Science Applications International Corporation
An Employee-Owned Company

January 14, 2000

Mr. Kevin Jasper
U.S. Army Corps of Engineers
ATTN: CEORL-ED-GS
600 Martin Luther King, Jr. Place
P.O. Box 59
Louisville, KY 40201-0059

Subject: Contract No. DACA27-97-D-0025, Delivery Order No. 0005: Phase II Remedial Investigation for Load Line 1, Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio

Re: Unscheduled Deliverable – Sampling of Potential Disposal Areas at Load Line 1 and Load Line 2

Dear Mr. Jasper:

This letter report contains results of surface soil sampling conducted to characterize potential demolition debris disposal areas at Load Line 1 and Load Line 2. These activities were conducted in accordance with the scope of work provided by the U.S. Army Corps of Engineers (USACE) for Technical Change #3 to the Load Line 1 Phase II Remedial Investigation (Delivery Order 0005 under contract number DACA27-97-0025). As noted in the scope of work (SOW) for Technical Change #3, this sampling was performed to establish the presence or absence of any potential contamination within proposed disposal areas to evaluate their suitability for use as fill areas for clean, solid demolition debris from the respective load lines. Sampling activities were conducted in accordance with the *Facility-Wide Sampling and Analysis Plan for the Ravenna Army Ammunition Plant, Ravenna, Ohio*, dated April 1996, and the *Facility-Wide Safety and Health Plan for the Ravenna Army Ammunition Plant, Ravenna, Ohio*, dated February 1996.

FIELD ACTIVITIES

Sampling activities were conducted on November 4, 1999. All sample stations were located in the field with the concurrence of the USACE Technical Manager, the RVAAP Environmental Coordinator, and Ohio Environmental Protection Agency (EPA) Site Coordinator. Composite samples for explosive and propellant analyses were collected from three subsamples located in an approximate equilateral triangle configuration, with each leg of the triangle about 3-ft long. The remaining samples for Target Analyte List (TAL) metals, cyanide, VOCs, SVOCs, pesticides, and PCBs were collected as discrete samples from the approximate center of the equilateral triangle. All samples were collected using decontaminated stainless steel hand-bucket augers where possible or scoops/spoons over a depth interval from 0 to 1 foot below ground surface (bgs) or from ground surface to bedrock refusal if less than 1 ft bgs.

At Load Line 1, surface soil samples were collected at all four "change-out buildings" where former employees changed clothing before and after work shifts. The building identification numbers include CB-8, CB-12, CB-22, and CB-23 (Attachment 1, Figure 1). Samples were collected at locations at each building as specified in the SOW; no Field Change Orders were required. One of the two additional planned contingency samples was collected at Building CB-23 (Station CB23-5). The depth to bedrock at the Load Line 1 sampling stations was very shallow; consequently, the maximum attained sample depth was 0.5 ft bgs. Because of the shallow depths to bedrock, only the minimum volume of soil sample needed for analyses could be collected at each station.

At Load Line 2, sampling was originally planned for four stations within the former borrow area. However, following field reconnaissance by USACE, RVAAP, and Ohio EPA personnel, a determination was made that the site was not suitable as a potential disposal area because it appeared to be periodically inundated following rainfall events. Accordingly, the sites of two former "change-out buildings," DB-8A and DB-22, were sampled. Two samples (including the second contingency sample) were collected at Building DB-8A, and three samples were collected at Building CB-22 (Attachment 1, Figure 2). The depth to bedrock at the Load Line 2 sampling stations was only slightly greater than that at Load Line 1. Refusal on bedrock occurred at depths between 0.5 and 0.7 ft bgs at every location except station DB8-01, where a depth of 1 ft bgs was attained. As at Load Line 1, because of the shallow depths to bedrock, only the minimum volume of soil sample needed for analyses could be collected at most of the stations.

Documentation for the sampling effort is provided in Attachment 2, which contains copies of field logbook entries (daily quality control report, task team activity logs, and boring logs), and Attachment 3, which contains copies of the field chain-of-custody records. Attachment 4 contains results of the topographic survey of the sampling stations, including horizontal coordinates and elevation data, conducted following the sampling effort.

RESULTS

Analytical data for the sampling event are presented separately for the Load Line 1 and Load Line 2 stations in Attachments 5 and 6, respectively. Tables containing data summary statistics for each load line precede the analytical results. These summary tables present the results of screening of the data against facility-wide background values for surface soils. In addition, the summary tables present the results of screening of the data against U.S. Environmental Protection Agency (EPA) Region IX residential preliminary remediation goals (PRGs) adjusted to reflect Ohio EPA risk target screening goals of 10^{-7} for carcinogens and hazard quotients of 0.1 for noncarcinogens. Comparisons of detected results to EPA Region IX industrial PRGs were also performed using the same risk target goals. Summary results for each of the major classes of analytes (e.g., TAL metals, explosives/propellants, VOCs/SVOCs, and pesticides/PCBs) are presented below.

TAL Metals and Cyanide

Fourteen metals were detected above facility-wide background criteria at Load Line 1. Of these 14 metals exceeding background values, seven also exceeded the residential PRG screening criteria (antimony, arsenic, cadmium, chromium, lead, manganese, and thallium). In the case of aluminum, arsenic, chromium, iron, and manganese, facility-wide background values exceed the residential PRG screening criteria. For these five constituents, a number of the observed results were greater than risk screening criteria, but less than facility-wide background values; however, only those results greater than both background and PRG screening criteria are highlighted as indicative of potential site-related impacts. A brief summary of Load Line 1 locations where these exceedances occurred is presented below; analytical results for each station are contained in Attachment 5.

- antimony - station CB22-04
- arsenic - station CB22-01
- cadmium - stations CB12-02, CB12-04, and CB23-01
- chromium - stations CB12-02, CB23-01, and CB23-05
- lead - stations CB8-01, CB8-02, CB12-02, CB12-04, CB22-04, and all five stations at Building CB-23
- manganese - station CB8-03
- thallium - station CB22-04

Of the constituents exceeding background and residential PRG screening criteria above, the result for arsenic, all three results for chromium, and lead concentrations at station CB8-02, CB12-02, CB23-01, and CB23-02 also were greater than the industrial PRG screening criteria.

At Load Line 2, eight metals were detected at levels exceeding facility-wide background values. Of these eight metals, chromium, iron, and lead also exceeded residential PRG screening criteria. The locations where these exceedances occurred include chromium at stations DB8-01 and DB22-02, iron at station DB8-01, and lead at stations DB8-02, DB22-01, and DB22-02. Both results for chromium and the result for iron also exceeded the industrial PRG screening criteria.

VOCs and SVOCs

Analyses for SVOCs at Load Line 1 detected 11 constituents. Of the 11 SVOCs detected at Load Line 1, four exceeded the residential PRG screening criteria [benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene]. All four of these constituents exceeded the residential PRG screening levels at stations CB22-04 and CB23-04. The concentrations of benzo(a)pyrene also exceeded the industrial PRG screening levels at both sampling stations. At Load Line 2 analyses for SVOCs were specified only for sampling station DB22-03; no SVOCs were detected.

Methylene chloride and toluene were the only VOCs detected at Load Line 1; none of the results exceeded residential risk screening criteria. At Load Line 2, VOC analyses were specified only for sampling station DB22-03. Acetone and toluene were detected at station DB22-03; however, both results were also less than residential risk screening criteria.

