EG&G MOUND-25-02-10-02--9511140040
Part 1 of 2

Environmental Restoration Program

OPERABLE UNIT 5
NEW PROPERTY EXTENDED PHASE
FIELD REPORT

MOUND PLANT
MIAMISBURG, OHIO

VOLUME II - APPENDICES A-F

July 1995

Final (Revision 0)

U.S. Department of Energy
Ohio Field Office

EG&G Mound Applied Technologies

APPENDIX A
FIELD LOGBOOKS

A.1 SOIL BORING LOGBOOKS
A.2 MONITORING WELL LOGBOOKS
A.3 SAMPLE MANAGER LOGBOOK
A.4 SITE MANAGER LOGBOOK
A.5 SURFACE WATER/SEDIMENT LOGBOOK

A.1

A.1 SOIL BORING LOGBOOKS

EG&G MOUND

OUT NEW PROP

EXTN PHASE

SOIL BORING

LOGBOOK

B401-B403

SOIL BORINGS
LOG BOOK

B401 B402 B403

PROJECT TITLE: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE RI/FS FIELD INVESTIGATIONS

WORK SITE: *MOUND PLANT*
Miamisburg, Ohio
OU5 New Property

ACTIVITY: *Mound OU5 New Property Phase 1 RI/FS Field Investigations*

CONTRACT #: *BOA 52264*
TASK ORDER: *34896*

PROJECT MANAGER: *Thomas Tank*
COMPANY NAME / ADDRESS: *Science Applications International Corporation*
4031 Colonel Glenn Hwy ,Dayton, Ohio 45431
TELEPHONE NUMBERS: *(513) 429-2699*

SUPERVISORS: *OU5 Manager: Alan Spesard (513)865-3859*
SAIC Proj. Manager: Thomas Tank (513)429-2699

EMERGENCY RESPONCE: *Police / Ambulance / Fire 911 or 865-4040*

PROCEDURES: *SOP 1.1, SOP 2.2, SOP 3.1, SOP 4.1, SOP 4.3, SOP 4.4, SOP 5.1, SOP 6.1, SOP 6.3*

START DATE: 6/14/94
END DATE: 7/20/94

TABLE OF CONTENTS SOIL BORINGS

B401, B402, B403 P.1

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO. 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
1	TASK TEAM LOG SHEET B401 6/14/94	31	NO ENTRY
2	" "	32	
3	" "	33	
4	" "	34	
5	" "	35	
6	" ; 6/15/94	36	
7	" "	37	
8	" "	38	
9	NO ENTRY	39	
10		40	
11		41	CGI MONITOR DATA B401
12		42	" "
13		43	" "
14		44	NO ENTRY
15		45	FID FIELD DATA B401
16		46	
17	BOREHOLE LOG B401	47	
18	" "	48	NO ENTRY
19	" "	49	BOREHOLE ABANDON. B401
20	NO ENTRY	50	NO ENTRY
21		51	KEY SHEET
22		52	NO ENTRY
23		53	"
24		54	SAMPLE LOG SHEET B401 01
25		55	" "
26		56	" B401 02
27		57	" "
28		58	NO ENTRY
29		59	
30		60	

TABLE OF CONTENTS SOIL BORINGS

B401, B402, B403 p. 11

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 3489

PAGE	FIELD LOG	PAGE	FIELD LOG
61	NO ENTRY	91	NO ENTRY
62	↓	92	"
63		93	GROUNDWATER QUALITY SPLG RECORD; W4Ø1Ø1
64		94	NO ENTRY
65		95	GROUNDWATER QUAL. SPLG. RECORD; W4Ø1Ø1
66		96	NO ENTRY
67		97	"
68	SAMPLE LOG SHEET; W4Ø1Ø1	98	GROUNDWTR QUAL. SPLG. RECORD - ALK; W4Ø1Ø1
69	" ; "	99	GROUNDWATER LEVELS; B4Ø1
70	NO ENTRY	100	NO ENTRY
71		101	STANDARD ELEC. CONDUCT. DATA
72		102	NO ENTRY
73		103	↓
74		104	
75		105	TASK TEAM ACTIV. LOG SHEET; 6/29/94
76		106	" ; "
77		107	" ; "
78		108	" ; 6/30/94
79		109	" ; "
80		110	" ; "
81		111	" ; "
82		112	" ; "
83		113	" ; "
84		114	" ; 7/6/94
85		115	" ; 7/20/94
86		116	" ; "
87		117	" ; "
88		118	" ; "
89		119	NO ENTRY
90	↓	120	"

TABLE OF CONTENTS SOIL BORINGS

B401, B402, B403 P-111

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
121	BOREHOLE LOG; B402	151	NO ENTRY
122	" ; "	152	"
123	NO ENTRY	153	BOREHOLE ABAND. LOG; B402
124		154	NO ENTRY
125		155	KEY SHEET
126		156	NO ENTRY
127		157	"
128		158	SAMPLE LOG SHEET; B402Ø1
129		159	" ; "
130		160	" ; B402Ø2
131		161	" ; "
132		162	NO ENTRY
133		163	
134		164	
135		165	
136		166	
137		167	
138		168	
139		169	
140		170	
141		171	
142		172	SAMPLE LOG SHEET; W402Ø1
143		173	" ; "
144		174	NO ENTRY
145	CGI MONITOR DATA; B402	175	
146	" ; "	176	
147	NO ENTRY	177	
148	"	178	
149	FID FIELD DATA; B402	179	
150	" ; "	180	

TABLE OF CONTENTS SOIL BORINGS

B401 B402 B403 P. IV

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
		210A, 210B, 210C	~~Monitoring Well Info.~~
181	NO ENTRY	211	TASK TEAM ACTIV. LOG-B403; 6/29/94
182	↓	212	" ; "
183	↓	213	" ; "
184	SAMPLE LOG SHEET; W4021	214	NO ENTRY
185	" ; "	215	↓
186	NO ENTRY	216	↓
187	↓	217	↓
188	↓	218	↓
189	↓	219	↓
190	↓	220	↓
191	↓	221	↓
192	↓	222	↓
193	↓	223	↓
194	↓	224	↓
195	↓	225	↓
196	↓	226	↓
197	↓	227	BOREHOLE LOG; B403
198	↓	228	" ; "
199	GRNDWTR. QUAL. SPLG. RECORD; W4021	229	NO ENTRY
200	NO ENTRY	230	↓
201	GRNDWTR QUAL. SPLG. RECORD; W402	231	↓
202	NO ENTRY	232	↓
203	GW. QUAL. SPLG. RECORD - ALK; W4021	233	↓
204	NO ENTRY	234	↓
205	GROUNDWATER LEVELS; W402	235	↓
206	NO ENTRY	236	↓
207	STANDARD ELEC. CONDUCTIV. DATA	237	↓
208	NO ENTRY	238	↓
209	↓	239	↓
210	↓	240	↓

TABLE OF CONTENTS SOIL BORINGS

B401 B402 B403 P.V

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
241	NO ENTRY	271	NO ENTRY
242		272	
243		273	
244		274	
245		275	
246		276	
247		277	
248		278	
249		279	
250		280	
251	CGI MONITOR DATA; B403	281	
252	NO ENTRY	282	SAMPLE LOG SHEET; B40311
253		283	" ; "
254		284	NO ENTRY
255	FID FIELD DATA; B403	285	
256	NO ENTRY	286	
257		287	
258		288	
259	BOREHOLE ABANDON. LOG; B403	289	
260	NO ENTRY	290	
261	KEY SHEET	291	
262	NO ENTRY	292	
263	"	293	
264	SAMPLE LOG SHEET; B40301	294	
265	" ; "	295	
266	" ; B40302	296	
267	" ; "	297	
268	NO ENTRY	298	
269		299	
270		300	

TABLE OF CONTENTS: SOIL BORINGS:
B401 B402 B403 P. VI

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
301	NO ENTRY	331	NA
302		332	
303		333	
304		334	
305		335	
306		336	
307		337	
308		338	
309		339	
310		340	
311		341	
312		342	
313		343	
314		344	
315		345	
316		346	
317		347	
318		348	
~~319~~ 210A	MONITOR WELL DIAG; W402	349	
~~320~~ 210B	WELL COMPLETION INFO; W402	350	
~~321~~ 210C	WELL CONSTRUCTION LOG; W402	351	
322	NO MORE PAGES IN BOOK -	352	
323	NO FURTHER ENTRIES	353	
324	NA	354	
325		355	
326		356	
327		357	
328		358	
329		359	
330		360	

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B401 P1

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/14/94 (TUES) TIME: 0215 : 18:00 PAGE 1 OF 5

Task Team Members:

MIKE KLIDERTS - SAIC

ERIC SNYDER - SAIC

ALLEN WOLFE - BOWSER

JOHN KRIFER - BO

RAY MOSS - MOUND HEALTH PHYSICS

MK 06/14/94

Narrative (include time and location):

0715 SAIC & BOWSER CREW ARRIVE AT SAIC FIELD TRAILER. SAIC CREW PREPARES SAMPLING EQUIPMENT

0725 JOHN DAVIS GIVES DAILY H&S TAILGATE BRIEFING 0731 BRIEFING ENDS. CALIBRATE EQUIPMENT: PH METER, OVA, LEL (SEE MSTR LOG) ~0830 LEAVE SAIC TRAILER 0904 ARRIVE AT B401 SITE DRILL CREW & MOUND H&S PERSONNEL ON SITE. MAST UP. DRILLER REPORTS DRILL RIG & AUGERS WERE DECONED ON 06/13/94 RIG APPEARS CLEAN. BRIEF DRILLERS ON DRILLING PLAN 0917 BEGIN SETTING UP SITE 1 CAUTION ZONE (EXCLUSION ZONE) SET-UP AROUND RIG AT APPROXIMATE RADIUS OF MAST HEIGHT. DRILLER REPORTS THAT GROUNDING ROD NOT USED & IS NOT REQUIRED

0935 SITE SET-UP FOR SAMPLING. SAIC CREW LEAVES SITE TO GET DOSIMETERS.

0952 RETURN TO SITE. SUSAN ABSTON, JOHN DAVIS & ON SITE TO GET SPLIT SPOON ADAPTER - LEAVE SITE AT 1000 NOTE DRILLER REPORTS THAT THEY WERE ON SITE AFTER H&S MEETING RIG WAS SET-UP YESTERDAY 1005 TAKE BACKGROUND INST. READINGS FROM SOIL W/ GRASS REMOVED APPROX 15 FT BEHIND DRILL RIG

Daily Weather Conditions: A.M. PARTLY SUNNY TEMP MID 80'S SOUTH BREEZE

P.M. PARTLY SUNNY TEMP MID 90'S " "

Recorded By [signature] 06/14/94 QA Checked By [signature] 6/17/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B401 P2

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/14/94 TIME: 0715 : 1800 PAGE 2 OF

Task Team Members:

SAME AS PAGE 1

Narrative (include time and location):

TAKE INITIAL BREATHING ZONE READINGS. FIDLER OVER BACKGROUND SOIL: TH=7K, GROSS 10K

1040 SAMPLE BOH BH0101 COLLECTED FROM 0.0 FT - 6 in USING SPADE AND SCOOP METHOD. SAMPLE PORTION TAKEN BY HP TECH (NO C-O-C) MK 06/15/94

NOTE: PPE LEVEL D MOD AS SPECIFIED IN H&S PLAN

1100 DRILLERS RIG UP AUGER. PLASTIC PLACED AT BOREHOLE JMD 6/15/94 ~~FOR~~ TO COLLECT CUTTINGS 2 IN DIAM SPLIT SPOON RIGGED UP COLLECT SOIL DESCRIPT. SAMPLE

1105 FIDLER = ND OF 0-2 FT SOIL DESC. SAMPLE.

1108 2-4 FT SS SAMPLE COLLECTED 1113 COOLER TEMP = 8°C ENCOUNTER HARD MATERIAL AT ~ 5.5 FT

1115 4-6 FT SAMPLE COLLECTED FIDLER = ND 1120 6-8 FT SAMPLE COLLECTED FIDLER = ND 1124 8-10 FT SAMPLE COLLECTED FIDLER ND 1132 10-12 FT SAMPLE COLLECT 1 IN RECOVERY DRILLER REPORTS THAT WE PUSHED A COBBLE NO READINGS TAKEN 1140 12-14 FT SAMPLE COLLECTED FIDDLER = ND 1144 14-16 FT SAMPLE COLLECTED 1150 DRILL CREW & HP LEAVE SITE COOLER TEMP AT 1156 = 9°C SAIC LEAVES SITE W/ SAMPLE & SAMPLE CONTAINERS

Daily Weather Conditions: A.M.

P.M. SEE PAGE 1

Recorded By [signature] 06/14/94 QA Checked By [signature] 6/17/94

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): ~~06/9/94~~ 06/14/94 MK 06/14/94 TIME: 0715 : 1800 PAGE 3 OF 5

Task Team Members:

SAME AS PAGE 1

Narrative (include time and location):

TO GO TO SAIC TRAILER & TO BREAK FOR LUNCH
1209 ARRIVE AT SAIC TRAILER GIVE SAMPLE TO JOLLETA FOR
PACKAGING COOLER TEMP = ~~40~~ 4°C SAMPLES IN TACT.
1312 SAIC ARRIVES AT SITE DRILL CREW & HP PRESENT.
1325 BEGIN AUGERING AT 16 FT BGS AUGERING AS IF WE ARE
ENCOUNTERING COBBLES OR SMALL BOULDERS 1330 16-18 FT
SAMPLE COLLECTED FIDLER = 0CPM 1337 18-20 FT COLLECTED
FIDLER = 0. MK 06/14/94
1340 DRILLING STOPS - HAMMER LINE COMES LOOSE 1348 CONTINUE
AUGERING 1354 COLLECT 20-22 FT SAMPLE WATER ZONE
MK 06/14/94
FROM ~~20~~ 21.6 - 21.8 1400 COLLECT 22-24 FT SAMPLE FIDLER
= ND WATER ENCOUNTERED AT ~ 23.5 FT BGS 1405
STOP DRILLING TO OBTAIN SPLIT SPOON ADAPTER FROM
OTHER CREW 1420 RAY MOSS RETURNS W/ ADAPTER
JOHN DAVIS ON SITE 1430 JOHN DAVIS LEAVES SITE
RIG UP W/ 3 IN DIAMETER SPLIT SPOON TO COLLECT SAMPLE
MK 06/14/94
FOR ANALYSIS - ~~1445 COLLECT SAMPLE B40102~~ DRILLER
REPORTS THAT BOULDER WAS ENCOUNTERED - SAMPLE DRIVEN
ONLY 1.5 FT 1450 COLLECT SAMPLE B40102 RUN SECOND
SPLIT SPOON TO COLLECT ENOUGH SOIL TO FILL CONTAINERS

Daily Weather Conditions: A.M. SEE PAGE 1

P.M.

Recorded By [signature] 06/14/94 QA Checked By [signature] 6/17/94

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/14/94 TIME: 0715 : 1800 PAGE 4 OF

Task Team Members:

SAME AS PAGE 1

Narrative (include time and location):

1604 SECOND SPLIT SPOON COLLECTED, SAMPLE IS SATURATED WITH WATER FIDLER = 0 CPM SECOND SPLIT SPOON COLLECTED FROM 26-28 FT & COMPOSITED WITH MATERIAL FROM 24-26 FT & 22 RUN 3RD SPLIT SPOON TO GET ENOUGH SOIL ~~1580~~ 15 32 3RD SPLIT SPOON COLLECTED COMPOSITED WITH ORIGINAL MATERIAL (28-30 FT)

1545 DRILLERS LEAVE SITE 1551 HP LEAVES SITE

NOTE: HP SCANNED HANDS AND FEET OF ALL PERSONNEL BEFORE THEY LEFT THE EXCLUSION ZONE. SAIC LOADS EQUIPMENT & SAMPLES INTO TRUCK COOLER TEMP = 8°C. EXCLUSION ZONE LEFT AROUND SITE, RIG MAST REMAINS UP DUE TO AUGERS STILL IN GROUND.

1600 SITE SECURE SAIC LEAVES SITE

1607 ARRIVE AT SAIC TRAILER.

DAILY SUMMARY: DRILLED OR SAMPLED TO A TOTAL DEPTH OF 30 FT BGS. WATER WAS ENCOUNTERED AT 23.5 FT BGS. SAMPLE B40101 COLLECTED BY SPADE & SCOOP FROM 0.0-0.5 FT SAMPLE ~~B40101~~ TAKEN WITH 3 3" SPLIT SPOONS FROM 24-30 FT WATER CONSIDERED TO BE WATER TABLE BASED ON

VTD 6/27/94

B40102

Daily Weather Conditions: A.M. SEE PAGE 1

P.M.

Recorded By [signature] 06/14/94 QA Checked By [signature] 6/27/94

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS B401 P5

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): ~~06/15/94~~ 6/14/94 TIME: 0715 : 1800 PAGE 5 OF 5

JTD 6/15/94

Task Team Members:

SAME AS PAGE 1

Narrative (include time and location):

AMOUNT, OF THICKNESS (6FT) AND DOCUMENTED WATER TABLE LEVELS FOR THE AREA.

1630-1800 M. KLIDERIS OBCONS

- 3 - 3-IN SPLIT SPOONS
- 5 - LARGE STAINLESS STEEL BOWLS
- 4 - LARGE STAINLESS STEEL SPOONS
- 3 - 2-IN SPLIT SPOONS

MK 06/15/94

Daily Weather Conditions: A.M. SEE PAGE 1

P.M.

Recorded By [signature] 06/14/94 QA Checked By [signature] 6/17/94

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS: B401 PG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/15/94 TIME: 08 00 PAGE 1 OF 3

Task Team Members:

MIKE KLIDZEJS - SAIC
EVELYN HARTRELL - SAIC
ALLAN WOLFE - BOWSER
JOHN KRIFER - BOWSER
RAY MOSS - MOUND HP

Narrative (include time and location):

0850 SAIC CREW ARRIVES AT B401 SITE. DRILL CREW ALRREADY ON SITE AND HAVE INSTALLED (PLACE) A 2 IN DIAM WELL SCREEN & RISER (TOTAL LENGTH = 35.3 FT) INSIDE AUGERS LEFT FROM DRILLING AUGERS WERE RAISED TO LEVEL ABOVE SCREEN. DRILLERS LEAVE SITE. SAIC CREW PREPARES TO PURGE & SAMPLE SCREEN BREATHING ZONE & CASING OPENING W/ LEL & OVA READINGS OK. TAG BOTTOM OF CASING AT 35.3 TAG WATER LEVEL AT 28.9 FT BELOW TOP OF CASING 22.9 FT BGS (6.0 FT CASING STICK-UP) 0945 BEGIN PURGING WELL BY BAILER. WILL PURGE 3 VOLUMES = 3.6 (SEE PAGE 95) 1000 FINISH PURGING 1 GALLON WATER APPEARS MUDDY 10YR 7/4 NO ODOR OBSERVED, FINES SUSPENDED. NOTE: PRE-CLEANED NEW BAILER USED FOR PURGING 1015 FINISH PURGING 3 GALLONS 1025 FINISH PURGING 3.75 GALLONS TAG WATER LEVEL AT 28.9 FT BELOW TOP OF CASING - NO LEVEL CHANGE 0955 BEGIN CALIBRATING EQUIPMENT 1125 END CALIBRATION - COLLECT FIRST STABILIZATION SAMPLE MEASURE pH, COND., TEMP. 1132 COLLECT 2ND

Daily Weather Conditions: A.M. PARTLY SUNNY, TEMP MID 80s SLIGHT BREEZE
P.M. MOSTLY SUNNY, TEMP - UPPER 90's

Recorded By MIKE KLIDZEJS 6/15/94 QA Checked By [signature] 6/17/94

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS B401 P. 7

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): 6/15/94 TIME: NA: PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

STABILIZATION SAMPLE - MEASURE pH, COND, TEMP. 1143 COLLECT THIRD STABILIZATION SAMPLE. 2ND & 3RD SAMPLES ARE WITHIN CRITERIA, PRIOR TO COLLECT SAMPLE 1150 BEGIN COLLECTING W40101 1200 COOLER TEMP = 3°C SCAN BREATHING ZONE W/ OVA & LEL - BOTH OK. CONTINUE FILLING SAMPLE CONTAINERS 1300 SAMPLING PERSONS BEGIN LOADING EQUIPMENT 1320 LEAVE SITE FOR LUNCH & TO DRIVE SAMPLES TO TRAILER 1332 RELINQUISH CUSTODY OF SAMPLES TO JOLETTA NOTE: FRACTION OF WATER GIVEN TO MOUND HP. 1307 MIKE KUDZEJS RETURNS TO SITE. DRILL CREW BEGINS PREPARING TO ABANDON B401. 1515 CREW MIXING GROUT 1520 CREW PUMPING GROUT (SEE PG. 49 FOR DETAILS) 1527 M. KUDZEJS LEAVES SITE TO GET SECURITY TO OPEN GATE 1533 M. KUDZEJS RETURNS TO THE SITE. FINGERS HAVE BEEN REMOVED DRILLERS REPORT THAT CASING WAS REMOVED FROM BOREHOLE, INTACT, WITH NO PROBLEM 1540 MAST LOWERED CUTTINGS ~~FR~~ FROM BOREHOLE SHOVELED INTO DRUM (55 GAL. OPEN TOP) 1547 TIM BAKER ON-SITE W/ ADDITIONAL CEMENT

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By MIKE KUDZEJS 6-15-94 QA Checked By [signature] 6/17/94

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TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS — B4a1 p.8

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO: 134896

Date (mm/dd/yy): 6/15/94 TIME: NA PAGE 3 OF 3

Task Team Members:

NA

Narrative (include time and location):

1550 DRILLERS MIXING ADDITIONAL GROUT SAME MIX AS FIRST BATCH. GROUT BROUGHT TO GROUND SURFACE 1600 DRILL CREW MOVES DRILL RIG OFF SITE TO DECON AREA. M. KLIDZEJS CLEANS UP SITE LOADS REMAINING EQUIPMENT. @ 1617 M. KLIDZEJS LEAVES SITE.

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By MIKE KLIDZEJS 6/15/94 QA Checked By [signature] 6/17/94

BOREHOLE LOG (SOIL)

SOIL BORINGS
B401 P17

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO: 34896

FACILITY CODE: MND16
LOCATION ID: BHH B401
COORDINATES (FT): JMD 6/27/94
NORTH N/A EAST N/A
GROUND ELEVATION (FT MSL)
LOCATION TYPE: BH
COMMENTS: SURFACE SAMPLE BH0101 COLLECTED 0-6.0 IN

DRILLER CODE: BOWS
COMPLETION DATE 6/14/1994
DIAMETER (IN): 8IN.
DEPTH (FTFD): 30.0
CONSTRUCTION METHOD: B
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
SEE GROUNDWATER LEVEL SHEET PG 99		

LOCATION DESCRIPTION

NEW PROPERTY S. OF SOILS DISPOSAL ZONE, AT PERIMETER FENCE AND N. of EPHEMERAL STREAM.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-.5	0-0.5	100%	100%	SPOON SCOOP O	BH0101	NA	NA	PT	SLIGHTLY MOIST, SILTY SOIL
									2.5 YR 2.5/0 - 2.5/2 MINOR
									ROCK FRAGMENTS, ROOT &
									ORGANIC MATL ABUNDANT.
	0-2.0	0.8	NA	SS S	NA	3/1/1/3	NA	PT	SAME AS ABOVE
	2.0-4.0	0.8	JMD 6/28/94	SS S	NA	NA	NA	NA	" " " w/ OBSERVABLE
									ORGANIC (ROOT) MATERIAL
	4.0-6.0	2.0FT	100%	SS S	NA	7/8/10/12	22	OL/OH	7.5 YR 3/2 SILTY CLAY
									MINOR ROOT MATERIAL
									VERY MINOR SMALL ROCK FRAG
	6.0-8.0	1.6	NA	S	NA	6/7/7/12	19	PT	SAME AS ABOVE w/
									SOME BUT MINOR FINE SAND

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MIKE KLIDZEIS 6-14-94
FORM COMPLETED BY / DATE

6/29/94
TECHNICAL REVIEWER / DATE

18

BOREHOLE LOG (SOIL) — SOIL BORINGS B401 P.2

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO.: 34896

FACILITY CODE: MND16 — DRILLER CODE: BOWS

LOCATION ID: B401 — COMPLETION DATE 6/14/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
									WHICH IS 7.5YR 7/0
	8-10	1.2	NR	S	NA	3/6/4/10	14	OL	SILTY CLAY 5YR 4/2
									GRADING AT @ 9.0 FT
									TO SILTY CLAY w/
									ABUNDANT WELL GRADED
									GRAVEL WHICH IS WELL-
									TO SUB ROUNDED 5YR 7/1
	10-12	0.1FT	NR	S	NA	29/14/27/21	48	NA	NO RECOVERY
	12.0-14	1.6FT	NR	S	NA	7/9/12/19	31	GM	5YR 7/1 - 6/2 SILTY CLAY
									AND GRAVEL MIX ABUN.
									ANGULAR TO SUB-ROUND
									ROCK (GRAVEL) FRAGM.
	14.0-16	1.0FT	NR	S	NA	14/23/26/22	48	GW	ABUNDANT ANGULAR
									ROCK (GRAVEL) MOSTLY
									LIMESTONE - DOLOSTONE
									7.5YR 5/0 IN A
					JMD 6/27/94				SILTY TO SANDY
	~~16-18~~	~~1.6FT~~		S		~~8/22/19/31~~			5YR 7/1 MATRIX, DRY
	16-18	1.6 FT	NR	S	NA	8/22/19/31	40	GW	MOIST WELL GRADED
									GRAVEL CLASTS, ANGULAR
									IN ABUNDANT SILTY TO SANDY MATRIX
									10YR 6/2 MOTTLED w/
									SILTY 10YR 6/4 LENSES
									CLASTS MOSTLY 10YR 6/1
	18-20	1.8FT	NR	S	NA	31/31/28/42	70	GW	SAME AS ABOVE
	20-22	1.1FT	NR	S	NA	11/18/21/25	49	GW	SAME AS ABOVE
									w/ WET ZONE AT
									21.6 - 21.8 WET ZONE

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE: 06/14/94 — TECHNICAL REVIEWER / 6/27/94

BOREHOLE LOG (SOIL) — SOIL BORINGS

B401 P.19

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — DRILLER CODE: BOWS

LOCATION ID: B401 — COMPLETION DATE 6/14/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
									CONSISTS OF 10YR 3/3
									CLAY ZONE
22-24	22-24	1.2	NR	S	NA	14/19/10/12	22	GW	22-22.6 = 10YR 7/1 - 6/1
									ANGULAR FRAGMENTS
									PEBBLE TO COBBLE SIZED
									IN SANDY TO SILTY MATRIX
									MOIST, AT BOTTOM 0.5
23.5-24.0	NA	→					→	SM	FT OF INTERVAL ENCOUNTER
									POORLY GRADED SAND
									(23.5 FT BGS) SAND IS
	JMD 6/27/94								WET (WATER TABLE)
~~24-26~~ 24-25.5	NA	→		S	NA	21/24/30/4	54	GW	SILTY SAND 10YR 5/3
									W/ ABUNDANT 10YR 6/1
									GRAVEL - SUB ROUNDED
									TO SUB ANGULAR
26-28	26-28	2.0	NR	S	NA	15/20/35/4	39	GW	MODERATELY SORTED
									SUB ROUNDED TO SUB
									ANGULAR GRAVEL WITH
	JMD 6/27/94								SOME COBBLE SIZED
									CLASTS WITH POORLY
									GRADED SILTY SAND
									MATRIX SAMPLE IS
									EXTREMELY WET
	28-30	2.0	NR	S	NA	80/45/33/31	64	GW	SAME AS ABOVE - WET
						LAST ENTRY			

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 06/14/94 — FORM COMPLETED BY / DATE

[signature] 6/27/94 — TECHNICAL REVIEWER /

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — SOIL BORINGS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOG DATE: ~~0~~ 14/JUN/94

LOGGER CODE: SAIC — FIELD REP: M. KLIDZEJS

CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC — CGI MODEL NO.: IS MX 251

SERIAL NO.: 9306099-061 — CALIBRATION DATE/TIME: 14/JUN/94 0746

ACCEPTANCE CODE: — BATTERY CONDITION: OK

CALIBRATION GAS (%LEL) JMD 6/27/94 — TYPE ~~NA~~ PENTANE — CONCENTRATION ~~NA~~ % LEL (6/27/94 JMD 50%) — CYLINDER SERIAL NO NA

CALIBRATION GAS (PPM) — TYPE NA — CONCENTRATION ~~NA~~ PPM — CYLINDER SERIAL NO NA

COMMENTS: BATTERY CHECK OK

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
BH01	NA	NA	1007	BACKGROUND SOIL	000	NA	20.8
"			1009	BREATHING ZONE	~~000~~ 000		20.8
B40101			1040	SL/BH	000		20.8
B401			1108	0.0-2.0	0		20.9
			1110	2.0-4.0	0		20.9
			1111	BZ	0		20.9
~~H~~ JMD			1116	4.0-6.0	0		20.8
			1120	6.0-8.0	0		20.9
			1124	8.0-10.0	0		20.8
			1126	BZ	0		20.9
			1132	10-12.0	NR		NR
			1136	BZ	0		20.9
			1141	12.0-14.0	0		20.9
			1144	14.0-16.0	0		20.9
			1321	BZ	0		20.6

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MIKE KLIDZEJS 6/14/94 — FORM COMPLETED BY / DATE

JMD 6/27/94 — TECHNICAL REVIEWER / DATE

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COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — SOIL BORING B401 P.42

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 3

FACILITY CODE: MND16 — **LOG DATE:** 14-JUN-94

LOGGER CODE: SAIC — FIELD REP: M. KLIDZETS

CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC — CGI MODEL NO.: IS MX 251

SERIAL NO.: 9306099-061 — CALIBRATION DATE/TIME: 14-JUN-94 0746

ACCEPTANCE CODE: A — BATTERY CONDITION 6000

CALIBRATION GAS (%LEL) JMD 6/27/94 — JMD 6/27/94

TYPE PENTANE ~~NA~~ — CONCENTRATION ~~NA~~ 50% % LEL — CYLINDER SERIAL NO NA

CALIBRATION GAS (PPM)

TYPE NA — CONCENTRATION NA PPM — CYLINDER SERIAL NO NA

COMMENTS: NONE

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B401	NA	NA	1330	16-18 FT	Ø	NA	20.8
			1338	18-20 FT	Ø		20.8
			1355	20-22 FT	Ø		20.8
			1401	22-24 FT	Ø		20.8
			1430	24-25.5	Ø		20.8
			1500	BZ	Ø		20.8
			1505	26-28	Ø		20.8
			1533	28-30	Ø		20.8
			LAST ENTRY				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

06/14/94 — FORM COMPLETED BY / DATE

6/27/94 — TECHNICAL REVIEWER / DATE

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA - SOIL BORINGS

B401 P

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34

FACILITY CODE: MND16 — **LOG DATE:** 15-JUN-94

LOGGER CODE: SAIC — FIELD REP: M. KLIDZEJS

CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC — CGI MODEL NO.: IS MX 251

SERIAL NO.: 930699-061 — CALIBRATION DATE/TIME: 15-JUN 94 0730

ACCEPTANCE CODE: A — BATTERY CONDITION GOOD

CALIBRATION GAS (%LEL) JMD 6/29/94 — JMD. 6/29/94

TYPE ~~100 p~~ PENTANE — CONCENTRATION 50% % LEL — CYLINDER SERIAL NO NR

CALIBRATION GAS (PPM)

TYPE NA — CONCENTRATION NA PPM — CYLINDER SERIAL NO NA

COMMENTS: NONE

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B401 BZ	NA	NA	0914	BREATHING ZONE (BZ)	Ø	NA	20.8
CASING OPENING	↓	↓	0914	BH	Ø	↓	20.8
WL PURGE WATER	↓	↓	0957	BH	Ø	↓	20.8
NO ENTRY							
NO ENTRY							
BREATHING ZONE	NA	NA	1517	BH	Ø	NA	20.8
				LAST ENTRY			

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MIKE KILDZEJS 6/15/94 — FORM COMPLETED BY / DATE

6/29/94 — TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS B401 p. 45

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

FACILITY CODE: MND16 LOG DATE: 14/JUN/94

LOCATION ID B401 LOCATION TYPE BH

LOGGER CODE: SAIC FIELD REP: M. KLIDZEJS

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO MODEL NO.: CENTURY OVA 128

SERIAL NO.: 40694 SAIC 0031

DATE/TIME CALIBRATION 14-JUN-94 0746 JMD 6/27/94 ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE/MARCO LOT No. 39562	1 100 PPM
2 ~~NA~~	2 ~~NA~~

COMMENTS NONE

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
1015	B401	NA	NA	NA	NA	0.0	NA	BACKGROUND SOIL
1015	B401	NA	NA	0.0	NA	0.0	NA	BREATHING ZONE
1040	B401 0	NA	NA	NA	NA	NA	0.0-0.6	BH
1108	B401	0.0	NA	NR	NA	NA	0.0-2.0	NONE
1110	B401	0.0	NA	NR	NA	NA	2.0-4.0	NONE
1120	B401 NA JMD 6/27/94	0.0	NA	NR	NA	NA	4.0-6.0	BH
1124		0.0	NA	NR	NA	NA	6.0-8.0	BH
1126		NA	NA	0.0	NA	NA	8.0-10	BZ
1132		NA	NA	NA	NA	NA	10.0-12	NO RECOVERY
1136		NA	NA	0.0	NA	NA	NR	BZ
1141		0.0	NA	NA	NA	NA	12.0-14	BH
		0.0	NA	NA	NA	NA	NR	NONE
1144		0.0	NA	NA	NA	NA	14.0-16.0	BH
		NA ~~0.0~~ JMD 6/27/94	NA	0.0	NA	NA	NR	BZ
1321		NA	NA	0.0	NA	NA	NR	BZ

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:	SB - SAMPLE BOTTLE	OBSERVED READING:	
BH - BOREHOLES	L - SURFACE LOCATION	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	WL - WELL	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	OT - OTHER (EXPLAIN)		OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MIKE KLIDZEJS — FORM COMPLETED BY / DATE

6/27/94 — TECHNICAL REVIEWER / DATE

A6

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORING B401 P46

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.

FACILITY CODE: MND16 **LOG DATE:** 14-JUN-94

LOCATION ID B401 LOCATION TYPE BH

LOGGER CODE: SAIC FIELD REP: M. KLIDZEJS

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO MODEL NO.: CENTURY OVA 128

SERIAL NO.: 40694 SAIC 0031

DATE/TIME CALIBRATION 14-JUN-94 0746 **ACCEPTANCE CODE:** A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE / HAZCO LOT 39562	1 100 PPM
2 NA	2 NA

COMMENTS NONE

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
1330	B401	0.0	NA	→	→	→	16-18 FT	NONE
1338		0.0	NA	→	→	→	18-20 FT	
1355		0.0	NA	→	→	→	20-22 FT	
1401		0.0	NA	→	→	→	22-24 FT	
1450	B401 02	0.0	NA	→	→	→	24-28 FT	SOIL SAMPLE B401 02
1500	B401	NA	NA	0.0	NA	NA	BZ	NONE
1505		0.0	NA	~~0.0~~ NA 6/27/94	NA	NA	26-28	
1533		0.0	NA	NA	NA	NA	28-30	
			LAST ENTRY					

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

06/14/94 FORM COMPLETED BY / DATE

6/27/94 TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA — SOIL BORINGS

B401 P 47

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOG DATE: 06/15/94

LOCATION ID: B401 — LOCATION TYPE: BH

LOGGER CODE: SAIC — FIELD REP: M. KLIDZEJS

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO — MODEL NO.: OVA 128

SERIAL NO.: H0694

DATE/TIME CALIBRATION 06/15/94 — ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE LOT NO: 39562	1 100 PPM
2 NA	2 NA

COMMENTS

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
0913	B401	NA	NA	0.0	NA	NA	NA	
0913		0.0	NA					CASING OPENING
~~0957~~		NA					NE	
1005		NA				0.0	NA	PURGE SAMPLE
NO ENTRY								
NO ENTRY								
1512	B401	NA	NA	0.0	NA	NA	NA	MIXING GROUT FOR ABAND.
				LAST ENTRY				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MIKE KLIDZEJS 6/15/94
FORM COMPLETED BY / DATE

6/27/94
TECHNICAL REVIEWER / DATE

BOREHOLE OR WELL PLUGGING / ABANDONMENT

B401 P 49

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE PROJECT NO: 34896

SITE ID NUMBER: B401 DATE PLUGGED 06 / 15 / 94

SITE COORDINATES: N: NA E: NA DEPTH BLS (ft) 30.0 FT BGS

TYPE OF CASING: 2 IN DIAM. STAINLESS STEEL WHICH WAS INSTALLED TEMPORARILY TO COLLECT GW SAMPLE

CASING DIAMETER (ID) (in.) 2.0 IN ID GROUND ELEVATION (ft msl) NA

SCREENED ELEVATION (ft msl) 24.7 - 30.0

GEOLOGIC MATERIAL AT SCREEN POORLY MODERATELY GRADED SAND AND GRAVEL JMD 6/27/94

AMOUNT OF CASING REMOVED (ft) 35.3 FT INTACT

PLUGGING MATERIAL 6 JMD 6/27/94 50 LB BAGS ~1/2 JMD 6/27/94 OF 50 LB BAG BENTONITE BLUE CIRCLE PORTLAND CEMENT

APPROX. VOLUME OF PLUGGING MATERIAL (cu ft.) TYPE I AQUAGEL GOLD SEAL NON TEMPERED BENTONITE JMD 6/27/94

PLUGGING METHOD JMD 6/27/94 GROUT, BENTONITE & WATER WAS MIXED IN PLASTIC DRUM, GROUT MIX WAS THEN PUMPED

REMARKS THROUGH RIG PUMP, THROUGH HOSE, (PLACED AT BOTTOM OF BOREHOLE) INTO THE AUGERS. AUGERS REMOVED SEQUENTIALLY AS GROUT IS PUMPED GROUT BROUGHT TO GROUND SURFACE

LATT ENTRY

RECORDED BY: MIKE KLIDZER 6/15/94 (Signature) QA CHECKED BY: 6/27/94 (Signature)

SAMPLE LOG SHEET

B401 p. 54

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

54

SAMPLE ID NUMBER: B40101 DATE COLLECTED (MM/DD/YY): 06/14/94 TIME (HH:MM): 10:40

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: NA

POINT CODE: B401

DESCRIPTION: NA

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO ~~2.00~~ 6.0 IN FT

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: NONE

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: (SIGNATURE) QA CHECKED BY: 6/27/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø1Ø1

B401 p. 55

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPC 0001	9289476431	G2342050	COMPUC
STET 1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C			F3146050	COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C			F3146050	COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C			F3146050	COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C			F3146050	COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C			G2342050	COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE			F3146050	COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE			F3146050	COMPUC
			LAST ENTRY				

SAMPLE ID'S RINSATE: ER0015 TRIP BLANK: TBN001 FIELD BLANK: AB0009 FIELD DUPLICATE: NA

RECORDED BY: MIKE KHOZEIS for 6/14/94 (SIGNATURE)

CHECKED BY: 6/27/94 (SIGNATURE)

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SAMPLE LOG SHEET

B401 P. 54

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40102 DATE COLLECTED (MM/DD/YY): 6/14/94 TIME (HH:MM): 1450

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: NA

POINT CODE: B401

DESCRIPTION: NA

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: ~~Soil Subsurface (> 6 Inches)~~ STET

DEPTH ~~0.00~~ 24.0 TO ~~0.00~~ 30.0 FT

SAMPLE TYPE:

- [X] GRAB
- [X] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: NONE

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [X] NO JTD 6/27/94 FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: MIKE KLIDZEJS 6/14/94 (SIGNATURE) FOR

QA CHECKED BY: JDT 6/27/94 (SIGNATURE)

(SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø1Ø2

B401 P.57

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØØ1	9289476431	See	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C			Container	COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C			lot # log	COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
2 ~~1~~-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			LAST ENTRY				

SAMPLE ID'S RINSATE: ERØØ16 TRIP BLANK: TBNØØ1 FIELD BLANK: ABØØØ9 FIELD DUPLICATE: NA

RECORDED BY: MIKE KLIDZEJS 6/14/94 (SIGNATURE)

CHECKED BY: 6/27/94 (SIGNATURE)

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SAMPLE LOG SHEET

B401 P. 68

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: W4Ø1Ø1

DATE COLLECTED (MM/DD/YY): Ø6/15/94

TIME (HH:MM): 115Ø ~~1000~~ JMH 10/3/94

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B4Ø1

DESCRIPTION: NA

FIELD OBSERVATIONS: NONE

SAMPLE -

MEDIA CODE: 66

DESCRIPTION: Monitoring Well

DEPTH ~~0.00~~ TO ~~0.00~~ FT

28.9' BTOC JMD 10/4/94

JMD 10/4/94

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO

FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: J. Humpert for MIKE KLIDZEJS 10/3/94 (SIGNATURE)

QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: W40101

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-40	Glass	CLPVOA	HCL to pH<2,4C	NPC004	9289476512	See	COMPUC
2-1000	AmbGlass	CLP SVOC	Cool,4C			Container	COMPUC
2-1000	AmbGlass	CLP PEST / PCB	Cool,4C			lot #	COMPUC
2-1000	AmbGlass	EXPLOSIVES	Cool,4C			log	COMPUC
1-1000	Poly	METALS	HNO3 to pH<2,4C				COMPUC
1-1000	Poly	CYANIDE	NaOH to pH>12,4C				COMPUC
1-1000	Poly	ANIONS Fl,SO4,Cl	Cool,4C				COMPUC
1-1000	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
1-1000	Poly	TOTAL NIT/TOTAL PHOS	H2SO4 to pH<2,4C				COMPUC
1-1000	AmbGlass	TOTAL ORGANIC CARBON	H2SO4 to pH<2,4C				COMPUC
1-1000	Poly	TOTAL SUSPENDED SOLIDS	Cool,4C				COMPUC
1-1000	Poly	TOTAL DISSOLVED SOLIDS	Cool,4C				COMPUC
1-1000	Poly	ALKALINITY	Cool,4C				COMPUC
2-1000	Poly	RADS Pu,Th,U,Am	HNO3 TO PH<2				COMPUC
2-1000	Poly	RADS Ac,Ra,Sr,GAMMA	HNO3 TO PH<2				COMPUC
			LAST ENTRY				

SAMPLE ID'S RINSATE: ER0017 TRIP BLANK: TBN002 2 pH 10/3/94 FIELD BLANK: AB0013 FIELD DUPLICATE: NA

RECORDED BY: J. Trumpert FOR MIKE KLIDZETS (SIGNATURE) 10/3/94 CHECKED BY: [signature] 10/4/94 (SIGNATURE)

GROUNDWATER QUALITY SAMPLING RECORD

SOIL BORINGS
B401 P.93

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO.: 34896

PAGE 1 OF 1

FACILITY CODE: MND16
LOT CONTROL NO.: NA
LOCATION ID: BH
SAMPLE TYPE: F
SAMPLE ID: W40101
ACCEPTANCE CODE: A
LOG DATE: 15-JUN-94
LOGGER CODE: SAIC
ANALYICAL LAB CODE: COMP

INITIAL GROUNDWATER DEPTH (FT): 28.9 FT BTOC 22.9 FT BGS
SAMPLE DEPTH (FT): 22.9' BGS
SAMPLING PERIOD: START 15-JUN-94 1150
COMPLETE 15-JUN-94 1300
SAMPLING METHOD: B ~~15-JUN-94 1300~~ JMD 6/23/94
DATE SENT: 15-JUN-94
COMMENTS NONE

FINAL PARAMETER MEASUREMENTS:

POTENTIAL OF HYDROGEN	pH	S.U.	7.50
SPECIFIC CONDUCTANCE	Ec	umhos/cm	0.910
REDOX POTENTIAL	Eh	mvolts	NR
TEMPERATURE	TMP	°C	12.3
ALKALINITY ($CaCO_3$)	ALK	mg/l	232
DISSOLVED OXYGEN	DO	mg/l	NR

TIME	TOTAL VOLUME WITHDRAWN (GALS)	TOTAL VOLUME WITHDRAWN (Bore Volume)	pH	Ec (umhos/cm)	TEMP (°C)	COMMENTS
0945	1	<1	7.2	NR	NR	NONE
1015	TOTAL 3	<3	NR	NR	NR	↓
1025	TOTAL 3.75	>3	NR	NR	NR	↓
1127	4.0	3.28	7.28	0.906	12.8	EC - ON SCALE 2nd/cm 25°
1134	4.75	3.89	7.51	0.907	12.4	NONE
1143	5.50	4.5	7.50	0.910	12.3	"
				LAST ENTRY		

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

SAMPLE TYPES:
F - FIELD, R - REPLICATE, K - KNOWN, A - ACID BLANK

SAMPLING METHODS:
BP - BLADDER PUMP, PP - PERISTALIC PUMP, G - GRAB, B - BAILER, AL - AIR-LIFT SAMPLER, SL - SUCTION LIFT PUMP, SP - SUBMERSIBLE PUMP

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MIKE KLIDZEJS 6/15/94
FORM COMPLETED BY / DATE

6/23/94
TECHNICAL REVIEWER / DATE

GROUNDWATER QUALITY SAMPLING RECORD

SOIL BORINGS B401 P.95

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO. 34896

PAGE 1 OF 1

FACILITY CODE: MND16

LOCATION ID: B401

LOG DATE: 06/15/94

BORE VOL CALCULATION (GAL)

$\frac{d^2\pi}{4}$ $(h_1 - h_2)$ X 7.48

$\frac{(0.18)^2\pi}{4} \neq 6.4 \times 7.48$

$\left(\frac{0.1018}{4}\right) \times 47.8720$

DEPTH OF WELL (h2) (ft): 35.3

DEPTH TO WATER (h1) (ft): 28.9

WELL DIAMETER (ft): 0.18

ONE BORE VOLUME (GAL): 1.22

SCREENED INTERVAL (ft):

FIELD REP: MIKE KLIDZEJS

INSTRUMENT(S) USED: SEE METE LOG

SAMPLING INFORMATION

WITDRAWL METHOD: BAILER

FILTER SIZE: NA

THERMOMETER ID: HAZCO 1239

Ec METER ID: HAZCO 1239

pH METER ID: HAZCO 3077

PUMP ID: NA

ALKALINITY KIT ID: HACH # 4067

CALIBRATION INFORMATION

DATE/TIME OF LAST Ec CALIBRATION: 6/16/94 0730

TIME OF pH CALIBRATION: 1103

FOR STANDARD pH 7, INSTRUMENT READING: 6.99 ADJUSTED TO 7.00

FOR STANDARD pH 4, INSTRUMENT READING: ~~3.9~~ 3.99 ADJUSTED TO 4.00

FOR STANDARD pH 10, INSTRUMENT READING: 9.87 ADJUSTED TO 10.00

Eh OF CALIBRATION SOLUTION: NR

Eh READING IN CALIBRATION SOLUTION AFTER MEASUREMENT: NR

TEMP OF CALIBRATION SOLUTION (°C): 26.9°C

SHIPPING INFORMATION

LAB(S) SHIPPED TO:	COMPUCHEM	NA	NA
DATE(S) SHIPPED:	6/15/94	↓	↓
METHOD OF SHIPMENT:	FEDEX	↓	

COMMENTS: NONE

The 1000 microsiemens/cm = ~~1.02~~ 1.009 millisiemens/cm — scale 2

10,000 microsiemens/cm = 10.03 millisiemens/cm — 20

49.017 millimho/cm = OFF SCALE ~~= 49.017 millimho/cm~~ — OFF SCALE

40

GROUNDWATER QUALITY SAMPLING RECORD

SOIL BOR

B401 P.98

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO:

SAMPLE ID B JHD 6/16/94 W40101

PAGE 1 OF 1

FACILITY CODE:

LOCATION ID: B401

LOG DATE: 6/16/94 1100A

ERROR AT 4.50: $\frac{X1 - X2}{XS}$ X 100 = NR %

1st = _____ %

2nd = _____ %

INITIAL pH 8.50

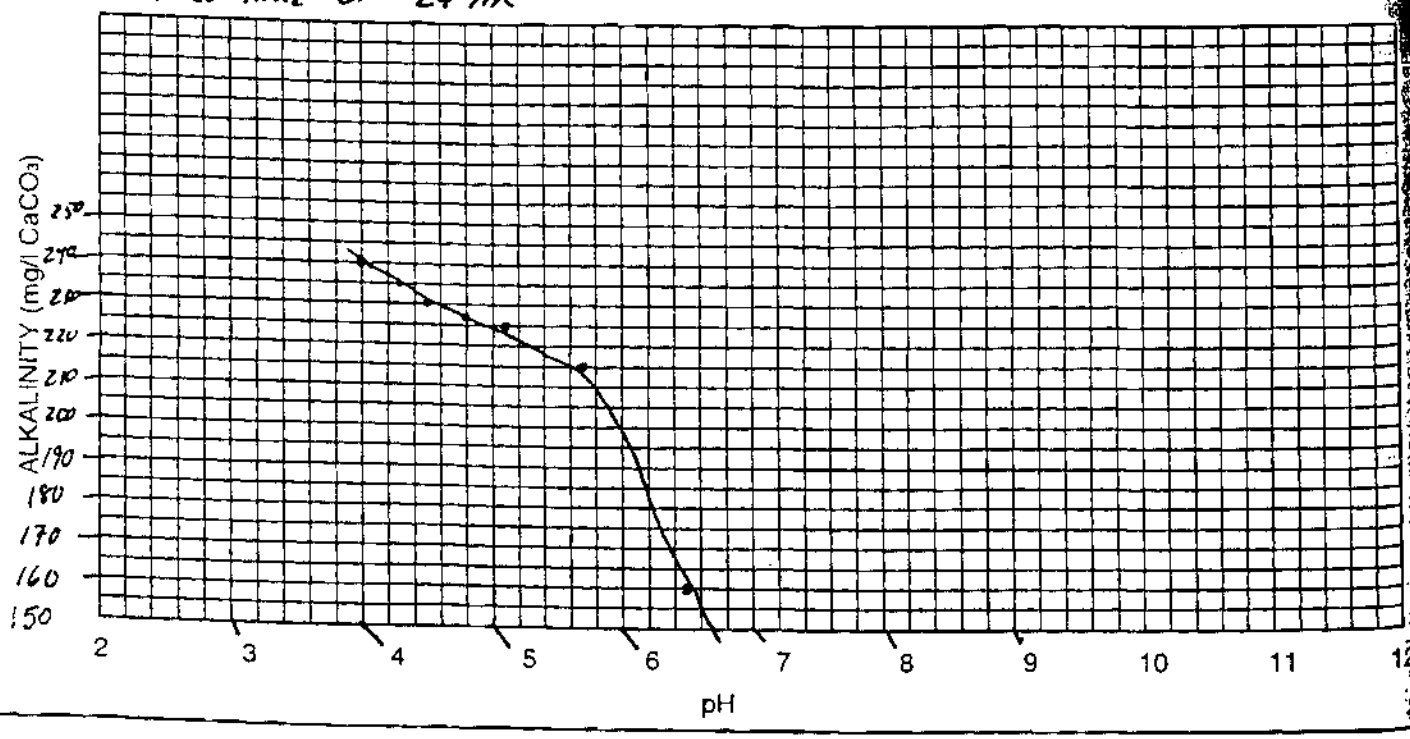
pH CHECK AFTER TITRATION

7.00 = 7.00 pH slope = 9.90

4.00 = 4.00

NOTE: UNABLE TO COMPLETE 2ND TITRATION RUN DUE TO ELAPSED HOLDING TIME OF 24 HR

pH	ALKALINITY (mg/l $CaCO_3$) 1st	2nd	3rd
8.90		NR	ND
~~8.60~~ 8.50	0		
8.30	NR		
8.05	NR		
7.80	NR		
7.50	NR		
6.50	160		
5.70	215		
5.10	224	JHD 6/16/94	
4.80	~~277~~ 227		
4.50	232		
4.25	236		
4.00	241		



GROUNDWATER LEVELS AND GASOLINE THICKNESS DATA

B401 P.99

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

FACILITY CODE: MNDIC LOGGER CODE: SAIC

LOG DATE: 15-JUN-94 TYPE OF PROBE: OTH HAZCO 1235 EC MPTE

ACCEPTANCE CODE: A

LOCATION ID	LOG TIME (HH:MM)	DEPTH TO WATER (ft)	DEPTH TO GAS (ft)	COMMENTS
	6/27/94			
B401	0930	~~22.9 BGS~~ 28.9 BTOC	NA	INITIAL DEPTH BEFORE PURGING
"	1025	22.9 BGS 28.9 BTOC	NA	DEPTH AFTER PURGING 73 VOLUMES
			LAST	ENTRY

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

TYPES OF PROBES: ROD - TEFLON ROD WITH PASTE OWI - OIL WATER INTERFACE PROBE OTH - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MIKE KLIDZENT 6-15-94
FORM COMPLETED BY / DATE

6/27/94
TECHNICAL REVIEWER / DATE

STANDARD ELECTRICAL CONDUCTIVITY DATA — SOIL BORINGS

B401 P-101

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO. 34896

FACILITY CODE: MND16 LOGGER CODE: SAIC

LOG DATE: 6/16/94 ACCEPTANCE CODE: A

MANUFACTURER/Ec METER ID: YSI 3000 TLC #1239 SN J9008863

ELECTRICAL CONDUCTIVITY OF KNOWN SOLUTIONS AT 25° C:	
KNOWN (mg/l KCl)	Ec (meter)
1000 microsiem/cm	1003 µmhos/cm

YSI 3167

Ec	TEMPERATURE (°C) LAB THERMOMETER	TEMPERATURE (°C) (Ec METER)
NR	0	NR
NR	1	NR
NR	2	NR
NR	3	NR
667	4	4.9
662	5	4.1
668	6	5.1
668	7	5.4
670	8	6.2
676	9	6.6
690	10	7.7
703	11	8.3
724	12	9.2
736	13	9.9
773	14	11.4
804	15	12.2
817	16	14.6
826	17	15.2
846	18	16.3
870	19	17.3
883	20	18.0
914	21	19.5
925	22	20.4
944	23	21.0
968	24	23.0
1006	25	24.0

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/16/94
FORM COMPLETED BY / DATE

J. Humpert 10/5/94
TECHNICAL REVIEWER / DATE

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B402 P. 105

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/29/94 TIME: 1345 : 1654 PAGE 1 OF 3

Task Team Members:

Susan L. Abston — Martha Cramer

AG 06/29/94

Narrative (include time and location):

1345 Setting up on B402

1400 Started rain. OVA needs recharging. Returning to trailer

1515 Returned to site after recharging meter

1517 Start drill rig and begin drilling w/ 6" bit. Using ~~[illegible]~~ drilling Casing. Adding 5 gal of water

1525 Bailing rig at 5.5 ft BGS - In clay

1530 Continue drilling. Adding 10 gal of water

1533 Stopped drilling. OVA reading at 4 ppm ~~[illegible]~~ SLA 06/29/94 down borehole and 1 ppm in breathing zone

~~1535~~

1530 0.1 ppm borehole. 0.0 ppm in breathing zone

1536 ~~Fan [illegible] drilling~~ SLA 06/29/94 Turned rig on. Placing meter at bottom of rig and having hits up to 10 ppm when the wind blows (not drilling) [About 3 ft from borehole]

1540 Turning rig off. ~~[illegible]~~ SLA 06/29/94 0.0 ppm at borehole headspace and breathing zone

1545 Turning rig on. OVA 0.0 ppm everywhere

1550 Starting drilling while continuously monitoring

Daily Weather Conditions: A.M. NA

P.M. ~84°F

Recorded By Susan L. Abston QA Checked By [illegible] 10/4/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B402 p. 106

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/29/94 TIME: 1345 : 1658 PAGE 2 OF 3

Task Team Members:

Susan L Abeder — Martha Cramer

JTG 06/29/94

Narrative (include time and location):

only going up to 0.1 ppm in borehole. 0.0 ppm in borehole

1558 Bailing out borehole. Added 5 gal of water collected grab sample. Pict up sand + gravel at 11/12 ft

12 - 15 ft BGS description

GC clayey gravels w/ sand clay mixture. Gravels are 2.0 - 15 mm sub angular to rounded quartzite pebbles, limestone frag, and mafic igneous rock. 75YR5/3 brown Clay

1644 Continued drilling, added 5 gal of water. All OVA readings remaining at 0.0 ppm

1703 Adding surface casing (drilling casing) to advance as we go down hole

1611 Driving casing (10 ft) + (~~6.99 ft~~ 6.96 ft)

1615 Continue drilling, adding 5 gallons of water. Storm clouds moving into the area

1622 Cleaning borehole out. Still at 15 ft after driving casing

1625 Continue drilling. Added 5 gal of water

1627 Driving casing on down. Drilled to 17 ft BGS

1636 Continue drilling to clean out hole from driving casing

Daily Weather Conditions: A.M. JTG 06/29/94

P.M.

Recorded By Susan L Abeder QA Checked By [illegible] 10/4/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B402 p.107

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO: 34896

Date (mm/dd/yy): 06/29/94 TIME: 1345 : 1658 PAGE 3 OF 3

Task Team Members:

Martha Cramer Susan L. Abston

06/29/94

Narrative (include time and location):

1436 Adding 5.06 ft of casing

1640 Clean borehole out drilling where we pushed casing

1650 Bailing borehole out at 20 ft BGS

Collected grab sample

17-20ft BGS Description

SW- well-graded gravely sands, 60% coarse 2.0-4.8 mm sand w/ 40% Gravels - quartzite, limestone

1654 Preparing to drive a 2 in spoon from 20-22ft BGS to check for water

1657 Driving spoon

1717 After thunder Shut rig off securing and cleaning site 2 in spoon dry

20-22 ft BGS Description

Same as above w/ 10% gravels

1710 Off site

06/29/94

Daily Weather Conditions: A.M. 06/29/94

P.M.

Recorded By Susan L Abston QA Checked By 10/4/94

100

TASK TEAM ACTIVITY LOG SHEET — **SOIL BORINGS**

B402 P. 108

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/30/94 TIME: 0715 : 1658 PAGE 1 OF 6

Task Team Members:

Susan L. Abstar — Martha Cramer

06/30/94

Narrative (include time and location):

0715 Arrived at trailer to calibrate instruments, pick up equipment, + have health and safety briefing

0806 Gone to find in HP to sign off on drilling permit

0831 Arrived at ~~BP~~ B402 site w/ Drillers - S. Belt + S. Patterson

0835 Cleanout hole, drilling to 22 ft BGS

Add 5 gallon of water

0842 Bailing well out at 22 ft BGS. Rigging up + push a spoon 22-24 ft BGS

22-24 ft Description

22 - 23.5 same as above. Bottom .5 ft

(23.5 - 24 ft) SP Poorly graded fine sand moderate brown 5YR 4/4. Water

0902 Drilling down + pushing casing to 24 ft to collect samples

0923 Driven 1st spoon 24-26 ft BGS

0927 1st spoon collect VOC sample. Composited remaining spoon in bowl. Out when opening spoon 0.0 ppm

Daily Weather Conditions: A.M. ≈ 75°F Clear Sunny

P.M. NA

Recorded By Susan L. Abstar QA Checked By [illegible] 10/4/94

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

B402 P109

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/30/94 TIME: 0715 : 1658 PAGE 2 OF 6

Task Team Members:

Martha Cramer — SUSAN L Abato

119 06/30/94

Narrative (include time and location):

24-26 ft BGS Description

SP Poorly graded 5YR4/4 moderate brown saturated fine sand w/ occassion gravel

0948 Collected 2nd split spoon ≈1 ft of core in sample represents 25-27 ft Below ground surface. OVA reading 0.0 ppm (only 1 more foot on new sample)

26-26.6 ft same as above

26.6-27 ft below ground surface description

5YR 4/1 Brownish grey silty clayey poorly graded sand (SM) fine

1016 Measured water at ~~20.64~~ 21.63 BGS

Talked w/ John Concern bottom layer acting as a confining layer. He did not think that it would and to continue w/ installation as planned

1033 Driving casing to 32ft BGS added 5.06 ft of casing and driving it

1038 Drilling down to 29ft BGS Added 5 gallon of water

1045 Adding 5.06 section of casing

1048 Driving casing to 32 ft BGS 2 ft of stick

Daily Weather Conditions: A.M. 119

P.M. 06/30/94

Recorded By Susan L Abato QA Checked By 10/4/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B402 P.1

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO: 34896

Date (mm/dd/yy): 06/30/94 TIME: 0715 : 1658 PAGE 3 OF 6

Task Team Members:

Susan L. Alston

Martha Cramer

06/30/94

Narrative (include time and location):

up to use when pulling it out

1050 Continued drilling down Added 5 gal of water

1057 Clean borehole out w/ bailer. Collected a grab sample 29 to 30.5 ft BGS. - Using sand pump GW- well graded gravel w/ coarse to fine sands (same as what was above fine sand layer. hard to tell if this is a true representative sample of the depth)

1103 Continued drilling, added 5 gallons of water

1107 Bailing well out w/ sand pump Grab sample Drilled to 31.7 ft TD how-Everything from the fine sands to coarse sands and gravels gravels & coarse sands well graded, fine sands poorly graded

1115 Measured water 22.11 ft BGS (23.51 BTOC)

1120 Collected VOC surface sample and composited 0-.5 ft BGS in a bowl. Collect an ambient air sample at same time

1150 Leaving site to deliver samples to drayer and to HP

Daily Weather Conditions: A.M. Hot

P.M. Overcast

Recorded By Susan L Alston QA Checked By 10/4/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS

B402 P2117

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/30/94 TIME: 0715 : 1658 PAGE 4 OF 6

Task Team Members:

Martha Cramer Susan L Alston

AJ 06/30/94

Narrative (include time and location):

1315 Depart for lunch

1315 Return from lunch. Drillers gone after a load of water

1321 Water at 23.5 ft (BTOC) = 22.09 ft BGS

1328 Driller back on site. Not able to get water

1331 TD hole at 30.7 ft. Casing to 30.6 ft in ground. Caved to bottom of casing

1341 J. Davis on site. Trying to locate water supple

1356 John off site. Transferring water from steam clean to truck tank

1356 Clean casing out & driving it to 32 ft BGS

1401 Cleaning hole out w/ sand pump

1406 TD hole at 32.6 ft BGS & setting well

from 21 - 31 screen

Screen # 304 Stainless Steel Wire Round Screen

10 slot. 10.27 ft. 10 ft of actual screen

Riser # 304 Stainless Steel 10.01 ft, 10.01, 10.02

top has .22 solid bottom has .04 solid

Daily Weather Conditions: A.M. NA

P.M. ~80°F Clear + Sunny

Recorded By Susan L Alston QA Checked By [illegible] 10/4/94

112

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

B402 p.112

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/30/94 TIME: 0715 : 1658 PAGE 5 OF 6

Task Team Members:

Susan L. Alston — Martha Gainor

110 06/30/94

Narrative (include time and location):

1425 Set well to 31.01 ft BGS, 9.30 ft of stick up
Adding sand through tremie pipe (Global Filter Pack #5) same sand as we have been using on all the wells
1430 Started sanding well
1439 Tremied 3 bags of sand to 25.3 ft inside drilling casing, Pulling casing up
1450 Tremied 1½ bags of sand to 21.8 ft BGS inside casin
1506 Pulling 1st 5.06 ft of casing off
1514 Added sand to 18.8 ft BGS inside pipe
Pulling 5.06 ft section of casing. Still have sand in casing
1530 Sand to 19.13 ft BGS Adding bentonite, Used 14 gal of water trimmings
1535 Trouble getting bentonite to fall down casing
Down casing able to get to 17.1 ft BGS
Wind coming in around bottom of casing
1¼ buckets of bentonite. Used 7 bags of sand
1610 Securing site and moving to B400 to grout
1615 Arrived at B400 to grout

Daily Weather Conditions: A.M. 110 06/30/94

P.M.

Recorded By Susan L Alston QA Checked By [illegible] 10/4/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B402 P 13

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO: 34896

Date (mm/dd/yy): 06/30/94 TIME: 0715 : 1658 PAGE 6 OF 6

Task Team Members:

Susan L Alston Martha Cramer

MC 06/30/94

Narrative (include time and location):

taped bentonite @ 14.2 ft BGS. Running tremie pipe to bottom of hole

1620 Mixing grout w/ 94 lb bags of "Miami Cement" Type I Portland w/ 4% Bentonite Powder Aquagel "Gold Seal"

1642 Grouted to surface w/ 6 bags of cement on ≈ 1/4 bag of gold seal. Cleaning grout plant

1658 left site

LAST ENTRY

MC 06/30/94

Daily Weather Conditions: A.M. MC

P.M. 06/30/94

Recorded By Susan L Alston QA Checked By [illegible] 10/4/94

114

TASK TEAM ACTIVITY LOG SHEET — **SOIL BORINGS** B402 P 114

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 07/06/94 TIME 0700 : PAGE 1 OF 1

Task Team Members:

Susan L. Albston — Martha Cramer

ALA 07/06/94

Narrative (include time and location):

0700 Arrived at trailers for health and safety briefing, calibrate equipment, and load equipment

0740 Arrived @ W402 site. Drillers gone after grout plant

0750 Drillers - S. Dathison + S. Bell (Rouser) on site, preparing to pull casing and grout boring annulus.

0800 Pulling casing.

0813 Bentonite (@ 15.3' ft BGS). Some cave in of mud

0820 Mixing grout Type I Portland cement w/ 4% bentonite (add seal)

0845 Used 2 bags of cement (Lafarge brand) to bring cement to surface

Cleaning grout plant. Cutting casing off to 2' ft AGS

0900 [illegible] casing [illegible]

0915 Rinsing down and loading up equipment

1010 Going to [illegible] rig & equipment

1115 Break for lunch

* see logbook A? W410 (S02) p. for remaining days activities

Daily Weather Conditions: A.M. ~85°F Hot, Hazy, Humid

P.M. NA

Recorded By Susan L Albston QA Checked By [illegible] 10/4/94

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

BA02 P.115

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 07/20/94 TIME: 0700 : PAGE 1 OF 1

Task Team Members:

Susan L. Abston — Martha Cramer

DLO 07/20/94

Narrative (include time and location): See logbook A7 Soil borings HL410 pg 174 for development 174 SB 9/1/94

0704 Arrived at trailer to pick up equipment calibrate instruments + pick up equipment + load into different truck

John said to go ahead + purge + sample well when water clears up using pump. Need to take final development measurement

0820 Arrived at W402. S. Patterson + S. Bell (Bauer) finishing up setting well pad form

0827 Started pump well to collect sample Water clear - slightly turbid no odor noted

0828 temp 13.5 °C → 3000 TLC Meter (YSI)

0829 cond .868 2mz/cm TC to 25°C → HACO #1422

SLA 07/20/94 pH → ORION Model 250A HACO #2022

~~Slope~~ SLA 07/20/94

0835 Calibration of pH meter 7(7sol.) 10(10sol) Slope 99.6

0838 pH 8.07

0847 Water @ 23.97ft BTOC after pulling pump and letting it recharge

0850 Putting pump back in well to purge.

Daily Weather Conditions: A.M. ≈ 76°F Partly Cloudy, Humid

P.M. NA

Recorded By Susan L Abston QA Checked By [illegible] 10/4/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B4QZ P1 16

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 07/20/94 TIME 0700 : 1037 PAGE 2 OF 4

Task Team Members:

Martha Cramer Susan L Alston

MC 07/20/94

Narrative (include time and location):

Water @ 23.97 ft BTOC
TD @ 33.31 ft BTOC
9.34 ft of water
$\pi \left(\frac{1}{12}\right)^2 (9.34)(7.49)$
1 well vol = ~~1.0356 gal~~ 1.53 gal
3 well vol - 4.59 gal pump at ~29 ft BTOC

0905 Initial reading slightly turbid
pH 8.17
temp 14.3 °C
cond .938 2mz-/cm TC to 25°C

0908 Pumping slow at 2 gal / 3.5 min.
↳ Reading after 2 gal slightly turbid but clear
pH 8.10
temp 14.1 °C
cond .973 2mz-/cm TC to 25°C

0912 Reading after 4 gal clear
pH 7.84
temp 13.9 °C
cond .097 2mz-/cm TC to 25°C

0915 Reading after 6 gal clear

Daily Weather Conditions: A.M. MC 07/20/94

P.M.

Recorded By Susan L Alston QA Checked By 10/4/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B402 P.117

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 07/20/94 TIME: 0700 : 1037 PAGE 3 OF 4

Task Team Members:

Sven I. Abston Martha Cramer

AJC 07/20/94

Narrative (include time and location):

pH 7.78
temp 13.8 °C
cond 1.163 2mv/cm TC to 25°C
0919 Reading after 8 gal clear
pH 7.75
temp 13.8 °C
cond 1.199 2mv/cm TC to 25°C
0922 ~~0920~~ well stable pH within .1, temp within 1, & cond. within 10%. Preparing to sample
0942 Took VOA sample for W402
0955 Slope 101.7 while calibrating pH 7(7sol) 10(10sol)
1000 pH 7.82
temp 15.3
cond 1.244 2mv/cm TC to 25°C } Final Read
1004 Redox calibration 232.8
1006 Redox reading 213.6 mV
1010 Calibrated YSI Model 59 Dissolved Oxygen Meter
Hach # 2185 to 97%
1012 DO 71% 19.80
1015 9770 for 10,000 sol 1000 for 1000 sol.
Post calibration of cond. meter at 18.9 °C

Daily Weather Conditions: A.M. DO 07/20/94

P.M.

Recorded By Susan I. Abston QA Checked By [illegible] 10/4/94

118

TASK TEAM ACTIVITY LOG SHEET — **SOIL BORINGS** B402 p. 118

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 07/20/94 TIME: 0700 : 1037 PAGE 4 OF 4

Task Team Members:

Susan L. Abston — Martha Cramer

07/20/94

Narrative (include time and location):

1030 Dump drill cutting - Drums do not have ± because they belonged to BOWSER

1037 Depart site for trailer to ae.con ~~[illegible]~~ SLA 07/20/94 Dump for WO 410

1248 Emhoff ≈1.7

LAST ENTRY

07/20/94

Daily Weather Conditions: A.M. N/A

P.M. 07/20/94

Recorded By Susan J. Abston QA Checked By Jurt 10/4/94

BOREHOLE LOG (SOIL)

SOIL BORINGS
B402 p.121

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

Page 1 of 2

FACILITY CODE: MND16
LOCATION ID: W402
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Borehole / Well WL
COMMENTS: NONE

DRILLER CODE: BOWS
COMPLETION DATE 06/30/1994
DIAMETER (IN): 6
DEPTH (FTFD): 32.6
CONSTRUCTION METHOD: C
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
06/30/94	1016	21.63
↓	1115	22.41
	1321	22.09

LOCATION DESCRIPTION

Field next to DP well and off back of spoil area

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-5	5	NA	NA	O2	NA	NA	NA	CL	7.5YR 4/2 Brown silty clay with ≈ 10% rock/gravel fragments
5.5-12	12	NA	NA	O2	NA	NA	NA	GC	Clay and gravel/sand mixture. Gravels 2.0-15mm subangular to rounded quartzite pebbles, limestone fragments, & mafic bearing rocks Clay - 7.5YR 5/3
12-20		NA	NA	O2	NA	NA	NA	SW	well graded gravelly sands 60% coarse 2.0-4.8 mm sand w/ 40% gravels, quartzite

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)
O1 Cable tool bailer/sand pump

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE 6/30/94 — TECHNICAL REVIEWER / DATE 10/4/94

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BOREHOLE LOG (SOIL) — **SOIL BORINGS** B402 p.122

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **PROJECT NO:** 34896

FACILITY CODE: MND16 — **DRILLER CODE:** BOWS

LOCATION ID: B402 — **COMPLETION DATE** 06/30/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
									Gray limestone
20-22	NA	NA	NA	C	NA	NA	NA	~~SW~~	Same as above w/ 10% gravels
22-24	NA	100%	Ø	S	NA	NA	NA	SW/SP	22-23.5 same as above
									23.5-24 Moderate brown 5YR4/4 poorly graded fine sand
								SP	Saturated
24-26	NA	100%	100%	U	~~NA~~ NA 07/20/94	B402	NA	~~SP~~ NA 07/20/94	Poorly graded 5YR4/4 moderately brown saturated fine sand w/ very few gravel
25-27	NA	100%	100%	U	B402	62	NA	NA	SP/SM 26-26.6 same as above. 26.6-27.0 5YR4/1 brownish grey silty / clayey poorly graded fine sand
27-32	NA	NA	NA	C	NA	NA	NA	GW	well graded gravel w/ coarse to fine sand
32-32.6									same as above
									TD borehole @ 32.6 ft BGS

07/21/94

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE: 6/30/94 — TECHNICAL REVIEWER / 6/30/94

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — SOIL BORINGS

B402 P.145

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOG DATE: 4/29/94

LOGGER CODE: SAIC — FIELD REP: SC Abston

CGI MANUFACTURER: Industrial Scientific — CGI MODEL NO.: MX25

SERIAL NO.: 94-03254-016 — CALIBRATION DATE/TIME: 4/29/94 0700

ACCEPTANCE CODE: A — BATTERY CONDITION: GOOD

CALIBRATION GAS (%LEL) TYPE: PENTANE CONCENTRATION: 50 % LEL CYLINDER SERIAL NO: 39525

CALIBRATION GAS (PPM) TYPE: NA CONCENTRATION: NA PPM CYLINDER SERIAL NO: NA

COMMENTS: NA

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B402	NA	NA	1515	BH	0.0	N	20.8
			1520		0.0	N	20.8
			1600		0.0	N	20.8
			1615		0.0	N	20.8
			1633		0.0	N	20.8
			1645		0.0	N	20.8
	(AGAIN CONTRY						

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 4/29/94 — FORM COMPLETED BY / DATE

[signature] 10/4/94 — TECHNICAL REVIEWER / DATE

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COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — SOIL BORINGS

B402 p. 146

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 3489

FACILITY CODE: MND16 **LOG DATE:** 6/30/94

LOGGER CODE: SAIC FIELD REP: SL Abston

CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC CGI MODEL NO.: MX 251

SERIAL NO.: 940328Ø-Ø16 CALIBRATION DATE/TIME: 6/30/94 0710

ACCEPTANCE CODE: BATTERY CONDITION GOOD

CALIBRATION GAS (%LEL) TYPE PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: NA

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
~~0835~~ MC 6/30/94	NA	NA	0835	BH	Ø.Ø	N	2Ø.8
B402	↓	↓	0850	↓	Ø.Ø	N	2Ø.8
↓	↓	↓	1Ø5Ø	↓	ØØ	N	2Ø.8
	ENTRY						

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Mark L. C[illegible] 6/30/94 — FORM COMPLETED BY / DATE

[illegible] 10/4/94 — TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS B402 p 149

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND 16 — LOG DATE: 6/29/94

LOCATION ID: B402 — LOCATION TYPE: BH WL TMD 10/4/94

LOGGER CODE: SAIC — FIELD REP: S. Abston

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FONBORO — MODEL NO.: CENTURY OVA 128

SERIAL NO.: A0478

DATE/TIME CALIBRATION 6/29/90 0710 — ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 Methane / 32875	1 100ppm
2 NA	2 NA

COMMENTS: NONE

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
1515	B402	NA			→	0.0	0.0	background
1520		0.0	0.0	0.0	0.0	NA	0.5 ft	using cable tool
1533		4.0	NA	1.0	NA		5.5 ft	stopped operations
1535		0.1	NA	0.0	NA		~~NA~~ "	continued operations
1536		710.0	NA	NA	NA		10/4/94 "	turned off rig
1548		0.0	0.0	0.0	0.0		"	con't operations
1550		0.1	0.0	0.0	0.0		"	using cable tool
1600		0.0	0.0	0.0	0.0		15 ft	"
1615		0.1	0.1	0.0	0.1		15 ft	"
1625		0.0	0.0	0.0	0.0		15 ft	"
1632		0.0	0.0	0.0	0.0		18 ft	"
1645		0.0	0.0	0.0	0.0		20 ft	
TEST COMPLETE								

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLES, TP - TEST PIT, SS - SOIL SAMPLE, SB - SAMPLE BOTTLE, L - SURFACE LOCATION, WL - WELL, OT - OTHER (EXPLAIN)

OBSERVED READING: DH - DOWNHOLE, HS - HEADSPACE, BZ - BREATHING ZONE, D - DURING DRILLING (BZ), OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Mark T. Cline 6/29/94 — FORM COMPLETED BY / DATE

[illegible] 10/4/94 — TECHNICAL REVIEWER / DATE

150

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORING B402 p. 150

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 334

FACILITY CODE: MND16 **LOG DATE:** 6/30/94

LOCATION ID B402 LOCATION TYPE ~~BH~~ WL JAD 10/4/94

LOGGER CODE: SAIC FIELD REP: SL Alston

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO MODEL NO.: OVA 128

SERIAL NO.: 40478

DATE/TIME CALIBRATION 6/30/94 0720 **ACCEPTANCE CODE:** A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 Methane / 32875	1 100 ppm
2 NA	2 NA

COMMENTS NONE

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
0835	B402	0.0	0.0	0.0	0.0	NA	21 ft	NONE
0850	"	0.0	0.0	0.0	0.0	↓	22 ft	↓
1050	"	0.0	0.0	0.0	0.0	↓	31 ft	↓
	1 1st FLTR							

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/30/94 — FORM COMPLETED BY / DATE

[signature] 10/4/94 — TECHNICAL REVIEWER / DATE

BOREHOLE OR WELL PLUGGING / ABANDONMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SITE ID NUMBER: W402 DATE PLUGGED NA / ___

SITE COORDINATES: N: NA E: NA DEPTH BLS (ft) NA

TYPE OF CASING: ___

CASING DIAMETER (ID) (in.) ___ GROUND ELEVATION (ft msl) ___

SCREENED ELEVATION (ft msl) ___

GEOLOGIC MATERIAL AT SCREEN NA

AMOUNT OF CASING REMOVED (ft) ___

PLUGGING MATERIAL ___

APPROX. VOLUME OF PLUGGING MATERIAL (cu ft.) ___

PLUGGING METHOD ___

REMARKS NOT ABANDONED. THIS BORING (B402) CONVERTED TO A MONITORING WELL (W402)

RECORDED BY: Mark Z Crow (Signature) QA CHECKED BY: [signature] 10/4/94 (Signature)

SAMPLE LOG SHEET

B402 p. 158

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40201 DATE COLLECTED (MM/DD/YY): 08/30/94 TIME (HH:MM): 1122

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROPERTY

POINT CODE: B402

DESCRIPTION: [illegible]

FIELD OBSERVATIONS: NONE

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO 2.00 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: [signature] (SIGNATURE)

QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

(SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø2Ø1

B402 p. 159

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ1Ø	8219959974	See	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C			Container	COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C			lot #	COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C			log	COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		LAST ENTRY					

SAMPLE ID'S RINSATE: ERØØ18 TRIP BLANK: TBNØ1Ø FIELD BLANK: ABØØ1Ø FIELD DUPLICATE: NA

RECORDED BY: [signature] (SIGNATURE) QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

SAMPLE LOG SHEET

B402 P. 160

160

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: 840202 DATE COLLECTED (MM/DD/YY): 06/30/94 TIME (HH:MM): 0927

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: Mound New Property

POINT CODE: B402

DESCRIPTION: Bay 402

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (> 6 Inches)

DEPTH 0.00 TO 0.00 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: NONE

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: [signature] (SIGNATURE) QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø2Ø2 B402 p.161

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ1Ø	8219959720	See	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C			Container	COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C			lot #	COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C			log	COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		LAST ENTRY					

SAMPLE ID'S RINSATE: ERØØ16 TRIP BLANK: TBNØ1Ø FIELD BLANK: ABØØ1Ø FIELD DUPLICATE: NA

RECORDED BY: [illegible] (SIGNATURE) CHECKED BY: [illegible] 10/4/94 (SIGNATURE)

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SAMPLE LOG SHEET

B402 P. 172

172

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: W40201

DATE COLLECTED (MM/DD/YY): 07/28/94

TIME (HH:MM): 1942

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: Mound New Property Extended Phase

POINT CODE: B402

DESCRIPTION: Boring (well) 4/02

FIELD OBSERVATIONS: ≈ 80°F Partly Cloudy Humid. Collect a duplicate W40211 TRIP Sample w/ Red Flow submersible Pump

SAMPLE -

MEDIA CODE: 66

DESCRIPTION: Monitoring Well

DEPTH 0.00 TO 0.00 FT

JTD 10/4/94

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY) _____

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO

FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: [signature] (SIGNATURE)

QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: W4020 1

B402 p. 173

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-40	Glass	CLPVOA	HCL to pH < 2,4C	NPC019	8219960560	See	COMPUC
2-1000	AmbGlass	CLP SVOC	Cool,4C			Container	COMPUC
2-1000	AmbGlass	CLP PEST / PCB	Cool,4C			lot #	COMPUC
2-1000	AmbGlass	EXPLOSIVES	Cool,4C			log	COMPUC
1-1000	Poly	METALS	HNO3 to pH < 2,4C				COMPUC
1-1000	Poly	CYANIDE	NaOH to pH > 12,4C				COMPUC
1-1000	Poly	ANIONS Fl,SO4,Cl	Cool,4C				COMPUC
1-1000	Poly	NO2/NO3	H2SO4 to pH < 2,4C				COMPUC
1-1000	Poly	TOTAL NIT/TOTAL PHOS	H2SO4 to pH < 2,4C				COMPUC
1-1000	AmbGlass	TOTAL ORGANIC CARBON	H2SO4 to pH < 2,4C				COMPUC
1-1000	Poly	TOTAL SUSPENDED SOLIDS	Cool,4C				COMPUC
1-1000	Poly	TOTAL DISSOLVED SOLIDS	Cool,4C				COMPUC
1-1000	Poly	ALKALINITY	Cool,4C				COMPUC
2-1000	Poly	RADS Pu,Th,U,Am	HNO3 TO PH < 2				COMPUC
2-1000	Poly	RADS Ac,Ra,Sr,GAMMA	HNO3 TO PH < 2				COMPUC
		LAST	ENTRY				

SAMPLE ID'S RINSATE: ER0017 TRIP BLANK: TBN018 FIELD BLANK: AB0013 FIELD DUPLICATE: W 40211

RECORDED BY: [signature] (SIGNATURE) QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

173

184

SAMPLE LOG SHEET B402 P. 184

PROJECT NAME: Mound New Property Extended Phase PROJECT NO: 34896

SAMPLE ID NUMBER: W4022 ~~7~~ 11 DATE COLLECTED (MM/DD/YY): 07/20/94 TIME (HH:MM): 0942

SAMPLING -

SAP 07/20/94

LOCATION CODE: MNDNPEP

DESCRIPTION: Mound New Property Extended Phase

POINT CODE: B402

DESCRIPTION: Well 502

FIELD OBSERVATIONS: ≈80°F Partly Cloudy Humid, Colight Sample w/ Rediflow Submersible Duplicate Sample of W4R61

SAMPLE -

MEDIA CODE: 66

DESCRIPTION: Monitoring Well

DEPTH 0.00 TO 0.00 FT

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) QC Field Duplicate

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: Steven J Ulrich (SIGNATURE)

QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

RECORDED BY: [illegible] (SIGNATURE) QA CHECKED BY: [illegible] 10/4/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: W4ØZ11 B4Ø2 p. 185

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NPCØ19	8219966Ø56Ø	See	COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C			Container	COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C			lot # log	COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH < 2,4C				COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH > 12,4C				COMPUC
4 ~~1~~-1ØØØ	Poly	ANIONS Fl,SO4,Cl	Cool,4C				COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH < 2,4C				COMPUC
1-1ØØØ	Poly	TOTAL NIT/TOTAL PHOS	H2SO4 to pH < 2,4C				COMPUC
1-1ØØØ	AmbGlass	TOTAL ORGANIC CARBON	H2SO4 to pH < 2,4C				COMPUC
1-1ØØØ	Poly	TOTAL SUSPENDED SOLIDS	Cool,4C				COMPUC
1-1ØØØ	Poly	TOTAL DISSOLVED SOLIDS	Cool,4C				COMPUC
1-1ØØØ	Poly	ALKALINITY	Cool,4C				COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U,Am	HNO3 TO PH < 2				COMPUC
2-1ØØØ	Poly	RADS Ac,Ra,Sr,GAMMA	HNO3 TO PH < 2				COMPUC
		LAST	ENTRY				

SAMPLE ID'S RINSATE: ~~ABØØ13~~ ERØØ17 pH 10/3/94 TRIP BLANK: TBNØ18 FIELD BLANK: ABØØ13 FIELD DUPLICATE: W4Ø2Ø1

RECORDED BY: [illegible] (SIGNATURE) QA CHECKED BY: [illegible] 10/4/94 (SIGNATURE)

185

GROUNDWATER QUALITY SAMPLING RECORD

SOIL BORINGS: B402 p.199

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

PAGE 1 OF 1

FACILITY CODE: SLA 07/28/94 MND16

LOCATION ID: B4~~0~~ 402

SAMPLE ID: B40281

LOG DATE: 07/28/94

ANALYICAL LAB CODE: COMP

LOT CONTROL NO.: NA

SAMPLE TYPE: F

ACCEPTANCE CODE: A

LOGGER CODE: SAIC

INITIAL GROUNDWATER DEPTH (FT): 21.67

SAMPLING PERIOD: START 07/28/94 0905

SAMPLING METHOD: SP

SAMPLE DEPTH (FT): ~~26~~ 29 SLA 07/28/94 ft BGS

COMPLETE 7/28/94 1015

DATE SENT: 7/29/94

COMMENTS Pumping 2 gal / 3.5 min.

FINAL PARAMETER MEASUREMENTS:

POTENTIAL OF HYDROGEN	pH	S.U.	7.82
SPECIFIC CONDUCTANCE	Ec	umhos/cm	1.244 2mv/cm
REDOX POTENTIAL	Eh	mvolts	213.6
TEMPERATURE	TMP	°C	15.3
ALKALINITY ($CaCO_3$)	ALK	mg/l	285
DISSOLVED OXYGEN	DO	mg/l	71 %

TIME	TOTAL VOLUME WITHDRAWN (GALS)	TOTAL VOLUME WITHDRAWN (Bore Volume)	pH	Ec (umhos/cm) 2mv/cm	TEMP (°C)	COMMENTS
0905	0	0	8.17	.938	14.3	Initial
0908	2	1.3	8.16	.973	14.1	NONE
0912	4	2.6	7.86	1.097	13.9	"
0915	6	3.9	7.79	1.163	13.8	"
0919	8	5.2	7.75	1.119	13.8	well stable
			Last Reading			
				1.20 07/28/94		

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

SAMPLE TYPES:		SAMPLING METHODS:		
F - FIELD	R - REPLICATE	BP - BLADDER PUMP	G - GRAB	SL - SUCTION LIFT PUMP
K - KNOWN	A - ACID BLANK	PP - PERISTALIC PUMP	B - BAILER	SP - SUBMERSIBLE PUMP
			AL - AIR-LIFT SAMPLER	

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 7/20/94
FORM COMPLETED BY / DATE

[signature] 10/4/94
TECHNICAL REVIEWER / DATE

GROUNDWATER QUALITY SAMPLING RECORD

SOIL BORINGS B402 P201

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

PAGE 1 OF 1

FACILITY CODE: MND16

LOCATION ID: W402

LOG DATE: 07/28/94

BORE VOL CALCULATION (GAL)

$\frac{d^2\pi}{4}$ $(h_1 - h_2)$ X 7.48

2.3 ft stickup

SAMPLING INFORMATION

DEPTH OF WELL (h2) (ft): 33.31 ft BTOC

DEPTH TO WATER (h1) (ft): 23.97 ft BTOC

WELL DIAMETER (ft): 2 in

ONE BORE VOLUME (GAL): 1.53

SCREENED INTERVAL (ft): 31.01 - 20.74

FIELD REP: S.L. Abston

INSTRUMENT(S) USED: TLC 3000 YSI, YSI Model 56, ORION Model 250A

WITDRAWL METHOD: SP

FILTER SIZE: # 5

THERMOMETER ID: Hazco #1422

Ec METER ID: Hazco #1422

pH METER ID: Hazco # 2022

PUMP ID: NA

ALKALINITY KIT ID: HACH 4067

CALIBRATION INFORMATION

DATE/TIME OF LAST Ec CALIBRATION: 7/28/94 0730

TIME OF pH CALIBRATION: 0955

FOR STANDARD pH 7, INSTRUMENT READING: 7

FOR STANDARD pH 4, INSTRUMENT READING: NA

FOR STANDARD pH 10, INSTRUMENT READING: 10

Eh OF CALIBRATION SOLUTION: 1000, 1000

Eh READING IN CALIBRATION SOLUTION AFTER MEASUREMENT: 977 → 1000

TEMP OF CALIBRATION SOLUTION (°C): 18.9°C

SHIPPING INFORMATION

LAB(S) SHIPPED TO:	COMPLC	NA	NA
DATE(S) SHIPPED:	07/28/94	↓	↓
METHOD OF SHIPMENT:	Fed. Ex		

COMMENTS: NONE

GROUNDWATER QUALITY SAMPLING RECORD

SOIL BORINGS
B402 P203

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO. 34896

PAGE 1 OF 1

FACILITY CODE: MND16
LOCATION ID: W4020I
LOG DATE: 7/20/94

ERROR AT 4.50: $\left| \frac{X1 - X2}{XS} \right| \times 100 =$ 2.89 %

1st = 2.89 %

2nd = NA %

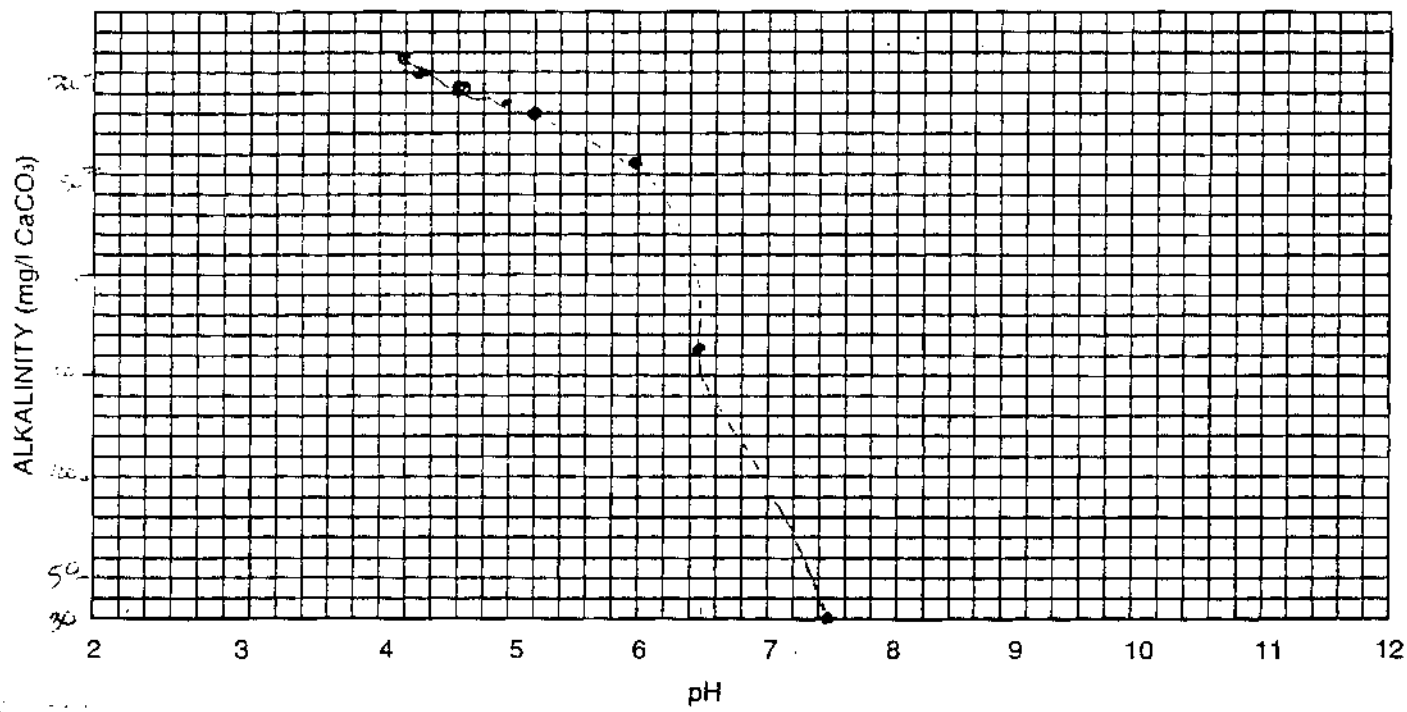
INITIAL pH 7.76

pH CHECK AFTER TITRATION

7.00 = 7.16

4.00 = 4.04

pH	ALKALINITY (mg/l $CaCO_3$) 1st	2nd	3rd
8.90	NA	NA	NA
8.60			
8.30			
8.05			
7.80	0	0	
7.50	29	151	
6.50	165	~~247~~ 151	
5.70	258	~~269~~ 247	
5.10	279	~~274~~ 269	
4.80	282	~~277~~ 274	
4.50	285	~~284~~ 277	
4.25	289	284	
4.00	293	286	



GROUNDWATER LEVELS AND GASOLINE THICKNESS DATA

B402 P.205

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: MND16

LOGGER CODE: SAIC

LOG DATE: 6/30/94 - 7/20/94

TYPE OF PROBE: YSI SCT 3040

ACCEPTANCE CODE: A

LOCATION ID	LOG TIME (HH:MM)	DEPTH TO WATER (ft)	DEPTH TO GAS (ft)	COMMENTS
W402	06/30/94			
	1016	21.63	NA	Borehole measurement
	1115	22.4		
	1321	22.09		
	07/19/94	NA		
	1537	21.72		Well measurement
	NO ENTRY →			
	7/20/94			
	0847	21.67		
			LAST ENTRY	

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

TYPES OF PROBES: ROD - TEFLON ROD WITH PASTE OWI - OIL WATER INTERFACE PROBE OTH - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

7/20/94 — FORM COMPLETED BY / DATE

10/4/94 — TECHNICAL REVIEWER / DATE

STANDARD ELECTRICAL CONDUCTIVITY DATA — SOIL BORINGS

B402 P 207

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOGGER CODE: SAIC

LOG DATE: 7/28/94 — ACCEPTANCE CODE: A

MANUFACTURER/Ec METER ID: 3500 TLC METER YSI Model 3200 SN: 91C628223 HAZCON 1422

ELECTRICAL CONDUCTIVITY OF KNOWN SOLUTIONS AT 25° C:	
KNOWN (mg/l KCl)	Ec (meter)
1500	1.170
NA	NA
NA	NA

Ec	TEMPERATURE (ºC) LAB THERMOMETER	TEMPERATURE (ºC) (Ec METER)
NR	0	NR
NR	1	↓
NR	2	↓
.801	3	2.8
.805	4	3.3
.764	5	4.0
.770	6	4.2
.778	7	5.6
.809	8	6.5
.828	9	7.9
.845	10	8.8
.870	11	9.9
.893	12	10.7
.920	13	11.7
.953	14	13.6
.962	15	14.3
.973	16	15.7
.975	17	16.5
.991	18	15.3
1.003	19	16.0
1.033	20	17.0
1.061	21	15.2
1.094	22	19.6
1.119	23	20.9
1.149	24	21.7
1.170	25	22.4

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Mark L Cia 7/28/94 — FORM COMPLETED BY / DATE

10/4/94 — TECHNICAL REVIEWER / DATE

MONITORING WELL

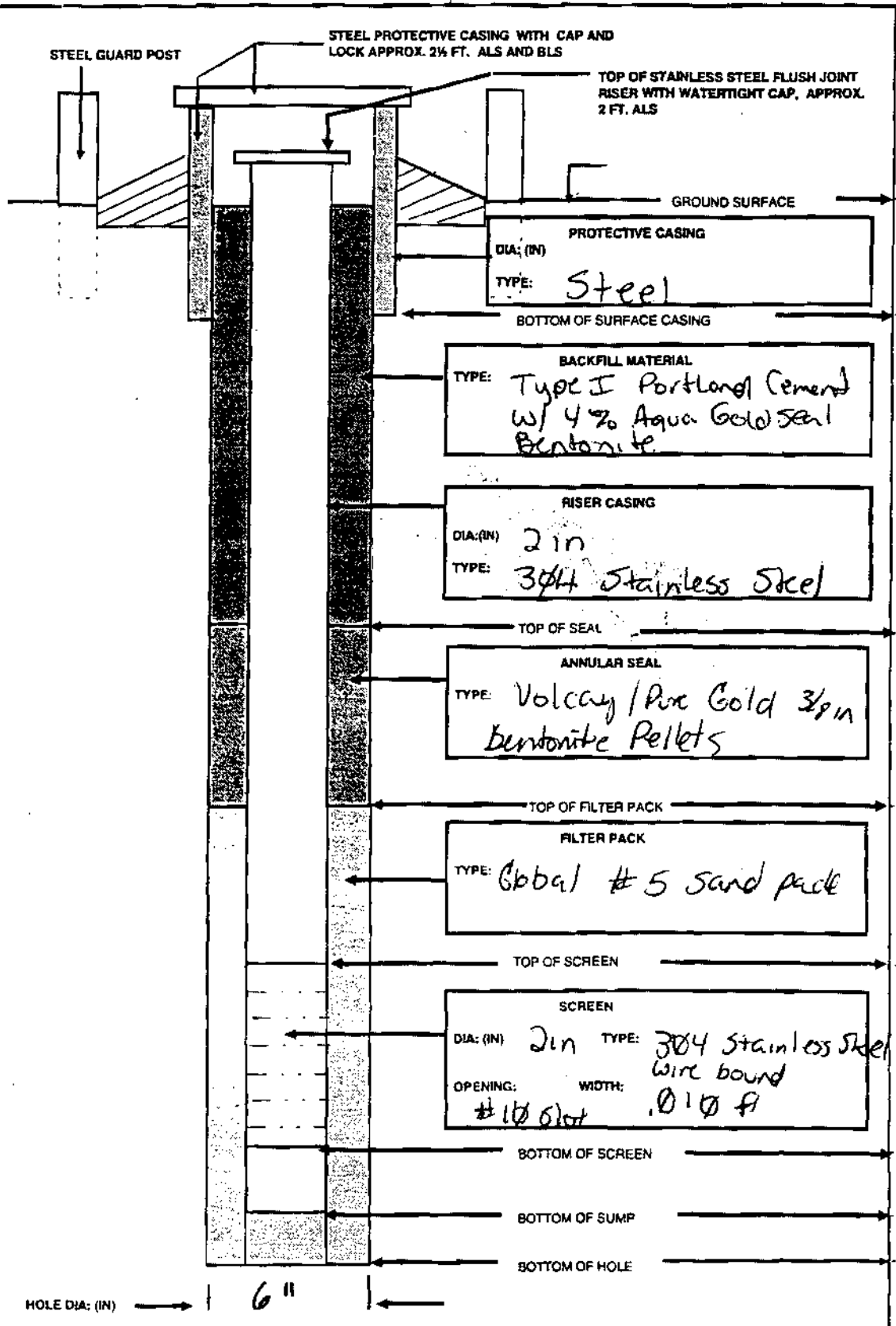
MONITORING WELLS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASED

PROJECT NO: 34896

8402 p 210A

WELL NUMBER: W402	BEGIN: 6/29/94	END: 7/6/94
COORDINATES: N: E: NA	REFERENCE POINT: NA	ELEVATION: NA MSL



WELL COMPLETION INFORMATION

B40Z P210B

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

PAGE 1 OF 1

FACILITY CODE:	MND16	FILTER PACK LENGTH (ft) :	13.47
LOCATION ID	W402	FORMATION OF COMPLETION (US/RC) :	GW
ACCEPTANCE CODE:	A	WELL TYPE CLASSIFICATION:	M
OWNER CODE:	EG&G	WELL COMPLETION METHOD:	S
INSTALLER CODE:	~~6/30/94~~ SAIC	ZONE OF COMPLETION:	U
INSTALLATION DATE:	~~10/4/94~~ 6/30/94		
CASING ELEVATION (FT MSL)		OPEN/SCREEN DEPTH (FTFD):	31.01 - 20.74
CASING LENGTH (FT):	23.04	OPEN/SCREEN LENGTH (FT):	10.27
CASING DIAMETER (IN):	2 in	OPEN/SCREEN AREA (IN²/FT):	NR
SEAL END DEPTH:	19.13	FLOW RELATIONSHIP:	O
SCREEN MATERIAL:	SS	CAP MATERIAL:	SS
RISER MATERIAL:	SS	CAP TYPE:	SL

WELL TYPE CLASSIFICATIONS:
- M - MONITORING WELL
- P - PRODUCTION WELL
- T - TEST WELL
- O - OTHER (SPECIFY)

CASING, CAP, AND RISER MATERIALS:
- BR - BRICK
- C1 - CONCRETE
- C2 - COPPER
- FI - FIBERGLASS
- GI - GALVANIZED IRON
- WI - WROUGHT IRON
- SS - STAINLESS STEEL
- OM - OTHER METAL
- TE - TEFLON
- PV - PVC
- RS - ROCK OR STONE
- ST - STEEL
- TI - TILE
- CS - COATED STEEL
- WO - WOOD
- NO - NONE
- OT - OTHER (SPECIFY)

CAP TYPES:
- LC - LOCKING
- SL - SLIP-ON
- TR - THREADED
- NO - NONE
- SC - SCREW ON
- OT - OTHER (SPECIFY)

FLOW RELATIONSHIPS:
- U - UPGRADIENT
- D - DOWNGRADIENT
- C - CROSS GRADIENT
- O - ON SITE
- N - NOT KNOWN
- B - BACKGROUND

ZONES OF COMPLETION:
- A - ARTESIAN
- B - ANISOTROPIC
- C - CONFINED
- H - AQUITARD
- G - AQUICLUDE
- I - ISOTROPIC
- M - MULTI-SYSTEM
- S - SEMI-CONFINED
- U - UNCONSOLIDATED

WELL COMPLETION METHODS:
- P - POROUS CONCRETE
- F - GRAVEL PACK
- H - HORIZONTAL GALLERY
- O - OPEN END
- P - PERFORATED / SLOTTED
- S - SCREEN
- T - SAND POINT
- W - WALLED OR SHORED
- X - OPEN
- O - OTHER (SPECIFY)

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/30/94 — FORM COMPLETED BY / DATE

[signature] 10/4/94 — TECHNICAL REVIEWER / DATE

BOREHOLE / WELL CONSTRUCTION FIELD DATA LOG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOCATION ID: W1402 — FIELD REP: J.L. Abston

LOGGER CODE: SAIC — DRILLER CODE: BOCOS — RIG TYPE: Cable tool

INSTALLER CODE: SAIC — COMPLETION DATE: 7/20/94 — ACCEPTANCE CODE: A

BOREHOLE SUMMARY

BIT TYPE	HOLE DIAM (in)	END DEPTH (ft)	FLUID TYPE
Cable Tool	6 in	32.6	Potable Water

CASING SUMMARY

CASING* TYPE	DESCRIPTION	DIAM (in)	END DEPTH† (ft)
P	Steel		
S	Stainless Steel	2	31.01

* P - Protective S - Screen O - Open N - None

† Depth from Top of Casing

CONSTRUCTION TIME LOG

ACTIVITY	START DATE	START TIME	END TIME
DRILLING	6/29/94	1517	1700
	6/30/94	0835	1115
CASING	6/30/94	1406	1430
FILTER PACK	6/30/94	1430	1530
SEAL	6/30/94	1530	1610
BACKFILL	7/6/94	820	0915
DEVELOPMENT	7/19/94	1549	1649
	~~7/20/94~~	~~827~~	~~1540~~
	7/20/94	0827	0847
OTHER			

WELL CONSTRUCTION

TYPE* CODE	DESCRIPTION	END DEPTH† (ft)
B	Portland Cement	15.3
S	Volclay Bentonite Pellets	19.3
F	#5 Sand Pack	32.6

* B - Backfill S - Seal F - Filter

† Depth From Ground Surface

WELL DEVELOPMENT

7/19/94 Water @ 24.02 ft BTOC.
TD of well @ 33.31 ft BTOC
Well vol = 1.51 x 5 = 7.57
14 gal of tremie water = 70 gal
Develop a total of 77.57
1549 - Initial readings Cond. 0.935 2mo/cm
temp = 15.7 °C pH 8.26
turbid - brown, no odor
7/20/94 @ 828 Final Sample → pH 8.07
Temp 13.5 °C cond. = 868 2mo/cm

COMMENTS: Slightly turbid to clear, no odor

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan Mitchell 7/20/94 — FORM COMPLETED BY / DATE

[illegible] 10/4/94 — TECHNICAL REVIEWER / DATE

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TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B403, P-211

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/29/94 TIME: 1330 : 1710 PAGE 1 OF 3

Task Team Members:

MIKE KLIDZEJS - SAIC
ERIC SAYLOR - SAIC
ALLAN WOLFE - BOWSER
JOHN KEIFER - BOWSER
RAY MOSS - MOUND HP
MK 6/29/94

Narrative (include time and location):

1330 SAIC CREW ARRIVES AT B403 LOCATION. DRILL CREW PRESENT - BACKS RIG INTO POSITION OVER B403. 1336 JOHN DAVIS ON SITE - DISCUSS DRILLING PLAN 1350 JOHN DAVIS LEAVES SITE. 1354 RAY MOSS ARRIVES ON SITE. SAIC CREW PREPARES TO SAMPLE. 1400 SAIC CREW DISCOVERS THAT OVA IS OUT OF GAS - ERIC & RAY LEAVE SITE TO GET & CALIBRATE AN HNu.

SITE DESCRIPTION - BOREHOLE LOCATION IS IN CENTER OF CUT ROAD WHICH RUNS PARALLEL TO MOUND FACILITY SOUTH FENCE. SURFACE VEGETATION (GRASS) HAS BEEN COVERED BY APPROX. 1/2 IN OF SOIL DURING ROAD CUTTING OPERATION. ABUNDANT FOSSILIFEROUS LIMESTONE FLOAT AROUND BOREHOLE LOCATION. 1423 ERIC & RAY RETURN TO SITE WITH HNU - SAIC PREPARES TO SAMPLE. WILL COLLECT SURFACE SAMPLE B40301 & DUPLICATE B40311

1430 COLLECT SAMPLE B40301 & B40311. VOC SAMPLES FOR EACH COLLECTED FROM GROUND. REMAINING FRACTIONS FILLED FROM SOIL COMPOSITE(S) IN BOWL. SAMPLE COLLECTED FROM 0.1 TO 0.6 FT - REMOVED 0.1 FT OF ROAD CUT SOIL FILL & GRASS. 1500 MAST RAISED & RIG STARTED.

Daily Weather Conditions: A.M. NA

P.M. MOSTLY CLOUDY, MID 80S, FAIRLY STRONG SW WIND

Recorded By [signature] 6/29/94 QA Checked By [signature] 10/4/94

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TASK TEAM ACTIVITY LOG SHEET — **SOIL BORINGS** B403 P 212

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/29/94 TIME: 1330 : 1710 PAGE 2 OF 3

Task Team Members:

SAME AS PG. 211

Narrative (include time and location):

RIG UP 2 IN. DIAM SPLIT SPOON. 1505 COLLECT 0-2 FT SPLIT SPOON FIDLER = ND OVER BACKGROUND. 1508 COLLECT 2-4 FT SPOON, FIDLER = ND. AUGER TO 4 FT MK 6/29/94 ~1515 COLLECT 4-6 FT SPOON FIDLER = ND. 1520 COLLECT 6-8 FT SPOON FIDLER = ND. DRILLER REPORTS SPOON REFUSED AT 6.9 FT. ATTEMPT TO AUGER TO 8 FT. AUGER REFUSAL AT 7.5 FT BGS. DRILLER REPORTS TOP OF ROCK AT ~6 FT. DECIDE TO SKID RIG, DRILL ~~BG~~ MK 6/29/94 TO 2.5 FT BGS. 1533 RIG IS MOVED EAST. OFFSET BOREHOLE IS 3.5 FT EAST OF ORIGINAL BOREHOLE. 1534 BEGIN AUGERING. AUGER TO 2.5 FT. CLEAN AUGER WITH PUNCH RIG UP 3 IN DIAM SPOON. 1553 COLLECT 2.5 TO 4.5 FT SPLIT SPOON. BEGIN COLLECTING B40302. VOC FRACTION COLLECTED FROM CENTER OF SPOON. REMAINING SOIL PLACED IN BOWL. 1600 COLLECT 4.5 TO 6.5 FT SPOON. DRILLER REPORTS THAT SPOON WAS REFUSED AT 5.5 FT. AUGER TO 6 FT BGS. RIG UP 3RD SPOON. 1608 COLLECT 3RD SPOON WHICH WAS REFUSED AT 7 FT BGS. 1615 PREPARE TO ABANDON BOREHOLES. THE BOREHOLE DEPTHS – ORIGINAL: 2.7 FT BGS

Daily Weather Conditions: A.M. SEE PG. 211

P.M.

Recorded By [signature] 6/29/94 QA Checked By [signature] 10/4/94

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS
B403 p. 255

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO.: 34896

FACILITY CODE: ~~NA~~ MND16 THD 10-4-94
LOG DATE: 6/29/94
LOCATION ID: B403
LOCATION TYPE: ~~NA~~ BH
LOGGER CODE: ~~NA~~ SAIC THD 10/4/94
FIELD REP: ~~NA~~ M. KLIDZEJ THD 10-4-94
FLAME IONIZATION DETECTOR INSTRUMENT
MANUFACTURER: ~~FOXBORO~~ HNU THD 10-4-94
MODEL NO.: ~~OVA 128~~ PI101 THD 10/4/94
SERIAL NO.: 0021
DATE/TIME CALIBRATION 6/29/94 0730
ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE	1 100 PPM
2 NA	2 NA

COMMENTS OTHER READINGS BELOW TAKEN OVER SAMPLE OR OPENED SPOON

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
1430	B403G1	NA	NA	0.0	NA	0.0	0-0.5	NONE
1503	B403	0.0	NA	0.0	NA	NA		
1507		NA				0.0	0-2.0	
1516		0.0	NA	0.0	NA	NA	6 FT	
1522		NA		NA		0.0	6-8 FT	
1530		0.0		0.0		NA	2.5 FT	
1553		NA		NA		0.0	2.5-4.5	
1600		NA		NA		0.0	4.5-5.5	
1619		0.0		0.0			7.5 FT	
				LAST ENTRY				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

M. Klidzej 6/29/94
FORM COMPLETED BY / DATE

10/4/94
TECHNICAL REVIEWER / DATE

BOREHOLE OR WELL PLUGGING / ABANDONMENT B403 pg 259

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE **PROJECT NO: 34896**

SITE ID NUMBER: B403 DATE PLUGGED 6 / 29 / 94

SITE COORDINATES: N: NA DEPTH BLS (ft) 8.0
E: NA

TYPE OF CASING: NA

CASING DIAMETER (ID) (in.) NA GROUND ELEVATION (ft msl) NR

SCREENED ELEVATION (ft msl) NA

GEOLOGIC MATERIAL AT SCREEN SILTY CLAY - CLAY AT TD

AMOUNT OF CASING REMOVED (ft) NA

PLUGGING MATERIAL SOUTHWESTERN TYPE I PORTLAND CEMENT 1-94LB BAG
AQUAGEL GOLD SEAL NON-TREATED BENT. 1/16 BAG
POTABLE WATER

APPROX. VOLUME OF PLUGGING MATERIAL (cu ft.) ~ 20 GALS.

PLUGGING METHOD GROUT MIXED IN BARREL. ~~FILLED~~ BOREHOLES FILLED FROM TOP OF CAVE-IN TO GROUND SURFACE

REMARKS MK 6/29/94 BY PUMPING GROUT THROUGH HOSE INTO BOTTOM OF BOREHOLE.

MK 6/29/94

RECORDED BY [signature] 6/29/94 (Signature) QA CHECKED BY: [signature] 10/4/94 (Signature)

228

BOREHOLE LOG (SOIL)

SOIL BORINGS

B403 p. 228

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

JTD 10-4-94

JTD 10-4-94

FACILITY CODE: ~~NA~~ MND16

DRILLER CODE: ~~NA~~ BOWS

LOCATION ID: B403

COMPLETION DATE 6/29/19

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
4-6	4-6	0.9	NR	S	NA	8/11/16/19	35	CL	SAME AS ABOVE
6-8	6-8	0.3	NR	S	NA	28/50/5	55	CL	SAME AS ABOVE WITH
									MORE ABUNDANT LIMESTONE
									CLASTS
					MK	6/29/94			
2.5-4.5	2.5-4.5	0.8	NR	U	B403U2	60/43/38/35	73	CL	5Y 5/4 VERY STIFF CLAY
									WITH ~20% LIMESTONE
									FRAGMENTS
4.5-6.5	4.5-5.5	0.9	NR	U	B403U2	15/53	68	CL	SAME AS ABOVE
6.0-8.0	6-7	1.0	NR	U	B403U2	NR	NR	CL	SAME AS ABOVE
						LAST ENTRY			

MK 6/29/94

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MIKE KLIDZERS 6/29/94

FORM COMPLETED BY / DATE

10/4/94

TECHNICAL REVIEWER /

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

SOIL BORINGS B403 p 251

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: JMD ~~MA~~ MND16

LOG DATE: 6/29/94 JMD 10/4/94

LOGGER CODE: 10/4/94 ~~LA~~ SAIC

FIELD REP: ~~MA~~ M. KLIDZERS

CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC

CGI MODEL NO.: MX1 251

SERIAL NO.: 9306099-061

CALIBRATION DATE/TIME: 6/29/94 0730

ACCEPTANCE CODE: A

BATTERY CONDITION OK

CALIBRATION GAS (%LEL)

TYPE PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO NR

CALIBRATION GAS (PPM)

TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: NONE

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
~~B403~~ B403	NA	NA	1430	SURFACE	000		20.9
B403 JMD 10/4/94			1503	2FT	000		20.9
			1516	6FT	000	MK 6/29/94	20.9
			1525	~~40 FT~~ 2.5 FT MC 6/29/94	000		20.9
			1536	2.5 FT	000		20.9
			1618	ABANDONMENT	000		20.9
				LAST ENTRY			

MC 6/29/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

M. Klidzers 6/29/94
FORM COMPLETED BY / DATE

JMD 10/4/94
TECHNICAL REVIEWER / DATE

SAMPLE LOG SHEET

B403 p. 264

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40301 DATE COLLECTED (MM/DD/YY) 06/29/94 TIME (HH:MM): 1430

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROPERTY

POINT CODE: B403

DESCRIPTION: NA

FIELD OBSERVATIONS: SEE ACTIVITY LOG

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH ~~0.00~~ TO 2.00 FT

0.1 TO 0.6

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: [signature] 6/29/94 (SIGNATURE)

QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø3Ø1

B4Ø3 p. 265

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
				GPH 10/3/94		GPH 10/3/94	
1-12Ø	WM Glass	CLPVOA	Cool,4C	~~FAXED~~ NPCØ1Ø	8249959720 ~~SEE SAMPLE LOG~~	See Container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			LMT Entry				
		MK					
			6/29/94				

SAMPLE ID'S RINSATE: ERØØ1B TRIP BLANK: TBNØ1Ø FIELD BLANK: ABØØØ9 FIELD DUPLICATE: B4Ø311

RECORDED BY: [signature] 6/29/94 (SIGNATURE)

QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

266

SAMPLE LOG SHEET

B403 p. 266

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40302 DATE COLLECTED (MM/DD/YY): 06/29/94 TIME (HH:MM): 1430

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: NIA

POINT CODE: B403

DESCRIPTION: NIA

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~0.00~~ TO 0.00 FT

MK 6/29/94

4.5 TO 7.0

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: SEE ACTIVITY LOG

MK 6/29/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: N/A

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/29/94

RECORDED BY: [signature] 6/29/94
(SIGNATURE)

QA CHECKED BY: [signature] 10/4/94
(SIGNATURE)

SAMPLE LOG SHEET

B403 p. 267

SAMPLE ID NUMBER: B4Ø3Ø2

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C gPH 10/3/94	NPCØ1Ø	8219959720	gPH 10/3/94 See Container Lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			LAST ENTRY				
		MK	6/29/94				

SAMPLE ID'S RINSATE: ERØØ16 TRIP BLANK: TBNØ1Ø FIELD BLANK: ABØØ1Ø FIELD DUPLICATE: NA

RECORDED BY: [signature] 6/29/94 (SIGNATURE)

QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

282

SAMPLE LOG SHEET

B403 p. 282

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B4Q311

DATE COLLECTED (MM/DD/YY): 6/29/94

TIME (HH:MM): 1430

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE:

DESCRIPTION:

FIELD OBSERVATIONS: SEE ACTIVITY LOG

MK 6/29/94

SAMPLE -

MEDIA CODE: 02 SURFACE MK 6/29/94

DESCRIPTION: Soil ~~Subsurface~~ (>6 inches)

DEPTH ~~0.00~~ TO ~~0.00~~ FT

MK 6/29/94

0.1 TO 0.4

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) QC Field Duplicate

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO

FIELD CHANGE ORDER REFERENCE NO: N/A

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/29/94

RECORDED BY: [signature] 6/29/94
(SIGNATURE)

QA CHECKED BY: [signature] 10/4/94
(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B40311

B403 p. 283

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	NPC010 ~~SAMPLE~~ JPH 10/3/94	8219959720 ~~SEE SAMPLE MANIFEST~~ 256	JPH 10/3/94 See Container lot #log	COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,NO2/NO3	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			LMHGNTY				
		MR	6/29/94				

SAMPLE ID'S RINSATE: ER0018 TRIP BLANK: TBN010 FIELD BLANK: FB0009 FIELD DUPLICATE: B40301

RECORDED BY: [signature] 6/29/94 (SIGNATURE)

QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

EG&G MOUND
OUS NEW PROP
EXTND PHASE

SOIL BORING
LOGBOOK

B404 - B406

SOIL BORINGS
LOG BOOK

B404 B405 B406

PROJECT TITLE: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE RI/FS FIELD INVESTIGATIONS

WORK SITE: *MOUND PLANT*
Miamisburg, Ohio
OU5 New Property

ACTIVITY: *Mound OU5 New Property Phase 1 RI/FS Field Investigations*

CONTRACT #: *BOA 52264*
TASK ORDER: *34896*

PROJECT MANAGER: *Thomas Tank*
COMPANY NAME / ADDRESS: *Science Applications International Corporation*
4031 Colonel Glenn Hwy ,Dayton, Ohio 45431
TELEPHONE NUMBERS: *(513) 429-2699*

SUPERVISORS: *OU5 Manager: Alan Spesard (513)865-3859*
SAIC Proj. Manager: Thomas Tank (513)429-2699

EMERGENCY RESPONCE: *Police / Ambulance / Fire 911 or 865-4040*

PROCEDURES: *SOP 1.1, SOP 2.2, SOP 3.1, SOP 4.1, SOP 4.3, SOP 4.4, SOP 5.1, SOP 6.1, SOP 6.3*

START DATE: ~~6/29/94~~ 7-24-94 6/22/94
END DATE: 6/29/94

TABLE OF CONTENTS: B404 B405 B406 SOIL BORINGS: I

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
1	TASK TEAM LOG; B404; 6/29/94	31	NO ENTRY
2	" ; " ; "	32	
3	" ; " ; "	33	
4	" ; " ; "	34	
5	NO ENTRY	35	
6		36	
7		37	
8		38	
9		39	
10		40	
11		41	CGI MONITOR DATA; B404
12		42	NO ENTRY
13		43	
14		44	
15		45	FID FIELD DATA; B404
16		46	NO ENTRY
17	BOREHOLE LOG; B404	47	
18	" ; "	48	RTS 1-13-95
19	" ; "	49	BOREHOLE ABANDON. LOG; B404
20	NO ENTRY	50	NO ENTRY
21		51	KEY SHEET
22		52	NO ENTRY
23		53	"
24		54	SAMPLE LOG SHEET; B404 01
25		55	" ; "
26		56	" ; B404 02
27		57	" ; "
28		58	" ; B404 21
29		59	" ; "
30		60	NO ENTRY

TABLE OF CONTENTS

B404 B405 B406

SOIL BORINGS II

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 3489

PAGE	FIELD LOG	PAGE	FIELD LOG
61	NO ENTRY	91	NO ENTRY
62		92	
63		93	
64		94	
65		95	
66		96	
67		97	
68		98	
69		99	
70		100	
71		101	
72	SAMPLE LOG SHEET; B40412	102	
73	" ; "	103	
74	NO ENTRY	104	
75		105	
76		106	
77		107	TASK TEAM LOG SHEET; B405; 6/22/9
78		108	" ; " ; "
79		109	" ; " ; "
80		110	NO ENTRY
81		111	
82		112	
83		113	
84		114	
85		115	
86		116	
87		117	
88		118	
89		119	
90		120	

TABLE OF CONTENTS
B404 B405 B406

SOIL BORINGS
III

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
121	NO ENTRY	151	FID FIELD DATA; B405
122	"	152	NO ENTRY
123	BOREHOLE LOG; B405	153	↓
124	" ; "	154	↓
125	" ; "	155	BOREHOLE ABANDON. LOG; B405
126	NO ENTRY	156	NO ENTRY
127		157	KEY SHEET
128		158	NO ENTRY
129		159	"
130		160	SAMPLE LOG SHEET; B405Ø1
131		161	" ; "
132		162	" ; B405Ø2
133		163	" ; "
134		164	" ; B405Z1
135		165	" ; "
136		166	NO ENTRY
137		167	
138		168	
139		169	
140		170	
141		171	
142		172	
143		173	
144		174	
145		175	
146	↓	176	
147	CGI MONITOR DATA; B405	177	
148	NO ENTRY	178	
149	↓	179	
150	↓	180	↓

TABLE OF CONTENTS
B404 B405 B406

SOIL BORINGS
IV

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 3489

PAGE	FIELD LOG	PAGE	FIELD LOG
181	NO ENTRY	211	NO ENTRY
182		212	"
183		213	TASK TEAM LOG; B406; 6/22/94
184		214	" ; " ; "
185		215	" ; " ; 6/23/94
186		216	" ; " ; "
187		217	" ; " ; "
188		218	" ; " ; "
189		219	" ; " ; 6/27/94
190		220	" ; " ; "
191		221	" ; " ; "
192		222	" ; " ; "
193		223	NO ENTRY
194		224	
195		225	
196		226	
197		227	
198		228	
199		229	BOREHOLE LOG; B406
200		230	NO ENTRY
201		231	BOREHOLE LOG; B406
202		232	
203		233	
204		234	
205		235	NO ENTRY
206		236	
207		237	
208		238	
209		239	
210		240	

TABLE OF CONTENTS B404 B405 B406

SOIL BORINGS V

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
241	NO ENTRY	271	SAMPLE LOG SHEET; B40621
242		272	" ; B40622
243		273	" ; "
244		274	NO ENTRY
245		275	
246		276	
247		277	
248		278	
249		279	
250		280	
251		281	
252		282	
253	CGI MONITOR DATA; B406	283	
254		284	
255		285	
256		286	
257	FID FIELD DATA	287	
258		288	
259		289	
260		290	
261	BOREHOLE ABANDON LOG; B406	291	
262	NO ENTRY	292	
263	KEY SHEET	293	
264	NO ENTRY	294	
265	"	295	
266	SAMPLE LOG SHEET; B40601	296	
267	" ; "	297	
268	" ; B40602	298	
269	" ; "	299	
270	" ; B40621	300	

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B404 P.1

PROJECT NAME: EG&G MOUND OUS NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 6/29/94 TIME: 0723 : 1300 PAGE 1 OF 4

Task Team Members:

MIKE KLIDZEIS - SAIC
ERIC SAYLOR - SAIC
ALLAN WOLFE - BOWSER
JOHN KEIFER - BOWSER
MK 6/29/94

Narrative (include time and location):

0723 TAILGATE MEETING AT SAIC FIELD TRAILER

DISCUSS:

- MEETING TIMES FOR DRILLERS
- ACTION LEVELS
  - 21 LEVEL D
  - 1-5 ppm w/ NO BENZENE OR VINYL CHLORIDE - LEVEL C
  - 75 ppm & 21 ppm w/ BENZENE OR VINYL CHLORIDE - LEVEL B - SHUTDOWN
- LEL ACTION LEVEL = 10%
- SAFETY GLASSES, PPE, ETC.

0730 - TAILGATE MEETING ENDS

0800 - SAIC ARRIVES AT B404 LOCATION. DRILL CREW ON SITE. RAY MOSS REPORTED ON 6/28/94 THAT HE DID NOT NEED TO BE PRESENT FOR DRILLING AT THIS LOCATION. SAIC CREW SETS UP TO SAMPLE.

0817 TAKE BACKGROUND O_2/LEL & OVA READINGS

SITE DESCRIPTION: BOREHOLE LOCATION WILL BE IN THE CENTER OF THE ROAD SOUTH OF THE SOUTH MOUND FENCE (15.5 FT SOUTH OF FENCE) LOCATION WAS MARKED WITH A STAKE MARKED "B404 PROPOSED". GRASS COVERS THE GROUND SURFACE AT THIS LOCATION.

Daily Weather Conditions: A.M. TEMP LOW 80's, CLEAR SW MOD BREEZE

P.M. NA

Recorded By [signature] 6/29/94 QA Checked By [signature] 7/27/94

2

TASK TEAM ACTIVITY LOG SHEET — **SOIL BORINGS** B404 PZ

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/29/94 TIME: 0723 : 1300 PAGE 2 OF 4

Task Team Members:

SHAWN A.S PG. 1

Narrative (include time and location):

0830 COLLECT SAMPLE B40401 USING SPADE & SCOOP SAMPLE COLLECTED FROM 0.1 TO ~~0.5~~ 0.6 FT AFTER GRASS WAS REMOVED. VOC FRACTION OF THE SAMPLE WAS COLLECTED DIRECTLY FROM THE GROUND. MATERIAL FOR THE REMAING FRACTIONS MIXED IN A BOWL THEN BOTTLED. SAMPLE COLLECTED WITH EQUIPMENT FROM ER0018 (BOWL & SPOON) 0850 COOLER TEMP IS 4°C. 0854 RIG STARTED MAST RAISED. DRILLERS RIG UP AUGERS & 2 IN DIAM SPOON 0907 COLLECT 0-2 FT SPOON 0909 COLLECT 2-4 FT SPOON 0912 COLLECT 4-6 0919 COLLECT 6-8 FT 0923 COLLECT 8-10 FT SPOON SPOON WAS REFUSED AT ~ 8.8 FT BGS. ATTEMPT TO AUGER TO 10 FT BGS. AUGER REFUSED AT 9.0 FT BGS DRILLER REPORTS TOP OF ROCK AT ~ 8.0 FT BGS. ~~1030~~ 0950 BEGIN MOVING RIG. WILL SKID RIG EAST ~ 2 FT TO COLLECT B40402. WILL BEGIN SAMPLING WITH 3 IN SPOON AT 4 FT BGS 0936 RIG IS MOVED EAST UP THE ROAD OFFSET BOREHOLE IS 3.5 FT EAST OF ORIGINAL. BEGIN AUGERING 1039 FINISH AUGERING TO 4 FT BGS - RIG ~~OF~~ UP

Daily Weather Conditions: A.M.

P.M. SEE PG 1

Recorded By [signature] 6/29/94 QA Checked By [signature] 7/21/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B404 P.3

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/29/94 TIME: 0723 : 1300 PAGE 3 OF 4

Task Team Members:

SAME AS PG. 1

Narrative (include time and location):

3 IN DIAM SPLIT SPOON TO COLLECT B40402 AFTER CLEANING AUGER WITH PUNCH 0947 COLLECT 4-6 FT SPOON FOR B40402 SAMPLE VOC FRACTION COLLECTED FROM THE CENTER REMAINDER OF SOIL PLACED IN BOWL. ~~0953 COLL~~ MC 6/29/94 0959 COLLECT 6-8 FT SPLIT SPOON SOIL IS MIXED WITH SOIL FROM 4-6 FT SPOON 1004 TO COLLECT A DUPLICATE THE RIG WILL BE SKIDDED EAST AGAIN. -THE DUP WILL BE COLLECTED FROM 4-8 FT 1013 HYDRAULIC LINE ON RIG COMES LOOSE AND A MINOR ~~OF~~ AMOUNT (2 CUPS) OF HYDRAULIC FLUID SPILLS ONTO PLASTIC LAID BELLOW THE RIG PRIOR TO DRILLING THIS MORNING NO FLUID EVIDENT REACHED THE GROUND SURFACE. HYDRAULIC LINE TIGHTENED & IS NOT LEAKING 1020 THIRD BOREHOLE IS 3.7 FT EAST OF BOREHOLE IN WHICH B40402 WAS COLLECTED. 1022 FINISH AUGERING TO 4 FT BGS & CLEAN AUGER WITH PUNCH. CLEAN 3 IN SPLIT SPOON RIGGED UP. 1030 COLLECT ~~1034 6~~ 4-6 FT SPOON. MC 6/29/94 VOC FRACTION OF B40412 COLLECTED FROM CENTER OF SPOON, REMAINDER OF SOIL PLACED IN BOWL TO BE MIXED WITH 6-8 FT SPOON. 1045 COLLECT

Daily Weather Conditions: A.M. SEE PG 1

P.M.

Recorded By [signature] 6/29/94 QA Checked By [signature] 7/27/94

4

TASK TEAM ACTIVITY LOG SHEET — **SOIL BORINGS**

B404 P.4

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/29/94 TIME: 0723 : 1300 PAGE 4 OF 4

Task Team Members:

SAME AS PG. 1

Narrative (include time and location):

6-8 FT SPOON - MIX SOIL WITH 4-6 FT PORTION & FILL B40412 CONTAINERS. 1100 DRILLER PREPARE TO ABANDON THE 3 BOREHOLES. TAL DEPTHS ORIGINAL 2.5FT 1ST OFFSET 2.5FT 2ND OFFSET 5.7FT NOTE THAT EACH BOREHOLE CAVED-IN (SEE PAGE 49 FOR ABANDONMENT DETAILS). 1105 COLLECT GEOTECH BUCKET SAMPLE FROM ~~DA~~ AUGER CUTTINGS. ~~EG~~ MK 6/29/94 SANDY-SILTY SOIL TYPICAL OF ~2-8 FT INTERVAL COLLECTED. SAMPLE IS B40421. DRILLERS SHOVEL CUTTINGS INTO 1 DRUM. DRUM IS LABELED. 1130 DRILLERS LEAVE SITE W/ RIG TO OREGON. 1135 SAIC LEAVES SITE AFTER LOADING EQUIPMENT. RELINQUISH SAMPLES B40401, B40402, B40412 & B40421 & C.O.C FN0009 TO JOLETTA AT 1300.

MK 6/29/94

Daily Weather Conditions: A.M. SEE PG. 1

P.M.

Recorded By [signature] 6/29/94 QA Checked By [signature] 7/27/94

BOREHOLE LOG (SOIL)

SOIL BORINGS
B404 P.17

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE 7/27/94 PROJECT NO: 34896

JHD 7/27/94 JHD

Page 1 of 3

FACILITY CODE: ~~NA~~ MND16
LOCATION ID: B404
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: ~~NA~~ BH JHD 7/27/94
COMMENTS: MK 6/29/94

DRILLER CODE: ~~NA~~ BOWS
COMPLETION DATE 06/29/19
DIAMETER (IN): 8
DEPTH (FTFD): ORIGINAL 2.8 FT BGS 1ST OFFSET 2.0 FT 2ND OFFSET 2.0
CONSTRUCTION METHOD: B
ACCEPTANCE CODE: ~~NA~~ A JHD 7/27/94

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
GROUNDWATER NOT ENCOUNTERED		

LOCATION DESCRIPTION

SEE ACTIVITY LOG

MK 6/29/94

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0.1-0.6	0.1-0.6	NA	NA	SPADE SCOOP	B40401	NA	NA	OL	10YR 4/3 VERY SLIGHTLY CLAYEY, SILTY SOIL W/ ROOT MATERIAL
0.0-2.0	0-0.7 ~~0-2~~	1.9	NA	S	NA	3/6/6/8	14	OL	SAME AS ABOVE
	0.7-1.9							CL	10 YR 5/6 MED. STIFF SILTY CLAY SOME ROOT MATERIAL
					MK 6/29/94				
2-4		1.7	NA	S	NA	7/7/9/22	31	CL	SAME AS 0.7-1.9 INTERVAL
4-6	4.0-4.6	2.0	NA	S	NA	10/19/12/25	37	CL	SAME AS ABOVE
	4.6-~~5.0~~ 5.2							CL	10 YR 4/3 MED STIFF SILTY CLAY WITH ABUNDANT CLASTS OF LT GRAY CRYSTALLINE LIMESTONE

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/29/94 — FORM COMPLETED BY / DATE

[signature] 7/27/94 — TECHNICAL REVIEWER / DATE

18

BOREHOLE LOG (SOIL)

SOIL BORINGS

B404 P.18

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 3489

PKD 7/27/94

FACILITY CODE: ~~NA~~ MND16

DRILLER CODE: BOWS

LOCATION ID: B404

COMPLETION DATE 6 /29/19

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
	5.2-6.0							SM	10 YR 4/4 FAIRLY WELL GRADED SILTS & SANDS WITH SOME FINE GRAVEL SIZE ROCK FRAGMENTS.
6-8 FT	6-8	1.9	NA	S	NA	6/8/7/9	16	OL	10 YR 4/4 CLAYEY SILT WITH ~~FRACT~~ SOME (~15%) COARSE SAND TO FINE GRAVEL SIZE ROCK FRAGS.
8-10	8-8.9	0.9	NA	S	NA	8/50/5	NA		SAME AS ABOVE
4-6	4-6	1.5	NA	U	B40402	20/51/67/32	99	SM	10YR 5/4 SILTY & SANDY SOIL WITH ~25% WELL GRADED ANGULAR LIGHT GRAY LIMESTONE FRAGMENTS
6-8	6-8	2.0	NA	U	B40402	25/26/21/19	40	SM	SAME AS ABOVE WITH ~35% ROCK FRAGMENTS
4-6	4-6	1.5	NA	U	B40412	~~[illegible]~~ MK 6/29/94	NR	SM	10YR 5/4 SILTY & SANDY SOIL W ~25% WELL GRADED LT-DARK GRAY LIMESTONE FRAGMENTS

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE: 6/29/94

TECHNICAL REVIEWER / 7/27/94

BOREHOLE LOG (SOIL)

SOIL BORINGS
B404 P.19

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

JMD 7/27/94 JMD 9/6/94

FACILITY CODE: ~~NA~~ MND16

DRILLER CODE: ~~NA~~ BOWS

LOCATION ID: B404

COMPLETION DATE 6/29/19

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
6-8			NA	U	B404-12	65/80/42/19		SM	SAME AS ABOVE

MK 6/29/94

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE 6/29/94

TECHNICAL REVIEWER / 7/27/94

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — SOIL BORINGS

B404 P.41

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: THD ~~NA~~ MND16 — LOG DATE: 6/29/94 THD 7/27/94

LOGGER CODE: 7/27/94 ~~NA~~ SAIC — FIELD REP: ~~NA~~ M. KLIDZEJS

CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC — CGI MODEL NO.: MX 251

SERIAL NO.: 9306099-061 — CALIBRATION DATE/TIME: 6/29/94 / 0712

ACCEPTANCE CODE: ~~NA~~ A THD 7/27/94 — BATTERY CONDITION OK

CALIBRATION GAS (%LEL) TYPE PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: MK 6/29/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B404	NA	NA	0817	BH BACKGROUND BZ	000		20.9
B404B1			0830	BH	000		20.9
B404			0907	0-2	000	MK 6/29/94	20.9
			0909	2-4	000		20.9
			0911	4-6 BZ	000		20.9
			0912	4-6	000		20.9
			0919	6-8	000		20.9
			0920	BZ	000		20.9
			0923	8-10	000		20.9

MK 6/29/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

M. Klidzejs 6/29/94 — FORM COMPLETED BY / DATE

[illegible] 7/27/94 — TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS
B404 P.45
PROJECT NO: 34896

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

FACILITY CODE: 7-27-94 ~~NA~~ MND16
LOG DATE: 6/29/94
LOCATION ID: B404
LOCATION TYPE: ~~NA~~ BH
LOGGER CODE: 7-27-94 ~~NA~~ SAIC
FIELD REP: 7-27-94 ~~NA~~ M. KLIDZEVS

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO
MODEL NO.: OVA128
SERIAL NO.: A41444
DATE/TIME CALIBRATION 6/29/94
ACCEPTANCE CODE: ~~NA~~ A 7/27/94

CALIBRATION GASES			
TYPE/CYLINDER ID NO.		CONCENTRATION (PPM)	
1	METHANE / 35523	1	100 ppm
2	NA	2	NA

COMMENTS MK 6/29/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
0817	B404	NR	NA	0.0	NA	NA	0	BACKGROUND BZ
0830	B404D1			NR		0.0	0.0-0.6	NA
0907	B404			"		0.0	0.0-2.0	"
0908				0.0		NA	2-4.0	BZ
0909				NR		0.0	2-4.0	NA
0911		0.0		0.0		NA	4-6	BZ
0912		NR		NR		0.0	4-6	NA
0919		"		"		0.0	6-8	NA
0920		0.0		0.0		NA	8	BZ
0923				NR		0.0	8-10	NA

MK 6/29/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/29/94
FORM COMPLETED BY / DATE

7-27-94
TECHNICAL REVIEWER / DATE

BOREHOLE OR WELL PLUGGING / ABANDONMENT

B404 P.49

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE **PROJECT NO: 34896**

SITE ID NUMBER: BH04 DATE PLUGGED 06 / 29 / 94

SITE COORDINATES: N: NR E: NR DEPTH BLS (ft) BH0401 HOLE - 8.8FT TO BH0402 HOLE - 8.0 FT TO ~~BH0412 HOLE - 8.0 FT~~ TO

TYPE OF CASING: NA

CASING DIAMETER (ID) (in.) NA GROUND ELEVATION (ft msl) NA

SCREENED ELEVATION (ft msl) NA

GEOLOGIC MATERIAL AT SCREEN SANDY & SILTY SOIL AT TO OF EACH HOLE

AMOUNT OF CASING REMOVED (ft) NA

PLUGGING MATERIAL SOUTHWESTERN TYPE I PORTLAND CEMENT - 2 94 LB BAGS AQUA-GEL GOLD SEAL NON-TREATED BENTONITE - 1 BAG POTABLE WATER

APPROX. VOLUME OF PLUGGING MATERIAL (cu ft.) TOTAL OF ~ 30 GALLONS FOR ~~THE 3 HOLES~~

PLUGGING METHOD EACH HOLE CAVED. BOREHOLES FOR BH0401 & BH0402 CAVED IN TO 2.5 FT BGS. GROUT MIX WAS PUMPED FROM 2.5 FT TO GROUND SURFACE.

REMARKS MK 6/29/94 BOREHOLE FOR BH0412 CAVED TO 5.7 FT BGS CEMENT GROUT MIX WAS PUMPED THROUGH AUGER AND FILLED FROM 5.7 FT BGS TO GROUND SURFACE. CUTTINGS PLACED IN DRUMS.

MK 6/29/94

RECORDED BY: [signature] 6/29/94 (Signature) QA CHECKED BY: [signature] 7/27/94 (Signature)

SAMPLE LOG SHEET

54

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: B4040Ø1 DATE COLLECTED (MM/DD/YY): 6/29/94 TIME (HH:MM): Ø83Ø

SAMPLING -

LOCATION CODE: MNØNPEP

DESCRIPTION: NA

POINT CODE: B4Ø4

DESCRIPTION: NA

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH ~~Ø.ØØ~~ TO ~~2.ØØ~~ FT

MK 6/29/94 ~~Ø.ØØ~~ 0.1 0.6 MK 6/29/94

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: SEE ACTIVITY LOG

SAMPLE COLLECTED WITH EQUIPMENT FROM RINSATE ER0002B ER0018

MK 6/29/94

MK 6/29/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: ~~N/A~~ Ø5-NP-Ø09 JHD 7/26/94

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

BOREHOLE LOCATION MOVED. THIS ~~MK 6/29/94~~ JHD 7/26/94

TRPC APPLIES TO ALL SAMPLES COLLECTED FROM B4Ø4

RECORDED BY: ML Kirby (SIGNATURE)

QA CHECKED BY: JOH 7-27-94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø4Ø1

55

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	FN009	SEE SAMPLE MAKERS LOG		COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

Mk Kodge 6/29/94

SAMPLE ID'S RINSATE: ~~ER0018~~ ER0018 MK 6/29/94 TRIP BLANK: TBN009 FIELD BLANK: AB0009 FIELD DUPLICATE: NA

RECORDED BY: Mk Kodge 6/29/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

56

SAMPLE ID NUMBER: B4Ø4Ø2

DATE COLLECTED (MM/DD/YY): 06/29/94

TIME (HH:MM): 0947

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: B4Ø4

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø2

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~0.00~~ MK 6/29/94 TO 4.0 ~~0.00~~ MK 6/29/94 FT 8.0

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: SAMPLE COLLECTED FROM 4-8 FT BGS IN HOLE 3.5 FT OFFSET TO THE EAST FROM BORING IN WHICH B40107 WAS COLLECTED

MK 6/29/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO

FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/29/94

RECORDED BY: [signature] 6/29/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B40402

57

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	FN009	SEE SAMPLE MNGRS LOG		COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			MK 6/29/94				

SAMPLE ID'S RINSATE: ER0016 TRIP BLANK: TB0009 FIELD BLANK: AB0009 FIELD DUPLICATE: B40412 NA

RECORDED BY: [signature] (SIGNATURE) QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896 58

SAMPLE ID NUMBER: B40421 DATE COLLECTED (MM/DD/YY): 06/29/94 TIME (HH:MM): 1105

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: B404

DESCRIPTION:

FIELD OBSERVATIONS: SHELBY TUBE NOT COLLECTED. BUCKET SAMPLE COLLECTED FROM AUGER CUTTINGS FROM 2-8 FT INTERVAL

MK 6/29/94

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 Inches) MC 6/29/94

DEPTH ~~0.00~~ 2.00 TO ~~0.00~~ 8.00 FT MC 6/29/94

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NKA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MC 6/29/94

RECORDED BY: [signature] 6/29/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø421

59

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
~~1-Ø~~	SHELBY	GEOTECHNICAL	~~Cool,4C~~				~~SINGLE~~
1-19	BUCKET	GEOTECHNICAL	Cool,4C	FNØØ9	SEE SAMPLE MNGRS LOG	N/A	SINGLE

MK 6/29/94

SAMPLE ID'S RINSATE: N/A TRIP BLANK: N/A FIELD BLANK: N/A FIELD DUPLICATE: N/A

RECORDED BY: [signature] 6/29/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase PROJECT NO: 34896 7Z

SAMPLE ID NUMBER: B4041Z DATE COLLECTED (MM/DD/YY): 6/29/94 TIME (HH:MM): 1030

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: NA

POINT CODE: NA

DESCRIPTION: NA

FIELD OBSERVATIONS: SAMPLE COLLECT FROM SECOND OFFSET BOREHOLE, 3.7 FT EAST OF BOREHOLE IN WHICH B4040Z WAS COLLECTED.

MK 6/29/94

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~0.00~~ MK 6/29/94 TO ~~0.00~~ FT

4.0 TO 8.0

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) QC Field Duplicate

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/29/94

RECORDED BY: [signature] 6/29/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: 73

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	FN0009	SEE SAMPLE MANG. LOG		COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

MK 6/29/94

SAMPLE ID'S RINSATE: ER0016 TRIP BLANK: TB0009 FIELD BLANK: AB0009 FIELD DUPLICATE: NA

3410402 CA 10-6-94

RECORDED BY: K Koffer 6/29/94 (SIGNATURE)

QA CHECKED BY: 7-27-94 (SIGNATURE)

107

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B405 P.107

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/22/94 TIME: 0820 : 1147 PAGE 1 OF 3

Task Team Members:

MIKE KLIDZEIS
ALLAN WOLFE - BOWSER
JOHN KEIFER - BOWSER
EVELYN HARTZELL
RAY MOSS
MK 6/20/94

Narrative (include time and location):

0820 SAIC CREW ARRIVES ON SITE. DRILL CREW & MOUND HP ALREADY PRESENT. DRILL RIG IS SET-UP WITH MAST RAISED OVER B405 LOCATION. RIG AND AUGERS WERE DECONED ON 6/21/94 AND APPEAR CLEAN. ~~SITE~~ BOREHOLE LOCATION IS AT THE END OF A CLEARED ROAD, CUT & FILLED, THROUGH WOODS, WEST OF POWER LINE. LOCATION OF BOREHOLE APPEARS TO BE ON THE NATURAL GROUND SURFACE (WITH VEGETATION REMOVED), HOWEVER GROUND SURFACE APPEARS CUT TO THE NORTH OF THE BOREHOLE LOCATION, AND FILLED (WITH MATERIAL FROM ROAD CUTTING ACTIVITIES) TO THE SOUTH. 0845 SAIC CREW PREPARES TO TAKE SURFACE ANALYTICAL & GEOTECHNICAL SAMPLES. 0900 COLLECT B40501 FROM 0.0 - 0.5 FT USING SAAOR & SCOOP METHOD FIELD = NO ABOVE BACKGROUND. 0920 COLLECT BUCKET PORTION OF B40521 FROM 0.0 TO ~1.3 FT 0925 RIG UP SHELBY TUBE 0927 PUSH SHELBY TUBE ~~0930 COLLECT SHELBY TUBE FROM~~ FROM 0.0 TO ≈1.5 FT WHERE TUBE IS REFUSED. RECOVERY IS POOR SHELBY TUBE IS PART OF SAMPLE B40521 0937 BEGIN HAMMERING 2.0-4.0 FT INTERVAL NOTE: GAVE HP PORTION OF SOIL FOR SAMPLE B40501

Daily Weather Conditions: A.M. 0820 TEMP ~ 80, CLEAR CALM

P.M. MK 06/22/94

Recorded By [signature] 06/22/94 QA Checked By [signature] 6/27/94

108

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B405 P.108

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/22/94 TIME: 0820 : 1147 PAGE 2 OF 3

Task Team Members:

SAME AS PG. 107

Narrative (include time and location):

0941 COLLECT 2-4 FT SS, FIDLER = ND 0946 COLLECT 4-6 FT SS FIDLER = ND BEGIN ADDING B405 MATERIAL TO GEOTECH BUCKET COMPOSITE B40723 AT 3.0 FT (IN B405) 0952 COLLECT 6-8 FT SS FIDLER = ND 1006 COOLER TEMP = 7°C 1008 COLLECT 8-10 FT SS FIDLER = ND. 1014 COLLECT ~~NA~~ MK 6/22/94 10-12 FT SS FIDLER = ND 1015 DRILLER REPORTS SPLIT SPOON ~~REFUSAL~~ MK 6/22/94 REFUSAL AT 11 FT BGS BASED ON SPLIT SPOON REFUSAL & LITHOLOGY AT 11 FT BGS (HARD SHALE & LIMESTONE RESIDUUM) DECIDE TO COLLECT SAMPLE B40502 FROM 5.0 - 11.0 FT BGS. 1025 RIG IS MOVED UP EAST MK 6/23/94 AWAY FROM ~~BOR~~ MK 6/22/94 ORIGINAL BOREHOLE APPROX. 2.5 FT. ~~BORED~~ MK 6/22/94 STOPPED CONTRIBUTING TO SAMPLE B40723 AT ~ 11 FT BGS 1029 AUGER TO 5.0 FT, CLEAR AUGER W/ KNOCK-OUT PLUG 1040 ~~COL~~ BEGIN MK 6/22/94 COLLECT 1ST SPOON FOR SAMPLE B40502. VOA FRACTION OF SAMPLE COLLECTED FROM MIDDLE OF SPOON (~ 6.0 FT) 1047 COLLECT 2ND SPLIT SPOON FOR SAMPLE B40502 FROM 7-9.0 FT BGS FIDLER = ND MATERIAL MIXED WITH 1ST SPOON 1200 COLLECT 3RD

Daily Weather Conditions: A.M. SEE PG. 107

P.M.

Recorded By [signature] 06/22/94 QA Checked By [signature] 6/27/94

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

SOIL BORINGS
B405 P.109
TASK NO.: 34896

Date (mm/dd/yy): 06/22/94 TIME: 0820: 1147 PAGE 3 OF 3

Task Team Members:

SAME AS PG. 107

Narrative (include time and location):

SPLIT SPOON FROM 9.0 - 11.0 FT BGS. FIDLER = ND
MK 6/22/94
~~TO~~ 1105 DRILL CREW PREPARES TO ABANDON BORE HOLES
9-11 FT SPLIT SPOON MATERIAL IS MIXED W/ PREVIOUS
TWO SPLIT SPOONS & PLACED IN SAMPLE CONTAINERS
COOLER TEMP @1115 = 8°C SEE PG. 155 FOR
ABANDONMENT DETAILS. DRILL CREW & SAIC CREW
PICKS UP SITE & LOADS EQUIPMENT. CUTTINGS SHOVELED
OFF PLASTIC INTO DRUMS 1137 HP SCANS HANDS & FEET OF ENTIRE CREW 1138 HP LEAVES SITE
1142 SAIC LEAVES SITE W/ DRILL CREW, TRUCK & RIG. 1147 ARRIVE AT SAIC TRAILER RELINQUISH
SAMPLES B40501, B40502, ~~B4~~ B40723 AND C-O-C
MK 6/22/94
FORM FN004 TO JOLETTA

MK 6/22/94

Daily Weather Conditions: A.M. SEE PG. 107

P.M.

Recorded By [signature] 06/22/94 QA Checked By [signature] 6/27/94

BOREHOLE LOG (SOIL)

SOIL BORINGS
B405 P.123

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE
PROJECT NO: 34896

JMD 7-27-94

FACILITY CODE: ~~NA~~ MND16
LOCATION ID: B405
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: ~~NA~~ BH
COMMENTS: MK 6/22/94

DRILLER CODE: ~~NA~~ BOWS JMD 7-27-94
COMPLETION DATE 06/22/19
DIAMETER (IN): 8 IN
DEPTH (FTFD): ORIG - 11 FT BGS OFFSET - 11 FT BGS
CONSTRUCTION METHOD: B
ACCEPTANCE CODE: ~~NA~~ A JMD 7-27-94

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
GROUNDWATER NOT ENCOUNTERED		

LOCATION DESCRIPTION
SEE PG. 107
MK 6/22/94

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0.0-0.5	0.0-0.5	100%	NA	SPOON & SCOOP	B405S01	NA	NA	OH	10YR 3/2 CLAY TO SILTY
									CLAY. ABUNDANT ROOT
									MATERIAL SOME LIGHT GRAY
		MK 6/22/94							TO 10YR 7/2 FOSSILIFEROUS
~~0.0-0.5~~									L.S. FRAGMENTS.
1.0-2.0	0.0-1.5	1.0 FT	NA	T	B405T1	NA	NA	NA	PUSHED SHELBY TUBE COULD
		MK 6/22/94							NOT OBTAIN INTERVAL
2.0-4.0	2.0-2.7 ~~2.0~~	2.0	NA	S	NA	55/8/16/17	33	OH	SAME AS ABOVE
	2.7-3.0								MICRITIC TO FOSSILIFEROUS LIMESTONE
	~~3.0-4.0~~	MK 6/22/94							LIGHT GRAY
	3.0-4.0							~~OL~~ CL	SLTLY MOIST CLAYEY SILT
						11/10/1:1/12	23	MK 6/22/94	MOTTLED IN COLOR-PREDOM.

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

H. Kelly 06/22/94
FORM COMPLETED BY / DATE

7-27-94
TECHNICAL REVIEWER / DATE

124

BOREHOLE LOG (SOIL)

SOIL BORINGS B405 P.124

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 348

TMD 7-27-94

TMD 7-27-94

FACILITY CODE: ~~NA~~ MND16

DRILLER CODE: ~~NA~~ BOWS

LOCATION ID: B405

COMPLETION DATE 6 / 22/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
									10YR 5/3 W MOTTLING OF
									10YR 6/6
4-6	4-6	1.8	NA	S	NA	11/19/11/12 9/13/13/15 MK 6/22/94	23	~~OL~~ CL MK 6/22/94	SILTY CLAY MOTTLED
									IN COLOR FREEDOM 10YR 6/6
									WITH 10YR 5/1 - ~~W~~ INTERVAL
									IS WEATHERED BEDROCK
									CRUMBLY, FOSSIL FRAGMENTS
									AND CASTS VISIBLE IN CORE
									(IN CLAYS), ALSO SOME
									MICRITIC L.S. LENSES
6-8	6-8	1.6	NA ~~1.6~~ MK 6/22/94	S	NA	9/8/13/15	28	CL	SAME AS ABOVE
8-10					NA	9/10/13/15	28		SAME MATERIAL AS ABOVE BUT
									GRADING TO 5YR 5/3
	MK 6/22/94								IN COLOR
10-12	10-10.6 ~~9-11~~	1.3	NA	S		11/19/55/50	NA	CL	~~IN~~ SAME AS ABOVE
	10.6-11.7							CL	HARD SILTY CLAY 5Y5/1
									SHOWING ~~FINE~~ FISSILE
									BEDDING PROBABLE
									SHALE RESIDUUM.
									SAMPLE FAIRLY WET
									IN LAST 0.1 FT OF
									RECOVERY
						MK 6/22/94			
5-7	5-7	1.6		V	CH5002		NR	CL	SEE ABOVE. SPOONS
									DRIVEN FOR SAMPLE
									B4D5D2 SAME AS
									4-6 FROM DRIG D4
				MK 6/22/94					

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/22/94

FORM COMPLETED BY / DATE

7-27-94

TECHNICAL REVIEWER /

125

BOREHOLE LOG (SOIL)

SOIL BORINGS

B405 P. 125

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

JAD 7-27-94

JAD 7-27-94

Page 3 of 3

FACILITY CODE: ~~NA~~ MNDIG

DRILLER CODE: ~~NA~~ BOWS

LOCATION ID: B405

COMPLETION DATE 6 / 22/19 94

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
	7-9	0.2FT	NA	U	B405U2	NR	NR	CL	SAME AS ABOVE
1-11	9-11	1.8	NA	U	B405U2	NR	NR	CL	SAME AS 10-12 FT
									IN ORIGINAL BH WITH
									1 LARGER ~3 FT
									FOSSILIFEROUS L.S
									COBBLE MED. DARK
									GRAY IN COLOR.

