GLOVEBOX BOOK

OU 7-13/14 Field Representative GEM Logbook

DATE START January 20, 20 04

DATE END February 20, 20 04

LOGBOOK NO: ER-038-2004

LOGBOOK ASSIGNED TO: Gail Olson

PROJECT: OU 7-13/14 Field Representative GEM

WHEN COMPLETED RETURN TO:

COREY HARRIS OR KATHY OTTER
6-2850 MS# 3960 6-5405

*****IF OWNERSHIP OF THIS LOGBOOK CHANGES, PLEASE IMMEDIATELY NOTIFY: COREY HARRIS AT francl@inel.gov*****

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520-5093

GEM FRs:	Work	Home	Pager	Cell
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Craig Conner	6-3090	523-3352	6493	
Bob Fox	6-7844	524-6139		
Jean Holdren	6-6901	227-0446		
Greg Hulet	6-0283	523-6199		
Brandt Meagher	6-9767	523-7986		520-6554
Denny Myers	6-3081	552-4602	4927	
Gail Olson	6-4069	523-4959		
Greg Studley	525-9358	528-0609		
Neal Yancey	6-5157	785-5258	9363	709-1177
Turnaround Office	6-9200			
Shift Supervisors:				
Matt Schorzman, A/B days	6-2236		6153	
Dan Croft, A/B nights	6-2767			
Steve Lambert, C shift	6-2767		4957	
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Other Contacts:				
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RWMC shift desk	6-2767			
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Jerry Custer		A		
Mike Galassi		A(acting)		
Kevin McCarthy		C		
Kelly Hoyle		B (acting)		
Bon Holm		D		
Brian Perkes, IH	6-9358	IH		
Jeff Messaros, WGS	521-0358	WGS		sampling coord.
Rick Anselmo, fax	6-4929	INTEC		

DAILY LOGS

Daily logs are a freeform narrative record of the daily activity during the shift of the OU 7-13/14 field representative. Information will be used for:

1) estimating container integrity for the source release model (e.g., are the drums and bags completely degraded such that the sludges are releasing freely to the environment?),
2) the design and development of remediation alternatives (e.g., are there apparent impediments to grouting success?), and
3) determining the accuracy of disposal records.

Type of Information to Record in the Daily Log:

Estimated void space of the excavation area (first area is supposed to be a lot of empty drums)

Condition of the bags, drums, boxes. Note the amount of deterioration.

Anything in writing (drum ID will look like RFO74705496; barcode 005778)

Label information (where affixed, how big, what color, what was on it)

Colors (e.g., of drums, bags, boxes and the sludges and wastes)

Waste container identification

Waste consolidation (estimate of void fraction within the drum or box)

Feasibility of visual identification of waste type

Visual evidence of waste interactions or biological degradation

Visual evidence of waste migration into interstitial soil or underburden

Observation of commingling of waste and interstitial soils during retrieval

Visual identification of waste seam/underburden or waste/container or waste/waste interface

General waste form (sludge, liquids, etc..)

Moisture

What fraction of the drums is breached

How much surface area of the drums is gone

Condition of cardboard/plywood boxes

How much of the backfill dirt can be separated from the waste, and is the backfill dirt TRU, < 2 nCi/g, or between 2 and 100 nCi/g.

Staining (include color and the distance that the staining has moved from origination)

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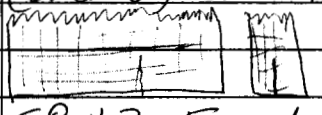
DAILY LOG

Date: 1/20/04 Name: Gail Olson Shift Start Time: 7AM

Dig location at start of shift: Reach (ft) 13.7 Angle (degrees) ~35 = (between 3+4) Depth (ft) 9.7*

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

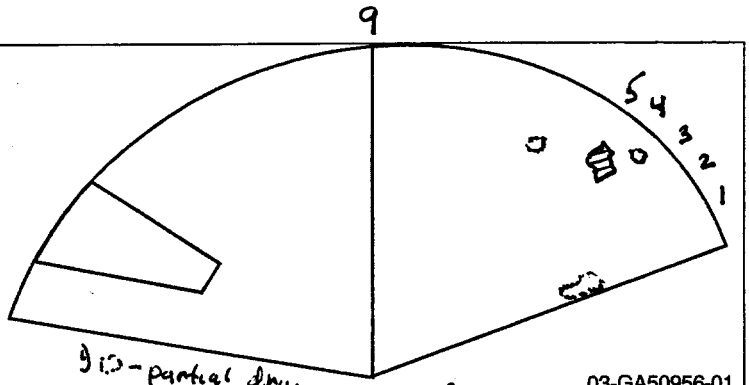
TIME	OBSERVATION * NOTE: SUBTRACT ~4' to get depth from surface.
1049	GB#1 - White stuff brought in - looks like shredded fabric, like thin linen, ½" squares or so, pure white. One portion of material is stained orange. Filter? Looks more like crepe paper than linen. Might be an absorbent material. Also was a chunk of wood in the tray ~ 1½" x 2½". Apparently waste is here. Rest is soil, mostly dry, blocky. Some rocks/stones, calcium-encrusted lava (basalt) chunk ~ 4" x 8", scant roots/root hairs.
	 ← 1ST DIAGRAM OF FIRST WASTE.
1237	GB#3: Found part of backhoe, which matched a part they found last night. In general, the soil is getting gloddier. Is moist.
1315	Another scoop of soil - same vicinity as plastic/fiber material slightly to the left (~ ~~37°~~) (40°) Largely loose soil w/ ~ 30% clods. Clods ~~are~~ range from 1½" to ~ 4-5" diameter. A little lighter than 10YR 5/4. Sample collected for GEM. from each cart → composite
1323	GB#2: Load (next scoop) looks a little more moist/orangier (still ~ 10YR 5/4 though) and some calcic chunks ~ 10YR 6/2. Lighting?
	Gail Olson 1/20/04 1408

1·26·04
1000:

1) waste (drums) excavated over weekend.

2) ARC sections 1-3/4 3rd 1' Lift exposed more bright white material insection 4

3) barrel/Drum in sect. 1 Along wall has plastic liner; excavation has spilled some contents (?) that appear to be excised granular contents [from glove box side]



9 i.e. - partial drum exposure

bright white material exposure area

4) shift progress for 3rd (lift lift) @ ARC section 4.5 - 5
Note: scoop #'s begin w/ PGS # Ex. 2043 43rd scoop @ PGS 2

[illegible] 1·26·04

DAILY LOG

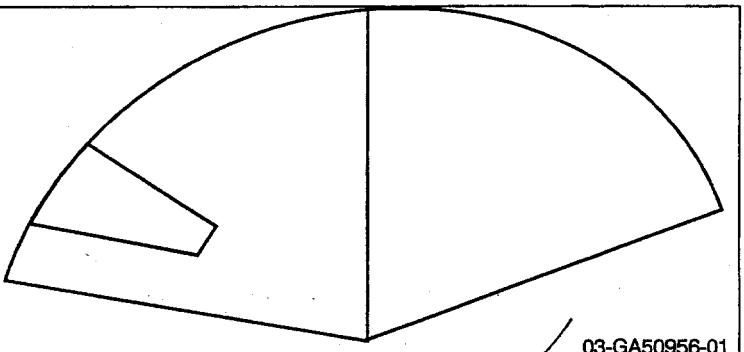
Date: 1/26/04 Name: G.W. Studley Shift Start Time: 0930

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
1000	PGS 1 in operation: sorting TRAY
1030	TRAY sorted & DRUMMED - wasn't able to see material IN TRAY
1036	backhoe in operation; scoop going to PGS 1: from Area section 5 #2043(?)(1043?
1047	sorting soil IN TRAY @ PGS-1: SL moist, LT-MOD yel brown - 10YR 5/4,
	fin-med grain (silty-fn sand) soil w/ some chunks of (basalt) Bx. (minor)
	Bx chunks RANGE up to 2" w/ CO_3(?) coating - not formed in pit/area burial (?)
	R-A-D 9.64-5-10.07 [10.07 - 7.68 = 2.39' below shoring box] ?? RAD 2nd hand
1102	Excavator scoop → PGS2: SAME AS PGS-1; SL darker in color?? moist.
#2044	content? (10YR 4/2?) fewer Bx chunks: silty loam soil (?) CREWS → break
1145 →	break [Note: drum debris in debris TRAY (PGS-3) has a peacock - cobalt
	blue color coating splotches - Oxidized Fe/paint (??)]
1225	sorting PGS-2 soil TRAY. moisture content tends to form "chunky"
	breakup of soil/silt from compaction of fill [*2044 RAD 7.54-5-9.56]
1240	DAVE Morgan obtaining pictures of "peacock" drum debris: DRUMMING
	sorted soil TRAY @ PGS-2
1251	Excavator obtaining scoop from in front of backhoe, section 5; scoop → PGS2
	#2045 R-A-D 6.08-5-9.52: "Cloddy-chunky silty soil w/ Bx (basalt)
	sporadic occurrences. SL. moist, LT brown 7.5YR 6/4-5/4 (depending on moist.)
1315-1318	PGS 2 Liner/soil ready for drum → DRUMMED
1353	PGS 3 under repair; PGS 2 only can handle (2) more scoops for
	capacity, PGS 1 FMM done for moment.
#2046	5.81-5-9.76
1400	Leaving site

G.W. Studley 1.26.04



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2/25/04

DAILY LOG

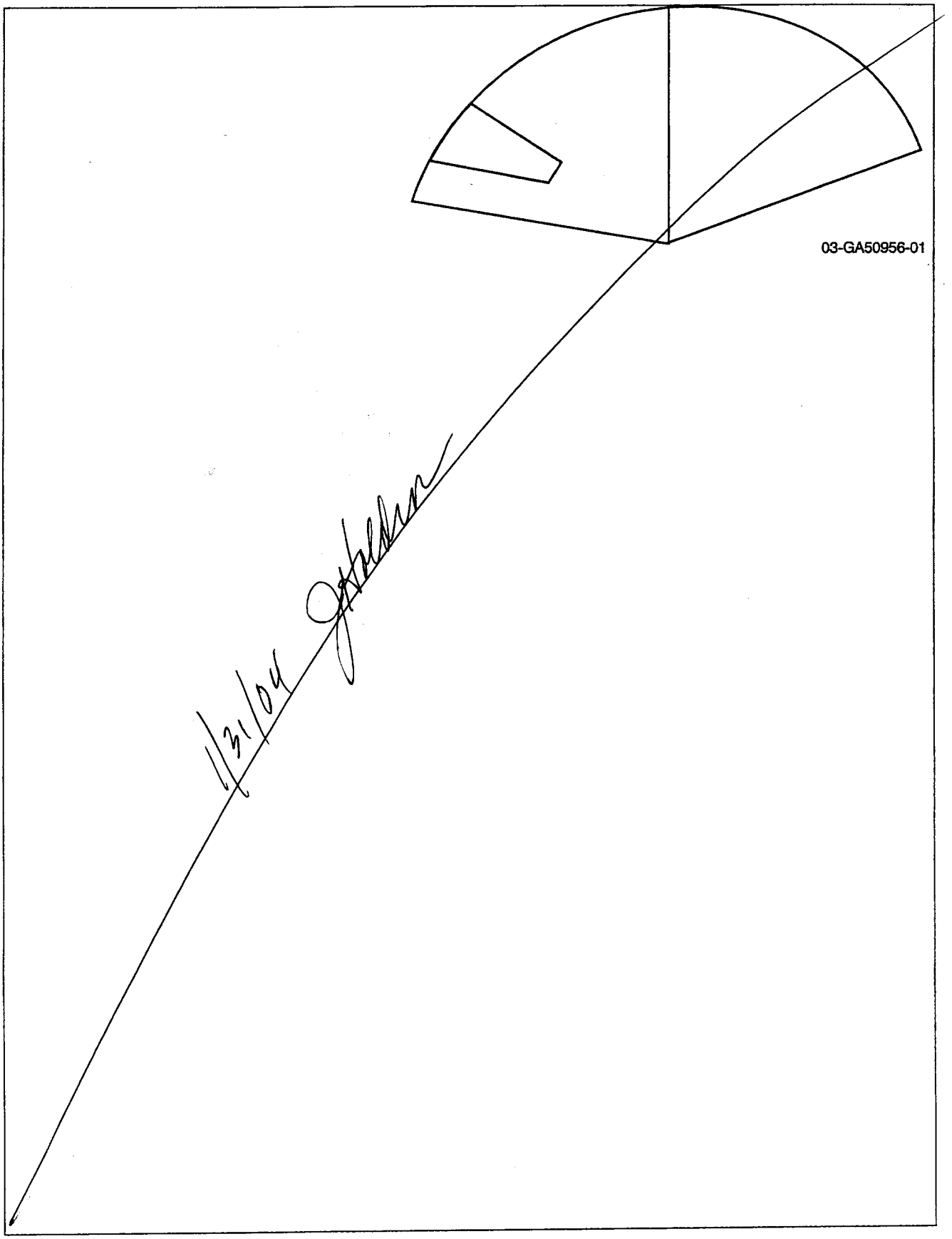
Date: 1/27/04 Name: Gail Olson Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
1123	GB #2 - Scoops from today =
	2058 9.31, 4, 10.75
	2059 8.84, 4, 11.12
	3062
	1094

1/27/04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1/31/04

DAILY LOG

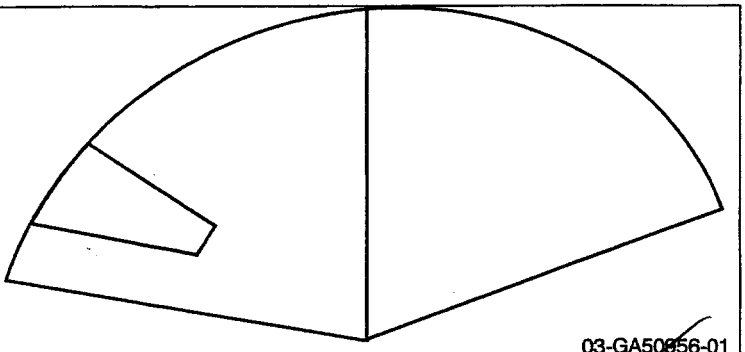
Date: 1/31/04 Name: Jean Holdren Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
1320	Scoop # 3069
	The scoop was taken from an area of the pit that appears to be a sludge area. There was staining in the pit. The HEO (Scott) attempted to get beneath the "sludge" to det if there were bags or rusty barrel carcass. In GB #3, the scoop contains mostly soil w/ abt 1% or less of plastic pieces ≤ 4" diameter and cardboard pieces abt same size. Plastic pieces still have some plasticity - you can pull them + they aren't just plain brittle. They don't break. One piece of plastic had a moist smear of orange "sludge" or something. It left moist spot on operators glove.
~~1335~~	Jean Holdren 1335
1335	Collected what appears to be cemented sludge - a few small dessicated roots are present - perhaps these are shreds of plywood. Slight rad readings observed on crumbled bits of "moderate reddish orange" material, color 10R 6/6, and 10R 4/6. These materials were photographed in a dustpan, then returned to the tray. Tray contents were bagged and drummed 1425.
1425	Scoop # 1124
	metal drum remnant, collar and part of drum side. Obvious peanut butter-looking sludge, but samples not collected. Further observation - nice, pure-looking masses about 3½ - 4 inches in diameter. A sample was requested. A sample container must be bagged in. Sample color is 5Y 7/2. Gbox operator describes the material as mushy, putty-like, goochy. Collected two samples.

2/25/04



03-GA50856-01

2/25/04

Shane Steel PGS #3
Mel Saunders PGS #1

2-1-04

DAILY LOG

Date: 1-31-04 Name: RJ Fox Shift Start Time: 20:00

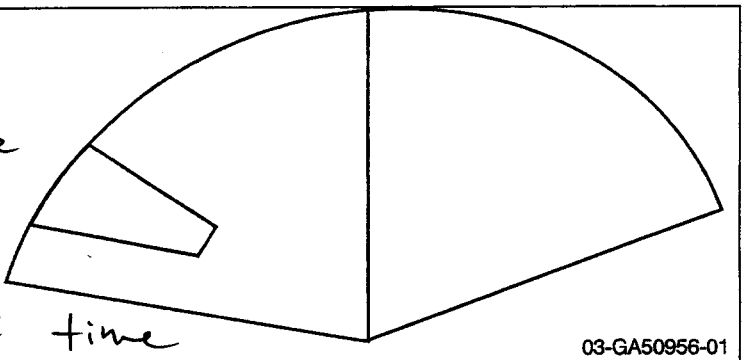
Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION Steve Lambert (Super) Kevin McCarthy (Foreman)
2110	PGS #3 is slow: 15 minutes to move tray in + out. Tray still had scoop of dirt / debris in it Scoop # 3070. Crew changed out gloves / o-rings performed minor maintenance + changed out Bag In / Bag out Device - PGS #2 - crew performed Maintenance + PGS #2 is out of service. PGS #1 Is in service + working well - Drumming out @ Start of shift (Drums are weighing ~ 300-400 lbs) Scoop # 1126 still in tray / Now is drummed out - Soil - Very little debris. No or low rad
2215	reading. Scoop # 1127 into PGS #1: less than 1% debris. Debris does consist of rusted drum shards < 1" long + decomposing cardboard. RCT took rad reading from soil - No or very low rad. Clay chunks > 4" dia + chunks of calcium carbonate rock > 3" dia
0040	Scoop # 3071 into PGS #3 - Mostly Soil. Nothing Interesting Now 2-1-04
0119	PGS #3 Scoop # 1128 - Probable 743 sludge sample chunks of Moderate Yellow 5Y 7/6 moist texture some darker Red Moderate Reddish Brown 10R 4/6 And maybe between 10R 3/R + 10R 4/6. - Consistency is peanut butter - moist, clumps when squeezed w/ glove 2 samples taken
0248	PGS #3 Scoop # 3073 5 or 6 large chunks of peanut butter / sludge - Some slightly coated w/ soil. will try to get soil off. Mixture of colors Light Brown 5YR 5/6 to moderate yellow 5Y 7/6. The attempt will be to get as many samples as possible - 10? This is a very good, intact, relatively clean 743 sludge -
0420	Bagging samples out on #3 - This will take several hours. All 10 may not come out this shift. Had to compromise and chose only

RJ Fox 0421 2-1-04 over

10 Samples. This scoop
Could easily have done
20+ samples; But,



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there was a question of time
and the # of DDTC canisters available.
They only had enough DDTC's to get 10
Samples + still have enough DDTC's to do
their routine composites. 10 was a
Compromise between shift super, PGS#3 Supr,
+ cad con. RJ Fy 2-1-04

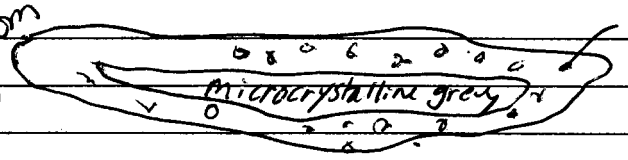
Justified 2/25/04

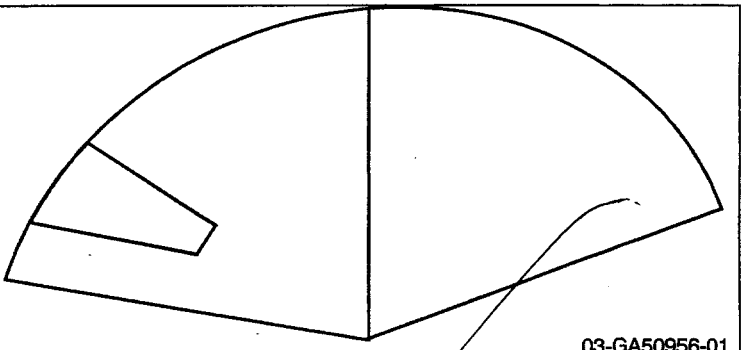
DAILY LOG

Date: 2-1-04 Name: Gail Olson Shift Start Time: 7A-7P (D)

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
~~1400~~ 1430 ~ 1620	There are 10 samples in GB#1, w/ readings of ~ 10000 counts thru the glovebox gloves. These samples have caused problems, ~~for th~~ They jars are α contaminated, need to be deconned ~~on~~ (outside of jars). Also may need to decon the glovebox where they count the smears. ~~#~~ Some workers are getting stopped upon exiting by the monitors. Recorded reading from the FMM in the Sample Info Sheets section. Reading ~ 200 counts from window of GB#1. Presently there are 2 samples there which we called 741 sludge.
	picture of grey chunk from GB#1. Hot.  5B5/1 microcrys.
	We're not sure if one or both are 741 sludge, since both read ~ 10,000 counts through the gloves.
1716	GB#3 is shut down; Smear gb is shut down; GB#1 is on hold w/our samples. Smears from GB#3 are 20000 D.
NO EXCAVATION DURING OUR STINT	
	Gail 2-1-04 1830



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Gustaly 2/25/04

DAILY LOG

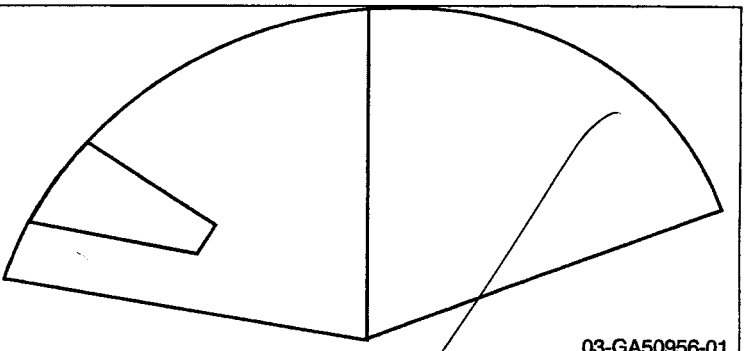
Date: 2/2/04 Name: MCAGHER / OLSON Shift Start Time: 10:00 am

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) 9.44 Angle (degrees) 3.5 Depth (ft) 12.82

TIME	OBSERVATION
10:34	PGS #1 - ~~SAMPLE TAKEN~~ BGM SCOOP/CART # 1132
	Apparently this CART was dug on 2/1/04. Watched
	operator ~~sift~~ BGM SORT through tray. Majority
	of WASTE(S) APPEARS to be hard, concrete like
	material white in color. Looks like some
	smaller amount of putty material.
	MIXED up waste forms that look mostly
	like soil.
11:05	Lunch
12:20	Selecting sample - NOT REQUESTING "ROCK hard"
	material, setting aside REDish material that
	is friable.
2:00	SCOOP PLACED into PGS #1 from bottom
	of pit.
4:50	Intestinal soil sample (GT02) collected
	from PGS #~~3~~2 bgm
5:31	SCOOP placed into PGS #1 from bottom
	of pit (#1134) - NO obvious samples
	to be taken
5:40	OUT

2/2/04



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Bob Stanley 2/25/04

DAILY LOG

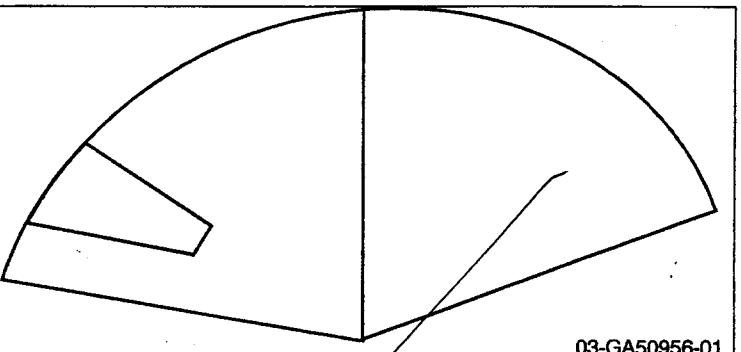
Date: 2/2/04 Name: MYERS/STUDLEY Shift Start Time: 2000

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
2030	STEVE LAMBERT ASKED ME TO CALL JOE UPTERGROVE, THE FNM. MR. UPTERGROVE ASKED THAT WE SPEED UP THE SAMPLING PROCESS AND EXPRESSED THE NEED FOR MORE PRODUCTION. I TOLD HIM I'D PASS ALONG THE MESSAGE.
2100	CREW PROCESSED TRAY #1135 INTO THE DRUMS AND PROCEEDED TO CHANGE OUT DRUMS AT PGS1. I DIDN'T SEE ANY LIKELY SAMPLE MATERIAL. MOSTLY SOIL INTERSPERSED WITH WHITE FLAKEY MATERIAL.
2130	CREW PROCESSED TRAY #5076 IN PGS3. TRAY CONTAINED MOSTLY SOIL AND ONE LARGE CHUNK OF CONCRETE DEBRIS. SMALL AMOUNTS OF CLAY-LIKE CLUMPS EXHIBITED SOME COHESION, AND WERE MOLDABLE TO A LIMITED EXTENT. POSSIBLE T41 SLUDGE, BUT WAS NOT CONTAMINATED WITH RAD THROUGH THE GLASS. NO SAMPLE TAKEN, TIME TO GET SOME DRUMS FILLED. SEVERAL SMALL DRUM FRAGMENTS ALSO.
2300	CREW WENT TO LUNCH. LIMITED SAMPLING OPPORTUNITY FOR REMAINDER SHIFT. THINK WE'LL CALL IT A NITE.

