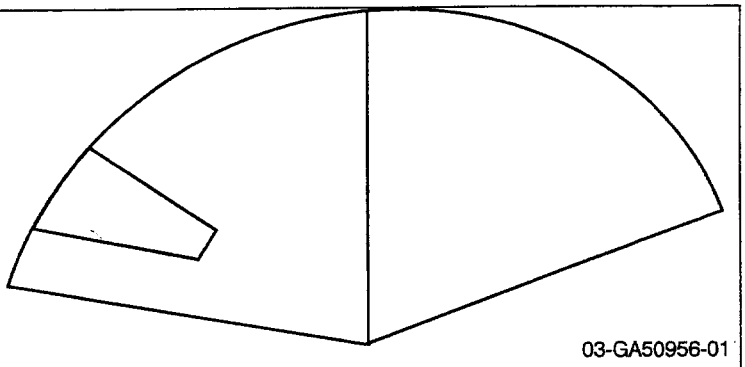
Moisture:

Soil Stain:

Comments: 2 pieces of "Blackish" material in CART - I don't believe to be graphite, Looks RESIN LIKE - OR CORROSION of drum - NO RAD READINGS - DID NOT SAMPLE

Other:

Signature: **Date:** 2/2/04


03-GA50956-01

Fred 6B#1
Pam 6B#2

Sample Information Sheet

Sample Number(s): P9 G R ~~22~~ 21 01 2G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 1

Date: 2/5/04 **Time (24 hr):** 1324 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** 150

Location: Reach (ft): 7.61 Angle (degrees): 7 Depth (ft): 13.23 Scoop #: 1163

Justification for interstitial soil sample —

Description of Waste Material in Cart:

Identifiable items, materials: plastics

Condition of items: _____

Bags/bag pieces (color, condition): pieces of bags,

Sludge characteristics: lt yellow & orange (colors below)

Interstitial soil characteristics: _____

Free liquid: * Absorbed? — Sampled by OU 7-10? — Other —

* There was free liquid nearby.

Distinguishable markings on anything —

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): _____

Color(s): 10YR 8/2, 5YR 5/6, 10YR 6/6 Sheen present? NO

Texture/consistency: silt-like

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): random; the sample was pulled from scoop w/ bot of pit; they'd already scraped the top off there was a bunch of exposed sludge. After it had been scooped, it was homogenized w/ soil. Attempted to get large chunks of soil! to the ext possible.

~~Waste characteristics~~:

~~Color (drum/bag/waste)~~:

~~Container Markings~~:

~~Drum Integrity (corrosion?)~~:

Bag Integrity:

Moisture: (10YR 8/2, 5YR 5/6 10YR 6/6) → sludge

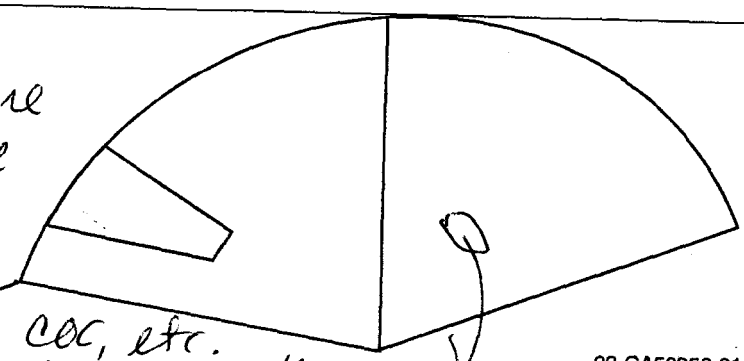
Soil Stain: _____

Comments: _____

Other: _____

Signature: _____ **Date:** _____

230 Somehow, ~~this~~ samples were put into 741 jars. The data recorder had processed the paperwork on them; initiated the COC, etc. We decided to attempt to correct the problem by re-containerizing the samples into 743 jars, ~~re-in~~ correcting the paperwork, and re-generating new labels for the 743 sludge.



location of sludge

244 ~~Now they~~ It would be a 4-hour shutdown of the glovebox 2 to correct the sample label problem. So we'll leave these as "741" knowing that they aren't.

P9GP060156-P9GP070156

*Note - sampled as as 741; should have been a 743.

Sample Information Sheet

Sample Number(s): P9 G R ~~06~~ 22 01 ~~56~~ 2G – ~~P9GP070156~~ ~~P9GR23012G~~

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 2

Date: 4/5/04 **Time (24 hr):** 1400 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** GEM030148

Location: Reach (ft): 8.73 Angle (degrees): 6 Depth (ft): 14.5 Scoop #: 2121

Justification for interstitial soil sample _____

Description of Waste Material in Cart:

Identifiable items, materials: _____

Condition of items: _____

Bags/bag pieces (color, condition): _____

Sludge characteristics: _____

Interstitial soil characteristics: _____

Free liquid: _____ Absorbed? _____ Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything _____

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): moist sludge

Color(s): see p 152 Sheen present? no

Texture/consistency: massive to crumbly

Comment: mistakenly called 741 sludge.

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): dumped. 3 drums evident – 2 on section 75°

Waste characteristics: mixed

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

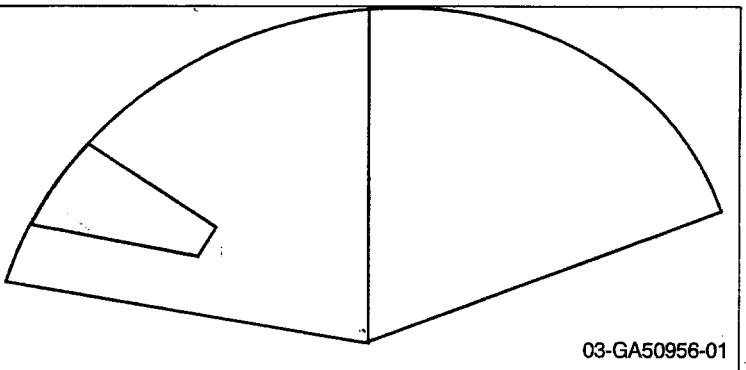
Moisture: _____

Soil Stain: _____

Comments: _____

Other: _____

Signature: [signature] **Date:** 4/5/04


03-GA50956-01

verified recorders sheet

Sample Information Sheet

Sample Number(s): **P9 G** 1 0 3 **01** 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil:** Type=T Suffix=6G

Sub-Project (circle one): **PRDT** **RWSC** **OCVZ** **Glovebox Line:** PGS 1

Date: 02/08/04 **Time (24 hr):** 21:14 **Sample Weight:** # 1.00 **Rad Reading:** 20.5 Dr 20.1 n FGE ∅

DDTC Number: RW-13 **New Drum Bar Code:** GEM030484

Location: ~~Reach (ft):~~ 8.65 Angle (degrees): 5 Depth (ft): 15.12 Scoop #: ~~15.12~~ 1202

Justification for interstitial soil sample: base of angle of repose; section 5; some white matl.

Description of Waste Material in Cart:

Identifiable items, materials: clump of interstitial soil; ~~2nd clump of soil w/ some plastic~~

Condition of items: NA

Bags/bag pieces (color, condition): no

Sludge characteristics: some sludge obs. once in tray.

Interstitial soil characteristics: clumpy w/ some bright white matl with - some sludge

Free liquid: no Absorbed? no Sampled by OU 7-10? to compile Other

Distinguishable markings on anything no

Comments: undistinguished soil / base soil is HUE10YR 4/2 drk yellow brn

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): dry; no sheen

Color(s): sludge HUE5Y 5Y 7/2 yellowish gray Sheen present? no

Texture/consistency:

Comment: sludge; less than pea size —

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped):

Waste characteristics:

Color (drum/bag/waste):

Container Markings:

Drum Integrity (corrosion?):

Bag Integrity:

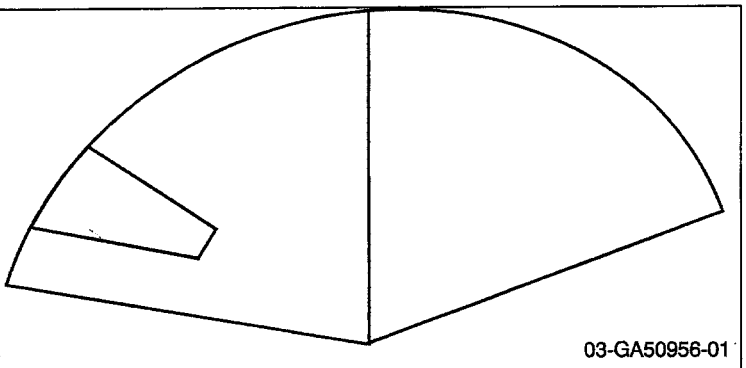
Moisture:

Soil Stain:

Comments: soil @ base of dig; angle of repose sect — 5 some white granular matl. // sludge drum immediately behind

Other:

Signature: [signature] **Date:** 02/08/04


03-GA50956-01

verified recorders sheet

Sample Information Sheet

Sample Number(s): **P9 G** T 0 5 **01** 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** PGS 1

Date: 02/08/04 **Time (24 hr):** 2116 **Sample Weight:** #10 #1.23 **Rad Reading:** FGE Ø

DDTC Number: RW-13 **New Drum Bar Code:** GEM030484

Location: Reach (ft): 8.65 Angle (degrees): 5 Depth (ft): 15.12 Scoop #: 1202

Justification for interstitial soil sample angle of repose, section 5, white matl.

Description of Waste Material in Cart:

Identifiable items, materials: clump of soil + some white granular matl

Condition of items:

Bags/bag pieces (color, condition):

Sludge characteristics: no sludge apparent

Interstitial soil characteristics: clumpy – well consolidated – no sludge

Free liquid: no Absorbed? no Sampled by OU 7-10? composite Other

Distinguishable markings on anything no

Comments: unremarkable soil + some white granular inclusions

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): dry

Color(s): All 10YR 4/2 dk yellow brown Sheen present? no

Texture/consistency: clump

Comment: white inclusions – salt?

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped):

Waste characteristics:

Color (drum/bag/waste):

Container Markings:

Drum Integrity (corrosion?):

Bag Integrity:

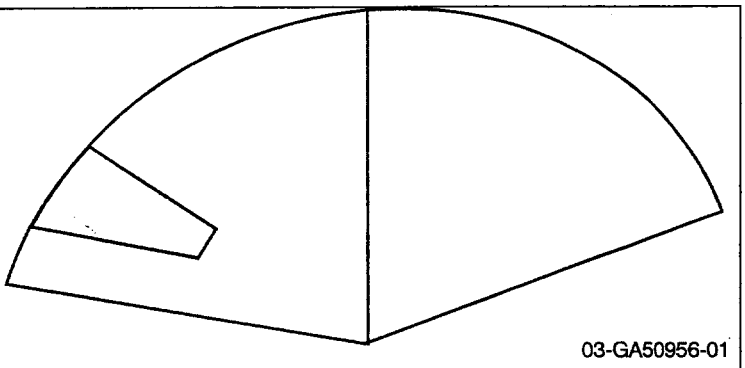
Moisture:

Soil Stain:

Comments: little or no sludge from drum immediately behind

Other:

Signature: [signature] **Date:** 02/08/04


03-GA50956-01

verified recorders sheet TEB

Sample Information Sheet

drag 2151

Sample Number(s): P9 G T 0 4 01 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** PGS 2

Date: 02/08/04 **Time (24 hr):** 21:35 39 **Sample Weight:** 1.08 # **Rad Reading:** <0.5 BJ <0.1 n

DDTC Number: RO-15 **New Drum Bar Code:** GEM030146

Location: Reach (ft): 7.47 Angle (degrees): 7 Depth (ft): 13.70 Scoop #: 2151

Justification for interstitial soil sample consolidated soil at base of P09-04

Description of Waste Material in Cart:

Identifiable items, materials: some whitish granular

Condition of items: NA

Bags/bag pieces (color, condition): no

Sludge characteristics: no sludge

Interstitial soil characteristics: granular w/ some white granular inclusion

Free liquid: no Absorbed? no Sampled by OU 7-10? yes Other

Distinguishable markings on anything none

Comments: unremarkable soil; NUE 10YR 4/2 dark yellow brn

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): dry

Color(s): NUE 10YR 4/2 dk yellow brn Sheen present? no

Texture/consistency: well broken up

Comment: uniformly broken up by shaving mass w/ excavat bucket

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped):