MK 6/22/94

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/22/94

FORM COMPLETED BY / DATE

7-27-94

TECHNICAL REVIEWER /

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

SOIL BORINGS
B405 P.147

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO: 34896

FACILITY CODE: ~~NA~~ MND16 TMD 7-27-94
LOGGER CODE: ~~NA~~ SAIC
LOG DATE: 06/22/94 TMD 7-27-
FIELD REP: ~~NA~~ M. KLIDZETS
CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC
CGI MODEL NO.: MX 251
SERIAL NO.: 9306099
CALIBRATION DATE/TIME: 06/22/94/0710
ACCEPTANCE CODE: ~~NA~~ A TMD 7-27-94
BATTERY CONDITION: OK

CALIBRATION GAS (%LEL)
TYPE PENTANE/CRL CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39731

CALIBRATION GAS (PPM)
TYPE — CONCENTRATION — PPM CYLINDER SERIAL NO —

COMMENTS:
MK 6/22/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B405	NA	NA	0850	NA	000	NA	20.6
0.0-0.5'			0901	SL	000		20.6
0.0-2.0			0936	BZ	000		20.6
2-4			0941		000		20.6
4-6			0946		000		20.6
6-8			0952		000		20.6
			0955	BZ	000		20.6
8-10			1009	"	000		20.6
			1012	BZ	000		20.6
10-12			1014	"	000		20.6
			1031	BZ	000		20.6
5-7			1041	"	000		20.7
7-9			1047	"	000		20.6
				MK 6/22/94			

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/22/94
FORM COMPLETED BY / DATE

[signature] 7/27/94
TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS
B405 P. 151

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO.: 34896

FACILITY CODE: ~~NA~~ MNDIG THD 7-27-94
LOG DATE: 06/22/94
LOCATION ID: B405
LOCATION TYPE: ~~NA~~ BH THD 7-27-94
LOGGER CODE: ~~NA~~ SAIC THD 7-27-94
FIELD REP: ~~NA~~ M. KUDZETS

FLAME IONIZATION DETECTOR INSTRUMENT:
MANUFACTURER: HNU
MODEL NO.: PI 101
SERIAL NO.: SAIC 0003
DATE/TIME CALIBRATION 06/22/94 / 0715
ACCEPTANCE CODE: ~~NA~~ A THD 7-27-94

CALIBRATION GASES			
TYPE/CYLINDER ID NO.		CONCENTRATION (PPM)	
1 ISOBUTYLENE	59193	1	~~100~~ 100 ppm
2 NA		2	NA

COMMENTS MK 6/22/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
0850	B405	NR	NA	0.0	NA		—	BACKGROUND
	B40501					0.0	0.0-0.5 ft	0.0-0.5
0936	0			0.0			0.0-2.0 ft	
0941						0.0	2-4	
0946						0.0	4-6	
0952						0.0	6-8	
0955				0.0				MK 6/22/94
1009						0.0	8-10	
1012				0.0				
1014						0.0	10-12	
1031				0.0			6 FT	
1040				~~0~~		0.0	5-7	
1047				MK 6/22/94		0.0	7-9	
				MK 6/22/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/22/94
FORM COMPLETED BY / DATE

7/27/94
TECHNICAL REVIEWER / DATE

BOREHOLE OR WELL PLUGGING / ABANDONMENT B405 P.155

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE **PROJECT NO: 34896**

SITE ID NUMBER: B405 DATE PLUGGED ~~06~~ 06 / 22 / 94

SITE COORDINATES: N: NA E: NA DEPTH BLS (ft) ORIGINAL BH - 11.7 FT OFFSET BH - 11.1

TYPE OF CASING: NONE

CASING DIAMETER (ID) (in.) NA GROUND ELEVATION (ft msl) NA

SCREENED ELEVATION (ft msl) NA

GEOLOGIC MATERIAL AT SCREEN NA

NA

AMOUNT OF CASING REMOVED (ft) NONE

PLUGGING MATERIAL SOUTHWESTERN MIAMI TYPE I PORTLAND CEMENT - 3 94 LB BAGS
AQUAGEL GOLD SEAL 100% NONTREATED BENT. - 3/4 50 LB BAG

APPROX. VOLUME OF PLUGGING MATERIAL (cu ft.) ~ 40 GAL

PLUGGING METHOD ORIGINAL BOREHOLE - GROUT MIXED IN DRUM, AND PUMPED THROUGH RIG, THROUGH HOSE, INTO BOREHOLE. BOREHOLE

~~REMARKS~~ FILLED TO GROUND SURFACE.

OFFSET - GROUT PUMPED THROUGH RIG/HOSE INTO AUGER. AUGERS SEQUENTIALLY REMOVED AS GROUT IS RAISED. GROUT EVENTUALLY BROUGHT TO SURFACE. FOR ABANDONMENT ENDS AT 1125

MK 06/22/94

RECORDED BY: [signature] 06/22/94 (Signature) QA CHECKED BY: [signature] 7/27/94 (Signature)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896 P.160

SAMPLE ID NUMBER: B40501 DATE COLLECTED (MM/DD/YY): 06/22/94 TIME (HH:MM): 0900

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: B405

DESCRIPTION:

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO ~~2.00~~ 0.5 FT MK 6/22/94

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: SAMPLE COLLECTED BY SPADE & SCOOP METHOD FROM 0.0-0.5

MK 06/22/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 06/22/94

RECORDED BY: (SIGNATURE) QA CHECKED BY: 7/27/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø5Ø1

161

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	FN0004	SEE SAMPLE MULES LOG		COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

MC 6/22/94

SAMPLE ID'S RINSATE: ER0015 TRIP BLANK: ~~TB0006~~ FIELD BLANK: ~~NA~~ AB0009 MC 6/30/94 FIELD DUPLICATE: NA

RECORDED BY: [signature] 6/22/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

SAMPLE LOG SHEET

162

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: B4Ø5Ø2 DATE COLLECTED (MM/DD/YY) 06/22/94 TIME (HH:MM): 1040

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: B4Ø5

DESCRIPTION:

FIELD OBSERVATIONS: SAMPLE COMPOSITED FROM 3 SPLIT SPOON COLLECTED FROM 5-7, 7-9, 9-11, VOA FRACTION COLLECTED FROM MIDDLE OF 5-7 FT SPOON.

MK 6/22/94

SAMPLE -

MEDIA CODE: Ø2

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~0.00~~ TO ~~0.00~~ FT

5.00 11.00 MK 6/22/94

SAMPLE TYPE:

- [X] GRAB
- [X] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: N/A

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

SAMPLE COLLECT FROM 3 SPLIT SPOONS, 5-11 FT, TO OBTAIN SUFFICIENT VOLUME

RECORDED BY: [signature] 6/22/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B40502

163

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	FN0004		SEE SAMPLE MNGT LOG	COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

MAK 6/22/94

SAMPLE ID'S RINSATE: ER0015 TRIP BLANK: TB40004 ~~FIELD BLANK:~~ AMBIENT AB0009 FIELD DUPLICATE: N/A

MC 6/22/94

RECORDED BY: [signature] 6/22/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

164

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: B4Ø521 DATE COLLECTED (MM/DD/YY): 06/22/94 TIME (HH:MM): 0920

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: B4Ø5

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø2

DESCRIPTION: Soil Subsurface (> 6 Inches)

DEPTH Ø.ØØ TO -Ø:ØØ FT

1.3 ML 6/22/94 - BUCKET

0.0 TO 1.5 SHELBY TUBE

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: BUCKET SAMPLE COLLECTED FROM 0.0 TO 1.3 FT BGS SHELBY TUBE COLLECTED FROM 0.0 TO 1.5 FT

ML 6/22/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [ ] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

ML 6/22/94

RECORDED BY: [signature] 6/22/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø521

165

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-Ø	SHELBY	GEOTECHNICAL	Cool,4C	FN004	SEE SAMPLE MANGE LOG	NA	SINGLE
1-19	BUCKET	GEOTECHNICAL	Cool,4C	FN004	↓	NA	SINGLE

MK 4/22/94

SAMPLE ID'S .RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: (SIGNATURE) QA CHECKED BY: 7-27-94 (SIGNATURE)

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B406 P.213

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/22/94 TIME: 1405 : 1535 PAGE 1 OF 2

Task Team Members:

MICHAEL KLIDZEJS - SAIC
JOHN KEIFER - BOWSER
EVELYN HARTZELL - SAIC
RAY MOSS - MOUND HP
ALAN WOLFE - BOWSER
MK 6/23/94

Narrative (include time and location):

1405 SAIC CREW ARRIVES IN FIELD. DRILL CREW ALREADY PRESENT. SAIC LOCATES B406 LOCATION STAKE. DRILL CREW MOVES RIG TO LOCATION. 1420 CREW STANDING BY WAITING FOR RAY MOSS & PENETRATION PERMIT. 1427 RAY MOSS ARRIVES WITH PENETRATION PERMIT. ~~DRIL~~ MK 6/22/94 INSPECT DRILL RIG - RIG & AUGERS APPEAR CLEAN - RIG WAS DECONED AFTER DRILLING AT B405. 1450 EXCLUSION ZONE SET AT RADIUS OF MAST HEIGHT AROUND DRILL RIG. SAIC CREW PREPARES TO GET SURFACE SAMPLE B406 01. 1457 COLLECT SAMPLE B406 01 FROM ~~0.0 TO 0.5 FT.~~ 0.2 TO 0.7 FT. MK 6/22/94 MK 6/22/94 GRASS & ROOTS MK 6/22/94 GRASS WERE REMOVED TO DEPTH OF 0.2 FT, SAMPLE LOCATION WAS THEN SCRAPED WITH CLEAN SPOON. VOC FRACTION THEN COLLECTED WITH NEW CLEAN SPOON. SOIL FROM SCRAPED LOCATION THEN MIXED IN BOWL AND REMAINING SAMPLE CONTAINERS FILLED. FLOWER OF SAMPLE = NO OVER BACKGROUND. MK 6/22/94 COOLER TEMP AT 1515 = 6°C 1518 DRILL CREW LEAVES SITE. SAIC SECURES SITE. EXCLUSION ZONE UP. SAIC LEAVES SITE. 1535 RELINQUIS CUSTODY OF SAMPLES

Daily Weather Conditions: A.M. CLEAR, CALM, TEMP LOW 80°S MK 6/22/94 ~~OVERCAST TEMP LOW 80°S~~

P.M. PARTLY CLOUDY TEMP LOW 90S, HUMID MK 6/22/94 ~~THUNDERSTORMS, RAIN, TEMP LOW 80s~~ MK 6/22/94

Recorded By [signature] 6/22/94 QA Checked By [signature] 7-27-94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B406 P.214

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/22/94 TIME: 1405 : 1535 PAGE 2 OF 2

Task Team Members:

SAME AS PG. 213

MK 6/22/94

Narrative (include time and location):

AND C-O-C FORM # FN006 TO ZOLLETA.

MK 6/22/94

Daily Weather Conditions: A.M. SEE PG. 213

P.M.

Recorded By [illegible] 6/22/94 QA Checked By [illegible] 7-27-94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS: B403 P. 213

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/29/94 TIME: 1330 : 1710 PAGE 3 OF 3

Task Team Members:

SAME AS PG. 2

Narrative (include time and location):

OFFSET 3.3 FT BLS. 1617 MAST LOWERED 1620 RAY MOSS LEAVES SITE WITH HP FRACTION OF B40302, AFTER SCANNING HANDS & FEET OF CREW. 1625 BEGIN ABANDONING HOLES (SEE PG. 259 FOR ABANDONMENT DETAILS) 1635 ABANDONMENT COMPLETE. CUTTINGS PLACED IN OPEN TOP DRUM. LABEL PLACED ON DRUM. 1640 DRILLERS LEAVE SITE. SAIC CREW CLEANS SITE 1647 SAIC LEAVES SITE. 1710 RELINQUISH SAMPLES B40301, B40311 AND B40302 TO JOLETTA, WITH E-O-C FN010.

LAST ENTRY

MK 6/29/94

Daily Weather Conditions: A.M. SEE PG 211

P.M.

Recorded By [signature] 6/29/94 QA Checked By [signature] 10/4/94

BOREHOLE LOG (SOIL)

SOIL BORINGS
B403 P.227
PROJECT NO: 34896

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

JTD 10/4/94

Page 1 of 2

FACILITY CODE: ~~NA~~ MND16
LOCATION ID: B403
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: NA
COMMENTS: NONE / MK 6/29/94

DRILLER CODE: JTD 10-4-94 ~~NA~~ BOWS
COMPLETION DATE 06/29/19
DIAMETER (IN): 8 IN
DEPTH (FTFD): ORIGINAL 7.5 FT ~~OFFSET 7.0 FT~~
CONSTRUCTION METHOD: B
ACCEPTANCE CODE: NA

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
GROUNDWATER NOT ENCOUNTERED		

LOCATION DESCRIPTION

SEE ACTIVITY LOG
MK 6/29/94

LITHOLOGIC LOG

LOGGER CODE: NA

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0.1-0.5	0.1-0.5	100%	NA	SPADE & SCOOP	MK 6/29/94 ~~B403~~ B403-01	NA	NA	ML	5Y 3/1 CLAYEY SILTY SOIL
									WITH ABUNDANT ROOT
		MK 6/29/94							MATERIAL
0-2	0-0.4 & 0-2	1.2 FT	NR	S	NA	8/12/8/12	20	ML	SAME AS ABOVE
	0.4-1.2	NA						CL	MOTTLED 5Y 3/2 AND
									5Y 5/4 STIFF SILTY CLAY
									W/ ~ 25% GRAY FOSSIL-
									IFEROUS LIMESTONE
									FRAGMENTS (FINE GRAVEL
									SIZED)
2-4	2-4	1.6 FT	NR	S	NA	7/11/12/40	52	CL	5Y 6/4 STIFF CLAY WITH
									ABUNDANT LT GRAY LS CLASTS

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE: 6/29/94

TECHNICAL REVIEWER / DATE: 10/4/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B406 P.215
TASK NO.: 34896

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

Date (mm/dd/yy): 06/23/94 TIME: 0850 : 1440 PAGE 1 OF 4

Task Team Members:

MIKE KIDZETS - SAIC
ERIC SAYLOR - SAIC
ALLAN WOLFE - BOWSER
JOHN KIEFER - BOWSER
RAY MOSS - MOUND H
MK 6/23/94

Narrative (include time and location):

0850 SAIC CREW ARRIVES AT B406 SITE. BOWSER CREW AND RAY MOSS PRESENT, SAIC UNLOADS EQUIPMENT PLASTIC PLACED UNDER DRILL RIG. 0900 TAKE BACKGROUND BREATHING ZONE LEL & HNU READINGS. 0905 MAST ON RIG IS RAISED. FIRST AUGER FLIGHT RIGGED UP. 0911 0-2 FT SS COLLECTED FIDLER = ND 0913 2-4 FT SS COLLECTED FIDLER = ND 0917 COLLECT 4-6 FIDDLER = ND 0920 COLLECT 6-8 FT SS FIDLER = ND 0926 COLLECT 8-10 FT SS FIDLER = ND 0930 COLLECT CUTTINGS STARTING AT 6.0 FT BGS FOR ZONE 2 GEOTECHNICAL SAMPLE (IF RETAINED WILL BE PART OF SAMPLE B40621) 0934 DRILLERS PREPARE A SHELBY TUBE TO BE PUSHED FROM 10-12 FT BGS (POSSIBLE ZONE 2 0943 COLLECT SHELBY TUBE FIDDLER = ND 0948 COLLECT 12-14 FT SS FIDLER = ND 0955 COLLECT 14-16 FT SS FIDLER = ND 1002 16-18 FT SS COLLECTED FIDLER = ND 1007 COLLECT 18-20 SS FIDLER = ND 1013 COLLECT 20-22 FT SS FIDLER = ND DRILLER REPORTS HARD SURFACE OR BOULDER ENCOUNTERED BETWEEN 21 & 22.0 FT BGS 1000 AUGER TO A DEPTH OF 24 FT, PAST OBSTRUCTION WHICH

Daily Weather Conditions: A.M. TEMP UPPER 70's, HUMID, SLIGHT SW BREEZE
P.M. THUNDERSTORMS, RAIN TEMP LOW 80's

Recorded By [signature] 6/23/94 QA Checked By [signature] 7/27/94

2116

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS: B406 p. 216

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 348961

Date (mm/dd/yy): 06/23/94 TIME: 0850 : 1440 PAGE 2 OF 4

Task Team Members:

SAME AS PG 215

Narrative (include time and location):

REFUSED 20-22 FT SS AT ~21.5 FT BGS 1025 COLLECT 24-26 FT SS FIDLER = NO CONTACT BETWEEN CLAY ABOVE AND SAND/SILT/GRAVEL ENCOUNTERED AT ~24.0 FT. ~~END~~ STOP NC 6/23/94 CONTRIBUTING MATERIAL TO B40621 BUCKET COMPOSITE. AT 24.0 FT. 1035 COLLECT 26-28 FIDLER = NO DRILLER REPORTS 26-28 FT SS BOUNCED DURING HAMMERING AS IF ON BEDROCK OR A LARGE COBBLE. AUGER TO 28 FT 1038 COLLECT 28-30 FT SAMPLE FIDLER = NO 1046 COLLECT 30-32 FT SS FIDLER = NO. START FILLING NEW BUCKET WITH CUTTINGS AT 30 FT BGS (FOR POSSIBLE ZONE 3 COMPOSITE) 1055 SPLIT SPOON REFUSED PROBABLY ON A COBBLE AT ~33.5 1057 COLLECT 32-34 FT SS FIDLER = NO AUGER TO 34 FT BGS. 1104 COLLECT 34-36 FT SS FIDLER = NO 1117 COLLECT 36-38 FT SS FIDLER = NO. BASED ON INCREASING MOISTURE OBSERVED IN NC 6/23/94 ~~EO~~ SPLIT SPOON SAMPLES AND THE DEPTH AT WHICH WATER WAS ENCOUNTERED IN B408, DECIDE TO RIG UP WITH 3 IN DIAM SPLIT SPOON TO BEGIN COLLECTING SAMPLE B40602 AT A DEPTH OF 38 FT BGS.

Daily Weather Conditions: A.M. SEE PG 215

P.M.

Recorded By [signature] 6/23/94 QA Checked By [signature] 7-27-94

217

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

SOIL BORINGS
B406 P.217
TASK NO.: 34896

Date (mm/dd/yy): 6/23/94 TIME 0850 : 1440 PAGE 3 OF 4

Task Team Members:

SAME AS PG 215

Narrative (include time and location):

END COLLECTION OF BUCKET COMPOSITE FOR THIS HOLE AT 38 FT BGS. 1130 COLLECT SAMPLE B40602 VOC FRACTION TAKEN FROM MIDDLE OF FIRST SPOON (38-40) REMAINDER OF SPOON PLACED IN BOWL TO BE MIXED WITH NEXT 2 SPOONS. 1142 DRILLER REPORTS THAT COBBLE WAS ENCOUNTERED IN ATTEMPT TO DRIVE 40-42 FT SPOON. AUGER TO 42 FT BGS BEGIN DRIVING 2ND SPOON AT 42. SPOON REFUSED AT 42.0 FT BGS 1155 BECAUSE OF REFUSAL AT 42.0 HAVE DECIDED TO CONTINUE AUGER. A NEW ~~SAMPLE~~ VOC FRACTION WILL BE COLLECTED FOR SAMPLE B40602 ~~WILL BE~~ ~~COLLECTED~~ WHEN WE AUGER PAST THE OBSTRUCTION. SAMPLE TIME WILL START WHEN NEXT SPLIT SPOON IS COLLECTED. VOC FRACTION COLLECTED AT 1130 WAS REMOVED FROM SAMPLE CONTAINER & THROWN AWAY IN CUTTINGS PILE. 1200 HP LEAVES SITE 1207 DRILL CREW LEAVES SITE. 1210 SAIC LEAVES SITE. 1408 SAIC CREW RETURNS TO SITE TO ADVISE DRILLERS OF LIGHTNING WARNING. SIGN DRILLERS TIME/MATERIALS SHEETS FOR THIS WEEK. 1425 DISMISS DRILLERS

MK 6/23/94
MK 6/28/94
MK 6/28/94
MK 6/28/94

Daily Weather Conditions: A.M. SEE PG. 215

P.M.

Recorded By [signature] 6/23/94 QA Checked By [signature] 7-27-94

210

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B406 P.218

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/23/94 TIME: 0850 : 1440 PAGE 2 OF 2

Task Team Members:

SAME AS PG 215

Narrative (include time and location):

DUE TO WEATHER. ~~SAIC~~ MK 6/23/94 DRILL CREW LEAVES SITE. SAIC CREW STAND BY FOR WEATHER TO CLEAR TO COVER CUTTINGS W PLASTIC. 1437 CUTTINGS COVERED IN PLASTIC. EXCLUSION ZONE REMAINS SET AROUND RIG 1440 SAIC CREW LEAVES SITE.

MK 6/23/94

Daily Weather Conditions: A.M. SEE PG 215

P.M.

Recorded By [signature] 6/23/94 QA Checked By [signature] 7-27-94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B406 P219

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 6/27/94 TIME: 0825 : 1640 PAGE 1 OF 4

Task Team Members:

MIKE KLIDZEJS - SAIC

ERIC SAYLOR - SAIC

ALLAN WOLFE - BOWSER

JOHN KIEFER - BOWSER

RAY MOSS - MOUND HP /MK 6/27/94

Narrative (include time and location):

0825 SAIC CREW ARRIVES ON B406 SITE. DRILLERS & MOUND HP ON SITE. EXCLUSION ZONE STILL SET AROUND SITE. ON THURSDAY 6/23/94 ENDED DAY W/ SPLIT SPOON REFUSAL AT 42.0 FT BGS. WILL AUGER PAST OBSTRUCTION AND ATTEMPT TO COLLECT SPLIT SPOON SAMPLE B406B02 AT 43 TO ~~49~~ 49FT. MK 6/27/94 48.5 0850 RIG STARTED 0854 BEGIN DRIVING SPOON. TAKE BACKGROUND OVA & LEL READINGS 0901 COLLECT SAMPLE B406B02 (FIRST SPLIT SPOON) SAMPLE COLLECTED W/ EQUIPMENT FROM RINSATE ER016 (1 SS BOWL & 1 SS SPOON) FIDLER OF FIRST SPLIT SPOON = ND 0916 SECOND SPLIT SPOON COLLECTED FIDLER = ND. 0923 RIG UP 3RD SPLIT SPOON. 0933 BEGIN DRIVING 3RD SPOON 0938 COLLECT 3RD SPOON DRILLERS REPORT THAT 3RD SPOON COULD ONLY BE DRIVEN 1.5 FT. FIDLER = ND. ~~SAMPLE CONTAINERS FOR B406B02 NOT FILLED~~ MK 6/27/94 MK 6/27/94 RIG UP 3 IN SPLIT SPOON TO DETERMINE WATER TABLE DEPTH. ADVANCE AUGER TO 49 FT BLS DRIVE SPOON FROM 49-51. 0950 COLLECT 49-51 FT SPOON. WATER STILL NOT ENCOUNTERED. ~~M. KLIDZEJS LEAVES SITE TO GET J. DAVIS ON RADIO~~ MK 6/27/94 RIG UP 1 SPLIT SPOON 1012 J. DAVIS ON SITE - REPORTS THAT WE MUST DRILL TO BEDROCK OR WATER TABLE. DRILLER REPORTS THAT 51-53

Daily Weather Conditions: A.M. OVER CAST TEMP - UPPER 70's, W-SW BREEZE

P.M. PARTLY SUNNY TEMP LOWER 80's

Recorded By [signature] 6/27/94 QA Checked By [signature] 7-27-94

220

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B406 P.220

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/27/93 TIME: 0825 : 1640 PAGE 2 OF 4

Task Team Members:

SAME AS PG. 219

Narrative (include time and location):

FT SPOON IS REFUSED AT 51 FT. AUGER TO 53 FT BLS DRILLER BELIEVES THAT THIS INTERVAL 51-53? CONSISTS PRIMARILY OF BOULDERS. 1027 53-55 FT SPOON REFUSED AT 55 FT. DRILLERS ARE OUT OF AUGERS AND DRILL MK 6/27/94 BREAK TO ALLOW DRILLERS TO PICK-UP ^ 20 FT OF ADDITIONAL AUGERS. MK 6/27/94 1030 ALL PERSONELL LEAVE SITE. 1230 SAIC CREW ARRIVES ON SITE. BOUSEK & MOUND HP ON SITE. DRILL CREW RIGS UP AN ADDITIONAL AUGER. PLAN TO COLLECT 2 IN SPLIT SPOONS UNTIL THE INDICATION OF THE WATER TABLE. 1245 COLLECT 55-57 FT SPLIT SPOON FIDLER = ND DRILLER REPORTS SPOON WAS REFUSED AT 56.5 FT. AUGER TO 57.0 FT RIG UP W/ 2 IN SPOON. DRILLER ALSO REPORTS THAT RIG IS ^ DRILLING AS IF WE MAY BE ON COMPETENT ROCK. 1259 COLLECT 57-59 FT SPOON. FIDLER = NP. 57-59 FT SPLIT SPOON WAS DRIVEN 0.5 FT/100 BLOWS BEFORE REFUSAL WAS ENCOUNTERED. SAMPLE INDICATES THAT 57-? INTERVAL CONSISTS OF LIMESTONE WHICH IS FAIRLY COMPETENT. SOME WATER ALSO EVIDENT IN SPOON AND DRILLER REPORTS APPROXIMATELY 1 FT OF WATER IN AUGERS.

Daily Weather Conditions: A.M. SEE PG. 219

P.M.

Recorded By [signature] 6/27/94 QA Checked By [signature] 7-27-94

ZC1

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

SOIL BORINGS
B406 P. 221
TASK NO.: 34896

Date (mm/dd/yy): 06/27/93 TIME: 0825 : 1640 PAGE 3 OF 4

Task Team Members:

AS PG. 219

SAME

Narrative (include time and location):

ATTEMPT TO TAG WATER DEPTH W/ TLC METER. METER INDICATES NO WATER. PROBE APPEARS MUDDY BUT NOT WET 1320 JOHN DAVIS ON SITE DISCUSS SITUATION. BECAUSE SPLIT SPOONS HAVE BEEN REFUSED AND CANNOT DRIVE FURTHER, DECIDE TO AUGER FURTHER TO SEE IF TRUE BEDROCK WAS ENCOUNTERED AT 59.0 FT 1332 BEGIN AUGERING 1357 ENCOUNTER AUGER REFUSAL AT 63.0 FT BGS WITH 1700 LBS. OF DOWNPRESSURE. DECIDE TO KEEP THE SAMPLE B406D2 COLLECTED AT 0901 TODAY. 1347 J. DAVIS LEAVES SITE. 1357 RAY MOOS LEAVES SITE WITH THE HP FRACTION OF SAMPLE B406D2 COLLECTED TODAY. DRILL CREW PREPARES TO ABANDON THE BOREHOLE (SEE PAGE 261 FOR ABANDONMENT DETAILS) NOTE: ~~UPON REMOVAL~~ AK 6/27/94 ALTHOUGH NO WATER WAS ENCOUNTERED DURING DRILLING AND NO SPLIT SPOON SAMPLES ~~INDICATED~~ APPEARED WET, AK 6/27/94 THE AUGER FLIGHTS APPEARED MUDDY & WET UPON REMOVAL FROM THE HOLE. 1500 SHOVEL CUTTINGS INTO 55-GAL DRUMS. ASSUME THAT WATER IS FROM ZONE ABOVE WHICH WAS SAMPLED TODAY, PROBABLY RESULTING FROM THE RAINS OF THIS WEEKEND. SAIC & DRILL CREW LEAVE SITE @ 1534.

Daily Weather Conditions: A.M. SEE PG. 219

P.M.

Recorded By [signature] 6/27/93 QA Checked By [signature] 7-27-94

222

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS

B406 P.222

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/27/94 TIME: 0825 : 1640 PAGE 4 OF 4

Task Team Members:

SAME AS PG. 219

Narrative (include time and location):

MK 6/27/94 1540 ARRIVE AT SAIC TRAILER RELINQUISH SAMPLE BH0602 AND FIELD C-O-C EN007 TO JOLLETTA MINARE.

MK 6/27/94 ~ 1640 MEET W/ DRILLERS AT THE DECON AREA DRILLERS FINISH DECON OF RIG & AUGERS. JOHN DRIVES TO GUARD POST TO GET GUARD TO OPEN GATE. DRILL CREW & SAIC STAND-BY AT GATE WAITING FOR GUARD.

MK 06/27/94

Daily Weather Conditions: A.M. SEE PAGE 219

P.M.

Recorded By [signature] 6/27/94 QA Checked By [signature] 7-27-94

BOREHOLE LOG (SOIL)

SOIL BORINGS
B406 P. 229

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: ~~NA~~ MND16 THD 7-29-94
LOCATION ID: B406
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: ~~NA~~ BH THD 7-29-94
COMMENTS: MK 6/27/94

DRILLER CODE: ~~NA~~ BOWS THD 7-29-94
COMPLETION DATE 6/27/19
DIAMETER (IN): 8 IN
DEPTH (FTFD): 63.0 FT BGS
CONSTRUCTION METHOD: HOLLOW-STEM
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
MEASUREABLE GROUNDWATER NOT ENCOUNTERED		

LOCATION DESCRIPTION

SEE ACTIVITY LOG.
MK 6/27/94
THD 7/29/94

LITHOLOGIC LOG

LOGGER CODE: ~~NA~~ SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-2	0.2-0.7	100%	100%	SPOON SCOOP	B406D1	NA	NA	OH	~~OH~~ 10YR 3/2 CLAY TO SILTY CLAY WITH ABUNDANT ROOT MATERIAL
0-2	0.0-0.5	1.6	NA	S	NA	3/6/10/11	21	CH	10YR 3/2 CLAY TO SILTY CLAY W/ ABUNDANT ROOT MAT.
	0.5-1.6							OL	CLAY SILT W/ FAIRLY ABUNDANT PEBBLE SIZE ROCK FRAGS. SILT COLOR 10YR 6/4
2-4	2-3.4	1.4	NA	S	NA	8/10/11/13	24	OL	10YR 6/4 CLAYEY SILT GRADING DOWNWARD TO SILTY SAND WITH SOME WELL GRADED ROCK FRAGS

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/22/94 — FORM COMPLETED BY / DATE

7-27-94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL)

SOIL BORINGS
B-406 P.231

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

TMD 7-27-94 TMD 7-27-94

FACILITY CODE: ~~NA~~ MND16

DRILLER CODE: ~~NA~~ BOWS

LOCATION ID: B-406

COMPLETION DATE 6/27/19 94

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
4-6	4.4-4.3	1.8	NA	S	NA	8/10/10/16	26	OH	10YR 4/2 MOIST STICKY CLAY MX 6/27/94
	4.3-5.8							OH	~~10YR~~ 10YR 6/3 MOIST STICKY CLAY
6-8	6-8	1.8	NA	S	NA	6/7/8/10	18	OH	SAME AS ABOVE WITH SOME MINOR COARSE SAND TO FINE GRAVEL SIZED ROCK FRAGMENTS
8-10	8-10	1.9	NA	S	NA	7/10/14/15	29	OH	SAME AS ABOVE
10-12	10-12	1.9	1.9	T	B406(2)	NA	NA	UNK	SHELBY TUBE - COULD NOT OBSERVE
12-14	12-14	1.9	NA	S	NA	8/10/13/15	28	OH	SAME AS ABOVE BUT GRADIAL IN COLOR DOWNWARD FROM 10YR 6/3 TO 10YR 4/2 MX 6/27/94
~~14-16~~ MX 6/27/94									
14-16	14-14.4	0.4	NA	S	NA	14/18/24/33	57	~~UNK~~ NA MX 6/27/94	NO DESCRIPTION - ~~SAMPLE~~ MX 6/27/94 APPEARS GRASS OBSERVED IN CUTTINGS - SAMPLE NOT FROM COLUMN
16-18	16-18	2.1	NA	S	NA	9/13/16/17	33	OH	MOIST STICKY CLAY SOME (MINOR) COARSE SAND TO FINE GRAVEL SIZED ROCK FRAGMENTS CLAY COLOR 2.5Y 3/2
18-20	18-20	1.6	NA	S	NA	9/11/13/17	30	OH	SAME AS ABOVE - ROCK (GRAVEL) FRAGMENTS BECOMING SLIGHTLY MORE ABUNDANT
20-22	20-22	1.3	NA	S	NA	7/14/39/80	NA	OH	SAME AS ABOVE WITH ZONES OF MICRITIC

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE 6/23/94

TECHNICAL REVIEWER / 7-27-94

232

BOREHOLE LOG (SOIL)

SOIL BORING B406 7 23

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34

JHD 7-27-94

JHD 7-27-94

FACILITY CODE: LA MND16

DRILLER CODE: LA BOWS

LOCATION ID: B406

COMPLETION DATE 6/27/19 94

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
									MED. DARK GRAY LIMESTONE
				MK 6/23/94					FRAGMENTS (POSSIBLE
									COBBLES WHICH WERE
									HAMMERED THROUGH
22-24									(SEE ACT LOG - NO SAMPLE)
24-26	24-26	0.9	NA	S	NA	8/11/24/35	59	GM	SAND SILT GRAVEL
								GM	MIXTURE AND FOSSILIFEROUS
									LIMESTONE (MED-DARK GRAY)
									FRAGMENTS
26-28	26-28	0.2	NA	S	NA	50/6	NA	OH	CLAY/1 1072 3/2 & LIMESTONE FRAGMENT
									SAMPLE IS SUSPECT
28-30	28-30	?0.6	NA	S	NA	46/31/50/15 41/31/50/15 MK 6/27/94	NA	GM	MOIST, PREDOMINANT
									MED SIZED SAND
									WITH MINOR SILT AND
									SOME COARSE SAND TO
									MED GRAVEL SIZE
									& LIMESTONE FRAGMENT
30-32	30-32	0.8	NA	S	NA	14/21/37/46	83	GW	2.5Y 8/1 - 2.5Y 5/4
									GRAVEL & SAND GRAVEL IS
									SUBANGULAR TO SUBROUNDED
									MOISTURE INCREASING
									DOWNWARD.
32-34	32-34	1.2	NA	S	NA	43/46/50/5	NA	GW	SAME AS ABOVE WITH
									SLIGHTLY GREATER PERC.
									OF GRAVEL (SAND STILL
									PREDOMINANT)
34-36	34-36	1.4	NA	S	NA	38/49/45/42	87	GW	SAME AS ABOVE
									THOUGH FAIRLY DRY
									THIN (0.1 FT) FOSSILIFEROUS

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/23/94

FORM COMPLETED BY / DATE

7-27-94

TECHNICAL REVIEWER

BOREHOLE LOG (SOIL)

SOIL BORINGS B406 P.233

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE TMD 7-27-94 PROJECT NO. 34886

Page 3 of 5

FACILITY CODE: ~~NA~~ MND16 TMD 7-27-94 DRILLER CODE: BOWS ~~NA~~ MK 6/27/94

LOCATION ID: B406 COMPLETION DATE 6 / 27/19 94

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
									CALCAREOUS SHALE
									STRINGER AT ~ 34.7 FT
36-38	36-38	1.4	NA	S	NA	17/19/21/26	47	GW	SAME AS ABOVE - NO
									SHALE STRINGER -
									SLIGHTLY MORE MOIST
38-40	38-40	1.2	NA	U	NA	37/49/49/46	95	GW	SAME AS ABOVE W/
									SOME VERY COARSE
									GRAVEL MATERIAL PERCENTAGE
									OF MATERIAL GREATER
									THAN SAND SIZE IS
									INCREASING ~~750%~~
									~50% OF SPOON IS
									GREATER THAN SAND
									SIZE - SAMPLE VERY
						MK 6/27/94			MOIST AT BOTTOM (39.8)
40-42		—	NA	U	NA	NA	NA	UNK	SPLIT SPOON REFUSED
									NO SAMPLE

MK 6/27/94

SEE NEXT PAGE

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/23/94 — FORM COMPLETED BY / DATE

7-27-94 — TECHNICAL REVIEWER /

234

BOREHOLE LOG (SOIL)

SOIL BORINGS
B406 P. 234

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34899

JMD 7-27-94 JMD 7-27-94

FACILITY CODE: ~~NA~~ MND16

DRILLER CODE: BOWS ~~NA~~

LOCATION ID: BH06

COMPLETION DATE 6/27/19 94

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
43-45	43-45	1.8 FT	NA	U	B40602	59/43/45/48	93	GW	WELL GRADED SAND &
									GRAVEL, MOIST FGW FINES
									GRAVEL TO 3.0 INCHES IN
									DIAMETER.
45-47	45-47	1.0 FT	NA	U	B40602	90/98/100/95	195	GW	SAME AS ABOVE
47-48.5 ~~47-48.9~~ MK 6/27/94	47-48.5	1.4	NA	U	B40602	65/100/88	NA		SAME AS ABOVE
49-51	49-51	0.3	NA	U	NA	100/3	NA	GW	SAME AS ABOVE
51-53	51-53	NA	NA	U	NA	50/0	NA	UNK	SPOON REFUSED
53-55	53-55	NA	NA	U	NA	50/0	NA	UNK	SPOON REFUSED
									DRILL SUGGEST THAT 51-55
									FT INTERVAL CONSISTS OF
									~~Rock~~ PREDOMINANTLY OF
									BOULDERS.
55-57	55-55.4	0.9	NA	S	NA	27/57/50/1	NA	GW	SAME AS ABOVE
	55.4-55.9								LT. TO MED. DARK GRAY
~~57-59~~ MK 6/27/94			~~NA~~ MK 6/29/94						~~CA~~ HIGHLY WEATHERED
									SOFT CALCAREOUS SHALE
57-59	57-59	0.4	NA	S	NA	100/6	NA	NA	LIGHT GRAY MICROCRYSTALLINE
									LIMESTONE ~~SHOWING REACT OF BEDDING~~
									SPOON IS WET - WATER
MK 6/27/94									IN AUGERS (APPROX 1.0 FT)
~~59-63~~									(SEE ACTIVITY LOG)
59-63	59-63	NA	NA	AUGER	NA	NA	NA		AUGERED THIS INTERVAL
									TO DETERMINE THICKNESS
									OF BEDROCK. AUGER
									REFUSAL AT 63.0 FT
									- PROBABLE LIMESTONE.
						MK 6/27/93			

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE: Kirkpatrick 6/27/94

TECHNICAL REVIEWER / 7/27/94

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

SOIL BORINGS
B406 P.253

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: ~~NA~~ MND16 THD 7-27-94 **LOG DATE:** 06/22/94 THD 7-27-94
LOGGER CODE: ~~NA~~ SAIC 7-27-94 FIELD REP: ~~NA~~ M. KLIDZEJS
CGI MANUFACTURER: INDUSTRIAL SCIENT. CGI MODEL NO.: MX251
SERIAL NO.: 9306099-061 CALIBRATION DATE/TIME: 06/22/94 / 0725
ACCEPTANCE CODE: ~~NA~~ A THD 7-27-94 BATTERY CONDITION OK

CALIBRATION GAS (%LEL) TYPE PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525
CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA
COMMENTS: NONE

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B406	NA	NA	1452	BACKGROUND BZ	000	NA	20.7
B406D1	NA	NA	1457	0.2-0.7	000	"	20.7

MK 6/22/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/22/94 — FORM COMPLETED BY / DATE

7/27/94 — TECHNICAL REVIEWER / DATE

254

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

SOIL BORING B406 P. 254

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 3480

FACILITY CODE: MND16 ~~NA~~ JHD 7-27-94

LOG DATE: 06/23/94 JHD 7-27-94

LOGGER CODE: SAIC ~~NA~~

FIELD REP: ~~NA~~ M. KUDZEJS

CGI MANUFACTURER: INDUST. SCIENT.

CGI MODEL NO.: MX 251

SERIAL NO.: 9306099-061

CALIBRATION DATE/TIME: 06/23/94/0715

ACCEPTANCE CODE: ~~NA~~ A JHD 7-27-94

BATTERY CONDITION OK

CALIBRATION GAS (%LEL)

TYPE PENTANE 75% CONCENTRATION 50 % LEL CYLINDER SERIAL NO LOT 39525

CALIBRATION GAS (PPM)

TYPE — CONCENTRATION — PPM CYLINDER SERIAL NO —

COMMENTS:

MK 6/23/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B406	NA	NA	0900	BZ BOUND	000	NA	20.7
			0911	0-2	000		20.7
			0913	2-4	000		20.7
			0917	4-6	000		20.7
			0919	BZ	000		20.7
			0920	6-8	000		20.7
			0926	8-10	000		20.7
			0937	BZ	000	MK 6/23/94	20.7
			0948	12-14	000		20.7
			0950	BZ	000		20.7
			0955	14-16	000		20.7
			1002	16-18	000		20.7
			1007	18-20	000		20.7
			1012	20-22	000		20.7
			1015	BZ	000		20.7

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/23/94 FORM COMPLETED BY / DATE

7-27-94 TECHNICAL REVIEWER / DATE

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — SOIL BORINGS

B406 P.255

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: ~~NA~~ TMD 7-27-94 MND16 — LOG DATE: 06/23/94 TMD 7-27-94

LOGGER CODE: ~~NA~~ 7-27 SAIC — FIELD REP: ~~NA~~ M. KLIDZEJS

CGI MANUFACTURER: INDUST. SCIENT. — CGI MODEL NO.: MX 251

SERIAL NO.: 9306099-061 — CALIBRATION DATE/TIME: 06/23/94 / 0715

ACCEPTANCE CODE: ~~NA~~ A TMD 7-27-94 — BATTERY CONDITION OK

CALIBRATION GAS (%LEL) TYPE PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: MK 6/23/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B406 BACKGROUND BZ			0900 MK 6/23/94	BZ	000	NA	20.7
B406	NA	NA	1025	24-26	000		20.7
			1035	26-28	000		20.7
			1043	BZ	000		20.7
			1046	30-32	000	MK 6/23/94	20.7
			1057	32-34	000		20.7
			1111	BZ 34-36	000		20.7
			1117	36-38	000		20.7
			1130	38-40	000		20.7
			MK 6/23/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE: 6/23/94

TECHNICAL REVIEWER / DATE: 7-27-94

256

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

SOIL BORINGS B406 P.25

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 348

FACILITY CODE: ~~NA~~ MND16 TMD 7-27-94

LOG DATE: MK 6/27/94 6/23/94 / 6/27/94

LOGGER CODE: ~~NA~~ SAIC

FIELD REP: TMD 7/27/94 ~~NA~~ MK 6/27/94 ~~M. KLIDZETS~~

CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC

CGI MODEL NO.: MX 251

SERIAL NO.: 9306099-061

CALIBRATION DATE/TIME: 6/23/94/0715

ACCEPTANCE CODE: ~~NA~~ A TMD 7/27/94

BATTERY CONDITION OK

CALIBRATION GAS (%LEL)

TYPE PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM)

TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: MK 6/23/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B406	NA	NA	0854	BACKGROUND BZ	000	NA	20.9
B40602			0901	43-45	000		20.9
B40602			0917	45-47	000		20.9
B406			0922	BZ	000		20.9
			0938	47-48.5	000		20.9
			0949	49-51	000		20.9
			1010	BZ	000		20.9
			1233	BZ	000		20.9
			1245	55-57	000		20.9
			1300	57-59	000		20.9
			1335	BZ	000		20.9
			MK 6/23/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/23/94 FORM COMPLETED BY / DATE

7-27-94 TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS
B406 P. 257
PROJECT NO: 34896

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

FACILITY CODE: ~~NA~~ MND16 JMD 7-27-94 LOG DATE: 06/22/94

LOCATION ID B406 LOCATION TYPE ~~NA~~ BH JMD 7-27-94

LOGGER CODE: ~~NA~~ SAIC JMD 7-27-94 FIELD REP: ~~NA~~ M. KLIDZEJS JMD 7-27-94

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: HNU MODEL NO.: P101

SERIAL NO.: # SAIC 0003

DATE/TIME CALIBRATION 6/22/94/0730 ACCEPTANCE CODE: ~~NA~~ A JMD 7-27-94

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 ISOBUTYLENE 39193	1 100 PPM
2 NA	2 NA

COMMENTS /mk 6/22/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
1452	—			0.0				BACKGROUND
1457	B406D1					0.0	0.2-0.7	

MK 6/22/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/22/94
FORM COMPLETED BY / DATE

[signature] 7/27/94
TECHNICAL REVIEWER / DATE

258

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORING: B406 PZ

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.: 34

FACILITY CODE: ~~NA~~ MND16 JHD 7-27-94

LOG DATE: 06/23/94

LOCATION ID: B406

LOCATION TYPE: ~~NA~~ BH JHD 7/27/94

LOGGER CODE: ~~NA~~ SAIC JHD 7-27-94

FIELD REP: ~~NA~~ M. KLIDZETS JHD 7/27/94

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: HNU

MODEL NO.: PI01

SERIAL NO.: SAIC 0021

DATE/TIME CALIBRATION 6/23/94/0720

ACCEPTANCE CODE: ~~NA~~ A JHD 7/27/94

CALIBRATION GASES			
TYPE/CYLINDER ID NO.		CONCENTRATION (PPM)	
1	ISOBUTYLENE 39193	1	100 PPM
2	NA	2	NA

COMMENTS: MK 6/23/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
0900	~~NA~~	NA	NA	0.0	NA		~~NA~~	BACKGROUND BZ
0911						0.0		0-2
0913						0.0		2-4
0917								4-6
0919				0.0				—
0920						0.0		6-8
0926						0.0		8-10
0937				0.0				—
0948						0.0		12-14
0950				0.0				—
0955						0.0		14-16
1002						0.0		16-18
1007						0.0		18-20
~~1013~~						0.0		20-22
1015				0.0				—

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/25/94
FORM COMPLETED BY / DATE

[signature] 7-27-94
TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS
B406 p. 259

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO: 34896

FACILITY CODE: MND16
LOG DATE: 6/23/94
LOCATION ID: B406
LOCATION TYPE: ~~NA~~ BH JHD 7-27-94
LOGGER CODE: ~~NA~~ SAIC JHD 7/27/94
FIELD REP: ~~NA~~ B. KUDZEJS
FLAME IONIZATION DETECTOR INSTRUMENT: HNU MK 6/23/94 PI 101
MANUFACTURER: ~~OVA-1 FOXBORO~~
MODEL NO.: ~~OVA-128~~ MK 6/23/94
SERIAL NO.: SAIC 0021
DATE/TIME CALIBRATION 6/23/94/0720
ACCEPTANCE CODE: ~~NA~~ A JHD 7-27-94

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 ISOBUTYLENE 39193	1 100 ppm
2 NA	2 NA

COMMENTS MK 6/23/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
1025	NA	NA	NA		NA	0.0	24-26	
1035						0.0	26-28	
1043				0.0			28-30	
1046						0.0	30-32	MK 6/23/94
1057						0.0	32-34	
1111				0.0			34-36	
1117						0.0	36-38	

MK 6/23/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/23/94
FORM COMPLETED BY / DATE

7/27/94
TECHNICAL REVIEWER / DATE

260

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS B406 P.260

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE **PROJECT NO:** 348

FACILITY CODE: ~~NA~~ MND16 JHD 7/27/94 **LOG DATE:** 06/27/94

LOCATION ID B406 LOCATION TYPE ~~NA~~ BH JHD 7/27/94

LOGGER CODE: ~~NA~~ SAIC JHD 7/27/94 FIELD REP: ~~NA~~ M. KLIDZEJS

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO MODEL NO.: OVA 128

SERIAL NO.: 40478 JHD 7/27/94

DATE/TIME CALIBRATION 6/27/94 **ACCEPTANCE CODE:** ~~NA~~ A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE / 35323	1 100 PPM
2 NA	2 NA

COMMENTS /MK 6/27/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
0854		NA	NA	0.0	NA			
0901	BH0602					0.0	43-45	
0917	BH0602					0.0	45-47	
0922				0.0				MK 6/27/94
0938	BH0602					0.0	47-48.5	
0949						0.0	49-51	
1010				0.0				
1233				0.0			55	
1245						0.0	55-57	
1300						0.0	57-59	
1335				0.0			60	AUGERLINER
		MK 6/27/94						

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/27/94 — FORM COMPLETED BY / DATE

[signature] 7-27-94 — TECHNICAL REVIEWER / DATE

BOREHOLE OR WELL PLUGGING / ABANDONMENT

B406 P.261

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SITE ID NUMBER: B406 DATE PLUGGED 06 / 27 / 94

SITE COORDINATES: N: NA E: NA DEPTH BLS (ft) 63.0 FT BGS

TYPE OF CASING: NA

CASING DIAMETER (ID) (in.) NA GROUND ELEVATION (ft msl) NA

SCREENED ELEVATION (ft msl) NA

GEOLOGIC MATERIAL AT SCREEN NA - LIMESTONE (?) AT AUGER REFUSAL AT 63.0 FT BGS

AMOUNT OF CASING REMOVED (ft) NA

PLUGGING MATERIAL SOUTHWESTERN TYPE I PORTLAND CEMENT (9 - 94 LBS BAGS) AQUAGEL GOLDSEAL NON-TREATED BENTONITE (2 - 50 LB. BAGS) POTABLE WATER

APPROX. VOLUME OF PLUGGING MATERIAL (cu ft.) 150 GALS.

PLUGGING METHOD GROUT MIXED IN TUB AND IS PUMPED THROUGH FLO PUMP, THROUGH HOSE AND INTO AUGER ~~OPEN~~ MK 6/27/94 AUGERS

~~REMARKS~~ RAISED AND REMOVED AS GROUT LEVEL IS RAISED. GROUT BROUGHT TO GROUND SURFACE. AUGERS APPEARED MUDDY & WET UPON REMOVAL. CUTTINGS PLACED INTO OPEN TOP 55 GAL DRUMS. DRUMS LABELED.

MK 6/27/94

RECORDED BY: [signature] 6/27/94 (Signature) CHECKED BY: [signature] 7-27-94 (Signature)

SAMPLE LOG SHEET

266

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B4Ø6Ø1 DATE COLLECTED (MM/DD/YY): 06/22/94 TIME (HH:MM): 1457

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: NA

POINT CODE: B4Ø6

DESCRIPTION: NA

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH ~~0.00~~ 0.2 TO ~~2.00~~ 0.7 FT MK 6/22/94

SAMPLE TYPE:

- [X] GRAB
- [X] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: SEE FIELD ACTIVITY LOG PG 213

MK 6/22/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/22/94

RECORDED BY: [signature] 6/22/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø6Ø1

267

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	FN0006	SEE SAMPLE MANAGER LOG		COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

MK 6/22/94

SAMPLE ID'S RINSATE: EQ0015 TRIP BLANK: TB0006 FIELD BLANK: ~~NA~~ AB0009 MK 6/30/94 FIELD DUPLICATE: NA

RECORDED BY: [signature] 6/22/94 (SIGNATURE) QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

268

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: B4Ø6Ø2 DATE COLLECTED (MM/DD/YY): ~~06/23/94~~ MK 6/27/94 06/27/94 TIME (HH:MM): ~~1130~~ 0901 MK 6/27/94

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: NA

POINT CODE: B4Ø6

DESCRIPTION: NA

SAMPLE -

MEDIA CODE: Ø2

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~0.00~~ 43.0 TO ~~0.00~~ 48.5 FT

FIELD OBSERVATIONS: SEE ACTIVITY LOG.

MK 06/23/94

SAMPLE TYPE:

- [X] GRAB
- [X] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: ~~[X] YES~~ MK 06/27/94 [X] NO FIELD CHANGE ORDER REFERENCE NO: N/A

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

~~SAMPLE COLLECTED FROM 3 SPLIT SPOONS (38-40, 40-42, 42-44, 44-46) TO OBTAIN~~ MK 6/23/94 ~~SUFFICIENT VOLUME~~ MK 6/23/94 SAMPLE COLLECTED FROM 43.0'-48.5 FT BASED ON ANTICIPATED DEPTH OF WATER TABLE. WATER WAS NOT ENCOUNTERED. 3-IN SPLIT SPOONS FROM 49.0 TO 55 FT WERE REFUSED WITH NO RECOVERY. ~~THEREFORE~~ COMPETENT BEDROCK & AUGER REFUSAL AT 63 FT. SAMPLE IS 20 TO 14.5 FT ABOVE TRUE BEDROCK. MK 6/27/94

RECORDED BY: [signature] 6/27/94 (SIGNATURE) QA CHECKED BY: [signature] 6/27/94 (SIGNATURE) 7-27-94

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø6Ø2

269

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	FN007	SEE SAMPLE MNGRS LOGBOOK		COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		MK 6/27/94					

SAMPLE ID'S RINSATE: ER0015 ~~16~~ MK 6/30/94 TRIP BLANK: TBN007 ~~TBN006~~ MK 6/30/94 FIELD BLANK: AB0009 FIELD DUPLICATE: N/A

RECORDED BY: [signature] 6/27/94 (SIGNATURE) QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

270

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: B40621 DATE COLLECTED (MM/DD/YY): 06/23/94 TIME (HH:MM): 0943
0930 MK 6/23/94

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: NA

POINT CODE: B406

DESCRIPTION: NA

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 inches)

DEPTH ~~0.00~~ TO ~~0.00~~ ~~FT~~ MK 6/23/94
10.00 12.00 FT - SHELBY TUBE
6.0 TO 24.00 FT

SAMPLE TYPE:

- [x] GRAB MK 6/23/94
- [x] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [x] OTHER (SPECIFY) SHELBY TUBE

FIELD OBSERVATIONS: SHELBY TUBE COLLECTED FROM 10 TO 12 FT BGS. BUCKET COMPOSITED COLLECTED FROM 2IN DIAMETER SPLIT SPOONS DRIVEN BETWEEN 6.0 AND 24.00 FT BGS

SAMPLE COLLECTED: [x] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [x] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/23/94

RECORDED BY: [signature] (SIGNATURE) QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø621

271

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-Ø	SHELBY	GEOTECHNICAL	Cool,4C	FNØIØB	SEE SAMPLE MANAGER LOG	N/A	SINGLE
1-19	BUCKET	GEOTECHNICAL	Cool,4C	FNØIØB	↓	NA	SINGLE

MK 6/23/94

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: [signature] 6/23/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

272

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: B4Ø622 DATE COLLECTED (MM/DD/YY): 06/23/94 TIME (HH:MM): 1046

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: N/A

POINT CODE: B4Ø6

DESCRIPTION: N/A

SAMPLE -

MEDIA CODE: Ø2

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~Ø.ØØ~~ TO ~~Ø.ØØ~~ FT

30.0 TO 38.0

SAMPLE TYPE:

- [X] ~~GRAB~~ MK 6/23/94
- [X] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: COMPOSITE BUCKET SAMPLE ONLY. COLLECTED FROM 2 IN DIAM SPLIT SPOON CUTTINGS FROM 30.0 TO 38.0 FT BGS MK 6/23/94

MK 6/23/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: N/A

IF SAP WAS NOT FOLLOWED; SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/23/94

RECORDED BY: [signature] (SIGNATURE) QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

SAMPLE LOG SHEET

273

SAMPLE ID NUMBER: B4Ø622

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
~~1-Ø~~	~~SHELBY~~	~~GEOTECHNICAL~~	~~Cool,4C~~				~~SINGLE~~
1-19	BUCKET	GEOTECHNICAL	Cool,4C	FN0100	SEE SAMPLE MANAGER LOG	NA	SINGLE
			MK 6/23/94				

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: [signature] 6/23/94 (SIGNATURE)

QA CHECKED BY: [signature] 7-27-94 (SIGNATURE)

EG & G MOUND

OU5 NEW PROP

EXTND PHASE

SOIL BORING

LOGBOOK

B407 - B409

SOIL BORINGS
LOG BOOK

B407 B408 B409

PROJECT TITLE: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE RI/FS FIELD INVESTIGATIONS

WORK SITE: *MOUND PLANT*
Miamisburg, Ohio
OU5 New Property

ACTIVITY: *Mound OU5 New Property Phase 1 RI/FS*
Field Investigations

CONTRACT #: *BOA 52264*
TASK ORDER: *34896*

PROJECT MANAGER: *Thomas Tank*
COMPANY NAME / ADDRESS: *Science Applications International Corporation*
4031 Colonel Glenn Hwy ,Dayton, Ohio 45431
TELEPHONE NUMBERS: *(513) 429-2699*

SUPERVISORS: *OU5 Manager: Alan Spesard (513)865-3859*
SAIC Proj. Manager: Thomas Tank (513)429-2699

EMERGENCY RESPONCE: *Police / Ambulance / Fire 911 or 865-4040*

PROCEDURES: *SOP 1.1, SOP 2.2, SOP 3.1, SOP 4.1, SOP 4.3, SOP 4.4, SOP 5.1, SOP 6.1, SOP 6.3*

START DATE: 6/15/94
END DATE: 6/28/94

TABLE OF CONTENTS SOIL BORINGS

B407 B408 B409 p. I

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
1	Activity log sheet - B407; 6/20/94	31	NO ENTRY
2	" ; 6/21/94	32	
3	" ; "	33	
4	" ; "	34	
5	NO ENTRY	35	
6		36	
7		37	
8		38	
9		39	
10		40	
11		41	CGI MONITOR DATA - B407
12		42	"
13		43	NO ENTRY
14		44	"
15		45	FID FIELD DATA - B407
16		46	"
17	BOREHOLE LOG - B407	47	NO ENTRY
18	"	48	"
19	"	49	BOREHOLE ABAND. LOG - B407
20	NO ENTRY	50	NO ENTRY
21		51	KEY SHEET
22		52	NO ENTRY
23		53	"
24		54	SAMPLE LOG SHEET; B407Ø1
25		55	" ; "
26		56	" ; B4Ø7Ø2
27		57	" ; "
28		58	" ; B4Ø721
29		59	" ; "
30		60	NO ENTRY

TABLE OF CONTENTS SOIL BORINGS

B407 B408 B409 p II

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
61	NO ENTRY	91	NO ENTRY
62	SAMPLE LOG SHEET; B407Z3	92	
63	" ; "	93	
64	NO ENTRY	94	
65		95	
66		96	
67		97	
68		98	
69		99	
70		100	
71		101	
72		102	
73		103	
74		104	
75		105	
76		106	
77		107	ACTIVITY LOG SHEET - B408; 6/15/94
78		108	" ; 6/16/94
79		109	" ; "
80		110	" ; "
81		111	" ; "
82		112	" ; "
83		113	" ; "
84		114	" ; 6/20/94
85		115	" ; "
86		116	NO ENTRY
87		117	
88		118	
89		119	
90		120	

TABLE OF CONTENTS SOIL BORINGS

B407 B408 B409 P. III

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
121	NO ENTRY	151	FID FIELD DATA - B408
122	"	152	
123	BOREHOLE LOG - B408	153	
124	"	154	
125	"	155	BOREHOLE ABANDON. LOG - B408
126	"	156	NO ENTRY
127	NO ENTRY	157	KEY SHEET
128		158	NO ENTRY
129		159	"
130		160	SAMPLE LOG SHEET; B40801
131		161	" ; "
132		162	" ; B40802
133		163	" ; "
134		164	" ; B40821
135		165	" ; "
136		166	" ; B40822
137		167	" ; "
138		168	NO ENTRY
139		169	
140		170	
141		171	
142		172	
143		173	
144		174	SAMPLE LOG SHEET; W40801
145		175	" ; "
146		176	NO ENTRY
147	CGI MONITOR DATA - B408	177	"
148		178	SAMPLE LOG SHEET; B40811
149		179	" ; "
150		180	NO ENTRY

TABLE OF CONTENTS SOIL BORINGS

B407 B408 B409 p. IV

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
181	NO ENTRY	211	NO ENTRY
182		212	"
183		213	Activity LOG SHEET - B409; 6/28/94
184		214	" ; "
185		215	" ; "
186		216	" ; "
187		217	NO ENTRY
188		218	
189		219	
190		220	
191		221	
192		222	
193		223	
194		224	
195		225	
196		226	
197		227	
198		228	
199		229	BOREHOLE LOG - B409
200		230	"
201	GW QUAL. SPLG. RECORD; W40801	231	NO ENTRY
202	" ; B408	232	
203	" ; "	233	
204	NO ENTRY	234	
205	GW QUAL. SPLG. RECORD-ALK; W40801	235	
206	NO ENTRY	236	
207	"	237	
208	GROUNDWATER LEVEL DATA; B408	238	
209	STANDARD ELEC. COND. DATA	239	
210	NO ENTRY	240	

TABLE OF CONTENTS SOIL BORINGS

B407 B408 B409 p. I

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
241	NO ENTRY	271	NO ENTRY
242		272	
243		273	
244		274	
245		275	
246		276	
247		277	
248		278	
249		279	
250		280	
251		281	
252		282	
253	CGI MONITOR DATA - B409	283	
254	NO ENTRY	284	
255		285	
256		286	
257	FID FIELD DATA - B409	287	
258	NO ENTRY	288	
259		289	
260		290	
261	BOREHOLE ABAND. LOG - B409	291	
262	NO ENTRY	292	
263	KEY SHEET	293	
264	NO ENTRY	294	
265	"	295	
266	SAMPLE LOG SHEET; B40901	296	
267	" ; "	297	
268	" ; B40902	298	
269	" ; "	299	
270	NO ENTRY	300	

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS B407 P-1

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/20/94 TIME: 1420 : 1615 PAGE 1 OF 1

Task Team Members:

Mike Kidzejs — John Keifer

Evelyn — Ray Moss

Allan Wolfe — AK 6/20/94

Narrative (include time and location):

1420 SAIC & Bowser crew arrive at ~~B407~~ B407 site. Drill rig & augers appear clean. Rig was ordered at approx 12:30 – 1330. Rig set up over stake marked B407. SAIC crew sets up to sample. 1447 take background readings w/ OVA & LEL. 1500 collect sample B407D1. 1525 collect geotechnical sample B407U1 (bucket portion). Rain starts at ~ 1523. Rained during collection of bucket sample. 1547 collect Shelby tube portion of sample. Waiting for Ray Moss to return (he left site at ~ 1510). 1615 decide to end for the day – Ray Moss not yet on site. Borehole is covered in plastic. Drill crew secures rig. SAIC crew loads equipment.

MK 06/20/94

Daily Weather Conditions: A.M. MK 6/20/94

P.M. Temp low 90's, humid. S breeze. Storms late in afternoon

Recorded By [signature] 06/20/94 QA Checked By [signature] 6/27/94

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TASK TEAM ACTIVITY LOG SHEET — **SOIL BORINGS**

B407 p.2

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/21/94 TIME: 0820 : 1634 PAGE 1 OF 3

Task Team Members:

MIKE KLIDZEJS - SAIC
EVELYN HARTZELL SAIC
ALLAN WOLFE - BOWSER
JOHN KEIFER - BOWSER
RAY MOSS - MOUND HP
MK 06/21/94

Narrative (include time and location):

0820 SAIC CREW ARRIVES AT B407 SITE. RAY MOSS ON SITE. BOWSER CREW HAS MOVED THE RIG OFF B407 LOCATION TO PULL CABLE-TOOL RIG UP MUDDY HILL. 0930 DRILL CREW RETURNS TO SITE W/ RIG. RIG IS SET UP OVER B407 LOCATION. 0933 TAKE BACKGROUND BZ LEL 4 OVA READINGS. ~~AUGERS ARE SET UP APPROX. 1FT OFFSET FROM THE LOCATION OF THE B40701 COLLECTION. WILL THEREFORE RUN 1ST 2 IN SPOON FROM 0.0-2.0 FT BGS~~ MK 6/21/94 MK 6/21/94 MK 6/21/94 0939 COLLECT 2.0-4.0 SPOON FIDDLER = ND ABOVE BCKGND. 0945 COLLECT 4.0-6.0 FIDDLER = ND ABOVE BCKGND. 0952 COLLECT 6.0-8.0 FIDDLER = ND 0957 COLLECT 8-10 FIDDLER = ND. DRILL CREW RIGS UP A SHELBY TUBE TO COLLECT GEOTECH SAMPLE B40722 FROM 10-12 FT BGS (POSSIBLE ZONE TWO - TRANSITION ZONE BETWEEN SURFACE CLAYS AND SUBSURFACE GRAVELS & SANDS). BEGAN COLLECTING B40723 GEOTECH COMPOSITE BUCKET AT 6 FT. (ZONE 2 - TRANSITION ZONE) AT 0952. 1007 DRILLER REPORTS THAT SHELBY TUBE WAS REFUSED AFTER ADVANCING APPROX 2 IN. - NOT COLLECTED 1013 COLLECT 10-12 FT SPLIT SPOON. FIDDLER = ND

Daily Weather Conditions: A.M. TEMP LOW 80's (0830) CLEAR, CALM

P.M. TEMP LOW 90'S PARTLY SUNNY

Recorded By [signature] 06/21/94 QA Checked By [signature] 6/27/94

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

B407 P.3

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/21/94 TIME: 0820 : 1634 PAGE 2 OF 3

Task Team Members:

SAME AS Pg 2

Narrative (include time and location):

END COLLECTION OF ~~BO~~ B40723 BUCKET SAMPLE MK 6/21/94 AT 10 FT. - NOTE WITH CHANGE - POSSIBLE WEATHERED BEDROCK.

1023 COLLECT 12-14 SS FIDLER = ND 1030 COLLECT 14-16 SS DRILLER REPORTS ENCOUNTER OF BEDROCK AT 15.7 FT BGS FIDLER = ND 1050 BASED ON SPLIT-SPOON REFUSAL & ENCOUNTER OF FAIRLY COMPETENT SHALE AT ~ 15.7 FT - WILL STOP DRILLING, MOVE RIG OVER ~2 FT, DRILL TO 10 FT BGS AND BEGIN COLLECTION OF B40702 1100 BEGIN PULLING AUGERS FROM ORIGINAL BOREHOLE 1105 DRILL RIG MOVED APPROX. 2 FT NW FROM ORIGINAL BOREHOLE LOCATION. PLASTIC LAID DOWN AROUND BOREHOLE TO COLLECT CUTTINGS. 1010 BEGIN AUGERING. 1011 ENCOUNTERED OBSTRUCTION. MOVE RIG AN ADDITIONAL 1 FT NW FROM ORIGINAL BOREHOLE LOCATION MK 6/21/94 1118 FINISH ADVANCING AUGER TO 10.0 FT BGS. RIG UP W/ ~~2~~ 3 IN DIAM SPLIT SPOON MK 6/30/94 1132 COLLECT 1ST SS FOR SAMPLE B40702 COLLECT VOC FRACTION MIX REMAINDER IN STAINLESS BOWL

Daily Weather Conditions: A.M. SEE Pg 2

P.M.

Recorded By [signature] 06/21/94 QA Checked By [signature] 6/27/94

4

TASK TEAM ACTIVITY LOG SHEET — **SOIL BORINGS** B407 P.4

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/21/94 TIME: 0820 : 1634 PAGE 3 OF 3

Task Team Members:

SAME AS PAGE 2

Narrative (include time and location):

RIG W/ 2ND SPLIT SPOON 1145 COLLECT 2ND FIDLER = 0 ND ONLY GOT ~.5 FT RECOVERY OF HUGGER TO 13.0 FT – RIG W/ 3RD SPOON 1155 COLLECT 3RD SPLIT SPOON FOR THE SAMPLE FIDLER = ND 1202 SAMPLE IN COOLER COOLER TEMP = 6°C SAMPLES ON FIELD C-O-C W/ FN004 1220 DRILL CREW LEAVES SITE FOR LUNCH. SAIC CREW LEAVES SITE AFTER LOADING EQUIPMENT TRANSFER CUSTODY OF SAMPLES TO JOLLETTA 1400 ~~ARRIVE~~ RETURN TO BH07 SITE TO ABANDON BOREHOLE 1420 DRILLERS LEAVE SITE TO GET EMPTY DRUMS SAIC CREW LOADS EQUIPMENT.
500 DRILL CREW RETURNS TO SITE, PREPARES TO GROUT BOREHOLES (SEE PG 49 FOR ABANDONMENT DETAILS). @ 1604 CUTTING SHOVELED INTO OPEN-TOP DRUMS. DRUMS LABELED 1634 SAIC & DRILL CREW LEAVE SITE.

MK 6/21/94

Daily Weather Conditions: A.M. SEE PG. 2

P.M.

Recorded By [signature] 06/21/94 QA Checked By [signature] 6/27/94

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BOREHOLE LOG (SOIL) — **SOIL BORINGS** B407 P.17

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **PROJECT NO:** 34896

JMD 10/4/94 — JMD 10-4-94 — Page 1 of 3

FACILITY CODE: ~~NA~~ MND16 — **DRILLER CODE:** ~~NA~~ BOWS

LOCATION ID: B407 — **COMPLETION DATE** 06 /21 /1994

COORDINATES (FT): — **DIAMETER (IN):** 8IN

NORTH NA — EAST NA — **DEPTH (FTFD):** ORIGINAL BH – 15.7 OFFSET BH 15.0 B

GROUND ELEVATION (FT MSL) JMD 10-4-94 — **CONSTRUCTION METHOD:** HOLLOW STEM AUGER/SPLIT SPOON

LOCATION TYPE: ~~NA~~ BH — **ACCEPTANCE CODE:** ~~NA~~ A JMD 10/4/94

COMMENTS: MK 6/21/94

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
GROUNDWATER NOT ENCOUNTERED		

LOCATION DESCRIPTION

SEE ACTIVITY LOG

MK 6/21/94

JMD 10/4/94

LITHOLOGIC LOG — **LOGGER CODE:** ~~NA~~ SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0.0-0.5	0.0-0.5	100%	NA	~~SPOON~~ & SCOOP	B40701	NA	NA	OH	2.5Y 2.5/1 CLAYEY TO SILTY
			MK 6/20/94						SOIL W/ ABUNDANT
									ROOT MATERIAL, MINOR
				MK 6/20/94					ROCK (LIMESTONE) FRAGMENTS
0.0-2.0	0.5-2.0	1.4FT	~~NA~~	~~NA~~ SHELBY TUBE	~~NA~~ MK 6/21/94	NA	NA	~~NA~~	SHELBY TUBE COLLECTED
									COULD NOT EXAMINE LITH.
~~0.0-2.0~~ 2.0-4.0	MK 6/20/94		NA MK 6/20/94	S	MK 6/20/94		24		(SEE ACT. SECT.)
	~~2.0-4.0~~	~~1.5FT~~				14/8/11/13	~~24~~ MK 6/20/94		
	2.0-2.6	1.5	NA					OH	2.5Y 3/2 MOIST CLAY W/
	~~2.6-3.1~~	MK 6/20/94							ABUNDANT ORGANICS
	2.6-3.1		NA						2.5Y 6/1 MOTTLED W/ 2.5Y
									7/1 – 7/2 SILTY CLAY, MOIST

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
- A - AIR ROTARY
- B - BORED OR AUGERED
- C - CABLE - TOOL
- D - DUG
- H - HYDRAULIC - ROTORY
- J - JETTED
- P - AIR - PERCUSSION
- R - REVERSE ROTERY
- T - TRENCHING
- V - DRIVEN
- W - DRIVE AND WASH
- Z -OTHER (SPECIFY)

SAMPLE METHODS:
- A - AUGER CUTTINGS
- S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
- U - 3" O.D. 2.42" I.D. TUBE SAMPLES
- T - 3" O.D. THIN-WALLED SHELBY TUBE
- O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/21/94 — FORM COMPLETED BY / DATE

6/27/94 — TECHNICAL REVIEWER / DATE

18

BOREHOLE LOG (SOIL)

SOIL BORINGS

B407 p. 18

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

JMD 10/4/94 JMD 10/4/94 Page 2 of 3

FACILITY CODE: ~~NA~~ MND16

DRILLER CODE: ~~NA~~ BOWS

LOCATION ID: B407

COMPLETION DATE 6 /21/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
						MK 6/21/94			W/ ABUNDANT 2.5Y 7/1
						~~10/21/20/21~~			MK 6/21/94 ~~MICRITIC TO~~ FOSSILIFEROUS
									LIMESTONE
4.0-6.0	4.0-4.5	1.1	NA	S	NA	10/21/20/21	41	OH	MK 6/21/94 ~~SAME AS~~ 2.5Y 3/2
									MOIST CLAY
	4.5-5.1		NA	S	NA				2.5Y 6/2 SILTY CLAY W/ ABUND
									MICRITIC TO FOSSILIFEROUS LIMESTONE
6.0-8.0	6-8	1.5	NA	S	NA	8/15/22/29	51	OH	SAME AS ABOVE
8.0-10.0	8-10	1.4	NA	S	NA	7/15/25/22	47	OH	SAME AS ABOVE
10.0-12.0	10-12	0.5	NA	S	NA	50/4	NA	CL	5Y 5/2 CLAYEY SILT
									LOOKS LIKE WEATHERED
									BEDROCK SHOWING
									POSSIBLE RELICT BEDDING (THIN
									OR LAMINATIONS
12.0-14.0	12.0-12.8	1.2	NA	S	NA	15/50/5	NA	CL	5Y 6/3 ORG. CLAYEY SILT
									SOME (MINOR) SMALL
									L.S. FRAGMENTS
	12.8-0.4		NA		NA		~~NA~~ MK 6/21/94	NA	MK 6/21/94 ~~2.5Y 7/1~~ 2.5Y 7/1
									THINLY BEDDED (~2MM)
									WEATHERED BEDROCK
									SLIGHLTY CLAYEY TO
	MK 6/29/94								SILTY, CRUMBLY
14.0-16	~~6.0~~	0.6	NA	S	NA	41/50/1	NA	NA	SAME AS ~~ABOVE~~ BECOMING
									MK 6/21/94 ~~POSSIBLY SOME~~ HARDER
									BEDDING APPARENT.
									SHALE.
						MK 6/21/94			

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MK 6/21/94 — FORM COMPLETED BY / DATE

~~DAH 6/27/94~~ — TECHNICAL REVIEWER /

BOREHOLE LOG (SOIL)

SOIL BORINGS
B407 p. 19

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.: 34896

FACILITY CODE: MND16

LOCATION ID: B407

DRILLER CODE: BOWS

COMPLETION DATE 06/21/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
10-12	10-12	1.6	NA	U	B40702	15/57/80/3	NA	NA	(SEE ACTIVITY LOG)
									RE-DRIVING INTERVAL
									TO COLLECT SAMPLE
									B40702 - 3FT OFFSET
									FROM ORIGINAL BH
									(SEE ~~NEXT~~ PG 18 FOR
									DESCRIPTION)
12-14	12-12.6	0.6	~~0.6~~ NA	U	B40702	UNK	NA	NA	
~~13-15~~ 13-15	13-14	1.0	NA	U	B40702	51/65/2	NA	NA	

MK 6/21/94

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/21/94
FORM COMPLETED BY / DATE

6/27/94
TECHNICAL REVIEWER /

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — SOIL BORINGS

B407 p.41

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOG DATE: 6/20/94

LOGGER CODE: SAIC — FIELD REP: M. KLIDZEJS

CGI MANUFACTURER: IS MX 251 — CGI MODEL NO.: MX 251

SERIAL NO.: 9306099-0061 — CALIBRATION DATE/TIME: 6/20/94/0705

ACCEPTANCE CODE: A — BATTERY CONDITION OK

CALIBRATION GAS (%LEL)

TYPE PENTANE — CONCENTRATION ~~0.75~~ 50 % LEL (JHD 6/27/94) — CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM)

TYPE NA — CONCENTRATION NA PPM — CYLINDER SERIAL NO NA

COMMENTS: MK 6/20/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B407	NA	NA	1448	BH- ~~BACKGROUND~~	000	NA	20.6
SAMPLE B40201	NA	NA	1500	SL	000	NA	20.6
			LAST ENTRY				

MK 06/20/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 06/20/94 — FORM COMPLETED BY / DATE

[signature] 6/27/94 — TECHNICAL REVIEWER / DATE

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COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — SOIL BORINGS

B407 p.42

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 3489

FACILITY CODE: MND16 — **LOG DATE:** 6/21/94

LOGGER CODE: SAIC — FIELD REP: M. KLIDZEJS

CGI MANUFACTURER: INDUSTRIAL SCIENT. — CGI MODEL NO.: LEL/O2 MX 251

SERIAL NO.: 9306099 - 061 — CALIBRATION DATE/TIME: 6/21/94 / 0730

ACCEPTANCE CODE: A — BATTERY CONDITION GOOD

CALIBRATION GAS (%LEL) TYPE LEL PENTANE CONCENTRATION 50 % LEL — CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM — CYLINDER SERIAL NO NA

COMMENTS: MX 6/21/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE JHD 6/27/94	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B407 BACKGROUND BZ	NA	NA	0933	~~BZ~~ BH	000	NA	20.7
B407			0939	2-4	000		20.6
B407			0945	4-6	000		20.6
BZ			0947	NR	000		20.6
			0953	6-8	000		20.6
			0957	8-10	000		20.6
BZ			1005	NR	000		20.6
				10-12	000		20.6
BZ			1022	12	000		20.6
			1024	12-14	000		20.6
			1030	14-16	000		20.6
BZ			1119	10FT	000		20.6
			1132	10-12	000		20.6
			1145	12-12.6	000		20.6
BZ			1154	NR	000		20.6

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 06/21/94 — FORM COMPLETED BY / DATE

[signature] 6/27/94 — TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS
B407 p.45

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO.: 34896

FACILITY CODE: MND16
LOG DATE: 06/20/94
LOCATION ID: B407
LOCATION TYPE: BH
LOGGER CODE: SAIC
FIELD REP: Mike Kuidzess

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO
MODEL NO.: OVA 128
SERIAL NO.: 9000025209
DATE/TIME CALIBRATION 6/20/94 0705
ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE 39562	1 100 ppm
2 NA	2 NA

COMMENTS MK 6/20/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
1448	B407	NA	NA	0.0	NA	NA	NA	BACKGROUND BREATHING ZONE
1500	B407001	NA	NA	NA	NA	0.0	0.0-0.5	SAMPLE
			LAST ENTRY					
			MK 6/20/94					

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/20/94
FORM COMPLETED BY / DATE

[signature] 6/27/94
TECHNICAL REVIEWER / DATE

46

FLAME IONIZATION DETECTOR FIELD DATA — SOIL BORINGS

B407 P. 46

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO.: 34896

FACILITY CODE: MND16 — LOG DATE: 06/21/94

LOCATION ID B407 — LOCATION TYPE BH

LOGGER CODE: SAIC — FIELD REP: OVA 128

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO OVA 128 — MODEL NO.: OVA 128

SERIAL NO.: 40694

DATE/TIME CALIBRATION ~~6/20~~ 6/21/94/0735 — ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE 39562	1 100 PPM
2 NA	2 NA

COMMENTS MC 6/21/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
0938	B407	NR	NA	0.0	NA		NA	BACKGROUND
0939				NA		0.0	2-4'	2-4
0945				NA		0.0	4-6'	4-6
0947				0.0		NA	NA	NONE
0952				NA		0.0	6-8'	6-8
				NA		00	8-10'	8-10
1005				0.0		NA	NA	NONE
				NA		0.0	10-12'	10-12
1022				0.0		NA	NA	NONE
1023				NA		0.0	12-14'	12-14
~~0930~~ 1030	MC 6/21/94			NA		0.0	14-16'	14-16
1119				0.0		NA	10'	10FT
1132				NA		0.0	10-12'	10-12
1145				NA		0.0	12-12.6	12-12.6
1154				0.0		0.0	NA	NONE

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/21/94
FORM COMPLETED BY / DATE

[signature] 6/27/94
TECHNICAL REVIEWER / DATE

BOREHOLE OR WELL PLUGGING / ABANDONMENT B407 p.49

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY; EXTENDED PHASE PROJECT NO: 34896

SITE ID NUMBER: B407 DATE PLUGGED 06 / 21 / 94

SITE COORDINATES: N: NA E: NA DEPTH BLS (ft) ORIGINAL BH = 15.7 OFFSET = 15.0

TYPE OF CASING: NONE

CASING DIAMETER (ID) (in.) NA GROUND ELEVATION (ft msl) N/A

SCREENED ELEVATION (ft msl) NA

GEOLOGIC MATERIAL AT SCREEN NA

NA

AMOUNT OF CASING REMOVED (ft) NA

PLUGGING MATERIAL SOUTHWESTERN TYPE I PORTLAND CEMENT (94 LBS) AQUAGEL GOLDSEAL 100% NON-TREATED BENTONITE POTABLE WATER

APPROX. VOLUME OF PLUGGING MATERIAL (cu ft.)

PLUGGING METHOD FOR B407 ORIGINAL BOREHOLE WAS TAGGED AT 4.7 FT BGS INDICATING CAVE IN FROM 16.0 - 4.7 ft. GROUT MIXED IN BARREL

REMARKS PUMPED THROUGH RIG INTO BOREHOLE TO GROUND SURFACE. OFFSET BOREHOLE TAGGED AT 13.7 FT BGS. GROUT PUMPED THROUGH RIG, THROUGH HOSE PLACED INSIDE OF AUGERS. AUGERS REMOVED SEQUENTIALLY AS GROUT IS EMPLACED. GROUT BROUGHT (IN BOTH HOLES) TO GROUND SURFACE.

MK 6/21/94

RECORDED BY: [signature] MK 6/21/94 (Signature) 6/21/94

QA CHECKED BY: [signature] 6/27/94 (Signature)

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SAMPLE LOG SHEET

B407 p.54

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B407Ø1 DATE COLLECTED (MM/DD/YY) 06/20/94 TIME (HH:MM): 1500

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROPERTY

POINT CODE: B407

DESCRIPTION: BORING B407

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO ~~2.ØØ~~ 0.5 MK 06/20/94 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: SAMPLE COLLECTED FROM 0.0 TO 0.5 FT BGS. VEGETATION AT THE LOCATION WAS REMOVED DURING SITE PREP. SAMPLE COLLECTED W/ SPADE & SCOOP

MK 6/20/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: N/A

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/20/94

RECORDED BY: [signature] 06/20/94 (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø7Ø1

B407 p. 55

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
				NPC0004			
1-12Ø	WM Glass	CLPVOA	Cool,4C	FN003	SEE SAMPLE MANAGER LOG	SEE PREP LOT # LOG	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			LAST ENTRY				
		MK 6/20/94					

SAMPLE ID'S RINSATE: ER0015 TRIP BLANK: TB0004 ~~FIELD BLANK~~ AMBIENT: AB0009 MK 6/20/94 FIELD DUPLICATE: NO

RECORDED BY: 6/20/94 (SIGNATURE) QA CHECKED BY: 6/23/94 (SIGNATURE)

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SAMPLE LOG SHEET

B407 p. 56

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B4070 2 DATE COLLECTED (MM/DD/YY): 6/21/94 TIME (HH:MM): 1132

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B407

DESCRIPTION: BORING B407

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~0.00~~ 10.0 TO ~~0.00~~ 15.0 FT

JMD 6/27/94

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: SEE ACTIVITY LOG

MK 6/21/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/21/94

RECORDED BY: [signature] 6/21/94 (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B40702

B 407 p. 57

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
				NPC005			
1-120	WM Glass	CLPVOA	Cool,4C	FN004	SEE SAMPLE LOG	MINGES	COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		LMK ENTRY					
			MK 6/21/94				

SAMPLE ID'S RINSATE: EB0016 TRIP BLANK: TBN005 FIELD BLANK: AB0009 FIELD DUPLICATE: N/A

RECORDED BY: [signature] 6/21/94 (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

SAMPLE LOG SHEET

B407 p. 58

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PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B0721 DATE COLLECTED (MM/DD/YY): 06/20/94 TIME (HH:MM): 1525

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROPERTY

POINT CODE: B407

DESCRIPTION: BORING B407

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (> 6 Inches)

DEPTH 0.00 TO ~~0.00~~ MK 06/20/94 0.5 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: BUCKET SAMPLE COLLECTED WITH DECONED SHOVEL FROM 0.0 - 0.5 FT BGS. COLLECT GEOTECHNICAL SHELBY TUBE SAMPLE FROM 0.0-2.0 FT RECOVERY = 1.4 FT

MK 06/20/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: [signature] 06/20/94 (SIGNATURE)

QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø721

B407 p. 59

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-Ø	SHELBY	GEOTECHNICAL	Cool,4C	SEE SAMPLE MAGR LOG		NA	SINGLE
1-19	BUCKET	GEOTECHNICAL	Cool,4C	↓	↓	NA	SINGLE
		LAST ENTRY					
			MK 6/20/94				

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: [signature] 06/20/94 (SIGNATURE) QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

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SAMPLE LOG SHEET

B407 p. 62

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40723 DATE COLLECTED (MM/DD/YY): 06/21/94 TIME (HH:MM): 0952

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B407

DESCRIPTION: BORING B407

FIELD OBSERVATIONS: COMPOSITE SAMPLE OF ZONE 2 (TRANSITION BETWEEN SURFACE CLAYS & SUBSURFACE)
6/22/94 - 3-11 FT INTERVAL FROM B405 ADDED.

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (> 6 Inches)

DEPTH ~~0.00~~ TO ~~0.00~~ FT MK 6/21/94

6.0 TO 10.0 FT B407 MK 6/22/94

3.0 TO 11.0 FT B405

MK 6/22/94

SAMPLE TYPE:

- [x] GRAB
- [x] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

SAMPLE COLLECTED: [x] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [x] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: N/A

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/21/94

RECORDED BY: M L Kloeffler 6/21/94 (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø723

B407 p. 63

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
~~1-Ø~~	~~SHELBY~~	~~GEOTECHNICAL~~	~~Cool,4C~~				~~SINGLE~~
1-19	BUCKET	GEOTECHNICAL	Cool,4C	FN010A	SEE SAMPLE MNGRS LOG	NA	SINGLE
		LAST ENTRY					
		MK					
			6/22/94				

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: M Kopp (SIGNATURE) QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS

B408 P107

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/15/94 TIME: 1506 : 1517 PAGE 1 OF 1

Task Team Members:

MICHAEL KLIDREJS - SAIC

ALLAN WOLFE - BOWSER

JOHN KRIFER - BOWSER

MK 06/15/94

Narrative (include time and location):

1505 RIG SET UP ON B408 BOREHOLE LOCATION/ NUMBER MARKED WITH STAKE. LOCATION IS AS MARKED ON MAP. 1517 CREW LEAVES SITE ~~RIG~~ AFTER SECURING RIG. MK 06/15/94

MK 06/15/94

Daily Weather Conditions: A.M. MK 06/15/94

P.M. PARTLY SUNNY TEMP LOW 90's

Recorded By MK Klidrejs 06/15/94 QA Checked By [illegible] 6/28/94

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TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

B408 P-108

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/16/94 TIME: 0720 : 1615 PAGE 1 OF 6

Task Team Members:

MIKE KLIDZEJS - SAIC
JOHN KEIFER
ERIC SAWYER - SAIC
RAYMOND MOSS - MOUND HP
ALLAN WOLFE - BOWSER
MK 06/16/94

Narrative (include time and location):

0720 SAIC & BOWSER CREW ASSEMBLE IN THE FIELD TRAILER FOR H&S BRIEFING 0725 BRIEFING ENDS SAIC CREW LOADS EQUIPMENT. CALIBRATE AM ~~HELIUM~~ LEL/O2 MK 6/16/94 & OVA CALIBRATION OK. DECON 2 STEEL 2" ID SPLIT SPOONS 0824 SAIC CREW ARRIVES ON SITE DRILLER PRESENT. SAIC CREW SETS UP SITE EXCLUSION ZONE SET UP AT RADIUS EQUAL TO MAST HEIGHT 0830 TAKE BACKGROUND READINGS W/ OVA & LEL 0852 BEGIN PREPARING TO COLLECT SURFACE SAMPLE BY SCRAPING SURFACE W/ DECONED SPOON VEGETATION AT BOREHOLE LOCATION WAS REMOVED EARLIER (PREVIOUS WEEK) FIRST SAMPLE WILL BE COLLECTED WITH EQUIPMENT FROM EQ RINSATE SAMPLE ER0015 Drilling rig was decontaminated on 6/15/94 and appears to be clean. Augers also appear to be clean. 0903 SAMPLE B40801 AND B40811A (FIELD DUP.) MK 6/16/94 COLLECTED USING SPADE & SCOOP FROM 0-0.5 FT VOA COLLECTED FROM GROUND, REMAINING ALIQUOTS MIXED 0913 RAY MOSS ON SITE. FIDLER BACKGROUND GROSS 8 KCPM PLUT - 170 KCPM FIDLER OF SAMPLE = NO OVER BACKGROUND 0921 COOLER TEMP @ 4°C 0930 BEGIN COLLECTING GEOTECHNICAL

Daily Weather Conditions: A.M. PARTLY SUNNY TEMP ~ 83° WINDS CALM

P.M. SUNNY TEMP ~ 94° WINDS CALM

Recorded By [signature] Eric Sawyer 06/16/94 QA Checked By [signature] 6/27/94

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

B408 p. 109

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO. 134896

Date (mm/dd/yy): 06/16/94 TIME: 0720: 1615 PAGE 2 OF 6

Task Team Members:

SAME AS PAGE 108

Narrative (include time and location):

B40821 MK 06/16/94 SAMPLER WITH SHOVEL. SAMPLE IS FROM 0.0-0.5 FT BGS, SAMPLE SOIL PLACED IN PLASTIC BUCKET 0957 DRILLERS RIG UP SHELBY TUBE TO COLLECT GEOTECHNICAL SAMPLE B40821. FILTER OF TUBE = ~~0.0~~ NO MK 6/16/94 ABOVE BACKGROUND. 1000 DRILLERS RIG UP W/ 2 IN DIAM SPLIT SPOON 1005 BEGIN HAMMERING SPOON 1006 COLLECT 2.0-4.0 SS FILTER = NO ~~ABOVE~~ ABOVE MK 6/16/94 BG. 1009 COLLECT 4.0-6.0 SS ~~100~~ 1014 COLLECT 6.0-8.0 FILTER = NO 1017 COLLECT 8.0-10.0 FILTER = NO 1021 COLLECT 10-12.0 FILTER = NO 1040 COLLECT 12.0-14.0 SAMPLE FILTER = NO 1045 COLLECT 14.0-16.0 SAMPLE FILTER = = NO. ATTEMPT TO COLLECT SHELBY TUBE AT 16.0-18.0 FT INTERVAL 1056 COLLECT GEOTECH SAMPLE SHELBY TUBE ~~SP~~ B40822 MK 6/16/94 ~~0122~~ B40822 MK 6/16/94 1113 RIG UP SPLIT SPOON (2 IN) TO COLLECT 17.0-18.0 FT SAMPLE. SHELBY TUBE WAS REFUSED AT ~ 17.0 FT 1116 COLLECT 17.0-18.0 SS FILTER = 0 (NO) 1121 COLLECT 18.0-20.0 SS FILTER = NO BEGIN AT 17 FT TO PLACE CUTTINGS IN GEOTECH. BUCKET FOR COMPOSITE SAMPLE 1128 COLLECT 20-22 SS FILTER = ~~0~~ MK 6/16/94 NO. COOLER TEMP AT 1130 = 6.0°C

Daily Weather Conditions: A.M. SEE PG 108

P.M.

Recorded By [signature] 06/16/94 QA Checked By [signature] 6/27/94

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TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

B408 P.110

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/16/94 TIME: 0700 : 1615 PAGE 3 OF 6

Task Team Members:

SAME AS PG 108

Narrative (include time and location):

1135 COLLECT 22-24 FT SS FIDLER = 0.0, ND COLLECT 24.0-26.0 AT 1142 FIDLER = ND 1150 COLLECT 26.0-28 FT SS FIDLER = ND 1156 COLLECT 28-30 DRILLER REPORTS THAT COBBLE REFUSED SPLIT SPOON AT ~29 FT FIDLER = 0, ND ~~COLLECT~~ MK 6/16/94 AUGER PAST OBSTRUCTION (COBBLE) AT ~~30~~ 29 FT 1203 COLLECT 30-32 FT SS FIDLER = ND ABOVE BACKGROUND. DRILL CREW BREAKS FOR LUNCH AND TO GET AUGERS SAIC LOADS SAMPLES TO BRING TO TRAILER 1210 SAIC & BOWSER & HP LEAVE SITE COOLER TEMP CHECKED BEFORE LEAVING = 5°C.

1338 SAIC CREW & HP ARRIVE BACK AT B408 SITE ERIC LEAVES SITE TO GET SAMPLE COOLER 1345 RIG STARTED 1350 BEGIN DRIVING SPLIT SPOON 1355 32.0-34.0 FT SS COLLECTED FIDLER = ND 1409 34-36 FT SS COLLECTED WATER ENCOUNTERED AT ~35.5 FT BGS & FIDLER = ND CREW RIGS UP 3.0 IN DIAMETER SPLIT SPOON NOTE: 34-36 SS SAMPLE WAS NOT PLACED IN GEOTECH SAMPLE GEOTECH SAMPLE COLLECTION ENDED AT 34.0 FT BGS

Daily Weather Conditions: A.M. SEE PG 108

P.M.

Recorded By [signature] 06/16/94 QA Checked By [signature] 6/27/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B408 P:111

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/16/94 TIME: 0720 : 1615 PAGE 4 OF 6

Task Team Members:

SAME AS PG 108

Narrative (include time and location):

~~1411 COLLECT SOIL SAMPLE~~ MK 6/16/94 1411 DRILLER REPORTS THAT 3 IN SPLIT SPOON WAS REFUSED AFTER 100 BLOWS AND ONLY 6 IN OF ADVANCE. AUGER 1 ~~FOOT~~ FOOT MK 6/16/94 PAST AUGER REFUSAL POINT TO 37.0 FT BGS. ~~SAM~~ 1420 SAMPLE B4080Z COLLECTED FROM 37-41 FT BGS. SAMPLE IS WET. VOA FRACTION COLLECTED FROM SPOON REMAINDER OF SOIL PLACED IN SS MIXING BOWL RIG UP W/ SECOND 3 IN SPOON TO GET ADEQUATE VOLUME 1440 39-41 SS COLLECTED. AUGER TO 40 3RD SPLIT SPOON RIGGED UP TO COLLECT W/ MORE SAMPLE FOR B4080Z THIS SPOON WILL BE DRIVEN FROM 41-43.0 FT BGS 1455 SPOON REFUSED AT 42.0 FT 3RD SPOON COLLECTED AT 1500 FIDLER = 0-NO ABOVE BACKGROUND. SAMPLE FROM 3 SPOONS MIXED & PLACED IN CONTAINERS 1515 COOLER TEMP = 7°C DRILLERS LEAVE SITE TO GET WELL SCREEN & RISER MATERIALS SAMPLE B4080Z ON FIELD C-O-C NO. 2217 1528 JOHN & JOLETTA ON SITE TRANSFER SAMPLES & C-O-C TO JOLETTA

Daily Weather Conditions: A.M.

P.M. SEE PG 108

Recorded By [signature] 06/16/94 QA Checked By [signature] 6/27/94

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TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

B408 P.12

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

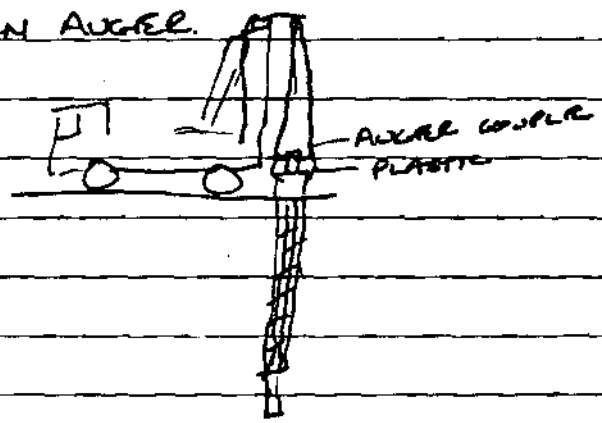
Date (mm/dd/yy): 06/16/94 TIME: 0720 : 1615 PAGE 5 OF 6

Task Team Members:

SAME AS PG 108

Narrative (include time and location):

1537 DRILL CREW RETURNS TO SITE. BEGIN TO DISASSEMBLE RODS. TOTAL DEPTH OF BOREHOLE TAGGED AT ~~45.4 FT~~ MIC 6/16/94 DRILLER REPORTS THAT SOME SAND HAS HEAVED INTO AUGERS. TOTAL OF 45.4 FT OF ~~SCR~~ 2.0 IN OD DECONED SCREEN & RISER PLACED INSIDE OF AUGERS SCREEN EQUALS 5.0 FT IN LENGTH. 1547 AUGERS RAISED APPROXIMATELY 5.0 FT 1 AUGER FLIGHT REMOVED STICK-UP OF WELL RISER EQUALS 3.3 FT AUGER COUPLE ON RIG LOWERED OVER ~~SCREEN~~ RISER OPENING TO SECURE. PLASTIC PLACED OVER OPEN AUGER.



TOTAL LENGTH OF SCREEN & CASING = 45.4 FT

STICK-UP 3.3

DEPTH OF BOTTOM OF CASING 42.1 FT

SCREEN INTERVAL 37.1-42.1

1602 DRILL CREW LEAVES SITE. EQUIPMENT IS LOADED SITE IS SECURED EXCLUSION ZONE LEFT UP AROUND

Daily Weather Conditions: A.M. SAME PG 108

P.M. SAME

Recorded By [signature] 06/16/94 QA Checked By [signature] 6/27/94

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B408 P113

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO: 34896

Date (mm/dd/yy): 06/16/94 TIME: 0720 : 1615 PAGE 6 OF 6

Task Team Members:

SAME AS PG 108

Narrative (include time and location):

DRILL RIG, PLASTIC PLACED OVER CUTTINGS IN CASE OF RAIN 1615 SAIC CREW LEAVES SITE. DAILY SUMMARY: DRILLED TO TOTAL DEPTH OF 42.1 FT BGS. WATER WAS ENCOUNTERED AT ~ 35.5 FT BGS. SURFACE SOIL SAMPLE B40801 AND B40811 MK 06/16/94 COLLECTED FROM 0.0 TO 0.5 FT BGS. GEOTECHNICAL SAMPLE B40821 COLLECTED AND CONSISTED OF 1 5 GALLON BUCKET W/ SOILS FROM 1ST INTERVAL (0.0 TO 0.5 FT) AND 1 SHELBY TUBE COLLECTED FROM 0.0 TO 2.0 FT. GEOTECHNICAL COMPOSITE BUCKET SAMPLE ~~COLLECTED~~ INITIATED MK 06/16/94 FROM PROBABLE ZONE 3 FROM 17.0 FT TO 34.0 FT. SOIL SAMPLE B40802 COLLECTED BY ~~FRO~~ 3 3IN SPLIT SPOONS FROM 37-41 FT. BGS. MK 6/16/94

MK 06/16/94

Daily Weather Conditions: A.M. SEE PG 108

P.M.

Recorded By [signature] 06/16/94 QA Checked By [signature] 6/27/94

114

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS: B408 P. 114

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/20/94 TIME: 0800 : 1330 PAGE 1 OF 2

Task Team Members:

MIKE KLIDZEJS — JOHN KNIFER

EVELYN HARTZELL — RAY MOSS

ALLAN WOLFE — MK 6/20/94

Narrative (include time and location):

0800 SAIC ARRIVES ON SITE. BOWSER PRESENT. SAIC CREW BEGINS SETTING UP SITE. EXCLUSION ZONE RESET (STORMS FROM WEEKEND KNOCKED LINE DOWN) TO ~~WIDTH~~ RADIUS OF MAST HEIGHT. 0830 EVELYN CALIBRATES pH & CONDUCTIVITY METERS. SCAN BREATHING ZONE OVER OPEN WELL OK. TAG DEPTH TO WATER IN TEMPORARY WELL AT 37.34 FT ~~BGS~~ BTOC (34.07 FT BGS) MK 6/20/94

0833 RAY MOSS (MOUND HP) ONSITE, DELIVERS SAMPLE CONTAINER FOR WATER SAMPLE ~~BE~~ MK 6/20/94 0847 BEGIN BAILING WELL 0915 FINISH BAILING BEGIN COLLECTING DEVELOPMENT STABILIZATION SAMPLES 0935 PARAMETERS WITHIN STABILIZATION CRITERIA AFTER BAILING TOTAL OF 4 GALS. 0937 BEGIN COLLECTING SAMPLE W4Ø8Ø1 0942 COMPLETE SAMPLE COLLECTION 1057 COOLER TEMP = 7°C 1100 LEAVE SITE AFTER LOADING EQUIPMENT. 1115 RELINQUISH SAMPLE CUSTODY & C-O-C FN002 TO JOLIETA.

1125 M. KLIDZEJS RETURNS TO SITE DRILL CREW PREPARES TO ABANDON HOLE. 1132 SCREEN AND RISER REMOVED FROM HOLE INTACT. 1133

Daily Weather Conditions: A.M. 0800 TEMP ~80° CALM

P.M. MK 6/20/94

Recorded By [signature] 6/20/94 QA Checked By [signature] 6/27/94

115

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS B408 P115

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE TASK NO.: 34896

Date (mm/dd/yy): 06/20/94 TIME : 0800 : 1330 PAGE 2 OF 2

Task Team Members:

SAME AS PG 114

Narrative (include time and location):

1135 CREW BEGINS MIXING CEMENT (SEE PG 155 FOR ABANDONMENT DETAILS) 1200 M KLIDZEJS LEAVES SITE TO GET DRUM 1330 DRILLERS REPORT THAT HOLE (B408) HAS BEEN FILLED TO GROUND SURFACE WITH GROUT, AUGERS REMOVED. DRILL RIG DEMOBILIZED TO DECON AREA FOR DECON!.

MK 06/20/94

Daily Weather Conditions: A.M.

P.M. SEE PG 114

Recorded By [signature] 6/20/94 QA Checked By [signature] 6/27/94

1C2

BOREHOLE LOG (SOIL)

SOIL BORINGS
B408 P.123

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: MND16
LOCATION ID: B408
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL) NA
LOCATION TYPE: BH
COMMENTS: NONE

DRILLER CODE: BOWS
COMPLETION DATE 06/16/1994
DIAMETER (IN): 8"
DEPTH (FTFD): 42.0
CONSTRUCTION METHOD: B - SPLIT SPOON
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
6/20/94	0830	34.04

MK 6/20/94

LOCATION DESCRIPTION

SEE ACTIVITY LOG

MK 6/20/94

LITHOLOGIC LOG

LOGGER CODE: MIKE KIDZEJS

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0.0-0.5	0.0-0.5	—	—	Stainless Spoon	B408B01 B408B11	NA	NA	SM	DRY SILTY SOIL 10YR 5/3
									ABUNDANT ROOT MATERIAL
									SOME MINOR COARSE SAND
									TO FINE GRAVEL SIZE
			MK 06/16/94						
	~~2.0~~	~~2.0~~	~~100%~~	~~T~~	~~S00121~~	~~NA~~	~~NA~~		ROCK FRAGMENTS
	0-2.0	2.0	100%	T	S00121	NA	NA	NA	COULD NOT OBSERVE INTERVAL
									BETWEEN 0.5 & 2.0 FT
2.0-4.0		1.2FT	~~S~~ NA	S	NA	3/3/5/6	11	SM	MOIST SILTY SOIL 10YR 3/2
									SOME MINOR ROOT
									MATERIAL
4.0-6.0		1.1FT	NA	S	NA	3/4/5/6	59	~~SM~~	~~SAME AS 2.0-4.0~~
									10YR 3/2 MORE CLAY

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/16/94
FORM COMPLETED BY / DATE

6/27/94
TECHNICAL REVIEWER / DATE

124

BOREHOLE LOG (SOIL)

SOIL BORINGS

B408 p.124

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 3486

JTD 10/4/94 BOWS

FACILITY CODE: MND16

LOCATION ID: B408

DRILLER CODE: [illegible]

COMPLETION DATE 6/16/19

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
								SC	THIN 2.0-4.0 MOIST
									MINOR MOTTLING OF 10YR7/3
6.0-8.0	6.0-7.8	0.7	NR	S	NA	3/2/2/2	4	SC	SAME AS ABOVE
	7.8-8.0							GC	ENCOUNTER 2.5YR 7/2
									SILTY CLAY WITH ABUNDANT
									MODERATELY GRADED
									MED SAND TO COARSE
									GRAVEL SIZED ROCK FRAG
									(ALLUVIAL? MTLS)
	8.0-10.0	0.9FT	NR	S	NA	3/6/4/5	9	GM	SILTY CLAY MATRIX MOTTLED IN
									COLOR 2.5YR 5/2 TO 2.5YR 7/1
									CONTAINING ABUNDANT SUBROUNDED
									TO SUBANGULAR WELL GRADED
									MED SAND TO COARSE GRAVEL SIZED
									MATERIAL - ALSO 1 IN LENSE OF
									SILTY CLAY TO 10YR 4/3
	10-12	0.9FT	NR	S	NA	22/35/16/65	29	GM	SAME AS ABOVE
	12-14	1.4FT	NR	S	NA	15/13/12/16	28	GM	SAME AS ABOVE WITH
									2 SILTY CLAY LENSE AT ~12.0-12.1
									10YR
	14-16	NR	NR	S	NA	16/37/28/65	73	GM	PREDOMINANT SILTY-SANDY
									MATRIX WITH FAIRLY ABUNDANT
									WELL GRADED GRAVEL
									SAND & COBBLES (MED SAND
									SIZED TO COARSE GRAVEL
									SIZED SAND AND SILT
									IS MOTTLED IN COLOR
									FROM LIGHT GRAY MINOR TO
									RED & 10YR 5/3
						MK 6/16/94			

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE 6/16/94

TECHNICAL REVIEWER / 6/24/94

BOREHOLE LOG (SOIL)

SOIL BORINGS B408 p.125

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.: 34896

JTHD 10/1/97 BOWS Page 3 of 4

FACILITY CODE: MND16

DRILLER CODE: BOWSER

LOCATION ID: B408

COMPLETION DATE 6 / 16 / 19

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
16-18	16-18	0.6 FT	NR	T	500122	NA	NA	NA	NA - SHELBY TUBE SAMPLE
17-18	170-18	0.8	NR	S	NA	50/35	85	GM	SLIGHT BIT MORE MOIST
									THAN ABOVE 10YR 6/4
									WELL GRADED FAIRLY
									ABUNDANT COARSE GRAVEL
						MK 6/16/94			
18-20	NA	1.4	NR	S	NA	27/26/21/22	43	GM	POORLY WELL GRADED
									SAND, SILT GRAVEL
									MOTTLED IN COLOR
									PREDOMINANT 10YR 7/1
									WITH 10YR 5/6
									~~MTN ZONE AT~~
20-22	NA	1.2	NR	S	NA	25/23/22/22	44	GM	SAME AS ABOVE
									BOTTOM OF CORE HAS
									MORE ABUNDANT 10YR 7/1
									MATERIAL ALSO BECOMING
22-24	NA	1.3	NR	S	NA	NR		GM	MORE MOIST.
						16/12/18/21	39		SAME AS 18.0-20.0
									INTERVAL
24.0-26.0	NA	1.4	NR	S	NA	20/22/40/34	82		SAME AS ABOVE
26-28.0	NA	1.4	NR	S	NA	18/21/23/33	56	GM-SW	SAME AS ABOVE
									W/ A GREATER PERCENTAGE
									OF SAND (LESS GRAVEL
									AND SILT)
28-30	NA	0.4	NR	S	NA	14/23/50/0	50	GM	SAME ~~SA~~ AS ABOVE
30-32	NA	NR	NR	S	NA	21/50/36/23	59	GM	SAME AS ABOVE
						MK 6/16/94			MK 6/16/94

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE 6/16/94

TECHNICAL REVIEWER / 6/29/94

126

BOREHOLE LOG (SOIL) — SOIL BORINGS

B408 p.1 of 2

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — DRILLER CODE: BOWS

LOCATION ID: B408 — COMPLETION DATE 06/16/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
32-34	32-34	1.3	NR	S	NA	41/30/30/24	54	GM	SAME AS ABOVE
				S					
34-36	NA	1.4	NR	S	NA	33/32/29/21	50	GM-GC	GENERALLY SAME AS
									ABOVE W/ CLASTS OF
									LIMESTONE/DOLOSTONE
									(MICRITIC) WET IN BOTTOM
									1/4 ALSO SLIGHT AMOUNT
									OF CLAY. NOTE: NOT
									THE SAME TYPE OF ~~MAT~~
									MATERIAL IN WHICH WATER
									WAS ENCOUNTERED IN B401
									- MORE CLAY MORE COARSE
									SAND AND GRAVEL.
36-37	~~NA~~	~~NA~~	~~NA~~	S	~~NA~~	~~NA~~	~~NA~~	~~NA~~	- NO SAMPLE COLLECTED
									SPLIT SPOON REFUSED AT
									36.6 - AUGERED PAST
~~37-39~~									OBSTRUCTION TO 37.0 FT
37-39	NA	1.8	NR	S	NA	21/28/33/22	55	GC	SAMPLE IS WET SMALLER
								GC	PERCENTAGE OF SILT (LESS THAN)
									ABOVE (MAY BE DUE TO
									WATER) SAMPLE VERY
									POORLY SORTED SAME
									COLOR AS ABOVE
39-41	NA	1.2	NR	S	NA	79/30/31/38	69	GC	SAME AS ABOVE
~~41-42~~	JTD 6/13/94								SAME AS ABOVE
41-42	NA	NR	NR	S	NA	60/82/90/2	NA	GC	BUT GREATER SAND
									PERCENTAGE
				MK 6/16/94					

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/16/94 — FORM COMPLETED BY / DATE

6/27/94 — TECHNICAL REVIEWER /

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

SOIL BORINGS
B408 p. 147

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO: 34896

FACILITY CODE: JHD 6/27/94 ~~HA~~ MND16 JHD 6/27/94
LOG DATE: 06/16/94 JHD 6/27/94
LOGGER CODE: ~~M. Klidzejs~~ SAIC
FIELD REP: ~~HA~~ M. KLIDZEJS
CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC
CGI MODEL NO.: MX 251
SERIAL NO.: 9306099-061
CALIBRATION DATE/TIME: 06/16/94 0750
ACCEPTANCE CODE: ~~NA~~ A JHD 6/27/94
BATTERY CONDITION OK

CALIBRATION GAS (%LEL)
TYPE LEL PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM)
TYPE MC 6/16/94 CONCENTRATION MK 6/16/94 PPM CYLINDER SERIAL NO MK 6/16/94

COMMENTS:
MK 6/16/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B408 BACKGROUND	NA	NA	0830	BACKGROUND SOIL	000	NA	20.7
—			0830	BREATHING ZONE (BZ)	000		20.7
B408 01			0903	SL	000		20.8
B408 11			0903	SL	000		20.8
			0903	BZ	000		20.8
2.0-4.0			1006	BH	000		20.8
4.0-6.0			1009	BH	000		20.8
6.0-8.0			1014	BH	000		20.8
			1015	BZ	000		20.8
8.0-10.0			1017	BH	000		20.8
10.0-12.0			1021	BH	000		20.8
+ NA			1035	BZ	000		20.8
12.0-14.0			1040	BH	000		20.8
14.0-16.0			1045	BH	000		20.8
16.0-17			1057	~~BZ~~ BH	000		20.8

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/16/94
FORM COMPLETED BY / DATE

[signature] 6/27/94
TECHNICAL REVIEWER / DATE

148

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — SOIL BORING

B408 P. 148

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO.

FACILITY CODE: ~~JHD~~ ~~HA~~ MND16 — LOG DATE: 06/16/94

LOGGER CODE: 6/27/94 ~~HA~~ SAIC — FIELD REP: JHD 6/27/94 ~~HA~~ M. KLIDZENS

CGI MANUFACTURER: ~~M~~ INDUST. SCIENT. — CGI MODEL NO.: MX 251

SERIAL NO.: 9306099-061 — CALIBRATION DATE/TIME: 06/16/94/0750

ACCEPTANCE CODE: ~~HA~~ A JHD 6/27/94 — BATTERY CONDITION OK

CALIBRATION GAS (%LEL) TYPE LEL PENTANE CONCENTRATION 50 % LEL — CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM — CYLINDER SERIAL NO NA

COMMENTS: MK 6/16/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B408 17.0-18	NA	NA	1116	BH	000	NA	20.8
18.0-20.0			1121		000		20.8
20.0-22.0			1128		000		20.8
			1132	BZ	000		20.8
22.0-24.0			1135		000		20.8
24.0-26.0			1142		000		20.8
26-28.0			1150		000		20.8
			1153	BZ	000		20.8
28-30.0			1156		000		20.8
~~30-32.0~~			1203		000		20.8
				BZ	000		20.6
32.0-34.0			1355		000		20.5
34.0-36.0			1400		000		20.6
37.0-39.0			1420		000		20.6
			1430	BZ	000		20.6

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE, SL - SURFACE LOCATION, TP - TEST PIT, WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/16/94 FORM COMPLETED BY / DATE — 6/27/94 TECHNICAL REVIEWER / DATE

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

SOIL BORINGS: B408 P.149

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: JHD ~~NA~~ MND16

LOG DATE: 06/16/94

LOGGER CODE: 6/27/94 ~~NA~~ SAIC

FIELD REP: JHD 6/27/94 ~~NA~~ M. KLIDZETS

CGI MANUFACTURER: INDUST. SCIENT.

CGI MODEL NO.: MX 251

SERIAL NO.: 9306099-061

CALIBRATION DATE/TIME: 06/16/94 / 0750

ACCEPTANCE CODE: ~~NA~~ A JHD 6/27/94

BATTERY CONDITION OK

CALIBRATION GAS (%LEL)

TYPE LEL PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM)

TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS:

MK 6/16/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B408 39.0-41.0	NA	NA	1400	BH	000	NA	20.6
41.0-42.0	NA	NA	1500	BH	000	NA	20.6
			LAST ENTRY				

MK 06/16/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/16/94 FORM COMPLETED BY / DATE

6/27/94 TECHNICAL REVIEWER / DATE

150

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

SOIL BORIN
B408 p.150

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.: 3

FACILITY CODE: JMD ~~NA~~ MND16

LOG DATE: 06/20/94

LOGGER CODE: 6/27/94 ~~NA~~ SAIC

FIELD REP: JMD 6/27/94 ~~NA~~ M. KUDZEJS

CGI MANUFACTURER: INDUST. SCIENT.

CGI MODEL NO.: MX 251

SERIAL NO.: 9306099-061

CALIBRATION DATE/TIME: 06/20/94 0780

ACCEPTANCE CODE: ~~NA~~ A JMD 6/27/94

BATTERY CONDITION OK

CALIBRATION GAS (%LEL)

TYPE PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM)

TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS:

MK 06/20/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGE
B408	NA	NA	0830	BH/BZ	000	NA	20.8
			0847	BH/BZ	000		20.8
			0943	BH/BZ	000		20.8
			1131	BH/BZ	000		20.6
			LAST ENTRY				
			MK 6/20/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/20/94 FORM COMPLETED BY / DATE

[signature] 6/27/94 TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS
B408 p.151

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO: 34896

FACILITY CODE: JHD 6-27-94 ~~NA~~ MND16
LOG DATE: 6/16/94
LOCATION ID B408
LOCATION TYPE: ~~NA~~ BH JHD 6/27/94
LOGGER CODE: ~~NA~~ SAIC JHD 6/27/94
FIELD REP: ~~NA~~ M. KLIDZEJS JHD 6-27-94

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO
MODEL NO.: OVA 128
SERIAL NO.: H0694
DATE/TIME CALIBRATION 6/16/94 0755
ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE	1 100 PPM
2 NA	2 NA

COMMENTS MK 06/20/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
0840	B408	NA	NA	NA	NA	BACKGROUND 0.0	NA	BACKGROUND SOIL
0840	B408			0.0	NA	NA	NA	BZ
0903	B408001			NA		0.0	NA	SAMPLE
0903	B408011			"		0.0	NA	SAMPLE
	B408			0.0		NA	NA	BZ
1007	B408			NA		0.0	2.0-4.0	2.0-4.0
~~1009~~ MK 6/16/94	"					0.0	MK 6/16/94	4.0-6.0
1014	~~NOTE~~ MK 6/16/94					0.0		6.0-8.0
1017	B408					0.0	8.0-10.0	8.0-10.0
1021	B408					0.0	10.0-12.0	10.0-12.0
1035	B408			0.0		NA	NR	
1040	"			NA ~~0.0~~ MK 6/16/94		0.0	12.0-14.0	12.0-14
1045	"			NA ~~0.0~~ MK 6/16/94		0.0	14.0-16.0	14.0-16.0
1050	"			NA		NA	16.0-18.0	16.0-18.0
1116	"			NA		0.0	17.0-18.0	17.0-18.0

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/16/94
FORM COMPLETED BY / DATE

6/27/94
TECHNICAL REVIEWER / DATE

152

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORING B408 P.152

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.: 34

FACILITY CODE: MND16

LOG DATE: 6/16/94

LOCATION ID: B408

LOCATION TYPE: BH

LOGGER CODE: SAIC

FIELD REP: M. KLIDZEJS

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO

MODEL NO.: OVA 128

SERIAL NO.: 40694

DATE/TIME CALIBRATION 6/16/94 0755

ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE	1 100 PPM
2 NA	2 NA

COMMENTS MK 6/16/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
1121	18-20 B408	NA	NA	NA	NA	0.0	18-20	NONE
1128	20-22			"		0.0	20-22	
1132	—			0.0		NA	22FT	
1135	22.0-24.0			NA		0.0	22-24	
1142	24.0-26.0					0.0	24-26	
1150	26.0-28.0					0.0	26-28	
1153				0.0		NA	29 F	
1156	28.0-30.0			NA ~~0.0~~		0.0	28-30	
1203	30.0-32.0			NA ~~0.0~~		0.0	30-32	
1347				0.0		NA	32 BE	
1355	32.0-34.0			NA		0.0	32-34	
1400	34.0-36.0					0.0	34-36	
1420	37.0-39.0					0.0	37-39	
1430				0.0		NA		
1440	39.0-41.0			NA		0.0	39-41	

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

M. Kridger 6/16/94
FORM COMPLETED BY / DATE

6/27/94
TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA — SOIL BORINGS

B408 P.153

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOG DATE: 6/16/94

LOCATION ID: B408 — LOCATION TYPE: BH

LOGGER CODE: SAIC — FIELD REP: M. KLIDZENS

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO — MODEL NO.: OVA 128

SERIAL NO.: 40694

DATE/TIME CALIBRATION 6/16/94 0755 — ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE	1 100 PPM
2 NA	2 NA

COMMENTS MK 6/16/94

TIME (HH:MM)	SAMPLE ID B408	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
1500	41.0 - 42.0	NA	→	→	→	0.0	41-42	NONE
				LAST ENTRY				

MK 6/16/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/16/94 — FORM COMPLETED BY / DATE

[signature] 6/27/94 — TECHNICAL REVIEWER / DATE

154

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORING B408 p 154

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.

FACILITY CODE: MND16

LOG DATE: 06/20/94

LOCATION ID B408

LOCATION TYPE BH

LOGGER CODE: SAIC

FIELD REP: M. KLIDZEJS

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: FOXBORO

MODEL NO.: OVA 128

SERIAL NO.: 40694 SAIC # 0031

DATE/TIME CALIBRATION 06/20/94

ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE	1 100 PPM
2 ~~METH~~ N/A	2 N/A

MK 6/20/94

COMMENTS MK 6/20/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
0830	B408	NA	NA	0.0	NA	NA	NA	NA
0847	B408	↓	↓	0.0	↓	↓	NA	NA
0943	B408	↓	↓	0.0	↓	↓	NA	NA
1131	B408	↓	↓	0.0	↓	↓	NA	DUPLICATE AGAIN.
				LAST ENTRY.				

MK 6/20/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/20/94 FORM COMPLETED BY / DATE

6/27/94 TECHNICAL REVIEWER / DATE

BOREHOLE OR WELL PLUGGING/ ABANDONMENT

B408 p.155

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SITE ID NUMBER: BH08 DATE PLUGGED 06 / 20 / 94

SITE COORDINATES: N: NA DEPTH BLS (ft) 42.1 FT BGS
E: NA

TYPE OF CASING: TEMP 2" ID SS

CASING DIAMETER (ID) (in.) 2.0 GROUND ELEVATION (ft msl) NA

SCREENED ELEVATION (ft msl) (37.1-42.1)

GEOLOGIC MATERIAL AT SCREEN WELL GRADED SAND AND GRAVEL; MINOR SILT

AMOUNT OF CASING REMOVED (ft) 45.4

PLUGGING MATERIAL BLUE CIRCLE TYPE I PORTLAND CEMENT 6 BAGS (94 LBS) AQUAGEL GOLDSEAL 100% NONTREATED BENTONITE 1 BAG WATER

APPROX. VOLUME OF PLUGGING MATERIAL (cu ft.)

PLUGGING METHOD GROUT MIXED IN PLASTIC DRUM. GROUT IS PUMPED THROUGH RIG PUMP, THROUGH HOSE PLACED AT

REMARKS BOTTOM OF AUGER STRING, AUGERS SEQUENTIALLY REMOVED AS GROUT FILLS HOLE. GROUT FILLED TO SURFACE.

LAST ENTRY

MK 6/20/94

RECORDED BY: [signature] 06/20/94 (Signature)

QA CHECKED BY: [signature] 6/27/94 (Signature)

SAMPLE LOG SHEET

B408 p.160

160

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40801 DATE COLLECTED (MM/DD/YY): 06/16/94 TIME (HH:MM): 0903

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B408

DESCRIPTION: BORING B408

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO ~~2.00~~ 0.5 MK 6/16/94 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: SPRE ACTIVITY LOG

MK 6/16/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: 05-NP-009

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

BOREHOLE LOCATION MOVED. ~~MK 06/16/94~~ JMD 7/26/94

THIS TRPC APPLIES TO ALL SAMPLES FROM B408

RECORDED BY: [signature] (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø8Ø1

B408 p. 161

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C # NPCØØ3	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	FØØ4	SEE SAMPLE MANGRS LOG	SEE LOT NO. LOG.	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			LAST ENTRY				
		MK 6/16/94					

SAMPLE ID'S RINSATE: RLØØ15 TRIP BLANK: TBØØØ3 FIELD BLANK: ABØØØ9 FIELD DUPLICATE: ~~NA~~ B40811 MK 6/16/94

RECORDED BY: [signature] 6/16/94 (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

191

162

SAMPLE LOG SHEET

B408 p.162

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B4Ø8Ø2 DATE COLLECTED (MM/DD/YY): Ø6/16/94 TIME (HH:MM): 1420

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B4Ø8

DESCRIPTION: BORING B408

SAMPLE -

MEDIA CODE: Ø2

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~Ø.ØØ~~ 37.Ø TO Ø.ØØ 42.Ø FT

MK 6/16/94

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: SEE ACTIVITY LOG

MK 6/16/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: N/A

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/16/94

RECORDED BY: [signature] 6/16/94 (SIGNATURE)

CHECKED BY: [signature] 6/27/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø8Ø2

B408 p.163

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C # NPCØØ3	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	2217	SEE SAMPLE MNGRS LOG		COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		LAST ENTRY					
		MK	6/16/94				

SAMPLE ID'S RINSATE: RLØØ16 TRIP BLANK: TBNØØ3 FIELD BLANK: ABØØØ9 FIELD DUPLICATE: N/A

RECORDED BY: [signature] 6/16/94 (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

163

SAMPLE LOG SHEET

B408 7-164

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40821

DATE COLLECTED (MM/DD/YY): 06/16/94

TIME (HH:MM): 0930

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: — MK 06/16/94

POINT CODE: B408

DESCRIPTION: — MK 06/16/94

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH 0.00 TO ~~0.00~~ MK 06/16/94 0.5 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY) 1 SHELBY TUBE COLLECTED ALSO

FIELD OBSERVATIONS: SAMPLE COLLECTED WITH SHOVEL TO DEPTH OF 0.5 FT BGS. SHELBY TUBE COLLECTED FROM GROUND SURFACE 0.0 FT TO 2.0 FT BGS

MK 06/16/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO

FIELD CHANGE ORDER REFERENCE NO: MK 06/16/94

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 06/16/94

RECORDED BY: [signature] 6/16/94 (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø821

B408 p.165

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-Ø	SHELBY	GEOTECHNICAL	Cool,4C	F-8ØH	SEE SAMPLE MANAGERS LOG	NA	SINGLE
1-19	BUCKET	GEOTECHNICAL	Cool,4C	F-8ØH		NA	SINGLE
			LAST ENTRY				
		MN 6/16/94					

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: [signature] 06/16/94 (SIGNATURE) QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

165

SAMPLE LOG SHEET B408 7.166

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: B40822 DATE COLLECTED (MM/DD/YY): 6/16/94 TIME (HH:MM): 1056

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B408

DESCRIPTION: BORING B408

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (> 6 Inches)

DEPTH ~~0.00 TO 0.00 FT~~

16.0 18.0 FT MK - SHELBY TUBE

17.0 TO 34.0 FT - BUCKET

SAMPLE TYPE:

- [x] ~~GRAB~~ MK 6/16/94
- [x] SPATIAL COMPOSITE (BUCKET)
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY) SHELBY TUBE

FIELD OBSERVATIONS: RECOVERY ONLY 0.6 FT IN SHELBY. BUCKET PORTION COLLECTED FROM 17-34.0 FT

MK 6/16/94

SAMPLE COLLECTED: [x] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [x] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: N/A

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/16/94

RECORDED BY: [signature] 6/16/94 (SIGNATURE)

QA CHECKED BY: [signature] 8/5/94 (SIGNATURE)

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø822 B408 p. 167

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-Ø	SHELBY	GEOTECHNICAL	Cool,4C	F804	SEE SAMPLE MANAGER LOG	NA	SINGLE
~~1-19~~	~~BUCKET~~	~~GEOTECHNICAL~~	~~Cool,4C~~ MK 6/16/94				~~SINGLE~~
1-19	BUCKET	GEOTECHNICAL	NA	FN010C	SEE SAMPLE MANAGER LOG	NA	SINGLE
		LAST ENTRY					

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: [signature] (SIGNATURE) QA CHECKED BY: [signature] JHD 10/6/94 8/10/5/94 (SIGNATURE)

167

SAMPLE LOG SHEET

B408 p. 174

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: W40801

DATE COLLECTED (MM/DD/YY): 06/20/94

TIME (HH:MM): ~~0937~~ MK 6/20/ 0937

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B408

DESCRIPTION: BORING B408

FIELD OBSERVATIONS: SEE ACTIVITY LOG

MK 6/20/94

SAMPLE -

MEDIA CODE: 66

DESCRIPTION: Monitoring Well

DEPTH ~~0.00~~ TO ~~0.00~~ FT

37.1 TO 42.1 → SCREENED INTERVAL

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [X] NO JHD 7/26/94

FIELD CHANGE ORDER REFERENCE NO: 05 - NP - 012

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

SEE ABOVE TRPC. NO PACKER WAS USED ON WELL SCREEN

~~MK 6/20/94~~ JHD 7/26/94

RECORDED BY: [signature] 6/20/94 (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: W40801

B408 p.175

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-40	Glass	CLPVOA	HCL to pH<2,4C	NPC004 FN002	SEE SAMPLE MANAGERS LOG		COMPUC
2-1000	AmbGlass	CLP SVOC	Cool,4C				COMPUC
2-1000	AmbGlass	CLP PEST / PCB	Cool,4C				COMPUC
2-1000	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-1000	Poly	METALS	HNO3 to pH<2,4C				COMPUC
1-1000	Poly	CYANIDE	NaOH to pH>12,4C				COMPUC
3 ~~1~~-1000 pH 6/20/94	Poly	ANIONS Fl,SO4,Cl	Cool,4C				COMPUC
1-1000	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
1-1000	Poly	TOTAL NIT/TOTAL PHOS	H2SO4 to pH<2,4C				COMPUC
1-1000	AmbGlass	TOTAL ORGANIC CARBON	H2SO4 to pH<2,4C				COMPUC
1-1000	Poly	TOTAL SUSPENDED SOLIDS	Cool,4C				COMPUC
1-1000	Poly	TOTAL DISSOLVED SOLIDS	Cool,4C				COMPUC
1-1000	Poly	ALKALINITY	Cool,4C				COMPUC
2-1000	Poly	RADS Pu,Th,U,Am	HNO3 TO PH<2				COMPUC
2-1000	Poly	RADS Ac,Ra,Sr,GAMMA	HNO3 TO PH<2				COMPUC
1-1000	Glass	Tritium	Cool,4C				COMPUC
		MC 6/20/94					

SAMPLE ID'S RINSATE: ER0017 TRIP BLANK: TBN004 FIELD BLANK: AB0013 FIELD DUPLICATE: NA

RECORDED BY: [signature] 6/20/94 (SIGNATURE)

QA CHECKED BY: [signature] 6/27/94 (SIGNATURE)

175

SAMPLE LOG SHEET B408 2.178

PROJECT NAME: Mound New Property Extended Phase PROJECT NO: 34896

SAMPLE ID NUMBER: B40811 DATE COLLECTED (MM/DD/YY): 06/16/94 TIME (HH:MM): 0903

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B40B

DESCRIPTION: BORING B408

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH 0.00 TO ~~0.00~~ 0.5 FT

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [x] OTHER (SPECIFY) QC Field Duplicate

FIELD OBSERVATIONS: SEE ACTIVITY LOG

DUPLICATE OF B40801

MK 06/16/94

SAMPLE COLLECTED: [x] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [ ] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MK 6/16/94

RECORDED BY: 06/16/94 (SIGNATURE) QA CHECKED BY: 10/5/94 (SIGNATURE)

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B40811 B408 p. 179

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	NPC003	9289476416	SEE LOT# LOG	COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			LAST ENTRY				
		MK	6/16/94				

SAMPLE ID'S RINSATE: EL0015 TRIP BLANK: TBN003 FIELD BLANK: AB0009 FIELD DUPLICATE: B40801 AND NA 10/5/94

RECORDED BY: [signature] 06/16/94 (SIGNATURE) QA CHECKED BY: [signature] 10/5/94 (SIGNATURE)

179

201

GROUNDWATER QUALITY SAMPLING RECORD

SOIL BORINGS
B408 P. 201

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO: 34896

JHD 10/5/94

PAGE 1 OF 1

FACILITY CODE: ~~NA~~ MND16
LOCATION ID: B408
SAMPLE ID: W40801
LOG DATE: 06/20/94 JHD 10/5/94
ANALYICAL LAB CODE: ~~NA~~ COMP

LOT CONTROL NO.: NA
SAMPLE TYPE: ~~GRAB~~ F JHD 6/27/94
ACCEPTANCE CODE: ~~NA~~ A JHD 10/5/94
LOGGER CODE: ~~NA~~ SAIC

INITIAL GROUNDWATER DEPTH (FT): 37.34
SAMPLING PERIOD: START 0937
SAMPLING METHOD: BAILER

SAMPLE DEPTH (FT): 37.1 - 42.1
COMPLETE 0942
DATE SENT: SEE SAMPLE MANAGERS LOG

COMMENTS PURGE 3 VOLUMES FROM 0847 TO 0915
MK 6/20/94

FINAL PARAMETER MEASUREMENTS:

			1ST	2ND	3RD
POTENTIAL OF HYDROGEN	pH	S.U.	~~12.8~~	7.77,	7.78, 7.77
SPECIFIC CONDUCTANCE	Ec	umhos/cm		0.72,	0.73, 0.73
REDOX POTENTIAL	Eh	mvolts		200.0,	197.5, 196.4
TEMPERATURE	TMP	°C		12.8,	12.8, 12.8
ALKALINITY ($CaCO_3$)	ALK	mg/l		268.5 (AVG. OF RUN 1 + RUN 2)	
DISSOLVED OXYGEN	DO	mg/l		6.72 @ 15.4°C	

TIME	TOTAL VOLUME WITHDRAWN (GALS)	TOTAL VOLUME WITHDRAWN (Bore Volume)	pH	Ec (umhos/cm)	TEMP (°C)	COMMENTS
0915	3.5	3.125	NA	NA	NA	NONE
0920	3.75	3.348	↓	↓	↓	↓
0930	4.00	3.57	↓	↓	↓	↓
0942	4.50	4.018	7.77	0.72	12.8	200.0 SAMPLE 0942
0945	4.50	4.018	7.78	0.73	12.8	197.5 NA
0947	4.50	4.018	7.77	0.73	12.8	196.4 NA
				LAST ENTRY		

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

SAMPLE TYPES:
F - FIELD R - REPLICATE
K - KNOWN A - ACID BLANK

SAMPLING METHODS:
BP - BLADDER PUMP
PP - PERISTALIC PUMP
G - GRAB
B - BAILER
AL - AIR-LIFT SAMPLER
SL - SUCTION LIFT PUMP
SP - SUBMERSIBLE PUMP

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 6/20/94
FORM COMPLETED BY / DATE

[signature] 6/27/94
TECHNICAL REVIEWER / DATE

202

GROUNDWATER QUALITY SAMPLING RECORD — SOIL BORI

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO.

JMD 10/5/94 PAGE 1 OF 1

FACILITY CODE: NA

LOCATION ID: B408 — LOG DATE: 6/20/94

TIME	TOTAL VOLUME WITHDRAWN (GALS)	TOTAL VOLUME WITHDRAWN (Bore Volume)	pH	Ec (umhos/cm)	TEMP (°C)	COMMENTS
	3.5		7.70	0.72	13.4	
	3.75	MK 6/20/94	7.78	0.74	12.8	
	4.0		7.79	0.73	12.8	
		SEE PG 202 FOR THIS INFORMATION				

GROUNDWATER QUALITY SAMPLING RECORD

SOIL BORINGS
B408 p.203
PROJECT NO: 34896

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

JMD 10/5/94 PAGE 1 OF 1

FACILITY CODE: NA

LOCATION ID: B408

LOG DATE: 06/20/94

BORE VOL CALCULATION (GAL)

$\frac{d^2\pi}{4}$ $(h_1 - h_2)$ X 7.48

$\frac{.2^2(3.1416)}{4}(42.1-37.34) \times 7.48$

$\frac{0.1257}{4}(4.76)(7.48) = 1.1180$ GAL

0.0314 (35.6048)

DEPTH OF WELL (h2) (ft): 42.1

DEPTH TO WATER (h1) (ft): 37.34

WELL DIAMETER (ft): ~~2.00~~ .20 FT

ONE BORE VOLUME (GAL): 1.12 GAL

SCREENED INTERVAL (ft): 37.0 - 42.1 FT BGS

FIELD REP: Kuidzeis

INSTRUMENT(S) USED: pH/H, Diss O_2, COND

SAMPLING INFORMATION

WITDRAWL METHOD: BAILER

FILTER SIZE: NA

THERMOMETER ID: ORION 250 A SN: 002139

Ec METER ID: HACCO 1239 YSI 3000 TLC

pH METER ID: ORION 250 A SN: 002139

PUMP ID: NA

ALKALINITY KIT ID: HACH DIGITAL TITRATOR

CALIBRATION INFORMATION

DATE/TIME OF LAST Ec CALIBRATION: 06/16/94

TIME OF pH CALIBRATION: 0830

FOR STANDARD pH 7, INSTRUMENT READING: 7.08 adjusted to 7.00

FOR STANDARD pH 4, INSTRUMENT READING: 4.11 ~~3.97~~ adjusted to 4.00

FOR STANDARD pH 10, INSTRUMENT READING: 10.05 adjusted to 10.00

Eh OF CALIBRATION SOLUTION: ~~Jmk~~

Eh READING IN CALIBRATION SOLUTION AFTER MEASUREMENT: 230.7

TEMP OF CALIBRATION SOLUTION (°C): 25°C

CONDUCTIVITY METER 1000 MICROSIEMEN/cm = 1.02

10,000 " = 9.98 20 mV/cm TC to 25°C Setting

SHIPPING INFORMATION

LAB(S) SHIPPED TO: SEE SAMPLE MANAGERS LOGBOOK

DATE(S) SHIPPED:

METHOD OF SHIPMENT:

COMMENTS:

MK 6/20/94

GROUNDWATER QUALITY SAMPLING RECORD

SOIL BORINGS B408 P205

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

PAGE 1 OF 1

SMD 1 10/5/94

FACILITY CODE: MND16

LOCATION ID: B408; SAMPLE W40801

LOG DATE: RUN1: 6/20/94 @ 12:45 RUN2: 6/21/94 @ 09:30

ERROR AT 4.50: $\left| \frac{X1 - X2}{XS} \right| \times 100 =$ 14.8 %

1st = 14.8 %

2nd = NA %

INITIAL pH 7.91

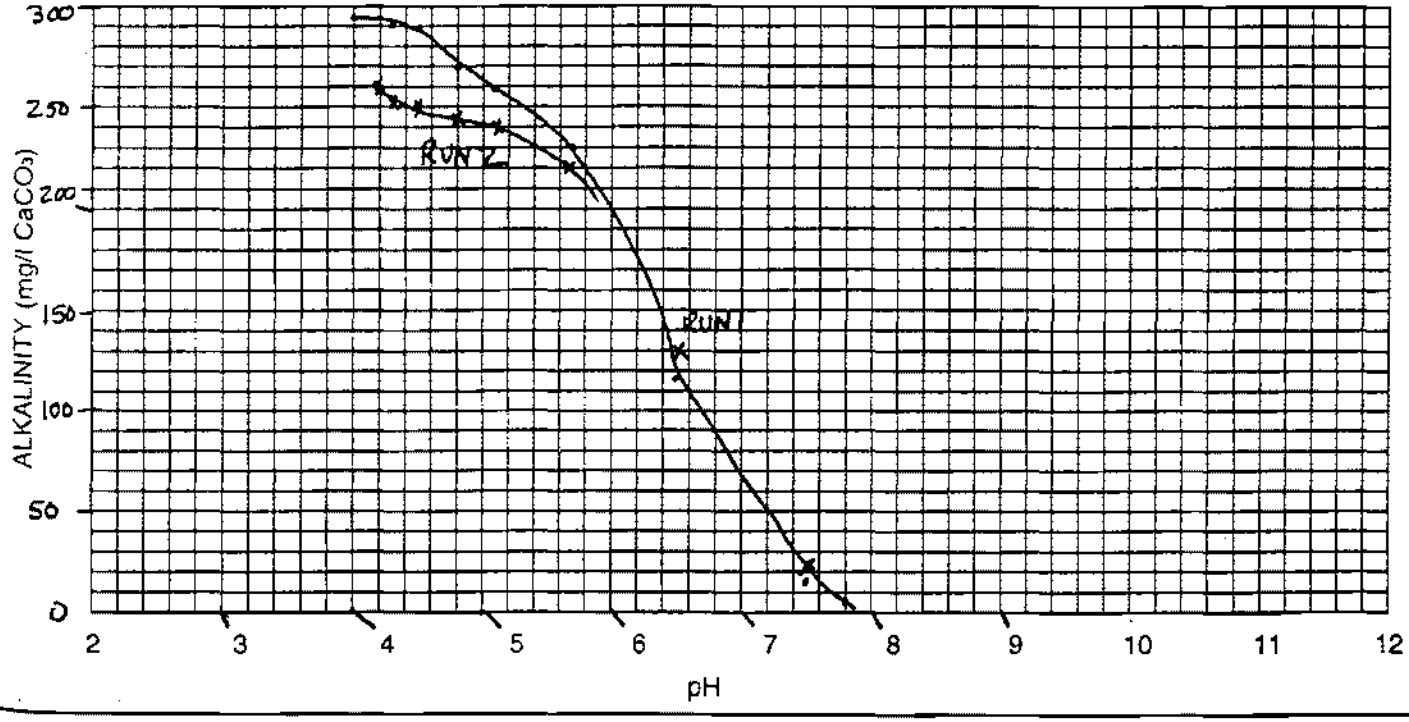
pH CHECK AFTER TITRATION

7.00 = 7.02

4.00 = 4.00

pH	ALKALINITY (mg/l $CaCO_3$)		
	1st	2nd	3rd
8.90	NA	NA	NR
8.60			
8.30			
8.05			
7.80	8	8	
7.50	15	23	
6.50	117	130	
5.70	230	219	
5.10	258	239	
4.80	270	245	
4.50	287	250	
4.25	291	252	
4.00	295	259	

NOTE: 3RD RUN NOT performed even though % ERROR between RUN1 and RUN2 > 10%



200

GROUNDWATER LEVELS AND GASOLINE THICKNESS DATA

B408 p.208

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO. 34

FACILITY CODE: MND16 LOGGER CODE: SAIC

LOG DATE: 6/16/94 – 6/20/94 TYPE OF PROBE: OTH

ACCEPTANCE CODE: A YSI TLC METER

LOCATION ID	LOG TIME (HH:MM)	DEPTH TO WATER (ft)	DEPTH TO GAS (ft)	COMMENTS
B408	0830	34.04	NA	INITIAL DEPTH
B408	0955	39 36.4	NA	DEPTH AFTER COLLECTING
LAST	ENTRY	39.7' MK 6/20/94		SAMPLE (AFTER APPROX. 10.5 GALLONS REMOVED.

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

TYPES OF PROBES: ROD - TEFLON ROD WITH PASTE OWI - OIL WATER INTERFACE PROBE OTH - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[illegible] 6/20/94 — FORM COMPLETED BY / DATE

[illegible] 6/27/94 — TECHNICAL REVIEWER / DATE

STANDARD ELECTRICAL CONDUCTIVITY DATA

SOIL BORINGS B401 P. 209

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: ~~NA~~ MND16 JAD 10/5/94

LOGGER CODE: ~~NA~~ SAIC JAD 10/5/94

LOG DATE: 6/20/94

ACCEPTANCE CODE: ~~NA~~ A

MANUFACTURER/Ec METER ID: YSI 3000 TLC METER HAZCO 1239

ELECTRICAL CONDUCTIVITY OF KNOWN SOLUTIONS AT 25° C:	
KNOWN (mg/l KCl)	Ec (meter)
~~10000~~	~~1 x 10^4~~ JAD 10/5/94
1000 MICROMHOS/CM	~~1 x 10^3~~ 1003 NMhos/CM YSI 3167

TIME Ec	TEMPERATURE (°C) LAB THERMOMETER	TEMPERATURE (°C) (Ec METER)
09:42 NR ~~0.72~~ JAD 10/5/94	0	~~14.1~~ NR
NR	1	JAD 10/5/94 NR
NR	2	NR
NR	3	NR
667	4	4.9
662	5	4.1
668	6	5.1
668	7	5.4
670	8	6.2
676	9	6.6
690	10	7.7
703	11	8.3
724	12	9.2
736	13	9.9
773	14	11.4
804	15	12.2
817	16	14.6
826	17	15.2
846	18	16.3
870	19	17.3
883	20	18.0
914	21	19.5
925	22	20.4
944	23	21.0
968	24	23.0
1006	25	24.0

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[illegible] 6/20/94
FORM COMPLETED BY / DATE

[illegible] 10/5/94
TECHNICAL REVIEWER / DATE

TASK TEAM ACTIVITY LOG SHEET

SOIL BORINGS
B409 P.213

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 6/28/94 TIME: 0815 : 1443 PAGE 1 OF 4

Task Team Members:

MIKE KLIDZEJS — JOHN KIEFER

ERIC SAYZOF

ALLAN WOLFE — MK 6/28/94

Narrative (include time and location):

0815 SAIC CREW ARRIVES AT BH09 SITE. BOWSER CREW PRESENT. ON 6/27/94 THE DRILL RIG WAS MOVED TO THE SITE AFTER BEING DECONED. AT PRESENT CREW IS STANDING BY FOR JOHN DAVIS TO ARRIVE AND DETERMINE THE EXACT DRILLING LOCATION. AT APPROX. 0730 RAY MOSS REPORTED THAT HP COVERAGE WAS NOT REQUIRED FOR THE BH09 LOCATION AND THAT HE WOULD NOT BE ON SITE. HE CAN BE REACHED A 3493. 0920 JOHN DAVIS & ALEX RRAY (MOUND) ON SITE - CHOOSE BEST LOCATION FOR BH09 0924 JOHN & ALEX LEAVE SITE 0932 RIG IS MOVED OVER BORING LOCATION DRILL CREW BEGINS TO LEVEL RIG 0945 SITE SET-UP. TAKE BACKGROUND READINGS. PREPARE TO COLLECT BH0901 FROM THE SURFACE. SAMPLE BH0901 WILL BE COLLECTED USING THE SPADE & SCOOP METHOD. VOA FRACTION COLLECTED FROM GROUND. SOIL FOR OTHER FRACTIONS MIXED IN A BOWL THEN PLACED IN SAMPLE CONTAINERS. SAMPLE BH0901 COLLECTED AT 0954. SITE DESCRIPTION: BOREHOLE LOCATION IS APP 13.7 FT SW OF STAKE 1056, TRE AT THE APPROXIMATE CENTER OF THE WIDTH OF A ROAD BULLDOZED INTO THE WOODS

MK 6/28/94

Daily Weather Conditions: A.M. PARTLY SUNNY, TEMP UPPER 70's WINDS CALM

P.M. MOSTLY SUNNY, TEMP LOW 80's, MODERATE SW WIND

Recorded By [signature] 6/28/94 QA Checked By [signature] 10/4/94

214

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

B409 P214

Date (mm/dd/yy): 06/28/94 TIME: 0815 : 1443 PAGE 2 OF 4

Task Team Members:

SAME AS PG 213

Narrative (include time and location):

BOREHOLE LOCATION APPEARS AT THE NATURAL ELEVATION (NEITHER CUT NOR FILLED). SURFACE VEGETATION HOWEVER WAS REMOVED DURING DOZING. ON THE ROAD BELOW THE B409 LOCATION, ABUNDANT FOSSILIFEROUS LIMESTONE FLOAT IS ABUNDANT, POSSIBLY INDICATING A SHALLOW DEPTH TO BEDROCK. 1010 DRILL RIG IS STARTED, RIG UP WITH A 2" IN DIAM SPLIT SPOON. 1014 COLLECT 0-2 FT SPOON 1016 COLLECT 2-4 FT SPOON SPOON REFUSED AFTER 2 IN. AUGER TO 4.0 FT. 1024 COLLECT 4-6 FT SPOON 1032 COLLECT 6-8 FT SPOON 1035 COLLECT 8-10 FT SPOON 1043 COLLECT 10-12 FT SPOON 1045 COOLER TEMP = 6°C. AUGER TO 12 FT BGS. 1054 COLLECT 12-14 FT SPOON. SHALE (COMPETENT) ENCOUNTERED IN 12-14 FT SPOON. DRILLER BELIEVES SHALE BEGAN AT APPROXIMATELY 11.5. 1200 AUGER TO 14.0 FT BGS ~~WAF~~ MK 6/28/94 WHERE AUGER IS REFUSED. DECIDE TO SKID RIG AND COLLECT SAMPLE ~~BOL~~ MK 6/28/94 B40902 FROM APPROXIMATELY ~~8-12~~ 7 MK 6/28/94 FT BGS IN OFFSET HOLE. RIG IS MOVED AND NEW HOLE LOCATION MARKED AT 3.6 FT EAST OF ORIGINAL LOCATION 1115 DRILL (AUGER) TO 7.0 FT BGS. 1018 ERIC LEAVES TO CABLE-TOOL RIG

Daily Weather Conditions: A.M. SEE PG 213

P.M.

Recorded By [signature] 6/28/94 QA Checked By [signature] 10/4/94

TASK TEAM ACTIVITY LOG SHEET — **SOIL BORINGS** B409 P.215

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/28/94 TIME: 0815 : 1443 PAGE 3 OF 4

Task Team Members:

SAME AS PG 213

Narrative (include time and location):

TO PICK-UP 3" SPLIT SPOON ADAPTER. STANDING BY. 1130 ERIC RETURNS TO SITE W/ ADAPTER. RIG UP 1ST SPLIT SPOON TO BE DRIVEN FROM 7.0-9.0 FT BGS. - FIRST SPOON FOR BH0902 - VOC FRACTION WILL BE COLLECTED FROM MIDDLE OF THIS SPOON. REMAINDER OF ~~MAT~~ SOIL FROM 1ST SPOON & ADDITIONAL REQUIRED TO GET SUFFICIENT SAMPLE VOLUME WILL BE MIXED IN A BOWL THEN PLACED IN SAMPLE CONTAINERS.
0937 PULL RUN DOWN AUGER TO CLEAN. ~~OP 12~~
1147 COLLECT 7-9 FT SPLIT SPOON AFTER IT REFUSED AT ~ 8.0 FT. NO SOIL RECOVERY MK 6/28/94 - LARGE LIMESTONE ROCK BLOCKED SPOON. AUGER TO 9.0 FT. ~~1204~~ MK 6/28/94 1249 BEGIN DRIVING 9-11 FT SPOON. COLLECT SPOON AND ~~SAMPLE~~ BEGIN COLLECTION OF BH0902 AT 1157. 1204 COLLECT 11-13 FT MK 6/28/94 SPOON. MIX MATERIAL WITH FIRST SPOON MK 6/28/94 1213 DRILLERS LEAVE SITE FOR LUNCH. ~~1223~~ 1227 SAIC CREW LEAVES SITE 1235 RELINQUISH SAMPLES & C-O-C EN008 TO JOLETTA MINARD AT THE SAIC FIELD TRAILER.

MK 6/28/94

Daily Weather Conditions: A.M. SEE PG. 213

P.M.

Recorded By [signature] 6/28/94 QA Checked By [signature] 10/5/94

216

TASK TEAM ACTIVITY LOG SHEET — SOIL BORINGS B409 p 216

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/28/94 TIME: 0815 : 1443 PAGE 4 OF 4

Task Team Members:

SAME AS PG. 213

Narrative (include time and location):

1400 SAIC CREW RETURNS TO BH09 SITE TO ABANDON BOREHOLES. DRILL CREW ON SITE TAG DEPTH OF BOTH BOREHOLES AT 1407. ORIGINAL BOREHOLE TAGGED AT 3.7 FT BGS INDICATING CAVE-IN FROM 14.0 TO 3.7 FT. OFFSET BOREHOLE TAGGED THROUGH AUGERS AT 11.7 FT BGS. 1410 BEGIN ABANDONING BOREHOLES. (SEE PG. 261 FOR DETAILS) 1422 BOREHOLES FILLED WITH GROUT BEGIN SHOVELING CUTTINGS INTO DRUMS. 1443 DRILLERS & SAIC LEAVE SITE.

LAST ENTRY

MK 06/28/94

Daily Weather Conditions: A.M. SEE PG. 213

P.M.

Recorded By [signature] 6/28/94 QA Checked By [signature] 10/5/94

BOREHOLE LOG (SOIL)

SOIL BORINGS B409 P 229

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE 10/5/94 PROJECT NO: 34896

JHD

Page 1 of 2

FACILITY CODE: ~~NA~~ MAIDIG JHD/10/5/94

LOCATION ID: B409

COORDINATES (FT):

NORTH NA EAST NA

GROUND ELEVATION (FT MSL) NA

LOCATION TYPE: ~~NA~~ BH JHD 10/5/94

COMMENTS:

DRILLER CODE: ~~Bowers~~ BOWS

COMPLETION DATE 06 / 28 / 19

DIAMETER (IN): 8.0

DEPTH (FTFD): ORIGINAL BH - 14.0 FT OFFSET BH 13.0 FT B

CONSTRUCTION METHOD: HOLLOW STEM AUGER

ACCEPTANCE CODE: ~~NA~~ A JHD 10/5/94

MK 6/28/94

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
~~GROUNDWATER~~		
NOT		
ENCOUNTERED		

LOCATION DESCRIPTION

SEE ACTIVITY LOG

MK 6/28/94

JHD 10/5/94

LITHOLOGIC LOG

LOGGER CODE: ~~NA~~ SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0.0-0.5	0.0-0.5	100%	NA	SPADE & SCOOP	B409001	NA	NA	OH	SILTY CLAY 2.5 Y 3/1
									WITH ABUNDANT ROOT
									MATERIAL
0-2.0	0-2	1.7FT	NA	S	NA	5/9/11/15	26	~~CL~~ OH MK 6/28/94	SILTY CLAY 2.5 Y 3/1 W/
									ROOT MATERIAL GRADING
									DOWNWARD TO 5 Y 5/2
									SILTY CLAY WITH SOME FOSSILIFERO
						50/2 MK 6/28/94			LIMESTONE ROCK FRAGMENTS
2-4	2-4	0.3	NA	S	NA	50/2	NA	CL	2.5 Y 3/1 SILTY CLAY W/
									A LARGE ROOT (1/2 INCH)
4-6	4-6	1.2	NA	S	NA	16/23/50/5	NA	CL	4.0-4.2 SAME AS 0-0.5
									4.2-5.2 - SILTY CLAY

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:

A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:

A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

MK 6/28/94 — FORM COMPLETED BY / DATE

10/5/94 — TECHNICAL REVIEWER / DATE

230

BOREHOLE LOG (SOIL)

SOIL BORINGS B409 P.23

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 3486

JHD 10/5/94 JHD 10/5/94

FACILITY CODE: ~~NA~~ MND16

DRILLER CODE: ~~NA~~ BOWS

LOCATION ID: B409

COMPLETION DATE 6/28/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
									MOTTLED IN COLOR
									PREDOMINANT 5Y 6/2
									WITH 5Y 5/3 SOME SMALL
									MICRITIC LIMESTONE FRAGMENTS
6-8	6-8	0.5	NA	S	NA	17/21/25/23	48	OL	SAME AS ABOVE WITH
									10YR 4/2 STAINING AROUND
									VISIBLE ROOTS. FOSSILIFERO
									LIMESTONE AT BOTTOM OF
									INTERVAL
8-10	8-10	1.2	NA	S	NA	4/11/14/22	36	OL	SILTY CLAY, FIRM ~~MOT~~, MOTTLED
									IN COLOR PRED 10YR 5/2
									WITH BLUISH GRAY, AND
									10YR 5/4
10-12	10-12	0.1	NA	S	NA	38/35/50/5	NA	OL	10YR 5/2 FIRM CLAY
									WITH 1 DARK GREY MICRITIC
									LIMESTONE FRAGMENT
12-14	12-14	0.5	NA	S	NA	33/50/5	NA	~~OL~~ NA MK 6/28/94	WEATHERED, HARD BUT
									CRUMBLY ~~PRESENTS~~ MK 6/28/94 5Y 5/1
									SHALE (POSSIBLY CALCEROUS)
7-9	7-9	0.1	NA	U	B40902	29/31/90/0	NA	NA	LARGE MICRITIC TO FOSSILIFERO
									LIMESTONE FRAGMENT
									LITTLE SOIL
9-11	9-11	1.4	NA	U	B40902	25/48/65	NA	OL	5Y 5/2 SILTY FIRM CLAY W
									~~ABUNDANT~~ SOME LIMESTONE
									FRAGMENTS
11-13	11-13	1.7	NA	U	B40902	28/50/71/50	NA	OL	SAME AS 12-14 PT IN
									ORIGINAL BOREHOLE
					MK	6/28/94			

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/28/94 — FORM COMPLETED BY / DATE

10/5/94 — TECHNICAL REVIEWER / DATE

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

SOIL BORINGS: B409 & B253

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: JHD ~~NA~~ MND16

LOG DATE: 6/28/94 JHD 10/5/94

LOGGER CODE: 10/5/94 ~~NA~~ SAIC

FIELD REP: ~~NA~~ M. KLIDZEJS

CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC

CGI MODEL NO.: MX251

SERIAL NO.: 9403280-016 9306099-061

CALIBRATION DATE/TIME: 6/28/94 0716

ACCEPTANCE CODE: ~~NA~~ A JHD 10/5/94

BATTERY CONDITION OK

CALIBRATION GAS (%LEL)

TYPE PENTANE CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM)

TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: BZ INDICATES READING TAKEN IN BREATHING ZONE

MK 06/28/94

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B409	NA	NA	0945	BH BACKGROUND BZ	000	NA	20.9
			0954	B4 0-0.5	000		20.9
			1014	0-2	000		20.9
			1016	2-4	000		20.9
BZ			1018	4-6	000		20.9
AT WELL			1022	NA	000		20.9
			1024	4-6	000		20.9
			1032	6-8	000		20.9
			1035	8-10	000		20.9
BZ			1037	~~NA~~ MK 6/28/94	000		20.9
BH			1037	~~NA~~ MK 6/28/94	000		20.9
			1043	10-12	000		20.9
			1054	12-14	000		20.9
B409 02			1157	9-11	000		20.9
B409 02			1205	11-13	000		20.9

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

6/28/94 FORM COMPLETED BY / DATE

10/5/94 TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

SOIL BORINGS
B409 p.257

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO: 34896

FACILITY CODE: ~~NA~~ MND16 JHD 10-5-94
LOG DATE: 6/28/94
LOCATION ID: B409
LOCATION TYPE: ~~NA~~ BH JHD 10-5-94
LOGGER CODE: ~~NA~~ SAIC
FIELD REP: ~~NA~~ M. KLIDZEJS

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: Foxboro
MODEL NO.: OVA 128
SERIAL NO.: HNU 2241 SN: A41444
DATE/TIME CALIBRATION 6/28/94 0725
ACCEPTANCE CODE: ~~NA~~ A JHD 10-5-94

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE 39562	1 100 ppm
2 NA	2 NA

COMMENTS: MC 6/28/94

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
0945	B409	NA	NA	0.0	NA		0.0	BACKGROUND
0954	B409D1	↓	↓	NA	↓	0.0	0.0-0.5	NA
1014	B409	↓	↓	↓	↓	0.0	0-2	↓
1016	B409	↓	↓	↓	↓	0.0	2-4	↓
1018	↓	↓	↓	0.0	↓	NA	4-6	↓
1022	↓	0.0	↓	NA	↓	NA	NA	AT AUGER
1024	↓	NA	↓	↓	↓	0.0	4-6	NA
1032	↓	↓	↓	↓	↓	0.0	6-8	↓
1035	↓	↓	↓	↓	↓	0.0	8-10	↓
1037	↓	↓	↓	0.0	↓	NA	10	↓
1037	↓	0.0	↓	NA	↓	NA	10	↓
1043	↓	NA	↓	↓	↓	0.0	10-12	↓
1054	↓	↓	↓	↓	↓	0.0	12-14	↓
1157	B409D2	↓	↓	↓	↓	0.0	9-11	↓
1204	B409D2	↓	↓	↓	↓	0.0	11-13	↓

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

M. Klidzejs 6/28/94
FORM COMPLETED BY / DATE

JHD 10/5/94
TECHNICAL REVIEWER / DATE

BOREHOLE OR WELL PLUGGING / ABANDONMENT

B409 p.261

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SITE ID NUMBER: B409 DATE PLUGGED 06 / 28 / 94

SITE COORDINATES: N: NA E: NA DEPTH BLS (ft) ORIGINAL - 14.0 OFFSET - 11.7

TYPE OF CASING: NA

CASING DIAMETER (ID) (in.) NA GROUND ELEVATION (ft msl) NA

SCREENED ELEVATION (ft msl) NA

GEOLOGIC MATERIAL AT SCREEN SHALE AT TD IN BOTH BOREHOLES

MK 6/28/94

AMOUNT OF CASING REMOVED (ft) NA

PLUGGING MATERIAL SOUTHWESTERN TYPE I PORTLAND CEMENT (2 94LB. BAGS) AQUAGEL GOLD SEAL NON-TREATED BENTONITE (1/4 BAG) POTABLE WATER

APPROX. VOLUME OF PLUGGING MATERIAL (cu ft.) 35 GAL

PLUGGING METHOD HAD CAVE-IN IN ORIGINAL BOREHOLE FROM TD (14.0) TO A DEPTH OF 3.7 FT BGS. GROUT, MIXED IN

~~REMARKS~~ BARREL, WAS PUMPED THROUGH RIG, THROUGH HOSE PLACED IN BOREHOLE. GROUT BROUGHT TO GROUND SURFACE IN OFFSET BOREHOLE GROUT WAS PUMPED THROUGH HOSE PLACED INSIDE OF AUGERS. GROUT BROUGHT TO GROUND SURFACE AS AUGERS WERE SEQUENTIALLY REMOVED. CUTTINGS FROM BOREHOLES SHOVELED INTO OPEN TOP 55 GAL DRUMS.