D. R. Myers 2/2/04 2300



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RJ Stanley 2/25/04

DAILY LOG

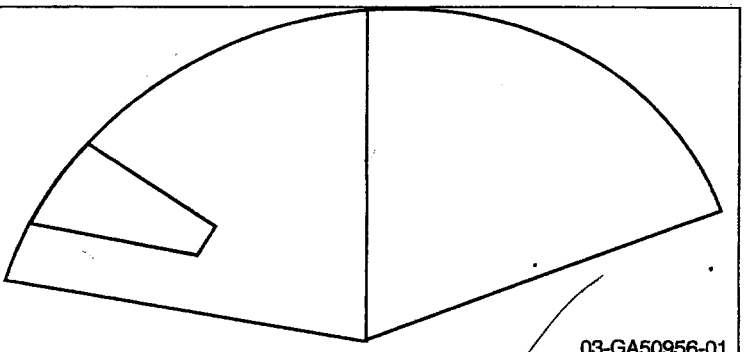
Date: 2-4-4 Name: Neal Yancey Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
12:42	PGS-1 Glovebox 3 observed drum out of soil/waste. The scoop # on this tray was 157. All three gloveboxes were performing drum changeout. The operators expected to be down for 2-3 hours before resuming excavation because of the changeout

Neal Yancey 2-4-4



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2/25/04

1A-1B

DAILY LOG

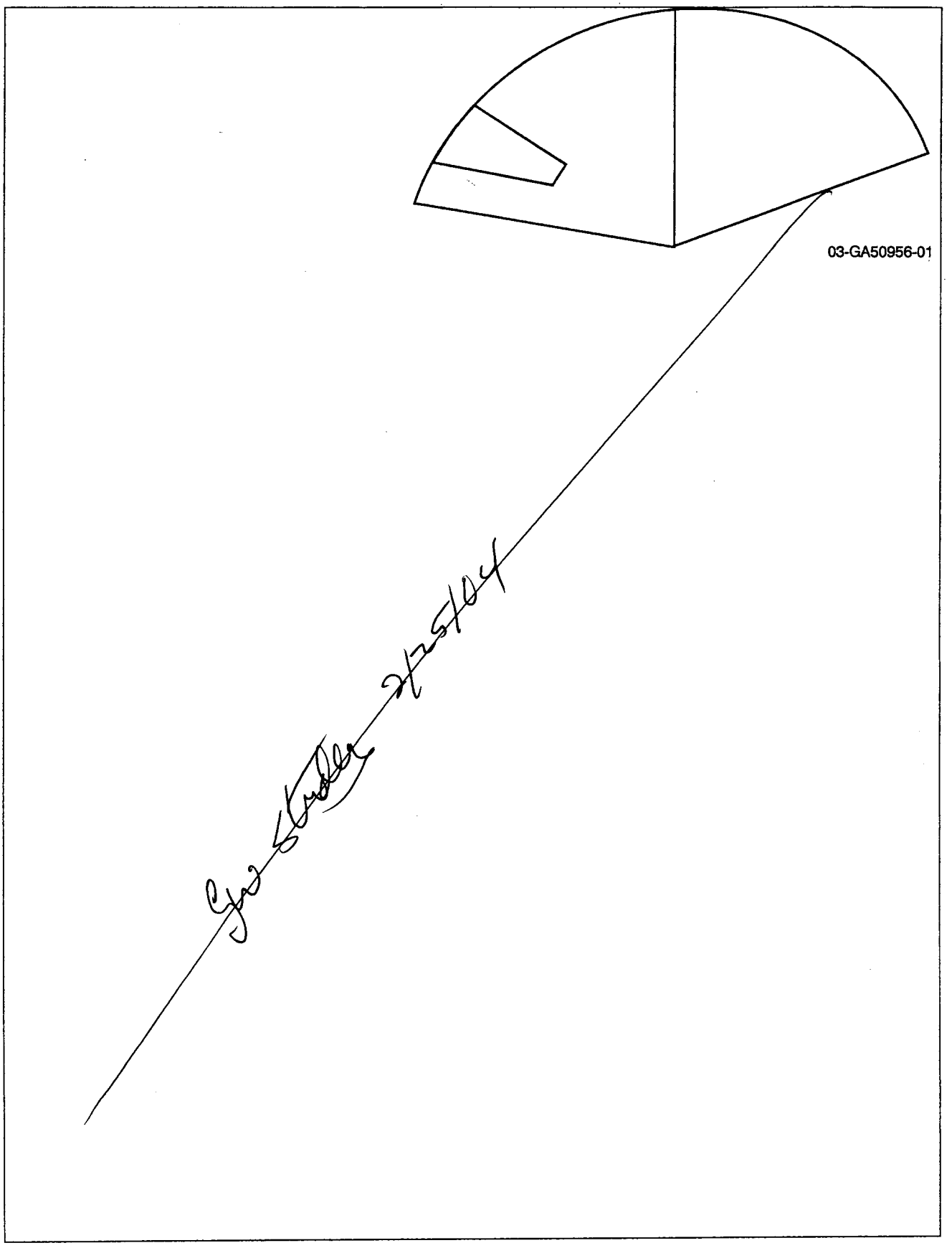
Date: 2/5/04 Name: Gail Olson Shift Start Time: 10:30

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
10:58	GB#1 = Scoop next to the leaking drum.
Just before	~~When~~ we came on shift, a drum w/ liquid had been encountered. They hit it and liquid poured out. When they went into the tray to get absorbent, the absorbent went airborne + spread all over the pit, blocking view of pit. We didn't see the absorbent incident but took pix of the "fallout". ~~Next~~ The scoop contains gloves + debris along w/ some "work permits" from 1967. Matt Schorzman said they found some permit(s) last night/yesterday also, which were also dated 1967 (april).
Present scoop →	R 6.84 A 3 D 13.33 S# 1162
	There's ~ 10%-50% debris in form of papers, gloves, and a bit of box material.
12:00	GB#3 Items in item cart include drum ring, rusty chunk of drum metal, gloves + 3 in 1 oil can (possibly new?) The soil cart has elevated rad readings. Sludge in cart is grey in color, ~~soil~~ mixed w/ soil. Scoop #'s 13090 R=7.62, A=5 D=13.55 PGS#2 is empty; ready for another scoop.
12:23	HEOs and most of crew still not back from lunch.
1241	Scoop going to GB#2. There's sludge (whitish) beneath this scoop. Mostly dirt/plastic
1	~~D=14.08 8.42=R~~ Scoop 1163
	R=7.61 A=7 D=13.23

2-5-04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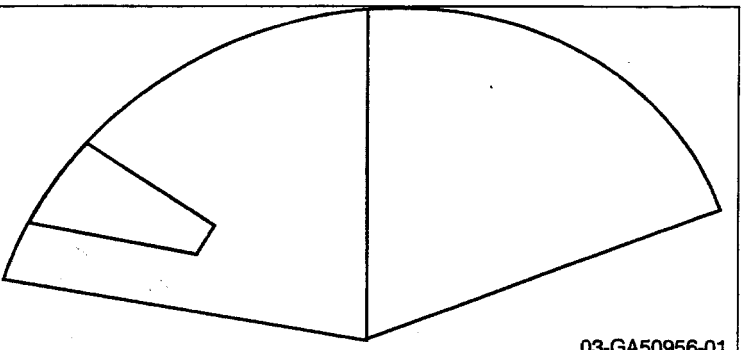
DAILY LOG

Date: 2/6/04 Name: Jean Holdren Shift Start Time: 0900

Dig location at start of shift: Reach (ft) 7.15 Angle (degrees) 5 Depth (ft) 13.87

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
0900	No gloves are operating. PGS1 is testing the drum-out procedure to assess continued respirator requirements. PGS2 is down - a glove is torn and must be replaced. PGS3 is completing a drumout. Kelly Hoyle (GEM Foreman) indicates it will "be a while" before excavation and GB operations resume. He says probably later today.
1445	PGS3 1/5 scoop 1176 - mixture of confetti shavings, dirt, and shredded pieces of plastic bag. Small clumps of probable 743 (peanut butter-looking) sludges are present in small quantities (e.g., 7-10 pieces ~ 1" diameter) are observed. A few pieces darker sludge were identified as such by the GB operator. This load also contained numerous pieces of badly corroded metal (drum remnants) and stained, shredded cloth. No rad readings showed positive. In all, this was an uninteresting scoop, except lots more "confetti". R-A-D = 8.33, -3, -14.79
1500	PGS2, scoop placed in tray
1510	PGS1, scoop placed in tray
1510	lunch break
	Visually, the 1500 and 1510 scoops are similar to the one collected at 1445, and are probably no more interesting. We called it a day since the apparent plan is to continue in an hour after the PGSs are cleared of the awaiting scoops.
	2/6/04
	JHoldren



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2/25/04

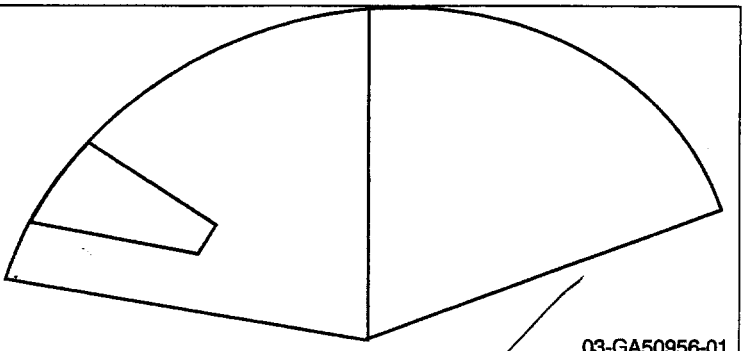
DAILY LOG

Date: 2/8/04 Name: RV Fox Shift Start Time: 0700

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
0700	Outside door (Big Rollup) is stuck open preventing opening of inside roll up door. This is causing shutdown because they cannot have both doors (Big Rollups) open at the same time. Manual drum handling could be followed to move drums out. But right now GEM is shut down until door is fixed.
0800	Crew is manually hauling in empty drums. Drums need a 3-4 hour warm-up time. Crew only has 2 empties that are currently usable.
1035	Big rollup doors still not fixed: crew is manually taking full drums from beneath PGS lines out of tent + hauling them to inner rollup doors.
1404	1 Core sample acquired.
1515	Core sample is stuck in the tube + they cannot get it out. It will likely be another hour before they get this sample out + tool up for the second core. Next shift may see more sampling opportunities for interstitial soils on the Zone 1 / Zone 2 interface



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2/25/04

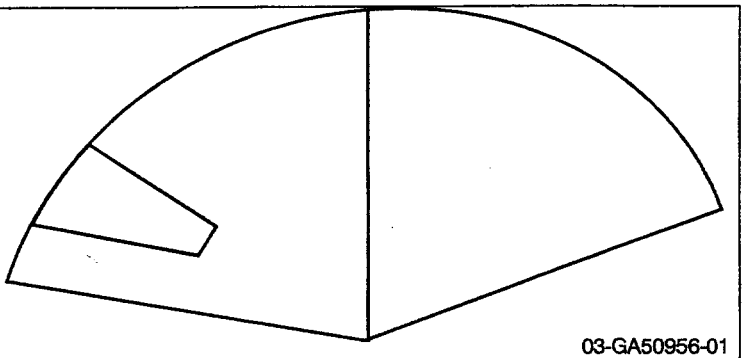
DAILY LOG

Date: 02/08/04 Name: Tom Bechtold Shift Start Time: 20:30

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
21:03	(interstitial soil); at foot of _____ in sector 5 white granular matl rumble from NEO dock some plastic film on end of excavation to PGS Inv 1@
21:28	soil from base of PG9-04 to PGS #2 <dump>
@ 0:13	more soil to build platform in section 1 to place drum reduction tray waste is mixed w/ soil displaced during stabilization of tray atop section 2 expect obstruction of ~~from~~ some waste from displace lateral to PGS
@ 0:25	PGS2 — largely soil; some plastic film; misc drum remnants one yellow glove, clump of oildri? no sample
@ 0:35	PGS-3 — ibid ~~tray 3106~~ ~~7.13/5/14.30~~ no sample
@ 1:02	PGS-3 — #3124 8.75/7/15.41 no sample clumpy dirt / no apparent sludge
@ 1:22	PGS-3 #3125 9.73/6/15.70 — very solid clump dropped to end of cart & broken up — color as soil = 10YR 4/2 dark yellow brown; no ~~plastic~~ soft sludge; clumps difficult to break no sample
@ 1:42	PGS-1 # ~~10~~ 1203 7.86/5/15.74 — just dirt no sample
@ 1:51	PGS-1 # 1204 6.64/5/13.92 — drum of PTE crushed. gloves significantly degraded — clumped together latex? small clumps of 743 sludge ~~gray~~ 10YR 4/2 pale olive major volume is unremarkable soil no sample
@ 2:08	PGS-3 # 3127 9.32/6/16.01 largely soil & clots small clots of dark green 743 sludge 10GY 4/4 mingled w/ wet cardboard drum remnants (?) no sample
@ 2:15	PGS-1 # ~~1206~~ 1205 7.76/6/15.54 primarily soft soil few glove remains
	<over>



cont.

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@ 2:30 #1206 7.48/6/15.88 recorder records 96% soil + 28.741?
small gray clumps – not soft

@ ≅ 2:30 conv. w/ Rick W. + Ronit.
anticipate rest of night cleaning soil from section 1 + more drum sizing tray.
then exit 1wk to remove overburden to PP-20

Note that excavation is to ≅ 8 @ dig face, which is within section 2 of original dig plan,

only sludge observed was gray quartzite while dark green matl observed @ 2:08 was sludge

~~02/08~~
02/09/04 3:20

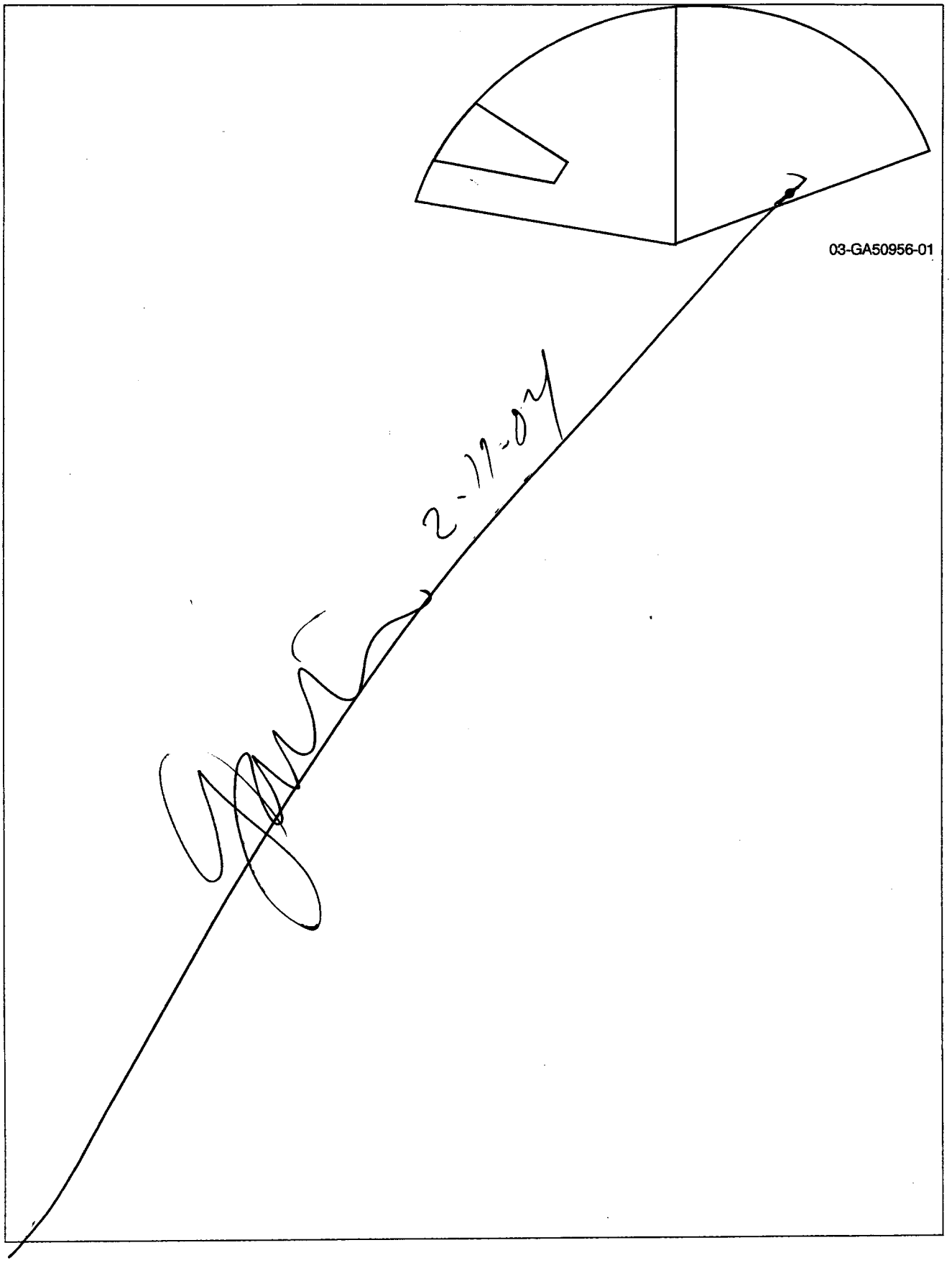
DAILY LOG

Date: ____________ Name: ____________________________ Shift Start Time:________

Dig location at start of shift: Reach (ft) _______ Angle (degrees)______ Depth (ft) ______

Dig location at end of shift: Reach (ft) ______ Angle (degrees) ______ Depth (ft) ______

TIME	OBSERVATION


03-GA50956-01
2-17-04

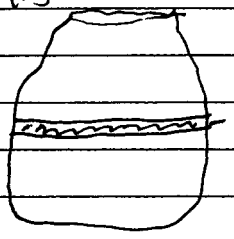
DAILY LOG

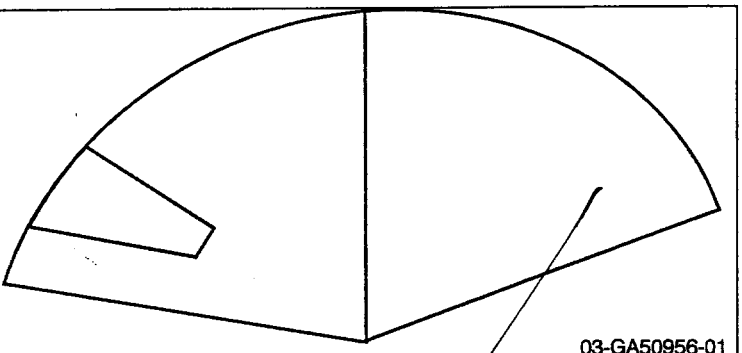
7A-7P

Date: 2/11/04 Name: Gail Olson Shift Start Time: Notes @ 15:03

Dig location at start of shift: Reach (ft) — vary Angle (degrees) ~70 Depth (ft) 14 ft (13.73)

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
1503	6B#3 just ~~B~~ loaded drum w/ soil scoop. Excavation is focusing on sizing a drum at present. The drum is empty, bagged, great condition. You can see it's still yellow. The drum will go to 6B#2 after sizing, where the 85 gal. drums can be packaged. at 6B#3, items in tray are 50% metal (corroded) and 50% plastic, and paper debris, including intact "horsetails" (taped tops of ~~drum~~ bags) GLO 2-11-04
1517	6B#1 soil scoop arrives scoop# 238 R= 8.73 A= 7 D= 13.45
	6B#2 Items tray: a bag, discolored to 100K like pig ears that you buy for your dog; the bag is ~ 1ft long, ~9"-10" diameter, horse tailed w/ white tape on top, has a ~~rubber~~ GLO 2-11-04 "pocket" that contains a tube or something: May have one day looked like this
	
	The tray containing this bag gives off some β γ ~ 20000 counts (no mR/hr ~~reading~~ detects)
1639	Mashed drum to 6B#1. Coordinates S, R, A, D = 1241 7.63 8 13.07
	2.11.04



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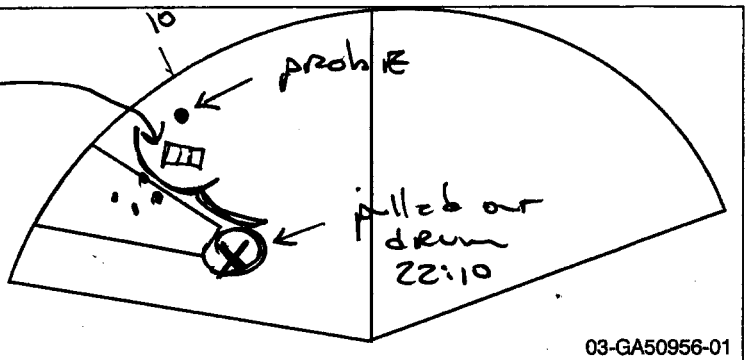
DAILY LOG

Date: 2/12/04 Name: Conner / Studley Shift Start Time: 8:30 AM 7:00 AM - 7 - PM

Dig location at start of shift: Reach (ft) 8.62 Angle (degrees) 7 Depth (ft) 13.61

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
0925	GB#2 - Scoop of dirt was loaded - Small pieces of graphite was found Throughout The dirt.
0958	GB#1 A very large scoop of soil was placed into Glovebox 1. IT WAS Thought Their may be some sludge mix in the soil but sludge material could not be found. We did Take one interstitial soil sample from This Tray. R - 7.12 A - 8 D - 13.06
1305	GB#1, Soil/Debrec was loaded INTO Tray - Another piece of graphite was found. Plastic Airline hood, various plastic pieces NO INDICATION of sludge in This Tray.
1640	We Identified a piece of Sludge in the dig face and requested To Look at it by bring The material To the Viewing window. The sludge was identified as 743 and was combined with a Total scoop of waste and placed in GB#1. When viewing in GB#1 Their was Plastics, Drum rings, cardboard Bad Bags along with other Drum metal.
1700	GB#1 - They decided To change 4 gloves Prior To sorting waste and Taking The 2 samples
1800	Left for Shift change



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- UNDER cut is evident next to probes
- PROBE shown ABOVE APPEARS to HAVE GONE THRU TOP of drum

2/25/04

DAILY LOG

PM Shift Change

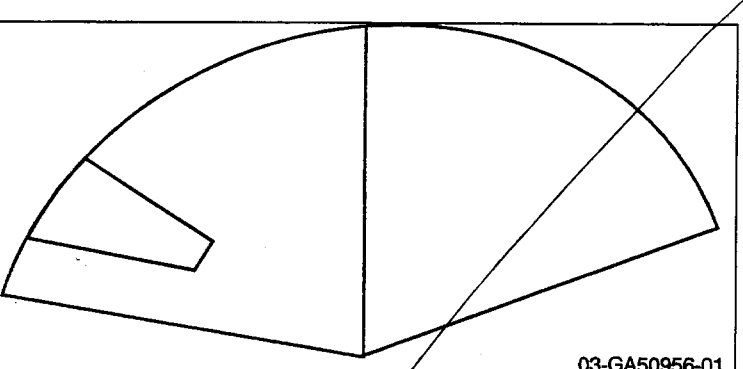
Date: 2/12/04 Name: MEAGHER Shift Start Time: 7:55 Arrival

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
20:49	Large amount of debris in GB #1, plastic, paper, metal 3 samples in tray, 1 hanging above tray, and 1 near FMM. I will ID samples when available.
20:51	22 & 23 743 verified empty jars in tray on GB #1
21:04	GB #3 - Main tray empty - small amount of debris, including small (10 cm³) chunk graphite.
21:06	GB #2 - Main tray empty - some debris in 2nd tray The entire crew is waiting for a procedure change and update to their copies
21:10	Inventoried sample ~~tables~~ labels.
	741/742 - labels 8 thru 13 in file
	743 - labels 24 thru 58 in file
	Soil labels 8 thru 36 in file
	Appears to be one label sheet (#59) - It may be possible that #59 was used on 2/2/04 (pg 140) cause ~~this~~ the sample on 2/2/04 was definately collected.
21:26	- Collected P9GR22012G - Verified pg 160
21:28	- Collected P9GR23012G - Verified pg 170
21:50	- Scoop placed in GB #3 -
22:00	- Scoop placed in GB #2 - looks like total soil - worked on ~~the~~ begin smashing a metal drum
22:10	Peeled our drum - "X" marks the spot
22:21	Set aside sludge for later GB #3, no jars available
2300	Scoop placed in GB #2, 90 % soil, plastic & metal ring from a cardboard drum - no samples
2347	Scoop in #3 - mostly soil - some graphite - U.
2354	Lunch
2/13 0030	Sorting soil in GB #3 - 99.9 % soil - Bagged in sample jar P9GR24012G (GB #3) in anticipation of filling later in shift.

2/13/04 0039



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Blow 2/3/04 0200

DAILY LOG

Date: 2/13/04 Name: MEAGHER Shift Start Time:_____

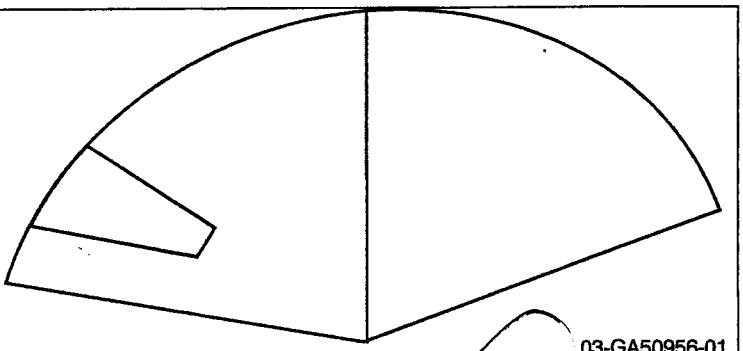
Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
0040	Working on TENT in GB #2 - new floor
0140	Stand down due to electronic notepad failer. TOTAL of 3 743 samples taken this shift. SS & foreman said they would set aside any large chunks they found later tonight.