Pesticides/PCBs

Pesticides (4,4'-DDE and endrin aldehyde) and PCBs (PCB-1254) were detected only at Load Line 1. PCB-1254 exceeded its residential PRG screening criterion at both stations, CB22-04 and CB23-04. The result for station CB23-04 also exceeded the industrial risk screening level.

If you have any questions or would like to discuss these results, please call me at 865-481-8761 or Kevin Jago at 865-481-4614.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

Steve Selecman
Project Manager

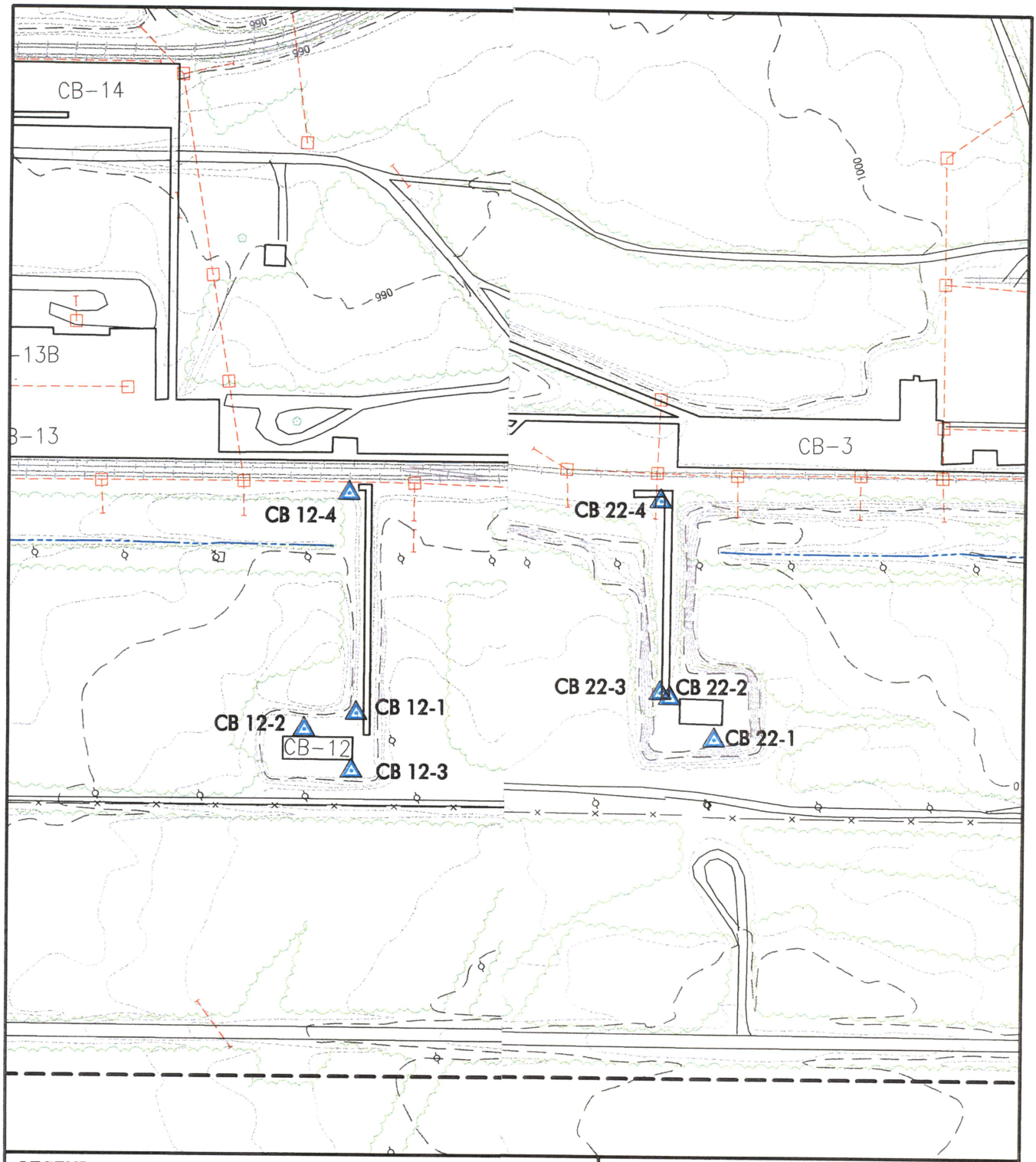
Attachments: 1 through 6

cc: Kathy Dominic, SAIC
Bill Ingold, IR
Kevin Jago, SAIC
John Jent, USACE (2 copies)
Diane Kurlich, OEPA
Stan Levenger, MKM
Eileen Mohr, OEPA
Mark Patterson, RVAAP (2 copies)
Jarnal Singh, OEPA
Col. Tom Tadsen, OARNG
Bob Whelove, IOC
Project File

Attachment 1

Unscheduled Deliverable –
Sampling of Potential Disposal Areas at Load Line 1 and Load Line 2

Figures



LEGEND:

- BUILDING
- ASPHALT ROAD
- GRAVEL ROAD
- RAILROAD TRACKS
- FENCE LINE
- POND
- STREAM
- CONTOUR (2-FT. INTERVAL)
- CONTOUR (10-FT. INTERVAL)