MK 6/28/94

RECORDED BY: [signature] 6/28/94 (Signature) CHECKED BY: [signature] 10/5/94 (Signature)

266

SAMPLE LOG SHEET

B409 p. 266

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B4090 1 DATE COLLECTED (MM/DD/YY): 06/28/94 TIME (HH:MM): 0954

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B409

DESCRIPTION: BORING B409

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO ~~2.00~~ 0.5 MK 6/28/94 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: SEE ACTIVITY LOG

MK 6/28/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: ~~HA~~ JMD 7/26/94 05-NP-009

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

BOREHOLE LOCATION MOVED

THIS TRPC APPLIES TO ALL SAMPLES ~~MK 6/28/94~~ JMD 7/26/94

RECORDED BY: [signature] 6/28/94 (SIGNATURE)

QA CHECKED BY: [signature] 10/5/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4Ø9Ø1

B409 p. 267

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	FN008	SEE SAMPLE LOG	MANAGERS	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			LAST ENTRY				
			MK 6/28/94				

SAMPLE ID'S RINSATE: ER0015 TRIP BLANK: TBN008 FIELD BLANK: AB0009 FIELD DUPLICATE: NA

RECORDED BY: [signature] 06/28/94 (SIGNATURE)

QA CHECKED BY: [signature] 10/5/94 (SIGNATURE)

267

SAMPLE LOG SHEET

B409 p. 268

268

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40902 DATE COLLECTED (MM/DD/YY): 6/28/94 TIME (HH:MM): 1157

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: MOUND NEW PROP

POINT CODE: B409

DESCRIPTION: BORING B409

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~0.00~~ TO ~~0.00~~ MR 6/28/94 FT

9.00 13.00

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: VOC FRACTION COLLECTED FROM MIDDLE OF 9-11 FT SPOON REMAINING MATERIAL FROM 1ST SPOON MIXED W/ 11-13 FT SPOON.

MR 6/28/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

(IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

MR 6/28/94

RECORDED BY: [signature] 6/28/94 (SIGNATURE)

QA CHECKED BY: [signature] 10/5/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B40902

B469 p. 269

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	FN008	SEE SAMPLE LOG	MANIFESTS	COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		LAST ENTRY					
		MK 6/28/94					

SAMPLE ID'S RINSATE: FR008 16 TRIP BLANK: TBN008 FIELD BLANK: AB009 FIELD DUPLICATE: NA

RECORDED BY: [signature] 6/28/94 (SIGNATURE) QA CHECKED BY: [signature] 10/5/94 (SIGNATURE)

269

A.3

A.2 MONITORING WELL LOGBOOKS

EG1G MOUND

OU5 NEW PROP

EXTND PHASE

MONITOR WELL

LOGBOOK

W398-399

W411

MONITORING WELLS LOG BOOK

W411 W398 W399

PROJECT TITLE: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE RI/FS FIELD INVESTIGATIONS

WORK SITE: *MOUND PLANT*
Miamisburg, Ohio
OU5 New Property

ACTIVITY: *Mound OU5 New Property Phase 1 RI/FS Field Investigations*

CONTRACT #: *BOA 52264*
TASK ORDER: *34896*

PROJECT MANAGER: *Thomas Tank*
COMPANY NAME / ADDRESS: *Science Applications International Corporation*
4031 Colonel Glenn Hwy ,Dayton, Ohio 45431
TELEPHONE NUMBERS: *(513) 429-2699*

SUPERVISORS: *OU5 Manager: Alan Spesard (513)865-3859*
SAIC Proj. Manager: Thomas Tank (513)429-2699

EMERGENCY RESPONCE: *Police / Ambulance / Fire 911 or 865-4040*

PROCEDURES: *SOP 1.1, SOP 2.2, SOP 3.1, SOP 4.1, SOP 4.3, SOP 4.4, SOP 5.1, SOP 6.1, SOP 6.3*

START DATE: 6/16/94
END DATE: 8/29/94

TABLE OF CONTENTS W411 - W398 - W9 W399 MONITORING WELLS p. I

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
1	ACTIVITY LOG SHEET - W411; 6/16/94	31	NO ENTRY
2	" ; "	32	
3	" ; "	33	
4	" ; "	34	
5	" ; "	35	
6	" ; "	36	
7	" ; 6/20/94	37	
8	" ; "	38	
9	" ; "	39	
10	" ; 6/22/94	40	
11	ACTIVITY LOG SHEET - W399; 7/5/94	41	
12	" ; "	42	
13	ACTIVITY LOG SHEET - W411; 7/12/94	43	CGI MONITORING DATA; W411
14	" ; "	44	NO ENTRY
15	" ; 7/13/94	45	CGI MONITORING DATA; W411
16	" ; 7/18/94	46	NO ENTRY
17	BOREHOLE LOG - W411	47	FID FIELD DATA; W411
18	"	48	" ; "
19	NO ENTRY	49	NO ENTRY
20		50	"
21		51	KEY SHEET
22		52	ACTIVITY LOG SHEET - W411; 7/18/94 - 7/19/94
23		53	" ; 7/19/94
24		54	SAMPLE LOG SHEET; B39701
25		55	" ; "
26		56	NO ENTRY
27		57	
28		58	
29		59	
30		60	

TABLE OF CONTENTS — W411, W398, W399 — MONITORING WELLS — P. II

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
61	NO ENTRY	91	GW QUAL. SPLG. RECORD; W39701
62		92	NO ENTRY
63		93	GW QUAL. SPLG. RECORD; W411
64		94	NO ENTRY
65		95	GW QUAL. SPLG. RECORD; ALK; W39701
66		96	NO ENTRY
67		97	GROUNDWATER LEVEL DATA; W411
68	SAMPLE LOG SHEET; W39701	98	NO ENTRY
69	" ; "	99	STANDARD ELEC. CONDUCTIV. DATA
70	ACTIVITY LOG SHEET - W411; 7/19/94	100	NO ENTRY
71	NO ENTRY	101	
72		102	
73		103	WELL CONSTRUCTION FIELD LOG; W411
74		104	NO ENTRY
75		105	WELL COMPLETION INFO; W411
76		106	NO ENTRY
77		107	MONITORING WELL DIAGRAM; W411
78		108	NO ENTRY
79		109	Activity LOG SHEET - W398; 6/21/94
80		110	" ; "
81		111	" ; "
82		112	" ; "
83		113	" ; "
84		114	" ; 6/22/94
85		115	" ; "
86		116	" ; "
87		117	" ; 6/23/94
88		118	NO ENTRY
89		119	
90		120	

ELLS
34896

TABLE OF CONTENTS MONITORING WELLS
W411 W398 W41-W399 P III
PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
121	NO ENTRY	151	CGI MONITOR DATA; W398
122		152	" ; "
123		153	NO ENTRY
124		154	"
125	BOREHOLE LOG; W398	155	FID FIELD DATA; W398
126	" ; "	156	" ; "
127	NO ENTRY	157	NO ENTRY
128		158	"
129		159	KEY SHEET
130		160	NO ENTRY
131		161	"
132		162	SAMPLE LOG SHEET; B39801
133		163	" ; "
134		164	NO ENTRY
135		165	
136		166	
137		167	
138		168	
139		169	
140		170	
141		171	
142		172	
143		173	
144		174	
145		175	
146		176	
147		177	
148		178	
149		179	
150		180	

TABLE OF CONTENTS W411 W398 W399 MONITORING WELLS PIV

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO.: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
181	NO ENTRY	211	NO ENTRY
182		212	
183		213	
184		214	
185		215	
186		216	
187		217	Activity Log Sheet; W399; 6/14/94
188		218	" ; "
189		219	" ; "
190		220	" ; "
191		221	" ; "
192		222	" ; 6/15/94
193		223	" ; "
194		224	" ; "
195		225	" ; "
196		226	" ; 6/16/94
197		227	" ; "
198		228	Activity Log Sheet - W411; 7/5/94
199		229	Activity Log Sheet - W399; 7/21/94
200		230	" ; "
201		231	" ; 7/25/94
202		232	" ; 8/11/94
203		233	Borehole Log; W399
204		234	" ; "
205		235	" ; "
206		236	NO ENTRY
207		237	
208		238	
209		239	
210		240	

TABLE OF CONTENTS
W411 W398 W399

MONITORING WELLS
P. V

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
241	NO ENTRY	271	SAMPLE LOG SHEET: B399Ø1
242		272	NO ENTRY
243		273	
244		274	
245		275	
246		276	
247		277	
248		278	
249		279	
250		280	
251		281	
252		282	
253		283	
254		284	SAMPLE LOG SHEET; W399Ø1
255		285	" ; "
256		286	ACTIVITY LOG SHEET - W399; 8/22-8/23/94
257		287	" ; 8/24, 8/25, 8/29/94
258		288	NO ENTRY
259	CGI MONITOR DATA; W399	289	
260	" ; "	290	
261	NO ENTRY	291	
262	"	292	Activity LOG SHEET - W399; 8/29/94
263	FID FIELD DATA; W399	293	NO ENTRY
264	" ; "	294	
265	NO ENTRY	295	
266	"	296	
267	KEY SHEET	297	
268	NO ENTRY	298	
269	"	299	
270	SAMPLE LOG SHEET; B399Ø1	300	

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W411 W398 W399

MONITORING WELLS
P-VI

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
301	NO ENTRY	331	NA
302		332	
303		333	
304		334	
305		335	
306		336	
307	GW QUAL. SPLG. RECORD - W399Ø1	337	
308	NO ENTRY	338	
309	GW QUAL. SPLG. RECORD - W399	339	
310	NO ENTRY	340	
311	"	341	
312	GW QUAL. SPLG. RECORD AIK - W399Ø1	342	
313	GROUNDWATER LEVEL DATA - W399	343	
314	NO ENTRY	344	
315		345	
316		346	
317		347	
318		348	
319	WELL CONSTRUCTION DATA LOG; W399	349	
320	NO ENTRY	350	
321	"	351	
322	WELL COMPLETION INFO - W399	352	
323	MONITOR WELL DIAGRAM - W399	353	
324	NO ENTRY.	354	
325	END OF BOOK - NO MORE PAGES	355	
326	NO MORE ENTRIES	356	
327		357	
328		358	
329		359	
330		360	

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS W411 P-1

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/16/94 TIME: ~~0937~~ : 1735 PAGE 1 OF 6

Task Team Members:

Susan L. Abston

Martha Cramer

SLC 07/27/94

Narrative (include time and location):

See pg 226 for morning activities (06/16/94)

SLC 06/16/94

W411 JMD 10/4/94

0937 Started ~~Live~~ cable tool drilling ~~← 397~~ using a 5ft section of 10" galvanized steel casing to act as a guide for the bit and steel - BOUSER - S. Patterson, S. Belt SLC 06/16/94

0941 Adding 5 gallons of water to bore hole

0944 Cleaning out the borehole @ 6ft BGS Limestone lens at the top 2ft but in soils We will collect samples after we drill the well Do not have the hammer with us now because of room and the limestone outcropping at the surface. Will describe soils at that time. Only have mud samples now JMD 6/25/94

0952 Continued drilling Added 2½ gal of ~~water~~ WATER

0957 Cleaning out hole @ 10ft BGS - Still in Soils and lenses of limestone

Continue drilling ..Added 2½ gal water

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Susan L Abston QA Checked By [illegible] 6/26/94

2

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **W411 PZ TASK NO.: 34896**

Date (mm/dd/yy): 6/16/94 TIME: 0737 : 1735 PAGE 2 OF 6

Task Team Members:

Martha Cramer

S. L. Abston

DJC 06/16/94

Narrative (include time and location):

JHD 6/23/94

1017 Cleaning out borehole at ~~12.5~~ 12.5 ft BGS. Encountering lens of limestone but no solid bedrock. Unable to determine exact elevation of lenses w/ this rig but a harder on was encountered @ ≈ 11 ft BGS

1021 Continue drilling adding 5 gal. of water

1040 Rock @ 14 ft BGS (solid) 17 SLA 06/16/94

1050 Cleaning out borehole @ ~~16~~ 17 ft BGS - Collected Grab sample. In rock but not very hard yet.

1054 Continued drilling adding 5 gal of water

SLA 06/16/94 14-17 ft BGS Description.

N5 Medium grey fossiferous, crystalline limestone w/ fragments of N4 medium dark grey shale 90% limestone frag - 10% shale, 50% of the limestone is weather stained. 10YR 5/4 Moderate yellowish brown

1106 Cleaning out borehole @ 20 ft BGS. Collecting grab sample. Very good rock @ 19 ft

1110 Continue drilling adding 5 gal. of water to borehole

~~17-20 ft BGS Description~~

Same as above w/ only traces of shale fragments and only about 20% weather stained limestone fragments

Daily Weather Conditions: A.M. ≈ 80°F Partly Cloudy Hot - Humid

P.M. NA

Recorded By Susan J Abston QA Checked By [illegible] 6/26/94

TASK TEAM ACTIVITY LOG SHEET | **MONITORING WELLS** W411-P3

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE | **TASK NO.: 34896**

Date (mm/dd/yy): 6/16/94 TIME: 0937 : 1735 PAGE 3 OF 6

Task Team Members:

Same as 1 of 4

JLC
06/16/94

Narrative (include time and location):

Fossil in both grab sample include bryozoans, brachiopods, crynoids. One small (1mm) frag of limestone had gold metallic sulfides? associated w/ it. (pyrite)

1130 Cleaning out hole @ 24 ft and collecting grab sample

1140 Shutting down rig and scanning out. Can here thunder in the back of the plant

1157 Off site for lunch

1301 Returned to site. Rig on to continue drilling

1315 No potable water. Leaving after another load

1355 Returned to site and start drilling @ 24 ft BGS

20-24 ft BGS Description

N5 medium-grey fossiliferous crystalline limestone fragments. Decreasing amounts of fossil materials to ≈ < 5% at this depth from ≈ 50% at 14-17 ft BGS

+ Closer inspection of cuttings from 14-17 ft after they dried showed several small frags of limestone contain sulfide crystals → pyrite or marcasite

1425 Cleaning borehole out @ 28 ft and taking a grab sample

1432 Continued drilling added 5 gal of water

Daily Weather Conditions: A.M. NA

P.M. ≈ 90° F Humid, Hot, Partly Cloudy

Recorded By Susan L Abston QA Checked By [illegible] 6/26/94

4.

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO.: 3489

Date (mm/dd/yy): 06/16/94 TIME: 0927 : 1735 PAGE 4 OF 6

Task Team Members:

Same as 1 of 6

D.J.C. 06/16/94

Narrative (include time and location):

24-28 ft BGS Description

Same as above

1453 Cleanhole out @ 31 ft BGS and collecting grab sample

1500 Continued drilling added 5 gal of water

28-31 Ft BGS Description

Increasing shale frag. still <5%

1517 Cleaning borehole out @ 35 ft BGS and collecting a grab sample

1525 John on site Drillers continuing to drill looking @ lithology of surrounding wells and decided to call the first lens of limestone bedrock (31 ft BGS)

1535 Drilled to 36 ft BGS and going to clean out and let it set to see if it is making water. John off site

31-36 ft BGS Description

Same as above w/ larger shale fragments ≤10% shale

Some limestone. Looks like some water movement

Daily Weather Conditions: A.M. D.J.C.

P.M. 06/16/94

Recorded By Duncan J. Clifton QA Checked By [signature] 6/26/94

ELLS
34896

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W411 PS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/16/94 TIME: 0937 : 1735 PAGE 5 OF 6

Task Team Members:

Same as 1 of 6

SLA 06/16/94

Narrative (include time and location):

1550 Secured, cleanup site, scanned out to take Jeff to his office + to pick up a bailer + water level indicator to do a bail + recharge on W399

1614 Arrived @ ~~66~~ SLA 06/16/94 W 399. Driller cut riser pt to 2.3 ft AGS

Water @ 9.40 ft BTOC

1623 Started bailing

1643 Bailed 4 gal to 29.39 ft BGS letting recharge while drillers prepare to ~~dri~~ SLA 06/16/94 grout

1653 Water @ 24.62 ft BGS - recharge

Start mixing grout - Magnolia Brand Blue Circle Portland Cement Type I

90 lb Bags w/ 45% Aquagel Gold Seal SLA 06/16/94

1715 Brought grout to the surface - 4 bags

1731 ~~.62 ID, .65~~ SLA 06/16/94 .52 ID .55 OD 5.00 3.7 2.3

5 ft Black steel protective casing with protective cover installed over riser

Daily Weather Conditions: A.M.

P.M.

SLA 06/16/94

Recorded By Susan L Nelson QA Checked By 6/26/94

6

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W41 P6

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 6/16/94 TIME: 0937 : 1735 PAGE 6 OF 6

Task Team Members:

Same as 1 of 6

HG 06/16/94

Narrative (include time and location):

after cleaning the grout plant out
1735 Cleaning, securing, & departing site
LAST ENTRY

HG 06/16/94

Daily Weather Conditions: A.M.

P.M.

HG 06/28/94

Recorded By [signature] QA Checked By [signature] 6/26/94

ELLS
34896

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS — W411 P7 — 7

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/28/94 TIME: ~~0937~~ 0708 : 1630 PAGE 1 OF 3

Task Team Members:

Martha Cramer
Susan Alston

06/28/94

Narrative (include time and location):

0708 Arrived @ trailers to load equipment, calibrate and pick up equipment and have morning health & Safety
0810 Depart for site. Drillers gone after water
0830 Road to W411 very muddy - Drill support truck stuck, left (HP) on site
0838 Measured water at 24.2 BTOC Casing (guiding casing)
0840 Cleaning out borehole and bailing out water to check for recharge
0842 Borehole caved in ≈ 5ft over weekend (shale probable cause)
0915 Water 35 ft BTOC (33ft BGS)
TD of hole @ 36.1 ft BGS
Letting borehole set to check for water
0935 John + Joletta on site to collect ambient air blank while we take a surface sample
0945 Collect sample B39701
1000 John + Joletta off site
1015 Water level @ 29.2ft ~~BG~~ BTOC
Going to drill another 4ft and set well

Daily Weather Conditions: A.M. ≈85°F Hot, Humid, Partly Cloudy
P.M. NA

Recorded By Susan L Alston QA Checked By 6/26/94

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TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/20/94 TIME: 0708 : 1630 PAGE 2 OF 3

Task Team Members:

Same as One of 3

06/20/94

Narrative (include time and location):

1035 Continue drilling down 4 more ft to 40 ft BGS

1102 Cleaned out borehole and collected a

JTD 10/4/94 grab sample

36-40 ft, ~~36 - 33~~ ft BGS Description

Medium gray (N5) fossiliferous, crystalline limestone

1106 Continued drilling @ ~~33~~ 39.7 ft

1108 Drilled to 40 ft BGS and cleaned borehole 06/20/94

1114 Measured water @ 39.2 BTOC = 36.2 BGS

TD of hole @ 40.05 ft BGS

1135 Broke for lunch

1235 Returned from lunch

1301 Water @ 27.6 ft BTOC = 24.6 ft BGS

TD of hole @ 40.05 ft BGS no cave in during lunch. Making water so going to set the well. Pulling the guiding casing out of the hole

Daily Weather Conditions: A.M. MA

P.M. ~94°F Hot Humid Partly Cloudy

Recorded By Susan J Abston QA Checked By [illegible] 6/26/94

ELLS
34896

9

TASK TEAM ACTIVITY LOG SHEET | MONITORING WELLS
W411 p 9
PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE | TASK NO: 34896

Date (mm/dd/yy): 06/26/94 TIME: 0700 : 1430 PAGE 3 OF 3

Task Team Members:

Same as 1 of 3

JC
06/26/94

Narrative (include time and location):

Screen 10.01 ft Bottom cap welded to it included in 10.1 ft = 25 ft. Top of screen has .17 ft of solid to threads. 304 SS #10 slot wire band screen
Solid 304 SS 10.01, 10.02, 10.00 ft in length, 2 in ID, 2 3/8 in OD
1320 Adding well pipe w/ centralizer 139 ft from bottom of 1st riser pipe (SS centralizer) set 06/26/94
2.09 ft AGS of stick up on riser
Adding 30 ft of 2 in PVC tremie pipe
1425 Added 12 bags of 50 lb sand #5 same as used at W399 to 25.98 ft BGS
poured through tremie. Used 46.75 gal of water
1515 Added 1 1/2 buckets of bentonite to 22.9 ft BGS. Bentonite in water so we did not hydrate. Same bentonite as used on set 06/26/94 W399
1517 Rain starts loading up equipment
1534 Standing out - Lighting alert stop work
1430 Still lighting alert drillers departing we will break the rig down and decon tomorrow

JC
06/26/94

Daily Weather Conditions: A.M.
P.M.

Recorded By Susan J Alston QA Checked By 6/26/94

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TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W411 P10

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/22/94 TIME: 1456 : 1649 PAGE 1 OF 1

Task Team Members:

Martha Crapper

Susan L. Abston

*For log of morning activities see pg. 114

24.42 − 2.09 = 22.33

Narrative (include time and location):

1456 Bentonite @ 24.42 ft BTOC = 22.33 ft BGS

1502 Water @ 27.41 ft BTOC in well

1516 Running tremie hose to bottom of the well. And preparing to mix grout

1555 Setting protective casing .55 OD, .52 ID 5ft ~~Black carbon~~ steel after grout to surface.

1601 Cleaning up grout plant. Grout to surface. Used 4 bags of cement

1634 Jeff T. (H.P.) scanning us out. Securing, cleaning, and departing site

1649 Off site → Grout was Type I Portland Cement with 4% bentonite (gold seal)

LAST ENTRY

DJO 06/23/94

Daily Weather Conditions: A.M. N/A

P.M. ≈ 90° F Partly Cloudy, Hot, & Humid

Recorded By Susan L Abston QA Checked By [illegible] 6/26/94

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W399 P. 11

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 07/05/94 TIME: 0700 PAGE 1 OF 2

Task Team Members:

Susan L. Abston — Martha Cramer

NOTE: THIS PAGE IS 7/5/94 ACTIVITY FOR W399

Narrative (include time and location): 07/06/94 Well 399

0700 Arrive @ trailers to calibrate equipment, load and have health + safety meeting

0735 Waiting on drillers. Drive out to parking lot. S. Patterson w/ BOUSER has not seen S. Belt (helper)

0830 Call office. S. Belt called in sick. Decide to begin developing wells. S. Patterson will need to pick up truck + pump

0840 S. Patterson off site. Calibrating additional instruments and reading at development procedure

1055 S. Patterson on site. Decanning pump + tubing

11:50 Break for lunch

1300 Return from lunch. Check w/ HP's → Ray Mowen said we did not need any HP coverage for development

1325 Arrive at ~~GW~~ W399

1335 Check readings at well while removing cap TVA [284.78] 0.0 ppm LEL 0% O_2 20.8%

1550 Water @ 12.07 ft BTOC [742.30 - 0.6]

TD of well, at 35.14 ft BTOC

Pump 15 gal of water trapping sand x 5 = 75 gal

Sit Question

Sit 07/05/94

Daily Weather Conditions: A.M. ≈ 75°F Partly Cloudy

P.M. ≈ 90°F Partly Cloudy

Recorded By Susan L. Abston QA Checked By [illegible] 10/4/94

12

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS** W399 p.12

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 07/05/94 TIME: 0700 PAGE 2 OF 2

Task Team Members:

Susan L Abston — Martha Cramer

JLG 07/05/94

NOTE: THIS PAGE IS 7/5/94 ACTIVITY FOR W399

Narrative (include time and location):

23.07 ft of water

π r² (23.07)

π (.0069) (23.07)

.0216 × 7.48 (23.07)

.162 (23.07)

3.74 × 5 vol (18.7 gal) 108.70

90.00 ~~83.75~~ SLA 07/05/94 + 18.7 = ~~102.45~~ SLA 07/05/94 gal

1415 Placed deconned pump and hose and cable down well. Warming up generator.

Having ~~at~~ JLA 07/05/94 trouble w/ DH probe read out due to heat

1421 Cooled it down in truck. Calibrating it to the 7 & 10 pH solution

pH ORION model 258 [95.7 slope]

1426 Temp 14.5 °C pH 7.38

Grey turbid, no odor noted. rock flour in water

.883 2 mv/cm ; .697 2 mv/cm

1429 well dry after 8 gal. Letting it recharge

See pg. 228. to cont.

Daily Weather Conditions: A.M. JLG 07/05/94

P.M.

Recorded By Susan L Abston QA Checked By [illegible] 10/4/94

LLS
12
4896

13

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W411 p. 13

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 07/~~05~~ 12/94 SLA 07/12/94 TIME: ~~0700~~ 1500 SLA 07/12/94 1700 PAGE 1~~2~~ 3 OF 2 SLA 07/12/94

Task Team Members:

Martha Crane — Susan L Alston

MC 07/12/94

Narrative (include time and location): W411 JMD 10/4/94

1500 Arrived at ~~G3417~~ to begin development

1506 Scanned well while removing cap OVA - ppm

1525 28.47 to water BTOC } 11.7 ft of water

40.17 to TD BTOC

16.75 gal of water used during tremie

16.75 x 5 = 83.75

$\pi (1/2)^2 \times h \times 7.49$

~~$\pi (1/2)^2$~~ SLA 07/12/94

$\pi (1/2)^2 \times (11.7) \times 7.49 = 1.911$ ~~15~~ 9.5

remove 93.25 gal

Setting pump + rigging up to begin development

1543 Collected 1st water (initial) from hose.

temp 17.3 °C } 2000 TLC meter

Cond. 1.718 (2 in 25/cm TC to 25°C) } VSI HACO #1422

pH 7.70 } orion model 25RA

Temp 17.3 °C } HACO #7557

~~pH~~ SLA 07/12/94 Meters calibrate in field prior to use

pH meter slope 99.1 (1540)

very turbid - grey, no odor noted

1550 well dry after 10 gal

Daily Weather Conditions: A.M. NA

P.M. ≈ 85°F Clear Sunny

Recorded By Susan L Alston QA Checked By [illegible] 10/4/94

14

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W411 p 14

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 07/12/94 TIME: 1500 : 1700 PAGE 2 OF 2

Task Team Members:

Susan L. Alston — Metha Cramer

07/12/94

Narrative (include time and location):

1552 Continue pumping 15

1555 Well dry after ~~20~~ gal, Letting recharge

1010 Continue pumping slowly SLA 07/12/94

1625 Dry after a total of ~~30~~ 20 gal. Letting recharge

1642 Continue pumping SLA 07/12/94

1648 Dry after about 24 gal. Going to let it set over night

1700 Securing, Cleaning, + departing site

CAST ENTRY

07/12/94

Daily Weather Conditions: A.M.

P.M.

07/12/94

Recorded By Susan L. Alston QA Checked By 10/4/94

ELLS
4
34896

15

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W411 p. 15

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 07/13/94 TIME: ~~0700~~ : 1420 PAGE 1 OF 1

Task Team Members:

Susan L Alston — Martha Cramer

JLG 07/13/94

Narrative (include time and location):

0700 Arrived @ trailer to load equipment, calibrate instruments and have health + safety briefing

0945 Arrived at site. S. Patterson & S. Belt (BOUER) on site

0750 Began pumping ~~G-397~~ W411 VHD 10-4-94 again after water still turbid and grey in color. No odor noted (Less turbid than yesterday)

0755 Dry after 29 gal of water. Letting well recharge. Preparing to set form pump & every 15 min. SLA 07/13/94

1145 Break for lunch. Filled 1st 55 gallon drum

1245 Return from lunch. Joletta tells us that John has been informed for us to dump drill cuttings out of our drum at the AOC (boring location)

1305 Return to site - raining

1320 Rain stop. Continue pump well ≈ every 5 min. Dumping drums of drill cuttings & spreading on site

1420 Move to G410 while well is recharging to grout

see logbook A7

Daily Weather Conditions: A.M. ≈70°F Partly Cloudy

P.M. ≈85°F Cloudy, Occasional Rain

Recorded By Susan L Alston QA Checked By VHD 10-4-94

16

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W411 p. 16

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 07/18/94 TIME: 0700 : 1615 PAGE 1 OF 2

Task Team Members:

Martha Cramer — Susan L Alston

[signature]
07/18/94

Narrative (include time and location):

0700 Arrived @ trailer to calibrate instruments pick up equipment & have H+S meeting.

0730 Arrived @ ~~G-397~~ W411 JHD 10-4-94 Able to get back in to it now that it has dried out. S. Patterson, & S. Bell (BOWSER) on site.

0747 Continued pumping well for development heft pump in well over weekend - not able to get back to well due to mud before today

Bar code # of drill cutting bars emptied at site next to borehole

009839, 009755, 009753, 009809

009847, 009754, 009761

Pumping @ slow 20 min @ 5 gal before well goes dry

1145 Break for lunch. Pumped ~83 gal total

1245 Temperature lunch continued pumping

1422 Pumped 14 gal water. Prepare to purge well. Pulling pump. ~~Water at in BCC [illegible]~~

1424 Taking reading on development water

pH 7.73 (Orion 250A, Hach 7 & 7) Cond. 1546 2m mho (YSI EC 300; Fisher 1472 1.55 C)

temp 14.5 color - slightly turbid, gray color - none

Calibrated pH meter @ 1420 slope 181.8 7 (w/ 7 sol) 10 (w/ 10 sol)

Daily Weather Conditions: A.M. ≈ 75°F Clear, Pretty

P.M. ≈ 85°F Few Clouds, Pretty

Recorded By Susan L Alston QA Checked By [signature] 10/4/94

Cont on p. 52

17

BOREHOLE LOG (SOIL)

MONITORING WELLS
W411 D17
PROJECT NO: 34896

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

Page 1 of 2

FACILITY CODE: MND16
LOCATION ID: ~~B397~~ W411 JMD 10/4/94
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL) NA
LOCATION TYPE: ~~BH~~ WL JMD 10/4/94
COMMENTS: NONE

DRILLER CODE: BOWS
COMPLETION DATE 06/20/1994
DIAMETER (IN): 8 in
DEPTH (FTFD): 40.05
CONSTRUCTION METHOD: C
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
06/20/94	1114	36.2 — Bailed in borehole
06/20/94	1301	24.16
06/22/94	1456	25.32 in well

LOCATION DESCRIPTION

Along outer perimeter road near gate 2 on the new property

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
~~2-14~~	NA	NA	NA	~~NA~~	NA	NA	NA	NA	
0-2	C			CABLE TOOL BAILER					Greyish brown (5YR 3/2) silty clay with small grey N5 limestone fragments and plant detritus
2-14									Alternating layers of soil, greyish brown (5YR 3/2) silty clay and layers of medium grey (N5) fossiliferous crystalline limestone. Fossils include brachiopods and bryozoans, some have pyrite on surface
14-17									90% medium grey (N5) fossiliferous (bryozoans, brachiopods (50% of frag))

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE

TECHNICAL REVIEWER / DATE 6/26/94

18

BOREHOLE LOG (SOIL)

MONITORING WELLS
W411 P. 18
PROJECT NO.: 34896

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

FACILITY CODE: MND16
LOCATION ID: ~~B-397~~ W411
JHD 10/4/94

DRILLER CODE: BOWS
COMPLETION DATE 06/22/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-17				0					Crystalline limestone with 10%
									medium dark grey (N4) shale
1/10 06/22/94									50% of limestone fragments exhibit
									moderate yellowish brown (10YR5/4)
									weathered staining, Pyrite on some fossil
17-20				CABLE TOOL BAILER					Same as above but with
									only traces of shale frag.
1/10 06/22/94									and 20% of limestone
					1/10 06/22/94				frag. have staining
20-24									medium grey (N5) crystalline
1/10 06/22/94									limestone with <5% fossil
									materials
24-28									Same as above
28-31									Same as above w/ increasing
1/10 06/22/94									shale - medium dark grey (N4)
									fragment but <5%
31-36									Same as above w/ ≈10%
1/10 06/22/94									shale
36-40									Same as above with
									<5%
						1/10 06/22/94			

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J Alston 06/22/94 — FORM COMPLETED BY / DATE

[illegible] 6/26/94 — TECHNICAL REVIEWER /

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

MONITORING WELLS
W411 p. 43

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: MND16 LOG DATE: 06/16/94

LOGGER CODE: SAIC FIELD REP: S.L. Abston

CGI MANUFACTURER: Industrial Scientific CGI MODEL NO.: MX 251

SERIAL NO.: 9403279-091 CALIBRATION DATE/TIME: 06/16/94 0720

ACCEPTANCE CODE: A BATTERY CONDITION Good

CALIBRATION GAS (%LEL) TYPE Pentane CONCENTRATION 50 % LEL CYLINDER SERIAL NO 29731

CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: NA

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
~~B397~~ W411 JTD 10/4/94	NA	NA	0935	BH	0.0	N	20.9
			~~1010~~ 0950	BH	0.0	N	20.9
			1015	BH	0.0	N	20.9
			1051	BH	0.0	N	20.9
			1110	BH	0.0	N	20.9
			1400	BH	0.0	N	20.9
			1432	BH	0.0	N	20.9
			1500	BH	0.0	N	20.9
			1520	BH	0.0	N	20.9
			LAST ENTRY				
			06/23/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J. Abston 06/16/94
FORM COMPLETED BY / DATE

6/26/94
TECHNICAL REVIEWER / DATE

45

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — MONITORING WELLS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOG DATE: 06/20/94

LOGGER CODE: SAIC — FIELD REP: S. Abston

CGI MANUFACTURER: Industrial Scientific — CGI MODEL NO.: MX251

SERIAL NO.: 9403279-071 — CALIBRATION DATE/TIME: 06/20/94 0730

ACCEPTANCE CODE: A — BATTERY CONDITION: Good

CALIBRATION GAS (%LEL) TYPE: Pentane — CONCENTRATION: 50 % LEL — CYLINDER SERIAL NO: 3973

CALIBRATION GAS (PPM) TYPE: NA — CONCENTRATION: NA PPM — CYLINDER SERIAL NO: NA

COMMENTS: NA

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B397	NA	NA	1035	~~BH~~ WL	0%	NA	20.9
W411 JTD 10/4/94				JTD 10/4/94			

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J. Abston 06/20/94 — FORM COMPLETED BY / DATE

6/26/94 — TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

MONITORING WELLS
W411 p. 47

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO: 34896

FACILITY CODE: MNDIL
LOG DATE: 06/16/94
LOCATION ID: B397 W411 JTD 10/4/94
LOCATION TYPE: BH WL JTD 10/4/94
LOGGER CODE: SAIC
FIELD REP: S.L. Abston

FLAME IONIZATION DETECTOR INSTRUMENT:
MANUFACTURER: Foxboro
MODEL NO.: OVA 128GC
SERIAL NO.: 900025208
DATE/TIME CALIBRATION 6/16/94 0720
ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 Methane / 29562	1 100 ppm
2 NA	2 NA

COMMENTS NA

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
1935	B397	0.0	0.0	0.0	0.0	NA	0 ft.	NA
~~1040~~ MLC 6/16/94 0950		0.0	0.0	0.0	0.0		6 ft.	
1015		0.0	0.0	0.0	0.0		12.5 ft	
1051		0.0	0.0	0.0	0.0		17 ft	
1110		0.0	0.0	0.0	0.0		20 ft	
1400		0.0	0.0	0.0	0.0		24 ft.	
1422		0.0	0.0	0.0	0.0		27 ft.	
1500		0.0	0.0	0.0	0.0		31 ft	
1520		0.0	0.0	0.0	0.0		35 ft	
				LMH Entry				
				MLC 06/23/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE top of auger	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Dean T. Morton 06/16/94
FORM COMPLETED BY / DATE

6/26/94
TECHNICAL REVIEWER / DATE

40

FLAME IONIZATION DETECTOR FIELD DATA — **MONITORING WELL** W411 p 48

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **PROJECT NO.:** 3489

FACILITY CODE: MND16 — **LOG DATE:** 06/20/94

LOCATION ID ~~B 397~~ W411 JMD 10-4-94 — LOCATION TYPE ~~BH~~ WL JMD 10/4/94

LOGGER CODE: SAIC — FIELD REP: S.C Abston

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: Foxboro — MODEL NO.: ~~0~~ OVA 128 GC SIA 06/20/94

SERIAL NO.: 900025208

DATE/TIME CALIBRATION 06/20/94 1074 — **ACCEPTANCE CODE:** A

CALIBRATION GASES			
TYPE/CYLINDER ID NO.		CONCENTRATION (PPM)	
1	Methane / 39562	1	100 ppm
2	NA	2	NA

COMMENTS

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
1035	~~B 397~~ W411 JMD 10/4/94	00	0.0	0.0	00	NA	36 ft.	NA
			LAST ENTRY					

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J Watson 9/20/94 — FORM COMPLETED BY / DATE

[illegible] 9/26/94 — TECHNICAL REVIEWER / DATE

7/18/94 0700 1615 pg 2 of 2

Susan L. Hoston
Martha Cramer

W411 p52

1429 Letting well recharge

1452 water @ 25.53 BTOC Not to 80% recovery yet
Continuing to let recharge

1600 Water @ 24.08 going to let recharge over night
Cleaning up and securing pump at site.

1615 Depart site to decon other pump hose/cable

Susan J Hoston 10/4/94

7/19/94 0700 1519 pg 1 of 3
Martha Cramer Susan L Hoston

0700 Arrive @ trailer to pick up equipment & calibrate instruments. Drillers (S. Patterson & Bert) working on pump. It stopped working during decon yesterday

0734 EM Hoff come from development of well 2 ~~GW~~ W411 JHD 10-4-94 with the guide line being. Decide to return to ~~GW~~ W411 JHD 10/4/94 Bail well to try to remove some of the silt

0750 Arrive @ ~~GW~~ W411 JHD 10-4-94 and prepare to bail

0802 Water @ 33.20 BTOC

0805 Began bailing

0851 Letting well recharge. Less silt in bailer.
Bailed ~ 7 gal

0956 Bailed out another 3 gal. Looking much better. Collecting sample for Ammonia conc and field readings

1001 pH meter calibration 7 for 7 sol. 10 for 10 sol
Slope = 105.3 (ORION Model 250A Hach #2022
Conductivity meter Hach # 1472

1012 pH 7.91
Cond 168 (3mm/cm) 25°C Color slightly tinted - grey
temp 14.4 Odor - none noted

AM ~ 75°F Partly Cloudy
Susan Hoston 10/4/94

7/9/94 Martha Cramer 1519 Susan Alston pg 2 of 3 53

W411 p. 53

1123 Departing ~~site to put~~ water in ~~[illegible]~~ core

1040 Talk w/ Tom Tank and he said to go ahead + purge + stabilize this well + then ~~[illegible]~~ sample it

1110 Break for lunch W411 JTD 10/4/94

1149 Return from lunch @ ~~[illegible]~~ preparing to purge using the pump

1235 33.57 ft TBTOC to water

1236 Slope of same pH meter as early today during calibration 1.04.0

1238 Place pump back in well to purge

$\pi \left(\frac{1}{12}\right)^2 ft \times 7.49 = 1$ well vol

$.0218 \times 6.6 \times 7.49 = 1.078$ gal

3 well vol = 3.2 gal

1246 Initial Sample

pH 7.64 temp 18.4°C

1251 cond 1.28 2mm/cm

→ Sample after 1 gal

pH 7.85 temp 16.4°C cond 1.297 2mm/cm

1256 Sample after 2 gal

pH 7.84 temp 15.9°C cond 1.35 2mm/cm

1300 pump ≈ 1 gal/min

→ Sample after 3 gal

pH 7.82 temp 15.7°C cond 1.385 2mm/cm

1304 Sample after 4 gal.

pH 7.39 temp 15.2°C cond 1.345 2mm/cm

1307 Well stable - letting it recharge to sample

1345 Started sampling well w/ low flow pump

1357 Well dry after filling 1 1/2 (1 liter bottles). Letting recharge

10/4/94

54

SAMPLE LOG SHEET W411 p. 54

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: B397Ø1 DATE COLLECTED (MM/DD/YY): 06/23/94 TIME (HH:MM): Ø945

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: Mound - New Property

POINT CODE: ~~B397~~ ~~W3~~ W411 JHD 10/11/94

DESCRIPTION: ~~Borehole # 397~~ WELL 411

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 2.ØØ FT

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Collected sample using a stainless steel spoon and composited in stainless steel bowl from surface to Ø.5 ft BGS

JHD 06/23/94

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

Collected using spoon from ground surface for .5 ft ~~BGS~~ SLA Ø6/23/94

RECORDED BY: Susan J. Allston (SIGNATURE) QA CHECKED BY: [signature] 6/26/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B397Ø1

W411 p. 55

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	FN0Ø1	9289476512	See Container Lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
2-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		Last Entry					

SAMPLE ID'S RINSATE: ERØØ15 TRIP BLANK: TBØØ4 FIELD BLANK: ABØØØ9 FIELD DUPLICATE: NA

RECORDED BY: Susan L Wilson (SIGNATURE) CHECKED BY: [illegible] 6/26/94 (SIGNATURE)

55

SAMPLE LOG SHEET W411 p. 68

PROJECT NAME: Mound New Property Extended Phase PROJECT NO: 34896

SAMPLE ID NUMBER: W397Ø1 DATE COLLECTED (MM/DD/YY): Ø7/19/91 TIME (HH:MM): 1345

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: Mound New Property Extended Phase Mound Well grab w/ 8 bottle (1000ml) left to fill. Recharged for 15 min

POINT CODE: ~~B397~~ W411 JMD 10/4/94

DESCRIPTION: ~~Well 397~~ WELL 411

FIELD OBSERVATIONS: ≈ 90°F Partly Cloudy, Hot

SAMPLE -

MEDIA CODE: 66

DESCRIPTION: Monitoring Well JMD 10/4/94

DEPTH ~~0.00~~ TO ~~0.00~~ FT

~~28.47~~ FT BTOC

33.57 FT BTOC CA 10-6-94

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

JD 07/19/94

RECORDED BY: Susan J Weber (SIGNATURE) QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: W39701

W411 p. 65

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-40	Glass	CLPVOA	HCL to pH<2,4C	NPC018	821996000		COMPUC
2-1000	AmbGlass	CLP SVOC	Cool,4C				COMPUC
2-1000	AmbGlass	CLP PEST / PCB	Cool,4C				COMPUC
2-1000	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-1000	Poly	METALS	HNO3 to pH<2,4C				COMPUC
1-1000	Poly	CYANIDE	NaOH to pH>12,4C				COMPUC
1-1000	Poly	ANIONS Fl,SO4,Cl	Cool,4C				COMPUC
1-1000	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
1-1000	Poly	TOTAL NIT/TOTAL PHOS	H2SO4 to pH<2,4C				COMPUC
1-1000	AmbGlass	TOTAL ORGANIC CARBON	H2SO4 to pH<2,4C				COMPUC
1-1000	Poly	TOTAL SUSPENDED SOLIDS	Cool,4C				COMPUC
1-1000	Poly	TOTAL DISSOLVED SOLIDS	Cool,4C				COMPUC
1-1000	Poly	ALKALINITY	Cool,4C				COMPUC
2-1000	Poly	RADS Pu,Th,U,Am	HNO3 TO PH<2				COMPUC
2-1000	Poly	RADS Ac,Ra,Sr,GAMMA	HNO3 TO PH<2				COMPUC
		LAST ENTRY					

Missing lot # for container lot # log

SAMPLE ID'S RINSATE: ER0017 TRIP BLANK: TBN017 FIELD BLANK: AB0013 FIELD DUPLICATE: NA

RECORDED BY: Susan L Abston (SIGNATURE)

CHECKED BY: [signature] 10/4/94 (SIGNATURE)

1430 Finished sample well. Final grab sample field measurements

1432 Calibrating pH meter 7 (7sol.) 10 (10sol)
slope = 97.6
pH 7.53 @ 1442 W411 p.70
SCM 7/19/94 1433 temp 15.8 °C @ 1433
cond 1,393.2 mv/cm @ 1433
Diss O2 18.60 59% @ 1446
Redox 153.4 mV @ 1449
Alkalinity collected to run in trailer

* Eddie Moore Safety stopped by site while well was recharging. His only comment concerned hard hats + safety glasses. Not wearing hard hats because we are only sampling wells

1439 Calibrated DO meter YSI model 59 Dissolved Oxygen HACCO #2183 to 97.Ø%
Post Calibration of cond. meter 9967, 1002 @ 19.4°C

1450 Cleaning site Only lacks concrete pad being poured. Formed layed & wire put on area

1559 Leaving site to deliver samples to Joel Fica

15 19 orthofl @ 2.75 for ~~0.947~~ (more than before
SCM 7/19/94 we bailed
W411
JTD 10/4/94

JJG
07/28/94

Susan L Alston Jeff 10/4/94

GROUNDWATER QUALITY SAMPLING RECORD

MONITORING WELLS
W411 p. 91

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.: 34896

PAGE 1 OF 1

FACILITY CODE: SLA 07/28/94
LOCATION ID: ~~W9: W397~~ W411 JMD 10/4/94
SAMPLE ID: W 397 01
LOG DATE: 7/19/94
ANALYICAL LAB CODE: COMP

LOT CONTROL NO.: NA
SAMPLE TYPE: F
ACCEPTANCE CODE: A
LOGGER CODE: SAIC

INITIAL GROUNDWATER DEPTH (FT): 31.48
SAMPLING PERIOD: START 7/19/94 1246
SAMPLING METHOD: SP
COMMENTS pump 1 gal /min

SAMPLE DEPTH (FT): 28.47 BTOC
COMPLETE 7/19/94 1456
DATE SENT: 7/19/94
well vol = 1.074

FINAL PARAMETER MEASUREMENTS:

POTENTIAL OF HYDROGEN	pH	S.U.	7.53
SPECIFIC CONDUCTANCE	Ec	umhos/cm	1.393 2mr/cm
REDOX POTENTIAL	Eh	mvolts	153.6
TEMPERATURE	TMP	°C	15.8
ALKALINITY ($CaCO_3$)	ALK	mg/l	SLA 07/28/94 312
DISSOLVED OXYGEN	DO	mg/l	~~+8.6~~ 54%

TIME	TOTAL VOLUME WITHDRAWN (GALS)	TOTAL VOLUME WITHDRAWN (Bore Volume)	pH	Ec (umhos/cm) 2mr/cm	TEMP (°C)	COMMENTS
1246	0	0	7.64	1.28	18.4	initial
1251	1	1	7.85	1.297	16.4	NONE
1256	2	2	7.84	1.35	15.9	↓
1300	3	3	7.82	1.385	15.7	↓
	4	4	7.89	1.345	15.2	well stable

SLA 07/28/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

SAMPLE TYPES:
F - FIELD, R - REPLICATE
K - KNOWN, A - ACID BLANK

SAMPLING METHODS:
BP - BLADDER PUMP, PP - PERISTALIC PUMP
G - GRAB, B - BAILER, AL - AIR-LIFT SAMPLER
SL - SUCTION LIFT PUMP, SP - SUBMERSIBLE PUMP

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J Alatos 7/19/94
FORM COMPLETED BY / DATE

10/4/94
TECHNICAL REVIEWER / DATE

GROUNDWATER QUALITY SAMPLING RECORD

W411-p.93

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: MND16

LOCATION ID: ~~W397~~ W411 JHD 10/4/94

LOG DATE: 7/19/91

BORE VOL CALCULATION (GAL)

$$\frac{d^2\pi}{4}(h_1 - h_2) \times 7.48$$

DEPTH OF WELL (h2) (ft): 33.57 ft BTOC

DEPTH TO WATER (h1) (ft): 40.17 ft BTOC

WELL DIAMETER (ft): 2 in

ONE BORE VOLUME (GAL): 1.078 gal

SCREENED INTERVAL (ft): 37.70 - 27.94

FIELD REP: S.C. Abston

INSTRUMENT(S) USED: TLC 3000 YSI

YSI model 59, ORION model 250A

SAMPLING INFORMATION

WITDRAWL METHOD: SP

FILTER SIZE: # 5

THERMOMETER ID: HACCO # 1422

Ec METER ID: HACCO # 1422

pH METER ID: HACCO # 2022

PUMP ID: NA

ALKALINITY KIT ID: HACH #4067

CALIBRATION INFORMATION

DATE/TIME OF LAST Ec CALIBRATION: 7/28/94 0730

TIME OF pH CALIBRATION: 1236

FOR STANDARD pH 7, INSTRUMENT READING: 7

FOR STANDARD pH 4, INSTRUMENT READING: NA

FOR STANDARD pH 10, INSTRUMENT READING: 10

Eh OF CALIBRATION SOLUTION: 1000, 10000

Eh READING IN CALIBRATION SOLUTION AFTER MEASUREMENT: 1002, 9967

TEMP OF CALIBRATION SOLUTION (°C): 19.4°C

SHIPPING INFORMATION

LAB(S) SHIPPED TO:	COMPUC	NA	NA
DATE(S) SHIPPED:	7/19/94	↓	↓
METHOD OF SHIPMENT:	Fed Ex	↓	↓

COMMENTS: NONE

GROUNDWATER QUALITY SAMPLING RECORD

W411 P.95

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE 1 OF 1

FACILITY CODE: MNDIL

LOCATION ID: W411 / SAMPLE ID = W39701

LOG DATE: 7/19/94

ERROR AT 4.50: $\frac{X1 - X2}{XS}$ X 100 = 1.25 %

1st = 18.3 %

2nd = 1.25 %

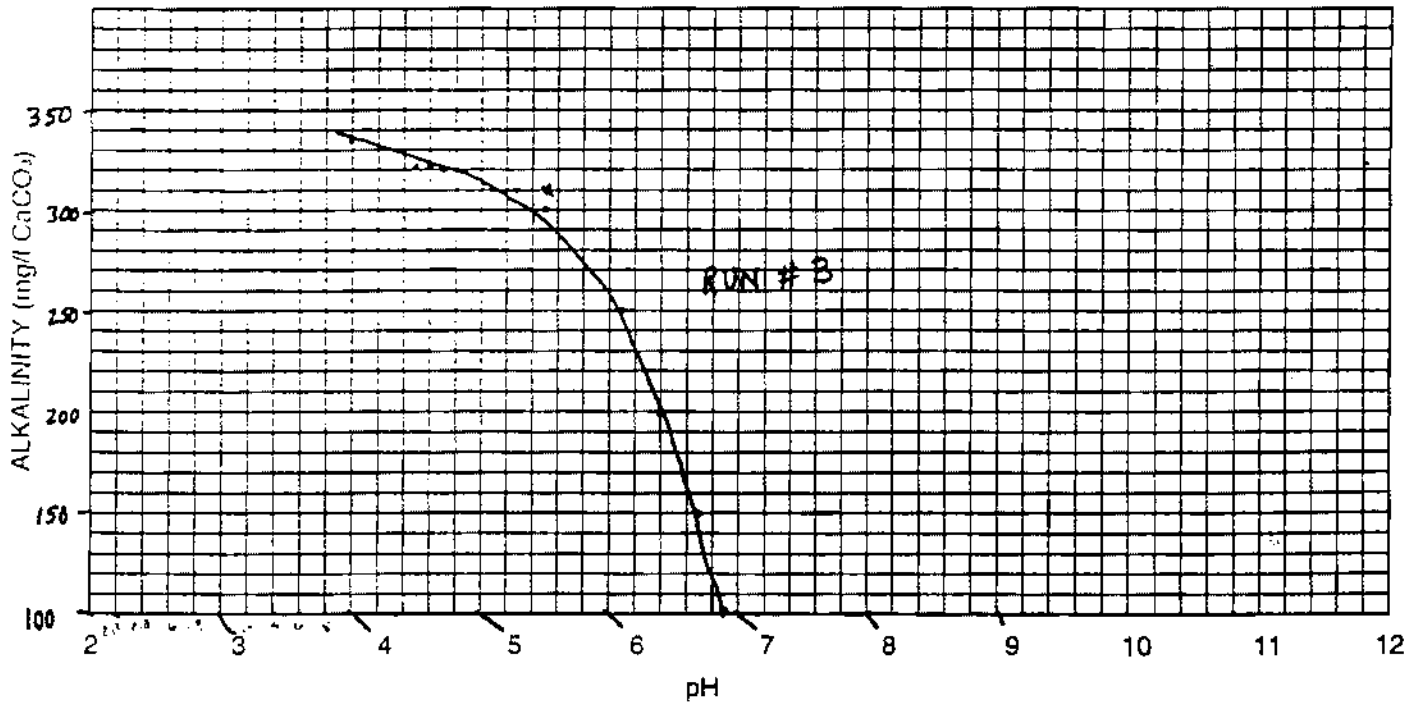
INITIAL pH 7.60

pH CHECK AFTER TITRATION

7.00 = 7.05

4.00 = 4.05

pH	ALKALINITY (mg/l $CaCO_3$) 1st	2nd	3rd
8.90	NA	NA	7.73/0
8.60			6.93/102
8.30			6.70/150
8.05			6.43/200
7.80			6.12/250
7.50	7.05/100	7.63/0	5.50/300
6.50	~~7.05/100~~ 6.88/125	6.88/101	5.24/310
5.70	6.64/150 6.61/200	6.64/150	4.72/320
5.10	6.35/250 5.96/300	6.39/200	4.59/322
4.80	5.62/325 4.65/350	6.06/250	4.55/323
4.50	4.49 353	5.37/260	4.49/324
4.25	NR	4.48 320	3.99/335
4.00	3.99/365	3.97/330	NR



GROUNDWATER LEVELS AND GASOLINE THICKNESS DATA

W411 P97

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOGGER CODE: SAIC

LOG DATE: 6/16/94 - 7/19/94 — TYPE OF PROBE: YSI SCT 300

ACCEPTANCE CODE: A

LOCATION ID	LOG TIME (HH:MM)	DEPTH TO WATER (ft) BGS	DEPTH TO GAS (ft) BGS	COMMENTS
	6/16/94			
~~W397~~	1653	24.62	NA	
W411	6/20/94 0838	21.90		BOREHOLE CAVED APPROX 5'
JEO 10/4/94	6/20: 1015	26.90		BOREHOLE CLEAN
	6/20: 1301	24.60		
	6/22: 1502	25.32		Well measurement
	~~07/05: 1350~~	9.98		SLA 07/28/94
	7/12 1525	26.38		
	7/18 1452	33.44		
	7/18 ~~31.84~~ 1600	31.99		
	7/19 ~~0802~~ SLA 07/28/94	31.11		
	7/19 1235	31.48		
			LAST ENTRY	

JEO 07/28/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

TYPES OF PROBES: ROD - TEFLON ROD WITH PASTE OWI - OIL WATER INTERFACE PROBE OTH - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J Alston 7/19/94 — FORM COMPLETED BY / DATE

[illegible] 10/4/94 — TECHNICAL REVIEWER / DATE

STANDARD ELECTRICAL CONDUCTIVITY DATA

W41LD99

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE PROJECT NO.: 34896

FACILITY CODE: MND16 LOGGER CODE: SAIC

LOG DATE: 7/28/94 ACCEPTANCE CODE: A

MANUFACTURER/Ec METER ID: 3000 T-L-C METER YSI MODEL 3000 SN: 9100228223 Hach # 1422

ELECTRICAL CONDUCTIVITY OF KNOWN SOLUTIONS AT 25° C:	
KNOWN (mg/l KCl)	Ec (meter)
1000	1.170
NA	NA
NA	NA

Ec	TEMPERATURE (°C) LAB THERMOMETER	TEMPERATURE (°C) (Ec METER)
NR	0	NR
NR	1	↓
NR	2	↓
.801	3	2.8
.805	4	3.3
.766	5	4.0
.770	6	4.2
.778	7	5.6
.809	8	6.8
.828	9	7.9
.845	10	8.8
.870	11	9.9
.893	12	10.7
.920	13	11.9
.943	14	13.4
.962	15	14.3
.973	16	14.7
.975	17	14.8
.991	18	15.3
1.013	19	16.0
1.033	20	17.0
1.067	21	18.2
1.094	22	19.6
1.119	23	20.4
1.149	24	21.7
1.170	25	22.6

NO ENTRY MCC 7/28/94

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Marla Z Crane 7/28/94
FORM COMPLETED BY / DATE

10/4/94
TECHNICAL REVIEWER / DATE

BOREHOLE / WELL CONSTRUCTION FIELD DATA LOG

W411 p. 103

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOCATION ID: ~~G 6 0397~~ W411 — FIELD REP: S.L. Alston

LOGGER CODE: SAIC — DRILLER CODE: BOWS — RIG TYPE: Cable tool

INSTALLER CODE: SAIC — COMPLETION DATE: 7/18/94 — ACCEPTANCE CODE: A

BOREHOLE SUMMARY

BIT TYPE	HOLE DIAM (in)	END DEPTH (ft)	FLUID TYPE
Hammer	8"	40.05	Potable water

CASING SUMMARY

CASING* TYPE	DESCRIPTION	DIAM (in) ID	END DEPTH† (ft)
P	Steel	2	2.5
S	#304 Stainless Steel Wire Bound #10 slot	2	37.95
Riser	#304 Stainless Steel	2	27.94

* P - Protective S - Screen O - Open N - None

† Depth from Top of Casing

CONSTRUCTION TIME LOG

ACTIVITY	START DATE	START TIME	END TIME
DRILLING	06/16/94	0937	06/20/94 1108
CASING	06/20/94	1326	1325
FILTER PACK	06/20/94	1325	1425
SEAL	06/26/94	1500	1515
BACKFILL Grout	06/22/94	1516	1634
DEVELOPMENT	7/12/94	1525	1700
	7/13/94	0750	1420
OTHER	7/18/94	0747	1424

WELL CONSTRUCTION

TYPE* CODE	DESCRIPTION	END DEPTH† (ft)
F	#5 quartz sand	40.05 to 25.98
S	CETCO Volclay pellets 3/8 inch bentonite	25.98 to 22.33
B	Blue Circle Portland Type I Cement with 5% Hydrogel Cold seal	22.33 to surface

* B - Backfill S - Seal F - Filter

† Depth From Ground Surface

WELL DEVELOPMENT

7/12/94 28.47 ft BTOC to water
40.17 ft BTOC to T.D.
1.9 gal = 1 well vol x 5 = 9.5 gal
16.75 gal of water to remove x 5 = 83.75
Need to remove 93.25 gal
1543 Initial sample temp 17.3°C pH = 7.7
cond = 1.778 2mho/cm ; grey very turbid, no odor
1424 Final Reading pH = 7.73 temp 14.5°C
cond 1.544 2mho/cm , Pumped 94 gal
slightly turbid no odor

COMMENTS:

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J. Alston 7/18/94 — FORM COMPLETED BY / DATE

[illegible] 10/4/94 — TECHNICAL REVIEWER / DATE

105

WELL COMPLETION INFORMATION

W411 P105

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 3489

PAGE 1 OF

FACILITY CODE: MND16

LOCATION ID: ~~W397~~ JHD 10-4-94 W411

ACCEPTANCE CODE: A

OWNER CODE: E696

INSTALLER CODE: S+IC

INSTALLATION DATE: 06/20/94

CASING ELEVATION (FT MSL): NA

CASING LENGTH (FT): 30.03

CASING DIAMETER (IN): 2 in ID

SEAL END DEPTH: 22.33 BGS

SCREEN MATERIAL: SS #304 Stainless Steel

RISER MATERIAL: SS Wire Bound #10 Slot #304 Stainless Steel

FILTER PACK LENGTH (ft): 14.07

FORMATION OF COMPLETION (US/RC): UNK

WELL TYPE CLASSIFICATION: M

WELL COMPLETION METHOD: S

ZONE OF COMPLETION: C Fracture Flow

OPEN/SCREEN DEPTH (FTFD): 37.95 to 27.94

OPEN/SCREEN LENGTH (FT): 10.01

OPEN/SCREEN AREA (IN²/FT): NA

FLOW RELATIONSHIP: N

CAP MATERIAL: SS

CAP TYPE: SL

WELL TYPE CLASSIFICATIONS:
- M - MONITORING WELL
- P - PRODUCTION WELL
- T - TEST WELL
- O - OTHER (SPECIFY)

CASING, CAP, AND RISER MATERIALS:
- BR - BRICK
- C1 - CONCRETE
- C2 - COPPER
- FI - FIBERGLASS
- GI - GALVANIZED IRON
- WI - WROUGHT IRON
- SS - STAINLESS STEEL
- OM - OTHER METAL
- TE - TEFLON
- PV - PVC
- RS - ROCK OR STONE
- ST - STEEL
- TI - TILE
- CS - COATED STEEL
- WO - WOOD
- NO - NONE
- OT - OTHER (SPECIFY)

CAP TYPES:
- LC - LOCKING
- SL - SLIP ON
- TR - THREADED
- NO - NONE
- SC - SCREW ON
- OT - OTHER (SPECIFY)

FLOW RELATIONSHIPS:
- U - UPGRADIENT
- D - DOWNGRADIENT
- C - CROSS GRADIENT
- O - ON SITE
- N - NOT KNOWN
- B - BACKGROUND

ZONES OF COMPLETION:
- A - ARTESIAN
- B - ANISOTROPIC
- C - CONFINED
- H - AQUITARD
- G - AQUICLUDE
- I - ISOTROPIC
- M - MULTI-SYSTEM
- S - SEMI-CONFINED
- U - UNCONSOLIDATED

WELL COMPLETION METHODS:
- P - POROUS CONCRETE
- F - GRAVEL PACK
- H - HORIZONTAL GALLEY
- O - OPEN END
- P - PERFORATED/SLOTTED
- S - SCREEN
- T - SAND POINT
- W - WALLED OR SHORED
- X - OPEN
- O - OTHER (SPECIFY)

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Moe I Chan 6/20/94 — FORM COMPLETED BY / DATE

[illegible] 6/26/94 — TECHNICAL REVIEWER / DATE

107

MONITORING WELL

MONITORING WELLS

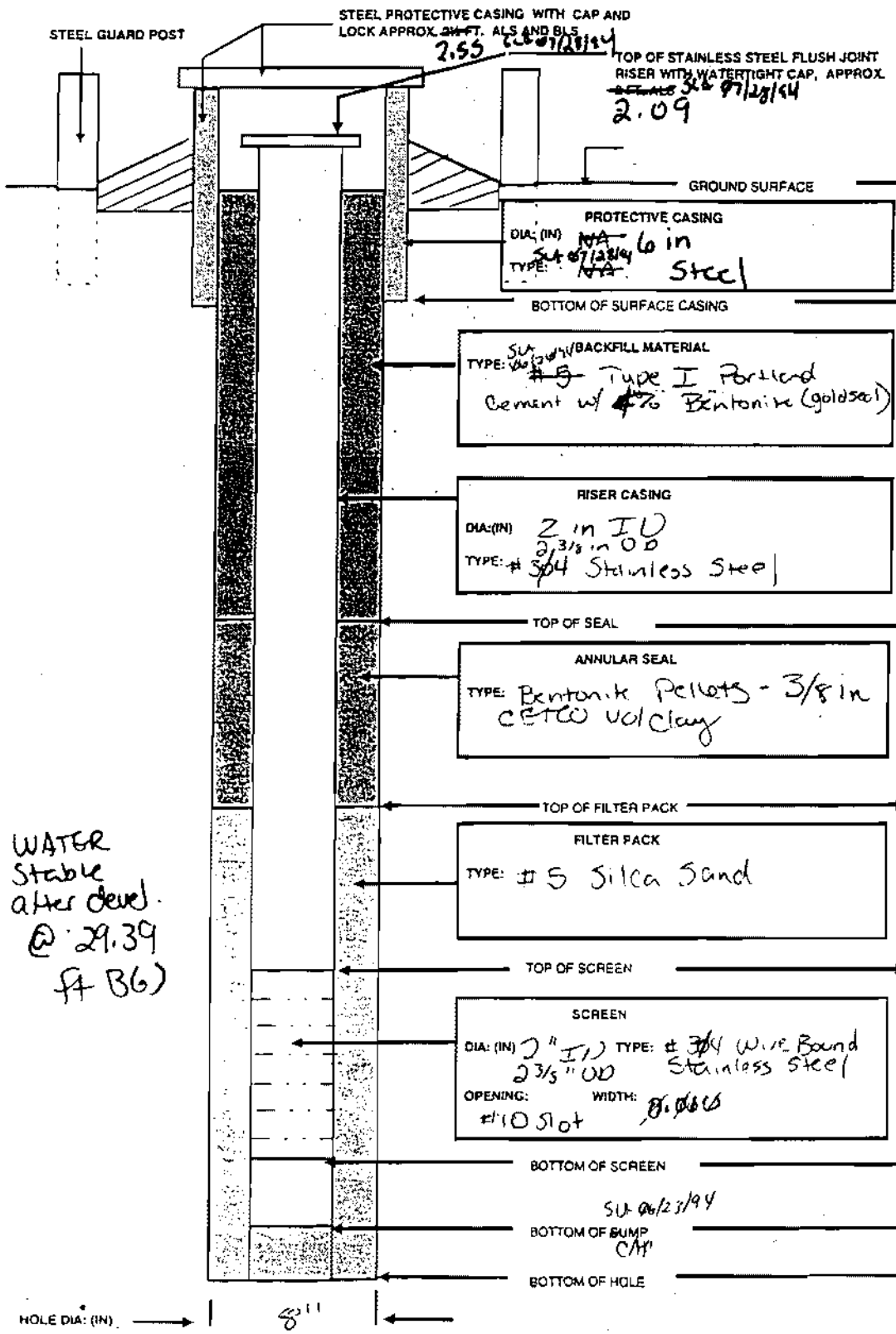
W411 107

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASED

PROJECT NO: 34896

MD 10/4/94

WELL NUMBER: ~~W-397~~ W411	BEGIN: 06/16/94	END: 6/22/94
COORDINATES: N: E: NA	REFERENCE POINT: NA	ELEVATION: NA MSL



WATER Stable after devel. @ 29.39 ft BG)

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W398 p109

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/21/94 TIME: 0605: 1630 PAGE 1 OF 5

Task Team Members:

Susan Abston

Martha Cramer

06/21/94

Narrative (include time and location):

0605 Arrived @ trailers to load equipment, calibrate instruments, and have health & safety meeting

0705 Talk w/ Joyce about grouting ~~W397~~ W411 10-4-94 She said we could do it from the other side of the perimeter fence if we did not damage the fence in any way and barricaded off the equipment.

0820 Breaking rig down and having ATV dolling pull us off the site due to the mud from the rain last night - BOWSER S. Patterson & J. Belt

0950 Steam cleaning the rig and equipment at the decon pad

1047 Returning rig to site - Not able to get it up the hill & on to the road

1130 Roy Malich (HA) stopped by site & did not want the drillers churning up any more dirt under the power lines due to possible contamination leaving rig till after lunch and letting ground dry out some more

1138 Break for lunch

1240 Return to site after lunch Pulling drill

Daily Weather Conditions: A.M. ≈85°F Hazy, Hot & Humid

P.M. NA

Recorded By Susan J Abston QA Checked By [illegible] 6/26/94

110

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W398 P110

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/21/94 TIME: 0605 : 1630 PAGE 2 OF 5

Task Team Members:

Same as 1 of 5

06/21/94

Narrative (include time and location):

On Site w/ ATV

1340 Setting rig up at BH 398 Rigging up w/ 8" bit

1407 Begin drilling

1411 Drill to 12 ft BGS and set 10" x 5' quicksand casing in the ground (SLH 06/21/94)

1412 Continue drilling. Adding 2½ gal of water

1416 Added 2½ gal of water @ 3 ft BGS

1420 Added 5 gal of water to Borehole @ ≈ 5ft BGS

1426 Cleaning out borehole @ 6 ft BGS

Adding 5 gal of water

0-6 ft BGS Description

Rock @ ≈ 1.5 ft BGS (will verify when we remove quicksand casing) ~~Then Alternating~~ (SLH 06/21/94) NS clays - 5YR 3/2 grayish brown clay w/ limestone frag - Rock is ~~N6~~ ~~N3~~ N3 (SLH 06/21/94) NOTENS medium light gray to Dark gray fossiferous crystalline limestone w/ 80% of the fragments having 10YR 5/4 moderate yellowish brown weather staining. 10% of fragments are N3 dark gray

Daily Weather Conditions: A.M. NA

P.M. ≈ 95° F Partly Cloudy, Hot + Humid

Recorded By Duane L Alston QA Checked By [illegible] 6/26/94

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W398 P111

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/21/94 TIME: 0605 : 1630 PAGE 3 OF 5

Task Team Members:

Same as 1 of 5

JLO
06/21/94

Narrative (include time and location):

Shale fragments. Fossils include brachiopods, bryozoans

1240 Continued drilling @ 6 ft BGS added 5 gal of water

1256 Cleaning out borehole @ 9 ft & collecting grab sample

6-9 ft BGS Description

Same as above w/ <5% shale fragments

Some limestone frag. have a 5R4/2 grayish red staining

1459 Continued drilling - added 5 gal of water

1518 Cleaning borehole out @ 12 ft and collecting grab sample

1523 Continued drilling Added 5 gal of water

9-12 ft BGS Description

Same as 6-9 ft BGS w/ decreasing amounts of fossil fragments and staining surfaces

1536 Cleaning out borehole @ 15 ft BGS & collecting grab sample

12-15 ft BGS Description

Same as 9-12 ft BGS

1559 Continued drilling Added 7½ gal of water

Daily Weather Conditions: A.M.

P.M.

JLO
06/21/94

Recorded By Susan J Alston QA Checked By 6/26/94

112

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS** W398 P112

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/21/94 TIME: 0605 : 1636 PAGE 4 OF 5

Task Team Members:

Same as One of 5

06/21/94

Narrative (include time and location):

1553 Cleaning hole out @ 18 ft BGS and collecting a grab sample

1559 Continued drilling Added 16 gal of water 15 - 18 ft BGS Description

N6 - N3 medium light grey to dark grey limestone (crystalline) fragments with some fossil frag (brachiopods + bryozoans) and <10% weather stained frag (these may be from higher in the section). Some fragments of white to yellowish white massive calcite

1621 Cleaning borehole out @ 23 ft BGS and collecting a grab sample

Rock harder @ 18.5 ft BGS. It has been pretty consistant from ~~at~~ 1.5 ft BGS to 19.5 ft BGS (medium hard limestone)

Mound had no more drums. The two we had were full. Not able to continue drilling

Daily Weather Conditions: A.M.

P.M.

06/21/94

Recorded By Susan J Albion QA Checked By 6/26/94

TASK TEAM ACTIVITY LOG SHEET

MONITORING WELLS
W 398 P.113

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/21/94 TIME: 0605 : 1630 PAGE 5 OF 5

Task Team Members:

Same as 1 of 5

06/21/94

Narrative (include time and location):

1630 Scanning out

LAST ENTRY

06/21/94

Daily Weather Conditions: A.M.

P.M.

06/23/94

Recorded By Susan L Alyhor QA Checked By 6/26/94

TASK TEAM ACTIVITY LOG SHEET

MONITORING WELLS
W398 P114

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/02/94 TIME: 0710 : 1325 PAGE 1 OF 3

Task Team Members:

Susan Mosher
Martha Cramer

Narrative (include time and location):

0710 Arrived @ trailer to pick up equipment calibrate instruments and have safety meeting
0800 Having trouble getting water to grout or getting drums to drill
0850 John has drums and will be delivering them
0905 Sharon and Steve (Bowser) begin drilling at 23 ft BGS for B 398. Jeff H (U.P.) on site
0910 Joyce stops by site. Said she is going to building 34 to take care of the water problem
0914 Joyce off site
0916 John on site w/ drums
0919 John off site
0945 Cleaning borehole out @ 26.5 ft BGS and collecting a grab sample
23-26.5 ft BGS Description
N6 medium light grey to N4 med. dark gray crystalline limestone w/ <5% fossil frag. and <5% N2 greyish black shale fragment

Daily Weather Conditions: A.M. ≈80°F Clear, Hot
P.M. NA

Recorded By Susan J Mosher QA Checked By [illegible] 6/26/94

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W398 P115

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/22/94 TIME: 0710 : 1325 PAGE 2 OF 3

Task Team Members:

Same as 1 of 3

Narrative (include time and location):

0949 Continued drilling Added 5 gal of water

0950 Collect surface sample from surface to .5 ft BGS - Greyish brown 5YR 3/2) silty clay w/ small limestone fragment (gray-N5) and plant detritus

1007 ~~NT~~ 06/22/94 Drum we are putting all cuttings into does not have a seal for the lid #001575 QC ✓ by RB

Left leaving site

1015 Cleaning bore hole out @ 30.0 ft BGS and collecting a grab sample. Joletta on site to collect surface sample

1022 Continue drilling - Add 5 gal of water

1026 Joletta off site

1033 Added 5 gal of water to borehole

1040 Cleaning bore hole out @ 33 ft BGS. Collecting grab sample

26.5 - 30.0 ft BGS ~~Description~~

Same as above 6/26/94

30.0 - ~~33.0~~ 33.0 ft BGS ~~Description~~

Same as above

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Susan L Abelson QA Checked By Tom 6/26/94

TASK TEAM ACTIVITY LOG SHEET

MONITORING WELLS W398 p 116

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/22/94 TIME: 0710 : 1325 PAGE 3 OF 3

Task Team Members:

Same as 1 of 3

06/22/94

Narrative (include time and location):

1048 Stick up 3.18 ft AGS Casing for guide
Water @ 33.19 ft BTOC 30.01 BGS
TD @ 36.2 ft BTOC 33.02
1052 Jeff H. (HP) on site to scan us for lunch
1120 Leaving site for lunch
1200 Return from lunch. Getting equipment to grout W 399. Getting ice for water cooler
1325 Water @ 33.1 ft BTOC in W398. going to let it sit over night.
1348 Drillers gone after a load of water
1405 Cleaning and securing site
* Activities continued log sheets on pg. 10

06/22/94

Daily Weather Conditions: A.M. NA

P.M. ≈ 90°F Partly Cloudy, hot, Humid

Recorded By Susan J Abbott QA Checked By [illegible] 6/26/94

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — W398 P117 TASK NO.: 34896

Date (mm/dd/yy): 06/~~22~~ 23/94 TIME: 0705 : 1315 PAGE 1 OF 1

Task Team Members: SLA 06/23/94

Martha Cramer

Susan Abston 06/23/94

Narrative (include time and location):

0705 Arrived at trailer to pick up instruments, equipment, and have a health + safety meeting

0805 Tagged water at 32.8 ft BTOC. Only made 0.3 ft of water over night. Probably drilling water - determine to grout well after talking w/ John Davis

0820 Drillers - Sharon and Steve - preparing to grout. Run tremie pipe to bottom of borehole (33 ft BGS)

0910 Grouted to surface w/ 6 bags of Type I Portland cement w/ 4% Bentonite (gold seal). Cleaning grout plant

0930 Breaking down drill rig and cleaning site

1022 Leaving site to decon rig and equipment

1131 Moving decanned rig to B440

1149 Break for lunch

1245 Return from lunch - lightning alert not able to continue working

1315 Fill out drilling paper work and depart site

LAST ENTRY

Daily Weather Conditions: A.M. ≈ 80°F Partly Cloudy.

P.M. ≈ 80°F Raining

Recorded By: Susan J. Abston QA Checked By: [signature] 6/26/94

BOREHOLE LOG (SOIL)

MONITORING WELLS: W398, P125

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: JTD 10/4/94 MND16

LOCATION ID: WB 398

COORDINATES (FT):

NORTH NA EAST NA

GROUND ELEVATION (FT MSL) NA

LOCATION TYPE: ~~BH~~ WL JTD 10/4/94

COMMENTS:

DRILLER CODE: BOWS

COMPLETION DATE 06/22/1994

DIAMETER (IN): 8 in

DEPTH (FTFD): 33.02

CONSTRUCTION METHOD: C

ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
06/22/94	1048	30.01
06/22/94	1325	29.72
06/23/94	0805	29.62

LOCATION DESCRIPTION

Along outer perimeter road near gate 2 on new property

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
	NA	NA	NA	NA	NA	NA	NA	NA	
0-1.5								CL	Greyish brown (5YR 3/2) silty clay with N5 grey limestone fragments and plant debris
1.5-6									90% (N6-N3) medium light grey to dark grey fossiferous (bryozoans and brachiopods) crystalline limestone → (80% of LS frag. exhibit moderate yellowish brown (10YR 5/4) weathering staining) 10% (N3) dark grey shale.

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:

A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:

A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan Wilson 06/22/94
FORM COMPLETED BY / DATE

6/26/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) — MONITORING WELLS

PROJECT NAME: EG&G MOUND OUS NEW PROPERTY - EXTENDED PHASE — PROJECT NO.: 34898

FACILITY CODE: MND16 — DRILLER CODE: BOWS

LOCATION ID: WB398 — COMPLETION DATE: 6/23/94

JHD 10/4/94 — JHD 6/22/94

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
6-9									Same as above with only
									5% shale. Some greyish red
									5R4/2 staining
9-12									Same as above w/
									decreasing amounts of fossils
									and staining surfaces
12-15									Same as above
15-18									Medium light grey to dark
									grey (N6-N3) crystalline
									limestone with some fossil frag
									(crinoids, brachiods) w/ <10%
									exhibiting staining. Some fragments
									of white to gelatinous white massive
									calcite
18-23									Same as above w/ rock
									becoming harder at 18.5 ft
23-26.5									(Medium light Grey, N6) to med.
									dark grey (N4) crystalline limestone
									with <5% fossiferous and
									<5% greyish black (N2)
									shale fragments
26-30									Same as above
30-33									Same as above
									TD hole @ 33.02 BGS

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE: 06/02/95

TECHNICAL REVIEWER / 6/26/94

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA

MONITORING WELLS W398-P151

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.: 34896

FACILITY CODE: MND16

LOG DATE: 06/21/94

LOGGER CODE: SAIC

FIELD REP: S.L. Anston

CGI MANUFACTURER: Industrial Scientific

CGI MODEL NO.: MX251

SERIAL NO.: 9403279-091

CALIBRATION DATE/TIME: 06/21/94 0726

ACCEPTANCE CODE: A

BATTERY CONDITION Good

CALIBRATION GAS (%LEL)

TYPE Pentane CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39731

CALIBRATION GAS (PPM)

TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: NA

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE JHD 10/4/94	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
W398	NA	NA	1400	BH WL	0 %	N	20.9
JHD 10-4-94 "			1405	"	0 %	N	20.9
"			1410	"	0 %	N	20.9
"			1500	"	0 %	N	20.9
"			1520	"	0 %	N	20.9
"			1540	"	0 %	N	20.9
"			1600	"	0 %	N	20.9
			LAST ENTRY				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J Alston 06/21/94
FORM COMPLETED BY / DATE

6/26/94
TECHNICAL REVIEWER / DATE

10

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — MONITORING WELL: W398 D152

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — **LOG DATE:** 06/22/94

LOGGER CODE: SAIC — FIELD REP: S. L. Abston

CGI MANUFACTURER: Industrial Scientific — CGI MODEL NO.: MX251

SERIAL NO.: 9403279-091 — CALIBRATION DATE/TIME: 06/22/94/07:16

ACCEPTANCE CODE: — BATTERY CONDITION: Fair

CALIBRATION GAS (%LEL) TYPE: Pentane — CONCENTRATION: 56 % LEL — CYLINDER SERIAL NO: 39731

CALIBRATION GAS (PPM) TYPE: NA — CONCENTRATION: NA PPM — CYLINDER SERIAL NO: NA

COMMENTS: NA

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
~~B~~398	NA	NA	0916	~~BH~~ WL	0.50	N	20.9
W ↓ JHD 10/4/94	↓	↓	0945	↓ JHD 10/4/94	0.90	N	20.9
↓	↓	↓	1020	↓	0.90	N	20.9

DJH 10/6/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J Ulderson 06/22/94 — FORM COMPLETED BY / DATE

[illegible] 6/26/94 — TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

MONITORING WELLS
W398 p. 155

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE
PROJECT NO. 3489E

FACILITY CODE: MND16
LOG DATE: 6/21/94
LOCATION ID: W ~~B~~ 398 JHD 10/4/94
LOCATION TYPE: ~~BH~~ WL JHD 10/4/94
LOGGER CODE: SA1.6
FIELD REP: S.L. Abston

FLAME IONIZATION DETECTOR INSTRUMENT:
MANUFACTURER: Foxboro
MODEL NO.: OVA 128GC
SERIAL NO.: 900002 5208
DATE/TIME CALIBRATION 06/21/94 0640
ACCEPTANCE CODE: A

CALIBRATION GASES			
TYPE/CYLINDER ID NO.		CONCENTRATION (PPM)	
1	Methane / 39562	1	100 ppm
2	NA	2	NA

COMMENTS NA

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
1400	W ~~B~~398 JHD 10/4/94	0.0	0.0	0.0	~~0.0~~ NA	NA	0 ft	scan before drilling
~~1420~~ 1405	"	0.0	0.0	0.0	0.0		1 ft.	using cable tool
1440	"	0.0	0.0	0.0	0.0		6 ft	"
1500	"	0.0	0.0	0.0	0.0		9 ft	"
1500	"	0.0	0.0	0.0	0.0		12 ft	"
1540	"	0.0	0.0	0.0	0.0		15 ft	"
1600	"	0.0	0.0	0.0	0.0		18 ft	"
				Last Entry				
				JJ6 6/21/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J. Abston 06/21/94
FORM COMPLETED BY / DATE

6/26/94
TECHNICAL REVIEWER / DATE

156

FLAME IONIZATION DETECTOR FIELD DATA — MONITORING WELL W398 P156

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **PROJECT NO:** 348

FACILITY CODE: MND16 — **LOG DATE:** 06/22/94

LOCATION ID W ~~B~~ 398 JMD 10/4/94 — LOCATION TYPE ~~BH~~ WL JMD 10/4/94

LOGGER CODE: SAIC — FIELD REP: S.L. Abston

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: — MODEL NO.: OVA 128 GC

SERIAL NO.: 9 0000 25208

DATE/TIME CALIBRATION 06/22/94 0731 — **ACCEPTANCE CODE:** A

CALIBRATION GASES			
TYPE/CYLINDER ID NO.		CONCENTRATION (PPM)	
1	Methane / 39562	1	100 ppm
2	NA	2	NA

COMMENTS NA

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		
0910	W B398 JMD 10/4/94	0.0	0.0	0.0	0.0	NA	23 ft	NA
0945	↓	0.0	0.0	0.0	0.0	↓	27 ft	↓
1020	↓	0.0	0.0	0.0	0.0	↓	20 ft	↓
			LAST ENTRY					

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J. Abston 06/22/94 — FORM COMPLETED BY / DATE

[illegible] 6/26/94 — TECHNICAL REVIEWER / DATE

SAMPLE LOG SHEET

W398 p. 162

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B398Ø1

DATE COLLECTED (MM/DD/YY): 06/22/94

TIME (HH:MM): ~~0900~~ 0950
SCA 06/22/94

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: B398

DESCRIPTION:

FIELD OBSERVATIONS: Collected sample from ground surface to .5 ft BGS with a spoon and composited in a bowl

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 2.ØØ FT

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO

FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: [signature] (SIGNATURE)

QA CHECKED BY: [signature] 6/26/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B398Ø1

W398 p163

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØØ6	821996Ø232	See Container Lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
			LAST ENTRY				

SAMPLE ID'S RINSATE: ERØØ15 TRIP BLANK: TBNØØ6 FIELD BLANK: ABØØØ9 FIELD DUPLICATE: NA

RECORDED BY: Susan J Alston (SIGNATURE)

CHECKED BY: [signature] 6/26/94 (SIGNATURE)

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TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W.399 P. 217

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/14/94 TIME: 09 : 00 (0900) PAGE 1 OF 5 (1642)

Task Team Members:

Martha Cramer

Susan L. Abston

06/23/94

Narrative (include time and location):

0900 Arrived @ B-399. Crew on site and site up w/ Bucyrus 22W cable tool rig. Drillers S.C. Patterson, Steve Belt, Jim Hagger, H.P. Jeff Tracket, Martha Cramer + Susan Abston SAIC.

0914 Removing grass to take the surface sample. Will drive a spoon from 0 to 2 ft BGS

0920 Rigging up w/ 2 ft 3 in split spoon - stainless steel. Adding one adapter to the spoon to rig up w/ the steel for the rig. SLA 06/14/94 Rig deconned on 6/13/94 with steam cleaner at decon area disigneted by EG+G Mound

0932 Left site to go to auger rig to get a different adapter for split spoon

1009 Returned to site going to take sample at surface w/ spoon and bowl instead of split spoon

1010 Collect VOC from 1st scoops. Composite surface samples in a bowl and filled the rest of the jars

3.9 ft Bit w/ a 1.5 ft adapter ~~[illegible]~~ hammer SLA 06/14/94

Daily Weather Conditions: A.M. 06/23/94

P.M.

Recorded By Susan L Abston QA Checked By 10/4/94

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TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W399 p. 218

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/14/94 TIME: 0900 : 1642 PAGE 2 OF 5

Task Team Members:

Same as 1 of 5

06/23/94

Narrative (include time and location):

Drilling a bore hole for 6 5/8" casing w/ 6 in ID

~~1042~~ 1040 Begin drilling to 3 ft BGS. LEL continuously

SLA 06/14/94 ~~1044~~ monitoring drilling. Drill Bit 6" x 4 3/4"

~~1045~~ 1045 Adding a piece of casing to act as a guide for the hammer. Adding about 2 1/2 buckets of water to soften soil around casing

SLA 06/14/94 ~~1051~~ 1050 Cleaning bore hole out w/ clean out tool

1055 Driving a two inch spoon to check for bedrock

1102 Pulled 2 in spoon 1.1 ft of recovery Bottom .9 ft limestone (weathered) Bedrock @ ~~3.2~~ 3.8 ft BGS Bedrock at ~~3.8~~ 4.4 ft BGS

1105 Continued drilling

1115 Cleaning out hole to 6 ft BGS and collecting a grab sample. Adding 5 gal of water

1120 Continue drilling

1124 Joletta Humpert onsite to collect sample B39901

Daily Weather Conditions: A.M. ≈80°F Partly Cloudy

P.M. NA

Recorded By Doreen J Alston QA Checked By [illegible] 10/4/94

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS W399 p219

PROJECT NAME: EG&G MOUND GUS NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/14/94 TIME: 0900 : 1642 PAGE 3 OF 5

Task Team Members:

Same as 1 of 5

JJO
06/23/94

Narrative (include time and location):

1126 Joletta off site.

① 3.8 - 9.5 ABGS Description

- N6-N3 medium light grey to dark grey fossiliferous (bryozoans brachipods) crystalline limestone exhibiting moderate yellowish brown (10YR5/4) weather staining. Some (5%) frag of N3 dark grey shale.

1132 Cutting turning a bluish grey tint. Cleaning out the borehole at 9.5 ft BGS.

② 9.5 - 16.5 ft BGS Description

N4 to N7 medium dark grey to light grey limestone w/ 10YR5/4 Moderate yellowish brown stained crystalline bryozoane frag. - brachipods < 5% frag of N3 dark grey shale

1135 Pulling out casing guide

1138 Continued drilling. Not using casing to guide hammer bit

1139 John Davis on site to check on progress

Add water w/ 5 gallons bucket everytime w/ clean the borehole out (≈ 5 gal each time)

1145 John Davis off site

Daily Weather Conditions: A.M.

P.M.

JJO
06/23/94

Recorded By Susan J Alston QA Checked By 10/4/94

220

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS** W397 p 220

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/14/94 TIME: 0900 : 1642 PAGE 4 OF 5

Task Team Members:

Same as 1 of 5

N/A 06/23/94

Narrative (include time and location):

1148 Sound (pitch changes) on rig (bit).
1158 Grab Sample @ 13 ft BGS. Cleaning out hole
1200 Looking down hole after pulling out clean out tool can see some rock at 1ft BGS the more weathered below
1202 Everyone HP scanned of the site
1259 Returned from lunch preparing to continue drilling
1309 Rig on - continued drilling
1321 John Davis on site
1335 Cleaning out borehole
1340 Continued drilling
② 16.5 - 23 ft BGS Description
Same as above

1354 Cleaning out the hole @ 18.5 ft BGS
slight trickle of water coming in borehole
trying to determine if it is drilling water
washed back up in rock or the actual
water table John off site Grab sample
1400 Continue advancing drilling stem

Daily Weather Conditions: A.M. N/A
P.M. ≈ 95°F Partly Cloudy

Recorded By Susan J Abbott QA Checked By ✓ 10/4/94

TASK TEAM ACTIVITY LOG SHEET

MONITORING WELLS: W399 P221

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO.: 34896

Date (mm/dd/yy): 06/14/94 TIME: 0900 : 1642 PAGE 5 OF 9

Task Team Members:

Same as 1 of 5

06/23/94

Narrative (include time and location):

1415 John back on site w/ new H. Nu. Our battery was going down (# 002)

1417 John off site SCA 06/14/94

1425 Cleaning out hole @ 23 ft BGS / Grab Sample

1429 Continued advancement down. No water was coming in this time.

1450 Cleaning out the borehole @ 27 ft BGS. Collecting cuttings

1458 Continued drilling. John on site SCA 06/14/94

1530 Cleaning out borehole @ 33 ft Collecting grab sample

1542 Continued drilling to 34 ft BGS

1554 Jeff (HP) was radioed that the samples were OK to ship off site. John off site

1605 Drilled to 34 ft Pulling steel and cleaning out hole + taking grab sample

1615 # 4117 3937 HP's → Jeff's number

Jeff off site after scanning us

1630 Water rose from 32 ft BGS to 31.7 ft BGS. Letting well set over night and will check it in the morning

1642 Cleaned and secured site - departed

Daily Weather Conditions: A.M.

P.M. 06/23/94

Recorded By Susan J. Taylor QA Checked By 10/4/94

222

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W399 p222

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/15/94 TIME: 07 : 08 (0708 1625) PAGE 1 OF 4

Task Team Members:

Martha Cramer

Susan Abston MD 06/23/94

Narrative (include time and location):

0708 Arrived @ SAIC trailer - Health and Safety tailgate and loading equipment, calibrating instruments.

0820 Arrived @ B 399 site Drillers on site went over health + safety tailgate. S. Patterson + S. Belt

0835 Water @ 5.3 ft BGS - TD of borehole @ 32.8 ft BGS some cave in over night. Returning to trailers to talk w/ John about well. Drillers still on stand by. Drillers Patterson and Belt.

0845 Talked w/ John. As soon as we are able to get drums we will clean the hole out set the well w/ 1 ft of sand on the bottom & place the bentonite seal, move the rig off come back tomorrow and do a bail-recharge test to insure we have the water table in the screen zone and move on to the next well location.

0935 Returned to B-399 site. Waiting on drums. Try to hand auger a sample above bedrock

0945 Hand augered to 7 ft BGS and refused

SLA 06/15/94 Jeff ~~Flecket~~ Fleckenstein (HTD) on site SLA 06/15/94

Daily Weather Conditions: A.M. ≈ 80°F Partly Cloudy Humid

P.M. NA

Recorded By Susan J Abston QA Checked By [signature] 10/4/94

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

W399 P223

Date (mm/dd/yy): 06/15/94 TIME: 0800 / 1625 PAGE 2 OF 4

Task Team Members:

Same as 1 of 4

Narrative (include time and location):

on limestone. Moving over to try again

0956 Hand augered to .8 ft BGS Refused on rock again and bent auger. Rock at .9 to 1.2 ft BGS in borehole. Not able to take a sample (bedrock sample) it would just be a duplicat of the surface sample. Jeff (HD) scanned equipment to leave site.

1009 John on site → still waiting on drums checking borehole

1013 John off site.

1105 Drum on site

1110 Break for lunch

1210 Returned from lunch waiting on Jeff (HP) to arrive on site

1235 Jeff (HP) & Joyce on site.

1248 Joyce off site. Cleaning out borehole

1300 Clear hole out to 33.9 ft BGS. Able to bring all the water out. Slow recharge. Screen 10 ft total length welded well cap is .25 ft to of screen .17 to slots

32.8
.25
32.55

Daily Weather Conditions: A.M. NA

P.M. ≈95°F Partly Cloudy, Sunny, Hot, Humid

Recorded By [signature] QA Checked By [signature] 10/4/94

224

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS** W395 PZ24

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/15/94 TIME: 0705 : 1625 PAGE 3 OF 4

Task Team Members:

Same as 1 of 4

06/23/94

Narrative (include time and location):

#10 Slot Wire Bound 304 Sch. Stainless Steel prepackaged

Riser - 102 ft (total length - of all 3 section) 304 Stainless Steel

Sand - Global Filter Pack #5.

Waiting on tremie pipe and centralizer

.2 ft 2 3/8" OD / .17 ft 2 in ID of pipe

1340 On site w/ tremie pipe John & Joyce on site. Discussing tremie sand. 6 in borehole will not allow for the two inch tremie pipe and a centralizer due to the tremie of the sand being the most important of the two since it is a bedrock well we will not be using a centralizer. However, still have concern about tremie water recirculation

1350 Drilling add the 10 ft of screen + 30 ft of riser

1400 Joyce & John off site to check on recirculation water

Daily Weather Conditions: A.M.

P.M. 06/23/94

Recorded By [signature] QA Checked By [signature] 10/4/94

225

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W399 P225

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/15/94 TIME: 0708 : 1625 PAGE 4 OF 4

Task Team Members:

Same as 1 of 4

06/23/94

Narrative (include time and location):

1408 Jeff (HP) on site, Adding 30 ft of tremie pipe to the well 2 in PVC threaded flush joint

1410 Drillers preparing the water for pumping down the tremie. Stainless steel well setting at 32.8 ft BGS (7.2 ft of stick up) 1.1 ft of sand on bottom

1413 Standby

1425 ~~Same~~ Started sanding well

1500 Sand to 21.3 ft BGS - 6 bags (50lb) tremied using 18 gallons of potable water no recirculation. Collect sample of sand

1505 Added 2 buckets of bentonite pellets CETCO Volclay / Pure Gold 3/8 inch Bentonite Tablets to 19.3 ft BGS

~~CETC~~ 06/15/94

1525 Breaking rig down; John said to use a 8 in bit for next borehole and cleaning up site & serving area

1625 Departing site. Leaving rig on site to steam clean tomorrow

Daily Weather Conditions: A.M. 70

P.M. 06/23/94

Recorded By Susan L. Alston QA Checked By 10/4/94

226

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS** W399 & 226

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 6/16/94 TIME: ~~07~~ 0722 : ~~22~~ 0840 PAGE 1 OF 2

Task Team Members:

Susan L. Abster

Martha Cramer

Narrative (include time and location):

0722 Arrived @ trailer to calibrate & pick up instruments and equipment, and attend Health & Safety Meeting

0745 Moving Rig to steam clean to move to GW 397 (B-397) W411 JMD 10/5/94

0825 Moving rig to ~~W-397~~ Tagged bentonite in W-399 @ 14.1 ft BGS - must have had some cave in during the night

0840 Jeff (HP) came by + said he had to attend training until 1000 and then he would be back and we could start. Drillers setting drilling up on site. Rigging up w/ a 8 in diameter bit as per John Davis

Daily Weather Conditions: A.M. 70

P.M. 80

Recorded By Susan L Abster QA Checked By JMJ 6/26/94

227

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W399 & 227

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 6/16/94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

Grouting activities & bail & recharge test on pg 5-6 for ~~GW~~ W399

SW 06/23/94

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Susan J Abbott QA Checked By [illegible] 6/26/94

228

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W411 p. 228

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 07/05/94 TIME 0700 : 1400 PAGE 1 OF 1

Task Team Members:

Susan C Abston — Martha Craner

JJO 07/28/94

Narrative (include time and location): JMD 10/4/94

Cont from p. 12 W ~~347~~ 411

1500 Having trouble w/ pump. Generator not running at a constant rate - Power surging messing up controller for pump

1520 Measure water at 30.82 ft BTOC. Pump still not pump. Pull pump to check in 5 gal. bucket

1545 Not able to get pump to coord

1550 Driller off site to drop off pad materials at Oscar pad and to take pump & generator back to shop to see what is wrong

1600 ~~Water~~ Sediment level at 3.17 ft BGS in W 411

need to bring it on up

JJO 07/28/94

Daily Weather Conditions: A.M. JJO

P.M. 07/28/94

Recorded By Susan J Abston QA Checked By [illegible] 10/4/94

229

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W399 P229

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO: 34896

Date (mm/dd/yy): 07/21/94 TIME: 0930 : 1315 PAGE 1 OF 2

Task Team Members:

Susan L. Alston — Martha Cramer

DJO 01/28/95

Narrative (include time and location): SLA 07/21/94

0930 Arrived at W-399 to continue pumping

0938 Uncapped well. OVA reading of 3.0 ppm at first but within 30 sec it had dissapated to 0.0 ppm - No reading 0.0 ppm

0942 LEL 20.9 + 0.6 SLA 07/21/94

Water @ 21.45 ft BGS TOC

TD @ 35.14 BTOC

0947 103.4 = Slope while calibrating pH Meter #2022 (HACCO) 7 (std.) 10 (10 solution)

$= \pi \left(\frac{1}{12}\right)^2 (13.69)(7.49)$

1 well vol = 2.24 × 5 = 11.2

SLA 07/21/94 ~~Purge~~ remove water × 5 = 90 gal. (101.2 gal)

* 1st developed 07/05/94 pg 11 + 12 of this logbook

0950 Place pump down well. Grundfos Redi Flo 2 submersible

1000 Initial Reading

pH 8.41

temp 14.7 °C

cond 3.17 20 mV/cm TC to 25°

Slightly turbid No odor noted, slightly grey

1005 Dry after ≈ 7 gal

Daily Weather Conditions: A.M. ≈ 80 °F Partly Cloudy, Humid

P.M. NA

Recorded By Susan L Alston QA Checked By [illegible] 10/4/94

230

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS** W399 p. 230

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 07/21/94 TIME: ~~0930~~ : 1315 PAGE 2 OF 2

Task Team Members:

Susan L. Alston — Mr. the Crane

SLA 07/28/94

Narrative (include time and location):

1020 Try to pump again. Produce ≈ 1 pint of water. Letting it recharge

1100 Pump - dry after ≈ 1 quart

1130 Pump - dry after ≈ 1 pint

1220 Break for lunch

1315 Return from lunch. Return to W399

≈ 30 min intervals to pump. Not getting any water to a max. of a pint each time. We will let it recharge over the weekend and re-evaluate the situation.

SLA 07/28/94

Daily Weather Conditions: A.M. NA

P.M. ≈ 85° F Partly Cloudy

Recorded By Susan L Alston QA Checked By [illegible] 10/4/94

231

TASK TEAM ACTIVITY LOG SHEET | **MONITORING WELLS** W399-P231

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE | **TASK NO.: 34896**

Date (mm/dd/yy): 07/25/94 TIME: 0754 1450 PAGE 1 OF 1

Task Team Members:

SUSAN L. Abston Martha Cramer

LJO
07/28/94

Narrative (include time and location):

0754 Water @ 30.82 ft ~~36.65~~ BTOC SIA 07/25/94
Not making much water. Going to have S. Patterson + S. Belt bail well

1450 S. Patterson + S. Belt said they have a total of 25 gal after periodically bailing all day
Need to re-evaluate

07/26/94
0710 Water at 33.81 ft BGS
not much recharge

LJO
07/28/94

Daily Weather Conditions: A.M.

P.M.

LJO
07/28/94

Recorded By Susan L Abston QA Checked By [illegible] 10/4/94

232

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS W399 p 232

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 8/11/94 TIME: 0730 PAGE 1 OF 1

Task Team Members:

GREG LODER SAIC

TED KEEN BOWSER MORNER

Narrative (include time and location):

0730 ON SITE TO SURGE W399. DECON STAINLES STEEL SURGE BLOCK

0810 SET UP ON WELL HNU = Ø IN BOREHOLE

0823 WATER LEVEL @ 24.1 FT TD IS 33.6 FT

0845 BEGIN SURGING. PROCEDURE WILL BE TO BEGIN AT THE BOTTOM THIRD OF THE WATER COLUMN WORKING THE BLOCK UP AND DOWN 3 FEET SEVERAL TIMES THEN COME UP TO THE MIDDLE THIRD AND REPEAT THE PROCEDURE AND SO ON FOR APPROXIMATELY ONE HOUR

0945 FINISHED SURGING HNU = Ø WATER @ 24.3 FT

0955 USED A DISPOSABLE BAILER TO CHECK TURBIDITY WATER IS ONLY SLIGHTLY TURBID SO WE WILL CONTINUE SURGING

1030 STOP SURGING WATER IS MEDIUM TO HIGHLY TURBID SO WE BEGIN BAILING. WATER @ 24.3 FT

1100 WATER @ 29.5 FT AFTER 3 GALLONS

1111 WATER @ 32.2 FT AFTER 4 GALLONS

1125 WELL DRY AFTER 4.5 GALLONS

1130 LOCK UP WELL AND LEAVE SITE

Daily Weather Conditions: A.M. 70°F OVERCAST

P.M. NA

Recorded By [signature] QA Checked By [signature] 10/4/94

BOREHOLE LOG (SOIL)

MONITORING WELLS W399 P233

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: MND16

LOCATION ID: WP 399 JHD 10/4/94

COORDINATES (FT):

NORTH NA EAST NA

GROUND ELEVATION (FT MSL) NA

LOCATION TYPE: ~~BH~~ WL JHD 10/4/94

COMMENTS: NONE

DRILLER CODE: ~~BOS~~ BOWSGR

COMPLETION DATE 06/14/1994

DIAMETER (IN): 6 in

DEPTH (FTFD): 32.8

CONSTRUCTION METHOD: C

ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
06/14/94	1636	31.7
06/15/94	0835	5.3
08/10/94	1100	26.29 TOC
8/11/94	0810	24.1

LOCATION DESCRIPTION

Near gate. 2 off main road in neto property

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-3H	0-.5	.5	NA	O	B39901	NA	NA	CL	Sampled using spoon. Silty clay. Dark brown ( ) dry, firm w/ plant root fragments. Bryozoan stem fragment (LS) and small 1% weathered limestone fragments <3% ave. 1mm in size. Rock @ 1.2 ft BGS SLA 06/14/94
				CABLE TOOL BAILER					
3-5	NA	1.1	NA	S	NA	NA	NA	CL-LS	Rock @ ~~3.2~~ 1.2 ft BGS Top .2 ft same as above w/ 80% limestone small

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:

A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:

A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J. Weston 06/14/94 — FORM COMPLETED BY / DATE

[signature] 6/26/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL)

MONITORING WELL: W399 P234

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 3489

FACILITY CODE: MND16

DRILLER CODE: BOWS

LOCATION ID: W399 DTD 10/4/94

COMPLETION DATE 06 / 14 / 19

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
				0					SLA 06/14/94 fragment. Bottom 1.9 ft
									Limestone very bottom
									25ft Bedrock - N4 Dark
									medium grey limestone w/
									fossil fragment ~~flat 5~~ 9
				1.2 OUT	3144				~~to f the spoon~~ weathered
									~~bedrock~~ SLA 06/14/94
									* Bedrock @ 1.9 to 1.2
									ft BGS - Limestone layers
									alternating with clays
				CABLE TOOL BAILER					to 4ft BGS were limestone
									only occurs
5-9.5									Med. light grey (N6)
									to dark grey (N3)
									fossiliferous (bryozoans, brachiopods)
									crystalline limestone exhibiting
									moderate yellowish brown
									(10YR5/4) weathering staining
									and <5% N3 dark grey
									shale frag
9.5-16.5									Medium light grey (N6) to dark
									grey (N3) crystalline limestone
									w/ <5% (N3) dark grey shale
									fragments. Fairly traces of
									bryozoans and brachiopods. <10%
									of frag exhibit weathering
16.5-23									Some OS shale
23-31									Medium light grey (N6) to
									dark grey (N3) crystalline limestone

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE: [signature] 6/14/94

TECHNICAL REVIEWER / DATE: [signature] 6/26/94

250

BOREHOLE LOG (SOIL)

MONITORING WELLS W399 p235

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO.: 34896

FACILITY CODE: MNDIL

LOCATION ID: WR 399 JHD 10/4/94

DRILLER CODE: BOWS

COMPLETION DATE 06/14/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
				0					w/ ≈ 15% (N3) dark
									gray shale and frag.
									of white to yellowish
									white massive calcite
31-34									Same as above w/only
									traces of shale and
									calcite
				CABLE TOOL BAILER					Drilled to 34 ft BGS

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE 06/14/94

TECHNICAL REVIEWER / 6/26/94

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — MONITORING WELLS: W399 p.259

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO.: 34896

FACILITY CODE: MND16 **LOG DATE:** 6/14/94

LOGGER CODE: SAIC FIELD REP: S. L Abston

CGI MANUFACTURER: MSA CGI MODEL NO.: 261

SERIAL NO.: 89000 22069 CALIBRATION DATE/TIME: 06/14/94 0830

ACCEPTANCE CODE: A BATTERY CONDITION good

CALIBRATION GAS (%LEL) TYPE NA CONCENTRATION NA % LEL CYLINDER SERIAL NO NA

CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: Background check - good

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
S.L Abston 06/14/94							
~~1048~~	NA	NA	1048	BH	0%	0.0	20.9
~~B~~ 399			1059	BH	0%	0.0	20.9
W SLA 10/4/94			1114	BH	0%	0.0	20.9
			1132	BH	0%	0.0	20.9
			1311	BH	0%	0.0	20.9
			1322	BH	0%	0.0	20.9
			1400	BH	0%	0.0	20.9
			1425	BH	0%	0.0	20.9
			1458	BH	0%	0.0	20.9
			1533	BH	0%	0.0	20.9
				Last entry			
			1210 06/14/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J Abston 06/14/94 — FORM COMPLETED BY / DATE

[illegible] 6/26/94 — TECHNICAL REVIEWER / DATE

260

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — MONITORING WELLS W399 P260

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO.: 34896

FACILITY CODE: MND16 — LOG DATE: 06/15/94

LOGGER CODE: SAIC SLA 06/15/94 — FIELD REP: S.L. Alston

CGI MANUFACTURER: ~~MSA~~ Industrial Scientific — CGI MODEL NO.: ~~261~~ MX251 SLA 06/15/94

SERIAL NO.: ~~890002822064~~ SLA 06/16/94 — CALIBRATION DATE/TIME: 0910 06/15/94

ACCEPTANCE CODE: A — BATTERY CONDITION good

9403279-091

CALIBRATION GAS (%LEL) TYPE Pentane CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39731

CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: NONE

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN

NO DRILLING AT B399 on 06/15/94 [illegible] 06/23/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[illegible] 6/15/94 — FORM COMPLETED BY / DATE

[illegible] 6/26/94 — TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA

MONITORING WELLS
W399 p.263

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE
PROJECT NO.: 34896

FACILITY CODE: MND16
LOG DATE: 06/14/94
LOCATION ID: WB 399 JHD 10/4/94
LOCATION TYPE: ~~BH~~ WL JHD 10/4/94
LOGGER CODE: SAIC
FIELD REP: S.T. Abston

FLAME IONIZATION DETECTOR INSTRUMENT:
MANUFACTURER: Foxboro Analytical
MODEL NO.: 128 GC OVA
SERIAL NO.: 50289 H-Nu Systems Inc SAIC 3003 PJ101
DATE/TIME CALIBRATION: 06/14/94 0825 06/14/94 0845
ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 Methane 39562	1 100 ppm
2 Isobutylene C_4H_8 Lot# 391238	2 100 ppm

COMMENTS: OVA had the wrong probe. Calibrated a H-Nu using Isobutylene

TIME (HH:MM)	SAMPLE ID JHD 10/4/94	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
1048	WB 399	0.0	0.0	0.0	0.0	NA	2 ft	using cable tool hammer
1058		0.0	0.0	0.0	0.0		3 ft	driving spoon
1114		0.0	0.0	0.0	0.0		6 ft	using cable tool hammer
1132		0.0	0.0	0.0	0.0		9.5 ft	"
1311		0.0	0.0	0.0	0.0		13 ft	"
1332		0.0	0.0	0.0	0.0		16.5 ft	"
1400		0.0	0.0	0.0	0.0		19 ft	"
1425		0.0	0.0	0.0	0.0		23 ft	"
1458		0.0	0.0	0.0	0.0		27.5 ft	"
1523		0.0	0.0	0.0	0.0		31 ft	"
					1st entry			

JAO 06/23/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J. Abston
FORM COMPLETED BY / DATE

6/26/94
TECHNICAL REVIEWER / DATE

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FLAME IONIZATION DETECTOR FIELD DATA

MONITORING WELLS W399 PZ64

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: MND16 **LOG DATE:** 06/15/94

LOCATION ID W399 LOCATION TYPE WL

LOGGER CODE: SAIC FIELD REP: S.L. Abston

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: Foxboro Analytical MODEL NO.: 128 GC OVA

SERIAL NO.: 50289

DATE/TIME CALIBRATION 06/15/94 0740 **ACCEPTANCE CODE:** A

CALIBRATION GASES			
TYPE/CYLINDER ID NO.		CONCENTRATION (PPM)	
1	Methane / # 39562	1	100 ppm
2	NA	2	NA

COMMENTS Received new probe from HAZCO and able to calibrate instrument. Had some trouble getting it to light

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
		DH	HS	BZ	D	OT		

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE

6/26/94

TECHNICAL REVIEWER / DATE

W399 p270

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B399Ø1 DATE COLLECTED (MM/DD/YY): Ø6/14/94 TIME (HH:MM): 1Ø1Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: Mound EG&G New Property

POINT CODE: B399

DESCRIPTION: Borehole 399

FIELD OBSERVATIONS: Sample taken w/ scoop at surface. Split samples w/ HP Sampled for 0-.5 ft BGS

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 2.ØØ FT

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

~~Only sampled to .5 ft BGS~~ SLJ XX/XX/94

RECORDED BY: Susan J Alston (SIGNATURE)

QA CHECKED BY: [signature] 6/26/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B399Ø1

W399 p 271

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØØ1	9289476431	See Container Lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		LAST ENTRY					

SAMPLE ID'S RINSATE: ERØØ15 TRIP BLANK: TBNØØ1 FIELD BLANK: ABØØØ9 FIELD DUPLICATE: NA

RECORDED BY: Susan Tillson (SIGNATURE) QA CHECKED BY: [signature] 6/26/94 (SIGNATURE)

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SAMPLE LOG SHEET

W399 p. 284

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: W39901 DATE COLLECTED (MM/DD/YY): 8/29/94 TIME (HH:MM): 1500

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: NA

POINT CODE: B399

DESCRIPTION: NA

SAMPLE -

MEDIA CODE: 66

DESCRIPTION: Monitoring Well JHD 10/4/94

DEPTH ~~0.00~~ TO ~~0.00~~ FT

31.5 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sample collected with disposable bailer. Only able to collect VOAS + 7 liters of water before ~~bay~~ JPH 8/30/94 well went dry.

Called J. Davis for direction. Per Alex Brey (EG&G), parameter list was reduced and samples shipped to lab.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

Parameter list reduced per A. Brey (EG&G)

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: W39901

W 399 P 285

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-40	Glass	CLPVOA	HCL to pH<2,4C	OAC024	821996ø593	B3228ø2ø	COMPUC
1 ~~2~~-1000 QPA 8/30/94	AmbGlass	CLP SVOC	Cool,4C	↓	↓	C3231ø2ø	COMPUC
~~2-1000~~	~~AmbGlass~~	~~CLP PEST / PCB~~	~~Cool,4C~~				~~COMPUC~~
~~2-1000~~	~~AmbGlass~~	~~EXPLOSIVES~~	~~Cool,4C~~				~~COMPUC~~
QPA 8/30/94 1-~~1000~~ 500	Poly	METALS	HNO3 to pH<2,4C	OAC024	821996ø593	C3231ø2ø	COMPUC
~~1-1000~~	~~Poly~~	~~CYANIDE~~	~~NaOH to pH>12,4C~~				~~COMPUC~~
1-1000	Poly	ANIONS Fl,SO4,Cl	Cool,4C	OAC024	821996ø593	C3231ø2ø	COMPUC
1-1000	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
~~1-1000~~	~~Poly~~	~~TOTAL NIT/TOTAL PHOS~~	~~H2SO4 to pH<2,4C~~				~~COMPUC~~
~~1-1000~~	~~AmbGlass~~	~~TOTAL ORGANIC CARBON~~	~~H2SO4 to pH<2,4C~~				~~COMPUC~~
1-~~1000~~ 500 QPA 8/30/94	Poly	TOTAL SUSPENDED SOLIDS	Cool,4C	OAC024	821996ø593	C3231ø2ø	COMPUC
~~1-1000~~	~~Poly~~	~~TOTAL DISSOLVED SOLIDS~~	~~Cool,4C~~				~~COMPUC~~
QPA 8/30/94 ~~1-1000~~ 500	~~Poly~~	~~ALKALINITY~~	~~Cool,4C~~				~~COMPUC~~
1 ~~2~~-1000 QPA 8/30/94	Poly	RADS Pu,Th,U,Am	HNO3 TO PH<2	OAC024	821996ø593	C3231ø2ø	COMPUC
1 ~~2~~-1000	Poly	RADS Ac,Ra,Sr,GAMMA	HNO3 TO PH<2	↓	↓		COMPUC
		LAST ENTRY					

SAMPLE ID'S RINSATE: ERØØ17 TRIP BLANK: TBAØ24 FIELD BLANK: ABØØ13 FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: [signature] 10/4/94 (SIGNATURE)

83

286 8/22/94 M. Cramer, Chris Halley

1547 Arrive at W399 & uncap HNu = Ø ppm

1552 Water Level 27'.74"

W399 p. 286

$= \frac{d^2 \pi}{4}(h_1 - h_2) \times 7.48$

$= \frac{\left(\frac{2}{12}\right)^2 \pi}{4}(33.0 - 27.74) \times 7.48$

$= \frac{3.14(.028)}{4}(5.26)(7.48)$

$= .86$ gal = 1 well volume

1600 Calibrate pH meter Slope = 98.9
Begin bailing well

1605 Initial reading
pH = 7.45
temp = 15.9° C
Cond = 2.36 on 20 mV/cm to 25°C

1705 Well is dry after 4.5 gallons

1710 Pack up, Secure well and leave for trailers
Mark Z Cramer ~~Jeff~~ 10/4/94

8-23-94
1543 Arrive at well # 399, uncap HNU = 450 ppm
Breathing Zone = 0 ppm; We'll go ahead and purge
1550 water level = 32.64
.36 × .17 = .06 gallons = 1 well Volume
1555 Calibrate pH meter
1600 Begin bailing water is turbid, grayish brown
1605 initial reading
pH = 7.26 15°C
Temp = 17.5°C
Cond = 2.48 on 20 mV/cm
AITO 8.23

1620 Well Bailed Dry
1630 Secure well - back to trailers
~~Mark~~ ~~Jeff~~ 10/4/94

8/24/94 M. Cramer
C. Halley

W399 p. 287 287

1555 Uncapped well water level 32.22 TD = 35.5

.164 x (3.28)
= .54 gallons = 1 well volume

1559 Calibrate pH meter slope 98.8

1604 Initial reading
pH 7.39
temp 15.3°C
cond 3.11 on 20 ~v/cm to 25°C

1615 Well is dry after bailing
~0.5 gallons

1620 secure site and leave for trailer
Mark L Cramer ~~Tom~~ 10/4/94

8-25-94 Matt Oblay
Chris Halley

1620 arrive @ well
water level = 33.36, T.D. = 35.5 = (2.14)(.17) =
= .36 gallons = 1 well volume
1625 Calibrate pH meter
1630 No water in well, bailer comes up dry.
1640 Lost bailer in well, it may have gotten hung up near screened interval and this may have caused the bailer to have come up dry in attempts to pull water out of well.

- we will fish out bailer monday morning (Aug. 29)

1650 off-site to trailer.

8-29-94
0815 arrive at well to "fish" out bailer from #399
0830 Bailer is out of MW 399, well is clear.
0840 Secure well - back to trailer.
~~Tom~~ 10/4/94

8/29/94 J. Humpert, J. Alvarado W399 p 29-2

1430 Arrive at ~~W399 Uncap~~ well.
Water level = 31.5'
Drop TLC probe downhole. Temp = 13.2°C
Conductivity is 2.70 µV at 25°C on 20 µV/cm channel
and 2.06 µV on 20 µV/cm channel

1445 Pull sample to do field measurements.
ORP = -3.6 @ 25°C
DO = 6 mg/L
pH - calibrate at 4 and 10 = 98% slope
pH = 7.38.

1500 Begin collecting sample W39901 + ~~cond~~ alkalinity sample JPH 8/30/94
Collect VOAs and 7 liters - well dry.

1530. Call J. Davis for direction. Wants us to call Compuchem to determine min. volume required per parameter. J.D. will call Alex Brey (EG&G). Secured well.

1600 JH Call Compuchem - spoke with Marlene Swift. Directed J.H. of min. volumes required. See Sample Mgmt. logbook. J.H called J.D. with info. J.D. will call with direction as soon as he speaks with A. Brey.

1640 Received call from J.D. - will reduce parameter list to accomodate for low sample volume. - see Sample Log Sheet for list.

J. Alvarado conducting ~~conductivity~~ JPH 8/30/94 alkalinity test.

1730. Offsite to deliver samples to fedex.

JPH 10/4/94

GROUNDWATER QUALITY SAMPLING RECORD — MONITORING WELLS W399 P307

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16
LOCATION ID: ~~B399~~ W399 JHD 10/4/94
SAMPLE ID: W399Ø1
LOG DATE: 8/29/94
ANALYICAL LAB CODE: COMP

LOT CONTROL NO.: NA
SAMPLE TYPE: F
ACCEPTANCE CODE: A
LOGGER CODE: SAIC

INITIAL GROUNDWATER DEPTH (FT): 31.5
SAMPLE DEPTH (FT): NA
SAMPLING PERIOD: START 15ØØ
COMPLETE 153Ø
SAMPLING METHOD: bailer - disposable (B)
DATE SENT: 8/29/94
COMMENTS Parameter list reduced ~~to pH~~ 8/30/94 due to low volume recovery

FINAL PARAMETER MEASUREMENTS:

POTENTIAL OF HYDROGEN	pH	S.U.	7.38
SPECIFIC CONDUCTANCE	Ec	umhos/cm	2.70 at 25°C
REDOX POTENTIAL	Eh	mvolts	-3.6
TEMPERATURE	TMP	°C	13.2
ALKALINITY ($CaCO_3$)	ALK	mg/l	39Ø
DISSOLVED OXYGEN	DO	mg/l	6.Ø

TIME	TOTAL VOLUME WITHDRAWN (GALS)	TOTAL VOLUME WITHDRAWN (Bore Volume)	pH	Ec (umhos/cm)	TEMP (°C)	COMMENTS
15ØØ	0.066	.17	7.38	2.7	13.2	.25 L retrieved
15Ø5	0.198	.67				
1510	~~0.132~~ 0.198	1.12		NOTE: NOT ENOUGH WATER IN WELL TO		
1513	0.132	1.51		ESTABLISH STABILIZATION PARAMETERS.		
1516	0.132	1.85		WELL PURGED FROM 8/22/94 - 8/25/94.		
1518	0.132	2.18		REDUCED PARAMETER LIST; SEE PAGES 284-285		
1520	0.132	2.52				
1522	0.132	2.85				
1525	Ø					Well dry!

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

SAMPLE TYPES: F - FIELD, R - REPLICATE, K - KNOWN, A - ACID BLANK

SAMPLING METHODS: BP - BLADDER PUMP, PP - PERISTALIC PUMP, G - GRAB, B - BAILER, AL - AIR-LIFT SAMPLER, SL - SUCTION LIFT PUMP, SP - SUBMERSIBLE PUMP

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

J. Humpert 8/29/94 — FORM COMPLETED BY / DATE

10/4/94 — TECHNICAL REVIEWER / DATE

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GROUNDWATER QUALITY SAMPLING RECORD

W399, 309

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: MND16

LOCATION ID: W399

LOG DATE: 8/29/94

BORE VOL CALCULATION (GAL)

$\frac{d^2\pi}{4}$ $(h_1 - h_2)$ X 7.48

(.022)(2.4)(7.48) = .39 GAL

DEPTH OF WELL (h2) (ft): 33.9

DEPTH TO WATER (h1) (ft): 31.5

WELL DIAMETER (ft): .167

ONE BORE VOLUME (GAL): .39

SCREENED INTERVAL (ft): 22.8 - 32.55

FIELD REP: J. Humpert, J. Alvarado

INSTRUMENT(S) USED: TLC

SAMPLING INFORMATION

WITDRAWL METHOD: B

FILTER SIZE: NA

THERMOMETER ID: NA

Ec METER ID: NR

pH METER ID: NR

PUMP ID: NA

ALKALINITY KIT ID: HACH 4067

CALIBRATION INFORMATION

DATE/TIME OF LAST Ec CALIBRATION: NA

TIME OF pH CALIBRATION: 1500

FOR STANDARD pH 7, INSTRUMENT READING: NA

FOR STANDARD pH 4, INSTRUMENT READING: 4.01

FOR STANDARD pH 10, INSTRUMENT READING: 10.0

Eh OF CALIBRATION SOLUTION: No Zorbel solution available

Eh READING IN CALIBRATION SOLUTION AFTER MEASUREMENT: NA

TEMP OF CALIBRATION SOLUTION (°C): NA

SHIPPING INFORMATION

LAB(S) SHIPPED TO:	CompuChem	NA	NA
DATE(S) SHIPPED:	8/29/94	↓	↓
METHOD OF SHIPMENT:	Fedex		

COMMENTS: NONE

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GROUNDWATER QUALITY SAMPLING RECORD

W399 p. 312

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

PAGE 1 OF 1

FACILITY CODE: MND16

LOCATION ID: B399

LOG DATE: 8/29/94

ERROR AT 4.50: $\frac{X1 - X2}{XS}$ X 100 = _____ %

1st = 1.5 %

2nd = NA %

INITIAL pH 7.00

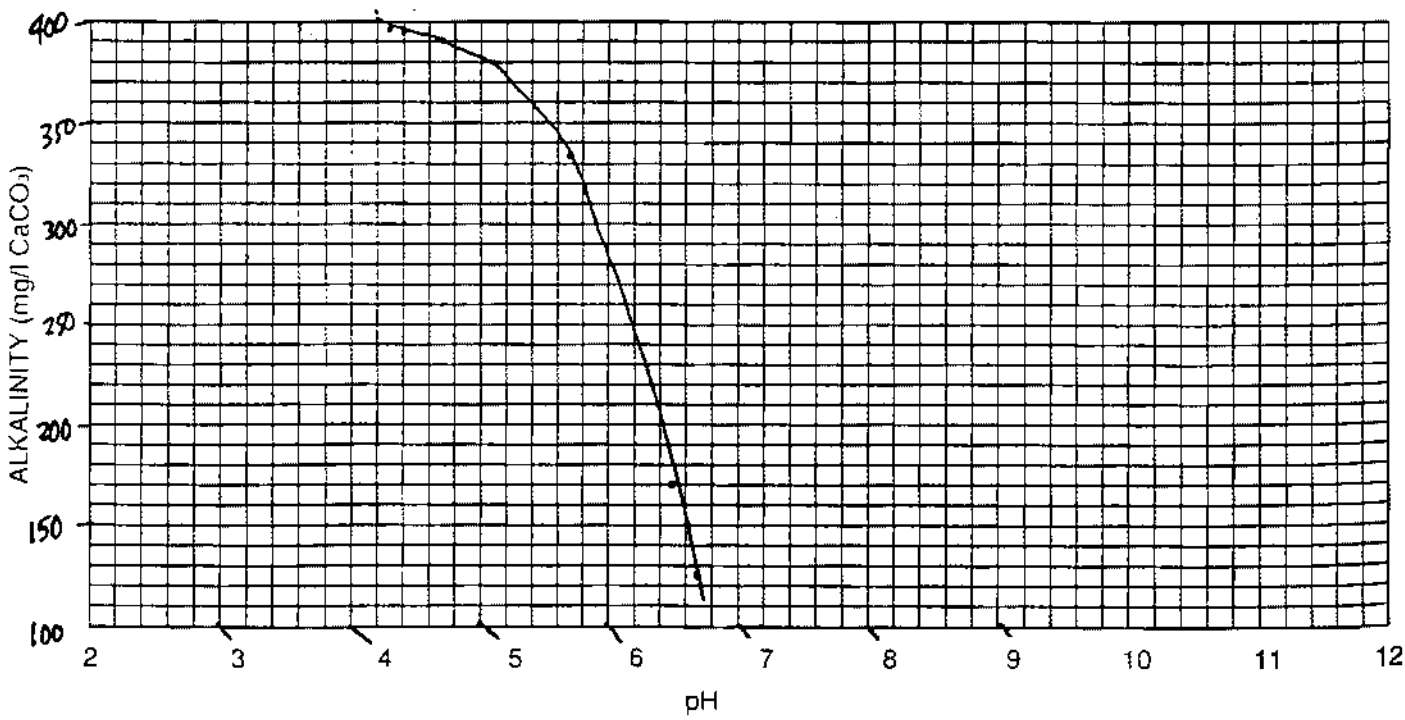
pH CHECK AFTER TITRATION

7.00 = 7.05

4.00 = 4.00

pH run 1	pH run 2
7.71	7.71
~~6~~ 7.11 (8/29/94)	7.50
6.7	6.5
6.51	5.7
5.7	4.89
5.09	4.79
4.71	4.48
4.38	4.25
4.26	3.98
3.99	

pH	ALKALINITY (mg/l $CaCO_3$) 1st	2nd	3rd
8.90	NA	NA	NA
8.60	0	0	
8.30	50	14	
8.05	125	165	
7.80	170	327	
7.50	336	380	
6.50	380	383	
5.70	390	390	
5.10	396	394	
4.80	398	400	
4.50	404	NA	
4.25	NA	NA	
4.00	NA	NA	



GROUNDWATER LEVELS AND GASOLINE THICKNESS DATA

W 399 & 313

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 — LOGGER CODE: SAIC

LOG DATE: 6/14/94 – 8/29/94 — TYPE OF PROBE: YSI SCT 3000 OTH TLC METER

ACCEPTANCE CODE: A

LOCATION ~~W411~~ W399 STID 10/5/94	LOG TIME (HH:MM)	DEPTH TO WATER (ft)	DEPTH TO GAS (ft)	COMMENTS
~~W399~~	6/14 : 1636	31.7	NA	Borehole Measurement
W399	6/15 : 0835	5.3		
	6/16 : 1614	7.1		Well Measurement
	6/16 : 1652	22.82		SLA @ 1/32 Bailed 4 gal recharged
	6/16 : 1643	27.09		After bailing 4 gal
	7/5 1350	9.77		Well Measurement
	7/21 : 0942	19.65		
	7/25 : 0754	28.52		
	7/26 0710	31.51		
~~W411~~	8/22 : 1552	27.74	NA	PRIOR to PURGING / DEVELOPMENT
W399	8/23 : 1550	32.64	NA	"
STID 10/5/94	8/24 : 1555	32.22	NA	"
	8/25 : 1620	33.36	NA	"
	8/29 : 1430	31.50	NA	PRIOR to SAMPLING
		LAST ENTRY		

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

TYPES OF PROBES: ROD - TEFLON ROD WITH PASTE OWI - OIL WATER INTERFACE PROBE OTH - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan L. Abston 8/29/94 — FORM COMPLETED BY / DATE

[illegible] 10/5/94 — TECHNICAL REVIEWER / DATE

319

BOREHOLE / WELL CONSTRUCTION FIELD DATA LOG

W399-P-319

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

W399 SHEET MD 10/5/94 W411

FACILITY CODE: MND16 — LOCATION ID: ~~B399~~ / W399 — FIELD REP: S.L. Abston

LOGGER CODE: SAIC — DRILLER CODE: BOWS — RIG TYPE: Cable tool

INSTALLER CODE: SAIC — COMPLETION DATE: 06/ /94 — ACCEPTANCE CODE: A

BOREHOLE SUMMARY

BIT TYPE	HOLE DIAM (in)	END DEPTH (ft)	FLUID TYPE
hammer	6 in	33.9	Potable Water
		TD 06/23/94	

CASING SUMMARY

CASING* TYPE	DESCRIPTION	DIAM (in) ID	END DEPTH† (ft)
P	Steel	5 1/4	2.3
S	#304 Stainless Steel		
	wire bound #10 slot	2	32.8
Riser	#304 Stainless	2	22.8
	Steel		

* P - Protective S - Screen O - Open N - None

† Depth from Top of Casing

CONSTRUCTION TIME LOG

ACTIVITY	START DATE	START TIME	END TIME
DRILLING	06/14/94	1042	6/15/94 1300
CASING	06/15/94	1356	1408
FILTER PACK	06/15/94	1408	1500
SEAL	06/15/94	1500	1565
BACKFILL	06/16/94	1653	1735
DEVELOPMENT	8/22/94	1552	8/29/94 1430
OTHER SURGING	8/11/94	0845	8/11/94 1111

WELL CONSTRUCTION

TYPE* CODE	DESCRIPTION	END DEPTH† (ft)
F	#5 quartz silica	33.9
	sand	
S	CETCO Vol Clay	21.3
	3/8 inch bentonite pellets	
B	Blue Circle Portland	14.1
	Type I cement w/4%	
	Aquagel Gold gel	

* B - Backfill S - Seal F - Filter

† Depth From Ground Surface

✗ WELL DEVELOPMENT

7/5/94: H2O @ 12.07 BTOC, WELL TD @ 35.14 BTOC
23.07' WATER COLUMN = 3.75 gal (1 WELL VOL)
x5 = 19 gal : 18 gal H2O USED to TREMIE
SAND x5 = 90 gal + 19 gal = 109 gal to REMOVE.
Develop w/ pump. - REMOVE 8 gal. - WELL DRY
7/21/94: Continue develop w/ pump. - REMOVE 7 gal - WELL DRY. 7/25/94; develop w/ bailer - REMOVE 25 gal - well dry.; 8/11/94 - SURGING - REMOVE 4.5 gal; 8/22 - 8/25 - develop w/ bailer. REMOVE 5.5 gal. TOTAL H2O REMOVED ≐ 50 gal. per E616.

COMMENTS: decide to sample.

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J Abston 06/23/94 — FORM COMPLETED BY / DATE

[illegible] 6/26/94 — TECHNICAL REVIEWER / DATE

322

WELL COMPLETION INFORMATION

W399 P 322

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO:

PAGE 1 OF 1

FACILITY CODE:	MND16	FILTER PACK LENGTH (ft) :	12.6
LOCATION ID	W 399	FORMATION OF COMPLETION (US/RC) :	UNK
ACCEPTANCE CODE:	A	WELL TYPE CLASSIFICATION:	M
OWNER CODE:	EG4G	WELL COMPLETION METHOD:	S
INSTALLER CODE:	SAIC	ZONE OF COMPLETION:	C - fracture flow
INSTALLATION DATE:	06/15/94		
CASING ELEVATION (FT MSL)	NA	OPEN/SCREEN DEPTH (FTFD):	22.8 to 32.8
CASING LENGTH (FT):	25.1	OPEN/SCREEN LENGTH (FT):	10 ft
CASING DIAMETER (IN):	2 in ID	OPEN/SCREEN AREA (IN²/FT):	NA
SEAL END DEPTH:	14.1 BGS	FLOW RELATIONSHIP:	N
SCREEN MATERIAL:	SS	CAP MATERIAL:	SS
RISER MATERIAL:	SS	CAP TYPE:	SL

WELL TYPE CLASSIFICATIONS:
- M - MONITORING WELL
- P - PRODUCTION WELL
- T - TEST WELL
- O - OTHER (SPECIFY)

CASING, CAP, AND RISER MATERIALS:
- BR - BRICK
- C1 - CONCRETE
- C2 - COPPER
- FI - FIBERGLASS
- GI - GALVANIZED IRON
- WI - WROUGHT IRON
- SS - STAINLESS STEEL
- OM - OTHER METAL
- TE - TEFLON
- PV - PVC
- RS - ROCK OR STONE
- ST - STEEL
- TI - TILE
- CS - COATED STEEL
- WO - WOOD
- NO - NONE
- OT - OTHER (SPECIFY)

CAP TYPES:
- LC - LOCKING
- SL - SLIP-ON
- TR - THREADED
- NO - NONE
- SC - SCREW ON
- OT - OTHER (SPECIFY)

FLOW RELATIONSHIPS:
- U - UPGRADIENT
- D - DOWNGRADIENT
- C - CROSS GRADIENT
- O - ON SITE
- N - NOT KNOWN
- B - BACKGROUND

ZONES OF COMPLETION:
- A - ARTESIAN
- B - ANISOTROPIC
- C - CONFINED
- H - AQUITARD
- G - AQUICLUDE
- I - ISOTROPIC
- M - MULTI-SYSTEM
- S - SEMI-CONFINED
- U - UNCONSOLIDATED

WELL COMPLETION METHODS:
- P - POROUS CONCRETE
- F - GRAVEL PACK
- H - HORIZONTAL GALLEY
- O - OPEN END
- P - PERFORATED / SLOTTED
- S - SCREEN
- T - SAND POINT
- W - WALLED OR SHORED
- X - OPEN
- O - OTHER (SPECIFY)

33.9
21.3
12.6

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan T Alston 06/23/94 — FORM COMPLETED BY / DATE

6/26/94 — TECHNICAL REVIEWER / DATE

-32-

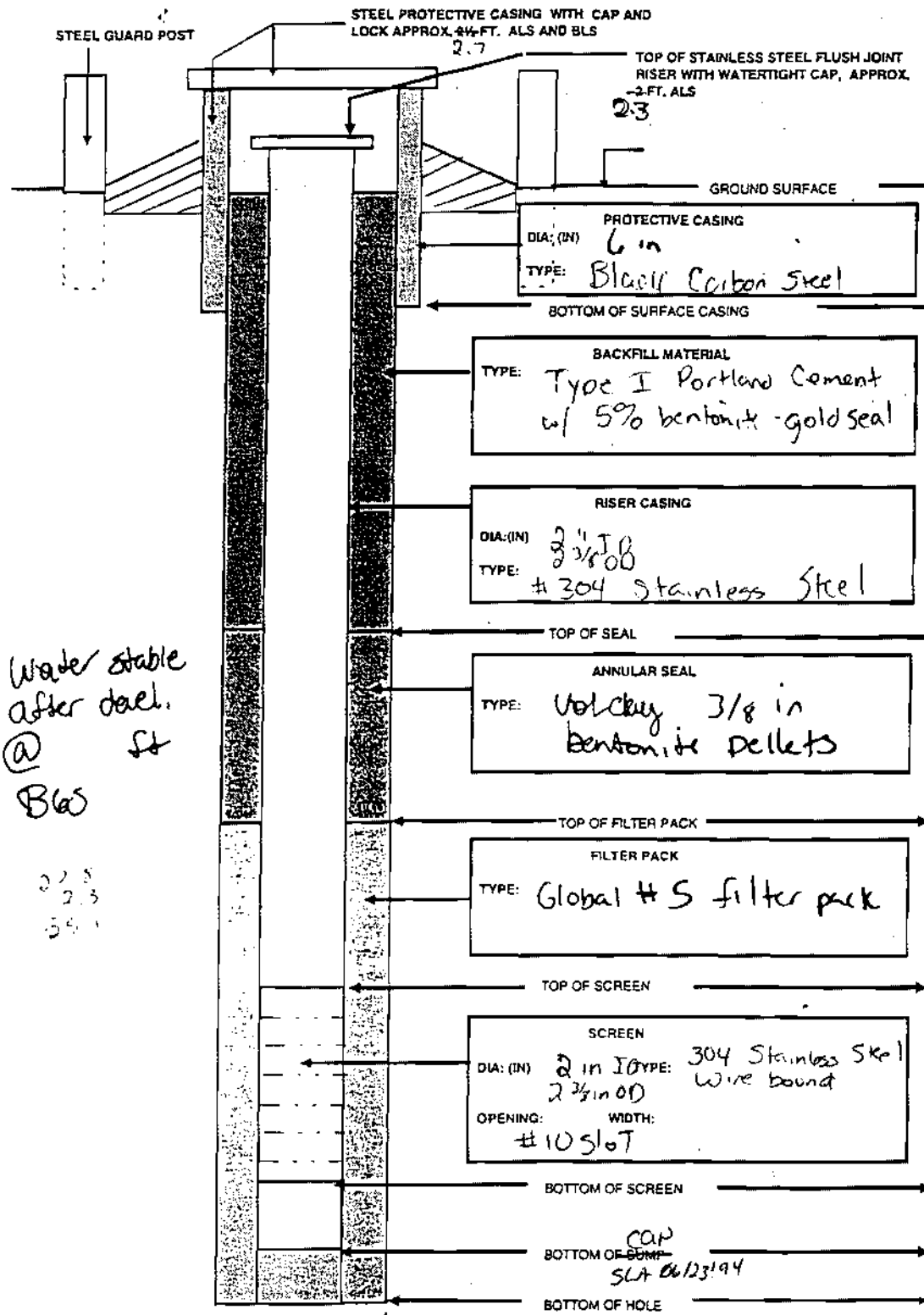
MONITORING WELL

MONITORING WELLS

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASED

PROJECT NO: 34896

WELL NUMBER: W 399	BEGIN: 06/14/94 0900	END: 8/29/94 1430	
COORDINATES: N: NA E: NA	REFERENCE POINT: NA	ELEVATION: NA MSL	



ECAL MOUND

OUS NEW PROP

EXTND PHASE

MONITOR WELL

LOGBOOK

W400

MONITORING WELLS LOG BOOK

W400

PROJECT TITLE: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE RI/FS FIELD INVESTIGATIONS

WORK SITE: *MOUND PLANT*
Miamisburg, Ohio
OU5 New Property

ACTIVITY: *Mound OU5 New Property Phase 1 RI/FS Field Investigations*

CONTRACT #: *BOA 52264*
TASK ORDER: *34896*

PROJECT MANAGER: *Thomas Tank*
COMPANY NAME / ADDRESS: *Science Applications International Corporation*
4031 Colonel Glenn Hwy ,Dayton, Ohio 45431
TELEPHONE NUMBERS: *(513) 429-2699*

SUPERVISORS: *OU5 Manager: Alan Spesard (513)865-3859*
SAIC Proj. Manager: Thomas Tank (513)429-2699

EMERGENCY RESPONCE: *Police / Ambulance / Fire 911 or 865-4040*

PROCEDURES: *SOP 1.1, SOP 2.2, SOP 3.1, SOP 4.1, SOP 4.3, SOP 4.4, SOP 5.1, SOP 6.1, SOP 6.3*

START DATE: 6/27/94
END DATE: 7/14/94

TABLE OF CONTENTS MONITORING WELLS

W400

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
1	TASK TEAM ACTIVITY LOG SHEET; 6/27/94	31	NO ENTRY
2	" ; "	32	
3	" ; "	33	
4	" ; "	34	
5	" ; "	35	
6	" ; "	36	
7	" ; "	37	
8	" ; "	38	
9	" ; "	39	
10	" ; 6/28/94	40	
11	" ; "	41	
12	" ; "	42	
13	" ; "	43	CGI MONITOR DATA; W400
14	" ; "	44	" ; "
15	" ; "	45	NO ENTRY
16	" ; "	46	"
17	BOREHOLE LOG ; W400	47	FID FIELD DATA; W400
18	" ; "	48	" ; "
19	NO ENTRY	49	NO ENTRY
20		50	"
21		51	KEY SHEET
22		52	TASK TEAM ACTIVITY LOG SHEET; 7/14/94
23		53	" ; "
24		54	SAMPLE LOG SHEET; B40001
25		55	" ; "
26		56	" ; B40002
27		57	" ; "
28		58	NO ENTRY
29		59	
30		60	

TABLE OF CONTENTS MONITORING WELLS

W400001 PG. 11

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE PROJECT NO.: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
61	NO ENTRY	91	GROUNDWATER QUALITY SAMPLING RECORD
62		92	NO ENTRY
63		93	GROUNDWATER QUALITY SAMPLING RECORD
64		94	NO ENTRY
65		95	GROUNDWATER SAMPLING RECORD - ALKALINITY
66		96	NO ENTRY
67		97	GROUNDWATER LEVELS DATA
68	SAMPLE LOG SHEET; W400001	98	NO ENTRY
69	" ; "	99	STANDARD ELECTRICAL CONDUCTIV. DATA
70	TASK TEAM ACTIVITY LOG SHEET; 7/14/94	100	NO ENTRY
71	" ; "	101	
72	NO ENTRY	102	
73		103	WELL CONSTRUCTION FIELD DATA LOG
74		104	NO ENTRY
75		105	WELL COMPLETION INFORMATION
76		106	NO ENTRY
77		107	"
78		108	MONITORING WELL DIAGRAM
79		109	NO ENTRY
80		110	
81		111	
82		112	END OF BOOK - NO MORE PAGES
83		113	
84		114	
85		115	
86		116	
87		117	
88		118	
89		119	
90		120	

TASK TEAM ACTIVITY LOG SHEET

MONITORING WELLS W400 PJ 1

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

TASK NO: 34896

Date (mm/dd/yy): 06/27/94 TIME 0715 : 1756 PAGE 1 OF 9

Task Team Members:

SUSAN L. Alston

MARTHA CRAMER

6/27/94

Narrative (include time and location):

0715 Arrived @ SAIC trailer to pick up equipment and calibrate instruments

0804 Depart trailer for site. Drillers gone after water @ 0740

0821 Arrive at B400 site. Having trouble getting rig started to pull up into site. Set up at stalk but found out Thursday afternoon after lighting alert that we need to set up back in the dozed out area

0845 Talked with Ray Moss concerning HP coverage. HP's decided that since we were out of the area of known contamination that we did not need full time coverage. That he would scan our sample + we would give him his sample

0858 Trying to move rig on to site

0925 Talked w/ John Davis. He is coming to look at the site because we can't get up on the flat ground. Drillers S. Belt, + S. Patterson (Bowser) talked w/ ATV rig and if they get

Daily Weather Conditions: A.M. ≈ 70°F Overcast

P.M. NA

Recorded By Susan L Alston QA Checked By

2

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS W400 PS2

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/27/94 TIME: 0715 : 1754 PAGE 2 OF 6

Task Team Members:

Same as 1 of 9

JLO 06/27/94

Narrative (include time and location):

their last scraper they can come + scrape down the mud for us

0935 Return to site to wait on John and went over Health + Safety w/ Drillers

0958 John on site. Calling to see if we can move the drilling location

1009 OKed to set up were the stake was

1012 Laying down plastic under rig and setting up rig. Putting front tires on timbers. John off site

1020 Going atk. table, drums and trailer We are letting the tires dry out some so we can drive them up on the timbers (they keep sliding off) Steam cleaning 2 in split spoons for soil descriptions

1121 Moving trailer on to site. Need trailer for hammer and for casing. We will advance casing as we drill using the 6 inch bit SLA 06/27/94

1125 Setting up on timbers.

1135 Break for lunch

Daily Weather Conditions: A.M. JLO 06/27/94

P.M.

Recorded By Susan L Alston QA Checked By

LS 896

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS W400 PS3

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO: 34896

Date (mm/dd/yy): 06/27/94 TIME: 0715 : 1754 PAGE: 3 OF 9

Task Team Members:

Same as 1 of 9 — AL 06/27/94

Narrative (include time and location):

1230 Return from lunch site up rig
Gave after OWA
1303 Return to site drill rig mask up
and area flagged sitting up sampling
equipment and hanging signs and
putting plastic under drums
6" ID TD 6 5/8 OD screw together coupling 7½
in casing.
1335 Start drilling using 6 in bit. Using 10"
casing at first to guide bit

1340	Breathing zone (SLA 06/27/94 ~~HANDOUT~~)	0.0 ppm	0.0	20.8	@ 1 ft BGS
	Borehole	0.0 ppm	0.0	20.8	
	Head space	0.0 ppm	0.0	20.8	

1342 Adding 5 gallons of water to borehole
Drum 0548 does not have a seal. We
were ~~does not~~ (SLA 06/27/94) going to use the drum w/o
a seal on B 398 but we did not ~~took the seal from~~
~~this drum and used it~~ SLA 06/27/94
1351 Bailing well at 6 ft BGS
1357 Adding 5 gallons of water

Daily Weather Conditions: A.M. NA

P.M. ≈ 85°F Over cast

Recorded By Susan J Alabra QA Checked By [illegible]

4

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS** W400 p. 4

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/27/94 TIME: 0715 : 1756 PAGE 4 OF 9

Task Team Members:

Susan L. Alston
Martha Cramer

Narrative (include time and location):

~~1531~~ 1354 Continued drilling at 6 ft BGS still in clay

		OVA	LEL	O2
1355	Breathing zone @ 6 ft BGS	0.0	0%	20.8
	Borehole " " " "	0.0	0%	20.8
	Headspace " " " "	0.0	0%	20.8

OVA will have a reading around 4 ppm at the motor for the engine of the drilling

1358 Cleaning hole out at 9 ft BGS - still in clay

1359 Adding 5 gallons of potable water to borehole

1401 Continued drilling @ 9 ft BGS

		OVA	LEL	O2
1403	Breathing zone @ 10 ft BGS	0.0 ppm	20.8	0
	Borehole " " " "	0.5 ppm	20.1	0
	Headspace " " " "	0.0 ppm	20.8	0

Sand @ ≈ 10 ft BGS

1410 Rig up to drive casing for the sand we have encountered. Pulling guiding casing and replacing it w/ casing to drive as the drill casing piece 10.5 ft in length

Daily Weather Conditions: A.M. P.M.

Recorded By Susan L Alston QA Checked By

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W400 Pg 5

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/27/94 TIME: 0715 : 1756 PAGE 5 OF 9

Task Team Members:

Susan L. Alston — SLA 06/27/94

Martha Cramer

Narrative (include time and location):

1416 Driving casing till coupling flush w/ ground

1422 Adding another piece of casing 5.06 ft in length (5'2")
screw together casing. Casing steam clean
prior to using @ decon pad

1425 Drove this piece of casing to 12.5 ft BGS
Loosing driving steel and Adding 5 gallons of
water to borehole

1426 Continue drilling @ 10.5 ft BGS

		OVA	LEL	O2
1429	Breathing zone at 12 ft BGS	0.4	20.8	0
	Borehole " " " "	0.7	20.8	0
	Headspace (ground bottom of casing @ ground)	0.0	20.8	0

1431 Clean borehole out and collecting grab sample

1435 Martha on site - John brought her to the site

1440 Continue drilling - John off site

1446 Drilled to 15 ft BGS John delivered 2
3 in SS spoon and an adapter

1450 Bailing well at 15.0 ft BGS. Collecting
a grab sample. Same sand as above

1455 Driving casing to 15.3 ft BGS. John off site

1457 Rigging up to drive spoons to check for water

Daily Weather Conditions: A.M. SLA 06/27/94

P.M.

Recorded By Susan L Alston QA Checked By [illegible]

6

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W400 P6

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/27/94 TIME: 0715 : 1756 PAGE 6 OF

Task Team Members:

Susan L. Abston — Martha Cramer

A20 06/27

Narrative (include time and location):

1500 Using sand pump to suck all the sand and gravel out of the hole to the bottom of the casing

1504 Driving 2 in spoon from 15 - 17 ft BGS

		OVA	LGL	%O
1506	Breathing zone at 16 ft BGS	0.0 ppm	0%	20.8
	Headspace " " " "	0.0 ppm	0%	20.8
	Borehole " " " "	0.0 ppm	0%	20.8

1508 Opened split spoon 0.0 ppm OVA Sand and gravel. Slightly wet at bottom could be from drilling water

1514 Driving a 5.05 ft of casing after screwing it to the piece in the ground

1516 Continued drilling

1522 Bailing well w/ sand pump

1526 Driving 2 in spoon 17-19 ft BGS Not recording blow counts because using ≈ 550 lb hammer

1530 Continue drilling down to 19.2 ft BGS Limestone float at 18.6 - 18.9 No grey crystalline limestone OVA 0.0 will driving spoon

1532 Added 5 gallons of water to borehole

Daily Weather Conditions: A.M. NA

P.M. (1530) Partly cloudy, w/ sun ≈ 88°F

Recorded By Susan L Abston QA Checked By

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS W400 P.7

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/27/94 TIME: 0715 : 1754 PAGE 7 OF 9

Task Team Members:

Susan L. Alston — Martha Cramer

06/27/94

Narrative (include time and location):

1540 Driving casing on down to continue drilling
1542 Having trouble w/ the casing hanging up on the bit. Added 5 gallons of water
1544 Head space @ 18.5 ft BGS 0.0 ppm OVA 0 LEL 20.8 O_2
Bore hole " " " " 0.0 ppm 0 20.8
Headspace " " " " 0.0 ppm 0 20.8
1545 Driving casing on down to 19.5 ft BGS
1549 Loosen driving use to continue drilling
1550 Continued drilling - Added 5 gallons of water
1551 Adding 5 more gallons of water
1553 Bailing with sand pump
1556 Continued drilling OVA LEL O_2
Breathing zone @ 19.5 ft BGS 0.0 ppm 0 20.8
Headspace zone @ 19.5 ft BGS 0.0 ppm 0 20.8
Borehole zone @ 19.5 ft BGS 0.0 ppm 0 20.8
1608 Bailing well out w/ sand pump (manual - sort of like a bailer) @ 20.5 ft BGS
1611 Driving 2 in spoon from 20.5 - 22.5 ft BGS
1616 OVA 0.0 ppm when we opened spoon
1623 Continued drilling. Spoon contained sand

Daily Weather Conditions: A.M. 06/27/94

P.M.