0200

2/13/04



03-GA50956-01

Rod Stanley 2/25/04

DAILY LOG

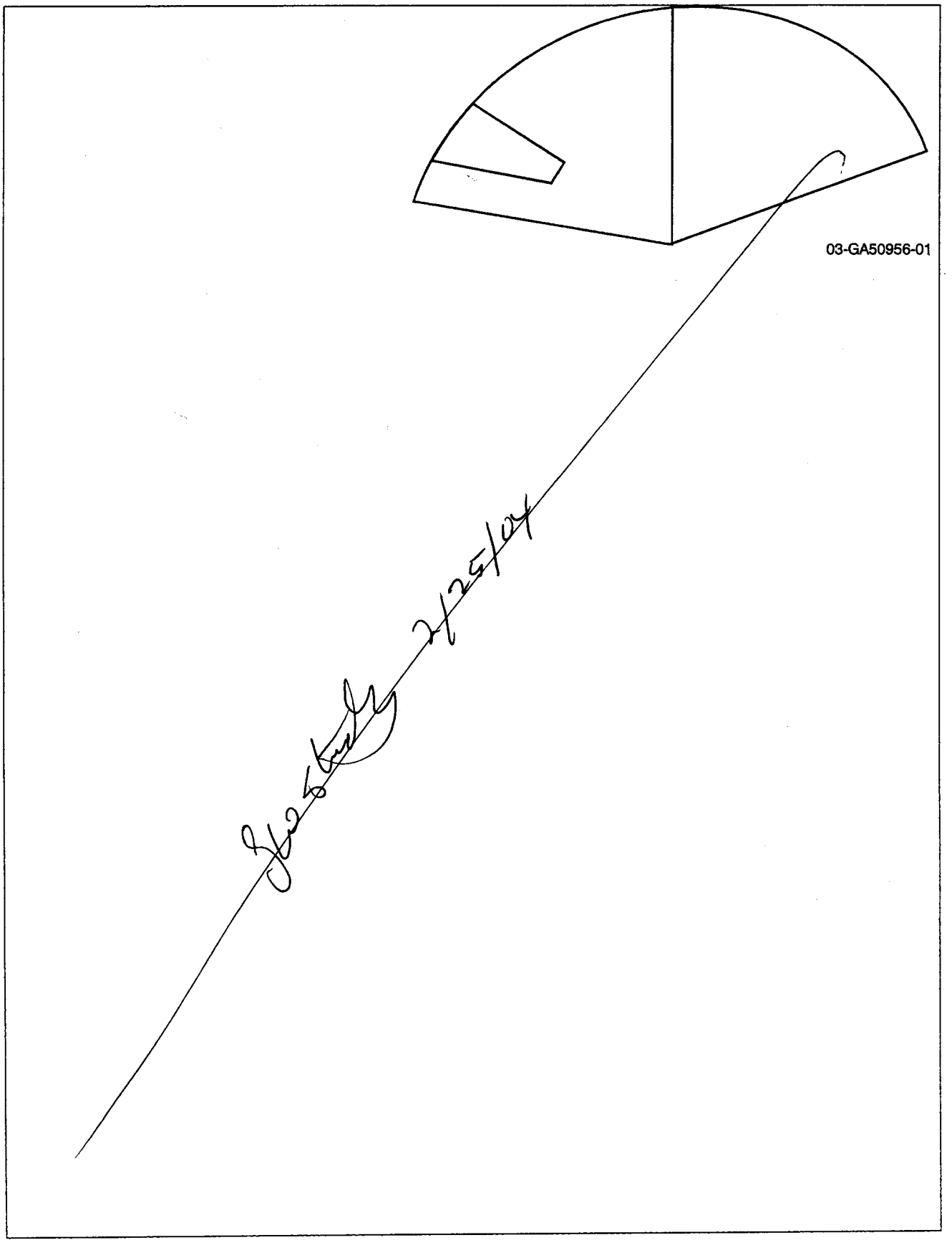
Date: 2/13/04 Name: Craig Conner Shift Start Time: 7:00 ~~pm~~ - 7:00 PM 9:00 Arrival

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
9:35	GB #1 Scoop Taken From general area at Bottom of Dig for "cleanup"
	Pieces of Plastic, Drum, Tape
12:15	Returned from Lunch and began moving more dirt into
	GB #2 and GB #3 - No samples identified.
1355	Two drums That were Laying in Pit was smashed in Tray in
	Pit for sizing purposes. No liquids or materials were found
	in either Drum.
1405	A Third Drum was sized in The sizing Tray.
1740	Intentional soil sample was pulled.
	Shift ended and was Turned over To next crew
	To complete Taking 2 soil samples in GB #2.
	Bottles were labled and ready To place into
	GB #2.
	No other samples were Taken This shift.

Conner 2/13/04


03-GA50956-01

DAILY LOG

Date: 2/13/04 Name: D. R. MYERS Shift Start Time: 2030

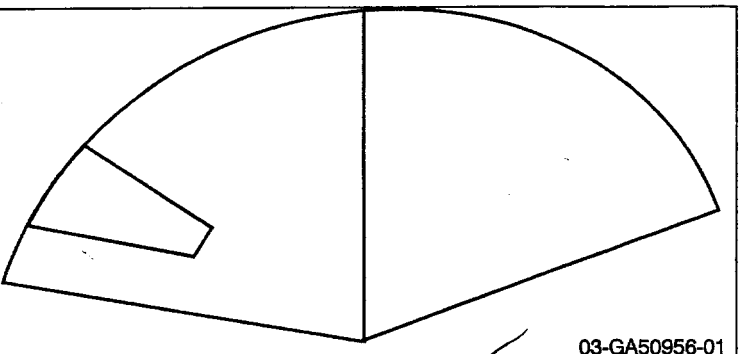
Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
2030	INTERSTITIAL SOIL SAMPLE WAS TAKEN IN PGS #2
	AND PLACED IN THE FMH. THIS IS THE COMPLETION OF
	THE SAMPLING FROM THE PREVIOUS SHIFT.
0530	ROUTINE SOIL AND DEBRIS PROCESSED THROUGH
	GLOVE BOXES. NO SLUDGE IDENTIFIED FOR
	SAMPLING.

D. R. Myers

Z. Hufford



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DAILY LOG

8:30 START

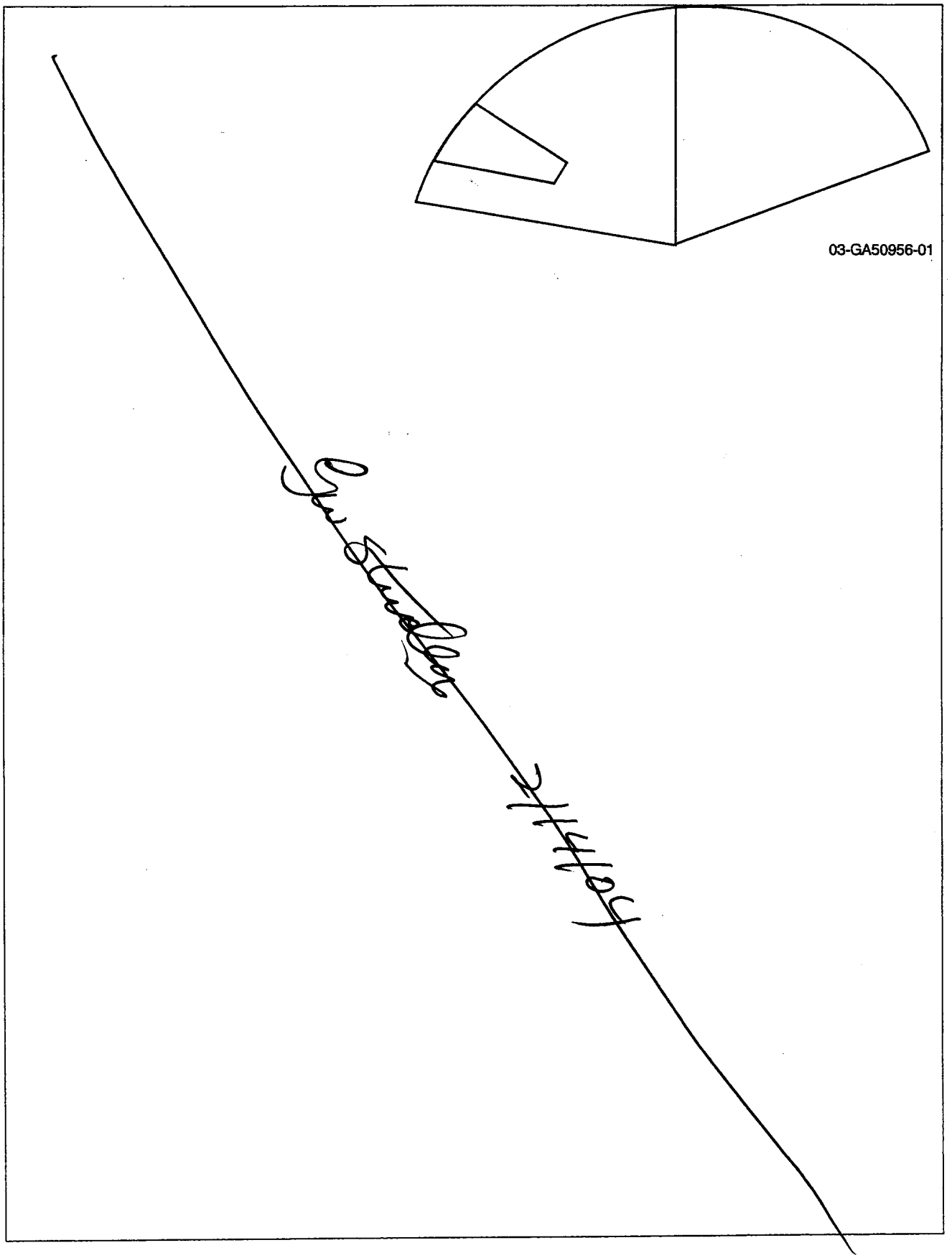
Date: 2/14/04 Name: CRAIG CONNER Shift Start Time: 7:00 AM - 7:00 PM

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
0845	Pieces of graphite was Loaded in To GB#2. These were Removed from Drum on 2/13/04 day shift.
0901	GB#2 - 5 Small Bags of graphic molds each with identifying numbers on them. Each Bag contained a Plastic Nalgine Bottle with graphite in it. Rad Reading are 18-20 mR/hr. (C-3657 = example of identification Number)
1015	Another scoop of Bags with plastic Bottles in GB#2
1112	Lunch Break
Note -	Backhoe is being operated very carefully due To damaged hydrolic cylinder. They are not going To size any more Drums in The sizing Trays.
1315	Only dirt from Top layer is being processed Through GB#1 They are cleaning soil from away from shoring box next To excavator
1500	Left for The day

2/14/04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DAILY LOG

Date: 2/14/04 Name: Studley Shift Start Time:_____

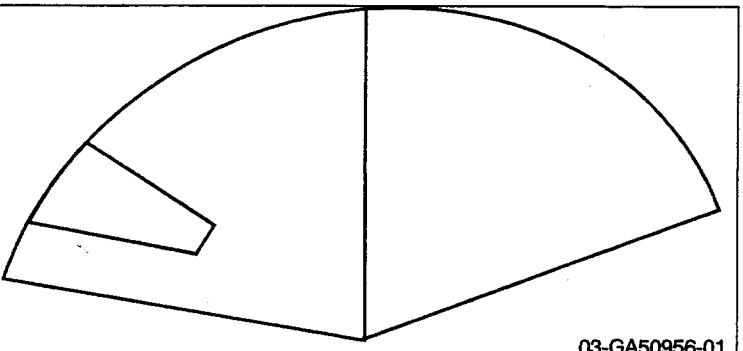
Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
2158	SCOOP PGS # 1 SCOOP # 1279
	TRAY - SOIL, MINOR GRAVEL, DRY SLIGHTLY MOIST, - MOSTLY SILTY
	LOAM type SOIL - LIGHT BROWN 5YR 6/4 (?), fine - med. GRAINED
	metal strip ~ 1 ft x 1 in, heavily RUSTED, ~ 15% 1" chunks of
	clumped soil
2229	SCOOP PGS # 1 SCOOP # 1281
	TRAY - SOIL, V. MOIST, MOIST cardboard, pieces yellow tape, small
	pieces plastic, piece RUSTED DRUM; some of the yellow tape has
	V. MOIST SOIL stuck to it; another ~ 1 ft x 1" metal strip.
	- TRAY SOIL/MOISTURE MAYBE Representative of Liquid Absorbed
	during backfill from Last shift ? COLOR RANGE 5YR 6/4 -
	10YR 5/4 - No Noticeable sludge

2/14/04

Lee Studley



03-GA50956-01

Gus Stuedley 2/25/07

DAILY LOG

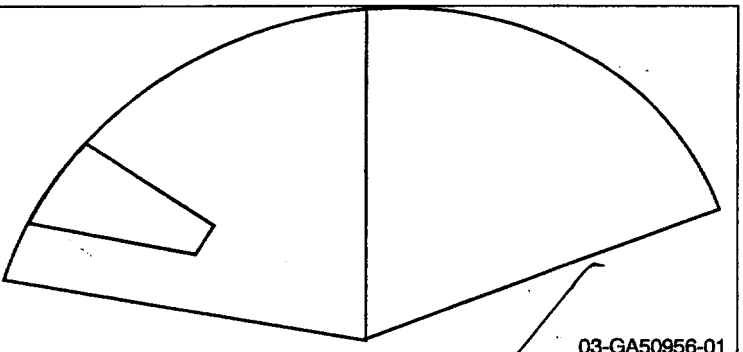
Date: 02/15/04 Name: T. E. Beckfold Shift Start Time: 09:12

Dig location at start of shift: Reach (ft) _____ Angle (degrees) 110 Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
09:12	pit ~~excavated~~ through area 2 and immediately adjacent probe cluster P9-20; drum sizing tray at right ≈ 50°; pile of drum carcasses ≈ 60° to 70° from angle of repose to base of box beneath excavator arm; using open bucket to remove drum debris @ binding in ~~forward ram~~ has raised concern re ~~arm failure~~ disabling arm; suspect bag of graphite in drum sizing box; 2 drums of sludge in face of angle of repose @ 90° ≈ halfway up angle
	<damaged ram is immediately forward of EO/particle - taking now>
	goals to gather as much PGS sludge as possible
	Ron Holm — cooperative
9:49	moving through debris quickly; stacking to far right of drum sizing tray; no sludge; conversation w/ Ron Holm — cores will not be taken this shift or next @ INTEC has not been advised and necessary to repair core hammer @ coupler has been fractured — order has not been initiated to repair coupler.
9:58	disc. @ displace Rick Horne & Kelly Dooley re remove sludge from angle repose @ 90° — no objection. Rick Horne says 6 bags of graphite bottles ~~to be~~ expired yesterday; number of drums not known; 5 bags to PGS 2; 45 mR when piled in cart; 5 bags into 55 gal. drum — ≈ 10 mR ≈ ≈ 43 PGE ruptured one bottle in bottom of excavation gray plume of dust observed rising to WES air outlet — meters ~~the~~ rose ≈ 4X bg & then dropped.

02/15/04



03-GA50956-01

Justified 2/25/04

DAILY LOG

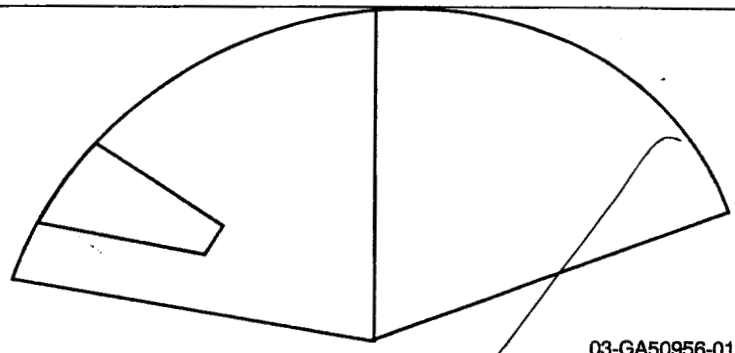
Date: 02/15/04 Name: T. E. Bechtold Shift Start Time: 9:12

Dig location at start of shift: Reach (ft) _____ Angle (degrees) 110 Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
@ 10:04	See p. 47
10:13	anticipate sludge sample to PGS #2 scoop 2229
10:41	tray in glovebox; bagging in 20 bottles; appears to be black cylindrical filter at bottom of sludge drum — Jean says
Filter	some filter material in scoop; tray is mixed soil and very plastic sludge — obvious sheen.
	color of sludge is 5Y 6/4 dusty yellow
10:59	— lunch — reviewed drum from excavator side
	B.61/10/9:57 B.57; retrieved perhaps 1/3 of drum vol.
NEO drums depth	drum on side & largely intact; sludge continues to slump. Some bright beads beneath filter with flashlight — drops of oil? This is a single sludge drum — no other open in immediate area relatively intact drum immediately behind
12:07	scoop 2229 still in PGS 2; sludge has lost sheen soil on top has dried — clearly oildri/kitty litter
	Some ragged orange/yellow debris — gloves? this may be top of drum.
12:44	jars bagged in; decision to pack jars by hand using orange gloves w/o change of gloves between jars — Jean concurs ✓
13:00	photos of filter some ~ 1200 ✓ through glass
13:55	12/20 samples collected PGS 2 — smearing 1st bottles & out part — sufficient sludge or find 8/20 in tray
	soil & graphite bag(?) to PGS #1
	will not take soil sample (2) cut yellow tape seals
	'bagged out'; plastic in good condition; graphite pieces
	~1" diameter; pieces of graphite through soil volume
	— sorted out in tray; total ~ 1 g PGE, 1° Pu239
14:51	— smears for 12/20 samples out DDTC for count;
	2nd lunch.

02/15/04



03-GA50956-01

Substitute 2/25/04

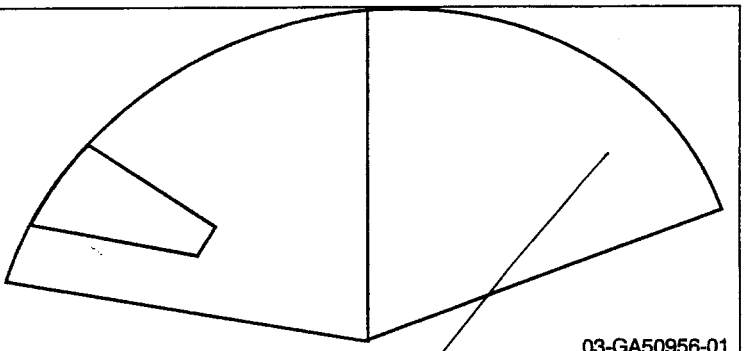
DAILY LOG

Date: 2/15/04 Name: T. E. Dechtold Shift Start Time: 9:12

Dig location at start of shift: Reach (ft) _____ Angle (degrees) 110 Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
16:55	continued from 7.50; first 3 samples into DDTC RW-13 #25, 26 & 31
	<glove box line #1 — replaced glove — on line?>
	PGS3 has not operated all day + previous shift left 2 scoops total to date / sample bottle in FMM being scooped out @ 17:14
17:14	excavator on? / still cleaning sample bottles in PGS-2
17:21	~~scoop #3~~ to PGS1 cart #1288 4.93/10/13.48 drum lid; pieces of 2x4; latex gloves; 80-90% loose dry soil; one large clot (~10% ≈15% hard? plastic; drum rim pieces
	3rd set of scopes from PGS-2 into DDTC!
17:49	samples 27, 29 & 30 into DDTC RW-15
17:57	samples 28, 32 & 33 into DDTC RW-17
18:03	samples 34, 35 & 36 into DDTC RW-23
@18:10	scoop to PGS #1 — bag of graphite, unknown white mass 10" x 6" dia.
18:28	8 empty sample jars remain in PGS-2 there are P9GR37012G through P9GR44012G there is sufficient sludge in the cart to fill these. Next group of 743 sludge samples should be taken from a fresh sludge mass, as that in cart has had significant evaporative loss. Note that label P9GR39012G is not in the file folder. no 741 sludge was observed. no interstitial soil samples were taken as soil-waste is well mixed.



03-GA50956-01

DAILY LOG

Date: 2/15/04 Name: RJ Fox Shift Start Time: 1830

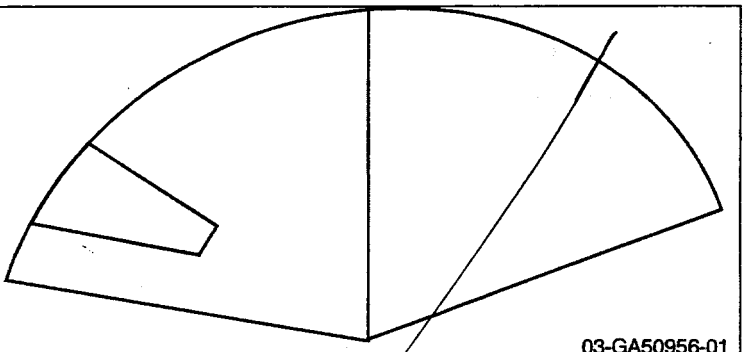
Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
1830	There are 8 sludge samples remaining in PBS #2 from last shift. Gave direction to Brian Budz regarding those 8. Bagged in remaining jars for 743 sludge (14) there is no label for P9GR59012G ? So we could only take 14 more sludges, in addition to the 8 already in PBS #2
2249	Finished sampling 8 sludge samples in PBS#2 - Samples are now going into FMM
0056	2 scoops of 743 sludge put into sample pan in #2 will attempt 14 remaining 743 sludge samples
0125	- There may not be enough to fill 14 remaining samples in this pan. If not then another scoop will be put in but it may contain more dirt. We shall see what develops.
0130	PBS#2 crew also bagged in 9 interstitial soil sample containers in anticipation of samples. P9GT13016G - P9GT21016G Unknown if we will get them this shift but we will try
0222	We're able to fill all 14 (743) sludges: This should close out all 743 sludge samples?
0620	No soils taken.

2/16/04

RJ Fox



03-GA50956-01

2/25/04

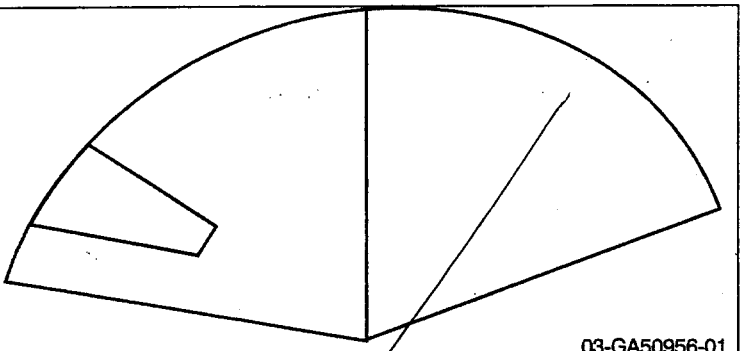
DAILY LOG

Date: 02/16/04 Name: T.E. Bechtold Shift Start Time: 8:30

Dig location at start of shift: Reach (ft) _____ Angle (degrees) 110 Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
9:00	Samples #37, 38 & 39 into DDTC RW-07 previous — briefed by Bob Fox @ digface at end of shift. NB - Bob believes that white mass moved to FGS 1 at end of 02/16/04 day shift was fused cyanide pellets. Bob does not believe that a sample was taken. There is sampling protocol for cyanide. Jean believes there is a small mass of white material still at bottom of pit — will attempt to encourage sample (OU7-10) Bob also noted that 14 addition sludge samples were taken from the top of the horizontal drum, and that that material was dry - like Kitty litter — oil dri? Observation above is consistent with observation of sample jars in glovebox, however, color and consistency suggest this is "dry" sludge and not oil-dri from packaging at top of drum. Note that earlier samples (initial 12) from this 743 drum may be better candidates for OCVS, and perhaps sample identifiers to DNTEC should be changed.
9:16	Sample jars 40, 42, 43 into DDTC RW-09
9:24	conv. w/ Jeff Mavaros — believes there are DDTC at Intec. Hopes to have addnl DDTC by noon. GEMO believe we will not be allowed to bring new samples into FGS-2 until backlog is removed. need 4 DDTC. Ron Holms says OU 7-13/14 sampling will be restricted to FGS-2. Crew most cooperative!
9:56	See p 121; augmented 11 OCVZ samples #25 - 35
	02/16/04



03-GA50956-01

DAILY LOG

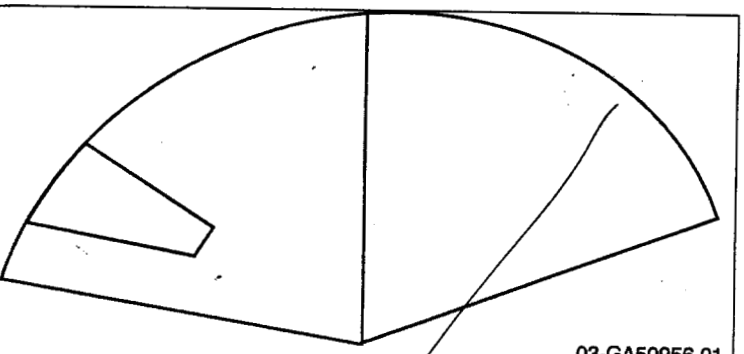
Date: 02/16/04 Name: T. E. Bechtold Shift Start Time: 8:30

Dig location at start of shift: Reach (ft) _____ Angle (degrees) 110 Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
10:00	#41 + 44 loaded into DDTC RW-24
10:13	#45 — #53 passed smear, but DDTC not avail.
	Ron Holm has agreed that interstitial soil can come
	into PGS-2 before all jars are removed.
≈10:40	#46, 45, 47 RW-10
10:42	#48, 49, 50 RW-06
10:49	#51, 52, 53 RW-02
12:51	ongoing housekeeping :- PGS-2; excavator ~~not operating~~, on now
	intent is to clean area 2 of excavat— + then
	retrieve interstitial soils. glove inspection in 7":
	Jeff Menaros packaging samples for shipment to INTEC;
	voice mail out to Gretchen re. OK to assign
	dry 743 sludges to HDT
≈13:00	load of dirt to PGS-2 — pit cleanup
	some lively dunded red brown matl. 5YR 4/4
	often around gray sludge clots — may be rust
	might also be rotting wood? same matl as wood
	removed from dirt, but wood largely intact.
	cont 2232 9,72/9/14,82
	Jean says this was from drum sizing area — assume red is rust.
13:23	PGS-2 crew to PGS-1 to clear out — Senator Simpson here @ 2P!
	we do have 3 PGS crews here today, however, it
	takes 1 crew to package samples to INTEC.
13:59	have exposed new drum immediately beneath 743
	drum sampled 2/15-2/16 ∴ take interstitial soil
	sample(s) now. tracking log say 19 avail (#13-36) 24
14:25	Senator Simpson here; have had conversation w/
	Peter Shaw, Jeff Sondrup, Lisa Norvego, Jeff Menaros
	Greg Hulet not avail.; Gretchen M has not returned
	call. Samples at INTEC in storage — no action
	planned until completion of GEM samples. recommended
	mtg to discuss allocation of 743 samples.