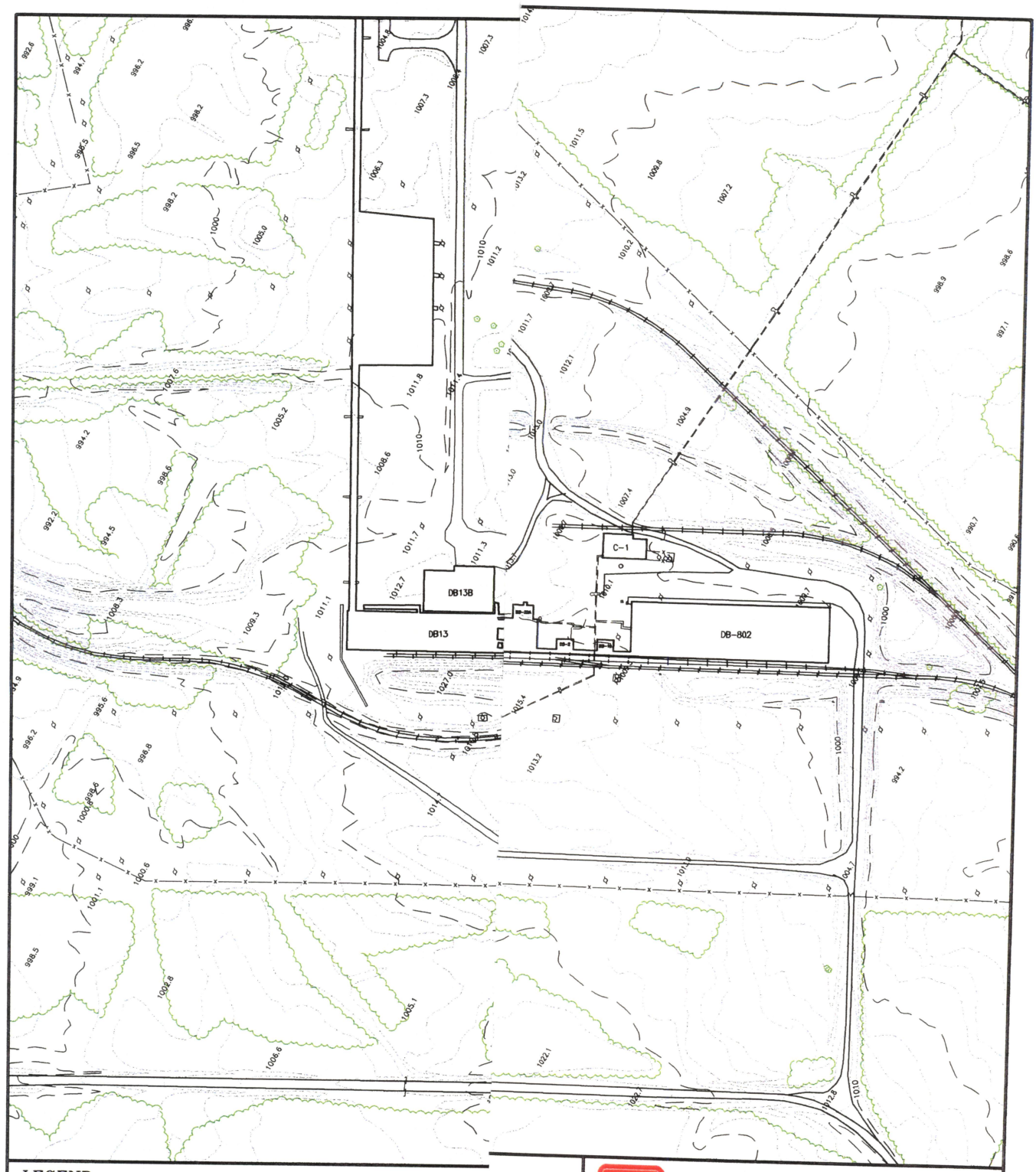
400

US Army Corps of Engineers Nashville District

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
NASHVILLE, TENNESSEE

RAVENNA ARMY AMMUNITION PLANT
RAVENNA, OHIO
LOAD LINE 1

DRAWN BY:	REV. NO./DATE:	CAD FILE:
R. BEELER	REV 0/01-10-00	/99035/DWGS/G62PDA01



LEGEND:

- BUILDING
- ASPHALT ROAD
- GRAVEL ROAD
- RAILROAD TRACKS
- FENCE LINE
- POND
- STREAM
- CONTOUR (2-FT. INTERVAL)
- CONTOUR (10-FT. INTERVAL)
- SURFACE SOIL SAMPLE LOCATION

600

US Army Corps of Engineers
Nashville District

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
NASHVILLE, TENNESSEE

RAVENNA ARMY AMMUNITION PLANT
RAVENNA, OHIO
LOAD LINE 2

DRAWN BY:	REV. NO./DATE:	CAD FILE:
R. BEELER	REV 0/01-13-00	/99035/DWGS/G62SURV2

Attachment 2

Unscheduled Deliverable –
Sampling of Potential Disposal Areas at Load Line 1 and Load Line 2

Field Logbook Documentation

Daily Quality Control Report

DATE 11:4.99

DAY | S | M | T | W | TH ✓ | F | S |

DAILY QUALITY CONTROL REPORT

WEATHER: Bright Sun ✓ | Cloudy | Overcast | Rain | Snow

TEMP: To 32° | 32-30° | 30-70° 48° ✓ | 70-85° | 85° up

WIND: Still | Moderate ✓ | High | Report No. 1

HUMIDITY: Dry ✓ | Moderate | Humid

COE PROJECT MANAGER J. Jent

PROJECT LL1/LL2 Potential Disposal Areas

JOB NO. _____

CONTRACT NO. _____

SUB-CONTRACTORS ON SITE: ACHW (Surveyors)

EQUIPMENT ON SITE:

WORK PERFORMED (INCLUDING SAMPLING): Soil sampling was conducted at the following build-ups at LL1:

CB-8
CB-12
CB-22
CB-23

and trees at LL2: DB-8A and DB-22. Soils were collected w/ hand augers + stainless steel bowls + spoons. Sample locations were field located w/ concurrence of J Jent (USACE) and Ohio EPA's Eileen Mohr. Most of the locations @ LL1 were underlain by bedrock, so the objective of 1 ft depth on surface samples could not be met. All samples were collected in one day, with numbering sequence beginning w/ last # in sequence from sampling in summer 1999. Samples collected today: LL-0738, -0737, -0743, -0740, -0739, -0741, -0730, -0731, -0729, -0736, -0744, -0725, -0726, -0727, -0728, -0742, -0733, -0735, -0734, -0722, -0723, -0724, and -0732; all surface soils.

(Continuation Sheet) 4

PROJECT LL1/LL2 Potential Disposal Areas REPORT NO. 1

JOB NO. _____ DATE: 11.4.99

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS): Mini Raes cal - checked per entry in M+TE section.

HEALTH AND SAFETY LEVELS AND ACTIVITIES: Level D. Tailgate mtg per log entry.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN: None.

SPECIAL NOTES: Complete QA check of logbooks. Complete demob

TOMORROW'S EXPECTATIONS:

By: KL Dominic 11.4.99
(Signature and date)

QA Check by: Vicki Brumbach 11-9-99
(Signature and date)

Load Line 1
Building CB-8

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11-4-99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

Dave Moore
Scott Stroud
Bean Williams

BW 11.4.99

Narrative (include time and location):