Recorded By Susan L Alston QA Checked By

8

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W400 P38

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/27/94 TIME: 0715 : 1754 PAGE 8 OF 9

Task Team Members:

Susan L. Alston — Martha Cramer

SLA 06/27/94

Narrative (include time and location):

SLA 06/27/94

and gravel. Bottom ~~13~~ .3 of sample NG mod. light grey limestone. Broke chunks of shoe of spoon

1625 Adding 5 gal. of water to Borehole

		OVA	LEL	% O
1625	Breathing zone @ 21 ft BGS	Ø ppm	Ø	20.8
	Borehole " " " "	Ø ppm	Ø	20.8
	Headspace " " " "	Ø ppm	Ø	20.8

1635 Adding 2 gal of water to borehole
Driving a spoon from 22.5 – 24.5 ft BGS after bailing w/ zero pump. Not able to keep bore hole bailed out

1645 Adding a ~~6.10~~ SLA 06/27/94 6.96 ft Piece of casing to drive down to keep hole open

1655 Driving casing to 22.5 Very hard at bottom

1700 Continue drilling

		OVA	LEL	% O
1700	Breathing zone @ 21.5 ft BGS	Ø ppm	Ø	20.8
	Headspace " " " " "	Ø ppm	Ø	20.8
	Borehole " " " " "	Ø ppm	Ø	20.8

1710 Driving casing to 23 ft BGS and continue drilling. Very hard - too hard to drive GS spoon. We will try when it settles up some

Daily Weather Conditions: A.M. _____

P.M. _____ 06/27/94

Recorded By Susan L Alston QA Checked By _____

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W400-85.9

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 06/27/94 TIME: 0715 : 1756 PAGE 9 OF 9

Task Team Members:

Susan L. Abston — Martha Cramer

06/27/94

Narrative (include time and location):

1715 Bailing well out w/ sand pump. Grab sample of cutting → Same ~~as~~ SLA 06/27/94 sand as above

1720 Driving spoon from 23-25 ft BGS OVA 0.0 ppm when opening spoon

Wet zone at 24.2 - 24.35 ft BGS in a area of well sorted fine grain sand

1728 Drove casing to 25 ft BGS

1732 Continue drilling. Added 5 gallons of water.

Breathing zone @ ft BGS OVA 3.0 ppm* LEL 70.0

Borehole " " " " " 5.0 ppm

Headspace " " " " " 1.0 ppm

*Reading due to engine propably

1740 Checked borehole & pegged meter. Shut rig down

1743 Borehole at 2.5 ppm. Not able to get an methane probe today. Securing site

1753 Drillers off site

1756 SAIC off site

Daily Weather Conditions: A.M. _____

P.M. _____ 06/27/94

Recorded By Susan L Abston QA Checked By _____

10

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W400 pg 10

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — **TASK No.: 34896**

Date (mm/dd/yy): 06/28/94 TIME: 0715 : 1310 PAGE 1 OF 7

Task Team Members:

Susan C. Alston — Martha Cranel

06/28/94

Narrative (include time and location):

0715 Arrived at trailer to calibrate instruments, pick up equipment, and have health + safety meeting. Drillers S. Patterson + S. Bilt gone after drums W400 SHD 5/30/94

0810 Arrived at ~~B 400~~. Gave health and safety briefing to drillers

SCA 06/28/94 ~~0810~~ 0815 Breathing zone, borehole, + headspace w/ OVA all 0.0 ppm

0825 Cleaning borehole out. Drilling out to ~~25~~ 27 ft BGS. SCA 06/28/94

		OVA	LEL	O2
0829	Breathing zone at 25.5 ft BGS	0.0 ppm	0	20.8
	Borehole " " " "	3.5 ppm	0	20.8
	Headspace " " " "	0.0 ppm	0	20.8
0830	With methane prop	OVA	LEL	O2
	Breathing zone at 25.5 ft BGS	0.0 ppm	0	20.8
	Borehole " " " "	0.8 ppm	0	20.8
	Headspace " " " "	0.0 ppm	0	20.8

0837 Cleaning out borehole @ 27 ft BGS

0843 Sands are heaving into the bottom of casing. Sign of water. Sand heaves to 25.6 ft BGS

Daily Weather Conditions: A.M. ~70°F Partly Cloudy

P.M. NA

Recorded By Susan J Alston QA Checked By

11

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS W400 P5-11

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): 06/28/94 TIME: 0715 : 1310 PAGE 2 OF 7

Task Team Members:

Susan L. Alston — Martha Cramer

06/28/94

Narrative (include time and location):

Water coming from 25-27 ft BGS
0852 Driving casing to 27 ft BGS to start driving spoons for a sample.
Cuttings from cleaning out borehole at 0837 were large 20 mm size quartz pebble - sub rounded to rounded fragments
0854 Drilling to clean hole out to 27 ft BGS
0900 Cleaning bore hole to 27 ft w/ sand pump
0912 Water at 25 ft BTOC
0916 Driving 1st spoon from 27-29 ft BGS
Grab sample from cleaning borehole
0925 Collect VOA sample from 1st spoon OVA 0.0 ppm while opening. Compositing the rest of sample
0949 Collecting second spoon 29-31 ft BGS OVA 0.0 ppm while opening. Compositing w/ 1st spoon and filling sample jars
1009 Water at 23.57 ft BTOC. Casing stick up @ .7 ft water at 22.87
Casing 5.5 ft in length → to add to cont. drilling
* While driving second spoon John Davis and Mound personnel - Alexander Bay, said to ~~hurry it~~ SLA 06/28/94

Daily Weather Conditions: A.M. 06/28/94

P.M.

Recorded By Susan L Alston QA Checked By

12

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS** W4000 P72

PROJECT NAME: EG&G MOUND 915 NEW PROPERTY EXTENDED PHASE — **TASK NO: 34896**

Date (mm/dd/yy): 06/28/94 TIME: 0715 : 1310 PAGE 3 OF 7

Task Team Members:

Susan L. Abston — Marthea Cramer

06/28/94

Narrative (include time and location):

to place the screen into the water all the way because they were not worried about floaters
Place top of screen at stable water level
Sample Description ~~24~~ 27-31 ft BGS
10YR 5/4 Yellowish brown fine sand saturated w/ coarse gravel and 1 110mm limestone angular cobble. Gravel ranges from angular to rounded w/ carbonates tending to be more angular
1030 Checked water level -> 23.46 ft BTOC
Same as before. Preparing to drill to 30 ft BGS
1032 Adding 5.5 ft of screw together casing
1039 Driving casing
1042 Drove casing to 30.5 ft BGS and cleaning out hole w/ sand pump
* Gravel consist of N3 dark grey to N7 light grey angular to sub rounded limestone fragment w/ some weathering 10YR 5/4 mod. yellowish brown weather staining, [illegible] N8 very light grey, rounded to subrounded quartz pebble
1106 Continue drilling at 33 ft BGS

		OVM	LEL	%O
Breathing zone at	33 ft BGS	0.0 ppm	0	20.8
Borehole " "	33 " " "	0.1 ppm	0	20.8
Head space " "	33 " " "	0.6 ppm	0	20.8

Daily Weather Conditions: A.M. N4

P.M. ~85°F Partly Cloudy

Recorded By Susan L Abston QA Checked By [illegible]

13

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W400 P513

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): 06/28/94 TIME: 0715 : 1310 PAGE 4 OF 7

Task Team Members:

Susan L. Alston — Martha Cramer

06/28/94

Narrative (include time and location):

* See description p. 13, angular frag. of 5GY 4/1 dark greenish grey mafic rocks

1116 Drilled to 34 ft BGS

1125 23.75 BGS to water

1138 Leaving site to deliver samples to HP and to trailer

1215 Break for lunch

1315 Return from lunch

1330 Tagged water @ 23.17 ft BGS

1339 Take surface BV0001 VOA sample
Composite from 0-.5 ft BGS in a bowl and fill all jars

1349 Martha off site w/ cooler (4°C) to deliver samples to trailer and HP

1352 Preparing to set well at 32.5
SS #304 #10 slot, Wire Bound Screen - 9.99 ft
Riser #304 SS. All material wrapped from factory
10.0 ft, 10.01, 5.01
Total length 35.01

Daily Weather Conditions: A.M. 06/24/94

P.M.

Recorded By Susan L Alston QA Checked By

14

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS**

W400 pg 14

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 06/28/94 TIME: 0715 : 1310 PAGE 5 OF 7

Task Team Members:

SUSAN L Abston — Martha Cramer

06/28/94

Narrative (include time and location):

Not using centralizers because we are setting the well through casing and they will not work (won't be able to expand out (pulling casing as we send)

1409 Placing 30 ft of 2 in ID PVC tremie pipe in bore hole. Having to move the well slightly off center to fit tremie pipe inside casing. Capped well w/ expandable cap for now to keep anything from falling in.

1412 Tremie sand. TD hole at 33.7 (some heaving)

1425 Tremied 3 bags of sand to 25.2 ft BGS. Pulling casing to continue sand. Mathew on site

1450 Adding 3 bags of sand (90 lbs). Sand to 21.8 ft BGS

1500 Pulling 1 more joint of casing

1517 Adding 1 more bag of sand

1525 Pulling ~~another~~ 5 ft (set @ 28/94) section of casing (pic all the way out)

1530 Adding 1 more bag of sand: Sand to ~~25.5~~ 23.5 ft BGS

1542 Pulling another 6.94 ~~5~~ ft (set @ 28/94) section of casing (set @ 28/94)

1545 Sand at 25.5 After adding most of another

Daily Weather Conditions: A.M. 06/28/94

P.M.

Recorded By Susan L Abston QA Checked By

TASK TEAM ACTIVITY LOG SHEET — MONITORING WELLS

W400 P15 — 15

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO: 34896

Date (mm/dd/yy): 06/28/94 TIME: 0715 : 1316 PAGE 4 OF 7

Task Team Members:

Martha Cromer

Susan L. Alston

06/28/94

Narrative (include time and location):

bag. Pulling casing up to add bentonite (≈2 1/2") Used 16 gal of water to tremie

16 1415 Sand at 19.3 ft BGS. Water used for tremie must have saturated sand above water table causing collapse. Trying to get sand to drop

16 1421 Sand at 18 ft BGS. Going to call John for advise

16 1429 Talked w/ John and others in office. We have 2 ft of manufactured sand and 2 1/2 ft of natural sand over casing. Said to go ahead and bentonite

16 1447 Added 3/4 of 50lb bucket brought sand to 16.71 ft BGS. Need another .4 ft. Pull casing up some

16 1450 Adding 1/4 bucket of bentonite

Hung up in casing will not fall. Casing will move freely but bentonite will not fall.

Trying to push bentonite w/ tremie pipe

1764 Got bentonite knocked at. At 15.42 ft BGS

Daily Weather Conditions: A.M.

P.M. 06/28/94

Recorded By Susan L. Alston QA Checked By

16

TASK TEAM ACTIVITY LOG SHEET — **MONITORING WELLS** W400 & 402

PROJECT NAME: EG&G MOUND QUSNEW PROPERTY EXTENDED PHASE — **TASK NO. 34896**

Date (mm/dd/yy): 06/28/94 TIME: 0715 : 1310 PAGE 7 OF 7

Task Team Members:

Susan L Alston — Martha Cramer

06/28/94

Narrative (include time and location):

Pulling casing above expect swell of bentonite
Taking off a 5ft section
1738 Securing, cleaning up, & departs site

06/29/94 0700 pg 1 of 1

Susan L Alston — Martha Cramer

0700 Arrived at trailer to pick up equipment, calibrate instruments and have health & safety meeting (S. Belt & S Patterson in attendance)
0750 Arrived at ~~B400~~ W400 location JHO 6-30-94 Preparing for moving to B402
tearing rig down, loading equipment
0930 Go to see if we can get gate 106 opened
0943 Guard called to get gate on Premier road open Not able to go in gate 106
1000 At gate waiting on security guard
1015 Security guard let us out. Going to drill pad
1027 Beginning drill pipe & equipment
1105 Met w/ John & Alex to state B-402 Roy has permit
Unless drill stem cleaning
12:15 Break for lunch
1315 Return to B400 and pick up remaining drill
* Start Day under B-402

Daily Weather Conditions: A.M. ≈75°F Clear Sunny (06/30/94)
P.M. ≈85°F Partly Cloudy, Slight Breeze

Recorded By Susan L Alston QA Checked By [signature]

* see logbook W402 pg 113 for 6/30/94 routing info.
* See logbook W410 pg 84 for 7/6/94 info.

10-15 15-17, 17-19, 20.5-22.5, 23-25, 27-27, 27-31 17

BOREHOLE LOG (SOIL)

MONITORING WELLS
W400 P 17

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO. 34896

Page 1 of 2

FACILITY CODE: MND16
LOCATION ID: ~~B400~~ W400
COORDINATES (FT): JTD 9-30-94
NORTH NA EAST NA
GROUND ELEVATION (FT MSL) NA
LOCATION TYPE: BH
COMMENTS: NONE

DRILLER CODE: BOWS JTD 9-30-94
COMPLETION DATE 06/28/1994
DIAMETER (IN): 4"
DEPTH (FTFD): ~~32~~ 34.0
CONSTRUCTION METHOD: C
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
6/28/94	1069	22.87 ft BGS
6/28/94	1125	23.75
6/28/94	1336	23.17

LOCATION DESCRIPTION

At Mound new property area near potable wells - OP well and also close to W33

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-10	0-0.5	NA	NA	O'	~~B0~~ SLA 0-0.5 B400001	NA	NA	CL	Brown (10YR 5/6) silty clay
									w/ root fragments, limestone
									(1.5) gray angular fragments
10-15	NA	NA	NA	O²	NA	NA	NA	GW	Well graded (all sizes .2-
									3 cm) gravel 5 mixed with
									10YR 5/4 yellowish brown
									fine sand. Gravel consist
									of angular to sub rounded
									quartzites
15-17	~~100%~~ 90%	100%	Ø	S	NA	NA	NA	GW	Same as above
17-19		100%	Ø	S	NA	NA	NA	GW	Same as above
20.5-22.5		100%	C	S	NA	NA	NA	GW	Same as above w/ Pho

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY) Drum * bow / O¹ Cable tool bailer / sand pump O²

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

FORM COMPLETED BY / DATE

TECHNICAL REVIEWER / DATE

18

BOREHOLE LOG (SOIL) — **MONITORING WELLS** W400 P18

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **PROJECT NO:** 3489

FACILITY CODE: MND16 — **DRILLER CODE:** BOWS

LOCATION ID: W400 — **COMPLETION DATE** 06/28/1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
									bottom 0.3 ft N16 mod
	SLA 06/27/94								grey limestone fragments
~~22.5~~	~~24.5~~	~~100%~~	~~0~~						
22.5	23.0			02				GW	same as top of last
SLA 06/27/94									spoon
~~24.2~~	~~25.0~~								
23-25	ft	100%	0	S	NA	NA	NA	SP	well sort fine grained
									sand. Wet at 24.2
									to 24.25 ft BGS
27-29	ft	100%	100%	U	B400002	NA	NA	SP	same as above
									w/ one 110 mm limestone
									angular cobble - saturated
29-31	ft	NA	NA	02	NA	NA	NA	GW	~~same as above w/~~ SLA 06/27/94
									50% fine yellowish
									brown (10YR5/4) sand
									w/ 50% coarse gravel
									Gravels range from angular
									to sub rounded w/ carbonate
									fragments being more angular
									and quartzites being more
									rounded. Some gravel
									fragments exhibit mod. yellowish
									brown (10YR5/4) weather
									staining. Some dark greenish
									grey mafic gravels

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Susan J. Clifton — FORM COMPLETED BY / DATE

TECHNICAL REVIEWER /

COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — MONITORING WELLS

W400-P-43

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 **LOG DATE:** 06/27/94

LOGGER CODE: SAIC FIELD REP: SL Abston

CGI MANUFACTURER: INDUSTRIAL SCIENTIFIC CGI MODEL NO.: MX251

SERIAL NO.: 94 Ø3280 - Ø16 CALIBRATION DATE/TIME: 06/27/94 0715

ACCEPTANCE CODE: A BATTERY CONDITION Good

CALIBRATION GAS (%LEL) TYPE Pentane CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM) TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: NA

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE JHD 9/30/94	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B4ØØ W JHD 9/30/94	NA	NA	1340	~~BH~~ WL	Ø %	N	2Ø.8%
			1355		Ø %	N	2Ø.8
			14Ø3		Ø %	N	2Ø.4
			1429		Ø %	N	2Ø.8
			15Ø6		Ø %	N	2Ø.8
			1544		Ø %	N	2Ø.8
			1556		Ø %	N	2Ø.8
			1625		Ø %	N	2Ø.8
			17Ø2		Ø %	N	2Ø.8
	LAST ENTRY						

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Monica Crum 6/27/94 — FORM COMPLETED BY / DATE

9/30/94 — TECHNICAL REVIEWER / DATE

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COMBUSTIBLE GAS INDICATOR (CGI) MONITORING DATA — MONITORING WELLS

W400 P 44

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — PROJECT NO: 348

FACILITY CODE: MND16 **LOG DATE:** 6/28/94

LOGGER CODE: SAK FIELD REP: SL Alston

CGI MANUFACTURER: Industrial Scientific CGI MODEL NO.: MX251

SERIAL NO.: 94Ø3280-Ø16 CALIBRATION DATE/TIME: 06/28/94 0720

ACCEPTANCE CODE: A BATTERY CONDITION Good

CALIBRATION GAS (%LEL)

TYPE Pentane CONCENTRATION 50 % LEL CYLINDER SERIAL NO 39525

CALIBRATION GAS (PPM)

TYPE NA CONCENTRATION NA PPM CYLINDER SERIAL NO NA

COMMENTS: NA

LOCATION ID OR DESCRIPTION	COORDINATES FT NORTH	COORDINATES FT EAST	MONITORING TIME (HH:MM)	LOCATION TYPE JMD 9-30-94	% LOWER EXPLOSIVE LIMIT	PPM	% OXYGEN
B400	NA	NA	0815	~~BH~~ WL	Ø.Ø	N	2Ø.9
W JMD 9-30-94	↓	↓	0829	↓	Ø.Ø	N	2Ø.9
↓	↓	↓	0830	↓	Ø.Ø	N	2Ø.9
↓	↓	↓	1106	↓	Ø.Ø	N	2Ø.8
	LAST ENTRY						

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES: BH - BOREHOLE SL - SURFACE LOCATION TP - TEST PIT WL - WELL

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Marbin J. Crane 6/28/94 — FORM COMPLETED BY / DATE

9/30/94 — TECHNICAL REVIEWER / DATE

FLAME IONIZATION DETECTOR FIELD DATA — MONITORING WELLS W400 P.47

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO.: 34896

FACILITY CODE: MND16 — LOG DATE: 06/27/94

LOCATION ID: ~~B400~~ W400 JMD 9-30-94 — LOCATION TYPE: ~~BH~~ WL JMD 9-30-94

LOGGER CODE: SMC — FIELD REP: SL Abston

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: Foxboro — MODEL NO.: OVA 128

SERIAL NO.: A41444

DATE/TIME CALIBRATION 06/27/94 0715 — ACCEPTANCE CODE: A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE 32075	1 100ppm
2 NA	2 NA

COMMENTS: NONE

TIME (HH:MM)	SAMPLE ID W JMD 9-30-94	OBSERVED READING (ppm) DH	HS	BZ	D	OT	DRILLING DEPTH (ft)	COMMENTS
1340	B400	0.0	0.0	0.0	0.0	NA	1 ft	using cable tool
1355		0.0	0.0	0.0	0.0		6 ft	
1403	0.5	~~0.0~~	0.0	0.0	0.0		10 ft	
1429	0.7	~~0.0~~	0.0	0.0	0.0		12 ft	
1506		0.0	0.0	0.0	0.0		16 ft	
1544		0.0	0.0	0.0	0.0		18.5 ft	
1556		0.0	0.0	0.0	0.0		19.5 ft	
1623		0.0	0.0	0.0	0.0		21 ft	
1702		0.0	0.0	0.0	0.0		21.5 ft	
1732		5.0	5.0	3.0	NR		25	
1743		2.5	NR	NR	NR			

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:
BH - BOREHOLES
TP - TEST PIT
SS - SOIL SAMPLE
SB - SAMPLE BOTTLE
L - SURFACE LOCATION
WL - WELL
OT - OTHER (EXPLAIN)

OBSERVED READING:
DH - DOWNHOLE
HS - HEADSPACE
BZ - BREATHING ZONE
D - DURING DRILLING (BZ)
OT - OTHER

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Michael T. Chan 9/27/94 — FORM COMPLETED BY / DATE

JMD 9/30/94 — TECHNICAL REVIEWER / DATE

48

FLAME IONIZATION DETECTOR FIELD DATA — **MONITORING WELLS**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **PROJECT NO.: 01400.P.48**

FACILITY CODE: MND16 **LOG DATE:** 6/28/94

LOCATION ID ~~B400~~ W400 JHD 9/30/94 **LOCATION TYPE** ~~BH~~ WL JHD 9-30-94

LOGGER CODE: SAIC **FIELD REP:** SL Abston

FLAME IONIZATION DETECTOR INSTRUMENT:

MANUFACTURER: Foxboro MODEL NO.: OVA 128

SERIAL NO.: 40478

DATE/TIME CALIBRATION 6/28/94 0715 **ACCEPTANCE CODE:** A

CALIBRATION GASES	
TYPE/CYLINDER ID NO.	CONCENTRATION (PPM)
1 METHANE / 32815	1 100 ppm
2 NA	2 NA

COMMENTS

TIME (HH:MM)	SAMPLE ID	OBSERVED READING (ppm)					DRILLING DEPTH (ft)	COMMENTS
	W	DH	HS	BZ	D	OT		
0815	~~B~~400	0.0	0.0	0.0	NR		25 ft	
0829		3.5	0.0	0.0			25.5 ft	
0830	SLT W JHD 9-30-94	0.8	0.0	0.0			25.5 ft	switched to methane scrubber
0915	0.40001	NA	NA	NA		0.0	27-29	prop. split spoon sample
0949	W "	NA	NA	NA		0.0	NA	split spoon sample
1106	~~B~~400	0.1	0.0	0.0			33 ft	
	LAST ENTRY							

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

LOCATION TYPES:		OBSERVED READING:	
BH - BOREHOLES	SB - SAMPLE BOTTLE	DH - DOWNHOLE	BZ - BREATHING ZONE
TP - TEST PIT	L - SURFACE LOCATION	HS - HEADSPACE	D - DURING DRILLING (BZ)
SS - SOIL SAMPLE	WL - WELL		OT - OTHER
	OT - OTHER (EXPLAIN)		

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 9/28/94 — FORM COMPLETED BY / DATE

[signature] 9/30/94 — TECHNICAL REVIEWER / DATE

52 07/14/94 0700

Susan L. ~~Abston~~ Martha Cramer

0700 Arrived @ trailer to calibrate equipment pick up equipment & have health & safety briefing Drillers S. Patterson, J. Belt (BOWSER) waiting on J. Hesser + generator, Not able to get truck unstuck yet

0754 Going to get extra pump & controll box from GW397 site.

0810 Return to ~~generator~~ site 07/14/94 trailer to decon pump & cable + hose

0915 Arrive at W2/400 to begin development

0917 Uncap well OVA = 0.0 ppm LEL = 0.0 20.9

0920 Drillers on site S. Belt + J. Hesser (S. Patterson has to leave)

0922 Water level @ 24.79 ft BTOC

TD of well @ 34.99 ft BTOC

$\pi r^2 (h) \times 7.49$

$\pi \left(\frac{1}{12}\right)^2 (10.20) \times 7.49$

1 well volume = 1.67 gal

5 well volume = 8.35

16 gal of deionized water X 5 = 80 gal

Need to pump 88.35 gal

0932 Calibrating pH meter. Slope is 104.5

0943 pH ~~5.48~~ 8.48 } Orion Model 250A HACCO # 7557

temp 14.6

Cond .762 2 mho/cm } 300 TLC YSI HACCO # 1422

temp 14.5

Sample from initial water from W2/400

Continue pumping. Turbid - light brown, no odor noted

Weather - Overcast ≈ 75°F

Susan L. Abston

07/14/94 070P Pg 2 of 4 53

SUSAN L. Abston Martha Cramer

0954 After ≈15 gal only slightly turbid
SLA 07/14/94 0010 Periodically surging
1035 Pumped ≈110 gal of water Calibrate pH slope 103.1
temp 12.8
Cond 737 2m℧/cm
pH 7.39
slightly turbid to clear, no odor
Securing site for lunch and returning to prepare additional instruments

1110 Break for lunch
1210 Return from lock. Load instruments + sample containers
Drillers pick up drums + loading well pad material

1320 Arrive a W400 site. Set up for pursing & sampling
1332 Pulling pump to measure water level
1346 Water at 24.79 ft. Stabilized back to original depth
3 well vol. = 5 gal

1353 Putting pump back into well
1345 Gone after 5gal bucket to determine flow.
1355 Check flow first due to the small amout of water to purge not able to determine between
Pump slow -> Cannot capable of pumping much slower
pumping 1 gal/min
Conductivity meter 1.640 2m℧/cm (for 1000 µS Lot#947847 Lot#9461780071 1014 SLA 07/14/94
9.60 20m℧/cm for 10,000 µS 1045
TC to 25°C
pH meter Slope 96.1, 7 for 7 sol, 10 for 10 sol
Redox 222.1 YSI 3682 ZOBELL solution

1407 Collected initial water sample
pH 7.34
temp 17.1°C
cond. .302 for 2m℧/cm
Weather ≈850 Hazy, Hot, Humid

Cont. of pg 70

W400 P 54

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40001

DATE COLLECTED (MM/DD/YY): 06/28/94

TIME (HH:MM): 1339

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: Mound - New Property

POINT CODE: B400

DESCRIPTION: Boring 4004

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO 2.00 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY) _____

FIELD OBSERVATIONS: NONE

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO

FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: Susan Pilston (SIGNATURE)

QA CHECKED BY: [signature] 9/30/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B4ØØØ1

W400 p 55

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUM8ER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØØ8	8219959731	See	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C			Container	COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C			Lot # log	COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		LAST ENTRY					

SAMPLE ID'S RINSATE: ERØØ15 TRIP BLANK: TBNØØ8 FIELD BLANK: ABØØØ9 FIELD DUPLICATE: NA

RECORDED BY: Susan Weber (SIGNATURE) QA CHECKED BY: [illegible] 9/30/94 (SIGNATURE)

54

SAMPLE LOG SHEET

W400 p. 56

56

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: B40002

DATE COLLECTED (MM/DD/YY): 06/28/94

TIME (HH:MM): 0925

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: Mound New Property

POINT CODE: B400

DESCRIPTION: Borehole 4

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH ~~0.00~~ 27.0 TO ~~0.00~~ ~~27.0~~ 31.0 FT

SA 06/05/94

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: NONE

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO

FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: Susan L Clinton (SIGNATURE)

QA CHECKED BY: [signature] 7/30/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: B40002

W400 p 57

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	NPC008	8219959731	See	COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C			Container	COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C			Lot # log	COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC
		LAST ENTRY					

SAMPLE ID'S RINSATE: ER0016 TRIP BLANK: TBN008 FIELD BLANK: AB0009 FIELD DUPLICATE: NA

RECORDED BY: [signature] (SIGNATURE) QA CHECKED BY: [signature] 9/30/94 (SIGNATURE)

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SAMPLE LOG SHEET

W400 p 68

PROJECT NAME: Mound New Property Extended Phase

PROJECT NO: 34896

SAMPLE ID NUMBER: W40001

DATE COLLECTED (MM/DD/YY): 7/14/94

TIME (HH:MM): 1456

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION: Mound New Property Extended Phase

POINT CODE: B400

DESCRIPTION: Well 11 7" Cisc

FIELD OBSERVATIONS: Hazy, Humid, Overcast
Using bailer which rinsate was collected
with to sample well

SAMPLE -

MEDIA CODE: 66

DESCRIPTION: Monitoring Well

DEPTH 0.00 TO 0.00 FT

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO

FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

NONE

RECORDED BY: [signature] (SIGNATURE)

QA CHECKED BY: [signature] 9-30-94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: W4ØØØ1

W400 p 69

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØ17	8219969440		COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C				COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C				COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH<2,4C				COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH>12,4C				COMPUC
1-1ØØØ	Poly	ANIONS Fl,SO4,Cl	Cool,4C				COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
1-1ØØØ	Poly	TOTAL NIT/TOTAL PHOS	H2SO4 to pH<2,4C				COMPUC
1-1ØØØ	AmbGlass	TOTAL ORGANIC CARBON	H2SO4 to pH<2,4C				COMPUC
1-1ØØØ	Poly	TOTAL SUSPENDED SOLIDS	Cool,4C				COMPUC
1-1ØØØ	Poly	TOTAL DISSOLVED SOLIDS	Cool,4C				COMPUC
1-1ØØØ	Poly	ALKALINITY	Cool,4C				COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U,Am	HNO3 TO PH<2				COMPUC
2-1ØØØ	Poly	RADS Ac,Ra,Sr,GAMMA	HNO3 TO PH<2				COMPUC
		Last Entry					

pH 10/5/94

Sample Management Office

Container Lot # log.

SAMPLE ID'S RINSATE: ERØØ17 TRIP BLANK: TBNØ15 FIELD BLANK: ABØØ13 FIELD DUPLICATE: NA

RECORDED BY: [signature] (SIGNATURE) QA CHECKED BY: [signature] 9-30-94 (SIGNATURE)

69

70 07/14/94 0700

1411 Collect sample after 2 gal
pH 8.45
Cond .748 2 mho/cm
temp ~~15.3~~ 14.9
SLA 07/14/94

1417 Collect sample after 4 gal
pH 8.60
cond ~~.733~~ .742 2 mho/cm
SLA 07/14/94
temp 15.7

1419 Collect sample after 6 gal very clear
pH 8.59
cond .744 2 mho/cm
temp 13.2

1423 Collected sample after 8 gal very clear
pH 8.58
cond .737 mho/cm
temp 13.2

3 consecutive readings - purging complete

1450 Sampling well w/ bailer

1550 Finish filling ~~bottles~~ sample containers
Preparing for field measurements. Calibrating instruments
pH slope 95.2 7 (7 sol.) 10 (10 sol.
YSI sol 6 temp 20.3°C 1045 (1000 sol.) 9600 (10,000)

Susan J Alston

07/14/94 0700 Pg 4 of 4 71

Field measurement
1601 temp 15.0 °C
pH 8.50
Cond. .723
redox 122.8 mV
Diss Oxygen 88%
Emhoff <1

07/28/94

Susan L Alston

GROUNDWATER QUALITY SAMPLING RECORD — MONITORING WELLS

W400 p 91

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

PAGE 1 OF 1

FACILITY CODE: MND16
LOCATION ID: ~~W4886~~ W400 JHD 9/30/94
SAMPLE ID: W40601
LOG DATE: 7/14/94
ANALYTICAL LAB CODE: COMP

LOT CONTROL NO: NA JHD 9/30/94
SAMPLE TYPE: ~~W~~ F
ACCEPTANCE CODE: A
LOGGER CODE: SAIC

INITIAL GROUNDWATER DEPTH (FT): 24.79
SAMPLING PERIOD: START 7/14/94 1407
SAMPLING METHOD: ~~SP~~ MJC 7/14/94 B
COMMENTS NONE

SAMPLE DEPTH (FT): 27.54
COMPLETE 7/14/94 1601
DATE SENT: 7/14/94

FINAL PARAMETER MEASUREMENTS:

POTENTIAL OF HYDROGEN	pH	S.U.	8.5
SPECIFIC CONDUCTANCE	Ec	umhos/cm	.723 2 mr/cm
REDOX POTENTIAL	Eh	mvolts	122.8
TEMPERATURE	TMP	°C	15.4
ALKALINITY ($CaCO_3$)	ALK	mg/l	305
DISSOLVED OXYGEN	DO	mg/l	88%

TIME	TOTAL VOLUME WITHDRAWN (GALS)	TOTAL VOLUME WITHDRAWN (Bore Volume)	pH	Ec (umhos/cm) 2 mr/cm	TEMP (°C)	COMMENTS
1407	0	0	7.36	.302	17.1	NONE
1411	2	1.2	8.48	.748	14.9	↓
1417	4	2.4	8.60	.742	15.7	
1419	6	3.4	8.59	.744	13.2	
1423	8	4.8	8.58	.737	13.2	Stably
				LAST ENTRY		
			1.10			
			7/28/94			

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

SAMPLE TYPES:
F - FIELD, R - REPLICATE, K - KNOWN, A - ACID BLANK

SAMPLING METHODS:
BP - BLADDER PUMP, PP - PERISTALIC PUMP, G - GRAB, B - BAILER, AL - AIR-LIFT SAMPLER, SL - SUCTION LIFT PUMP, SP - SUBMERSIBLE PUMP

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Dwayne J Alston 7/14/94 — FORM COMPLETED BY / DATE

[illegible] 9/30/94 — TECHNICAL REVIEWER / DATE

GROUNDWATER QUALITY SAMPLING RECORD

W400 D.T.S.

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

PAGE 1 OF 1

FACILITY CODE: MND16

LOCATION ID: ~~W400~~ W400 MD 9/30/94

LOG DATE: 07/14/94

BORE VOL CALCULATION (GAL)

$\frac{d^2\pi}{4}$ $(h_1 - h_2)$ X 7.48

DEPTH OF WELL (h2) (ft): 34.99 ft BTOC

DEPTH TO WATER (h1) (ft): 24.79 BTOC

WELL DIAMETER (ft): 2 in

ONE BORE VOLUME (GAL): 1.67 gallons

SCREENED INTERVAL (ft): 32.5 - ~~22.49~~ 23.51

FIELD REP: SL Absan

INSTRUMENT(S) USED: YSI-SCT 3000 flow water level and Grundfos Rediflow pump for purging

SAMPLING INFORMATION

WITDRAWL METHOD: Bailer

FILTER SIZE: # 5

THERMOMETER ID: Hazco # 7557

Ec METER ID: Hazco # 1422 SM 07/14/94

pH METER ID: Hazco # ~~4~~ 7557

PUMP ID: NA

ALKALINITY KIT ID: 4067

CALIBRATION INFORMATION

DATE/TIME OF LAST Ec CALIBRATION: 7/28/94 0900

TIME OF pH CALIBRATION: 0932

FOR STANDARD pH 7, INSTRUMENT READING: 7

FOR STANDARD pH 4, INSTRUMENT READING: NA

FOR STANDARD pH 10, INSTRUMENT READING: 10

Eh OF CALIBRATION SOLUTION: 1000 , 10,000

Eh READING IN CALIBRATION SOLUTION AFTER MEASUREMENT: 1045 , 9600

TEMP OF CALIBRATION SOLUTION (°C): 20.3°C

SHIPPING INFORMATION

LAB(S) SHIPPED TO:	CCAPUC	NA	NA
DATE(S) SHIPPED:	07/14/94	↓	↓
METHOD OF SHIPMENT:	FCA Ex	↓	↓

COMMENTS: NONE

GROUNDWATER QUALITY SAMPLING RECORD

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — PROJECT NO.: 34896

PAGE 1 OF 1

FACILITY CODE: MND16

LOCATION ID: W400

LOG DATE: 7/14/94

ERROR AT 4.50: $\frac{X1 - X2}{XS}$ X 100 = 5.9 %

1st = 305 %

2nd = 288 %

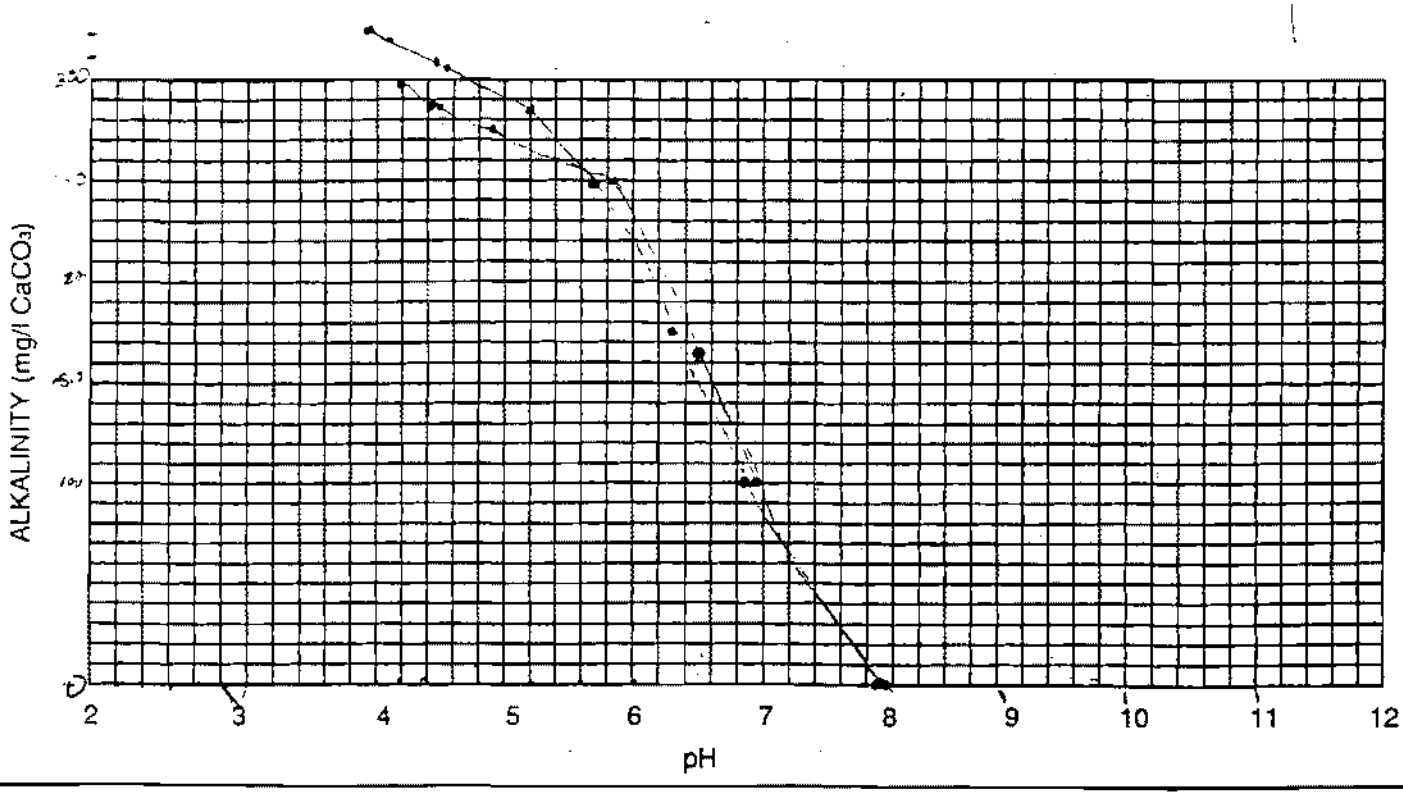
INITIAL pH 7.84

pH CHECK AFTER TITRATION

7.00 = NR

4.00 = NR

pH	ALKALINITY (mg/l $CaCO_3$) 1st pH / ALK	2nd pH / ALK	3rd
8.90	NA	NA	NA
8.60			
8.30			
8.05			
7.80	7.84 / Ø	7.93 / Ø	
7.50	6.81 / 100	6.86 / 100	
6.50	6.35 / 175	6.46 / 165	
5.70	5.70 / 249	5.61 / 250	
5.10	5.10 / 286	4.85 / 275	
4.80	4.53 / 304	4.51 / 285	
4.50	4.50 / 305	4.50 / 288	
4.25	4.05 / 318	4.00 / 297	
4.00	3.98 / 320	NA	



GROUNDWATER LEVELS AND GASOLINE THICKNESS DATA

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE PROJECT NO. 34896

FACILITY CODE: MND16 **LOGGER CODE:** SAIC

LOG DATE: 06/28/94, 07/14/94 TYPE OF PROBE: VST SCT 3000 OTH

ACCEPTANCE CODE: A

LOCATION ID	LOG TIME (HH:MM)	DEPTH TO WATER (ft)	DEPTH TO GAS (ft)	COMMENTS
W400	06/28/94 1089	22.81	NA	Bore hole
	1125	23.75		
	1336	23.17		
	07/14/94	~~22.29~~ 07/28/94		well
	0922	22.29		
	1340	22.29		
		Last Entry		

NA 07/28/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

TYPES OF PROBES: ROD - TEFLON ROD WITH PASTE OWI - OIL WATER INTERFACE PROBE OTH - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Alison L. Alston 7/14/94 — FORM COMPLETED BY / DATE

9/30/94 — TECHNICAL REVIEWER / DATE

STANDARD ELECTRICAL CONDUCTIVITY DATA

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

FACILITY CODE: MND16 LOGGER CODE: SAIC

LOG DATE: 7/28/94 ACCEPTANCE CODE: A

MANUFACTURER/Ec METER ID: 3000 T-L-C METER YSI MODEL 3000 SN: 9108028223 HACCO# 1422

ELECTRICAL CONDUCTIVITY OF KNOWN SOLUTIONS AT 25° C:	
KNOWN (mg/l KCl)	Ec (meter)
1.000	1.170
NA	NA
NA	NA

Ec	TEMPERATURE (°C) LAB THERMOMETER	TEMPERATURE (°C) (Ec METER)
NR	0	NR
NR	1	↓
NR	2	↓
.801	3	2.8
.805	4	3.3
.766	5	4.0
.770	6	4.2
.778	7	5.6
.809	8	6.8
.828	9	7.9
.845	10	8.8
.870	11	9.9
.893	12	10.7
.926	13	11.9
.953	14	13.4
.962	15	14.3
.975	16	14.7
.975	17	14.8
.991	18	15.3
1.013	19	16.0
1.033	20	17.0
1.067	21	18.2
1.092	22	19.6
1.119	23	20.4
1.149	24	21.7
1.170	25	22.0

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

[signature] 7/28/94
FORM COMPLETED BY / DATE

[signature] 9/30/94
TECHNICAL REVIEWER / DATE

BOREHOLE / WELL CONSTRUCTION FIELD DATA LOG

W400-P103

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

FACILITY CODE: MND16 **LOCATION ID** W400 **FIELD REP:** SC Abston
LOGGER CODE: SAIC **DRILLER CODE:** BOWS **RIG TYPE:** CABLETOOL
INSTALLER CODE: SAIC **COMPLETION DATE:** 7/6/94 **ACCEPTANCE CODE:** A

BOREHOLE SUMMARY

BIT TYPE	HOLE DIAM (in)	END DEPTH (ft)	FLUID TYPE
6 inch cable tool	6 in	34.0	Potable water
	LAST Entry		

CASING SUMMARY

CASING* TYPE	DESCRIPTION	DIAM (in)	END DEPTH† (ft)
P	Steel	6 in	2.7
S	Stainless Steel	2 in	32.5
	LAST Entry		

* P - Protective S - Screen O - Open N - None

† Depth from Top of Casing

CONSTRUCTION TIME LOG

ACTIVITY	START DATE	START TIME	END TIME
DRILLING	6/27/94	1335	1743
	6/28/94	0815	1116
CASING	6/28/94	1352	1409
FILTER PACK	6/28/94	1409	1656
SEAL	6/28/94	1650	1738
BACKFILL	6/30/94	1620	1658
	7/6/94	1520	1534
DEVELOPMENT	7/14/94	0915	1423
OTHER NONE			

WELL CONSTRUCTION

TYPE* CODE	DESCRIPTION	END DEPTH† (ft)
B	Type I Portland cement w/ 4% Bentonite	14.2
S	Vadose Zone Gold Bentonite Pellets	18.0
F	#4 C. Sand Pack	34.0
	LAST Entry	

* B - Backfill S - Seal F - Filter

† Depth From Ground Surface

WELL DEVELOPMENT

TD water @ 24.79 ft BTOC, TD of well at 34.99 ft BTOC
1 well volume = 1.67 gal 5 well vol = 8.35 gal
16 gallons tremie water x 5 = 80 gal
Need to develop 88.35 gal
0943 Initial reading: pH 8.48
temp: 14.6°C cond: .7422 (2 mo/cm)
turbid - light brown no odor
1035 Final reading after 116 gal temp = 12.8°C
cond = .737 (2 mo/cm) pH = 7.39 slightly turbid but clear,

COMMENTS: No odor

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Mark J Crane 7/28/94
FORM COMPLETED BY / DATE

9/30/94
TECHNICAL REVIEWER / DATE

105

WELL COMPLETION INFORMATION

W400 p105

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

PAGE 1 OF 1

FACILITY CODE:	MND16	FILTER PACK LENGTH (ft) :	19.8
LOCATION ID	W400	FORMATION OF COMPLETION (US/RC) :	GW
ACCEPTANCE CODE:	A	WELL TYPE CLASSIFICATION:	M
OWNER CODE:	EG96	WELL COMPLETION METHOD:	S
INSTALLER CODE:	SAIC	ZONE OF COMPLETION:	U
INSTALLATION DATE:	6/28/94		
CASING ELEVATION (FT MSL)		OPEN/SCREEN DEPTH (FTFD):	22.31 - 32.5
CASING LENGTH (FT):	25.02	OPEN/SCREEN LENGTH (FT):	9.99
CASING DIAMETER (IN):	2in	OPEN/SCREEN AREA (IN²/FT):	NA
SEAL END DEPTH:	14.2	FLOW RELATIONSHIP:	O
SCREEN MATERIAL:	SS	CAP MATERIAL:	SS
RISER MATERIAL:	SS	CAP TYPE:	SL

WELL TYPE CLASSIFICATIONS:
- M - MONITORING WELL
- P - PRODUCTION WELL
- T - TEST WELL
- O - OTHER (SPECIFY)

CASING, CAP, AND RISER MATERIALS:
- BR - BRICK
- C1 - CONCRETE
- C2 - COPPER
- FI - FIBERGLASS
- GI - GALVANIZED IRON
- WI - WROUGHT IRON
- SS - STAINLESS STEEL
- OM - OTHER METAL
- TE - TEFLON
- PV - PVC
- RS - ROCK OR STONE
- ST - STEEL
- TI - TILE
- CS - COATED STEEL
- WO - WOOD
- NO - NONE
- OT - OTHER (SPECIFY)

CAP TYPES:
- LC - LOCKING
- SL - SLIP-ON
- TR - THREADED
- NO - NONE
- SC - SCREW ON
- OT - OTHER (SPECIFY)

FLOW RELATIONSHIPS:
- U - UPGRADIENT
- D - DOWNGRADIENT
- C - CROSS GRADIENT
- O - ON SITE
- N - NOT KNOWN
- B - BACKGROUND

ZONES OF COMPLETION:
- A - ARTESIAN
- B - ANISOTROPIC
- C - CONFINED
- H - AQUITARD
- G - AQUICLUDE
- I - ISOTROPIC
- M - MULTI-SYSTEM
- S - SEMI-CONFINED
- U - UNCONSOLIDATED

WELL COMPLETION METHODS:
- P - POROUS CONCRETE
- F - GRAVEL PACK
- H - HORIZONTAL GALLEY
- O - OPEN END
- P - PERFORATED, SLOTTED
- S - SCREEN
- T - SAND POINT
- W - WALLED OR SHORED
- X - OPEN
- O - OTHER (SPECIFY)

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Mark T Crane 7/25/94
FORM COMPLETED BY / DATE

9/30/94
TECHNICAL REVIEWER / DATE

108

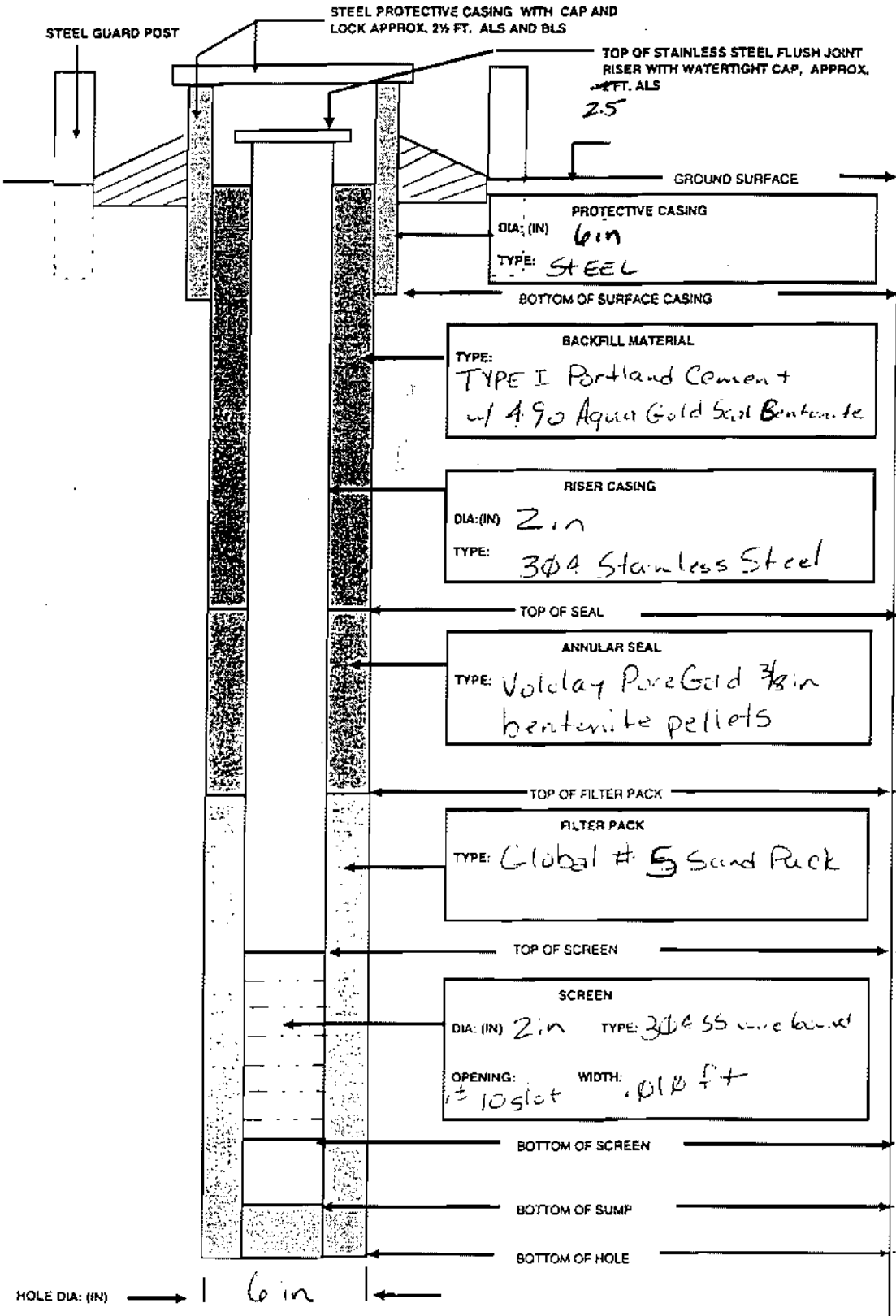
MONITORING WELLS

MONITORING WELLS
W400 P 105

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASED

PROJECT NO: 34896

WELL NUMBER: W400	BEGIN: 6/27/94	END: 7/6/94
COORDINATES: N: E: NA	REFERENCE POINT: NA	ELEVATION: NA MSL



DEPTH	ELEV
0	
2.4	
14.2	
15.0	
22.51	
32.5	
32.5	
34	

A.3

A.3 SAMPLE MANAGER LOGBOOK

EG & G MOUND

OU5

SAMPLE MANAGER LOGBOOK

NEW PROPERTY EXTENDED PHASE

SAMPLE MANAGER LOG BOOK

PROJECT TITLE: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE RI/FS FIELD INVESTIGATIONS

WORK SITE: *MOUND PLANT*
Miamisburg, Ohio
OU5 New Property

ACTIVITY: *Mound OU5 New Property Phase 1 RI/FS*
Field Investigations

CONTRACT #: *BOA 52264*
TASK ORDER: *34896*

PROJECT MANAGER: *Thomas Tank*
COMPANY NAME / ADDRESS: *Science Applications International Corporation*
4031 Colonel Glenn Hwy ,Dayton, Ohio 45431
TELEPHONE NUMBERS: *(513) 429-2699*

SUPERVISORS: *OU5 Manager: Alan Spesard (513)865-3859*
SAIC Proj. Manager: Thomas Tank (513)429-2699

EMERGENCY RESPONCE: *Police / Ambulance / Fire 911 or 865-4040*

PROCEDURES: *SOP 1.1, SOP 2.2, SOP 3.1, SOP 4.1, SOP 4.3, SOP 4.4, SOP 5.1, SOP 6.1, SOP 6.3*

START DATE: 6/13/94
END DATE: 8/29/94

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Pg 1

SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OUS NEW PROPERTY EXTENDED PHASE

PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
1	Task Team Activity 6/13/94	31	Task Team Activity 7/19/94
2	↓	32	" " " 7/20/94
3	Task Team Activity 6/14/94	33	" " " 7/21/94
4	Task Team Activity 6/15/94	34	Task Team Activity 8/29/94
5	↓	35	↓
6	↓	36	No Entry
7	Task Team Activity 6/16/94	37	
8	Task Team Activity 6/20/94	38	
9	Task Team Activity 6/21/94	39	
10	↓	40	
11	Task Team Activity 6/22/94	41	
12	↓	42	
13	Task Team Activity 6/23/94	43	
14	Task Team Activity 6/27/94	44	
15	Task Team Activity 6/28/94	45	
16	Task Team Activity 6-29-94	46	
17	↓	47	
18	Task Team Activity 6/30/94	48	
19	Task Team Activity 7/5/94	49	
20	Task Team Activity 7/6/94	50	
21	Task Team Activity 7/7/94	51	
22	↓	52	
23	Task Team Activity 7/8/94	53	
24	Task Team Activity 7/11/94	54	
25	↓	55	
26	Task Team Activity 7/12/94	56	
27	↓	57	
28	Task Team Activity 7/13/94	58	
29	Task Team Activity 7/14/94	59	
30	Task Team Activity 7/18/94	60	↓

TABLE OF CONTENTS pg. II SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 3489

PAGE	FIELD LOG	PAGE	FIELD LOG
61	No Entry	91	No Entry
62		92	
63		93	
64		94	Sampling Notes
65		95	
66		96	No Entry
67		97	Sampling Notes
68		98	
69		99	
70		100	No Entry
71		101	Blank Page
72		102	Sample Log Sheet ERØØ15
73		103	
74		104	Sample Log Sheet ERØØ16
75		105	
76		106	Sample Log Sheet ERØØ17
77		107	
78		108	Sample Log Sheet ERØØ18
79		109	
80		110	Sample Log Sheet ERØØ19
81		111	
82		112	Sample Log Sheet ERØØ2Ø
83		113	
84		114	Sample Log Sheet ERØØ21
85		115	
86		116	Sample Log Sheet ERØØ22
87		117	
88		118	No Entry
89		119	
90		120	

TABLE OF CONTENTS

SAMPLE MANAGER:

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE

PROJECT NO.: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
121	No Entry	151	Blank Page
122		152	No Entry
123		153	
124		154	
125		155	
126	Blank Page	156	
127	Blank Page	157	
128	Sample Log Sheet AB0009	158	
129		159	
130	Sample Log Sheet AB0010	160	
131		161	
132	Sample Log Sheet AB0011	162	
133		163	
134	Sample Log Sheet AB0012	164	
135		165	
136	Sample Log Sheet AB0013	166	
137		167	
138	Blank Page	168	
139	Blank Page	169	
140	Sample Log Sheet BB0009	170	Blank Page
141		171	Sample ID/COC Tracking Form
142	Sample Log Sheet BB0010	172	
143		173	
144	Sample Log Sheet BB0011	174	
145		175	
146	Sample Log Sheet BB0012	176	No Entry
147		177	
148	Sample Log Sheet BB0013	178	
149		179	
150	Blank Page	180	

TABLE OF CONTENTS

pg IV

SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE

PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
181	No Entry	211	Trip Blank Tracking Form
182		212	No Entry
183		213	
184		214	
185		215	
186		216	
187		217	
188		218	
189		219	
190		220	
191	Sample Container Lot # Log	221	Contract Reports
192		222	
193		223	
194		224	
195		225	
196		226	
197		227	No Entry
198		228	
199		229	
200		230	
201		231	
202		232	
203		233	
204		234	
205		235	
206		236	
207	No Entry	237	
208		238	
209		239	
210		240	

TABLE OF CONTENTS — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO.: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
241	No Entry	271	No pages
242		272	
243		273	
244		274	
245		275	
246		276	
247		277	
248		278	
249		279	
250		280	
251		281	
252		282	
253		283	
254		284	
255		285	
256		286	
257		287	
258		288	
259		289	
260	Last page of logbook - no entry	290	
261	No pages - No entry	291	
262		292	
263		293	
264		294	
265		295	
266		296	
267		297	
268		298	
269		299	
270		300	

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): 6-13-94 TIME: NA PAGE 1 OF 2

Task Team Members: pg. 1

Joletta Humpert (SAIC)

JPH 6/13/94

Narrative (include time and location):

0745 At SAIC Beavercreek office to pick up logbooks. Drove to Mound Plant

0830 Sat in on the end of J. Davis' orientation meeting. Passed out logbooks to crews to review.

0900-1100 Rearranged and straightened trailer.

1100 Discussed sampling soil gas strategy with M. Monrow and M. Howard.

1300 E. Jackson, C. McIver, and S. Brown arrived with trucks and equipment. Unloaded equipment and began sorting sample jars.

Received the following containers:

60 VOAs
5 TRIPs
30 8-oz Amber jars
138 1 Liter plastic
108 1 Liter amber glass
164 4-oz. jar
acids/bases - H_2SO_4, NaOH
3

Daily Weather Conditions: A.M. Hot! 75°F, slight breeze
P.M. Hotter! 91°F, slight breeze

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET **SAMPLE MANAGER**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE **TASK NO.: 34896**

Date (mm/dd/yy): 6-13-94 TIME: N/A PAGE 2 OF 2

Task Team Members:

J. Humpert pg. 2

JPH 6/13/94

Narrative (include time and location):

1500 Called Marlene Swift to order more 8-oz sample jars for delivery on Tuesday morning to Fedex Office in Miamisburg, OH.

1530 Frank Miller gave me trip blank sample ids - start with TBNØØ1 for New Property and TBAØØ1 for Ops Area. Coolants blanks (if used) should be CBNØØ1 and CBAØØ1.

Talked to A. Meyer. Decision was made to use temp. strips included in CompuChem SampleSavers instead of coolant blanks.

1630 Continued prepping bottles, etc. for 6/14.

1700 Assisted in other preparation activities

Last Entry

Daily Weather Conditions: A.M. N/A

P.M. N/A

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 6-14-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Joletta Humpert (SAIC) pg. 3

JPH 6/14/94

Narrative (include time and location):

0700 At office to pick up equipment and soil gas logbooks.
0730 Packing sample jars for crews.
0800 - 0900 Met w J. Geister. See Soil gas logbook for details.
0900 - 1030 Working with soil gas crew.
1030 Run to fedex office to pickup sample jars. Stopped at B399 to pick up surface sample. Returned to trailer to package samples and unpack bottles.
1130 M.K. brought in samples from B401 - packaging those samples. Missing SVOC/Pest/PCB and Anion samples. Informed Eric Saylor of missing samples.
1300 Received 8 cases of 250 ml (8-oz) amber jars from CompuChem (192 jars total received).
1330 Prepping jars for 6/15.
1340 M.M. and M.H return. - Off doing soil gas again
1600 Return to trailer to package samples (B401Ø2) and pack compuchem boxes.
1820 Total 4 boxes packed. airbill # 9289476431
Sent trip blank (one) TBNØØ1.
Delivered to fedex. Offsite
Last Entry.

Daily Weather Conditions: A.M. Hot! @ 75°F, slightly overcast
P.M. Hot!

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 6/15/94 TIME: NA PAGE 1 OF 13

JPH 6/20/94

Task Team Members:

Joletta Humpert

Pg. 4

JPH 6/15/94

Narrative (include time and location):

0700 Onsite.

0700-0900 Taking inventory of sample jars and determining need for New Property. Also calculated sample need for Ops Area. Contacted M. Swift at CompuChem and placed bottle order. See pg. 5.

1000 M. Swift called and said there was one broken sample in the 6/14/94 shipment from B4010Z was broken (8-oz jar). CompuChem was able to Composite into a 4-oz jar for analysis. No action required from SAIC

1010 Talked to A. Meyer. Still have not received OK on field change request for changes in analytical methods. May have to put some samples on hold until approval is received.

1015 Prepped for collecting Equipment Rinsate ER0015.

1030 Collected ER0015. Preserved appropriate samples and checked with pH paper.

1200 Swept trailer and took a lunch break. Completing logbook.

Daily Weather Conditions: A.M. Hot, @ 75-80°F, very muggy

P.M. Hot! @ 90°F, very, very muggy

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): 6/15/94 TIME: NA PAGE 2 OF ~~2~~ 3 gHH 6/20/94

Task Team Members:

J. Humpert pg. 5

JPH 6/15/94

Narrative (include time and location):

Sample Bottle Request from CompuChem:

For New Property:

310 8-oz amber
72 1-L amber
@161 1-L poly
20 trips

For Ops Area:

122 40-ml vials
256 1-L amber
408 1-L poly
1044 8-oz jars
275 4-oz jars
30 trips.

M. Swift said delivery would be 6/15/94 at Fed. Ex office.

1330 Received water sample W40101 from M.K. Began packing samples, labeling, and preserving samples as needed. Placed samples in fridge to cool.

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Joletta Humpert QA Checked By Laura M. Massey 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET — **SAMPLE MANAGER**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 6/15/94 TIME: NA PAGE 3 OF 3

Task Team Members:

J. Humpert

pg. 6

JPH 6/15/94

Narrative (include time and location):

1345 Continued packaging samples and prepping samplesavers.

1600 Began packing samplesavers.
Total of 9 samplesavers packed with 45 samples
Air bill # ~~9269476416~~ JPH 6/15/94 6289476420.

1800 Delivered to fedex office
Offsite.
Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): ~~6-20~~ 6-16-94 JPH 6/16/94 TIME: NA PAGE 1 OF 1

Task Team Members: Pg. 7

Joletta Humpert

JPH 6/16/94

Narrative (include time and location):

0700 Onsite. Prepping bottles for crews.
0900 - 1300 Sampled with OU9 Regional Soils (L. Morrison's team).
1300 - 1500 Packaged B40801, B40811, and B40802
1600 - 1800 Packed sample savers. Shipped four boxes.
Airbill # 9289476416.
2 of 4 9348913201
3 of 4 9348913217
4 of 4 9348913226
Offsite @ 1830
Last Entry

Daily Weather Conditions: A.M. Hot! ~~76°F~~ JPH 6/20/94 76°F, Cloudy
P.M. Hot! 95°F, Cloudy

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET — **SAMPLE MANAGER**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 6/20/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Joletta Humpert

Pg. 8

JPH 6/20/94

Narrative (include time and location):

0700 Onsite at sample trailer. Prepping sample bottles for crews. Cable-tool rig will be collecting a surface sample only. Hollow stem will be collecting a water sample.

0830 Collected rinsate for OA hollow stem crew.

0930 Drove out to site with J. Davis to deliver logbook to ~~OU7~~ JPH 6/20/94 Area 7 drill site.

1000 Onsite at Cable-tool rig for the collection of B39701. Collected ambient blank (AB00009) during sample collection. Collected 5' from crew. Rig not idling since this was a surface sample. Brought sample in.

1030 Onsite at Area 7 rig. Collected AB00001 during collection of B01003. Collected ~~AB0~~ JPH 6/20/94 B01001 and B01002 for transport to trailer (and out of heat).

1200 to 1300 Packing samples

1330 Collected BB00009 - sample bank blank for NP samples.

1430-1530 Fedex run for sample jar pickup.

1600-1830 Packing samples. Ship fedex. Airbill# 9289476512. Off site. Last Entry.

Daily Weather Conditions: A.M. Hot! 79°F, sunny, 98% humidity.

P.M. Hotter! 97°F, more humid

Recorded By Joletta Humpert. QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 6/21/94 TIME: NA PAGE 1 OF 2

Task Team Members:

J. Humpert pg. 9

JPH 6/21/94

Narrative (include time and location):

0700 Onsite at sample trailer. Morning briefing by D. Davis. Prepped sample bottles for crews.

0800 Packaging Area 7 sample

1000 Packing samples from NP and OA.

1200 Collected ER0002 for subsurface soil samples. Per conversation with A. Meyer, will collect surface and subsurface rinsates due to varying equipment rinsate parameters. Surface soil samples include analysis for Bi, Li, and Mo, whereas subsurface samples are analyzed for Bi only.

Recvd call from Denny Gault (EG&G) who wanted 2 sets of groundwater sample bottles so they can be filled and set as PE samples to the lab. He wanted 2 sets of bottles and labels. Will have to call Frank to get sample IDs. Will try to prepare bottles today.

1300–1500 Preparing samplesavers by removing bottles and blue ice. Received 100+ sample boxes from Fedex today @ 1430.

Daily Weather Conditions: A.M. Hot, @ 75°F, Partly sunny.

P.M. Hot, 90°F, Partly sunny.

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET **SAMPLE MANAGER**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE **TASK NO.: 34896**

Date (mm/dd/yy): 6-21-94 TIME: NA PAGE 2 OF 2

Task Team Members:

J. Humpert (SAIC) Pg. 10

E. Saylor (SAIC)

JPH 6/21/94

Narrative (include time and location):

1600 No samples collected by crews this afternoon.

1600 Packaging samples from morning.

Shipped 1 sample cooler. Airbill # 8219959484.

1700 Ran out of time to collect sample jars for D. Gault. Called and left message. Talked to Frank Miller - decided to label samples W00001 and W00002.

1745. Delivery of samples to fedex. Offsite.

Fast Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Joletta Humpert QA Checked By Laura M. Morilyn 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO: 34896

Date (mm/dd/yy): 6-22-94 TIME: NA PAGE 1 OF 2

Task Team Members: Pg. 11

Joletta Humpert (SAIC)
Eric Saylor (SAIC)

JPH 6/22/94

Narrative (include time and location):

0720 Onsite at sample trailer. Prepped sample bottles for crews.

0800-0845 Prepped bottles for PE samples for Denny Gault. Called at 0845 to notify him that they were ready.

0850 Unpacking sample savers.
Talked to tom Tank. Decided we cannot consider any sample within 1' as subsurface, samples taken between 1-2' will be considered a surface sample. Will have to collect subsurface duplicate during drilling.

1000 Out at drill rig in Area 7

1030 Picked up B39801 from cable tool rig. Packaging and labeling samples.

1100 Packaging B40501 and B40502 from hollow-stem auger rig.

1300 Packaging geotechnical samples for ~~Ops~~ JPH 6/22/94 B40521, B40821, and B40721.

1430 E. Saylor went to pick up samples from Ops Area. Packaged B05001.

Daily Weather Conditions: A.M. Warm @ 70°F, sunny
P.M. Hot, @ 90°F, sunny

Recorded By Joletta Humpert QA Checked By Tamra M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET **SAMPLE MANAGER**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE **TASK NO.: 34896**

Date (mm/dd/yy): 6-22-94 TIME: NA PAGE 2 OF 2

Task Team Members: pg. 12

J. Humpert

E. Saylor

JPH 6/22/94

Narrative (include time and location):

1530 Began packaging samplesavers. Total of five boxes packed. Airbill # 8219960062.

1645 Left for fedex drop off.

Offsite

Just Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): 6-23-94 TIME: NA PAGE 1 OF 1

Task Team Members: pg. 13

Joletta Hampert

Evelyn Meagher-Hartzell

JPH 6/23/94

Narrative (include time and location):

0700 Onsite. Prepping sample jars. Collecting ER0016 for subsurface soil.
0900 Worked with E. MH to unpack sample savers
1000 Sent EMH to pick up samples from G. Loder.
1030 Packaging samples from Area 7 (B030001 & B030002).
1200 Packaging sample from Area 7 (B030003).
1300 Went to lunch.
1400 Thunderstorm rolling through - lightening alarm - all crews shut down
1400-1530 Rain!
1530 Recvd soil screening results from HP.
1600 Packaging samples for Ops Area.
No Samples shipped from New Property.
JPH 6/23/94 ~~Offsite @ 1630~~ Packaged B030004 (partial including VOA, TOC, Lanthanides, SVOC/Pest/PCB, Metals/Cyanide).
JPH 6/23/94 ~~Fast Entry~~
Helped J. Schultheis package OU9 samples
Offsite @ JPH 6/23/94 1730.
Fast Entry

Daily Weather Conditions: A.M. Hot, @ 75°F
P.M. Hot, @ 85°F, Rain @ 1430.

Recorded By Joletta Hampert QA Checked By Laura M. Marsiar 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET	SAMPLE MANAGER
PROJECT NAME: EG&G MOUND OUS NEW PROPERTY, EXTENDED PHASE	TASK NO.: 34896

Date (mm/dd/yy): 6/27/94 TIME: NA PAGE 1 OF 1

Task Team Members: pg. 14

Joletta Humpert

George Wahl

JPH 6/27/94

Narrative (include time and location):

6:30 Onsite at sample trailer
Helping soil gas crew get organized and plan strategy.

0700 Collecting rinsate ER0016 for subsurface samples. Preserving containers as required.

0830 Prepping sample containers for both crews.

0900 Heading out to Area 7 rig to collect ambient and sample bank blanks for groundwater and soil samples.

0915 Onsite at Area 7 rig. Not drilling yet - waiting for HP to arrive

0945 Collecting rinsate on bailer for groundwater samples (ER0017).

1030 Went to Area 7 to collect ambients. AB0002

1200 Received B03004, B03005, and B0 JPH 6/27/94 W03001 for packaging. Collected BB0002 for Ops Area.

1500 Began packing sample savers. Received B4062.

1600 Received B03006 from Ops Area.

1730. Offsite to deliver to fedex. Total 7 boxes.
Airbill #. ~~8219960372~~ 8219959786
JPH 6/28/94

Daily Weather Conditions: A.M. 70°F, cloudy
P.M. 80°F cloudy

Recorded By Joletta Humpert. QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO: 34896

Date (mm/dd/yy): 6-28-94 TIME: NA PAGE 1 OF 1

Task Team Members: pg. 15

J. Humpert

George Wahl

JPH 6/28/94

Narrative (include time and location):

0700 Onsite at sample trailer. Prepping sample containers for crews.

0730. Collecting rinsate for Ops Area ER0003.

0900 Completing logbook work.

1030 Packaging B40002. Unpacking sampleservers.

1200 Sorting Labels, Packaging B40901, B40902, and B03007.

1400 Unpacking sampleservers.
Cleaning trailer. Moving sampleservers from Weston trailer (George Wahl).

1500 Packaging B40001.

1545 Packaging samples from Area 7; B07001 B07101, and B07002.

1630 Packaging Ops Area samples. G. Wahl assisting in packaging New Property samples

1800 Loading cars with samples. Total of 5 boxes for New Property. Airbill # 8219959731.

1805 Offsite. Deliver to fedex.
Last Entry

Daily Weather Conditions: A.M. Sunny, @ 75°F
P.M. Sunny, @ 84°F

Recorded By J. Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 3489

Date (mm/dd/yy): 6-29-94 TIME: N.A PAGE 1 OF 2

Task Team Members: pg. 16

Juletta Humpert

George Uhl

JPH 6/29/94

Narrative (include time and location):

0700 Onsite at sample trailer. Collecting rinsate for NP surface samples - ER0018. Gave bowl + spoon to M.K. Preserved samples.

0830 Collected rinsate for Ops Area groundwater sample using bailer. Preserved samples as needed - ER0004.

1000 Packaged PE samples delivered by K. McMahan. Included 2 VOAs, 2 SVOCs, 3 Pest/PCBs, and 2 metals samples. Called A. Meyer about how to ship samples - what charge #, etc.

1030 Packaged B07003 which was delivered by J. Davis. Part of B07003 was collected on 6/28/94 at 1530 and part on 6/29/94 at 0828. On 6/28/94, collected VOC, SVOC/Pest/PCB, Metal/Cyn, Explosives, and TOC.

1115 Left to go pickup trip blanks from fedex office + lunch

1230 Back at trailer. Packaging B04001, B04002, and B04012 collected at NP.

1400 Unpacking sample savers.

Daily Weather Conditions: A.M. Warm, 73°F, Sunny, humid

P.M. @ 85°F, Sunny, Rain @ 1630

Recorded By Juletta Humpert QA Checked By Tamara M. Moriler 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND-OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 6-29-94 TIME: NA PAGE 2 OF 2

Task Team Members: pg. 17

J. H.

G. W.

JPH 6/29/94

Narrative (include time and location):

1500 Received B16001 from J. Davis. Packaging sample.
1550 Begin Packing sample savers
1630 Received B16002 and B16003. Packaging samples.
1730 Finishing packing samples savers. 8 boxes for new prop. Airbill # 8219960136.
1745 Offsite and headed for fedex.
~~Last Entry~~ JPH 6/29/94

Note: A. Meyer called and said PE samples were for OU9-Rigano. Fedexed to Compuchem using EG&G shipping number 1218-2251-2. Shipped 2 boxes weighing total of 38 lbs. Airbill # 8219960582.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Jolotta Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET	SAMPLE MANAGER
PROJECT NAME: EG&G MOUND OUS NEW PROPERTY, EXTENDED PHASE	TASK NO.: 34896

Date (mm/dd/yy): 6-30-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Joletta Humpert pg. 18

George Wahl

JPH 6/30/94

Narrative (include time and location):

0720 Onsite @ sample trailer. Collecting ER for B16 (for rads and VOC only).

0830 Packaging B40301, B40311, and B40302 received at 1530 JPH 6/30/94 1730 on 6/29/94. Held overnight in refrigerator.

1015 Unpacking sample savers and organizing sample bottles.

1100 Catching up on logbook and lunch.

1200 Packaging geotechnical samples.

1230 Packaging B16004, B16005, and B40201, B40202, and W16001

1430 Packing soil gas timers from Area 21.

1500 Area 7 drill rig shut down - no more samples from them.

1515 Began packaging sample savers.
Total of 6 boxes for NP.
Airbill # 8219959920

1630 Packaged geotechnical buckets from NP
Total of 5 buckets sent. Airbill # 3405302972 and 9289476523. Deliver to fedex. Offsite at 1800. Last Entry.

Daily Weather Conditions: A.M. Sunny, @72°F
P.M. Sunny, @85°F

Recorded By J Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 7/5/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Jeletta Humpert pg. 19

Greg Schank (SAIC Audit)

JPH 7/5/94

Narrative (include time and location):

0715 Onsite at sample trailer. H&S briefing by J. Davis.

0800 Collected rinsate (ER0019) for sediment samples for NP. Samples preserved appropriately.

0915. Advised by Greg Shank to record acid lot numbers used for preservation.

0930 Completing logbooks.

1000 Packaging geotechnical samples.

1030-1215 Pulling soil gas samplers in non-AOC P27-41 (excluding 32) (hole caved in).

1230 Lunch

1240 Packaging sediment samples SD0701 and SD0801. Also packaging ops area B13001, B13002, and B13003.

1430 Packaging geotechnical samples (shelby tubes).

1530 Begin packaging SD1401 and ~~SD0~~ JPH 7/5/94 ~~SD0~~ JPH 7/5/94 SD1501.

1615 Received B13004, B13005, and B13006 (VOC only) from Ops Area. Eight coolers for NP. Airbill # 8219959974 (Compuchem) + 2169350816 and 9289476501 (Singleton).

1745 Offsite to deliver to fedex. East Entry.

Daily Weather Conditions: A.M. 80°F, Hot, Sunny.

P.M. 97°F; Very very hot, humid

Recorded By Jeletta Humpert QA Checked By Laura M. Monihan 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 3489

Date (mm/dd/yy): 7-6-94 TIME: NA PAGE 1 OF 1

Task Team Members: Pg. 20

Joletta Humpert

Tonya Pfaff

JPH 7/6/94

Narrative (include time and location):

0715 Onsite at sample trailer. Prepping bottles for crews. Collecting rinsate for Ops Area.

0830 Packaging shelby tubes into fedex tubes

0900 No samples will be collected by cable tool rig today. Sediment sampling crew out.

0930 Received two sediment SD1201 and SD1301 and a duplicate SD1311. Packaging.

1045 Received W1300 1 and W1310 1 (dup) groundwater samples from Ops Area. Packaging.

1200 Received SD1601 and SD1701. Packaging.

1400 Received SD2001, SD1801, and SD1901. Packaging

1530 Received SD0601. Packaging.

1530-1700 Packaging samples into samplesavers.

Delivered to fedex. Shipped 9 samplesavers, 5 shelby tubes, and 4 buckets.

Airbill # to CompuChem: 8219959764

Airbill #s to Singleton: 2169350702 and 2169350691

1715 Offsite - delivery to fedex

Last Entry

Daily Weather Conditions: A.M. Very hot, @ 80°F, Sunny

P.M. Hotter, 95°F

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 7-7-94 TIME: NA PAGE 1 OF 2

Task Team Members:

J. Humpert

Pg. 21

JPH 7/7/94

Narrative (include time and location):

0645 Onsite at sample trailer. Collecting rinsate for crew. Preserving sample.

0730 Called for Elisa - we desperately need water.

0800 Juan informed me that we may not need a bowl for rinsate for sample collection.

0830 Began relabeling rinsate for sample from NP area for subsurface sample for cable tool rig.

0915 Catching up on logbooks and labels.

0930-1015 Packaging and labeling sample jars for PE samples to be sent to ERA. Sent samples according to list provided by A. Meyer to:
Joel Holtz: Environmental Resource Association, 5540 Marshall St., Arvado, CO 80002.

1100 Received sediment samples SD0901, SD0911, and SD1001, and SD1101 for labeling and packaging.

1230 Ran to fedex to pick up trip blanks.

1300 Made trip to semi-trailer to get more samplesavers.

1330-1430 Up to ears in boxes - unpacking for more blue ice. Also packing bottles for seep crew. Will collect dup and MS/MSD.

Daily Weather Conditions: A.M. 72°F, Sunny

P.M. Hotter! 92°F, Sunny

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET — **SAMPLE MANAGER**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 7-7-94 TIME: NA PAGE 2 OF 2

Task Team Members: pg. 22

J.H

JPH 7/7/94

Narrative (include time and location):

1530 Received SD23Ø1, SD24Ø1, SD25Ø1, and SD27Ø1 from sediment crew. Packing some samplecoolers.

1535 Received delivery of DI water from Lanco - 55 gall HDPE drum.

1645 Received seep samples from crew - began labeling and preserving. Assisted by M. Cramer, S. Abston, T. Pfaff, and J. Davis.

1830 Out of ice!! - will run to BP and buy ice, bag it, and add to coolers.

1830 Offsite to BP

1845 Bagging ice and adding to coolers. Off to fedex.

1900 Delivery to fedex.

2 buckets - Singleton Airbill # 2169350805

Ops Area - 7 containers: # 8219960151

and NP - 12 containers: # 8219960383.

1940 Leave fedex for home.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): 7-8-94 TIME: NA PAGE 1 OF 1

Task Team Members:

J. Humpert

pg. 23

JH 7/8/94

Narrative (include time and location):

0730 Onsite at sample trailer. Completing logbook from yesterday.

0800 Reviewing soil gas logbooks and tracking status of samplers.

0815-0915 Pulling samplers in Area 22 (non HP area). Pulled 64-66, 70-73, 75-77. Others between 64 and 85 were caved in or behind a locked gate.

0930 Prepping water bottles for crew

1000-1130 Cleaning sample trailer. Boxing soil gas tubes for shipment.

1200 Separating labels and custody seals from Compuchem packs.

1230 Lunch

1300 Prepping boxes, labels, and custody seals for water samples. Bagging ice.

1530 Waiting for water sample and completing logbook.

1630 Received sample, packaging, and preserving.

1730 Left for Fedex to deliver boxes. Airbill #8219960652.

Last Entry

Daily Weather Conditions: A.M. Overcast 75°F, Slight breeze.

P.M. same, except partly sunny.

Recorded By Juletta Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET — **SAMPLE MANAGER:**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO: 34896**

Date (mm/dd/yy): 7-11-94 TIME: NA PAGE 1 OF 2

Task Team Members:

Joletta Humpert pg. 24

JPH 8/29/94

Narrative (include time and location):

0710 Onsite at sample trailer. Collecting ER0021 at 0730 for sediment crew. Preserving + packaging.
0830 Prepping bottles for seep crew (Ops)
0845 Ran to Jeder to pick up blue ice, custody seals and trip. Two of the trips are already worthless (bubbles). Also shipped Area 21 timers to NERI (Airbill # 2169350794) and shelby tube B40621 to Singleton (Airbill # 2169350772).
0945 Back to trailer - catching up on logbooks.
1100 Received sediment samples SD2601, SD2201, SD2101 and SD2111 (dup.) Packaged samples.
1130 Received S02001 (seep for Ops Area). Packaging and preserving.
1300 Juan ran to get more samplesavers from Semi.
1320 Unpacking those samplesavers.
1400 Packing bags of ice for shipment.
1500 Received SD0101, SD0201, and SD0301 Sediment team will quit sampling now because I need to collect a rinsate for them.
Received B41002 and B41012 (dup) from

Daily Weather Conditions: A.M. Sunny, 70°F
P.M. Sunny, 86°F

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 7-11-94 TIME: NA PAGE 2 OF 2

Task Team Members:

J. Humpert Pg. 25

JPH 7/11/94

Narrative (include time and location):

Cable-tool rig. Packaging.

1600 Began packing sample savers with assistance from Tonya Pfaff.

1700 Completed packing. Total of 13 boxes - airbill # 8219959683 to Compuchem. Sent 1 bucket to singleton - airbill # ~~8219959683~~ JPH 7/11/94 2169350783

1715 Offsite to deliver to fedex.

1745 Leave fedex for home.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET — **SAMPLE MANAGER**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 7-12-94 TIME: NA PAGE 1 OF 2

Task Team Members:

Joletta Humpert pg. 26

JPH 7/12/94

Narrative (include time and location):

0630 At guard shack - they lost my dosimeter. Finally get a new one

0650 At sample trailer

0700 Collecting ER0022 for sediment crew. I will go out with Chris Halley and complete sediments sampling. Eric Saylor will go with G. Loder on Ops rig.

0745 At first sediment location SD04. Collecting SD0401.

0805 At second location SD05. Collecting SD0501

0830 Return to trailer and package samples.

0900 Preserving rinsate bottles for ER0022.

0930 Consulting with J. Davis concerning progress of crew.

0935-1200 Pulling soil gas samplers with C. Halley in non-AOC area (#86-95, #207-214).

1200 Packaging B41001 received from cable tool rig.

1315 Head out to pull more samplers

Pull 222-225, 228-229, 231, 232, and 235. Several cave ins when trying to retrieve. Wire broke on several. Tube broke on 231. Transferred wires to empty tube immediately.

1500 Completing COC and waiting for sample savers

Daily Weather Conditions: A.M. Warm 70°F, Sunny

P.M. Hot! 88°F, Sunny, No breeze

Recorded By Joletta Humpert QA Checked By Laura M. Marion 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO: 34896

Date (mm/dd/yy): 7-12-94 TIME: NA PAGE 2 OF 2

Task Team Members: J. Humpert. Pg. 27

JEH 7/12/94

Narrative (include time and location):

Not 1300 Received call from K. MacMahon concerning field change (approved by A. Spevard) as follows: If there are no OVA JEH 7/12/94 or Rad readings, then the cuttings can be left at drill site. If there are positive readings on OVA and rad, then cuttings must be drummed.

1530 Packaging samples into sampleservers
Total of seven boxes. Airbill # 8219960685

1650 Offsite to deliver to fedex
East Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Juliette Humpert QA Checked By Laura M. Morrison 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET	SAMPLE MANAGER
PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE	TASK NO: 34896

Date (mm/dd/yy): 7-13-94 TIME: NA PAGE 1 OF 1

Task Team Members: pg. 28

Jeletta Humpert

JPH 8/29/94

Narrative (include time and location):

0715 Onsite at sample trailer.
0800-1130 Pulling soil gas samplers in Area 22.
1200 Lunch. Delivery by fedex of boxes, blue ice, + trips.
1230-1330 Pulling samplers in non-AOC.
Raining. raining.
1400-1530 Pulling samplers
1530 Received PE Samples to package. -Sample ID PS0001 time: 1600 sampler: JPH. Shipped on COC NPC016. No trip blank required because no VOCs shipped. Airbill # 8219959860
Shipped one bucket from 314 (B1421) to Singleton
Airbill # ~~8219959860~~ JPH 7/13/94 2169350761
Loaded boxes
1630 Delivered to fedex.
Last Entry

Daily Weather Conditions: A.M. Hot 75°F, Sunny, humid
P.M. Hotter 89°F, sunny, then rain

Recorded By Jeletta Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO: 34896

Date (mm/dd/yy): 7-14-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Joletta Humpert

Pg. 29

JPH 7/14/94

Narrative (include time and location):

0715 Onsite at sample trailer. Prepping
0900 Pulling soil gas samples
1200 Lunch
1230 Packaging B08001, B08002, and B08003.
1400 Packing Ops Area samples.
1600 Waiting for water sample
Note: Sally Brown called about FIDLER needing recalibrated for Monday. J.H. called Keith MacMahan and he said he would switch it out first thing Monday morning. Give K.M. a call Monday first thing.

1610 Note: Keith MacMahan called about medicals on Friday. They will take 3 people at 1230 and 2 people at 1300. Go to OS East Bldg and call K.M.
1630 Received water sample W40001. Packaging and preserving. Shipped 7 boxes - airbill # 821996 944685 to Compuchem. JPH 7/14/94
1730 Delivered to fedex.
Last Entry

Daily Weather Conditions: A.M. Hot! 75°F, sunny, humid
P.M. Hotter 85°F, more humid.

Recorded By Joletta Humpert QA Checked By Laura M. Morrisa 8/17/94

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET	SAMPLE MANAGER
PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE	TASK NO.: 34896

Date (mm/dd/yy): 7-18-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Jolletta Humpert. Pg. 30

JPH 7/18/94

Narrative (include time and location):

0715 Onsite at sample trailer. Tailgate briefing.
0800 Get soil gas crew prepped to sample
0900 Go out with soil gas crew (Juan Alvarado and Chris Halley) to demonstrate sample installing techniques.
1030. Back to sample trailer.
1045 Crew returns - bad extension cords - safety violation. Find good cord and go back out.
1130. Lunch
1230 - Catching up on logbooks. Packing soil gas tubes from Area 22 for shipment.
1430 Groundwater crew just done developing - will begin purging and probably have a sample in couple of hours.
Will ship sample tomorrow due to late collection
Revise. No sample collected today. Offsite @ 1630.
Last Entry

Daily Weather Conditions: A.M. Warm, humid, 75°F
P.M. Hot, 85°F, Humid

Recorded By Jolletta Humpert QA Checked By Laura M. Moriya 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 7-19-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Joletta Humpert pg. 31

JPH 7/19/94

Narrative (include time and location):

0715. Onsite @ sample trailer.
Crew prepping to sample B397.
1100 Crew reported having difficulty with B397.
Silts are >1. Instructed them to call T. Tank
to get direction.
1200 Received B09003, B09004, and B09005 (Ops).
1400 Prepped labels for W397001.
Received W397001. Packaging and Preserving.
1450 Delivery to fedex. Total of five boxes to
Complichem. Airbill # 8219960000.
Last Entry

Daily Weather Conditions: A.M. Sunny @ 75°F
P.M. Sunny @ 88°F

Recorded By Joletta Humpert QA Checked By Laura M. Marion 8/17/94

Task Team Activity Log

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 7-20-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Joletta Humpert pg. 32

JPH 7/20/94

Narrative (include time and location):

0700 Onsite at sample trailer.
0715 Collecting rinsate ER0008 for subsurface soil for Ops Area.
0730 Onsite at B12 acting as flag girl.
1000 Ran to guard post 2 to catch fedex truck.
1030 Packaging B12001, B12002 and B12003.
1115 Packaging ER0008. Preserving as needed.
1230 Packaging W4021 and W4027 (Groundwater).
1400 Began packing water sample in coolers.
1500 Receive B10001, B10002, and B10003 for packaging.
1600 Begin packing samplesavers with help from G. Loder.
1730 Delivery to fedex
1745 At fedex. Total of 3 coolers shipped
Airbill # 8219960560.
Fast Entry

Daily Weather Conditions: A.M. Sunny 80°F
P.M. Sunny 95°F

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 8/17/94

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): 7-21-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Joletta Humpert Pg. 33

JPH 7/21/94

Narrative (include time and location):

0715 Onsite at sample trailer. Working with soil gas crew to pull samplers in SDB.
0730 Catching up on logbooks.
0915 Received B41001 (MSMSD) from crew.
Packaging and Preserving
1130 Packaging B11001, B11002, B11102, B11003 and B11004.
1230 Lunch - finish packaging above samples.
1330 Bagging Ice
1430 Packing coolers and boxes.
1600 Total of 5 boxes packed. Airbill # 8219959775.
Continuing to pack ops area samples.
1730 Completed packing ~~boxes~~ JPH 7/21/94 boxes after receiving gw sample W11001 from Ops Area.
Load boxes in minivan
1800 Offsite to deliver to fedex
Last Entry

Daily Weather Conditions: A.M. Sunny, 70°F
P.M. Sunny, 85°F

Recorded By Joletta Humpert QA Checked By Ronald T. Smith

Task Team Activity Log Sheet

TASK TEAM ACTIVITY LOG SHEET — **SAMPLE MANAGER**

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — **TASK NO.: 34896**

Date (mm/dd/yy): 8/29/94 TIME: NA PAGE 1 OF 2

Task Team Members: pg. 34

Joletta Humpert

Juan Alvarado

JPH 8/29/94

Narrative (include time and location):

1300 Prepping equipment and bottles to go sample W39901. Calling J. Davis to confirm appropriate field measurements to be taken. Reference SOP 2.2.

1430 Onsite at W399. Unlock well. Record temp and water level in well using TLC meter.

1500 Begin collecting sample - minimal water in well - not sure if we'll be able to get full sample (approx. 22 liters).

1530 Begin experiencing very low water volumes - pretty much bailed well dry. Have collected VOAs (preserved) and 7 liters of water (all unpreserved)

1530 Called J. Davis to get ideas of what to do. He suggested we call Compuchem to find out minimum volume required per parameter. He would call Alex Brey (EG&G) and inform him of situation.

1545 Called Compuchem - spoke to Marlene Swift - she provided minimum volumes for each parameter as follows:

SVOC - 1 liter	Metal/Cyn - 1 liter	Explosives - 1 liter
Pest/PCB - 1 liter	TOC - 1 liter	Fl/Cl/SO4 - 1 liter

Daily Weather Conditions: A.M. NA

P.M. Warm, @ 76°F, Sunny

Recorded By Joletta Humpert QA Checked By Ronald T. Smith

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): 8/29/94 TIME: NA PAGE 2 OF 2

Task Team Members:

Pg. 35

J.H

J.A

JPH 8/29/94

Narrative (include time and location):

NO_2/NO_3 - 1 liter
TSS/TDS - 1 liter
TN/TP - 500/500ml
Alkalinity - 500 ml

Tritium - 1 Liter
All other rads - 2 liters

1600 Called J. Davis with this info. He is waiting for call back from A. Brey - will call asap with direction.

1650 Call from J.D. Per conversation with A. Brey, the following parameters were selected for analysis for W3990Ø1:

VOC - 240 ml
SVOC - 1 liter
Metals - 500 ml
Fl/Cl/SO4 - 1 liter
NO_2/NO_3 - 1 liter
Tritium - 1 liter
Other rads - 2 liters
TSS - 500 ml = Total of 7 liters.

1700 Samples labeled and preserved appropriately Fedexed to Compuchem. Airbill #8219960593.
Jast Entry

Daily Weather Conditions: A.M. NA

P.M. Warmer, @ 78°F

Recorded By Juletta Humpert QA Checked By Ronald T. Smith

Task Team Activity Log

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): NA TIME: NA PAGE NA OF

Task Team Members:

pg 94

Narrative (include time and location): Sediments

Sample	Ambient	SBB	FR	Trip	~~COC~~ COC
SD01 01	AB0012	BB0012	ER0022	TBN014	~~SPC014~~ NPC014
SD02 01	↓	↓	↓	↓	↓
SD03 01	↓	↓	↓	↓	↓
SD04 01	↓	↓	↓	TBN015	NPC015
SD05 01	↓	↓	↓	↓	↓

Fast Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Juletta Humpert QA Checked By [illegible]

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): NA TIME: NA PAGE NA

Task Team Members:

pg 95

*dup SD1311 ***dup SD2111

**dup SD0911

Narrative (include time and location):

Sediments

Sample	Ambient	SBB	ER	Trip	COC
SD07Ø1	ABØØ11	BBØØ11	ERØØ19	TBNØ11	NPCØ91
SDØ8Ø1	↓	↓	↓	↓	↓
SD14Ø1	↓	↓	↓	↓	↓
SD15Ø1	↓	↓	↓	↓	↓
SD12Ø1				TBNØ12	NPCØ12
SD13Ø1*	↓	↓	↓	↓	↓
SD16Ø1	↓	↓	↓	↓	↓
SD17Ø1	↓	↓	↓	↓	↓
SD2ØØ1	↓	↓	↓	↓	↓
(10) SD18Ø1	↓	↓	↓	↓	↓
SD19Ø1	↓	↓	ERØØ2[illegible]	↓	↓
SDØ6Ø1	↓	↓	↓	↓	↓
SDØ9Ø1**	↓	↓	↓	TBNØ13	NPCØ13
SD1ØØ1	↓	↓	↓	↓	↓
SD11Ø1	↓	↓	↓	↓	↓
SD23Ø1	↓	↓	↓	↓	↓
SD24Ø1	↓	↓	↓	↓	↓
SD25Ø1	↓	↓	↓	↓	↓
SD27Ø1	↓	↓	↓	↓	↓
SD21Ø1***	↓	↓	ERØØ21-1	TBNØ14	NPCØ14
SD26Ø1	ABØØ12	BBØØ12	ERØØ22	↓	↓
SD22Ø1	↓	↓	↓	↓	↓

Daily Weather Conditions: A.M. P.M.

Recorded By Juletta Humpert QA Checked By Ronald T. Smith

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — TASK NO. 34896

Date (mm/dd/yy): NA TIME: NA PAGE NA OF NA

Task Team Members:

pg. 97

* Dup B4Ø412

** dup B4Ø12

JPH 8/30/94

Narrative (include time and location):

SubSurface Samples

	Sample #	Ambient	SAB	Eqpt Rinsate	Trip	COC
1.	B4Ø1Ø2	ABØØØ9	BBØØØ9	ERØØ16	TBNØØØ1	NPCØØ1
2.	B4Ø8Ø2	ABØØØ9	BBØØØ9		TBNØØ3	NPCØØ3
3.	B4Ø7Ø2	ABØØØ9	BBØØØ9		TBNØØ5	NPCØØ5
4.	B4Ø5Ø2	ABØØØ9	BBØØØ9		TBNØØ6	NPCØØ6
5	B4Ø6Ø2	ABØØØ9	BBØØØ9	14-①	TBNØØ7	NPCØØ7
6	B4ØØØ2	ABØØØ9	BBØØØ9		TBNØØ8	NPCØØ8
7.	B4Ø9Ø2				TBNØØ8	NPCØØ8
8	B4Ø4Ø2*				TBNØØ9	NPCØØ9
9	B4Ø3Ø2	ABØØ1Ø	BBØØ1Ø		TBNØ1Ø	NPCØ1Ø
10	B4Ø2Ø2					
	B41ØØ2**			ERØØ2Ø	TBNØ14	NPCØ14

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Juletta Humpert QA Checked By Ronald T. Smith

Task Team Activity Log

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): NA TIME: NA PAGE NA OF NA

Task Team Members:

pg 98

* collected duplicate (B4Ø811)
** collected dup B4Ø311

JPH 8/30/94

Narrative (include time and location):

Surface

	Sample #	Ambient	SBB	Eqpt Rinsate	Trip	COC
1.	B399Ø1	ABØØØ9	BBØØØ9	ERØØ15-2	TBNØØ1	NPCØØ1
2.	B4Ø1Ø1			-3	TBNØØ1	NPCØØ1
3.	B4Ø8Ø1*			-1	TBNØØ3	NPCØØ3
4.	B397Ø1	①	①	-4	TBNØØ4	NPCØØ4
5.	B4Ø7Ø1			-5	TBNØØ4	NPCØØ4
6.	B398Ø1			-6	TBNØØ6	NPCØØ6
7.	B4Ø5Ø1			-7		
8	B4Ø6Ø1			-8		
9	B4ØØØ1			-9	TBNØØ8	NPCØØ8
1Ø	B4Ø9Ø1			-1Ø		
11	B4Ø4Ø1			ERØØ18	TBNØØ9	NPCØØ9
12	B4Ø3Ø1**			ERØØ18	TBNØ1Ø	NPCØ1Ø
	B4Ø2Ø1	ABØØ1Ø	BBØØ1Ø	ERØØ18		
	B41ØØ1			ERØØ18	TBNØ15	NPCØ15

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Joletta Humphrey QA Checked By Ronald T. Smith

TASK TEAM ACTIVITY LOG SHEET — SAMPLE MANAGER

PROJECT NAME: EG&G MOUND OUS NEW PROPERTY - EXTENDED PHASE — TASK NO.: 34896

Date (mm/dd/yy): NA TIME: NA PAGE NA OF NA

Task Team Members:

pg. 99

* dup

** MS/MSD

JPH 8/30/94

Narrative (include time and location):

Groundwater

Sample #	Ambient	SBB	Equipt Rinse	Trip	COC
W4Ø1Ø1	ABØØ13	BBØØ13	ERØØ17	TBNØØ2	NPCØØ2
W4ØBØ1	↓	↓	↓	TBNØØ4	NPCØØ4
W4ØØØ1	↓	↓	↓	TBNØ15	NPCØ17 JPH 8/24/94
W397Ø1	↓	↓	↓	TBNØ17	NPCØ18
W4Ø2Ø1 *	↓	↓	↓	TBNØ18	NPCØ19
W41ØØ1 **	↓	↓	↓	TBNØ19	NPCØ2Ø
W399Ø1	↓	↓	↓	TBAØ24	CACØ24

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Jaletta Humphrey QA Checked By Ronald T. Smith

Task Team Activity

tkw

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 1Ø2 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ERØØ15 DATE COLLECTED (MM/DD/YY): 6/15/94 TIME (HH:MM): 1Ø3Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: ER

DESCRIPTION:

SAMPLE -

MEDIA CODE: 73

DESCRIPTION: RINSE WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

Collected rinsate in sample trailer using ASTM Type II DI Water on a sample bowl and large spoon. Collected for surface sample B4Ø8Ø1. Preserved samples appropriately.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morton 8/1/94

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ERØØ15 pg 1Ø3

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØØ2	9289476424	3Ø99Ø13	COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C			H3182Ø1Ø	COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH<2,4C			C4Ø7ØØ1Ø	COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH>12,4C			C4Ø7ØØ1Ø	COMPUC
3 ~~1~~-1ØØØ	Poly	ANIONS Fl,SO4,Cl	Cool,4C			C4Ø7ØØ1Ø	COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH<2,4C			C3231Ø2Ø	COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U, Am	HNO3 TO PH<2			C4Ø7Ø1Ø	COMPUC
2-1ØØØ	Poly	RADS Ac,Sr,GAMMA	HNO3 TO PH<2			C4Ø7ØØ1Ø	COMPUC
1-1ØØØ	Glass	TRITIUM	NONE			H3182Ø1Ø	COMPUC
1-1ØØØ	Glass	TOC	H2SO4 to pH<2	↓	↓	H3182Ø1Ø	↓

gpt 6/15/94

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØØ2 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Jolitta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

TASK 1 COMPLETED

tcw

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 1Ø4 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ERØØ16 DATE COLLECTED (MM/DD/YY): ~~6-23-94~~ 6-27-94 JPH 6/23/94 TIME (HH:MM): ~~Ø75Ø~~ Ø7ØØ JPH 6/23/94

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: ER

DESCRIPTION:

SAMPLE -

MEDIA CODE: 73

DESCRIPTION: RINSE WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

Collected in sample trailer using bowl and spoon and DI water (ASTM Type II). Collected for use with Subsurface sample.

Samples preserved appropriately.

Sample disposed of on 6/23/94 due to sample not being collected as anticipated - bowl and spoon were used but sample not collected.

Rinsate recollected on 6/27/94 - Bowl and spoon used for B4Ø6Ø2.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison (SIGNATURE) /17/94

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ERØØ16 pg 1Ø5

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØØ7 ~~NPCØØ7~~	8219959786 ~~8219959786~~	B3228Ø2Ø	COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C	JPH 6/23/94	JPH 6/28/94	H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C			H3182Ø1Ø	COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH<2,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH>12,4C			C3231Ø2Ø	COMPUC
3 JPH 6/23/94 1-1ØØØ	Poly	ANIONS Fl,SO4,Cl	Cool,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH<2,4C			C3231Ø2Ø	COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U	HNO3 TO PH<2			C3231Ø2Ø	COMPUC
2-1ØØØ	Poly	RADS Ac,Sr,GAMMA	HNO3 TO PH<2			C3231Ø2Ø ~~C3231Ø2Ø~~ JPH 6/27/94	COMPUC
1-1ØØØ	Glass	TRITIUM	NONE			H3182Ø1Ø	COMPUC
1-1ØØØ	Glass	TOC	H_2SO_4 to pH<2,4C			H3182Ø1Ø	

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØØ7 ~~TBNØØ7~~ JPH 6/23/94 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

TASK: Team Activity

tkw

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 106 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ERØØ17 DATE COLLECTED (MM/DD/YY): 6/27/94 TIME (HH:MM): 1ØØØ

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: ER

DESCRIPTION:

SAMPLE -

MEDIA CODE: 73

DESCRIPTION: RINSE WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

Collected on bailer (disposable) to check the decon process of the lab. The lab would not supply any certification on their process.

Collected by pouring ASTM Type II DI water into bailer and then from bailer to sample jars.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Jolitta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/9/94 (SIGNATURE)

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ERØØ17 pg 1Ø7

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØØ7	821995978 ~~821996Ø372~~ ~~gpH 6/28/94~~	B3228Ø2Ø	COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C			H3182Ø1Ø	COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH<2,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH>12,4C			C3231Ø2Ø	COMPUC
3 gpH 6/27/94 1-1ØØØ	Poly	ANIONS Fl,SO4,Cl	Cool,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U	HNO3 TO PH<2				COMPUC
2-1ØØØ	Poly	RADS Ac,Sr,GAMMA	HNO3 TO PH<2				COMPUC
1-1ØØØ	Glass	TRITIUM	NONE			H3182Ø1Ø	COMPUC
1-1ØØØ	Poly	TKN,TP	H_2SO_4 to pH<2,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Glass	TOC	H_2SO_4 to pH<2,4C			C3231Ø2Ø	
1-1ØØØ	Poly	TSS	Cool,4C			C3231Ø2Ø	
1-1ØØØ	Poly	TDS	Cool,4C			C3231Ø2Ø	
1-1ØØØ	Poly	Alkalinity	Cool,4C			C3231Ø2Ø	

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØØ7 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Jolietta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

TASK TOOR ACTIVITY

tcw

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 108 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ER0018 DATE COLLECTED (MM/DD/YY): 6-29-94 TIME (HH:MM): 0720

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: ER

DESCRIPTION:

SAMPLE -

MEDIA CODE: 73

DESCRIPTION: RINSE WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

Collected in sample trailer using ASTM Type II DI water using Bowl and spoon.

Associated with B4040 1-surface sample

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED Joletta Humpert (SIGNATURE) QA CHECKED BY Laura M. Morrison (SIGNATURE) 7/7/94

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ERØØ18 pg 1Ø9

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØØ9	821996Ø136	B3228Ø2Ø	COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C				COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH<2,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH>12,4C				COMPUC
3 opt 6/29/94 7-1ØØØ	Poly	ANIONS Fl,SO4,Cl	Cool,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U	HNO3 TO PH<2				COMPUC
2-1ØØØ	Poly	RADS Ac,Sr,GAMMA	HNO3 TO PH<2				COMPUC
1-1ØØØ	Glass	TRITIUM	NONE			H3182Ø1Ø	COMPUC
1-1ØØØ	Glass	Total Organic Carbon	H_2SO_4 to pH<2,4C				COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØØ9 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morillas 8/17/94 (SIGNATURE)

TASK TEAM ACTIVITY

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg. 110 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ERØØ19 DATE COLLECTED (MM/DD/YY): 7/5/94 TIME (HH:MM): ØØ8ØØ

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: ER

DESCRIPTION:

SAMPLE -

MEDIA CODE: 73

DESCRIPTION: RINSE WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

Collected in field trailer using ASTM Type II Water - collected on using spoon and bowl.

Associated with sediment sample SDØ7Ø1

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED Joletta Humpert (SIGNATURE) CHECKED BY Laura M. Morrison 8/17/9 (SIGNATURE)

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ERØØ19 pg 111

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØ11	8219959974	B3228Ø2Ø	COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C				COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH<2,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH>12,4C				COMPUC
1-1ØØØ	Poly	ANIONS Fl,SO4,Cl	Cool,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U	HNO3 TO PH<2				COMPUC
2-1ØØØ	Poly	RADS Ac,Sr,GAMMA	HNO3 TO PH<2				COMPUC
1-1ØØØ	Glass	TRITIUM	NONE			H3182ØKØ	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ11 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Marion 8/17/94 (SIGNATURE)

[redacted]

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 112 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ER0020 DATE COLLECTED (MM/DD/YY): 7-7-94 TIME (HH:MM): 0800

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: ER

DESCRIPTION:

SAMPLE -

MEDIA CODE: 73

DESCRIPTION: RINSE WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: ~~[illegible] Sample~~ JH 7-7-94

Collected in sample trailer for crew using ASTM Type II water and bowl and spoon

Collected subsurface sample - Cabletool rig

Nitric Acid J.T. Baker lot no. 648031

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ERØØ2Ø pg 113

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NRØ13	821996Ø383	B3228Ø2Ø	COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C				COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH < 2,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH > 12,4C				COMPUC
3x-1ØØØ 7/6/91	Poly	ANIONS Fl,SO4,Cl	Cool,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH < 2,4C			C3231Ø2Ø	COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U	HNO3 TO PH < 2			C4Ø7ØØ1Ø	COMPUC
2-1ØØØ	Poly	RADS Ac,Sr,GAMMA	HNO3 TO PH < 2			C3231Ø2Ø	COMPUC
1-1ØØØ	Glass	TRITIUM	NONE			H3182Ø1Ø	COMPUC
1-1ØØØ	Glass	TOC	H_2SO_4 to pH<2, 4C				

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ12 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/12/91 (SIGNATURE)

Task Team Activity

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 14 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ERØØ21 DATE COLLECTED (MM/DD/YY): 7-11-94 TIME (HH:MM): Ø73Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: ER

DESCRIPTION:

SAMPLE -

MEDIA CODE: 73

DESCRIPTION: RINSE WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

Collected in sample trailer for sediment crew using bowl and spoons and ASTM Type II Water

Associated w/ SD21Ø1

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert QA CHECKED BY: Laura M. Morrison 8/17/94

/(SIGNATURE) QA CHECKED BY: (SIGNATURE)

[redacted]

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ERØØ21 pg 115

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØ14	8219959683	B3228Ø2Ø	COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C				COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH<2,4C			C4Ø7ØØ1Ø	COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH>12,4C				COMPUC
3-1ØØØ 7/11/94	Poly	ANIONS Fl,SO4,Cl	Cool,4C			C4Ø7ØØ1Ø	COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U	HNO3 TO PH<2				COMPUC
2-1ØØØ	Poly	RADS Ac,Sr,GAMMA	HNO3 TO PH<2				COMPUC
1-1ØØØ	Glass	TRITIUM	NONE			H3182Ø1Ø	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ14 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/7/94 (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 116 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ERØØ22 DATE COLLECTED (MM/DD/YY): 7-12-94 TIME (HH:MM): Ø7ØØ

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: ER

DESCRIPTION:

SAMPLE -

MEDIA CODE: 73

DESCRIPTION: RINSE WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

Collected in sample trailer using ASTM Type II water. Associated with sediment sample SDØ4Ø1.

Preserved appropriately

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/ /94

Laura Marquez (SIGNATURE) QA CHECKED BY: [illegible] 8/17/91 (SIGNATURE)

[redacted]

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ERØØ22 pg 117

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØ15		B3228Ø2Ø	COMPUC
2-1ØØØ	AmbGlass	CLP SVOC	Cool,4C			H3182Ø1Ø	COMPUC
2-1ØØØ	AmbGlass	CLP PEST / PCB	Cool,4C				COMPUC
2-1ØØØ	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-1ØØØ	Poly	METALS	HNO3 to pH<2,4C			C3231Ø2Ø	COMPUC
1-1ØØØ	Poly	CYANIDE	NaOH to pH>12,4C				COMPUC
3 pH 7/12/94 1-1ØØØ	Poly	ANIONS Fl,SO4,Cl	Cool,4C				COMPUC
1-1ØØØ	Poly	NO2/NO3	H2SO4 to pH<2,4C				COMPUC
2-1ØØØ	Poly	RADS Pu,Th,U	HNO3 TO PH<2				COMPUC
2-1ØØØ	Poly	RADS Ac,Sr,GAMMA	HNO3 TO PH<2				COMPUC
1-1ØØØ	Glass	TRITIUM	NONE			H3182Ø1Ø	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ15 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Julita Humpert (SIGNATURE) QA CHECKED BY: Laura M. Marquez 8/17/91 (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 128 **PROJECT NO:** 34896

SAMPLE ID NUMBER: AB0009 DATE COLLECTED (MM/DD/YY): 6-20-94 TIME (HH:MM): 1000

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: AB

DESCRIPTION:

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

Sample collected at B397 when sample crew was collecting B3970I. Collected by filling 2 40-ml vials using ASTM Type II DI water.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ABØØØ9

pg 129

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NPCØØ4	9289476512	B3228Ø2Ø	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØØ4 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Monilar 8/17/94 (SIGNATURE)

Analytical Blanks | Notes

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 130 **PROJECT NO:** 34896

SAMPLE ID NUMBER: AB0010 DATE COLLECTED (MM/DD/YY): ~~6-27-94~~ 6-30-94 JPH 6/30/94 TIME (HH:MM): ~~1140~~ 1122 JPH 6/30/94

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: AB

DESCRIPTION:

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

~~Collected at B03 in Area 7 while collecting W03001 (groundwater sample). Collected by filling 2 40-ml vials with ASTM Type II water approx. 10' from rig. Rig idle. Crew using bailer to JPH 6/27/94 collect sample.~~

Sample collected at B402 during collecting of B40201. Sample collected by filling 2 40-ml vials with ASTM Type II water.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY Jolietta J Humpert (SIGNATURE) CHECKED BY Laura M. Morillar 8/1[illegible]

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ABØØ1Ø

pg. 131

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NPCØ1Ø	821995972Ø	~~B3228Ø2Ø~~ ~~B3228Ø2Ø~~ JPH 6/30/94	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ1Ø FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY Laura M. Morrison 8/17/94 (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg. 132 **PROJECT NO:** 34896

SAMPLE ID NUMBER: AB0011 DATE COLLECTED (MM/DD/YY): 7-5-94 TIME (HH:MM): 1105

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: AB

DESCRIPTION:

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Collected at SD07 using ASTM Type II water using 2 40-ml vials. (sediment sampling)

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert (SIGNATURE) CHECKED BY: Laura M. Morrison 8/[illegible]/94 (SIGNATURE)

(SIGNATURE) [redacted]

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ABØØ11 pg. 133

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NPCØ11	8219959974	B3228ØZØ	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ11 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Marion 8/17/91 (SIGNATURE)

Finished Blanks ... tes

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 134 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ABØØ12 DATE COLLECTED (MM/DD/YY): 7-11-94 TIME (HH:MM): Ø846

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: AB

DESCRIPTION:

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

Collected at SD26 (sediment pile) using ASTM Type II Water

Associated with SD26Ø1.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/1/94

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ABØØ12

Pg. 135

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NPCØ14	8219959683	B3228Ø2Ø	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ14 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Jolette Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

Finished blanks | Notes

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg. 136 **PROJECT NO:** 34896

SAMPLE ID NUMBER: ABØØ13 DATE COLLECTED (MM/DD/YY): 7-14-94 TIME (HH:MM): 1450

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: AB

DESCRIPTION:

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS:

JPH 7/14/94

~~Collected in sample trailer while~~

Collected at B4ØØ while collecting W4ØØØ1 using ASTM Type II water

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY Joletta Humpert (SIGNATURE) CHECKED BY Laura M. Morrison 8/17/94 (SIGNATURE)

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: ABØØ13 pg. 137

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NPCØ16	8219959440	B3228Ø2Ø	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ15 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Jolette Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 140 **PROJECT NO:** 34896

SAMPLE ID NUMBER: BB0009 DATE COLLECTED (MM/DD/YY): 6-20-94 TIME (HH:MM): 1330

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: BB

DESCRIPTION:

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) Sample Bank Blank

FIELD OBSERVATIONS: Collected in sample trailer while packaging B39701. Collected using ASTM Type II DI Water.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert (SIGNATURE)

QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: BBØØØ9

pg 141

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NPCØØ4	9289476512	B3228Ø2Ø	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØØ4 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morillon 8/17/94 (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 142 **PROJECT NO:** 34896

SAMPLE ID NUMBER: BB0010 DATE COLLECTED (MM/DD/YY): 6/30/94 TIME (HH:MM): 1300

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: BB

DESCRIPTION:

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) Sample Bank Blank

FIELD OBSERVATIONS: Collected in sample trailer while packaging B42021 using ASTM Type II water.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert (SIGNATURE) CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: BBØØ1Ø

pg 143

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NPCØ1Ø	8219959720	B3228Ø2Ø	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ1Ø FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Jolitta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morillon 8/17/91 (SIGNATURE)

Sample Bank Blank

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg. 144 **PROJECT NO:** 34896

SAMPLE ID NUMBER: BB0011 DATE COLLECTED (MM/DD/YY): 7-5-94 TIME (HH:MM): 1300

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: BB

DESCRIPTION:

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [x] OTHER (SPECIFY) Sample Bank Blank

FIELD OBSERVATIONS: Collected in sample trailer while packaging SD07 (sediment) using ASTM Type II Water.

SAMPLE COLLECTED: [x] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [x] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/[illegible]/94 (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: BBØØ11

pg 145

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH < 2,4C	NPCØ11	8219959974	B3228ØzØ	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ11 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Jolotta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

Sample Trans. Blanks Blanks + Blanks

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg 146 **PROJECT NO:** 34896

SAMPLE ID NUMBER: BBØØ12 DATE COLLECTED (MM/DD/YY): 7-11-94 TIME (HH:MM): 113Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: BB

DESCRIPTION:

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) Sample Bank Blank

FIELD OBSERVATIONS:

Collected in sample trailer while packaging SD26Ø1 (sediments) using ASTM Type II Water

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert (SIGNATURE) CHECKED BY: Laura M. Morrison 8/11/94

(SIGNATURE) (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: BBØØ12 pg. 147

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØ14	8219959683	B3228ØZØ	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ14 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase pg. 148 **PROJECT NO:** 34896

SAMPLE ID NUMBER: BBØØ13 DATE COLLECTED (MM/DD/YY): ~~7/18/94~~ 7/14/94 TIME (HH:MM): 163Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: BB

DESCRIPTION:

FIELD OBSERVATIONS: Collected in sample trailer while packaging W4ØØØ1.

SAMPLE -

MEDIA CODE: 72

DESCRIPTION: ASTM WATER

DEPTH NA TO NA NA

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) Sample Bank Blank

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: BBØØ13

(SIGNATURE) QA CHECKED BY: 8/17/94
(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: BBØØ13 pg 149

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
2-4Ø	Glass	CLPVOA	HCL to pH<2,4C	NPCØ16	8219959440	B3228Ø2Ø	COMPUC

SAMPLE ID'S RINSATE: NA TRIP BLANK: TBNØ15 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Jeletta Humpert (SIGNATURE) QA CHECKED BY: Laura M. Morrison 8/17/94 (SIGNATURE)

SAMPLE ID / COC TRACKING FORM

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MOUND SAMPLE ID	MOUND LAB COC	LAB COC
B399Ø1		NA	NPCØØ1
B4Ø1Ø1		24Ø4	NPCØØ1
ERØØ15		NA	NPCØØ2
B4Ø8Ø1		F8Ø4	NPCØØ3
B4Ø811		F8Ø4	NPCØØ3
B397Ø1		FNØØ1	NPCØØ4
ABØØØ9		NA	NPCØØ4
B398Ø1 (487) gpH 6/21/94		FNØØ3	~~NPCØØ5~~ NPCØØ4 gpH 6/23/94
B4Ø7Ø2		FNØØ4	NPCØØ5
B398Ø1		FNØØ5	NPCØØ6
B4Ø5Ø1		FNØØ4A	NPCØØ6
B4Ø5Ø2		↓	NPCØØ6
B4Ø721		FNØØ3	NPSØØ2
W4Ø8Ø1		FNØØ2	NPCØØ4
B4Ø1Ø2		F4Ø1	NPCØØ1
B4Ø821		F8Ø4	NPSØØ6 (B) gpH 7/14/ NPSØØ1 (5J)
B4Ø8Ø2		2217	NPCØØ3
B4Ø6Ø1		FNØØ6	NPCØØ6
TBNØØ3		NA	NPCØØ3
TBNØØ4		NA	NPCØØ4
BBØØØ9		NA	NPCØØ4
TBNØØ6		NA	NPCØØ6
B4Ø521		FNØØ4A	NPSØØ3
TBNØØ5		NA	NPCØØ5
TBNØØ1		NA	NPCØØ1

SAMPLE ID / COC TRACKINGFORM

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MOUND SAMPLE ID	MOUND LAB COC	LAB COC
TBNØØ2		NA	NPCØØ2
W4Ø1Ø1		24Ø4	NPCØØ2
ERØØ17		NA	NPCØØ7
B4Ø6Ø2		FNØØ7	↓
TBNØØ7		NA	↓
ERØØ16		NA	↓
B4Ø9Ø1		FNØØ8	NPCØØ8
B4Ø9Ø2		FNØØ8	↓
TBNØØ8		NA	NPCØØ8
B4ØØØ1		FNØØ8A	↓
B4ØØØ2		FNØØ8A	↓
B4Ø4Ø1		FNØØ 9	NPCØØ9
B4Ø4Ø2	↓	↓	↓
B4Ø4Ø2	↓	↓	↓
TBNØ1Ø		NA	NPCØ1Ø
ABØØ1Ø	↓	↓	↓
BBØØ1Ø	↓	↓	↓
B4Ø3Ø1		FNØ1Ø	↓
B4Ø311	↓	↓	↓
B4Ø3Ø2	↓	↓	↓
B4Ø2Ø1		FNØ1ØE	↓
B4Ø2Ø2	↓	↓	↓
B4Ø421		FNØØ9	NPSØØ4
B4Ø621		FNØ1ØB	NPSØ1Ø (S.T.) NPSØØ5 (B)
B4Ø723		FNØ1ØA	↓

SAMPLE ID / COC TRACKING FORM

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE — PROJECT NO. 34896

SAMPLE ID	MOUND SAMPLE ID	MOUND LAB COC	LAB COC
B4Ø622 (E)		FNØ1ØD	NPSØØ5
B4Ø822 (B)		FNØ1ØC	↓
ERØØ19		NA	NPCØ11 ~~NPCØ1Ø~~ 8PH 8/5/94
TBNØ11		NA	NPCØ11
BBØØ11		NA	↓
ABØØ11		NA	↓
SDØ7Ø1		FNØ11	↓
SDØ8Ø1 ~~SDØ7Ø2~~ 7PH 7/5/94		↓	↓
SDØ721		↓	↓
SDØ821		↓	↓
SD14Ø1		FNØ12	↓
SD15Ø1		↓	↓
SD1521		↓	↓
SD13Ø1		FNØ13	NPCØ12
SD12Ø1		↓	↓
SD1311		↓	↓
SD16Ø1		FNØ14	NPCØ12
SD17Ø1		↓	↓
SD2ØØ1		FNØ15	NPCØ12
SD18Ø1		↓	↓
SD19Ø1		↓	↓
SDØ6Ø1		↓	↓
SDØ9Ø1		FNØ16	NPCØ13
SDØ911		↓	↓
SD1ØØ1		↓	↓

SAMPLE ID / COC TRACKINGFORM

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MOUND SAMPLE ID	MOUND LAB COC	LAB COC
SD11Ø1		FNØ16	NPCØ13
SD23Ø1		FNØ17	↓
SD24Ø1		↓	↓
SD25Ø1		↓	↓
SD27Ø1		↓	↓
ERØØ21		NA	NPCØ14
SDØ721 (B)		FNØ11	NPSØØ6
SDØ821 (B)		↓	↓
B4Ø821 (S.T.)			↓
B4Ø822 (S.T.)			↓
B4Ø521 (S.T.)			↓
SD1521 (Bucket)		FNØ12	↓
SD1621 (B)		FNØ14	NPSØØ7
SD1221 (B)		FNØ13	↓
SD1321 (B)		↓	↓
SD2Ø21 (B)		FNØ15	↓
BØ4Ø21 (S.T.)			NPSØØ8
BØ1Ø21 (S.T.)			↓
BØ1Ø23 (S.T.)			↓
B4Ø721 (S.T.)			↓
BØ1Ø22 (S.T.)			↓
SDØ921 (B)			NPSØØ9
SD2321 (B)		FNØ17	↓
SD26Ø1		FNØ18	NPCØ14
SD22Ø1		↓	↓

SAMPLE ID / COC TRACKING FORM

PROJECT NAME: EG&G MOUND OU5, NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MOUND SAMPLE ID	MOUND LAB COC	LAB COC
SD21Ø1		FNØ18	NPCØ14
SD2111		↓	↓
SDØ1Ø1		FNØ19	NPCØ14
SDØ2Ø1		↓	↓
SDØ3Ø1		↓	↓
ABØØ12		NA	NPCØ14
BBØØ12		↓	↓
TBNØ14		↓	↓
B41ØØ2		FNØ19A ~~FNØ19~~ 7/11/94	NPCØ14
B41Ø12		↓	↓
SDØ321		FNØ19	NPSØ11 7/11/94
SDØ4Ø1		FNØ2Ø	NPCØ15
SDØ5Ø1		↓	↓
B41ØØ1		FNØ2ØA	NPCØ15
PSØØØ1		NA	NPCØ16
W4ØØØ1		FNØ21	NPCØ17
W397Ø1		FNØ22	NPCØ18
W4Ø2Ø1		FNØ23	NPCØ19
W4Ø211		↓	↓
W41ØØ1 (MS/MSD)		FNØ24	NPCØ2Ø

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
B399Ø1	SOIL	VOC	G2342Ø5Ø	6/14/94
		SVOC/Pest/PCBs	F3146Ø5Ø	"
		Explosives	F3146Ø5Ø	"
		Anions	F3146Ø5Ø	"
		TOC	G2342Ø5Ø	"
		Metals/Cyn	F3146Ø5Ø	"
		Iso PTU		"
		Rads		"
B4Ø1Ø1	SOIL	VOC	G2342Ø5Ø	6/14/94
		TOC	"	
		anions	F3146Ø5Ø	
		explosives		
		iso PTU		
		Gamma, etc.		
		Metals/Cyn		
		SVOC/Pest/PCB		
B4Ø1Ø2	SOIL	VOC	G2342Ø5Ø	6/14/94
		TOC		
		Anions	F3146Ø5Ø	
		Metals/Cyn		
		Explosives		
		Gamma		
		Iso PTU		
		SVOC/Pest/PCB		
W4Ø1Ø1	WTR	VOA	B3228Ø2Ø	6/15/94
		SVOC/Pest/PCB	H3182Ø1Ø	
		Explosives	H3182Ø1Ø	
		Metals	C4Ø7ØØ1Ø	
		Cyanides	C4Ø7ØØ1Ø	

Container Lot # Log

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5, NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34[illegible]

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE [illegible]
W4Ø1Ø1	WTR	NO_2/NO_3	C4Ø7ØØ1Ø	6/15/94
		Gamma, Ac, Ra, Sr	C4Ø7ØØ1Ø	
		Iso PTU, Am	C4Ø7ØØ1Ø	
		TOC	H3182Ø1Ø	
		Tritium	H3182Ø1Ø	
		TKN, TP	C3231Ø2Ø	
		TDS	C3231Ø2Ø	
		TSS	C4Ø7ØØ1Ø	
		Fluoride	C3231Ø2Ø	
		Chloride	C4Ø7ØØ1Ø	
		Sulfate	C4Ø7ØØ1Ø	
		Alkalinity	C4Ø7ØØ1Ø	
B4Ø8Ø1	SOIL	Metals/Cyn	F3146Ø5Ø	6/16/94
		VØA	G2342Ø5Ø	
		Explosives	F3146Ø5Ø	
		Gamma, Ac, Sr, H_3	F3146Ø5Ø	
		Pu, Th, U, Am	F3146Ø5Ø	
		SVOC/Pest/PCB	F3146Ø5Ø	
		Anions	F3146Ø5Ø	
B4Ø8Ø1	SOIL	TOC	G2342Ø5Ø	6/16/94
B4Ø811	SOIL	TOC	G2342Ø5Ø	
		Iso PTU	F3146Ø5Ø	
		VOC	G2342Ø5Ø	
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metals/Cyn	F3146Ø5Ø	
		Explosives	F3146Ø5Ø	
		Anions	F3146Ø5Ø	
		Sr, Gamma, Ac, H_3	F3146Ø5Ø	
B4Ø8Ø2	SOIL	VOC	G2342Ø5Ø	6/16/94

COC Tracking Form Sample, Trans. Blanks, Ambient Blanks

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OUS,NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
B34Ø8Ø2	SOIL	SVOC/Pest	F3146Ø5Ø	6/16/94
		Anions	F3146Ø5Ø	
		Metals/Cyn	F3146Ø5Ø	
		TOC	G2342Ø5Ø	
		Gamma	F3146Ø5Ø	
		Iso PTU	F3146Ø5Ø	
		Exp	F3146Ø5Ø	
B397Ø1	SOIL	Anions	F3146Ø5Ø	6/20/94
		VOC	G2342Ø5Ø	
		Exp	F3146Ø5Ø	
		Metal/Cyn		
		Gamma		
		Iso PTU		
		SVOC/Pest/PCB		
		TOC	G2342Ø5Ø	
W4Ø8Ø1	WTR	SVOC	H3182Ø1Ø	6/20/94
		Pest/PCB		
		Exp.		
		Tritium		
		TOC		
		TSS	C4Ø7ØØ1Ø	
		TN/TP		
		Metals		
		Gamma		
		Alkalinity		
		TDS		
		Cyanide		
		Rads PTU		
		NO_2/NO_3		

Container Lot # Log

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE PROJECT NO: 3489

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
W4Ø801	WTR	VOC	B3228Ø2Ø	6/2Ø/94
B4Ø7Ø1	SOIL	VOC	G2342Ø5Ø	6/20/94
		TOC		
		SVOC/Pest/PCB	F3146Ø5Ø	
		Gamma		
		Iso PTU		
		Exp		
		Anions		
		Metals/Cyn		
B4Ø7Ø2	SOIL	Anions	F3146Ø5Ø	6/21/94
		VOA	G2342Ø5Ø	
		Exp	F3146Ø5Ø	
		Metal/Cyn		
		Rad PTU		
		Gamma		
		TOC	G2342Ø5Ø	
B398Ø1	SOIL	TOC	G2342Ø5Ø	6/22/94
		VOC		
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/Cyn		
		Anion		
		Gamma		
		Iso PTU		
		Exp		
B4Ø5Ø1	SOIL	VOC	G2342Ø5Ø	6/22/94
		TOC		
		Anions	F3146Ø5Ø	
		Exp		
		SVOC/Pest/PCB		

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
B4Ø5Ø1	SOIL	Metal/Cyn	F3146Ø5Ø	6/22/94
		Gamma		
		Iso PTU		
B4Ø5Ø2	SOIL	VOC	G2342Ø5Ø	6/22/94
		TOC		
		Anion	F3146Ø5Ø	
		SVOC/Pest/PCB		
		Metals/Cyn		
		Gamma		
		Iso PTU		
		Exp		
B4Ø6Ø1	SOIL	VOC	G2342Ø5Ø	6/22/94
		TOC		
		Anion	F3146Ø5Ø	
		SVOC/Pest		
		Metal/Cyn		
		Gamma		
		Iso PTU		
		Exp		
B4Ø6Ø2	SOIL	VOC	G2342Ø5Ø	6/27/94
		TOC		
		Met/Cyn	F3146Ø5Ø	
		Gamma		
		Iso PTU		
		Anions		
		Exp		
		SVOC/Pest		
B4ØØØ2	Soil	VOC	G2342Ø5Ø	6/28/94
		TOC		

Container Lot # Log

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY, EXTENDED PHASE PROJECT NO: 3[illegible]

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE U[illegible]
B4ØØØ2	SOIL	SVOC/Pest	F3146Ø5Ø	6/28/94
		Metal/Cyn		
		Anions		
		Exp		
		Gamma		
		Iso PTU		
B4Ø9Ø2	SOIL	SVOC/Pest	F3146Ø5Ø	6/28/94
		Metal/Cyn		
		Anion		
		Gamma		
		Iso PTU		
		VOC	G2342Ø5Ø	
		TOC		
B4Ø9Ø1	SOIL	TOC	G2342Ø5Ø	6/28/94
		VOC		
		Anions	F3146Ø5Ø	
		SVOC/Pest		
		Metal/Cyn		
		Gamma		
		Exp		
		Iso PTU		
B4ØØØ1	SOIL	VOC	G2342Ø5Ø	6/28/94
		TOC		
		SVOC/Pest	F3146Ø5Ø	
		Metal/Cyn		
		Anions		
		Gamma		
		Iso PTU		
		Exp		

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
B4Ø412	SOIL	VOC	G2342Ø5Ø	6/29/94
		TOC		
		SVOC/Pest	F3146Ø5Ø	
		Metal/Cyn		
		Anions		
		Gamma		
		Iso PTU		
		Exp		
B4Ø4Ø2	SOIL	VOC	G2342Ø5Ø	6/29/94
		TOC		
		Anions	F3146Ø5Ø	
		Gamma		
		Iso PTU		
		Pest/PCB/SVOC		
		Metal/Cyn		
~~B4Ø4Ø4~~ JPH 6/29/94		Exp		
B4Ø4Ø1	SOIL	VOC	G2342Ø5Ø	6/29/94
		TOC		
		Anions	F3146Ø5Ø	
		Gamma		
		Iso PTU		
		SVOC/Pest/PCB		
		Exp		
B4Ø3Ø1	SOIL	VOC	G2342Ø5Ø	6/29/94
		TOC		
		Anion	F3146Ø5Ø	
		SVOC/Pest		
		Metal/Cyn		
		Gamma		

Container Lot # Log

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OUS,NEW PROPERTY, EXTENDED PHASE PROJECT NO: 3466

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE U
B4Ø3Ø1	SOIL	Iso PTU	F3146Ø5Ø	6/29/94
↓	↓	Exp	↓	↓
B4Ø3Ø2	Soil	VOC	G2342Ø50	6/29/94
		TOC	↓	
		Iso PTU	F3146Ø5Ø	
		Gamma		
		Exp		
		SVOC/Pest		
		Metal/Cyn		
↓	↓	Anions	↓	↓
B4Ø311	SOIL	VOC	G2342Ø5Ø	6/29/94
		TOC	↓	
		Anion	F3146Ø5Ø	
		Exp		
		Metal/Cyn		
		SVOC/Pest		
		Gamma		
↓	↓	Iso PTU	↓	↓
B4Ø2Ø1	SOIL	VOC	G2342Ø5Ø	6/30/94
		TOC	↓	
		Anion	F3146Ø50	
		Gamma		
		Iso PTU		
		Exp		
		SVOC/Pest		
		Metal/Cyn	↓	
B4Ø2Ø2	SOIL	VOC	G2342Ø5Ø	
		TOC	↓	
↓	↓	SVOC/Pest	~~G2342Ø5Ø~~ 9PK 6/30/94 F3146Ø5Ø	↓

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VOC Trip Blank, Equip. Rinse Blanks, Rinsate Blanks

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
B4Ø2Ø2	SOIL	Anion	F3146Ø5Ø	6/3Ø/94
		Gamma		
		Iso PTU		
		Exp		
		Metal/cyn		
SDØ7Ø1	SOIL	VOC	G2342Ø5Ø	7/5/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/cyn		
		Gamma		
		Iso PTU		
		Exp		
SDØ8Ø1	SOIL	VOC	G2342Ø5Ø	7/5/94
		SVOC/Pest/PCB		
		Metal/cyn		
		Gamma		
		Iso PTU		
		Exp		
SD14Ø1	SOIL	VOC	G2342Ø5Ø	7/5/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/cyn		
		Gamma		
		Iso PTU		
		Exp		
		Anions		
SD15Ø1	SOIL	VOC	G2342Ø5Ø	7/5/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/cyn		
		Gamma		
		Iso PTU		

Container Lot # Log

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE PROJECT NO: 346

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE US
SD15Ø1	SOIL	Exp	F3146Ø5Ø	7/5/94
↓	↓	Anions	↓	↓
SD12Ø1	SOIL	VOC	G2342Ø5Ø	7/6/94
SD12Ø1	SOIL	Gamma	F3146Ø5Ø	
		Iso PTU		
		SVOC/Pest		
		Metal/Cyn		
		Exp		
		Anions		
~~SD13Ø1~~ SD13Ø1	SOIL	VOC	G2342Ø5Ø	7/6/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/Cyn		
		Anions		
		Exp		
		Gamma		
		Iso PTU		
SD1311	SOIL	VOC	G2342Ø5Ø	7/6/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/Cyn		
		Anions		
		Exp		
		Gamma		
		Iso PTU		
SD16Ø1	SOIL	VOC	G2342Ø5Ø	7/6/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/Cyn		
		Anions		
		Exp		
		Gamma/PTU		

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE PROJECT NO: 34696

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
SD17Ø1	SOIL	VOC	G2342Ø5Ø	7/6/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/Cyn		
		Anion		
		Gamma		
		Iso PTU		
		Exp		
SD2ØØ1	SOIL	VOC	G2342Ø5Ø	7/6/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/Cyn		
		Exp		
		Gamma		
		Iso PTU		
		Anion		
SD18Ø1	SOIL	VOC	G2342Ø5Ø	7/6/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/Cyn		
		Anion		
		Exp		
		Gamma		
		Iso PTU		
SD19Ø1	SOIL	VOC	G2342Ø5Ø	7/6/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/Cyn		
		Gamma		
		Iso PTU		
		Anion		
		Exp		

Container Lot # Log

Sample Trans. Blanks Ambient Blanks

CDC Tracking ...

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE PROJECT NO: 3366

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE
SD06Ø1	SOIL	VOC	G2342Ø5Ø	7/6/94
		SVOC/Pest/PCB	F3146Ø5Ø	
		Metal/Cyn		
		Anion		
		Exp		
		Gamma		
		Iso PTU		
SD26Ø1	SOIL	VOC	G2342Ø5Ø	7-11-94
		SVOC/Pest	F3146Ø5Ø	
		Metal/Cyn		
		Anion		
		Gamma		
		Iso PTU		
		Exp		
SD22Ø1	SOIL	VOC	G2342Ø5Ø	7/11/94
		SVOC/Pest	F3146Ø5Ø	
		Metal/cyn		
		Anion		
		Gamma/IsoPTU		
		Exp		
SD21Ø1	SOIL	VOC	G2342Ø5Ø	7/11/94
		SVOC/Pest	F3146Ø5Ø	
		Metal/cyn		
		Anion		
		Gamma		
		Iso PTU		
		Exp		
SD2111	SOIL	VOC	G2342Ø5Ø	7/11/94
		SVOC/Pest	F3146Ø5Ø	

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
SD2111	SOIL	Metal/cyn	F3146Ø5Ø	7/11/94
		Anion		
		Gamma		
		Iso PTU		
		Exp		
SDØ1Ø1	SOIL	VOC	G2342Ø5Ø	7/11/94
		SVOC/Pest	F3146Ø5Ø	
		Metal/cyn		
		Anion		
		Gamma		
		Iso PTU		
		Exp		
SDØ2Ø1	SOIL	VOC	G2342Ø5Ø	7/11/94
		SVOC/Pest	F3146Ø5Ø	
		Metal/cyn		
		Anions		
		Gamma		
		Iso PTU		
		Exp		
SDØ3Ø1	SOIL	VOC	G2342Ø5Ø	7/11/94
		SVOC/Pest	F3146Ø5Ø	
		Metal/cyn		
		Anions		
		Exp		
		Gamma		
		Iso PTU		
B41ØØ2	SOIL	VOC	G2342Ø5Ø	7/11/94
		SVOC/Pest	F3146Ø5Ø	
		Metal/cyn		

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 3489

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
B41Ø Ø2	SOIL	Anions	F3146Ø5Ø	7/11/94
		Exp		
		Gamma		
		Iso PTU		
B41Ø12	SOIL	VOC	G2342Ø5Ø	7/11/94
		SVOC/Pest	F3146Ø5Ø	
		Metal/cyn		
		Anion		
		Gamma		
		Iso PTU		
		Exp		
SDØ4Ø1	SOIL	VOC	G2342Ø5Ø	7/12/94
		SVOC/Pest	F3146Ø5Ø	
		Metal/cyn		
		Anions		
		Gamma		
		Exp		
		Iso PTU		
SDO5Ø1	SOIL	VOC	G2342Ø5Ø	7/12/94
		SVOC/Pest	F3146Ø5Ø	
		Metal/cyn		
		Gamma		
		Iso PTU		
		Exp		
		Anions		
B41ØØ1	SOIL	VOC	G2342Ø5Ø	7/12/94
		SVOC/Pest	F3146Ø5Ø	
		Anion		
		Metal/cyn		

pg 2Ø4

Container Lot # Log

Sample Rinsate Blanks Footbert Blanks

COC Tracking

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
B41ØØ1	SOIL	Gamma	F3146Ø5Ø	7/12/94
		Iso PTU		
		Exp		
PSØØØ1	WTR	Pest	Not listed	7/13/94
		PCB		
		SVOC		
		Exp		
		Alkalinity Anions, TDS,	3187Ø82	
		Metal		
		Cyanide		
		TKN, TP, TOC		
W4ØØØ1	WTR	Alkalinity	C4Ø7ØØ1Ø	7/14/94
		SVOC	H3182Ø1Ø	
		Pest/PCB		
		TSS / TDS	C4Ø7ØØ1Ø	
		VOA	B3228Ø2Ø	
		Exp	H3182Ø1Ø	
		NO_2/NO_3	C4Ø7ØØ1Ø	
		Metal		
		Cyanide		
ABØØ13	WTR	VOA	B3228Ø2Ø	7/14/94
BBØØ13				
W397Ø1	WTR	Pest/PCB	H3182Ø1Ø	7/17/94
		Exp		
		Anions	C4Ø7ØØ1Ø	
		TDS		
		TSS		
		Tritium, TOC	H3182Ø1Ø	
		SVOC		

SAMPLE CONTAINER LOT NUMBER LOG

PROJECT NAME: EG&G MOUND OUS NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

SAMPLE ID	MATRIX	ANALYSIS	LOT NUMBER	DATE USED
W3970 1	WTR	Metals	C4070 10	7/19/94
↓	↓	Cyanide	↓	↓
		NO_2/NO_3		
		Alkalinity		
		TKN/TP		
W4020 1	WTR	Iso PTU; Gamma;	C4070 10	7/20/94
↓	↓	TDS; Anions; Metals;	↓	↓
		NO_2/NO_3; Cyanide;	C3231 02	
		TSS; Alkalinity; TKN/TP		
		SVOC; Pest; Exp; H^3; TOC	H3182 01	
		VOA	B3228 01	
W4100 1	WTR	SVOC/Pest/PCB	H3182 01	7/21/94
↓	↓	Anions; TSS/TDS;	C4070 10	↓
		Cyanide; Metal; Cy	↓	
		VOA	B3228 02	
		TOC; Tritium; Exp	H3182 01	
		Gamma, Iso PTU,	C4070 10	
		NO_2/NO_3, ALK	↓	

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE: Marlene Swift 919-406-1626

ORIGINATOR: J. Humpert

ORGANIZATION: CompuChem

DATE CONTACTED: 6-13-94

ADDRESS: CITY: STATE ZIP:

Telecon: [X] Visit: [ ]

SUBJECT: Bottle Request

DISCUSSION:

J. Humpert requested more 8-oz (192) jars to be delivered on 6/14/94 to Miamisburg Fedex office: 2578 Corporate Place
Miamisburg, OH 45342
1-800-238-5355

COMMENTS, ACTION, DATES

M. Swift said jars would be bulk shipped on 6/14/94.

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE: Marlene Swift 919-406-1626

ORIGINATOR: JPH 6/15/94 ~~J. Hum~~ J. Humpert

ORGANIZATION: CompuChem

DATE CONTACTED: 6/15/94 1000

ADDRESS: CITY: STATE ZIP:

Telecon: [X] Visit: [ ]

SUBJECT: Bottles request

DISCUSSION:

Ordered sample bottles - see task activity sheet (pg. 4) for details. Compuchem will also include fedex forms with sample savers for shipment.

COMMENTS, ACTION, DATES

M. Swift will have jars delivered to fedex on Monday 6/20/94.

Container Log # Log | Trip Blank Tracking | Contact Reports | COC Tracking Form

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE: J. Humpert (SAIC)

ORIGINATOR: Marlene Swift

ORGANIZATION:

DATE CONTACTED: 6/15/94 1015

ADDRESS: CITY: STATE ZIP:

Telecon: ☒ Visit: ☐

SUBJECT: Bottle broken on receipt

DISCUSSION:

One 8-oz sample from B4Ø1Ø2 was broken on receipt. CompuChem was able to composite sample into a 4-oz jar.

COMMENTS, ACTION, DATES

No action required by SAIC

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE: Marlene Swift

ORIGINATOR: Joletta Humpert

ORGANIZATION: CompuChem

DATE CONTACTED: 6/16/94

ADDRESS: CITY: STATE ZIP:

Telecon: ☒ Visit: ☐

SUBJECT:

DISCUSSION:

Only sent 9 trip blanks since you're just going to send one per day and we don't want them sitting around. Samples from 6/15/94 received ok at correct pH and temp.

COMMENTS, ACTION, DATES

None.

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE: Marlene Swift	ORIGINATOR: M. Swift
ORGANIZATION: CompuChem	DATE CONTACTED: 6/17/94
ADDRESS: CITY: STATE ZIP:	Telecon: [X] Visit: [ ]
SUBJECT:	
DISCUSSION: Returned call to M. Swift. She informed me that 95 samplesavers ~~leave~~ are to be delivered on Monday and the same number on Tuesday.	COMMENTS, ACTION, DATES

GPH 6/20/94

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY - EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE: Natalie Carter 919-406-1665	ORIGINATOR: J. Trumpeit
ORGANIZATION: CompuChem	DATE CONTACTED:
ADDRESS: CITY: STATE ZIP:	Telecon: [X] Visit: [ ]
SUBJECT:	
DISCUSSION: Contacted N. Carter @ sample shipment of 6/20/94 - 11 boxes for Ops Area and 4 boxes and a cooler for NP.	COMMENTS, ACTION, DATES

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE **PROJECT NO: 34896**

INDIVIDUAL CONTACTED, TITLE, PHONE: Marlene Surft 919-406-1626	ORIGINATOR: J Humpert
ORGANIZATION: CompuChem	DATE CONTACTED: 6/27/94
ADDRESS: CITY: STATE ZIP:	Telecon: ☒ Visit: ☐
SUBJECT:	

DISCUSSION:	COMMENTS, ACTION, DATES
left message for Marlene that I need trip blanks - 18 of the ones I have have air bubbles.	Will call her again

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE **PROJECT NO: 34896**

INDIVIDUAL CONTACTED, TITLE, PHONE: Marlene Surft	ORIGINATOR: J Humpert
ORGANIZATION: CompuChem	DATE CONTACTED:
ADDRESS: CITY: STATE ZIP:	Telecon: ☒ Visit: ☐
SUBJECT:	

DISCUSSION:	COMMENTS, ACTION, DATES
Received call from Marlene. Explained trip blank air bubble problem. They will send 20 more for tomorrow delivery.	

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE: Marlene Swift	ORIGINATOR: J. Humpert
ORGANIZATION: Compuchem	DATE CONTACTED: 7/6/94
ADDRESS: CITY: STATE ZIP:	Telecon: [X] Visit: [ ]
SUBJECT:	

DISCUSSION:	COMMENTS, ACTION, DATES
Called to get more trip blanks - they will ~~ship~~ 7/6/94 ship more tomorrow. Will ship 8 on Thurs. and 8 on Monday?	

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY , EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE: Marlene	ORIGINATOR: J. Humpert
ORGANIZATION: Compuchem	DATE CONTACTED: 7/11/94
ADDRESS: CITY: STATE ZIP:	Telecon: [X] Visit: [ ]
SUBJECT:	

DISCUSSION:	COMMENTS, ACTION, DATES
Called to get (again) trip blanks, Custody seals, and samplesavers. Wants me to call back tomorrow with Mound address.	

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE: Marlene	ORIGINATOR: J. Humpert
ORGANIZATION:	DATE CONTACTED: 7-12-94
ADDRESS: CITY: STATE ZIP:	Telecon: [X] Visit: [ ]
SUBJECT:	
DISCUSSION: Ordered 200 Custody Seals, 12 Trips, 25 Samplesavers, and some blue ice to be delivered to SAIC Trailer tomorrow. Gave address for Mound Golf Course snack bar - 810 Mound Ave.	COMMENTS, ACTION, DATES

CONTACT REPORT

PROJECT NAME: EG&G MOUND OU5,NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

INDIVIDUAL CONTACTED, TITLE, PHONE:	ORIGINATOR:
ORGANIZATION:	DATE CONTACTED:
ADDRESS: CITY: STATE ZIP:	Telecon: [ ] Visit: [ ]
SUBJECT:	
DISCUSSION:	COMMENTS, ACTION, DATES

A.4 SITE MANAGER LOGBOOK

EG & G MOUND

OU5

SITE MANAGER
LOGBOOK

OPS AREA PHASE I
NEW PROP EXTND PHASE

Russ Tussings 4800 3400

SITE MANAGER LOG BOOK

PROJECT TITLE: EG&G MOUND OU5 OPERATIONAL AREA PHASE I RI/FS FIELD INVESTIGATIONS

WORK SITE: *MOUND PLANT*
Miamisburg, Ohio
OU5 New Property

ACTIVITY: *Mound OU5 OPERATIONAL AREA Phase 1 RI/FS Field Investigations*

CONTRACT #: *BOA 52264*
TASK ORDER: *34896*

PROJECT MANAGER: *Thomas Tank*
COMPANY NAME / ADDRESS: *Science Applications International Corporation*
4031 Colonel Glenn Hwy ,Dayton, Ohio 45431
TELEPHONE NUMBERS: *(513) 429-2699*

SUPERVISORS: *OU5 Manager: Alan Spesard (513)865-3859*
SAIC Proj. Manager: Thomas Tank (513)429-2699

EMERGENCY RESPONCE: *Police / Ambulance / Fire 911 or 865-4040*

PROCEDURES: *SOP 1.1*

START DATE: 5/11/94
END DATE:

TABLE OF CONTENTS — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — PROJECT NO: 3489

PAGE	FIELD LOG		PAGE	FIELD LOG	
1	TASK TEAM ACTIV. SHEET	5/11/94	31	TASK TEAM ACTIV. SHEET	6/16/94
2	"	5/12/94	32	"	"
3	"	5/16/94	33	"	6/20/94
4	"	5/17/94	34	"	6/21/94
5	"	5/18/94	35	"	"
6	"	5/19/94	36	"	6/22/94
7	"	5/23/94	37	"	"
8	"	5/23/94	38	"	"
9	"	5/24/94	39	"	6/23/94
10	"	5/24/94	40	"	"
11	"	5/25/94	41	"	"
12	"	5/26/94	42	"	6/27/94
13	"	5/26/94	43	"	"
14	"	5/31/94	44	"	"
15	"	6/1/94	45	"	6/28/94
16	"	6/1/94	46	"	"
17	"	6/2/94	47	"	"
18	"	6/2/94	48	"	6/29/94
19	"	6/6/94	49	"	"
20	"	6/7/94	50	"	"
21	"	6/8/94	51	"	6/30/94
22	"	6/9/94	52	"	"
23	"	6/13/94	53	"	"
24	"	"	54	"	7/5/94
25	"	6/14/94	55	"	"
26	"	"	56	"	7/6/94
27	"	"	57	"	"
28	"	6/15/94	58	"	7/7/94
29	"	"	59	"	"
30	"	"	60	"	"

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PII

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 PROJECT NO.: 34896

PAGE	FIELD LOG		PAGE	FIELD LOG	
61	TASK TEAM ACTIV. SHEET;	7/8/94	91	TASK TEAM ACTIVITY SHEET;	8/2/94
62	" ;	7/11/94	92	" ;	8/3/94
63	" ;	"	93	" ;	8/4/94
64	" ;	7/12/94	94	" ;	8/8/94
65	" ;	7/13/94	95	" ;	8/9/94
66	" ;	"	96	" ;	8/10/94
67	" ;	7/14/94	97	" ;	8/11/94
68	" ;	"	98	Task Team Activity Sheet;	8/15/94
69	" ;	"	99	" ;	8/16/94
70	" ;	7/15/94	100	" ;	8/17/94
71	" ;	7/18/94	101	" ;	8/18/94
72	" ;	"	102	" ;	8/22/94
73	" ;	7/19/94	103	" ;	8/23/94
74	" ;	"	104	" ;	8/24/94
75	" ;	7/20/94	105	" ;	8/25/94
76	" ;	"	106	Task Team Activity Sheet;	8/29/94
77	NEW PROP. GEOTECH. SAMPLE SUMMARY		107	" ;	8/30/94
78	"		108	" ;	8/31/94
79	"		109	" ;	9/1/94
80	NEW PROP DRILLING - MULTIPLE HOLE SUMMARY		110	" ;	9/6/94
81	Task Team Activity Sheet;	7/21/94	111	" ;	9/7/94
82	" ;	7/22/94	112	" ;	9/8/94
83	" ;	7/25/94	113	" ;	9/12/94
84	" ;	"	114	" ;	9/13/94
85	" ;	"	115	Task Team Activity Sheet	9/14/94
86	" ;	7/26/94	116		
87	" ;	"	117		
88	" ;	7/27/94	118	NO ENTRY	
89	" ;	7/28/94	119		
90	" ;	8/1/94	120		

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PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 P/III PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
121	NO ENTRY	151	NO ENTRY
122		152	
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SITE MANAGER LOGBOOK

PSL

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
181	NO ENTRY	211	NO ENTRY
182		212	
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SITE MANAGER LOGBOOK

P. V

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
241	TAILGATE SAFETY FORM; 5/11/94	271	TAILGATE SAFETY FORM; 7/6/94
242	" ; 5/12/94	272	" ; 7/12/94
243	" ; 5/16/94	273	" ; 7/13/94
244	" ; 5/17/94	274	" ; 7/14/94
245	" ; 5/18/94	275	" ; 7/18/94
246	" ; 5/19/94	276	" ; 7/21/94
247	" ; 5/23/94	277	" ; 7/27/94
248	" ; 5/24/94	278	" ; 8/22/94
249	" ; 5/25/94	279	" ; 8/23/94
250	" ; 5/26/94	280	" ; 8/25/94
251	" ; 5/31/94	281	" ; 8/29/94
252	" ; 6/1/94	282	" ; 9/1/94
253	" ; 6/2/94	283	NO ENTRY
254	" ; 6/6/94	284	
255	" ; 6/7/94	285	
256	" ; 6/8/94	286	
257	" ; 6/9/94	287	
258	" ; 6/13/94	288	
259	" ; 6/14/94	289	
260	" ; 6/15/94	290	
261	" ; 6/16/94	291	
262	" ; 6/20/94	292	
263	" ; 6/21/94	293	
264	" ; 6/22/94	294	
265	" ; 6/23/94	295	
266	" ; 6/27/94	296	
267	" ; 6/28/94	297	
268	" ; 6/29/94	298	TAILGATE SAFETY FORM; 9/6/94
269	" ; 6/30/94	299	" ; 9/7/94
270	" ; 7/5/94	300	" ; 9/8/94

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SITE MANAGER LOGBOOK
P VI

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

PROJECT NO: 34896

PAGE	FIELD LOG	PAGE	FIELD LOG
301	TAILGATE SAFETY FORM; 9/12/94	331	NA
302	" ; 9/13/94	332	
303	" ; 9/14/94	333	
304	END OF ACTIVITIES - NO MORE	334	
305	ENTRIES IN THIS BOOK	335	
306	NA	336	
307		337	
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311		341	
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TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.1

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 5/11/94 TIME: 0700 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS	SAIC	BERNARD KIENOW	SHAW, WEISS, DENNIPLES
ERIC SAYLOR	SAIC	ART TURPIN	
EVELYN MENGHER-	SAIC	JEFF KUNKA	
		JOHN HALEY	

Narrative (include time and location):

@ Mound Post 2 @ 0700. ES, EM & survey crew attend Mound orientation. JD to trailer to prep for briefing and first day of clearing/staking.

0800 Begin briefing

0900 Complete briefing. Out to Post 2 (grid point 050) to get surveyors started. Joyce Geisler on site. Find error on site map; 1W on map is really 0W, 2W = 1W, etc. Put in a few pins in SE corner by Post 2. Surveyors leave site to cut pins in half

1200 Break for lunch.

1300 Return fm. lunch. Per K. McMahan, surveyors can have their 2-way radios on site w/o permit. KM will try to be onsite tomorrow morn. Continue working in SE corner on North lines 1-6. Surveyors leave about 1500 to pick up equip. @ trailer. Logbook entries. Prep for tomorrow's work.

Last entry

Daily Weather Conditions: A.M. cool, clear, sl. breezy, 45°F

P.M. cloudy, windy, 65°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 34896

Date (mm/dd/yy): 5/12/94 TIME: 0700 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS	(SMC)	BERNARD KIENOW	(SWD)
ERIC SAYLOR	(SMC)	ART TURPIN	(SWD)
EVELYN MEACHER	(SMC)	JEFF KUNKA	(SWD)

Narrative (include time and location):

0700 @ site @ 0700. Conduct Tailgate briefing. K. McMahan onsite briefly. Says that 2-way radios and phones are completely unrestricted. Discuss work plans w/ SWD. They will work to the water tower then west off the hill. Prep equipment - build weedwacker

0815 At site w/ SWD. Continue working in SE corner of OU5. Identify several HP and restricted zones.

1200 Break for lunch. T. Tank on site

1245 Back for lunch. SWD have truck problems (yesterday also); they return to site around 1400. Move to SW corner of OU5 - heavily vegetated.

1730 Back to trailer, clean up, prep equip. for Monday.

1800 Offsite - EOD

CAM entry

Daily Weather Conditions: A.M. Clear cool calm 45°F

P.M. Warm, sunny 75°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET

P.3

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 5/16/94 MON TIME: 0700 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS	(SMC)	BERNARD KIENOW	(SWD)
ERIC SAYLOR	↓	ANT TURPIN	↓
EVELYN MEACHER		JEFF LUNKA	

Narrative (include time and location):

@ tailgate @ 0700. Prep equip. Conduct Tailgate meeting. Discuss days activities; SWD will try to work on NONAOC grid by Area 13 to establish control. ES & EM will continue cutting 3N line. JD in trailer doing paperwork.

0800 @ site. Work on 2N & 3N line around 16W. Also work in NE corner of site.

1200 Break for lunch

1230 Continue w/ 16W line clearing so SWD can put in points & at angles.

NOTE: JD prepared forms, drop off 2 wk look ahead to J Wisler. JD off site @ 1230.

1800 Back @ trailer (ES, EM). Prep for tomorrow. off site @ 1815

Last Entry

Daily Weather Conditions: A.M. clear cool & calm 50°F

P.M. Same warming to 70°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK 7.4

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 5/17/94 TIME: 0700 PAGE 1 OF

Task Team Members:

JOHN DAVIS	(SMC)	BERNIE KIENOW	(SWD)
ERIC SAYLOR	↓	ART TURPIN	↓
EVELYN MEAGHER		JEFF KUNKA	

Narrative (include time and location):

0700 @ trailer. Conduct Tailgate Safety Mtg. J. Geisler on site. She doesn't want us working N. of Area J in D&D zone until she talks w/ HP. Discuss work plan. Will continue cutting 16W line.

0800 @ site.

0830 Mike O'Donoghue & Roy Mowen @ trl. Discuss HP coverage. Will schedule HP coverage for A22 first of next week - will use Jeff Tackett. Re D&D: they say were OK here as long as we stay out of road rope.

- Continue working in SW corner on lines 5N, 6N, 7N, 8N mostly clearing.