02/16/04



03-GA50956-01

Justin Cly 2/25/04

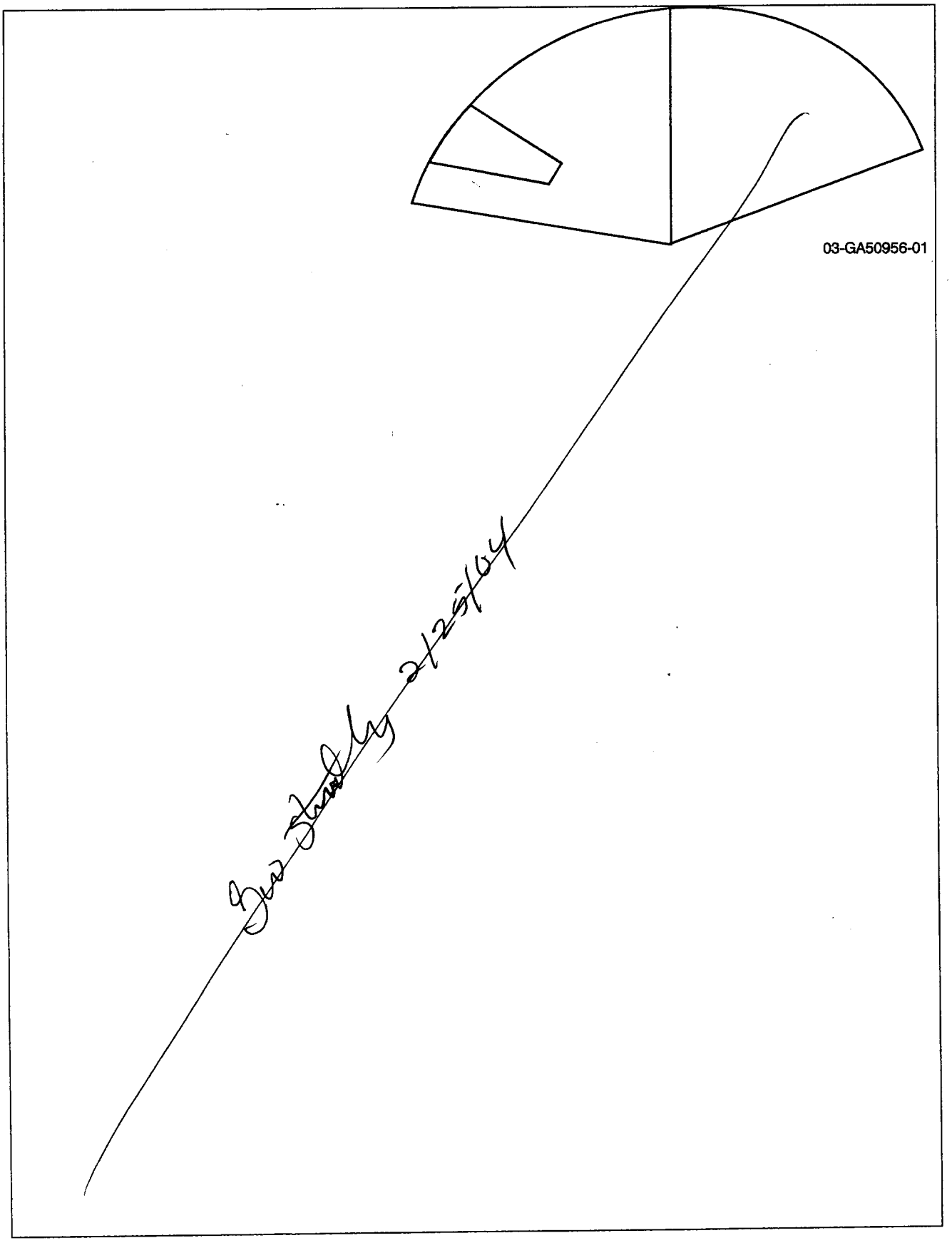
DAILY LOG

Date: 02/16/04 Name: T. E. Bechtold Shift Start Time: 8:30

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
14:37	shovel load to PGS-1 - senator's entourage as well unremarkable soil & small amount of 743 from drum expired 2/16-2/16. Attempted to obtain interstitial soil from location to left of bottom of 743 drum — struck drum immediately beneath — went on - no interstitial soil sample.
16:47	bucket of cleanup soil into PGS-2; largely clumps of overburden from beside/~~beneath~~ beneath P9-20 cart # 2234 12.54/10/14.23
	& PGS-1 cart # 1293 10.92/11/15.16 same as above
≈17:20	bucket to PGS-1 w/ white matl. — Jean saw black bag; bright white salt — probably 745 OU7-10 to take 2 samples cart # 1294 11.05/9/14.60 apparently, 4 745 samples have been taken previously
≈17:30	cart 2235 10.07/9/14.74 PGS-2 more suspect 745, cart contained clear bag matl. in good condition & J seal, contained clump of suspect 743 sludge — ≈ 5GY 3/2 grayish dive green
1805	Cart 2236 into PGS-2 — ~~appears to be little but, yes~~ clean dirt w/ some red oxide
	final summary — have seen gray & green sludge from bottom of area 2 & cards, however appears to be only one drum in cent. of area 2; therefore may be clear variation in single drum. green material was somewhat lucent — about fist sized w/o adherent soil
	02/16/04


03-GA50956-01

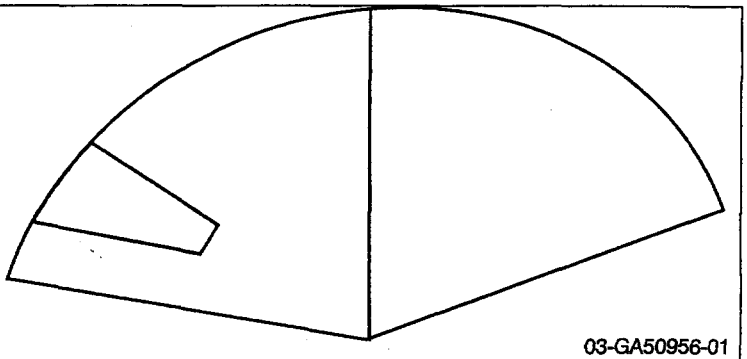
DAILY LOG

Date: 2/16 Name: R J Fox Shift Start Time: 2000

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
2045	Very nice + fairly intact graphite molds found in PGS #2 soil scoop. Mold features were easily discernable. No numbers were present. Two halves present
	Crews are working on production tonight. We were asked to hold off sample requests until after midnight. We will try for interstitial soils. Nine I.S. jars still bagged in to PGS #2 PGS #1 + #3 have been largely used for production while we have been asked to use #2 exclusively for sampling. I guess we hang until after midnight
0145	Soil scoop acquired RAD = 7.99 - 9 - 14.69 Went to PGS #2 - Interstitial soil but has some 743 sludge + white chunks - sludge will be easy to segregate - also white chunks. Will take 9 interstitial soil samples from this tray.
	2/17/09
	RJ Fox



03-GA50956-01

General observation: In the upper waste zones the drums were corroded + bags intact w/ still a lot of elasticity. However in zone 2 down around ~15 Ft the soil is very wet + the drums are corroded but the bags are worse looking. Bags have apparently been in this "saturated" zone in the water + the plastizer in the bags has leached out. The bags are much more brittle. Further, the sludges are water wet. The 743 sludges are appearing very dark + wet w/ water. This would indicate that those drums in the lower zone have lost most of their oils + organics due to more bag rupture. The bags that have been out of the water have faired better.

White globs of crystalline solid have also been found. Possible Sodium Cyanide? What is the CN- Actinide Chemistry in Soil / H2O? RJR Soluble Complexes?

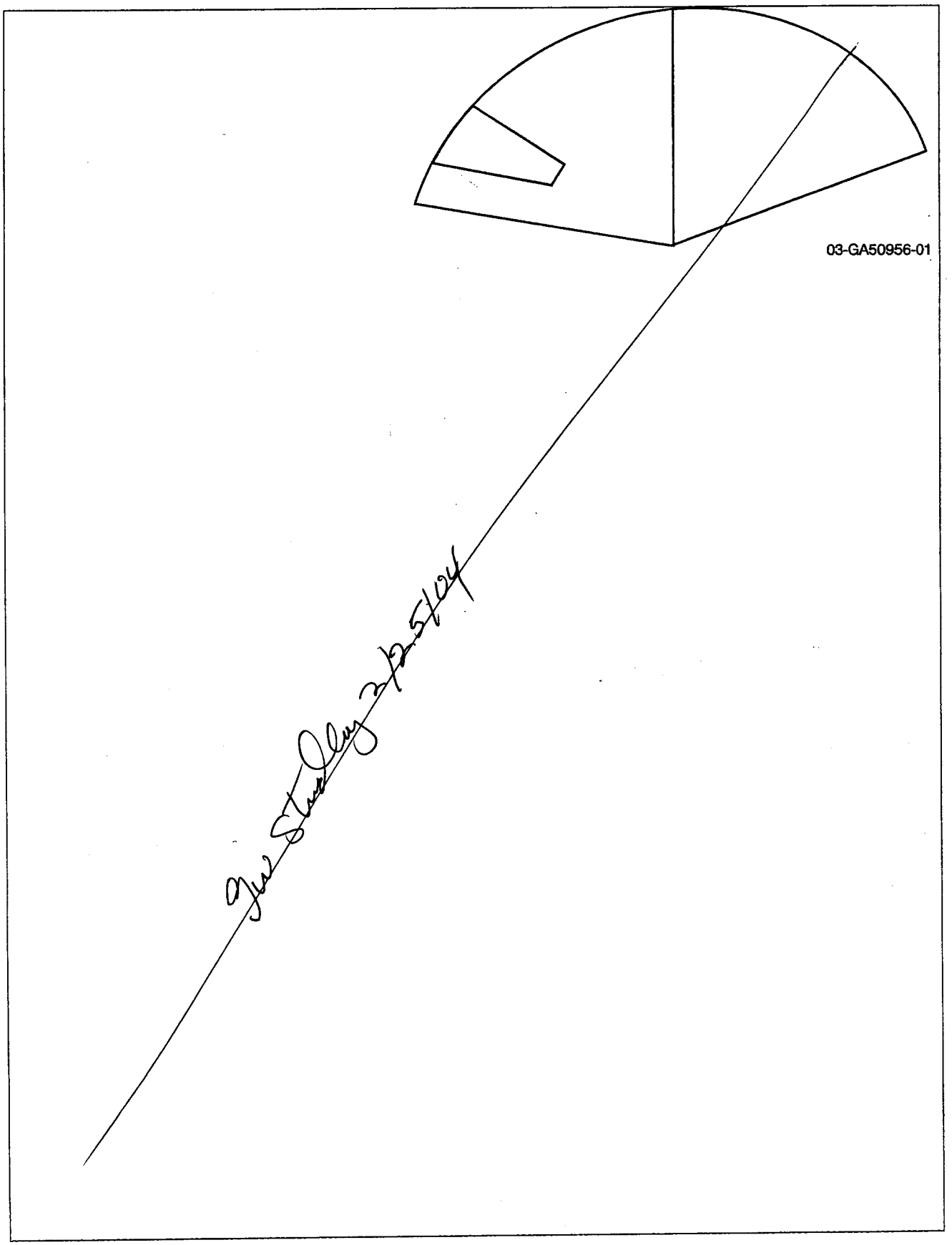
DAILY LOG

Date: 02/17/04 Name: T.E. Bechtold Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) 9.15

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
9:18	review of prev. shift notes; 9 intermitted soil samples (BF); 15 intermitted soil samples remain
9:44	conv. @ excavation w/ Jean + Joe U - Joe very cooperative take intermitted soil sample at base of PG-20-06 Jean says take all except #10 sample bottle jar #13 remained unfilled in PGS-2 ∴ #13, 22, 23, 24, 25, 26 + 27
photo?	<graphite matl remains in PGS-2; appears to be broken crucible>
~10:00	conv. w/ Jeff Monroe; left message w/ Rick A re disposition of 743 samples to projects; disc. w/ Jean + Bob. assignment; message out to Greg; need to resolve if previously logged samples can be reassigned.
10:18	3 scoops taken earlier this morning — soil. ~~cart to~~ scoop to PGS-2; cart 2244 9.89/11/14.76; dumps to front of cart + pile of fine grained soil in center, decision w/ Jean to sample dumps at leading edge (2) and fine grain soil in middle + bottom of pile.
10:37	bagging jars into PGS-2 22 (23)
Bill	samples were collected in PGS-2 (13, 23, 24, 25, 26) soils AED has just removed drum of graphite from left of PG-20 cluster — crucibles or intact hemispherical molds? Samples in PGS-2 being processed through FMM
13:17	scoop to PGS-1 - one graphite - nearly intact; hemispherical interior with hole at center; groove about outside; 2nd piece - identical; funnel or mold? cart # T305, 11.76/14/9.95 = 60K dpm through glove
13:27	PGS-2 changing out glove immediately adjacent DDTC part ∴ will not be able to remove sample jars for some time.
	02/17/04


03-GA50956-01

DAILY LOG

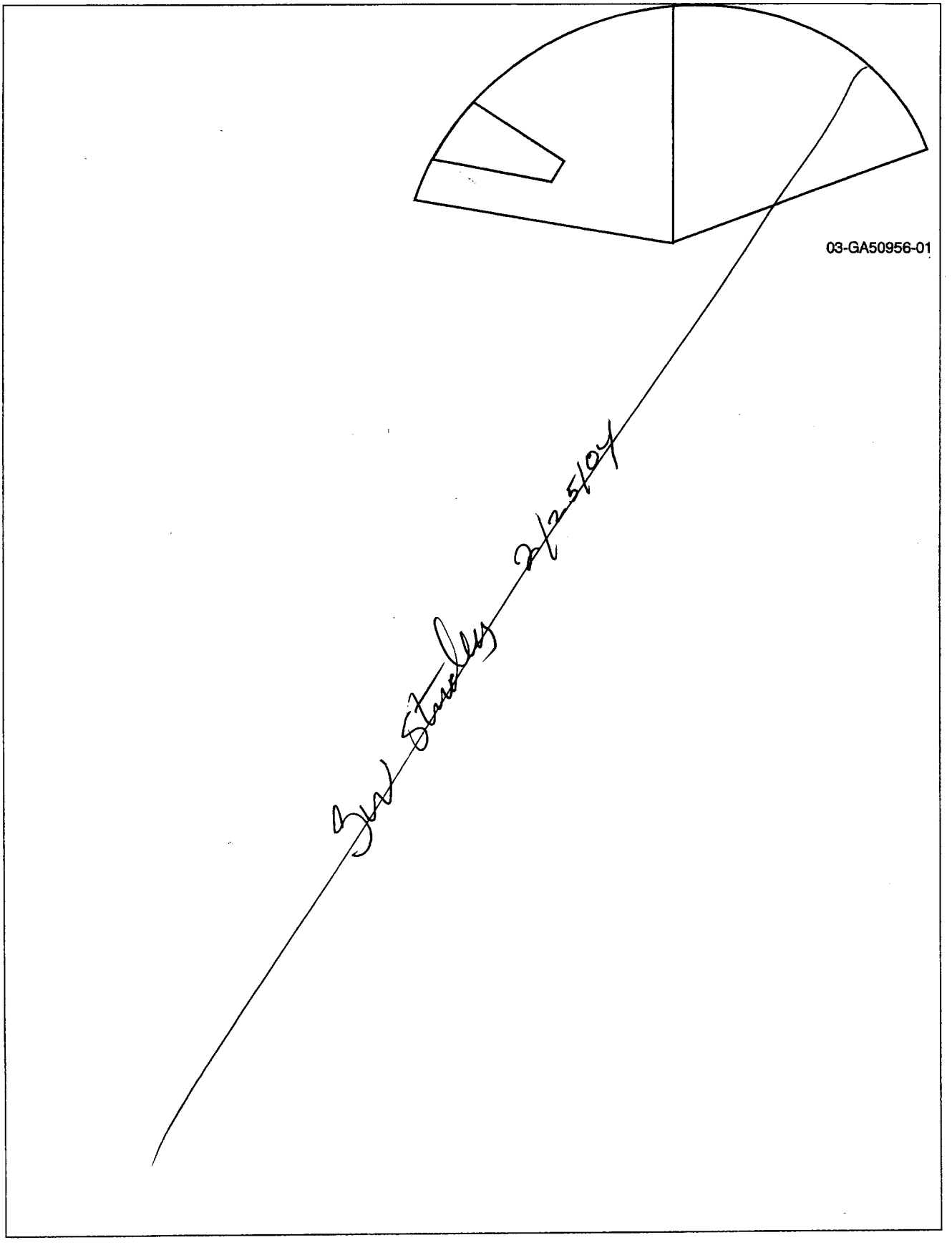
Date: 02/17/04 Name: J. E. Bechtold Shift Start Time: 9:15

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
14:04	Joe U. agrees to retrieve one soil packed graphite object (bowl) to obtain interstitial soil cont 2345 11:59/14/9.67
14:15	scoop into cont.; cont is full of several bowl objects and a large amount of flat mold pieces; not quite as packed with soil as previous scoop into FGS-1; ~~B-4~~ γ = 1mR/hr. into FGS @ window
	~~FMM~~ 1 bucket graphite pieces #27 0.23±0.03 FGE
	0.22±0.03 Pu239
	2nd #21.46 0.22±.02 FGE
	3rd #26.74 0.20±.02 FGE
	4th #14.46 0.15±.03 FGE
	≈89.66
	Note – oil filter media #1.92 was 0.18±0.02 FGE from 2/15/04?
17:49	scoop of dirt into FGS-2 & shut down for night

02/17/04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DAILY LOG

Date: 2/17/04 Name: RJ Fop Shift Start Time: 2000

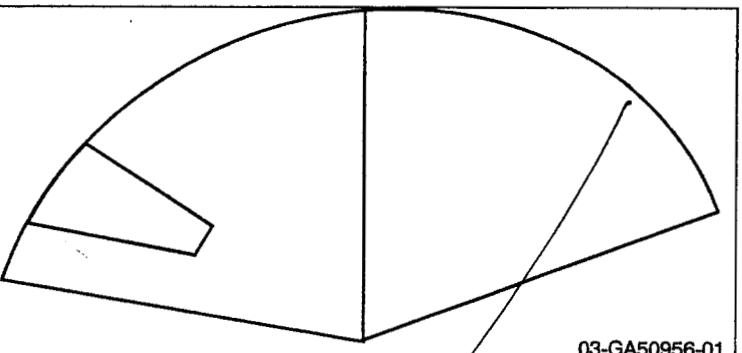
Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
2045	Probably will not take any samples tonight but rather observe materials coming into PGS lines. Recent scoops have come in from area behind the piles in zone 3. This appears to be overburden - clay + calcium carbonate chunks.
0015	Last 7 scoops have been of loose soil close to center pivot. No real interesting things going on.
0208	Rotation in PGS #2 worked on getting samples smeared out. They should be able to get them out this shift. Scoop of white powder + soil going to PGS #1. Close up look shows white, crystalline powder. Fairly white + pure like white powdered sugar. Looks like NaCN that has absorbed moisture.
0300	Break - scoops still coming from close to center pivot. Nothing interesting; Just cleaning up loose soil in pot.

2/18/04

RJ F



03-GA50956-01

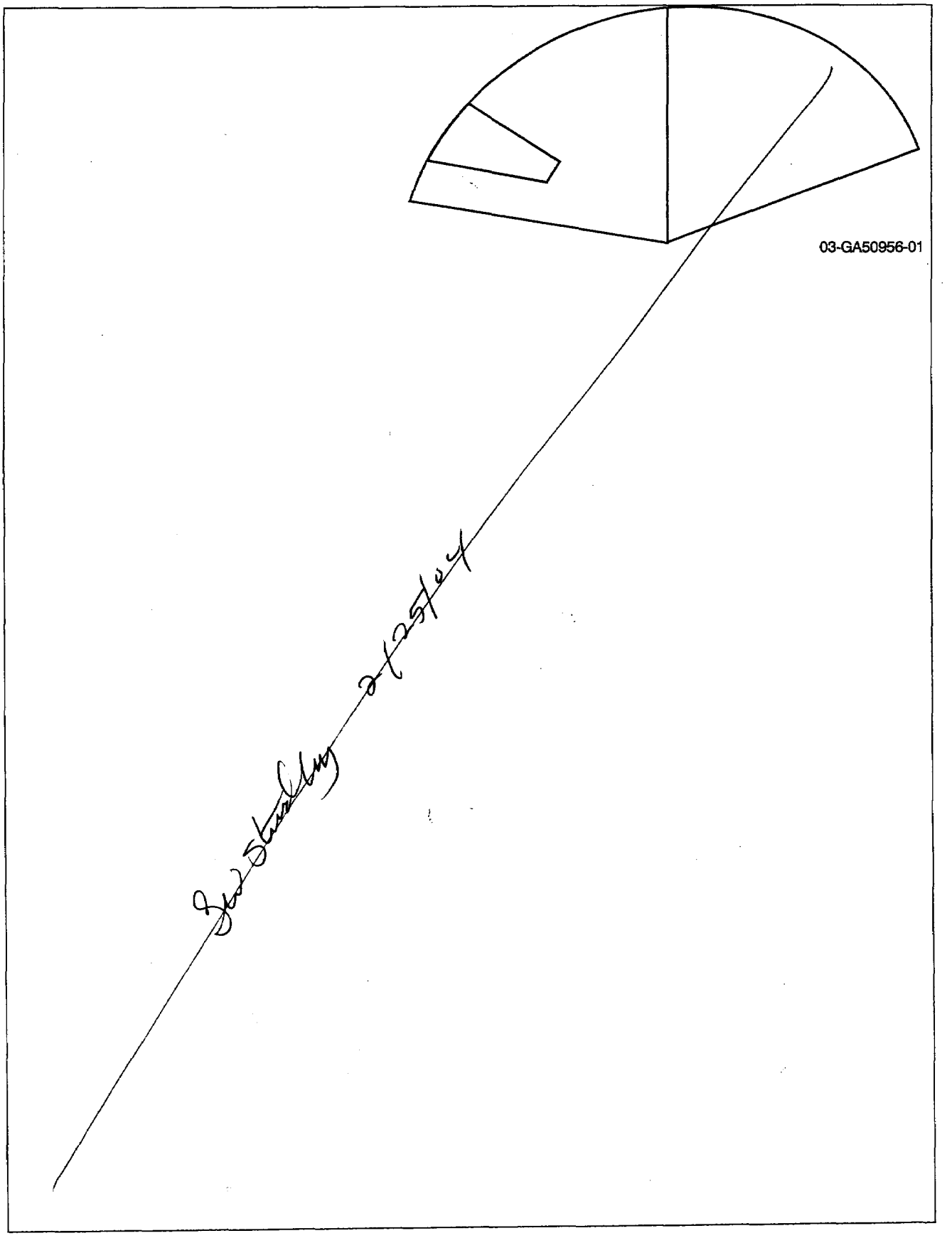
DAILY LOG

Date: 02/18/04 Name: T. E. Bechtold Shift Start Time: ≈8:30

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
8:30	daily work order is to continue to clean area 2 and overburden adjacent P9-20 cluster; need addn. 5 yd³; take intershield soil as required; no mention of probe removal or coring; Jim Barker in facility; Gail back and stationed — may come out
~~9:15~~ 9:15	security viewing graphite in PGS-2 Barker with them have taken 7 x 741/742 samples 2 of these are 743 — relabeled? TEB
	✓8 label remain for 741/742 #8-13 and 14 & 15 all 743 labels used (55) 9 intershield soil labels remain #28-36
9:49	Im out to Gail @ re resolve label changes effected by Beth McIlwain and use of EPA intershield soil labels 2x #37 — 47 (dups) 46 ∴ 20 labels TEB
	<all 047-13/14 sample jars were processed out of PGS-2 last night>
@ 9:58	PGS1 — 4 cards thru shift #1319, 1320, 1321, 1322 — all soil
@ 10:10	preparing to remove probe(s); viewing from vt window @ PGS-2, directly above P9-20 cluster; push against 9-20-06 & bridged overburden collapses. pull P9-20-01, with same result. 10:15 grasps thimble on P9-20-01 — Don released & difficulty in reacquiring grasp (10:29); broke thimble from P9-20-01 ≈ 10:30 — sheared off; now grasping P9-20-1 directly, appears that remaining overburden & imploded drum have settled? P9-20-01 pulled w/ some difficulty; P9-20-01 06 pulled with ease — ≈ 10:40
	02-18-04


03-GA50956-01

DAILY LOG

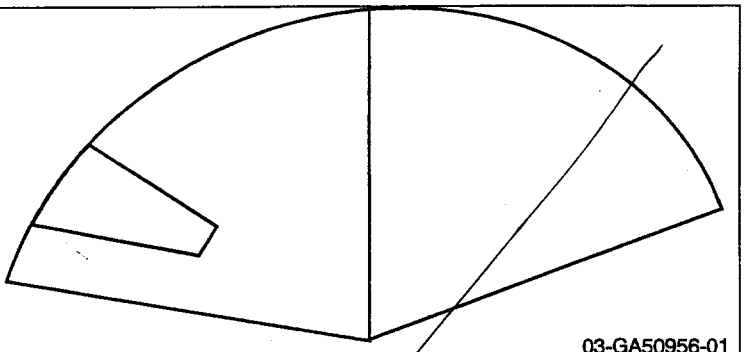
Date: 02/18/04 Name: T. E. Bechtold Shift Start Time: 8:30

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
12:39	GEMO's back from lunch; conv. w/ Jody S. — saw first set of force cones in PGS-2 — wrapped in plastic; conv. w/ Ron Hoh re how to package — agreed to place whole in jar in beginning.
~~1300~~ 13:00	Team not back from late lunch yet; conv. w/ Joe Chlarquiere at excavator site; are going to disrupt drum pierced by P9-20 — also appears to be at least 2 drums immediately beneath; at 24 yd³ removed; Joe believes removal of drums required to clear area for probing; HEO removes large clump of overburden from atop skewered drum; probes loose soil beneath P9-20 back against angle of repose;
N.B.	
13:19	HEO moves drum grass away from P9-20; plastic bags remain immediately adjacent P9-20; clear bags in excellent condition; bagged white package on PGS side of probe; yellow bagged package beneath, to excavator side; drum liner bags in good condition — inner bags clear & clean; air sampling in PGS-3; PGS-2 ready to receive waste; yellow bag rolls to bottom of area 2;
*13:25	advisory alert — hole in glove in PGS-2; yellow bagged objects in area 2 appear to be jars, probably graphite scrapings; at least 3 yellow bags now visible; re alert PGS-2 — tip snipped from glove on shelf near FMM — no α on decks; smears clean; one bag in area 2 appears crushed — graphite visible?;
13:37	change out excavator buckets; graphite do
13:48	HEO attempts to pick up bag from P9-20; dumping soil in pit — asked to stand down from PGS-2 — graphite/security concern; Cart 2252 7.32/11/10.53 3mR 1° soil; dusting of graphite visible — had intentionally crushed scrapings pottho.