BW 11.4.99 1600 ARRIVE AT SAMPLE LOCATION LL1 / CB-8-1

1605 SAMPLE FOR EXPLOSIVES, METALS & CYANIDE

ID # LL0722

1613 MOVE TO NEXT SITE

NOTE: See log book 2 for location CB3-3

BW 11.4.99

Daily Weather Conditions: A.M. N/A

P.M. SUNNY, 40's °F, BREEZE

Recorded By BEAN WILLIAMS QA Checked By KD

HTRW DRILLING LOG

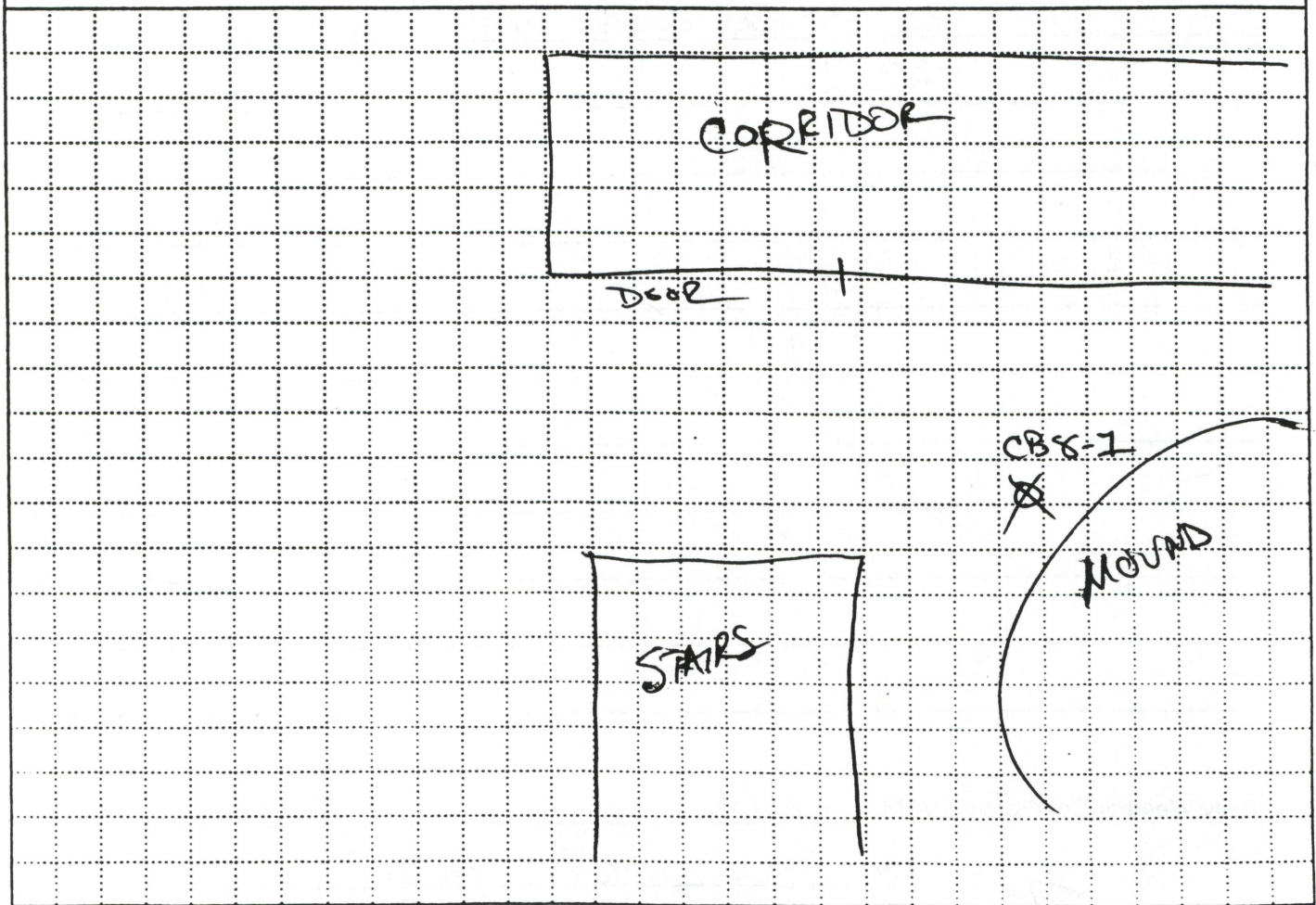
1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: N/A	DISTRICT: LOUISVILLE; HOLE NUMBER: CB 8-1; SHEET: 1 of 2
3. PROJECT: LLT - Potential Disposal Area	4. LOCATION: CB-8-1	
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURER'S DESIGNATION OF DRILL: N/A	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Stainless Steel Bowl & Spoon	8. HOLE LOCATION: See Map	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 11-4-99	11. DATE COMPLETED: 11-4-99
12. OVERBURDEN THICKNESS: One Inch	15. DEPTH GROUNDWATER ENCOUNTERED: N/A	
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
14. TOTAL DEPTH OF HOLE: 1"	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	—	CYANIDE	EXPLOSIVES	—	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	—	N/A	N/A	Beau Hill

LOCATION SKETCH/COMMENTS — SCALE: NOT TO SCALE



PROJECT	HOLE NO
LLT - Potential Disposal Area	CB 8-1

DRILLING LOG

HOLE NUMBER CBS-1

PROJECT LLT / CBS-1 Potential Disposal | INSPECTOR Beau Williams | SHEET 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
			Ø.Ø	N/A	LL Ø722	
	5"	ML SILT w/ SAND, ROOTLETS & ORGANICS, (FINE GRAIN SAND, SUBANGULAR), SOFT, MOIST, NON PLASTIC, ~20% GRAVEL 10 YR 3/3 DARK BROWN				BOB, 1" BGS

BW 11.4.99

PROJECT LLT Disposal (Potental) Area

HOLE NO CBS-1

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO:** 0005

Date (mm/dd/yy): 11.4.99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

BW

DM

SS

BW
11.4.99

Narrative (include time and location):

1615 ARRIVE ON LOCATION LL1 CB 8-2

1620 SAMPLE METALS, CYANIDE & EXPLOSIVES

SAMPLE # LL0723

1625 MOVE TO NEXT LOCATION

NOTE: See log!

BW
11.4.99

Daily Weather Conditions: A.M. N/A

P.M. SUNNY, 40's °F, BREEZY

Recorded By BRIAN W. WILLIAMS QA Checked By RH

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: N/A	DISTRICT: Louisville; HOLE NUMBER: CB8-2; SHEET: 1 OF 2

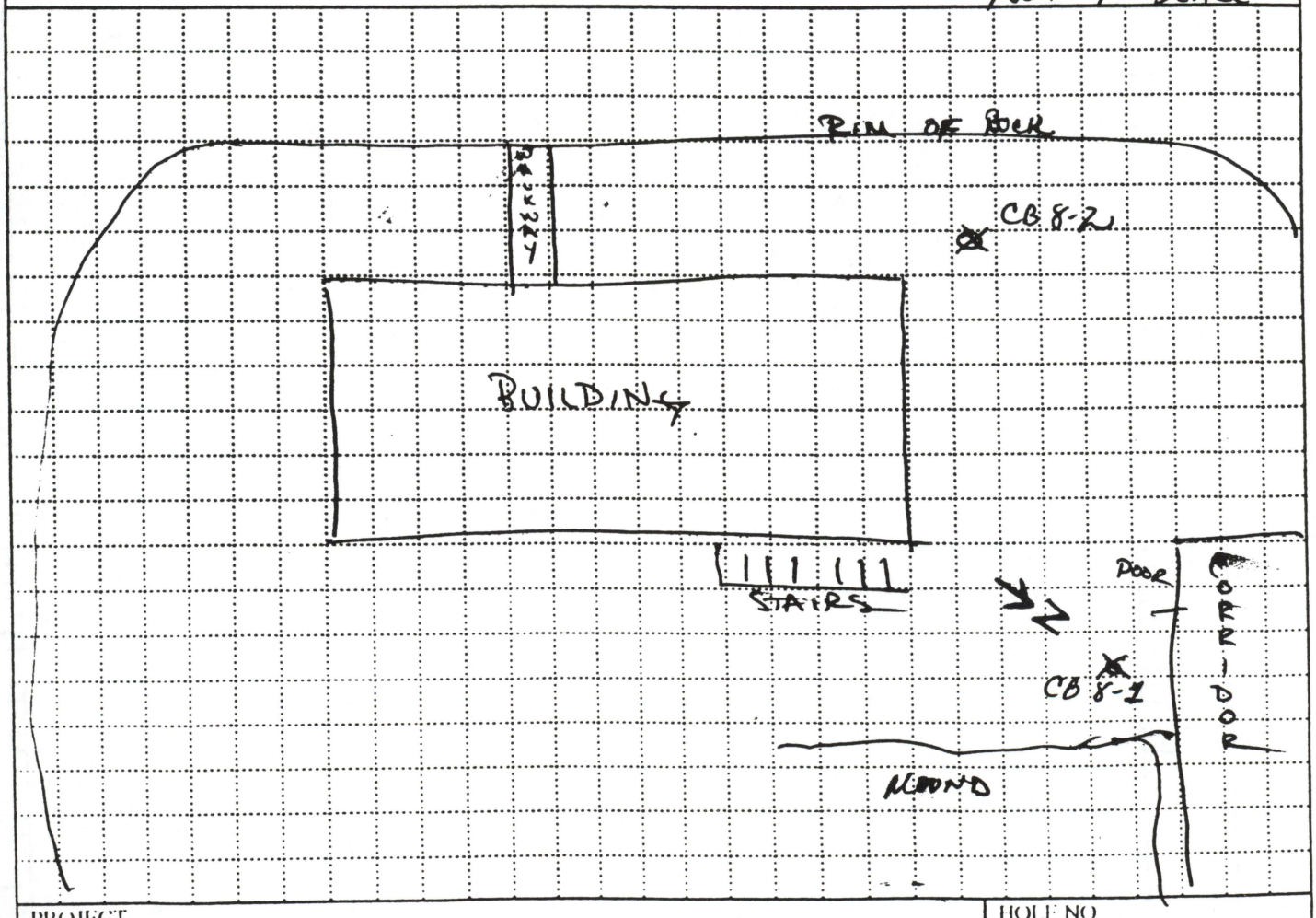
3. PROJECT: Load Line 1 Potential Disposal Area	4. LOCATION: CB-8-2
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURERS DESIGNATION OF DRILL: N/A
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Stainless Steel Bowl & Spoon	8. HOLE LOCATION: See Map
	9. SURFACE ELEVATION
	10. DATE STARTED: 11-4-99; 11. DATE COMPLETED: 11-4-99
12. OVERBURDEN THICKNESS	15. DEPTH GROUNDWATER ENCOUNTERED: N/A
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A
14. TOTAL DEPTH OF HOLE	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
	—	CYANIDE	EXPLOSIVE			NA