1200 Break for lunch

1230 Back from lunch. Start cutting on 9N from 6W to give surveyors control.

NOTE: JD offsite @ 1630

1500 Back to trl (ES, SM). EOD

LAST ENTRY

Daily Weather Conditions: A.M. Clear cool breezy 50°F

P.M. Same, warming to 60°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P5

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 5/18/94 TIME: 07 00 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS	SAIC	BERNARD KLENOW	SWD
ERIC SAYLOR	↓	ART TURPIN	↓
EVELYN MEAGHER		JEFF KUNKA	

Narrative (include time and location):

0700 @ t/e. Conduct Tailgate Meeting. Discuss days work orders. JD works on saw maintenance.
Note: J. Cassler on site @ 0800. Update her map. JD tells her about HP mtg yesterday - she concurs.

0800 @ site. Work in area around Area J chasing on 19N and 9N
Note: JD offsite @ 1200. Drop off chains @ Miamisburg for sharpening. Call R. Tusing to set up security escort for tomorrow.

1200 Break for lunch

1230 Continue working around Area J.

1700 Back to t/e. Prep for tomorrows activities.

1730 Offsite

Last Entry

Daily Weather Conditions: A.M. Sunny Breezy, 50°F

P.M. Some warming to 65°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE: TASK NO: 234896

Date (mm/dd/yy): 5/19/94 TIME: 0700 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS	SAIC	BERNARD KIENOW	SWD
ERIC SAYLOR	↓	ART TURPIN	↓
EVELYN MEALHER		JEFF KUNKA	

Narrative (include time and location):

0700 @ site. (T/R). Load truck w/supplies

0730 Meet guards @ Bldg 23 by Area 13. SWD surveys around Bunkers etc.

Note: @ 0900 JD leaves site to Attend New Prop. Extended Phase Kickoff Mtg @ OSE Bldg.

1130 Left Bunker area w/guards

1200 Break for lunch

1400 JD meets K. McMahan and Hoppy? Out to A21 to try to define boundary. Find center of bunker but can't find perimeter due to heavy vegetation and lack of deep soil on surface. FIDLER readings 10-15K above background in bunker area. KM suggests that to properly define boundary, it necessary to do subsurface soil samples w/ appropriate PPE and HP support — which is not in our scope of work.

1500 JD walks lines IN thru 7N (WEST half). Some cutting on GAL. Contact Tim Pedro and put Sharon Eccleemeyer on Access List, Orientation for Monday.

Last Entry

Daily Weather Conditions: A.M. Cool, hazy clear 50°F

P.M. Some Clouds 60°F

Recorded By [signature] QA Checked By [signature] 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P7

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): 5/23/94 MON TIME: 07 00 PAGE 1 OF 2

Task Team Members:

JOHN DAVIS	SAIC	BRAD RICHARDSON	SAIC
EVELYN MEACHER	↓	CHRIS HALLEY	↓
SHARON KACIKMEYER	↓	BERNARD KIENOW	SWD
		ART TURPIN	↓
		JEFF KUNKA	↓

Narrative (include time and location):

0700 @ trailer. Prep equipment.

0730 give orientation to SK, BR, CH. Do Tailgate Safety meeting. Arrange crews; BR & CH working on lines 2N-7N; EM, SK w/ surveyors in Area 22. JD calls HP & arranges for HP coverage in A22. K. McMahan on site; says they will collect soil spls in A21 to determine hazard, then suggests we stake/clr as planned. J. Geisler on site; updates her map, disc. permitting. JD tells her will do all stake/clr before 6/13, then will do field investigations.

NOTE: JD offsite @ 0830.

1130 Brad R. & Chris H. back at trailer; between 9:15-11:30 Chopped 4N Line between 15 W and 19 W; Also staked these locations

5/23/94 1700 This afternoon we staked 1N 23W, 5N 17W, 5N 13W, 6N 17W and points along 6N Line from 11W to 15 W. Then we chopped 14N Line from 10W to 13 W.

1715 Cut surveyors line-of sights in Areas 22 + 21 this morning + afternoon.

Daily Weather Conditions: A.M. SI overcast, 65°F, humid

P.M. Mostly sunny, 88°F, humid, breeze 5-10 mph

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): 5/29/94 TIME: 10:00 PAGE 2 OF 2

Task Team Members:

John Davis	SAIC	Brad Richardson	SAIC
Evelyn Meagher Hartzell	↓	Chris Holley	↓
Sharon Kriedemeyer	↓	Bernard Kirnow	SWD
		Art Turpin	↓
		Jeff Kunka	

Narrative (include time and location):

1000 Health Physics arrived at Area 22 to let us into the area (Sharon & Evelyn). The HP representative was Henry Robinson. He gave us brief instructions, including: 1) do not dig in the dirt, 2) do not place stakes in the ground then move them 3) do not stay in the area any more than necessary, especially on the mounds of dirt. He explained that the area contained buried debris, including cobalt, that was giving off some gamma rays. We were told that we didn't have to wear the rubber boots as long as we rinsed our boot after leaving the area. He gave us permission to enter the area unaccompanied during the day.

LMT Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By EVELYN MEAGHER QA Checked By

8/15/94

TASK TEAM ACTIVITY LOG SHEET

P.9c

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO.: 34896

Date (mm/dd/yy): 5/24/94 TUES TIME: 0700 PAGE 1 OF 2

Task Team Members:

JOHN DAVIS	SAIC	EVELYN MEACHER	SAIC
BRAD RICHARDSON	↓	SHARON KREITKMEYER	↓
CHRIS HAUFY		BERNARD KIENOW	SWD
		ART TURPIN	
		JEFF KUNICA	↓

Narrative (include time and location):

0700 All tlr. Prep for days activities. Team status. Conduct safety mtg.

0730 Surveyors to Bldg 49 to meet Security; JD left message w/ Russ Tusing yesterday for escort. EM & SK to A22 to cut lines; JD, BR, CH to AJ to stake, cut lines. NOTE: J. Geisler w/ tlr. Discuss intrusive permitting in Ops Area. JD gives JG Activity sched. JG will permit in "blocks", prob. starting in SE corner and permitting 400x400' blocks. JG says she's getting swamped. JD agrees to stake KC borings in A2 so she can permit those.

1700 Brad and Chris team back. Today in Area J Staked J-A-13 thru J-E-1; J-F-13 thru J-F-5; and J-6-13 thru J-6-9; Cut lines down hillside on west side of Area J. (along 13, 12, 11, 10, 9, 8, 7 and part of 6 where I encountered alot of poison ivy. For the surveyors we chop 21-A-4 thru 21-A-1; Also chopped 13-A-3 thru 13-A-6.

Daily Weather Conditions: A.M. Overcast, Muggy, 75°F

P.M. Partly Sunny, Scattered Showers, 85°F, Wind 15-20 mph W

Recorded By [signature] QA Checked By [signature] Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.10

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 34896

Date (mm/dd/yy): 5/24/94 TIME: NA PAGE 2 OF 2

Task Team Members:

Brad Richardson — Sharon Kriete-meyer

Chris Holley

Evelyn Meagher-Hartzell

Narrative (include time and location):

continued: Safety Officer, Eddie Magness gave us a safety visit. Also a maintenance man said that there will be work done on the H_2O tower next month and that they will be cordoning-off a portion of Area J

morning

Sharon + Evelyn worked in Area 22 again. This time Health Physics sent Roy + Jeff, who wanted to check us each time we left the area. They were not concerned about us going between the area and the truck, but ~~they ch~~ Jeff did check our boots + hands with the FIDLER when we left for lunch. Had difficulties starting the chainsaw most of the morning.

1230 After lunch, ~~the~~ Evelyn + Sharon's chain saw would not start. Worked on it until about 2:30, when Greg got it running but not very well. Evelyn made arrangements to get it worked on + took it to be serviced. Sharon stated in Area J

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By [signature] 8/15/94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P.11

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 5/25/94 TIME: 07 00 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS — EVELYN MEACHER

BRAD RICHARDSON — SHARON KALTENMEYER

CHRIS HALLEY

Narrative (include time and location):

0700 @ t/r. Surveyors not here today. Conduct Tailgate Briefing. Assign work; BR & CH to A22, EM, SM to A22 JD to town to pick up chainsaw etc.

1500 Brad & Chris chopped and cleared Line M in Area J Between 7 & 1. Then up to Area 21: Staked perimeter From A-1 to A-7 to J-7 to J-1; then Chopped Lines I & H; started chopping Lines G & F (continued tomorrow). Leave for meeting @ Dayton Off.

0730 Sharon & Evelyn cleared & staked in Area 22. Jeff From H&P checked our hands & boots for radiation before lunch (1130) & after we finished Area 22 (1500).

1500 Sharon & Evelyn staked in Area J.

1600 Evelyn left site to ~~drop~~ JMD 5/25/94 pick up chainsaw

1730 Sharon left site to go home

LAST ENTRY

Daily Weather Conditions: A.M. overcast, sl. rain, then clearing 70°F

P.M. same, warming to 75°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.12

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 5/26/94 TIME: 0700 PAGE 1 OF 2

Task Team Members:

Brad Richardson — Evelyn Meagher-Hartzell
Chris Halley — Sharon Krietemeyer
John Davis

Narrative (include time and location):

0730 - On Site; Surveyors here today, Conduct Health and Safety briefing. Assign work BR & CH clearing on Area 21; EM & SK going w/ security to access - sensitive areas.

1040 - Brad & Chris back @ trailer. From 8:00 to 8:30 chopped Lines 6 & F and started on E in Area 21; Surveyors asked us to chop lines 1 & 5 in Area J; At 9:30 we were done chopping line 5 when Chris said that he had cut his finger: Chris' narrative on the event: Was clearing sides of excess brush. Laid machette to the side to pull branches down. Lost balance and placed hand down to stop fall. Machette cut through glove and finger (right index finger). Took off to hospital. Realized cut was not that bad. Washed cut out at home and applied sterile gauze. No problem.

Sharon & Evelyn: Met security @ 0730 & ~~stacked~~ EMH stakes in FENCE IN secure areas til 1130

Daily Weather Conditions: A.M. Mostly Cloudy, 55°F, Wind 10-15 NNW.

P.M. NA

Recorded By Brad Richardson QA Checked By [signature]

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P. 13

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO. 34896

Date (mm/dd/yy): 5/26/99 TIME: N/A PAGE 2 OF 2

Task Team Members:

N/A

Narrative (include time and location):

1130 Sharon & Evelyn Lunch

1650 Back @ Trailer: Finished Lines A B C D & E in Area 21 [not staked yet. Next week can finish staking Area 21 then ~~exit~~ 5/26/99 chop in other direction]

1230 - Staked in secure areas w/ security escorts until 1700 (Sharon & Evelyn)

1730 left site (Sharon & Evelyn)

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. Mostly sunny, 65°F, Wind 10-15 NNW

Recorded By [signature] QA Checked By [signature]

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P-14

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 5/31/94 TUES TIME: 07 00 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS	SAIC	SHARON KRUTHAUPER	SAIC
CHRIS HALLEY	↓	BERNARD KIENOW	SWD
EVELYN MEACHER	↓	ANT. TURPIN	↓
		JEFF KUNKA	↓

Narrative (include time and location):

0700 @ trailer. Conduct Tailgate mtgs. Discuss work plans. J. Geisler on site: says SWD can go to Bldg 27 (explosives) but must be done by 9:00. SWD expects to finish today.

- Note: JD expecting Tim Bohmer for Bowker-Morner today but no-show.
- Note: Chris Halley off site @ 0800.

EM & SK will work closely w/ surveyors so they have all cutting they need.

0800 On site EM, SK mark A3, then move to A21 to finish clearing/staking. CH back on site around 930. JD & CH stake A7 (soil gas) and boreholes.

1200 Both crews @ t/k for lunch

1300 Continue work. EM & SK back to A21. CH off site again. JD to A7 to continue staking. Note: K. McMahan out till 6/14

Note: Surveyors done work. Off site @ approx 1030A.

1700 All back @ trailer to clean up. Off site @ 1730.

Last entry

Daily Weather Conditions: A.M. Clear, Cool, Calm, 50°F

P.M. Sunny, warming to 74°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P 15

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/1/94 TIME: 07:00 PAGE 1 OF 2

Task Team Members:

JOHN DAVIS	SMC	SHARON KEILHOLTZER	SMC
EVELYN MEACHER	↓	BRAD RICHARDSON	↓
CHRIS HALLEY			

Narrative (include time and location):

0700 @ HR. Prep equip. for day. Conduct Tailgate Mtg. J. Geisler on site; discuss util. clearances; Rod will start permitting today in SE corner. For Monthly Safety Report: CH's cut finger is not OSHA reportable.

0830-0930: JD takes Tim Boehmer to A7 to look @ borehole locs. All look OK if hole in HP area is on Road. Then to New Property. TB wants to scrape rd fm Benner Road, across creek, into meadow, and to Powerline Rd. Also scrape perimeter fence road. Also Hole in fence Road. All locs OK except B401 needs to be moved inside fence, B405 to Powerline Road.

0800 SK + EM to Area 21 to clear.

1115 SK + EM off site for lunch

1200 SK + EM back onsite. Went to Area 13 to stake and clear.

~~1230~~ 1430 EM slipped on steep hill. SK She hit a stump (~1" diameter), which knocked her visor up + poked her in the eye. SK drove her to the emergency room. The doctor said she had three scratches SK on her cornea SK but ~~has not~~ SK did not appear to have pierced the eye. The

Daily Weather Conditions: A.M. Warm + Sunny, ~75°F

P.M. Warm + Sunny, ~80°F

Recorded By [signature] QA Checked By [signature]

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P-16

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/1/94 TIME: NA : ____ PAGE 2 OF 2

Task Team Members:

John Davis — Sharon Krietemeyer
Evelyn Meagher — Brad Richardson
Chris Halley

Narrative (include time and location):

doctor gave her antibiotic eye drops and patches and released her.
1600 ~~EK~~ EM + SK ~~returned~~ EK returned to site.
1615 EM left the site for the day
1700 SK left the site for the day.
1700 BR & CH clearing on Area J hillside all day. Poison Ivy was very thick; wore Tyvek suit which slowed down work rate Did Lines 1, 2, 3, 4, 5.
1705 BR & CH left site

LAST ENTRY

Daily Weather Conditions: A.M. See previous page
P.M. " " "

Recorded By: Sharon Krietemeyer QA Checked By: [illegible]

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK: P17

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 6/2/94 TIME: 07 00 PAGE 1 OF 2

Task Team Members:

JOHN DAVIS — Chris Halley

SHARON KLIETEMEYER

Brad Richardson

Narrative (include time and location):

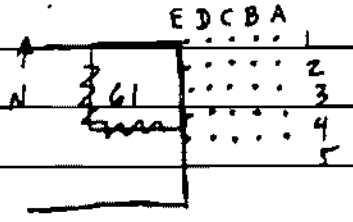
0700 @ tlr. Conduct H&S Mtg. Work assignments; SK, BR, & CH will all work together. Finish stake AJ, then to 3/SDB.

- NOTE: J. Geisler on site. JD discusses clearances. Informs JG of 6/13 start for soil gas and drilling in New Prop; 6/20 start for A7 drillings; 6/8-6/9 dozer work in New Prop. Arrange to meet here 10:30A Monday.

- NOTE: per disc. btwn Tom Trask & Alan Spreand

1) in wooded AOCs w/ difficult access - no FIDLER (which eliminates need for bi-directional lines); specifically hill-side of AJ, all of A21, and wooded portions of A22. Also applies to wooded area of A13

2) Place a 100' x 100' grid w/ 25-ft centers off Bldg 61.



JD completes forms for J. Geisler & drops off. Finishes locating A7 holes.

Daily Weather Conditions: A.M. sl. cloudy, cool, & breezy.

P.M. SAME

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P-18

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO. 34896

Date (mm/dd/yy): 6/2/94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

1100 K. McMahan onsite talking about details of injury incident. J. Davis offsite.

1100 SK, BR, & CH not able to do line 16 because no HP person was available

Chopped & staked line 15 N, staked 15 N 7W.

Chopped 14 N & staked 14 N 7W to 14 N 13 N.

Chopped a little on line 10 N.

1630 SK off site

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Monica 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.19

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): 6/6/94 MO TIME: 0730 PAGE 1 OF 1

Task Team Members:

Tom Davis — Matt Obloy
Brad Richardson
Chris Halley

Narrative (include time and location):

0730 Onsite. Some delay due to some acquired assigned soil work. J. Geisler onsite - wants medical update on Evelyn. Discuss clearances - no word yet from A. Spoke and regarding blanket approval for soil gas emplacement. Conduct H&S briefing.

0830 BR, CH, MO to Area 3/SDB to begin staking there. JD to HP Bldg to discuss coverage for dozer work in New Property. Talk w/ Roy Mowen; tell him dozer work on Wed & Thurs - his only concerned w/ contamination in Area 1. Discuss scheduling - tell him New Property drilling to start 6/13 w/ 2 rigs and soil gas survey in Ops Area to start 6/14. He thinks they might not be able to provide HP coverage for all.

1030 JD meets J. Geisler in A7 - show her the 15 A7 boring locations. Then stake Bldg 61 100' x 100'.

1200 JD offsite.

1100 BR, MO, & CH Staked most of Area 3; It began to storm at 1400 and continues now.

LAST ENTRY

Daily Weather Conditions: A.M. Sunny / Mostly Cloudy 78°F, West Wind
P.M. Severe Storms 75°F, Gusting Winds

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

P-20

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/7/94 TIME: 0730 PAGE 1 OF 1

Task Team Members:

Brad Richardson

Chris Halley

Narrative (include time and location):

0730 Onsite; BR & CH to finish staking Area 3 and then proceed on staking SDB Area. J. Geisler on site she said in area 3, locations G15, G14, F14, E14, D14, E13 may be directly over sanitary line. In area 3 Joyce said they will try to get a variance for everything other than telephone, electric and fire lines. Also in the wooded area, when intrusive procedures begins she or Ron will be with the crews.

17:00 In morning BR & CH chopped Lines A & B & C in Area 3 and staked those lines also. In afternoon began chopping additional lines in Area J (10 foot spacing.

LAST ENTRY

Daily Weather Conditions: A.M. Sunny, 65°F, Calm

P.M. " 85°F,

Recorded By [signature] QA Checked By [signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 6/8/94 TIME: 0715 PAGE 1 OF 1

Task Team Members:

Brad Richardson
Chris Halley
Eric Saylor

Narrative (include time and location):

0715 On Site; Eric Saylor's already here. Loading up van

0735 We are set up to have a guard escort us tomorrow from 0730 - 1530 inside the security areas. First thing tomorrow morning we have to contact our escort guard through guard post 2

0800 JOHN DAVIS ON SITE. MISC. PAPERWORK IN TRAILER, THEN to New Property to stake surface water/sediment sampling locations.

1700 BR, CH & ES left site; Today we cleared 5 more lines in Area J for the geophysical survey. Approx. 3½ more lines to clear in Area J for tommorrow. B.R. was off-site for another Project's meeting from 0830 to 1430

LMT ENTRY

BRR 6/8/94

Daily Weather Conditions: A.M. Mostly Cloudy, 60°F,

P.M. " " "

Recorded By [signature] QA Checked By [signature]

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE II — TASK NO.: 34896

Date (mm/dd/yy): 06/09/94 TIME: 0715 PAGE 1 OF 1

Task Team Members:

A Brad Richardson — Matt Obley
Chris Halley
Eric Saylor

Narrative (include time and location):

0715 B.R. & E.S. on site.
0730 CH on site; B.R & E.S will go back to Area J and finishish cleaning the geophysical lines. CH and M.O will go around w/ security and finishin staking w/in secure areas.
0800 J Geisler says there are some points near Area 7 and Area 3/SDB that will have to be move due to utility.
0830 CH + MO to stake secure areas 7; Sm/PP; and 13. BR + ES to finish geophysical lines in Area J. (12N15-12W
1200 Lunch
1245 CH + MO to Area 3/SDB to stake. BR + ES to stake and finish Area 3.
245-315 To Walmart for supplies (paint, bar oil, etc) CH + MO
0315 Both crews at Area 3/SDB to finish staking/CH WAT ENTRY

Daily Weather Conditions: A.M. Mostly Sunny 60°F, Calm
P.M. " " 80°F Slight wind

Recorded By [signature] QA Checked By [signature]

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.23

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 06/13/94 TIME: 0715 PAGE 1 OF 2

Task Team Members:

Eric Saylor, Mike Klidjeez, Mark Howard, Bonner-Morrow Crew
Chris Halley, Martha Cramer, Joetta Humpert
John Davis, Mike Monroe

Narrative (include time and location):

0730 ES, BH + JD on site.

0745 Rest of SAIC crew and Bonner-Morrow attend Contractor Orientation and a H/R. JD gives site orientation briefing. See H&S Tailgate mtg form.

0930: dozer operator to New Prop via Bonner Road - start working on South part of property. Tim Boehman of B.M back to yard to pick up hydropunches. SA

SAIC crews established:

Susan Austin, Martha Cramer: Cable tool
Mike Klidjeez, Eric Saylor: HSA
Mark Howard, Mike Monroe: Soil Gas.

Crews reading procedures, prepping for drilling. Waiting on fedx delivery from office.

- See phone call for Tom Tank: OK to do dozer work on Perimeter Road. Wells 397 & 398 sited OK. OK to doze a 10'x10' site.
- Blanket approval for soil gas for sanitary, sewer, water.

Other notes of interest:

per T. Tank; if its necessary to skid rig to collect a sample, decon of augers not necessary.

per Roy Mowen, excavation permit needs to be posted on rig.

Daily Weather Conditions: A.M. Sunny 70°F Calm
P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/25/94

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I TASK NO: 34896

Date (mm/dd/yy): 6/13/94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

Also per Roy Mowen, last sample of day needs to be a SSF @ 3:45 - HP quits @ 4:30.

per J. Geisler; cable on HSA is smashed - needs replacement before drilling. Cones need to go in road around 399 location.

per Hr Fm A. Spesard; excavate at intersection on perimeter road w. of Bldg 21 culvert w/ HP coverage. R. Mowen there @ 1400 so dozer can do that work.

per J. Geisler; HP is off @ 430 No exceptions. HSA came up steep road - Not allowed

- No drill start today due to lack of procurement. Field crew to rentize place for hammer and generator (hammer too small), crew to Meijers for misc, and Davis to Hazco (misc supplies and to change oil). Still missing radios, phones and other items.

6/13/94 JMD

~~1500~~ One vehicle delivered about 1130, 2nd vehicle @ 130.

1800 All crews offsite.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. humid, hot to 90°F

Recorded By [signature] QA Checked By Laura M. Manson 8/15/94

TASK TEAM ACTIVITY LOG SHEET

P.25

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 6/14/94 TIME: 0700 PAGE 1 OF 3

Task Team Members:

JOHN DAVIS, JOLETTA HUMPHREY, MARK ~~MIKE~~ HOWARD (MHO 6/14/94), MIKE KLIDJECE, ERIC SAYLOR (HSA), MIKE MONROE, SUSAN ~~AUSTIN~~ ABSTON, MARTHA CRAMER (CABLE TOOL), BOWIER-MORNER CREW

Narrative (include time and location): JD 6/14/94

0700 all staff @ t/r. Conduct HAS Meeting. Drill crews still prepping equipment. One of the OVA probes is working, will use Regional Soil HNU until replacement probe is found.

0830 Crews out to rigs. Waiting on drill permit for HSA

0915 Soil gas crew starts near Guard Post 2 but drill too small. Joletta will call Procurement for a Larsen drill. Crew to rental store for Larsen drill.

0995 Cable tool waiting on adaptor to drive 1st spoon for soil sample.

1035 JD delivers 6 miles of misc. supplies to HSA. Crew prepping to collect surface sample. Not drilling yet

1045 JD @ cable tool. Drilling. Crew has collected surf sample and is hammering to 3' to collect bedrock spl

Cable tool hit bedrock @ 3.8' @ W399. Missed sample - will skid rig and collect after well is installed.

1200 JD @ HSA. Surf. sample collected. Drilling to water table.

1200-1300 Break for lunch.

Daily Weather Conditions: A.M. hot humid clear 90°F

P.M. Same

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P-26

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO. 34896

Date (mm/dd/yy): 6/14/94 TIME: NA PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

per J. Geisler; for soil gas, only first four lines have been utility-cleared (1-4N); Rod is accompanying SG crew as they install. J. Geisler thinks this will slow us down. In A7, SG Block 3 (on grassy hill) is cleared. Block 1 (N. of pond) is nearly cleared - JG moved a few locations in line 3 1-3' N. or S. - moves are acceptable.

For A7 drilling:

#1: JG moved 6'N to accept. location - OK

#2: JG moved 5'S " " - OK

#3: in leach field. Is that what we want? yes. Not cleared

#4: Not cleared

#5: loc as staked OK

#6, 7: Need to be moved.

#8, 9, 10, 11: loc as staked OK

#12, 13, 14: Not cleared

#15: in D1D area. May require jukeline D&D support.

1400 JD @ cable tool. Poss. water @ ≐ 20'

1430 JD @ HSA: water @ ≐ 22'. Crew collecting soil sample, then will attempt Hydropunch.

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.27

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO. 34896

Date (mm/dd/yy): 6/14/94 TIME: NA: PAGE 3 OF 3

Task Team Members:

NA

Narrative (include time and location):

per T. Trask; Borehole #3 goes in leach field, just make sure we miss holding tank - J. Geisler should have map.

1600 HSA finishes B401; driller is bringing appropriate equipment tomorrow to collect grab water sample; depth @ ≐ 30'

Cable tool @ ≐ 30.' Might have water. Will leave hole open overnight. If there's water in the hole in the morning, will install well @ Site Geologist discretion

1700 Crews back to trailer. Misc chores; decon, spl mgt, etc.

1800 All personnel offsite.

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrar 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P28

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/15/94 TIME: 0700 PAGE 1 OF 3

Task Team Members:

JOHN DAVIS JOCETTA HUMPERT — MIKE KLIDJECZ EVELYN MEAGHER (HSA)

JEFF DEVAULHN — MIKE MONROE MARK HOWARD (SC)

SUSAN ABSTON MARTY CRAMER (CABLE TOOL) — BOWSER-MORNER CREW

Narrative (include time and location):

0700 All personnel @ tlr. Conduct H&S briefing.
Crews gathering equipment.
Joyce Miller @ tlr. D&D requirements for drilling Borehole #15 in A7:

- 40 hr HAZWOPER w/ refresher & medical
- Wear rad blues & booties. (supplied by Mound)
- Rad Worker Permit (no respirator necessary)
- D&D Orientation
- 8 hr Rad II Training - computer. Mike Klidjecz & Mark Howard have it. Drillers will need it.

Per Tim Bochmer (B-M); Gene Wolf needs addendum for grab water sampling. Written up per hour + equipment.
0800 Jeff DeVaulhn on site. Evelyn Meagher onsite

Cable tool on standby waiting on IDM drums. They've been procured but not bar coded.
1000 JD @ HSA. Crew purging water for screen prior to sampling. Water v. murky

Daily Weather Conditions: A.M. warm 80°F humid

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P29

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/15/94 TIME: NA PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

1015 @ Cable tool. Still waiting on IDM drums. Standing water in hole @ approx 6'. Bedrock @ approx 1' (crew SEE it in hole) So no bedrock sample (soil) collected since its the same material as the surface sample.

1100 @ Bldg 61 pick up 8 open top IDM drums. Deliver to cable tool.

1330 @ cable tool. Waiting on tremie pipe. 6" hole not big enough for stabilizers and tremie. Since procedure says stabilizers is optional, will use tremie. For next well, will probably drill an 8" hole.

1430 Start tremie #5 sand / slurry in W399.

Note: Per Tim Bochmer, AZ RCS will not be available on MON because Security not ready to support remaining Regional Soil Drilling

1500 Tremie sand and bentonite completed. Alec Bray and Alan Spesard @ Cable tool. Per A. Bray; sand slurry is required. Also, its not allowed to let water flow out of well. Per A. Spesard; AZ drilling priority is 5 holes around Bldg 29.

1530 Note: SC crew reports that hammer drill is broken

Daily Weather Conditions: A.M. NA

P.M. V. hot and humid 95°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.30

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/15/94 TIME: 0700 PAGE 3 OF 3

Task Team Members:

NA

Narrative (include time and location):

1700 E. Jackson delivers supplies to trailer and takes back broken equipment.

EOD SUMMARY:

HSA: B401 abandoned. Rig decomed and set up on B408

CABLE TOOL: W399 has sand and bentonite. Will set grout tomorrow after bentonite is cured. Rig broken down ready to decon

SOIL GAS: hammer broken. Slow progress. All three samples in for non AOC.

1800 All personnel offsite.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET P-31

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 6/16/94 TIME: 0700 PAGE 1 OF 2

Task Team Members:

John Davis Joletta Minard
Mike Klidjecz, Eric Saylor (HSA)
Susan Alston, Martha Cramer (CABLE)
Mark Howard Mike Monroe (SG)
Chris Hailey, Jeff Devaughn (Stake)
Bowler Morner Crews

Narrative (include time and location):

0715 Staff onsite. Conduct H&S Briefing. Crews preparing for days activities.

Note: per A. Spesard, he approved a verbal change order to use a screen without a packer to collect grab water samples in soil borings.

1330 Meet T. Taylor, B. Stanley, A. Spesard in Area 7. Locate Boring #16. As approves 5' shift to get off utilities. As wants 4 soil gas points, 1 on each side of fuel tanks at S. end of Area 7. Also, moved Borehole #15 outside of HP rope.

EOD Summary

HSA: Set up on B408. Drilled to 42.1 FBLS. H2O at 35.5 FBLS. Surf spl & wtr table sample (soil) collected. Geotech spl at surf collected; 1 SGAI bucket and 1 Shelby tube from zone 1

Soil Gas: Installed 11 samplers in woods (south portion) - hand auger. [AM] Installed 4 samplers. Some downtime for Mound Construction.

~~Cable Tool:~~ Inspection. Also downtime due to equipment failure

Cable Tool: W399 - water in hole, bailed and recharged. Grouted to

Daily Weather Conditions: A.M. Warm humid sl hazy 85°F

P.M. Same

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO.

Date (mm/dd/yy): 6/16/94 TIME: NA PAGE 2 OF

Task Team Members:

NA

Narrative (include time and location):

surface. Cut off well. W397 - drilled to 36', poss H_2O @ 31-36 F. Will let sit over weekend to see if hole is making water. No soil or water samples collected. Bedrock @ approx 1-3' FBLS.

Note: JD runs Alkalinity on B401 wtr sample. Couldnt complete 2nd run - surpassed 24-hr holding time.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 34896

Date (mm/dd/yy): 6/20/94 TIME: 0700 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS JOLETTA MINARD ERIC SAYLOR MIKE KUDZETC EVELYN MEACHER (NP HSA)
GREG LODER JEFF DEVAULN (A7 HSA) SALLY BROWN CRAIG PATTERSON (FIDLER)
SUSAN ABSTON MARTHA CRANGE (CABLE TOOL) MIKE MONROE MARK HOWARD (SOIL GAS)

Narrative (include time and location):

0730 all personnel @ HR. Conduct HSS Briefing. Conduct site orientation and assign training to SB, CP.
A7 HSA set up on B1.
FIDLER crew begins equip. & site familiarization.
HAZCO delivers new OVA - old one was leaking Hz
Broadway barricade delivers flashing highway barrels for A7.
0945 to Bldg 91 pick up 3 open top IDM drums & deliver to Cable tool. Support truck is stuck. Crew collecting soil sample.
J. Minard collects ambient. Waiting to see if hole makes water.
0930 @ A7 HSA. Set up on B1. Waiting on drill permit for J. Loeder and shelby tubes for drillers.
Note: Village Rental delivers drill for soil gas crew.
Note: per Mike Donahue, may have trouble supporting all drills - HP coverage.
Davis off site @ 1030

FOD SUMMARY:
A7 HSA: @ 32' B1. No water or bedrock
NP HSA: Moved to B407
CABLE TOOL: Water @ W397. Setting well

Daily Weather Conditions: A.M. hot humid hazy 90°F
P.M. RAIN

Recorded By [signature] QA Checked By Laura M. Monroe 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.34

PROJECT NAME: EG&G MOUND OU6 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/21/94 TIME: 0700 PAGE 1 OF 2

Task Team Members:

JOHN DAVIS JOLETTA HUMPERT ERIC SAYLOR GREG LODER JEFF DEVAULT (A7 HSA)
MARK MONROE, MIKE HOWARD (SC) 6/21/94 SUSAN ABSTON MARCHA CRAMER (CABLE TOOL)
MIKE KLIDJECE EVELYN MEACHER (NP HSA) SALLY BROWN CRAIG PATTERSON (FIDLER)

Narrative (include time and location):

0730 all personnel @ the Conduct H&S Briefing. Review plan for days activities.
- Discuss need for vehicles & another tie w/ T. Tank. Tie to be set up in Contract. Parking lot for storage & decon. No electricity.
0830 Call for A7 HSA. No HP on site.
Per T. Tank; only 1/2 bucket required for all geotech samples.
0915 Cable tool support vehicle stuck @ W397 - ATV HSA comes up to unstick it.
0930 A7 HSA has high OVM readings. Run detector tubes; neg. on benzene, vinyl chloride. Resume drilling.
1430 @ A7B2, driller noticed vent for Asbestos Abatement in Bldg 29. Driller wants personal air monitor. J. Geisler contacted Indust. Hygiene - 3 filters in place but driller not comfortable. J. Geisler working w/ I.H. to see if they can supply monitoring.
@ 1400 JD @ Bldg 91 to pick up IDW barrels but none available.
1545 Call to Sandy Geibel - I. Hygiene:
- wants opinion on Level D clothing. "Street" clothes OK but shouldnt leave site. Coveralls required? If so, amendment to HSP.

Daily Weather Conditions: A.M. hot, hazy, humid 95°F
P.M. SAME

Recorded By [signature] QA Checked By [signature] 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P35

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE-1 — TASK NO.: 34896

Date (mm/dd/yy): 6/21/94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

- should exclusion zones be posted? Signs saying Do Not Enter
  40 HR TRNG REQUIRED
- re Asbestos. She will set up an AMCA Monitor by vent and will get results by Thurs. Samples analyzed inside building are below background. Activities inside bldg include wall & floor washing not Asbestos removal per se.

EOD SUMMARY

CABLE TOOL: Set up on W398. Drilled to 25'. Dry

NP HSA: completed B407 to TD 13.5 Dry. Decomm'd.

OA HSA: completed B2. TD @ ≐ 7' Hole grouted

FIDLER: 1 FIDLER down; otherwise good progress

JMD 6/21/94 ~~SOIL GAS~~: 1N, 2N lines completed. Portions of 3N, 4N completed

SOIL GAS: Good progress

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P36

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 34896

Date (mm/dd/yy): 6/22/94 TIME: 0715 PAGE 1 OF 3

Task Team Members:

John Davis, Joletta Humpert, Eric Saylor, Greg Lodar, Jeff Dunnigan (OAHSA), Susan Alston, Martha Cramer (Cable tool), Mark Howard, Mike Monroe (SL), Mike Klidzejs, Evelyn Mercher (NPHSA), Chris Patterson, Sally Brown (FDUPR)

Narrative (include time and location):

0715 All personnel on site. Low on OVA - pump switch broken on one. JD took it to Mazco last nite & they wouldn't fix it w/o a PO #. This morn, another OVA wouldn't calibrate w/ methane.
- Crews prepping for activities.

0800-0900 JD checking mound ION chambers. Find K. McMahan. Load up 8 used (empty) Weston barrels on Bldg 91. Deliver to rigs.

Cable tool continues drilling on W398. NPHSA set up on B405. OAHSA set up on B4.

Disc. w/ T. Trask. Mound wants 4 add'l borings around Bldg 24 for full rad/chem suite, 5' samples, hand augered. K. McMahan knows locations.

Disc. w/ T. Trask for B16 (A7). only rad spls need to be collected. Wants a Soil Screening Facility spl ≐ 2'.
- Drill rig crew notices that B16 as located is under power lines. Try to find Bob Stanley or A. Spessard to relocate but unavailable so rig goes to B5.

Daily Weather Conditions: A.M. hot hazy humid 90°F

P.M. same, some clouds

Recorded By [signature] QA Checked By [signature] 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P-37

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/22/94 TIME: NA : ____ PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

J. Geisler shows spot for trailer - by stop sign. No tiedowns required if its only a storage trailer. J. Geisler has no problem w/ outside decon.

J Geisler & JD Mills relocate A7B9 - About 15'N of orig location per J. Geisler; holes 3, 7, 8, 6 are cleared. A7HSA will barricade off B3 and B7 for tomorrows drilling.

per T. Tank: ok to move A7B9 to north 15' to clear line.

@ 1530 A7B5 had to move rig approx 3' to finish collecting sample. JD contacted J. Geisler about the move. No utility lines encountered.

- Call fm Dan Garrison Mound Safety. JD asked to make postings for exclusion zone. DG says coveralls (nuisance control) required = Level D. DG is checking on if Mound will supply coveralls. JD will check to see if SAIC will supply coveralls.

- Call fm K. McMahon. A7B16 on hold. Re broken finger - suggested switching cables. Also said high heat can affect readings.
- G. Loder reports that A7B7 will need to be moved to clear

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Monaldo 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOO P.38

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 34896

Date (mm/dd/yy): 6/22/94 TIME: NA : _____ PAGE 3 OF

Task Team Members:

NA

Narrative (include time and location):

steam lines.

EOD Summary:

A7 HSA: B5 completed. TD approx 7'. Hole grouted.

NP HSA: B405 completed and grouted. TD ≐ 14'. No water encountered. Set up on B406. Collected surf. sample.

NP Cable tool: W398 drilled to about 39' No water. Will let sit overnite.

Soil Gas: AOC 22: 2 trenches installed, 34 tubes on perimeter. Need urinalysis to get inside A22. Good productive day.

FIDLER: good progress. 1 FIDLER still down but not really affecting production

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK 989

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/23/94 TIME: 0700 PAGE 1 OF 3

Task Team Members:

JOHN DAVIS, JOLETTA Humpert, Evelyn MEASHER, Greg Loder, Jeff DeVausen (OAHSA)
Mike Klidzejs, Eric Saylor (NPHSA), MARK Howard, Mike Monroe (SG)
SUSAN Abston, Martha Cranul (cable tool), SALLY BROWN, CRAIG PATTERSON (FIDLER)

Narrative (include time and location):

0730 all personnel on site. Conduct H&S Briefing.
J. Geisler and Bill Stoll (4768) @ the. BS will be JG replacement next week. Discuss misc. items. Agree to drill A7B8, A7B9 on Mon.
- Call to Gene Wolfe Bowen-Morrow. GW agrees to drill W400 w/ cable tool @ nuger prices. Set up B-M man (Jim) for drum staging today - will meet Denny Grout @ 0900 @ Guard Post 2. Re pump for well develop. - B-M will supply pump and generator @ no cost but will charge for manpower. B-M will try to supply enough tubing to dedicate to each well. B-M coveralls and work uniforms are rentals and are laundered commercially.

· Note: per K. McMahan, bumper guards on wells not necessary - none in high traffic areas.

1300. Only one OVA operational. Hazco delivers one and takes back 2 bad ones.
G. Loder reports poss. high OVA on A7B3 @ 17.5'. Also wet

Daily Weather Conditions: A.M. hazy, overcast, humid 80°F
P.M. RAIN and lightning

Recorded By: [signature] QA Checked By: Laura M. Monroe 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P40

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO.: 34896

Date (mm/dd/yy): 6/23/94 TIME: NA PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

NCRs to write up:
- 6" hole on W399
- no 2nd alk. run on B401 water sample
- no continuous coring on B1, B2
- delay in waxing geotech shelby tubes sample these. Concern about cross-contamination. Discuss w/ T. Tank. Discuss w/ Alec Berry. He says to make sure it's not just a nitrate hit.

1300 lightning Alert. All crews @ t/r. Release drillers.
Note: cable tool moved to W400

1500 Alec Berry of Alan Spesard @ t/r. Their decision re A7 soil borings: drill all borings to bedrock. Collect rad/chem spls to 30' @ 5' intvls. Collect geotech spls to TD @ discreete lithologic horizons. They would like to be contacted when a boring gets to around 40' w/ no bedrock.

Note: client report that Mound HP has requested all sampling

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK

P41

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE-1 TASK NO: 34896

Date (mm/dd/yy): 6/23/94 TIME: NA : PAGE 3 OF 3

Task Team Members:

NA

Narrative (include time and location):

completed @ 330p (it was 345 before)

Per T. Tank; B402 to be converted to a well. No replacement for W398

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK #P-47

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE II — TASK NO: 34896

Date (mm/dd/yy): 6/27/94 TIME: 07 30 PAGE 1 OF 3

Task Team Members:

John Davis, Joletta Humpert, George Wahl, Gary Loder, Jeff DeVaughn (AHSA)
Mike Klidzejs, Eric Saylor (NPHSA), Mark Howard, Mike Monroe (SC)
Susan Abston, Martha Cromer (cable tool), Sally Brown, Craig Patterson (FIDCER)
Paul Parrish, Dave Cummings (GEOP)

Narrative (include time and location):

0730. Staff @ HR. Conduct H&S Briefing.
Per K. McMahan - drums next week? B-M will have to supply until then.
Per T. Tank, A. Berry: on B3 (A7) drill only enough to collect last soil sample and water sample. If hole is showing true OVA hits (not methane) grout and abandon. If hole is clean, continue drilling to bedrock.
- Call R. Tusing to set up FIDCER security escort for tomorrow 730-430. Meet @ Post 2. 6/27
- Call for Dave Keefer. Surveillance sched. for ~~last~~ Thurs. Needs copy of OU5 SAP. Call Will Kegley 615-481-8738

1000 @ cable tool rig. Rig cant get to map location - B400. Call T. Tank - OK to drill 130' W. Change order has been done for this. No radio communic. - approx 1 hr downtime waiting for necessary communications.

1015 @ NPHSA. No water yet @ ≐45. Drillers have augers to 55'.

1030 @ AHSA B3. Pursing wtr to collect grab sample. Thin flocks on top of water indicated

Daily Weather Conditions: A.M. overcast, cool, humid
P.M. same, pleasant

Recorded By [signature] QA Checked By Laura M. Marsan 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P43

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/27/94 TIME: NA PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

by interface probe

1330 @ NP HSA B406. Current depth is 60'. No water encountered. Poss bedrock. Refusal @ 60' - withard shale? Trying to auger through it. Cont spl collected @ 45'. Question is what is total depth in this situation? Auger refusal @ 63'. Decide this is bedrock. Cont soil sample @ 45' which is 20' above bedrock. This spl collected based on damp core but hole didn't make water.

@ 1330 A7 HSA B3, collected grab water sample. No VOC hits. Continue drilling.

1430 Call fm B3 HSA: current depth @ 30.0, no bedrock. JD calls A. Bray. A Bray says to go to 45 and call again.

1400 M. Cremer onsite. Deliver keys to cable tool.

1600. Call fm A7B3: to date-

17-24 w. sorted gravel, water @ 17

24-33 brn cly moist @ top then drying

33-36 TOTD gray cly, dry. VOC hit @ 34-36 100ppm neg meth, v. chloride, benzene.

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK — p. 44

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/27/94 TIME: NA : _____ PAGE 3 OF 3

Task Team Members:

NA

Narrative (include time and location):

No spl collected @ 20' - CESE gravel, no fines.

1600 per Bill Stott; per Kathy Kaylor, OK to deliver t/e on site. JD Mech truck driver, positioni trailer @ stop sign south of Bldg 105 as directed by B. Stott.

1700 Call A. Berry inform him of B3 situation

EOD summary: B3: drilled to 36' (SEE PG 44)

B406: drilled to 63' auger refusal No water. Grouted and abandoned

B400 drilled to 24' No wtr. Poss OVA hit.

FIDLER: 45 points in NONADC 213 to date

Soil GM: good progress

Geophysc.: continue FM 31

LMt Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO.: 34896

Date (mm/dd/yy): 6/28/94 TIME: 0730 PAGE 1 OF 3

Task Team Members:

JOHN DAVIS JOLETTA HUMPERT GEORGE WAHL GREG LODER JEFF DEVAUGHAN (ATHSA)
MIKE KLIDZETS ERIC SAYLOR (NDHSA) MARK HOWARD MIKE MONROE (SG)
SUSAN ABSTON MARTHA CRAMER (CABLE) SALLY BROWN CRAIG PATTERSON (FIDLER)
PAUL PARRISH DAVE CUMMINGS (GEODATAS)

Narrative (include time and location):

0730 all personnel onsite. Conduct HTS Briefing. Crew prepping for activities.

Per T. Tank. "Delete" Field Change OS-NP-005 re location of B409. Wants B409 drilled as located on map. Will need another FC to put it back to orig. location.

NCR items: no spl @ 20' intvl in B3. Coarse gravels, fines washed out.

- well tag placement in W399, W397.
- geotech spls unwaxed.

0830 disc w/ Bill Stott: reemphasize safety glasses. Wants sign on HR (semi) w/ ph. numbers. Make sure exclusion zones are posted.

0830 Call fm A. Beary: B3 - keep drilling. BVA not a concern. Call him @ 45'. B400 - anticip. 5' above water table. If hit is methane, keep going. Otherwise, notify.

Per A. Beary: move B402 60' N toward fence. Confirm w/ A. Spessard.

0930 @ A783 w/ K. McNaghan & A. Beary. Depth @ 40' gives 10% LEL

Daily Weather Conditions: A.M. humid and warm

P.M. same

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P-46

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 34896

Date (mm/dd/yy): 6/28/94 TIME: NA PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

per K. McMahon, A. Berry, & T. Tank, Abandon & grout.

- Then to B409. Moving back to ORIS. location. Then to B400. Anticipated Bedrock @ 2-5' Water @ approx 25' Per A. Berry, set the top of the well @ water level to avoid a dry hole during groundwater fluctuation. With A. Berry, pick a new location for well @ B402. (SEE pg 45)

- Call to Hazco: the OVA methane probe lets methane through; i.e. blocks volatiles other than methane.

1100 @ B409 Bedrock @ 14'. Missed subsurf. spl so will skid RIG and drill to get sample.

1130 Davis offsite. Back to Dayton office for misc. Project paperwork.

- New Prop drillings on schedule if all drilling and pad construct. completed by 6/30

- Call fm A. Berry. Has found a spot for the Soils Disp. Well. Also wants to move B402 in Soils Disp. Zone.

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK — P47

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 34896

Date (mm/dd/yy): 6/28/94 TIME: NA PAGE 3 OF 3

Task Team Members:

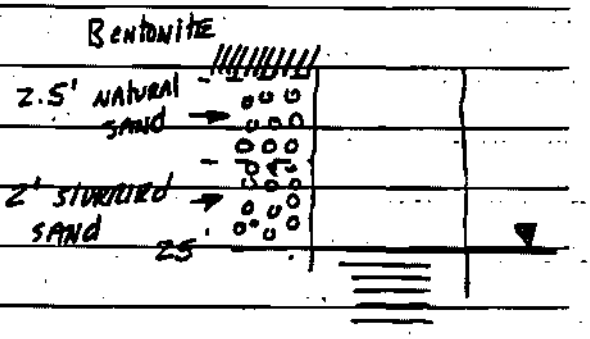
NA

Narrative (include time and location):

Drill new well in SDZ first - midafternoon tomorrow.

1630 Call fm S. Abston. While setting the well @ B400, about 2½ ft of natural inplace sand fell in on the 2' of sand filter, essentially giving about 4' of sand pack. Discussed situation w/ SAIC hydrologist - decide integrity and structure of well not compromised. Told her to set bentonite.

NCR ITEM: EXCESSIVE SAND



NOTE: per P. Parrish, Geophy. crew completed EM-31 survey today.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO. 34896

P. 48

Date (mm/dd/yy): 6/29/94 TIME: 0730 PAGE 1 OF

Task Team Members:

John Davis, Joletta Humpert, George Wahl, Gary Loder, Jeff DeVaughn (AFHSA), Susan Alston, Martha Carroll (CABLE), Mike Klidzejz, Eric Saylor (NPHSA), Sally Brown, Craig Parrish (ADEQA), Mark Howard, Mike Monroe (36), Paul Parrish, Dave Cummings (GEOP)

Narrative (include time and location):

0715 All personnel on site. Conduct H&S Briefing. Give Site Orientation Briefing to P. Parrish, D. Cummings, G. Wahl. Call for Bill Stott. 12 locks required for B16 lockout. Dave Weimer (3323) is head electrician. Mast must be down and street lites unlocked by 430. Need security escort for sewer & tl substations.

0900 @ A7B7. G. Loder reports OVA hit of 60 ppm downhole. Call to Steve Davis Div H&S - SAIC. He said Action levels are set to breathing zone. Downhole hit of 60 ppm can "no big deal". G. Loder documents <1 ppm in breath zone. Breezy today also. Drillers shouldn't keep heads around top of auger flights. According to S. Davis, ok to drill. Still must observe Action Levels in BZ

STEVE DAVIS 615 481-4755

1000 G. Loder reports 15% LEL @ B7. A. Berry on site. Decide to grout and abandon due to exceeding LEL Action Levels.

Kip Weaver (Mound Drawings) planning a trench yard @ B16. Proposes a new location for B16 based on different idea of

Daily Weather Conditions: A.M. Warm & clear 75°F

P.M. Same w/ some rain

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P49

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/29/94 TIME: NA PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

where septic tank is.

1100. Cable tool off of B400 and being decomm'd. Go w/ A. Berry & stake relocation of B402 = approx 110' N of orig. location; in SDZ.

- Told A. Berry about small "cave-in" @ B400. He was alright with it.

1200 Call for T. Tank. Informed me that we shouldn't have put in soil gas sampling in A21 per Change Order

1230 @ B16 for meeting to determine proper location Bob Stanley (3885). Relocate B16 approx 15' S. of orig. location. This loc. believed to be middle of tank. Tank believed to be @ ≐ 20', sitting on bedrock. Spls scheme is RAD spls only @ 5' intvls w/ VOA spls @ OVA hits. Want to penetrate tank. Bill Stott checking to see if lockout is necessary - loc. approx 15' for overhead lines. Actinium is in tank. B. Stott says loc is ok no overheads. He'll write the clearance permit

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By: [signature] QA Checked By: Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.50

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/29/94 TIME: NA PAGE 3 OF 3

Task Team Members:

NA

Narrative (include time and location):

1430 @ B16, K. McMahan says RIS will shut down if any elevated FIDLER readings are recorded. A spl will be analyzed @ SSF to determine further action.

per B. Stott; clearance permits done for B6, B13, B14, B10, B11, B12 B16. B10 will require a street light lockout.

B12 relocated approx 12' SW per K. McMahan to avoid overhands

- All A7 boring cleared except B15.

EOD summary

A7 B16: TDD = 12' K. McMahan shut RIS down @ 1600 due to high rads - will analyze @ SSF

NP HSA: completed 403, 404. HSA done

NP Cable: TDD = 20.0 Dry.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 6/30/94 TIME: 0730 PAGE 1 OF 3

Task Team Members:

John Davis, Joletta Humpert, George Wahl, Greg Loder, Jeff DeVaughn (A7HSA), Mike Klidzeja, Eric Saylor (NPHSA), Sally Brown, Craig Patterson (FIDLER), Susan Alston, Marlon Cramer (NPCABLE), Mark Howard, Mike Monroe (SG), Paul Parrish, ~~Dave Cummings~~ (GEOPH)

TMD 6/30/94 George Wahl

Narrative (include time and location):

0730 all personnel onsite. Call Roy Moore to arrange wipes to release NP ATV HSA rig. TMD 6/30/94

- T. Tank arranges for A7HSA thru ~~7/1~~ 7/12. Will also add cable tool in A7.

Per K. McMahan: SSF results for last B16 spl = 16.9 pc thorium-232. Limit is 25 pc

0930 Call fm A7B16. Hit water @ 16.7'. Cuttings fm 14-16 quite hot. No one working in SSF due to Retirement Party. Rad water sample only? Water sample at all? Field parameters if rad only?

~~Th 232~~

Call fm K. McMahan who is @ SSF. Spl fm 16-18 avg. 25 pc. Mound AP allows work to 25 pc w/ coveralls. Fm 25-50, th232 add Tyvex or blue smocks. Need Rad Work Permit. OK to drill next 2 ft

- Call T. Tank. He confirms collect. of water sample - Rad only. Also do SOP 2.2 parameters.

1100 Collecting water spl. Per R. Moore, action levels determined by Actinium levels, not thorium. Actinium test may take sev. days.

NOTE: Sally Brown offsite @ ≐ 1000 (bad back). Eric Saylor fills in

Daily Weather Conditions: A.M. cool clear 70° pleasant

P.M. SAME

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOO

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): 6/30/94 TIME: NA : _____ PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

Note: per K. McMahan, were shut down on B6, at least for today. Respirator fit may be required.
Rig and barricade must be offsite by EOD w/ augers in hole.
IDMs must be marked radioactive. IDMs must be moved.

1440 Mtg w/ A. Berry, A. Spaeland, T. Tank @ OSE Bldg.

- July 20 issue NPPI FR
- Poss. recording of areas.
- Add ≐ 4 soil sms around fuel tanks - A. Berry/Spaeland will locate
- wants bedrock on all A7 boreholes - need to circumvent LEL. Need SSF samples at all intvls. Need to research how to lower LEL.

Paul Parrish reports mag/grad completed. To date EM31 and mag/grad are completed. May not be necessary for EM34

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P53

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 134896

Date (mm/dd/yy): 6/30/94 TIME: NA PAGE 3 OF 3

Task Team Members:

NA

Narrative (include time and location):

EOD SUMMARY

NPHSA: Finished last HSA borings B404 (yesterday). M. Klidzeja working on logbooks today.

A7HSA: Shut down by Mound HP @ 1100 due to high rad hits. TDTD = 18' Water spld @ ≐16'

NPCable Tool: Well set and bentonite seal. on B402. TD = 33.' Screen @ ≐ 21-31' wtr @ 22.09

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P-54

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/5/94 TIME: 0715 PAGE 1 OF 2

Task Team Members:

JOHN DAVIS JOLETTA MINARD CRAIG PATTERSON SALLY BROWN (FIDLER)
GREG LODER JEFF DEVAUGH (AZHSA) CHRIS HALLEY, ERIC SAYLOR GEORGE WAHL (SED SPLG)
SUSAN ABSTON MARTHA CRAMER (CABLE)

Narrative (include time and location):

0715 all personnel onsite. Conduct H&S Briefing.
J. Geisler onsite. Review last weeks activities w/ them.
Alert them that B410 will require a LOTO.
- Get sediment sampling crew going. They go to office for logbook.
- Greg Schanie onsite for SAIC QA surveillance.
  - MATE QAAP 12.1 - Not necessary. QAAP's are guidelines. QAPjP takes precedence. Get rid of MATE usage log - no entries.
  - Not recording lot numbers of calib gases on MATE log.
  - All pages numbered in logbooks. Cont Entry. Blank pages crossed out & dated

- Note: Drillers helpers for Cable tool sick today. Decide to start well development.

1000 to A7 B13 w/ G. Schanie to observe operations
1030 to Bldg 61 w/ G. Schanie to observe FIDLER
1130 to NON-AOC w/ G. Schanie to observe soil gas retrieval.

Daily Weather Conditions: A.M. humid, clear, 80°F
P.M. NR

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK 055

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/5/94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

NOTE: per M. Carman; she heard from A. Meyer that Compuchem is getting chloroform hits (20ppb) from ambients.

1400 w/ G. Schank to sediment sample site SD014. He suggests we write on FC to initiate COC on spl tkr w/ Spl Mgr, i.e. life of sample begins w/ Spl Mgr. This assumes that Sample Log Sheets be completed in field and transfer is documented in Activ. Log.

- G. Schank notes that sample bottles are not labelled. "Not good enough" that bags are labelled.

JMP 7-5-94

1430

1630 w/ G. Schank to W399 to observe well pursing.

1515 Call fm G. Loder on ~~w/~~ TTD 7/5/94 B13. Water in hole at 31.3 TDTD = 34. 0-28 = cly 28-30 = sand, 30-34 = cly and a little gravel in spoon below 34. Instruct G. Loder to pump for grab water sampling.

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. v. humid and hot 90°F

Recorded By [signature] QA Checked By Laura M. Marman 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 56

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/6/94 TIME: 0730: PAGE 1 OF 2

Task Team Members:

John Davis, Joletta Humpert, Tanya Pfaff, Ron Smith, Juan Alvarez (SEEP), Greg Loder, Jeff Davanzon (ATHSA), Chris Halley, Eric Taylor (SED), Susan Abston, Martha Cragmen (CABLE), Mike Monroe, George Wahl (SG), Sally Brown, Craig Patterson (FIDLER)

Narrative (include time and location):

0730 All personnel onsite. Conduct H&S briefing.

G. Loder reports that water in B13 up to ≈ 15 BLS. Pursing w/ bailer.

- Cable tool crew back.

Give Site Overview briefing to Chris Halley, Ron Smith, Tanya Pfaff

0900 @ HSA A7. Collecting water sample

0930 w/ Cable tool. Grouting B402 & pulling casing.

M. Cragmen wants to establish work/rest cycles today due to heat.

Debrief w/ G. Schonk. Will leave Procedure checklists

- FC for Compuchem boxes. JH doing it.
- FC to eliminate methanol wipe on bottles
- FC to cover label w/ clear tape.
- FC to use teflon instead of parafilm
- FC to check VOAs for and cyanide for Chlorine & sulfides.
- FC for temp blanks in lab coolers. Use temp strips instead
- Confirm that split spoons are checked w/ OVA.

Daily Weather Conditions: A.M. hot 90°F humid sl. overcast

P.M. SAME

Recorded By [signature] QA Checked By Laura M. Monroe 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OUS OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/6/94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

- No personnel decon. Take 5 gal of water. BMP
- Use stickies on sample bottles w/ IDs.
- JD will lineout & initial end of page. in logbooks.
- Lack of training for drillers. Use Attendance Record.

1500 call fm J. Geisler. RWP required to enter bldg for LOTO. for B410. IN Penthouse. Bring 6 locks. Bowser driller needs to attend LOTO. Need 4 locks each. Set up for 700a tomorrow = security escort.

1700 @ B13. G. Locke reports TDID = 62. Water encountered @ 59. Per A. Berry, do not collect a water spl as this interval due to commingling of water; this intvl and intvl @ 31.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK #258

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): 7/7/94 TIME: 0700 PAGE 1 OF 3

Task Team Members:

John Davis, Joletta Hompert, Gary Locker, Jeff DeVuyst (HSA)
Tanya Pfaff, Juan Alvarado (SEEP), Sally Brown, Craig Patterson (FIDLER)
Susan Ahslow, Martha Cermele (CABLE), Mike Monroe, George Wahl (SG)
Chris Halley, Eric Saylor (SED.

Narrative (include time and location):

0700 all personnel onsite.
0700 Meet S.C. Patterson, J. Geisler @ Bldg 102 for Security escort to Bldg 50 for LOTO.
0800 Security arrives
0830 Complete LOTO @ Bldg 50 - street lites then to substation near B10 for LOTO of main street lites.
0900 Complete LOTO. Cable tool starts on B410
0945 G. Locker reports that B13 is completed. TD @ 70' @ bedrock
0900 T. Trask on site. Discuss schedule.
1100 Call T. Pedro leave mss. for FRI access
D. Sink, D. Work, J. Heger : B-M
G. Locker, J. DeVuyst, J. Davis, J. Minard, J. Alvarez : SAIC
1030 G. Locker reports B13 completed @ 70.0 bedrock
1430 @ OSE Bldg for mtg w/ T. Trask, A. Spillard, A. Barry, K. McMahan
- B-M offsite by COB 7/15 if they cant finish. w/ if Burlington can come on.
- B16 Actinium @ 20 pc/g.
- Will need Rad Worker II Tech (1-dm) w/ respirator fit.
- We have SSF coverage tomorrow until 330. Last spl to SSF by 300 for B14.

Daily Weather Conditions: A.M. hot, humid, 92°F
P.M. SAME

Recorded By [signature] QA Checked By Laura M. Marvin 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P59

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/7/94 TIME: NA : ____ PAGE 2 OF 3

Task Team Members:

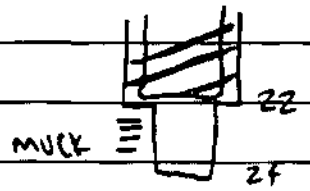
NA

Narrative (include time and location):

- re LEL; Adding water is first choice to reduce LEL.
- B16 water will go back in hole.

1400 @ cable tool. @ 17', clean rounded gravels, no water.
1415 @ HSA B14. Start drilling.

1545 After Mtg., back to BA10. Skester lowers mast then accompanies me to Bldg 50 for removal of LOTO.
1600 @ Bldg 50 for LOTO.
1615 to substation. Complete removal of LOTO.
1630 G. Coder reports @ B14 @ 22-24', drill into a black muck, damp, OVA= >1000ppm DH, <1ppm BZ (breezy) and LEL = 85% O_2 = 16%. Shut down Rig.
Also poor recovery. No spl @ 5', 10', spld 12-18
Auger @ 22'



Daily Weather Conditions: A.M. NA
P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.60

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/7/94 TIME: NA PAGE 3 OF 3

Task Team Members:

NA

Narrative (include time and location):

EOD SUMMARY: Cable tool (B410) @ 26'. Dry.

HSA: @ 24' High LEL

SEEP: sampled 1 SEEP, S01001; spl, dupe, MS/MSD

SEDS: Good progress. Approx 20 sed spls collected to date. No surface water encountered.

1830 All personnel off site.

last entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.61

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/8/94 FRI TIME: 0700 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS JOLETTA HUMPERT

LUCS LODGE JEFF DEVAUGN (HSA A7)

JUAN ALVARADO

Narrative (include time and location):

0700 ON site. HSA CREW @ B14. LEL FROM yesterday (road ovr) has dissipated. Continue drilling.

0815 @ HSA B14. MINOR LEL hits around 8%. Prepping to collect grab water sample. Lite in risers @ ≐ 21.7. @ 28-30', OVA @ >1000 ppm DH, LEL = 24%.

Spend rest of day purging well & collecting water spl.

No pump available.

- Stake several more sed spls points in Ops Area
- Complete tlx inventory
- QA logbooks.

1530 TD offsite

LAST ENTRY

Daily Weather Conditions: A.M. OVERCAST, COOL, V. SL. DRIZZLE INTERMITTENT, 75°F

P.M. CLEARING AND WARM

Recorded By [signature] QA Checked By Laura M Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 62

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/11/94 MON TIME: 0700 PAGE 1 OF 2

Task Team Members:

John Davis, Joletta Humphrey, Mike Monroe, George Wahl (SC), Greg Loder, Jeff DeVaughn (ATHSA), Juan Alvarado, Tonya Pfaff (SEED), Susan Abston, Martin Cramer (CABLE), Craig Patterson, Sally Brown (FIDUCIA)

Narrative (include time and location):

0700 all personnel on site

0730 Meet J. Geisler & S.C. Patterson for LOTO. Go to Bldg 50, run deep wells

0800 LOTO completed. To B14. LEL has dissipated over weekend. Continue diag.

- FINISH staking sed splg locs.

1000 @ B410 w/ A. Berry. Water tentatively tagged @ ≈ 31'. per A. Berry; set screen 2' above wtr but drill to bedrock. If necessary, grout w/ bentonite in sump to set well.

41 TDD 7-11-94

1530 @ B410. Wtr @ 30.95'. TDTD = 39' Will set screen 29-39 tomorrow. Lowrey want for LOTO.

1535 @ B14. TDTD = 74.94'. No bedrock. In clean w-sorted River gravel.

1615 @ Bldg 102 for LOTO. Cleared them @ 1645. To Bldg 50 and deep wells

1700 LOTO completed.

Daily Weather Conditions: A.M. cool, clear, balmy, 75°F

P.M. warming to 85°F

Recorded By [signature] QA Checked By Laura M. Marvin 8/15/94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P.63

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO. 34896

Date (mm/dd/yy): 7/11/94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

EOD SUMMARY:

CABLE TOOL: TD= 41.2' WTR @ 30.95. CASING IN HOLE

AT HSA: still on B14. TDTD = 76.0

SEEPS: Sold remaining flowing seep. Total of 2 seeps sampled. 3 more potentials but all dry.

SEDS: Good progress. Will complete tomorrow.

SG: IN SDB.

FIDLER: starting A22

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Marsden 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 64

PROJECT NAME: EG&G MOUND OUS OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/12/94 TUES TIME: 0715 PAGE 1 OF 1

Task Team Members:

John Davis, Joletta Hempel, Mike Monroe, George Wehl (SG), Gary Loder, Eric Saylor (AT HSA), Sally Brown, Craig Patterson (FIDLER), Susan Alston, Martha Cramer (CABLE), Chris Halley (SED)

Narrative (include time and location):

0715 All personnel on site. Conduct H&S briefing.
0715 @ bldg 102 for LOTO w/ S.C. Patterson
0815 Guard shows up. To bldg 50
0830 R. Konig (electrician) shows up. Do bldg 50 LOTO
0845 @ pumphouse. Complete LOTO.

0845. Sed spls completed. 27 sed locs. No flowing water.
JD to office for misc. paperwork

1600 Call fm G. Loder. @ B14, heaving sands @ 108. Difficulty keeping sand out of augers - no pilot bit in augers.
GL calls A. Beaty who says its ok just to auger to bedrock - no split-spoon sampling required.
Last Entry

Daily Weather Conditions: A.M. Warm, humid, clear, 85°F
P.M. Same

Recorded By [signature] QA Checked By Laura M. Monroe 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.65.

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/13/94 Wed TIME: 07 : 00 PAGE 1 OF 2

Task Team Members:

John Davis, Joletta Humpert, Sally Brown, Greg Patterson (FIDLER), Greg Loder, Eric Saylor (A7 HSA), Mike Monroe, George Iwahl (SU), Susan Abston, Martha Cramer (CABLE), Juan Alvarado

Narrative (include time and location):

0700 all personnel on site.

0830 Complete B14, TD @ 114.0 hyper refusal. @ bedrock.
Setting up on B8.
- S. Abston, M. Cramer developing, pursing, and sampling W397.
- Note: J. Humpert, Juan Alvarado pulling soil gas tubes in A22.

0900 Call T. Pedro. Put D. Sink, D. Work, J. Hayes, S. Abston, M. Cramer, J. Davis on access list for Fri 7/15
Also call M. O'Donahue. He will arrange HP coverage (Henry Robinson) and SSF support for 7/15, A7 drilling.

0915 Chris Holley onsite to replace Sally Brown on FIDLER

1000 Stake bldg PH holes w/ K. McMechan. PH1, PH2 in front, PH3, PH4 in back. Locs can be moved as necessary for utilities clearance.
- KM also wants to schedule Rad II training on Fri 7/15 or Fri 7/22

1100 Call for K. McMechan. Per OU5 Mgrs, its OK to dump New Prop cuttings @ site if there is no OUR hits.

1500 Lightning Alert per Henry Robinson

1530 Cable tool support truck gets stuck on perimeter road in New Prop.

Daily Weather Conditions: A.M. warm humid clear 85°F
P.M. heavy rains in PM.

Recorded By [signature] QA Checked By Laura M. Monroe 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 66

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO. 34896

Date (mm/dd/yy): 7-13-94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

EOD Summary:

Cable tool: Grouted B410 continue developing 39'. Slow recovery.

HSA: complete B14 @ 114'. ~~Move to~~ 7/13/94.

Difficulty grouting - holes run out of grout due to washouts from heavier sands. Move to B8

Soil Gas: installing in Area 3

FIDLER: working in A7

Lost Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET

P.67

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 7-14-94 ~~THURS~~ TIME: 07:00 PAGE 1 OF 3

Task Team Members:

JOHN DAVIS JOLETTA HUMPERT GREG LODER ERIC SAYLOR (HSA)
MIKE MONROE GEORGE WAHL (SG) SUSAN ABSTON MARTHA CRAMER (CASTLE)
SALLY BROWN CRAIG PATTERSON (FIDLER)

Narrative (include time and location):

0700 All personnel on site. Conduct HAS Briefing.
Scan trash bags from drill rigs w/ FIDLER and OVA.
No detect on either so throw in dumpster.

0830 @ HSA @ A7, B8. Drilling nicely but poor recovery; in clay;
@ About 8'.
- Then to Bldg 19 and pick up 6 poly 10M water drums for well develop

0900 Call for K. McMahon. Need 1 training set for tomorrow!
0930 Call K. McMahon. Give him names for training: Also S. Willis for ACCESS:
J. Davis, S. Abston, M. Cramer (SMC)
Dennis Sink D. Work (B-M)
depth @ 12'. high OVA (pegged) downhole. 35ppm a foot above casing. 0ppm in BZ. Neg. on dragger tubes.
- D. Sink wants to send rig to yard on Fri to fix leaking hydraulic line.

NOTE: due to muddy conditions (inaccessible) to W397, Martha and Susan are developing 8400.

Daily Weather Conditions: A.M. overcast, sl. drizzle, humid, 80°F
P.M. clearing some and warmer.

Recorded By [signature] QA Checked By Laura M. McMahon 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.68

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): 7/14/94 TIME: NA : _____ PAGE 2 OF 3

Task Team Members:

NA

Narrative (include time and location):

0945: Call from A. Meyer. Requirement for soil pH is analysis w/i 48 hrs but Singleton didn't do it because pH wasn't in their SOW. Amy wanted to know if we could recollect. I said NO because samples come from depth and holes are grouted.

1030 Call fm. G. Coder; @ B8, @ 14 ft, OVA and LEL pegged. Decide to let hole sit over lunch to dissipate.

1230 @ B8. G. Coder report that after lunch, LEL was still high so added water to augers; to ground surface (approx 10 gal), drove A spoon, and LEL dropped below action level.

Note: re OVA hit @ 16': 120 ppm w/o methane probe, 85 ppm w/ probe = 35 ppm non-methane volatiles. Neg. benzene & vinyl chloride on draeger tubes

1330 Spoon refusal @ 26' on B8. Will move to B9 next

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.69

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): 7/14/94 TIME: N/A PAGE 3 OF 3

Task Team Members:

N/A

Narrative (include time and location):

1430 @ OSE for mtg w/ A. Spesard, T. Trunk, K. McMahon, A. Berry.

- Discussion of Level D. What should we be wearing? Need to call SAIC Corporate. A. Spesard says disregard D. Garrison and S. Weibel. SAIC can wear coveralls if we want but not that Mound is forcing us to wear them. Disregard above paragraph. Continue wearing coveralls in A7. per A. Spesard. Get copies of 3-dy supervised training for field staff.
- NPPI FR due 7/27. Get a copy.
- If we drill a boring 30-40' below water table, grab a water sample. 100 ml.

S. Alston & M. Creamer develop, purge & sample B400.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Tamra M. Mohrlan 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.70

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/15/94 FRI TIME: 0900 PAGE 1 OF

Task Team Members:

JOHN DAVIS	SAIC	DENNIS SINK	BOWER MORRIS
SUSAN ABSTON	↓	DWIGHT WORK	↓
MARTIN CRAMER			

Narrative (include time and location):

at OSE bldg @ 0800; J. DAVIS, S. ABSTON, M. CRAMER, D. WORK, D. SINK for Rad Worker II TRAINING

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By: [signature] QA Checked By: Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.71

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA: PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/18/94 MON TIME: 07 00 PAGE 1 OF 2

Task Team Members:

G. Loder, G. Wahl (AZHSA) — C. Patterson (FIDLER)
S. Alston, M. Cramer (CAHE) — J. Davis, J. Hummel
J. Alvarado, C. Helley (SG)

Narrative (include time and location):

0700 all personnel onsite. Call from K. McMahon - he says that if we have respirator fit-tests, may not need Mound fit testing.

G. Loder late, so release B-M crew to drill geotechnical holes on Main Hill - D. Sink estimates 3-4 hrs for completion.

Note: T. Tank pulled Sally Brown into office - no support for Craig P.

- S. Alston & M. Cramer purging and sampling W397 today.
- Note: Suggestions to speed up A7 drilling:
  - for shallow holes, no rig decon between holes.
  - for deep holes, discontinue spooning at some depth and auger to bedrock
  - if we get LEL hit, flood hole immediately.

1315 K. MacMahan called - HEPA ~~cartridge~~ 7/18/94 cartridge good - we can have OV cartridges onhand if we want but is not necessary. Not required to have Mound fit-testing —

Daily Weather Conditions: A.M. warm & humid

P.M. same

Recorded By [signature] QA Checked By [signature] 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOO

P. 72

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/18/94 TIME: NA PAGE 2 OF

Task Team Members:

J.H.

Narrative (include time and location):

as long as everyone is fittested by company and can provide cards

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By J. Humpert QA Checked By Laura M. Mauer 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.73

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7-19-94 TIME: NA PAGE 1 OF 2

Task Team Members:

Craig Patterson - Sally Brown (FDLGE) Martha Cramer - Susan Abston (NP) Juan Alvarado - Chris Halley (Soil gas) Joe Schultheis, Elisa Jackson, Greg Loder - George Wahl (Area 7) Dave Cummings (Geophysical)

Narrative (include time and location):

0715 Onsite. All personnel present. K. MacMahan at trailer asking for copy of respirator fit cards for SAIC. Also inquiring about whether we ship soil screening results. He's worried that that may potentially be a conflict of interest because the lab may be able to falsify a result within 20%. I said we sometimes sent a copy of results or had a verbal that everything was OK to ship. He asked for a complete copy of results to date. I don't have a complete set because sometimes HP only gives one copy and I have to ship it. I explained to K.M. that it would be hard for the lab to use soil screening since those results are only for Th-232 and Pu-238. I told K.M. that we could stop sending the results if he wanted - he said he'd get back to us on it. Also took respirator cards and papers to copy.

0800 Ran ambient blank to G. Loder at B09. S. Abston and M. Cramer collecting W39701 at B397 w bailer.

Daily Weather Conditions: A.M. Sunny, 70°F

P.M. NA

Recorded By J. Humpert QA Checked By [signature] 7/21/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P-74

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): ~~7-18-94~~ 7-19-94 JHD 7-20-94 TIME: NA PAGE 2 OF 2

Task Team Members:

J. Humpert et al.

Narrative (include time and location):

0930 MCramer and S. Alston not able to sample due to high levels of silt. Bailed well dry and still high level of silts. Called T. Tank for guidance.

1200 G Loder to trailer - at point of collecting last sample (B09005). Will finish hole after lunch.

1300 S. Alston and M. Cramer getting stable readings at B397 - will sample well.

1405 G. Loder finishes B09. Moving to B12 and is skipping decon of rig with approval from T. Tank.

1430 K. MacMahan called. EG&G fidler guy out today - only one that has key for room where FIDLERS are kept. He will get us a new calibrated FIDLER on Wed. morning. Also said we should stop sending soil screening results to lab as directed by EG&G. Just give labs verbal everything OK.

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. Sunny 88°F

Recorded By Juletta Humpert QA Checked By [illegible] 7/21/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

P.15

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/20/94 TIME: 0700 PAGE 1 OF 2

Task Team Members:

Joni Davis, Joletta Humphrey, Greg Loder, George Wahl (ATHSA), Juan Alvarado, Chris Halley (SG), Marlon Cramer, Susan Abston (GW spls), Sally Brown, Craig Patterson (FIDLER)

Narrative (include time and location):

0700 all personnel on site
- J. Alvarado reports that 3 points in SDB exceeded FIDLER background, scanned for soil gas improvement. Did not drill there. Has checking w/ HP to determine background. OU5 HSP says Action level is 3x background
- G. Loder drilling B12
- S. Abston, M. Cramer sampling B402.
- K. McMahon onsite. Decide to finish B16 on Mon 7/25

0830 call fm K. McMahon. Approval fm A. Spessard, A. Berry - No need to decon back of rig between shallow holes. Need to use clean augers.
- also ok to just ream below 30' unless lithology changes.

1000 @ B402. Spls crew finishing sampling there.
1015 @ B12. Just completed. TD = 22' Moving to B10
1030 @ B10 w/ J. Geiska. Move hole approx 10' S. to avoid a LOD. Scanned ok.

Daily Weather Conditions: A.M. hot and humid 90°F
P.M. same

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK #P-76

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/20/94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

1300 @ B10. Just getting started.

1330 Call S. Willis for FRI Access:

J. Davis, J. Minard, L. Coder, G. Wahl (SAIC)

D. Sink Dwork (B-M).

1400 Call for K. McMahan. He wants to stage all IDM drums in A7.

1500 G. Coder completes B10 @ 13.5'.

Note: Fielder crew reports that field test and disc. w/ Roy Mowan indicate that sweeping w/ out channel does not detect plutonium i.e. that its possible to get a hit on CH1 w/o a corresponding hit on out channel. Also found that to get a hit on CH1, Fielder must be stationary and on the ground to a max. 2" above ground — not conducive to field screening.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK D-77

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): NA TIME: NA PAGE 1 OF 4

Task Team Members:

NA

Narrative (include time and location):

NOTE: The following is a summary of geotechnical sampling performed in the New Property, extended Phase. All samples were collected w/ the HSA auger

Lithologic Zones:

ZONE 1: surface mostly silty clays; clayey silty soil

ZONE 2: subsurface silty clays, commonly w/ fairly abundant limestone fragments; may be weathered bedrock in places

ZONE 3: BVA? sand, gravel, well graded, possible BVA material

Note: ZONE 2 consists of silty clays. In areas of higher elevations, clay grades downward to weathered bedrock (either shale or fossiliferous limestone)

Samples Collected

ZONE 1: B40521 B40721 B40821

ZONE 2: B40421 B40621 B40723

ZONE 3: B40622 B40822

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGB 278

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): NA TIME: NA PAGE 2 OF 4

Task Team Members:

NA

Narrative (include time and location):

GEOTECHNICAL SAMPLING (CONT.)

HOLE	SPL COLLECTED			
B401	NONE			
B403	NONE			
B404	B40421	BUCKET	2-8'	silty clay (ZONE 2)
B405	B40521	bucket	0.0-1.3	silty clay (ZONE 1)
		Shelby	0.0-1.5	
B406	B40621	bucket	6.0-24.0	clay (ZONE 2)
		Shelby	10.0-12.0	
	B40622	bucket	30.0-38.0	BVA (ZONE 3)
B407	B40723	bucket	6.0-10.0	silty clay (ZONE 2)
			3.0-11.0 (FM B405)	
	B40721	bucket	0.0-0.5	clayey to silty soil (ZONE 1)
		Shelby	0.0-2.0	
B408	B40821	bucket	0.0-0.5	silty soil (ZONE 1)
		Shelby	0.0-2.0	
	B40822	bucket	17.0-34.0	BVA (ZONE 3)
		Shelby	16.0-18.0	

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morillas 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): NA TIME: NA PAGE 3 OF 4

Task Team Members:

NA

Narrative (include time and location):

B409 NONE.

SAMPLE SUMMARY

ZONE 1	3 buckets	3 Shelbys
ZONE 2	3 buckets	1 Shelby
ZONE 3	2 buckets	1 Shelby

SOIL - silty clays, clayey silts (ZONE 1)

grades FIRM CLAYS (ZONE 2)

weathered shale or limestone (PARTS of ZONE 2)

BVA ZONE 3

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 80

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): NA TIME: NA PAGE 4 OF 4

Task Team Members:

NA

Narrative (include time and location):

SUMMARY OF NEW PROPERTY EXTENDED PHASE DRILLING - MULTIPLE HOLES

B407 2 HOLES; 2ND to collect subsurface sample
B409 2 HOLES; 2ND to collect subsurface sample
B408 1 HOLE
B404 3 HOLES; 2ND to collect subsurface sample
3RD to collect subsurface duplicate
B405 2 HOLES; 2ND to collect subsurface sample
B406 1 HOLE
B403 3 HOLES;

B402 1 HOLE
B401 1 HOLE

LAST ENTRY

Daily Weather Conditions: A.M. NA
P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrow 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.31

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/21/94 THUR TIME: 0700 PAGE 1 OF 1

Task Team Members:

John Davis, Joletta Humpert, Gail Loden, George Wahl (A7HSA)
Juan Alvarado, Chris Holley (SG), Susan Alston, Martha Cramer (GW spl)
Sally Brown, Curtis Patterson (FIDLER)

Narrative (include time and location):

0700 all personnel on site. Conduct HAS briefing.
A7HSA set up on B11
K. McMahon and J. Geiska on site. Discuss concrete specs for well pads:
- 3000 psi
- max 2 hr to pour (from start of mix in yard to pour)
- need to keep concrete wet for several days.

Discuss w/ Skeeter Patterson. He wants to pour next Mon.
- Evaluate B-M invoice for A7HSA thru 6/30; their invoice agrees with our logbooks.

- A7HSA completes B11; TD @ 20.5 (bdek); water sampled @ 12.5
- S. Alston collect water spl @ B410. Then to W399 — difficulty pumping - v. slow recharge

Last Entry

Daily Weather Conditions: A.M. humid overcast 80°F
P.M. Still warming to 90°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO.: 34896

Date (mm/dd/yy): 7/22/94 TIME: 07 00 PAGE 1 OF 1

Task Team Members:

Greg Loder George Wahl
Joletta Minend John Davis

Narrative (include time and location):

0700 G. Loder, G. Wahl on site.
Drill B6; TD @ 16' NO WATER ENCOUNTERED.
JD on site @ 1030 after resp. fit test in Dayton.

1300 Drillers back from lunch. Send them to 17 to stage
10M drums

Daily Weather Conditions: A.M. overcast, sl. humid 80°F
P.M. Clearing some

Recorded By [signature] QA Checked By Laura M. Marilla
8/15/94

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 7-25-94 TIME: NA PAGE 1 OF 3

Task Team Members:

Joletta Humpert Sally Brown Craig Patterson (FIDLER)
Susan Abston Martha Cramer (B16)
Juan Alvarado Chris Halley (Soil Gas)

Narrative (include time and location):

0715 All personnel onsite at sample trailer.
Getting S. Abston and M. Cramer ready for B16.
S. Abston reviewing logbook from previous drilling.
0800 K. MacMahan stopped by - EG&G is now saying we can't use our own respirator fits. Also mentioned Allen Spesard was going to stop by to talk to crew.
0810 Called A. Spesard. - he doesn't need to speak to crew. Said we start without respirators but Henry Robinson and Keith MacMahan will be monitoring (w/ Fidler) to ensure we don't exceed the Actinium Action level of 60 pCi/g. If we exceed the action level, EG&G will not accept our respirator fit tests and we'll probably have to get fit test by Mound. (Keith's beeper #: ~~8-267-1446~~) JPH 7/25/94
0830 K. MacMahan Called - informed him they were starting B16. He's heading down right now.
Call D. Gault - leave message to call about what needs to be done with drums outside Bldg 19.

Daily Weather Conditions: A.M. Sunny, 70°F
P.M. NA

Recorded By J. Humpert QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 84

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896-5

Date (mm/dd/yy): 7-25-94 TIME: NA PAGE 2 OF 3

Task Team Members:

J. Humpert

Narrative (include time and location):

Talked to drillers - they're trying to line up concrete truck to come in tomorrow (Tues.) at 9:00am and 1:00 pm. Rod Long said they will need to get a pour card from Joyce tomorrow morning.

Skeeter and Steve will decon rig and equipment and get with me to line up HP to come and take wipes so they can get equipment back to yard. Also informed them concerning drums - waiting for call from D. Gault.

0840 D. Gault returned call - drums can be placed on pallets and set inside loading dock at Bldg 19. Bldg 19 is open and the pallets are inside. Empty barrels need to be cleaned out (deconned) and can also be placed inside loading dock.

1300 Martha reported they're done collecting samples at B16 - will continue doing lithologic descriptions until hitting sand layer and then will auger to bedrock (instructions per K. McMahan).

Skeeter & Steve working on blass pies and deconning (cleaning) and moving barrels. Still very little

Daily Weather Conditions: A.M. NA

P.M. Sunny, humid, 85°F

Recorded By J. Humpert QA Checked By Laura M. Marsiglia 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK 185

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): 7-25-94 TIME: NA PAGE 3 OF 3

Task Team Members:

J.H

Narrative (include time and location):

water coming out of B399 per Skeeter & Steve. Concrete truck will be here tomorrow morning at 8:30am and 1:00 pm. Will need to get pour card from Joyce Geisler - left message on her voice mail.

Juan A. informed me that Chris H. will be out with Kuomer (surveying) for OU9 tomorrow @ 10:30 am. Either myself or possibly Laura M. will fill in.

1400 G. Loder called - will come down tomorrow to fill in for C. Halley on soil gas crew. Asking if we had developed a second team yet. Will probably need Loder on Wed. to pull Area 21 with me.

1600 B16 complete - tagged bedrock at 48'. No rad hits during drilling. No water below 18'. Will pull & wipe augers Tues.
Offsite to deliver to fedex.
Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By J. Humpert QA Checked By Laura M. Morular 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK 186

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/26/94 TUES TIME: 0700 PAGE 1 OF 2

Task Team Members:

Joletta Hompert John Davis Sally Brown Craig Patterson (FIDLER)
Greg Loder Juan Alvarado (SG)
Susan Abston Martha Cremer (A7 HSA)

Narrative (include time and location):

0700 all personnel on site.
- HSA auger team grout B16. V. Slow mechanic on W399 - unable to sample.

1015 @ B16. Crew waiting on Health Physics for results of dirty wipes on augers. Must wait for results before decontaminating equipment

- Note: S.C. Patterson and S. Belt pouring well pads today. J. Geisler drops off permits for concrete - one for morning pour and one for afternoon pour.

- 1500 All pads are poured. Patterson and Belt putting Broom finishes on pads. Will be completed today

Note: unable to set up on B15 today. Waiting on wipes, then drillers decon all equip. (No 2nd wipe required).
No HP coverage past 1500 (H. Robinson in training)

Note: discussion w/ K. McMahan re FIDLER detection of plutonium; out channel does pick up plutonium tho not as well as CH. 1. But to do it effectively on either channel, FIDLER must be stationary or moved v. slowly and must be 1-2" max

Daily Weather Conditions: A.M. overcast, cool, 70°F
P.M. warming to 85°F

Recorded By [signature] QA Checked By [signature] 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896 — P.87

Date (mm/dd/yy): 7/26/94 TIME: NA PAGE 2 OF 2

Task Team Members:

NA

Narrative (include time and location):

Above ground. KM opinion that FIDLER isn't a good instrument used in a sweep, for plutonium detection.

LAST ENTRY

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 88

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/27/94 WED TIME: 0700 PAGE 1 OF

Task Team Members:

JOHN DAVIS JOLETTA HUMPHREY SUSAN ALSTON MARTHA CRAMER (A7 HSA)
CHRIS HALLEY JUAN ALVARADO (SG)
SALLY BROWN CRAIG PATTERSON (FIDLER)

Narrative (include time and location):

~~JTD 7/27/94~~

0700 ~~All site on personnel~~ All personnel on site. Conduct Hys Briefing.

- HSA crew set up on B15. Good progress.
- JD + JH to New Property to pick up drums.
- Call T. Tank and give weekly update.
- Call for A. Berry. Discuss lack of water @ W399. He suggests we do more surging, with a surge block. Also said we shouldn't dump groundwater from IDW to ground.

1400 Complete B15 @ 19'. No water. Drillers then deconnin rig and washing barrels out. DRILLING COMPLETE!

LAST ENTRY

Daily Weather Conditions: A.M. Cool, overcast, quite pleasant

P.M. Still w/ some clearing

Recorded By [signature] 7/27/94 QA Checked By Laura M. Morrison 8/16/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 7/28/94 THURS TIME: 0700 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS, JOLETTA HUMPERT, SUSAN ABSTON
CHRIS HALLEY, JUAN ALVARADO (SG), GREG LODER
CRAIG PATTERSON, SALLY BROWN (FIDLER), MARTHA CRAMER

Narrative (include time and location):

0700 all personnel on site.
G. Loder, S. Abston work on completing logbooks.
M. Cramer calibrates TLC meter.
J. Minard, G. Loder pulling soil gas samplers.
J. Davis QAs logbooks.

1400 Joe Schultheis on site to look @ AOC J geophysical grid.

1430 @ OSE Bldg for mtg w/ K. McMahon, A. Spessard, T. Tank, Jim Zahora

- small sg grid around A7 gas tanks. Research w/ Petrex
- PH holes scheduled for Tues, Wed next week
- AZ1; not sure what contaminant is there. Will run FIDLER. per A. Spessard.
- FIDLER methodology to remain the same.

LAST ENTRY

Daily Weather Conditions: A.M. CALM, clear, NICE, 80°F
P.M. SAME

Recorded By [signature] QA Checked By Laura M. Marsden 8/5/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P90

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

Date (mm/dd/yy): 8/1/94 MON TIME: 0730 PAGE 1 OF 1

Task Team Members:

John Davis, Joletta Humpert, Sally Brown, Craig Patterson (FIDO), Juan Alvarado, Chris Halley (SG), Martha Crawler (SG)

Narrative (include time and location):

0730 all personnel on site.
FIDLER working in 3/SDB. Soil gas in A7.
1200 JD to office to discuss misc project details w/ T. Frank
LAST ENTRY

Daily Weather Conditions: A.M. humid overcast 80°F
P.M. same

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 34896

Date (mm/dd/yy): 8/2/94 TUES TIME: 0730 PAGE 1 OF 1

Task Team Members:

JOHN DAVIS Joletta Humpert Martha Cremer

Juan Alvarado Chris Holley (SG)

Sally Brown Craig Patterson (FIDLER)

Narrative (include time and location):

0730 all personnel on site. FIDLER crew to 3/SDB, soil gas to A7. Yesterday, Joletta & Martha staked new prop. holes for As-builts Surveyors. Also put locks on wells & removed plastic. Checked for trash and IDM - one soil IDM left @ B409.

0900 To H_2O IDM staging area to cover drums. Then check scanned locations of PH holes; #1 & #2 moved N to edge of road approx 12' from edge of PH Bldg.

1200 JD to office. Evaluate Bowker-Morner invoices. Look @ ODCs.

1700 Word from trailer - FIDLER survey completed!

Last Entry

Daily Weather Conditions: A.M. overcast, humid, 85°F, sl. breeze.

P.M. same.

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.92

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 8/3/94 Wed TIME: 0700: PAGE 1 OF 1

Task Team Members:

JUAN ALVARADO Chris Halley (soil gas)

JOHN DAVIS

Narrative (include time and location):

0700 Soil gas crew onsite. Working in A7

1400 JD onsite to check access for Add'l Sampling Program. Late entry

Daily Weather Conditions: A.M. cool, overcast 75°F

P.M. warmer 85°F

Recorded By [signature] QA Checked By Laura M. Morrissey 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.93

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO. 34896

Date (mm/dd/yy): 8/4/94 Thurs TIME: 0700 PAGE 1 OF 8

Task Team Members:

Juan Alvarado Chris Hailey

Narrative (include time and location):

0700 Soil gas crew onsite. Working in A7.

0930 A. Beary calls J. Davis @ Beaverdam office.
AB wants W399 surged to try to improve flow to collect groundwater sample.

1000 JDavis faxes July Accident Report to J. Geisler

1430 @ OSE Bldg for mtg w/ A. Spurrad, A. Beary, K. McMahon, T. Tank
- Discuss issuance of New Prop. Phase 1 Field Report
- Discuss Add'l Sampling Plan
- Discuss 50/10 Validation. Will treat OPS Area and New Prop as a "single batch".
- A. Beary wants to surge W399.
- Some EPD Worker II slots; 730A 8/10 @ 91B; Keith needs to know first thing Mon.

NOTE: Soil gas completes Area 7 today.
Last Entry

Daily Weather Conditions: A.M. cool overcast 80°F

P.M. warm to 85°F

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK p.94

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 8/8/94 MON TIME: 0700 PAGE 1 OF 1

Task Team Members:

Joletta Humpert

Gary Lodin John Davis (PH BLDG BORINGS)

Martha Cramer Chris Halley (SOIL GAS)

Narrative (include time and location):

0700 Soil gas crew on site. Work in AJ all day.

0800 G. Lodin onsite w/ equip. from Village Rental.

0930 J. Davis onsite.

- To Bldg 24 to drill B17, B18, B19, B20; 0-5' each; with hand augering equipment.

1130 v. difficult drilling. Complete B17.

1530 continued diff. drilling. Complete B18.

Last Entry

Daily Weather Conditions: A.M. Warm 85°F Clear

P.M. Sunny, sl. more humid

Recorded By [signature] QA Checked By Laura M. Morrissey 8/15/94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK

P.95

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 8/9/94 TIME: 0730 PAGE 1 OF 1

Task Team Members:

Joletta Humpert

Martha Cramer Chris Halley (SC)

Greg Loder Juan Alvarado (PH BLDG BORINGS)

Narrative (include time and location):

SOIL CM CREW WORKING IN AREA I. V. difficult drilling down steep hillside.

GL & JA continue w/ PH bldg. Complete B20? @ 3'. B19? Auger refusal @ 2'. Attempted to contact Mound personnel for direction.

Last Entry

Daily Weather Conditions: A.M. SEE INDIV. LOGBOOKS

P.M.

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET SITE MANAGER LOGBOOK P.96

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 8/10/94 TIME: 0730 PAGE 1 OF 1

Task Team Members:

Joletta Humpert Greg Loder (SG Retrieve)
Chris Halley Martha Cremin (SG place)
Joe Schultheis (W399)

Narrative (include time and location):

All personnel on site by 0730

1130 Call fm. Joe Schultheis. He checked water level in W399; water @ 26.29' from top of casing. Well depth @ 35.11 TOC. Screen @ 23.33 which means there's about 7' of water in screen which is a sufficient amount to surge.

1200 Call to Joletta. JH & GL drilling soil gas tubes in A3. CH & MC installing SG tubes in Area J.

Note: Yesterday GL completed drilling and sampling PH holes; all to 3'. Also grouted holes.

Call to Jim?; Bowen-Morrow. Ted Keen set up to surge and pump W399 tomorrow; w/ G. Loder.

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By Laura M. Morrison 8/15/94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P.97

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34895

Date (mm/dd/yy): 8/11/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Joletta Humpert, Paul Parrish (SG Artesian)

Chris Helley, Juan Alvarado (SG Placer)

Greg Loder (W399)

Narrative (include time and location):

GL supervises Bowler Morner to ~~pu~~ ~~on 8/11/94~~ SURGE and pump W399

@ start, WL @ 24.1' well depth = 33.0

SURGE for 1 hour, check turbidity SURGE AGAIN.

Then ~~point~~ ~~on 8/12/94~~ bail well dry, 4.5 gal removed.

SEE W399 logbook for details

Last Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By [signature] QA Checked By [signature] 8/15/94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P.98

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 8/15/94 MON TIME: 0715 PAGE 1 OF 1

Task Team Members:

Joletta Humpert (SG Retrieve) (Soil G Place) Chris Halley
Paul Parrish (SG Retrieve)
Martha Cramer (SG Place

Narrative (include time and location):

All ~~personell~~ JH 8/15/94 personnel onsite by 0730

Placement Crew working in Area 61 and Area J.
Retrieval crew in Area 7.
Fast Entry

Daily Weather Conditions: A.M. NA
P.M. NA

Recorded By Joletta Humpert QA Checked By Laura M. Marusa 9-27-94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK
l.99

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 8/16/94 TUES TIME: Ø7 3Ø PAGE 1 OF 1

Task Team Members:

~~Joletta~~ JPH 8/16/94

Chris Halley + Martha Cramer (SG Place)

Narrative (include time and location):

All personnel onsite @ Ø7ØØ

Working in Area 13 with security.
East Entry

Daily Weather Conditions: A.M. NA

P.M. NA

Recorded By Joletta Humpert QA Checked By Laura M. Marion 9-27-94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK p. 100

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 34896

Date (mm/dd/yy): 8/17/94 WED TIME: NA PAGE 1 OF 1

Task Team Members:

M. Cramer

C. Haley

Narrative (include time and location):

All Entries Made by CH 8/31/94

0700 Arrive at Trailer

0936 Crew to non-AOC areas.

1150 Lunch Break

1330 Back to ~~AOC~~ non-AOC areas

1605 Back to Trailer

1610 Tubes / Log Book

Last Entry

Daily Weather Conditions: A.M. Overcast / Hazy / Fog ~64°F

P.M. N/A

Recorded By [signature] QA Checked By [signature]

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK p. 101

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 8/18/94 THURS TIME: NA PAGE 1 OF 1

Task Team Members:

MARTHA CRAMER CHAU HALLEY (SOIL GAS) SHAW, WEISS, DENADLES (SURVEYORS)

JOHN DAVIS ", BERNARD KLENOW

JEFF, KUNCA

Narrative (include time and location):

0800 SWD personnel & JDAVIS on site to locate As built OPS AREA and New Property soil borings, wells, seeps, and sediment points.

- Work in Ops Area; locate A7 borings (B01-B16) and Bldg 24 borings (B17-B20). Also locate well W410 and those sed. points w/i Ops Area

1200-1300 LUNCH

1300-1600 To New Prop. Show them boring, well, and sed locations. They'll (SWD) finish surveying next Tues.

Last Entry

Daily Weather Conditions: A.M. Sl. overcast 85°F

P.M. Same

Recorded By [signature] QA Checked By Juletta Humpert

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 102

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 8/22/94 TIME: NA PAGE 1 OF 1

Task Team Members:

M Cramer
C Haley

Narrative (include time and location):

All Entries made by CA 8/31/94

0700 Arrive @ site
0730 Juletta calls to discuss upcoming week workplans for soilgas.
0805 H+S briefing
0815 Non-AOC area
0900 High Rad areas encountered by SG crew. Called J Davis - MC/CH will sample well 399 this week. Need to purge 3 days and sample
0945 Continue Non AOC.
1:45 To Lunch

~1500 To well 399 to purge
~1630 Return from well.
~1630 Tubes/Logbooks
Last Entry.

Daily Weather Conditions: A.M. Cloudy / Cool 63°
P.M. N/A

Recorded By [signature] QA Checked By [signature]

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK 7-103

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO.: 34896

Date (mm/dd/yy): 8/23/94 TIME: NA PAGE 1 OF 1

Task Team Members:

M. Cramer — Steve Davis (Oak Ridge)
C. Hatley
M. Oblo

Narrative (include time and location):

~~All Entries made by C.H. 8/31/94~~ JPH 9/6/94

0715 Personnel onsite.
0800 M.O. trained in soil gas procedures.
0900 M.O and C.H. leave to help OU9 surveyors.
1000 H&S briefing by M.C.
1030 Pick up HP - off to non AOC to install.
1145 Lunch
1315 Back to Area 13 to pull timers.
1430 Begin installing in non AOC
1530 Back at trailer - offsite.
Last Entry

Daily Weather Conditions: A.M. 75°F, Sunny
P.M. 80°F, breezy

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 9-27-94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.104

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 8/24/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Martha Cramer (S.G. Inc)
Chris Halley (S.G. Inc)
Henry Robinson (EG & G)

JPH 8/24/94

Narrative (include time and location):

0700 Onsite at trailer
0715 J. Geisler provides permits
0830 Begin drilling in non-AOC (SW/PP) area to install tubes.
1200 Lunch
1305 Back to SW/PP Area to install
1450 Scanned out by HP.
1515 Bailing W399 in New Property
1600 Offsite

Daily Weather Conditions: A.M. 68°F, cloudy, overcast
P.M. 78°F, cloudy.

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 9-27-94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK: P-105

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): ~~8/24/94~~ 8/25/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Martha Cramer (SG In) Henry Robinson (EG&G)
Matt Obley (SG In-training).
Chris Halley (SG In).

Narrative (include time and location):

0700 Onsite at trailer
0800 Meet security at Gate 56 to install in nonADC.
0830 H&S briefing.
1150 Break for lunch. M. Cramer leaves for office.
1245 Back to nonADC to install.
1605 Patching holes w/ quickcrete.
1620 Purging Well W399.
1700 Offsite

Daily Weather Conditions: A.M. 72°F, overcast, P. cloudy.
P.M. 87°F, hot, sunny

Recorded By Joletta Humpert. QA Checked By Laura M. Marrin 9-27-94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.106

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 8/29/94 TIME: NA PAGE 1 OF 1

Task Team Members:

J. Humpert (retrieval) Matt Obley (install)
Juan Alvarado (retrieval)
Chris Halley (install)

Narrative (include time and location):

0730 Arrive @ trailer
0745 Keith McMahon indicated a hand count will be conducted some time this week.
H&S briefing
0800 Retrieval crew leaves to retrieve in Area J, non AOC north, Area 13 timers, and patch holes in Area J.
0900 Installation crew off to non AOC to install tubes.
1215 Break for lunch
Retrieval crew leaves for office
1300 C.H. out with J. Geisler locating points.
M.O. heads to office.
Last Entry

Daily Weather Conditions: A.M. Sunny, 70°F
P.M. Sunny, 75°F

Recorded By Jolotta Humpert QA Checked By Laura M. Marilon 9-27-94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P.107

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 8-30-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Matt Obloy Chris Halley (SG Inc)

JPH 8/30/94

Narrative (include time and location):

0730 Arrive at trailers
0830 Off to non-AOC to install following H&S briefing
1130 Lunch break
1230 Back to non AOC to install
1550 Scan out with HP
1615 Unload equipment
Offsite. Last Entry

Daily Weather Conditions: A.M. 75°F, Sunny
P.M. 75°F, Overcast

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 9-27-94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P.108

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 34896

Date (mm/dd/yy): 8/31/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Chris Halley Matt Oblay (S.G. Jr)

JPH 8/31/94

Narrative (include time and location):

0730 Onsite at sample trailer
0800 Off to install in non AOC - pick up HP.
1215 Lunch break
1300 Meet w J. Geisler for permits
1330 Rain - shut down
1400 Back at trailer - prepping soil gas tubes, etc.
1600 Offsite
Last Entry

Daily Weather Conditions: A.M. 70°F Overcast

P.M. 72°F, Overcast, rain

Recorded By Joletta Humpert QA Checked By Laura M. Marion 9-27-94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P. 109

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 9/1/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Matt Obley Chris Halley (S.G. In)
Joletta Humpert Brad Richardson (S.G. Out)

Narrative (include time and location):

0730 Onsite at sample trailer
H&S briefing
0800 Installation team out to non-AOC after picking up HP.
Retrieval team out to Area J, Area 61 & Area 3. Retrieving tubes and patching holes.
1200 Lunch. Retrieval team done. Shipping Area 3 + Area J.
1500 Installation team returns to trailer - prepping tubes.
1630 Offsite.
Test Entry

Daily Weather Conditions: A.M. Sunny, 70°F
P.M. Sunny, 75°F

Recorded By Joletta Humpert QA Checked By Laura M. Marinan 9-27-94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P. 110

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 34896

Date (mm/dd/yy): 9/6/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Matt Oblog, Brad Richardson (SG. In)
Joletta Humpert Paul Parrish (SG. Out)

Narrative (include time and location):

0700 Onsite at sample trailer
0715 M.O. talking with Geisler @ day's activities
0800 J Geisler returns - discuss strategy to finish sampling points plus additional points.
0830 Installation team out to pick up HP coverage and work in non-AOC.
H&S briefing conducted.
1200 Retrieval complete for today. Team offsite
1215 Installation team met w J. Geisler. Continued drilling in non-AOC
Last Entry

Daily Weather Conditions: A.M. Overcast, 65°F, light drizzle
P.M. NA

Recorded By Joletta Humpert QA Checked By Laura M. Morrison 9-27-94

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 111

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 9/7/99 TIME: N/A PAGE 1 OF 1

Task Team Members:

Matt Oldag, Brad Richardson (installation)
Joletta Humpert, Paul Parrish (retrieval) JPH 9/7/99

Narrative (include time and location):

0800 On site at Sample Trailer
0840 Meet with HP - working in nonAOC installing Retrieval team with security in Area 13.
1200 Break for lunch. Retrieval team leaves site to ship Area 13 and Area 61 tubes, then head to office
1330 Installation team meets w J. Geister in NonAOC Wst. Installing
1530 Back at trailer
1545 Offsite

Daily Weather Conditions: A.M. Sunny, 65°F, Calm Wind
P.M. Sunny, 70°F, SWind 5-10 mph

Recorded By Brad Richardson QA Checked By Joletta Humpert

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P. 112

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I

TASK NO.: 34896

Date (mm/dd/yy): 9/8/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Matt Oblog (S.G. Jr.)

Brad Richardson (S.G. Jr.) JPH 9/8/94

Narrative (include time and location):

0815 Onsite at sample trailer. Working with HP and EG&G concerning high alpha readings on M.O.'s hands.

0900 Meet security - installing in nonAOC (near Bldg 87)

1200 ~~1100~~ JPH 9/8/94 Lunch break

1300 Back to nonAOC Secure area (near Bldg 87)

1530 Exit secure area - back to trailers

1610 Offsite

Last Entry

Daily Weather Conditions: A.M. 72°F Sunny

P.M. 72°F, Sunny

Recorded By Juletta Humpert QA Checked By Laura M. Marsden 9-27-94

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P. 113

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 9/12/94 TIME: NA PAGE 1 OF 1

Task Team Members:

Joletta Humpert (S.G. Out) Brad Richardson (S.G. In)
Paul Parrish (S.G. Out)
Matt Oblay (S.G. In)

Narrative (include time and location):

0730 Onsite at sample trailer
1000 Joletta Humpert and Paul Parrish finish Pulling Non AOC Tubes (See page 98 Non AOC Logbook).
12:00 Brad and Matt break for lunch
13:00 Brad and Matt continue installing Soil Gas Tubes
16:20 Offsite
Data Entry

Daily Weather Conditions: A.M. 60°F Sunny
P.M. 80°F, Sunny

Recorded By [signature] QA Checked By Joletta Humpert

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK p. 114

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 9-13-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Matt Oldey

A. Brad Richardson

JRH 9/15/94

Narrative (include time and location):

08:00 Matt and Brad on-site, load equipment into truck, prepare for installation of Soil Gas Tubes.

11:30 Break for lunch

12:15 Continue installing Soil Gas Tubes.

15:30 finish installing Sample Tubes for the day.

Last Entry

Daily Weather Conditions: A.M. 70°F Sunny

P.M. 85°F, Sunny

Recorded By Matt Oldey QA Checked By Joletta Humpert

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P. 115

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 9-14-94 TIME: NA PAGE 1 OF 3

Task Team Members:

Matt Oldy
A Brad Richardson
Henry Robinson

JPH 9/15/94

Narrative (include time and location):

0745 - Brad on-site, load equipment into truck for the soil-gas surveys ~~& RSI (regional soil invest. sampling)~~ & OU5 additional samples. JPH 9/15/94
Waiting on Joyce - make sure we have clearance to do screen samples w/o intrusive permit.
0830 Call to someone @ X-3351 (Burn Area). He said they were burning explosives this morning and early afternoon and that he would contact Joyce when it would be safe to collect samples in burn area
0900 - Joyce gave us digging permit for all our screening sample points and the Metals point (TAL)
0910 - Got Henry, go to 13.25N 5.75W (#29); since we don't have security escort we moved point outside fence in grass area - Henry clears point
0925 - Collect Screen Soil 13.25N 5.75W (#29)
0930 - Locate 21.5N 2.5W (#115) - Henry clears point.
0935 - Collect Screen Soil 21.5N 2.5W (#115)
0940 - Locate 14.3N 12.75W (#65) - Henry clears point
0941 - Collect Screen Soil ~~1040~~ 14.3N 12.75W (#65)
1050 - Locate 13.5N, 15.5W (#28) - Henry clears point

Daily Weather Conditions: A.M. 70°F, Sunny, Calm
P.M. NA

Recorded By A Brad Richardson QA Checked By Juletta Humpert

TASK TEAM ACTIVITY LOG SHEET — SITE MANAGER LOGBOOK P-116

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

Date (mm/dd/yy): 9-14-94 TIME: NA PAGE 2 OF 3

Task Team Members:

A Brad Richardson
Matt Oblog
Henry Robinson

JPH 9/15/94

Narrative (include time and location):

0952 1057 - Collect 13.5 N 15.5 W (#28) - had moved off pavement
1006 - Locate 13 N 22.5 W (#86, 87) - Henry clears site
1010 - Collect 13 N 22.5 W (#86, 87)
1026 - Locate 2.5 N 18 W (#45) - Henry clears site
1030 - Collect 2.5 N 18 W (#45) - bushwacked 50 feet north of 2N 18 stake in woods
1040 - Locate 0S 5W (#46) - Henry clears site
1045 - Collect 0S 5W (#46) - along road.
1049 - Locate 4.5 N 7.5 W (#117) - Henry clears site
1052 - Collect 4.5 N 7.5 W (#117)
1108 - Got amber jars for TAL Metals sample
1109 - At #50 (8N 24.5W) 9-14-94, Henry clears site
1112 - Collect #50 (8N 24W) - same location as the soilgas probe
- Lot # F3146050 8 oz. Amber Jar
9-14-94 (Sample # BB1ØØ1) JPH 9/15/94 0-6"
1117 - Henry clears us for lunch
1120 - Back @ Trailer
1330 - Meet Joyce and Henry @ Burn area
1340 - At BB2 1Ø1 & BB2 ØØ1 - H & J clay; gravel/sand
1341 - Collect " " " " - Duplicate " " 0"-6"

Daily Weather Conditions: A.M. 78°F Sunny, SW 10-15
P.M. 89° " "

Recorded By [signature] QA Checked By Jolette Humpert

TASK TEAM ACTIVITY LOG SHEET

SITE MANAGER LOGBOOK P. 117

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

Date (mm/dd/yy): 9-14-94 TIME: NA PAGE 3 OF 3

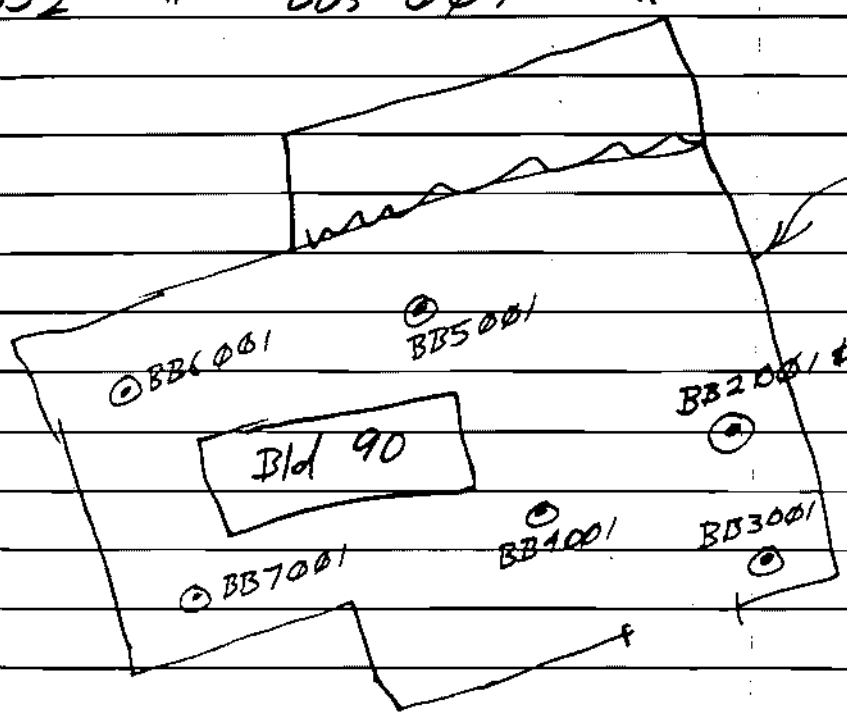
Task Team Members:

A Brad Richards
Matt Obley
Henry Robinson

JPH 9/15/94

Narrative (include time and location):

1345 - Collect BB3 ØØ1 - Sand & Gravel 0"-6"
1349 - Collect BB4 ØØ1 " " "
1352 - " BB5 ØØ1 " " "



1356 - Collect BB6 ØØ1 Sand & Gravel 0"-6"
1400 - Collect BB7 ØØ1 " " "
- All locations sampled were cleared by Joyce and Henry prior to sampling; Henry also collected screen samples
1405 - Finished here - shipped samples fedex.

Daily Weather Conditions: A.M. NA
P.M. 90°F Sunny SW 10-15

Recorded By A Brad Richards QA Checked By Jolette Hunnicutt

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P-24

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

DATE: 5/11/94 Su M Tu (W) Th F Sa TIME: 0800

WEATHER: Clear, sunny, warm 50°F

WORKING CONDITIONS: good.

REQUIRED PPE: steel toed boots & safety glasses when staking. Add cleaning PPE when cleaning.

NOTES: Brief personnel on OU5 details esp. Site-Specific H&S Checklists. Discuss & use of cleaning equip. & associated hazards. Discuss rudimentary first aid, heat exhaustion, and tick dangers. Discuss slip, trip, and fall hazards as well as brief initial discussion of specific AOC hazards.

Last entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Eric Taylor		
Cathy Mc[illegible]		
[illegible]		
Art Tuyn		
Jeff Kuhn		

JOHN H. DAVIS

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P.242

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 3489

DATE: 5/12/94 Su M Tu W (Th) F Sa TIME: 0730

WEATHER: clear crisp calm 45°F

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots. Add clearing PPE when clearing

NOTES: Discussed slip trip fall hazards. Discussed entry into decommissioned buildings. Discuss work plan for the day.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

JOHN H. DAVIS

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK 9.2A3

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 34896

DATE: 5/16/94 Su (M) Tu W Th F Sa TIME: 0730

WEATHER: clear cool sl breeze 50°F

WORKING CONDITIONS: good

REQUIRED PPE: boots, glasses, add clearing PPE when clearing.

NOTES:

Discuss:

- slip, trip, fall esp. on steep hillsides
- poison ivy
- ticks - use of Permanone
- saw & machete safety esp. in thick vegetation & steep slopes
- remind surveyors to always wear glasses and wear hardhats when in wooded area

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]		
Jeff Tuttle		
Eric Sayler		
[illegible]		
[illegible]		

Tony Davis

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P.244

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 3489

DATE: 5/17/94 — Su M (Tu) W Th F Sa — TIME: 0730

WEATHER: clear cool breezy 50°F

WORKING CONDITIONS: good

REQUIRED PPE: boots, gloves, add cleaning PPE when cleaning

NOTES:

Discuss:

- ticks & Permanone
- Cleaning equipment safety
- HP coverage; per J. Geisler. Shell check HP area D D&D to see if it's OK to go in.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

[illegible]

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK 9.245

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 5/18/94 Su M Tu (W) Th F Sa TIME: 07:30

WEATHER: clear cool breezy 50°F

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots, add cleaning PPE when cleaning

NOTES:

Discuss:

- cleaning tool safety
- drink plenty of water
- safety breaks

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Eric Taylor		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P 246

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO. 34

DATE: 5/19/94 — Su M Tu W (Th) F Sa — TIME: 7:25

WEATHER: cool, breezy, sunny, 50°F

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots, add clearing PPE when clearing

NOTES: Discuss
* cutting tool safety
* taking rest breaks as needed & drinking H_2O
* cautioned regarding fall & trip hazards

Last entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Eric Taylor		
[illegible]		
[illegible]		
[illegible]		
Bernard D [illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

P. 247

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 5/23/94 Su (M) Tu W Th F Sa TIME: 07:30

WEATHER: good - sl overcast, 65°F

WORKING CONDITIONS: good

REQUIRED PPE: hook & glasses; add cleaning PPE when cleaning.

NOTES:

Discuss
- chainsaw & machete safety
- familiarizing 1st aid
- ticks
- heat exhaustion
- slip, trip, fall

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	[illegible]	
[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P-248

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 3489

DATE: 5-21-94 Su M (Tu) W Th F Sa TIME: 7:30

WEATHER: OVERCAST, MUGGY, 75°F

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots, add PPE cleaning.

NOTES:

DISCUSS

- chainsaw safety - idling chain. Don't walk on steep hills if saw is not operating correctly.
- drink lots of water.

LAST ENTRY

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	Sharon Kristenger	
[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

P-249

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO. 34896

DATE: 5-25-94 Su M Tu (W) Th F Sa TIME: 7:30

WEATHER: overcast, rainy, 65-70° F

WORKING CONDITIONS: Fair, slightly slippery

REQUIRED PPE: glasses, boots, Add PPE for clearing

NOTES:

Discuss
- slip/trip/Fall hazards
- rattlesnake first aid
- cautioned workers regard slippery conditions

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Cindy Montgomery		
Sharon Kretzmayer		
Bud Richards		
Chr D Holly		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P.250

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 5-26-94 Su M Tu W (Th) F Sa TIME: 7:30

WEATHER: hazy w/ some sun, some rain

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots, add clear PPE w/in clear.

NOTES:

Discuss:

Be safe - its tough out there!

Cont entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	[illegible]	
[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

P. 251

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 5/31/94 Su M (Tu) W Th F Sa TIME: 0730

WEATHER: Clear cool 50°F calm

WORKING CONDITIONS: Good.

REQUIRED PPE: glasses & steel toed boots, Add clearing PPE when clearing

NOTES:

Discuss

- Mound PPE requirements. Always glasses & boots. Add hardhat when in construction zone or in woods.
- Clearing PPE: hardhat, hearing protect, gloves, face shield glasses, boots, chaps, vest.
- Chainsaw, machete safety.
- ticks: use Permanone & insect spray.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Art Tsup		
Jeff Kahn		
Cindy Mcintosh		
Sharon Bietenger		
Bruce D Kunst		
Chas J Hilty		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM

SITE MANAGER LOGBOOK P-252

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 3489

DATE: 6/1/94 Su M Tu W Th F Sa TIME: 07:00

WEATHER: 70° F, sunny

WORKING CONDITIONS: good

REQUIRED PPE: glasses + steel toed boots, add clearing equipment when clearing

NOTES:

Discuss

- Safety in Area 3/SDB.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]		
[illegible]		
[illegible]		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

P-253

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 6/2/94 Su M Tu W (Th) F Sa TIME: 07:30

WEATHER: 60°F Sunny

WORKING CONDITIONS: good

REQUIRED PPE: glasses + steel toed boots, add clearing equipment when clears

NOTES:

Discuss:

- eye scratch incident of Evelyn Meagher yesterday
  Eye protection v. important. Stress discussion of slip trip fall

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]		
[illegible]		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK: 1254

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 6-6-94 Su (M) Tu W Th F Sa TIME: 0800

WEATHER: overcast, humid, 60° F

WORKING CONDITIONS: good

REQUIRED PPE: SEE below

NOTES:

Discuss:

- Mound PPE requirement; glasses & hook always, hard hats in construction zones. Also discuss cleaning PPE
- Poison ivy. Lots of it at Area J. Where its thick, recommended PPE is taped up tyvek w/ nitrile gloves.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Matt Oxley		
[illegible]		
Chris Hurley		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

p. 255

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO. 34896

DATE: 6/7/94 Su M (Tu) W Th F Sa TIME: 08:00

WEATHER: Sunny humid 65°F

WORKING CONDITIONS: good

REQUIRED PPE: See below

NOTES:

Discuss:
- Safety in Area 3 / SDB
  Unit Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Brad Richards		
Alan D. Hall		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM

SITE MANAGER LOGBO
8256

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 3

DATE: 6/8/94 Su M Tu (W) Th F Sa TIME: 07 30

WEATHER: Mostly Cloudy, 60°F

WORKING CONDITIONS: Good

REQUIRED PPE: See below

NOTES:

Discuss:

- Concerns w/ area J.
  - Ticks (Tape Pants legs to boots)
  - Poison Ivy (where encountered tape up and
  - wear tyvek if necessary)
  - Steep slope dangers

LAST ENTRY

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Eric Taylor		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO. 34896

DATE: 6/9/99 Su M Tu W (Th) F Sa TIME: 07:30

WEATHER: Mostly Sunny 60°F, Calm

WORKING CONDITIONS: Good

REQUIRED PPE: See below

NOTES:

Discuss Concerns w/ Area J
- Ticks
- Poison Ivy
- Steep slopes

Discuss Mounds PPE Requirements
- safety shoes
- safety glasses
- Hard Hats in construction area.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]		
Eric Taylor		
[illegible]		
[illegible]		

[illegible]

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM SITE MANAGER LOG

P. 258

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO.

DATE: 1/13/94 Su M Tu W Th F Sa TIME: 07:3

WEATHER: Sunny 70°F

WORKING CONDITIONS: (Good)

REQUIRED PPE: See below

NOTES: Concerns

- Hard hats in construction areas
- Safety Glasses
- Lost side shields
- Discuss Mound PPE: glasses & boots always, hardhats around drill rigs.
- JSA's for drill rigs
- Biological hazards in New Prop; ticks, etc.
- Site-Specific Checklist for New Prop

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896 — P-259

DATE: 6/14/94 Su M (Tu) W Th F Sa TIME: 0730

WEATHER: SUNNY humid 85°F

WORKING CONDITIONS: good

REQUIRED PPE: boots, glasses, hardhats

NOTES:

Discuss
- use of PPE
- heat stress - drink lots of water
- 1-ton limit on "Steep Hill" Road by Dixon Pond. Rigs must go around.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	[illegible]	
[illegible]	Mark T. [illegible]	
[illegible]	[illegible]	
Martha Crowe		
Susan L Abler		
L C Patterson		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM

SITE MANAGER LOGBOOK: P-260

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 3489

DATE: 6/15/94 Su M Tu (W) Th F Sa TIME: 0730

WEATHER: warm 80°F humid Clear

WORKING CONDITIONS: good.

REQUIRED PPE: glasses, boots, handhelds in exclusion zones

NOTES:

Discuss:

- Mound speed limit of 15 mph
- heat stress - drink lots of water, take safety breaks
- PPE in exclusion zones
- use of handhelds for soil gas; applicable if in H&S Checklists

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	[illegible]	
[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK 9761

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 6/16/94 Su M Tu W (Th) F Sa TIME: 07:30

WEATHER: hot humid hazy 90°F

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots, handhelds in exclusion zones

NOTES:

Discussed

- anticipated 90°F weather today - heat stress. Safety breaks and drink lots of water. Awnings will be supplied if necessary
- Safety glasses will be replaced as necessary.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Susan L Albison	Mark Fitzgerald	
[illegible]	[illegible]	
[illegible]		
S C Patterson		
Jon [illegible]		
Eric Taylor		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM SITE MANAGER LOGBOOK 9.262

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

DATE: 6-20-94 Su (M) Tu W Th F Sa TIME: 0730

WEATHER: humid, hazy, warm

WORKING CONDITIONS: good

REQUIRED PPE: boots & glasses, add hardhat in construction zones & exclusion zones.

NOTES: Discussed

- speed limit of 15 mph
- must wear seat belt
- No parking or storage w/i 8' of security fence
- Mound PPE; glasses & boots.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	Susan Hilton	Eric [illegible]
[illegible]	Joletta Humpert	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible] 6/20/94
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P. 263

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO.: 34896

DATE: 6-21-94 Su M (Tu) W Th F Sa TIME: 0730

WEATHER: hazy, overcast humid 75°F

WORKING CONDITIONS: good but wet

REQUIRED PPE: glasses, boots, handbook in exclusion zones, construction zones

NOTES:

Discussed

- lightening alerts. Mound AP passes to board.
- tick precautions and what to do if find an imbedded tick
- Drilling in A7: radiological concerns. Stay upwind of dust. No eating, drinking, chewing in exclusion zone. Inhalation, ingestion are primary exposure routes.
- If hit are recorded on monitoring equip (OVA, O2/LEL) Mound will supply work coveralls and will launder.
- Slippery driving conditions in new property
- Heat stress

Last entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM

SITE MANAGER LOGBOOK P. 264

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 3489

DATE: 6/22/94 Su M Tu (W) Th F Sa TIME: 0730

WEATHER: warm, humid, 90°F, clear

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots, hardhats as required.

NOTES: Discussed

- training forms
- Don't let drillers start rig, put up mast, etc until exclusion zone is established
- Get urine samples turned in
- Chiggers are bothersome. Need more insect spray
- Heat stress - drink water and safety breaks.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	[illegible]	
[illegible]	[illegible]	
Juletta Humpert	[illegible]	
Yaunta Cramer	[illegible]	
[illegible]	Sally J. Brown	
Eric Taylor		

[illegible]

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P-265

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 234896

DATE: 6/23/94 Su M Tu W (Th) F Sa TIME: 0730

WEATHER: hazy & overcast. lightning alert in aft.

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots, handwate as required

NOTES: Discussed

- earplugs, signs on exclusion zone, coveralls, training records to be turned in, urine samples, teflon tape on soil samples plastic under rig and drums

LAST ENTRY

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Eric Saylor	Maurice L. Cramer	[illegible]
Susan J. Gilbert	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	Juliette Dumont	
[illegible]	[illegible]	

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P-266

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 3489

DATE: 6/27/94 — Su (M) Tu W Th F Sa — TIME: 0730

WEATHER: overcast, sl. drizzle 65°F

WORKING CONDITIONS: wet, slippery.

REQUIRED PPE: glasses, boots. Add hardhats in exclusion zones and construction zones

NOTES: Discussed:

- drill crews to wear coveralls
- wet driving conditions

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	[illegible]	
Eric Taylor	[illegible]	
[illegible]	George Wahl	
Susan J. Allston	[illegible]	
[illegible]	Juliette Hurnpert	
[illegible]		

[illegible]

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

P-207

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 6/28/94 Su M (Tu) W Th F Sa TIME: 0730

WEATHER: hazy, overcast, cool

WORKING CONDITIONS: good

REQUIRED PPE: glasses and boots; hard hats in exclusion zones and construction sites

NOTES: Discussed:

- Logbook protocol: line outs, signatures, blank spaces, Abandonment Log
- Audit on Thursday - Audit protocol, housekeeping
- decon station - flammables in cabinet @ EOD
- tape (teflon) soil jars @ Rig.
- Wear earplugs @ Rig
- Action levels > 1 ppm on OVA
- Glove changes
- Joletta Humpert in charge when JDavis not here.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Sally A Brown	Eric Saylor	
[illegible]	Joletta Humpert	
[illegible]		
Marsha L Crow		
Susan L Alston		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM

SITE MANAGER LOGBOOK P. 268

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 3489

DATE: 6/29/94 Su M Tu (W) Th F Sa TIME: 0730

WEATHER: clear, sl. humid 80°F

WORKING CONDITIONS: GOOD

REQUIRED PPE: glasses and boots, hardhats as required.

NOTES:

Discussed:

Action levels. Level D is <1 ppm OVA. Level C is 1-5 ppm w/o benzene or vinyl chloride. Level B is >5 ppm or >1 ppm w/ benzene or vinyl chloride.

10% LEL: >10% LEL must be intrinsically safe environment which drilling is not.

Safety glasses: ALWAYS wear them!

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Sally Brown	Jeff DeVaughn	[illegible]
[illegible]	George Wahl	[illegible]
Susan T Alston	[illegible]	[illegible]
Mantraz Cramer	[illegible]	Joletta Humphrey
[illegible]	SC Patterson	[illegible]
Eric Taylor	[illegible]	

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 348967

DATE: 6/30/94 Su M Tu W (Th) F Sa TIME: 1200

WEATHER: clear cool humid 70° F

WORKING CONDITIONS: good

REQUIRED PPE: glasses and boots, hardhats as required

NOTES: Discussed:

- chigger protection
- Action levels w/ B/G. Mound HP will determine working levels and will issue Stop Work as necessary

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]		
[illegible]		
[illegible]		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM

SITE MANAGER LOGBOOK P. 270

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1

TASK NO: 3489

DATE: 7/5/94 Su M (Tu) W Th F Sa TIME: 0730

WEATHER: clear, humid, 80°F

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots, hardhats as required

NOTES:

Discussed

- drilling schedule to finish by 7/12
- Dual protection: ingestion, inhalation. No eating, drinking, smoking in exclusion zone. Stay upwind of borehole. If dusty conditions occur, water the hole
- New Property sediment sampling: ticks & poison ivy

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

Susan L Alston	Chris D Hall	
George Wahl	Martha L Cosma	
[illegible]	Juletta Thompson	
[illegible]	[illegible]	
[illegible]		
Sally A Brown		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P 27

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE I — TASK NO: 34896

DATE: 7/6/94 Su M Tu (W) Th F Sa TIME: 0730

WEATHER: sl. overcast, humid, warm

WORKING CONDITIONS: good

REQUIRED PPE: glasses & boots, handwarts as required.

NOTES: Discussed

• weather conditions

Wrt Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	Juletta Humpert	
Susan L Alston	George Wahl	
Martin Cramer	Steve C. Bell	
Sally A Brown Jr	Sheeka Patterson	
[illegible]	[illegible]	
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOG NO. P-272

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO. 134

DATE: 7-12-94 Su M (Tu) W Th F Sa TIME: 0800

WEATHER: warm clear humid 80°F

WORKING CONDITIONS: good

REQUIRED PPE: hardhats as required, glasses and boots

NOTES:

Discussed:
scheduling
heat stress
chiggers
Last entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	Eric Taylor	
Sally O'Brond		
George Wahl		
[illegible]		
Susan L. Alsdorf		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER'S LOGBOOK 2735

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 7/13/94 — Su M Tu (W) Th F Sa — TIME: 0730

WEATHER: warm clear humid 85°F

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots, handlens as required

~~Discussed~~ JHD 7/13/94

NOTES:

Discussed:

chigger protection

tick protection

OSHA medical surveillance - required for all intrusive activities

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	[illegible]	
Eric Taylor		
George Wall		
[illegible]		
Guy Patton		
Susan J Alexander		

[illegible]

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM SITE MANAGER LOGBOOK 8.274

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 TASK NO: 34896

DATE: 7/14/94 Su M Tu W (Th) F Sa TIME: 0750

WEATHER: overcast sl drizzle humid 75°F

WORKING CONDITIONS: slippery

REQUIRED PPE: glasses & boots; hardhats as required

NOTES: Discussed

- poison ivy. Clean w/ Clorox.
- OSHA medical required
- slippery driving conditions

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]	Juliette Hunsperger	
George Wahl	George Wahl	
[illegible]		
Sally Brown		
Susan L Alden		
Marsha L Cramer		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK P. 275

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 7/18/94 — Su (M) Tu W Th F Sa — TIME: 0730

WEATHER: WARM, 80°F, CLEAR

WORKING CONDITIONS: good

REQUIRED PPE: glasses and boots, hardhats as required

NOTES:

Discussed:

- keep vehicles gassed up
- watch for poison ivy.

Last Entry

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

J. Humpert		
[illegible]		
[illegible]		
[illegible]		

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK 0276

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 3489

DATE: 7/21/94 — Su M Tu W (Th) F Sa — TIME: 0700

WEATHER: overcast, humid

WORKING CONDITIONS: good

REQUIRED PPE: glasses and boots; add handbat as required.

NOTES:

Discussed

- all intrusive personnel must submit a pre-work urine sample.
- humid conditions and possible lightning alert

LAST ENTRY

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]		
Juliette Humpert		
[illegible] Hale		
SB [illegible] Sally J Brown		
[illegible]		
Marcia L Cross		

[illegible]

SITE HEALTH & SAFETY OFFICER

TAILGATE SAFETY MEETING LOG FORM — SITE MANAGER LOGBOOK

PROJECT NAME: EG&G MOUND OU5 OPERATIONAL AREA PHASE 1 — TASK NO: 34896

DATE: 7/27/94 Su M Tu (W) Th F Sa TIME: 0715

WEATHER: OVERCAST, COOL

WORKING CONDITIONS: good

REQUIRED PPE: glasses, boots; hardhat as required

NOTES:

Discussed:

- all personnel must read the HAS Site Specific Checklist before going into an area. (AOC)

The following individuals attended the daily "tailgate" safety meeting: (Signatures)

[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

[illegible] 7/27/94

SITE HEALTH & SAFETY OFFICER

A.5

Part 2 of 2

25-02-10-02
9511140040

A.5 SURFACE WATER/SEDIMENT LOGBOOK

EG&G MOUND

OUT NEW PROP

EXTND PHASE

SURF WTR / SED

LOGBOOK

SURFACE WATER / SEDIMENT LOG BOOK

PROJECT TITLE: **EG&G MOUND OU5 NEW PROPERTY EXTENDED PHASE RI/FS FIELD INVESTIGATIONS**

WORK SITE: *MOUND PLANT*
Miamisburg, Ohio
OU5 New Property

ACTIVITY: *Mound OU5 New Property Phase 1 RI/FS*
Field Investigations

CONTRACT #: *BOA 52264*
TASK ORDER: *34896*

PROJECT MANAGER: *Thomas Tank*
COMPANY NAME / ADDRESS: *Science Applications International Corporation*
4031 Colonel Glenn Hwy ,Dayton, Ohio 45431
TELEPHONE NUMBERS: *(513) 429-2699*

SUPERVISORS: *OU5 Manager: Alan Spesard (513)865-3859*
SAIC Proj. Manager: Thomas Tank (513)429-2699

EMERGENCY RESPONCE: *Police / Ambulance / Fire 911 or 865-4040*

PROCEDURES: *SOP 1.1, SOP 2.2, SOP 3.1, SOP 4.1, SOP 4.3, SOP 4.4, SOP 5.1, SOP 6.1, SOP 6.3*

START DATE: _____
END DATE: _____

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Pg. I

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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10	No Entry	40	
11	Task Team Activity 7/6/94	41	
12	No Entry	42	
13	Task Team Activity 7/7/94	43	
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16	No Entry	46	
17	Task Team Activity 7/12/94	47	
18	No Entry	48	
19		49	Borehole Log SD07
20		50	No Entry
21		51	Borehole Log SD08
22		52	No Entry
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24		54	No Entry
25		55	Borehole Log ~~SD07~~ 7/14/94 SD15
26		56	No Entry
27		57	Borehole Log SD13
28		58	No Entry
29		59	Borehole Log SD12
30		60	No Entry

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pg II

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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62	No Entry	92	No Entry
63	Borehole log SD17	93	Borehole log SDØ3
64	No Entry	94	No Entry
65	Borehole log SD18	95	Borehole log SDØ1
66	No Entry	96	No Entry
67	Borehole log SD19	97	Borehole log SDØ2
68	No Entry	98	No Entry
69	Borehole log SD2Ø	99	Borehole log SDØ4
70	No Entry	100	No Entry
71	Borehole log SDØ6	101	Borehole log SDØ5
72	No Entry	102	No Entry
73	Borehole log SDØ9	103	Blank Page
74	No Entry	104	Sample log Sheet SDØ1Ø1
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76	No Entry	106	No Entry
77	Borehole log SD1Ø	107	↓
78	No Entry	108	Sample log Sheet SDØ2Ø1
79	Borehole log SD11	109	↓
80	No Entry	110	No Entry
81	Borehole log SD24	111	↓
82	No Entry	112	Sample log Sheet SDØ3Ø1
83	Borehole log SD25	113	↓
84	No Entry	114	Sample log Sheet SDØ321
85	Borehole log SD27	115	↓
86	No Entry	116	Sample log Sheet SDØ4Ø1
87	Borehole log SD21	117	↓
88	No Entry	118	No Entry
89	Borehole log SD22	119	↓
90	No Entry	120	Sample log Sheet SDØ5Ø1

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pg III

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

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128	Sample Log Sheet SD07Ø1	158	No Entry
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136	Sample Log Sheet SD09Ø1	166	Sample Log Sheet SD1621
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138	Sample Log Sheet SD0921	168	Sample Log Sheet SD17Ø1
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140	Sample Log Sheet SD10Ø1	170	No Entry
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142	No Entry	172	Sample Log Sheet SD18Ø1
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144	Sample Log Sheet SD11Ø1	174	No Entry
145	↓	175	↓
146	No Entry	176	Sample Log Sheet SD19Ø1
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148	Sample Log Sheet SD12Ø1	178	No Entry
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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

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184	Sample Log Sheet SD21Ø1	214	Sample Log Sheet SDØ911
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186	Sample Log Sheet - No Entry	216	Sample Log Sheet SD1311
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190	No Entry	220	No Entry
191	↓	221	↓
192	Sample Log Sheet SD23Ø1	222	Blank Page
193	↓	223	↓
194	Sample Log Sheet SD2321	224	No Entry
195	↓	225	
196	Sample Log Sheet SD24Ø1	226	
197	↓	227	
198	No Entry	228	
199	↓	229	
200	Sample Log Sheet SD25Ø1	230	
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204	Sample Log Sheet SD26Ø1	234	
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206	No Entry	236	
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208	Sample Log Sheet SD27Ø1	238	
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210	No Entry	240	↓

TASK TEAM ACTIVITY LOG SHEET SURFACE WATER/SEDIMENT

Pg 9

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE TASK NO.: 34896

Date (mm/dd/yy): 07/05/94 TIME: 1600 : 05 PAGE 1 OF 1

ES 7/5/94

Task Team Members:

Chris Halley

George Wahl

Eric Saylor

JPH 9/14/94

Narrative (include time and location):

Sediment sampling team took samples at the following locations: SD07; SD08; SD14; SD15. Geotechnical samples were also taken at points SD07, SD08, and SD15. Sampling crew followed procedures stated in SOP Method 5.2. Sampling crew took samples for Mound personnel for each point and delivered them to Building ~~300~~ 30. ES 7/5/94
Due to extreme heat, sampling crew took extra precautions to prevent heat stress and other heat-related problems from occurring. Sampling crew was "scanned" by MOUND personnel to ensure no RAD contamination was present.
Sampling crew followed all procedures outlined in the site health and safety plan. Rinsate sample was taken at point SD07.
No Mound HP or safety personnel accompanied the sampling crew at any time during the day.

Greg Schank and John Davis inspected the crew's sampling procedures during the sampling of SD14.
Last Entry
ES

Daily Weather Conditions: A.M. 7:00 a.m. 75°F Very humid

P.M. 15:00 90°F Very humid

Recorded By Eric Saylor QA Checked By Juletta Humpert

TASK TEAM ACTIVITY LOG SHEET SURFACE WATER/SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE TASK NO.: 34896

pg. 11

Date (mm/dd/yy): 07/06/94 TIME: 15 : 35 PAGE 1 OF 1

Task Team Members:

Chris Haley

Eric Saylor

Jett 6/14/94

Narrative (include time and location):

Sediment sampling team took sediment samples at the following locations: SD06; SD12; SD13; SD16; SD17; SD18; SD19; SD20. Geotechnical samples were also taken at points SD1621, SD1221, SD1321, SD2021. Sampling crew followed procedures stated in SOP Method 5.2. Sampling crew took samples for Mound personnel for each point and delivered them to Building 30. Sampling crew followed procedures set forth in the site health and safety plan. Sampling crew was "scanned" by MOUND personnel to ensure no RAD contamination is present. Due to the extreme heat, the sampling crew took extra precautions to prevent heat-related problems from occuring. A duplicate sample was taken at SD13.

No MOUND HP or safety personnel accompanied the sampling crew during the day.

Last Entry

Daily Weather Conditions: A.M. 7:00 80°F Sunny Very humid

P.M. 15:30 92°F Sunny Very humid

Recorded By Eric Saylor QA Checked By Joletta Humpert

n

TASK TEAM ACTIVITY LOG SHEET SURFACE WATER/SEDIMENT

pg. 13

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE TASK NO.: 34896

Date (mm/dd/yy): 07/07/94 TIME: 16 : 00 PAGE 1 OF 1

Task Team Members:

Chris Halley

Eric Saylor

JPH 9/14/94

Narrative (include time and location):

Sediment sampling team took samples at the following locations: SD09; SD10; SD11; SD23; SD24; SD25; SD27. Geotechnical samples were also taken at SD09 and SD23. Sampling crew took samples for Mound personnel for each point and delivered them to Building 30 at 1500. Sampling crew followed procedures stated in SOP Method 5.2 Sampling Crew followed procedures in the project health and safety plan. Sampling crew was "scanned" by Mound personnel in order to ensure no RAD contamination was present. No MOUND HP or safety personnel accompanied the crew during the day. A duplicate sample was taken at SD09.

Due to the extreme heat, the sampling crew took extra precautions to prevent heat-related problems from occuring.

No problems were encountered during the day.

Last Entry

Daily Weather Conditions: A.M. 7:00 73°F Very humid

P.M. 15:00 90°F Very humid

Recorded By Eric Saylor QA Checked By Jolette Humpert

TASK TEAM ACTIVITY LOG SHEET SURFACE WATER/SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE TASK NO: 34896

Pg 15

Date (mm/dd/yy): 07/11/94 TIME: 15 : 00 PAGE 1 OF 1

Task Team Members:

Chris Halley

Eric Saylor

JPH 9/14/94

Narrative (include time and location):

Sediment sampling team took samples at the following locations: SD21; SD22; SD26; SD01; SD02; and SD03. A duplicate sample and rinsate sample was taken at SD21. A geotechnical sample was also taken at SD03. Sampling crew took samples for Mound personnel at points SD21, SD22, and SD26 and delivered them to Building 30. At points SD01, SD02, and SD03 Mound HP employee Roy Mowen was present during the sampling. Roy took the Mound samples taken at those points to Building 30. Sampling crew followed procedures set forth in SOP Method 52. Sampling crew followed procedures set forth in the project health and safety plan. Sampling crew was "scanned" by Roy Mowen at the last sampling point to ensure no RAD contamination was present. ~~Ro~~ ES 7/11 Took field blank sample AB0012.

JPH 9/14/94

No problems were encountered during the day.

Last Entry

Daily Weather Conditions: A.M. 0700 60°F

P.M. 1500 78°F

Recorded By Eric Saylor QA Checked By Juletta Humpert

TASK TEAM ACTIVITY LOG SHEET SURFACE WATER/SEDIMENT

pg. 17

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE TASK NO. 34896

Date (mm/dd/yy): 7-12-94 TIME: NA PAGE 1 OF 1

Task Team Members:

Chris Halley
Joletta Humpert

JPH 7/12/94

Narrative (include time and location):

0700 Prepping. J.H collecting rinsate ER0022 for last samples.
0745 Onsite at SD04. Collecting sample. SD0401.
0810 Onsite at SD05. Collecting SD0501. Some machete work required to get to sampling location. Collected HP samples at both locations and delivered to Bldg 30 for analysis. Sampling crew followed SOP 5.2 and H&S plan.
Returned to trailer.
Last Entry

Daily Weather Conditions: A.M. Warm, sunny, 70°F, no breeze
P.M. NA

Recorded By Joletta Humpert QA Checked By EJ Schulthis

BOREHOLE LOG (SOIL) SEDIMENT pg 49

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

Page 1 of 1

FACILITY CODE: MND16 ES 7/5/94
LOCATION ID: SD07 ~~XX~~ and SD721
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07/05/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Highly wooded area. Moist stream bed. No running water present in stream bed.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-0.5'	NA	100%	100%	O	SD071	NA	NA	ML	HUE 10YR 3/2
0'-0.5'	NA	100%	100%	O	SD721	NA	NA	ML	Very dark grayish brown clay with some sand and trace of gravel. Clay was very soft. Sand was very loose. Overall the soil is well sorted.
									Few roots present in the stream bed.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/5/94 — FORM COMPLETED BY / DATE

Juletta Humphrey 9/14/94 — TECHNICAL REVIEWER / DATE

ES 7/5/99

BOREHOLE LOG (SOIL) SEDIMEN

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 3489

Pg 50

Page____of ____

FACILITY CODE: _____ DRILLER CODE: _____

LOCATION ID: SD08021 and SD08221 COMPLETION DATE: 07/0 /1994

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD08021	NA	NA	SC	HUE 10YR 3/2
									Very dark grayish brown

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/5/99 FORM COMPLETED BY / DATE

Jeffrey Hunzpert 9/14/99 TECHNICAL REVIEWER /

50

BOREHOLE LOG (SOIL)

SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

Page 1 of 1

FACILITY CODE: MND16ES 7/5/94

LOCATION ID: SD08~~21~~ ~~and SD0821~~

COORDINATES (FT):

NORTH NA EAST NA

GROUND ELEVATION (FT MSL)

LOCATION TYPE: Surface

COMMENTS: None

DRILLER CODE: NA

COMPLETION DATE: 07/05/1994

DIAMETER (IN): NA

DEPTH (FTFD): 0'-0.5'

CONSTRUCTION METHOD: NA

ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Highly wooded area.
Moist stream bed.
No running water present.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD0821	NA	NA	SC	HUE 10YR 3/2
0'-0.5'	NA	100%	100%	O	SD0821	NA	NA	SC	Very dark grayish brown clay with some sand and little gravel. Clay is very soft. Sand is very loose. Overall soil is well sorted.
									Many roots are present in the stream bed.

9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:

A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:

A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/5/94
FORM COMPLETED BY / DATE

Juletta Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL)

SEDIMENT

pg 53

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

Page 1 of 1

FACILITY CODE: MND16
LOCATION ID: SD014
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07 / 05/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Two large heavily vegetated fields drain into the stream. Stream bed is moist. Large amount of vegetation on sides of stream.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD0N01	NA	NA	ML	HUE 7.5 YR 3/2
0'-0.5'	NA	100%	100%	O	SD1421	NA	NA	ML	Vec
									ES 7/5/94
									Dark brown clay with some sand and little gravel. Clay is very soft. Sand is loose. Overall the soil is well graded.
									Juletta Humpert 7/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/5/94 — FORM COMPLETED BY / DATE

Juletta Humpert 9/14/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MND16 ES 7/5/94
LOCATION ID: SD15~~01~~
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07 05 /1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'- 0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Two large heavily vegetated fields drain into the stream. Stream bed is moist. Slightly standing water is present downstream. No running water in the stream. Large amount of vegetation on the sides of the stream.

LOGGER CODE: SAIC

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD1501	NA	NA	CL	HUE 10YR 4/2
0'-0.5'	NA	100%	100%	O	SD1521	NA	NA	CL	Dark grayish brown clay with some sand. Clay is very soft. Sand is very loose. Overall soil is well graded.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/5/94
FORM COMPLETED BY / DATE

Juanita Humphrey 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

Page 1 of 1

FACILITY CODE: MND16
LOCATION ID: SD13
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7 / 6 /1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Two large highly vegetated fields drain into stream. Stream sampling point is in an open field. No running or standing water is present. Some vegetation on stream bed. Some metallic debris in stream bed (possibly old fence line).

LOGGER CODE: SAIC

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD13-01	NA	NA	CL	HUE 7.5YR 4/2
0-0.5	NA	100%	100%	O	SD1311	NA	NA	CL	Brown clay with some sand. Clay is soft. Sand is loose. Soil is well sorted

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/6/94
FORM COMPLETED BY / DATE

Juletta Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL)

SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

Page 1 of 1

FACILITY CODE: MND16

LOCATION ID: SD12

COORDINATES (FT):

- NORTH NA EAST NA

GROUND ELEVATION (FT MSL)

LOCATION TYPE: Surface

COMMENTS: None

DRILLER CODE: NA

COMPLETION DATE: 7 16 /1994

DIAMETER (IN): NA

DEPTH (FTFD): 0'-0.5'

CONSTRUCTION METHOD: NA

ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point is located in a highly wooded area. Vegetation is present on sides of stream but not in the bed. No running water or standing water is present in the stream.

LOGGER CODE: SAIC

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD12001	NA	NA	CL	HUE 10YR 4/2 Dark grayish brown clay with little sand and gravel. Clay is very soft. Sand is very loose. Gravel ranges in size from 10 mm to 7110 mm in size.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:

A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:

A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/6/94
FORM COMPLETED BY / DATE

Juliette Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

Pg 61

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

Page 1 of 1

FACILITY CODE: MND16
LOCATION ID: SD16
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/6/1994
DIAMETER (IN): NA
DEPTH (FTFD): Ø'-Ø.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Located in highly wooded area. Vegetation is present on the sides of the stream and in the bed. No running or standing water is present.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
Ø'-Ø.5'	NA	100%	100%	~~SD16Ø1~~ ES O	SD16Ø1	NA	NA	CL	HUE 10YR 3/2 Very dark grayish brown clay with some sand and little gravel. Clay is very soft. Sand is very loose. Gravel sizes vary up to approximately 90 mm.
Ø'-Ø.5'	NA	100%	100%	O	SD1621	NA	NA	CL	

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
CABLE - TOOL
DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/6/94
FORM COMPLETED BY / DATE

Juletta Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PG 63

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

FACILITY CODE: MND16
LOCATION ID: SD17
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/6/1994
DIAMETER (IN): NA
DEPTH (FTFD): Ø'-Ø.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point located in a highly wooded area. No running or standing water present. Vegetation present on the sides and in the bed of the stream.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
Ø'-Ø.5'	NA	100%	100%	O	SD17Ø1	NA	NA	CL	HUE 10YR 4/2
									Dark grayish brown clay with some sand and little gravel.
				JPH	9/14/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/6/94
FORM COMPLETED BY / DATE

Juliette Humphrey 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

pg 65

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

Page 1 of 1

FACILITY CODE: MNDIG
LOCATION ID: SD18
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/6/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point in highly wooded area. Vegetation is present on sides of stream and in the bed. Stream bed soil is moist, however there is no sign of running or still water

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD18#1	NA	NA	ML	HUE 10YR 3/2 Very dark grayish brown ~~clay~~ sand with little clay and gravel. Clay is very soft. Sand is very loose. Gravel varies in size from less than 10 mm to 110 mm and above.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/6/94
FORM COMPLETED BY / DATE

J Humpert 7/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

Page 1 of 1

FACILITY CODE: MND16
LOCATION ID: SD19
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/6/1994
DIAMETER (IN): NA
DEPTH (FTFD): Ø'-Ø.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

stream sampling point located in highly wooded area. Some vegetation on sides of stream and in its bed is present. Stream bed soil is moist but no running or standing water is present. Metal debris (possibly old fence line) found in sampling point.

LOGGER CODE: SAIC

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
Ø'-Ø.5'	NA	100%	100%	O	SD19Ø1	NA	NA	ML	HUE 10YR 3/2 Very dark grayish brown sand with some clay and little gravel. Sand is loose. Clay is very soft. Gravel ranges from approximately 10 mm to 30 mm in size. Soil is well sorted.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Sayla 7/6/94 — FORM COMPLETED BY / DATE

J Humpert 9/14/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD20
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/6/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point in wooded area. No running or standing water is present. Vegetation is present in the stream bed as well as along its sides.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD2001	NA	NA	CL	HUE 10YR 3/2
0'-0.5'	NA	100%	100%	O	SD2021	NA	NA	CL	Very dark grayish brown clay with some sand and little gravel. Clay is very soft. Sand is very loose. Gravel is generally less than 40 mm.
				JPH	9/14/94				

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Sayler 7/6/94 — FORM COMPLETED BY / DATE

J Humpert 9/14/94 — TECHNICAL REVIEWER / DATE

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BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD06
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/6/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point in stream receives runoff from one highly wooded area and one partial one. Vegetation is present throughout stream. No running or standing water is present.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-0.5'	NA	100%	100%	O	SD06-01	NA	NA	CL	HUE 7.5 YR 3/2 Dark brown silty clay. Clay is very soft. Many roots of various sizes are present.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/6/94
FORM COMPLETED BY / DATE

JHumpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE 29-73 PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD09
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/7/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point located in highly wooded area. Slow moving and ~~slightly~~ ES 7/6/94 standing water near the sampling point. Glass debris was found in the sampling point. Metal debris is located slightly upstream from the point.

LOGGER CODE: SAIC

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O ES 7/6/94	SD0901	NA	NA	ML	HUE 10YR 4/3 Brown sand with some clay and little gravel. Clay is very soft. Sand is very loose.
0'-0.5'	NA	100%	100%	O	SD0911	NA	NA	ML	
0'-0.5'	NA	100%	100%	O	SD0921	NA	NA	ML	Gravel sizes are generally less than or equal to 20 mm. The soil is well sorted and wet.
				JPH 9/14/94					

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/7/94
FORM COMPLETED BY / DATE

J Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL)

SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

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FACILITY CODE: MND16

LOCATION ID: SD23

COORDINATES (FT):

NORTH NA EAST NA

GROUND ELEVATION (FT MSL)

LOCATION TYPE: Surface

COMMENTS: None

DRILLER CODE: NA

COMPLETION DATE: 7/7/1994

DIAMETER (IN): NA

DEPTH (FTFD): 0'-0.5'

CONSTRUCTION METHOD: NA

ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point in a highly wooded area. Vegetation (roots) are present at the sampling point. No running or standing water is present.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD23001	NA	NA	CL	HUE 10YR 3/2
0'-0.5'	NA	100%	100%	O	SD23021	NA	NA	CL	Very dark grayish brown clay with some sand. Clay is very soft. Sand is loose.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:

A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:

A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Snyder 7/7/94
FORM COMPLETED BY / DATE

J Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO. 34896

FACILITY CODE: MND16
LOCATION ID: SD10
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7 / 7 /1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point in highly wooded area. Stream receives runoff from two very wooded areas. Stream bed is moist but no running or standing water is present. Some vegetation is present.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD1001	NA	NA	CL	HUE 10YR 4/3 Brown clay with little sand and gravel. Clay is soft. Sand is loose. Gravel is generally less than or equal to 30 mm.

9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/7/94 — FORM COMPLETED BY / DATE

J Hampton 9/14/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL)

SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

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FACILITY CODE: MND16

LOCATION ID: SD11

COORDINATES (FT):

NORTH NA EAST NA

GROUND ELEVATION (FT MSL)

LOCATION TYPE: Surface

COMMENTS: None

DRILLER CODE: NA

COMPLETION DATE: 7/7/1994

DIAMETER (IN): NA

DEPTH (FTFD): 0'-0.5'

CONSTRUCTION METHOD: NA

ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point is located in a highly wooded area. Stream receives runoff from two very wooded areas. Vegetation is present on the sides of the stream but not in its bed. No running water is present. Some standing water is present slightly downstream

LOGGER CODE: SAIC

LITHOLOGIC LOG

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD11001	NA	NA	CL	HUE 2.5Y 4/2 Dark grayish brown sand with little clay and gravel. Sand is loose. Clay is soft. Gravel is generally less than 20 mm. Soil is well sorted

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:

A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:

A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/7/94 — FORM COMPLETED BY / DATE

J Humpert 9/14/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD24
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/7/1994
DIAMETER (IN): NA
DEPTH (FTFD): Ø'-Ø.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point in a highly wooded area. No running or standing water is present. Vegetation is present in the sampling point. Stream bed is relatively dry.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
Ø'-Ø.5'	NA	100%	100%	O	SD24Ø1	NA	NA	CL	HUE 10YR 3/1 Very dark gray clay with some sand. Clay is very soft. Sand is loose.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/7/94
FORM COMPLETED BY / DATE

J Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD25
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/7/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point in a densely wooded area. Stream is dry. Vegetation throughout the stream.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD25-1	NA	NA	CL	HUE 10YR 3/2 Very dark grayish brown clay with little sand. Clay is very soft. Sand is loose.
									Many small roots present.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/7/94 — FORM COMPLETED BY / DATE

J Humpert 9/14/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) — SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD27
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 7/7/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point, located in a densely wooded area. Stream is relatively dry. No running or standing water is present.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-0.5'	NA	100%	100%	O	SD27-01	NA	NA	CL	HUE 10YR 3/2 Very dark grayish brown clay with some sand. Clay is soft. Sand is loose.
				JPH	9/14/94				
									Vegetation, especially small roots, is present in the sampling point.