02/18/04



03-GA50956-01

Good Sunday 2/25/04

DAILY LOG

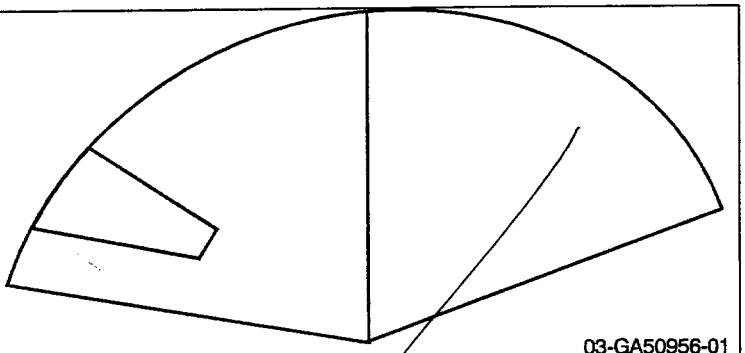
Date: 02/18/04 Name: T.E. Bechtold Shift Start Time: 8:30

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
14:41	Scoop to PGS-2; conversation w/ Joe H. probability of cores tonight is Ø; cores will be taken before PT-20 is pulled; Jim Baker has advised Entec that cores will be shipped Fri and/or Saturday; cores will be taken Thursday night or Friday morning.
15:13	cort 2253 contained 2 scarifying jars 2 in 1st FMM bucket = 153 FGE! Jean says 5 jars / layer, and only first was removed ∴ potentially 15 / drum. 3 jars @ glove box window where 5 mR jar held to glove was 35 mR.
16:55	no excavation going on; PGS-2 recalibrating FMM; have not determined FGE of 3rd bottle.
17:02	— calling end of shift Bob, you have (8) labels for 741/742 and (9) labels available for intact soil.; use ~~SA~~ labels for forcing cores if you can get them out — see if they fit in sample jar. Cores to be taken Thursday late or Friday day. ~~Ø~~ try to get FGE for 3rd bottles of graphite scarifying in PGS-2 once FMM is recalibrated.

02/18/04



03-GA50956-01

DAILY LOG

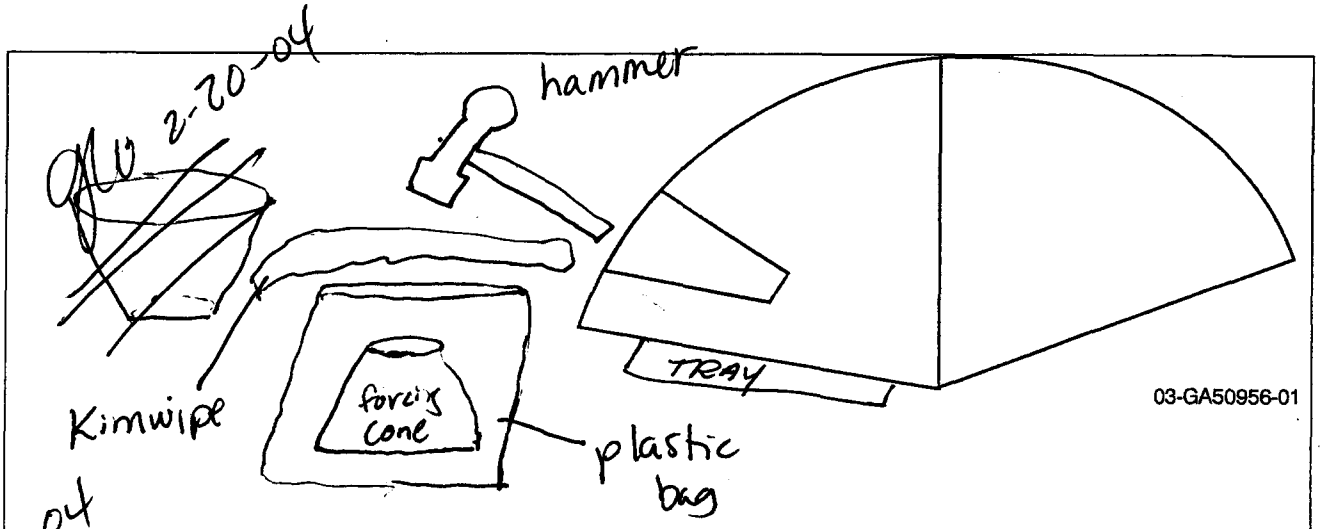
Date: 2/18/04 Name: RV Ruf Shift Start Time: 2000

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
2111	GEM is currently @ 75+ yards. Talk is that the 100x dirt in the pit will be cleaned up and cores taken. They the plug may be pulled - throw up hands & declare victory.
	9 interstitial soil samples left - given direction that we will be able to pull those 9 in PGS #2 after midnight.
0014	Excavator is cleaning up soil in the pit & most of the soil/debris coming into #1 & #3 is from a 1 ft lift done early in the evening. PGS #2 has been busy so far dividing up the 3 scarfing jars so they can be drummed out. Trying to negotiate 9 interstitial samples w/ foreman & shift supervisor. Probably not until much later. May not get a chance tomorrow to do it. Cores will be taken tomorrow.
0300	Took scoop from base of probes RAD 7.02 11 13.42 will be used for interstitial soil samples
0443	Scoop in PGS #2 #22256 scoop All 9 samples filled.
0513	We out of here!

RVR 2/19/04



2-20-04 NOTE: The forcing cone from core #1 was still attached to the core barrel. Operators in PGS #2 knocked the soil out of forcing cone ~~into~~ through the core barrel + into a bag.

from 2-19-04 OPS

There may be some contamination in the soil from the following sources:

1) contamination through the RCS. The ~~con~~ soil-packed cones sat in the tray for many days before being moved into the glovebox. Graphite fines, organics + dust may have been airborne in the RCS and settled on the soil in the cones. (Top + bottom of soil in cones was exposed)
2) contamination in PGS #2. e.g., Graphite fines. One of the french cans ~~was~~ required a couple hours of decontamination because ~~it~~ the outside of it became contaminated w/ previous ~~batch of~~ tray containing Graphite, which had FMM readings indicating Pu +/or Am.
3) contamination on hammer, w/in and outside plastic bags. While the operator attempted to minimize contamination + there was likely inadvertant contamination. The plastic bags used were already in the glovebox + had been used to hold rope throughout the ~~pr~~ excavation duration (since January, possibly, or longer). He placed a Kimwipe (clean) over the forcing cone prior to hammering it + the soil went inside the bag.

Gail Olson

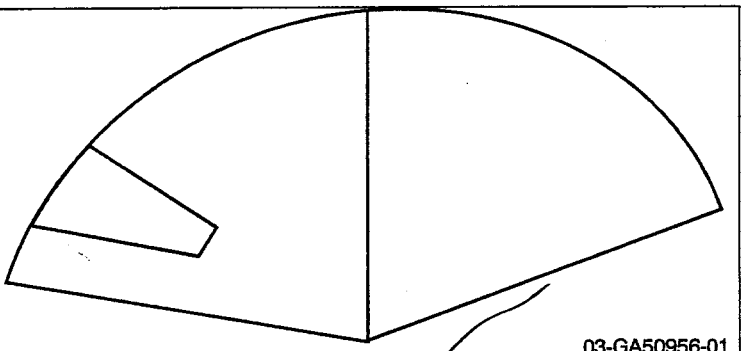
DAILY LOG

Date: 2/19/04 Name: D. R. MYERS Shift Start Time: 0700

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
0900	ARRIVED ON SITE. PGS#2 HAS 11 INTERSTITIAL SOIL SAMPLES. PRIMARY ACTIVITY WILL BE TO GET THE SAMPLES OUT OF PGS#2. THEY ARE CHANGING OUT SOME GLOVES ON PGS#2 IN THE MORNING. WORKING WITH GREG S. TO GET READY FOR UNDERBURDEN CORE SAMPLING. CHECKED THE LENGTH OF THE CORE BARRELS AND SENT THEM TO GET CUT.
1100	WENT TO LUNCH.
1200	BACK FROM LUNCH. NO SAMPLES HAVE BEEN PROCESSED THROUGH PGS#2. GAIL AND GREG ARE MAKING SURE EVERYTHING IS READY FOR CORE SAMPLING; LINERS, LOCATION, WRENCHES, ETC.
1250	PGS#2 IS BAGGING A BALL PEEN HAMMER AND SCREW-DRIVER TO GET THE SAMPLES OUT OF ~~LEXAN TUBES~~ CORE barrel & forcing cone (#1) and out of forcing cone #2. GLO.
1325	OPERATORS WERE ABLE TO KNOCK THE UPPER PART OF CORE #1 INTO A BAG AND PLACE IT INTO THE SAMPLE. THE MATERIAL IN THE CONE OF THE SAMPLER WAS EXTREMELY HARD AND COULD NOT BE DRIVEN BACK DOWN THE BARREL.
1335	SAMPLE #2 WAS IN A FORCE CONE. THE SOIL IN THE CONE WAS DRIVEN OUT INTO A BAG AND THE SAMPLE JAR WAS FILLED FROM THE BAG. THIS IS CORE SAMPLE #2. DRM
	CORE #1 DDTC RW01
	CORE #2 DDTC RW01
	THE SAMPLES WERE REMOVED FROM PGS#2.
	D.R. Myers 2/19/04



03-GA50956-01

2-20-07

DAILY LOG

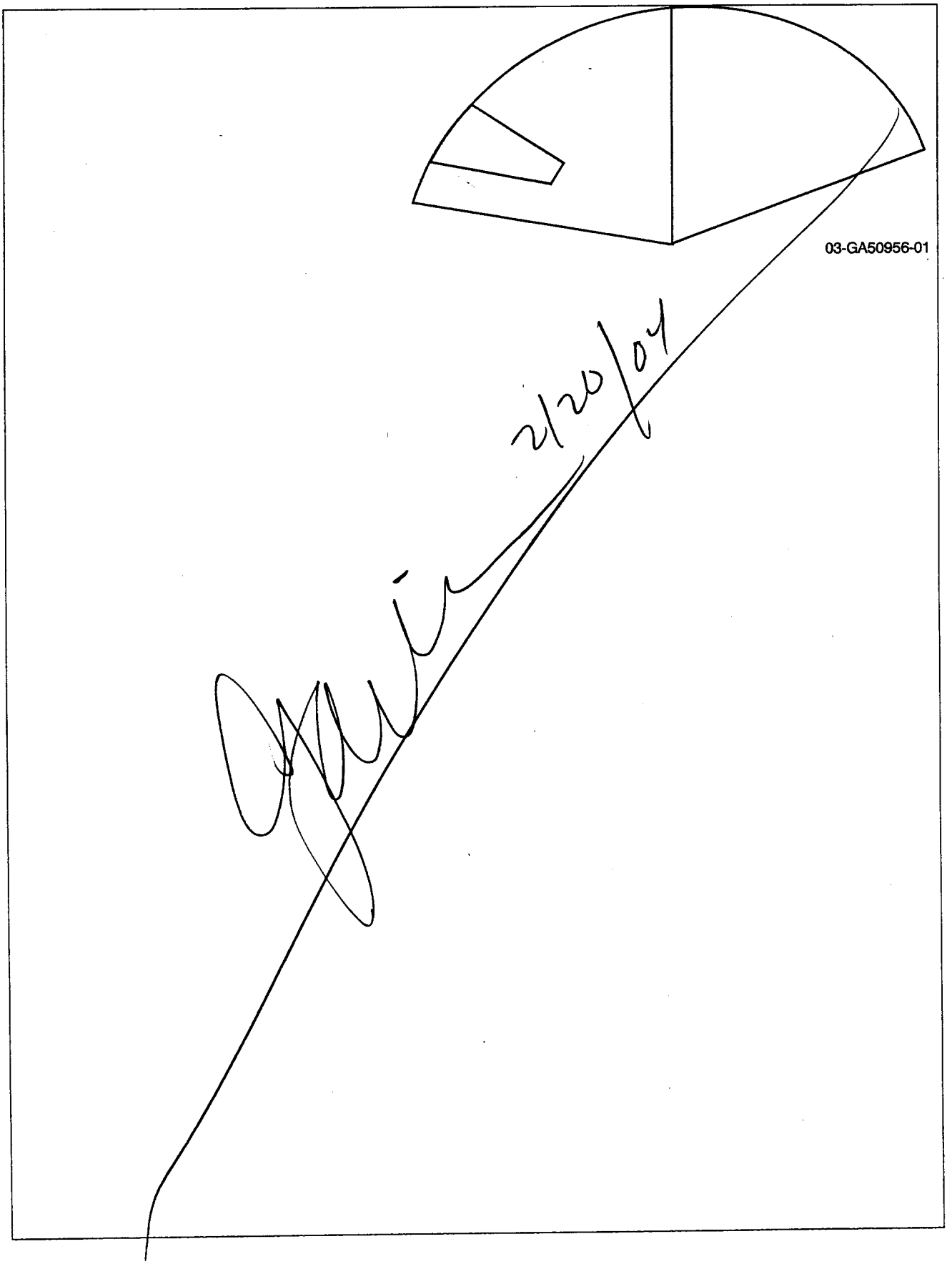
Date: 2/20/04 Name: Gail Olson Shift Start Time: 7A-7P

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
1200	Spent the morning obtaining 2 core samples (5A + B). Nothing processed through gloveboxes. The 5A core, near P9-20, was probably an undeburden sample but the Core 3 was clearly not. The material is orange, was glistening in the core barrel from moisture + now that its been sitting for an hour + has dried, is glistening like brown sugar. ~~The Core 4 appears~~
~~1200~~ 1400	Core 5A ("5B", they've now named it): The forcing core is stuck to the core barrel + Rick Anselmo indicated he cannot remove the core from the core barrel given current procedures + approvals + needs us to have the core removed from the core barrel at GEM. Thus, these are being x-ferred to PGS#1 and the soil will be hammered out of the forcing core similar to cores from 1 & 2. They are presently cleaning out the glovebox as much as possible, replacing gloves, getting stuff cleaned up. The core from Core 4 came off of the core barrel so has been packaged w/ the core + will be shipped to INTEC as part of the core. Core "5A" has just been pulled + the coring went smoothly, however, ~~the HEO~~ once the core was removed from the soil the HEO put the end of it back into the soil surface. I think he was trying to get a depth on the sample core. This resulted in some "contamination" of at the bottom of the core.

2-20-04

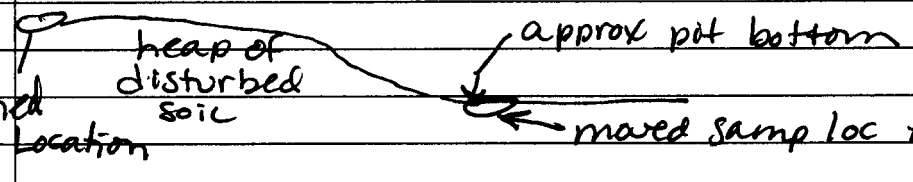
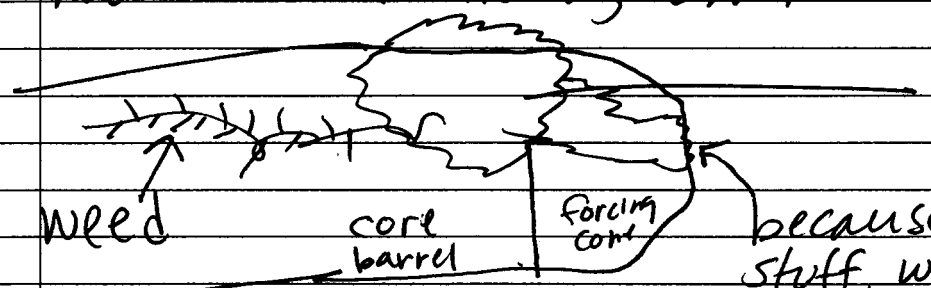

03-GA50956-01
2/20/04

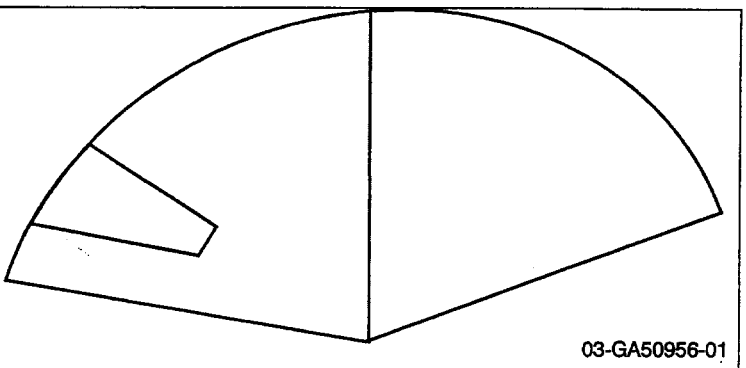
DAILY LOG

Date: 7/20/04 Name: Gail Olson Shift Start Time: 7A - 7P B shift

Dig location at start of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION
1500	Core 3: Collected several feet from originally-planned location, due to pile of soil on bot of pit
	
	At the new location, there appeared to be surface contamination, but it ~~was~~ did not appear - or was assumed - to be only surficial. Contam on surface may be nitrate salts. (white in color, granular).
	The core barrel was caked w/ rust-colored sediment or sludge or stained soil, and had a weed sticking on it
	
	because the orange stuff was here, it is deduced to have been a result of coring into, not pulling out of, the hole. At the bot of forcing cone, caked into it, was greyish colored soil, poss indic. of calcic soil or near-refusal. Estimated core length ~ 47". See Studtay's notes in Excavator book.
	2-20-04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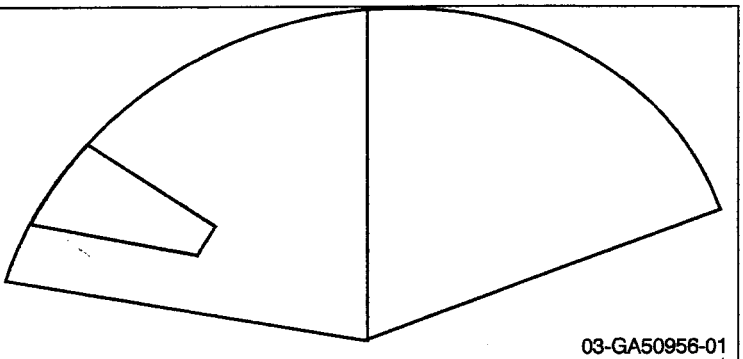
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION



03-GA50956-01

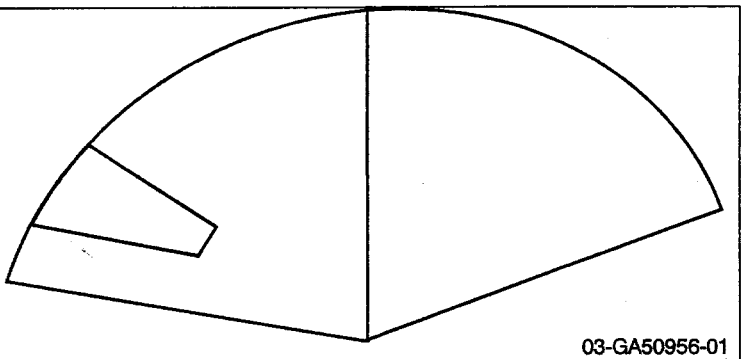
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION



03-GA50956-01

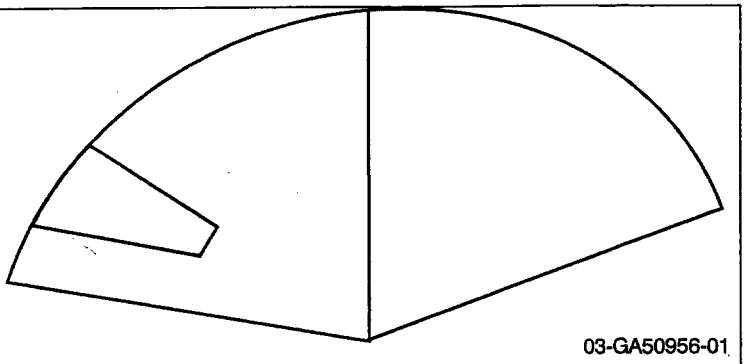
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION


03-GA50956-01

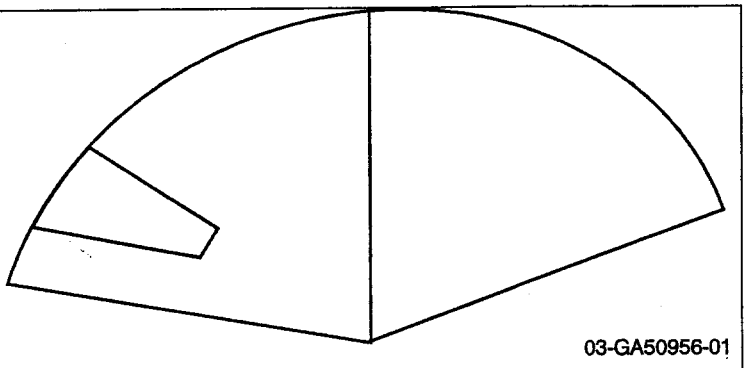
DAILY LOG

Date: ____________ Name: ____________________________ Shift Start Time:________

Dig location at start of shift: Reach (ft) _______ Angle (degrees)______ Depth (ft) ______

Dig location at end of shift: Reach (ft) ______ Angle (degrees) ______ Depth (ft) ______

TIME	OBSERVATION


03-GA50956-01

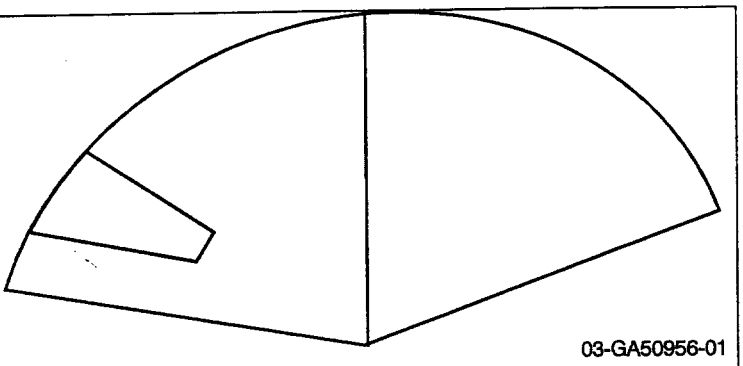
DAILY LOG

Date: ____________ Name: ____________________________ Shift Start Time:________

Dig location at start of shift: Reach (ft) _______ Angle (degrees)______ Depth (ft) ______

Dig location at end of shift: Reach (ft) ______ Angle (degrees) ______ Depth (ft) ______

TIME	OBSERVATION


03-GA50956-01

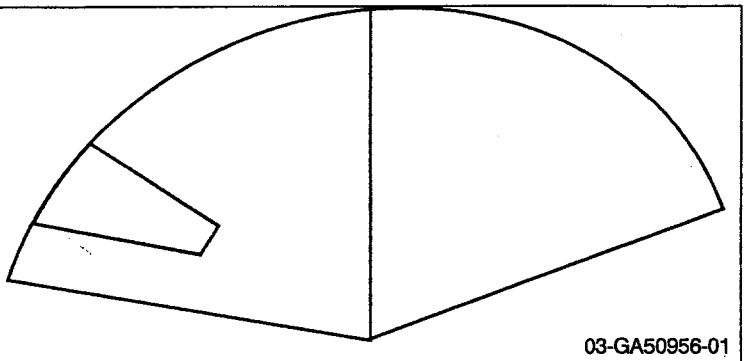
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION



03-GA50956-01

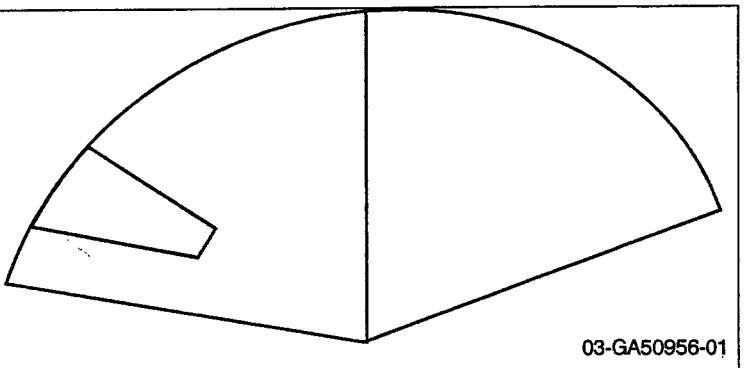
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION


03-GA50956-01

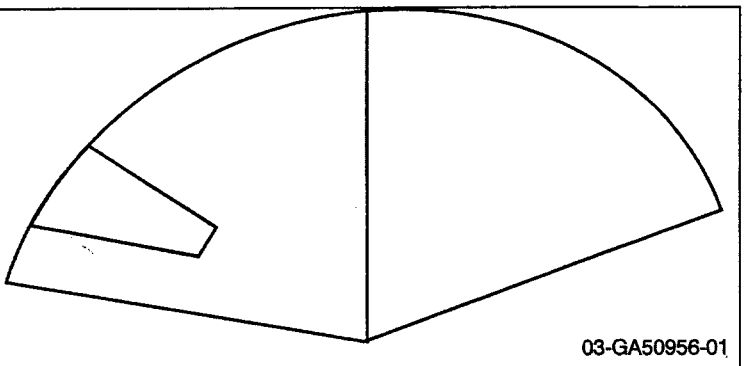
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION


03-GA50956-01

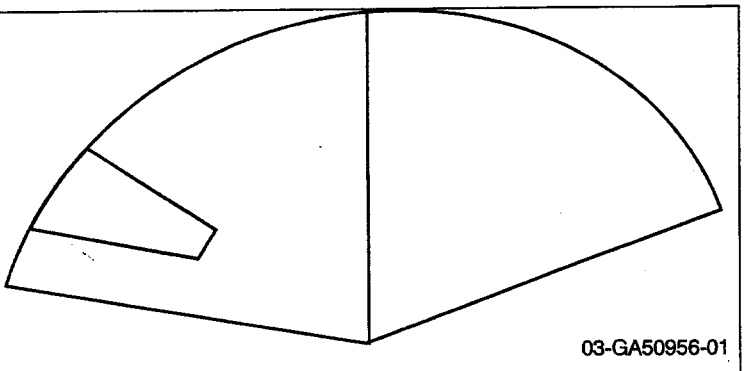
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION