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	—	—	—	

LOCATION SKETCH/COMMENTS — SCALE: NOT TO SCALE



PROJECT	HOLE NO
LL1 - Potential Disposal Area	CB 8-2

ENG FORM 5056-R, AUG 94 (Proponent CECW-EG)

DRILLING LOG

PROJECT: LLL Potential Disposal Area	INSPECTOR: Bean Williams	HOLE NUMBER: CB-8-2	SHEET: 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		ML SILT W/SAND, FINE GRAIN, SUB ANGULAR, SOFT, MOIST, NON-PLASTIC, LESS THAN	0.0	N/A	LL0723	
	5"	10% ~~GR~~ PEBBLE BW 11.4.98				BOB 4" BGS
		10 YR 3/3 DARK BROWN				
		BW 11.4.98				

PROJECT: LLL - Potential Disposal Area | HOLE NO: CB 8-2

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11.4.99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

BEAU WILLIAMS

DAVE MOORE

SCOTT STROUD

BW 11.4.99

Narrative (include time and location):

1630 ARRIVE AT SITE LOCATION LL1/CB-8-3

1633 SAMPLE EXPLOSIVES, METALS & CYANIDE

SAMPLE # LL0724

1638 LEAVE TO NEXT LOCATION

NOTE: LL1-CB8-1,2 IN "LL1/LL2 POTENTIAL DISPOSAL AREAS SOIL SAMPLING, BOOK #1" PP 40-45

BW 11.4.99

Daily Weather Conditions: A.M. N/A

P.M. SUNNY, ~45°F, BREEZY

Recorded By BEAU WILLIAMS QA Checked By Vicki Brumbach

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: N/A	HOLE NUMBER: CB-8-3
		SHEET: 1 OF 2

3. PROJECT: LL1 Potential Disposal Area

4. LOCATION: ~~CB-8-1~~ BW 11.4.99 CB-8-3

5. NAME OF DRILLER: Scott Stroud

6. MANUFACTURERS DESIGNATION OF DRILL: N/A

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: Stainless Steel Bowl & Spoon

8. HOLE LOCATION: See Map

9. SURFACE ELEVATION:

10. DATE STARTED: 11.4.99

11. DATE COMPLETED: 11.4.99

12. OVERBURDEN THICKNESS: 2 inches

13. DEPTH GROUNDWATER ENCOUNTERED: N/A

14. DEPTH DRILLED INTO ROCK: N/A

15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A

16. TOTAL DEPTH OF HOLE: 2 inches

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

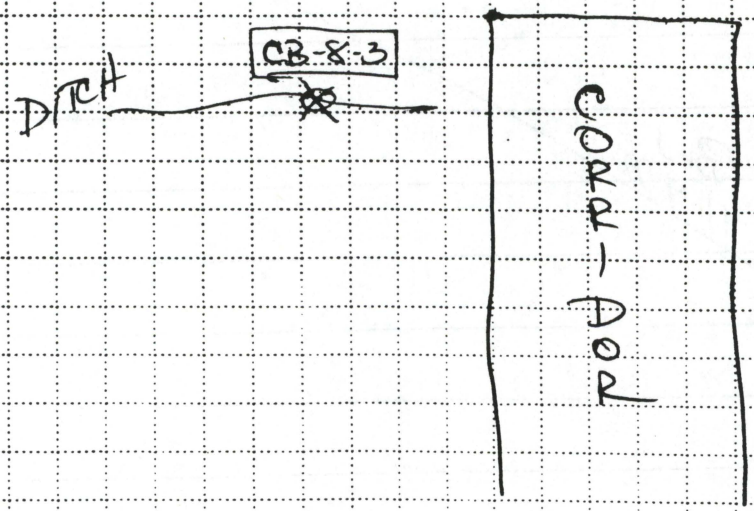
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	—	CYANIDE	EXPLOSIVES	—	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	—	—	—	Brian D. Hill

LOCATION SKETCH/COMMENTS

SCALE: Not to Scale



PROJECT	HOLE NO
Load Line 1 Potential Disposal Area	LL1/CB-8-3

ENG FORM 5056-R, AUG 94

(Proponent CECW-EG)

DRILLING LOG

PROJECT: LL1/ CB2" LL1 Pot. Disp. Area | INSPECTOR: Bean Williams | HOLE NO: LL1/~~CB2-4~~ CB8-3 | SHEET: 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	2"	ML SILT WITH SAND				
	6"	ROOTLETS, 20% GRAVEL, SOFT, MOIST, (FINE GRAIN SAND - SUBANGULAR)	Ø.Ø	N/A	LLØ724	BOB 2" BGS.
		10YR 3/3 DARK BROWN				

BW 11.4.99

PROJECT: LL1 Potential Disposal Area | HOLE NO: LL1/CB8-3

Load Line 1
Building CB-12

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): [illegible] Su M Tu W Th F Sa PAGE 1 OF 1

Task Team Members:

EW

SS

[illegible]

Narrative (include time and location):

1200 - Arrive at location LL1-CB12-01

1210 - Sampled For explosives, metals and cyanide
- Sample ID LL0725

1215 - Leave site LL1-CB12-01

11/04/99

Daily Weather Conditions: A.M. N/A

P.M. Sunny, 50's, breezy

Recorded By [signature] QA Checked By [signature]

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: SAIC	DISTRICT: Louisville
		HOLE NUMBER: LL1/CB12-1
		SHEET 1 of 2