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Sayla 7/7/94 — FORM COMPLETED BY / DATE

Humpert 9/14/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

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PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD21
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07/11/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point located in a densely wooded area. Large amount of vegetation present. Large roots present in stream bed. Located 5' from fenceline.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-0.5'	NA	100%	100%	O	SD2101	NA	NA	CL	HUE 10YR 3/2
0-0.5'	NA	100%	100%	O	SD2111	NA	NA	CL	Very dark grayish brown clay with some sand. Clay is very soft. Sand is loose.
									Large and small roots are present in and surrounding the sampling point.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/11/94
FORM COMPLETED BY / DATE

J Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MNDIG
LOCATION ID: SD22
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07 /11 /1994
DIAMETER (IN): NA
DEPTH (FTFD): 0-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH[1](FT)
NA		

LOCATION DESCRIPTION

Sampling point located in a large highly vegetated field. No running or standing water is present.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-0.5'	NA	100%	100%	O	SD22-01	NA	NA	OH	HUE 10YR 4/2
									Dark grayish brown clay.
									Clay is medium stiff.
									Small roots present throughout
									the sample.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/11/94
FORM COMPLETED BY / DATE

J. Hummpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL)

SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE

PROJECT NO: 34896

FACILITY CODE: MND16
LOCATION ID: SD26
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07 / 11 / 19 94
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point located in a large highly vegetated field. Gravel driveway approximately 20' west of point. No running or standing water is present.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD26Ø1	NA	NA	CL	HUE 2.5Y 4/2
									Dark grayish brown clay.
									Clay is medium stiff.
									Many small roots are present.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/11/94
FORM COMPLETED BY / DATE

J Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) — SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE — PROJECT NO: 34896

Page 1 of 1

FACILITY CODE: MNDIG
LOCATION ID: SD03
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07/11/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point located 10' south of fenceline. Point receives drainage from a 10" PVC drainage pipe and from sloping terrain beginning at roadway.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD0301	NA	NA	CL	HUE 7.5YR 4/2
0'-0.5'	NA	100%	100%	O	SD0321	NA	NA	CL	Brown clay with sand. Clay is soft. Sand is loose.
									Some small roots are present in the sampling point. Nickel found in point. It appears to have been there for quite some time.
					JPH	9/14/94			

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/11/94 — FORM COMPLETED BY / DATE

J Humpert 9/14/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD01
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07 / 11 /1994
DIAMETER (IN): NA
DEPTH (FTFD): 0'-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point 15' south of fenceline and 30' south of roadway and 8' North of densely wooded area. Point receives runoff from roadway and from slope from roadway south to the point. No running or standing water is present.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD0101	NA	NA	OH	HUE 10YR 3/2
									Very dark grayish brown
									Clayey Clay is medium
									stiff.
				QPH	9/14/94				Some small roots are
									present.

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Taylor 7/11/94
FORM COMPLETED BY / DATE

J Humpert 9/14/94
TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

FACILITY CODE: MND16
LOCATION ID: SD02
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07 / 11 / 1994
DIAMETER (IN): NA
DEPTH (FTFD): 0-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point 8' south of roadway and 9' north of fenceline. Point receives runoff from roadway and from terrain sloping downward from east to west.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-0.5'	NA	100%	100%	O	SD0201	NA	NA	CL	HUE 7.5YR 3/2
									Dark brown clay with
									little sand and gravel.
									Clay is very soft. Sand
									is loose. Some stones
				JPK	9/14/94				greater than 110 mm in
									length were located in
									and surrounding the
									sampling point.
									Some small roots are present.

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Eric Saylor 7/11/94 — FORM COMPLETED BY / DATE

J Humpert 9/14/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD04
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07/12/1994
DIAMETER (IN): NA
DEPTH (FTFD): 0-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point 3' South of roadway and 3' N of fenceline. Point receives runoff from roadway.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0-0.5'	NA	100%	100%	O	SD04	NA	NA	CL	Hue: 7.5YR 3/2 Dark Brown clay with some sand and trace gravel. Clay is medium stiff. Sand is very loose. Gravel is generally less than 10 mm. Some small roots are present.

JPH 9/14/94

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z -OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Juliette Minard 7/12/94 — FORM COMPLETED BY / DATE

J Trumpert 9/14/94 — TECHNICAL REVIEWER / DATE

BOREHOLE LOG (SOIL) SEDIMENT

PROJECT NAME: EG&G MOUND OU5 NEW PROPERTY, EXTENDED PHASE PROJECT NO: 34896

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FACILITY CODE: MND16
LOCATION ID: SD05
COORDINATES (FT):
NORTH NA EAST NA
GROUND ELEVATION (FT MSL)
LOCATION TYPE: Surface
COMMENTS: None

DRILLER CODE: NA
COMPLETION DATE: 07 / 12 / 1994
DIAMETER (IN): NA
DEPTH (FTFD): 0-0.5'
CONSTRUCTION METHOD: NA
ACCEPTANCE CODE: A

GROUNDWATER LEVELS

DATE	TIME	DEPTH (FT)
NA		

LOCATION DESCRIPTION

Sampling point located approx 75' from fence to the S. Location clear of shrubbery and undergrowth. Relatively moist.

LITHOLOGIC LOG

LOGGER CODE: SAIC

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE RECOVERY	SAMPLE RETAINED	SAMPLE METHOD	SAMPLE ID	BLOW COUNT (PER 6 IN)	N VALUE	USCS	VISUAL DESCRIPTIONS
0'-0.5'	NA	100%	100%	O	SD05001	NA	NA	CL	Hue 10YR 4/2
									Dary grayish brown clay with
									some sand and trace gravel.
									Gravel ranges from 50 mm
									to less than 10 mm.
				JPH	9/14/94				Some roots are present.
									Clay is soft. Sand is
									loose.

ACCEPTANCE CODES: A - ACCEPTABLE, R - RECONNAISSANCE, U - UNACCEPTABLE, N - NOT DETERMINED

CONSTRUCTION METHODS:
A - AIR ROTARY
B - BORED OR AUGERED
C - CABLE - TOOL
D - DUG
H - HYDRAULIC - ROTORY
J - JETTED
P - AIR - PERCUSSION
R - REVERSE ROTERY
T - TRENCHING
V - DRIVEN
W - DRIVE AND WASH
Z - OTHER (SPECIFY)

SAMPLE METHODS:
A - AUGER CUTTINGS
S - 2" O.D. 1.38" I.D. DRIVE SAMPLES
U - 3" O.D. 2.42" I.D. TUBE SAMPLES
T - 3" O.D. THIN-WALLED SHELBY TUBE
O - OTHER (SPECIFY)

COMPLETE BOLDED DATA FOR ENTRY INTO TIMS

Juletta Hampert 7/12/94 — FORM COMPLETED BY / DATE

[illegible] 9-14-94 — TECHNICAL REVIEWER / DATE

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SDØ1Ø1 DATE COLLECTED (MM/DD/YY): Ø7/11/94 TIME (HH:MM): 13:3Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ1

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Point located 1~~Ø~~5' south of fenceline, 30' south of roadway, and 8' north of densely wooded area. Point receives some runoff from roadway and terrain sloping southward towards the point. Point also receives runoff from terrain sloping down from east to west. No running or standing water is present. Vegetation is present on and surrounding the point. ES 7/11

Weather: Temperature = 77°F Sunny

Mound HP employee Ray Mowen was present during the sampling.

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) CHECKED BY: Jolette Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD0101

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	NPC014	8219959683	See container lot # log	COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

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SAMPLE ID'S RINSATE: ER0021 TRIP BLANK: TBN014 FIELD BLANK: AB0012 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SDØ2Ø1 DATE COLLECTED (MM/DD/YY): 07/11/94 TIME (HH:MM): 1352

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ2

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point located 8' south of roadway and 2' north of fenceline. Point receives runoff from roadway and from terrain sloping downward from east to west. No running or standing water is present. Large amount of vegetation (especially small roots in the sampling point) is present.

Weather: Temperature = 78°F Sunny

MOUND HP employee Roy Mowen was present during sampling.

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

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SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ2Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ14	8219959683	See container Lot# log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

Pg 1Ø9

SAMPLE ID'S RINSATE: ERØØ22 TRIP BLANK: TBNØ14 FIELD BLANK: ABØØ12 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD03Ø1 DATE COLLECTED (MM/DD/YY): 07/11/94 TIME (HH:MM): 1240

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ3

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Point located 10' south of fenceline. Point receives drainage from a 10" PVC drainage pipe and from sloping terrain beginning at the roadway. No standing or running water is present.

Weather: Temperature: 76°F Sunny

Mound HP employee Roy Mowen was present during the sampling.

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE [illegible]G SHEET

SAMPLE [illegible]UMBER: SDØ3Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ14	8219959683	See container lot # log.	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 113

SAMPLE ID'S RINSATE: ERØØ22 TRIP BLANK: TBNØ14 FIELD BLANK: ABØØ12 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SDØ321 DATE COLLECTED (MM/DD/YY): Ø7/11/94 TIME (HH:MM): 124Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ3

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

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FIELD OBSERVATIONS: Same as SDØ3Ø1.

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [✓] YES [✓] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ321

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-19	BUCKET	GEOTECHNICAL	Cool,4C	NPSØ11 ~~NPCØ14~~ JPH 9/14/94	JPH 9/14/94 ~~821995 9683~~ 2169350783	See container Lot # Log	SINGLE

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SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SDØ4Ø1 DATE COLLECTED (MM/DD/YY): Ø7-12-94 TIME (HH:MM): Ø75Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ4

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point is located in grassy area next to road. Temperature approximately 70°F, sunny, no breeze. No running water - relatively dry.

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Joletta Menard (SIGNATURE)

QA CHECKED BY: ~~Joletta Humphrey~~ EJSchu[illegible] 9/14/94 (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ4Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ15	821996Ø685	See Container Lot # Log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

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SAMPLE ID'S RINSATE: ERØØ22-1 TRIP BLANK: TBNØ15 FIELD BLANK: ABØØ12 FIELD DUPLICATE: NA

RECORDED BY: Juletta Minard (SIGNATURE) QA CHECKED BY: [illegible] 9/14/94 E. Schulekus (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD05Ø1 DATE COLLECTED (MM/DD/YY): 7-12-94 TIME (HH:MM): Ø815

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ5

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 120

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point is located in sandy, rocky area - close to large tree. Little shrubbery in immediate area. Tree-covered. No signs of running water visible - relatively dry. Temperature: 70°F, sunny

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Jolette Humpert (SIGNATURE) QA CHECKED BY: EJ Schultheis (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ5Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ15	8219960685	See Container Lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

SAMPLE ID'S RINSATE: ERØØ22 TRIP BLANK: TBNØ15 FIELD BLANK: ABØØ12 FIELD DUPLICATE: NA

RECORDED BY: Joletta Humpert (SIGNATURE) QA CHECKED BY: EJ Schultheis (SIGNATURE)

Pg. 121

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD06Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø6/94 TIME (HH:MM): 15Ø3

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ6

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 124

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: Stream where sampling point is located receives runoff from highly wooded area on the east and partially wooded area on the west. Stream bed is relatively dry. No running or standing water is present. Vegetation is present throughout the stream. Many roots are present in the sample.

Weather: Temperature = 92°F Very humid Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ6Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ12	8219959764	See container Lot # Log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 125

SAMPLE ID'S RINSATE: ERØØ19 20 ES 7/6/94 TRIP BLANK: TBNØ12 FIELD BLANK: ~~NA~~ ABØØ11 ES 7/11/94 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD07Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø5/94 TIME (HH:MM): 11:Ø5

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ7

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point SDØ7Ø1 is located in a highly wooded area. Very humid morning. Temperature approximately 85°F. Stream bed where sampling point is located was moist. No running water in stream is visible.

Few roots are present in the stream bed.

Lost entry ES 7/5/94

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ7Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ11	8219959974	See Container Lot # Log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C	↓	↓	↓	COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C	↓	↓	↓	COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C	↓	↓	↓	COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C	↓	↓	↓	COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE	↓	↓	↓	COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE	↓	↓	↓	COMPUC

Pg. 129

SAMPLE ID'S RINSATE: ERØØ19-1 TRIP BLANK: ES 7/5/94 ~~NA~~ TBNØ11 FIELD BLANK: ~~NA~~ ABØØ11 ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Jolette Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SDØ721 DATE COLLECTED (MM/DD/YY): Ø7/Ø5/94 TIME (HH:MM): 11:Ø5

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ7

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

pg. 130

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Same as SDØ7Ø1

Last Entry. ES 7/5/94

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ721

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-19	BUCKET	GEOTECHNICAL	Cool,4C	NPSØØ6 NPCØ11 gpH 9/14/94	gpH 9/14/94 8219959974 9289476501	See container lot log #	SINGLE

SAMPLE ID'S RINSATE: NA TRIP BLANK: ~~NA~~ gpH 9/14/94 NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SDØ8Ø1 DATE COLLECTED (MM/DD/YY): ø7/ø5/94 TIME (HH:MM): 11:45

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ8

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point SDø8ø1 is located in a highly wooded area. Very humid morning. Temperature approximately 85°F. Stream where point is located is in a moist, rocky area. No running water is present.

Many roots are present in the stream bed.

Last entry. ES 7/5/94

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

ø8/132

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ8Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ11	8219959974	See container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C	↓	↓	↓	COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C	↓	↓	↓	COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C	↓	↓	↓	COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C	↓	↓	↓	COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE	↓	↓	↓	COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE	↓	↓	↓	COMPUC

Pg. 133

SAMPLE ID'S RINSATE: ~~NA~~ ES 7/5/94 ERØØ19 TRIP BLANK: ~~NA~~ TBNØ11 ES 7/6/94 FIELD BLANK: ~~NA~~ ABØØ11 ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Jolette Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SDØ821 DATE COLLECTED (MM/DD/YY): 07/05/94 TIME (HH:MM): 11:45

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ8

DESCRIPTION:

FIELD OBSERVATIONS: Same as SDØ8Ø1

Last entry. ES 7/5/94

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg 134

SAMPLE TYPE:

- [x] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ821

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-19	BUCKET	GEOTECHNICAL	Cool,4C	NP5606 ~~NPCØ11~~	gPH 9/14/94 ~~821995 9974~~	See container lot log #	SINGLE
				gPH 9/14/94	9289476501		

pg 135

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD0901 DATE COLLECTED (MM/DD/YY): 07/07/94 TIME (HH:MM): 0830

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD09

DESCRIPTION:

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO 6.00 IN

pg. 136

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point in highly wooded area. Stream receives runoff from a highly vegetated field to the east and a highly wooded area to the west. Glass debris was located in the sampling point. Metal debris was located slightly upstream from the point. Some vegetation present in the stream bed. Sampling hole became ½ full of water during the sampling.

Weather

Temperature: 82°F Very humid Sunny

Took field duplicate at this point.

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Jolitta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ9Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ13	821996Ø383	See container Lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C	↓	↓	↓	COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C	↓	↓	↓	COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C	↓	↓	↓	COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C	↓	↓	↓	COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE	↓	↓	↓	COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE	↓	↓	↓	COMPUC

pg. 137

SAMPLE ID'S RINSATE: ERØØ2Ø TRIP BLANK: TBNØ13 FIELD BLANK: ~~N/A~~ ABØØ11 ES 7/11 FIELD DUPLICATE: SDØ911

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SDØ921 DATE COLLECTED (MM/DD/YY): 07/07/94 TIME (HH:MM): 0830

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ9

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 138

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Same as SD09 01.

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Taylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SDØ921

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-19	BUCKET	GEOTECHNICAL	Cool,4C	NPS0009 ~~NPC013~~ JPH 9/14/94	JPH 9/14/94 ~~8219960383~~ 2169350805	See container Lot# Log	SINGLE

Pg. 139

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD1001 DATE COLLECTED (MM/DD/YY): 07/07/94 TIME (HH:MM): 0930

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD10

DESCRIPTION:

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO 6.00 IN

Pg. 140

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: Sampling point located in a highly wooded area. Stream receives runoff from two highly wooded areas. No standing or running water is present. Some vegetation is present.

Weather: Temperature 82°F Very humid Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD1ØØ1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ13	8219960383	See container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 14

SAMPLE ID'S RINSATE: ERØØ2Ø TRIP BLANK: TBNØ13 FIELD BLANK: ABØØ13 ~~NA~~ ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD1101 DATE COLLECTED (MM/DD/YY): 07/07/94 TIME (HH:MM): 10:00

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD11

DESCRIPTION:

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO 6.00 IN

pg 144

SAMPLE TYPE:

- [x] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point located in a highly wooded area. Stream receives runoff from two very wooded areas. Vegetation is present on the sides of the stream but not in its bed. No running water is present. Some standing water is present slightly downstream.

Weather: 83°F Very humid Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) DATA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD11Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ13	8219960383	See container Lot# Log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

Std. loc

SAMPLE ID'S RINSATE: ERØØ2Ø TRIP BLANK: TBNØ13 FIELD BLANK: ABØØ11 ~~NA~~ ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD12Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø6/94 TIME (HH:MM): Ø845

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD12

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 148

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Stream is located in a highly wooded area. Vegetation is present on the sides but not on the bed itself. No running or standing water is present.

Temperature: 83°F Very humid

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD12Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	~~FNØ13~~ NPCØ12 26 716	8219959764	See container	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C			lot log #	COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

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SAMPLE ID'S RINSATE: ERØØ19 TRIP BLANK: TBNØ12 FIELD BLANK: ~~NA~~ ABØØ11 ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Taylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD1221 DATE COLLECTED (MM/DD/YY): 07/06/94 TIME (HH:MM): 0845

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD12

DESCRIPTION:

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO 6.00 IN

Pg 1 of 50

SAMPLE TYPE:

- [x] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Same as SD1201

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD1221

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
				JPH 9/14/94			
1-19	BUCKET	GEOTECHNICAL	Cool,4C	~~#BC013~~ ES ~~FN013~~ JK	JPH 9/14/94 ~~8019959764~~	See Container Lot# Log	SINGLE
				NPS007	216935001691		

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

pg. 151

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD13Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø6/94 TIME (HH:MM): Ø7:44

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD13

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 152

SAMPLE TYPE:

- [x] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: Stream bed has little plant growth. Two large fields drain into stream bed. No running or standing water present. Some metallic debris in stream bed (possibly old fence line). Temperature: 80°F Very humid

Took field duplicate at this point.

SAMPLE COLLECTED: [x] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [x] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD13Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C # ES 7/6/94	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ12 ~~FNØ13~~	8219959764	See Container Lot # Log.	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

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SAMPLE ID'S RINSATE: ERØØ19 TRIP BLANK: TBNØ12 FIELD BLANK: ES 7/6 ~~SD13H~~ ABØØ11 FIELD DUPLICATE: SD1311

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD1321 DATE COLLECTED (MM/DD/YY): 07/06/94 TIME (HH:MM): 07:44

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD13

DESCRIPTION:

FIELD OBSERVATIONS: Same as SD 1301.

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO 6.00 IN

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Taylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD1321

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-19	BUCKET	GEOTECHNICAL	Cool,4C	ES 7/6/94 ~~NP5Ø18~~ ~~FNØ13~~ NP5ØØ7	QPH 9/14/94 ~~8219959764~~ 216935Ø691	See container lot # log	SINGLE

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Taylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

pg. 155

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD14Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø5/94 TIME (HH:MM): 14Ø8

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD14

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Temperature approximately 9Ø°F. Very humid. Stream bed is moist. Large to small stones present in the stream bed. Vegetation is present on the side of the bed but not on the bottom. Two heavily vegetated fields drain into the stream.

Last entry. ES 7/5/94

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humphett (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD14Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ11	8219959974	See container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 157

SAMPLE ID'S RINSATE: ES 7/5/94 ERØØ19 ~~NA~~ TRIP BLANK: TBNØ11 ES 7/6/94 ~~NA~~ FIELD BLANK: ABØØ11 ~~NA~~ ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juliette Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD15Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø5/94 TIME (HH:MM): 143Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD15

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 150

SAMPLE TYPE:

- [x] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: Temperature approximately 9Ø°F. Very humid conditions. Stream bed is very moist. Some standing water is present slightly downstream. No running water is present in the stream. Large amount of vegetation on sides of stream is present but little on floor of the stream. Two Large highly vegetated fields drain into the stream.

Last entry. ES 7/5/94

SAMPLE COLLECTED: [x] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [x] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD15Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ11	8219959974	See Container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 161

SAMPLE ID'S RINSATE: ES 7/5/94 ERØØ19 ~~NA~~ TRIP BLANK: TBNØ11 ES 7/6/94 ~~NA~~ FIELD BLANK: ABØØ11 ~~NA~~ ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD1521 DATE COLLECTED (MM/DD/YY): 07/05/94 TIME (HH:MM): 1430

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD15

DESCRIPTION:

FIELD OBSERVATIONS: Same as SD1501

Last entry 7/5/94 ES

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO 6.00 IN

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SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD1521

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-19	BUCKET	GEOTECHNICAL	Cool,4C	NPS006 ~~NPC011~~ gPH 9/14/94	9284765001 ~~8219959974~~ gPH 9/14/94	See container lot # log	SINGLE

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SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD16Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø6/94 TIME (HH:MM): 1Ø:15

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD16

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 164

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point is located in a highly wooded area. Many of the stones in the stream bed are covered with moss. Vegetation is present on the sides and at the bottom of the stream bed. No running or standing water is present.

Weather

Temperature: 85°F Very humid. Sunny

~~Many roots of various sizes are in the sample.~~

ES 7/6/94

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD16Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ12 ~~PNØ14~~ ES 7/6	8219959764	See container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 165

SAMPLE ID'S RINSATE: ERØØ19 TRIP BLANK: TBNØ12 FIELD BLANK: ABØØ11 ~~NA~~ ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juliette Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD1621 DATE COLLECTED (MM/DD/YY): 07/06/94 TIME (HH:MM): 10:15

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD16

DESCRIPTION:

FIELD OBSERVATIONS: Same as SD1601

SAMPLE -

MEDIA CODE: 01

DESCRIPTION: Soil Surface (0 - 6 Inches)

DEPTH 0.00 TO 6.00 IN

pg. 1 of

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Taylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD1621

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
				ES 7/6/94			
1-19	BUCKET	GEOTECHNICAL	Cool,4C	~~NPO 012~~ ~~FN 014~~	9/11 9/11/94 8219959764	See container lot # log	SINGLE
				NPS007	216935091		

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SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Jolletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD17Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø6/94 TIME (HH:MM): 1Ø:55

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD17

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: Sampling point is located in a highly wooded area. There is no standing or running water present in the stream. Vegetation is present on the sides and in the bed of the stream.

Weather: Temperature: 86°F Very humid. Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD17Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	ES 7/6/94 NPC Ø12 ~~FNØ14~~	8219959764	See Container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

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SAMPLE ID'S RINSATE: ERØØ19 TRIP BLANK: TBNØ12 FIELD BLANK: ~~NA~~ ABØØ22 ES 7/6 FIELD DUPLICATE: NA

RECORDED BY: Eric Taylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD18Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø6/94 TIME (HH:MM): 13:Ø3

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD18

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 172

SAMPLE TYPE:

- [x] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point is located in a highly wooded area. Vegetation is present on the sides of the stream bed in the bed. No running or standing water is present. Animal habitats are near the sampling point.

Weather: Temperature: 91°F Very humid Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD18Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ12	8219959764	See container Lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

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SAMPLE ID'S RINSATE: ERØØ19 TRIP BLANK: TBNØ12 FIELD BLANK: ~~NA~~ ABØØ11 ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD19Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø6/94 TIME (HH:MM): 133Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD19

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

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SAMPLE TYPE:

- [x] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point located in a highly wooded area. Stream is the drainage point of two highly vegetated fields. Vegetation is present on the sides and in the bed of the stream. No running or standing water is present. Metal debris (possibly old fenceline) is located in the sampling point. Other metal debris such as steel pipe are located along the sides of the stream.

Weather: Temperature: 92°F Very humid Sunny

SAMPLE COLLECTED: [x] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [x] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD19Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ12	8219959764	See container Lot# Log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

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SAMPLE ID'S RINSATE: ~~ERØØ19~~ 2Ø ES 7/6/94 TRIP BLANK: TBNØ12 FIELD BLANK: ~~NA~~ ABØØ11 ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD2ØØ1 DATE COLLECTED (MM/DD/YY): Ø7/Ø6/94 TIME (HH:MM): 14Ø5

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD2Ø

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Ø81-BJ

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point is located in a wooded area. The stream bed is ES 7/6 soil is moist, however there is no running or standing water present. Sampling point ES 7/6 receives runoff from two highly vegetated fields. Vegetation is present in the stream bed and on its sides.

Weather: Temperature 92°F Very humid Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

(SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD2ØØ1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ13	821995964	See container Lot# Log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

Pg. 181

SAMPLE ID'S RINSATE: ERØØ19 TRIP BLANK: TBNØ12 FIELD BLANK: ABØØ11 ~~NA~~ ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD2Ø21 DATE COLLECTED (MM/DD/YY): Ø7/Ø6/94 TIME (HH:MM): 14Ø5

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD2Ø

DESCRIPTION:

FIELD OBSERVATIONS: Same as SD2ØØ1.

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 183

SAMPLE TYPE:

- [x] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD2021

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-19	BUCKET	GEOTECHNICAL	Cool,4C	NPS007 NPC013 JPH 9/14/94	2169350691 8219959764 JPH 9/14/94	See container Lot# Log	SINGLE

SAMPLE ID'S RINSATE: NA TRIP BLANK: NA FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD21Ø1 DATE COLLECTED (MM/DD/YY): 07/11/94 TIME (HH:MM): 0836

ES 7/11

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD21

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

pg. 184

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point located in densely wooded area. Large amount of vegetation present on sides and in the bed of stream. Located 5' from fenceline. Large amount of dead branches present. No running or standing water is present. Stream bed soil is moist.

Weather: Temperature: 62°F Sunny

Took duplicate at this point.

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Jolotta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD21Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPØØ14	8219959683	See container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 185

SAMPLE ID'S RINSATE: ERØØ2 1-1 ES 7/11/94 TRIP BLANK: TBNØ14 FIELD BLANK: ABØØ11 ~~NA~~ ES 7/11/94 FIELD DUPLICATE: SD2111

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Jolette Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD22Ø1 DATE COLLECTED (MM/DD/YY): Ø7/11/94 TIME (HH:MM): Ø915

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD22

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

881 Pd

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: Sampling point located in a large highly vegetated field. Grass and other vegetation on the surface of the sampling point had to be shoveled away prior to beginning the sampling. No running or standing water is present. Many roots present in sampling point.

Weather: Temperature: 64°F Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD22Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ14	8219959683	See container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 189

SAMPLE ID'S RINSATE: ERØØ2 2 ES 7/11 TRIP BLANK: TBNØ14 FIELD BLANK: ABØØ12 ~~NA~~ FIELD DUPLICATE: NA

RECORDED BY: Eric Taylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD23Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø7/94 TIME (HH:MM): 1245

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD23

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point in a densely wooded area. Vegetation (roots) are present in the stream bed sampling point. No running or standing water is present. Stream receives runoff from a highly wooded area on the east and from a small wooded area and overgrown field on the west.

Weather: Temperature = 86°F Very humid Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD23Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ13	8219960383	See Container Lot # Log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

Pg. 193

SAMPLE ID'S RINSATE: ERØØ2Ø TRIP BLANK: TBNØ13 FIELD BLANK: ~~NA~~ ABØØ11 ES 7/10 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD2321 DATE COLLECTED (MM/DD/YY): 07/07/94 TIME (HH:MM): 1245

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD23

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 1 of 1

FIELD OBSERVATIONS: Same as SD23Ø1.

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Taylor (SIGNATURE) CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD2321

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-19	BUCKET	GEOTECHNICAL	Cool,4C	NPS009 ~~NPC013~~ gH 9/14/94	2169350805 ~~8219960383~~ gH 9/14/94	See container Lot # Log	SINGLE

SAMPLE ID'S RINSATE: ER0020 TRIP BLANK: TBN013 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

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SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD24Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø7/94 TIME (HH:MM): 133Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD24

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

SAMPLE TYPE:

- [X] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: ES 7/6/94 ~~Two~~ Sampling point located in a stream in a densely wooded area. Vegetation (roots), ES 7/13 ~~and~~ dead leaves and wood at sampling point. No running or standing water is present.

Weather: Temperature = 86°F Very humid Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD24Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ13	8219960383	See container Lot log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 197

SAMPLE ID'S RINSATE: ERØØ2Ø TRIP BLANK: TBNØ13 FIELD BLANK: ~~NA~~ ABØØ11 ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Taylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD25Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø7/94 TIME (HH:MM): 14ØØ

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD25

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 2of

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point in densely wooded area. Stream is dry. Vegetation (roots) are present throughout the stream.

Weather: 88°F Very humid Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Jolette Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD25Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ13	8219960383	See container Lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

Pg. 2Ø1

SAMPLE ID'S RINSATE: ERØØ2Ø TRIP BLANK: TBNØ13 FIELD BLANK: ~~NA~~ ABØØ11 ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD26Ø1 DATE COLLECTED (MM/DD/YY): 07/11/94 TIME (HH:MM): 1000

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD26

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 264

SAMPLE TYPE:

- [X] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] OTHER (SPECIFY)
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK

FIELD OBSERVATIONS: Sampling point is located in a large highly vegetated field. No running or standing water is present. Gravel driveway and fenceline are located approximately 20' west of point. Many small roots are present in the sampling point.

Weather: Temperature: 65°F Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Saylor (SIGNATURE) CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD26Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ14	8219959683	See container Lot# log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

Pg. 2Ø5

SAMPLE ID'S RINSATE: ERØØ2 2 ES 7/11 TRIP BLANK: TBNØ14 FIELD BLANK: ~~NA~~ ABØØ2 ES 7/11 FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD27Ø1 DATE COLLECTED (MM/DD/YY): Ø7/Ø7/94 TIME (HH:MM): 143Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD27

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø1

DESCRIPTION: Soil Surface (Ø - 6 Inches)

DEPTH Ø.ØØ TO 6.ØØ IN

Pg. 298

SAMPLE TYPE:

- [x] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [ ] OTHER (SPECIFY)

FIELD OBSERVATIONS: Sample in densely wooded area. No running or standing water is present. Vegetation is present throughout the stream. Stream receives runoff from two densely wooded areas.

Weather: Temperature = 88°F Very humid Sunny

SAMPLE COLLECTED: [✓] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [✓] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO: NA

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: Eric Taylor (SIGNATURE) CHECKED BY: Juliette Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER: SD27Ø1

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ13	8219969383	See container Lot # Log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

Pg. 2of9

SAMPLE ID'S RINSATE: ERØØ2Ø TRIP BLANK: TBNØ13 FIELD BLANK: NA FIELD DUPLICATE: NA

RECORDED BY: Eric Saylor (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SDØ911 DATE COLLECTED (MM/DD/YY): 7/7/94 TIME (HH:MM): Ø83Ø

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SDØ9

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø2

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH Ø.ØØ TO Ø.ØØ FT

SAMPLE TYPE:

- [ ] GRAB
- [ ] TIME COMPOSITE
- [ ] QC RINSATE
- [ ] SPATIAL COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) QC Field Duplicate

FIELD OBSERVATIONS: See pg. 136

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: [signature] 9-14-94 (SIGNATURE)

QA CHECKED BY: Joletta Humpert (SIGNATURE)

pg. 2/4

SAMPLE LOG SHEET

SAMPLE ID NUMBER:

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	NPC013	8219960383	See container lot # log	COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

PA 215

SAMPLE ID'S RINSATE: ER0026 TRIP BLANK: TBN013 FIELD BLANK: AB0011 FIELD DUPLICATE: SD0901

RECORDED BY: [signature] 9-14-94 (SIGNATURE) QA CHECKED BY: Jolette Humpert (SIGNATURE)

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD1311 DATE COLLECTED (MM/DD/YY): 7/6/94 TIME (HH:MM): Ø744

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD13

DESCRIPTION:

SAMPLE -

MEDIA CODE: Ø2

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH Ø.ØØ TO Ø.ØØ FT

Pg. 216

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) QC Field Duplicate

FIELD OBSERVATIONS: See pg. 152

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: [signature] 9-14-94 (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE L SHEET

SAMPLE ID NUMBER:

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-12Ø	WM Glass	CLPVOA	Cool,4C	NPCØ12	8219959764	See container lot # log	COMPUC
1-25Ø	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-25Ø	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-25Ø	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-25Ø	WM Glass	ANIONS Fl,SO4,Cl,NØ2/NØ3	Cool,4C				COMPUC
1-12Ø	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-25Ø	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-25Ø	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

SAMPLE ID'S RINSATE: ERØØ19 TRIP BLANK: TBNØ12 FIELD BLANK: ABØØ11 FIELD DUPLICATE: SD13Ø1

RECORDED BY: [signature] 9-14-94 (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

Pg 217

SAMPLE LOG SHEET

PROJECT NAME: Mound New Property Extended Phase **PROJECT NO:** 34896

SAMPLE ID NUMBER: SD2111 DATE COLLECTED (MM/DD/YY): 7/11/94 TIME (HH:MM): 0806

SAMPLING -

LOCATION CODE: MNDNPEP

DESCRIPTION:

POINT CODE: SD21

DESCRIPTION:

FIELD OBSERVATIONS: See pg. 184

SAMPLE -

MEDIA CODE: 02

DESCRIPTION: Soil Subsurface (>6 Inches)

DEPTH 0.00 TO 0.00 FT

pg 218

SAMPLE TYPE:

- [ ] GRAB
- [ ] SPATIAL COMPOSITE
- [ ] TIME COMPOSITE
- [ ] QC TRIP BLANK
- [ ] QC RINSATE
- [ ] QC FIELD BLANK
- [X] OTHER (SPECIFY) QC Field Duplicate

SAMPLE COLLECTED: [X] YES [ ] NO

SAP SAMPLING PROCEDURE WAS FOLLOWED: [X] YES [ ] NO FIELD CHANGE ORDER REFERENCE NO:

IF SAP WAS NOT FOLLOWED, SPECIFY WHAT DEVIATIONS WERE NECESSARY AND WHY (INCLUDE FIELD CHANGE ORDER REFERENCE NO.):

RECORDED BY: [signature] 4-14-94 (SIGNATURE) QA CHECKED BY: Joletta Humpert (SIGNATURE)

SAMPLE LOG SHEET

SAMPLE ID NUMBER:

CONTAINER VOLUME (ml)	CONTAINER TYPE	METHOD NAME AND NUMBER ANALYSIS	PRESERVATIVES (TYPE/VOL)	C-O-C #	AIR BILL #	CONTAINER LOT #	LABORATORY
1-120	WM Glass	CLPVOA	Cool,4C	NPC014	8219959683	See container lot # log	COMPUC
1-250	AmbGlass	SVOC,PEST/PCB	Cool,4C				COMPUC
1-250	AmbGlass	EXPLOSIVES	Cool,4C				COMPUC
1-250	WM Glass	METALS,Cyanide	Cool,4C				COMPUC
1-250	WM Glass	ANIONS Fl,SO4,Cl,N02/N03	Cool,4C				COMPUC
1-120	AmbGlass	TOTAL ORGANIC CARBON	Cool,4C				COMPUC
2-250	WM GLASS	RADS Pu,Th,U	NONE				COMPUC
2-250	WM GLASS	RADS Ac,Sr,H3,GAMMA	NONE				COMPUC

pg. 2/9

SAMPLE ID'S RINSATE: ER0021 TRIP BLANK: TBN014 FIELD BLANK: AB0011 FIELD DUPLICATE: SD2101

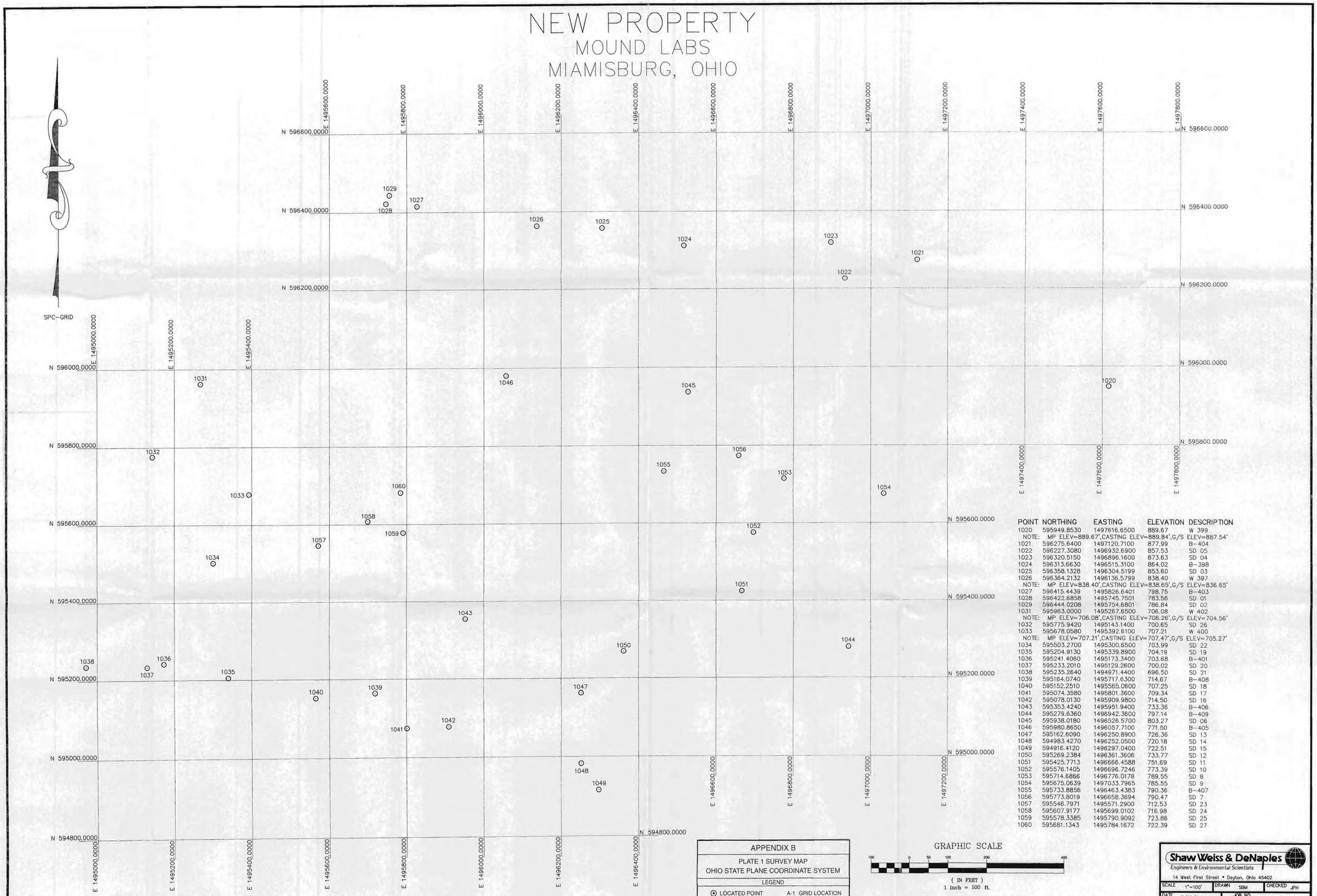
RECORDED BY: [signature] 9-14-94 (SIGNATURE) QA CHECKED BY: Juletta Humpert (SIGNATURE)

APPENDIX B

PLATE 1: Survey Map of Located Grid Points
Ohio State Plane Coordinate System (1927)

PLATE 2: Survey Map of Located Grid Points
Mound Plant Coordinate System

NEW PROPERTY
MOUND LABS
MIAMISBURG, OHIO



POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1020	595949.8530	1497616.6500	889.67	W 399
NOTE:	MP ELEV=889.67',CASTING ELEV=889.84',G/S ELEV=887.54'			
1021	596275.6400	1497120.7100	877.99	B-404
1022	596227.3080	1496932.6900	857.53	SD 05
1023	596320.5150	1496896.1600	873.63	SD 04
1024	596313.6630	1496515.3100	864.02	B-398
1025	596358.1328	1496304.5199	853.60	SD 03
1026	596364.2132	1496136.5799	838.40	W 397
NOTE:	MP ELEV=838.40',CASTING ELEV=838.65',G/S ELEV=836.65'			
1027	596415.4439	1495826.6401	798.75	B-403
1028	596422.6858	1495745.7501	783.56	SD 01
1029	596444.0208	1495754.6801	786.84	SD 02
1031	595963.0000	1495267.6500	706.08	W 402
NOTE:	MP ELEV=706.08',CASTING ELEV=706.26',G/S ELEV=704.56'			
1032	595775.9420	1495143.1400	700.65	SD 26
1033	595678.0580	1495392.6100	707.21	W 400
NOTE:	MP ELEV=707.21',CASTING ELEV=707.47',G/S ELEV=705.27'			
1034	595503.2700	1495300.6500	703.99	SD 22
1035	595204.9130	1495339.8900	704.19	SD 19
1036	595241.4080	1495173.3400	703.68	B-401
1037	595233.2010	1495129.2600	700.02	SD 20
1038	595235.2640	1494971.4400	696.50	SD 21
1039	595164.0740	1495717.6300	714.67	B-408
1040	595152.2510	1495565.0600	707.25	SD 18
1041	595074.3580	1495801.3600	709.34	SD 17
1042	595078.0130	1495909.9800	714.50	SD 16
1043	595353.4240	1495951.9400	733.36	B-406
1044	595279.6360	1496942.3600	797.14	B-409
1045	595938.0180	1496526.5700	803.27	SD 06
1046	595980.8650	1496057.7100	771.50	B-405
1047	595162.6090	1496250.8900	726.36	SD 13
1048	594983.4270	1496252.0500	720.18	SD 14
1049	594916.4120	1496297.0400	722.51	SD 15
1050	595269.2384	1496361.3606	733.77	SD 12
1051	595425.7713	1496666.4588	751.69	SD 11
1052	595576.1405	1496696.7246	773.39	SD 10
1053	595714.6866	1496776.0178	789.55	SD 8
1054	595675.0639	1497033.7965	785.55	SD 9
1055	595733.8856	1496463.4383	790.36	B-407
1056	595773.8019	1496658.3694	790.47	SD 7
1057	595546.7971	1495571.2900	712.53	SD 23
1058	595607.9177	1495699.0102	716.98	SD 24
1059	595578.3385	1495790.9092	723.86	SD 25
1060	595681.1343	1495784.1672	722.39	SD 27

APPENDIX B

PLATE 1 SURVEY MAP
OHIO STATE PLANE COORDINATE SYSTEM

LEGEND

⊙ LOCATED POINT A-1 GRID LOCATION

GRAPHIC SCALE

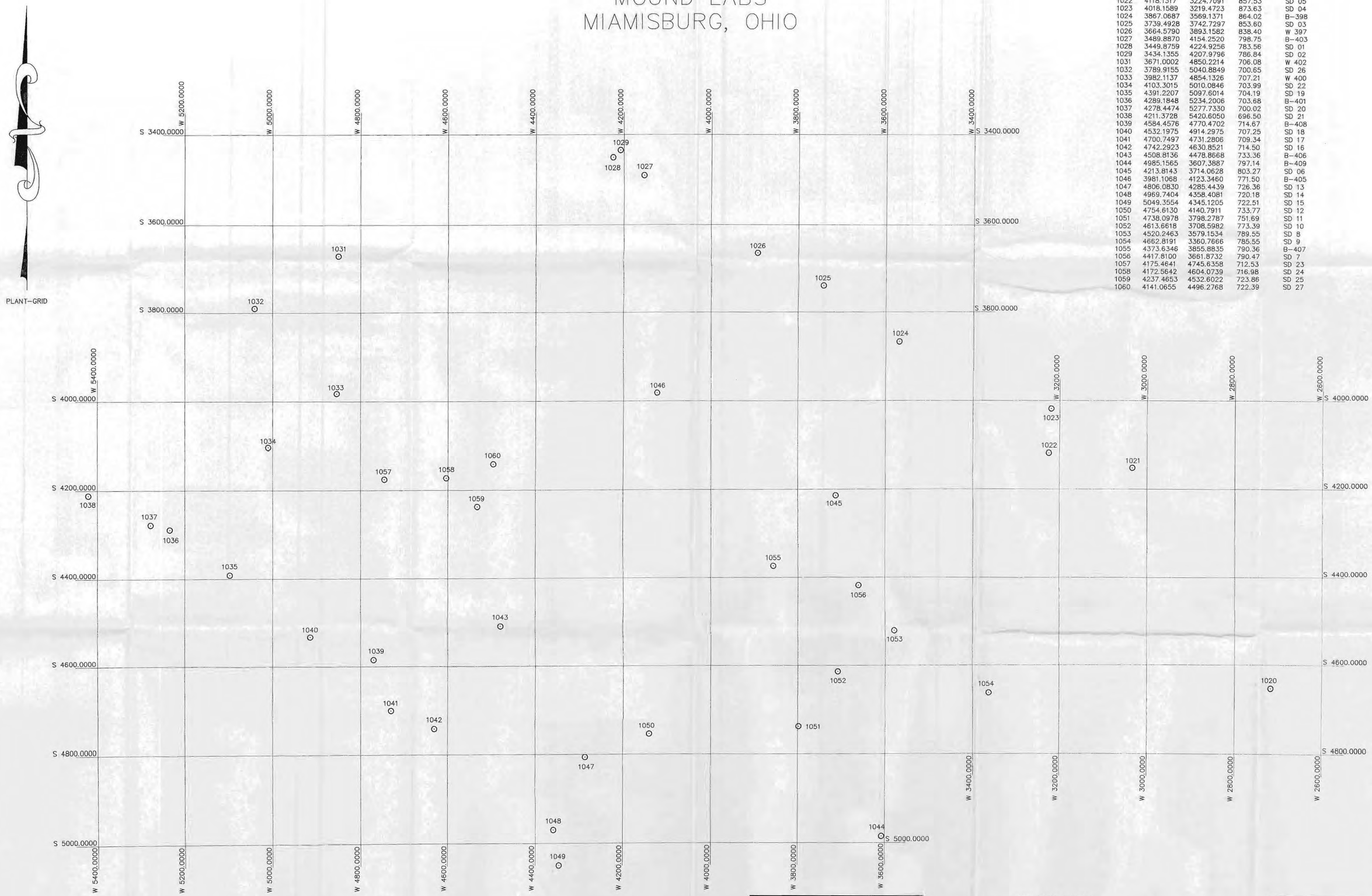
100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

Shaw Weiss & DeNaples
Engineers & Environmental Scientists
14 West First Street • Dayton, Ohio 45402

SCALE 1"=100'	DRAWN SBM	CHECKED JPH
DATE 8/29/94	JOB NO. L2952-A	

NEW PROPERTY
MOUND LABS
MIAMISBURG, OHIO



POINT	SOUTH	WEST	ELEVATION	DESCRIPTION
1020	4653.3514	2716.4548	889.67	W 399
1021	4151.7881	3033.5161	877.99	B-404
1022	4118.1317	3224.7091	857.53	SD 05
1023	4018.1589	3219.4723	873.63	SD 04
1024	3867.0687	3569.1371	864.02	B-398
1025	3739.4928	3742.7297	853.60	SD 03
1026	3664.5790	3893.1582	838.40	W 397
1027	3489.8870	4154.2520	798.75	B-403
1028	3449.8759	4224.9256	783.56	SD 01
1029	3434.1355	4207.9796	786.84	SD 02
1031	3671.0002	4850.2214	706.08	W 402
1032	3789.9155	5040.8849	700.65	SD 26
1033	3982.1137	4854.1326	707.21	W 400
1034	4103.3015	5010.0846	703.99	SD 22
1035	4391.2207	5097.6014	704.19	SD 19
1036	4289.1848	5234.2006	703.68	B-401
1037	4278.4474	5277.7330	700.02	SD 20
1038	4211.3728	5420.6050	696.50	SD 21
1039	4584.4576	4770.4702	714.67	B-408
1040	4532.1975	4914.2975	707.25	SD 18
1041	4700.7497	4731.2806	709.34	SD 17
1042	4742.2923	4630.8521	714.50	SD 16
1043	4508.8136	4478.8668	733.36	B-406
1044	4985.1565	3607.3887	797.14	B-409
1045	4213.8143	3714.0628	803.27	SD 06
1046	3981.1068	4123.3460	771.50	B-405
1047	4806.0830	4285.4439	726.36	SD 13
1048	4969.7404	4358.4081	720.18	SD 14
1049	5049.3554	4345.1205	722.51	SD 15
1050	4754.6130	4140.7911	733.77	SD 12
1051	4738.0978	3798.2787	751.69	SD 11
1052	4613.6618	3708.5982	773.39	SD 10
1053	4520.2463	3579.1534	789.55	SD 8
1054	4662.8191	3360.7666	785.55	SD 9
1055	4373.6346	3855.8835	790.36	B-407
1056	4417.8100	3661.8732	790.47	SD 7
1057	4175.4641	4745.6358	712.53	SD 23
1058	4172.5642	4604.0739	716.98	SD 24
1059	4237.4653	4532.6022	723.86	SD 25
1060	4141.0655	4496.2768	722.39	SD 27

APPENDIX B

PLATE 2 SURVEY MAP
MOUND PLANT COORDINATE SYSTEM

LEGEND

⊙ LOCATED POINT A-1 GRID LOCATION

GRAPHIC SCALE

100 0 50 100 200 400

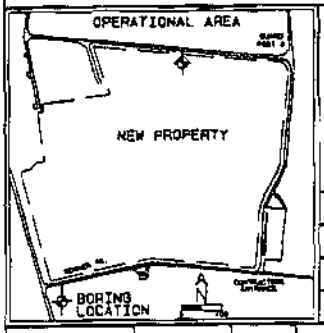
(IN FEET)
1 inch = 100 ft.

Shaw Weiss & DeNaples
Engineers & Environmental Scientists
14 West First Street • Dayton, Ohio 45402

SCALE 1"=100'	DRAWN SBM	CHECKED JPH
DATE 8/29/94	JOB NO. L2952-A	

APPENDIX C
BOREHOLE AND MONITORING WELL LOGS

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B398	Page 1 of 1



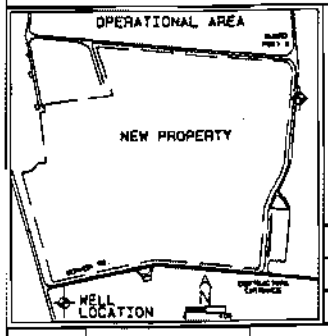
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: 8 in. Cable-Tool
Drilling Dates: 6/21, 6/22, 6/23/94
Logged By: Susan Abston
Total Depth (ft BGS): 33.02

COORDINATES
State Plane: Northing: 596313.6630
Easting: 1496515.3100
Mound Plant; South: 3867.0687
West: 3569.1371
Ground Surface Elevation (ft MSL): 864.02

GROUNDWATER	DEPTH (ft BGS)	COMMENTS
▼	29.02	Encountered during drilling on 6/22/94.
▽	29.82	Measured 6/23/94, not suitable for well placement.
▽		

BLOW COUNTS	RECOVERY (ft)	F.I.O. (ppm)	DEPTH (ft BGS)	SAMPLES: Geotech.	SAMPLES: Water	SAMPLES: Soil	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
NA	NA	0				B398B01		CL	0-1.5 CLAY, some silt, trace gravel; organic material; 5YR3/2 greyish brown.
		0	4						1.5-33.02 Interbedded shale and limestone bedrock.
		0	8						
		0							
		0	12						
		0							
		0	16						
		NR	20						
			24						
			28						
			32						

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	WELL LOG W399	Page 1 of 1



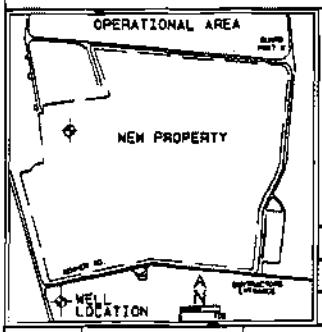
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: Cable Tool
Drilling Fluid: Water
Drilling Completed: 6/14/94
Well Installed: 6/15/94
Logged By: Susan Abston
Total Depth (ft BGS): 34.0

COORDINATES
State Plane; Northing: 595949.8530
Easting: 1497616.6500
Mound Plant; South: 4653.3514
West: 2716.4548
Ground Surface Elevation (ft MSL): 887.54
Top of Casing Elevation (ft MSL): 889.67

GROUNDWATER	DATE	DEPTH (ft BGS)	COMMENTS
▼	6/14/94	31.7	Encountered during drilling
▽	6/15/94	5.3	Measured prior to well installation.

DEPTH (ft BGS)	SAMPLES: Water	SAMPLES: Soil	WELL CONSTRUCTION	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
			steel protective casing with locking cap (2.30 ft AGS); concrete pad			
0	B39901				CL	0-3.8 CLAY, some silt, trace gravel; firm; dry; organic material; 10YR3/3 dark brown.
4 ▼			cement bentonite grout			3.8-34.0 Interbedded shale and limestone bedrock.
8			2" stainless steel riser			
12			(14.10 ft BGS)			
16			3/8" bentonite pellet seal			
20			(21.30 ft BGS); (22.80 ft BGS)			
24			2", 0.01 slotted stainless steel screen			
28			Global #5 sand pack			
▼ 32	W39901		(32.80 ft BGS); stainless steel cap; (33.90 ft BGS); 8" borehole diameter			

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	WELL LOG W400	Page 1 of 1



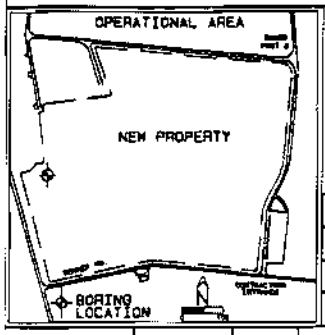
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: Cable Tool
Drilling Fluid: Water
Drilling Completed: 6/28/94
Well Installed: 6/28/94
Logged By: Susan Abston
Total Depth (ft BGS): 34.0

COORDINATES	
State Plane; Northing:	595678.0580
Easting:	1495392.6100
Mound Plant; South:	3982.1137
West:	4854.1326
Ground Surface Elevation (ft MSL):	705.27
Top of Casing Elevation (ft MSL):	707.21

GROUNDWATER	DATE	DEPTH (ft BGS)	COMMENTS
▼	6/28/94	22.87	Encountered during drilling.
▽			

DEPTH (ft BGS)	SAMPLES: Water	SAMPLES: Soil	WELL CONSTRUCTION	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
0	B40001		steel protective casing with locking cap (2.50 ft AGS); concrete pad		CL	0-10.0 CLAY, some silt; rootlets; angular limestone fragments; 10YR5/6 brown.
4			cement bentonite grout			
8			2" stainless steel riser		GW	10.0-23.0 GRAVEL, some fine sand; well graded; angular to subrounded granules and pebbles; 10YR5/4 yellowish brown.
12			(14.20 ft BGS)			
16			3/8" bentonite pellet seal; (18.00 ft BGS)			
20			Global #5 sand pack; (22.51 ft BGS)			
▼ 24					SP	23.0-29.0 SAND; fine; well sorted; trace cobbles. F.I.D.=5.0ppm
28	W40001	B40002	2", 0.01 slotted stainless steel screen; Global #5 sand pack		GW	29.0-34.0 SAND and GRAVEL; fine sand, angular to subrounded granules and pebbles; 10YR5/4 yellowish brown.
32			(32.50 ft BGS); stainless steel cap (34.00 ft BGS); 8" borehole diameter			

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B401	Page 1 of 1



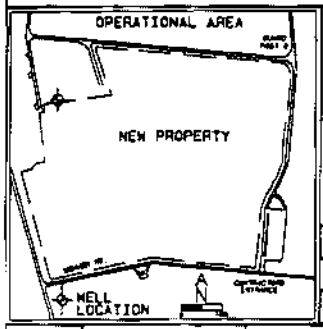
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: 8 in. Hollow-Stem Auger
Drilling Dates: 8/14/94
Logged By: Mike Klidzejs
Total Depth (ft BGS): 30.0

COORDINATES
State Plane; Northing: 595241.4060
Easting: 1495173.3400
Mound Plant; South: 4289.1848
West: 5234.2006
Ground Surface Elevation (ft MSL): 703.68

GROUNDWATER	DEPTH (ft BGS)	COMMENTS
▼	22.9	Encountered during drilling. Sample collected.
▽		
▽		

BLOW COUNTS	RECOVERY (ft)	F.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES (Geotech. / Water / Soil)	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
3 1 1 3	0.8	0		B40101		PT	0-4.0 SILT, trace gravel; organic material; moist; 2.5YR2.5/0 gray.
NR	0.8	0	4				
7 8 10 12	2.0	0				OH	4.0-8.0 CLAY, some silt, trace sand and gravel; rootlets; 7.5YR3/2 dark brown.
8 7 7 12	1.6	0	8				
3 6 4 10	1.2	0				CL	8.0-10.0 CLAY, some silt and gravel; subround to rounded granules and pebbles; 5YR4/2 dark reddish gray.
29 14 27 21	0.1	0					10.0-12.0 No recovery.
7 9 12 19	1.6	0	12			GM	12.0-14.0 CLAY, SILT and GRAVEL; angular to subrounded granules and pebbles; 5YR7/1 light gray.
14 23 28 22	1.0	0				GW	14.0-16.0 GRAVEL, some silt and sand; angular granules and pebbles; 5YR7/1 light gray.
8 22 19 31	1.6	0	16			GW	16.0-22.0 GRAVEL, some silt and sand; angular granules and pebbles; moist; 10YR6/2 pale brown.
34 31 28 42	1.8	0					
11 18 24 25	1.1	0	20				
14 19 10 12	1.2	0	▼			GW	22.0-23.5 GRAVEL, some silt and sand; angular pebbles and cobbles; moist; 10YR7/1 light gray.
			24			SM	23.5-24.0 SAND; well sorted; saturated.
21 24 50 4	NR	0				GW	24.0-26.0 SILT, SAND and GRAVEL; subangular to subrounded granules and pebbles; saturated; 10YR5/3 brown
15 20 35 4	2.0	0		M40101 B40102		GW	
80 45 33 31	2.0	0	28				26.0-30.0 GRAVEL, some silt and sand; subangular to subrounded granules, pebbles, and cobbles; poorly sorted; saturated.
			32				

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	WELL LOG W402	Page 1 of 1



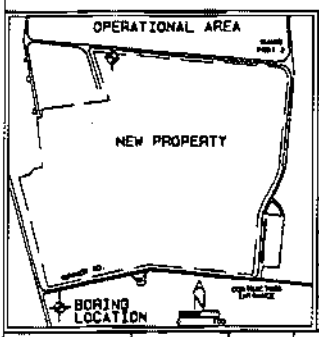
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: Cable Tool
Drilling Fluid: Water
Drilling Completed: 6/30/94
Well Installed: 6/30/94, 7/16/94
Logged By: Susan Abston
Total Depth (ft BGS): 32.6

COORDINATES
State Plane; Northing: 595963.0000
Easting: 1495267.6500
Mound Plant; South: 3671.0002
West: 4850.2214
Ground Surface Elevation (ft MSL): 704.56
Top of Casing Elevation (ft MSL): 706.08

GROUNDWATER	DATE	DEPTH (ft BGS)	COMMENTS
▼	6/30/94	22.09	Encountered during drilling.
▽	7/20/94	21.67	Sample collected.

DEPTH (ft BGS)	SAMPLES: Water	SAMPLES: Soil	WELL CONSTRUCTION	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
0	B40201		steel protective casing with locking cap (2.30 ft AGS); concrete pad		CL	0-5.5 CLAY, some silt, trace gravel; 7.5YR4/2 brown.
4			cement bentonite grout		GC	F.I.D.=4.0ppm; 5.5-12.0 CLAY, GRAVEL and SAND; subangular to rounded granules and pebbles; 7.5YR5/3 brown.
8			2" stainless steel riser			
12					SW	12.0-23.5 SAND and GRAVEL; poorly sorted.
16			(15.30 ft BGS); 3/8" bentonite pellet seal; (18.13 ft BGS)			
20			(20.74 ft BGS)			
24	B40202; W40201; W40211		2", 0.01 slotted stainless steel screen		SP	23.5-26.6 SAND; fine; well sorted; saturated; 5YR4/4 brown.
28			Global #5 sand pack		SM; GW	26.6-27.0 SAND, some silt and clay; fine sand; well sorted; 5YR4/1 brownish grey. 27.0-32.6 SAND and GRAVEL; fine to coarse sand; poorly sorted.
32			(31.01 ft BGS); stainless steel cap (32.60 ft BGS); 8" borehole diameter			

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B403	Page 1 of 1



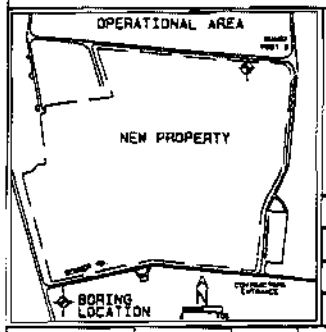
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: 8 in Hollow-Stem Auger
Drilling Dates: 6/29/94
Logged By: Mike Klidzejs
Total Depth (ft BGS): 7.5

COORDINATES
State Plane; Northing: 596415.4439
Easting: 1495826.6401
Mound Plant; South: 3489.8870
West: 4154.2520
Ground Surface Elevation (ft MSL): 798.75

GROUNDWATER	DEPTH (ft BGS)	COMMENTS
		None encountered.

BLOW COUNTS	RECOVERY (ft)	P.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES: Geotech.	SAMPLES: Water	SAMPLES: Soil	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
8 12 8 12	1.2	0			B40301 B40311			ML CL CL	0-0.5 SILT and CLAY; organic material; 5Y3/1 very dark gray. 0.5-1.2 CLAY, some silt, trace gravel; stiff; mottled; 5Y3/2 dark olive gray and 5Y5/4 olive. 1.2-7.5 CLAY, some gravel; stiff; 5Y6/4 pale olive.
7 11 12 40	1.6	0	4						
8 11 16 19	0.9	0				B40302			
28 50/5	0.3	0							
			8						
			12						
			16						
			20						
			24						
			28						
			32						

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B404	Page 1 of 1



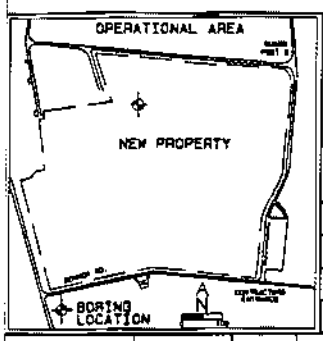
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: 8 in. Hollow-Stem Auger
Drilling Dates: 6/29/94
Logged By: Mike Klidzejs
Total Depth (ft BGS): 8.8

COORDINATES
State Plane; Northing: 596275.6400
Easting: 1497120.7100
Mound Plant; South: 4151.7881
West: 3033.5161
Ground Surface Elevation (ft MSL): 877.99

GROUNDWATER	DEPTH (ft BGS)	COMMENTS
		None encountered.

BLOW COUNTS	RECOVERY (ft)	F.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES Geotech.	SAMPLES Water	SAMPLES Soil	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
3 6 8 8	1.9	0				B40401		OH CL	0-0.7 SILT and CLAY; organic material; 10YR4/3 brown.
7 7 9 22	1.7	0							0.7-4.0 CLAY, some silt; stiff; organic material; 10YR5/6 yellowish brown.
10 19 12 25	2.0	0	4	B40421		B40402		CL SM	4.0-5.2 CLAY, some silt and gravel; stiff; 10YR4/3 brown.
8 8 7 9	1.9	0				B40412		OH	5.2-6.0 SILT and SAND, some gravel; poorly sorted; 10YR4/4 dark yellowish brown.
8 50/5	0.9	0	8						6.0-8.8 CLAY, some silt, sand and gravel; 10YR4/4 dark yellowish brown.
			12						
			16						
			20						
			24						
			28						
			32						

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B405	Page 1 of 1



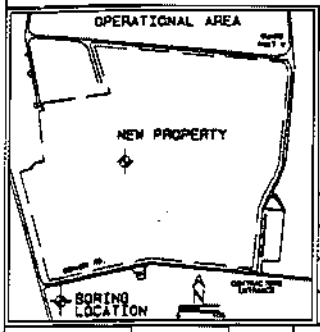
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: 8 in. Hollow-Stem Auger
Drilling Dates: 6/22/94
Logged By: Mike Klidzejs
Total Depth (ft BGS): 11.3

COORDINATES
State Plane; Northing: 595980.8650
Easting: 1496057.7100
Mound Plant; South: 3981.1068
West: 4123.3460
Ground Surface Elevation (ft MSL): 771.50

GROUNDWATER	DEPTH (ft BGS)	COMMENTS
		None encountered.

BLOW COUNTS	RECOVERY (ft)	P.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES: Geotech.	SAMPLES: Water	SAMPLES: Soil	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
NA	NA	0		B40521		B40501		OH	0-0.5 CLAY, some silt, trace gravel; organic material; 10YR3/2 very dark grayish brown.
55 18 16 17	2.0	0						OH	0-2.0 Shelby tube sample and bucket sample collected.
11 10 11 12	1.8	0	4					CL	2.0-4.0 CLAY, some silt, trace gravel; organic material; 10YR3/2 very dark grayish brown.
9 13 13 15	1.6	0							4.0-10.8 CLAY, some silt, trace gravel; 10YR6/6 brownish yellow.
9 10 13 15	NR	0	8			B40502			
11 19 55 50	1.3	0						CL	10.8-11.3 CLAY, some silt; hard; 5Y5/1 gray.
			12						
			16						
			20						
			24						
			28						
			32						

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B406	Page 1 of 2



Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: 8 in. Hollow-Stem Auger
Drilling Dates: 6/22, 6/23, 6/27/94
Logged By: Mike Klidzejs
Total Depth (ft BGS): 63.0

COORDINATES
State Plane: Northing: 595353.4240
Easting: 1485951.9400
Mound Plant: South: 4508.8138
West: 4478.8888
Ground Surface Elevation (ft MSL): 733.36

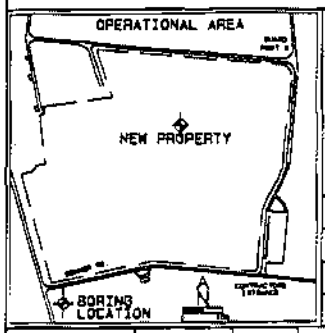
GROUNDWATER	DEPTH (ft BGS)	COMMENTS
		None encountered.

BLOW COUNTS	RECOVERY (ft)	P.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES Geotech.	SAMPLES Water	SAMPLES Soil	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
3 8 10 11	1.8	0				B40601		OH	0-0.5 CLAY, some silt; organic material; 10YR3/2 very dark grayish brown.
8 10 11 13	1.4	0						SM	0.5-4.0 SILT, some clay and gravel; poorly sorted; 10YR6/4 light yellowish brown.
8 10 10 18	1.8	0	4					CL	4.0-6.0 CLAY; moist; sticky; 10YR4/2 dark grayish brown.
6 7 8 10	1.8	0						CL	6.0-10.0 CLAY, trace coarse sand; moist; sticky; 10YR4/2 dark grayish brown. (6.0-24.0 Geotechnical bucket sample B40621 collected.)
7 10 14 15	1.9	0	8						
NA	1.9	0							10.0-12.0 Shelby tube sample B40621 collected.
8 10 13 15	1.9	0	12					CL	12.0-14.0 CLAY, trace coarse sand; moist; sticky; 10YR6/3 pale brown.
14 18 24 33	0.4	0		B40621					14.0-16.0 No sample collected.
9 23 18 17	2.1	0	16					CL	16.0-22.0 CLAY, trace coarse sand; moist; sticky; 2.5Y3/2 very dark grayish brown.
9 17 13 17	1.6	0							
7 14 39 80	1.3	0	20						
NA	0	0							22.0-24.0 No sample collected.
8 11 24 35	0.9	0	24					GM	24.0-30.0 SAND, SILT and GRAVEL; moist.
50/6	0.2	0							
46 31 50/5	0.8	0	28						
14 21 37 48	0.8	0						GW	30.0-40.0 SAND and GRAVEL; subangular to subround; moist; 2.5Y5/4 light olive brown.
43 45 50/5	1.2	0	32	B40622					
38 48 45 42	1.4	0							

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B406	Page 2 of 2

BLOW COUNTS	RECOVERY (ft)	P.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES: Geotech.	SAMPLES: Water	SAMPLES: Soil	LITHOLOGY	USCS	
38 49 45 42	1.4	0						GW	
17 19 21 26	1.4	0							
37 68 49 48	1.2	0	39						
NA	0	0							40.0-43.0 No sample collected.
			43						
59 43 45 48	1.8	0						GW	43.0-51.0 SAND and GRAVEL; poorly sorted.
90 98 99 95	1.0	0				B40602			
			47						
65 100 88	1.4	0							
100/3	0.3	0							
			51						
50/0	0	0							51.0-55.4 No recovery.
50/0	0	0							
			55						
27 52 50/1	0.9	0							55.4-63.0 Interbedded shale and limestone bedrock.
100/6	0.4	0							
			59						
NA	NA	0							
			63						
			67						
			71						
			75						
			79						

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B407	Page 1 of 1



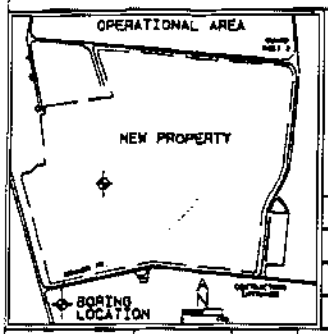
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: 8 in. Hollow-Stem Auger
Drilling Dates: 6/21/94
Logged By: Mike Klidzeis
Total Depth (ft BGS): 15.7

COORDINATES
State Plane: Northing: 595733.8856
Easting: 1496463.4383
Mound Plant: South: 4373.6348
West: 3855.8835
Ground Surface Elevation (ft MSL): 790.38

GROUNDWATER	DEPTH (ft BGS)	COMMENTS
		None encountered.

BLOW COUNTS	RECOVERY (ft)	F.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES: Geotech.	SAMPLES: Water	SAMPLES: Soil	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
NA	2.0	0		B40721		B40701		OH	0-2.0 CLAY and SILT, trace gravel; organic material; 2.5Y2.5/1 black.
14 8 11 13	1.5	0						OH OH	2.0-2.6 CLAY; organic material; moist; 2.5Y3/2 very dark grayish brown.
10 21 20 21	1.1	0	4					OH OH	2.6-4.0 CLAY, some silt and gravel; moist; 2.5Y6/1 gray.
8 13 22 29	1.5	0							4.0-4.5 CLAY; moist; 2.5Y3/2 very dark grayish brown.
7 15 25 22	1.4	0	8	B40723					4.5-10.0 CLAY, some silt and gravel; 2.5Y6/2 light brownish gray.
50/4	0.5	0						CL	10.0-12.0 SILT, some clay; laminated; 5Y5/2 grayish brown.
15 50/5	1.2	0	12			B40702		CL	12.0-12.8 SILT, some clay, trace gravel; dry; 5Y6/3 light yellowish brown.
41 50/1	0.8	0							12.8-15.7 Interbedded shale and limestone bedrock.
			16						
			20						
			24						
			28						
			32						

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B408	Page 1 of 2



Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: 8 in. Hollow-Stem Auger
Drilling Dates: 6/16/94
Logged By: Mike Klidzejs
Total Depth (ft BGS): 42.0

COORDINATES
State Plane; Northing: 595184.0740
Easting: 1495717.6300
Mound Plant; South: 4584.4576
West: 4770.4702
Ground Surface Elevation (ft MSL): 714.87

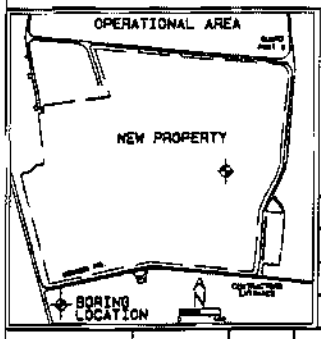
GROUNDWATER	DEPTH (ft BGS)	COMMENTS
▼	34.04	Measured prior to sample collection.
▽		
▽		

BLOW COUNTS	RECOVERY (ft)	F.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES Geotech.	SAMPLES Water	SAMPLES Soil	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
NA	NA	0		B40821		B40801 B40811		SM	0-0.5 SILT, trace sand and gravel; dry; organic material; 10YR5/3 brown.
3 3 5 6	1.2	0						SM	0-2.0 Shelby tube sample collected.
			4						2.0-4.0 SILT; organic material; 10YR3/2 very dark grayish brown.
3 4 56	1.1	0						SC	4.0-7.8 SILT, some clay; moist; 10YR3/2
3 2 2 2	0.7	0							
			8						
3 6 4 5	0.9	0						GM	7.8-14.0 CLAY, some silt and sand, trace gravel; poorly sorted; subangular to subrounded granules and pebbles; 2.5YR7/2 light gray.
22 35 16 13	0.9	0							
			12						
15 13 12 16	1.4	0							
15 37 28 35	NR	0						GM	14.0-16.0 SILT and SAND, some gravel; poorly sorted; 10YR5/3 brown.
			16						
NA	0.8	0							16.0-18.0 Shelby tube sample B40822 collected. (17.0-34.0 Geotechnical bucket sample B40822 collected.)
21 26 21 22	1.4	0						GM	18.0-36.0 SAND, SILT and GRAVEL; poorly sorted; moist; 10YR7/1 light gray.
			20						
29 23 22 22	1.2	0							
16 12 16 21	1.3	0							
			24						
20 26 36 44	1.4	0		B40822					
16 21 23 33	1.4	0							
			28						
14 23 50	0.4	0							
21 37 36 23	NR	0							
			32						
41 30 30 24	1.3	0							
33 52 29 21	1.4	0							

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B408	Page 2 of 2

BLOW COUNTS	RECOVERY (ft)	F.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES Geotech.	SAMPLES Water	SAMPLES Soil	LITHOLOGY	USCS	
33 52 29 21	1.4	0						GM	
NA	NA	0							36.0–37.0 No recovery.
21 28 33 22	1.8	0						GM	37.0–42.0 SAND and GRAVEL, trace silt; poorly sorted; saturated; 10YR7/1 light gray.
29 30 31 38	1.2	0	39		W40801	B40802			
88 82 90/2	NR	0							
			43						
			47						
			51						
			55						
			59						
			63						
			67						
			71						
			75						
			79						

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	SOIL BORING B409	Page 1 of 1



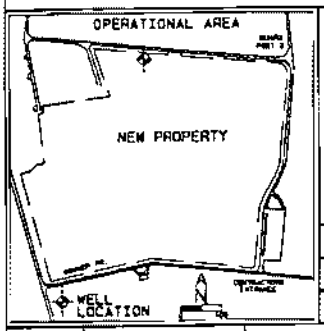
Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: 8 in. Hollow-Stem Auger
Drilling Dates: 6/28/94
Logged By: Mike Klidzejs
Total Depth (ft BGS): 14.0

COORDINATES
State Plane; Northing: 595279.6360
Easting: 1496942.3600
Mound Plant; South: 4985.1565
West: 3607.3887
Ground Surface Elevation (ft MSL): 797.14

GROUNDWATER	DEPTH (ft BGS)	COMMENTS
		None encountered.

BLOW COUNTS	RECOVERY (ft)	F.I.D. (ppm)	DEPTH (ft BGS)	SAMPLES Geotech.	Water	Soil	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
5 9 11 15	1.7	0				B40901		CL	0-4.2 CLAY, some silt, trace gravel; organic material; 2.5Y3/1 very dark gray.
50/2	0.3	0							
18 23 50/5	1.2	0	4					CL	4.2-8.0 CLAY, some silt and gravel; 5Y6/2 light olive gray.
17 21 25 23	0.5	0							
4 11 14 22	1.2	0	8					CL	8.0-12.0 CLAY, some silt; hard; 10YR5/2 grayish brown.
38 35 50/5	0.1	0				B40902			
33 50/5	0.5	0	12						12.0-14.0 Interbedded shale and limestone bedrock.
			16						
			20						
			24						
			28						
			32						

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	WELL LOG W411	Page 1 of 2



Area of Concern: New Property
Drilling Company: Bowser-Morner
Drilling Method: Cable Tool
Drilling Fluid: Water
Drilling Completed: 6/20/94
Well Installed: 6/20/94
Logged By: Susan Abston
Total Depth (ft BGS): 40.05

COORDINATES
State Plane; Northing: 596364.2132
Easting: 1496136.5799
Mound Plant; South: 3664.5790
West: 3893.1582
Ground Surface Elevation (ft MSL): 836.65
Top of Casing Elevation (ft MSL): 838.40

GROUNDWATER	DATE	DEPTH (ft BGS)	COMMENTS
▼	6/20/94	36.2	Encountered during drilling.
▽	6/20/94	24.6	Maximum recharge prior to well placement.

DEPTH (ft BGS)	SAMPLES: Water	SAMPLES: Soil	WELL CONSTRUCTION	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
0	B4110!		steel protective casing with locking cap (2.09 ft AGS); concrete pad		OH	0-14.0 CLAY, some silt, trace gravel; 5YR3/2 greyish brown.
4						
			cement bentonite grout			
8						
12			2" stainless steel riser			
16						14.0-40.05 Interbedded shale and limestone bedrock.
20						
			(22.33 ft BGS)			
24			3/8" bentonite pellet seal			
			(25.88 ft BGS)			
28			(27.94 ft BGS)			
			2", 0.01 slotted stainless steel screen			
32						
	W4110!		Global #5 sand pack			

MOUND / NEW PROPERTY	OU5 NEW PROPERTY EXTENDED PHASE FIELD INVESTIGATION	WELL LOG W411	Page 2 of 2

DEPTH (ft BGS)	SAMPLES Water	SAMPLES Soil	WELL CONSTRUCTION	LITHOLOGY	USCS	DESCRIPTION / COMMENTS
	W411D1					
39			(37.95 ft BGS) stainless steel cap (40.05 ft BGS) 8" borehole diameter			
43						
47						
51						
55						
59						
63						
67						
71						
75						
79						

APPENDIX D
RADIOLOGICAL DATA - MOUND SOIL SCREENING FACILITY DATA

APPENDIX D
RADIOLOGICAL DATA - MOUND SOIL SCREENING FACILITY DATA

	MOUND SOIL SCREENING FACILITY DATA			
SMPID	Plutonium - 238		Thorium - 232	
	Units: pCi/g		Units: pCi/g	
	RESULTS	Note:	RESULTS	Note:
B39801	40	a	1.4	
B39802	34	a	1.7	
	23		2.9	a
B39901	17		1.2	
B40001	21		1	
B40002	11		0.7	
B40101	19		1.4	
B40102	17		0.7	
B40201	6		1	
B40202	0		1	
B40301	2		0.8	
B40302	6		1.3	
B40401	36	a	1	
B40402	0		0.8	
B40412	0		1	
B40501	28	a	1.3	
B40502	35	a	1.1	
B40601	11		0.8	
B40602	10		0.8	
B40701	38	a	1.7	
B40702	31	a	1.5	
B40801	34	a	1.3	
B40802	10		1	
B40901	10		1	
B40902	27	a	1.6	
B41101	22		1.6	
SD0101	11		1	
SD0201	6		0.9	
SD0301	47	a	5.3	a
SD0401	22		1.5	
SD0501	5		1.2	
SD0601	1		1.2	
SD0701	18		2.2	a
SD0801	2		1.2	
SD0901	4		1.3	
SD1001	23		1.5	
SD1101	13		0.9	
SD1201	13		0.8	
SD1301	0		1	

APPENDIX D
RADIOLOGICAL DATA - MOUND SOIL SCREENING FACILITY DATA

	MOUND SOIL SCREENING FACILITY DATA			
SMPID	Plutonium - 238		Thorium - 232	
	Units: pCi/g		Units: pCi/g	
	RESULTS	Note:	RESULTS	Note:
SD1401	21		1.3	
SD1501	0		1.1	
SD1601	22		1.4	
SD1701	0		0.9	
SD1801	18		0.8	
SD1901	0		0.6	
SD2001	16		2.1	a
SD2101	21		1.5	
SD2201	19		1.7	
SD2301	15		1.2	
SD2401	31	a	1.8	
SD2501	19		1.6	
SD2601	6		1.2	
SD2701	0		1.1	

a - Concentration at or above the Mound Soil Screening Facility detection level of 25 pCi/g for Pu-238 and 2 pCi/g for Th-232.

CPM - Counts per minute

KCPM - Counts per minute x 1000

pCi/g - Picocuries per gram

APPENDIX E
RADIOLOGICAL AND CHEMICAL ANALYTICAL DATA

E.1 RADIOLOGICAL AND CHEMICAL ANALYTICAL SOIL DATA
E.2 RADIOLOGICAL AND CHEMICAL ANALYTICAL GROUNDWATER DATA
E.3 RADIOLOGICAL AND CHEMICAL ANALYTICAL SEDIMENT DATA

DATA QUALIFIERS

The primary data qualifiers to be applied, as described in the CLP Functional Guidelines and in Section 4.0 and 5.0 of Appendix H, of the QAPjP (DOE 1993a).

U	-	The material was analyzed, but was not detected. The associated numerical value is the sample quantitation limit.
J	-	The associated numerical value is an estimated quantity.
R	-	The data are unusable (compound may or may not be present). Resampling and reanalysis is necessary for verification.
N	-	Presumptive evidence of presence of material.
NJ	-	Presumptive evidence of the presence of the material at an estimated quantity.
UJ	-	The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Subqualifiers are used to assist in data assessment by indicating the source of the primary qualifier. These subqualifiers are attached to the primary qualifier, separated by a hyphen. The following is a list of allowable subqualifiers.

SUBQUALIFIERS - ORGANICS

B	-	Qualified due to method blank or a field blank
C	-	Qualified due to calibration
H	-	Holding time exceeded
K	-	Qualified due to surrogate recovery
S	-	Qualified due to matrix spike recovery
I	-	Qualified due to internal recovery
P	-	Pesticide/PCB results have >25% difference on two different columns
(+)	-	Potential positive bias (added after subqualifier with a parentheses)
(-)	-	Potential negative bias (added after subqualifier with a parentheses)

SUBQUALIFIERS - INORGANICS

B	-	Qualified due to method blank of field blank
C	-	Qualified due to calibration
H	-	Holding time exceeded
S	-	Qualified due to matrix spike recovery
I	-	Interference (ICP serial dilution, ICS, or GFAA spike recovery)
D	-	Duplicate (replicate limits exceeded)

L	-	Qualified due to LCS
(+)	-	Potential positive bias (added after subqualifier with a parentheses)
(-)	-	Potential negative bias (added after subqualifier with a parentheses)

Examples of final qualification might be J-C, UJ-S(+), UJ-BC(-), etc.

E.1

APPENDIX E.1
RADIOLOGICAL AND CHEMICAL ANALYTICAL SOIL DATA

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B39801		B39901		B40001		B40002		B40101	
		502-B39801		502-B39901		502-B40001		502-B40002		502-B40101	
		620586 REG		618883 REG		621594 REG		621595 REG		618890 REG	
		6/22/94		6/14/94		6/28/94		6/28/94		6/14/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	390	U	380	U	420	U	390	U	380	U
Acenaphthylene	UG/KG	390	U	380	U	420	U	390	U	380	U
Anthracene	UG/KG	390	U	380	U	420	U	390	U	380	U
Benzo(a)anthracene	UG/KG	390	U	42	J	420	U	390	U	58	J
Benzo(a)pyrene	UG/KG	390	U	42	J	420	U	390	U	51	J
Benzo(b)fluoranthene	UG/KG	390	U	95	J	64	J	390	U	98	J
Benzo(g,h,i)perylene	UG/KG	390	U	380	U	420	U	390	U	380	U
Benzo(k)fluoranthene	UG/KG	390	U	160	J	130	J	390	U	170	J
Benzoic Acid	UG/KG	1900	U	1800	U	2000	U	1900	U	1800	U
Benzyl Alcohol	UG/KG	390	U	380	U	420	U	390	U	380	U
2-Benzyl-4-Chlorophenol	UG/KG	390	U	380	U	420	U	390	U	380	U
bis(2-Chloroethoxy)methane	UG/KG	390	U	380	U	420	U	390	U	380	U
bis(2-Chloroethyl)ether	UG/KG	390	U	380	U	420	U	390	U	380	U
bis(2-Ethylhexyl)phthalate	UG/KG	390	UJ	380	U	420	U	390	U	380	U
4-Bromophenyl-phenylether	UG/KG	390	U	380	U	420	U	390	U	380	U
Butylbenzylphthalate	UG/KG	390	U	380	U	420	U	390	U	380	U
Carbazole	UG/KG	390	U	380	U	420	U	390	U	380	U
4-Chloro-3-methylphenol	UG/KG	390	U	380	U	420	U	390	U	380	U
4-Chloroaniline	UG/KG	390	U	380	U	420	U	390	U	380	U
2-Chloronaphthalene	UG/KG	390	U	380	U	420	U	390	U	380	U
2-Chlorophenol	UG/KG	390	U	380	U	420	U	390	U	380	U
4-Chlorophenyl-phenylether	UG/KG	390	U	380	U	420	U	390	U	380	U
Chrysene	UG/KG	390	U	54	J	420	U	390	U	78	J
Di-n-butylphthalate	UG/KG	390	U	99	U	420	U	390	U	85	U
Di-n-octylphthalate	UG/KG	390	U	380	U	420	U	390	U	380	U
Dibenzo(a,h)anthracene	UG/KG	390	U	380	U	420	U	390	U	380	U
Dibenzofuran	UG/KG	390	U	380	U	420	U	390	U	380	U
1,2-Dichlorobenzene	UG/KG	390	U	380	U	420	U	390	U	380	U
1,3-Dichlorobenzene	UG/KG	390	U	380	U	420	U	390	U	380	U
1,4-Dichlorobenzene	UG/KG	390	U	380	U	420	U	390	U	380	U
3,3'-Dichlorobenzidine	UG/KG	780	U	760	U	420	U	390	U	760	U
2,4-Dichlorophenol	UG/KG	390	U	380	U	420	U	390	U	380	U
Diethylphthalate	UG/KG	390	U	380	U	420	U	390	U	380	U
2,4-Dimethylphenol	UG/KG	390	U	380	U	420	U	390	U	380	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B39801		B39901		B40001		B40002		B40101	
		502-B39801		502-B39901		502-B40001		502-B40002		502-B40101	
		620586 REG		618883 REG		621594 REG		621595 REG		618890 REG	
		6/22/94		6/14/94		6/28/94		6/28/94		6/14/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	390	U	380	U	420	U	390	U	380	U
4,6-Dinitro-2-methylphenol	UG/KG	1900	U	1800	U	1000	U	980	U	1800	U
2,4-Dinitrophenol	UG/KG	1900	U	1800	U	1000	U	980	U	1800	U
2,4-Dinitrotoluene	UG/KG	390	U	380	U	420	U	390	U	380	U
2,6-Dinitrotoluene	UG/KG	390	U	380	U	420	U	390	U	380	U
Fluoranthene	UG/KG	390	U	78	J	54	J	390	U	110	J
Fluorene	UG/KG	390	U	380	U	420	U	390	U	380	U
Hexachlorobenzene	UG/KG	390	U	380	U	420	U	390	U	380	U
Hexachlorobutadiene	UG/KG	390	U	380	U	420	U	390	U	380	U
Hexachlorocyclopentadiene	UG/KG	390	U	380	U	420	U	390	U	380	U
Hexachloroethane	UG/KG	390	U	380	U	420	U	390	U	380	U
Indeno(1,2,3-c,d)pyrene	UG/KG	390	U	380	U	420	U	390	U	380	U
Isophorone	UG/KG	390	U	380	U	420	U	390	U	380	U
2-Methylnaphthalene	UG/KG	390	U	380	U	420	U	390	U	63	J
2-Methylphenol	UG/KG	390	U	380	U	420	U	390	U	380	U
4-Methylphenol	UG/KG	390	U	380	U	420	U	390	U	380	U
N-Nitroso-di-n-propylamine	UG/KG	390	U	380	U	420	U	390	U	380	U
N-Nitrosodiphenylamine	UG/KG	390	U	380	U	420	U	390	U	380	U
Naphthalene	UG/KG	390	U	380	U	420	U	390	U	380	U
2-Nitroaniline	UG/KG	1900	U	1800	U	1000	U	980	U	1800	U
3-Nitroaniline	UG/KG	1900	U	1800	U	1000	U	980	U	1800	U
4-Nitroaniline	UG/KG	1900	U	1800	U	1000	U	980	U	1800	U
Nitrobenzene	UG/KG	390	U	380	U	420	U	390	U	380	U
2-Nitrophenol	UG/KG	390	U	380	U	420	U	390	U	380	U
4-Nitrophenol	UG/KG	1900	U	1800	U	1000	U	980	U	1800	U
2,2'-oxybis(1-Chloropropane)	UG/KG	390	U	380	U	420	U	390	U	380	U
Pentachlorophenol	UG/KG	1900	U	1800	U	1000	U	980	U	1800	U
Phenanthrene	UG/KG	390	U	380	U	420	U	390	U	78	J
Phenol	UG/KG	390	U	380	U	420	U	390	U	380	U
Pyrene	UG/KG	390	U	78	J	59	J	390	U	98	J
1,2,4-Trichlorobenzene	UG/KG	390	U	380	U	420	U	390	U	380	U
2,4,5-Trichlorophenol	UG/KG	1900	U	1800	U	1000	U	980	U	1800	U
2,4,6-Trichlorophenol	UG/KG	390	U	380	U	420	U	390	U	380	U
Tentatively Identified Compounds		20		15		19		25		23	

APPENDI... .1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40102		B40201		B40202		B40301		B40302	
		502-B40102		502-B40201		502-B40202		502-B40301		502-B40302	
		618891 REG		622488 REG		622496 REG		622529 REG		622552 REG	
		6/14/94		6/30/94		6/30/94		6/29/94		6/29/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	360	U	370	U	390	U	440	U	380	U
Acenaphthylene	UG/KG	360	U	370	U	390	U	440	U	380	U
Anthracene	UG/KG	360	U	370	U	390	U	440	U	380	U
Benzo(a)anthracene	UG/KG	360	U	90	J	390	U	440	U	380	U
Benzo(a)pyrene	UG/KG	360	U	98	J	390	U	440	U	380	U
Benzo(b)fluoranthene	UG/KG	360	U	160	J	390	U	440	UJ	380	U
Benzo(g,h,i)perylene	UG/KG	360	U	370	U	390	U	440	U	380	U
Benzo(k)fluoranthene	UG/KG	360	U	320	J	390	U	440	UJ	380	U
Benzoic Acid	UG/KG	1800	U	1800	U	1900	U	2100	U	1900	U
Benzyl Alcohol	UG/KG	360	U	370	U	390	U	440	U	380	U
2-Benzyl-4-Chlorophenol	UG/KG	360	U	370	U	390	U	440	U	380	U
bis(2-Chloroethoxy)methane	UG/KG	360	U	370	U	390	U	440	U	380	U
bis(2-Chloroethyl)ether	UG/KG	360	U	370	U	390	U	440	U	380	U
bis(2-Ethylhexyl)phthalate	UG/KG	340	J	370	U	390	U	440	U	380	U
4-Bromophenyl-phenylether	UG/KG	360	U	370	U	390	U	440	U	380	U
Butylbenzylphthalate	UG/KG	360	U	370	U	390	U	440	U	380	U
Carbazole	UG/KG	360	U	370	U	390	U	440	U	380	U
4-Chloro-3-methylphenol	UG/KG	360	U	370	U	390	U	440	U	380	U
4-Chloroaniline	UG/KG	360	U	370	U	390	U	440	U	380	U
2-Chloronaphthalene	UG/KG	360	U	370	U	390	U	440	U	380	U
2-Chlorophenol	UG/KG	360	U	370	U	390	U	440	U	380	U
4-Chlorophenyl-phenylether	UG/KG	360	U	370	U	390	U	440	U	380	U
Chrysene	UG/KG	360	U	84	J	390	U	440	U	380	U
Di-n-butylphthalate	UG/KG	140	U	370	U	390	U	440	U	380	U
Di-n-octylphthalate	UG/KG	130	J	370	U	390	U	440	U	380	U
Dibenzo(a,h)anthracene	UG/KG	360	U	370	U	390	U	440	U	380	U
Dibenzofuran	UG/KG	360	U	370	U	390	U	440	U	380	U
1,2-Dichlorobenzene	UG/KG	360	U	370	U	390	U	440	U	380	U
1,3-Dichlorobenzene	UG/KG	360	U	370	U	390	U	440	U	380	U
1,4-Dichlorobenzene	UG/KG	360	U	370	U	390	U	440	U	380	U
3,3'-Dichlorobenzidine	UG/KG	730	U	740	U	780	U	870	U	760	U
2,4-Dichlorophenol	UG/KG	360	U	370	U	390	U	440	U	380	U
Diethylphthalate	UG/KG	360	U	370	U	390	U	440	U	380	U
2,4-Dimethylphenol	UG/KG	360	U	370	U	390	U	440	U	380	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40102		B40201		B40202		B40301		B40302	
		502-B40102		502-B40201		502-B40202		502-B40301		502-B40302	
		618891 REG		622488 REG		622496 REG		622529 REG		622552 REG	
		6/14/94		6/30/94		6/30/94		6/29/94		6/29/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	360	U	370	U	390	U	440	U	380	U
4,6-Dinitro-2-methylphenol	UG/KG	1800	U	1800	U	1900	U	2100	U	1900	U
2,4-Dinitrophenol	UG/KG	1800	U	1800	U	1900	U	2100	U	1900	U
2,4-Dinitrotoluene	UG/KG	360	U	370	U	390	U	440	U	380	U
2,6-Dinitrotoluene	UG/KG	360	U	370	U	390	U	440	U	380	U
Fluoranthene	UG/KG	360	U	170	J	390	U	57	J	380	U
Fluorene	UG/KG	360	U	370	U	390	U	440	U	380	U
Hexachlorobenzene	UG/KG	360	U	370	U	390	U	440	U	380	U
Hexachlorobutadiene	UG/KG	360	U	370	U	390	U	440	U	380	U
Hexachlorocyclopentadiene	UG/KG	360	U	370	U	390	U	440	U	380	U
Hexachloroethane	UG/KG	360	U	370	U	390	U	440	U	380	U
Indeno(1,2,3-c,d)pyrene	UG/KG	360	U	56	J	390	U	440	U	380	U
Isophorone	UG/KG	360	U	370	U	390	U	440	U	380	U
2-Methylnaphthalene	UG/KG	360	U	370	U	390	U	440	U	380	U
2-Methylphenol	UG/KG	360	U	370	U	390	U	440	U	380	U
4-Methylphenol	UG/KG	360	U	370	U	390	U	440	U	380	U
N-Nitroso-di-n-propylamine	UG/KG	360	U	370	U	390	U	440	U	380	U
N-Nitrosodiphenylamine	UG/KG	360	U	370	U	390	U	440	U	380	U
Naphthalene	UG/KG	360	U	370	U	390	U	440	U	380	U
2-Nitroaniline	UG/KG	1800	U	1800	U	1900	U	2100	U	1900	U
3-Nitroaniline	UG/KG	1800	U	1800	U	1900	U	2100	U	1900	U
4-Nitroaniline	UG/KG	1800	U	1800	U	1900	U	2100	U	1900	U
Nitrobenzene	UG/KG	360	U	370	U	390	U	440	U	380	U
2-Nitrophenol	UG/KG	360	U	370	U	390	U	440	U	380	U
4-Nitrophenol	UG/KG	1800	U	1800	U	1900	U	2100	U	1900	U
2,2'-oxybis(1-Chloropropane)	UG/KG	360	U	370	U	390	U	440	U	380	U
Pentachlorophenol	UG/KG	1800	U	1800	U	1900	U	2100	U	1900	U
Phenanthrene	UG/KG	360	U	100	J	390	U	440	U	380	U
Phenol	UG/KG	360	U	370	U	390	U	440	U	380	U
Pyrene	UG/KG	360	U	170	J	390	U	62	J	380	U
1,2,4-Trichlorobenzene	UG/KG	360	U	370	U	390	U	440	U	380	U
2,4,5-Trichlorophenol	UG/KG	1800	U	1800	U	1900	U	2100	U	1900	U
2,4,6-Trichlorophenol	UG/KG	360	U	370	U	390	U	440	U	380	U
Tentatively Identified Compounds		15		17		25		24		11	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40311		B40401		B40402		B40412		B40501	
		502-B40311		502-B40401		502-B40402		502-B40412		502-B40501	
		622574 REG		622188 REG		622193 REG		622193 REG		620587 REG	
		06/29/94DUPE		6/29/94		6/29/94		06/29/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	440	U	410	U	360	U	360	U	420	U
Acenaphthylene	UG/KG	440	U	410	U	360	U	360	U	420	U
Anthracene	UG/KG	440	U	410	U	360	U	360	U	420	U
Benzo(a)anthracene	UG/KG	440	U	410	U	360	U	360	U	420	U
Benzo(a)pyrene	UG/KG	440	U	42	J	360	U	360	U	420	U
Benzo(b)fluoranthene	UG/KG	52	J	68	J	360	U	360	U	420	U
Benzo(g,h,i)perylene	UG/KG	440	U	410	U	360	U	360	U	420	U
Benzo(k)fluoranthene	UG/KG	100	J	140	J	360	U	360	U	420	U
Benzoic Acid	UG/KG	2200	U	2000	U	1700	U	1700	U	2000	U
Benzyl Alcohol	UG/KG	440	U	410	U	360	U	360	U	420	U
2-Benzyl-4-Chlorophenol	UG/KG	440	U	410	U	360	U	360	U	420	U
bis(2-Chloroethoxy)methane	UG/KG	440	U	410	U	360	U	360	U	420	U
bis(2-Chloroethyl)ether	UG/KG	440	U	410	U	360	U	360	U	420	U
bis(2-Ethylhexyl)phthalate	UG/KG	440	U	410	U	360	U	360	U	420	UJ
4-Bromophenyl-phenylether	UG/KG	440	U	410	U	360	U	360	U	420	U
Butylbenzylphthalate	UG/KG	440	U	410	U	360	U	360	U	420	U
Carbazole	UG/KG	440	U	410	U	360	U	360	U	420	U
4-Chloro-3-methylphenol	UG/KG	440	U	410	U	360	U	360	U	420	U
4-Chloroaniline	UG/KG	440	U	410	U	360	U	360	U	420	U
2-Chloronaphthalene	UG/KG	440	U	410	U	360	U	360	U	420	U
2-Chlorophenol	UG/KG	440	U	410	U	360	U	360	U	420	U
4-Chlorophenyl-phenylether	UG/KG	440	U	410	U	360	U	360	U	420	U
Chrysene	UG/KG	440	U	410	U	360	U	360	U	420	U
Di-n-butylphthalate	UG/KG	440	U	410	U	360	U	360	U	67	J
Di-n-octylphthalate	UG/KG	440	U	410	U	360	U	360	U	420	U
Dibenzo(a,h)anthracene	UG/KG	440	U	410	U	360	U	360	U	420	U
Dibenzofuran	UG/KG	440	U	410	U	360	U	360	U	420	U
1,2-Dichlorobenzene	UG/KG	440	U	410	U	360	U	360	U	420	U
1,3-Dichlorobenzene	UG/KG	440	U	410	U	360	U	360	U	420	U
1,4-Dichlorobenzene	UG/KG	440	U	410	U	360	U	360	U	420	U
3,3'-Dichlorobenzidine	UG/KG	890	U	810	U	720	U	720	U	840	U
2,4-Dichlorophenol	UG/KG	440	U	410	U	360	U	360	U	420	U
Diethylphthalate	UG/KG	440	U	410	U	360	U	360	U	420	U
2,4-Dimethylphenol	UG/KG	440	U	410	U	360	U	360	U	420	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40311		B40401		B40402		B40412		B40501	
		502-B40311		502-B40401		502-B40402		502-B40412		502-B40501	
		622574 REG		622188 REG		622193 REG		622193 REG		620587 REG	
		06/29/94DUPE		6/29/94		6/29/94		06/29/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	440	U	410	U	360	U	360	U	420	U
4,6-Dinitro-2-methylphenol	UG/KG	2100	U	2000	U	1700	U	1700	U	2000	U
2,4-Dinitrophenol	UG/KG	2100	U	2000	U	1700	U	1700	U	2000	U
2,4-Dinitrotoluene	UG/KG	440	U	410	U	360	U	360	U	420	U
2,6-Dinitrotoluene	UG/KG	440	U	410	U	360	U	360	U	420	U
Fluoranthene	UG/KG	440	UJ	57	J	360	U	360	U	420	U
Fluorene	UG/KG	440	U	410	U	360	U	360	U	420	U
Hexachlorobenzene	UG/KG	440	U	410	U	360	U	360	U	420	U
Hexachlorobutadiene	UG/KG	440	U	410	U	360	U	360	U	420	U
Hexachlorocyclopentadiene	UG/KG	440	U	410	U	360	U	360	U	420	U
Hexachloroethane	UG/KG	440	U	410	U	360	U	360	U	420	U
Indeno(1,2,3-c,d)pyrene	UG/KG	440	U	410	U	360	U	360	U	420	U
Isophorone	UG/KG	440	U	410	U	360	U	360	U	420	U
2-Methylnaphthalene	UG/KG	440	U	410	U	360	U	360	U	420	U
2-Methylphenol	UG/KG	440	U	410	U	360	U	360	U	420	U
4-Methylphenol	UG/KG	440	U	410	U	360	U	360	U	420	U
N-Nitroso-di-n-propylamine	UG/KG	440	U	410	U	360	U	360	U	420	U
N-Nitrosodiphenylamine	UG/KG	440	U	410	U	360	U	360	U	420	U
Naphthalene	UG/KG	440	U	410	U	360	U	360	U	420	U
2-Nitroaniline	UG/KG	2100	U	2000	U	1700	U	1700	U	2000	U
3-Nitroaniline	UG/KG	2100	U	2000	U	1700	U	1700	U	2000	U
4-Nitroaniline	UG/KG	2100	U	2000	U	1700	U	1700	U	2000	U
Nitrobenzene	UG/KG	440	U	410	U	360	U	360	U	420	U
2-Nitrophenol	UG/KG	440	U	410	U	360	U	360	U	420	U
4-Nitrophenol	UG/KG	2100	U	2000	U	1700	U	1700	U	2000	U
2,2'-oxybis(1-Chloropropane)	UG/KG	440	U	410	U	360	U	360	U	420	U
Pentachlorophenol	UG/KG	2100	U	2000	U	1700	U	1700	U	2000	U
Phenanthrene	UG/KG	440	U	410	U	360	U	360	U	420	U
Phenol	UG/KG	440	U	410	U	360	U	360	U	420	U
Pyrene	UG/KG	440	UJ	70	J	360	U	360	U	420	U
1,2,4-Trichlorobenzene	UG/KG	440	U	410	U	360	U	360	U	420	U
2,4,5-Trichlorophenol	UG/KG	2100	U	2000	U	1700	U	1700	U	2000	U
2,4,6-Trichlorophenol	UG/KG	440	U	410	U	360	U	360	U	420	U
Tentatively Identified Compounds		15		21		15		17		22	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40502		B40601		B40602		B40701		B40702	
		502-B40502		502-B40601		502-B40602		502-B40701		502-B40702	
		620588 REG		620589 REG		621376 REG		619914 REG		620389 REG	
		6/22/94		6/22/94		6/27/94		6/20/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	370	U	380	U	350	U	400	U	360	U
Acenaphthylene	UG/KG	370	U	380	U	350	U	400	U	360	U
Anthracene	UG/KG	370	U	380	U	350	U	400	U	360	U
Benzo(a)anthracene	UG/KG	370	U	380	U	350	U	400	U	360	U
Benzo(a)pyrene	UG/KG	370	U	380	U	350	U	400	U	360	U
Benzo(b)fluoranthene	UG/KG	370	U	380	U	350	U	59	J	360	U
Benzo(g,h,i)perylene	UG/KG	370	U	380	U	350	U	400	U	360	U
Benzo(k)fluoranthene	UG/KG	370	U	380	U	350	U	100	J	360	U
Benzoic Acid	UG/KG	1800	U	1900	U	1700	U	2000	U	1700	U
Benzyl Alcohol	UG/KG	370	U	380	U	350	U	400	U	360	U
2-Benzyl-4-Chlorophenol	UG/KG	370	U	380	U	350	U	400	U	360	U
bis(2-Chloroethoxy)methane	UG/KG	370	U	380	U	350	U	400	U	360	U
bis(2-Chloroethyl)ether	UG/KG	370	U	380	U	350	U	400	U	360	U
bis(2-Ethylhexyl)phthalate	UG/KG	370	UJ	380	UJ	350	U	400	U	60	J
4-Bromophenyl-phenylether	UG/KG	370	U	380	U	350	U	400	U	360	U
Butylbenzylphthalate	UG/KG	370	U	380	U	350	U	400	U	360	U
Carbazole	UG/KG	370	U	380	U	350	U	400	U	360	U
4-Chloro-3-methylphenol	UG/KG	370	U	380	U	350	U	400	U	360	U
4-Chloroaniline	UG/KG	370	U	380	U	350	U	400	U	360	U
2-Chloronaphthalene	UG/KG	370	U	380	U	350	U	400	U	360	U
2-Chlorophenol	UG/KG	370	U	380	U	350	U	400	U	360	U
4-Chlorophenyl-phenylether	UG/KG	370	U	380	U	350	U	400	U	360	U
Chrysene	UG/KG	370	U	380	U	350	U	400	U	360	U
Di-n-butylphthalate	UG/KG	370	U	68	J	350	U	120	U	37	J
Di-n-octylphthalate	UG/KG	370	U	380	U	350	U	400	U	68	J
Dibenzo(a,h)anthracene	UG/KG	370	U	380	U	350	U	400	U	360	U
Dibenzofuran	UG/KG	370	U	380	U	350	U	400	U	360	U
1,2-Dichlorobenzene	UG/KG	370	U	380	U	350	U	400	U	360	U
1,3-Dichlorobenzene	UG/KG	370	U	380	U	350	U	400	U	360	U
1,4-Dichlorobenzene	UG/KG	370	U	380	U	350	U	400	U	360	U
3,3'-Dichlorobenzidine	UG/KG	740	U	770	U	350	U	810	U	720	U
2,4-Dichlorophenol	UG/KG	370	U	380	U	350	U	400	U	360	U
Diethylphthalate	UG/KG	370	U	380	U	350	U	400	U	360	U
2,4-Dimethylphenol	UG/KG	370	U	380	U	350	U	400	U	360	U

APPENDIX E.1 Radiological And Chemical Analytical Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40502		B40601		B40602		B40701		B40702	
		502-B40502		502-B40601		502-B40602		502-B40701		502-B40702	
		620588 REG		620589 REG		621376 REG		619914 REG		620389 REG	
		6/22/94		6/22/94		6/27/94		6/20/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	370	U	380	U	350	U	400	U	360	U
4,6-Dinitro-2-methylphenol	UG/KG	1800	U	1900	U	870	U	2000	U	1700	U
2,4-Dinitrophenol	UG/KG	1800	U	1900	U	870	U	2000	U	1700	U
2,4-Dinitrotoluene	UG/KG	370	U	380	U	350	U	400	U	360	U
2,6-Dinitrotoluene	UG/KG	370	U	380	U	350	U	400	U	360	U
Fluoranthene	UG/KG	370	U	380	U	350	U	65	J	360	U
Fluorene	UG/KG	370	U	380	U	350	U	400	U	360	U
Hexachlorobenzene	UG/KG	370	U	380	U	350	U	400	U	360	U
Hexachlorobutadiene	UG/KG	370	U	380	U	350	U	400	U	360	U
Hexachlorocyclopentadiene	UG/KG	370	U	380	U	350	U	400	U	360	U
Hexachloroethane	UG/KG	370	U	380	U	350	U	400	U	360	U
Indeno(1,2,3-c,d)pyrene	UG/KG	370	U	380	U	350	U	400	U	360	U
Isophorone	UG/KG	370	U	380	U	350	U	400	U	360	U
2-Methylnaphthalene	UG/KG	370	U	380	U	350	U	400	U	360	U
2-Methylphenol	UG/KG	370	U	380	U	350	U	400	U	360	U
4-Methylphenol	UG/KG	370	U	380	U	350	U	400	U	360	U
N-Nitroso-di-n-propylamine	UG/KG	370	U	380	U	350	U	400	U	360	U
N-Nitrosodiphenylamine	UG/KG	370	U	380	U	350	U	400	U	360	U
Naphthalene	UG/KG	370	U	380	U	350	U	400	U	360	U
2-Nitroaniline	UG/KG	1800	U	1900	U	870	U	2000	U	1700	U
3-Nitroaniline	UG/KG	1800	U	1900	U	870	U	2000	U	1700	U
4-Nitroaniline	UG/KG	1800	U	1900	U	870	U	2000	U	1700	U
Nitrobenzene	UG/KG	370	U	380	U	350	U	400	U	360	U
2-Nitrophenol	UG/KG	370	U	380	U	350	U	400	U	360	U
4-Nitrophenol	UG/KG	1800	U	1900	U	870	U	2000	U	1700	U
2,2'-oxybis(1-Chloropropane)	UG/KG	370	U	380	U	350	U	400	U	360	U
Pentachlorophenol	UG/KG	1800	U	1900	U	870	U	2000	U	1700	U
Phenanthrene	UG/KG	370	U	380	U	350	U	400	U	360	U
Phenol	UG/KG	370	U	380	U	350	U	400	U	360	U
Pyrene	UG/KG	370	U	380	U	350	U	56	J	360	U
1,2,4-Trichlorobenzene	UG/KG	370	U	380	U	350	U	400	U	360	U
2,4,5-Trichlorophenol	UG/KG	1800	U	1900	U	870	U	2000	U	1700	U
2,4,6-Trichlorophenol	UG/KG	370	U	380	U	350	U	400	U	360	U
Tentatively Identified Compounds		23		22		25		16		23	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		B40801		B40802		B40811		B40901		B40902	
		502-B40801		502-B40802		502-B40811		502-B40901		502-B40902	
		619402 REG		619403 REG		619404 REG		621596 REG		621597 REG	
		6/16/94		6/16/94		06/16/94DUPE		6/28/94		6/28/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	360	U	390	U	370	U	420	U	380	U
Acenaphthylene	UG/KG	360	U	390	U	370	U	420	U	380	U
Anthracene	UG/KG	360	U	390	U	370	U	420	U	380	U
Benzo(a)anthracene	UG/KG	360	U	390	U	370	U	420	U	380	U
Benzo(a)pyrene	UG/KG	360	U	390	U	370	U	420	U	380	U
Benzo(b)fluoranthene	UG/KG	37	J	390	U	370	UJ	49	J	380	U
Benzo(g,h,i)perylene	UG/KG	360	U	390	U	370	U	420	U	380	U
Benzo(k)fluoranthene	UG/KG	65	J	390	U	370	UJ	100	J	380	U
Benzoic Acid	UG/KG	1700	U	1900	U	1800	U	2100	U	1800	U
Benzyl Alcohol	UG/KG	360	U	390	U	370	U	420	U	380	U
2-Benzyl-4-Chlorophenol	UG/KG	360	U	390	U	370	U	420	U	380	U
bis(2-Chloroethoxy)methane	UG/KG	360	U	390	U	370	U	420	U	380	U
bis(2-Chloroethyl)ether	UG/KG	360	U	390	U	370	U	420	U	380	U
bis(2-Ethylhexyl)phthalate	UG/KG	360	U	170	J	370	U	420	U	380	U
4-Bromophenyl-phenylether	UG/KG	360	U	390	U	370	U	420	U	380	U
Butylbenzylphthalate	UG/KG	360	U	390	U	370	U	420	U	380	U
Carbazole	UG/KG	360	U	390	U	370	U	420	U	380	U
4-Chloro-3-methylphenol	UG/KG	360	U	390	U	370	U	420	U	380	U
4-Chloroaniline	UG/KG	360	U	390	U	370	U	420	U	380	U
2-Chloronaphthalene	UG/KG	360	U	390	U	370	U	420	U	380	U
2-Chlorophenol	UG/KG	360	U	390	U	370	U	420	U	380	U
4-Chlorophenyl-phenylether	UG/KG	360	U	390	U	370	U	420	U	380	U
Chrysene	UG/KG	360	U	390	U	370	U	420	U	380	U
Di-n-butylphthalate	UG/KG	95	U	120	U	96	U	420	U	380	U
Di-n-octylphthalate	UG/KG	360	U	47	J	370	U	420	U	380	U
Dibenzo(a,h)anthracene	UG/KG	360	U	390	U	370	U	420	U	380	U
Dibenzofuran	UG/KG	360	U	390	U	370	U	420	U	380	U
1,2-Dichlorobenzene	UG/KG	360	U	390	U	370	U	420	U	380	U
1,3-Dichlorobenzene	UG/KG	360	U	390	U	370	U	420	U	380	U
1,4-Dichlorobenzene	UG/KG	360	U	390	U	370	U	420	U	380	U
3,3'-Dichlorobenzidine	UG/KG	720	U	780	U	740	U	850	U	760	U
2,4-Dichlorophenol	UG/KG	360	U	390	U	370	U	420	U	380	U
Diethylphthalate	UG/KG	360	U	390	U	370	U	420	U	380	U
2,4-Dimethylphenol	UG/KG	360	U	390	U	370	U	420	U	380	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40801		B40802		B40811		B40901		B40902	
		502-B40801		502-B40802		502-B40811		502-B40901		502-B40902	
		619402 REG		619403 REG		619404 REG		621596 REG		621597 REG	
		6/16/94		6/16/94		06/16/94DUPE		6/28/94		6/28/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	360	U	390	U	370	U	420	U	380	U
4,6-Dinitro-2-methylphenol	UG/KG	1700	U	1900	U	1800	U	2100	U	1800	U
2,4-Dinitrophenol	UG/KG	1700	U	1900	U	1800	U	2100	U	1800	U
2,4-Dinitrotoluene	UG/KG	360	U	390	U	370	U	420	U	380	U
2,6-Dinitrotoluene	UG/KG	360	U	390	U	370	U	420	U	380	U
Fluoranthene	UG/KG	41	J	390	U	39	J	420	U	380	U
Fluorene	UG/KG	360	U	390	U	370	U	420	U	380	U
Hexachlorobenzene	UG/KG	360	U	390	U	370	U	420	U	380	U
Hexachlorobutadiene	UG/KG	360	U	390	U	370	U	420	U	380	U
Hexachlorocyclopentadiene	UG/KG	360	U	390	U	370	U	420	U	380	U
Hexachloroethane	UG/KG	360	U	390	U	370	U	420	U	380	U
Indeno(1,2,3-c,d)pyrene	UG/KG	360	U	390	U	370	U	420	U	380	U
Isophorone	UG/KG	360	U	390	U	370	U	420	U	380	U
2-Methylnaphthalene	UG/KG	360	U	390	U	370	U	420	U	380	U
2-Methylphenol	UG/KG	360	U	390	U	370	U	420	U	380	U
4-Methylphenol	UG/KG	360	U	390	U	370	U	420	U	380	U
N-Nitroso-di-n-propylamine	UG/KG	360	U	390	U	370	U	420	U	380	U
N-Nitrosodiphenylamine	UG/KG	360	U	390	U	370	U	420	U	380	U
Naphthalene	UG/KG	360	U	390	U	370	U	420	U	380	U
2-Nitroaniline	UG/KG	1700	U	1900	U	1800	U	2100	U	1800	U
3-Nitroaniline	UG/KG	1700	U	1900	U	1800	U	2100	U	1800	U
4-Nitroaniline	UG/KG	1700	U	1900	U	1800	U	2100	U	1800	U
Nitrobenzene	UG/KG	360	U	390	U	370	U	420	U	380	U
2-Nitrophenol	UG/KG	360	U	390	U	370	U	420	U	380	U
4-Nitrophenol	UG/KG	1700	U	1900	U	1800	U	2100	U	1800	U
2,2'-oxybis(1-Chloropropane)	UG/KG	360	U	390	U	370	U	420	U	380	U
Pentachlorophenol	UG/KG	1700	U	1900	U	1800	U	2100	U	1800	U
Phenanthrene	UG/KG	360	U	390	U	370	U	420	U	380	U
Phenol	UG/KG	360	U	390	U	370	U	420	U	380	U
Pyrene	UG/KG	36	J	390	U	370	UJ	47	J	380	U
1,2,4-Trichlorobenzene	UG/KG	360	U	390	U	370	U	420	U	380	U
2,4,5-Trichlorophenol	UG/KG	1700	U	1900	U	1800	U	2100	U	1800	U
2,4,6-Trichlorophenol	UG/KG	360	U	390	U	370	U	420	U	380	U
Tentatively Identified Compounds		18		11		15		25		12	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE			
		B41101	
		502-B41101	
		619913 REG	
		6/20/94	
		Result	Val
Semi-volatile Organics	Units		
Acenaphthene	UG/KG	420	U
Acenaphthylene	UG/KG	420	U
Anthracene	UG/KG	420	U
Benzo(a)anthracene	UG/KG	420	U
Benzo(a)pyrene	UG/KG	420	U
Benzo(b)fluoranthene	UG/KG	420	U
Benzo(g,h,i)perylene	UG/KG	420	U
Benzo(k)fluoranthene	UG/KG	420	U
Benzoic Acid	UG/KG	2000	U
Benzyl Alcohol	UG/KG	420	U
2-Benzyl-4-Chlorophenol	UG/KG	420	U
bis(2-Chloroethoxy)methane	UG/KG	420	U
bis(2-Chloroethyl)ether	UG/KG	420	U
bis(2-Ethylhexyl)phthalate	UG/KG	420	U
4-Bromophenyl-phenylether	UG/KG	420	U
Butylbenzylphthalate	UG/KG	420	U
Carbazole	UG/KG	420	U
4-Chloro-3-methylphenol	UG/KG	420	U
4-Chloroaniline	UG/KG	420	U
2-Chloronaphthalene	UG/KG	420	U
2-Chlorophenol	UG/KG	420	U
4-Chlorophenyl-phenylether	UG/KG	420	U
Chrysene	UG/KG	420	U
Di-n-butylphthalate	UG/KG	420	U
Di-n-octylphthalate	UG/KG	420	U
Dibenzo(a,h)anthracene	UG/KG	420	U
Dibenzofuran	UG/KG	420	U
1,2-Dichlorobenzene	UG/KG	420	U
1,3-Dichlorobenzene	UG/KG	420	U
1,4-Dichlorobenzene	UG/KG	420	U
3,3'-Dichlorobenzidine	UG/KG	840	U
2,4-Dichlorophenol	UG/KG	420	U
Diethylphthalate	UG/KG	420	U
2,4-Dimethylphenol	UG/KG	420	U

APPENDIX E.1 Radiologicn And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE			
		B41101	
		502-B41101	
		619913 REG	
		6/20/94	
		Result	Val
Semi-volatile Organics	Units		
Dimethylphthalate	UG/KG	420	U
4,6-Dinitro-2-methylphenol	UG/KG	2000	U
2,4-Dinitrophenol	UG/KG	2000	U
2,4-Dinitrotoluene	UG/KG	420	U
2,6-Dinitrotoluene	UG/KG	420	U
Fluoranthene	UG/KG	420	U
Fluorene	UG/KG	420	U
Hexachlorobenzene	UG/KG	420	U
Hexachlorobutadiene	UG/KG	420	U
Hexachlorocyclopentadiene	UG/KG	420	U
Hexachloroethane	UG/KG	420	U
Indeno(1,2,3-c,d)pyrene	UG/KG	420	U
Isophorone	UG/KG	420	U
2-Methylnaphthalene	UG/KG	420	U
2-Methylphenol	UG/KG	420	U
4-Methylphenol	UG/KG	420	U
N-Nitroso-di-n-propylamine	UG/KG	420	U
N-Nitrosodiphenylamine	UG/KG	420	U
Naphthalene	UG/KG	420	U
2-Nitroaniline	UG/KG	2000	U
3-Nitroaniline	UG/KG	2000	U
4-Nitroaniline	UG/KG	2000	U
Nitrobenzene	UG/KG	420	U
2-Nitrophenol	UG/KG	420	U
4-Nitrophenol	UG/KG	2000	U
2,2'-oxybis(1-Chloropropane)	UG/KG	420	U
Pentachlorophenol	UG/KG	2000	U
Phenanthrene	UG/KG	420	U
Phenol	UG/KG	420	U
Pyrene	UG/KG	420	U
1,2,4-Trichlorobenzene	UG/KG	420	U
2,4,5-Trichlorophenol	UG/KG	2000	U
2,4,6-Trichlorophenol	UG/KG	420	U
Tentatively Identified Compounds		11	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		B39801		B39901		B40001		B40002		B40101	
		502-B39801		502-B39901		502-B40001		502-B40002		502-B40101	
		620586 REG		618883 REG		621594 REG		621595 REG		618890 REG	
		6/22/94		6/14/94		6/28/94		6/28/94		6/14/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
Acetone	UG/KG	12	UJ	12	UJ	12	UJ	31	J	11	UJ
Acetonitrile	UG/KG	120	U	120	U	120	U	120	U	110	U
Acrylonitrile	UG/KG	120	U	120	U	120	U	120	U	110	U
Benzene	UG/KG	6	U	6	U	6	U	6	U	6	U
Bromodichloromethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Bromoform	UG/KG	6	U	6	U	6	U	6	U	6	U
Bromomethane	UG/KG	12	U	12	U	12	U	12	U	11	U
2-Butanone	UG/KG	12	U	12	U	12	U	12	U	11	U
Carbon Disulfide	UG/KG	6	U	6	U	6	U	6	U	6	U
Carbon Tetrachloride	UG/KG	6	U	6	U	6	U	6	U	6	U
Chlorobenzene	UG/KG	6	U	6	U	6	U	6	U	6	U
Chlorodibromomethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Chloroethane	UG/KG	12	U	12	U	12	U	12	U	11	U
Chloroform	UG/KG	6	U	6	U	6	U	6	U	6	U
Chloromethane	UG/KG	12	U	12	U	12	U	12	U	11	U
1,1-Dichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Dichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
1,1-Dichloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Dichloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Dichloropropane	UG/KG	6	U	6	U	6	U	6	U	6	U
cis-1,3-Dichloropropene	UG/KG	6	U	6	U	6	U	6	U	6	U
trans-1,3-Dichloropropene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Diethylbenzene	UG/KG	24	U	23	U	25	U	24	U	23	U
Ethylbenzene	UG/KG	6	U	6	U	6	U	6	U	6	U
Hexane	UG/KG	12	U	12	U	12	U	12	U	11	U
2-Hexanone	UG/KG	12	U	12	U	12	U	12	U	11	U
Iodomethane	UG/KG	12	U	12	U	12	U	12	U	11	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	12	U	12	U	11	U
Methylene Chloride	UG/KG	6	U	11	U	6	U	6	U	6	U
Styrene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,1,2,2-Tetrachloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Tetrachloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
Toluene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,1,1-Trichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B39801		B39901		B40001		B40002		B40101	
		502-B39801		502-B39901		502-B40001		502-B40002		502-B40101	
		620586 REG		618883 REG		621594 REG		621595 REG		618890 REG	
		6/22/94		6/14/94		6/28/94		6/28/94		6/14/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
1,1,2-Trichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Trichloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
Trichlorotrifluoroethane	UG/KG	12	U	12	U	12	U	12	U	11	U
Vinyl Acetate	UG/KG	12	U	12	U	12	U	12	U	11	U
Vinyl Chloride	UG/KG	12	U	12	U	12	U	12	U	11	U
Xylene, Total	UG/KG	6	U	6	U	6	U	6	U	6	U
Tentatively Identified Compounds		1		1		1		1		1	

APPENDIX E.1 Radiological And Chemical Analy... Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40102		B40201		B40202		B40301		B40302	
		502-B40102		502-B40201		502-B40202		502-B40301		502-B40302	
		618891 REG		622488 REG		622496 REG		622529 REG		622552 REG	
		6/14/94		6/30/94		6/30/94		6/29/94		6/29/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
Acetone	UG/KG	11	UJ	21	U	38	U	24	U	55	U
Acetonitrile	UG/KG	110	U	110	U	120	U	130	U	120	U
Acrylonitrile	UG/KG	110	U	110	U	120	U	130	U	120	U
Benzene	UG/KG	6	U	6	U	6	U	7	U	6	U
Bromodichloromethane	UG/KG	6	U	6	U	6	U	7	U	6	U
Bromoform	UG/KG	6	U	6	U	6	U	7	U	6	U
Bromomethane	UG/KG	11	U	11	U	12	U	13	U	12	U
2-Butanone	UG/KG	11	U	11	U	12	U	13	U	12	U
Carbon Disulfide	UG/KG	6	U	6	U	6	U	7	U	6	U
Carbon Tetrachloride	UG/KG	6	U	6	U	6	U	7	U	6	U
Chlorobenzene	UG/KG	6	U	6	U	6	U	7	U	6	U
Chlorodibromomethane	UG/KG	6	U	6	U	6	U	7	U	6	U
Chloroethane	UG/KG	11	U	11	U	12	U	13	U	12	U
Chloroform	UG/KG	6	U	6	U	6	U	7	U	6	U
Chloromethane	UG/KG	11	U	11	U	12	U	13	U	12	U
1,1-Dichloroethane	UG/KG	6	U	6	U	6	U	7	U	6	U
1,2-Dichloroethane	UG/KG	6	U	6	U	6	U	7	U	6	U
1,1-Dichloroethene	UG/KG	6	U	6	U	6	U	7	U	6	U
1,2-Dichloroethene	UG/KG	6	U	6	U	6	U	7	U	6	U
1,2-Dichloropropane	UG/KG	6	U	6	U	6	U	7	U	6	U
cis-1,3-Dichloropropene	UG/KG	6	U	6	U	6	U	7	U	6	U
trans-1,3-Dichloropropene	UG/KG	6	U	6	U	6	U	7	U	6	U
1,2-Diethylbenzene	UG/KG	22	U	23	U	24	U	27	U	23	U
Ethylbenzene	UG/KG	6	U	6	U	6	U	7	U	6	U
Hexane	UG/KG	11	U	11	U	12	U	13	U	12	U
2-Hexanone	UG/KG	11	U	11	U	12	U	13	U	12	U
Iodomethane	UG/KG	11	U	11	U	12	U	13	U	12	U
4-Methyl-2-pentanone	UG/KG	11	U	11	U	12	U	13	U	12	U
Methylene Chloride	UG/KG	7	U	11	U	14	U	12	U	13	U
Styrene	UG/KG	6	U	6	U	6	U	7	U	6	U
1,1,2,2-Tetrachloroethane	UG/KG	6	U	6	U	6	U	7	U	6	U
Tetrachloroethene	UG/KG	6	U	6	U	6	U	7	U	6	U
Toluene	UG/KG	6	U	6	U	6	U	7	U	6	U
1,1,1-Trichloroethane	UG/KG	6	U	6	U	6	U	7	U	6	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40102		B40201		B40202		B40301		B40302	
		502-B40102		502-B40201		502-B40202		502-B40301		502-B40302	
		618891 REG		622488 REG		622496 REG		622529 REG		622552 REG	
		6/14/94		6/30/94		6/30/94		6/29/94		6/29/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,2-Trichloroethane	UG/KG	6	U	6	U	6	U	7	U	6	U
Trichloroethene	UG/KG	6	U	6	U	6	U	7	U	6	U
Trichlorotrifluoroethane	UG/KG	11	U	11	U	12	U	13	U	12	U
Vinyl Acetate	UG/KG	11	U	11	U	12	U	13	U	12	U
Vinyl Chloride	UG/KG	11	U	11	U	12	U	13	U	12	U
Xylene, Total	UG/KG	6	U	6	U	6	U	7	U	6	U
Tentatively Identified Compounds		1		1		1		1		1	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		B40311		B40401		B40402		B40412		B40501	
		502-B40311		502-B40401		502-B40402		502-B40412		502-B40501	
		622574 REG		622188 REG		622193 REG		622193 REG		620587 REG	
		06/29/94DUPE		6/29/94		6/29/94		06/29/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	52	U	12	UJ	11	UJ	11	UJ	13	UJ
Acetonitrile	UG/KG	140	U	120	U	110	U	110	U	130	U
Acrylonitrile	UG/KG	140	U	120	U	110	U	110	U	130	U
Benzene	UG/KG	7	U	6	U	5	U	5	U	6	U
Bromodichloromethane	UG/KG	7	U	6	U	5	U	5	U	6	U
Bromoform	UG/KG	7	U	6	U	5	U	5	U	6	U
Bromomethane	UG/KG	14	U	12	U	11	U	11	U	13	U
2-Butanone	UG/KG	14	U	12	U	11	U	11	U	13	U
Carbon Disulfide	UG/KG	7	U	6	U	5	U	5	U	6	U
Carbon Tetrachloride	UG/KG	7	U	6	U	5	U	5	U	6	U
Chlorobenzene	UG/KG	7	U	6	U	5	U	5	U	6	U
Chlorodibromomethane	UG/KG	7	U	6	U	5	U	5	U	6	U
Chloroethane	UG/KG	14	UJ	12	U	11	U	11	U	13	U
Chloroform	UG/KG	7	U	6	U	5	U	5	U	6	U
Chloromethane	UG/KG	14	U	12	U	11	U	11	U	13	U
1,1-Dichloroethane	UG/KG	7	U	6	U	5	U	5	U	6	U
1,2-Dichloroethane	UG/KG	7	U	6	U	5	U	5	U	6	U
1,1-Dichloroethene	UG/KG	7	U	6	U	5	U	5	U	6	U
1,2-Dichloroethene	UG/KG	7	U	6	U	5	U	5	U	6	U
1,2-Dichloropropane	UG/KG	7	U	6	U	5	U	5	U	6	U
cis-1,3-Dichloropropene	UG/KG	7	U	6	U	5	U	5	U	6	U
trans-1,3-Dichloropropene	UG/KG	7	U	6	U	5	U	5	U	6	U
1,2-Diethylbenzene	UG/KG	27	U	25	U	22	U	22	U	26	U
Ethylbenzene	UG/KG	7	U	6	U	5	U	5	U	6	U
Hexane	UG/KG	14	U	12	U	11	U	11	U	13	U
2-Hexanone	UG/KG	14	U	12	U	11	U	11	U	13	U
Iodomethane	UG/KG	14	U	12	U	11	U	11	U	13	U
4-Methyl-2-pentanone	UG/KG	14	U	12	U	11	U	11	U	13	U
Methylene Chloride	UG/KG	46	U	6	U	9	U	9	U	6	U
Styrene	UG/KG	7	U	6	U	5	U	5	U	6	U
1,1,2,2-Tetrachloroethane	UG/KG	7	U	6	U	5	U	5	U	6	U
Tetrachloroethene	UG/KG	7	U	6	U	5	U	5	U	6	U
Toluene	UG/KG	7	U	6	U	5	U	5	U	6	U
1,1,1-Trichloroethane	UG/KG	7	U	6	U	5	U	5	U	6	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40311		B40401		B40402		B40412		B40501	
		502-B40311		502-B40401		502-B40402		502-B40412		502-B40501	
		622574 REG		622188 REG		622193 REG		622193 REG		620587 REG	
		06/29/94DUPE		6/29/94		6/29/94		06/29/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,2-Trichloroethane	UG/KG	7	U	6	U	5	U	5	U	6	U
Trichloroethene	UG/KG	7	U	6	U	5	U	5	U	6	U
Trichlorotrifluoroethane	UG/KG	14	U	12	U	11	U	11	U	13	U
Vinyl Acetate	UG/KG	14	U	12	U	11	U	11	U	13	U
Vinyl Chloride	UG/KG	14	U	12	U	11	U	11	U	13	U
Xylene, Total	UG/KG	7	U	6	U	5	U	5	U	6	U
Tentatively Identified Compounds				1		1		1		1	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		B40502		B40601		B40602		B40701		B40702	
		502-B40502		502-B40601		502-B40602		502-B40701		502-B40702	
		620588 REG		620589 REG		621376 REG		619914 REG		620389 REG	
		6/22/94		6/22/94		6/27/94		6/20/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	33	J	12	UJ	11	UJ	12	UJ	11	UJ
Acetonitrile	UG/KG	110	U	120	U	110	U	120	U	110	U
Acrylonitrile	UG/KG	110	U	120	U	110	U	120	U	110	U
Benzene	UG/KG	6	U	6	U	5	U	6	U	5	U
Bromodichloromethane	UG/KG	6	U	6	U	5	U	6	U	5	U
Bromoform	UG/KG	6	U	6	U	5	U	6	U	5	U
Bromomethane	UG/KG	11	U	12	U	11	U	12	U	11	U
2-Butanone	UG/KG	11	U	12	U	11	U	12	U	11	U
Carbon Disulfide	UG/KG	6	U	6	U	5	U	6	U	5	U
Carbon Tetrachloride	UG/KG	6	U	6	U	5	U	6	U	5	U
Chlorobenzene	UG/KG	6	U	6	U	5	U	6	U	5	U
Chlorodibromomethane	UG/KG	6	U	6	U	5	U	6	U	5	U
Chloroethane	UG/KG	11	U	12	U	11	U	12	U	11	U
Chloroform	UG/KG	6	U	6	U	5	U	6	U	5	U
Chloromethane	UG/KG	11	U	12	U	11	U	12	U	11	U
1,1-Dichloroethane	UG/KG	6	U	6	U	5	U	6	U	5	U
1,2-Dichloroethane	UG/KG	6	U	6	U	5	U	6	U	5	U
1,1-Dichloroethene	UG/KG	6	U	6	U	5	U	6	U	5	U
1,2-Dichloroethene	UG/KG	6	U	6	U	5	U	6	U	5	U
1,2-Dichloropropane	UG/KG	6	U	6	U	5	U	6	U	5	U
cis-1,3-Dichloropr[illegible]	UG/KG	6	U	6	U	5	U	6	U	5	U
trans-1,3-Dichloro[illegible]	UG/KG	6	U	6	U	5	U	6	U	5	U
1,2-Diethylbenzene	UG/KG	23	U	24	U	21	U	25	U	22	U
Ethylbenzene	UG/KG	6	U	6	U	5	U	6	U	5	U
Hexane	UG/KG	11	U	12	U	11	U	12	U	11	U
2-Hexanone	UG/KG	11	U	12	U	11	U	12	U	11	U
Iodomethane	UG/KG	11	U	12	U	11	U	12	U	11	U
4-Methyl-2-pentanone	UG/KG	11	U	12	U	11	U	12	U	11	U
Methylene Chloride	UG/KG	14	U	7	U	5	U	6	U	6	U
Styrene	UG/KG	6	U	6	U	5	U	6	U	5	U
1,1,2,2-Tetrachloroethane	UG/KG	6	U	6	U	5	U	6	U	5	U
Tetrachloroethene	UG/KG	6	U	6	U	5	U	6	U	5	U
Toluene	UG/KG	6	U	6	U	5	U	6	U	5	U
1,1,1-Trichloroethane	UG/KG	6	U	6	U	5	U	6	U	5	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40502		B40601		B40602		B40701		B40702	
		502-B40502		502-B40601		502-B40602		502-B40701		502-B40702	
		620588 REG		620589 REG		621376 REG		619914 REG		620389 REG	
		6/22/94		6/22/94		6/27/94		6/20/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,2-Trichloroethane	UG/KG	6	U	6	U	5	U	6	U	5	U
Trichloroethene	UG/KG	6	U	6	U	5	U	6	U	5	U
Trichlorotrifluoroethane	UG/KG	11	U	12	U	11	U	12	U	11	U
Vinyl Acetate	UG/KG	11	U	12	U	11	U	12	U	11	U
Vinyl Chloride	UG/KG	11	U	12	U	11	U	12	U	11	U
Xylene, Total	UG/KG	6	U	6	U	5	U	6	U	5	U
Tentatively Identified Compounds		1		1		1		1		1	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40801		B40802		B40811		B40901		B40902	
		502-B40801		502-B40802		502-B40811		502-B40901		502-B40902	
		619402 REG		619403 REG		619404 REG		621596 REG		621597 REG	
		6/16/94		6/16/94		06/16/94DUPE		6/28/94		6/28/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
Acetone	UG/KG	11	UJ	18	J	11	UJ	13	UJ	51	J
Acetonitrile	UG/KG	110	U	33	U	110	U	130	U	110	U
Acrylonitrile	UG/KG	110	U	120	U	110	U	130	U	110	U
Benzene	UG/KG	5	U	6	U	6	U	6	U	6	U
Bromodichloromethane	UG/KG	5	U	6	U	6	U	6	U	6	U
Bromoform	UG/KG	5	U	6	U	6	U	6	U	6	U
Bromomethane	UG/KG	11	U	12	U	11	U	13	U	11	U
2-Butanone	UG/KG	11	U	12	U	11	U	13	U	11	U
Carbon Disulfide	UG/KG	5	U	6	U	6	U	6	U	6	U
Carbon Tetrachloride	UG/KG	5	U	6	U	6	U	6	U	6	U
Chlorobenzene	UG/KG	5	U	6	U	6	U	6	U	6	U
Chlorodibromomethane	UG/KG	5	U	6	U	6	U	6	U	6	U
Chloroethane	UG/KG	11	U	12	U	11	U	13	U	11	U
Chloroform	UG/KG	5	U	6	U	6	U	6	U	6	U
Chloromethane	UG/KG	11	U	12	U	11	U	13	U	11	U
1,1-Dichloroethane	UG/KG	5	U	6	U	6	U	6	U	6	U
1,2-Dichloroethane	UG/KG	5	U	6	U	6	U	6	U	6	U
1,1-Dichloroethene	UG/KG	5	U	6	U	6	U	6	U	6	U
1,2-Dichloroethene	UG/KG	5	U	6	U	6	U	6	U	6	U
1,2-Dichloropropane	UG/KG	5	U	6	U	6	U	6	U	6	U
cis-1,3-Dichloropropene	UG/KG	5	U	6	U	6	U	6	U	6	U
trans-1,3-Dichloropropene	UG/KG	5	U	6	U	6	U	6	U	6	U
1,2-Diethylbenzene	UG/KG	22	U	24	U	23	U	26	U	23	U
Ethylbenzene	UG/KG	5	U	6	U	6	U	6	U	6	U
Hexane	UG/KG	11	U	12	U	11	U	13	U	11	U
2-Hexanone	UG/KG	11	U	12	U	11	U	13	U	11	U
Iodomethane	UG/KG	11	U	12	U	11	U	13	U	11	U
4-Methyl-2-pentanone	UG/KG	11	U	12	U	11	U	13	U	11	U
Methylene Chloride	UG/KG	12	U	10	U	6	U	24	U	15	U
Styrene	UG/KG	5	U	6	U	6	U	6	U	6	U
1,1,2,2-Tetrachloroethane	UG/KG	5	U	6	U	6	U	6	U	6	U
Tetrachloroethene	UG/KG	5	U	6	U	6	U	6	U	6	U
Toluene	UG/KG	5	U	6	U	6	U	6	U	6	U
1,1,1-Trichloroethane	UG/KG	5	U	6	U	6	U	6	U	6	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40801		B40802		B40811		B40901		B40902	
		502-B40801		502-B40802		502-B40811		502-B40901		502-B40902	
		619402 REG		619403 REG		619404 REG		621596 REG		621597 REG	
		6/16/94		6/16/94		06/16/94DUPE		6/28/94		6/28/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,2-Trichloroethane	UG/KG	5	U	6	U	6	U	6	U	6	U
Trichloroethene	UG/KG	5	U	6	U	6	U	6	U	6	U
Trichlorotrifluoroethane	UG/KG	11	U	12	U	11	U	13	U	11	U
Vinyl Acetate	UG/KG	11	U	12	U	11	U	13	U	11	U
Vinyl Chloride	UG/KG	11	U	12	U	11	U	13	U	11	U
Xylene, Total	UG/KG	5	U	6	U	6	U	6	U	6	U
Tentatively Identified Compounds		1		1		1		1		1	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		B41101	
		502-B41101	
		619913 REG	
		6/20/94	
		Result	Val
Volatile Organics	**Units**		
Acetone	UG/KG	13	UJ
Acetonitrile	UG/KG	130	U
Acrylonitrile	UG/KG	130	U
Benzene	UG/KG	6	U
Bromodichloromethane	UG/KG	6	U
Bromoform	UG/KG	6	U
Bromomethane	UG/KG	13	U
2-Butanone	UG/KG	13	U
Carbon Disulfide	UG/KG	6	U
Carbon Tetrachloride	UG/KG	6	U
Chlorobenzene	UG/KG	6	U
Chlorodibromomethane	UG/KG	6	U
Chloroethane	UG/KG	13	U
Chloroform	UG/KG	6	U
Chloromethane	UG/KG	13	U
1,1-Dichloroethane	UG/KG	6	U
1,2-Dichloroethane	UG/KG	6	U
1,1-Dichloroethene	UG/KG	6	U
1,2-Dichloroethene	UG/KG	6	U
1,2-Dichloropropane	UG/KG	6	U
cis-1,3-Dichloropropene	UG/KG	6	U
trans-1,3-Dichloropropene	UG/KG	6	U
1,2-Diethylbenzene	UG/KG	26	U
Ethylbenzene	UG/KG	6	U
Hexane	UG/KG	13	U
2-Hexanone	UG/KG	13	U
Iodomethane	UG/KG	13	U
4-Methyl-2-pentanone	UG/KG	13	U
Methylene Chloride	UG/KG	6	U
Styrene	UG/KG	6	U
1,1,2,2-Tetrachloroethane	UG/KG	6	U
Tetrachloroethene	UG/KG	6	U
Toluene	UG/KG	6	U
1,1,1-Trichloroethane	UG/KG	6	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE			
		B41101	
		502-B41101	
		619913 REG	
		6/20/94	
		Result	Val
Volatile Organics	Units		
1,1,2-Trichloroethane	UG/KG	6	U
Trichloroethene	UG/KG	6	U
Trichlorotrifluoroethane	UG/KG	13	U
Vinyl Acetate	UG/KG	13	U
Vinyl Chloride	UG/KG	13	U
Xylene, Total	UG/KG	6	U
Tentatively Identified Compounds		1	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		B39801		B39901		B40001		B40002		B40101	
		502-B39801		502-B39901		502-B40001		502-B40002		502-B40101	
		620586 REG		618883 REG		621594 REG		621595 REG		618890 REG	
		6/22/94		6/14/94		6/28/94		6/28/94		6/14/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**										
Aldrin	UG/KG	2	U	0.054	J	2.1	U	2	U	0.35	J
alpha-BHC	UG/KG	2	U	2	U	2.1	U	2	U	2	U
alpha-Chlordane	UG/KG	2	U	2	U	2.1	U	2	U	2	U
Aroclor-1016	UG/KG	39	U	38	U	41	U	39	U	38	U
Aroclor-1221	UG/KG	79	U	78	U	83	U	78	U	77	U
Aroclor-1232	UG/KG	39	U	38	U	41	U	39	U	38	U
Aroclor-1242	UG/KG	39	U	38	U	41	U	39	U	38	U
Aroclor-1248	UG/KG	39	U	38	U	41	U	39	U	38	U
Aroclor-1254	UG/KG	39	U	38	U	41	U	39	U	38	U
Aroclor-1260	UG/KG	39	U	38	U	41	U	39	U	38	U
beta-BHC	UG/KG	2	U	2	U	2.1	U	2	U	2	U
4,4'-DDD	UG/KG	3.9	U	3.8	U	4.1	U	3.9	U	3.8	U
4,4'-DDE	UG/KG	3.9	U	3.8	U	4.1	U	3.9	U	3.8	U
4,4'-DDT	UG/KG	3.9	U	3.8	U	4.1	U	3.9	U	3.8	U
delta-BHC	UG/KG	0.17	J	2	U	2.1	U	2	U	2	U
Dieldrin	UG/KG	3.9	U	3.8	U	4.1	U	3.9	U	3.8	U
Endosulfan I	UG/KG	2	U	2	U	2.1	U	2	U	0.13	J
Endosulfan II	UG/KG	3.9	U	3.8	U	4.1	U	3.9	U	3.8	U
Endosulfan Sulfate	UG/KG	3.9	U	3.8	U	4.1	U	[illegible]	U	3.8	U
Endrin	UG/KG	3.9	U	0.15	J	4.1	U	[illegible]	U	3.8	U
Endrin Aldehyde	UG/KG	3.9	U	3.8	U	4.1	U	3.9	U	3.8	U
Endrin Ketone	UG/KG	3.9	U	0.76	J	4.1	U	3.9	U	3.8	U
gamma-BHC (Lindane)	UG/KG	2	U	2	U	2.1	U	2	U	2	U
gamma-Chlordane	UG/KG	2	U	0.057	J	2.1	U	2	U	2	U
Heptachlor	UG/KG	2	U	0.13	J	2.1	U	2	U	2	U
Heptachlor Epoxide	UG/KG	2	U	0.11	J	2.1	U	2	U	2	U
p,p'-Methoxychlor	UG/KG	20	U	0.24	U	21	U	20	U	20	U
Toxaphene	UG/KG	200	U	200	U	210	U	200	U	200	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40102		B40201		B40202		B40301		B40302	
		502-B40102		502-B40201		502-B40202		502-B40301		502-B40302	
		618891 REG		622488 REG		622496 REG		622529 REG		622552 REG	
		6/14/94		6/30/94		6/30/94		6/29/94		6/29/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**										
Aldrin	UG/KG	1.9	U	1.9	U	2	U	2.2	U	2	U
alpha-BHC	UG/KG	1.9	U	1.9	U	2	U	2.2	U	2	U
alpha-Chlordane	UG/KG	1.9	U	0.25	J	2	U	2.2	U	2	U
Aroclor-1016	UG/KG	37	U	37	U	39	U	43	U	38	U
Aroclor-1221	UG/KG	74	U	75	U	79	U	88	U	77	U
Aroclor-1232	UG/KG	37	U	37	U	39	U	43	U	38	U
Aroclor-1242	UG/KG	37	U	37	U	39	U	43	U	38	U
Aroclor-1248	UG/KG	37	U	37	U	39	U	43	U	38	U
Aroclor-1254	UG/KG	37	U	37	U	39	U	43	U	38	U
Aroclor-1260	UG/KG	37	U	37	U	39	U	43	U	38	U
beta-BHC	UG/KG	1.9	U	1.9	U	2	U	2.2	U	2	U
4,4'-DDD	UG/KG	3.7	U	3.7	U	3.9	U	4.3	U	3.8	U
4,4'-DDE	UG/KG	3.7	U	3.7	U	3.9	U	0.9	J	3.8	U
4,4'-DDT	UG/KG	3.7	U	3.7	U	3.9	U	4.3	U	3.8	U
delta-BHC	UG/KG	1.9	U	1.9	U	2	U	2.2	U	2	U
Dieldrin	UG/KG	3.7	U	3.7	U	3.9	U	4.3	U	3.8	U
Endosulfan I	UG/KG	1.9	U	1.9	U	2	U	2.2	U	2	U
Endosulfan II	UG/KG	3.7	U	3.7	U	3.9	U	4.3	U	3.8	U
Endosulfan Sulfate	UG/KG	3.7	U	3.7	U	3.9	U	4.3	U	3.8	U
Endrin	UG/KG	3.7	U	3.7	U	3.9	U	4.3	U	3.8	U
Endrin Aldehyde	UG/KG	3.7	U	3.7	U	3.9	U	4.3	U	3.8	U
Endrin Ketone	UG/KG	3.7	U	3.7	U	3.9	U	4.3	U	3.8	U
gamma-BHC (Lindane)	UG/KG	1.9	U	1.9	U	2	U	2.2	U	2	U
gamma-Chlordane	UG/KG	1.9	U	1.9	U	2	U	2.2	U	2	U
Heptachlor	UG/KG	0.13	J	1.9	U	2	U	2.2	UJ	2	U
Heptachlor Epoxide	UG/KG	1.9	U	1.9	U	2	U	2.2	U	2	U
p,p'-Methoxychlor	UG/KG	1.9	U	19	U	20	U	22	U	20	U
Toxaphene	UG/KG	190	U	190	U	200	U	220	U	200	U

APPENDIX E.1 Radiological and Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40311		B40401		B40402		B40412		B40501	
		502-B40311		502-B40401		502-B40402		502-B40412		502-B40501	
		622574 REG		622188 REG		622193 REG		622194 REG		620587 REG	
		06/29/94DUPE		6/29/94		6/29/94		06/29/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	2.3	U	2.1	U	1.9	U	1.8	U	2.2	U
alpha-BHC	UG/KG	2.3	U	2.1	U	1.9	U	1.8	U	2.2	U
alpha-Chlordane	UG/KG	2.3	U	2.1	U	1.9	U	1.8	U	2.2	U
Aroclor-1016	UG/KG	44	U	40	U	36	U	36	U	42	U
Aroclor-1221	UG/KG	89	U	82	U	73	U	73	U	86	U
Aroclor-1232	UG/KG	44	U	40	U	36	U	36	U	42	U
Aroclor-1242	UG/KG	44	U	40	U	36	U	36	U	42	U
Aroclor-1248	UG/KG	44	U	40	U	36	U	36	U	42	U
Aroclor-1254	UG/KG	44	U	40	U	36	U	36	U	42	U
Aroclor-1260	UG/KG	44	U	40	U	36	U	36	U	42	U
beta-BHC	UG/KG	2.3	U	2.1	U	1.9	U	1.8	U	2.2	U
4,4'-DDD	UG/KG	4.4	U	4	U	3.6	U	3.6	U	4.2	U
4,4'-DDE	UG/KG	0.82	J	4	U	3.6	U	3.6	U	4.2	U
4,4'-DDT	UG/KG	4.4	U	4	U	3.6	U	3.6	U	4.2	U
delta-BHC	UG/KG	2.3	U	2.1	U	1.9	U	1.8	U	2.2	U
Dieldrin	UG/KG	4.4	U	4	U	3.6	U	3.6	U	4.2	U
Endosulfan I	UG/KG	2.3	U	2.1	U	1.9	U	1.8	U	2.2	U
Endosulfan II	UG/KG	4.4	U	4	U	3.6	U	3.6	U	4.2	U
Endosulfan Sulfate	UG/KG	4.4	U	4	U	3.6	U	3.6	U	4.2	U
Endrin	UG/KG	4.4	U	2	R	3.6	U	3.6	U	4.2	U
Endrin Aldehyde	UG/KG	4.4	U	4	U	3.6	U	3.6	U	4.2	U
Endrin Ketone	UG/KG	4.4	U	4	U	3.6	U	3.6	U	4.2	U
gamma-BHC (Lindane)	UG/KG	2.3	U	2.1	U	1.9	U	1.8	U	2.2	U
gamma-Chlordane	UG/KG	2.3	U	2.1	U	1.9	U	1.8	U	2.2	U
Heptachlor	UG/KG	0.95	J	2.1	U	1.9	U	1.8	U	2.2	U
Heptachlor Epoxide	UG/KG	2.3	U	2.1	U	1.9	U	1.8	U	2.2	U
p,p'-Methoxychlor	UG/KG	23	U	21	U	19	U	18	U	22	U
Toxaphene	UG/KG	230	U	210	U	190	U	180	U	220	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		B40502		B40601		B40602		B40701		B40702	
		502-B40502		502-B40601		502-B40602		502-B40701		502-B40702	
		620588 REG		620589 REG		621376 REG		619914 REG		620389 R1 REG	
		6/22/94		6/22/94		6/27/94		6/20/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	1.9	U	2	U	1.8	U	0.074	J	1.8	U
alpha-BHC	UG/KG	1.9	U	2	U	1.8	U	2.1	U	1.8	U
alpha-Chlordane	UG/KG	1.9	U	2	U	1.8	U	2.1	U	1.8	U
Aroclor-1016	UG/KG	37	U	39	U	34	U	40	U	36	U
Aroclor-1221	UG/KG	75	U	78	U	70	U	82	U	73	U
Aroclor-1232	UG/KG	37	U	39	U	34	U	40	U	36	U
Aroclor-1242	UG/KG	37	U	39	U	34	U	40	U	36	U
Aroclor-1248	UG/KG	37	U	39	U	34	U	40	U	36	U
Aroclor-1254	UG/KG	37	U	39	U	34	U	40	U	36	U
Aroclor-1260	UG/KG	37	U	39	U	34	U	40	U	36	U
beta-BHC	UG/KG	1.9	U	2	U	1.8	U	2.1	U	1.8	U
4,4'-DDD	UG/KG	3.7	U	3.9	U	3.4	U	0.22	R	3.6	U
4,4'-DDE	UG/KG	3.7	U	3.9	U	3.4	U	4	U	3.6	U
4,4'-DDT	UG/KG	3.7	U	0.25	J	3.4	U	4	U	3.6	U
delta-BHC	UG/KG	1.9	U	2	U	1.8	U	2.1	U	1.8	U
Dieldrin	UG/KG	3.7	U	3.9	U	3.4	U	4	U	3.6	U
Endosulfan I	UG/KG	1.9	U	2	U	1.8	U	0.27	J	1.8	U
Endosulfan II	UG/KG	3.7	U	3.9	U	3.4	U	4	U	3.6	U
Endosulfan Sulfate	UG/KG	3.7	U	3.9	U	3.4	U	4	U	3.6	U
Endrin	UG/KG	3.7	U	3.9	U	3.4	U	4	U	3.6	U
Endrin Aldehyde	UG/KG	3.7	U	3.9	U	3.4	U	0.3	J	3.6	U
Endrin Ketone	UG/KG	3.7	U	3.9	U	3.4	U	0.25	J	3.6	U
gamma-BHC (Lindane)	UG/KG	1.9	U	2	U	1.8	U	2.1	U	1.8	U
gamma-Chlordane	UG/KG	1.9	U	2	U	1.8	U	2.1	U	1.8	U
Heptachlor	UG/KG	1.9	U	2	U	1.8	U	2.1	U	1.8	U
Heptachlor Epoxide	UG/KG	1.9	U	2	U	1.8	U	2.1	U	1.8	U
p,p'-Methoxychlor	UG/KG	19	U	20	U	18	U	21	U	18	U
Toxaphene	UG/KG	190	U	200	U	180	U	210	U	180	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40801		B40802		B40811		B40901		B40902	
		502-B40801		502-B40802		502-B40811		502-B40901		502-B40902	
		619402 REG		619403 REG		619404 REG		621596 REG		621597 REG	
		6/16/94		6/16/94		D6/16/94DUPE		6/28/94		6/28/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	1.9	U	2	U	1.9	U	2.2	U	1.9	U
alpha-BHC	UG/KG	1.9	U	2	U	1.9	U	2.2	U	1.9	U
alpha-Chlordane	UG/KG	1.9	U	2	U	1.9	U	2.2	U	1.9	U
Aroclor-1016	UG/KG	36	U	39	U	37	U	42	U	38	U
Aroclor-1221	UG/KG	73	U	79	U	76	U	86	U	76	U
Aroclor-1232	UG/KG	36	U	39	U	37	U	42	U	38	U
Aroclor-1242	UG/KG	36	U	39	U	37	U	42	U	38	U
Aroclor-1248	UG/KG	36	U	39	U	37	U	42	U	38	U
Aroclor-1254	UG/KG	36	U	39	U	37	U	42	U	38	U
Aroclor-1260	UG/KG	36	U	39	U	37	U	42	U	38	U
beta-BHC	UG/KG	1.9	U	2	U	1.9	U	2.2	U	1.9	U
4,4'-DDD	UG/KG	3.6	U	3.9	U	3.7	U	6.6	J	3.8	U
4,4'-DDE	UG/KG	3.6	U	3.9	U	3.7	U	4.2	U	3.8	U
4,4'-DDT	UG/KG	3.6	U	3.9	U	3.7	U	4.2	U	3.8	U
delta-BHC	UG/KG	1.9	U	2	U	1.9	U	2.2	U	1.9	U
Dieldrin	UG/KG	3.6	U	3.9	U	3.7	U	4.2	U	3.8	U
Endosulfan I	UG/KG	0.051	J	2	U	1.9	UJ	2.2	U	1.9	U
Endosulfan II	UG/KG	3.6	U	3.9	U	3.7	U	4.2	U	3.8	U
Endosulfan Sulfate	UG/KG	3.6	U	3.9	U	3.7	U	4.2	U	3.8	U
Endrin	UG/KG	3.6	U	3.9	U	3.7	U	4.2	U	3.8	U
Endrin Aldehyde	UG/KG	3.6	U	3.9	U	3.7	U	4.2	U	3.8	U
Endrin Ketone	UG/KG	3.6	U	3.9	U	3.7	U	4.2	U	3.8	U
gamma-BHC (Lindane)	UG/KG	1.9	U	2	U	1.9	U	2.2	U	1.9	U
gamma-Chlordane	UG/KG	1.9	UJ	2	U	0.058	J	2.2	U	1.9	U
Heptachlor	UG/KG	1.9	U	2	U	1.9	U	2.2	U	1.9	U
Heptachlor Epoxide	UG/KG	0.1	J	2	U	1.9	UJ	2.2	U	1.9	U
p,p'-Methoxychlor	UG/KG	1.9	U	20	U	1.9	U	22	U	19	U
Toxaphene	UG/KG	190	U	200	U	190	U	220	U	190	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE			
		B41101	
		502-B41101	
		619913 REG	
		6/20/94	
		Result	Val
Pesticides and PCBs	Units		
Aldrin	UG/KG	2.2	U
alpha-BHC	UG/KG	2.2	U
alpha-Chlordane	UG/KG	2.2	U
Aroclor-1016	UG/KG	42	U
Aroclor-1221	UG/KG	85	U
Aroclor-1232	UG/KG	42	U
Aroclor-1242	UG/KG	42	U
Aroclor-1248	UG/KG	42	U
Aroclor-1254	UG/KG	42	U
Aroclor-1260	UG/KG	42	U
beta-BHC	UG/KG	2.2	U
4,4'-DDD	UG/KG	4.2	U
4,4'-DDE	UG/KG	1.8	J
4,4'-DDT	UG/KG	4.2	U
delta-BHC	UG/KG	2.2	U
Dieldrin	UG/KG	4.2	U
Endosulfan I	UG/KG	2.2	U
Endosulfan II	UG/KG	4.2	U
Endosulfan Sulfate	UG/KG	4.2	U
Endrin	UG/KG	4.2	U
Endrin Aldehyde	UG/KG	4.2	U
Endrin Ketone	UG/KG	0.52	J
gamma-BHC (Lindane)	UG/KG	2.2	U
gamma-Chlordane	UG/KG	2.2	U
Heptachlor	UG/KG	0.11	J
Heptachlor Epoxide	UG/KG	2.2	U
p,p'-Methoxychlor	UG/KG	22	U
Toxaphene	UG/KG	220	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B39801		B39901		B40001		B40002		B40101	
		502-B39801		502-B39901		502-B40001		502-B40002		502-B40101	
		620619 REG		618895 REG		621610 REG		REG		REG	
		6/22/94		6/14/94		6/28/94		6/28/94		6/14/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	320	J	3	UJ	45.6	J	3	UJ	183	J
Fluoride	MG/KG	5.68	J	2.12	J	7.13	J	0.1	UJ	4.86	J
Nitrate-Nitrite-N	MG/KG	4.12	J	2.93	J	0.908	J	0.05	UJ	7.91	J
Sulfate	MG/KG	1370		97.5	J	891	J	25.4	J	356	J