Waste characteristics:

Color (drum/bag/waste):

Container Markings:

Drum Integrity (corrosion?):

Bag Integrity:

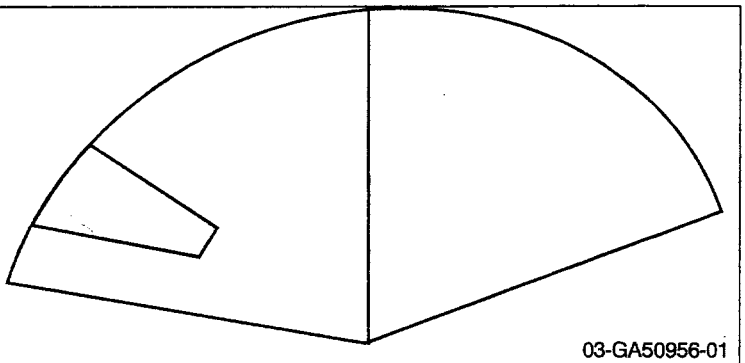
Moisture:

Soil Stain:

Comments: consolidated soil at base of probe P09-04

Other:

Signature: [signature] **Date:** 02/08/04



03-GA50956-01

Sample Information Sheet

BGM

Sample Number(s): P9 G P 06 01 5 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:**_____

Date:_____ **Time (24 hr):**_____ **Sample Weight:** _____ **Rad Reading:**_____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft):____ Angle (degrees):____ Depth (ft):_____ Scoop #:_____

Justification for interstitial soil sample_____

Description of Waste Material in Cart:

Identifiable items, materials:_____

Condition of items: _____

Bags/bag pieces (color, condition):_____

Sludge characteristics:_____

Interstitial soil characteristics:_____

Free liquid: _____ Absorbed? _____ Sampled by OU 7-10? _____ Other_____

Distinguishable markings on anything _____

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled):_____

Color(s):_____Sheen present? _____

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?):_____

Bag Integrity:_____

Moisture: _____

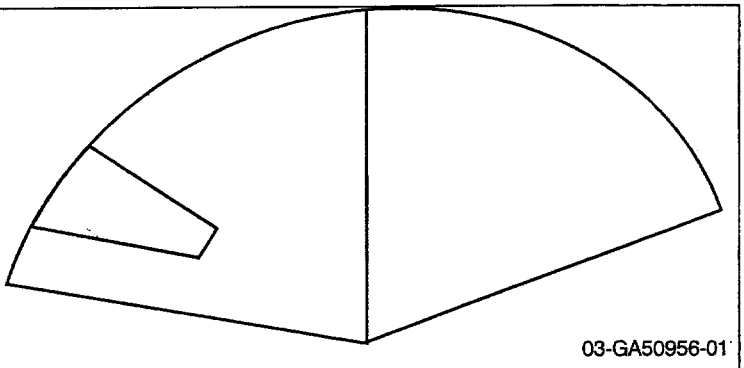
Soil Stain: _____

Comments:_____

Other:_____

_____

Signature: _____ **Date:**_____


03-GA50956-01

verified recorders sheet

Sample Information Sheet

Tray 2151

Sample Number(s): P9 G T 0 6 01 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil:** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** PGS 2

Date: 02/08/04 **Time (24 hr):** 21:40 38 **Sample Weight:** 0.98 0.98 **Rad Reading:** <.5 bg <.1 reach

DDTC Number: RW-15 **New Drum Bar Code:** GEM030146

Location: Reach (ft): 7.47 Angle (degrees): 7 Depth (ft): 13.70 Scoop #: 2151

Justification for interstitial soil sample base of P09-04; consolidated soil

Description of Waste Material in Cart:

Identifiable items, materials: some granular white mult

Condition of items: unremarkable soil

Bags/bag pieces (color, condition): no

Sludge characteristics: no sludge

Interstitial soil characteristics: shaven from consolidated soil @ base of probe

Free liquid: no Absorbed? no Sampled by OU 7-10? yes Other

Distinguishable markings on anything none

Comments: well broken up, some granular white clumps

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): dry

Color(s): HUE 10 YR 4/2 dk yellow brn Sheen present? no

Texture/consistency: crumbly

Comment:

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped):

Waste characteristics:

Color (drum/bag/waste):

Container Markings:

Drum Integrity (corrosion?):

Bag Integrity:

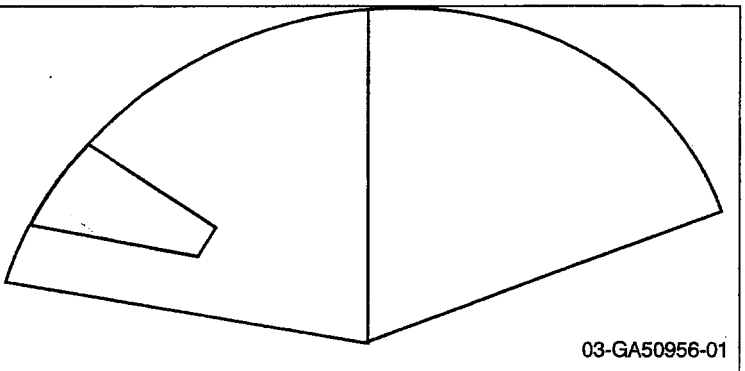
Moisture:

Soil Stain:

Comments: Consolidated soil @ base of probe P09-04

Other:

Signature: [signature] **Date:** 02/08/04


03-GA50956-01

Sample Information Sheet

Sample Number(s): P9 G T 0 7 01 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil:** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 1

Date: 2/11/04 **Time (24 hr):** 0958 **Sample Weight:** 1.03 **Rad Reading:** <.5 cpm <.1 mR/hr.

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 7.12 Angle (degrees): 8 Depth (ft): 13.06 Scoop #: 1246

Justification for interstitial soil sample Soil was Near a drum - Drum was very rusted

Description of Waste Material in Cart:

Identifiable items, materials: Rust colored soil From around Drum

Condition of items: _____

Bags/bag pieces (color, condition): None

Sludge characteristics: Orange/Rust color

Interstitial soil characteristics: Rust/dry

Free liquid: No Absorbed? N/A Sampled by OU 7-10? _____ Other 13/14

Distinguishable markings on anything _____

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): Dry

Color(s): Rust color with varios color soils Sheen present? N/A

Texture/consistency: high moisture content

Comment: enough moisture to compress together and stay in a ball.

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): —

Container Markings: —

Drum Integrity (corrosion?): —

Bag Integrity: —

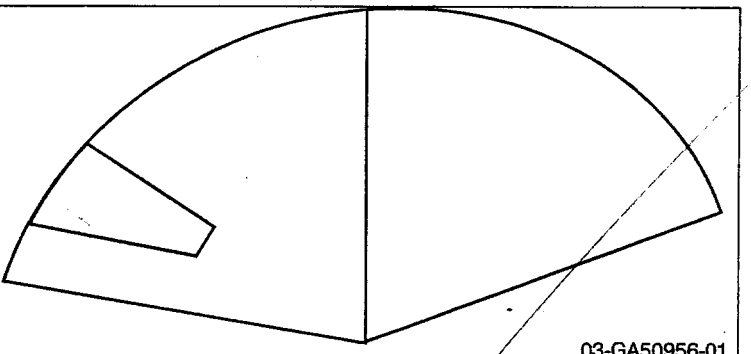
Moisture: _____

Soil Stain: _____

Comments: evidence of Several Drums being damaged and spread

Other: _____

Signature: [signature] **Date:** 2/12/04



03-GA50956-01

Blank 2/12/04

Sample Information Sheet

Sample Number(s): **P9 G** R 2 2 01 2 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT **RWSC OCVZ** **Glovebox Line:** #1

Date: 2/12/04 **Time (24 hr):** 2126 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: ~~Reach (ft): 6.12 Angle (degrees): 9 Depth (ft): 12.86~~ Scoop #: 1247 B&M

Justification for interstitial soil sample N/A

Description of Waste Material in Cart:

Identifiable items, materials: Lots of plastic & discolored, rusty metal

Condition of items: THIS PLASTIC seems a bit degraded, 3 TIES ARE still evident

Bags/bag pieces (color, condition): _____

Sludge characteristics: _____

Interstitial soil characteristics: dry

Free liquid: NO Absorbed? NA Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything _____

Comments: The discolored plastic is Glovebox gloves! AT LEAST 2 PAIR

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): _____

Color(s): _____ Sheen present? _____

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): DUMPED

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

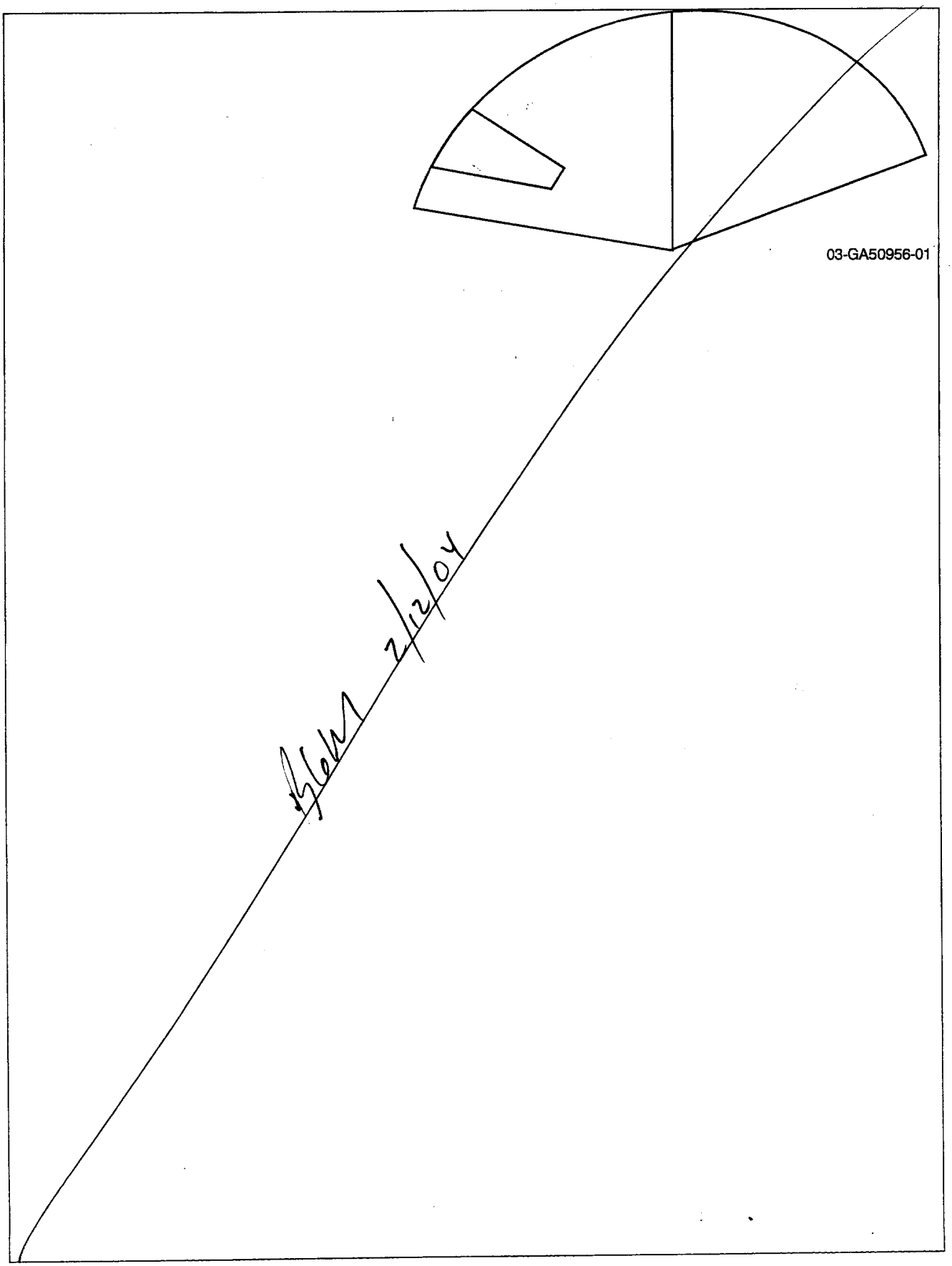
Moisture: _____

Soil Stain: _____

Comments: _____

Other: SEE NEXT PAGE

Signature: [signature] **Date:** 2/12/04


03-GA50956-01

Sample Information Sheet

Sample Number(s): P9 G R 2 3 01 2 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** #2

Date: 2/12/04 **Time (24 hr):** 2128 **Sample Weight:** 1.6 **Rad Reading:**

DDTC Number: **New Drum Bar Code:**

Location: Reach (ft): 4.63 Angle (degrees): 9 Depth (ft): 11.79 Scoop #: 1248

Justification for interstitial soil sample N/A

Description of Waste Material in Cart:

Identifiable items, materials: Graph fruit size chunk of machined graphite.