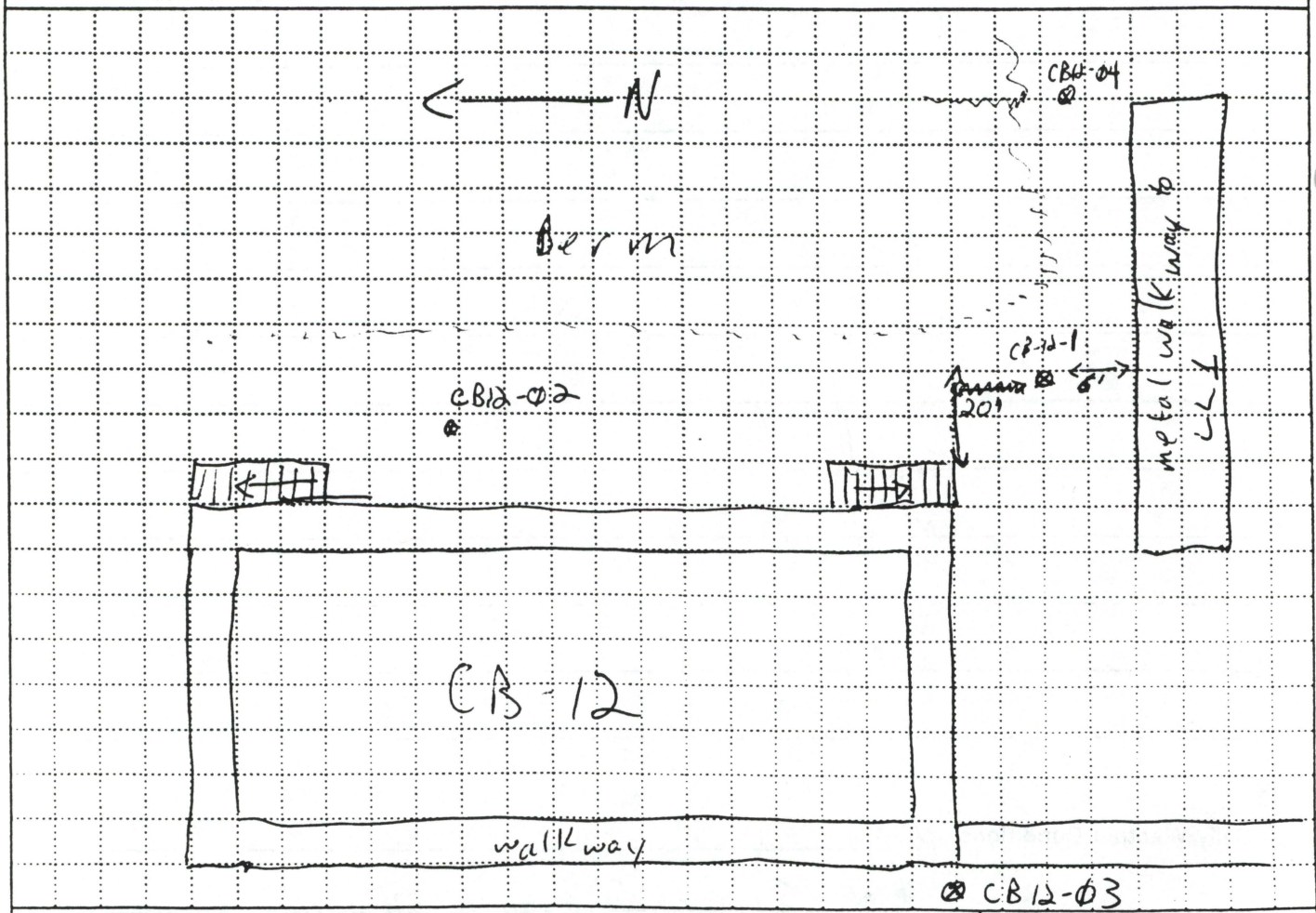
3. PROJECT: Load Line 1 Potential Disp	4. LOCATION: ~~Approx 11-4-99~~ N/A
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURER'S DESIGNATION OF DRILL: S.S. Spoon
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: S.S. spoon; S.S. Bowl	8. HOLE LOCATION: See Map
	9. SURFACE ELEVATION
	10. DATE STARTED: 11-4-99 / 11. DATE COMPLETED: 11-4-99
12. OVERBURDEN THICKNESS: 3"	15. DEPTH GROUNDWATER ENCOUNTERED: N/A
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A
14. TOTAL DEPTH OF HOLE: 3"	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
N/	—	X	Explosives	Cyanide	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
N/A	—	—	—	John Moore

LOCATION SKETCH/COMMENTS — SCALE:



PROJECT	HOLE NO
LL1 Potential Disposal Area	CB12-1

ENG FORM 5056-R, AUG 94 — Proponent CECW-EG

DRILLING LOG

PROJECT	LL-1 Potential Disposal Area	INSPECTOR	[illegible]	HOLE NUMBER	CB12-01
				SHEET	2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		ML silt w/sand, wet, soft, subangular to subrounded gravel, variable	0.0	N/A	LL0725	water at bottom of hole
	.5	in size, sand f-m grain, mottles 10YR 3/2 v. dk. greyish brown.				B.O.B. 3'' bgs

PROJECT LL1 Potential Disposal Area HOLE NO CB12-01

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11/04/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

BCO

SS

DM

Narrative (include time and location):

1222 - Arrive at location LL1/CB12-T2.

1228 - Sampled for explosives, metals, and cyanide.
Sample ID LLØ726

1235 - Leave site location LL1/CB12/Ø2

Daily Weather Conditions: A.M. N/A

P.M. Sunny, 50s, breezy

Recorded By _____ QA Checked By _____

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: SAIC	DISTRICT: Louisville
		HOLE NUMBER: CB12-02
		SHEET: 1 of 2

3. PROJECT: LL1 - Potential Disposal Area	4. LOCATION: CB12-02
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURER'S DESIGNATION OF DRILL: S.S. spoon
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: SS spoon and bowl	8. HOLE LOCATION: see map
	9. SURFACE ELEVATION:
10. DATE STARTED: 11/04/99	11. DATE COMPLETED: 11/04/99
12. OVERBURDEN THICKNESS: 3"	15. DEPTH GROUNDWATER ENCOUNTERED: N/A
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A
14. TOTAL DEPTH OF HOLE: 3"	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	N/A	N/A	

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
LL0726	—	X	cyanide	explosives	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	John W. Moore

LOCATION SKETCH/COMMENTS — SCALE:

See Map on Page 14. References all locations at Building CB-12

PROJECT	HOLE NO
LL1 - Potential Disposal Area	CB12-02

DRILLING LOG

PROJECT: LL1 - Potential Disposal Area | INSPECTOR: John Moore | HOLE NUMBER: CB12-02 | SHEET: 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		rootlets, ML silt w/sand, soft,	0.0	N/A	LL0726	Bedrock encountered
	0.5'	moist, sand F. grain, subangular, 10YR 3/2 V. dk. greyish brown.				B.O.B. 3' bgs

John Moore 11/04-99

PROJECT: LL1 - Potential Disposal Area | HOLE NO: CB12-02

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11/04/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

BW
SS
DM

John Moore 11-04-99

Narrative (include time and location):

1240- Arrive at location LL1/CB12-03
1245- Sample for explosives, metals, and cyanide
Sample ID LL0727
1253- Leave site location LL1/CB12-03

John Moore 11-04-99

Daily Weather Conditions: A.M. N/A

P.M. Sunny, 50's, breezy

Recorded By John Moore QA Checked By [illegible]