		B40102		B40201		B40202		B40301		B40302	
		502-B40102		502-B40201		502-B40202		502-B40301		502-B40302	
		620118 REG		REG		622518 REG		REG		622558 REG	
		6/14/94		6/30/94		6/30/94		6/29/94		6/29/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	46.5	J	3	UJ	33.6	J	107	J	176	J
Fluoride	MG/KG	1.42	J	1.11	J	1.18	J	5.31	J	3.68	J
Nitrate-Nitrite-N	MG/KG	1.19	J	0.557	J	0.05	UJ	10	J	0.834	J
Sulfate	MG/KG	83.3	J	165	J	480	J	362	J	248	J

		B40311		B40401		B40402		B40412		B40501	
		502-B40311		502-B40401		502-B40402		502-B40412		502-B40501	
		622578 REG		REG		622214 REG		REG		620627 REG	
		06/29/94DUPE		6/29/94		6/29/94		06/29/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	119	J	3	UJ	44.7	J	54	J	56.8	J
Fluoride	MG/KG	3.61	J	3.32	J	4.39	J	4.36	J	5.25	J
Nitrate-Nitrite-N	MG/KG	11.3	J	1.67	J	0.684	J	0.861	J	11.2	J
Sulfate	MG/KG	366	J	141	J	921	J	531	J	359	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40502		B40601		B40602		B40701		B40702	
		502-B40502		502-B40601		502-B40602		502-B40701		502-B40702	
		REG		620650 REG		621386 REG		REG		620394 REG	
		6/22/94		6/22/94		6/27/94		6/20/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	53.5	J	81.9	J	40.8	J	46.1	J	54.1	J
Fluoride	MG/KG	5.54	J	6.05	J	2.45	J	3.4	J	5.73	J
Nitrate-Nitrite-N	MG/KG	0.05	UJ	0.673	J	0.05	UJ	5.52	J	2.36	J
Sulfate	MG/KG	330		795		63.1		328	J	208	J

		B40801		B40802		B40811		B40901		B40902	
		502-B40801		502-B40802		502-B40811		502-B40901		502-B40902	
		619409 REG		619413 REG		619414 REG		REG		REG	
		6/16/94		6/16/94		06/16/94DUPE		6/28/94		6/28/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	75.6	J	47.1	J	3	UJ	3	UJ	3	UJ
Fluoride	MG/KG	3.55	J	1.3	J	1.62	J	5.07	J	3.49	J
Nitrate-Nitrite-N	MG/KG	17.9	J	0.589	J	12.5	J	0.05	UJ	0.05	UJ
Sulfate	MG/KG	296	J	40.4	J	182	J	331	J	187	J

		B41101	
		502-B41101	
		REG	
		6/20/94	
		Result	Val
Anions	Units		
Chloride	MG/KG	524	J
Fluoride	MG/KG	20.5	J
Nitrate-Nitrite-N	MG/KG	7.1	J
Sulfate	MG/KG	1910	J

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE

		B39801		B39901		B40001		B40002		B40101	
		502-B39801		502-B39901		502-B40001		502-B40002		502-B40101	
		620624 REG		618905 REG		621628 REG		REG		618911 REG	
		6/22/94		6/14/94		6/28/94		6/28/94		6/14/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Total Organic Carbon	Units										
Organic Carbon	MG/KG	13900	J	26700	J	5800	J	38400	J	30200	J
Organic Carbon	MG/KG	6970	J	24100	J	2660	J	18400	J	31600	J
Organic Carbon	MG/KG	8650	J	26500	J	4390	J	37100	J	41400	J
Organic Carbon	MG/KG	11000	J	21800	J	3370	J	38700	J	29900	J

		B40102		B40201		B40202		B40301		B40302	
		502-B40102		502-B40201		502-B40202		502-B40301		502-B40302	
		618914 REG		REG		REG		REG		REG	
		6/14/94		6/30/94		6/30/94		6/29/94		6/29/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Total Organic Carbon	Units										
Organic Carbon	MG/KG	3910	J	14000		18400	J	90200	J	3930	J
Organic Carbon	MG/KG	6191	J	10500		11100	J	21400	J	6240	J
Organic Carbon	MG/KG	6500	J	12400		10300	J	19600	J	8420	J
Organic Carbon	MG/KG	9530	J	10900		13500	J	20200	J	6090	J

		B40311		B40401		B40402		B40412		B40501	
		502-B40311		502-B40401		502-B40402		502-B40412		502-B40501	
		REG		REG		REG		REG		620630 REG	
		06/29/94DUPE		6/29/94		6/29/94		06/29/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Total Organic Carbon	Units										
Organic Carbon	MG/KG	23600	J	10800	J	28200	J	19300	J	12300	J
Organic Carbon	MG/KG	29600	J	7900	J	29800	J	16200	J	7630	J
Organic Carbon	MG/KG	19100	J	18200	J	11200	J	11600	J	9150	J
Organic Carbon	MG/KG	10900	J	14900	J	37000	J	24900	J	7410	J

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40502		B40601		B40602		B40701		B40702	
		502-B40502		502-B40601		502-B40602		502-B40701		502-B40702	
		620643 REG		620653 REG		621388 REG		619925 REG		620396 REG	
		6/22/94		6/22/94		6/27/94		6/20/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Total Organic Carbon	Units										
Organic Carbon	MG/KG	7820	J	13000	J	2040	J	12000	J	11500	J
Organic Carbon	MG/KG	3320	J	16800	J	6520	J	10200	J	7740	J
Organic Carbon	MG/KG	3640	J	15300	J	4040	J	9190	J	8210	J
Organic Carbon	MG/KG	2810	J	20100	J	2660	J	9000	J	6240	J

		B40801		B40802		B40811		B40901		B40902	
		502-B40801		502-B40802		502-B40811		502-B40901		502-B40902	
		619415 REG		619416 REG		619417 REG		REG		REG	
		6/16/94		6/16/94		06/16/94DUPE		6/28/94		6/28/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Total Organic Carbon	Units										
Organic Carbon	MG/KG	37800	J	43600	J	19000	J	4550		2830	J
Organic Carbon	MG/KG	55600	J	13400	J	18000	J	2880		2350	J
Organic Carbon	MG/KG	33800	J	11600	J	18600	J	4150		1620	J
Organic Carbon	MG/KG	33700	J	0000	J	21800	J	4480		4480	J

		B41101	
		502-B41101	
		619919 REG	
		6/20/94	
		Result	Val
Total Organic Carbon	Units		
Organic Carbon	MG/KG	10700	J
Organic Carbon	MG/KG	8410	J
Organic Carbon	MG/KG	10400	J
Organic Carbon	MG/KG	7220	J

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B39801		B39901		B40001		B40002		B40101	
		502-B39801		502-B39901		502-B40001		502-B40002		502-B40101	
		620591 REG		620112 REG		621598 REG		621601 REG		620115 REG	
		6/22/94		6/14/94		6/28/94		6/28/94		6/14/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**										
Aluminum	MG/KG	2640		2890		12500		1870		1680	
Antimony	MG/KG	1.8	UJ	1.8	UJ	2	J	2.9	J	1.7	UJ
Arsenic	MG/KG	7.3		7.9		7.4		4.5		6.8	
Barium	MG/KG	18		18.2		83.7		9.2		12.4	
Beryllium	MG/KG	0.12		0.13		0.74	U	0.06	U	0.13	
Bismuth	MG/KG	18.8		20.6		13.2		3.7	U	17.5	
Cadmium	MG/KG	0.2	U	0.2	U	0.21	U	0.2	U	0.2	U
Calcium	MG/KG	2050		1420		7850	J	190000	J	1670	
Chromium	MG/KG	3.5		2.7		14.4		4		1.7	
Cobalt	MG/KG	2.7		1.5		11		1.7		1.4	
Copper	MG/KG	4.2		3.3		17		5		3.4	
Cyanide	MG/KG	0.6	U	0.58	U	0.62	U	0.59	U	0.58	U
Iron	MG/KG	5480		3950		19000		4820		2790	
Lead	MG/KG	19	J	23.5	J	24.5		3.8		32	J
Lithium	MG/KG	2.3		4.1		14.5		4.6		2.7	
Magnesium	MG/KG	1160		1070		4760		40900		1180	
Manganese	MG/KG	152		102		955		195		116	
Mercury	MG/KG	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U
Molybdenum	MG/KG	4.6	J	6.2	J	5.9		1.3	U	4.1	J
Nickel	MG/KG	4.4		3.4		17.9		2.9		2.3	U
Potassium	MG/KG	372		430		2440		658		421	
Selenium	MG/KG	0.81	UJ	0.79	UJ	0.98	U	0.91	UJ	0.79	U
Silver	MG/KG	0.24	U	0.23	U	0.25	U	0.23	U	0.23	U
Sodium	MG/KG	155		41.7		78.3	U	185	U	32.6	
Thallium	MG/KG	0.62	U	0.84	U	0.9	UJ	0.84	UJ	0.83	U
Tin	MG/KG	11.3	U	10.8	U	11.8	U	10.9	U	10.9	U
Vanadium	MG/KG	5.7		1.7		24.2		5.7		0.75	
Zinc	MG/KG	15.1		7.7		62.5	J	14.1	J	6.7	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		B40102		B40201		B40202		B40301		B40302	
		502-B40102		502-B40201		502-B40202		502-B40301		502-B40302	
		620117 REG		622489 REG		622508 REG		622535 REG		622556 REG	
		6/14/94		6/30/94		6/30/94		6/29/94		6/29/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	437		6930		2710		19200		14800	
Antimony	MG/KG	1.7	UJ	3.3	J	2.3	J	2	R	2.9	J
Arsenic	MG/KG	6.8		5.1		3.3		5.5		4.4	
Barium	MG/KG	2.7		40.4		14.2		123		40.1	
Beryllium	MG/KG	0.061	U	0.35	U	0.066	U	1.1		0.73	U
Bismuth	MG/KG	66.9		11.2		3.7	U	12.6		15.6	
Cadmium	MG/KG	0.19	U	0.19	U	0.2	U	0.23	U	0.2	U
Calcium	MG/KG	26800		88500	J	127000	J	7360	J	76900	J
Chromium	MG/KG	1		8.1		4.4		19.4		14.6	
Cobalt	MG/KG	0.37		6.6		3.7		13		10.4	
Copper	MG/KG	1.9		11.8		7.8		13.8		15.8	
Cyanide	MG/KG	0.55	U	0.57	U	0.6	U	0.67	U	0.58	U
Iron	MG/KG	1480		13200		7240		26500		20100	
Lead	MG/KG	6.3	J	9		6		19.4		4.7	
Lithium	MG/KG			12		6.6		25.4		33	
Magnesium	MG/KG	15600		22300		40300		5600		10500	
Manganese	MG/KG	43.4		445		261		828		405	
Mercury	MG/KG	0.11	U	0.11	U	0.12	U	0.13	U	0.12	U
Molybdenum	MG/KG			4.3		1.4	U	5		5.3	
Nickel	MG/KG	2.2	U	12.6		6.5		22.1		19.1	
Potassium	MG/KG	176		1080		725		3720		3140	
Selenium	MG/KG	0.75	UJ	0.89	UJ	0.93	UJ	1	U	0.91	UJ
Silver	MG/KG	0.22	U	0.23	U	0.24	U	0.27	U	0.23	U
Sodium	MG/KG	72.2		140	U	169	U	544		432	U
Thallium	MG/KG	0.79	UJ	0.82	UJ	0.86	UJ	0.97	UJ	0.84	UJ
Tin	MG/KG	10.4	U	10.5	U	10.9	U	12.6	U	10.9	U
Vanadium	MG/KG	0.45		12.6		6.3		25.9		16.6	
Zinc	MG/KG	4.1		37.1	J	18.7	J	82.2	J	45.4	J

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40311		B40401		B40402		B40412		B40501	
		502-B40311		502-B40401		502-B40402		502-B40412		502-B40501	
		622577 REG		622196 REG		622200 REG		622201 REG		620595 REG	
		06/29/94DUPE		6/29/94		6/29/94		06/29/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	16100		6080		5220		5630		3830	
Antimony	MG/KG	2.1	R	1.9	R	2.9	J	2.2	J	1.9	UJ
Arsenic	MG/KG	5.3		6.7		7.5		6.3		6.3	
Barium	MG/KG	117		42.8		26.9		27.1		18	
Beryllium	MG/KG	0.95	U	0.31	U	0.23	U	0.23	U	0.23	
Bismuth	MG/KG	13.2		3.9	U	3.4	U	3.4	U	28.5	
Cadmium	MG/KG	0.23	U	0.21	U	0.19	U	0.19	U	0.22	UJ
Calcium	MG/KG	7340	J	2200	J	106000	J	103000	J	2060	
Chromium	MG/KG	16.8		8.1		6.7		7		5	
Cobalt	MG/KG	12.6		5.6		4.8		4.8		4.8	
Copper	MG/KG	14.3		9.6		11.8		10.9		5.5	
Cyanide	MG/KG	0.68	U	0.62	U	0.55	U	0.55	U	0.64	U
Iron	MG/KG	24900		11500		15200		10600		8430	
Lead	MG/KG	19.1		25.4		7.9		7.3		15.6	J
Lithium	MG/KG	22.8		4.8		8.9		9.3		6.4	
Magnesium	MG/KG	5060		1410		56500		36800		1310	
Manganese	MG/KG	814		169		354		253		350	
Mercury	MG/KG	0.14	U	0.12	U	0.11	U	0.11	U	0.13	U
Molybdenum	MG/KG	5.8		2.9		1.2	U	1.2	U	6.2	J
Nickel	MG/KG	20.7		7.3		10.8		10.1		8.6	
Potassium	MG/KG	2720		649		992		961		601	
Selenium	MG/KG	1.1	U	0.97	U	0.86	UJ	0.85	UJ	0.87	UJ
Silver	MG/KG	0.27	U	0.25	U	0.22	U	0.22	U	0.26	U
Sodium	MG/KG	518	U	60.4	U	175	U	137	U	32	
Thallium	MG/KG	0.98	UJ	0.89	UJ	0.79	UJ	0.79	UJ	0.66	UJ
Tin	MG/KG	12.8	U	11.7	U	10.3	U	10.3	U	12	U
Vanadium	MG/KG	22		16.3		11.2		10.9		6.1	
Zinc	MG/KG	83	J	47	J	30.5	J	38.6	J	15.8	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40502		B40601		B40602		B40701		B40702	
		502-B40502		502-B40601		502-B40602		502-B40701		502-B40702	
		620596 REG		620597 REG		621383 REG		620198 REG		620390 REG	
		6/22/94		6/22/94		6/27/94		6/20/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	3360		3210		668		3610		4070	
Antimony	MG/KG	1.7	UJ	1.8	UJ	1.8	J	1.9	UJ	1.8	J
Arsenic	MG/KG	3.7		11.8		4.4		6.7		5.7	
Barium	MG/KG	8.1		20.4		8.4		22.4		10.5	
Beryllium	MG/KG	0.18		0.18		0.058	U	0.21		0.19	
Bismuth	MG/KG	23.6		19.6		69.1		19.6		27.2	
Cadmium	MG/KG	0.19	UJ	0.2	UJ	0.18	U	0.21	UJ	0.19	UJ
Calcium	MG/KG	28300		1680		38600		1080		15300	
Chromium	MG/KG	4.1		5.7		7.7		4.6		5.1	
Cobalt	MG/KG	4.4		2.7		0.68		3.7		3.4	
Copper	MG/KG	4.9		8.1		15.7		3.9		4.6	
Cyanide	MG/KG	0.57	U	0.59	U	0.53	U	0.62	U	0.55	U
Iron	MG/KG	6960		6020		1670		6100		6450	
Lead	MG/KG	13.5	J	20.2	J	5.6	J	24.2	J	18.4	J
Lithium	MG/KG			4.4				4			
Magnesium	MG/KG	1720		1310		18500		915		2530	
Manganese	MG/KG	294		157		51.1		267		213	
Mercury	MG/KG	0.11	U	0.12	U	0.11	U	0.12	U	0.11	U
Molybdenum	MG/KG			5.4	J			4.2	J		
Nickel	MG/KG	6		5.7		5.5		4.9		6.1	
Potassium	MG/KG	795		343		158		488		1080	
Selenium	MG/KG	0.77	UJ	0.8	U	0.72	UJ	0.84	U	0.75	UJ
Silver	MG/KG	0.23	U	0.24	U	0.21	U	0.25	U	0.22	U
Sodium	MG/KG	79.1		39.3		85.2		37.8		80.9	
Thallium	MG/KG	0.59	UJ	0.61	U	0.76	UJ	0.89	U	0.79	U
Tin	MG/KG	10.6	U	10.8	U	9.9	U	11.6	U	10.1	U
Vanadium	MG/KG	4.8		7.3		1.7		7		6.2	
Zinc	MG/KG	15.9		23.2		34.1		15.6		25.6	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40801		B40802		B40811		B40901		B40902	
		502-B40801		502-B40802		502-B40811		502-B40901		502-B40902	
		619405 REG		619407 REG		619408 REG		621602 REG		621603 REG	
		6/16/94		6/16/94		06/16/94DUPE		6/28/94		6/28/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**										
Aluminum	MG/KG	1800		363		1900		21400		15900	
Antimony	MG/KG	1.7	UJ	1.8	UJ	1.7	UJ	1.9	R	2.6	J
Arsenic	MG/KG	7.7		5.1		7.4		7.4		3.4	
Barium	MG/KG	16.1		2		16.3		103		19.1	
Beryllium	MG/KG	0.13		0.065	U	0.12		1	U	0.71	U
Bismuth	MG/KG	12.3		57.2		14		14.5		18	
Cadmium	MG/KG	0.19	U	0.2	U	0.19	U	0.22	U	0.19	U
Calcium	MG/KG	812		38000		899		4980	J	62800	J
Chromium	MG/KG	2.7		1.2		2.9		22.5		17.4	
Cobalt	MG/KG	2.3		0.52		2.4		14.4		12.7	
Copper	MG/KG	3.8		1.4		4		16.2		23.3	
Cyanide	MG/KG	0.55	U	0.59	U	0.57	U	0.65	U	0.57	U
Iron	MG/KG	4040		1300		4760		28800		24600	
Lead	MG/KG	16.6	J	5.2	J	18	J	19.9		2	
Lithium	MG/KG	1.8	U					27.3		41.4	
Magnesium	MG/KG	583		13500		656		4520		14600	
Manganese	MG/KG	182		42.3		181		969		743	
Mercury	MG/KG	0.11	U	0.12	U	0.14		0.13	U	0.11	U
Molybdenum	MG/KG	3.6	J					6.2		6.2	
Nickel	MG/KG	2.8		2.4	U	3.4		24.1		22.1	
Potassium	MG/KG	341		157		270		3550		4320	
Selenium	MG/KG	0.74	U	0.81	UJ	0.77	U	1	U	0.89	UJ
Silver	MG/KG	0.22	U	0.24	U	0.23	U	0.26	U	0.23	U
Sodium	MG/KG	26.7		66.8		27.9		99.5	U	229	U
Thallium	MG/KG	0.57	UJ	0.62	UJ	0.59	U	0.93	UJ	0.82	UJ
Tin	MG/KG	10.3	U	11.1	U	10.6	U	12	U	10.8	U
Vanadium	MG/KG	4.6		1.3		4.8		37		19.4	
Zinc	MG/KG	13.3		4.8		13.4		62.2	J	48.2	J

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE			
		B41101	
		502-B41101	
		620196 REG	
		6/20/94	
		Result	Val
Inorganics	Units		
Aluminum	MG/KG	3640	
Antimony	MG/KG	1.9	UJ
Arsenic	MG/KG	6.4	
Barium	MG/KG	23.7	
Beryllium	MG/KG	0.22	
Bismuth	MG/KG	22.5	
Cadmium	MG/KG	0.22	UJ
Calcium	MG/KG	1900	
Chromium	MG/KG	4.5	
Cobalt	MG/KG	3.4	
Copper	MG/KG	4.4	
Cyanide	MG/KG	0.64	U
Iron	MG/KG	7150	
Lead	MG/KG	32.1	J
Lithium	MG/KG	4.4	
Magnesium	MG/KG	1030	
Manganese	MG/KG	220	
Mercury	MG/KG	0.13	U
Molybdenum	MG/KG	5.3	J
Nickel	MG/KG	5.4	
Potassium	MG/KG	683	
Selenium	MG/KG	0.87	UJ
Silver	MG/KG	0.26	U
Sodium	MG/KG	445	
Thallium	MG/KG	0.92	UJ
Tin	MG/KG	12.1	U
Vanadium	MG/KG	6	
Zinc	MG/KG	30.5	

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B39801		B39901		B40001		B40002		B40101	
		502-B39801		502-B39901		502-B40001		502-B40002		502-B40101	
		620598 REG		618892 REG		621615 REG		621624 REG		618909 REG	
		6/22/94		6/14/94		6/28/94		6/28/94		6/14/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	**Units**										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U
HMX	MG/KG	3	U	3	UJ			3	UJ	3	U
Nitrobenzene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ	2.5	U
Tetryl	MG/KG	2.5	U	2.5	U	2.5	UJ	2.5	UJ	2.5	U
1,3,5-Trinitrobenzene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U
2,4,6-Trinitrotoluene	MG/KG	0.11	J	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U

		B40102		B40201		B40202		B40301		B40302	
		502-B40102		502-B40201		502-B40202		502-B40301		502-B40302	
		618912 REG		622494 REG		622523 REG		622546 REG		622569 REG	
		6/14/94		6/30/94		6/30/94		6/29/94		6/29/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	**Units**										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ
HMX	MG/KG	3	U	3	UJ	3	UJ	3	UJ	3	UJ
Nitrobenzene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	U	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ
Tetryl	MG/KG	2.5	U	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ
1,3,5-Trinitrobenzene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ
2,4,6-Trinitrotoluene	MG/KG	1.5	U	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40311		B40401		B40402		B40412		B40501	
		502-B40311		502-B40401		502-B40402		502-B40412		502-B40501	
		622584 REG		622203 REG		622213 REG		622219 REG		620603 REG	
		06/29/94DUPE		6/29/94		6/29/94		06/29/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ	0.098	J
2,4-Dinitrotoluene	MG/KG	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U
HMX	MG/KG	3	UJ	3	UJ	3	UJ	3	UJ	3	U
Nitrobenzene	MG/KG	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ	0.2	UJ
Tetryl	MG/KG	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ	2.5	U
1,3,5-Trinitrobenzene	MG/KG	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ	1.5	U
2,4,6-Trinitrotoluene	MG/KG	1.5	UJ	1.5	UJ	1.5	UJ	1.5	UJ	0.2	J

		B40502		B40601		B40602		B40701		B40702	
		502-B40502		502-B40601		502-B40602		502-B40701		502-B40702	
		620604 REG		620606 REG		621389 REG		619926 REG		620391 REG	
		6/22/94		6/22/94		6/27/94		6/20/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U
HMX	MG/KG	3	U	3	U			3	U	3	U
Nitrobenzene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	UJ	2.5	UJ	2.5	UJ	2.5	U	2.5	UJ
Tetryl	MG/KG	2.5	U	2.5	U	2.5	UJ	2.5	U	0.29	J
1,3,5-Trinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U
2,4,6-Trinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		B40801		B40802		B40811		B40901		B40902	
		502-B40801		502-B40802		502-B40811		502-B40901		502-B40902	
		619418 REG		619419 REG		619420 REG		621638 REG		621648 REG	
		6/16/94		6/16/94		06/16/94DUPE		6/28/94		6/28/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	**Units**										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	UJ
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	UJ
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	UJ
HMX	MG/KG	3	U	3	U	3	U	3	UJ	3	UJ
Nitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	UJ
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	U	2.5	U	2.5	U	2.5	UJ	2.5	UJ
Tetryl	MG/KG	2.5	U	2.5	U	2.5	U	2.5	UJ	2.5	UJ
1,3,5-Trinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	UJ
2,4,6-Trinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	UJ

		B41101	
		502-B41101	
		619920 REG	
		6/20/94	
		Result	Val
EXPLOSIVES	**Units**		
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	U
2,4-Dinitrotoluene	MG/KG	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	U
HMX	MG/KG	3	U
Nitrobenzene	MG/KG	1.5	U
PETN	MG/KG	1	R
RDX	MG/KG	2.5	U
Tetryl	MG/KG	2.5	U
1,3,5-Trinitrobenzene	MG/KG	1.5	U
2,4,6-Trinitrotoluene	MG/KG	1.5	U

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE																
		B39801			B39901			B40001			B40002			B40101		
		502-B39801			502-B39901			502-B40001			502-B40002			502-B40101		
		620668 REG			619805 REG			621656 REG			621663 REG			619813 REG		
		6/22/94			6/14/94			6/28/94			6/28/94			6/14/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Ac-227	PCI/G	0.41+/-	NA	U	0.39+/-	NA	U	0.51+/-	NA	U	0.21+/-	NA	U	0.39+/-	NA	U
Am-241	PCI/G	0.43+/-	NA	U	0.54+/-	NA	U	0.51+/-	NA	U	0.20+/-	NA	U	0.42+/-	NA	U
Bi-207	PCI/G	0.05+/-	NA	U	0.06+/-	NA	U	0.08+/-	NA	U	0.03+/-	NA	U	0.05+/-	NA	U
Bi-210m	PCI/G	0.09+/-	NA	U	0.09+/-	NA	U	0.11+/-	NA	U	0.05+/-	NA	U	0.09+/-	NA	U
Co-60	PCI/G	0.06+/-	NA	U	0.07+/-	NA	U	0.08+/-	NA	U	0.03+/-	NA	U	0.05+/-	NA	U
Cs-137	PCI/G	0.06+/-	0.05	U	0.33+/-	0.08	U	0.42+/-	0.11	U	0.03+/-	NA	U	0.61+/-	0.09	U
K-40	PCI/G	16.40+/-	1.32		16.20+/-	1.48		21.11+/-	1.83		4.70+/-	0.6	U	14.69+/-	1.29	
Pu-238	PCI/G	0.12+/-	0.08		0.01+/-	0.08	U	0.29+/-	0.08		-0.01+/-	0.13	UJ	0.03+/-	0.05	U
Pu-239/40	PCI/G	0.01+/-	0.03	U	0.02+/-	0.03	U	0.01+/-	0.02	U	-0.01+/-	0.06	UJ	0.01+/-	0.02	U
Ra-226	PCI/G	0.92+/-	0.12		0.89+/-	0.15		1.17+/-	0.18		0.34+/-	0.07		0.84+/-	0.13	
Sr-90	PCI/G	-0.40+/-	0.39	U	-0.42+/-	0.38	U	0.04+/-	0.33	U	-0.39+/-	1.03	UJ	-0.04+/-	0.31	U
Th-228	PCI/G	1.77+/-	0.3		1.49+/-	0.26		1.27+/-	0.2		0.54+/-	0.17	U	1.21+/-	0.21	
Th-230	PCI/G	1.85+/-	0.31		1.40+/-	0.25		1.61+/-	0.23		0.63+/-	0.13		1.32+/-	0.22	
Th-232	PCI/G	1.44+/-	0.26		1.16+/-	0.23		1.04+/-	0.18		0.13+/-	0.06		0.91+/-	0.18	
Tritium	PCI/G	0.8+/-	1.5	U	2.8+/-	1.5	U	1.7+/-	2.1	U	1.1+/-	1.9	U	2.1+/-	1.5	U
U-234	PCI/G	0.85+/-	0.16	UJ	1.03+/-	0.23		0.94+/-	0.16	UJ	0.36+/-	0.12	UJ	0.77+/-	0.16	UJ
U-235	PCI/G	0.07+/-	0.04	J	0.21+/-	0.1	J	0.07+/-	0.04	J	0.06+/-	0.05	J	0.16+/-	0.07	J
U-238	PCI/G	0.91+/-	0.16	J	1.03+/-	0.23		1.07+/-	0.18	J	0.42+/-	0.13	UJ	0.94+/-	0.18	J

APPENDIX E.1 Radiological And Chemical Analytical Soil Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE																
		B40311			B40401			B40402			B40412			B40501		
		502-B40311			502-B40401			502-B40402			502-B40412			502-B40501		
		622647 REG			622234 REG			622230 REG			622239 REG			620673 REG		
		06/29/94DUPE			6/29/94			6/29/94			06/29/94DUPE			6/22/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Ac-227	PCI/G	0.60+/-	NA	U	0.39+/-	NA	U	0.26+/-	NA	U	0.27+/-	NA	U	0.57+/-	NA	U
Am-241	PCI/G	0.78+/-	NA	U	0.38+/-	NA	U	0.27+/-	NA	U	0.30+/-	NA	U	0.58+/-	NA	U
Bi-207	PCI/G	0.09+/-	NA	U	0.05+/-	NA	U	0.04+/-	NA	U	0.04+/-	NA	U	0.08+/-	NA	U
Bi-210m	PCI/G	0.13+/-	NA	U	0.09+/-	NA	U	0.06+/-	NA	U	0.06+/-	NA	U	0.13+/-	NA	U
Co-60	PCI/G	0.11+/-	NA	U	0.06+/-	NA	U	0.04+/-	NA	U	0.04+/-	NA	U	0.09+/-	NA	U
Cs-137	PCI/G	0.20+/-	0.08	U	0.51+/-	0.07	U	0.05+/-	NA	U	0.05+/-	NA	U	0.33+/-	0.11	U
K-40	PCI/G	29.04+/-	2.36		13.05+/-	1.29		9.44+/-	0.9	U	10.26+/-	0.93		34.46+/-	2.24	
Pu-238	PCI/G	0.11+/-	0.16	U	0.19+/-	0.14	J	-0.01+/-	0.1	UJ	0.01+/-	0.18	U	0.06+/-	0.16	U
Pu-239/40	PCI/G	0.01+/-	0.07	U	0.01+/-	0.06	UJ	-0.02+/-	0.06	UJ	0.00+/-	0.07	U	0.01+/-	0.06	U
Ra-226	PCI/G	0.36+/-	NA	J	0.83+/-	0.12		0.60+/-	0.08		0.67+/-	0.09		0.95+/-	0.19	
Sr-90	PCI/G	0.23+/-	0.33	U	0.08+/-	0.34	U	-0.06+/-	0.58	UJ	0.06+/-	0.6	UJ	0.15+/-	0.35	U
Th-228	PCI/G	1.54+/-	0.19		1.23+/-	0.24		0.86+/-	0.15	UJ	0.99+/-	0.18	U	1.64+/-	0.22	J
Th-230	PCI/G	1.05+/-	0.15	J	1.53+/-	0.27		1.39+/-	0.19	J	1.36+/-	0.21		1.23+/-	0.19	J
Th-232	PCI/G	1.28+/-	0.17		1.04+/-	0.22		0.47+/-	0.11	J	0.35+/-	0.1		1.28+/-	0.19	J
Tritium	PCI/G	2.7+/-	2.2		0.0+/-	0	U	0.8+/-	1.6	U	-0.8+/-	1.5	U	1.6+/-	1.7	U
U-234	PCI/G	0.74+/-	0.19		0.83+/-	0.19	UJ	0.88+/-	0.15	UJ	0.50+/-	0.11	J	0.85+/-	0.14	UJ
U-235	PCI/G	0.07+/-	0.06		0.05+/-	0.05	UJ	0.09+/-	0.05	J	-0.02+/-	0.03	UJ	0.07+/-	0.04	J
U-238	PCI/G	0.75+/-	0.19		0.97+/-	0.21	J	0.92+/-	0.16	J	0.53+/-	0.11	J	0.93+/-	0.15	J

E.2

APPENDIX E.2
RADIOLOGICAL AND CHEMICAL ANALYTICAL GROUNDWATER DATA

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W39901		W40001		W40101		W40201		W40211	
		502-W39901		502-W40001		502-W40101		502-W40201		502-W40211	
		636515 REG		625828 REG		619236 REG		627726 REG		627725 REG	
		8/29/94		7/14/94		6/15/94		7/20/94		07/20/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/L	10	U	10	U	10	UJ	14	U	10	U
Acetonitrile	UG/L	100	U	100	U	100	U	100	U	100	U
Acrylonitrile	UG/L	100	U	100	U	25	J	100	U	100	U
Benzene	UG/L	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	UG/L	5	U	5	U	5	U	5	U	5	U
Bromoform	UG/L	5	U	5	U	5	U	5	U	5	U
Bromomethane	UG/L	10	U	10	U	10	U	10	U	10	U
2-Butanone	UG/L	10	U	10	U	10	U	10	U	10	U
Carbon Disulfide	UG/L	5	U	5	U	5	U	5	U	5	U
Carbon Tetrachloride	UG/L	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	UG/L	5	U	5	U	5	U	5	U	5	U
Chlorodibromomethane	UG/L	5	U	5	U	5	U	5	U	5	U
Chloroethane	UG/L	10	U	10	U	10	U	10	U	10	U
Chloroform	UG/L	5	U	5	U	5	U	5	U	5	U
Chloromethane	UG/L	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane	UG/L	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	UG/L	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	UG/L	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethene	UG/L	5	U	10	U	10	U	10	UJ	2	J
1,2-Dichloropropane	UG/L	5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	UG/L	5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	UG/L	5	U	5	U	5	U	5	U	5	U
1,2-Diethylbenzene	UG/L	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	UG/L	5	U	5	U	5	U	5	U	5	U
Hexane	UG/L	10	U	10	U	1	J	10	U	10	U
2-Hexanone	UG/L	10	U	10	U	10	U	10	U	10	U
Iodomethane	UG/L	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone	UG/L	10	U	10	U	10	U	10	U	10	U
Methylene Chloride	UG/L	5	U	5	U	18	U	10	U	5	U
Styrene	UG/L	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	UG/L	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	UG/L	5	U	5	U	5	U	5	U	5	U
Toluene	UG/L	5	U	5	U	1	J	5	U	5	U

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W39901		W40001		W40101		W40201		W40211	
		502-W39901		502-W40001		502-W40101		502-W40201		502-W40211	
		636515 REG		625828 REG		619236 REG		627726 REG		627725 REG	
		8/29/94		7/14/94		6/15/94		7/20/94		07/20/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,1-Trichloroethane	UG/L	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	UG/L	5	U	5	U	5	U	5	U	5	U
Trichloroethene	UG/L	5	U	5	U	5	U	5	UJ	2	J
Trichlorotrifluoroethane	UG/L	5	U	5	U	5	U	5	U	5	U
Vinyl Acetate	UG/L	10	U	10	U	10	U	10	U	10	U
Vinyl Chloride	UG/L	10	U	10	U	10	U	10	U	10	U
Xylene, Total	UG/L	5	U	10	U	10	U	10	U	10	U

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE					
		W40801		W41101	
		502-W40801		502-W41101	
		619934 REG		627030 REG	
		6/20/94		7/19/94	
		Result	Val	Result	Val
Volatile Organics	Units				
Acetone	UG/L	10	U	10	U
Acetonitrile	UG/L	100	U	100	U
Acrylonitrile	UG/L	100	U	100	U
Benzene	UG/L	5	U	5	U
Bromodichloromethane	UG/L	5	U	5	U
Bromoform	UG/L	5	U	5	U
Bromomethane	UG/L	10	U	10	U
2-Butanone	UG/L	10	U	10	U
Carbon Disulfide	UG/L	5	U	5	U
Carbon Tetrachloride	UG/L	5	U	5	U
Chlorobenzene	UG/L	5	U	5	U
Chlorodibromomethane	UG/L	5	U	5	U
Chloroethane	UG/L	10	U	10	U
Chloroform	UG/L	5	U	5	U
Chloromethane	UG/L	10	U	10	U
1,1-Dichloroethane	UG/L	5	U	5	U
1,2-Dichloroethane	UG/L	5	U	5	U
1,1-Dichloroethene	UG/L	5	U	5	U
1,2-Dichloroethene	UG/L	5	U	4	J
1,2-Dichloropropane	UG/L	5	U	5	U
cis-1,3-Dichloropropene	UG/L	5	U	5	U
trans-1,3-Dichloropropene	UG/L	5	U	5	U
1,2-Diethylbenzene	UG/L	5	U	5	U
Ethylbenzene	UG/L	5	U	5	U
Hexane	UG/L	10	U	10	U
2-Hexanone	UG/L	10	U	10	U
Iodomethane	UG/L	10	U	5	U
4-Methyl-2-pentanone	UG/L	10	U	10	U
Methylene Chloride	UG/L	5	U	5	U
Styrene	UG/L	5	U	5	U
1,1,2,2-Tetrachloroethane	UG/L	5	U	5	U
Tetrachloroethene	UG/L	5	U	5	U
Toluene	UG/L	5	U	5	U

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE					
		W40801		W41101	
		502-W40801		502-W41101	
		619934 REG		627030 REG	
		6/20/94		7/19/94	
		Result	Val	Result	Val
Volatile Organics	Units				
1,1,1-Trichloroethane	UG/L	5	U	5	U
1,1,2-Trichloroethane	UG/L	5	U	5	U
Trichloroethene	UG/L	5	U	8	
Trichlorotrifluoroethane	UG/L	5	U	5	U
Vinyl Acetate	UG/L	10	U	10	U
Vinyl Chloride	UG/L	10	U	10	U
Xylene, Total	UG/L	5	U	10	U

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W39901		W40001		W40101		W40201		W40211	
		502-W39901		502-W40001		502-W40101		502-W40201		502-W40211	
		636515 REG		625828 REG		619236 REG		627726 REG		627725 REG	
		8/29/94		7/14/94		6/15/94		7/20/94		07/20/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**										
Acenaphthene	UG/L	10	U	10	U	10	U	10	U	10	U
Acenaphthylene	UG/L	10	U	10	U	10	U	10	U	10	U
Anthracene	UG/L	10	U	10	U	10	U	10	U	10	U
Benzo(a)anthracene	UG/L	10	U	10	U	10	U	10	U	10	U
Benzo(a)pyrene	UG/L	10	U	10	U	10	U	10	U	10	U
Benzo(b)fluoranthene	UG/L	10	U	10	U	10	U	10	U	10	U
Benzo(g,h,i)perylene	UG/L	10	U	10	U	10	U	10	U	10	U
Benzo(k)fluoranthene	UG/L	10	U	10	U	10	U	10	U	10	U
Benzoic Acid	UG/L	50	U	50	U	50	U	50	U	50	U
Benzyl Alcohol	UG/L	10	U	10	U	10	U	10	U	10	U
2-Benzyl-4-Chlorophenol	UG/L	10	U	10	U	10	U	10	U	10	U
bis(2-Chloroethoxy)methane	UG/L	10	U	10	U	10	U	10	U	10	U
bis(2-Chloroethyl)ether	UG/L	10	U	10	U	10	U	10	U	10	U
bis(2-Ethylhexyl)phthalate	UG/L	5	J	6	J	10	U	10	UJ	11	J
4-Bromophenyl-phenylether	UG/L	10	U	10	U	10	U	10	U	10	U
Butylbenzylphthalate	UG/L	10	U	10	U	10	U	10	U	10	U
Carbazole	UG/L	10	U	10	U	10	U	10	U	10	U
4-Chloro-3-methylphenol	UG/L	10	U	10	U	10	U	10	U	10	U
4-Chloroaniline	UG/L	10	U	10	UJ	10	U	10	UJ	10	UJ
2-Chloronaphthalene	UG/L	10	U	10	U	10	U	10	U	10	U
2-Chlorophenol	UG/L	10	U	10	U	10	U	10	U	10	U
4-Chlorophenyl-phenylether	UG/L	10	U	10	U	10	U	10	U	10	U
Chrysene	UG/L	10	U	10	U	10	U	10	U	10	U
Di-n-butylphthalate	UG/L	10	U	10	U	10	U	10	U	10	U
Di-n-octylphthalate	UG/L	10	U	10	U	10	U	10	U	10	U
Dibenzo(a,h)anthracene	UG/L	10	U	10	U	10	U	10	U	10	U
Dibenzofuran	UG/L	10	U	10	U	10	U	10	U	10	U
1,2-Dichlorobenzene	UG/L	10	U	10	U	10	U	10	U	10	U
1,3-Dichlorobenzene	UG/L	10	U	10	U	10	U	10	U	10	U
1,4-Dichlorobenzene	UG/L	10	U	10	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	UG/L	20	U	20	U	20	U	20	U	20	U
2,4-Dichlorophenol	UG/L	10	U	10	U	10	U	10	U	10	U
Diethylphthalate	UG/L	10	U	10	U	10	U	10	U	10	U
2,4-Dimethylphenol	UG/L	10	U	10	U	10	U	10	U	10	U

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W39901		W40001		W40101		W40201		W40211	
		502-W39901		502-W40001		502-W40101		502-W40201		502-W40211	
		636515 REG		625828 REG		619236 REG		627726 REG		627725 REG	
		8/29/94		7/14/94		6/15/94		7/20/94		07/20/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**										
Dimethylphthalate	UG/L	10	U	10	U	10	U	10	U	10	U
4,6-Dinitro-2-methylphenol	UG/L	50	U	50	U	50	U	50	U	50	U
2,4-Dinitrophenol	UG/L	50	U	50	U	50	U	50	U	50	U
2,4-Dinitrotoluene	UG/L	10	U	10	U	10	U	10	U	10	U
2,6-Dinitrotoluene	UG/L	10	U	10	U	10	U	10	U	10	U
Fluoranthene	UG/L	10	U	10	U	10	U	10	U	10	U
Fluorene	UG/L	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	UG/L	10	U	10	U	10	U	10	U	10	U
Hexachlorobutadiene	UG/L	10	U	10	U	10	U	10	U	10	U
Hexachlorocyclopentadiene	UG/L	10	U	10	U	10	U	10	U	10	U
Hexachloroethane	UG/L	10	U	10	U	10	U	10	U	10	U
Indeno(1,2,3-c,d)pyrene	UG/L	10	U	10	U	10	U	10	U	10	U
Isophorone	UG/L	10	U	10	U	10	U	10	U	10	U
2-Methylnaphthalene	UG/L	10	U	10	U	10	U	10	U	10	U
2-Methylphenol	UG/L	10	U	10	U	10	U	10	U	10	U
4-Methylphenol	UG/L	10	U	10	U	10	U	10	U	10	U
N-Nitroso-di-n-propylamine	UG/L	10	U	10	U	10	U	10	U	10	U
N-Nitrosodiphenylamine	UG/L	10	U	10	U	10	U	10	UJ	10	UJ
Naphthalene	UG/L	10	U	10	U	10	U	10	U	10	U
2-Nitroaniline	UG/L	50	U	50	U	50	U	50	U	50	U
3-Nitroaniline	UG/L	50	U	50	U	50	U	50	U	50	U
4-Nitroaniline	UG/L	50	U	50	U	50	U	50	U	50	U
Nitrobenzene	UG/L	10	U	10	U	10	U	10	U	10	U
2-Nitrophenol	UG/L	10	U	10	U	10	U	10	U	10	U
4-Nitrophenol	UG/L	50	UJ	50	U	50	U	50	U	50	U
2,2'-oxybis(1-Chloropropane)	UG/L	10	U	10	U	10	UJ	10	U	10	U
Pentachlorophenol	UG/L	50	U	50	U	50	U	50	U	50	U
Phenanthrene	UG/L	10	U	10	U	10	U	10	U	10	U
Phenol	UG/L	10	U	10	U	10	U	10	UJ	1	J
Pyrene	UG/L	10	U	10	U	10	U	10	U	10	U
1,2,4-Trichlorobenzene	UG/L	10	U	10	U	10	U	10	U	10	U
2,4,5-Trichlorophenol	UG/L	50	U	50	U	50	U	50	U	50	U
2,4,6-Trichlorophenol	UG/L	10	U	10	U	10	U	10	U	10	U
Tentatively Identified Compounds		15		20		12		2		5	

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE					
		W40801		W41101	
		502-W40801		502-W41101	
		619934 REG		627030 REG	
		6/20/94		7/19/94	
		Result	Val	Result	Val
Semi-volatile Organics	Units				
Acenaphthene	UG/L	10	U	10	U
Acenaphthylene	UG/L	10	U	10	U
Anthracene	UG/L	10	U	10	U
Benzo(a)anthracene	UG/L	10	U	10	U
Benzo(a)pyrene	UG/L	10	U	10	U
Benzo(b)fluoranthene	UG/L	10	U	10	U
Benzo(g,h,i)perylene	UG/L	10	U	10	U
Benzo(k)fluoranthene	UG/L	10	U	10	U
Benzoic Acid	UG/L	50	U	50	U
Benzyl Alcohol	UG/L	10	U	10	U
2-Benzyl-4-Chlorophenol	UG/L	10	U	10	U
bis(2-Chloroethoxy)methane	UG/L	10	U	10	U
bis(2-Chloroethyl)ether	UG/L	10	U	10	U
bis(2-Ethylhexyl)phthalate	UG/L	3	J	2	J
4-Bromophenyl-phenylether	UG/L	10	U	10	U
Butylbenzylphthalate	UG/L	10	U	10	U
Carbazole	UG/L	10	U	10	U
4-Chloro-3-methylphenol	UG/L	10	U	10	U
4-Chloroaniline	UG/L	10	U	10	UJ
2-Chloronaphthalene	UG/L	10	U	10	U
2-Chlorophenol	UG/L	10	U	10	U
4-Chlorophenyl-phenylether	UG/L	10	U	10	U
Chrysene	UG/L	10	U	10	U
Di-n-butylphthalate	UG/L	10	U	10	U
Di-n-octylphthalate	UG/L	10	U	10	U
Dibenzo(a,h)anthracene	UG/L	10	U	10	U
Dibenzofuran	UG/L	10	U	10	U
1,2-Dichlorobenzene	UG/L	10	U	10	U
1,3-Dichlorobenzene	UG/L	10	U	10	U
1,4-Dichlorobenzene	UG/L	10	U	10	U
3,3'-Dichlorobenzidine	UG/L	20	U	20	U
2,4-Dichlorophenol	UG/L	10	U	10	U
Diethylphthalate	UG/L	10	U	10	U
2,4-Dimethylphenol	UG/L	10	U	10	U

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE					
		W40801		W41101	
		502-W40801		502-W41101	
		619934 REG		627030 REG	
		6/20/94		7/19/94	
		Result	Val	Result	Val
Semi-volatile Organics	Units				
Dimethylphthalate	UG/L	10	U	10	U
4,6-Dinitro-2-methylphenol	UG/L	50	U	50	U
2,4-Dinitrophenol	UG/L	50	U	50	U
2,4-Dinitrotoluene	UG/L	10	U	10	U
2,6-Dinitrotoluene	UG/L	10	U	10	U
Fluoranthene	UG/L	10	U	10	U
Fluorene	UG/L	10	U	10	U
Hexachlorobenzene	UG/L	10	U	10	U
Hexachlorobutadiene	UG/L	10	U	10	U
Hexachlorocyclopentadiene	UG/L	10	U	10	U
Hexachloroethane	UG/L	10	U	10	U
Indeno(1,2,3-c,d)pyrene	UG/L	10	U	10	U
Isophorone	UG/L	10	U	10	U
2-Methylnaphthalene	UG/L	10	U	10	U
2-Methylphenol	UG/L	10	U	10	U
4-Methylphenol	UG/L	10	U	10	U
N-Nitroso-di-n-propylamine	UG/L	10	U	10	U
N-Nitrosodiphenylamine	UG/L	10	U	10	U
Naphthalene	UG/L	10	U	10	U
2-Nitroaniline	UG/L	50	U	50	U
3-Nitroaniline	UG/L	50	U	50	U
4-Nitroaniline	UG/L	50	U	50	U
Nitrobenzene	UG/L	10	U	10	U
2-Nitrophenol	UG/L	10	U	10	U
4-Nitrophenol	UG/L	50	U	50	U
2,2'-oxybis(1-Chloropropane)	UG/L	10	UJ	10	U
Pentachlorophenol	UG/L	50	U	50	U
Phenanthrene	UG/L	10	U	10	U
Phenol	UG/L	10	U	1	J
Pyrene	UG/L	10	U	10	U
1,2,4-Trichlorobenzene	UG/L	10	U	10	U
2,4,5-Trichlorophenol	UG/L	50	U	50	U
2,4,6-Trichlorophenol	UG/L	10	U	10	U
Tentatively Identified Compounds		6		11	

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W39901		W40001		W40101		W40201		W40211	
		502-W39901		502-W40001		502-W40101		502-W40201		502-W40211	
		636521 REG		625833 REG		619266 REG		627747 REG		627746 REG	
		8/29/94		7/14/94		6/15/94		7/20/94		07/20/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/L	488		65.3		113		156		157	
Fluoride	MG/L	1.04		0.193	J	0.31		0.16	J	0.201	
Nitrate-Nitrite-N	MG/L	NA		0.552		0.56	J	0.648		0.536	
Sulfate	MG/L	399		29.8		43.7		70		71.5	

		W40801		W41101	
		502-W40801		502-W41101	
		619936 REG		REG	
		6/20/94		7/19/94	
		Result	Val	Result	Val
Anions	Units				
Chloride	MG/L	42.7		232	
Fluoride	MG/L	0.201	J	0.393	
Nitrate-Nitrite-N	MG/L	0.53	J	0.339	
Sulfate	MG/L	42.6		62.2	

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New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W40001		W40101		W40201		W40211		W40801	
		502-W40001		502-W40101		502-W40201		502-W40211		502-W40801	
		625831 REG		619265 REG		627741 REG		627730 REG		619954 REG	
		7/14/94		6/15/94		7/20/94		07/20/94DUPE		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	**Units**										
2-Amino-4,6-dinitrotoluene	UG/L	3	UJ	3.6	U	3	UJ	3	UJ	3	U
1,3-Dinitrobenzene	UG/L	15	U	18	U	15	UJ	15	UJ	15	U
2,4-Dinitrotoluene	UG/L	0.5	UJ	0.6	U	0.5	UJ	0.5	UJ	0.5	U
2,6-Dinitrotoluene	UG/L	0.5	U	0.6	U	0.5	UJ	0.5	UJ	0.5	U
HMX	UG/L	20	U	24	U	20	UJ	20	UJ	20	U
Nitrobenzene	UG/L	15	U	18	U	15	UJ	15	UJ	15	U
PETN	UG/L	1	R	1	R	1	R	1	R	1	R
RDX	UG/L	6	UJ	7.2	U	6	UJ	6	UJ	6	U
Tetryl	UG/L	3	U	3.6	U	3	UJ	3	UJ	3	U
1,3,5-Trinitrobenzene	UG/L	15	U	18	U	15	UJ	15	UJ	15	U
2,4,6-Trinitrotoluene	UG/L	0.76	J	3.6	U	3	UJ	3	UJ	3	U

		W41101	
		502-W41101	
		627033 REG	
		7/19/94	
		Result	Val
EXPLOSIVES	**Units**		
2-Amino-4,6-dinitrotoluene	UG/L	3	UJ
1,3-Dinitrobenzene	UG/L	15	U
2,4-Dinitrotoluene	UG/L	0.5	UJ
2,6-Dinitrotoluene	UG/L	0.5	U
HMX	UG/L	20	U
Nitrobenzene	UG/L	15	U
PETN	UG/L	1	R
RDX	UG/L	6	UJ
Tetryl	UG/L	3	U
1,3,5-Trinitrobenzene	UG/L	15	U
2,4,6-Trinitrotoluene	UG/L	0.26	J

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W39901		W40001		W40101		W40201		W40211	
		502-W39901		502-W40001		502-W40101		502-W40201		502-W40211	
		WATER63651 REG		625832 REG		619240 REG		627729 REG		627728 REG	
		8/29/94		7/14/94		6/15/94		7/20/94		07/20/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**										
Aluminum	UG/L	1130	J	4810		40200		9950		2160	
Antimony	UG/L	2.3		1.2	U	55.9	UJ	1.2	U	1.2	U
Arsenic	UG/L	5.7	U	7	U	9.9	J	8.7	U	4	U
Barium	UG/L	46.9	J	133	J	240	J	102	J	76.1	J
Beryllium	UG/L	0.1	U	0.61	U	2.6	U	0.64	U	0.4	U
Bismuth	UG/L	62.4	U	193		688	J	147		111	
Cadmium	UG/L	0.3	U	1	U	4.6	UJ	0.55	U	0.52	U
Calcium	UG/L	111000		420000		703000		179000		149000	
Chromium	UG/L	309		10.7	U	111	J	16.1	U	9.2	U
Cobalt	UG/L	8.3		6.9		45.8	UJ	7		3.5	U
Copper	UG/L	8.3		26.9	J	160		11	U	1.6	U
Cyanide	UG/L	NA		10	U	10	U	10	U	10	U
Iron	UG/L	2840		4950		136000	J	10300		2530	
Lead	UG/L	1.1	U	8.5	J	80.7		6	J	1.1	R
Lithium	UG/L	NA		8.4		70.1		12.6		3.9	
Magnesium	UG/L	63200		86100	J	242000	J	55600	J	45400	J
Manganese	UG/L	220		1010	J	2190	J	317	J	111	J
Mercury	UG/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Molybdenum	UG/L	NA		NA		168		NA		NA	
Nickel	UG/L	394		18.4	J	122	J	7.4	J	0.8	R
Potassium	UG/L	65000		7550	J	10800		7410	J	4030	J
Selenium	UG/L	2.8	U	2.9	U	39	R	2.9	U	2.9	U
Silver	UG/L	0.4	U	0.5	U	3.6	UJ	0.5	U	0.5	U
Sodium	UG/L	423000		24800		42400		42200		42900	
Thallium	UG/L	3.6		12.3	U	2.6	UJ	11.1	U	9.5	U
Tin	UG/L	NA		47	UJ	47	U	47	UJ	47	UJ
Vanadium	UG/L	2.5		4.7		84.4	J	15		4.1	
Zinc	UG/L	109	J	261		413	J	67.9		30.3	

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE					
		W40801		W41101	
		502-W40801		502-W41101	
		620195 REG		627037 REG	
		6/20/94		7/19/94	
		Result	Val	Result	Val
Inorganics	Units				
Aluminum	UG/L	58800		31500	
Antimony	UG/L	55.9	UJ	1.2	U
Arsenic	UG/L	472	J	7	U
Barium	UG/L	552	J	95	J
Beryllium	UG/L	3.9	U	1.5	U
Bismuth	UG/L	1460	J	264	
Cadmium	UG/L	4.6	UJ	0.4	U
Calcium	UG/L	1760000		255000	J
Chromium	UG/L	164	J	49.6	U
Cobalt	UG/L	126	J	18.2	
Copper	UG/L	485		0.3	U
Cyanide	UG/L	10	U	10	U
Iron	UG/L	470000	J	31500	
Lead	UG/L	148		6.7	J
Lithium	UG/L	NA		132	
Magnesium	UG/L	462000	J	81900	J
Manganese	UG/L	7000	J	1120	J
Mercury	UG/L	0.4		0.2	U
Molybdenum	UG/L	NA		NA	
Nickel	UG/L	322	J	32.9	J
Potassium	UG/L	13300		28400	J
Selenium	UG/L	39	R	2.9	U
Silver	UG/L	3.6	UJ	0.5	U
Sodium	UG/L	18900		59200	
Thallium	UG/L	2.6	UJ	10.8	U
Tin	UG/L	NA		47	UJ
Vanadium	UG/L	138	J	29.1	
Zinc	UG/L	1140	J	83	

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W40001		W40101		W40201		W40211		W40801	
		502-W40001		502-W40101		502-W40201		502-W40211		502-W40801	
		625828 REG		619236 REG		627726 REG		627725 REG		619934 REG	
		7/14/94		6/15/94		7/20/94		07/20/94DUPE		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**										
Aldrin	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
alpha-BHC	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
alpha-Chlordane	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
Aroclor-1016	UG/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Aroclor-1221	UG/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Aroclor-1232	UG/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Aroclor-1242	UG/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Aroclor-1248	UG/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Aroclor-1254	UG/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Aroclor-1260	UG/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
beta-BHC	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
4,4'-DDD	UG/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
4,4'-DDE	UG/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
4,4'-DDT	UG/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
delta-BHC	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
Dieldrin	UG/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
Endosulfan I	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
Endosulfan II	UG/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
Endosulfan Sulfate	UG/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
Endrin	UG/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
Endrin Aldehyde	UG/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
Endrin Ketone	UG/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
gamma-BHC (Lindane)	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
gamma-Chlordane	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
Heptachlor	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
Heptachlor Epoxide	UG/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
p,p'-Methoxychlor	UG/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Toxaphene	UG/L	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE			
		W41101	
		502-W41101	
		627030 REG	
		7/19/94	
		Result	Val
Pesticides and PCBs	**Units**		
Aldrin	UG/L	0.05	UJ
alpha-BHC	UG/L	0.05	UJ
alpha-Chlordane	UG/L	0.05	UJ
Aroclor-1016	UG/L	0.5	UJ
Aroclor-1221	UG/L	0.5	UJ
Aroclor-1232	UG/L	0.5	UJ
Aroclor-1242	UG/L	0.5	UJ
Aroclor-1248	UG/L	0.5	UJ
Aroclor-1254	UG/L	0.5	UJ
Aroclor-1260	UG/L	0.5	UJ
beta-BHC	UG/L	0.05	UJ
4,4'-DDD	UG/L	0.1	UJ
4,4'-DDE	UG/L	0.1	UJ
4,4'-DDT	UG/L	0.1	UJ
delta-BHC	UG/L	0.05	UJ
Dieldrin	UG/L	0.1	UJ
Endosulfan I	UG/L	0.05	UJ
Endosulfan II	UG/L	0.1	UJ
Endosulfan Sulfate	UG/L	0.1	UJ
Endrin	UG/L	0.1	UJ
Endrin Aldehyde	UG/L	0.1	UJ
Endrin Ketone	UG/L	0.1	UJ
gamma-BHC (Lindane)	UG/L	0.05	UJ
gamma-Chlordane	UG/L	0.05	UJ
Heptachlor	UG/L	0.05	UJ
Heptachlor Epoxide	UG/L	0.05	UJ
p,p'-Methoxychlor	UG/L	0.5	UJ
Toxaphene	UG/L	5	UJ

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W39901		W40001		W40201		W40211		W41101	
		502-W39901		502-W40001		502-W40201		502-W40211		502-W41101	
		636521 REG		REG		627743 REG		REG		627051 REG	
		8/29/94		7/14/94		7/20/94		07/20/94DUPE		7/19/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Miscellaneous	Units										
Alkalinity	MG/L	NA		247		312		320		335	
Dissolved Solids	MG/L	NA		499		908		946		1100	
Kjeldahl Nitrogen	MG/L	NA		0.153	J	0.244	J	0.264	J	0.797	J
Suspended Solids	MG/L	138		4680		47		430		97	
Total Phosphorus	MG/L	NA		0.331		0.136		0.213		0.236	

		W40101		W40801	
		502-W40101		502-W40801	
		619272 REG		619948 REG	
		6/15/94		6/20/94	
		Result	Val	Result	Val
Miscellaneous	Units				
Alkalinity	MG/L	NA		NA	
Dissolved Solids	MG/L	516		431	
Kjeldahl Nitrogen	MG/L	0.368	J	0.369	J
Suspended Solids	MG/L	6170		19400	
Total Phosphorus	MG/L	0.666	J	0.1	U

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		W40001		W40101		W40201		W40211		W40801	
		502-W40001		502-W40101		502-W40201		502-W40211		502-W40801	
		625866 REG		619264 REG		627742 REG		627742 REG		619953 REG	
		7/14/94		6/15/94		7/20/94		07/20/94DUPE		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Total Organic Carbon	Units										
Organic Carbon	MG/L	3.14		2.72		1.77		2.18		2.96	
Organic Carbon	MG/L	3.31		2.78		2		2.12		2.93	
Organic Carbon	MG/L	3.12		2.78		1.74		2.12		2.74	
Organic Carbon	MG/L	3		2.7		1.81		2.03		2.98	

		W41101	
		502-W41101	
		627035 REG	
		7/19/94	
		Result	Val
Total Organic Carbon	Units		
Organic Carbon	MG/L	2.15	
Organic Carbon	MG/L	2.32	
Organic Carbon	MG/L	2.32	
Organic Carbon	MG/L	2.34	

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE																
		W39901			W40001			W40101			W40201			W40211		
		502-W39901			502-W40001			502-W40101			502-W40201			502-W40211		
		636533 REG			625869 REG			619852 REG			627766 REG			627772 REG		
		8/29/94			7/14/94			6/15/94			7/20/94			07/20/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Ac-227	PCI/L	38.65+/-	N/A	U	36.62+/-	NA	U	38.53+/-	NA	U	36.43	NA	U	36	NA	U
Am-241	PCI/L	0.13+/-	0.15	U	0.27+/-	0.25		0.54+/-	0.75	UJ	0.13+/-	0.09	J	0.19+/-	0.36	UJ
Bi-207	PCI/L	6.87+/-	N/A	U	6.54+/-	NA	U	6.62+/-	NA	U	6.54+/-	NA	U	6.34	NA	U
Bi-210m	PCI/L	10.82+/-	N/A	U	9.83+/-	NA	U	10.32+/-	NA	U	9.88+/-	NA	U	9.79	NA	U
Co-60	PCI/L	6.66+/-	N/A	U	6.55+/-	NA	U	7.36+/-	NA	U	6.39+/-	NA	U	6.56	NA	U
Cs-137	PCI/L	7.33+/-	N/A	U	6.86+/-	NA	U	7.34+/-	NA	U	7.3+/-	NA	U	7.17	NA	U
K-40	PCI/L	190.84+/-	N/A	U	101.2+/-	118.9	U	174.97+/-	NA	U	37.87+/-	118.8	U	82.49+/-	124.2	U
Pu-238	PCI/L	0.00+/-	0.18	UJ	0.03+/-	0.37	UJ	0.00+/-	0.29	UJ	-0.03+/-	0.19	U	0.03+/-	0.22	U
Pu-239/40	PCI/L	0.02+/-	0.08	UJ	-0.03+/-	0.14	UJ	-0.04+/-	0.17	UJ	-0.02+/-	0.08	U	-0.18+/-	0.3	U
Ra-226	PCI/L	1.08+/-	0.21	J	0.51+/-	0.16	J	1.22+/-	0.18	J	0.41+/-	0.14	J	0.83+/-	0.16	J
Sr-90	PCI/L	0.60+/-	2.16	U	0.35+/-	3.02	UJ	-3.30+/-	4.07	UJ	-1.27+/-	2.42	U	-1.03+/-	1.95	U
Th-228	PCI/L	0.73+/-	0.29	U	1.13+/-	0.28	U	0.88+/-	0.33	UJ	1.22+/-	0.24	U	1.31+/-	0.32	UJ
Th-230	PCI/L	0.21+/-	0.16	U	0.14+/-	0.1		0.21+/-	0.2	J	0.20+/-	0.09	UJ	0.69+/-	0.23	J
Th-232	PCI/L	0.22+/-	0.16		0.01+/-	0.07	U	0.15+/-	0.14	J	0.02+/-	0.05	UJ	0.07+/-	0.08	UJ
Tritium	PCI/L	-8.2+/-	288.5	U	590.2+/-	345.7		210.4+/-	255.9	U	1673.3+/-	393		1591.5+/-	391.4	
U-234	PCI/L	3.23+/-	0.62	J	0.61+/-	0.23	J	0.43+/-	0.16	J	0.91+/-	0.33	J	0.75+/-	0.27	J
U-235	PCI/L	0.36+/-	0.19	J	0.14+/-	0.14	J	0.04+/-	0.07	U	0.15+/-	0.13		0.15+/-	0.12	
U-238	PCI/L	1.02+/-	0.33	J	0.53+/-	0.22	J	0.19+/-	0.1		0.50+/-	0.24		0.47+/-	0.21	

APPENDIX E.2 Radiological and Chemical Analytical Groundwater Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE							
		W40801			W41101		
		502-W40801			502-W41101		
		619910 REG			627137 REG		
		6/20/94			7/19/94		
		Result	UNC	Val	Result	UNC	Val
Radiological	Units						
Ac-227	PCI/L	36.66+/-	NA	U	40.16	NA	U
Am-241	PCI/L	0.47+/-	0.44	J	0.44+/-	0.53	UJ
Bi-207	PCI/L	6.50+/-	NA	U	7.03+/-	NA	U
Bi-210m	PCI/L	9.67+/-	NA	U	10.33+/-	NA	U
Co-60	PCI/L	6.44+/-	NA	U	7.07+/-	NA	U
Cs-137	PCI/L	7.24+/-	NA	U	8.11+/-	NA	U
K-40	PCI/L	190.63+/-	NA	U	114.5+/-	138	U
Pu-238	PCI/L	-0.04+/-	0.25	UJ	0.00+/-	0.31	U
Pu-239/40	PCI/L	0.02+/-	0.15	UJ	-0.31+/-	0.41	U
Ra-226	PCI/L	1.22+/-	0.19	J	0.57+/-	0.16	J
Sr-90	PCI/L	2.45+/-	4.14	UJ	2.96+/-	2.35	U
Th-228	PCI/L	0.65+/-	0.31	U	1.38+/-	0.52	UJ
Th-230	PCI/L	0.43+/-	0.22	J	1.17+/-	0.47	J
Th-232	PCI/L	0.35+/-	0.2		0.39+/-	0.27	J
Tritium	PCI/L	313.7+/-	238.4	U	771.6+/-	346.3	
U-234	PCI/L	0.94+/-	0.24	J	0.13+/-	0.1	J
U-235	PCI/L	0.07+/-	0.07		-0.02+/-	0.07	U
U-238	PCI/L	1.12+/-	0.27		0.05+/-	0.07	U

APPENDIX E.3
RADIOLOGICAL AND CHEMICAL ANALYTICAL SEDIMENT DATA

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0101		SD0201		SD0301		SD0401		SD0501	
		502-SD0101		502-SD0201		502-SD0301		502-SD0401		502-SD0501	
		624618 REG		624608 REG		624736 REG		624960 REG		624967 REG	
		7/11/94		7/11/94		7/11/94		7/12/94		7/12/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	410	U	470	U	410	U	410	U	390	U
Acenaphthylene	UG/KG	410	U	470	U	410	U	410	U	390	U
Anthracene	UG/KG	410	U	470	U	410	U	410	U	390	U
Benzo(a)anthracene	UG/KG	44	J	48	J	410	U	130	J	390	U
Benzo(a)pyrene	UG/KG	410	U	470	U	410	U	130	J	390	U
Benzo(b)fluoranthene	UG/KG	130	J	120	J	34	J	230	J	69	J
Benzo(g,h,i)perylene	UG/KG	410	U	470	U	410	U	41	J	390	U
Benzo(k)fluoranthene	UG/KG	210	J	200	J	63	J	440		130	J
Benzoic Acid	UG/KG	2000	U	2300	U	2000	U	2000	U	1900	U
Benzyl Alcohol	UG/KG	410	U	470	U	410	U	410	U	390	U
2-Benzyl-4-Chlorophenol	UG/KG	410	U	470	U	410	U	410	U	390	U
bis(2-Chloroethoxy)methane	UG/KG	410	U	470	U	410	U	410	U	390	U
bis(2-Chloroethyl)ether	UG/KG	410	U	470	U	410	U	410	U	390	U
bis(2-Ethylhexyl)phthalate	UG/KG	410	U	470	U	410	U	410	U	390	U
4-Bromophenyl-phenylether	UG/KG	410	U	470	U	410	U	410	U	390	U
Butylbenzylphthalate	UG/KG	410	U	470	U	410	U	410	U	390	U
Carbazole	UG/KG	410	U	470	U	410	U	410	U	390	U
4-Chloro-3-methylphenol	UG/KG	410	U	470	U	410	U	410	U	390	U
4-Chloroaniline	UG/KG	410	UJ	470	UJ	410	UJ	410	UJ	390	UJ
2-Chloronaphthalene	UG/KG	410	U	470	U	410	U	410	U	390	U
2-Chlorophenol	UG/KG	410	U	470	U	410	U	410	U	390	U
4-Chlorophenyl-phenylether	UG/KG	410	U	470	U	410	U	410	U	390	U
Chrysene	UG/KG	51	J	51	J	410	U	110	J	390	U
Di-n-butylphthalate	UG/KG	410	U	470	U	410	U	410	U	47	J
Di-n-octylphthalate	UG/KG	410	U	470	U	410	U	410	U	390	U
Dibenzo(a,h)anthracene	UG/KG	410	U	470	U	410	U	410	U	390	U
Dibenzofuran	UG/KG	410	U	470	U	410	U	410	U	390	U
1,2-Dichlorobenzene	UG/KG	410	U	470	U	410	U	410	U	390	U
1,3-Dichlorobenzene	UG/KG	410	U	470	U	410	U	410	U	390	U
1,4-Dichlorobenzene	UG/KG	410	U	470	U	410	U	410	U	390	U
3,3'-Dichlorobenzidine	UG/KG	810	U	930	U	830	U	810	U	770	U
2,4-Dichlorophenol	UG/KG	410	U	470	U	410	U	410	U	390	U
Diethylphthalate	UG/KG	410	U	470	U	410	U	410	U	390	U
2,4-Dimethylphenol	UG/KG	410	U	470	U	410	U	410	U	390	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0101		SD0201		SD0301		SD0401		SD0501	
		502-SD0101		502-SD0201		502-SD0301		502-SD0401		502-SD0501	
		624618 REG		624608 REG		624736 REG		624960 REG		624967 REG	
		7/11/94		7/11/94		7/11/94		7/12/94		7/12/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	410	U	470	U	410	U	410	U	390	U
4,6-Dinitro-2-methylphenol	UG/KG	2000	U	2300	U	2000	U	2000	U	1900	U
2,4-Dinitrophenol	UG/KG	2000	U	2300	U	2000	U	2000	U	1900	U
2,4-Dinitrotoluene	UG/KG	410	U	470	U	410	U	410	U	390	U
2,6-Dinitrotoluene	UG/KG	410	U	470	U	410	U	410	U	390	U
Fluoranthene	UG/KG	97	J	98	J	410	U	260	J	64	J
Fluorene	UG/KG	410	U	470	U	410	U	410	U	390	U
Hexachlorobenzene	UG/KG	410	U	470	U	410	U	410	U	390	U
Hexachlorobutadiene	UG/KG	410	U	470	U	410	U	410	U	390	U
Hexachlorocyclopentadiene	UG/KG	410	U	470	U	410	U	410	U	390	U
Hexachloroethane	UG/KG	410	U	470	U	410	U	410	U	390	U
Indeno(1,2,3-c,d)pyrene	UG/KG	410	U	470	U	410	U	49	J	390	U
Isophorone	UG/KG	410	U	470	U	410	U	410	U	390	U
2-Methylnaphthalene	UG/KG	410	U	470	U	410	U	410	U	390	U
2-Methylphenol	UG/KG	410	U	470	U	410	U	410	U	390	U
4-Methylphenol	UG/KG	410	U	470	U	410	U	410	U	390	U
N-Nitroso-di-n-propylamine	UG/KG	410	U	470	U	410	U	410	U	390	U
N-Nitrosodiphenylamine	UG/KG	410	UJ	470	UJ	410	UJ	410	UJ	390	UJ
Naphthalene	UG/KG	410	U	470	U	410	U	410	U	390	U
2-Nitroaniline	UG/KG	2000	U	2300	U	2000	U	2000	U	1900	U
3-Nitroaniline	UG/KG	2000	U	2300	U	2000	U	2000	U	1900	U
4-Nitroaniline	UG/KG	2000	U	2300	U	2000	U	2000	U	1900	U
Nitrobenzene	UG/KG	410	U	470	U	410	U	410	U	390	U
2-Nitrophenol	UG/KG	410	U	470	U	410	U	410	U	390	U
4-Nitrophenol	UG/KG	2000	U	2300	U	2000	U	2000	U	1900	U
2,2'-oxybis(1-Chloropropane)	UG/KG	410	U	470	U	410	U	410	U	390	U
Pentachlorophenol	UG/KG	2000	U	2300	U	2000	U	2000	U	1900	U
Phenanthrene	UG/KG	47	J	48	J	410	U	170	J	390	U
Phenol	UG/KG	410	U	470	U	410	U	410	U	390	U
Pyrene	UG/KG	60	J	62	J	410	U	190	J	50	J
1,2,4-Trichlorobenzene	UG/KG	410	U	470	U	410	U	410	U	390	U
2,4,5-Trichlorophenol	UG/KG	2000	U	2300	U	2000	U	2000	U	1900	U
2,4,6-Trichlorophenol	UG/KG	410	U	470	U	410	U	410	U	390	U
Tentatively Identified Compounds		23		24		20		17		25	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		SD0601		SD0701		SD0801		SD0901		SD0911	
		502-SD0601		502-SD0701		502-SD0801		502-SD0901		502-SD0911	
		623403 REG		623057 REG		623071 REG		624049 REG		624084 REG	
		7/6/94		7/5/94		7/5/94		7/7/94		07/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	420	U	400	U	400	U	420	U	460	U
Acenaphthylene	UG/KG	420	U	400	U	400	U	420	U	460	U
Anthracene	UG/KG	420	U	400	U	400	U	420	U	460	U
Benzo(a)anthracene	UG/KG	420	U	400	U	400	U	98	J	130	J
Benzo(a)pyrene	UG/KG	420	U	400	U	400	U	100	J	150	J
Benzo(b)fluoranthene	UG/KG	63	J	400	U	400	U	220	J	250	J
Benzo(g,h,i)perylene	UG/KG	420	U	400	U	400	U	420	U	55	J
Benzo(k)fluoranthene	UG/KG	130	J	400	U	400	U	380	J	470	
Benzoic Acid	UG/KG	86	J	1900	U	2000	U	2000	U	71	J
Benzyl Alcohol	UG/KG	420	U	400	U	400	U	420	U	460	U
2-Benzyl-4-Chlorophenol	UG/KG	420	U	400	U	400	U	420	U	460	U
bis(2-Chloroethoxy)methane	UG/KG	420	U	400	U	400	U	420	U	460	U
bis(2-Chloroethyl)ether	UG/KG	420	U	400	U	400	U	420	U	460	U
bis(2-Ethylhexyl)phthalate	UG/KG	420	U	400	U	400	U	81	J	460	U
4-Bromophenyl-phenylether	UG/KG	420	U	400	U	400	U	420	U	460	U
Butylbenzylphthalate	UG/KG	420	U	400	U	400	U	420	U	460	U
Carbazole	UG/KG	420	U	400	U	400	U	420	U	460	U
4-Chloro-3-methylphenol	UG/KG	420	U	400	U	400	U	420	U	460	U
4-Chloroaniline	UG/KG	420	U	400	U	400	U	420	UJ	460	UJ
2-Chloronaphthalene	UG/KG	420	U	400	U	400	U	420	U	460	U
2-Chlorophenol	UG/KG	420	U	400	U	400	U	420	U	460	U
4-Chlorophenyl-phenylether	UG/KG	420	U	400	U	400	U	420	U	460	U
Chrysene	UG/KG	43	J	400	U	400	U	92	J	140	J
Di-n-butylphthalate	UG/KG	420	U	400	U	400	U	420	U	460	U
Di-n-octylphthalate	UG/KG	420	U	400	U	400	U	420	U	460	U
Dibenzo(a,h)anthracene	UG/KG	420	U	400	U	400	U	420	U	460	U
Dibenzofuran	UG/KG	420	U	400	U	400	U	420	U	460	U
1,2-Dichlorobenzene	UG/KG	420	U	400	U	400	U	420	U	460	U
1,3-Dichlorobenzene	UG/KG	420	U	400	U	400	U	420	U	460	U
1,4-Dichlorobenzene	UG/KG	420	U	400	U	400	U	420	U	460	U
3,3'-Dichlorobenzidine	UG/KG	420	U	790	U	810	U	840	U	920	U
2,4-Dichlorophenol	UG/KG	420	U	400	U	400	U	420	U	460	U
Diethylphthalate	UG/KG	420	U	400	U	400	U	420	U	460	U
2,4-Dimethylphenol	UG/KG	420	U	400	U	400	U	420	U	460	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0601		SD0701		SD0801		SD0901		SD0911	
		502-SD0601		502-SD0701		502-SD0801		502-SD0901		502-SD0911	
		623403 REG		623057 REG		623071 REG		624049 REG		624084 REG	
		7/6/94		7/5/94		7/5/94		7/7/94		07/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	420	U	400	U	400	U	420	U	460	U
4,6-Dinitro-2-methylphenol	UG/KG	1100	U	1900	U	2000	U	2000	U	2200	U
2,4-Dinitrophenol	UG/KG	1100	U	1900	U	2000	U	2000	U	2200	U
2,4-Dinitrotoluene	UG/KG	420	U	400	U	400	U	420	U	460	U
2,6-Dinitrotoluene	UG/KG	420	U	400	U	400	U	420	U	460	U
Fluoranthene	UG/KG	59	J	400	U	400	U	150	J	280	J
Fluorene	UG/KG	420	U	400	U	400	U	420	U	460	U
Hexachlorobenzene	UG/KG	420	U	400	U	400	U	420	U	460	U
Hexachlorobutadiene	UG/KG	420	U	400	U	400	U	420	U	460	U
Hexachlorocyclopentadiene	UG/KG	420	U	400	U	400	U	420	U	460	U
Hexachloroethane	UG/KG	420	U	400	U	400	U	420	U	460	U
Indeno(1,2,3-c,d)pyrene	UG/KG	420	U	400	U	400	U	420	U	67	J
Isophorone	UG/KG	420	U	400	U	400	U	420	U	460	U
2-Methylnaphthalene	UG/KG	420	U	400	U	400	U	420	U	460	U
2-Methylphenol	UG/KG	420	U	400	U	400	U	420	U	460	U
4-Methylphenol	UG/KG	420	U	400	U	400	U	420	U	460	U
N-Nitroso-di-n-propylamine	UG/KG	420	U	400	U	400	U	420	U	460	U
N-Nitrosodiphenylamine	UG/KG	420	U	400	U	400	U	420	UJ	460	UJ
Naphthalene	UG/KG	420	U	400	U	400	U	420	U	460	U
2-Nitroaniline	UG/KG	1100	U	1900	U	2000	U	2000	U	2200	U
3-Nitroaniline	UG/KG	1100	U	1900	U	2000	U	2000	U	2200	U
4-Nitroaniline	UG/KG	1100	U	1900	U	2000	U	2000	U	2200	U
Nitrobenzene	UG/KG	420	U	400	U	400	U	420	U	460	U
2-Nitrophenol	UG/KG	420	U	400	U	400	U	420	U	460	U
4-Nitrophenol	UG/KG	1100	U	1900	U	2000	U	2000	U	2200	U
2,2'-oxybis(1-Chloropropane)	UG/KG	420	U	400	U	400	U	420	U	460	U
Pentachlorophenol	UG/KG	1100	U	1900	U	2000	U	2000	U	2200	U
Phenanthrene	UG/KG	420	U	400	U	400	U	88	J	260	J
Phenol	UG/KG	420	U	400	U	400	U	420	U	460	U
Pyrene	UG/KG	51	J	400	U	400	U	130	J	230	J
1,2,4-Trichlorobenzene	UG/KG	420	U	400	U	400	U	420	U	460	U
2,4,5-Trichlorophenol	UG/KG	1100	U	1900	U	2000	U	2000	U	2200	U
2,4,6-Trichlorophenol	UG/KG	420	U	400	U	400	U	420	U	460	U
Tentatively Identified Compounds		25		16		18		17		21	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1001		SD1101		SD1201		SD1301		SD1311	
		502-SD1001		502-SD1101		502-SD1201		502-SD1301		502-SD1311	
		624149 REG		624066 REG		623402 REG		623404 REG		623405 REG	
		7/7/94		7/7/94		7/6/94		7/6/94		07/06/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	410	U	420	U	380	U	410	U	390	U
Acenaphthylene	UG/KG	410	U	420	U	380	U	410	U	390	U
Anthracene	UG/KG	410	U	420	U	380	U	410	U	390	U
Benzo(a)anthracene	UG/KG	410	U	420	U	380	U	410	U	390	U
Benzo(a)pyrene	UG/KG	410	U	420	U	380	U	410	U	390	U
Benzo(b)fluoranthene	UG/KG	410	U	62	J	380	U	48	J	58	J
Benzo(g,h,i)perylene	UG/KG	410	U	420	U	380	U	410	U	390	U
Benzo(k)fluoranthene	UG/KG	410	U	100	J	380	U	98	J	86	J
Benzoic Acid	UG/KG	2000	U	2100	U	1900	U	43	J	1900	U
Benzyl Alcohol	UG/KG	410	U	420	U	380	U	410	U	390	U
2-Benzyl-4-Chlorophenol	UG/KG	410	U	420	U	380	U	410	U	390	U
bis(2-Chloroethoxy)methane	UG/KG	410	U	420	U	380	U	410	U	390	U
bis(2-Chloroethyl)ether	UG/KG	410	U	420	U	380	U	410	U	390	U
bis(2-Ethylhexyl)phthalate	UG/KG	410	U	420	U	380	U	410	U	390	U
4-Bromophenyl-phenylether	UG/KG	410	U	420	U	380	U	410	U	390	U
Butylbenzylphthalate	UG/KG	410	U	420	U	380	U	410	U	390	U
Carbazole	UG/KG	410	U	420	U	380	U	410	U	390	U
4-Chloro-3-methylphenol	UG/KG	410	U	420	U	380	U	410	U	390	U
4-Chloroaniline	UG/KG	410	UJ	420	UJ	380	U	410	U	390	UJ
2-Chloronaphthalene	UG/KG	410	U	420	U	380	U	410	U	390	U
2-Chlorophenol	UG/KG	410	U	420	U	380	U	410	U	390	U
4-Chlorophenyl-phenylether	UG/KG	410	U	420	U	380	U	410	U	390	U
Chrysene	UG/KG	410	U	420	U	380	U	410	U	390	U
Di-n-butylphthalate	UG/KG	410	U	420	U	380	U	410	U	390	U
Di-n-octylphthalate	UG/KG	410	U	420	U	380	U	410	U	390	U
Dibenzo(a,h)anthracene	UG/KG	410	U	420	U	380	U	410	U	390	U
Dibenzofuran	UG/KG	410	U	420	U	380	U	410	U	390	U
1,2-Dichlorobenzene	UG/KG	410	U	420	U	380	U	410	U	390	U
1,3-Dichlorobenzene	UG/KG	410	U	420	U	380	U	410	U	390	U
1,4-Dichlorobenzene	UG/KG	410	U	420	U	380	U	410	U	390	U
3,3'-Dichlorobenzidine	UG/KG	810	U	850	U	380	U	410	U	790	U
2,4-Dichlorophenol	UG/KG	410	U	420	U	380	U	410	U	390	U
Diethylphthalate	UG/KG	410	U	420	U	380	U	410	U	390	U
2,4-Dimethylphenol	UG/KG	410	U	420	U	380	U	410	U	390	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1001		SD1101		SD1201		SD1301		SD1311	
		502-SD1001		502-SD1101		502-SD1201		502-SD1301		502-SD1311	
		624149 REG		624066 REG		623402 REG		623404 REG		623405 REG	
		7/7/94		7/7/94		7/6/94		7/6/94		07/06/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	410	U	420	U	380	U	410	U	390	U
4,6-Dinitro-2-methylphenol	UG/KG	2000	U	2100	U	960	U	1000	U	1900	U
2,4-Dinitrophenol	UG/KG	2000	U	2100	U	960	U	1000	U	1900	U
2,4-Dinitrotoluene	UG/KG	410	U	420	U	380	U	410	U	390	U
2,6-Dinitrotoluene	UG/KG	410	U	420	U	380	U	410	U	390	U
Fluoranthene	UG/KG	410	U	69	J	380	U	42	J	48	J
Fluorene	UG/KG	410	U	420	U	380	U	410	U	390	U
Hexachlorobenzene	UG/KG	410	U	420	U	380	U	410	U	390	U
Hexachlorobutadiene	UG/KG	410	U	420	U	380	U	410	U	390	U
Hexachlorocyclopentadiene	UG/KG	410	U	420	U	380	U	410	U	390	U
Hexachloroethane	UG/KG	410	U	420	U	380	U	410	U	390	U
Indeno(1,2,3-c,d)pyrene	UG/KG	410	U	420	U	380	U	410	U	390	U
Isophorone	UG/KG	410	U	420	U	380	U	410	U	390	U
2-Methylnaphthalene	UG/KG	410	U	420	U	380	U	410	U	390	U
2-Methylphenol	UG/KG	410	U	420	U	380	U	410	U	390	U
4-Methylphenol	UG/KG	410	U	420	U	380	U	410	U	390	U
N-Nitroso-di-n-propylamine	UG/KG	410	U	420	U	380	U	410	U	390	U
N-Nitrosodiphenylamine	UG/KG	410	UJ	420	UJ	380	U	410	U	390	UJ
Naphthalene	UG/KG	410	U	420	U	380	U	410	U	390	U
2-Nitroaniline	UG/KG	2000	U	2100	U	960	U	1000	U	1900	U
3-Nitroaniline	UG/KG	2000	U	2100	U	960	U	1000	U	1900	U
4-Nitroaniline	UG/KG	2000	U	2100	U	960	U	1000	U	1900	U
Nitrobenzene	UG/KG	410	U	420	U	380	U	410	U	390	U
2-Nitrophenol	UG/KG	410	U	420	U	380	U	410	U	390	U
4-Nitrophenol	UG/KG	2000	U	2100	U	960	U	1000	U	1900	U
2,2'-oxybis(1-Chloropropane)	UG/KG	410	U	420	U	380	U	410	U	390	U
Pentachlorophenol	UG/KG	2000	U	2100	U	960	U	1000	U	1900	U
Phenanthrene	UG/KG	410	U	420	U	380	U	410	U	390	U
Phenol	UG/KG	410	U	420	U	380	U	410	U	390	U
Pyrene	UG/KG	410	U	45	J	380	U	410	U	48	J
1,2,4-Trichlorobenzene	UG/KG	410	U	420	U	380	U	410	U	390	U
2,4,5-Trichlorophenol	UG/KG	2000	U	2100	U	960	U	1000	U	1900	U
2,4,6-Trichlorophenol	UG/KG	410	U	420	U	380	U	410	U	390	U
Tentatively Identified Compounds		18		26		18		21		14	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1401		SD1501		SD1501		SD1601		SD1701	
		502-SD1401		502-SD1501		502-SD1501		502-SD1601		502-SD1701	
		623084 REG		623100 DIL		623100 REG		623412 REG		623413 REG	
		7/5/94		7/5/94		7/5/94		7/6/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	800	U	130	J	120	J	400	U	400	U
Acenaphthylene	UG/KG	800	U	270	J	290	J	400	U	69	J
Anthracene	UG/KG	150	J	690	J	690		400	U	120	J
Benzo(a)anthracene	UG/KG	900		2800		2800		400	U	770	
Benzo(a)pyrene	UG/KG	860		2500		2500		400	U	740	
Benzo(b)fluoranthene	UG/KG	1300		4700		4800		400	U	1500	
Benzo(g,h,i)perylene	UG/KG	800	U	220	J	220	J	400	U	190	J
Benzo(k)fluoranthene	UG/KG	690	J	9300	J	8600	J	400	U	2700	
Benzoic Acid	UG/KG	3900	U	3700	U	1800	U			49	J
Benzyl Alcohol	UG/KG	800	U	750	U	370	U			400	U
2-Benzyl-4-Chlorophenol	UG/KG	800	U	750	U	370	U			400	U
bis(2-Chloroethoxy)methane	UG/KG	800	U	750	U	370	U	400	U	400	U
bis(2-Chloroethyl)ether	UG/KG	800	U	750	U	370	U	400	U	400	U
bis(2-Ethylhexyl)phthalate	UG/KG	800	U	750	U	370	U	58	J	67	J
4-Bromophenyl-phenylether	UG/KG	800	U	750	U	370	U	400	U	400	U
Butylbenzylphthalate	UG/KG	800	U	750	U	370	U	400	U	400	U
Carbazole	UG/KG	800	U	400	J	420		400	U	400	U
4-Chloro-3-methylphenol	UG/KG	800	U	750	U	370	U	400	U	400	U
4-Chloroaniline	UG/KG	800	U	750	UJ	370	UJ	400	UJ	400	UJ
2-Chloronaphthalene	UG/KG	800	U	750	U	370	U	400	U	400	U
2-Chlorophenol	UG/KG	800	U	750	U	370	U	400	U	400	U
4-Chlorophenyl-phenylether	UG/KG	800	U	750	U	370	U	400	U	400	U
Chrysene	UG/KG	940		2400		2400		400	U	710	
Di-n-butylphthalate	UG/KG	800	U	750	U	370	U	400	U	400	U
Di-n-octylphthalate	UG/KG	800	U	750	U	370	U	400	U	400	U
Dibenzo(a,h)anthracene	UG/KG	800	U	130	J	130	J	400	U	60	J
Dibenzofuran	UG/KG	800	U	240	J	250	J	400	U	400	U
1,2-Dichlorobenzene	UG/KG	800	U	750	U	370	U	400	U	400	U
1,3-Dichlorobenzene	UG/KG	800	U	750	U	370	U	400	U	400	U
1,4-Dichlorobenzene	UG/KG	800	U	750	U	370	U	400	U	400	U
3,3'-Dichlorobenzidine	UG/KG	1600	U	750	U	740	U	800	U	800	U
2,4-Dichlorophenol	UG/KG	800	U	750	U	370	U	400	U	400	U
Diethylphthalate	UG/KG	800	U	750	U	370	U	400	U	400	U
2,4-Dimethylphenol	UG/KG	800	U	750	U	370	U	400	U	400	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1401		SD1501		SD1501		SD1601		SD1701	
		502-SD1401		502-SD1501		502-SD1501		502-SD1601		502-SD1701	
		623084 REG		623100 DIL		623100 REG		623412 REG		623413 REG	
		7/5/94		7/5/94		7/5/94		7/6/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**										
Dimethylphthalate	UG/KG	800	U	750	U	370	U	400	U	400	U
4,6-Dinitro-2-methylphenol	UG/KG	3900	U	1900	U	1800	U	960	U	2000	U
2,4-Dinitrophenol	UG/KG	3900	U	1900	U	1800	U	960	U	2000	U
2,4-Dinitrotoluene	UG/KG	800	U	750	U	370	U	400	U	400	U
2,6-Dinitrotoluene	UG/KG	800	U	750	U	370	U	400	U	400	U
Fluoranthene	UG/KG	1500		5000		5000		400	U	1200	
Fluorene	UG/KG	800	U	440	J	460		400	U	53	J
Hexachlorobenzene	UG/KG	800	U	750	U	370	U	400	U	400	U
Hexachlorobutadiene	UG/KG	800	U	750	U	370	U	400	U	400	U
Hexachlorocyclopentadiene	UG/KG	800	U	750	U	370	U	400	U	400	U
Hexachloroethane	UG/KG	800	U	750	U	370	U	400	U	400	U
Indeno(1,2,3-c,d)pyrene	UG/KG	390	J	720	J	850		400	U	230	J
Isophorone	UG/KG	800	U	750	U	370	U	400	U	400	U
2-Methylnaphthalene	UG/KG	800	U	110	J	110	J	400	U	400	U
2-Methylphenol	UG/KG	800	U	750	U	370	U	400	U	400	U
4-Methylphenol	UG/KG	800	U	750	U	370	U	400	U	400	U
N-Nitroso-di-n-propylamine	UG/KG	800	U	750	U	370	U	400	U	400	U
N-Nitrosodiphenylamine	UG/KG	800	U	750	UJ	370	UJ	400	UJ	400	UJ
Naphthalene	UG/KG	800	U	210	J	200	J	400	U	400	U
2-Nitroaniline	UG/KG	3900	U	1900	U	1800	U	960	U	2000	U
3-Nitroaniline	UG/KG	3900	U	1900	U	1800	U	960	U	2000	U
4-Nitroaniline	UG/KG	3900	U	1900	U	1800	U	960	U	2000	U
Nitrobenzene	UG/KG	800	U	750	U	370	U	400	U	400	U
2-Nitrophenol	UG/KG	800	U	750	U	370	U	400	U	400	U
4-Nitrophenol	UG/KG	3900	U	1900	U	1800	U	960	U	2000	U
2,2'-oxybis(1-Chloropropane)	UG/KG	800	U	750	U	370	U	400	U	400	U
Pentachlorophenol	UG/KG	3900	U	1900	U	1800	U	1900	U	2000	U
Phenanthrene	UG/KG	900		3700		3700		400	U	520	
Phenol	UG/KG	800	U	750	U	370	U	400	U	400	U
Pyrene	UG/KG	1800		3100		3300		400	U	920	
1,2,4-Trichlorobenzene	UG/KG	800	U	750	U	370	U	400	U	400	U
2,4,5-Trichlorophenol	UG/KG	3900	U	1900	U	1800	U	960	U	2000	U
2,4,6-Trichlorophenol	UG/KG	800	U	750	U	370	U	400	U	400	U
Tentatively Identified Compounds		9		23		24		14		25	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1801		SD1901		SD2001		SD2101		SD2111	
		502-SD1801		502-SD1901		502-SD2001		502-SD2101		502-SD2111	
		623414 REG		623415 REG		623416 REG		624650 REG		624696 REG	
		7/6/94		7/6/94		7/6/94		7/11/94		07/11/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	370	U	350	U	400	U	42	J	410	U
Acenaphthylene	UG/KG	73	J	44	J	400	U	410	U	410	U
Anthracene	UG/KG	200	J	94	J	400	U	150	J	50	J
Benzo(a)anthracene	UG/KG	770		460		400	U	540		230	J
Benzo(a)pyrene	UG/KG	770		440		400	U	570		280	J
Benzo(b)fluoranthene	UG/KG	1600		900		400	U	1100		510	
Benzo(g,h,i)perylene	UG/KG	250	J	180	J	400	U	160	J	150	J
Benzo(k)fluoranthene	UG/KG	2900		1600		400	U	2200		930	
Benzoic Acid	UG/KG	1800	U	1700	U	2000	U	2000	U	2000	U
Benzyl Alcohol	UG/KG	370	U	350	U	400	U	410	U	410	U
2-Benzyl-4-Chlorophenol	UG/KG	370	U	350	U	400	U	410	U	410	U
bis(2-Chloroethoxy)methane	UG/KG	370	U	350	U	400	U	410	U	410	U
bis(2-Chloroethyl)ether	UG/KG	370	U	350	U	400	U	410	U	410	U
bis(2-Ethylhexyl)phthalate	UG/KG	370	U	350	U	400	U	410	U	45	J
4-Bromophenyl-phenylether	UG/KG	370	U	350	U	400	U	410	U	410	U
Butylbenzylphthalate	UG/KG	370	U	350	U	400	U	410	U	410	U
Carbazole	UG/KG	78	J	41	J	400	U	85	J	410	U
4-Chloro-3-methylphenol	UG/KG	370	U	350	U	400	U	410	U	410	U
4-Chloroaniline	UG/KG	370	UJ	350	UJ	400	UJ	410	UJ	410	UJ
2-Chloronaphthalene	UG/KG	370	U	350	U	400	U	410	U	410	U
2-Chlorophenol	UG/KG	370	U	350	U	400	U	410	U	410	U
4-Chlorophenyl-phenylether	UG/KG	370	U	350	U	400	U	410	U	410	U
Chrysene	UG/KG	640		390		400	U	500		220	J
Di-n-butylphthalate	UG/KG	370	U	350	U	400	U	410	U	410	U
Di-n-octylphthalate	UG/KG	370	U	350	U	400	U	410	U	410	U
Dibenzo(a,h)anthracene	UG/KG	95	J	46	J	400	U	410	U	410	U
Dibenzofuran	UG/KG	42	J	350	U	400	U	410	U	410	U
1,2-Dichlorobenzene	UG/KG	370	U	350	U	400	U	410	U	410	U
1,3-Dichlorobenzene	UG/KG	370	U	350	U	400	U	410	U	410	U
1,4-Dichlorobenzene	UG/KG	370	U	350	U	400	U	410	U	410	U
3,3'-Dichlorobenzidine	UG/KG	730	U	700	U	1900	U	810	U	820	U
2,4-Dichlorophenol	UG/KG	370	U	350	U	400	U	410	U	410	U
Diethylphthalate	UG/KG	370	U	350	U	400	U	410	U	410	U
2,4-Dimethylphenol	UG/KG	370	U	350	U	400	U	410	U	410	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1801		SD1901		SD2001		SD2101		SD2111	
		502-SD1801		502-SD1901		502-SD2001		502-SD2101		502-SD2111	
		623414 REG		623415 REG		623416 REG		624650 REG		624696 REG	
		7/6/94		7/6/94		7/6/94		7/11/94		07/11/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	370	U	350	U	400	U	410	U	410	U
4,6-Dinitro-2-methylphenol	UG/KG	1800	U	1700	U	1900	U	2000	U	2000	U
2,4-Dinitrophenol	UG/KG	1800	U	1700	U	1900	U	2000	U	2000	U
2,4-Dinitrotoluene	UG/KG	370	U	350	U	400	U	410	U	410	U
2,6-Dinitrotoluene	UG/KG	370	U	350	U	400	U	410	U	410	U
Fluoranthene	UG/KG	1300		740		400	U	1300		430	
Fluorene	UG/KG	100	J	50	J	400	U	99	J	410	U
Hexachlorobenzene	UG/KG	370	U	350	U	400	U	410	U	410	U
Hexachlorobutadiene	UG/KG	370	U	350	U	400	U	410	U	410	U
Hexachlorocyclopentadiene	UG/KG	370	U	350	U	400	U	410	U	410	U
Hexachloroethane	UG/KG	370	U	350	U	400	U	410	U	410	U
Indeno(1,2,3-c,d)pyrene	UG/KG	330	J	190	J	400	U	160	J	110	J
Isophorone	UG/KG	370	U	350	U	400	U	410	U	410	U
2-Methylnaphthalene	UG/KG	370	U	350	U	400	U	410	U	410	U
2-Methylphenol	UG/KG	370	U	350	U	400	U	410	U	410	U
4-Methylphenol	UG/KG	370	U	350	U	400	U	410	U	410	U
N-Nitroso-di-n-propylamine	UG/KG	370	U	350	U	400	U	410	U	410	U
N-Nitrosodiphenylamine	UG/KG	370	UJ	350	UJ	400	UJ	410	UJ	410	U
Naphthalene	UG/KG	370	U	350	U	400	U	410	U	410	U
2-Nitroaniline	UG/KG	1800	U	1700	U	1900	U	2000	U	2000	U
3-Nitroaniline	UG/KG	1800	U	1700	U	1900	U	2000	U	2000	U
4-Nitroaniline	UG/KG	1800	U	1700	U	1900	U	2000	U	2000	U
Nitrobenzene	UG/KG	370	U	350	U	400	U	410	U	410	U
2-Nitrophenol	UG/KG	370	U	350	U	400	U	410	U	410	U
4-Nitrophenol	UG/KG	1800	U	1700	U	1900	U	2000	U	2000	U
2,2'-oxybis(1-Chloropropane)	UG/KG	370	U	350	U	400	U	410	U	410	U
Pentachlorophenol	UG/KG	1800	U	1700	U	1900	U	2000	U	2000	U
Phenanthrene	UG/KG	870		460		400	U	910		220	J
Phenol	UG/KG	370	U	350	U	400	U	410	U	410	U
Pyrene	UG/KG	970		560		400	U	830		310	J
1,2,4-Trichlorobenzene	UG/KG	370	U	350	U	400	U	410	U	410	U
2,4,5-Trichlorophenol	UG/KG	1800	U	1700	U	1900	U	2000	U	2000	U
2,4,6-Trichlorophenol	UG/KG	370	U	350	U	400	U	410	U	410	U
Tentatively Identified Compounds		24		25		20		26		26	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD2201		SD2301		SD2401		SD2501		SD2601	
		502-SD2201		502-SD2301		502-SD2401		502-SD2501		502-SD2601	
		624638 REG		624102 REG		624142 REG		624156 REG		624704 REG	
		7/11/94		7/7/94		7/7/94		7/7/94		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	380	U	410	U	430	U	400	U	400	U
Acenaphthylene	UG/KG	380	U	410	U	430	U	400	U	400	U
Anthracene	UG/KG	380	U	410	U	430	U	400	U	400	U
Benzo(a)anthracene	UG/KG	380	U	410	U	430	U	400	U	48	J
Benzo(a)pyrene	UG/KG	380	U	410	U	430	U	400	U	56	J
Benzo(b)fluoranthene	UG/KG	70	J	35	J	430	U	400	U	120	J
Benzo(g,h,i)perylene	UG/KG	380	U	410	U	430	U	400	U	400	U
Benzo(k)fluoranthene	UG/KG	110	J	58	J	430	U	400	U	220	J
Benzoic Acid	UG/KG	1900	U	2000	U	2100	U	1900	U	1900	U
Benzyl Alcohol	UG/KG	380	U	410	U	430	U	400	U	400	U
2-Benzyl-4-Chlorophenol	UG/KG	380	U	410	U	430	U	400	U	400	U
bis(2-Chloroethoxy)methane	UG/KG	380	U	410	U	430	U	400	U	400	U
bis(2-Chloroethyl)ether	UG/KG	380	U	410	U	430	U	400	U	400	U
bis(2-Ethylhexyl)phthalate	UG/KG	68	J	120	J	430	U	400	U	400	U
4-Bromophenyl-phenylether	UG/KG	380	U	410	U	430	U	400	U	400	U
Butylbenzylphthalate	UG/KG	380	U	410	U	430	U	400	U	400	U
Carbazole	UG/KG	380	U	410	U	430	U	400	U	400	U
4-Chloro-3-methylphenol	UG/KG	380	U	410	U	430	U	400	U	400	U
4-Chloroaniline	UG/KG	380	UJ	410	UJ	430	UJ	400	UJ	400	UJ
2-Chloronaphthalene	UG/KG	380	U	410	U	430	U	400	U	400	U
2-Chlorophenol	UG/KG	380	U	410	U	430	U	400	U	400	U
4-Chlorophenyl-phenylether	UG/KG	380	U	410	U	430	U	400	U	400	U
Chrysene	UG/KG	380	U	410	U	430	U	400	U	58	J
Di-n-butylphthalate	UG/KG	380	U	410	U	430	U	400	U	400	U
Di-n-octylphthalate	UG/KG	380	U	410	U	430	U	400	U	400	U
Dibenzo(a,h)anthracene	UG/KG	380	U	410	U	430	U	400	U	400	U
Dibenzofuran	UG/KG	380	U	410	U	430	U	400	U	400	U
1,2-Dichlorobenzene	UG/KG	380	U	410	U	430	U	400	U	400	U
1,3-Dichlorobenzene	UG/KG	380	U	410	U	430	U	400	U	400	U
1,4-Dichlorobenzene	UG/KG	380	U	410	U	430	U	400	U	400	U
3,3'-Dichlorobenzidine	UG/KG	760	U	820	U	860	U	790	U	790	U
2,4-Dichlorophenol	UG/KG	380	U	410	U	430	U	400	U	400	U
Diethylphthalate	UG/KG	380	U	410	U	430	U	400	U	400	U
2,4-Dimethylphenol	UG/KG	380	U	410	U	430	U	400	U	400	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD2201		SD2301		SD2401		SD2501		SD2601	
		502-SD2201		502-SD2301		502-SD2401		502-SD2501		502-SD2601	
		624638 REG		624102 REG		624142 REG		624156 REG		624704 REG	
		7/11/94		7/7/94		7/7/94		7/7/94		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Dimethylphthalate	UG/KG	380	U	410	U	430	U	400	U	400	U
4,6-Dinitro-2-methylphenol	UG/KG	1900	U	2000	U	2100	U	1900	U	1900	U
2,4-Dinitrophenol	UG/KG	1900	U	2000	U	2100	U	1900	U	1900	U
2,4-Dinitrotoluene	UG/KG	380	U	410	U	430	U	400	U	400	U
2,6-Dinitrotoluene	UG/KG	380	U	410	U	430	U	400	U	400	U
Fluoranthene	UG/KG	56	J	410	U	430	U	400	U	81	J
Fluorene	UG/KG	380	U	410	U	430	U	400	U	400	U
Hexachlorobenzene	UG/KG	380	U	410	U	430	U	400	U	400	U
Hexachlorobutadiene	UG/KG	380	U	410	U	430	U	400	U	400	U
Hexachlorocyclopentadiene	UG/KG	380	U	410	U	430	U	400	U	400	U
Hexachloroethane	UG/KG	380	U	410	U	430	U	400	U	400	U
Indeno(1,2,3-c,d)pyrene	UG/KG	380	U	410	U	430	U	400	U	400	U
Isophorone	UG/KG	380	U	410	U	430	U	400	U	400	U
2-Methylnaphthalene	UG/KG	380	U	410	U	430	U	400	U	400	U
2-Methylphenol	UG/KG	380	U	410	U	430	U	400	U	400	U
4-Methylphenol	UG/KG	380	U	410	U	430	U	400	U	400	U
N-Nitroso-di-n-propylamine	UG/KG	380	U	410	U	430	U	400	U	400	U
N-Nitrosodiphenylamine	UG/KG	380	UJ	410	UJ	430	UJ	400	UJ	400	U
Naphthalene	UG/KG	380	U	410	U	430	U	400	U	400	U
2-Nitroaniline	UG/KG	1900	U	2000	U	2100	U	1900	U	1900	U
3-Nitroaniline	UG/KG	1900	U	2000	U	2100	U	1900	U	1900	U
4-Nitroaniline	UG/KG	1900	U	2000	U	2100	U	1900	U	1900	U
Nitrobenzene	UG/KG	380	U	410	U	430	U	400	U	400	U
2-Nitrophenol	UG/KG	380	U	410	U	430	U	400	U	400	U
4-Nitrophenol	UG/KG	1900	U	2000	U	2100	U	1900	U	1900	U
2,2'-oxybis(1-Chloropropane)	UG/KG	380	U	410	U	430	U	400	U	400	U
Pentachlorophenol	UG/KG	1900	U	2000	U	2100	U	1900	U	1900	U
Phenanthrene	UG/KG	380	U	410	U	430	U	400	U	58	J
Phenol	UG/KG	380	U	410	U	430	U	400	U	400	U
Pyrene	UG/KG	39	J	410	U	430	U	400	U	78	J
1,2,4-Trichlorobenzene	UG/KG	380	U	410	U	430	U	400	U	400	U
2,4,5-Trichlorophenol	UG/KG	1900	U	2000	U	2100	U	1900	U	1900	U
2,4,6-Trichlorophenol	UG/KG	380	U	410	U	430	U	400	U	400	U
Tentatively Identified Compounds		25		19		27		16		24	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE			
		SD2701	
		502-SD2701	
		624118 REG	
		7/7/94	
		Result	Val
Semi-volatile Organics	Units		
Acenaphthene	UG/KG	430	U
Acenaphthylene	UG/KG	430	U
Anthracene	UG/KG	430	U
Benzo(a)anthracene	UG/KG	430	U
Benzo(a)pyrene	UG/KG	430	U
Benzo(b)fluoranthene	UG/KG	430	U
Benzo(g,h,i)perylene	UG/KG	430	U
Benzo(k)fluoranthene	UG/KG	430	U
Benzoic Acid	UG/KG	2100	U
Benzyl Alcohol	UG/KG	430	U
2-Benzyl-4-Chlorophenol	UG/KG	430	U
bis(2-Chloroethoxy)methane	UG/KG	430	U
bis(2-Chloroethyl)ether	UG/KG	430	U
bis(2-Ethylhexyl)phthalate	UG/KG	430	U
4-Bromophenyl-phenylether	UG/KG	430	U
Butylbenzylphthalate	UG/KG	430	U
Carbazole	UG/KG	430	U
4-Chloro-3-methylphenol	UG/KG	430	U
4-Chloroaniline	UG/KG	430	UJ
2-Chloronaphthalene	UG/KG	430	U
2-Chlorophenol	UG/KG	430	U
4-Chlorophenyl-phenylether	UG/KG	430	U
Chrysene	UG/KG	430	U
Di-n-butylphthalate	UG/KG	430	U
Di-n-octylphthalate	UG/KG	430	U
Dibenzo(a,h)anthracene	UG/KG	430	U
Dibenzofuran	UG/KG	430	U
1,2-Dichlorobenzene	UG/KG	430	U
1,3-Dichlorobenzene	UG/KG	430	U
1,4-Dichlorobenzene	UG/KG	430	U
3,3'-Dichlorobenzidine	UG/KG	870	U
2,4-Dichlorophenol	UG/KG	430	U
Diethylphthalate	UG/KG	430	U
2,4-Dimethylphenol	UG/KG	430	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE			
		SD2701	
		502-SD2701	
		624118 REG	
		7/7/94	
		Result	Val
Semi-volatile Organics	Units		
Dimethylphthalate	UG/KG	430	U
4,6-Dinitro-2-methylphenol	UG/KG	2100	U
2,4-Dinitrophenol	UG/KG	2100	U
2,4-Dinitrotoluene	UG/KG	430	U
2,6-Dinitrotoluene	UG/KG	430	U
Fluoranthene	UG/KG	430	U
Fluorene	UG/KG	430	U
Hexachlorobenzene	UG/KG	430	U
Hexachlorobutadiene	UG/KG	430	U
Hexachlorocyclopentadiene	UG/KG	430	U
Hexachloroethane	UG/KG	430	U
Indeno(1,2,3-c,d)pyrene	UG/KG	430	U
Isophorone	UG/KG	430	U
2-Methylnaphthalene	UG/KG	430	U
2-Methylphenol	UG/KG	430	U
4-Methylphenol	UG/KG	430	U
N-Nitroso-di-n-propylamine	UG/KG	430	U
N-Nitrosodiphenylamine	UG/KG	430	UJ
Naphthalene	UG/KG	430	U
2-Nitroaniline	UG/KG	2100	U
3-Nitroaniline	UG/KG	2100	U
4-Nitroaniline	UG/KG	2100	U
Nitrobenzene	UG/KG	430	U
2-Nitrophenol	UG/KG	430	U
4-Nitrophenol	UG/KG	2100	U
2,2'-oxybis(1-Chloropropane)	UG/KG	430	U
Pentachlorophenol	UG/KG	2100	U
Phenanthrene	UG/KG	430	U
Phenol	UG/KG	430	U
Pyrene	UG/KG	430	U
1,2,4-Trichlorobenzene	UG/KG	430	U
2,4,5-Trichlorophenol	UG/KG	2100	U
2,4,6-Trichlorophenol	UG/KG	430	U
Tentatively Identified Compounds		25	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0101		SD0101		SD0201		SD0201		SD0301	
		502-SD0101		502-SD0101		502-SD0201		502-SD0201		502-SD0301	
		624618 REA		624618 REG		624608 REA		624608 REG		624736 REG	
		7/11/94		7/11/94		7/11/94		7/11/94		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
Acetone	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	UJ
Acetonitrile	UG/KG	120	UJ	120	UJ	140	UJ	140	UJ	130	U
Acrylonitrile	UG/KG	120	UJ	120	UJ	140	UJ	140	UJ	130	U
Benzene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Bromodichloromethane	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Bromoform	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Bromomethane	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
2-Butanone	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Chlorobenzene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Chloroethane	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
Chloroform	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Chloromethane	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
1,2-Diethylbenzene	UG/KG	25	UJ	25	UJ	29	UJ	29	UJ	26	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Hexane	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
2-Hexanone	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
Iodomethane	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
4-Methyl-2-pentanone	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
Methylene Chloride	UG/KG	10	U	6	U	19	U	11	U	10	U
Styrene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Tetrachloroethene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Toluene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0101		SD0101		SD0201		SD0201		SD0301	
		502-SD0101		502-SD0101		502-SD0201		502-SD0201		502-SD0301	
		624618 REA		624618 REG		624608 REA		624608 REG		624736 REG	
		7/11/94		7/11/94		7/11/94		7/11/94		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Trichloroethene	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Trichlorotrifluoroethane	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
Vinyl Acetate	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
Vinyl Chloride	UG/KG	12	UJ	12	UJ	14	UJ	14	UJ	13	U
Xylene, Total	UG/KG	6	UJ	6	UJ	7	UJ	7	UJ	6	U
Tentatively Identified Compounds		1		1		1		1		1	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0401		SD0501		SD0601		SD0701		SD0801	
		502-SD0401		502-SD0501		502-SD0601		502-SD0701		502-SD0801	
		624960 REG		624967 REG		623403 REG		623057 REG		623071 REG	
		7/12/94		7/12/94		7/6/94		7/5/94		7/5/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
Acetone	UG/KG	12	UJ	12	UJ	9	U	55	J	19	J
Acetonitrile	UG/KG	120	U	120	U	130	U	120	U	120	U
Acrylonitrile	UG/KG	120	U	120	U	130	U	120	U	120	U
Benzene	UG/KG	6	U	6	U	6	U	6	U	6	U
Bromodichloromethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Bromoform	UG/KG	6	U	6	U	6	U	6	U	6	U
Bromomethane	UG/KG	12	U	12	U	13	U	12	U	12	U
2-Butanone	UG/KG	12	U	12	U	13	U	12	U	12	U
Carbon Disulfide	UG/KG	6	U	6	U	6	U	6	U	6	U
Carbon Tetrachloride	UG/KG	6	U	6	U	6	U	6	U	6	U
Chlorobenzene	UG/KG	6	U	6	U	6	U	6	U	6	U
Chlorodibromomethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Chloroethane	UG/KG	12	U	12	U	13	U	12	U	12	U
Chloroform	UG/KG	6	U	6	U	6	U	6	U	6	U
Chloromethane	UG/KG	12	U	12	U	13	U	12	U	12	U
1,1-Dichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Dichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
1,1-Dichloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Dichloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Dichloropropane	UG/KG	6	U	6	U	6	U	6	U	6	U
cis-1,3-Dichloropropene	UG/KG	6	U	6	U	6	U	6	U	6	U
trans-1,3-Dichloropropene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Diethylbenzene	UG/KG	25	U	24	U	26	U	24	U	25	U
Ethylbenzene	UG/KG	6	U	6	U	6	U	6	U	6	U
Hexane	UG/KG	12	U	12	U	13	U	12	U	12	U
2-Hexanone	UG/KG	12	U	12	U	13	U	12	U	12	U
Iodomethane	UG/KG	12	U	12	U	13	U	12	U	12	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	13	U	12	U	12	U
Methylene Chloride	UG/KG	11	U	86	U	6	U	29	U	11	U
Styrene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,1,2,2-Tetrachloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Tetrachloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
Toluene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,1,1-Trichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0401		SD0501		SD0601		SD0701		SD0801	
		502-SD0401		502-SD0501		502-SD0601		502-SD0701		502-SD0801	
		624960 REG		624967 REG		623403 REG		623057 REG		623071 REG	
		7/12/94		7/12/94		7/6/94		7/5/94		7/5/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,2-Trichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Trichloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
Trichlorotrifluoroethane	UG/KG	12	U	12	U	13	U	12	U	12	U
Vinyl Acetate	UG/KG	12	U	12	U	13	U	12	U	12	U
Vinyl Chloride	UG/KG	12	U	12	U	13	U	12	U	12	U
Xylene, Total	UG/KG	6	U	6	U	6	U	6	U	6	U
Tentatively Identified Compounds		1		1				1		1	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0901		SD0911		SD1001		SD1101		SD1201	
		502-SD0901		502-SD0911		502-SD1001		502-SD1101		502-SD1201	
		624049 REG		624084 REG		624149 REG		624066 REG		623402 REG	
		7/7/94		07/07/94DUPE		7/7/94		7/7/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
Acetone	UG/KG	14	U	25	U	16	U	48	U	12	U
Acetonitrile	UG/KG	130	U	140	U	120	U	130	U	120	U
Acrylonitrile	UG/KG	130	U	140	U	120	U	130	U	120	U
Benzene	UG/KG	6	U	7	U	6	U	6	U	6	U
Bromodichloromethane	UG/KG	6	U	7	U	6	U	6	U	6	U
Bromoform	UG/KG	6	U	7	U	6	U	6	U	6	U
Bromomethane	UG/KG	13	U	14	U	12	U	13	U	12	U
2-Butanone	UG/KG	13	U	14	U	12	U	13	U	12	U
Carbon Disulfide	UG/KG	6	U	7	U	6	U	6	U	6	U
Carbon Tetrachloride	UG/KG	6	U	7	U	6	U	6	U	6	U
Chlorobenzene	UG/KG	6	U	7	U	6	U	6	U	6	U
Chlorodibromomethane	UG/KG	6	U	7	U	6	U	6	U	6	U
Chloroethane	UG/KG	13	UJ	14	UJ	12	UJ	13	UJ	12	U
Chloroform	UG/KG	6	U	7	U	6	U	6	U	6	U
Chloromethane	UG/KG	13	U	14	U	12	U	13	U	12	U
1,1-Dichloroethane	UG/KG	6	U	7	U	6	U	6	U	6	U
1,2-Dichloroethane	UG/KG	6	U	7	U	6	U	6	U	6	U
1,1-Dichloroethene	UG/KG	6	U	7	U	6	U	6	U	6	U
1,2-Dichloroethene	UG/KG	6	U	7	U	6	U	6	U	6	U
1,2-Dichloropropane	UG/KG	6	U	7	U	6	U	6	U	6	U
cis-1,3-Dichloropropene	UG/KG	6	U	7	U	6	U	6	U	6	U
trans-1,3-Dichloropropene	UG/KG	6	U	7	U	6	U	6	U	6	U
1,2-Diethylbenzene	UG/KG	26	U	28	U	25	U	26	U	23	U
Ethylbenzene	UG/KG	6	U	7	U	6	U	6	U	6	U
Hexane	UG/KG	13	U	14	U	10	J	13	U	12	U
2-Hexanone	UG/KG	13	U	14	U	12	U	13	U	12	U
Iodomethane	UG/KG	13	U	14	U	12	U	13	U	12	U
4-Methyl-2-pentanone	UG/KG	13	U	14	U	12	U	13	U	12	U
Methylene Chloride	UG/KG	13	U	20	U	27	U	23	U	10	U
Styrene	UG/KG	6	U	7	U	6	U	6	U	6	U
1,1,2,2-Tetrachloroethane	UG/KG	6	U	7	U	6	U	6	U	6	U
Tetrachloroethene	UG/KG	6	U	7	U	6	U	6	U	6	U
Toluene	UG/KG	6	U	7	U	6	U	6	U	6	U
1,1,1-Trichloroethane	UG/KG	6	U	7	U	6	U	6	U	6	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0901		SD0911		SD1001		SD1101		SD1201	
		502-SD0901		502-SD0911		502-SD1001		502-SD1101		502-SD1201	
		624049 REG		624084 REG		624149 REG		624066 REG		623402 REG	
		7/7/94		07/07/94DUPE		7/7/94		7/7/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,2-Trichloroethane	UG/KG	6	U	7	U	6	U	6	U	6	U
Trichloroethene	UG/KG	6	U	7	U	6	U	6	U	6	U
Trichlorotrifluoroethane	UG/KG	13	U	14	U	12	U	13	U	12	U
Vinyl Acetate	UG/KG	13	U	14	U	12	U	13	U	12	U
Vinyl Chloride	UG/KG	13	U	14	U	12	U	13	U	12	U
Xylene, Total	UG/KG	6	U	7	U	6	U	6	U	6	U
Tentatively Identified Compounds											

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1301		SD1311		SD1401		SD1501		SD1601	
		502-SD1301		502-SD1311		502-SD1401		502-SD1501		502-SD1601	
		623404 REG		623405 REG		623084 REG		623100 REG		623412 REG	
		7/6/94		07/06/94DUPE		7/5/94		7/5/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
Acetone	UG/KG	9	U	12	U	12	J	11	U	12	U
Acetonitrile	UG/KG	120	U	120	U	120	U	110	U	120	U
Acrylonitrile	UG/KG	120	U	120	U	120	U	110	U	120	U
Benzene	UG/KG	6	U	6	U	6	U	6	U	6	U
Bromodichloromethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Bromoform	UG/KG	6	U	6	U	6	U	6	U	6	U
Bromomethane	UG/KG	12	U	12	U	12	U	11	U	12	U
2-Butanone	UG/KG	12	U	12	U	12	U	11	U	12	U
Carbon Disulfide	UG/KG	6	U	6	U	6	U	6	U	6	U
Carbon Tetrachloride	UG/KG	6	U	6	U	6	U	6	U	6	U
Chlorobenzene	UG/KG	6	U	6	U	6	U	6	U	6	U
Chlorodibromomethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Chloroethane	UG/KG	12	U	12	U	12	U	11	U	12	U
Chloroform	UG/KG	6	U	6	U	6	U	6	U	6	U
Chloromethane	UG/KG	12	U	12	U	12	U	11	U	12	U
1,1-Dichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Dichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
1,1-Dichloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Dichloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Dichloropropane	UG/KG	6	U	6	U	6	U	6	U	6	U
cis-1,3-Dichloropropene	UG/KG	6	U	6	U	6	U	6	U	6	U
trans-1,3-Dichloropropene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,2-Diethylbenzene	UG/KG	24	U	24	U	24	U	22	U	24	U
Ethylbenzene	UG/KG	6	U	6	U	6	U	6	U	6	U
Hexane	UG/KG	12	U	12	U	12	U	11	U	12	U
2-Hexanone	UG/KG	12	U	12	U	12	U	11	U	12	U
Iodomethane	UG/KG	12	U	12	U	12	U	11	U	12	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	12	U	11	U	12	U
Methylene Chloride	UG/KG	8	U	13	U	15	U	6	U	14	U
Styrene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,1,2,2-Tetrachloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Tetrachloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
Toluene	UG/KG	6	U	6	U	6	U	6	U	6	U
1,1,1-Trichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1301		SD1311		SD1401		SD1501		SD1601	
		502-SD1301		502-SD1311		502-SD1401		502-SD1501		502-SD1601	
		623404 REG		623405 REG		623084 REG		623100 REG		623412 REG	
		7/6/94		07/06/94DUPE		7/5/94		7/5/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,2-Trichloroethane	UG/KG	6	U	6	U	6	U	6	U	6	U
Trichloroethene	UG/KG	6	U	6	U	6	U	6	U	6	U
Trichlorotrifluoroethane	UG/KG	12	U	12	U	12	U	11	U	12	U
Vinyl Acetate	UG/KG	12	U	12	U	12	U	11	U	12	U
Vinyl Chloride	UG/KG	12	U	12	U	12	U	11	U	12	U
Xylene, Total	UG/KG	6	U	6	U	6	U	6	U	6	U
Tentatively Identified Compounds						1		1			

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1701		SD1801		SD1901		SD2001		SD2101	
		502-SD1701		502-SD1801		502-SD1901		502-SD2001		502-SD2101	
		623413 REG		623414 REG		623415 REG		623416 REG		624650 REG	
		7/6/94		7/6/94		7/6/94		7/6/94		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	12	U	11	U	11	U	12	U	12	UJ
Acetonitrile	UG/KG	120	U	110	U	110	U	120	U	120	U
Acrylonitrile	UG/KG	120	U	110	U	110	U	120	U	120	U
Benzene	UG/KG	6	U	6	U	5	U	6	U	6	U
Bromodichloromethane	UG/KG	6	U	6	U	5	U	6	U	6	U
Bromoform	UG/KG	6	U	6	U	5	U	6	U	6	U
Bromomethane	UG/KG	12	U	11	U	11	U	12	U	12	U
2-Butanone	UG/KG	12	U	11	U	11	U	12	U	12	U
Carbon Disulfide	UG/KG	6	U	6	U	5	U	6	U	6	U
Carbon Tetrachloride	UG/KG	6	U	6	U	5	U	6	U	6	U
Chlorobenzene	UG/KG	6	U	6	U	5	U	6	U	6	U
Chlorodibromomethane	UG/KG	6	U	6	U	5	U	6	U	6	U
Chloroethane	UG/KG	12	U	11	U	11	U	12	U	12	U
Chloroform	UG/KG	6	U	6	U	5	U	6	U	6	U
Chloromethane	UG/KG	12	U	11	U	11	U	12	U	12	U
1,1-Dichloroethane	UG/KG	6	U	6	U	5	U	6	U	6	U
1,2-Dichloroethane	UG/KG	6	U	6	U	5	U	6	U	6	U
1,1-Dichloroethene	UG/KG	6	U	6	U	5	U	6	U	6	U
1,2-Dichloroethene	UG/KG	6	U	6	U	5	U	6	U	6	U
1,2-Dichloropropane	UG/KG	6	U	6	U	5	U	6	U	6	U
cis-1,3-Dichloropropene	UG/KG	6	U	6	U	5	U	6	U	6	U
trans-1,3-Dichloropropene	UG/KG	6	U	6	U	5	U	6	U	6	U
1,2-Diethylbenzene	UG/KG	24	U	22	U	22	U	24	U	25	U
Ethylbenzene	UG/KG	6	U	6	U	5	U	6	U	6	U
Hexane	UG/KG	12	U	11	U	11	U	4	J	12	U
2-Hexanone	UG/KG	12	U	11	U	11	U	12	U	12	U
Iodomethane	UG/KG	12	U	11	U	11	U	12	U	12	U
4-Methyl-2-pentanone	UG/KG	12	U	11	U	11	U	12	U	12	U
Methylene Chloride	UG/KG	8	U	11	U	15	U	20	U	6	U
Styrene	UG/KG	6	U	6	U	5	U	6	U	6	U
1,1,2,2-Tetrachloroethane	UG/KG	6	U	6	U	5	U	6	U	6	U
Tetrachloroethene	UG/KG	6	U	6	U	5	U	6	U	6	U
Toluene	UG/KG	6	U	6	U	5	U	6	U	6	U
1,1,1-Trichloroethane	UG/KG	6	U	6	U	5	U	6	U	6	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1701		SD1801		SD1901		SD2001		SD2101	
		502-SD1701		502-SD1801		502-SD1901		502-SD2001		502-SD2101	
		623413 REG		623414 REG		623415 REG		623416 REG		624650 REG	
		7/6/94		7/6/94		7/6/94		7/6/94		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,2-Trichloroethane	UG/KG	6	U	6	U	5	U	6	U	6	U
Trichloroethene	UG/KG	6	U	6	U	5	U	6	U	6	U
Trichlorotrifluoroethane	UG/KG	12	U	11	U	11	U	12	U	12	U
Vinyl Acetate	UG/KG	12	U	11	U	11	U	12	U	12	U
Vinyl Chloride	UG/KG	12	U	11	U	11	U	12	U	12	U
Xylene, Total	UG/KG	6	U	6	U	5	U	6	U	6	U
Tentatively Identified Compounds										1	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD2111		SD2111		SD2201		SD2301		SD2401	
		502-SD2111		502-SD2111		502-SD2201		502-SD2301		502-SD2401	
		624696 REA		624696 REG		624638 REG		624102 REG		624142 REG	
		07/11/94DUPE		07/11/94DUPE		7/11/94		7/7/94		7/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	12	UJ	12	UJ	12	UJ	27	U	15	U
Acetonitrile	UG/KG	120	UJ	120	UJ	120	U	120	U	130	U
Acrylonitrile	UG/KG	120	UJ	120	UJ	120	U	120	U	130	U
Benzene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Bromoform	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Bromomethane	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
2-Butanone	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Chloroethane	UG/KG	12	UJ	12	UJ	12	U	12	UJ	13	UJ
Chloroform	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Chloromethane	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
1,2-Diethylbenzene	UG/KG	25	UJ	25	UJ	24	U	25	U	26	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Hexane	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
2-Hexanone	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
Iodomethane	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
4-Methyl-2-pentanone	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
Methylene Chloride	UG/KG	6	U	6	U	6	U	170	U	19	U
Styrene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Toluene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD2111		SD2111		SD2201		SD2301		SD2401	
		502-SD2111		502-SD2111		502-SD2201		502-SD2301		502-SD2401	
		624696 REA		624696 REG		624638 REG		624102 REG		624142 REG	
		07/11/94DUPE		07/11/94DUPE		7/11/94		7/7/94		7/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Trichloroethene	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Trichlorotrifluoroethane	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
Vinyl Acetate	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
Vinyl Chloride	UG/KG	12	UJ	12	UJ	12	U	12	U	13	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	U	6	U	7	U
Tentatively Identified Compounds		1		1		1					

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE							
		SD2501		SD2601		SD2701	
		502-SD2501		502-SD2601		502-SD2701	
		624156 REG		624704 REG		624118 REG	
		7/7/94		7/11/94		7/7/94	
		Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**						
Acetone	UG/KG	15	U	12	UJ	33	U
Acetonitrile	UG/KG	120	U	120	U	130	U
Acrylonitrile	UG/KG	120	U	120	U	130	U
Benzene	UG/KG	6	U	6	U	7	U
Bromodichloromethane	UG/KG	6	U	6	U	7	U
Bromoform	UG/KG	6	U	6	U	7	U
Bromomethane	UG/KG	12	U	12	U	13	U
2-Butanone	UG/KG	12	U	12	U	13	U
Carbon Disulfide	UG/KG	6	U	6	U	7	U
Carbon Tetrachloride	UG/KG	6	U	6	U	7	U
Chlorobenzene	UG/KG	6	U	6	U	7	U
Chlorodibromomethane	UG/KG	6	U	6	U	7	U
Chloroethane	UG/KG	12	UJ	12	U	13	UJ
Chloroform	UG/KG	6	U	6	U	7	U
Chloromethane	UG/KG	12	U	12	U	13	U
1,1-Dichloroethane	UG/KG	6	U	6	U	7	U
1,2-Dichloroethane	UG/KG	6	U	6	U	7	U
1,1-Dichloroethene	UG/KG	6	U	6	U	7	U
1,2-Dichloroethene	UG/KG	6	U	6	U	7	U
1,2-Dichloropropane	UG/KG	6	U	6	U	7	U
cis-1,3-Dichloropropene	UG/KG	6	U	6	U	7	U
trans-1,3-Dichloropropene	UG/KG	6	U	6	U	7	U
1,2-Diethylbenzene	UG/KG	24	U	24	U	26	U
Ethylbenzene	UG/KG	6	U	6	U	7	U
Hexane	UG/KG	12	U	12	U	13	U
2-Hexanone	UG/KG	12	U	12	U	13	U
Iodomethane	UG/KG	12	U	12	U	13	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	13	U
Methylene Chloride	UG/KG	10	U	12	U	15	U
Styrene	UG/KG	6	U	6	U	7	U
1,1,2,2-Tetrachloroethane	UG/KG	6	U	6	U	7	U
Tetrachloroethene	UG/KG	6	U	6	U	7	U
Toluene	UG/KG	6	U	6	U	7	U
1,1,1-Trichloroethane	UG/KG	6	U	6	U	7	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE							
		SD2501		SD2601		SD2701	
		502-SD2501		502-SD2601		502-SD2701	
		624156 REG		624704 REG		624118 REG	
		7/7/94		7/11/94		7/7/94	
		Result	Val	Result	Val	Result	Val
Volatile Organics	Units						
1,1,2-Trichloroethane	UG/KG	6	U	6	U	7	U
Trichloroethene	UG/KG	6	U	6	U	7	U
Trichlorotrifluoroethane	UG/KG	12	U	12	U	13	U
Vinyl Acetate	UG/KG	12	U	12	U	13	U
Vinyl Chloride	UG/KG	12	U	12	U	13	U
Xylene, Total	UG/KG	6	U	6	U	7	U
Tentatively Identified Compounds				1			

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0101		SD0201		SD0301		SD0401		SD0501	
		502-SD0101		502-SD0201		502-SD0301		502-SD0401		502-SD0501	
		624646 REG		624609 REG		624737 REG		624961 REG		624968 REG	
		7/11/94		7/11/94		7/11/94		7/12/94		7/12/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	23000	J	12800	J	16200	J	19800	J	14400	J
Antimony	MG/KG	0.25	R	0.24	R	0.26	U	0.074	U	0.23	U
Arsenic	MG/KG	6.6	J	5.1	J	10.5		9.6		7.4	
Barium	MG/KG	123		78.6		77.1		97.4		77.4	
Beryllium	MG/KG	1.1		0.67		0.67		0.77		0.62	
Bismuth	MG/KG	38.2		24.8		20		34.5		18.9	
Cadmium	MG/KG	0.25	J	0.24	UJ	0.077	U	0.074	U	0.07	U
Calcium	MG/KG	7700		12200		14300		9410		14400	
Chromium	MG/KG	23.5		14.2		18.8	J	21.5	J	17.5	J
Cobalt	MG/KG	11.6		9		9.4		10.9		13.4	
Copper	MG/KG	17.3	J	13.1	J	14.8	J	16.3	J	12.9	J
Cyanide	MG/KG	0.62	U	0.61	U	1.1		0.61	U	0.59	U
Iron	MG/KG	26400		20200		22100		23400		21400	
Lead	MG/KG	29.3	J	20.2	J	16.7		22.3		17.5	
Lithium	MG/KG	26.9		17.5		15.1		16.5		14.2	
Magnesium	MG/KG	5380		5010		5790		5930		4130	
Manganese	MG/KG	800	J	646	J	551	J	702	J	733	J
Mercury	MG/KG	0.13		0.12	U	0.13	U	0.12	U	0.12	U
Molybdenum	MG/KG	7.8		8.4		10.5		9.6		8	
Nickel	MG/KG	22.4		17.6		18.3		19.8		17.5	
Potassium	MG/KG	5230	J	2680	J	2370	J	2360	J	2000	J
Selenium	MG/KG	1.2		0.77		0.77	U	0.74	U	0.7	U
Silver	MG/KG	0.25	U	0.24	U	0.103	U	0.098	U	0.094	U
Sodium	MG/KG	750		1890		1510		3450		658	
Thallium	MG/KG	0.74	R	0.73	R	0.77	R	0.74	R	0.7	R
Tin	MG/KG	11.6	U	11.4	U	12.1	U	11.5	U	11	U
Vanadium	MG/KG	31.9		17.8		29.9		38.1		26.2	
Zinc	MG/KG	82.4	J	63.1	J	117		73.7		60.1	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0601		SD0701		SD0801		SD0901		SD0911	
		502-SD0601		502-SD0701		502-SD0801		502-SD0901		502-SD0911	
		623418 REG		623059 REG		623073 REG		624052 REG		624088 REG	
		7/6/94		7/5/94		7/5/94		7/7/94		07/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	13100		14000		14500		10600	J	9990	J
Antimony	MG/KG	3	J	1.9	J	1.9	R	1.3	J	0.28	R
Arsenic	MG/KG	8		6.5		5.6		17.1	J	9.6	J
Barium	MG/KG	95.2		58.6		66.3		101		84.7	
Beryllium	MG/KG	0.63	U	0.67	U	0.66	U	0.47		0.45	
Bismuth	MG/KG	18		13.1		12.6		61.5		39.4	
Cadmium	MG/KG	0.22	U	0.21	U	0.21	U	5	J	0.59	J
Calcium	MG/KG	21100	J	46600	J	12800	J	63200		87500	
Chromium	MG/KG	14.3		15.7		16.2		17.7		15	
Cobalt	MG/KG	13		13.1		12.9		10.1		9.8	
Copper	MG/KG	14.8		15.3		15		27.5	J	26.7	J
Cyanide	MG/KG	0.64	U	0.61	U	0.62	U	0.64	U	0.71	U
Iron	MG/KG	19300		21500		21700		40500		31200	
Lead	MG/KG	19.9		13.2		11.4		255	J	128	J
Lithium	MG/KG	13.8		24.2		21.4		13.3		12.7	
Magnesium	MG/KG	5960		6230		4730		6630		8510	
Manganese	MG/KG	1050		810		785		5240	J	823	J
Mercury	MG/KG	0.13	U	0.12	U	0.12	U	0.13	U	0.14	U
Molybdenum	MG/KG	5.4		5.4		4.2		15.7		14	
Nickel	MG/KG	16.1		19		19.1		16.9		17.7	
Potassium	MG/KG	2020		2620		2200		2040	J	1880	J
Selenium	MG/KG	1	UJ	0.94	UJ	0.97	UJ	1		0.85	U
Silver	MG/KG	0.26	U	0.24	U	0.25	U	0.35		0.28	U
Sodium	MG/KG	157	U	142	U	95.1	U	865		742	
Thallium	MG/KG	0.93	UJ	0.87	UJ	0.89	UJ	2.1	J	0.85	R
Tin	MG/KG	12	U	11.3	U	11.6	U	41.1		20.1	
Vanadium	MG/KG	24.7		21.8		23.8		20.4		21.5	
Zinc	MG/KG	59.4	J	42.3	J	45.5	J	1310	J	144	J

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1001		SD1101		SD1201		SD1301		SD1311	
		502-SD1001		502-SD1101		502-SD1201		502-SD1301		502-SD1311	
		624150 REG		624070 REG		623417 REG		623419 REG		623420 REG	
		7/7/94		7/7/94		7/6/94		7/6/94		07/06/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	10900	J	7740	J	7660		10400		8410	
Antimony	MG/KG	0.25	R	0.26	R	2.5	J	2.9	J	3.3	J
Arsenic	MG/KG	5	J	6.3	J	4.2		6.2		6.2	
Barium	MG/KG	53.8		58.9		51.9		80.7		55.4	
Beryllium	MG/KG	0.49		0.37		0.35	U	0.52	U	0.4	U
Bismuth	MG/KG	17.1		23.6		12.6		15.2		15	
Cadmium	MG/KG	0.25	UJ	0.26	UJ	0.2	U	0.21	U	0.21	U
Calcium	MG/KG	25800		99800		70700	J	53000	J	63100	J
Chromium	MG/KG	12.1		10		9.9		11.8		10	
Cobalt	MG/KG	10.4		10.4		9.7		10.8		10.3	
Copper	MG/KG	11.1	J	10	J	10.5		11.6		12.7	
Cyanide	MG/KG	0.62	U	0.65	U	0.58	U	0.61	U	0.6	U
Iron	MG/KG	17800		17200		18100		17100		17100	
Lead	MG/KG	11.1	J	14.1	J	14.4		15.5		18.7	
Lithium	MG/KG	15.4		12.5		12.9		12.5		12.5	
Magnesium	MG/KG	4170		6550		4240		6310		6030	
Manganese	MG/KG	840	J	1070	J	789		959		716	
Mercury	MG/KG	0.12	U	0.13	U	0.12	U	0.12	U	0.12	U
Molybdenum	MG/KG	6.3		9.8		5		4.7		5.1	
Nickel	MG/KG	17.3		14.4		12		14.6		12.3	
Potassium	MG/KG	1620	J	1440	J	1170		1860		1290	
Selenium	MG/KG	0.74	U	0.78	U	0.91	UJ	0.96	UJ	0.94	UJ
Silver	MG/KG	0.25	U	0.26	U	0.23	U	0.25	U	0.24	U
Sodium	MG/KG	492		607		211	U	204	U	192	U
Thallium	MG/KG	0.74	R	0.78	R	0.84	UJ	0.88	UJ	0.87	UJ
Tin	MG/KG	11.7	U	12.3	U	11	U	11.5	U	11.3	U
Vanadium	MG/KG	17.5		14.7		14.4		20		16.4	
Zinc	MG/KG	36.2	J	42.9	J	33	J	42.1	J	40.3	J

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1401		SD1501		SD1601		SD1701		SD1801	
		502-SD1401		502-SD1501		502-SD1601		502-SD1701		502-SD1801	
		623086 REG		623101 REG		623421 REG		623424 REG		623425 REG	
		7/5/94		7/5/94		7/6/94		7/6/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	11800		6320		15600	J	8370	J	6290	J
Antimony	MG/KG	2.5	J	2.6	J	0.24	R	0.24	R	0.22	R
Arsenic	MG/KG	7.5		5.4		7.3	J	6	J	6.8	J
Barium	MG/KG	77.7		61.2		89		49.7		47.7	
Beryllium	MG/KG	0.56	U	0.33	U	0.65		0.37		0.28	
Bismuth	MG/KG	19.4		16		43.9		46.6		43.5	
Cadmium	MG/KG	0.21	U	0.19	U	0.24	UJ	0.24	UJ	0.22	UJ
Calcium	MG/KG	26700	J	60800	J	33500		54400		81500	
Chromium	MG/KG	13.5		7.7		16.7		10.5		9.7	
Cobalt	MG/KG	10.5		9		9.5		7.6		7.1	
Copper	MG/KG	13.9		8.4		14.5	J	9.9	J	7.2	J
Cyanide	MG/KG	0.61	U	0.56	U	0.6	U	0.61	U	0.55	U
Iron	MG/KG	18900		13200		21400		14100		17600	
Lead	MG/KG	16.5		12.2	J	12.1	J	12.6	J	10.2	J
Lithium	MG/KG	15.4		9.1		18.1		10.2		7.9	
Magnesium	MG/KG	11500		19900		13500		17300		18200	
Manganese	MG/KG	953		975		963	J	707	J	800	J
Mercury	MG/KG	0.12	U	0.11	U	0.12	U	0.12	U	0.11	U
Molybdenum	MG/KG	6.9		5.6		13.1		13.2		14.8	
Nickel	MG/KG	17.3		12.3		18.8		12.5		11.5	
Potassium	MG/KG	2040		892		2950	J	1690	J	1290	J
Selenium	MG/KG	0.95	UJ	0.88	UJ	0.72	U	0.73	U	0.66	U
Silver	MG/KG	0.24	U	0.22	U	0.24	U	0.24	U	0.22	U
Sodium	MG/KG	219	U	163	U	721		562		592	
Thallium	MG/KG	0.88	UJ	0.81	UJ	0.72	R	0.73	R	0.66	R
Tin	MG/KG	11.5	U	10.6	U	11.3	U	11.5	U	10.4	U
Vanadium	MG/KG	24		13.9		28		17.8		15.7	
Zinc	MG/KG	48.8	J	28.7	J	45.3	J	33.9	J	29.8	J

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1901		SD2001		SD2101		SD2111		SD2201	
		502-SD1901		502-SD2001		502-SD2101		502-SD2111		502-SD2201	
		623426 REG		623427 REG		624655 REG		624697 REG		624647 REG	
		7/6/94		7/6/94		7/11/94		07/11/94DUPE		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	7580	J	13400	J	10800	J	12800	J	16000	J
Antimony	MG/KG	0.22	R	0.24	R	0.25	R	0.25	R	0.24	R
Arsenic	MG/KG	5.8	J	5.9	J	6.1	J	6.3	J	6.7	J
Barium	MG/KG	53.1		107		71		77.8		96.3	
Beryllium	MG/KG	0.39		0.71		0.53		0.57		0.77	
Bismuth	MG/KG	31.4		30.7		26.2		39.5		27.5	
Cadmium	MG/KG	0.22	UJ	0.24	UJ	0.25	UJ	0.25	UJ	0.24	UJ
Calcium	MG/KG	49700		3370		26500		30400		3140	
Chromium	MG/KG	10.1		15.2		12.8		15.4		18.3	
Cobalt	MG/KG	8.1		11.2		10.4		10.3		11.9	
Copper	MG/KG	9.5	J	17.1	J	14.3	J	14.3	J	17.3	J
Cyanide	MG/KG	0.54	U	0.61	U	0.62	U	0.62	U	0.59	U
Iron	MG/KG	15300		21400		17600		18500		21100	
Lead	MG/KG	13	J	12.2	J	19.4	J	19	J	19	J
Lithium	MG/KG	9.8		14.9		13.5		14.5		19	
Magnesium	MG/KG	9800		2950		8030		10300		3190	
Manganese	MG/KG	749	J	1300	J	902	J	939	J	1200	J
Mercury	MG/KG	0.11	U	0.12	U	0.14		0.16		0.12	U
Molybdenum	MG/KG	11.8		8.2		10.2		12		7.8	
Nickel	MG/KG	13.3		21.2		16.5		17.1		20.7	
Potassium	MG/KG	1310	J	1930	J	1710	J	2280	J	3030	J
Selenium	MG/KG	0.65	U	0.73	U	0.74	U	0.75	U	0.71	U
Silver	MG/KG	0.22	U	0.24	U	0.25	U	0.25	U	0.24	U
Sodium	MG/KG	581		728		620		779		700	
Thallium	MG/KG	0.65	R	0.73	R	0.74	R	0.75	R	0.71	R
Tin	MG/KG	10.2	U	11.4	U	11.6	U	11.7	U	11.1	U
Vanadium	MG/KG	15.8		23.2		20.5		24.7		28.6	
Zinc	MG/KG	40.1	J	48.9	J	50.3	J	53.3	J	56.1	J

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD2301		SD2401		SD2501		SD2601		SD2701	
		502-SD2301		502-SD2401		502-SD2501		502-SD2601		502-SD2701	
		624104 REG		624143 REG		624157 REG		624711 REG		624120 REG	
		7/7/94		7/7/94		7/7/94		7/11/94		7/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	15300	J	12100	J	17100	J	19100	J	15100	J
Antimony	MG/KG	0.25	R	0.26	R	0.24	R	0.24	R	0.26	R
Arsenic	MG/KG	7	J	7.2	J	7.9	J	8.2	J	7	J
Barium	MG/KG	82.2		77.5		79.4		92.6		84.7	
Beryllium	MG/KG	0.7		0.63		0.73		0.83		0.68	
Bismuth	MG/KG	29		29.4		34.4		33.2		35.1	
Cadmium	MG/KG	0.25	UJ	0.26	UJ	0.24	UJ	0.24	UJ	0.26	UJ
Calcium	MG/KG	4920		10500		7260		14200		11500	
Chromium	MG/KG	18.2		14.2		19.1		21.3		17	
Cobalt	MG/KG	10.7		10.8		11.3		11		12.2	
Copper	MG/KG	14.4	J	15.7	J	16.4	J	20.8	J	15	J
Cyanide	MG/KG	0.62	U	0.66	U	0.6	U	0.61	U	0.66	U
Iron	MG/KG	22700		21200		22200		25400		21700	
Lead	MG/KG	14.2	J	15.8	J	14.3	J	18.5	J	15.4	J
Lithium	MG/KG	19.4		16.6		20.2		23.9		19.2	
Magnesium	MG/KG	3760		5560		4800		6440		6210	
Manganese	MG/KG	1040	J	995	J	911	J	794	J	1180	J
Mercury	MG/KG	0.12	U	0.13	U	0.12	U	0.15		0.13	U
Molybdenum	MG/KG	7.5		10		9.3		9.7		10.9	
Nickel	MG/KG	20.2		20		21.2		23.7		19.1	
Potassium	MG/KG	2590	J	1930	J	2730	J	3380	J	2880	J
Selenium	MG/KG	0.75	U	0.79	U	0.72	U	0.94		0.8	
Silver	MG/KG	0.25	U	0.26	U	0.24	U	0.24	U	0.26	U
Sodium	MG/KG	628		691		763		761		591	
Thallium	MG/KG	0.75	R	0.79	R	0.72	R	0.73	R	0.79	R
Tin	MG/KG	11.8	U	12.3	U	11.3	U	11.4	U	12.4	U
Vanadium	MG/KG	28.4		21.9		31		31.7		26.4	
Zinc	MG/KG	48.4	J	54.1	J	49.1	J	68.2	J	51.7	J