Condition of items: 1 chunk of sludge - enough for 2 bags

Bags/bag pieces (color, condition): soil/rust coated chunk ~ football size

Sludge characteristics: compact, clayey appearance - olive green color -

Interstitial soil characteristics:

Free liquid: No Absorbed? N/A Sampled by OU 7-10? NOT sludge Other 13/14

Distinguishable markings on anything NOT apparent

Comments: Probably about 50%, 50% debris

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): Gray color, looks like putty

Color(s): N° - (same as color guide) Sheen present? no

Texture/consistency: will form ball

Comment: Looks very much like window putty

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): dumped

Waste characteristics: Lots of debris in pit

Color (drum/bag/waste): drums very corroded, lots of plastic

Container Markings:

Drum Integrity (corrosion?):

Bag Integrity: fairly good condition

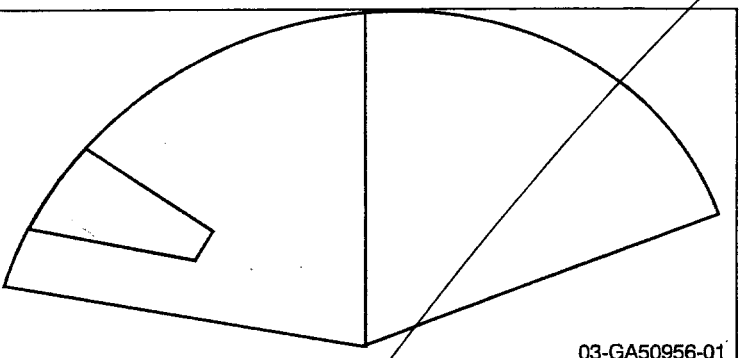
Moisture: Seems to be fairly moist in some areas

Soil Stain: of pit

Comments: Same tray as sample #22 on pg 168

Other: Double verified sample numbers on #22 & #23 organic sludge

Signature: [signature] **Date:** 2/12/04



03-GA50956-01

BGM 2/13/04

Sample Information Sheet

Sample Number(s): P9 G R 24 01 2 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** #30

Date: 2/13/04 **Time (24 hr):** 0120 **Sample Weight:** .83# **Rad Reading:**_____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft):____ Angle (degrees):____ Depth (ft):_____ Scoop #: 3159

Justification for interstitial soil sample_____

Description of Waste Material in Cart:

Identifiable items, materials: Mostly soil - Gray sludge (same as #22 & #23)

Condition of items: _____

Bags/bag pieces (color, condition): _____

Sludge characteristics: _____

Interstitial soil characteristics: _____

Free liquid: _____ Absorbed? _____ Sampled by OU 7-10? _____ Other_____

Distinguishable markings on anything _____

Comments: Same as #22 & #23.

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): _____

Color(s): _____ Sheen present? _____

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: Same situation

Color (drum/bag/waste): as #22 & #23

Container Markings: samples pulled

Drum Integrity (corrosion?): from GB #1

Bag Integrity: _____

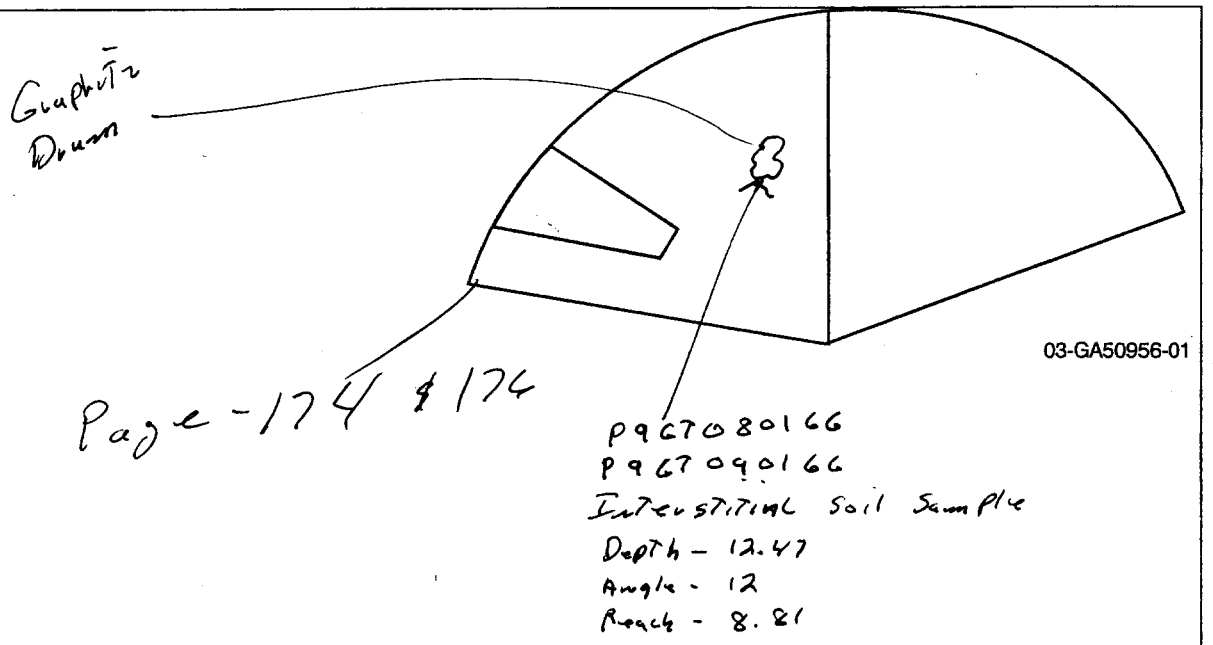
Moisture: _____

Soil Stain: _____

Comments: Collected about 1/2 jar from #3159 on 2/12 - later turned out to almost fill jar.

Other: _____

Signature: [signature] **Date:** 2/13/04


Graphite
Drum
03-GA50956-01
Page-174 & 174
P9GT080166
P9GT090166
Interstitial Soil Sample
Depth - 12.47
Angle - 12
Reach - 8.81

Sample Information Sheet

Sample Number(s): P9 G T 0 8 01 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil:** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 2

Date: 2/13/04 **Time (24 hr):** 1740 **Sample Weight:** _____ **Rad Reading:** Alpha - 620 <2.5 dpm <2.5 mr/hr

DDTC Number: PG-DDTC-RW21 **New Drum Bar Code:** _____

Location: Reach (ft): 8.81 Angle (degrees): 12 Depth (ft): 12.47 Scoop #: _____

Justification for interstitial soil sample Soil was located under Drum next to Probe Cluster

Description of Waste Material in Cart:

Identifiable items, materials: Light colored soil with areas of high moisture

Condition of items: _____

Bags/bag pieces (color, condition): mostly dirt with darker moisture content

Sludge characteristics: _____

Interstitial soil characteristics: granular

Free liquid: No Absorbed? _____ Sampled by OU 7-10? _____ Other 13/14

Distinguishable markings on anything _____

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): Dry with moist contents intermixed

Color(s): _____ Sheen present? _____

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): Drums was a graphite Drum when opened

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

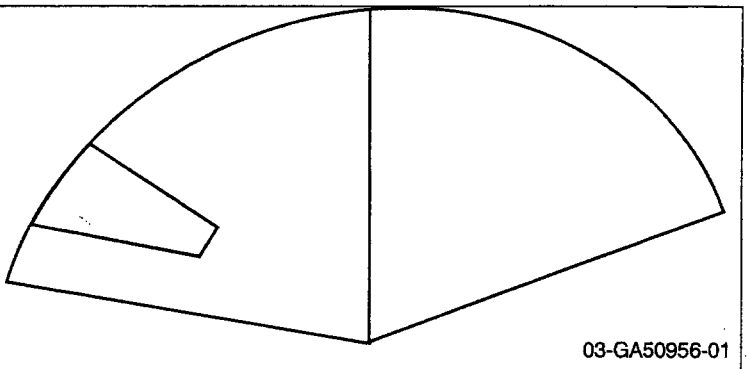
Moisture: _____

Soil Stain: _____

Comments: _____

Other: _____

Signature: [signature] **Date:** 2/13/04


03-GA50956-01

Sample Information Sheet

Sample Number(s): **P9 G** T 0 9 **01** 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil**: Type=T Suffix=6G

Sub-Project (circle one): **PRDT RWSC OCVZ** **Glovebox Line:** 2

Date: 2/13/04 **Time (24 hr):** 1740 **Sample Weight:** #18 [illegible] 2/13/04 **Rad Reading:** <.5 v/b <.5 mm/hr

DDTC Number: PG-DDTC-RW21 **New Drum Bar Code:** _____

Location: Reach (ft):____ Angle (degrees):____ Depth (ft):_____ Scoop #:_____

Justification for interstitial soil sample _____

Description of Waste Material in Cart:

Identifiable items, materials: _____

Condition of items: _____

Bags/bag pieces (color, condition): _____

Sludge characteristics: Same as 174

Interstitial soil characteristics: _____

Free liquid: _____ Absorbed? _____ Sampled by OU 7-10? _____ Other 13/14

Distinguishable markings on anything _____

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): DRY

Color(s): _____ Sheen present? no

Texture/consistency: _____

Comment: SAMPLE TAKEN AT START OF NITE SHIFT 2/13/04

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

Moisture: _____

Soil Stain: _____

Comments: See pg. 173 for Location

Other: _____

Signature: [signature] **Date:** 2/13/04

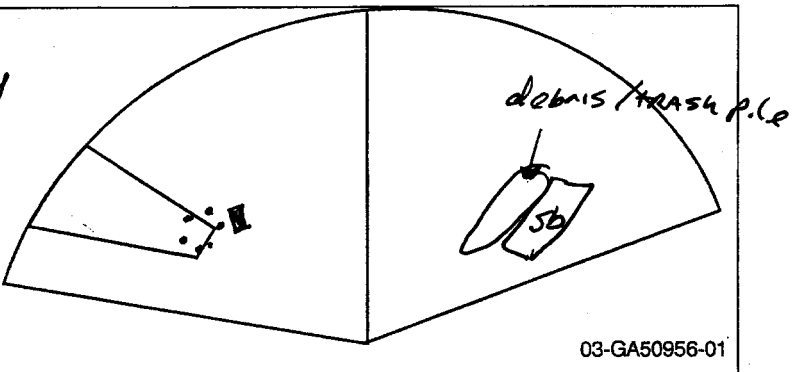
~~12/14/04~~ 2/14/04 KJH 12/13/04

∴ probe cluster

56 sizing box

▣ scoop 1281

exposed drum/partially full bag/drum liner



: soil moist - v. moist when drum removed to debris/trash pile

: Almost @ 15' depth close to top of underburden

J. Stalls 2/14/04

Sample Information Sheet

Sample Number(s): **P9 G** T 1 0 **01** 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** PGS #1

Date: 2/14/04 **Time (24 hr):** 2242 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** GEM 030267

Location: Reach (ft): 9.42 Angle (degrees): 11 Depth (ft): 14.79 Scoop #: 1281

Justification for interstitial soil sample exposed DRUM near bottom of waste zone; moisture

Description of Waste Material in Cart:

Identifiable items, materials: moist cardboard pieces, metal strip (rusted) yellow tape, plastic

Condition of items: very little – thorough rusted drum pieces,

Bags/bag pieces (color, condition): clear, opaque, stained; yellow rad tape – good – v. deteriorat.

Sludge characteristics: No sludge ?