2C

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: SAIC	DISTRICT: Louisville; HOLE NUMBER: CB12-03; SHEET: 2 of 2
3. PROJECT: LL1 / ~~CB~~ AMMUNITION Potential Disposal Area	4. LOCATION: CB12-03	
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURER'S DESIGNATION OF DRILL: S.S. spoon	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: S.S. spoon and bowl	8. HOLE LOCATION: see map	
	9. SURFACE ELEVATION:	
	10. DATE STARTED: 11-04-99	11. DATE COMPLETED: 11-04-99
12. OVERBURDEN THICKNESS: 3'	13. DEPTH GROUNDWATER ENCOUNTERED: N/A	
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
14. TOTAL DEPTH OF HOLE: 3'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
LL0727	—	X	explosives	Cyanide	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	John W. Moore

LOCATION SKETCH/COMMENTS — SCALE:

See Map on Page 14,
References all locations at
Building CB-12

PROJECT	HOLE NO.
LL1-Potential Disposal Area	CB12-03

DRILLING LOG

HOLE NUMBER CB12-03

PROJECT LL1 - Potential Disposal Area | INSPECTOR John D. Moore | SHEET 2 OF 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		ML silt w/sand (30%) F.-M grain, subangular 50% gravel, subrounded pebbles,	0.0	N/A	LL0727	Bedrock encountered
	0.5'	wet, soft, 10YR 3/2 v.dk. grayish brown, soft, wet.				0.5'

John D. Moore 11/04/99

PROJECT LL1 - Potential Disposal Area

HOLE NO CB12-03

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO:** 0005

Date (mm/dd/yy): 11/04/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

BCW
SS
DM

John Moore 11/4/99

Narrative (include time and location):

1307 - Arrive at sample location LL1/CB12-04.
1315 - Sample For explosives, metals, and cyanide
Sample ID - LL0728
1320 - Leave site location LL1/CB12-04

John Moore 11/04/99

Daily Weather Conditions: A.M. N/A

P.M. sunny, 50's, breezy

Recorded By John Moore QA Checked By Vicki Brumbach

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: SAIC	DISTRICT: Louisville; HOLE NUMBER: CB12-04; SHEET 1 OF 2

3. PROJECT: LL1 - Potential Disposal Area	4. LOCATION: CB12-04
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURER'S DESIGNATION OF DRILL: S.S. spoon
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: S.S. spoon and bowl	8. HOLE LOCATION: see map
	9. SURFACE ELEVATION
	10. DATE STARTED: 11/04/99; 11. DATE COMPLETED: 11/04/99
12. OVERBURDEN THICKNESS: 4"	15. DEPTH GROUNDWATER ENCOUNTERED: N/A
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A
14. TOTAL DEPTH OF HOLE: 4"	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	N/A	N/A	

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
LL0728	—	X	explosives	cyanide	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	Phil Moore

LOCATION SKETCH/COMMENTS — SCALE:

See Map on page 14.
References all locations at
Building CB12.

PROJECT	HOLE NO
LL1-Potential Disposa Area	CB12-04

ENG FORM 5056-R, AUG 94 (Proponent CECW-EG)

DRILLING LOG

HOLE NUMBER CBH-04

PROJECT LL1 - Potential Disposal Area | INSPECTOR John Lowry | SHEET 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		ML - silt w/sand (<10%), subrounded, subangular, non-grain, 10YR	0.0	N/A	LL0728	Bedrock encountered.
	0.5'	3/2 v. dk. grayish brown, soft, wet.				T.O.B. 4" bgs

PROJECT LL1 - Potential Disposal Area | HOLE NO CBH-04

Load Line 1
Building CB-22

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO:** 0005

Date (mm/dd/yy): 11/4/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

Paul Loof

Brad Baker

Narrative (include time and location):

1640: Set-up @ LL1-CB22-1. Vegitation appeared unimpacted.

1645: Encounter refusal in all 3 holes @ 0.4'

1650: Collect sample # LL0722.

DSL
11/4/99

Daily Weather Conditions: A.M. Sunny, windy, mid 40's

P.M.

Recorded By [signature] QA Checked By Vicki Brumbach

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DISTRICT: Louisville	HOLE NUMBER: LL1-CB22-1
	3. DRILL SUBCONTRACTOR: NA	SHEET 1 OF 2

4. PROJECT: LL2	5. LOCATION: CB-22
6. NAME OF DRILLER: NA	7. MANUFACTURER'S DESIGNATION OF DRILL: Bucket Auger
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 3" dia. stainless steel bucket auger. Stainless steel bowls and spoons	9. HOLE LOCATION: Southwest corner of the ditch
	10. SURFACE ELEVATION: NA
	11. DATE STARTED: 11/4/99 — 12. DATE COMPLETED: 11/4/99
13. OVERBURDEN THICKNESS: NA	14. DEPTH GROUNDWATER ENCOUNTERED: NA
15. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA
17. TOTAL DEPTH OF HOLE: 0.4'	18. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA

19. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	20. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

21. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	22. TOTAL CORE RECOVERY
LL0729	—	✓	Cyanide	Explosives	—	100

23. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	24. SIGNATURE OF INSPECTOR
Bentonite	—	—	—	Paul [illegible]

LOCATION SKETCH/COMMENTS: See page #17

SCALE:

PROJECT	HOLE NO
LL1	LL1-CB22-1

ENG FORM 5056-R, AUG 94 (Proponent CECW-EG)

DRILLING LOG

PROJECT	INSPECTOR	HOLE NO.	SHEET
LL1	P. Ivest	LL1-CB22-1	1 of 1

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G) 2 of 2
		ORGANIC SILT, wet, loose, black Ø.3'	NA	NA	LLØ727 1650	vjh 11/9/99
	1.Ø'	Sandy SILT (ML), Fine grained sand light grey variegated yellowish brown Ø.9' Bottom of Boring = Ø.4'				Refusal in all 3 holes @Ø.4'

PJL 11/4/99

PROJECT LL1 HOLE NO. LL1-CB22-1

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO:** 0005

Date (mm/dd/yy): 11/4/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

Paul Lucot

Brad Baker

PJL 11/4/99

Narrative (include time and location):

1550: Set-up @ ~~DA~~ PJL LL1CB22-2. There is grass on the surface.

1600: Encounter refusal @ 0.3' in one hole and 0.5' in the other two holes.

1605: Collect sample # LL0130 for explosives, metals, and cyanide analysis.

PJL 11/4/99

Daily Weather Conditions: A.M. Sunny, windy, low 40s

P.M. "