03-GA50956-01

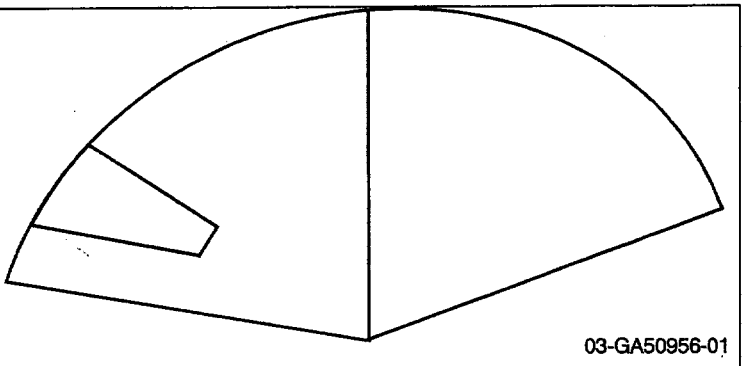
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION


03-GA50956-01

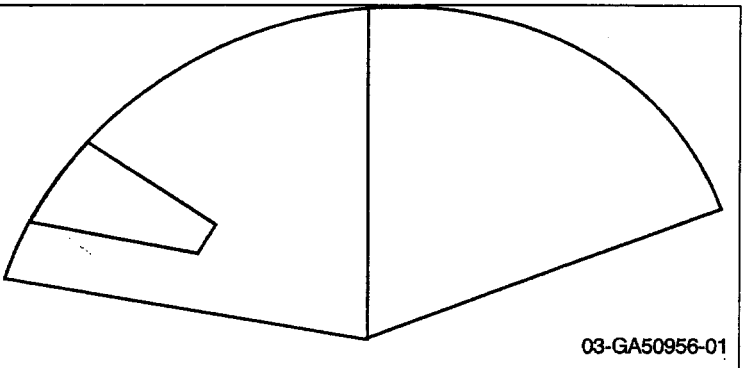
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION


03-GA50956-01

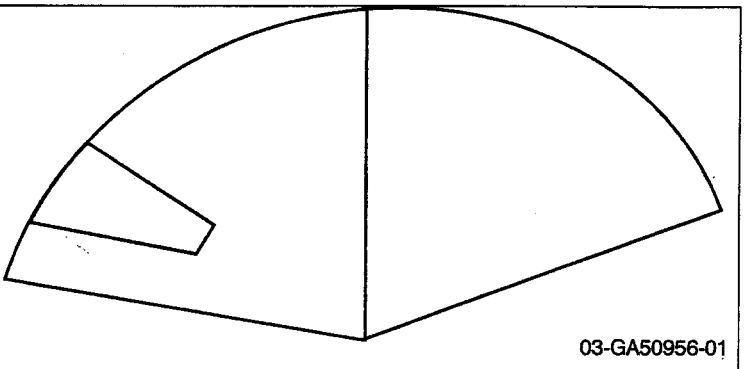
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION


03-GA50956-01

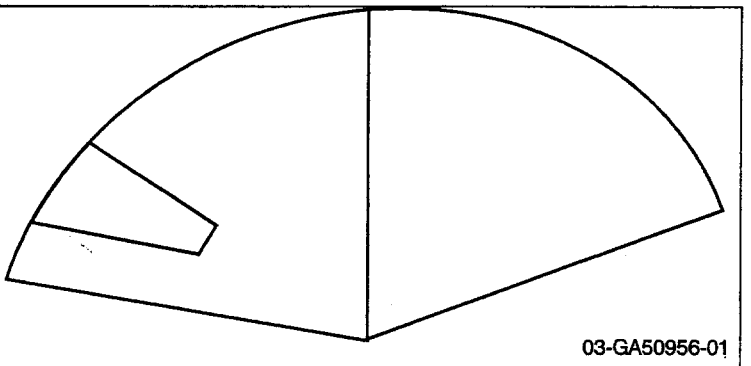
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION


03-GA50956-01

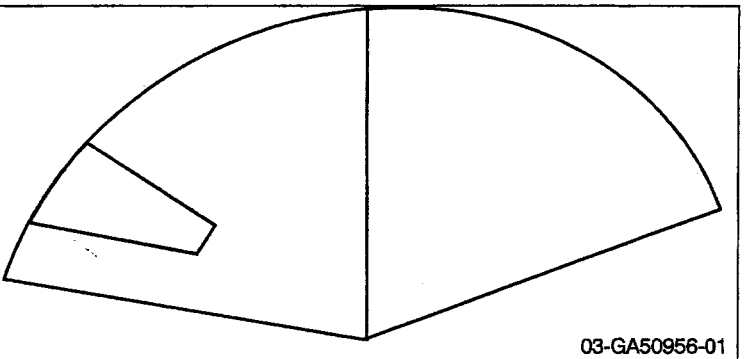
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION



03-GA50956-01

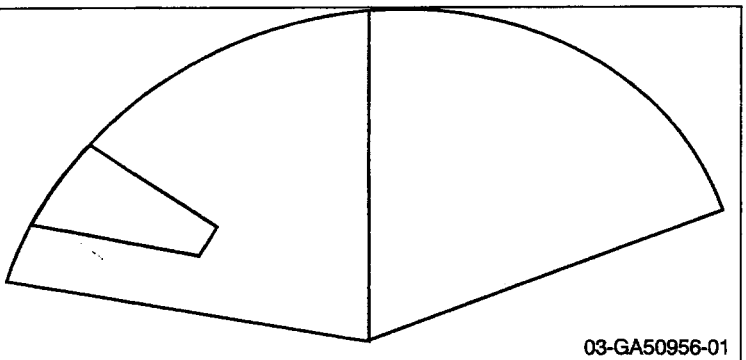
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION



03-GA50956-01

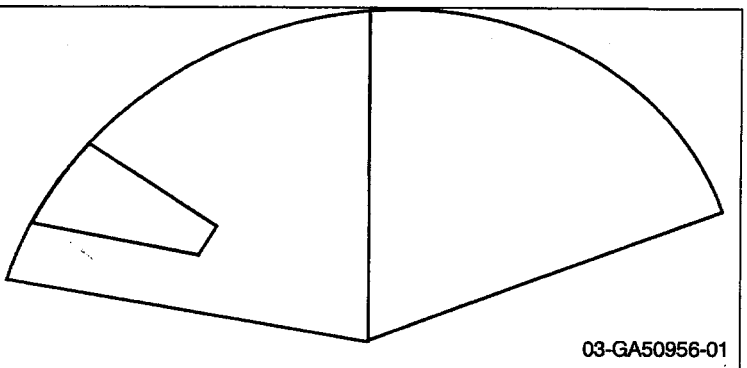
DAILY LOG

Date: _____ Name: _____ Shift Start Time:_____

Dig location at start of shift: Reach (ft) _____ Angle (degrees)_____ Depth (ft) _____

Dig location at end of shift: Reach (ft) _____ Angle (degrees) _____ Depth (ft) _____

TIME	OBSERVATION


03-GA50956-01

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

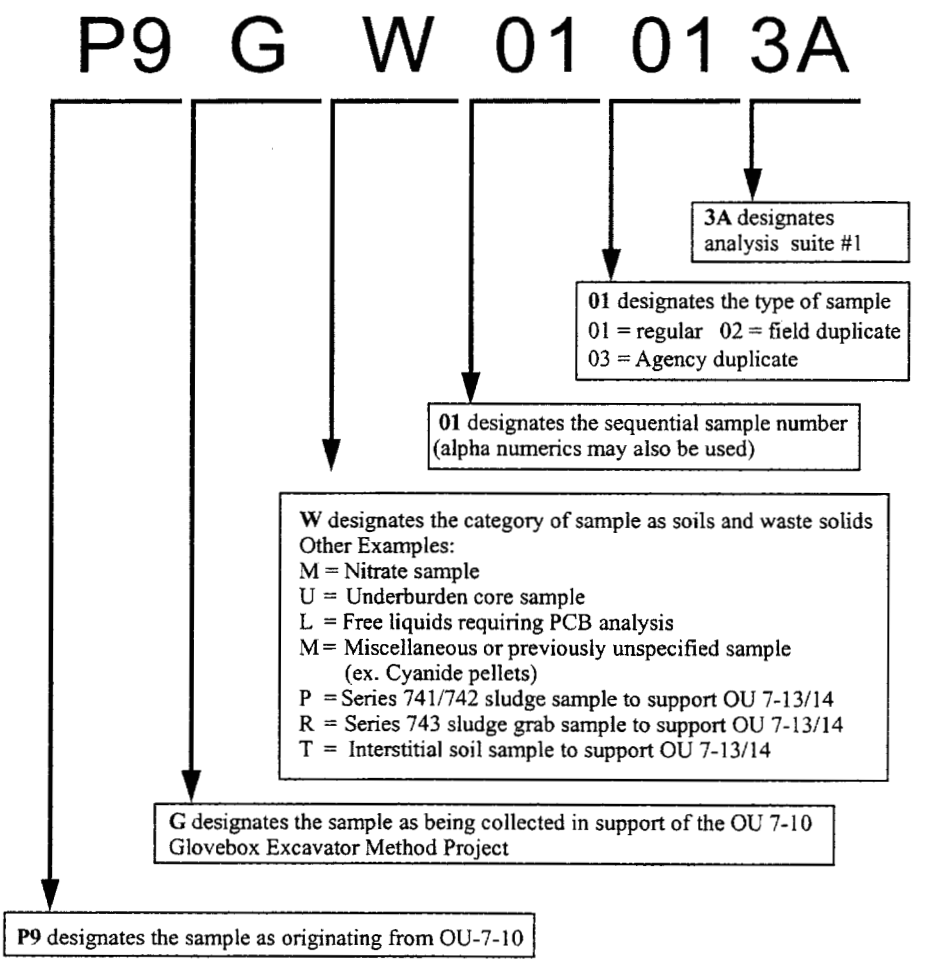
pg. 124

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:

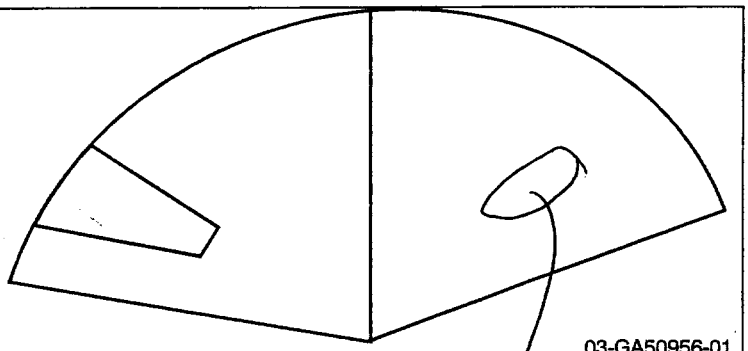
Moisture:

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

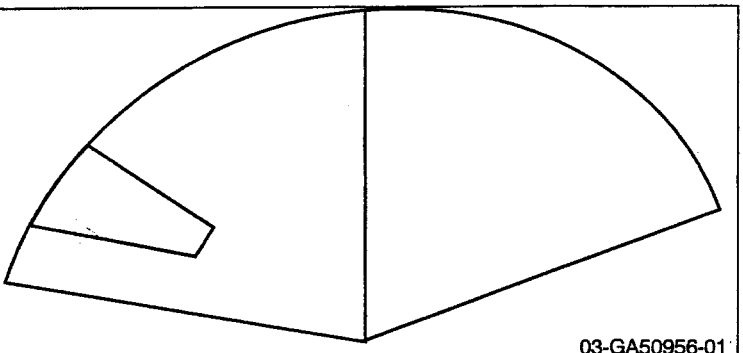
Moisture: slightly moist soil

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: _____

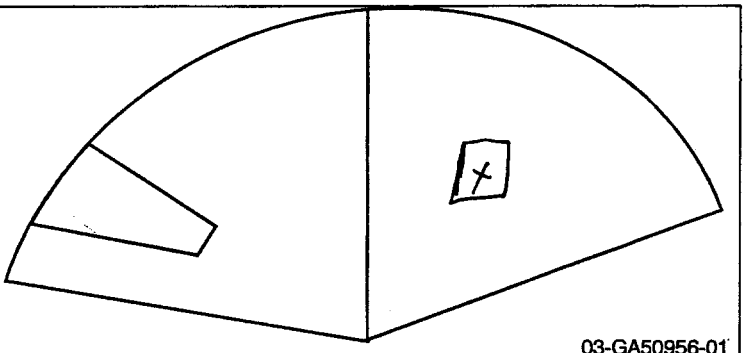
Soil Stain: _____

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: _____

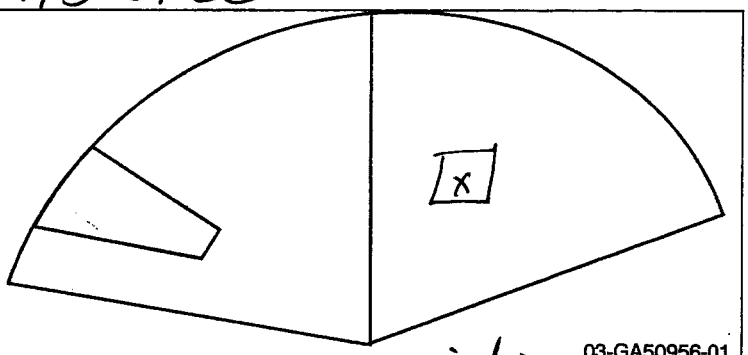
Comments: Taking at least 10 Samples

Other: _____

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

P9 6R060126 – P9 6R150126

~10000 cpm (10X1K) ~~at~~ 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: 2.41 E-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	
	Ad Am241: (4.33 ± 3.05)E-03 Adj Pu-239 (1.34E-01 ± 5.98E-02 U-233 Adj: (9.00 ± 8.56) E-03			Pu-239 .13 ± .06 @ 375.04 Pu-239 .02 ± .03 @ 413.71

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: _____

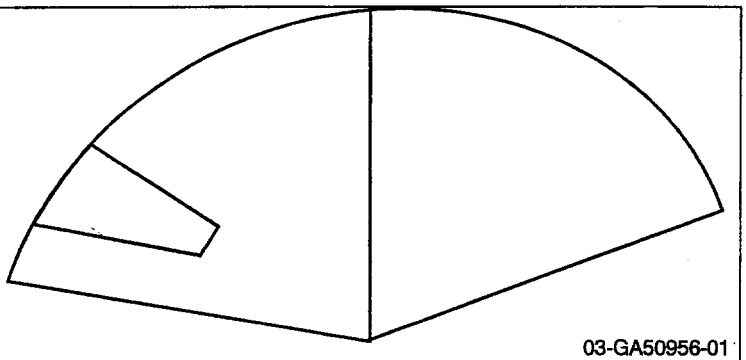
Moisture: _____

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:_____

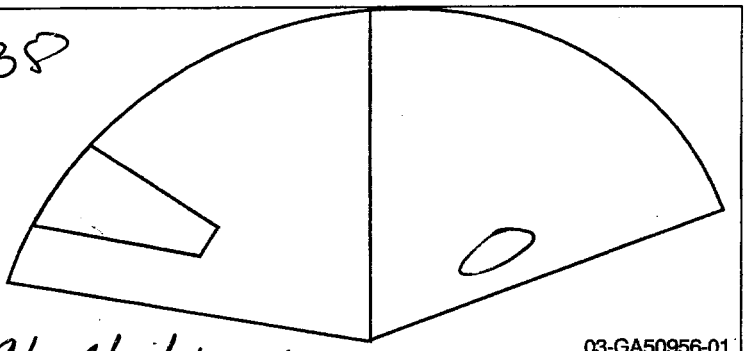
Other:_____

_____

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): _____

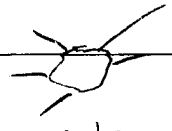
Sludge characteristics: Couple of ~~loose~~ chunks. w/in soil matrix

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

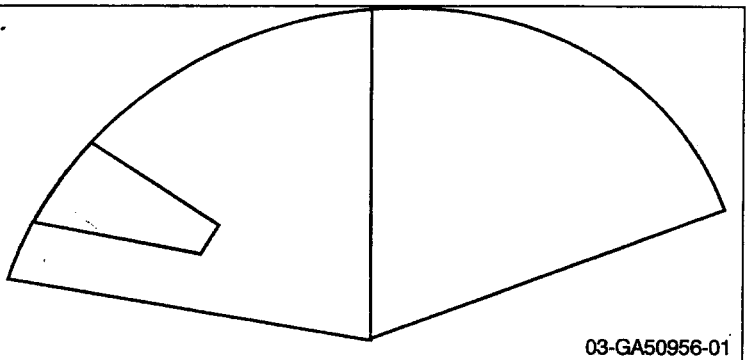
Soil Stain: Yes

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: _____

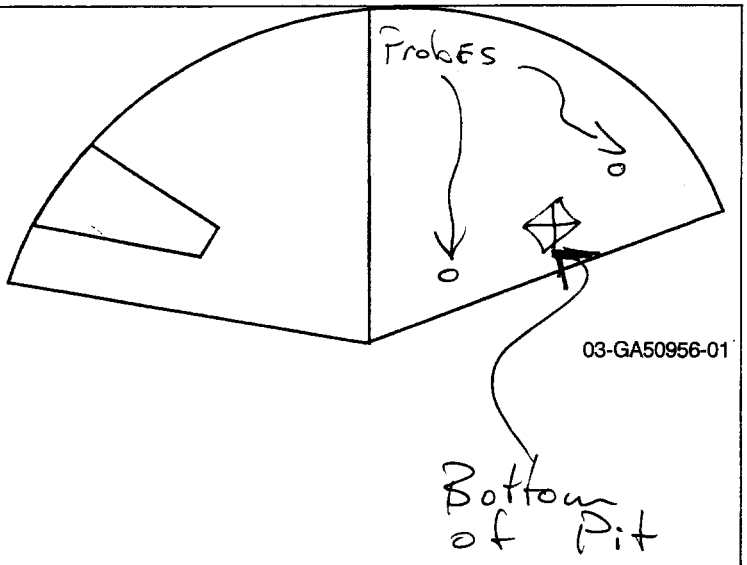
Soil Stain: _____

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: _____

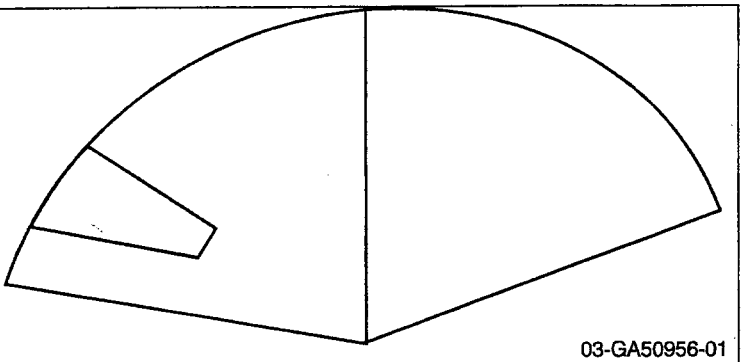
Comments: See Excavator log for details on location

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: _____

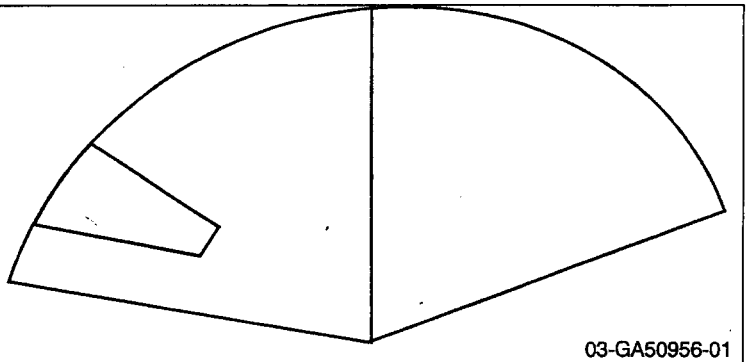
Moisture: _____

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: _____

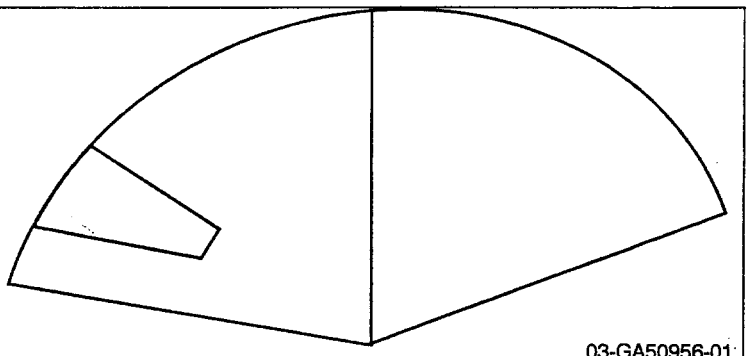
Moisture: _____

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.

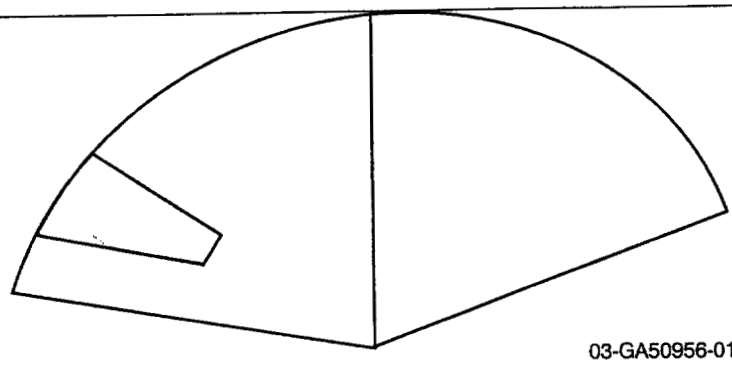
Moisture: moist at bottom of excavation

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

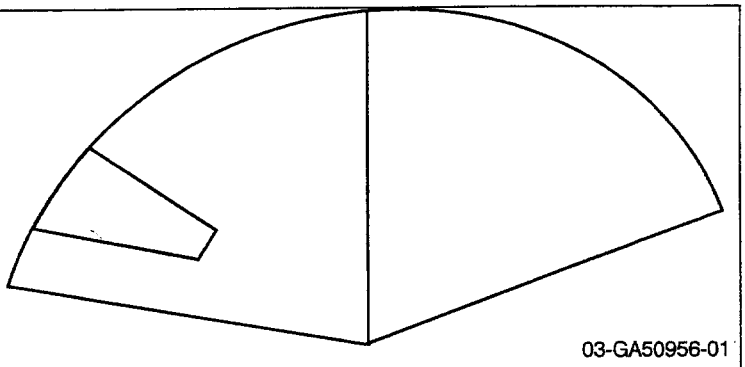
Moisture:

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

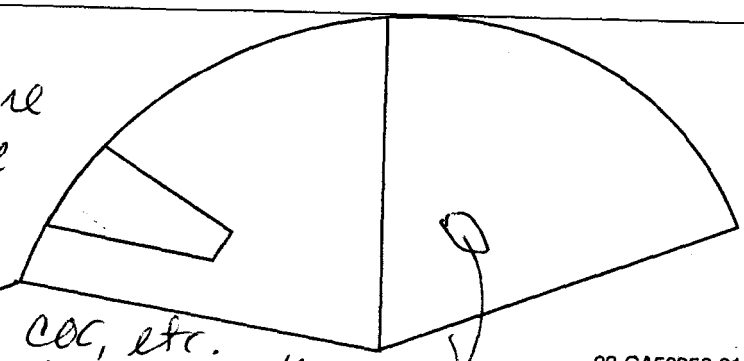
Soil Stain: _____

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 741; should have been a 743.