Interstitial soil characteristics: fine – med gr., Light brwn – Lt yel brwn [5YR 6/4 – 10YR 5/4

Free liquid: NO Absorbed? ✓ Sampled by OU 7-10? _____ Other OU 7 13/14

Distinguishable markings on anything NO

Comments: 5-15% debris/trash; drum pieces, plastic, yellow tape, metal strip

Sample Characteristics: – Yellow tape very pale yellow – almost white

Moisture (e.g., dry, visible sheen, pooled): moist – v. moist

Color(s): 5YR 6/4 – 10YR 5/4 Sheen present? none observable

Texture/consistency: moist / fine-med grained granular / crumbly – most gravel pieces are silt coated

Comment: sample taken because of absorbed liquid back fill from previous shift.

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): exposed dumped drums / drum liners

Waste characteristics: _____

Color (drum/bag/waste): Rusted Drum, stained bag / Drum Liner [pieces created from backhoe]

Container Markings: none identified

Drum Integrity (corrosion?): poor – thoroughly corroded / Rusted

Bag Integrity: poor – good

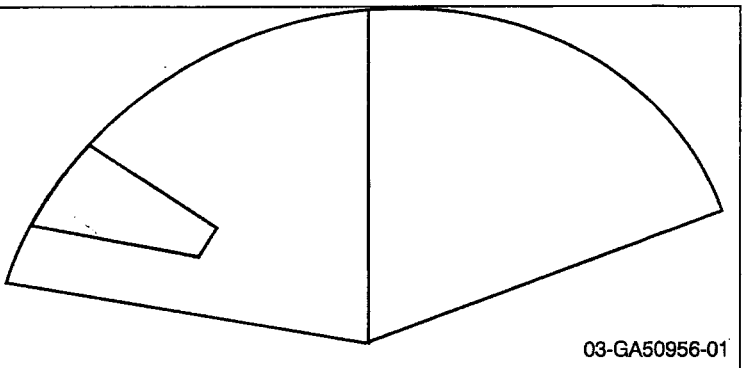
Moisture: moist – v. moist

Soil Stain: not readily identifiable

Comments: bagged sample bottles in @ 2242 but went on break
Actually sampled after break 0015

Other: ~~[signature] 2/14/04~~

Signature: [signature] **Date:** ~~12/14/04~~ 2/14/04 KGH 12/13/04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Sample Information Sheet

Sample Number(s): P9 G T 1 1 01 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** PGS # 1

Date: 2/14/04 **Time (24 hr):** 2242 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** GEM 030267

Location: Reach (ft): 9.42 Angle (degrees): 11 Depth (ft): 14.79 Scoop #: 1281

Justification for interstitial soil sample exposed drum, absorbed Liquid

Description of Waste Material in Cart:

Identifiable items, materials: _____

Condition of items: _____

Bags/bag pieces (color, condition): _____

Sludge characteristics: _____

Interstitial soil characteristics: _____

Free liquid: _____ Absorbed? _____ Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything _____

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): _____

Color(s): _____ Sheen present? _____

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

Moisture: _____

Soil Stain: _____

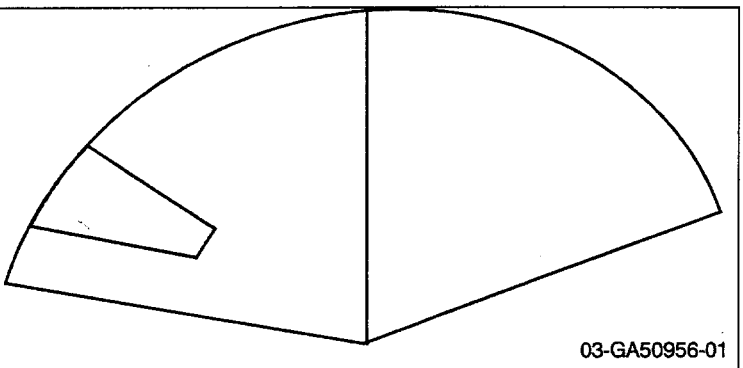
Comments: _____

Other: _____

SAME AS P.179

~~12/14/04~~ 2/14/04 KJH 12/13/04

Signature: SW Studley **Date:** ~~12/14/04~~ 2/14/04 KJH 12/13/04


03-GA50956-01

Sample Information Sheet

Sample Number(s): **P9 G** T 1 2 **01** 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): **PRDT RWSC OCVZ** **Glovebox Line:** PGS #1

Date: ~~12/14/04~~ 2/14/04 KJH 12/13/04 **Time (24 hr):** 2242 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** GEM 030267

Location: Reach (ft): 9.42 Angle (degrees): 11 Depth (ft): 14.79 Scoop #: 1281

Justification for interstitial soil sample exposed drum; absorbed liquid

Description of Waste Material in Cart:

Identifiable items, materials: _____

Condition of items: _____

Bags/bag pieces (color, condition): _____

Sludge characteristics: _____

Interstitial soil characteristics: _____

Free liquid: _____ Absorbed? _____ Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything _____

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): _____

Color(s): _____ Sheen present? _____

Texture/consistency: _____

Comment: _____

Same as P. 178 SWS 12/14/04

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

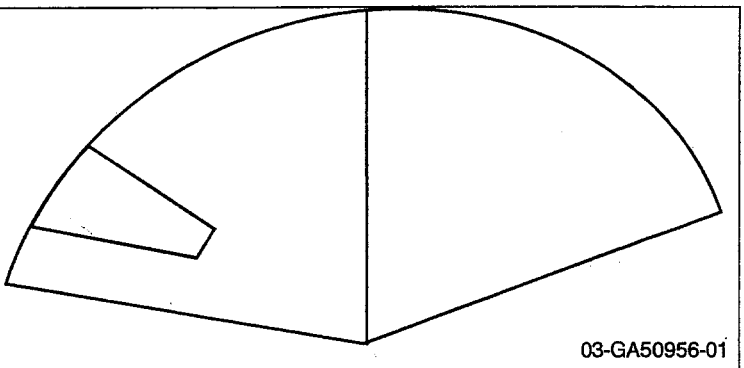
Moisture: _____

Soil Stain: _____

Comments: _____

Other: _____

Signature: [signature] **Date:** ~~12/14/04~~ 2/14/04 KJH 12/13/04


03-GA50956-01

02/16/04 TEB reassigned #25 – 35 for OCVZ

Sample Information Sheet

Sample Number(s): P9 G ~~1 G~~ R 25 01 2 G through P9GR35012G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC (OCVZ) #1 **Glovebox Line:** PGS2

Date: 02/15/04 **Time (24 hr):** ~~10:18~~ 12:49 **Sample Weight:** #1.3 **Rad Reading:** ~~Sam B~~ OFGE no B no γ

DDTC Number: _____ **New Drum Bar Code:** GEM030202

Location: Reach (ft): 13.61 Angle (degrees): 10 Depth (ft): ~~9.07~~ 12.53 Scoop #: 2229

Justification for interstitial soil sample NA

Description of Waste Material in Cart:

Identifiable items, materials: sludge 743; 5Y 6/4; oil dri; filter ✓

Condition of items: sludge has sheen

Bags/bag pieces (color, condition): clear – good

Sludge characteristics: 5Y 6/4 w/ sheen

Interstitial soil characteristics: finely divide; some oil dri

Free liquid: no Absorbed? no Sampled by OU 7-10? yes Other _____

Distinguishable markings on anything no.

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): visible sheen, some slumping

Color(s): 5Y 6/4 Sheen present? yes

Texture/consistency: like peanut butter – some portions crumbly

Comment: retains glove imprint when pressed in jar

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): dumped. drum horizontal

Waste characteristics: 743 sludge, sheen – fades w/ time

Color (drum/bag/waste): ~~5Y 6/4~~ black drum? sludge is 5Y 6/4

Container Markings: no

Drum Integrity (corrosion?): ~~Some~~ TEB 2/15/04 ~~relatively intact~~ heavy corr. & breached

Bag Integrity: good – ~~assume intact~~ TEB 2/15/04 but bag did not blast with pressure

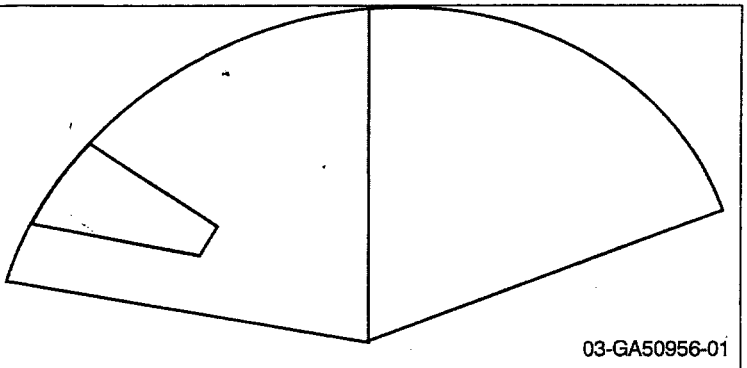
Moisture: ~~none~~ not obvious

Soil Stain: no

Comments: _____

Other: _____

Signature: [signature] **Date:** 02/15/04


03-GA50956-01

watched jars packaged packed full ≈ #1.2 – 1.4

25 26 27 28 29 30 31 32 33 34 35 36

see reverse for DDTC#

Sample Information Sheet P9GR36012G

#25 – 35 reassigned to OCVZ 02/16/04 TEB

Sample Number(s): P9 G ~~R 2 6 01 2 G~~ through ~~P9GR44012G~~ this shift.

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT ~~RWSC~~ OCVZ **Glovebox Line:** 2

Date: 02/15/~~02~~ 04 **Time (24 hr):** 12:50 **Sample Weight:** ≈ #1.2 **Rad Reading:** no FGE no B no J all

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 13.61 Angle (degrees): 10 Depth (ft): ~~9.02~~ 12.53 Scoop #: 2229

Justification for interstitial soil sample NA

Description of Waste Material in Cart:

Identifiable items, materials: 743 sludge; oil dri; filter

Condition of items: good

Bags/bag pieces (color, condition): clear, good

Sludge characteristics: 5Y 6/4 w/ sheen

Interstitial soil characteristics: finely divided w/ oil dri

Free liquid: no Absorbed? no Sampled by OU 7-10? yes Other _____

Distinguishable markings on anything no

Comments: _____

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): visible sheen fades w/ time

Color(s): 5Y 6/4 Sheen present? yes

Texture/consistency: like peanut butter – some portions crumbly

Comment: sheen fades w/ time – retains pattern of glove when pressed in jar

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): dumped – horizontal

Waste characteristics: 743 sludge

Color (drum/bag/waste): black drum; sludge is 5Y 6/4

Container Markings: no

Drum Integrity (corrosion?): ~~some corrosion – relatively intact~~ TEB 02/15/04 heavy & breached

Bag Integrity: good – ~~assume intact~~ TEB 02/15/04 but bag did not bloat with pressure

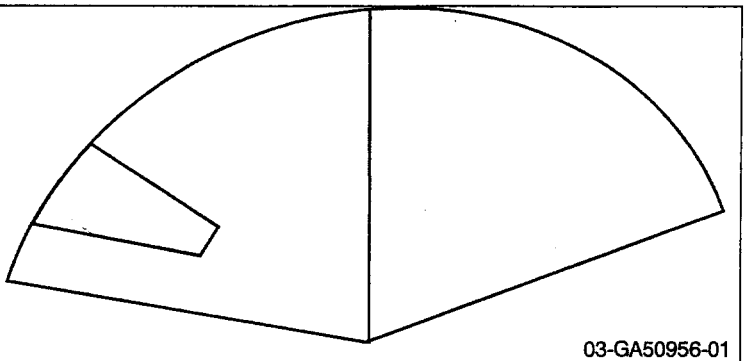
Moisture: not obvious

Soil Stain: no

Comments: _____

Other: _____

Signature: [signature] **Date:** 02/15/04



03-GA50956-01

DDTC

RW-13 #25, 26, 31

RW-15 #27, 29, 30

RW-17 #28, 32, 33

reassigned #36-58 to PRDT 02/16/04 [illegible]

Sample Information Sheet

Sample Number(s): ~~P9GR 45 01 2G~~ P9GR36012G through P9GR58012G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil:** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ 4 go to PRDT Remaining go to OCVZ **Glovebox Line:** #2

Date: 2/15/04 **Time (24 hr):** 0056 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft):____ Angle (degrees):____ Depth (ft):_____ Scoop #:_____

Justification for interstitial soil sample _____

Description of Waste Material in Cart:

Identifiable items, materials: Brown Sugar looking granulated, relatively dry

Condition of items: 743 sludge

Bags/bag pieces (color, condition): Bag was in good condition, Bottom of drum had "dry" sludge due to oil separation

Sludge characteristics: _____

Interstitial soil characteristics: _____

Free liquid: In top of drum Absorbed? No - By Soil Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything _____

Comments: From previous shift, this drum yielded samples & this shift also sampled this drum only on the bottom

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): Very little visible sheen - this is dry

Color(s): 10YR 5/4 Sheen present? 743 sludge

Texture/consistency: Dry, brown, granular w/ some wet spots

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): dumped

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): corroded

Bag Integrity: Intact

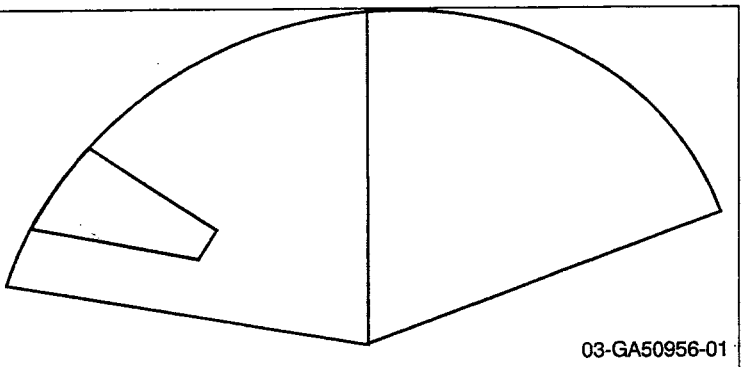
Moisture: Separated organic - oil on top, dry sludge below.