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0101		SD0201		SD0301		SD0401		SD0501	
		502-SD0101		502-SD0201		502-SD0301		502-SD0401		502-SD0501	
		624618 REG		624608 REG		624736 REG		624960 REG		624967 REG	
		7/11/94		7/11/94		7/11/94		7/12/94		7/12/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	2.1	UJ	2.4	U	2.2	U	2.1	UJ	2	U
alpha-BHC	UG/KG	2.1	UJ	2.4	U	2.2	U	2.1	UJ	2	U
alpha-Chlordane	UG/KG	2.1	UJ	2.4	U	2.2	U	2.1	UJ	2	U
Aroclor-1016	UG/KG	40	UJ	47	U	42	U	40	UJ	38	U
Aroclor-1221	UG/KG	82	UJ	96	U	85	U	82	UJ	78	U
Aroclor-1232	UG/KG	40	UJ	47	U	42	U	40	UJ	38	U
Aroclor-1242	UG/KG	40	UJ	47	U	42	U	40	UJ	38	U
Aroclor-1248	UG/KG	40	UJ	47	U	42	U	40	UJ	38	U
Aroclor-1254	UG/KG	40	UJ	47	U	42	U	40	UJ	38	U
Aroclor-1260	UG/KG	40	UJ	47	U	42	U	40	UJ	38	U
beta-BHC	UG/KG	2.1	UJ	2.4	U	2.2	U	2.1	UJ	2	U
4,4'-DDD	UG/KG	4	UJ	4.7	U	4.2	U	4	UJ	3.8	U
4,4'-DDE	UG/KG	4	UJ	4.7	U	1.1	J	0.33	R	0.77	J
4,4'-DDT	UG/KG	4	UJ	4.7	U	4.2	U	4	UJ	3.8	U
delta-BHC	UG/KG	2.1	UJ	2.4	U	2.2	U	2.1	UJ	2	U
Dieldrin	UG/KG	4	UJ	4.7	U	4.2	U	0.65	J	3.8	U
Endosulfan I	UG/KG	2.1	UJ	2.4	U	2.2	U	2.1	UJ	2	U
Endosulfan II	UG/KG	4	UJ	4.7	U	4.2	U	4	UJ	3.8	U
Endosulfan Sulfate	UG/KG	4	UJ	4.7	U	4.2	U	4	UJ	3.8	U
Endrin	UG/KG	4	UJ	4.7	U	4.2	U	4	UJ	3.8	U
Endrin Aldehyde	UG/KG	4	UJ	4.7	U	4.2	U	4	UJ	3.8	U
Endrin Ketone	UG/KG	4	UJ	4.7	U	4.2	U	4	UJ	3.8	U
gamma-BHC (Lindane)	UG/KG	2.1	UJ	2.4	U	2.2	U	2.1	UJ	2	U
gamma-Chlordane	UG/KG	2.1	UJ	2.4	U	2.2	U	2.1	UJ	2	U
Heptachlor	UG/KG	2.1	UJ	2.4	U	2.2	U	2.1	UJ	2	U
Heptachlor Epoxide	UG/KG	2.1	UJ	2.4	U	2.2	U	0.35	J	2	U
p,p'-Methoxychlor	UG/KG	21	UJ	24	U	22	U	21	UJ	20	U
Toxaphene	UG/KG	210	UJ	240	U	220	U	210	UJ	200	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0601		SD0701		SD0801		SD0901		SD0911	
		502-SD0601		502-SD0701		502-SD0801		502-SD0901		502-SD0911	
		623403 REG		623057 REG		623071 REG		624049 REG		624084 REG	
		7/6/94		7/5/94		7/5/94		7/7/94		07/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	0.099	R	2	U	2.1	U	2.2	U	2.4	U
alpha-BHC	UG/KG	2.2	U	2	U	2.1	U	2.2	U	2.4	U
alpha-Chlordane	UG/KG	2.2	U	2	U	2.1	U	2.2	U	2.4	U
Aroclor-1016	UG/KG	42	U	39	U	40	U	42	U	46	U
Aroclor-1221	UG/KG	86	U	80	U	82	U	85	U	93	U
Aroclor-1232	UG/KG	42	U	39	U	40	U	42	U	46	U
Aroclor-1242	UG/KG	42	U	39	U	40	U	42	U	46	U
Aroclor-1248	UG/KG	42	U	39	U	40	U	42	U	46	U
Aroclor-1254	UG/KG	42	U	39	U	40	U	42	U	46	U
Aroclor-1260	UG/KG	42	U	39	U	40	U	42	U	46	U
beta-BHC	UG/KG	2.2	U	2	U	2.1	U	2.2	U	2.4	U
4,4'-DDD	UG/KG	4.2	U	3.9	U	4	U	4.2	U	4.6	U
4,4'-DDE	UG/KG	4.2	U	3.9	U	4	U	0.79	J	4.6	UJ
4,4'-DDT	UG/KG	4.2	U	3.9	U	4	U	4.2	U	4.6	U
delta-BHC	UG/KG	2.2	U	2	U	2.1	U	2.2	U	2.4	U
Dieldrin	UG/KG	0.31	J	3.9	U	4	U	0.22	U	0.27	U
Endosulfan I	UG/KG	2.2	U	2	U	2.1	U	2.2	U	2.4	U
Endosulfan II	UG/KG	4.2	U	3.9	U	4	U	4.2	U	4.6	U
Endosulfan Sulfate	UG/KG	4.2	U	3.9	U	4	U	4.2	U	4.6	U
Endrin	UG/KG	4.2	U	3.9	U	4	U	4.2	U	4.6	U
Endrin Aldehyde	UG/KG	4.2	U	3.9	U	4	U	2.3	R	4	R
Endrin Ketone	UG/KG	4.2	U	3.9	U	4	U	4.2	U	4.6	U
gamma-BHC (Lindane)	UG/KG	2.2	U	2	U	2.1	U	2.2	U	2.4	U
gamma-Chlordane	UG/KG	2.2	U	2	U	2.1	U	2.2	U	2.4	U
Heptachlor	UG/KG	2.2	U	0.79	J	0.86	J	2.2	U	2.4	U
Heptachlor Epoxide	UG/KG	2.2	U	2	U	2.1	U	2.2	UJ	0.52	J
p,p'-Methoxychlor	UG/KG	22	U	20	U	21	U	22	U	24	U
Toxaphene	UG/KG	220	U	200	U	210	U	220	U	240	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1001		SD1101		SD1201		SD1301		SD1311	
		502-SD1001		502-SD1101		502-SD1201		502-SD1301		502-SD1311	
		624149 R1 REG		624066 REG		623402 REG		623404 REG		623405 REG	
		7/7/94		7/7/94		7/6/94		7/6/94		07/06/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
alpha-BHC	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
alpha-Chlordane	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
Aroclor-1016	UG/KG	41	U	43	U	38	U	40	U	40	U
Aroclor-1221	UG/KG	82	U	87	U	78	U	81	U	80	U
Aroclor-1232	UG/KG	41	U	43	U	38	U	40	U	40	U
Aroclor-1242	UG/KG	41	U	43	U	38	U	40	U	40	U
Aroclor-1248	UG/KG	41	U	43	U	38	U	40	U	40	U
Aroclor-1254	UG/KG	41	U	43	U	38	U	40	U	40	U
Aroclor-1260	UG/KG	41	U	43	U	38	U	40	U	40	U
beta-BHC	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
4,4'-DDD	UG/KG	4.1	U	4.3	U	3.8	U	4	U	4	U
4,4'-DDE	UG/KG	4.1	U	4.3	U	3.8	U	4	U	4	U
4,4'-DDT	UG/KG	4.1	U	4.3	U	3.8	U	4	U	4	U
delta-BHC	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
Dieldrin	UG/KG	0.15	U	4.3	U	3.8	U	4	U	4	U
Endosulfan I	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
Endosulfan II	UG/KG	4.1	U	4.3	U	3.8	U	4	U	4	U
Endosulfan Sulfate	UG/KG	4.1	U	4.3	U	3.8	U	4	U	4	U
Endrin	UG/KG	4.1	U	4.3	U	3.8	U	4	U	4	U
Endrin Aldehyde	UG/KG	4.1	U	0.9	U	3.8	U	4	U	4	U
Endrin Ketone	UG/KG	4.1	U	4.3	U	3.8	U	4	U	4	U
gamma-BHC (Lindane)	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
gamma-Chlordane	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
Heptachlor	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
Heptachlor Epoxide	UG/KG	2.1	U	2.2	U	2	U	2.1	U	2	U
p,p'-Methoxychlor	UG/KG	21	U	22	U	20	U	21	U	20	U
Toxaphene	UG/KG	210	U	220	U	200	U	210	U	200	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		SD1401		SD1501		SD1601		SD1701		SD1801	
		502-SD1401		502-SD1501		502-SD1601		502-SD1701		502-SD1801	
		623084 REG		623100 REG		623412 REG		623413 REG		623414 REG	
		7/5/94		7/5/94		7/6/94		7/6/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**										
Aldrin	UG/KG	2.1	U	1.9	U	2	U	2.1	UJ	1.9	U
alpha-BHC	UG/KG	2.1	U	1.9	U	2	U	2.1	UJ	1.9	U
alpha-Chlordane	UG/KG	2.1	U	0.24	J	2	U	2.1	UJ	1.9	U
Aroclor-1016	UG/KG	40	U	37	U	39	U	40	UJ	37	U
Aroclor-1221	UG/KG	81	U	74	U	80	U	81	UJ	74	U
Aroclor-1232	UG/KG	40	U	37	U	39	U	40	UJ	37	U
Aroclor-1242	UG/KG	40	U	37	U	39	U	40	UJ	37	U
Aroclor-1248	UG/KG	40	U	37	U	39	U	40	UJ	37	U
Aroclor-1254	UG/KG	40	U	37	U	39	U	40	UJ	37	U
Aroclor-1260	UG/KG	40	U	37	U	39	U	40	UJ	37	U
beta-BHC	UG/KG	2.1	U	1.9	U	2	U	2.1	UJ	1.9	U
4,4'-DDD	UG/KG	4	U	3.7	U	3.9	U	4	UJ	3.7	U
4,4'-DDE	UG/KG	4	U	3.7	U	3.9	U	5.2	R	3.7	U
4,4'-DDT	UG/KG	4	U	3.7	U	3.9	U	4	UJ	3.7	U
delta-BHC	UG/KG	2.1	U	1.9	U	2	U	2.1	UJ	1.9	U
Dieldrin	UG/KG	4	U	1.2	J	3.9	U	4	UJ	3.7	U
Endosulfan I	UG/KG	0.2	R	0.18	R	2	U	2.1	UJ	1.9	U
Endosulfan II	UG/KG	0.74	J	3.7	U	3.9	U	4	UJ	3.7	U
Endosulfan Sulfate	UG/KG	4	U	3.7	U	3.9	U	4	UJ	3.7	U
Endrin	UG/KG	4	U	3.7	U	3.9	U	4	UJ	3.7	U
Endrin Aldehyde	UG/KG	4	U	3.7	U	3.9	U	6.2	R	2.9	U
Endrin Ketone	UG/KG	4	U	3.7	U	3.9	U	0.67	J	0.35	U
gamma-BHC (Lindane)	UG/KG	2.1	U	1.9	U	2	U	2.1	UJ	1.9	U
gamma-Chlordane	UG/KG	2.1	U	1.9	U	2	U	2.1	UJ	0.53	U
Heptachlor	UG/KG	1.2	J	1.9	U	2	U	2.1	UJ	1.9	U
Heptachlor Epoxide	UG/KG	2.1	U	1.9	U	2	U	2.1	UJ	1.9	U
p,p'-Methoxychlor	UG/KG	21	U	19	U	20	U	9.4	U	3.3	R
Toxaphene	UG/KG	210	U	190	U	200	U	210	UJ	190	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1901		SD2001		SD2101		SD2111		SD2201	
		502-SD1901		502-SD2001		502-SD2101		502-SD2111		502-SD2201	
		623415 REG		623416 REG		624650 REG		624696 REG		624638 REG	
		7/6/94		7/6/94		7/11/94		07/11/94DUPE		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**										
Aldrin	UG/KG	1.8	U	2	U	2.1	U	2.1	U	2	U
alpha-BHC	UG/KG	1.8	U	2	U	2.1	U	2.1	U	2	U
alpha-Chlordane	UG/KG	3.5	J	2	U	0.9	U	1.5	J	2	U
Aroclor-1016	UG/KG	35	U	40	U	40	U	41	U	38	U
Aroclor-1221	UG/KG	72	U	81	U	82	U	83	U	78	U
Aroclor-1232	UG/KG	35	U	40	U	40	U	41	U	38	U
Aroclor-1242	UG/KG	35	U	40	U	40	U	41	U	38	U
Aroclor-1248	UG/KG	35	U	40	U	40	U	41	U	38	U
Aroclor-1254	UG/KG	35	U	40	U	40	U	41	U	38	U
Aroclor-1260	UG/KG	35	U	40	U	40	U	41	U	38	U
beta-BHC	UG/KG	1.8	U	2	U	2.1	U	2.1	U	2	U
4,4'-DDD	UG/KG	3.5	U	4	U	4	U	4.1	U	3.8	U
4,4'-DDE	UG/KG	3.5	U	4	U	4	UJ	0.78	J	3.8	U
4,4'-DDT	UG/KG	3.5	U	4	U	4	U	4.1	U	3.8	U
delta-BHC	UG/KG	1.8	U	2	U	2.1	U	2.1	U	2	U
Dieldrin	UG/KG	3.5	U	4	U	0.24	U	0.44	J	3.8	U
Endosulfan I	UG/KG	1.8	U	2	U	2.1	U	2.1	U	2	U
Endosulfan II	UG/KG	3.5	U	4	U	4	U	4.1	U	3.8	U
Endosulfan Sulfate	UG/KG	3.5	U	4	U	4	U	4.1	U	3.8	U
Endrin	UG/KG	3.5	U	4	U	0.29	U	4.1	U	3.8	U
Endrin Aldehyde	UG/KG	4	R	4	U	0.91	R	4.1	U	3.8	U
Endrin Ketone	UG/KG	0.86	J	4	U	4	U	4.1	U	3.8	U
gamma-BHC (Lindane)	UG/KG	1.8	U	2	U	2.1	U	2.1	U	2	U
gamma-Chlordane	UG/KG	1.8	U	2	U	2.1	U	2.1	U	2	U
Heptachlor	UG/KG	1.8	U	2	U	2.1	U	2.1	U	2	U
Heptachlor Epoxide	UG/KG	1.8	U	2	U	0.3	J	0.2	U	2	U
p,p'-Methoxychlor	UG/KG	6	R	20	U	2.5	U	0.98	U	20	U
Toxaphene	UG/KG	180	U	200	U	210	U	210	U	200	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD2301		SD2401		SD2501		SD2601		SD2701	
		502-SD2301		502-SD2401		502-SD2501		502-SD2601		502-SD2701	
		624102 REG		624142 REG		624156 R1 REG		624704 REG		624118 REG	
		7/7/94		7/7/94		7/7/94		7/11/94		7/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**										
Aldrin	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
alpha-BHC	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
alpha-Chlordane	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
Aroclor-1016	UG/KG	41	U	43	U	40	UJ	39	U	43	UJ
Aroclor-1221	UG/KG	84	U	87	U	80	UJ	80	U	88	UJ
Aroclor-1232	UG/KG	41	U	43	U	40	UJ	39	U	43	UJ
Aroclor-1242	UG/KG	41	U	43	U	40	UJ	39	U	43	UJ
Aroclor-1248	UG/KG	41	U	43	U	40	UJ	39	U	43	UJ
Aroclor-1254	UG/KG	41	U	43	U	40	UJ	39	U	43	UJ
Aroclor-1260	UG/KG	41	U	43	U	40	UJ	39	U	43	UJ
beta-BHC	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
4,4'-DDD	UG/KG	4.1	U	4.3	U	4	UJ	3.9	U	4.3	UJ
4,4'-DDE	UG/KG	4.1	U	4.3	U	4	UJ	3.9	U	4.3	UJ
4,4'-DDT	UG/KG	0.48	J	4.3	U	4	UJ	3.9	U	4.3	UJ
delta-BHC	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
Dieldrin	UG/KG	4.1	U	4.3	U	4	UJ	0.52	J	4.3	UJ
Endosulfan I	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
Endosulfan II	UG/KG	4.1	U	4.3	U	4	UJ	3.9	U	4.3	UJ
Endosulfan Sulfate	UG/KG	4.1	U	4.3	U	4	UJ	3.9	U	4.3	UJ
Endrin	UG/KG	4.1	U	4.3	U	4	UJ	3.9	U	4.3	UJ
Endrin Aldehyde	UG/KG	0.92	U	0.81	J	4	UJ	3.9	U	0.91	U
Endrin Ketone	UG/KG	4.1	U	4.3	U	4	UJ	3.9	U	4.3	UJ
gamma-BHC (Lindane)	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
gamma-Chlordane	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
Heptachlor	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
Heptachlor Epoxide	UG/KG	2.1	U	2.2	U	2	UJ	2	U	2.2	UJ
p,p'-Methoxychlor	UG/KG	21	U	22	U	20	UJ	20	U	22	UJ
Toxaphene	UG/KG	210	U	220	U	200	UJ	200	U	220	UJ

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0101		SD0201		SD0301		SD0401		SD0501	
		502-SD0101		502-SD0201		502-SD0301		502-SD0401		502-SD0501	
		624629 REG		624613 REG		624739 REG		624962 REG		REG	
		7/11/94		7/11/94		7/11/94		7/12/94		7/12/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	37.5	J	237	J	183	J	350	J	32.3	J
Fluoride	MG/KG	2.16	J	5.68	J	1.6	J	13.1	J	2.41	J
Nitrate-Nitrite-N	MG/KG	65.7	J	13.2	J	9170	J	4.62	J	3.81	J
Sulfate	MG/KG	120	J	734	J	25.9	J	540	J	215	J

		SD0601		SD0701		SD0801		SD0901		SD0911	
		502-SD0601		502-SD0701		502-SD0801		502-SD0901		502-SD0911	
		REG		REG		623079 REG		624057 REG		624089 REG	
		7/6/94		7/5/94		7/5/94		7/7/94		07/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	35	J	59.4	J	46	J	95	J	96.2	J
Fluoride	MG/KG	1.85	J	3.44	J	5.86	J	6.31	J	5.76	J
Nitrate-Nitrite-N	MG/KG	0.05	U	0.05	UJ	0.05	UJ	0.673	J	0.05	UJ
Sulfate	MG/KG	403	J	553	J	637	J	92.8	J	393	J

		SD1001		SD1101		SD1201		SD1301		SD1311	
		502-SD1001		502-SD1101		502-SD1201		502-SD1301		502-SD1311	
		624151 REG		624072 REG		623428 REG		623438 REG		623443 REG	
		7/7/94		7/7/94		7/6/94		7/6/94		07/06/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	3	UJ	62.9	J	45.8	J	56.5	J	66.9	
Fluoride	MG/KG	3.62	J	3.11	J	1.06	J	0.1	UJ	4.52	J
Nitrate-Nitrite-N	MG/KG	1.31	J	0.05	UJ	0.921		0.05	U	1.89	
Sulfate	MG/KG	345	J	264	J	418	J	277	J	514	J

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1401		SD1501		SD1601		SD1701		SD1801	
		502-SD1401		502-SD1501		502-SD1601		502-SD1701		502-SD1801	
		623092 REG		REG		623449 REG		623465 REG		623471 REG	
		7/5/94		7/5/94		7/6/94		7/6/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	119		50	J	82.3	J	74.8	J	32	J
Fluoride	MG/KG	4.97	J	0.899	J	2.91	J	5.63	J	3.4	J
Nitrate-Nitrite-N	MG/KG	0.765	J	0.05	UJ	2.03	J	1.44	J	1.19	J
Sulfate	MG/KG	1150	J	215	J	125	J	86.4	J	100	J

		SD1901		SD2001		SD2101		SD2111		SD2201	
		502-SD1901		502-SD2001		502-SD2101		502-SD2111		502-SD2201	
		623477 REG		623480 REG		624660 REG		624698 REG		624640 REG	
		7/6/94		7/6/94		7/11/94		07/11/94DUPE		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	34.1	J	49.6	J	46.3	J	50.6	J	44.8	J
Fluoride	MG/KG	1.76	J	4.21	J	0.1	UJ	1.82	J	2.77	J
Nitrate-Nitrite-N	MG/KG	0.05	UJ	0.05	UJ	10500	J	522	J	1.03	J
Sulfate	MG/KG	84.5	J	52.5	J	2	U	2	U	140	J

		SD2301		SD2401		SD2501		SD2601		SD2701	
		502-SD2301		502-SD2401		502-SD2501		502-SD2601		502-SD2701	
		624108 REG		624147 REG		624160 REG		624712 REG		624136 REG	
		7/7/94		7/7/94		7/7/94		7/11/94		7/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	3	UJ	47.8	J	37.1	J	58.3	J	50.2	J
Fluoride	MG/KG	2.63	J	1.43	J	2.38	J	4.09	J	2.63	J
Nitrate-Nitrite-N	MG/KG	1.79	J	48.7	J	1.68	J	4900	J	1.93	J
Sulfate	MG/KG	331	J	167	J	293	J	26.9	J	225	J

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD0101		SD0201		SD0301		SD0401		SD0501	
		502-SD0101		502-SD0201		502-SD0301		502-SD0401		502-SD0501	
		624635 REG		624616 REG		624742 REG		624966 REG		624973 REG	
		7/11/94		7/11/94		7/11/94		7/12/94		7/12/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
HMX	MG/KG	3	U	3	U	3	U	3	U	3	U
Nitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Tetryl	MG/KG	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3,5-Trinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
2,4,6-Trinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

		SD0601		SD0701		SD0801		SD0901		SD0911	
		502-SD0601		502-SD0701		502-SD0801		502-SD0901		502-SD0911	
		623437 REG		623061 REG		623075 REG		624063 REG		624098 REG	
		7/6/94		7/5/94		7/5/94		7/7/94		07/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U
HMX	MG/KG	3	U	3	U	3	UJ	3	U	3	U
Nitrobenzene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	U	2.5	U	2.5	UJ	2.5	U	2.5	U
Tetryl	MG/KG	2.5	U	2.5	U	2.5	UJ	2.5	UJ	2.5	UJ
1,3,5-Trinitrobenzene	MG/KG	1.5	R	1.5	U	1.5	UJ	1.5	U	1.5	U
2,4,6-Trinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1001		SD1101		SD1201		SD1301		SD1311	
		502-SD1001		502-SD1101		502-SD1201		502-SD1301		502-SD1311	
		624155 REG		624082 REG		623432 REG		623442 REG		623447 REG	
		7/7/94		7/7/94		7/6/94		7/6/94		07/06/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
HMX	MG/KG	3	U	3	U	3	U	3	U	3	U
Nitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Tetryl	MG/KG	2.5	UJ	2.5	UJ	2.5	U	2.5	U	2.5	U
1,3,5-Trinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	R	1.5	R	1.5	R
2,4,6-Trinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

		SD1401		SD1501		SD1601		SD1701		SD1801	
		502-SD1401		502-SD1501		502-SD1601		502-SD1701		502-SD1801	
		623088 REG		623103 REG		623461 REG		623466 REG		623473 REG	
		7/5/94		7/5/94		7/6/94		7/6/94		7/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	UJ	1.5	U	1.5	U	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	UJ	1.5	U	1.5	U	1.5	U
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	UJ	1.5	U	1.5	U	1.5	U
HMX	MG/KG	3	U	3	UJ	3	U	3	U	3	U
Nitrobenzene	MG/KG	1.5	U	1.5	UJ	1.5	U	1.5	U	1.5	U
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	U	2.5	UJ	2.5	U	2.5	U	2.5	U
Tetryl	MG/KG	2.5	U	2.5	UJ	2.5	U	2.5	U	2.5	U
1,3,5-Trinitrobenzene	MG/KG	1.5	R	1.5	UJ	1.5	R	1.5	U	1.5	U
2,4,6-Trinitrotoluene	MG/KG	1.5	U	1.5	UJ	1.5	U	1.5	U	1.5	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE											
		SD1901		SD2001		SD2101		SD2111		SD2201	
		502-SD1901		502-SD2001		502-SD2101		502-SD2111		502-SD2201	
		623478 REG		623483 REG		624668 REG		624702 REG		624643 REG	
		7/6/94		7/6/94		7/11/94		07/11/94DUPE		7/11/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
HMX	MG/KG	3	U	3	U	3	U	3	UJ	3	U
Nitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	U	2.5	U	2.5	U	2.5	UJ	2.5	U
Tetryl	MG/KG	2.5	U	2.5	U	2.5	U	2.5	UJ	2.5	U
1,3,5-Trinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
2,4,6-Trinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U

		SD2301		SD2401		SD2501		SD2601		SD2701	
		502-SD2301		502-SD2401		502-SD2501		502-SD2601		502-SD2701	
		624113 REG		624148 REG		624162 REG		624716 REG		624137 REG	
		7/7/94		7/7/94		7/7/94		7/11/94		7/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units										
2-Amino-4,6-dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
1,3-Dinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
2,4-Dinitrotoluene	MG/KG	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
2,6-Dinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
HMX	MG/KG	3	U	3	U	3	U	3	UJ	3	U
Nitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
PETN	MG/KG	1	R	1	R	1	R	1	R	1	R
RDX	MG/KG	2.5	U	2.5	U	2.5	U	2.5	UJ	2.5	U
Tetryl	MG/KG	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ	2.5	UJ
1,3,5-Trinitrobenzene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U
2,4,6-Trinitrotoluene	MG/KG	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE																
		SD0101			SD0201			SD0301			SD0401			SD0501		
		502-SD0101			502-SD0201			502-SD0301			502-SD0401			502-SD0501		
		624645 REG			624652 REG			624693 REG			624997 REG			625003 REG		
		7/11/94			7/11/94			7/11/94			7/12/94			7/12/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Ac-227	PCI/G	0.54+/-	NA	U	0.58+/-	NA	U	0.63+/-	NA	U	0.49+/-	NA	U	0.41+/-	NA	U
Am-241	PCI/G	0.56+/-	NA	U	0.75+/-	NA	U	0.64+/-	NA	U	0.65+/-	NA	U	0.55+/-	NA	U
Bi-207	PCI/G	0.08+/-	NA	U	0.08+/-	NA	U	0.08+/-	NA	U	0.07+/-	NA	U	0.06+/-	NA	U
Bi-210m	PCI/G	0.12+/-	NA	U	0.14+/-	NA	U	0.13+/-	NA	U	0.11+/-	NA	U	0.09+/-	NA	U
Co-60	PCI/G	0.07+/-	NA	U	0.09+/-	NA	U	0.08+/-	NA	U	0.09+/-	NA	U	0.07+/-	NA	U
Cs-137	PCI/G	0.73+/-	0.12	UJ	0.70+/-	0.12	UJ	0.12+/-	0.06	UJ	0.64+/-	0.11	U	0.17+/-	0.07	U
K-40	PCI/G	29.52+/-	2.03		26.46+/-	2.37		14.90+/-	1.64		16.63+/-	1.66		17.36+/-	1.49	
Pu-238	PCI/G	0.25+/-	0.15		0.25+/-	0.11		11.23+/-	0.81	J	0.79+/-	0.13		0.06+/-	0.2	U
Pu-239/40	PCI/G	0.05+/-	0.05		0.05+/-	0.06	U	-0.05+/-	0.05	UJ	0.02+/-	0.02	U	0.01+/-	0.09	U
Ra-226	PCI/G	1.03+/-	0.17		0.89+/-	0.19		0.80+/-	0.16		0.31+/-	NA	U	0.88+/-	0.15	
Sr-90	PCI/G	0.28+/-	0.39	U	-0.45+/-	0.37	U	0.27+/-	0.42	U	-0.58+/-	0.46	U	0.42+/-	0.41	U
Th-228	PCI/G	1.63+/-	0.24		1.60+/-	0.25		3.78+/-	0.38		1.38+/-	0.17	J	1.20+/-	0.17	J
Th-230	PCI/G	1.42+/-	0.22	J	1.53+/-	0.24	J	2.21+/-	0.27	J	1.59+/-	0.18	J	1.18+/-	0.17	
Th-232	PCI/G	1.16+/-	0.2	J	1.31+/-	0.22	J	2.12+/-	0.26	J	0.89+/-	0.13	J	0.92+/-	0.15	
Tritium	PCI/G	0.3+/-	1.6	U	-0.5+/-	1.6	U	2.8+/-	1.9	U	0.8+/-	1.7	U	0.5+/-	1.5	U
U-234	PCI/G	0.65+/-	0.17		0.79+/-	0.15		0.94+/-	0.14		0.91+/-	0.15	J	0.83+/-	0.17	
U-235	PCI/G	-0.01+/-	0.05	U	-0.01+/-	0.03	U	0.03+/-	0.02		0.05+/-	0.03	J	0.06+/-	0.04	
U-238	PCI/G	0.97+/-	0.21		0.93+/-	0.17		0.84+/-	0.13		0.95+/-	0.16	J	0.84+/-	0.17	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE																
		SD0601			SD0701			SD0801			SD0901			SD0911		
		502-SD0601			502-SD0701			502-SD0801			502-SD0901			502-SD0911		
		623251 REG			623116 REG			623121 REG			624164 REG			624180 REG		
		7/6/94			7/5/94			7/5/94			7/7/94			07/07/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Ac-227	PCI/G	0.39+/-	NA	U	0.29+/-	NA	U	0.45+/-	NA	U	0.22+/-	NA	U	0.25+/-	NA	U
Am-241	PCI/G	0.54+/-	NA	U	0.31+/-	NA	U	0.46+/-	NA	U	0.23+/-	NA	U	0.26+/-	NA	U
Bi-207	PCI/G	0.06+/-	NA	U	0.04+/-	NA	U	0.06+/-	NA	U	0.03+/-	NA	U	0.04+/-	NA	U
Bi-210m	PCI/G	0.09+/-	NA	U	0.06+/-	NA	U	0.11+/-	NA	U	0.05+/-	NA	U	0.06+/-	NA	U
Co-60	PCI/G	0.07+/-	NA	U	0.04+/-	NA	U	0.06+/-	NA	U	0.03+/-	NA	U	0.04+/-	NA	U
Cs-137	PCI/G	0.25+/-	0.07	U	0.07+/-	0.04	U	0.08+/-	NA	U	0.04+/-	0.03	U	0.09+/-	0.04	U
K-40	PCI/G	15.45+/-	1.44		15.56+/-	1.01		31.71+/-	1.89		8.92+/-	0.72	U	9.47+/-	0.83	U
Pu-238	PCI/G	0.46+/-	0.12		0.06+/-	0.12	U	-0.04+/-	0.13	U	0.05+/-	0.15	U	0.02+/-	0.14	U
Pu-239/40	PCI/G	0.01+/-	0.06	U	0.03+/-	0.04	U	0.04+/-	0.04	U	-0.02+/-	0.07	U	-0.01+/-	0.08	U
Ra-226	PCI/G	0.63+/-	0.13	J	0.68+/-	0.09		0.85+/-	0.17		0.41+/-	0.06		0.45+/-	0.08	
Sr-90	PCI/G	-0.04+/-	0.35	U	-0.30+/-	0.52	U	-0.29+/-	0.35	U	-0.05+/-	0.43	U	-0.67+/-	0.77	UJ
Th-228	PCI/G	1.69+/-	0.25		0.91+/-	0.18	U	1.52+/-	0.33		0.99+/-	0.14	U	0.50+/-	0.2	J
Th-230	PCI/G	1.55+/-	0.23		0.69+/-	0.15		1.35+/-	0.31		0.58+/-	0.11		0.39+/-	0.11	
Th-232	PCI/G	1.11+/-	0.19		0.51+/-	0.13		0.84+/-	0.24		0.36+/-	0.08		-0.01+/-	0.03	U
Tritium	PCI/G	0.7+/-	1.7	U	1.0+/-	1.7	U	1.1+/-	1.8	U	2.6+/-	1.9		1.6+/-	1.9	U
U-234	PCI/G	0.69+/-	0.13	J	0.52+/-	0.1	J	0.77+/-	0.16	J	0.55+/-	0.13	J	0.47+/-	0.12	
U-235	PCI/G	0.02+/-	0.03	UJ	-0.01+/-	0.02	UJ	0.17+/-	0.07	J	0.12+/-	0.06	J	-0.03+/-	0.03	U
U-238	PCI/G	0.79+/-	0.15	J	0.53+/-	0.1	J	0.93+/-	0.18	J	0.68+/-	0.15	J	0.47+/-	0.12	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE																
		SD1001			SD1101			SD1201			SD1301			SD1311		
		502-SD1001			502-SD1101			502-SD1201			502-SD1301			502-SD1311		
		624184 REG			624170 REG			623247 REG			623255 REG			623259 REG		
		7/7/94			7/7/94			7/6/94			7/6/94			07/06/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Ac-227	PCI/G	0.51+/-	NA	U	0.28+/-	NA	U	0.24+/-	NA	U	0.49+/-	NA	U	0.47+/-	NA	U
Am-241	PCI/G	0.55+/-	NA	U	0.39+/-	NA	U	0.31+/-	NA	U	0.51+/-	NA	U	0.60+/-	NA	U
Bi-207	PCI/G	0.08+/-	NA	U	0.04+/-	NA	U	0.03+/-	NA	U	0.08+/-	NA	U	0.06+/-	NA	U
Bi-210m	PCI/G	0.11+/-	NA	U	0.07+/-	NA	U	0.06+/-	NA	U	0.12+/-	NA	U	0.10+/-	NA	U
Co-60	PCI/G	0.07+/-	NA	U	0.05+/-	NA	U	0.04+/-	NA	U	0.07+/-	NA	U	0.08+/-	NA	U
Cs-137	PCI/G	0.11+/-	0.07	U	0.09+/-	0.06	UJ	0.04+/-	NA	U	0.10+/-	NA	U	0.09+/-	NA	U
K-40	PCI/G	22.67+/-	1.84		12.16+/-	1.05		7.86+/-	0.82	U	15.20+/-	1.65		14.13+/-	1.64	
Pu-238	PCI/G	0.04+/-	0.07	U	-0.06+/-	0.17	U	0.06+/-	0.15	U	0.04+/-	0.17	U	-0.01+/-	0.08	U
Pu-239/40	PCI/G	0.00+/-	0.02	U	-0.01+/-	0.07	U	-0.01+/-	0.07	U	0.01+/-	0.07	U	0.01+/-	0.03	U
Ra-226	PCI/G	1.02+/-	0.19		0.20+/-	NA	U	0.42+/-	0.08	J	0.73+/-	0.14	J	0.30+/-	NA	UJ
Sr-90	PCI/G	0.18+/-	0.34	U	-0.63+/-	0.94	UJ	-0.45+/-	0.59	U	-0.43+/-	0.47	U	0.04+/-	0.51	U
Th-228	PCI/G	1.45+/-	0.18	J	0.48+/-	0.1	J	0.93+/-	0.17	U	1.24+/-	0.24		1.08+/-	0.25	U
Th-230	PCI/G	1.66+/-	0.2	J	0.15+/-	0.06	J	1.41+/-	0.21		1.83+/-	0.3		2.24+/-	0.38	
Th-232	PCI/G	0.95+/-	0.14	J	0.01+/-	0.02	U	0.40+/-	0.11		0.93+/-	0.2		0.79+/-	0.21	
Tritium	PCI/G	2.5+/-	1.8	U	-0.2+/-	2	U	0.4+/-	1.6	U	1.4+/-	1.7	U	2.0+/-	1.7	
U-234	PCI/G	0.78+/-	0.14	J	0.53+/-	0.11		0.35+/-	0.12		0.54+/-	0.12	J	0.50+/-	0.12	J
U-235	PCI/G	0.04+/-	0.03	J	-0.02+/-	0.02	U	-0.01+/-	0.05	U	0.02+/-	0.03	UJ	0.00+/-	0.03	UJ
U-238	PCI/G	1.00+/-	0.16	J	0.45+/-	0.1		0.55+/-	0.16		0.65+/-	0.14	J	0.58+/-	0.12	J

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE																
		SD1401			SD1501			SD1601			SD1701			SD1801		
		502-SD1401			502-SD1501			502-SD1601			502-SD1701			502-SD1801		
		623126 REG			623132 REG			623263 REG			623267 REG			623271 REG		
		7/5/94			7/5/94			7/6/94			7/6/94			7/6/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Ac-227	PCI/G	0.31+/-	NA	U	0.22+/-	NA	U	0.32+/-	NA	U	0.23+/-	NA	U	0.24+/-	NA	U
Am-241	PCI/G	0.32+/-	NA	U	0.30+/-	NA	U	0.44+/-	NA	U	0.26+/-	NA	U	0.33+/-	NA	U
Bi-207	PCI/G	0.05+/-	NA	U	0.03+/-	NA	U	0.05+/-	NA	U	0.04+/-	NA	U	0.03+/-	NA	U
Bi-210m	PCI/G	0.07+/-	NA	U	0.06+/-	NA	U	0.07+/-	NA	U	0.06+/-	NA	U	0.06+/-	NA	U
Co-60	PCI/G	0.05+/-	NA	U	0.04+/-	NA	U	0.06+/-	NA	U	0.04+/-	NA	U	0.04+/-	NA	U
Cs-137	PCI/G	0.13+/-	0.05	U	0.04+/-	NA	U	0.06+/-	0.04	U	0.10+/-	0.05	U	0.06+/-	0.04	U
K-40	PCI/G	12.48+/-	1.04		7.99+/-	0.75	U	11.50+/-	1.11		9.94+/-	0.82	U	7.77+/-	0.86	U
Pu-238	PCI/G	0.01+/-	0.14	U	0.02+/-	0.05	U	0.00+/-	0.09	U	0.03+/-	0.02	J	0.03+/-	0.02	J
Pu-239/40	PCI/G	0.01+/-	0.07	U	0.00+/-	0.02	U	-0.01+/-	0.06	U	0.01+/-	0.02	UJ	0.00+/-	0.02	UJ
Ra-226	PCI/G	0.56+/-	0.1		0.49+/-	0.07		0.52+/-	0.1	J	0.54+/-	0.09	J	0.55+/-	0.09	J
Sr-90	PCI/G	0.06+/-	0.36	U	-0.08+/-	0.46	U	-0.16+/-	0.52	U	0.13+/-	0.55	U	0.12+/-	0.69	UJ
Th-228	PCI/G	0.76+/-	0.18	U	0.59+/-	0.11	UJ	1.31+/-	0.26		1.01+/-	0.17	U	0.73+/-	0.14	UJ
Th-230	PCI/G	0.98+/-	0.21		0.87+/-	0.13	J	1.48+/-	0.28		1.78+/-	0.24		1.03+/-	0.17	J
Th-232	PCI/G	0.57+/-	0.16		0.29+/-	0.07	J	0.83+/-	0.2		0.41+/-	0.11		0.29+/-	0.09	J
Tritium	PCI/G	0.9+/-	1.6	U	0.6+/-	1.5	U	1.3+/-	1.7	U	3.0+/-	1.9		1.1+/-	1.5	U
U-234	PCI/G	0.40+/-	0.1	J	0.45+/-	0.1	J	0.58+/-	0.14	J	0.50+/-	0.1	J	0.33+/-	0.09	J
U-235	PCI/G	-0.03+/-	0.03	UJ	-0.02+/-	0.04	UJ	0.06+/-	0.04	J	-0.02+/-	0.02	UJ	0.01+/-	0.03	UJ
U-238	PCI/G	0.56+/-	0.13	J	0.36+/-	0.09	J	0.97+/-	0.19	J	0.61+/-	0.11	J	0.40+/-	0.1	J

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE																
		SD1901			SD2001			SD2101			SD2111			SD2201		
		502-SD1901			502-SD2001			502-SD2101			502-SD2111			502-SD2201		
		623275 REG			623279 REG			624657 REG			624675 REG			624664 REG		
		7/6/94			7/6/94			7/11/94			07/11/94DUPE			7/11/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Ac-227	PCI/G	0.25+/-	NA	U	0.36+/-	NA	U	0.46+/-	NA	U	0.41+/-	NA	U	0.52+/-	NA	U
Am-241	PCI/G	0.32+/-	NA	U	0.52+/-	NA	U	0.59+/-	NA	U	0.52+/-	NA	U	0.54+/-	NA	U
Bi-207	PCI/G	0.04+/-	NA	U	0.05+/-	NA	U	0.06+/-	NA	U	0.06+/-	NA	U	0.08+/-	NA	U
Bi-210m	PCI/G	0.06+/-	NA	U	0.08+/-	NA	U	0.11+/-	NA	U	0.10+/-	NA	U	0.12+/-	NA	U
Co-60	PCI/G	0.04+/-	NA	U	0.06+/-	NA	U	0.08+/-	NA	U	0.07+/-	NA	U	0.08+/-	NA	U
Cs-137	PCI/G	0.13+/-	0.03	U	0.07+/-	NA	U	0.21+/-	0.07	UJ	0.12+/-	0.07	UJ	0.38+/-	0.07	UJ
K-40	PCI/G	8.02+/-	0.89	U	16.39+/-	1.39		19.50+/-	1.81		16.48+/-	1.61		25.63+/-	1.81	
Pu-238	PCI/G	0.01+/-	0.03	U	-0.01+/-	0.09	U	0.12+/-	0.17	U	0.03+/-	0.14	U	0.90+/-	0.16	
Pu-239/40	PCI/G	0.02+/-	0.03	U	0.00+/-	0.05	U	0.01+/-	0.07	U	0.00+/-	0.05	U	0.01+/-	0.05	U
Ra-226	PCI/G	0.48+/-	0.09	J	0.71+/-	0.14	J	0.82+/-	0.16		0.84+/-	0.14		1.09+/-	0.14	
Sr-90	PCI/G	0.10+/-	0.6	U	-0.11+/-	0.3	U	-0.34+/-	0.45	U	-0.20+/-	0.37	U	-0.31+/-	0.33	U
Th-228	PCI/G	1.09+/-	0.18	UJ	1.45+/-	0.18		1.29+/-	0.21	J	0.88+/-	0.14	J	1.40+/-	0.18	J
Th-230	PCI/G	0.82+/-	0.15	J	1.61+/-	0.19		1.70+/-	0.25	UJ	0.20+/-	0.06	J	1.66+/-	0.2	J
Th-232	PCI/G	0.53+/-	0.12	J	1.01+/-	0.15		0.76+/-	0.16	J	0.35+/-	0.08	J	0.89+/-	0.14	J
Tritium	PCI/G	0.9+/-	1.5	U	1.6+/-	1.7	U	-1.0+/-	1.8	U	1.0+/-	1.7	U	2.1+/-	1.7	U
U-234	PCI/G	0.57+/-	0.12	J	0.58+/-	0.12	J	0.67+/-	0.15		0.61+/-	0.16		0.99+/-	0.15	
U-235	PCI/G	-0.03+/-	0.03	UJ	0.00+/-	0.04	UJ	0.01+/-	0.04	U	0.02+/-	0.05	U	0.00+/-	0.02	U
U-238	PCI/G	0.59+/-	0.12	J	0.77+/-	0.14	J	0.78+/-	0.16		0.62+/-	0.16		1.06+/-	0.16	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE		SD2301			SD2401			SD2501			SD2601			SD2701		
		502-SD2301			502-SD2401			502-SD2501			502-SD2601			502-SD2701		
		624200 REG			624196 REG			624192 REG			624680 REG			624188 REG		
		7/7/94			7/7/94			7/7/94			7/11/94			7/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Ac-227	PCI/G	0.64+/-	NA	U	0.57+/-	NA	U	0.50+/-	NA	U	0.48+/-	NA	U	0.57+/-	NA	U
Am-241	PCI/G	0.64+/-	NA	U	0.58+/-	NA	U	0.50+/-	NA	U	0.49+/-	NA	U	0.59+/-	NA	U
Bi-207	PCI/G	0.09+/-	NA	U	0.08+/-	NA	U	0.07+/-	NA	U	0.06+/-	NA	U	0.09+/-	NA	U
Bi-210m	PCI/G	0.13+/-	NA	U	0.12+/-	NA	U	0.11+/-	NA	U	0.11+/-	NA	U	0.14+/-	NA	U
Co-60	PCI/G	0.09+/-	NA	U	0.08+/-	NA	U	0.08+/-	NA	U	0.07+/-	NA	U	0.08+/-	NA	U
Cs-137	PCI/G	0.30+/-	0.1	U	0.23+/-	0.08	U	0.10+/-	NA	U	0.09+/-	0.06	UJ	0.27+/-	0.12	U
K-40	PCI/G	23.25+/-	2.07		20.15+/-	1.86		21.62+/-	1.81		25.45+/-	1.8		21.88+/-	1.91	
Pu-238	PCI/G	21.87+/-	1.67		4.99+/-	0.41		0.03+/-	0.12	U	0.43+/-	0.13	J	1.73+/-	0.45	J
Pu-239/40	PCI/G	0.21+/-	0.08		-0.05+/-	0.03	U	0.01+/-	0.05	U	0.01+/-	0.05	UJ	-0.03+/-	0.11	UJ
Ra-226	PCI/G	0.92+/-	0.19		1.19+/-	0.19		1.08+/-	0.18		1.00+/-	0.15		1.02+/-	0.21	
Sr-90	PCI/G	0.77+/-	0.41	U	-0.19+/-	0.36	U	0.07+/-	0.36	U	-1.05+/-	0.82	UJ	-0.38+/-	0.42	U
Th-228	PCI/G	1.71+/-	0.29	J	1.79+/-	0.31	J	1.44+/-	0.25	J	1.07+/-	0.21	J	1.50+/-	0.33	J
Th-230	PCI/G	1.94+/-	0.31		1.36+/-	0.27		2.26+/-	0.33		1.32+/-	0.24	J	1.53+/-	0.34	
Th-232	PCI/G	1.80+/-	0.3		1.04+/-	0.23		1.00+/-	0.21		0.53+/-	0.15	J	0.55+/-	0.19	
Tritium	PCI/G	1.8+/-	1.7	U	2.3+/-	1.9	U	1.3+/-	1.6	U	1.5+/-	1.7	U	1.5+/-	1.9	U
U-234	PCI/G	0.71+/-	0.16		0.77+/-	0.19		0.93+/-	0.17		0.86+/-	0.19		0.68+/-	0.15	
U-235	PCI/G	-0.05+/-	0.04	U	0.14+/-	0.08		0.04+/-	0.03		0.04+/-	0.04		-0.01+/-	0.03	U
U-238	PCI/G	0.78+/-	0.16		0.79+/-	0.2		0.88+/-	0.17		0.89+/-	0.19		0.69+/-	0.15	

APPENDIX E.3 Radiological and Chemical Analytical Sediment Data
New Property Extended Phase

MOUND NEW PROPERTY EXTENDED PHASE																	
		SD0901		SD0911		SD1001		SD1101		SD2301		SD2401		SD2501		SD2701	
		502-SD0901		502-SD0911		502-SD1001		502-SD1101		502-SD2301		502-SD2401		502-SD2501		502-SD2701	
		624052 REG		624088 REG		624150 REG		624070 REG		624104 REG		624143 REG		624157 REG		624120 REG	
		7/7/94		07/07/94DUPE		7/7/94		7/7/94		7/7/94		7/7/94		7/7/94		7/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units																
Cerium	MG/KG	23.6		27.6		44.2		32.7		50.9		40.9		40.4		48.4	
Dypsprosi	MG/KG	2.8	R	3.1	R	2.7	R	7.8	U	3.9	U	2.9	R	2.7	R	2.9	R
Erbium	MG/KG	7.7	U	8.5	U	7.4	U	7.8	U	16.3	U	7.9	U	8.1	U	10.2	U
Europium	MG/KG	1	R	1.1	R	0.99	R	1	R	1	R	1	R	0.96	R	1.1	R
Gadolinin	MG/KG	45.4	U	8.8	U	7.7	U	56.9	U	7.8	U	8.1	U	7.5	U	8.2	U
Holmium	MG/KG	2.9	U	2.5	U	2.2	U	2.4	U	11.2	U	2.6	U	4.2	U	4.9	U
Lanthanum	MG/KG	13.8	U	9.7	U	14.8	U	12.4	U	22	U	14.5	U	15.7	U	18.4	U
Lutetium	MG/KG	0.52	R	0.57	R	0.5	R	0.52	R	0.5	R	0.52	R	0.48	R	0.53	R
Neodymium	MG/KG	20.3		25.5		23.1		23.4		33.4		16.5		12	U	28.7	
Praseodym	MG/KG	16.9	U	9.1	U	7.9	U	9.8	U	15.2	U	8.4	U	15.6	U	8.4	U
Samarium	MG/KG	21.1	U	23.2	U	20.3	U	21.4	U	20.5	U	21.5	U	19.8	U	21.6	U
Terbium	MG/KG	15.5	U	17	U	14.9	U	15.7	U	15	U	15.7	U	14.5	U	15.8	U
Thulium	MG/KG	2.6	R	2.8	R	2.5	R	2.6	R	2.5	R	2.6	R	2.4	R	2.6	R
Ytterbium	MG/KG	3.9	U	4.2	U	3.7	U	3.9	U	3.8	U	3.9	U	3.6	U	4	U

APPENDIX F
MOUND OU5 DATA QUALITY ASSESSMENT REPORT

The OU5 Data Quality Assessment report is in progress and will be added to this report upon completion.

APPENDIX F
MOUND OU5 DATA QUALITY ASSESSMENT REPORT

APPENDIX F

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ACRONYMS

ASTM	American Society for Testing and Materials
CLP	Contract Laboratory Program
CLP SOW	Contract Laboratory Program Statement of Work
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CC	cross check
DER	Duplicate Error Ratio
DOE	Department of Energy
DQA	Data Quality Assessment
DQO	Data Quality Objective
EPA	U.S. Environmental Protection Agency
GC/MS	Gas Chromatography/Mass Spectrometry
GFPC	Gas Flow Proportional Counting
GFAA	Graphite Furnace Atomic Absorption
HPLC	High Performance Liquid Chromatography
ICAP	Inductively Coupled Argon Plasma
ICS	interference check sample
IS	internal standard
MS	matrix spike
MSD	matrix spike duplicate
OEPA	Ohio Environmental Protection Agency
OU5	Operable Unit 5
OU9	Operable Unit 9
PE	performance evaluation
PCB	polychlorinated biphenyl
QAPjP	Quality Assurance Project Plan
QC	quality control
RPD	relative percent difference
RSI	Regional Soils Investigations
SVOC	semivolatile organic compound
VOC	volatile organic compound

F.1.0. INTRODUCTION

Chemical data are fundamental to an environmental investigation. Inherent in the chemical data are uncertainties arising from the natural variability in the environment and measurement error. Data quality objectives (DQOs) are statements specifying the analytical and statistical goals of a study. DQOs assessed in this appendix were developed during project planning and are presented in the OU5 Quality Assurance Project Plan (QAPjP).

This data quality assessment (DQA) evaluates the validity and performance of the data collection program by determining if the data are sufficient, adequate, and usable for supporting project decisions. Specifically, this DQA assess the organic, inorganic, and radiological data produced from the analysis of environmental samples collected during the Non-Area of Concern (AOC), Area 7, and the New Property investigations. This DQA also evaluates the impact of all quality control (QC) measures on the overall data quality and removes all unusable values from the investigation data set.

All sampling and analysis was conducted using the QC requirements and quality assurance (QA) objectives outlined in the OU5 and OU9 QAPjPs. A summary of the environmental and field QC samples collected and analyzed during the OU5 investigations are presented in Table F.1-1 on page F-14.

Note: Due to the large amount of tabulated data in this appendix, all tables are located in numerical order beginning on page F-14.

F.1.1. ENVIRONMENTAL ANALYTICAL LABORATORIES

CompuChem Environmental Corporation, Research Triangle Park, North Carolina, performed all chemical and radiological analyses. All environmental samples (i.e., soil, groundwater, and seep water) and field QC samples (i.e., trip blanks, ambient blanks, and equipment rinsates) were analyzed using U.S. Environmental Protection Agency (EPA) and Mound OU5 QAPjP methods from the following references:

- *Contract Laboratory Program Statement of Work Modifications, OU9 Site-Wide QAPjP, Appendix B*, Revision 3, June 1993;

- *Statement of Work for Organic Analysis, Multi-Media, Multi-Concentration,* EPA Contract Laboratory Program, March 1990 and revisions;

- *Statement of Work for Inorganic Analysis, Multi-Media, Multi-Concentration,* EPA Contract Laboratory Program, March 1990 and revisions;

- *Superfund Analytical Methods for Low Concentration Water for Organics Analysis,* EPA, June 1991;

- *Superfund Analytical Methods for Low Concentration Water for Inorganics Analysis,* EPA, June 1991;

- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,* SW-846, Third Edition, September 1986, with 1989 revisions; and

- *Methods for Chemical Analysis of Water and Wastes,* EPA-600/4-79, March 1983.

F.1.2. ANALYTICAL DATA VALIDATION

All analytical data were validated as described in Section F.3.0 using the guidelines and specifications described in the following documents:

- *Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses,* EPA Contract Laboratory Program, February 1988;

- *National Functional Guidelines for Organic Data Review, Multi-Media, Multi-Concentration (OLM01.0) and Low Concentration Water (OLC01.0),* EPA Contract Laboratory Program, Draft, December 1990, Revised June 1991;

- *Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses,* EPA Contract Laboratory Program, February 1988, Revised January 1993; and

- *Data Validation Guidelines for Non-Contract Laboratory Program (CLP) Analyses, OU9 Site-Wide QAPjP, Appendix H,* Revision 3, June 1993.

The validated results, including qualifiers, were incorporated into the OU5 database and used to evaluate data quality. The data quality summary, rejected data summary, accuracy and precision summary, and completeness calculations were prepared using 100 percent of all concentration records in the OU5 database. Bias and uncertainty were determined using 100 percent of the usable (i.e., unqualified results and estimated data points only) concentration values in the database. Table F.1-2 summarizes all qualified data points, as well as the associated potential bias and uncertainty.

F.1.3. QUALITY DATA MANAGEMENT

The OU5 database was populated with analytical results collected during the sampling required in the Mound OU5 investigations. All duplicate, QC blanks, and dilution results were resolved and the most appropriate data points were selected. The selection processes used are described below:

- All detected compounds in the trip blanks were evaluated and the reportable data points were adjusted using the following procedures: (1) All environmental samples were linked with the associated trip blanks, based on the applicable chain-of-custody form. (2) All potential contaminants detected in the associated trip blanks were evaluated. These blank concentrations were raised by a factor of 10 (for common laboratory contaminants) or 5 (for all other contaminants) based on the compound detected and applicable validation procedures. These adjusted values became the minimum concentration that would be considered representative in a given environmental sample. (3) All concentration values in the associated environmental samples were compared with the adjusted trip blank results. If the concentration did not exceed the minimum representative concentration (found in the trip blank), then the value was considered not detected at the concentration reported and was qualified as undetected.

- All detected compounds and elements in the equipment rinsate blanks were evaluated and the reportable data points were adjusted using the following procedures: (1) All environmental samples were linked with the associated equipment rinsate blanks, based on the applicable chain-of-custody form. (2) All potential contaminants detected in the

associated rinsate blanks were evaluated. These concentrations were raised by a factor of 10 (for common laboratory contaminants), 5 (for all other contaminants), or 3 (for radiochemical contaminants) based on the compound detected and appropriate validation procedures. These values became the minimum concentration that would be considered representative in a given environmental sample. (3) All concentration values in the associated environmental samples were compared with the adjusted equipment rinsate blank results. If the concentration did not exceed the minimum representative concentration (found in the equipment rinsate), the value was considered not detected at the concentration reported and was qualified as undetected.

- All data points qualified with "R" were marked to prevent incorporation into the usable data population.

- All laboratory duplicate values for sample identification and analytical method, and all values meeting the duplicate value criteria were evaluated using the following procedure (standard logic): (1) The higher concentration value was selected. (2) The detected value was selected. (3) The most sensitive contract-required quantitation or detection limit (CRQL or CRDL, respectively) was selected for duplicate nondetected values.

- All dilution results were evaluated for best value and CRQL/CRDL using the following procedure: (1) The diluted sample results were selected for all compounds, with the exception of volatile organic compounds (VOC) methylene chloride, acetone, 2-butanone, and toluene, and semi-volatile organic compounds (SVOC) phthalate esters. The concentration value reported in the nondiluted sample was selected for those compounds only. (2) The nondiluted value was selected to prevent potential false positive value incorporation into the usable data population for duplicate nondetected and detected values. (3) The most sensitive CRQL or CRDL was selected for duplicate nondetected values.

- All reanalyses results were evaluated for best value, based on QC results, and CRQL/CRDL using the standard logic procedure.

- All field duplicate/replicate analyses results were evaluated for best value and CRQL/CRDL using the following procedure: (1) Duplicate detected values were averaged if the calculated relative percent difference (RPD) was less than 20 (water) or 35 (soil) percent. The higher concentration value was selected if the reference RPD value was exceeded. (2) The detected value was selected where the duplicate value was not detected. (3) The most sensitive CRQL/CRDL was selected where both values were not detected.

F.2.0. DATA QUALITY OBJECTIVES

As defined in the QAPjP, the following specific data quality objectives (DQOs) for accuracy, precision, completeness, representativeness and comparability were used to assess the overall quality of the analytical data collected from OU5.

The DQOs for analyses conducted during the investigations are listed in Tables F.2-1 and F.2-2.

F.2.1. ACCURACY

Accuracy is defined as the degree of difference between measured or calculated values and the true value. Accuracy was determined in the OU5 data set using matrix spike/matrix spike duplicates (MS/MSD) for organics and MS samples for inorganics and radiochemical analyses. Data were qualified on the basis of percent recoveries (%R) of these spikes in conjunction with other validation criteria. All DQOs for accuracy were met for the EG&G Mound OU5 project. Laboratory accuracy and precision performance summary tables for each analysis are presented in Section F.4.2.

F.2.2. PRECISION

Precision is defined as the reproducibility, or degree of agreement between replicate measurements of the same compound or element. No data were rejected due to unacceptable RPD results; therefore, the precision DQOs for the OU5 projects were met. Laboratory accuracy and precision performance summary tables for each analysis are presented in Section F.4.2.

F.2.3. COMPLETENESS

Completeness is a measure of the amount of valid data obtained from a measurement system that achieves the project goals, compared to the amount expected under normal conditions. For data to be considered valid, they must have met all acceptance criteria, including accuracy and precision, as well as any other criteria specified by the analytical methods used. Samples to be collected for OU5 were predefined by depth intervals at each borehole. The initial planned number of samples was an estimation based upon the expected depth of each borehole. When the estimated number of samples were not obtained from a borehole due to bedrock, those samples planned at a greater depth, but not taken, are not considered to adversely affect the completeness of the data set. The project completeness goal per the OU5 QAPjP was 90%. Completeness is calculated by dividing the number of samples not taken (15) by the total number of samples planned (163) and multiplying by 100. Then, subtract this value (9.2) from 100 to get completeness, which is 91%. Neither total samples planned nor samples not taken, includes samples planned from locations which are on or below bedrock.

F.2.4. REPRESENTATIVENESS

Representativeness is defined as the degree to which the data accurately and precisely represent a characteristic of a population, parameter variations at a sampling location, a process condition, or an environmental condition. Sample representativeness was ensured during OU5 investigation by collecting sufficient samples of a population medium, properly distributed with respect to location and time. Representativeness was assessed by reviewing the drilling techniques, sample collection methods, equipment, and sample containers used. Representativeness was also assessed by evaluating the RPD values calculated from the field duplicate samples, the duplicate concentration values reported from redundant analyses, and the concentrations of contaminants detected in the field and laboratory QC blanks. The reproducibility of a representative set of samples reflects the degree of heterogeneity of the sampled medium.

F.2.5. COMPARABILITY

Comparability is defined as the confidence with which one data set can be compared to another. To achieve data comparability, the data set used for OU5 was generated by employing standardized analytical methods and standardized data validation procedures where available (i.e., CLP Methods and Functional

Guidelines). Where general guidance was unavailable, Mound specific methods and data validation procedures common to all Mound remedial investigations were used.

Additionally, CompuChem participated in the analysis of Performance Evaluation (PE) samples for organics and inorganics and Cross Check (CC) samples for radionuclides. The results of the samples are listed in Tables F.2-3 and F.2-4. The laboratory's performance over the period presented indicates their ability to generate accurate results over time. Based on the overall quality of the PE and CC sample results, and the stringent QC requirements set by the standardized methods, the data generated is considered comparable to other data generated through similar processes.

F.3.0. DATA VALIDATION AND ASSESSMENT

The OU5 data were validated as described in the following subsections. Data quality was assessed and the usable data population was then determined using the preparation and selection process described in Section F.1.3.

F.3.1. DATA VALIDATION PROCESS

All data received from the laboratories were subjected to an initial review to ensure that all elements of the required deliverable were submitted. All analytical data were validated according to the guidelines and procedures described in the documents listed in Section F.1.2.1. Ten percent of the data received full validation including recalculation of selected data. The remaining 90% went through a verification process that reviewed QC information and other enclosed forms. Validators were responsible for (1) reviewing the laboratory data (i.e., ensuring that the required information was complete), (2) comparing the laboratory QC results with the required control limits (using professional judgment where specific limits were not specified), (3) verify that selected results were correctly calculated, (4) qualifying affected data points, and (5) preparing a technical justification for the validation actions taken.

Wet chemistry methods (i.e. chloride, pH, sulfate, etc.) were validated to equivalent levels as the balance of organic, inorganic, and radiochemical data. Wet chemistry methods have fewer laboratory QA requirements and provide more general information than do CLP and CLP-type analyses. The results of wet chemistry analyses were therefore incorporated into the overall assessment of DQOs, but individual QA and method specific results are not presented in this appendix.

F.3.2. DATA VALIDATION REVIEW PROCESS

All analytical data received from the validators were reviewed for completeness and consistency before the validation qualifiers were incorporated into the OU5 database. Approximately 10% of all data validation reports received a secondary review to ensure conformity in validation procedures among validators. Any qualifiers inconsistently or inappropriately applied were revised, as necessary. All changes were documented.

F.3.3. DATA QUALITY ASSESSMENT

The DQA was conducted using the validated results. The complete OU5 usable data set contained 25,836 concentration records. Bias and uncertainty were evaluated for all estimated (i.e., "J or UJ") data points based on 100 percent of the total estimated (i.e., those data points [records] that were qualified as "J or UJ") dataset. Of these data, 35% (3,178 concentration values) are considered to have been reported at an artificially lower concentration (i.e., potentially biased low). Approximately 9% (856 concentration values) of the OU5 dataset are considered to have been reported at a maximum value (i.e., potentially biased high). The direction of bias could not be determined for 35% (3,204 records) of the OU5 dataset with the information provided. Uncertainty was evaluated as the potential for false negative or false positive values. Based on the data evaluated, 37% (3,371 concentration values) of the estimated values reported are considered potential false negatives and approximately 9% (439 values) are considered potential false positives.

F.4.0. LABORATORY QUALITY CONTROL SUMMARY

F.4.1. HOLDING TIMES

Holding times are defined as the maximum amount of time allowed to elapse between the time of sample collection and the time of sample analysis. Analysis of samples that have exceeded the method-recommended holding times may result in the following: (1) concentrations of compounds that ordinarily would have been detected are undetected due to chemical transformation, compound volatilization, or biodegradation; (2) reported concentrations lower than those originally present, due to the factors previously stated; or (3) reported concentrations greater than those originally present in the sample, due to external contamination of water samples or changes in soil moisture content. No data was rejected due

to holding time violations. Approximately 4% (1,079 records) of the usable data population were estimated due to holding time violations.

F.4.2. ACCURACY AND PRECISION

Laboratory accuracy and precision assessment and matrix effect sample evaluation was conducted using MS/MSD (for organic compounds) and spike and duplicate (for inorganic compounds and radiochemical) analyses. Accuracy and precision were expressed as the percent recovery of the spike compounds, elements or isotopes and the relative percent difference of the concentrations of the spike compounds, respectively. For samples collected and analyzed for trace metals and other inorganic chemicals, precision was expressed as the percent difference of the concentration of elements detected in the sample and associated analytical duplicate. A MS/MSD or a spike and analytical duplicate analysis was required for every 20 samples of a similar matrix.

F.4.2.1. Volatile Organic Compound Analyses

Eighteen soil samples and eight water samples were analyzed as MS/MSDs using CLP methods. These samples were spiked with the following compounds: acrylonitrile, acetonitrile, 1,1-dichloroethene, trichloroethene, benzene, toluene, and chlorobenzene. The analytical accuracy and precision results are summarized in Tables F.4-1 through F.4-4.

F.4.2.2. Semivolatile Organic Compound Analyses

Sixteen soil and four water samples were analyzed as MS/MSDs using the CLP SOW. These samples were spiked with the following compounds: phenol, 2-chlorophenol, 1,4-dichlorobenzene, n-nitroso-di-n-propylamine, 1,2,4-trichlorobenzene, 4-chloro-3-methlyphenol, acenaphthene, 4-nitrophenol, 2,4-dinitrotoluene, pentachlorphenol, and pyrene. The analytical accuracy and precision results are summarized in Tables F.4-5 through F.4-8.

F.4.2.3. Pesticides/PCB Analyses

Sixteen soil and two water samples were analyzed as MS/MSDs using the CLP SOW. These samples were spiked with the following compounds: gamma-BHC (lindane), heptachlor, aldrin, dieldrin, endrin,

and 4,4'-DDT. A summary of the recovery and difference results is presented in Tables F.4-9 through F.4-12.

F.4.2.4. Purgeable Hydrocarbons Analyses

Four water samples were analyzed as MS/MSDs using the CLP SOW. These samples were spike with the following compounds: trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, trichlorofluoromethane (Freon-11), and Freon-113. A summary of the recovery and difference results is presented in Tables F.4-13 through F.4-14.

F.4.2.5 Explosives Analyses

Twenty soil and four water samples were analyzed as MS/MSDs using the CLP SOW. These samples were spiked with the following compounds: RDX, 1,3,5-trinitrobenzene, 2,4,6-trinitrotoluene, 2,6-dinitrotoluene, and 2,4-dinitrotoluene. A summary of the recovery and difference results is presented in Table F.4-15 through F.4-18.

F.4.2.6. Inorganic Chemical Analyses

Ten soil and five water samples were analyzed as spike and duplicates using EPA CLP, solid waste, or other regional methods. A summary of the recovery and difference results is presented in Tables F.4-19 through F.4-22.

F.4.2.7. Lanthanide Analyses

Several soil and water samples were analyzed as spike and duplicates using EPA CLP, solid waste, or other regional methods. A summary of the recovery and difference results is presented in Tables F.4-23 through F.4-26.

F.4.2.8. Radionuclide Analyses

Several soil and water samples were analyzed as spike and duplicates using the referenced methods for radiochemical analyses. A summary of the recovery and difference results is presented in Tables F.4-27 through F.4-30.

F.4.3. COMPLETENESS

The analytical completeness goal was 95% as required by the OU5 QAPjP. Analytical completeness was calculated by determining the percentage of sample analyses that were not rejected for each method. No sample analyses were rejected, therefore the analytical completeness was 100% for all methods. Table F.4-31 presents analytical completeness on an analyses level, however these results do not impact the quality or completeness of the entire data set.

F.4.4. REPRESENTATIVENESS

Representativeness is ensured by conducting all field measurements, sample collection procedures, and laboratory analyses according to the guidelines and specifications described in the OU5 Work Plan, OU5 FSP, and OU5 QAPjP. Laboratory procedures initially were evaluated in the data validation process. All field procedures and any deviations are discussed in Section 2 of the report. The field duplicate values and QC blank results were processed using the procedures described in Section F.1.3. As a result, the dataset was considered representative for the purpose of the project.

Rejected values were not included in the usable data population due to the increased potential of using false positive or excluding false negative compounds or elements. As a result, 17 VOC, 45 SVOC, 39 Pesticide/PCB, 183 explosive, 304 inorganic, and 4 radiochemical data points were not included in the usable data population. Based on the evaluation of the field and laboratory QC results, 98 percent of the total environmental sample data points collected during OU5 were considered representative (i.e., 596 data points were removed from 26,432 total data points) and used as the basis for all recommendations presented in this report. Rejected data points are presented in Table F.4-32.

F.5.0. FIELD QUALITY CONTROL SUMMARIES

Forty-three trip blanks, 11 ambient blanks, 11 sample bank blanks, 18 equipment rinsate blanks, and 20 field duplicates were collected during this investigation. Trip ambient, and sample bank blanks were analyzed for VOCs only. Equipment rinsate blanks and field duplicates were analyzed for the same target compounds or elements and using the same laboratory techniques as those used for the environmental

samples. The analytical results obtained from the field QC blanks were used to assess the efficiency and effectiveness of the sample collection, handling, and equipment decontamination procedures used in the field.

F.5.1. TRIP BLANKS

Trip blanks monitor for VOC contamination during sample transport and storage. Trip blanks were prepared by the laboratory with American Society for Testing and Materials (ASTM) Type II water, stored with the unused sample bottles, and returned to the laboratory with each cooler containing VOC samples. The samples were analyzed for VOCs using the CLP SOW. Table F.5-1 summarizes the concentrations (i.e., greater than the applicable CRQL) of the detected VOCs in the trip blank samples collected during OU5 sampling. If the concentrations of the compounds detected in the environmental samples did not exceed 10 times (for methylene chloride, acetone, 2-butanone, and toluene) or 5 times (for all other compounds) that detected in the trip blank, the compound was considered not detected in the environmental sample (i.e., U) at the concentrations reported.

F.5.2. AMBIENT AND SAMPLE BANK BLANKS

Ambient blanks and sample bank blanks were collected to monitor for VOCs potentially present in the surrounding environment during sample collection and packaging respectively. Ambient blanks were collected by filling two 40-ml VOA containers with the ASTM Type II water at the site during the collection of the environmental samples. All ambient blanks were analyzed for CLP VOCs. Table F.5-2 summarizes the concentrations of the compounds detected in the ambient blanks.

Sample bank blanks were prepared by filling two 40-ml VOA containers with ASTM type II water at the location where the samples were packaged for shipment. The VOA vials were left uncapped during packaging. After the last environmental sample for a particular shipment had been prepared and placed in the shipping cooler, the vials were sealed and placed into the sample cooler. Sample bank blanks were tested for CLP VOCs.

F.5.3. EQUIPMENT RINSATE BLANKS

Equipment rinsate blanks were collected to evaluate the decontamination technique used for manual sampling equipment. Equipment rinsate blanks were collected by pouring ASTM Type II reagent water through a decontaminated piece of equipment into a prepared sample container appropriate for the required analysis. Equipment rinsate blanks were shipped to the laboratory, and analyzed for the same analytes as the environmental samples which the equipment was used to collect. All detected compounds and elements in the equipment rinsate blanks were evaluated and the reportable data points were adjusted using the procedure described for trip blanks. Table F.5-3 summarizes the concentrations of the compounds and elements detected in the equipment rinsate blanks collected during the OU5 projects.

F.5.4. FIELD REPLICATES

Replicate environmental samples were collected at selected locations to evaluate the precision of the sampling technique. The RPD value of each detected compound or element was reviewed to assess the sample collection reproducibility and matrix variability. Tables F.5-4 and F.5-5 summarizes the calculated RPD values (i.e. less than 20 percent [water samples] and less than 35 percent [soil samples]) for samples collected and analyzed for trace metals and organic compounds.

All field duplicate analyses results were evaluated for best value and CRQL/CRDL to be used in the OU5 data sets using the following procedure: (1) Duplicate detected values were averaged if the calculated RPD was less than or equal to 20 (water) or 35 (soil) percent. The higher concentration value was selected if the reference RPD value was exceeded. (2) The detected value was selected where the duplicate value was not detected. (3) The most sensitive CRQL/CRDL was selected where both values were not detected.

Table F.1-1. Samples Collected and Analyzed During the OU5 Field Investigation

Analysis	Soils		Water		
	Number of Environmental Samples	Number of Field Duplicate Samples	Number of Environmental Samples	Number of Field Duplicate Samples	Nymber of Field QC Samples
Volatile Organics	123	15	19	5	84
Semi-Volatile Organics	115	14	14	3	16
Pesticide/PCBs	115	14	13	3	16
Explosives	121	15	13	3	17
Inorganics	116	14	14	3	16
Gamma Spectroscopy	121	15	14	3	17
Alpha Spectroscopy	103	14	12	3	14
Liquid Scintillation	121	15	14	3	17
Alpha Scintillation	0	0	14	3	17
Conventional Analysis	115	14	14	3	16

PCB polychlorinated biphenyls
QC quality control

Table F.2-1. OU5 Data Quality Objectives for Water Samples

Analysis	Method	Accuracy* (% R)	Precision (RPD)	Completeness (%)
Volatile Organic Compounds	CLP SOW	61-145	14	95%
Semivolatile Organic Compounds	CLP SOW	9-127	50	95%
Pesticides/PCBs	CLP SOW	38-131	27	95%
Purgeable Hydrocarbons	SW846 8010		15	95%
Inorganics	CLP SOW	75-125	20	95%
Lanthanides	CLP SOW MOD C	75-125	20	95%
Explosives	SW846 8330	62-102	45	95%
Radiological Data	Various	± 3 x SD	+ 4 x SD	95%

-- Actual limits not stated in the QAPjP
* Accuracy values presented in table represent a compulation of all acceptable recovery ranges of individual compounds (i.e., the maximum and minimum limit of any target list compound (TLC).
CLP SOW Contract laboratory program statment of work
MOD Modification
PCB Polychlorinated biphenyl
%R Percent recovery
RPD Relative percent difference

Table F.2-2. OU5 Data Quality Objectives for Soil Samples

Analysis	Method	Accuracy (% R)	Precision (RPD)	Completeness (%)
Volatile Organic Compounds	CLP SOW	59-172	24	95%
Semivolatile Organic Compounds	CLP SOW	11-142	50	95%
Pesticides/PCBs	CLP SOW	23-139	50	95%
Purgeable Hydrocarbons	SW846 8010	60-140	30	95%
Inorganics	CLP SOW	75-125	35	95%
Lanthanides	CLP SOW MOD C	75-125	20	95%
Explosives	SW8330	--	--	95%
Radiological Data	Various	± 3 x SD	+ 4 x SD	95%

-- Actual limits not stated in the QAPjP
SD Standard Deviation - number determined by laboratory
* Accuracy values presented in table represent a compulation of all acceptable recovery ranges of individual compounds (i.e., the maximum and minimum limit of any target list compound (TLC).
CLP SOW Contract laboratory program statment of work
MOD Modification
PCB Polychlorinated biphenyl
%R Percent recovery
RPD Relative percent difference

Table F.2-3. Performance Evaluation Report for CompuChem
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Analyte	Test Date					
	Third Quarter 1994			Fourth Quarter 1994		
	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3
Aluminum	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----	Satisfactory
Antimony	Unsatisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Arsenic	Satisfactory	Unsatisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Barium	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----
Beryllium	Satisfactory	Satisfactory	Satisfactory	Unsatisfactory	Satisfactory	----
Cadmium	Satisfactory	Satisfactory	Warning	Satisfactory	Satisfactory	Satisfactory
Calcium	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----
Chromium	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Unsatisfactory	Unsatisfactory
Cobalt	----	Satisfactory	Satisfactory	----	Unsatisfactory	Satisfactory
Copper	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----
Iron	Satisfactory	Satisfactory	Unsatisfactory	Satisfactory	Satisfactory	Satisfactory
Lead	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Magnesium	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Manganese	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----	Satisfactory
Mercury	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Unsatisfactory	Satisfactory
Nickel	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----
Potassium	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----	Satisfactory

Table F.2-3. Performance Evaluation Report for CompuChem
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Analyte	Test Date					
	Third Quarter 1994			Fourth Quarter 1994		
	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3
Selenium	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----	Satisfactory
Silver	Satisfactory	----	Unsatisfactory	Satisfactory	Unsatisfactory	Satisfactory
Sodium	----	Satisfactory	Satisfactory	Unsatisfactory	Satisfactory	----
Thallium	----	Satisfactory	Satisfactory	Satisfactory	----	Satisfactory
Vanadium	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----	Satisfactory
Zinc	Satisfactory	Satisfactory	Satisfactory	Satisfactory	----	Satisfactory
Bromomethane	----	----	----	Satisfactory	----	----
Bromodichloromethane	----	----	----	Unsatisfactory	----	----
Trichloroethene	----	----	----	Satisfactory	----	----
trans-1,3-Dichloropropene	----	----	----	Satisfactory	----	----
2-pentanone,4-Methyl-	----	----	----	Satisfactory	----	----
2-Hexanone	----	----	----	Satisfactory	----	----
Tetrachloroethene	----	----	----	Satisfactory	----	----
1,1,2,2-Tetrachloroethane	----	----	----	Warning	----	----
Ethyl benzene	----	----	----	Satisfactory	----	----
Styrene	----	----	----	Satisfactory	----	----
Phenol	----	----	----	Satisfactory	----	----

Table F.2-3. Performance Evaluation Report for CompuChem
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Analyte	Test Date					
	Third Quarter 1994			Fourth Quarter 1994		
	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3
2-Chlorophenol	----	----	----	Satisfactory	----	----
1,4-Dichlorobenzene	----	----	----	Satisfactory	----	----
2,2'-oxybis(1-Chloropropene)	----	----	----	Satisfactory	----	----
Naphthalene	----	----	----	Satisfactory	----	----
Acenaphthene	----	----		Satisfactory	----	----
Dibenzofuran	----	----	----	Satisfactory	----	----
Diethylphthalate	----	----	----	Satisfactory	----	----
Fluorene	----	----	----	Satisfactory	----	----
Hexachlorobenzene	----	----	----	Satisfactory	----	----
Pentachlorophenol	----	----	----	Satisfactory	----	----
Fluoranthene	----	----	----	Satisfactory	----	----
Pyrene	----	----	----	Satisfactory	----	----
Dibenzo(a,h)anthracene	----	----	----	Satisfactory	----	----
gamma-BHC	----	----	----	Warning	----	----
Aldrin	----	----	----	Satisfactory	----	----
Dieldrin	----	----	----	Satisfactory	----	----
4,4'-DDE	----	----	----	Satisfactory	----	----

Table F.2-3. Performance Evaluation Report for CompuChem
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Analyte	Test Date					
	Third Quarter 1994			Fourth Quarter 1994		
	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3
Endrin	----	----	----	Satisfactory	----	----
4,4'-DDD	----	----	----	Satisfactory	----	----
Methoxychlor	----	----	----	Satisfactory	----	----
Aroclor-1016	----	----	----	----	----	----

---	Not Provided
Acceptable	Result $\leq \pm$ 2 Standard Deviations from Actual Concentrations
Warning	Result between 2 and 3 Standard Deviations from Actual Concentrations
Unaccpetable	Result > $\pm$ 3 Standard Deviations from Actual Concentrations

Table F.2-4. Cross Check Samples for CompuChem

Analyte	Date of Study
	April-94
Cesium-134 in Water	Satisfactory
Cesium-137 in Water	Satisfactory
Cobalt-60 in Water	Satisfactory
Gross Alpha in Water	Satisfactory
Gross Beta in Water	Satisfactory
Radium-226 in Water	Satisfactory
Radium-228 in Water	Satisfactory
Strontium-90 in Water	Satisfactory
Strontium-89 in Water	Satisfactory
Uranium (Natural) in Water	Satisfactory

Satisfactory Results were within action limits.

Table F.4-1. Volatiles Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimim Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
1,1-Dichloroethene	18	18	78	112	59-172
Trichloroethene	18	18	79	107	62-137
Benzene	18	18	80	104	66-142
Toluene	18	18	93	120	59-139
Chlorobenzene	18	18	85	105	60-133
Acetonitrile	18	16	31	124	60-140
Acrylonitrile	18	18	82	118	60-140

Table F.4-2. Volatiles Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
1,1-Dichloroethene	8	8	86	103	61-145
Trichloroethene	8	8	90	113	71-120
Benzene	8	8	87	106	76-127
Toluene	8	8	87	98	76-125
Chlorobenzene	8	8	88	102	75-130
Acetonitrile	8	7	94	156	70-130
Acrylonitrile	8	8	80	116	70-130

Table F.4-3. Volatiles Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
1,1-Dichloroethene	9	9	0	13	22
Trichloroethene	9	9	0	20	24
Benzene	9	9	0	10	21
Toluene	9	9	0	16	21
Chlorobenzene	9	9	0	16	21
Acetonitrile	9	6	2	107	25
Acrylonitrile	9	9	1	15	25

RPD relative percent difference

Table F.4-4. Volatiles Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
1,1-Dichloroethene	4	4	3	12	14
Trichloroethene	4	4	0	7	14
Benzene	4	4	0	5	11
Toluene	4	4	1	3	13
Chlorobenzene	4	4	1	4	13
Acetonitrile	4	3	1	49	15
Acrylonitrile	4	3	3	15	15

RPD relative percent difference

Table F.4-5. Semivolatiles Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Phenol	16	14	62	102	26-90
2-Chlorophenol	16	16	53	93	25-102
1,4-Dichlorobenzene	16	16	69	94	28-104
n-Nitroso-di-n-propylamine	16	16	70	111	41-126
1,2,4-Trichlorobenzene	16	12	79	122	38-107
4-Chloro-3-methylphenol	16	10	89	125	26-103
Acenaphthene	16	16	68	102	31-137
4-Nitrophenol	16	16	62	107	11-114
2,4-Dinitrotoluene	16	7	75	102	28-89
Pentachlorophenol	16	14	51	119	17-109
Pyrene	16	14	12	127	35-142

Table F.4-6. Semivolatiles Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Phenol	4	4	68	75	12-110
2-Chlorophenol	4	4	66	75	27-123
1,4-Dichlorobenzene	4	4	59	75	36-97
n-Nitroso-di-n-propylamine	4	4	77	88	41-116
1,2,4-Trichlorobenzene	4	4	64	98	39-98
4-Chloro-3-methylphenol	4	3	80	104	23-97
Acenaphthene	4	4	70	85	46-118
4-Nitrophenol	4	2	74	109	10-80
2,4-Dinitrotoluene	4	4	64	72	24-96
Pentachlorophenol	4	3	86	107	9-103
Pyrene	4	4	64	76	26-127

Table F.4-7. Semivolatiles Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Phenol	8	8	0	11	35
2-Chlorophenol	8	8	1	11	50
1,4-Dichlorobenzene	8	8	0	10	27
n-Nitroso-di-n-propylamine	8	8	1	26	38
1,2,4-Trichlorobenzene	8	8	2	18	23
4-Chloro-3-methylphenol	8	8	2	20	33
Acenaphthene	8	7	0	23	19
4-Nitrophenol	8	8	0	25	50
2,4-Dinitrotoluene	8	8	4	25	47
Pentachlorophenol	8	8	1	29	47
Pyrene	8	6	1	77	36

RPD relative percent difference

Table F.4-8. Semivolatiles Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Phenol	2	2	1	4	42
2-Chlorophenol	2	2	0	4	40
1,4-Dichlorobenzene	2	2	10	16	28
n-Nitroso-di-n-propylamine	2	2	5	9	38
1,2,4-Trichlorobenzene	2	2	14	17	28
4-Chloro-3-methylphenol	2	2	0	10	42
Acenaphthene	2	2	1	8	31
4-Nitrophenol	2	2	3	9	50
2,4-Dinitrotoluene	2	2	3	9	38
Pentachlorophenol	2	2	0	12	50
Pyrene	2	2	3	5	31

RPD relative percent difference

Table F.4-9. Pesticide/PCBs Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Lindane	16	16	55	86	46-127
Heptachlor	16	16	61	91	35-130
Aldrin	16	16	49	91	34-132
Dieldrin	16	16	56	88	31-134
Endrin	16	16	67	93	42-139
4,4'-DDT	16	16	61	87	23-134

Table F.4-10. Pesticide/PCBs Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Lindane	2		68	72	56-123
Heptachlor	2	2	70	72	40-131
Aldrin	2	2	58	60	40-120
Dieldrin	2	2	64	67	52-126
Endrin	2	2	68	71	56-121
4,4'-DDT	2	2	71	71	38-127

Table F.4-11. Pesticide/PCBs Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Gamma	8	8	0	14	50
Heptachlor	8	8	0	19	31
Aldrin	8	8	0	19	43
Dieldrin	8	8	1	20	38
Endrin	8	8	1	17	45
4,4'-DDT	8	8	0	17	50

RPD relative percent difference

Table F.4-12. Pesticide/PCBs Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Gamma	1	1	6	6	15
Heptachlor	1	1	3	3	20
Aldrin	1	1	3	3	22
Dieldrin	1	1	5	5	18
Endrin	1	1	4	4	21
4,4'-DDT	1	1	0	0	27

RPD relative percent difference

Table F.4-13. Purgeable Hydrocarbons Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
trans-1,2-Dichloroethene	4	4	117	130	38-155
cis-1,2-Dichloroethene	4	4	118	131	38-155
trichlorofluoromethane	4	4	116	136	21-156
Freon-113	4	4	116	144	21-156

Table F.4-14. Purgeable Hydrocarbons Precision Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
trans-1,2-Dichloroethene	2	2	2	2	20
cis-1,2-Dichloroethene	2	2	1	5	20
trichlorofluoromethane	2	2	5	6	20
Freon-113	2	2	3	4	20

Table F.4-15. Explosives Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
RDX	20	18	57	211	40-160
1,3,5-Trinitrobenzene	20	18	57	212	40-160
2,4-Dinitrotoluene	20	17	55	177	40-160
2,6-Dinitrotoluene	20	18	49	171	40-160
2,4,6-Trinitrotoluene	20	19	70	288	40-160

Table F.4-16. Explosives Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spiked Recovery (%)	Lab Acceptance Limits
RDX	4	1	52	112	62-87
1,3,5-Trinitrobenzene	4	3	59	99	85-100
2,4-Dinitrotoluene	4	3	53	99	75-99
2,6-Dinitrotoluene	4	2	58	109	66-102
2,4,6-Trinitrotoluene	4	1	65	126	78-102

Table F.4-17. Explosives Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
RDX	10	8	0	61	40
1,3,5-Trinitrobenzene	10	8	2	51	30
2,4-Dinitrotoluene	10	6	0	59	40
2,6-Dinitrotoluene	10	10	1	57	60
2,4,6-Trinitrotoluene	10	8	0	103	40

RPD relative percent difference

Table F.4-18. Explosives Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
RDX	2	1	1	42	32
1,3,5-Trinitrobenzene	2	1	6	37	19
2,4-Dinitrotoluene	2	1	0	34	31
2,6-Dinitrotoluene	2	2	38	45	45
2,4,6-Trinitrotoluene	2	1	40	10	29

RPD relative percent difference

Table F.4-19. Metals Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spiked Recovery (%)	Maximum Spiked Recovery (%)	Lab Acceptance Limits
Aluminum	0	--	--	--	--
Antimony	10	1	8	76	75-125
Arsenic	10	8	60	96	75-125
Barium	10	8	70	105	75-125
Beryllium	10	8	65	100	75-125
Bismuth	10	10	76	94	75-125
Cadmium	10	5	64	97	75-125
Calcium	0	--	--	--	--
Chromium	10	7	70	125	75-125
Cobalt	10	8	68	95	75-125
Copper	10	10	79	111	75-125
Iron	0	--	--	--	--
Lead	12	8	68	151	75-125
Magnesium	0	--	--	--	--
Manganese	10	3	-106	419	75-125
Mercury	10	10	86	125	75-125
Nickel	10	8	74	96	75-125
Potassium	0	--	--	--	--
Selenium	10	9	68	107	75-125
Silver	10	10	78	98	75-125
Sodium	0	--	--	--	--
Thallium	10	5	46	96	75-125
Tin	10	10	81	105	75-125
Vanadium	10	6	62	106	75-125
Zinc	10	8	68	124	75-125
Lithium	9	9	88	101	75-125
Molybdenum	9	4	28	3624	75-125
Cyanide	10	10	86	100	75-125

-- Not Applicable

Table F.4-20. Metals Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Aluminum	5	2	7	235	75-125
Antimony	5	4	32	97	75-125
Arsenic	5	4	22	102	75-125
Barium	5	4	74	97	75-125
Beryllium	5	5	76	101	75-125
Bismuth	5	5	86	100	75-125
Cadmium	5	4	51	93	75-125
Calcium	0	--	--	--	--
Chromium	5	4	57	97	75-125
Cobalt	5	4	63	96	75-125
Copper	5	5	75	98	75-125
Iron	5	3	1	845	75-125
Lead	5	5	89	106	75-125
Magnesium	0	--	--	--	--
Manganese	5	4	47	104	75-125
Mercury	5	4	98	128	75-125
Nickel	5	4	58	112	75-125
Potassium	0	--	--	--	--
Selenium	5	4	0	111	75-125
Silver	5	4	65	96	75-125
Sodium	0	--	--	--	--
Thallium	5	4	42	98	75-125
Tin	5	2	50	98	75-125
Vanadium	5	4	65	96	75-125
Zinc	5	4	65	98	75-125
Lithium	2	2	98	105	75-125
Molybdenum	2	2		99	75-125
Cyanide	5	5	90	95	75-125

-- Not Applicable

Table F.4-21. Metals Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Aluminum	10	8	1	43	35
Antimony	3	3	2	23	35
Arsenic	10	9	1	45	35
Barium	10	7	1	67	35
Beryllium	8	6	1	39	35
Bismuth	8	8	2	19	35
Cadmium	3	3	1	17	35
Calcium	10	8	1	49	35
Chromium	10	9	2	37	35
Cobalt	10	10	1	22	35
Copper	10	8	1	46	35
Iron	10	10	1	26	35
Lead	12	11	1	57	35
Magnesium	10	8	2	48	35
Manganese	10	9	1	42	35
Mercury	1	1	12	12	35
Nickel	10	9	1	51	35
Potassium	10	9	3	37	35
Selenium	0	--	--	--	--
Silver	1	0	69	69	35
Sodium	10	10	1	29	35
Thallium	1	1	12	12	35
Tin	2	1	1	37	35
Vanadium	10	9	2	38	35
Zinc	10	10	2	35	35
Lithium	9	9	1	28	35
Molybdenum	6	6	5	19	35
Cyanide	0	--	--	--	--

-- not applicable RPD relative percent difference

Table F.4-22. Metals Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Aluminum	4	3	5	101	20
Antimony	0	--	--	--	--
Arsenic	1	1	10	10	20
Barium	4	3	9	45	20
Beryllium	1	1	1	1	20
Bismuth	2	2	2	9	20
Cadmium	0	--	--	--	--
Calcium	5	5	1	16	20
Chromium	2	2	1	5	20
Cobalt	3	1	13	44	20
Copper	4	2	8	28	20
Iron	5	2	1	141	20
Lead	3	3	2	14	20
Magnesium	5	4	1	26	20
Manganese	3	3	1	5	20
Mercury	0	--	--	--	--
Nickel	3	2	3	171	20
Potassium	4	4	2	15	20
Selenium	0	--	--	--	--
Silver	0	--	--	--	--
Sodium	5	5	1	13	20
Thallium	0	--	--	--	--
Tin	0	--	--	--	--
Vanadium	3	2	4	95	20
Zinc	5	3	1	65	20
Lithium	1	1	2	2	20
Molybdenum	1	1	1	1	20
Cyanide	0	--	--	--	--

-- not applicable RPD relative percent difference

Table F.4-23. Lanthanides Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spiked Recovery (%)	Maximum Spiked Recovery (%)	Lab Acceptance Limits
Cerium	4	4	93	101	75-125
Dypsprosium	4	4	89	95	75-125
Erbium	4	0	126	138	75-125
Europium	4	4	91	98	75-125
Gadolinium	4	2	33	96	75-125
Holmium	4	4	91	100	75-125
Lanthanum	4	4	93	98	75-125
Lutetium	4	4	95	100	75-125
Neodymium	4	4	92	98	75-125
Praseodym	4	4	79	93	75-125
Samarium	4	4	98	101	75-125
Terbium	4	4	88	96	75-125
Thulium	4	4	86	89	75-125
Ytterbium	4	4	94	95	75-125

Table F.4-24. Lanthanides Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spiked Recovery (%)	Maximum Spiked Recovery (%)	Lab Acceptance Limits
Cerium	2	2	99	104	075-125
Dypsprosium	2	2	93	94	75-125
Erbium	2	0	140	146	75-125
Europium	2	2	97	102	75-125
Gadolinium	2	1	73	103	75-125
Holmium	2	2	103	105	75-125
Lanthanum	2	2	98	103	75-125
Lutetium	2	2	103	105	75-125
Neodymium	2	2	96	97	75-125
Praseodym	2	2	96	97	75-125
Samarium	2	2	100	100	75-125
Terbium	2	2	96	102	75-125
Thulium	2	2	94	101	75-125
Ytterbium	2	2	98	102	75-125

Table F.4-25. Lanthanides Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Cerium	4	3	7	43	35
Dypsprosium	2	2	11	15	35
Erbium	1	1	25	25	35
Europium	1	1	35	35	35
Gadolinium	1	1	1	1	35
Holmium	0	--	--	--	--
Lanthanum	4	3	6	54	35
Lutetium	0	--	--	--	--
Neodymium	3	2	11	78	35
Praseodymium	1	1	20	20	35
Samarium	0	--	--	--	--
Terbium	0	--	--	--	--
Thulium	0	--	--	--	--
Ytterbium	2	2	2	14	35

-- not applicable
RPD relative percent difference

Table F.4-26. Lanthanides Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Cerium	0	--	--	--	--
Dypsprosium	0	--	--	--	--
Erbium	0	--	--	--	--
Europium	0	--	--	--	--
Gadolinium	1	1	6	6	20
Holmium	0	--	--	--	--
Lanthanum	0	--	--	--	--
Lutetium	0	--	--	--	--
Neodymium	0	--	--	--	--
Praseodymium	0	--	--	--	--
Samarium	0	--	--	--	--
Terbium	0	--	--	--	--
Thulium	0	--	--	--	--
Ytterbium	0	--	--	--	--

-- not applicable
RPD relative percent difference

Table F.4-27. Radionuclides Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spiked Recovery (%)	Maximum Spiked Recovery (%)	Lab Acceptance Limits
Uranium-238	9	9	85	103	75-125
Thorium-230	9	9	95	119	75-125
Plutonium-238	9	9	95	110	75-125
Tritium	9	9	87	109	75-125
Strontium-90	9	9	92	123	75-125

Table F.4-28. Radionuclides Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spiked Recovery (%)	Maximum Spiked Recovery (%)	Lab Acceptance Limits
Uranium-238	6	6	96	105	75-125
Thorium-230	6	6	93	113	75-125
Plutonium-238	6	6	96	103	75-125
Tritium	6	6	94	99	75-125
Strontium-90	6	6	90	114	75-125
Radium-226	6	6	98	104	75-125
Americium-241	6	6	88	97	75-125

Table F.4-29. Radionuclides Precision Summary - Soil Samples

Analyte	Number of Spiked Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Uranium-238	9	8	2	54	50
Uranium-235	2	1	40	123	50
Uranium-234	8	8	0	34	50
Plutonium-239/240	0	--	--	--	--
Plutonium-238	3	2	13	105	50
Thorium-232	8	5	2	82	50
Thorium-230	9	5	1	113	50
Thorium-228	9	9	3	35	50
Actinium-227	0	--	--	--	--
Americium-241	0	--	--	--	--
Cobalt-60	0	--	--	--	--
Cesium-137	4	3	3	57	50
Bismuth-210	0	--	--	--	--
Bismuth-207	0	--	--	--	--
Potassium-40	9	9	2	40	50
Radium-226	7	6	6	57	50
Tritium	2	2	7	23	50
Strontium-90	0	--	--	--	--

-- not applicable
RPD relative percent difference

Table F.4-30. Radionuclides Precision Summary - Water Samples

Analyte	Number of Spiked Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Uranium-238	0	--	--	--	--
Uranium-235	0	--	--	--	--
Uranium-234	3	1	27	159	50
Plutonium-239/240	2	1	22	118	50
Plutonium-238	0	--	--	--	--
Thorium-232	1	1	36	36	50
Thorium-230	3	0	60	89	50
Thorium-228	6	6	9	28	50
Actinium-227	0	--	--	--	--
Americium-241	4	2	11	132	50
Cobalt-60	0	--	--	--	--
Cesium-137	0	--	--	--	--
Bismuth-210	0	--	--	--	--
Bismuth-207	0	--	--	--	--
Potassium-40	0	--	--	--	--
Radium-226	2	2	4	30	50
Tritium	1	1	11	11	50
Strontium-90	0	--	--	--	--

-- not applicable
RPD relative percent difference

Table F.4-31. Summary of Analytical Completeness

Analysis	Number of Samples Collected and Analyzed	Number of Concentration Values from Samples	Number of Concentration Values Rejected	Completeness (%)	Reason for Rejected Concentration Values
VOC	142	5460	17	100	Unacceptable QC results
SVOC	129	8303	45	99	Unacceptable QC results
Pesticides/PCBs	128	3593	39	99	Not Applicable
Explosives	134	1496	183	88	Not Applicable
Inorganics (trace metals and cyanide)	130	4622	304	93	Unacceptable QC results
Alpha Spectrometry[a]	115	943	3	99	Unacceptable QC results
Liquid Scintillation	135	263	1	99	Unacceptable QC results
Gamma Spectrometry[b]	125	1052	0	100	Not Applicable
Alpha Scintilliation	14	14	0	10	Not Applicable

[a] Alpha spectrometry included the analysis of plutonium, uranium, thorium, and americium-241 (in water samples only).
[b] Gamma spectrometry included the analysis of potassium-40, cesium-137, cobalt-60, bismuth-207, bismuth-210, radium-226, and americium-241 (in soils only).
NA Not applicable
PCB polychlorinated biphenyls
QC quality control
SVOC semivolatile organic compound
VOC volatile organic compound

Table F.4-32. Rejected Data Summary
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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B01001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B01001	Pesticide/PCBs	gamma-BHC (Lindane)	0.19	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B01002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B01002	Pesticide/PCBs	alpha-Chlordane	0.098	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was above the upper control limit.
B01003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B01004	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B01005	Inorganics	Molybdenum	1.2	MG/KG	MS recovery was <30%.
B01005	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B01006	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B01007	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B02001	Inorganics	Molybdenum	1.2	MG/KG	MS recovery was <30%.
B02001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B02001	Pesticide/PCBs	alpha-Chlordane	0.13	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B02002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B03001	Inorganics	Molybdenum	1.2	MG/KG	MS recovery was <30%.
B03001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B03001	Pesticide/PCBs	Dieldrin	0.63	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.
B03001	Pesticide/PCBs	Endosulfan Sulfate	0.90	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.
B03001	Pesticide/PCBs	alpha-Chlordane	0.58	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B03002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B03002	Pesticide/PCBs	4,4'-DDD	0.60	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.
B03003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B03004	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B03005	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B03007	Volatile Organics	Acetonitrile	110	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B04001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B04001	Pesticide/PCBs	Dieldrin	2.9	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B04002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B04102	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B05001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B05002	Inorganics	Antimony	1.70	MG/KG	MS recovery was <30%.
B05002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B06001	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B06001	Inorganics	Cadmium	0.77	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06001	Inorganics	Chromium	10.50	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06001	Inorganics	Cobalt	7.50	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06001	Inorganics	Copper	13.60	MG/KG	Professional judgment was used to qualify the data.
B06001	Inorganics	Nickel	14.90	MG/KG	CCV recovery was above the upper control limit.; MS recovery was below the lower control limit.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B06001	Inorganics	Thallium	0.17	MG/KG	Blank had a negative value >5X's the IDL.; MS recovery was below the lower control limit.
B06001	Inorganics	Vanadium	13.30	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B06001	Semi-volatile Organics	2,4,5-Trichlorophenol	1800	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	2,4,6-Trichlorophenol	380	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	2,4-Dichlorophenol	380	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	2,4-Dimethylphenol	380	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	2,4-Dinitrophenol	1800	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	2-Chlorophenol	380	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	2-Methylphenol	380	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	2-Nitrophenol	380	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	4,6-Dinitro-2-methylphenol	1800	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	4-Chloro-3-methylphenol	380	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	4-Methylphenol	380	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	4-Nitrophenol	1800	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	Benzoic Acid	1800	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	Benzyl Alcohol	380	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	Pentachlorophenol	1800	UG/KG	Surrogate recovery was <10%.
B06001	Semi-volatile Organics	Phenol	380	UG/KG	Surrogate recovery was <10%.
B06002	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B06002	Inorganics	Cadmium	0.72	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B06002	Inorganics	Chromium	12.70	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06002	Inorganics	Cobalt	7.60	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06002	Inorganics	Copper	13.00	MG/KG	Professional judgment was used to qualify the data.
B06002	Inorganics	Nickel	18.20	MG/KG	CCV recovery was above the upper control limit.; MS recovery was below the lower control limit.
B06002	Inorganics	Thallium	0.17	MG/KG	Blank had a negative value >5X's the IDL.; MS recovery was below the lower control limit.
B06002	Inorganics	Vanadium	11.60	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B06003	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B06003	Inorganics	[illegible]nium	0.95	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06003	Inorganics	Chromium	11.80	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06003	Inorganics	Cobalt	9.10	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06003	Inorganics	Copper	19.40	MG/KG	Professional judgment was used to qualify the data.
B06003	Inorganics	Nickel	18.80	MG/KG	CCV recovery was above the upper control limit.; MS recovery was below the lower control limit.
B06003	Inorganics	Thallium	0.17	MG/KG	Blank had a negative value >5X's the IDL.; MS recovery was below the lower control limit.
B06003	Inorganics	Vanadium	11.10	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B06003	Explosives	1,3,5-Trinitrobenzene	0.0100	MG/KG	Analysis holding times were exceeded.; LCS recovery was above the upper control limit.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B06003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B06003	Explosives	RDX	0.036	MG/KG	Analysis holding times were exceeded.; LCS recovery was above the upper control limit.
B07001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B07001	Semi-volatile Organics	4-Chloroaniline	380	UG/KG	Initial calibration RRF was <0.05.
B07001	Volatile Organics	Acetonitrile	110	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B07002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B07002	Semi-volatile Organics	4-Chloroaniline	400	UG/KG	Initial calibration RRF was <0.05.
B07002	Volatile Organics	Acetonitrile	120	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B07003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B07003	Semi-volatile Organics	4-Chloroaniline	390	UG/KG	Initial calibration RRF was <0.05.
B07003	Volatile Organics	Acetonitrile	120	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B07004	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B07101	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B07101	Semi-volatile Organics	4-Chloroaniline	380	UG/KG	Initial calibration RRF was <0.05.
B07101	Volatile Organics	Acetonitrile	110	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B08001	Inorganics	Dypsprosi	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B08001	Inorganics	Europium	0.90	MG/KG	Blank had a negative value >5X's the IDL.
B08001	Inorganics	Lutetium	0.45	MG/KG	Blank had a negative value >5X's the IDL.
B08001	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B08001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B08001	Pesticide/PCBs	Heptachlor	0.33	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B08002	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B08002	Inorganics	Dypsprosi	2.70	MG/KG	Blank had a negative value >5X's the IDL.
B08002	Inorganics	Europium	0.97	MG/KG	Blank had a negative value >5X's the IDL.
B08002	Inorganics	Lutetium	0.48	MG/KG	Blank had a negative value >5X's the IDL.
B08002	Inorganics	Thulium	2.40	MG/KG	Blank had a negative value >5X's the IDL.
B08002	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B08002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B08003	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B08003	Inorganics	Dypsprosi	2.70	MG/KG	Blank had a negative value >5X's the IDL.
B08003	Inorganics	Europium	0.97	MG/KG	Blank had a negative value >5X's the IDL.
B08003	Inorganics	Lutetium	0.48	MG/KG	Blank had a negative value >5X's the IDL.
B08003	Inorganics	Thulium	2.40	MG/KG	Blank had a negative value >5X's the IDL.
B08003	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B08003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B09001	Inorganics	Dypsprosi	2.40	MG/KG	Blank had a negative value >5X's the IDL.
B09001	Inorganics	Europium	0.89	MG/KG	Blank had a negative value >5X's the IDL.
B09001	Inorganics	Lutetium	0.44	MG/KG	Blank had a negative value >5X's the IDL.
B09001	Inorganics	Thulium	2.20	MG/KG	Blank had a negative value >5X's the IDL.
B09001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B09001	Pesticide/PCBs	Endrin Aldehyde	1.7	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B09001	Pesticide/PCBs	p,p'-Methoxychlor	1.5	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.
B09002	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B09002	Inorganics	Dypsprosi	2.60	MG/KG	Blank had a negative value >5X's the IDL.
B09002	Inorganics	Europium	0.95	MG/KG	Blank had a negative value >5X's the IDL.
B09002	Inorganics	Lutetium	0.47	MG/KG	Blank had a negative value >5X's the IDL.
B09002	Inorganics	Thulium	2.40	MG/KG	Blank had a negative value >5X's the IDL.
B09002	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B09002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B09002	Pesticide/PCBs	alpha-Chlordane	0.56	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B09003	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B09003	Inorganics	Dypsprosi	2.80	MG/KG	Blank had a negative value >5X's the IDL.
B09003	Inorganics	Europium	1.00	MG/KG	Blank had a negative value >5X's the IDL.
B09003	Inorganics	Lutetium	0.51	MG/KG	Blank had a negative value >5X's the IDL.
B09003	Inorganics	Thulium	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B09003	Inorganics	Bismuth	0.13	MG/KG	Blank had a negative value >5X's the IDL.
B09003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B09004	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B09004	Inorganics	Dypsprosi	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B09004	Inorganics	Europium	0.92	MG/KG	Blank had a negative value >5X's the IDL.
B09004	Inorganics	Lutetium	0.46	MG/KG	Blank had a negative value >5X's the IDL.
B09004	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B09004	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B09004	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B09005	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B09005	Inorganics	Dypsprosi	2.60	MG/KG	Blank had a negative value >5X's the IDL.
B09005	Inorganics	Europium	0.93	MG/KG	Blank had a negative value >5X's the IDL.
B09005	Inorganics	Lutetium	0.47	MG/KG	Blank had a negative value >5X's the IDL.
B09005	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B09005	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B09005	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B09102	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B09102	Inorganics	Dypsprosi	2.60	MG/KG	Blank had a negative value >5X's the IDL.
B09102	Inorganics	Europium	0.94	MG/KG	Blank had a negative value >5X's the IDL.
B09102	Inorganics	Lutetium	0.47	MG/KG	Blank had a negative value >5X's the IDL.
B09102	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B09102	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B09102	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B10001	Inorganics	Dypsprosi	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B10001	Inorganics	Europium	0.92	MG/KG	Blank had a negative value >5X's the IDL.
B10001	Inorganics	Lutetium	0.46	MG/KG	Blank had a negative value >5X's the IDL.
B10001	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B10001	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B10001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B10002	Inorganics	Antimony	0.05	MG/KG	MS recovery was <30%.
B10002	Inorganics	Dypsprosi	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B10002	Inorganics	Europium	0.91	MG/KG	Blank had a negative value >5X's the IDL.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B10002	Inorganics	Lutetium	0.46	MG/KG	Blank had a negative value >5X's the IDL.
B10002	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B10002	Inorganics	Bismuth	0.10	MG/KG	Blank had a negative value >5X's the IDL.
B10002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B10003	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B10003	Inorganics	Europium	0.92	MG/KG	Blank had a negative value >5X's the IDL.
B10003	Inorganics	Lutetium	0.46	MG/KG	Blank had a negative value >5X's the IDL.
B10003	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B10003	Inorganics	Bismuth	0.11	MG/KG	Blank had a negative value >5X's the IDL.
B10003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B11001	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B11001	Inorganics	Dypsprosi	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B11001	Inorganics	[illegible]pium	0.93	MG/KG	Blank had a negative value >5X's the IDL.
B11001	Inorganics	Lutetium	0.46	MG/KG	Blank [illegible] negative value >5X's the IDL.
B11001	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B11001	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
[illegible]	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B11[illegible]	Pesticide/PCBs	Endrin Aldehyde	0.47	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.
B11001	Pesticide/PCBs	alpha-Chlordane	1.6	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.
B11002	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B11002	Inorganics	Dypsprosi	2.60	MG/KG	Blank had a negative value >5X's the IDL.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B11002	Inorganics	Europium	0.94	MG/KG	Blank had a negative value >5X's the IDL.
B11002	Inorganics	Lutetium	0.47	MG/KG	Blank had a negative value >5X's the IDL.
B11002	Inorganics	Thulium	2.40	MG/KG	Blank had a negative value >5X's the IDL.
B11002	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B11002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B11003	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B11003	Inorganics	Dypsprosi	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B11003	Inorganics	Europium	0.93	MG/KG	Blank had a negative value >5X's the IDL.
B11003	Inorganics	Lutetium	0.46	MG/KG	Blank had a negative value >5X's the IDL.
B11003	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B11003	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B11003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B11004	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B11004	Inorganics	Dypsprosi	2.70	MG/KG	Blank had a negative value >5X's the IDL.
B11004	Inorganics	Europium	0.98	MG/KG	Blank had a negative value >5X's the IDL.
B11004	Inorganics	Lutetium	0.49	MG/KG	Blank had a negative value >5X's the IDL.
B11004	Inorganics	Thulium	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B11004	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B11004	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B11102	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B11102	Inorganics	Dypsprosi	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B11102	Inorganics	Europium	0.92	MG/KG	Blank had a negative value >5X's the IDL.
B11102	Inorganics	Lutetium	0.46	MG/KG	Blank had a negative value >5X's the IDL.
B11102	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B11102	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B11102	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B11102	Pesticide/PCBs	Endrin Aldehyde	0.41	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.
B12001	Inorganics	Europium	0.84	MG/KG	Blank had a negative value >5X's the IDL.
B12001	Inorganics	Lutetium	0.42	MG/KG	Blank had a negative value >5X's the IDL.
B12001	Inorganics	Thulium	2.10	MG/KG	Blank had a negative value >5X's the IDL.
B12001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B12002	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B12002	Inorganics	Dypsprosi	2.70	MG/KG	Blank had a negative value >5X's the IDL.
B12002	Inorganics	Europium	0.97	MG/KG	Blank had a negative value >5X's the IDL.
B12002	Inorganics	Lutetium	0.48	MG/KG	Blank had a negative value >5X's the IDL.
B12002	Inorganics	Thulium	2.40	MG/KG	Blank had a negative value >5X's the IDL.
B12002	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B12002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B12003	Inorganics	Antimony	0.06	MG/KG	MS recovery was <30%.
B12003	Inorganics	Dypsprosi	2.50	MG/KG	Blank had a negative value >5X's the IDL.
B12003	Inorganics	Europium	0.93	MG/KG	Blank had a negative value >5X's the IDL.
B12003	Inorganics	Lutetium	0.46	MG/KG	Blank had a negative value >5X's the IDL.
B12003	Inorganics	Thulium	2.30	MG/KG	Blank had a negative value >5X's the IDL.
B12003	Inorganics	Bismuth	0.12	MG/KG	Blank had a negative value >5X's the IDL.
B12003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B13001	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B13001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B13001	Semi-volatile Organics	4-Chloroaniline	360	UG/KG	Initial calibration RRF was <0.05.
B13001	Volatile Organics	Acetonitrile	110	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B13002	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.
B13002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B13002	Semi-volatile Organics	4-Chloroaniline	390	UG/KG	Initial calibration RRF was <0.05.
B13002	Volatile Organics	Acetonitrile	120	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B13003	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.
B13003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B13003	Semi-volatile Organics	4-Chloroaniline	390	UG/KG	Initial calibration RRF was <0.05.
B13003	Volatile Organics	Acetonitrile	120	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B13004	Inorganics	Antimony	1.90	MG/KG	MS recovery was <30%.
B13004	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.
B13004	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B13004	Semi-volatile Organics	4-Chloroaniline	410	UG/KG	Initial calibration RRF was <0.05.
B13004	Volatile Organics	Acetonitrile	120	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B13005	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.
B13005	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B13005	Semi-volatile Organics	4-Chloroaniline	380	UG/KG	Initial calibration RRF was <0.05.
B13005	Volatile Organics	Acetonitrile	110	UG/KG	Initial calibration RRF was <0.05.; Continuing calibration %d was >25%.
B13006	Volatile Organics	Acetonitrile	110	UG/KG	Initial calibration RRF was <0.05.; Continuing calibration %d was >25%.
B14001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B14001	Semi-volatile Organics	4-Chloroaniline	370	UG/KG	Initial calibration RRF was <0.05.
B14001	Volatile Organics	Acetonitrile	110	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B14002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B14002	Semi-volatile Organics	4-Chloroaniline	360	UG/KG	Initial calibration RRF was <0.05.
B14002	Volatile Organics	Acetonitrile	110	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B14003	Volatile Organics	Acetonitrile	120	UG/KG	Initial calibration RRF was <0.05.; Continuing calibration %d was >25%.
B14004	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B14004	Semi-volatile Organics	4-Chloroaniline	430	UG/KG	Initial calibration RRF was <0.05.
B14004	Volatile Organics	Acetonitrile	130	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B14104	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B14104	Semi-volatile Organics	4-Chloroaniline	390	UG/KG	Initial calibration RRF was <0.05.
B14104	Volatile Organics	Acetonitrile	120	UG/KG	Continuing calibration %d was >25%.; Initial calibration RRF was <0.05.
B15001	Inorganics	Antimony	0.15	MG/KG	MS recovery was <30%.; Concentration of the contaminant was detected at a level below the CRQL.
B15001	Inorganics	Cadmium	1.10	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B15001	Inorganics	Chromium	11.80	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15001	Inorganics	Cobalt	7.00	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15001	Inorganics	Copper	18.80	MG/KG	Professional judgment was used to qualify the data.
B15001	Inorganics	Nickel	14.60	MG/KG	CCV recovery was above the upper control limit.; MS recovery was below the lower control limit.
B15001	Inorganics	Thallium	0.23	MG/KG	Blank had a negative value >5X's the IDL.; MS recovery was below the lower control limit.
B15001	Inorganics	Vanadium	15.40	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B15001	Pesticide/PCBs	Endosulfan Sulfate	0.36	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B15001	Pesticide/PCBs	alpha-Chlordane	1.4	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B15001	Pesticide/PCBs	delta-BHC	0.24	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B15002	Inorganics	Antimony	0.14	MG/KG	MS recovery was <30%.; Concentration of the contaminant was detected at a level below the CRQL.
B15002	Inorganics	Cadmium	1.40	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15002	Inorganics	Chromium	19.70	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15002	Inorganics	Cobalt	11.90	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15002	Inorganics	Nickel	25.90	MG/KG	CCV recovery was above the upper control limit.; MS recovery was below the lower control limit.
B15002	Inorganics	Thallium	0.35	MG/KG	Blank had a negative value >5X's the IDL.; MS recovery was below the lower control limit.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B15002	Inorganics	Vanadium	26.20	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B15002	Pesticide/PCBs	alpha-Chlordane	1.2	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B15003	Inorganics	Antimony	0.41	MG/KG	MS recovery was <30%.
B15003	Inorganics	Cadmium	0.45	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15003	Inorganics	Chromium	21.10	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15003	Inorganics	Cobalt	15.40	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15003	Inorganics	Copper	29.40	MG/KG	Professional judgment was used to qualify the data.
B15003	Inorganics	Thallium	1.20	MG/KG	Blank had a negative value >5X's the IDL.; MS recovery was below the lower control limit.
B15003	Inorganics	Vanadium	29.10	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15003	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B15004	Inorganics	Antimony	0.30	MG/KG	Concentration of the contaminant was detected at a level below the CRQL.; MS recovery was <30%.
B15004	Inorganics	Cadmium	1.70	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15004	Inorganics	Chromium	29.30	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15004	Inorganics	Cobalt	18.50	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15004	Inorganics	Copper	39.10	MG/KG	Professional judgment was used to qualify the data.
B15004	Inorganics	Nickel	43.50	MG/KG	CCV recovery was above the upper control limit.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B15004	Inorganics	Thallium	0.37	MG/KG	Blank had a negative value >5X's the IDL.; MS recovery was below the lower control limit.
B15004	Inorganics	Vanadium	36.40	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15004	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B15101	Inorganics	Antimony	0.13	MG/KG	MS recovery was <30%.; Concentration of the contaminant was detected at a level below the CRQL.
B15101	Inorganics	Cadmium	0.87	MG/KG	Professional judgment was used to qualify the data.
B15101	Inorganics	Chromium	9.40	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15101	Inorganics	Cobalt	6.60	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15101	Inorganics	Copper	16.40	MG/KG	Professional judgment was used to qualify the data.
B15101	Inorganics	Nickel	12.90	MG/KG	CCV recovery was above the upper control limit.; MS recovery was below the lower control limit.
B15101	Inorganics	Thallium	0.20	MG/KG	Blank had a negative value >5X's the IDL.
B15101	Inorganics	Vanadium	12.10	MG/KG	Professional judgment was used to qualify the data.
B15101	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B15101	Pesticide/PCBs	alpha-Chlordane	0.88	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B15104	Inorganics	Antimony	0.13	MG/KG	MS recovery was <30%.
B15104	Inorganics	Cadmium	2.00	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15104	Inorganics	Chromium	26.40	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15104	Inorganics	Cobalt	20.80	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15104	Inorganics	Copper	36.30	MG/KG	Professional judgment was used to qualify the data.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B15104	Inorganics	Nickel	42.20	MG/KG	CCV recovery was above the upper control limit.; MS recovery was below the lower control limit.
B15104	Inorganics	Thallium	0.38	MG/KG	Blank had a negative value >5X's the IDL.; MS recovery was below the lower control limit.
B15104	Inorganics	Vanadium	27.70	MG/KG	Professional judgment was used to qualify the data.; MS recovery was below the lower control limit.
B15104	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B15104	Semi-volatile Organics	2,4,5-Trichlorophenol	4000	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	2,4,6-Trichlorophenol	830	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	2,4-Dichlorophenol	830	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	2,4-Dimethylphenol	830	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	2,4-Dinitrophenol	4000	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	2-Chlorophenol	830	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	2-Methylphenol	830	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	2-Nitrophenol	830	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	4,6-Dinitro-2-methylphenol	4000	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	4-Chloro-3-methylphenol	830	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	4-Methylphenol	830	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	4-Nitrophenol	4000	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	Benzoic Acid	4000	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	Benzyl Alcohol	830	UG/KG	Surrogate recovery was <10%.
B15104	Semi-volatile Organics	Pentachlorophenol	4000	UG/KG	Surrogate recovery was <10%.

Table F.4-32. Rejected Data Summary

Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B15104	Semi-volatile Organics	Phenol	830	UG/KG	Surrogate recovery was <10%.
B16002	Volatile Organics	Acetonitrile	110	UG/KG	Initial calibration RRF was <0.05.; Continuing calibration %d was >25%.
B17001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B17001	Pesticide/PCBs	Endrin Aldehyde	9.0	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B17002	Inorganics	Gadoliniu	7.20	MG/KG	MS recovery was <30%.
B17002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B17002	Pesticide/PCBs	Endrin Aldehyde	1.9	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B18001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B18002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B19001	Inorganics	Gadoliniu	6.30	MG/KG	MS recovery was <30%.
B19001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B19002	Inorganics	Gadoliniu	7.00	MG/KG	MS recovery was <30%.
B19002	Explosives	PETN	[illegible]0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B19002	Pesticide/PCBs	alpha-Chlordane	0.67	UG/KG	Surrogate/radiological chemical recovery was below the lower control limit.; The %D between the two pesticide/PCB column checks was >25%.
B20001	Inorganics	Gadoliniu	6.20	MG/KG	MS recovery was <30%.
B20001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B20002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
BB2001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
BB2101	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
BB3001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
BB4001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
BB5001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.

Table F.4-32. Rejected Data Summary

Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
BB6001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
BB7001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
S01001	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
S01101	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
S02001	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W03001	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
W11001	Inorganics	Chromium	0.5	UG/L	Blank had a negative value >5X's the IDL.
W11001	Inorganics	Bismuth	2.0	UG/L	Blank had a negative value >5X's the IDL.
W11001	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W13001	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W13101	Inorganics	Cyanide	20.0	UG/L	Samples were not preserved properly.; Professional judgment was used to qualify the data.
W13101	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W14001	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
B39801	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B39901	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40101	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40102	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B40201	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40202	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40301	Inorganics	Antimony	2.00	MG/KG	MS recovery was <30%.
B40301	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40302	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40311	Inorganics	Antimony	2.10	MG/KG	MS recovery was <30%.
B40311	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40401	Inorganics	Antimony	1.90	MG/KG	MS recovery was <30%.
B40401	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40401	Pesticide/PCBs	Endrin	2.0	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B40402	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40412	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40501	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40502	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40601	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40602	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.

Table F.4-32. Rejected Data Summary
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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
B40701	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40701	Pesticide/PCBs	4,4'-DDD	0.22	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
B40702	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40801	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40802	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40802	GRPC	Sr-90	-0.47	PCI/G	Radiological chemical recovery was <20%.
B40811	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
B40901	Inorganics	Antimony	[illegible].90	MG/KG	MS recovery was <30%.
B40901	Explosives	PETN	[illegible]	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
B40902	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Analysis holding times were exceeded.
[illegible]1	Inorganics	Thallium	0.68	MG/KG	Blank had a negative value >5X's the IDL.
[illegible]	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B4[illegible]	Inorganics	Antimony	0.24	MG/KG	MS recovery was <30%.
B41002	Inorganics	Thallium	0.73	MG/KG	Blank had a negative value >5X's the IDL.
B41002	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B41012	Inorganics	Thallium	0.73	MG/KG	Blank had a negative value >5X's the IDL.
B41012	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
B41101	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.; Professional judgment was used to qualify the data.
SD0101	Inorganics	Antimony	0.25	MG/KG	MS recovery was <30%.

Table F.4-32. Rejected Data Summary
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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
SD0101	Inorganics	Thallium	0.74	MG/KG	Blank had a negative value >5X's the IDL.
SD0101	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0201	Inorganics	Antimony	0.24	MG/KG	MS recovery was <30%.
SD0201	Inorganics	Thallium	0.73	MG/KG	Blank had a negative value >5X's the IDL.
SD0201	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0301	Inorganics	Thallium	0.77	MG/KG	Blank had a negative value >5X's the IDL.
SD0301	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0401	Inorganics	Thallium	0.74	MG/KG	Blank had a negative value >5X's the IDL.
SD0401	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0401	Pesticide/PCBs	4,4'-DDE	0.33	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
SD0501	Inorganics	Thallium	0.70	MG/KG	Blank had a negative value >5X's the IDL.
SD0501	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0601	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.
SD0601	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0601	Pesticide/PCBs	Aldrin	0.099	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
SD0701	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0801	Inorganics	Antimony	1.90	MG/KG	MS recovery was <30%.
SD0801	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0901	Inorganics	Dypsprosi	2.80	MG/KG	Blank had a negative value >5X's the IDL.
SD0901	Inorganics	Europium	1.00	MG/KG	Blank had a negative value >5X's the IDL.
SD0901	Inorganics	Lutetium	0.52	MG/KG	Blank had a negative value >5X's the IDL.
SD0901	Inorganics	Thulium	2.60	MG/KG	Blank had a negative value >5X's the IDL.
SD0901	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0901	Pesticide/PCBs	Endrin Aldehyde	2.3	UG/KG	The %D between the two pesticide/PCB column checks was >25%.

Table F.4-32. Rejected Data Summary

Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
SD0911	Inorganics	Antimony	0.28	MG/KG	MS recovery was <30%.
SD0911	Inorganics	Thallium	0.85	MG/KG	Blank had a negative value >5X's the IDL.
SD0911	Inorganics	Dypsprosi	3.10	MG/KG	Blank had a negative value >5X's the IDL.
SD0911	Inorganics	Europium	1.10	MG/KG	Blank had a negative value >5X's the IDL.
SD0911	Inorganics	Lutetium	0.57	MG/KG	Blank had a negative value >5X's the IDL.
SD0911	Inorganics	Thulium	2.80	MG/KG	Blank had a negative value >5X's the IDL.
SD0911	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD0911	Pesticide/PCBs	Endrin Aldehyde	4.0	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
SD1001	Inorganics	Antimony	0.25	MG/KG	MS recovery was <30%.
SD1001	Inorganics	Thallium	0.74	MG/KG	Blank had a negative value >5X's the IDL.
SD1001	Inorganics	Dypsprosi	2.70	MG/KG	Blank had a negative value >5X's the IDL.
SD1001	Inorganics	Europium	0.99	MG/KG	Blank had a negative value >5X's the IDL.
SD1001	Inorganics	Lutetium	0.50	MG/KG	Blank had a negative value >5X's the IDL.
SD1001	Inorganics	Thulium	2.50	MG/KG	Blank had a negative value >5X's the IDL.
SD1001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1101	Inorganics	Antimony	0.26	MG/KG	MS recovery was <30%.
SD1101	Inorganics	Thallium	0.78	MG/KG	Blank had a negative value >5X's the IDL.
SD1101	Inorganics	Europium	1.00	MG/KG	Blank had a negative value >5X's the IDL.
SD1101	Inorganics	Lutetium	0.52	MG/KG	Blank had a negative value >5X's the IDL.
SD1101	Inorganics	Thulium	2.60	MG/KG	Blank had a negative value >5X's the IDL.
SD1101	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1201	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.
SD1201	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1301	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.

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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
SD1301	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1311	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.
SD1311	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1401	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.
SD1401	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1401	Pesticide/PCBs	Endosulfan I	0.20	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
SD1501	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1501	Pesticide/PCBs	Endosulfan I	0.18	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
SD1601	Inorganics	Antimony	0.24	MG/KG	MS recovery was <30%.
SD1601	Inorganics	Thallium	0.72	MG/KG	Blank had a negative value >5X's the IDL.
SD1601	Explosives	1,3,5-Trinitrobenzene	1.5	MG/KG	Initial calibration RSD was >30%.
SD1601	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1701	Inorganics	Antimony	0.24	MG/KG	MS recovery was <30%.
SD1701	Inorganics	Thallium	0.73	MG/KG	Blank had a negative value >5X's the IDL.
SD1701	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1701	Pesticide/PCBs	4,4'-DDE	5.2	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.
SD1701	Pesticide/PCBs	Endrin Aldehyde	6.2	UG/KG	The %D between the two pesticide/PCB column checks was >25%.; Surrogate/radiological chemical recovery was below the lower control limit.
SD1801	Inorganics	Antimony	0.22	MG/KG	MS recovery was above the upper control limit.
SD1801	Inorganics	Thallium	0.66	MG/KG	Blank had a negative value >5X's the IDL.
SD1801	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1801	Pesticide/PCBs	p,p'-Methoxychlor	3.3	UG/KG	The %D between the two pesticide/PCB column checks was >25%.

Table F.4-32. Rejected Data Summary
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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
SD1901	Inorganics	Antimony	0.22	MG/KG	MS recovery was above the upper control limit.
SD1901	Inorganics	Thallium	0.65	MG/KG	Blank had a negative value >5X's the IDL.
SD1901	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD1901	Pesticide/PCBs	Endrin Aldehyde	4.0	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
SD1901	Pesticide/PCBs	p,p'-Methoxychlor	6.0	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
SD2001	Inorganics	Antimony	0.24	MG/KG	MS recovery was above the upper control limit.
SD2001	Inorganics	Thallium	0.73	MG/KG	Blank had a negative value >5X's the IDL.
SD2001	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD2101	Inorganics	Antimony	0.25	MG/KG	MS recovery was above the upper control limit.
SD2101	Inorganics	Thallium	0.74	MG/KG	Blank had a negative value >5X's the IDL.
SD2101	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD2101	Pesticide/PCBs	Endrin Aldehyde	0.91	UG/KG	The %D between the two pesticide/PCB column checks was >25%.
SD2111	Inorganics	Antimony	0.25	MG/KG	MS recovery was above the upper control limit.
SD2111	Inorganics	Thallium	0.75	MG/KG	Blank had a negative value >5X's the IDL.
SD2111	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD2201	Inorganics	Antimony	0.24	MG/KG	MS recovery was <30%.
SD2201	Inorganics	Thallium	0.71	MG/KG	Blank had a negative value >5X's the IDL.
SD2201	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD2301	Inorganics	Antimony	0.25	MG/KG	MS recovery was above the upper control limit.
SD2301	Inorganics	Thallium	0.75	MG/KG	Blank had a negative value >5X's the IDL.
SD2301	Inorganics	Europium	1.00	MG/KG	Blank had a negative value >5X's the IDL.
SD2301	Inorganics	Lutetium	0.50	MG/KG	Blank had a negative value >5X's the IDL.
SD2301	Inorganics	Thulium	2.50	MG/KG	Blank had a negative value >5X's the IDL.
SD2301	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.

Table F.4-32. Rejected Data Summary
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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
SD2401	Inorganics	Antimony	0.26	MG/KG	MS recovery was <30%.
SD2401	Inorganics	Thallium	0.79	MG/KG	Blank had a negative value >5X's the IDL.
SD2401	Inorganics	Dypsprosi	2.90	MG/KG	Blank had a negative value >5X's the IDL.
SD2401	Inorganics	Europium	1.00	MG/KG	Blank had a negative value >5X's the IDL.
SD2401	Inorganics	Lutetium	0.52	MG/KG	Blank had a negative value >5X's the IDL.
SD2401	Inorganics	Thulium	2.60	MG/KG	Blank had a negative value >5X's the IDL.
SD2401	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD2501	Inorganics	Antimony	0.24	MG/KG	MS recovery was <30%.
SD2501	Inorganics	Thallium	0.72	MG/KG	Blank had a negative value >5X's the IDL.
SD2501	Inorganics	Dypsprosi	2.70	MG/KG	Blank had a negative value >5X's the IDL.
SD2501	Inorganics	Europium	0.96	MG/KG	Blank had a negative value >5X's the IDL.
SD2501	Inorganics	Lutetium	0.48	MG/KG	Blank had a negative value >5X's the IDL.
SD2501	Inorganics	Thulium	2.40	MG/KG	Blank had a negative value >5X's the IDL.
SD2501	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD2601	Inorganics	Antimony	0.24	MG/KG	MS recovery was above the upper control limit.
SD2601	Inorganics	Thallium	0.73	MG/KG	Blank had a negative value >5X's the IDL.
SD2601	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.
SD2701	Inorganics	Antimony	0.26	MG/KG	MS recovery was <30%.
SD2701	Inorganics	Thallium	0.79	MG/KG	Blank had a negative value >5X's the IDL.
SD2701	Inorganics	Dypsprosi	2.90	MG/KG	Blank had a negative value >5X's the IDL.
SD2701	Inorganics	Europium	1.10	MG/KG	Blank had a negative value >5X's the IDL.
SD2701	Inorganics	Lutetium	0.53	MG/KG	Blank had a negative value >5X's the IDL.
SD2701	Inorganics	Thulium	2.60	MG/KG	Blank had a negative value >5X's the IDL.
SD2701	Explosives	PETN	1.0	MG/KG	Surrogate/radiological chemical recovery data was not present.

Table F.4-32. Rejected Data Summary
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Sample ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
W40001	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W40101	Inorganics	Selenium	39.00	UG/L	MS recovery was <30%.
W40101	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W40201	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W40211	Inorganics	Lead	1.10	UG/L	Blank had a negative value >5X's the IDL.
W40211	Inorganics	Nickel	0.80	UG/L	Blank had a negative value >5X's the IDL.
W40211	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W40801	Inorganics	Selenium	39.00	UG/L	MS recovery was <30%.
W40801	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W41001	Inorganics	Copper	0.30	UG/L	Blank had a negative value >5X's the IDL.
W41001	Inorganics	Lead	1.10	UG/L	Blank had a negative value >5X's the IDL.
W41001	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.
W41101	Explosives	PETN	1.0	UG/L	Surrogate/radiological chemical recovery data was not present.

Table F.5-1. Summary of Trip Blank Detectsons

Collection Date	Trip Blank Sample ID	Parameter	Results (µg/L)	Data Qualifier
27-Jun-94	TBN007	Methylene Chloride	2	J
28-Jun-94	TBN008	1,1-Dichloroethane	1	J
28-Jun-94	TBN008	Methylene Chloride	6	
29-Jun-94	TBN009	Methylene Chloride	5	
30-Jun-94	TBN010	Methylene Chloride	3	J
07-Jul-94	TBN013	Acrylonitrile	47	J
11-Jul-94	TBN014	Acrylonitrile	15	J
11-Jul-94	TBN014	Chloroform	1	J
20-Jul-94	TBN018	4-Methyl-2-pentanone	1	J
21-Jul-94	TBN019	4-Methyl-2-pentanone	1	J
22-Jun-94	TBA003	Trichloroethene	1	J
27-Jun-94	TBA005	Acrylonitrile	9	J
27-Jun-94	TBA005	Methylene Chloride	2	J
28-Jun-94	TBA006	Methylene Chloride	7	
29-Jun-94	TBA007	Methylene Chloride	5	
30-Jun-94	TBA008	Methylene Chloride	4	J
07-Jul-94	TBA011	Acetone	6	J
07-Jul-94	TBA011	Chloromethane	13	
08-Jul-94	TBA012	Trichloroethene	3	J
09-Aug-94	TBA022	Methylene Chloride	14	
10-Aug-94	TBA023	Acetone	5	J
10-Aug-94	TBA023	Methylene Chloride	13	

ID identification
J The result value is an estimated value
µg/L micrograms per liter
Note: No qualifier in the Data Qualifier column indicates that the data was not qualified.

Table F.5-2. Summary of Sample Bank Blanks
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Collection Date	Bank Blank Sample	Parameter	Results (µg/L)	Data Qualifier
20-Jun-94	BB0009	Bromodichloromethane	4	J
20-Jun-94	BB0009	Chloroform	18	
30-Jun-94	BB0010	Chloroform	6	
30-Jun-94	BB0010	Hexane	4	J
30-Jun-94	BB0010	Methylene Chloride	7	
30-Jun-94	BB0010	Xylene, Total	1	J
05-Jul-94	BB0011	Acetone	12	
05-Jul-94	BB0011	Bromodichloromethane	2	J
05-Jul-94	BB0011	Chloroform	14	
11-Jul-94	BB0012	Bromodichloromethane	4	J
11-Jul-94	BB0012	Carbon Tetrachloride	2	J
11-Jul-94	BB0012	Chloroform	65	
14-Jul-94	BB0013	Bromodichloromethane	2	J
14-Jul-94	BB0013	Chloroform	27	
20-Jun-94	BB0001	Bromodichloromethane	4	J
20-Jun-94	BB0001	Chloroform	16	
27-Jun-94	BB0002	Acetone	16	
27-Jun-94	BB0002	Chloroform	7	
27-Jun-94	BB0002	Methylene Chloride	6	
28-Jun-94	BB0003	1,1-Dichloroethane	1	J
28-Jun-94	BB0003	Bromodichloromethane	2	J
28-Jun-94	BB0003	Chloroform	20	
28-Jun-94	BB0003	Hexane	1	J
28-Jun-94	BB0003	Methylene Chloride	8	
07-Jul-94	BB0004	Acetone	23	

Table F.5-2. Summary of Sample Bank Blanks
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Collection Date	Bank Blank Sample	Parameter	Results (µg/L)	Data Qualifier
19-Jul-94	BB0005	Bromodichloromethane	6	
19-Jul-94	BB0005	Carbon Tetrachloride	3	J
19-Jul-94	BB0005	Chloroform	67	
27-Jul-94	BB0006	Bromodichloromethane	2	J
27-Jul-94	BB0006	Chloroform	15	

J The result value is an estimated value
µg/L micrograms per liter
Note: No qualifier in the Data Qualifier column indicates that the data was not qualified.
A blank in the Qualifier column indicates the validator agreed with the result presented by the lab.

Table F.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Analyte	Results	Data Qualifier	Units
15-Jun-94	ER0015	Acetone	2	J	UG/L
15-Jun-94	ER0015	Acrylonitrile	16	J	UG/L
15-Jun-94	ER0015	Bromodichloromethane	6		UG/L
15-Jun-94	ER0015	Calcium	576.00		UG/L
15-Jun-94	ER0015	Carbon Tetrachloride	4	J	UG/L
15-Jun-94	ER0015	Chloroform	44		UG/L
15-Jun-94	ER0015	Di-n-butylphthalate	1	J	UG/L
15-Jun-94	ER0015	Diethylphthalate	1	J	UG/L
15-Jun-94	ER0015	Phenol	1	J	UG/L
15-Jun-94	ER0015	Ra-226	0.88	J	PCI/L
27-Jun-94	ER0017	Bromodichloromethane	3	J	UG/L
27-Jun-94	ER0016	Chloroform	13		UG/L
27-Jun-94	ER0017	Chloroform	30		UG/L
27-Jun-94	ER0017	Kjeldahl Nitrogen	0.6560		MG/L
27-Jun-94	ER0016	Methylene Chloride	5		UG/L
27-Jun-94	ER0017	Methylene Chloride	6		UG/L
27-Jun-94	ER0016	Organic Carbon	2.8600		MG/L
27-Jun-94	ER0016	Organic Carbon	2.9500		MG/L
27-Jun-94	ER0016	Organic Carbon	3.0100		MG/L
27-Jun-94	ER0016	Organic Carbon	3.0800		MG/L
27-Jun-94	ER0017	Organic Carbon	3.4200		MG/L
27-Jun-94	ER0017	Organic Carbon	3.4800		MG/L
27-Jun-94	ER0017	Organic Carbon	3.5000		MG/L
27-Jun-94	ER0017	Organic Carbon	3.7600		MG/L
27-Jun-94	ER0016	Xylene, Total	1	J	UG/L
29-Jun-94	ER0018	1,1,1-Trichloroethane	1	J	UG/L

Table F.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Analyte	Results	Data Qualifier	Units
29-Jun-94	ER0018	Aluminum	106.00		UG/L
29-Jun-94	ER0018	Antimony	1.20		UG/L
29-Jun-94	ER0018	Barium	2.90		UG/L
29-Jun-94	ER0018	Bromodichloromethane	3	J	UG/L
29-Jun-94	ER0018	Chloroform	30		UG/L
29-Jun-94	ER0018	Copper	2.40		UG/L
29-Jun-94	ER0018	Methylene Chloride	4	J	UG/L
05-Jul-94	ER0019	1,1,1-Trichloroethane	1	J	UG/L
05-Jul-94	ER0019	Aluminum	121.00		UG/L
05-Jul-94	ER0019	Americium-241	0.52		PCI/L
05-Jul-94	ER0019	Barium	1.10		UG/L
05-Jul-94	ER0019	Bromodichloromethane	3	J	UG/L
05-Jul-94	ER0019	Calcium	722.00		UG/L
05-Jul-94	ER0019	Chloroform	22		UG/L
05-Jul-94	ER0019	Cobalt	1.20		UG/L
05-Jul-94	ER0019	Copper	4.60		UG/L
05-Jul-94	ER0019	Endosulfan Sulfate	0.015	J	UG/L
05-Jul-94	ER0019	Magnesium	212.00		UG/L
05-Jul-94	ER0019	Phenol	1	J	UG/L
05-Jul-94	ER0019	Plutonium-238	0.10		PCI/L
05-Jul-94	ER0019	Plutonium-239/40	0.11		PCI/L
05-Jul-94	ER0019	Tritium	464.4		PCI/L
07-Jul-94	ER0020	1,3-Dinitrobenzene	0.53	J	UG/L
07-Jul-94	ER0020	Acetone	25		UG/L
07-Jul-94	ER0020	Aluminum	119.00		UG/L
07-Jul-94	ER0020	Americium-241	0.22	J	PCI/L
07-Jul-94	ER0020	Hexane	2	J	UG/L

Table F.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Analyte	Results	Data Qualifier	Units
07-Jul-94	ER0020	Methylene Chloride	34		UG/L
07-Jul-94	ER0020	Sulfate	2.1700		MG/L
11-Jul-94	ER0021	1,3-Dinitrobenzene	0.43	J	UG/L
11-Jul-94	ER0021	Acrylonitrile	13	J	UG/L
11-Jul-94	ER0021	Aluminum	161.00		UG/L
11-Jul-94	ER0021	Americium-241	0.33		PCI/L
11-Jul-94	ER0021	Antimony	1.20		UG/L
11-Jul-94	ER0021	Barium	2.50		UG/L
11-Jul-94	ER0021	Bromodichloromethane	3	J	UG/L
11-Jul-94	ER0021	Calcium	376.00		UG/L
11-Jul-94	ER0021	Carbon Tetrachloride	2	J	UG/L
11-Jul-94	ER0021	Chloroform	57		UG/L
11-Jul-94	ER0021	Magnesium	117.00		UG/L
11-Jul-94	ER0021	Phenol	3	J	UG/L
11-Jul-94	ER0021	Plutonium-239/40	0.13		PCI/L
11-Jul-94	ER0021	Thorium-230	1.31		PCI/L
11-Jul-94	ER0021	Thorium-232	0.26		PCI/L
11-Jul-94	ER0021	Toluene	1	J	UG/L
12-Jul-94	ER0022	2-Amino-4,6-dinitrotoluene	0.24	J	UG/L
12-Jul-94	ER0022	Aluminum	104.00		UG/L
12-Jul-94	ER0022	Americium-241	0.26		PCI/L
12-Jul-94	ER0022	Bromodichloromethane	4	J	UG/L
12-Jul-94	ER0022	Calcium	356.00		UG/L
12-Jul-94	ER0022	Carbon Tetrachloride	3	J	UG/L
12-Jul-94	ER0022	Chloroform	66		UG/L
12-Jul-94	ER0022	Copper	1.10		UG/L
12-Jul-94	ER0022	Magnesium	116.00		UG/L

Table F.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Analyte	Results	Data Qualifier	Units
12-Jul-94	ER0022	Radium-226	0.25	J	PCI/L
12-Jul-94	ER0022	Sulfate	2.4900		MG/L
12-Jul-94	ER0022	bis(2-Ethylhexyl)phthalate	1	J	UG/L
20-Jun-94	ER0001	Bromodichloromethane	6		UG/L
20-Jun-94	ER0001	Carbon Tetrachloride	2	J	UG/L
20-Jun-94	ER0001	Chloroform	43		UG/L
20-Jun-94	ER0001	Chromium	1.40		UG/L
20-Jun-94	ER0001	Iron	20.10		UG/L
20-Jun-94	ER0001	Magnesium	86.20		UG/L
20-Jun-94	ER0001	Organic Carbon	3.1500		MG/L
20-Jun-94	ER0001	Organic Carbon	3.1800		MG/L
20-Jun-94	ER0001	Organic Carbon	3.4700		MG/L
20-Jun-94	ER0001	Organic Carbon	3.6300		MG/L
20-Jun-94	ER0001	Pu-238	1.74	J	PIC/L
20-Jun-94	ER0001	Pu-239/40	0.17	J	PIC/L
20-Jun-94	ER0001	Ra-226	0.08	J	PCI/L
20-Jun-94	ER0001	Sodium	315.00		UG/L
20-Jun-94	ER0001	Th-228	0.67	J	PIC/L
20-Jun-94	ER0001	Th-230	0.26	J	PIC/L
21-Jun-94	ER0002	2,4,6-Trinitrotoluene	10.0	J	UG/L
21-Jun-94	ER0002	2,4-Dinitrotoluene	2.4	J	UG/L
21-Jun-94	ER0002	2,6-Dinitrotoluene	2.6	J	UG/L
21-Jun-94	ER0002	Aluminum	38.00		UG/L
21-Jun-94	ER0002	Bromodichloromethane	5		UG/L
21-Jun-94	ER0002	Carbon Tetrachloride	2	J	UG/L
21-Jun-94	ER0002	Chloroform	36		UG/L
21-Jun-94	ER0002	Iron	31.20		UG/L

Table F.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Analyte	Results	Data Qualifier	Units
21-Jun-94	ER0002	Magnesium	79.20		UG/L
21-Jun-94	ER0002	Organic Carbon	3.5000		MG/L
21-Jun-94	ER0002	Organic Carbon	3.6400		MG/L
21-Jun-94	ER0002	Organic Carbon	3.8000		MG/L
21-Jun-94	ER0002	Organic Carbon	3.8600		MG/L
21-Jun-94	ER0002	Pu-239/40	0.13	J	PIC/L
21-Jun-94	ER0002	Ra-226	0.24	J	PCI/L
21-Jun-94	ER0002	Sodium	360.00		UG/L
21-Jun-94	ER0002	Th-228	1.24	J	PIC/L
21-Jun-94	ER0002	Th-230	0.71	J	PIC/L
21-Jun-94	ER0002	Th-232	0.57	J	PIC/L
28-Jun-94	ER0003	Aluminum	43.80		UG/L
28-Jun-94	ER0003	Chloroform	5		UG/L
28-Jun-94	ER0003	Holmium	10.00		UG/L
28-Jun-94	ER0003	Iron	35.50		UG/L
28-Jun-94	ER0003	Methylene Chloride	3	J	UG/L
28-Jun-94	ER0003	Organic Carbon	2.3100		MG/L
28-Jun-94	ER0003	Organic Carbon	2.4400		MG/L
28-Jun-94	ER0003	Organic Carbon	2.5300		MG/L
28-Jun-94	ER0003	Ra-226	0.24	J	PCI/L
28-Jun-94	ER0003	Samarium	82.00		UG/L
28-Jun-94	ER0003	Sodium	278.00		UG/L
28-Jun-94	ER0003	Th-228	0.66	J	PIC/L
28-Jun-94	ER0003	Th-230	0.44	J	PIC/L
29-Jun-94	ER0004	Bromodichloromethane	3	J	UG/L
29-Jun-94	ER0004	Chloroform	25		UG/L
29-Jun-94	ER0004	Copper	1.90		UG/L

Table F.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Analyte	Results	Data Qualifier	Units
29-Jun-94	ER0004	Kjeldahl Nitrogen	0.7160		MG/L
29-Jun-94	ER0004	Methylene Chloride	5		UG/L
29-Jun-94	ER0004	Organic Carbon	3.2000		MG/L
29-Jun-94	ER0004	Organic Carbon	3.2400		MG/L
29-Jun-94	ER0004	Organic Carbon	3.2800		MG/L
29-Jun-94	ER0004	Organic Carbon	3.4100		MG/L
29-Jun-94	ER0004	Ra-226	0.01	J	PCI/L
29-Jun-94	ER0004	Sulfate	2.0500		MG/L
29-Jun-94	ER0004	Th-228	1.08	J	PIC/L
29-Jun-94	ER0004	Th-230	0.47	J	PIC/L
30-Jun-94	ER0005	Bromodichloromethane	3	J	UG/L
30-Jun-94	ER0005	Chloroform	23		UG/L
30-Jun-94	ER0005	Methylene Chloride	5		UG/L
30-Jun-94	ER0005	Pu-239/40	0.16	J	PIC/L
30-Jun-94	ER0005	Ra-226	0.81	J	PCI/L
06-Jul-94	ER0006	2-Amino-4,6-dinitrotoluene	2.9	J	UG/L
06-Jul-94	ER0006	Acetone	11		UG/L
06-Jul-94	ER0006	Am-241	0.26	J	PCI/L
06-Jul-94	ER0006	Organic Carbon	1.3800		MG/L
06-Jul-94	ER0006	Organic Carbon	1.4200		MG/L
06-Jul-94	ER0006	Organic Carbon	1.4700		MG/L
06-Jul-94	ER0006	Organic Carbon	1.7000		MG/L
06-Jul-94	ER0006	Th-228	1.06	J	PIC/L
06-Jul-94	ER0006	Th-230	0.28	J	PIC/L
06-Jul-94	ER0006	Tritium	401.7		PCI/L
20-Jul-94	ER0008	Am-241	0.49	J	PCI/L
20-Jul-94	ER0008	Bromodichloromethane	5		UG/L

Table F.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Analyte	Results	Data Qualifier	Units
20-Jul-94	ER0008	Calcium	326.00		UG/L
20-Jul-94	ER0008	Carbon Tetrachloride	2	J	UG/L
20-Jul-94	ER0008	Cerium	52.00		UG/L
20-Jul-94	ER0008	Chloroform	54		UG/L
20-Jul-94	ER0008	Dypsprosium	11.00		UG/L
20-Jul-94	ER0008	Erbium	30.00		UG/L
20-Jul-94	ER0008	Europium	4.00		UG/L
20-Jul-94	ER0008	Gadolinium	31.00		UG/L
20-Jul-94	ER0008	Holmium	9.00		UG/L
20-Jul-94	ER0008	Lanthanum	17.00		UG/L
20-Jul-94	ER0008	Lutetium	2.00		UG/L
20-Jul-94	ER0008	Magnesium	101.00		UG/L
20-Jul-94	ER0008	Neodymium	50.00		UG/L
20-Jul-94	ER0008	Organic Carbon	1.8000	J	MG/L
20-Jul-94	ER0008	Organic Carbon	1.8200	J	MG/L
20-Jul-94	ER0008	Organic Carbon	1.9200	J	MG/L
20-Jul-94	ER0008	Organic Carbon	1.9500	J	MG/L
20-Jul-94	ER0008	Potassium	137.00	J	UG/L
20-Jul-94	ER0008	Praseodymium	32.00		UG/L
20-Jul-94	ER0008	Samarium	82.00		UG/L
20-Jul-94	ER0008	Terbium	60.00		UG/L
20-Jul-94	ER0008	Thulium	10.00		UG/L
20-Jul-94	ER0008	Ytterbium	15.00		UG/L
20-Jul-94	ER0008	Zinc	12.20		UG/L
22-Jul-94	ER0009	Am-241	0.19		PCI/L
22-Jul-94	ER0009	Barium	1.10		UG/L
22-Jul-94	ER0009	Bromodichloromethane	5		UG/L

Table F.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Analyte	Results	Data Qualifier	Units
22-Jul-94	ER0009	Calcium	322.00		UG/L
22-Jul-94	ER0009	Carbon Tetrachloride	2	J	UG/L
22-Jul-94	ER0009	Cerium	52.00		UG/L
22-Jul-94	ER0009	Chloroform	47		UG/L
22-Jul-94	ER0009	Dypsprosium	11.00		UG/L
22-Jul-94	ER0009	Erbium	30.00		UG/L
22-Jul-94	ER0009	Europium	4.00		UG/L
22-Jul-94	ER0009	Gadolinium	31.00		UG/L
22-Jul-94	ER0009	Holmium	9.00		UG/L
22-Jul-94	ER0009	Lanthanum	17.00		UG/L
22-Jul-94	ER0009	Lutetium	2.00		UG/L
22-Jul-94	ER0009	Magnesium	105.00		UG/L
22-Jul-94	ER0009	Neodymium	50.00		UG/L
22-Jul-94	ER0009	Organic Carbon	1.1200	J	MG/L
22-Jul-94	ER0009	Organic Carbon	1.1800	J	MG/L
22-Jul-94	ER0009	Organic Carbon	1.2100	J	MG/L
22-Jul-94	ER0009	Organic Carbon	1.2200	J	MG/L
22-Jul-94	ER0009	Potassium	147.00	J	UG/L
22-Jul-94	ER0009	Praseodymium	32.00		UG/L
22-Jul-94	ER0009	Samarium	82.00		UG/L
22-Jul-94	ER0009	Terbium	60.00		UG/L
22-Jul-94	ER0009	Thulium	10.00		UG/L
22-Jul-94	ER0009	Ytterbium	15.00		UG/L
26-Jul-94	ER0010	Am-241	0.17	J	PCI/L
26-Jul-94	ER0010	Barium	2.30		UG/L
26-Jul-94	ER0010	Bromodichloromethane	5		UG/L
26-Jul-94	ER0010	Calcium	334.00		UG/L

Table F.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Analyte	Results	Data Qualifier	Units
26-Jul-94	ER0010	Carbon Tetrachloride	2	J	UG/L
26-Jul-94	ER0010	Cerium	52.00		UG/L
26-Jul-94	ER0010	Chloroform	46		UG/L
26-Jul-94	ER0010	Dypsprosium	11.00		UG/L
26-Jul-94	ER0010	Erbium	30.00		UG/L
26-Jul-94	ER0010	Europium	4.00		UG/L
26-Jul-94	ER0010	Gadolinium	31.00		UG/L
26-Jul-94	ER0010	Holmium	9.00		UG/L
26-Jul-94	ER0010	Lanthanum	17.00		UG/L
26-Jul-94	ER0010	Lutetium	2.00		UG/L
26-Jul-94	ER0010	Magnesium	107.00		UG/L
26-Jul-94	ER0010	Manganese	1.90		UG/L
26-Jul-94	ER0010	Neodymium	50.00		UG/L
26-Jul-94	ER0010	Organic Carbon	1.3300	J	MG/L
26-Jul-94	ER0010	Organic Carbon	1.3600	J	MG/L
26-Jul-94	ER0010	Organic Carbon	1.6300	J	MG/L
26-Jul-94	ER0010	Potassium	153.00	J	UG/L
26-Jul-94	ER0010	Praseodymium			UG/L
26-Jul-94	ER0010	Samarium	82.00		UG/L
26-Jul-94	ER0010	Terbium	60.00		UG/L
26-Jul-94	ER0010	Thulium	10.00		UG/L
26-Jul-94	ER0010	Ytterbium	15.00		UG/L
26-Jul-94	ER0010	bis(2-Ethylhexyl)phthalate	2	J	UG/L

ID identification
J The result value is an estimated value
MG/L milligrams per liter
PCI/L picocuries per liter
UG/L micrograms per liter
Note: No qualifier in the Data Qualifier column indicates that the data was not qualified.

Table F.5-4. Field Precision Summary - Soil Samples
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Analyte	Number of Field Duplicate Pairs	Minimum RPD	Maximum RPD	Number Within Acceptance Limits	Percentage Within Limits
1,2-Dichloroethene	1	0.00	40.00	0	0.00
4,4'-DDE	1	9.30	9.30	1	100.00
Acenaphthene	2	0.00	0.00	2	100.00
Acetone	3	0.00	0.00	3	100.00
Aluminum	13	0.00	21.20	13	100.00
Anthracene	4	0.00	0.00	4	100.00
Antimony	4	0.00	12.90	4	100.00
Aroclor-1254	2	0.00	0.00	2	100.00
Arsenic	13	0.00	56.20	11	84.62
Barium	13	0.00	37.20	12	92.31
Benzo(a)anthracene	6	0.00	80.50	5	83.33
Benzo(a)pyrene	6	0.00	68.20	5	83.33
Benzo(b)fluoranthene	7	0.00	73.30	6	85.71
Benzo(g,h,i)perylene	2	0.00	0.00	2	100.00
Benzo(k)fluoranthene	7	0.00	81.20	6	85.71
Beryllium	10	0.00	8.00	10	100.00
Bismuth	10	0.00	43.80	8	80.00
Cadmium	1	0.00	0.00	1	100.00
Calcium	13	0.00	32.20	13	100.00
Carbazole	1	0.00	0.00	1	100.00
Cerium	4	0.00	0.00	4	100.00
Chloride	11	0.00	19.60	11	100.00
Chromium	11	0.00	18.40	11	100.00
Chrysene	6	0.00	77.80	5	83.33
Cobalt	11	0.00	11.80	11	100.00
Copper	11	0.00	10.10	11	100.00

Table F.5-4. Field Precision Summary - Soil Samples
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Analyte	Number of Field Duplicate Pairs	Minimum RPD	Maximum RPD	Number Within Acceptance Limits	Percentage Within Limits
Di-n-butylphthalate	2	0.00	22.20	2	100.00
Dibenzofuran	1	0.00	0.00	1	100.00
Dieldrin	1	0.00	0.00	1	100.00
Dypsprosium	2	0.00	0.00	2	100.00
Endrin	1	0.00	0.00	1	100.00
Europium	2	0.00	0.00	2	100.00
Fluoranthene	8	0.00	101.00	6	75.00
Fluorene	1	0.00	0.00	1	100.00
Fluoride	11	0.00	108.00	9	81.82
Gadolinium	1	0.00	0.00	1	100.00
Heptachlor Epoxide	1	0.00	0.00	1	100.00
Holmium	1	0.00	0.00	1	100.00
Indeno(1,2,3-c,d)pyrene	4	0.00	0.00	4	100.00
Iron	13	0.00	35.70	12	92.31
K-40	9	0.00	16.80	9	100.00
Lead	14	0.00	66.30	13	92.86
Lithium	7	0.00	7.10	7	100.00
Magnesium	14	0.00	42.20	13	92.86
Manganese	13	0.00	146.00	12	92.31
Mercury	3	0.00	0.00	3	100.00
Molybdenum	5	0.00	16.20	5	100.00
Naphthalene	2	0.00	0.00	2	100.00
Neodymium	7	0.00	0.00	7	100.00
Nickel	11	0.00	19.40	11	100.00
Nitrate-Nitrite-N	9	0.00	199.00	6	66.67
Organic Carbon	10	0.00	81.80	8	80.00

Table F.5-4. Field Precision Summary - Soil Samples
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Analyte	Number of Field Duplicate Pairs	Minimum RPD	Maximum RPD	Number Within Acceptance Limits	Percentage Within Limits
Phenanthrene	6	0.00	122.00	5	83.33
Potassiumium	14	0.00	36.20	13	92.86
Praseodym	1	0.00	0.00	1	100.00
Plutonium-238	2	0.00	0.00	2	100.00
Plutonium-239/40	1	0.00	0.00	1	100.00
Pyrene	6	0.00	91.20	5	83.33
Radium-226	13	[illegible]	28.60	13	100.00
Samarium	1	0.00	0.00	1	100.00
Silver	2	0.00	0.00	2	100.00
Sodium	8	0.00	22.70	8	100.00
Sulfate	11	0.00	124.00	7	63.64
Terbium	1	0.00	0.00	1	100.00
Tetrachloroethene	1	0.00	0.00	1	100.00
Thorium-228	5	0.00	37.80	3	60.00
Thorium-230	9	0.00	39.20	8	88.89
Thorium-232	9	0.00	73.90	8	88.89
Tin	1	0.00	0.00	1	100.00
Trichloroethene	1	18.20	18.20	1	100.00
Uranium-234	12	0.00	46.20	11	91.67
Uranium-235	3	0.00	0.00	3	100.00
Uranium-238	12	0.00	47.50	10	83.33
Vanadium	11	0.00	19.80	11	100.00
Ytterbium	1	0.00	0.00	1	100.00
Zinc	13	0.00	160.00	12	92.31
alpha-Chlordane	1	0.00	0.00	1	100.00
bis(2-Ethylhexyl)phthalate	2	0.00	0.00	2	100.00

Table F.5-4. Field Precision Summary - Soil Samples
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Analyte	Number of Field Duplicate Pairs	Minimum RPD	Maximum RPD	Number Within Acceptance Limits	Percentage Within Limits
gamma-Chlordane	2	0.00	0.00	2	100.00
Alkalinity	1	2.50	2.50	1	100.00
Alkalinity as Calcium Carbonate	1	0.00	0.00	1	100.00
Aluminum	2	0.00	0.00	2	100.00
Arsenic	1	0.00	0.00	1	100.00
Barium	2	0.00	0.00	2	100.00
Benzoic Acid	1	0.00	0.00	1	100.00
Bismuth	2	0.00	0.00	2	100.00
Calcium	2	0.00	0.00	2	100.00
Chloride	2	0.00	0.00	2	100.00
Chromium	1	0.00	0.00	1	100.00
Cobalt	1	0.00	0.00	1	100.00
Copper	1	0.00	0.00	1	100.00
Dissolved Solids	2	0.00	0.00	2	100.00
Fluoride	2	0.00	0.00	2	100.00
Iron	3	0.00	121.00	2	66.67
Kjeldahl Nitrogen	3	0.00	7.90	3	100.00
Lead	1	0.00	0.00	1	100.00
Magnesium	3	0.00	20.20	2	66.67
Manganese	2	0.00	0.00	2	100.00
Nitrate-Nitrite-N	2	0.00	0.00	2	100.00
Organic Carbon	2	0.00	0.00	2	100.00
Potassium	2	0.00	0.00	2	100.00
Radium-226	2	0.00	67.70	1	50.00
Sodium	2	0.00	0.00	2	100.00
Sulfate	2	0.00	0.00	2	100.00

Table F.5-4. Field Precision Summary - Soil Samples
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Analyte	Number of Field Duplicate Pairs	Minimum RPD	Maximum RPD	Number Within Acceptance Limits	Percentage Within Limits
Suspended Solids	2	0.00	0.00	2	100.00
Thorium-228	2	0.00	0.00	2	100.00
Thorium-232	1	0.00	0.00	1	100.00
Total Phosphorus	2	0.00	0.00	2	100.00
Tritium	3	0.00	5.00	3	100.00
Uranium-234	2	0.00	0.00	2	100.00
Uranium-238	3	0.00	6.20	3	100.00
Vanadium	2	0.00	0.00	2	100.00
Zinc	2	0.00	0.00	2	100.00

RPD relative percent difference