Sample Information Sheet

Sample Number(s): P9 G ~~R~~ ~~06~~ 01 ~~56~~ 22 2G - ~~P9GR230126~~ ~~P9GP070156~~

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: _____

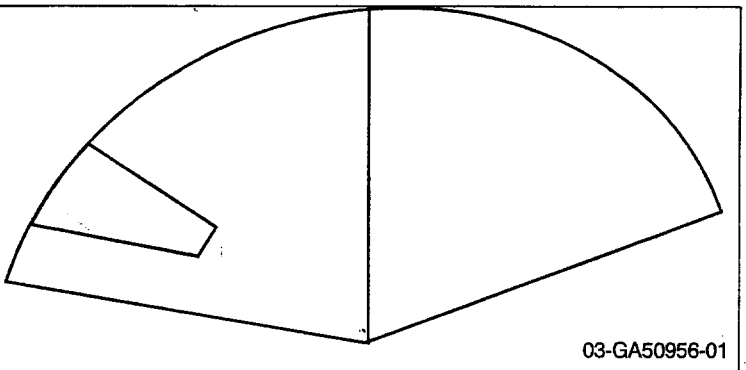
Moisture: _____

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:** GS1

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

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

Location: ~~Reach (ft):~~ 8.05 Angle (degrees): 5 Depth (ft): 6.12 Scoop #: 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: dumped interstitial soil; ~~2nd dump 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: dumpy 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: underlying soil / base soil is HUE 10YR 4/2 dark yellow brn

Sample Characteristics:

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

Color(s): sludge HUE 5Y 5/4 ~~gd brown~~ 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:

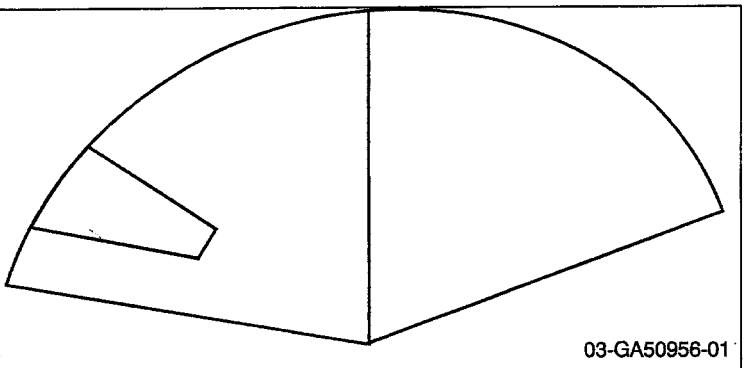
Moisture:

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 recorder 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:** RGS 1

Date: 02/08/04 **Time (24 hr):** 2116 **Sample Weight:** #10 #123 **Rad Reading:** FGE Ø

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

Location: Reach (ft): 8.05 Angle (degrees): 5 Depth (ft): 15.12 Scoop #: 1202

Justification for interstitial soil sample angle of repose, section B, 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 of some white granular inclusions

Sample Characteristics:

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

Color(s): ALE 10YR 4/2 dark yellowish 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:

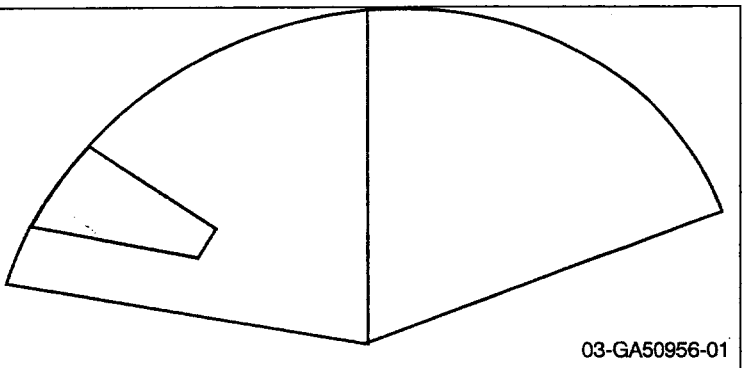
Moisture:

Soil Stain:

Comments: little or no sludge from drum immediately behind

Other:

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


03-GA50956-01

verified recorders sheet

Sample Information Sheet

drag 2151

Sample Number(s): P9 GT 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):** 2135 **Sample Weight:** 1.08 **Rad Reading:** <0.1 n

DDTC Number: RD-15 **New Drum Bar Code:** GEN030146

Location: Reach (ft): 3.47 Angle (degrees): 7 Depth (ft): 0.70 Scoop #: 2151

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

Description of Waste Material in Cart:

Identifiable items, materials: some white granular

Condition of items: NA

Bags/bag pieces (color, condition): no

Sludge characteristics: no sludge

Interstitial soil characteristics: granular w/ some white granular inclusions

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

Distinguishable markings on anything none

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

Sample Characteristics:

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

Color(s): NHE 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:

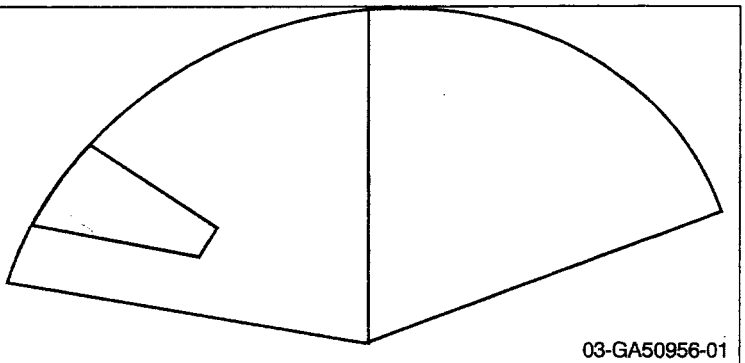
Moisture:

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: _____

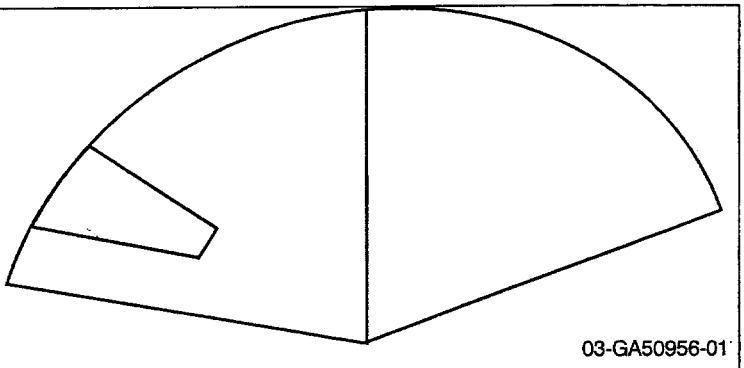
Soil Stain: _____

Comments:_____

Other:_____

_____

Signature: _____ **Date:**_____


03-GA50956-01

verified readers 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 **Sample Weight:** 0.98 **Rad Reading:** 4.5 β/γ 4.1 neck

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

Location: Reach (ft): 7.47 Angle (degrees): 7 Depth (ft): 3.70 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 matt

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 graphite white clumps

Sample Characteristics:

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

Color(s): HUE 10YR 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:

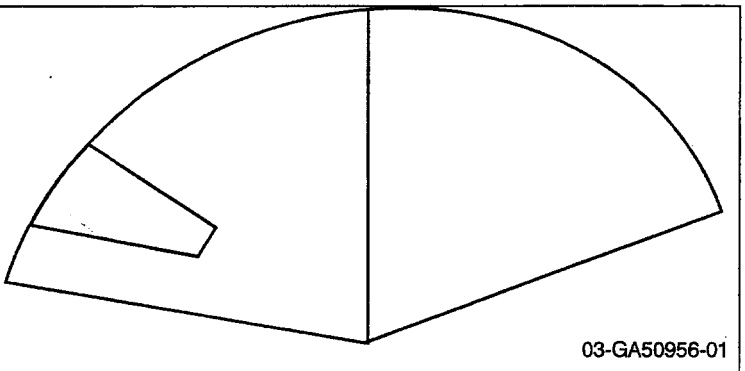
Moisture:

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: —

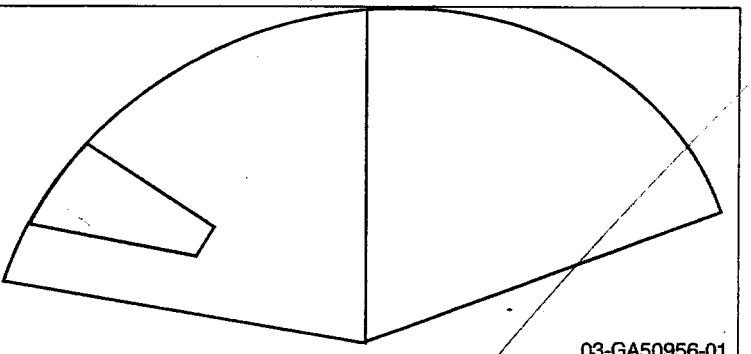
Moisture: _____

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: _____

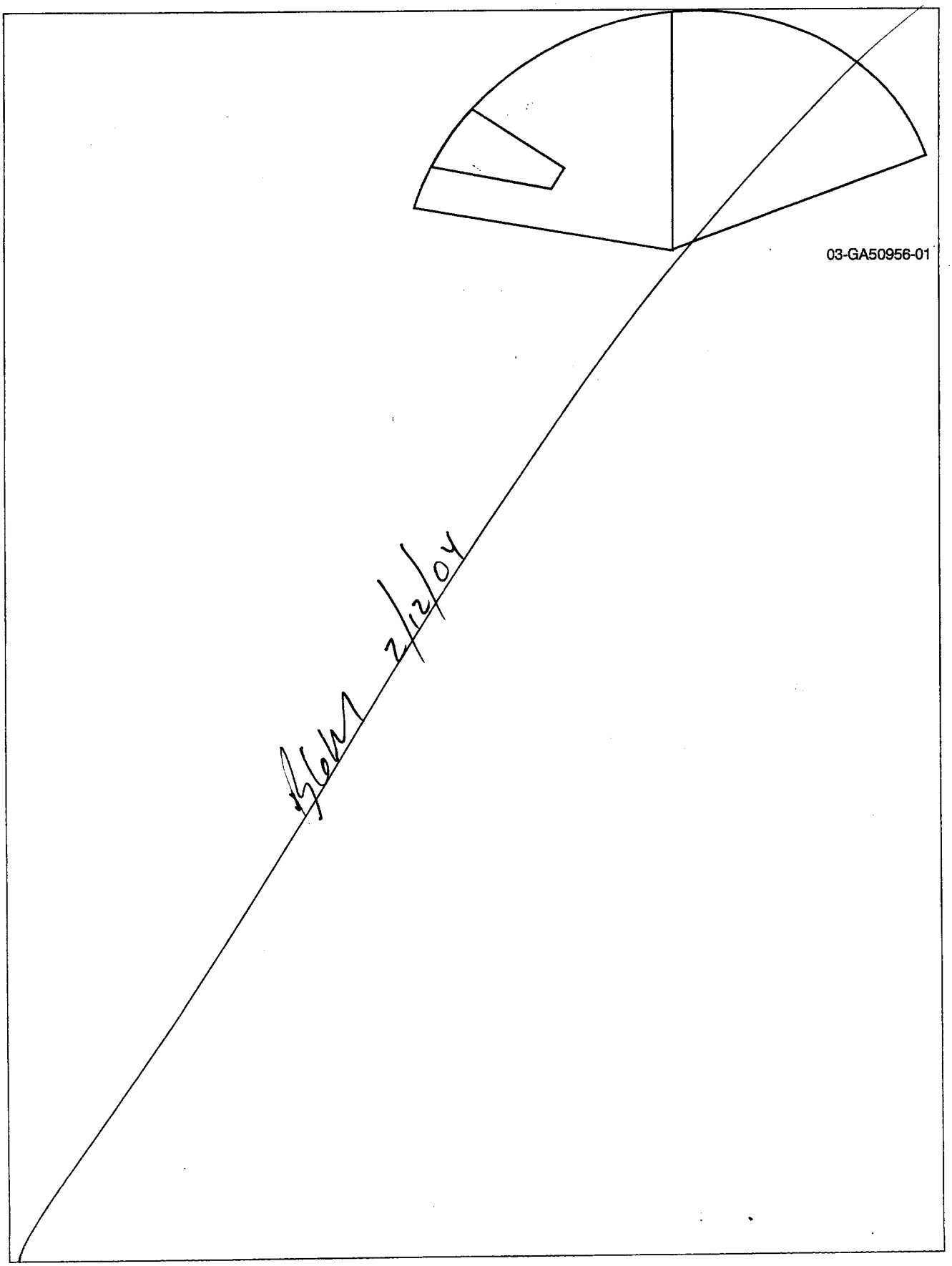
Moisture: _____

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

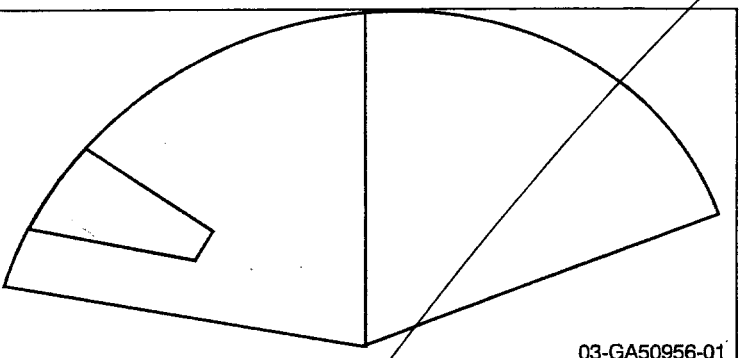
Moisture: Seems to be fairly moist in some areas

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: _____

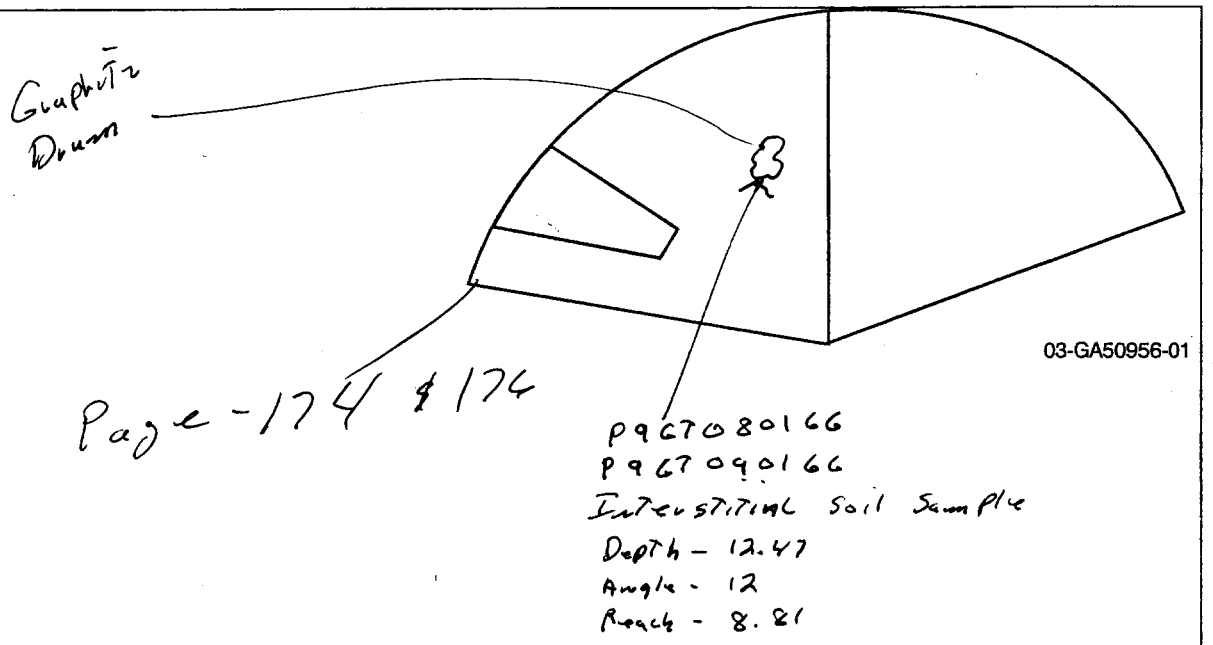
Moisture: _____

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: _____

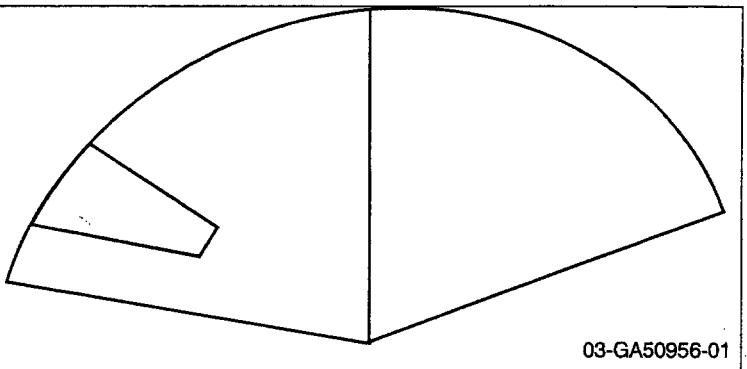
Moisture: _____

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 **Rad Reading:** <.5 rad/hr <.5 mr/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: as

Bags/bag pieces (color, condition): same

Sludge characteristics: 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

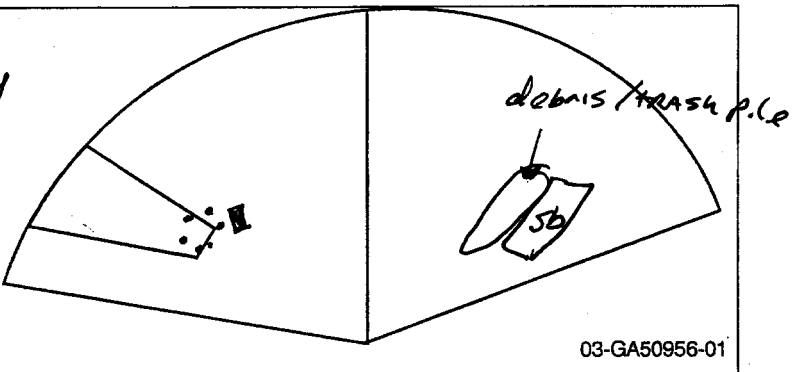
~~12/14/04~~ 2/14/04 KJH 12/13/04

∴ 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 RWSO 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 and tape - good - v. deteriorat.

Sludge characteristics: No sludge ?

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

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

Distinguishable markings on anything ND

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 no 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

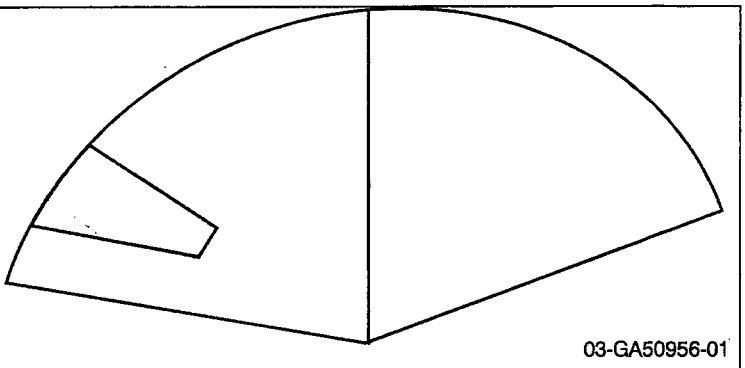
Soil Stain: not readily identifiable

Comments: bagged sample bottles in @ 2242 but went on break

Actually sampled after break 0015

Other: ~~G W Stu~~ 2/14/04

Signature: G W Stu **Date:** ~~12/14/04~~ 2/14/04 KGA 12/13/04


03-GA50956-01

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: _____

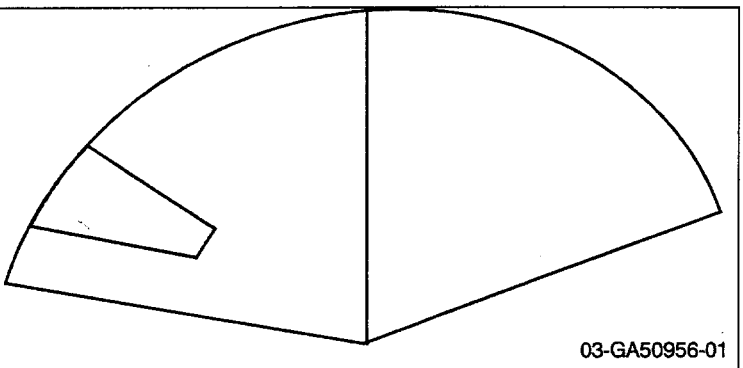
Comments: _____

SAME AS LW5 P.178

2/14/04 12/13/04

Other: _____

Signature: SW Stradley **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 6G

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 KGH 12/13/04 **Time (24 hr):** 2242 **Sample Weight:** _____ **Rad Reading:** _____

DDTC Number: _____ **New Drum Bar Code:** GEM 030264

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: _____

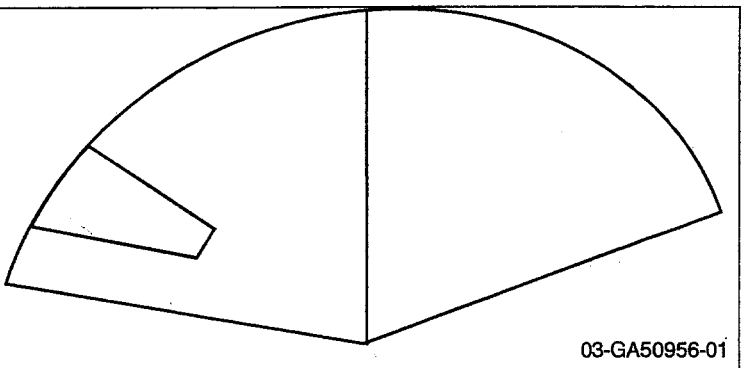
Soil Stain: _____

Comments: _____

Same as P. 175 Sig 12/14/04

Other: _____

Signature: _____ **Date:** ~~12/14/04~~ 2/14/04 KGH 12/13/04


03-GA50956-01

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

Sample Information Sheet

Sample Number(s): P9 G ~~T6~~ R25 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:** TGS2

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

DDTC Number: _____ **New Drum Bar Code:** GEMD30202

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?): ~~Same TEB 2/16/04 relatively intact~~ heavy corr. & breached

Bag Integrity: good – ~~Same TEB 2/16/04 intact~~ but bag did not blow with pressure

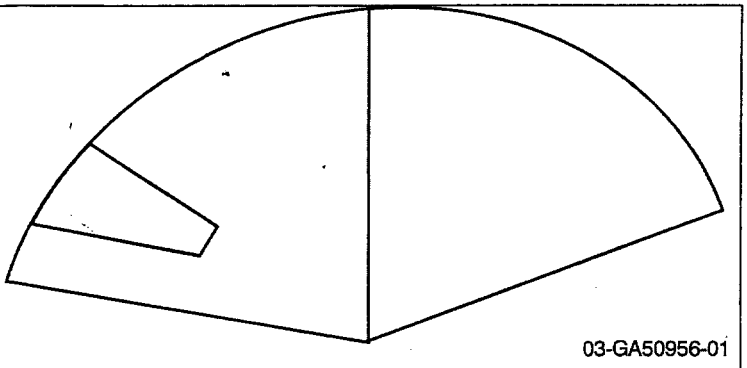
Moisture: ~~none~~ not obvious

Soil Stain: no

Comments: _____

Other: _____

Signature: _____ **Date:** 02/15/04


03-GA50956-01

watched jars packaged 25 26 27 28 29 30 31 32 33 34 35 36
packed full
= #1.2 – 1.4

see reverse for DDTC #

Sample Information Sheet P9GR36012G

#25 – 35 reassigned to OCVZ 02/16/04 RB ~~RB 02/15/04~~ this shtt.

Sample Number(s): P9 G ~~R 2 6 01 2 G~~ ~~through~~ ~~P9GR41012G~~

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: 02/15/04 **Time (24 hr):** 12:50 **Sample Weight:** #1.2 **Rad Reading:** no PCE no B no γ 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 DA

Description of Waste Material in Cart:

Identifiable items, materials: 743 sludge, oil dri, lite

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 w 5Y 6/4

Container Markings: no

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

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

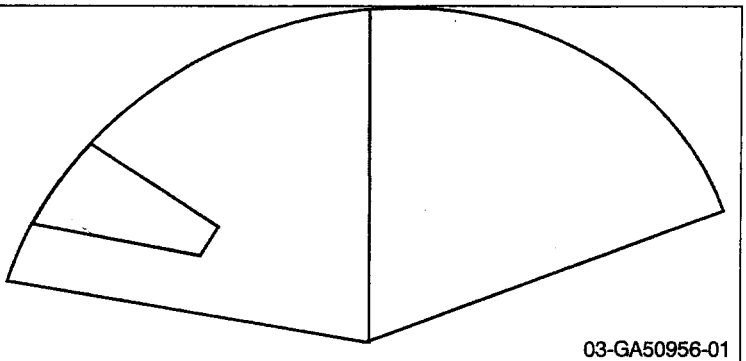
Moisture: not obvious

Soil Stain: no

Comments: _____

Other: _____

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~~ P9GR 36 01 2G through P9GR 58 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 4 go to PRDT Remaining go to OCVZ **Glovebox Line:** #2

Date: 2/15/04 **Time (24 hr):** 0856 **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 So. 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

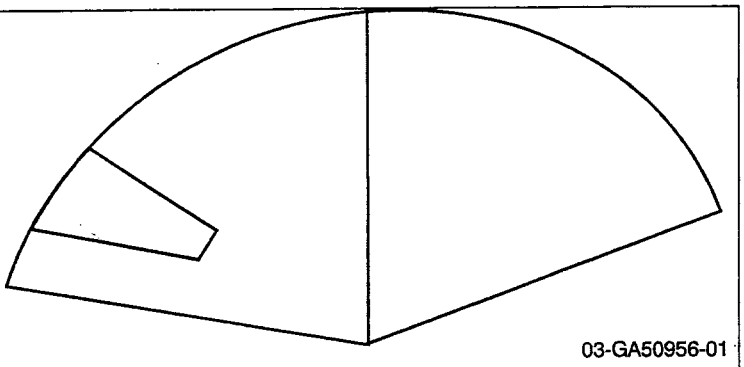
Moisture: Separated organic - oil on top, dry sludge below

Soil Stain: This was a classic organic separated sample

Comments: _____

Other: _____

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


03-GA50956-01

Note: #13 remained unfilled in 25-2 02/17/04 AM
used for soil beneath 19-20-06

Sample Information Sheet

Sample Number(s): P9 GT ~~13~~ 14 01 6G 02/18/04 — 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 easily identified + segregated