Soil Stain: This was a classic organic separated sample

Comments: _____

Other: _____

Signature: [signature] **Date:** ~~7/16/04~~ 2/16/04 KJH 12/13/04


03-GA50956-01

Note: #13 remained unfilled in PGS-2 02/17/04 AM
used for soil beneath P9-20-06

Sample Information Sheet

Sample Number(s): P9 GT ~~13~~ 14 01 6G 02/18/04 PES — P9GT21016G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil:** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** #2

Date: 2/17/04 **Time (24 hr):** 0205 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 7.99 Angle (degrees): 9 Depth (ft): 14.69 Scoop #: 2239

Justification for interstitial soil sample _____

Description of Waste Material in Cart:

Identifiable items, materials: Soil white chunks Some 743 sludge - all

Condition of items: easily identified + segregated

Bags/bag pieces (color, condition): _____

Sludge characteristics: _____

Interstitial soil characteristics: Moist - Came from Cavity around drum

Free liquid: NO Absorbed? — Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything —

Comments: Will have to pick through the tray but can do

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): Moist - Some white chunks - Some

Color(s): organic sludge Sheen present? _____

Texture/consistency: _____

Comment: Scoop # 2239

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

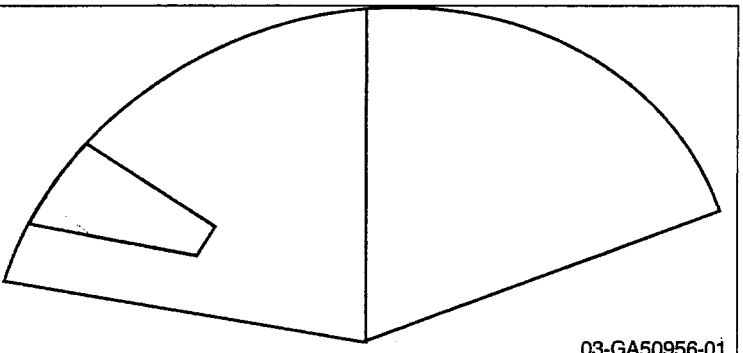
Moisture: _____

Soil Stain: _____

Comments: Scoop came from low in the pit 14.69 Ft where little mixing had occurred - good interstitial soils from a cavity around a corroded drum

Other: _____

Signature: [signature] **Date:** 2/17/04



03-GA50956-01

Sample Information Sheet

Sample Number(s): P9 GT 1 3 01 6 G and P9GT22016G through P9GT26016G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT (RWSC) OCVZ **Glovebox Line:** PGS-2

Date: 02/17/04 **Time (24 hr):** 10:28 **Sample Weight:** _____ **Rad Reading:** no B/g no PGE

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 9.89 Angle (degrees): 11 Depth (ft): 14.76 Scoop #: 2244

Justification for interstitial soil sample loose soil immediately beneath P9-20-06

Description of Waste Material in Cart:

Identifiable items, materials: soil; leading edge is clumpy, as overburden;

Condition of items: main body is fine & dry

Bags/bag pieces (color, condition): no bags

Sludge characteristics: NA

Interstitial soil characteristics: _____

Free liquid: no Absorbed? NA Sampled by OU 7-10? (yes) Other _____

Distinguishable markings on anything _____

Comments: take 2 samples from clumps (#13 & #22) @ front of cart; 2 from fine soil in mid mass (#23 & #24) and 2 fine soil samples from deep in mass near liner (#25 & #26)

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): (dry)

Color(s): 10YR 5/4 Sheen present? no

Texture/consistency: varies, as above

Comment: clumps at front of cart ✓; dry soil mid; bottom is grayish — ~~salt?~~ no, probably "ABS"

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): immediately adjacent P9-20 drum, beneath

Waste characteristics: skewered drum; as above — assumed to mix of soil

Color (drum/bag/waste): from above & near skewered drum — 10YR 5/4

Container Markings: NA

Drum Integrity (corrosion?): skewered drum is heavily corroded, but retains waste

Bag Integrity: intact bags within skewered drum

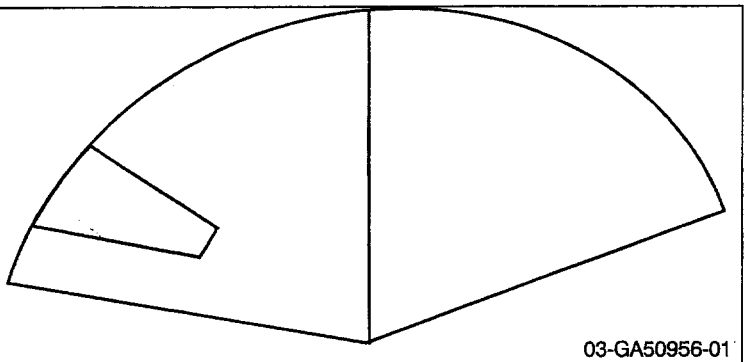
Moisture: dry

Soil Stain: not apparent

Comments: _____

Other: #13 & #22 clumps from front of cart; #23 & #24 fine soil near top of pile; #25 & #26 fine soil from near bottom of pile in cart

Signature: _____ **Date:** 02/17/04



03-GA50956-01

Sample Information Sheet

Sample Number(s): P9 GT 2 7 01 6 G

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil :** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** RGS-2

Date: 02/17/04 **Time (24 hr):**_____ **Sample Weight:** _____ **Rad Reading:**_____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft):____ Angle (degrees):____ Depth (ft):_____ Scoop #:_____

Justification for interstitial soil sample ~~soil within graphite object (bowl)~~

Description of Waste Material in Cart:

Identifiable items, materials: graphite ~~mo~~ bowl objects and many pieces of

Condition of items: flat mold — shook non-adherent soil off flat mold pieces

Bags/bag pieces (color, condition): ~~#~~ collected adherent soil; focused on

Sludge characteristics: fluted flat pieces w/ packed dirt

Interstitial soil characteristics: ~~unremovable soil adherent~~ to flat graphite mold pieces

Free liquid: no Absorbed? NA Sampled by OU 7-10? yes Other_____

Distinguishable markings on anything ~~no mold numbers observed~~

Comments: ~~4722~~ T2U02 on bowl object

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): appears moist

Color(s):_____ Sheen present? no

Texture/consistency: fine grained soil

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): See excavator log

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

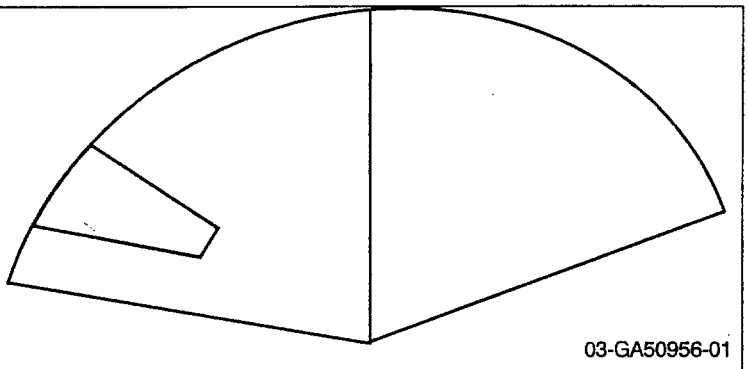
Moisture: _____

Soil Stain: _____

Comments: _____

Other: _____

Signature: [signature] **Date:** 02/17/04


03-GA50956-01

Sample Information Sheet

Sample Number(s): P9 GT 28 01 6E – P9ET36016E

Inorganic: Type=P Suffix=5G **Organic:** Type=R Suffix=2G **Interstitial soil:** Type=T Suffix=6G

Sub-Project (circle one): PRDT RWSC OCVZ **Glovebox Line:** 2

Date: 2/19/04 **Time (24 hr):** 0300 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** _____

Location: Reach (ft): 702 Angle (degrees): 11 Depth (ft): 13.42 Scoop #: _____

Justification for interstitial soil sample _____

Description of Waste Material in Cart:

Identifiable items, materials: Soils from base of probes P920 + optical probe – Center Probe

Condition of items: Appear clean, clear of sludge

Bags/bag pieces (color, condition): _____

Sludge characteristics: _____

Interstitial soil characteristics: _____

Free liquid: NA Absorbed? NA Sampled by OU 7-10? _____ Other _____

Distinguishable markings on anything —

Comments: Last of the soil samples.

Sample Characteristics:

Moisture (e.g., dry, visible sheen, pooled): Down in the moist zone of the pot

Color(s): Soil Sheen present? NO

Texture/consistency: _____

Comment: _____

Description of Dig Face (e.g., after our scoop has been removed):

Drum organization/orientation (stacked or dumped): _____

Waste characteristics: _____

Color (drum/bag/waste): _____

Container Markings: _____

Drum Integrity (corrosion?): _____

Bag Integrity: _____

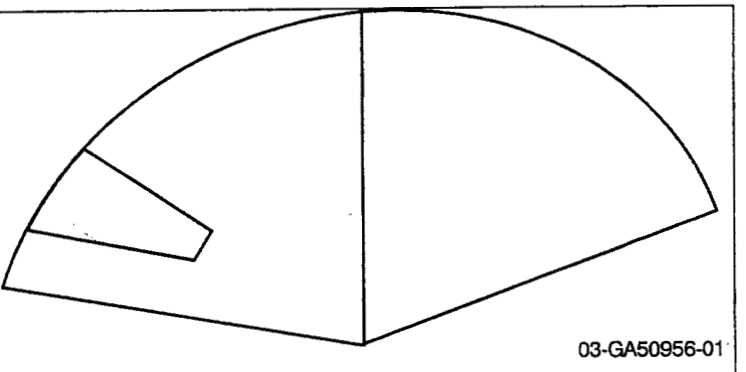
Moisture: _____

Soil Stain: _____

Comments: _____

Other: _____

Signature: [illegible] **Date:** 2/19/04


03-GA50956-01

FMM2 Detector	5 gal bucket of molds
Sample Container Activities For Spectrum	DATA_0018.spc

Fissile Gram Equivalents

0.23 +/- 0.03 FGE

0.00 +/- 0.00 Am-241 FGE

0.00 +/- 0.00 Pu-238 FGE

0.23 +/- 0.03 g Pu-239

0.00 +/- 0.00 Pu-240 FGE

0.00 +/- 0.00 Pu-241 FGE

0.00 +/- 0.01 U-233 FGE

0.01 +/- 0.01 U-235 FGE

0.005 Pu MDA (g)

GRAPHITE MOLDS

Weight (lbs)	Volume(% Full)
26.97	100

Density (g/cm3)

0.646

Ver 1.62 9/12/2003

CONTINUE

Activity in milliCuries

Am-241 Activities

59.48	16.57 +/- 0.45 mCi
122.99	4.01 +/- 2.77 mCi
125.29	5.79 +/- 0.72 mCi
146.00	2.90 +/- 3.62 mCi
169.56	26.61 +/- 10.18 mCi
662.42	0.00 +/- 0.00 mCi
721.99	0.00 +/- 0.00 mCi
ADJ TOTAL	1.78E+1 +/- 3.33E+1 mCi

Pu-239 Activities

129.29	14.64 +/- 0.78 mCi
203.54	12.73 +/- 2.85 mCi
345.01	19.52 +/- 2.81 mCi
375.04	13.44 +/- 1.22 mCi
413.71	14.17 +/- 1.40 mCi
ADJ TOTAL	1.40E+1 +/- 1.62E+0 mCi

Pu-238 Activities

152.68	-0.30 +/- -0.34 mCi
767.17	0.00 +/- 0.00 mCi
ADJ TOTAL	0.00E+0 +/- 0.00E+0 mCi

Pu-240 Activities

104.24	2.61 +/- 1.11 mCi
ADJ TOTAL	1.48E+1 +/- 1.97E+1 mCi

Pu-241 Activities

148.86	20.36 +/- 7.31 mCi
ADJ TOTAL	4.81E+1 +/- 4.54E+1 mCi

U-233 Activities

292.25	0.01 +/- 0.02 mCi
316.10	0.00 +/- 0.06 mCi
ADJ TOTAL	-6.26E-6 +/- 5.58E-2 mCi

U-235 Activities

143.76	0.00 +/- 0.00 mCi
185.72	0.00 +/- 0.00 mCi
ADJ TOTAL	1.17E-5 +/- 2.53E-5 mCi

U-238 Activities

1001.04	0.00 +/- 0.00 mCi
ADJ TOTAL	0.00E+0 +/- 0.00E+0 mCi

Co-60 Activities

1173.51	0.00 +/- 0.00 mCi
1332.28	0.00 +/- 0.00 mCi
ADJ TOTAL	0.00E+0 +/- 0.00E+0 mCi

Cs-137 Activities

661.62	0.00 +/- 0.00 mCi
ADJ TOTAL	1.69E-5 +/- 7.47E-6 mCi

Eu-152 Activities

121.78	0.00 +/- 0.00 mCi
344.30	0.00 +/- 0.00 mCi
778.90	0.00 +/- 0.00 mCi
1112.07	0.00 +/- 0.00 mCi
1408.08	0.00 +/- 0.00 mCi
ADJ TOTAL	0.00E+0 +/- 0.00E+0 mCi

Combined Waste Zone

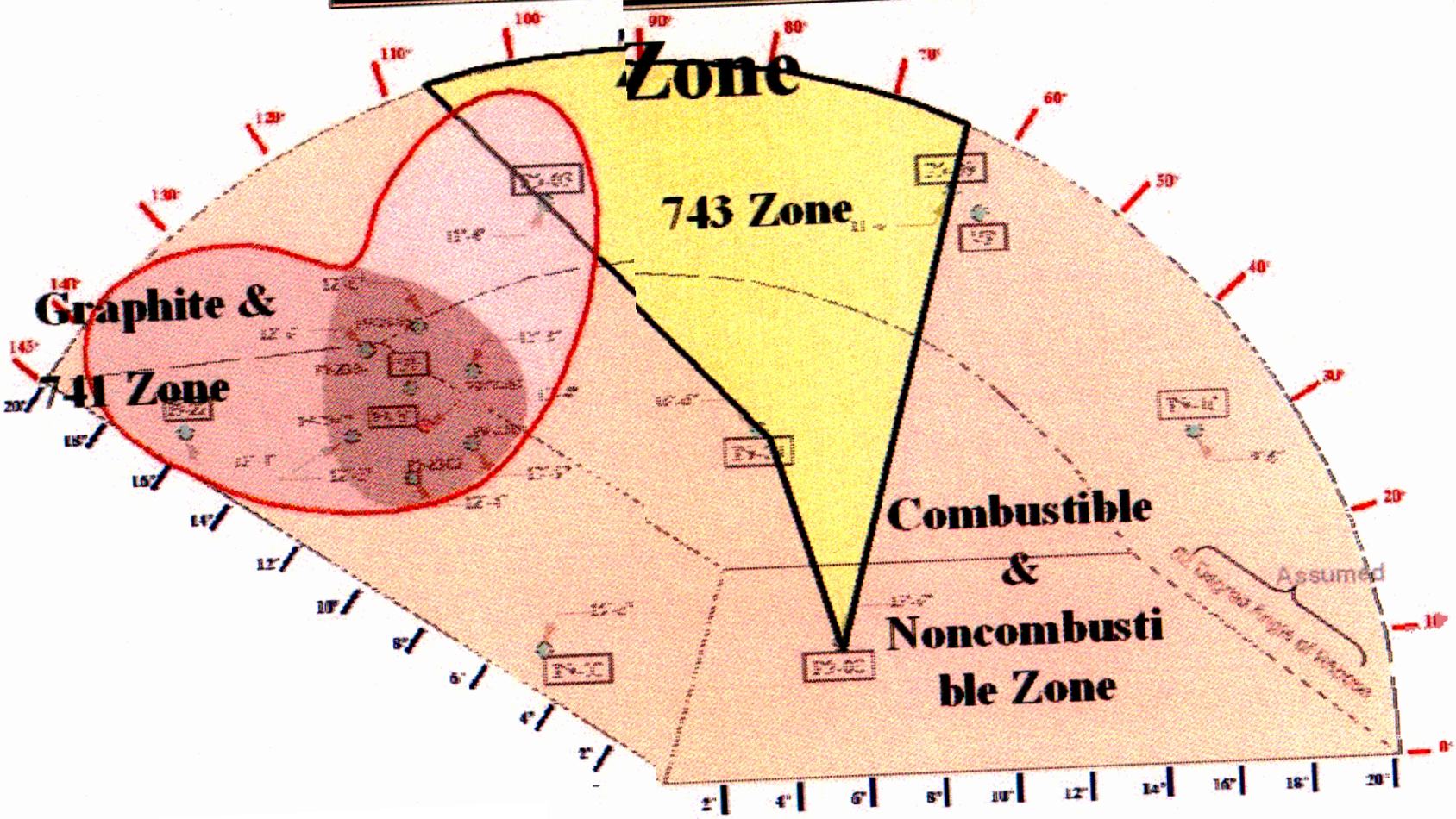
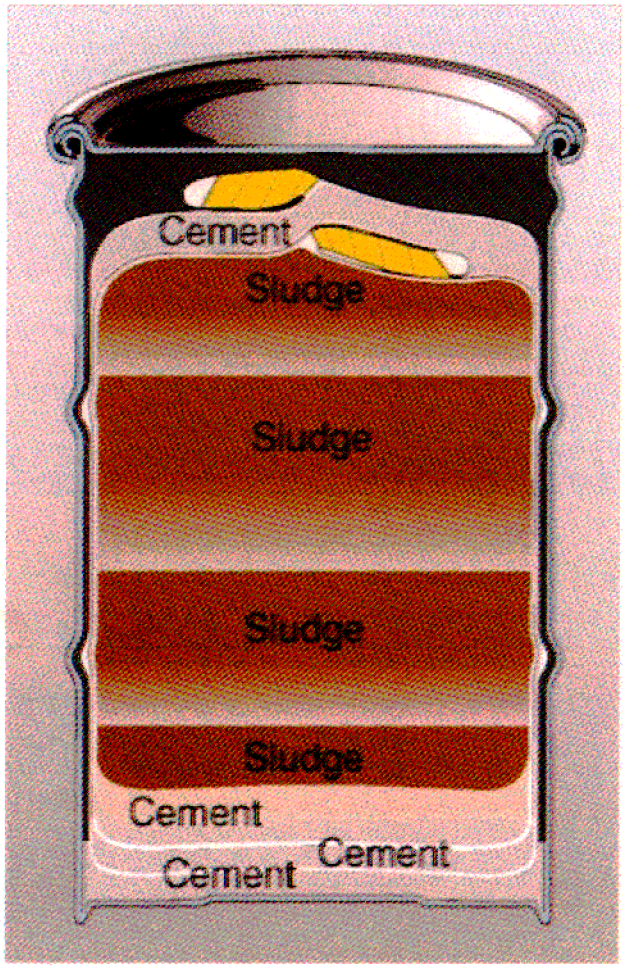
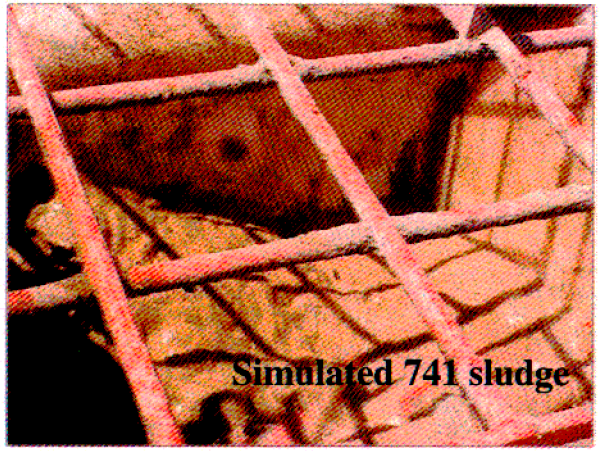


Table provides the quantity of waste drums for the major categories of expected waste materials.

Item Number	Expected Pit Contents	Quantity in 40× 40-ft) Stage I Area
1	Combustible waste	260 drums
2	Noncombustible waste	28 drums
3	Series 741 Sludge (first stage sludge)	3 drums
4	Series 742 Sludge (second stage sludge)	27 drums
5	Series 743 Sludge (organic setups such as oils, CCl_4, and trichloroethene; some beryllium; and polychlorinated biphenyls)	379 drums
6	Series 744 Sludge (special setups)	2 drums
7	Series 745 Sludge (evaporation salts [nitrates])	42 drums
8	Graphite	22 drums
9	Empty 55-gal drums	544 drums



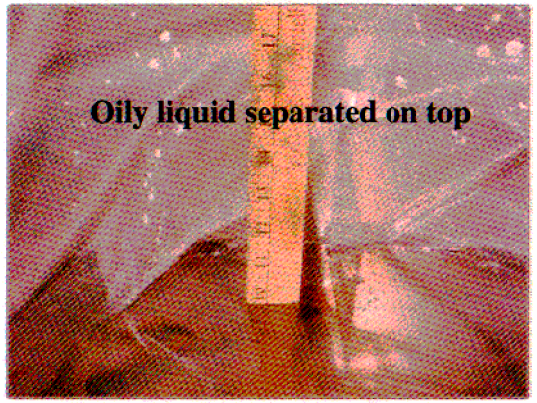


741/742 sludge as packaged

743 Sludge

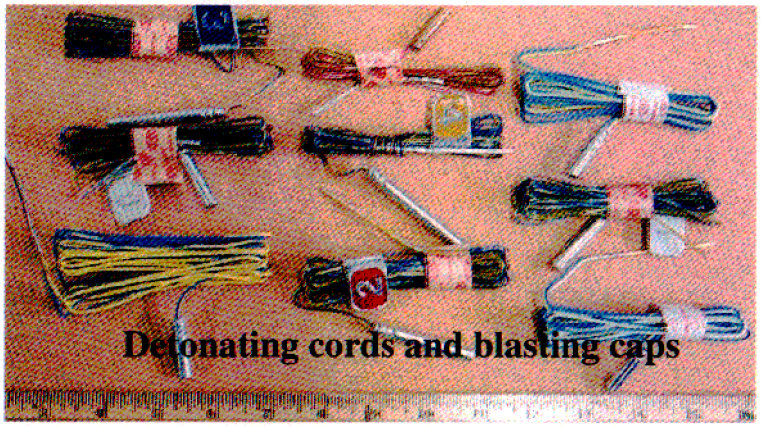
Oil-dri
743 Sludge
(as packaged)
Absorbent-Oil Dri
Absorbent-Oil Dri
Absorbent-Oil Dri

743-Like Sludge


Oily liquid separated on top

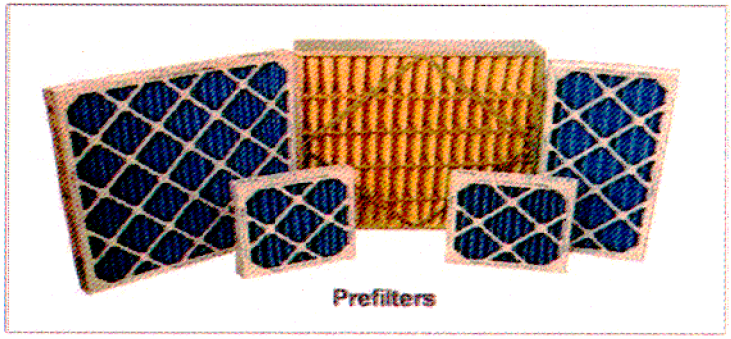
Oil-dri
Oily liquid
Solidified organic waste
743 sludge separated
over time
Oil-dri

Beryllium



Detonating cords and blasting caps

Compressed Gas Cylinders

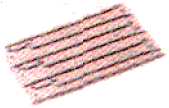


Prefilters

Lead pig

Graphite

Broken pieces of graphite may look like a crystalline graphite.