Condition of items: _____

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 organic sludge

Color(s): _____ 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: _____

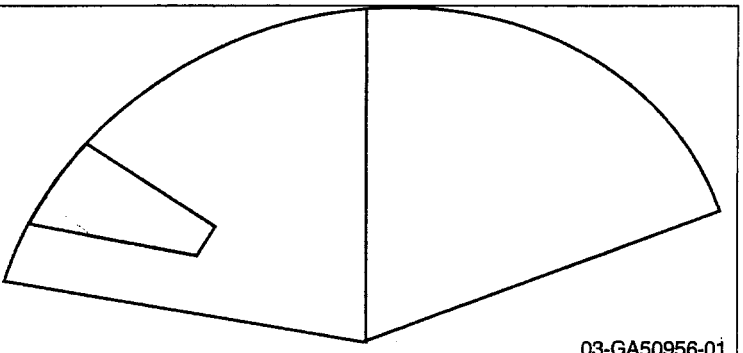
Moisture: _____

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

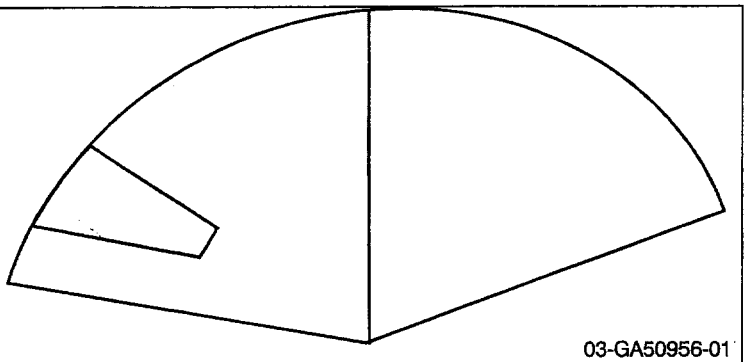
Moisture: dry

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: _____

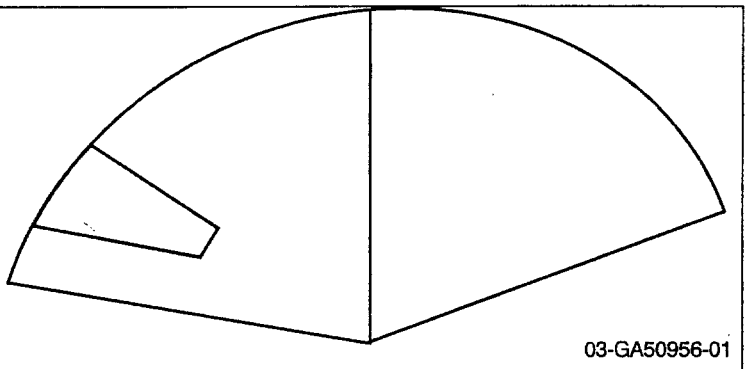
Moisture: _____

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: _____

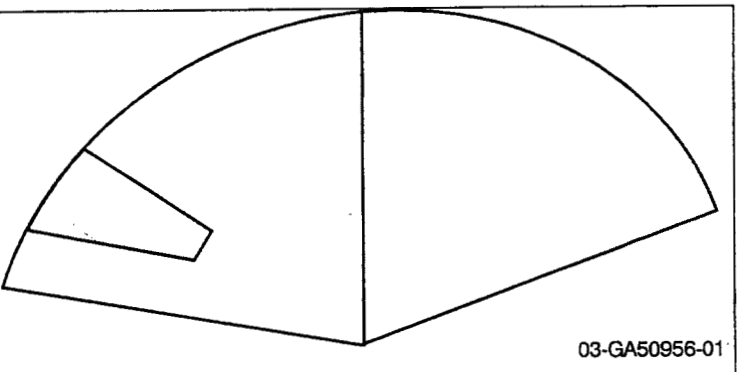
Moisture: _____

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

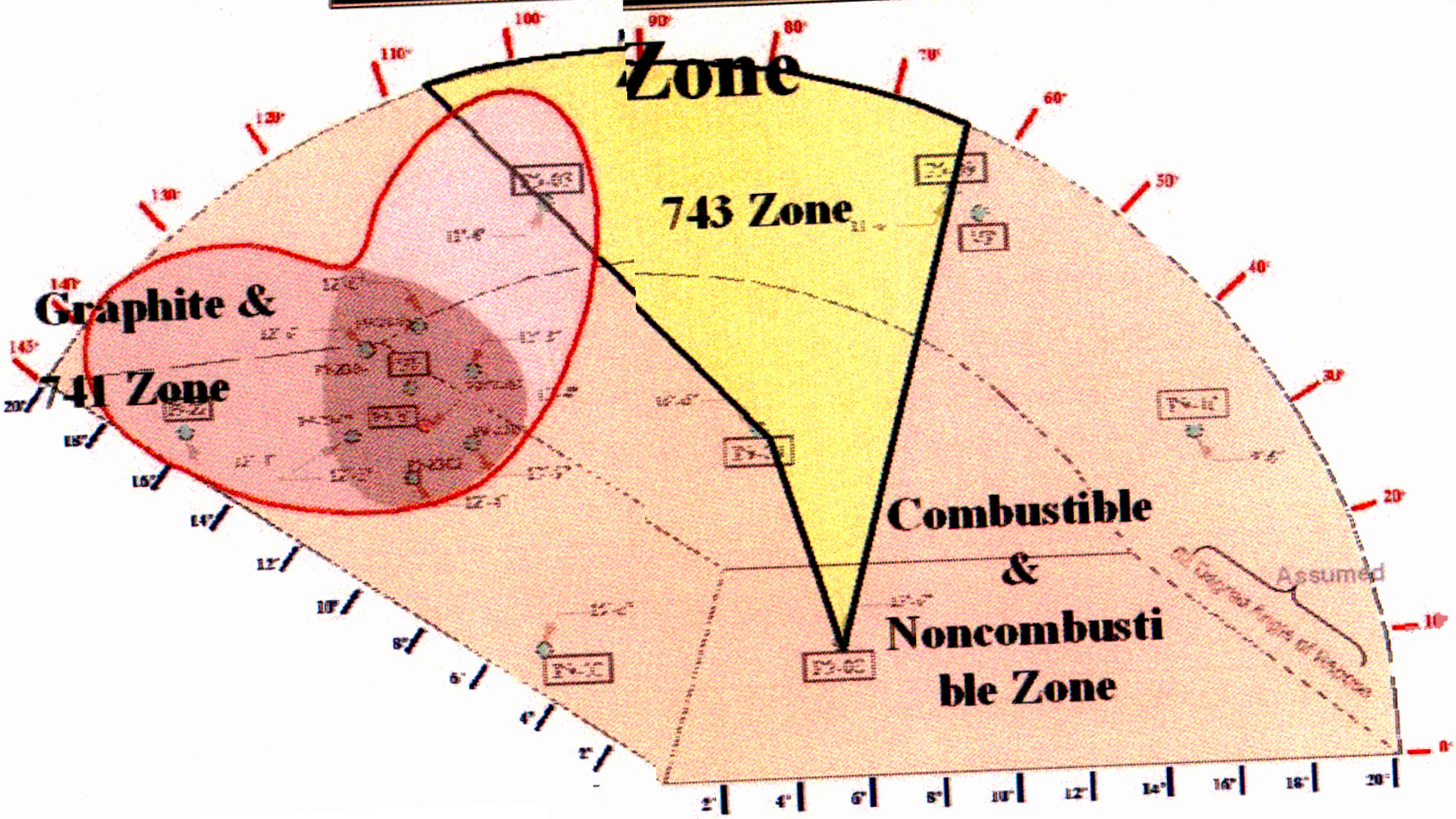
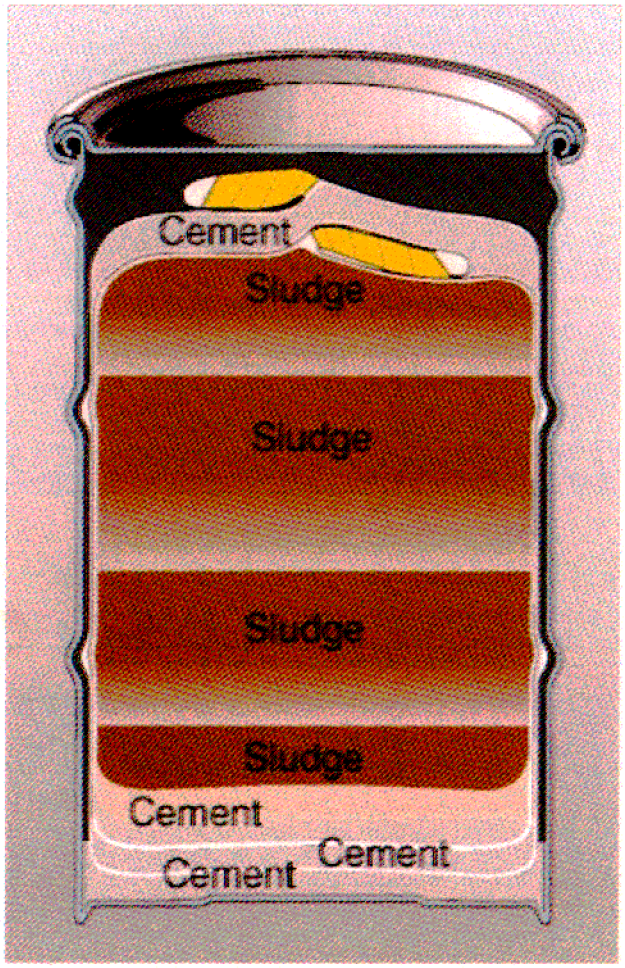
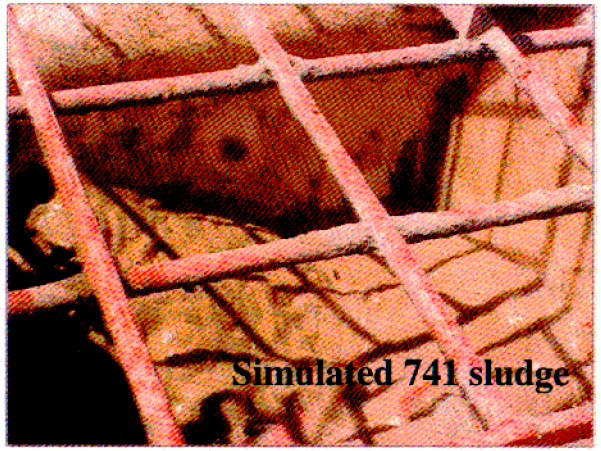


Table provides the quantity of waste drums for the major categories of expected waste materials.

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



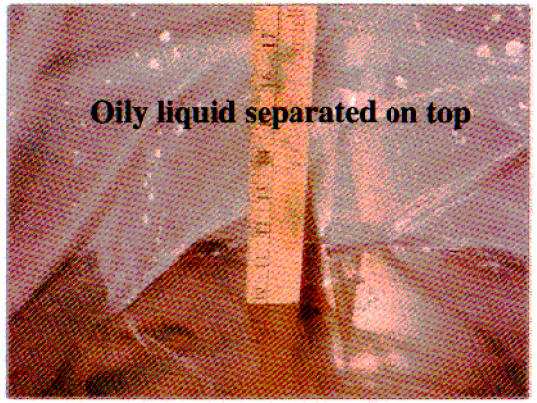


741/742 sludge as packaged

743 Sludge

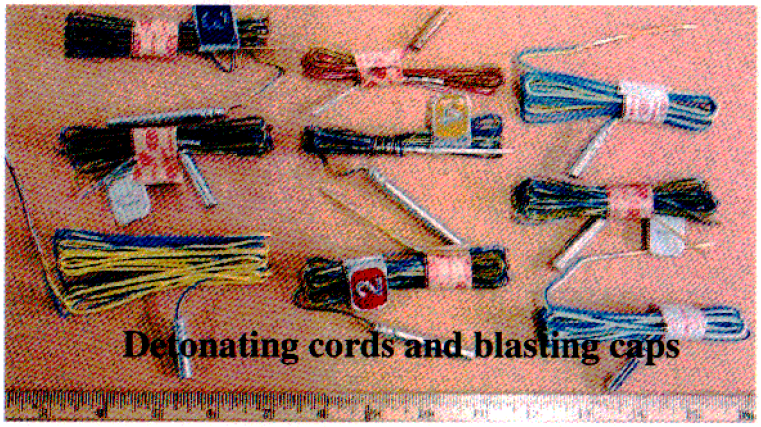
Oil-dri
743 Sludge
(as packaged)
Absorbent-Oil Dri
Absorbent-Oil Dri
Absorbent-Oil Dri

743-Like Sludge


Oily liquid separated on top

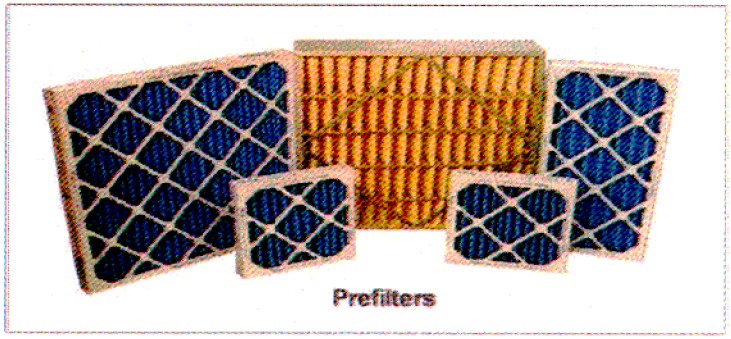
Oil-dri
Oily liquid
Solidified organic waste
743 sludge separated
over time
Oil-dri

Beryllium



Detonating cords and blasting caps

Compressed Gas Cylinders

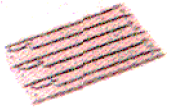


Prefilters

Lead pig

Graphite

Broken pieces of graphite may look like a crystalline graphite.



Graphite mold.

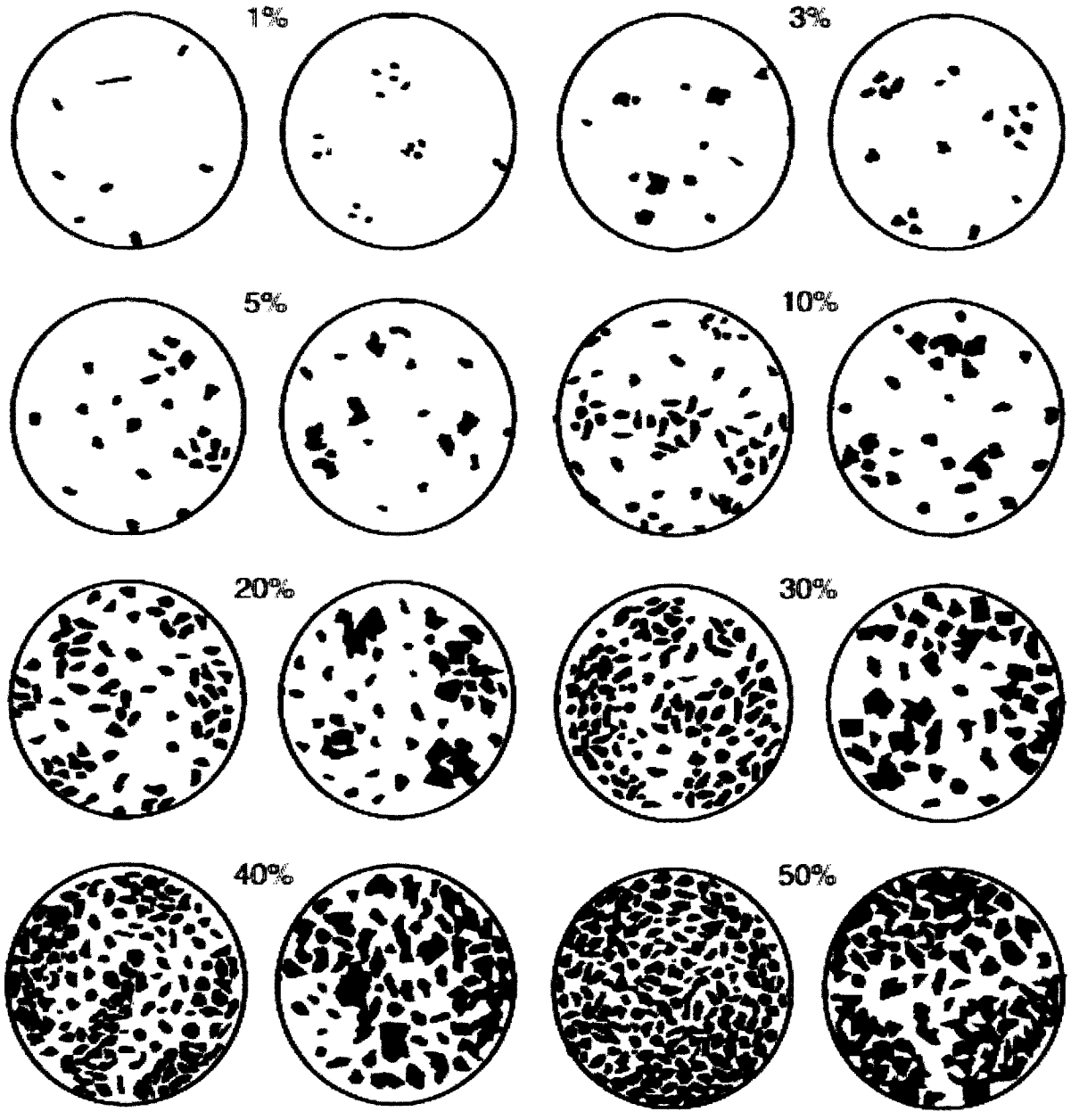
Graphite crucible. Graphite would originally have a smooth, machined surface.

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
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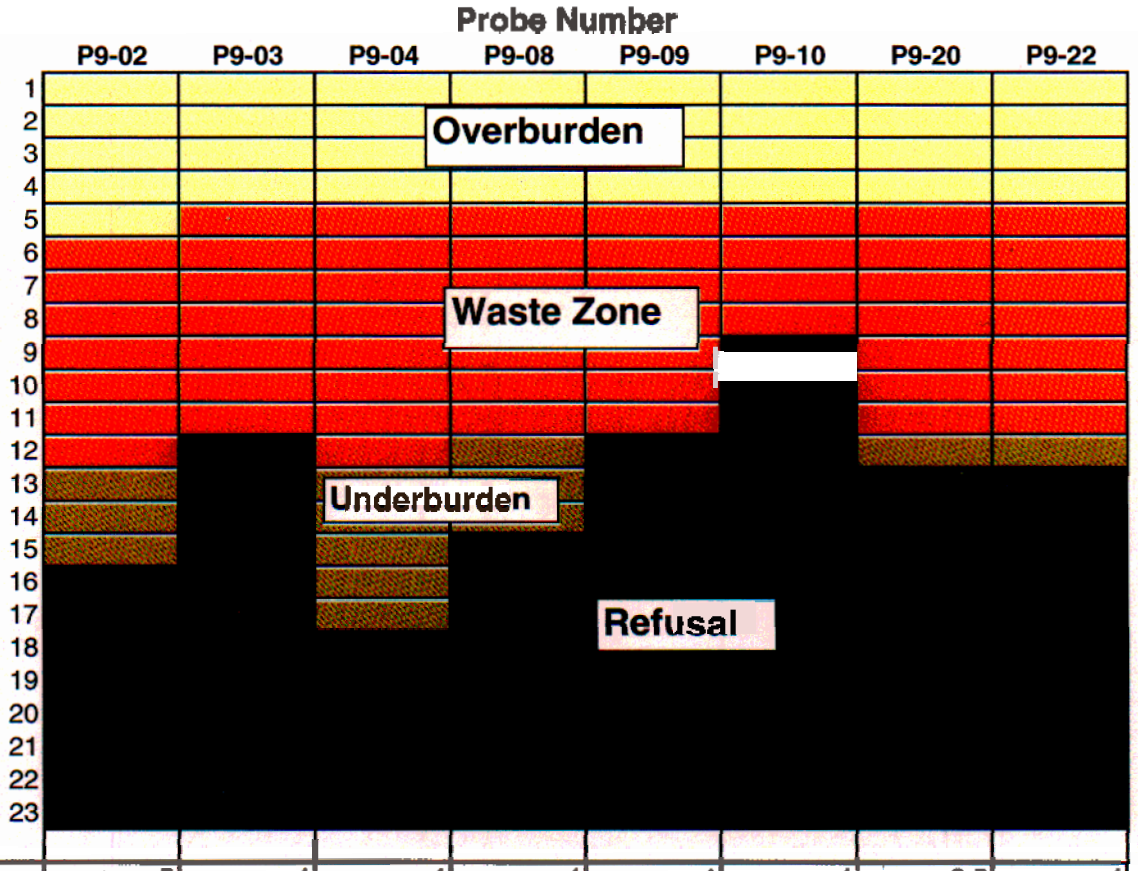
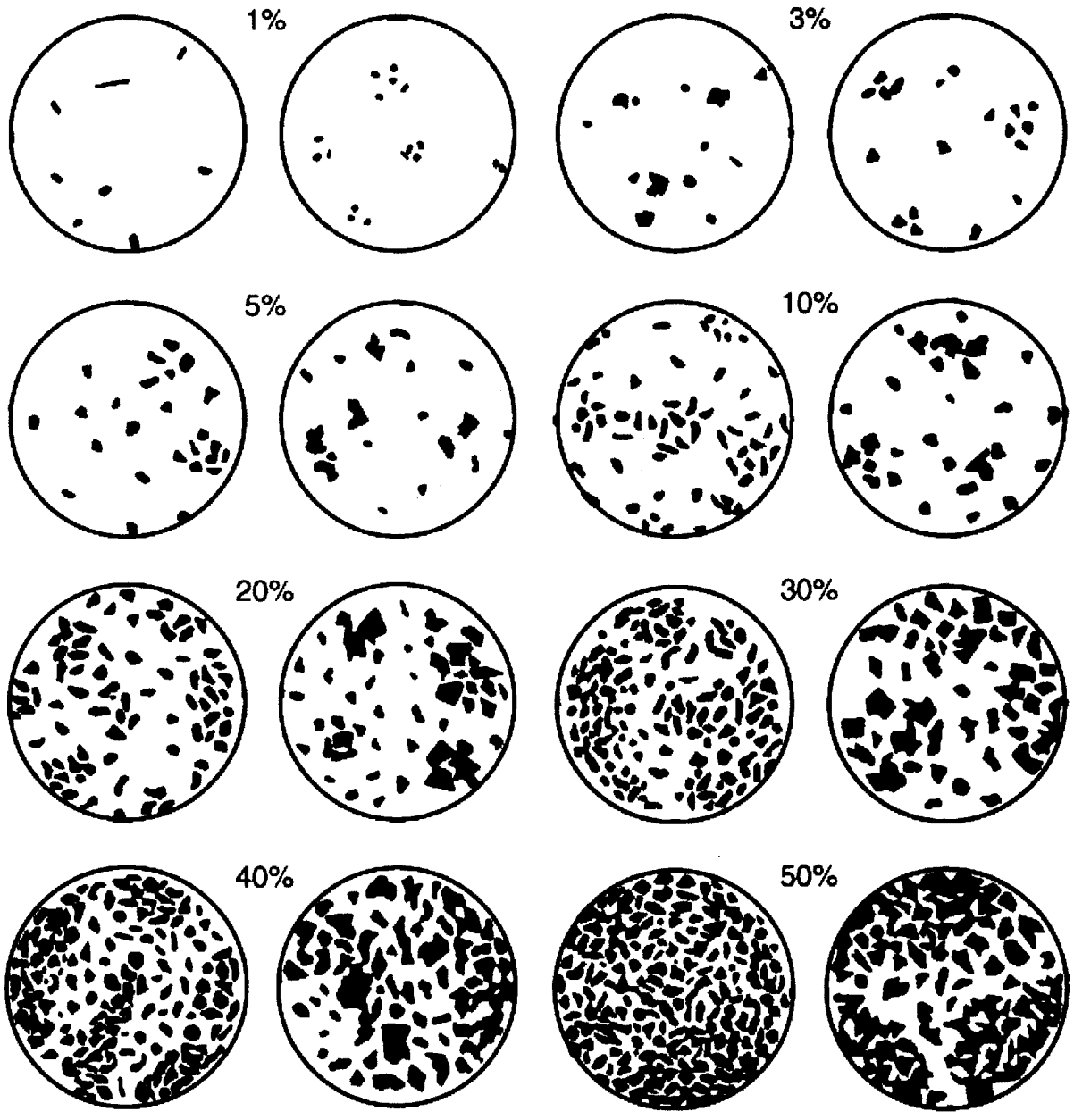


	P9-02	P9-03	P9-04	P9-08	P9-09	P9-10	P9-20	P9-22
Base of Overburden (ft)	5	4	4	4	4	4	3.5	4
Base of WZ (ft)	11.5	11	12	11	10.5	8	10.5	11
Base of underburden (ft)	15	No underb	16.5	13.5	No underb	No underb	12	12
Refusal (ft)	15	11.5	16.5	13.5	11	8.5	12	12


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 St Time Loc

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

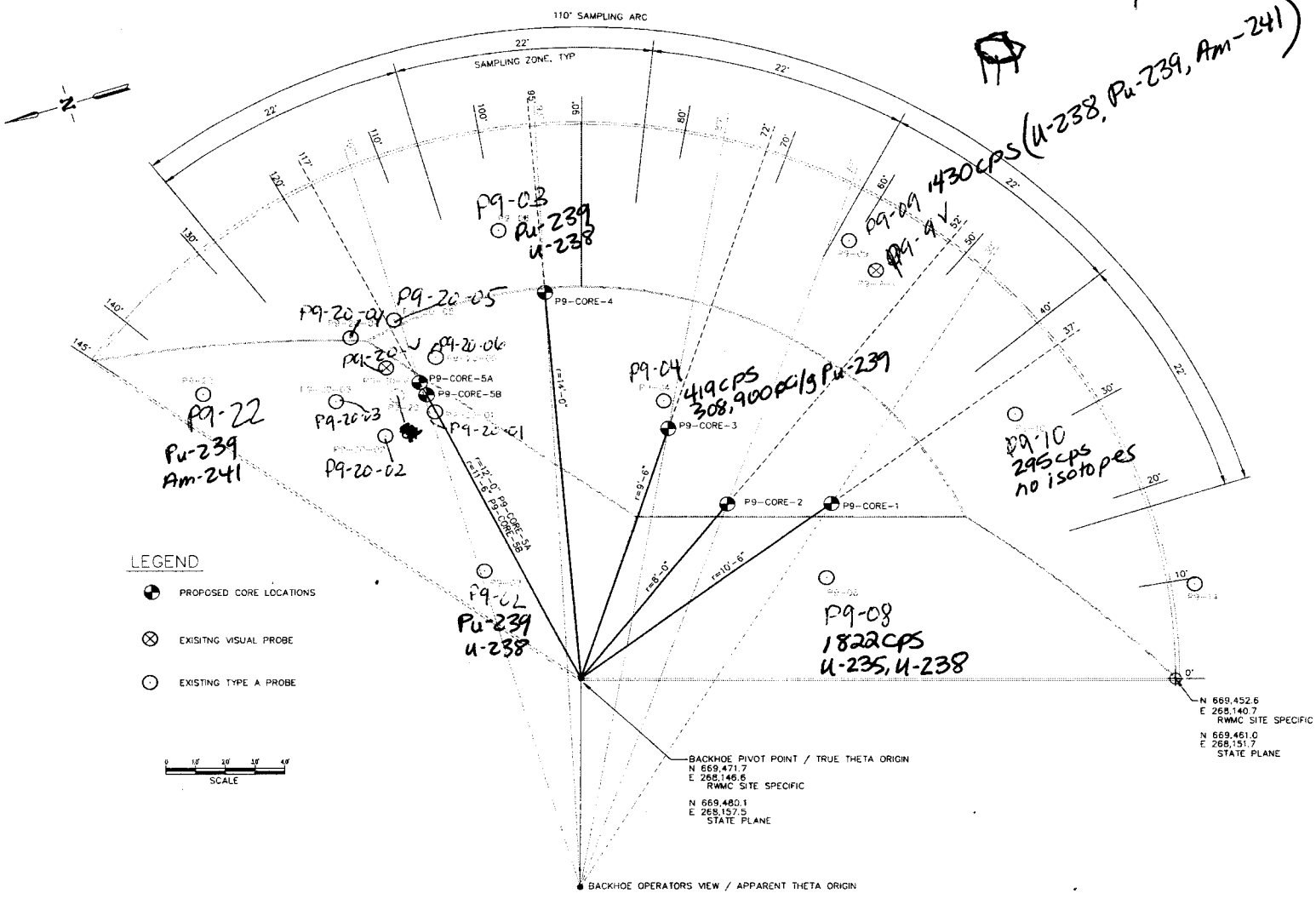


Figure 8. Proposed core locations for excavation bottom using r, θ d positioning system.

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