Graphite mold.

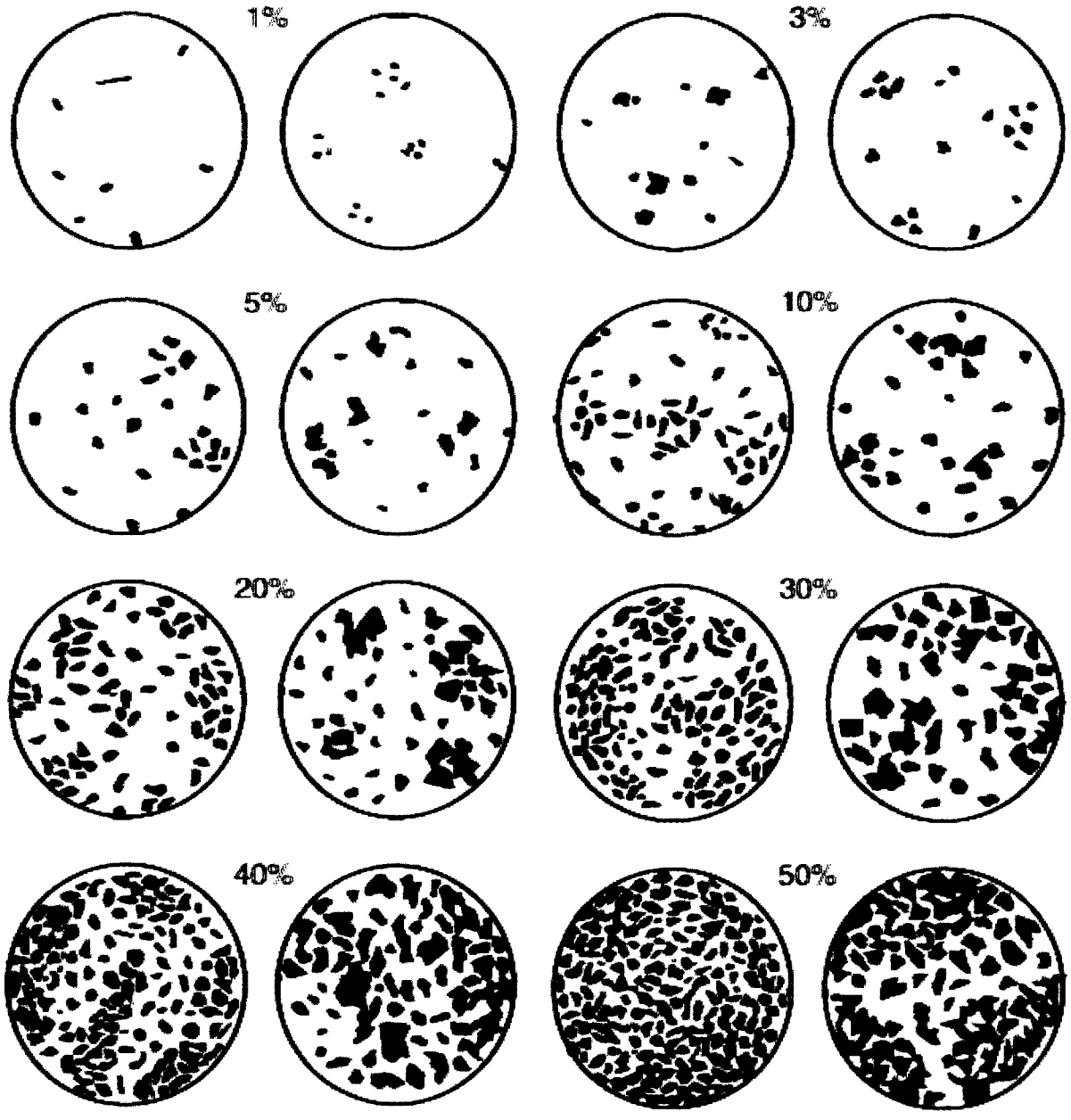
Graphite crucible. Graphite would originally have a smooth, machined surface.

Containerized unknowns

1 gal jugs w/graphite fines

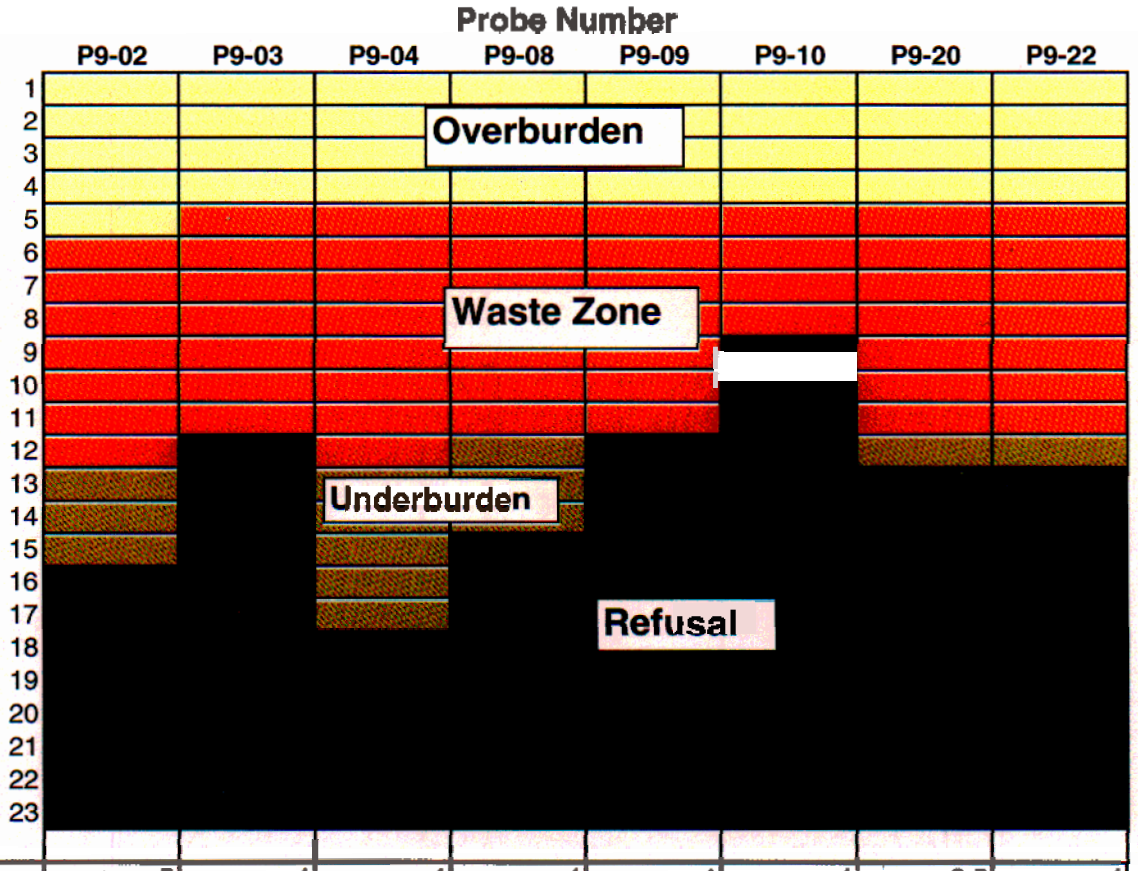
Sampling Guidelines

Target material	Description	# of disposed drums in excavation area	Probable disposal location	No. of 250-mL Samples	Sampling Guidance
741/742 sludge	Reddish (adobe-like) to reddish black, set up with Portland cement. Additional unmixed portland cement placed at bottom, top and between layers of sludge, in 5 to 15 lb batches. 741 has high rad field or high alpha contamination. 742 has lower rad fiel	1-3 drums 741 sludge 5-8 drums 742 sludge	Rare (<1%). May be anywhere.	13: 10 from one tray 3 from different trays	Grab samples of pure sludge
743 sludge	Yellow to dk. gray; oily, pasty, putty-like organic liquid waste solidified with calcium silicate. Packed with oil-dri, organic may be separated with liquid on top like old paint.	85-120 drums	Section 2 likeliest	58: 45 from one tray 3 from different trays 10 from >2 trays	Grab samples of pure sludge
Interstitial soil	Soil that is stained as a result of historic releases	NA	NA	36	Grab samples of interstitial soil (BOB!)
Cores	Beneath waste, above basalt	NA	Core Locations: Axial Pos (degrees) / Radial distance 37 / 10' 6" 52 / 8' 0" 72 / 9' 6" 95 / 14' 0" 117 / 12' 0" 117 / 11' 6"	6 cores	

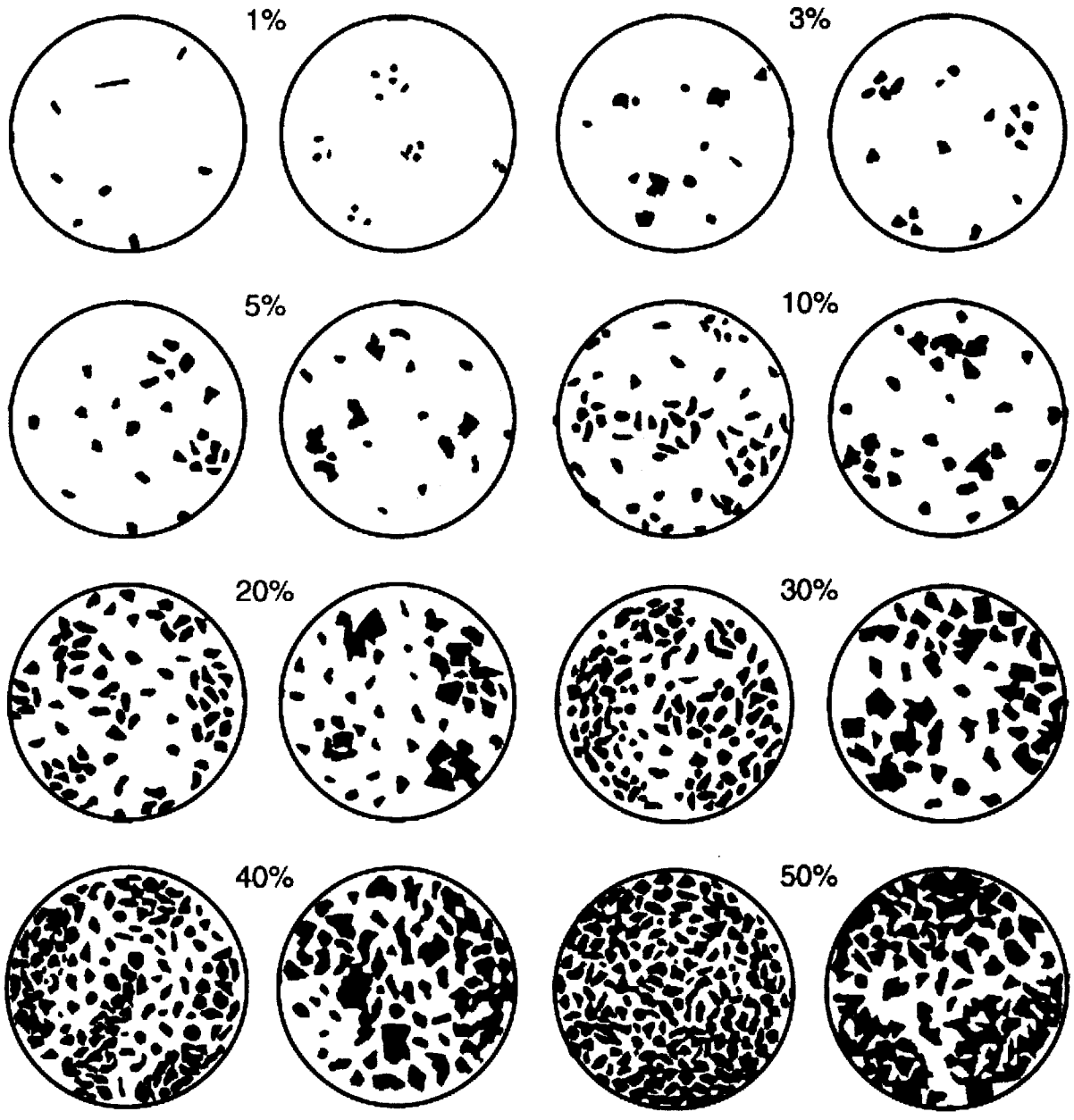

1%
3%
5%
10%
20%
30%
40%
50%

Sampling Guidelines

Target material	Description	# of disposed drums in excavation area	Probable disposal location	No. of 250-mL Samples	Sampling Guidance
741/742 sludge	Reddish (adobe-like) to reddish black, set up with Portland cement. Additional unmixed portland cement placed at bottom, top and between layers of sludge, in 5 to 15 lb batches. 741 has high rad field or high alpha contamination. 742 has lower rad fiel	1-3 drums 741 sludge 5-8 drums 742 sludge	Rare (<1%). May be anywhere.	13: 10 from one tray 3 from different trays	Grab samples of pure sludge
743 sludge	Yellow to dk. gray; oily, pasty, putty-like organic liquid waste solidified with calcium silicate. Packed with oil-dri, organic may be separated with liquid on top like old paint.	85-120 drums	Section 2 likeliest	58: 45 from one tray 3 from different trays 10 from >2 trays	Grab samples of pure sludge
Interstitial soil	Soil that is stained as a result of historic releases	NA	NA	36	Grab samples of interstitial soil (BOB!)
Cores	Beneath waste, above basalt	NA	Core Locations: Axial Pos (degrees) / Radial distance 37 / 10' 6" 52 / 8' 0" 72 / 9' 6" 95 / 14' 0" 117 / 12' 0" 117 / 11' 6"	6 cores	



	P9-02	P9-03	P9-04	P9-08	P9-09	P9-10	P9-20	P9-22
Base of Overburden (ft)	5	4	4	4	4	4	3.5	4
Base of WZ (ft)	11.5	11	12	11	10.5	8	10.5	11
Base of underburden (ft)	15	No underb	16.5	13.5	No underb	No underb	12	12
Refusal (ft)	15	11.5	16.5	13.5	11	8.5	12	12


1%
3%
5%
10%
20%
30%
40%
50%

741/742 (INORGANIC) SLUDGE SAMPLE TRACKING LOG

Sample #	Date collected	Project (P/R)[1]	Page #
P9GP01015G	2/1/04	P	134
P9GP02015G	2/1/04	P	134
P9GP03015G	2/1/04	P	138
P9GP04015G	2/1/04	P	138
P9GP05015G	2/1/04	P	138
P9GP06015G	2/2/04	P	140
P9GP07015G			
P9GP08015G			
P9GP09015G			
P9GP10015G			
P9GP11015G			
P9GP12015G			
P9GP13015G			

P = PRDT (Gretchen Matthern). 10 inorganic samples needed; can be collected from one tray.

R = RWSC (Larry Hull). 3 inorganic samples needed; should be collected from different trays.

Rick Anselmo
6-2735
RickA
SSR.

Sample Information Sheets

743 (ORGANIC) SLUDGE SAMPLE TRACKING LOG

Sample #	Date collected	Project (P/R/O)[1]	Page #
P9GR01012G	1/31/04	P	125
P9GR02012G	1/31/04	P	126
P9GR03012G	1/31/04	P	126
P9GR04012G	2-1-04	R	130
P9GR05012G	2-1-04	P	130
P9GR06012G	2-1-04	~~P~~ O	132
P9GR07012G	2-1-04	P	132
P9GR08012G	2-1-04	P	132
P9GR09012G	2-1-04	P	132
P9GR10012G	2-1-04	P	132
P9GR11012G	2-1-04	P	132
P9GR12012G	2-1-04	P	132
P9GR13012G	2-1-04	P	132
P9GR14012G	2-1-04	P	132
P9GR15012G	2-1-04	P	132
P9GR16012G	2-2-04	P	148
P9GR17012G	2-2-04	P	148
P9GR18012G	2-2-04	P	148
P9GR19012G	2/2/04	P	146
P9GR20012G	2/2/04	R	142
P9GR21012G			
P9GR22012G			
P9GR23012G			
P9GR24012G			
P9GR25012G			
P9GR26012G			
P9GR27012G			
P9GR28012G			
P9GR29012G			
P9GR30012G			

Sample #	Date collected	Project (P/R/O)[1]	Page #
P9GR31012G			
P9GR32012G			
P9GR33012G			
P9GR34012G			
P9GR35012G			
P9GR36012G			
P9GR37012G			
P9GR38012G			
P9GR39012G			
P9GR40012G			
P9GR41012G			
P9GR42012G			
P9GR43012G			
P9GR44012G			
P9GR45012G			
P9GR46012G			
P9GR47012G			
P9GR48012G			
P9GR49012G			
P9GR50012G			
P9GR51012G			
P9GR52012G			
P9GR53012G			
P9GR54012G			
P9GR55012G			
P9GR56012G			
P9GR57012G			
P9GR58012G			
P9GR59012G			

1. P=PRDT (Gretchen Matthern). 45 organic samples needed; can be collected from one tray.
R=RWSC (Larry Hull). 3 organic samples needed; should be collected from different trays.
O=OCVZ (Jeff Sondrup). 11 organic samples needed; 10 from different trays, 1 dup.

Sample Information Sheets

Date ft Time for

1/31/04 R Fox → 2/1/04 2:43 AM

0243: Scoop 3073 R·A·D 9.39 - 7 - 11.86 743 sludge

Exc. book p. 31

TS-6-0730
520-5093 my cell

Pit 9 Well ID	Gross (cps)	U235 (pCi/g)	U238 (pCi/g)	Pu239 (pCi/g)	Pa233 (pCi/g)	Am241 (pCi/g)	Cs137 (pCi/g)	Co60 (pCi/g)	Cl_1165 (cps)
P9-01	402		24	280,400			1		7
P9-02	637		70	308,100					1
P9-03	1,925		37	1,598,000					38
P9-04	419			308,900					8
P9-05	278			33,800	20				2
P9-06	432		361	151,700			1		20
P9-07	216						1		4
P9-08	1,822	34	2,516				0		7
P9-09	1,430		386	696,300		274,000			17
P9-10	295						1		3
P9-11	554	30	387	36,200			1		5
P9-12	213								7
P9-13	209		69						15
P9-14	265			36,200			1		3
P9-15	603			484,800		56,900			3
P9-16	244			72,500			0		17
P9-17	239		67				1		6
P9-18	211		27				0		12
P9-19	440	5	296	18,600					11
P9-20R	257,877			194,171,000		20,770,000			3
P9-21a	362			128,200			1		3
P9-22	1,693			1,499,000		141,300			3
P9-23	316			91,500			2		1
P9-24a	4,611			3,917,000		664,400			5
P9-25a	1,168			952,100		86,500			3
P9-26a	346			111,000			1		1
P9-27	2,598			2,549,000		235,100			6
P9-28a	225								
Average	10,001	23	385	10,372,215	20	3,175,457	1	0	8
Geomean	646	18	137	341,665	20	348,010	1	0	5
Ave P1-19	570	23	385	335,458	20	165,450	1		10
P9-20R*	257,877			194,171,000		20,770,000			3
P9-20-01	47,990			41,181,000	111	4,557,000			3
P9-20-02	22,115			6,562,000	158	12,663,000			3
P9-20-03	11,865			5,926,000	20	861,000			2
P9-20-04	962		62	478,000		74,000			2
P9-20-05	5,966		24	4,482,000	13	480,000	1		1
P9-20-06	18,334			13,640,000	34	1,844,000	1		17
Average	45,639	0	29	33,305,000	56	5,156,125	1	0	4
Geomean	16,561	0	39	9,864,071	43	1,825,630	1	0	3

9100 ~~5182~~ 51835 + 1898 elevation

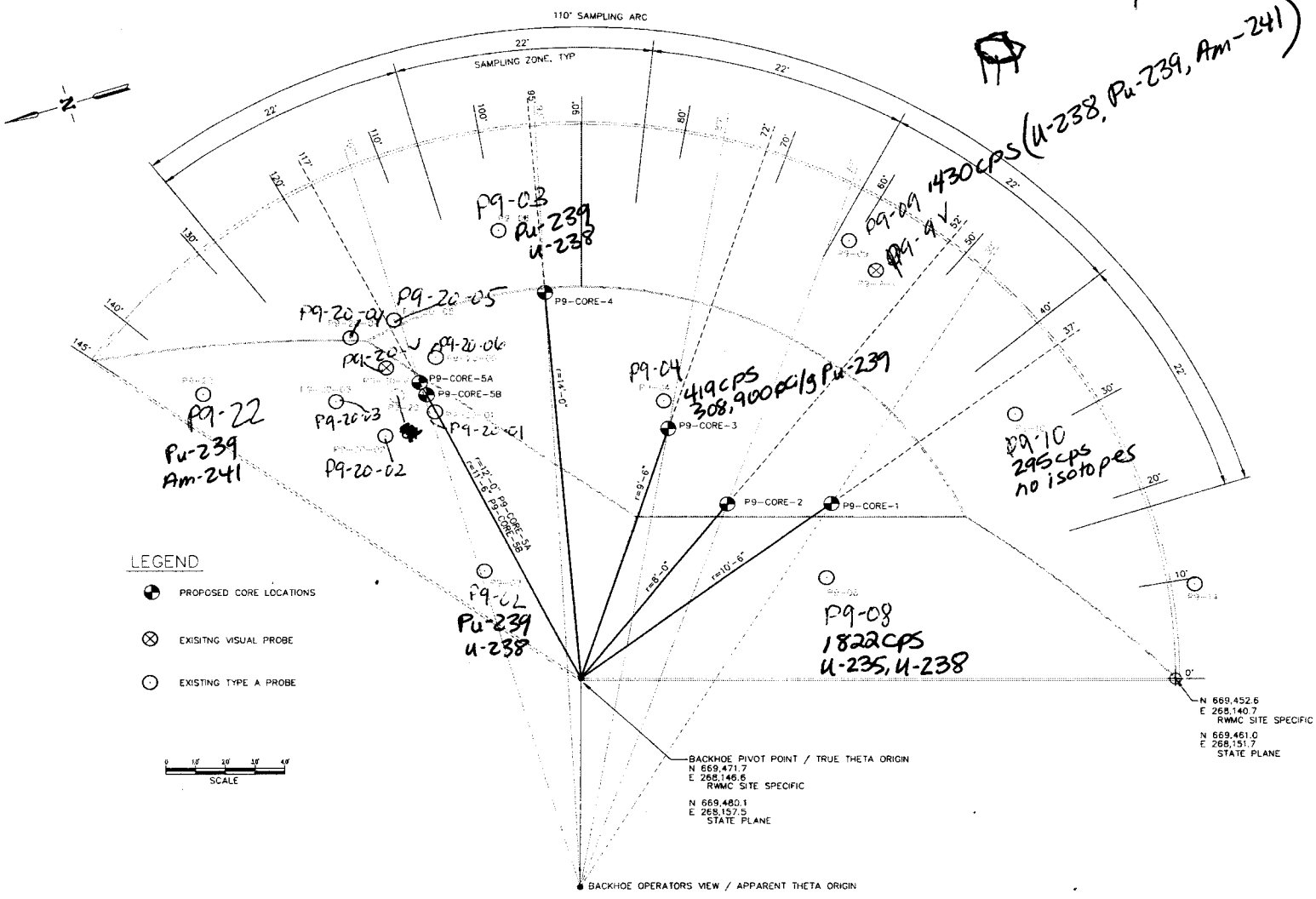


Figure 8. Proposed core locations for excavation bottom using r, θ d positioning system.

11 ft deep excavation + (1.5 – 5 ft) underburden