Recorded By Paul G. Lucot QA Checked By Vahi Brumbah

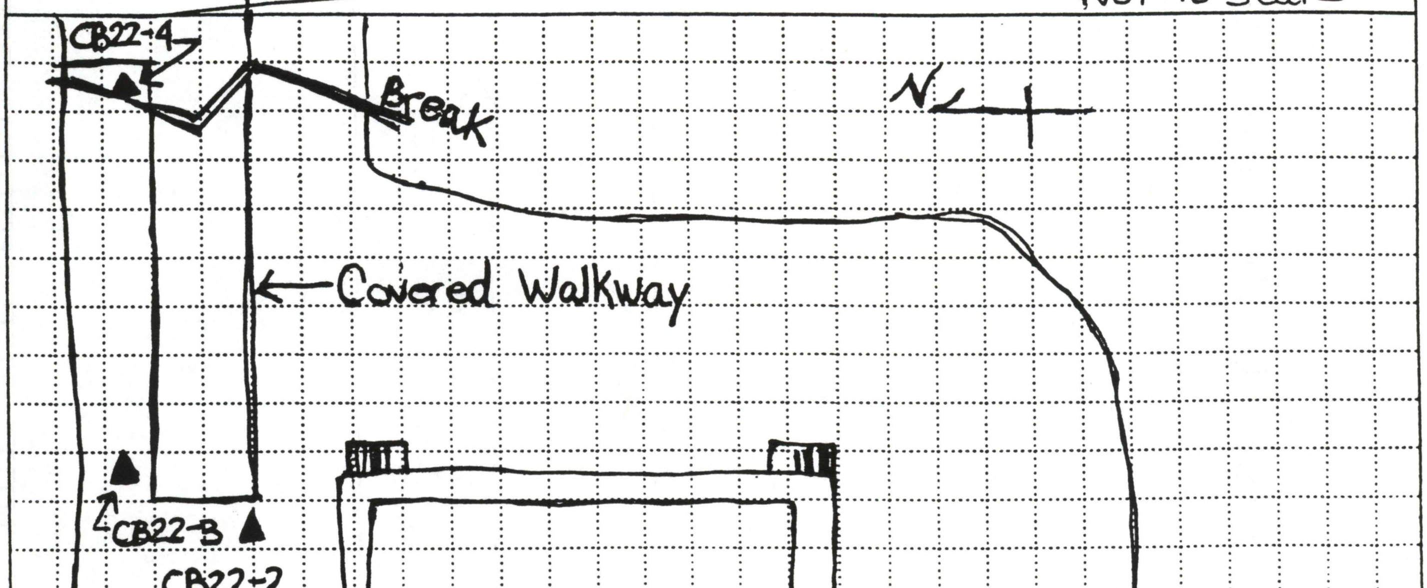
HTRW DRILLING LOG

Field	Entry
DISTRICT	Louisville
HOLE NUMBER	LL1-CB22-2
1. COMPANY NAME	SAIC
2. DRILL SUBCONTRACTOR	NA
SHEET / SHEETS	1 of 2
3. PROJECT	LL1
4. LOCATION	CB-22
5. NAME OF DRILLER	NA
6. MANUFACTURER'S DESIGNATION OF DRILL	Bucket Auger
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	See page #3
8. HOLE LOCATION	Riser by the walkway
9. SURFACE ELEVATION	NA
10. DATE STARTED	11/4/99
11. DATE COMPLETED	11/4/99
12. OVERBURDEN THICKNESS	NA
13. DEPTH DRILLED INTO ROCK	NA
14. TOTAL DEPTH OF HOLE	0.5
15. DEPTH GROUNDWATER ENCOUNTERED	NA
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	NA
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	NA
18. GEOTECHNICAL SAMPLES	NA
DISTURBED	NA
UNDISTURBED	NA
19. TOTAL NUMBER OF CORE BOXES	NA
20. SAMPLES FOR CHEMICAL ANALYSIS	LL8C30
VOC	—
METALS	✓
OTHER (SPECIFY)	Explosives
OTHER (SPECIFY)	—
OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY %	100
22. DISPOSITION OF HOLE	
BACKFILLED	
MONITORING WELL	
OTHER (SPECIFY)	
23. SIGNATURE OF INSPECTOR	[signature]

vjb 11/9/99

LOCATION SKETCH/COMMENTS

SCALE: Not to scale



PROJECT	HOLE NO.
LL1	LL1-CB22-02

DRILLING LOG

PROJECT	INSPECTOR	HOLE NUMBER
LL1	P. Lucero	LL1-CB22-2
		SHEET ~~1 of 1~~ 2 of 2

vjb 11/9/99

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Silty CLAY (CL), moist, soft plastic, olive brown (5Y4/4).	NA	NA	LL0730 1605	Refusal @ 0.3', 0.5', and 0.5'
		Bottom of Boring = 0.5'				
	1.0'					

DSL 11/4/99

PROJECT	HOLE NO.
LL1	LL1-CB22-2

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO:** 0005

Date (mm/dd/yy): ~~11/2/93~~ 11/4/93 Su M Tu W ~~Th~~ F Sa PAGE 1 OF 1

Task Team Members:

~~Paul Gilbert~~ Brad Baker

~~Brad Baker~~ Paul Gilbert

Narrative (include time and location):

1015: Begin coring LL1-CB22-3.

1025: Collect ~~Sample~~ # LL0731.

- had refusal @ 0.3' in 3 holes

Daily Weather Conditions: A.M. Sunny, windy, humid

" P.M.

Recorded By Paul Gilbert QA Checked By Helen Brumbach

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DISTRICT: Louisville	HOLE NUMBER: LL1-CB22-3
	3. DRILL SUBCONTRACTOR: NA	SHEET: 1 of 2

4. PROJECT: LL1	5. LOCATION: Outside
6. NAME OF DRILLER: NA	7. MANUFACTURERS DESIGNATION OF DRILL: Bucket Auger
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: See page #3	9. HOLE LOCATION: On the grand
	10. SURFACE ELEVATION: NA
	11. DATE STARTED: 11/4/99 — 12. DATE COMPLETED: 11/4/99
13. OVERBURDEN THICKNESS: NA	14. DEPTH GROUNDWATER ENCOUNTERED: NA
15. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA
17. TOTAL DEPTH OF HOLE: ~~NA~~ 0.3'	18. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA

19. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
LL0731	—	✓	Cyanide	Explosives		100%

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR

LOCATION SKETCH/COMMENTS: See page #17 — SCALE:

PROJECT	HOLE NO
LL1	LL1-CB22-3

ENG FORM 5056-R, AUG 94 — (Proponent CECW-EG)

DRILLING LOG

PROJECT	INSPECTOR P. Lecot	HOLE NUMBER LL1-CB22-3
		SHEET ~~1 of 1~~

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G) 2 of 2
		Silty CLAY with traces of gravel (CL), moist, soft, plastic ∅.5'	NA	NA	LL∅731	vjb 11/9/99
		~~(Bottom of Boring=3.∅')~~ PSL				
	1.∅'	Bottom of Boring=∅.5'				

PSL 11/9/99

PROJECT LL1

HOLE NO LL1-CB22-3

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11.4.99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

Bea Williams

Dave Moore

Scott Sikora

BW 11.4.99

Narrative (include time and location):

1650 Set up on CB22-4

1656 Sample VOC's, SVOC's, METALS, PCB's, PESTICIDES, EXPLOSIVES: PROPELLANTS, CYANIDE

Sample # LL0732

1715 Leave Site.

BW 11.4.99

Daily Weather Conditions: A.M. _____

P.M. Sunny, ~40°F, Breezy

Recorded By Bea Williams QA Checked By Vicki Brumbach

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: N/A	3. DISTRICT: LOUISVILLE
4. PROJECT: LL1/CB22-4	5. LOCATION: LL1/CB22-4	3. HOLE NUMBER: LL1/CB22-4
6. NAME OF DRILLER: SCOTT STROUD	7. MANUFACTURER'S DESIGNATION OF DRILL: N/A	4. SHEET 1 OF 2
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: STAINLESS STEEL BOWL & SPOON	9. HOLE LOCATION: SEE MAP	
	10. SURFACE ELEVATION:	
	11. DATE STARTED: 11.4.99	12. DATE COMPLETED: 11.4.99
13. OVERBURDEN THICKNESS: 4"	14. DEPTH GROUNDWATER ENCOUNTERED: N/A	
15. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
17. TOTAL DEPTH OF HOLE: 4"	18. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A	

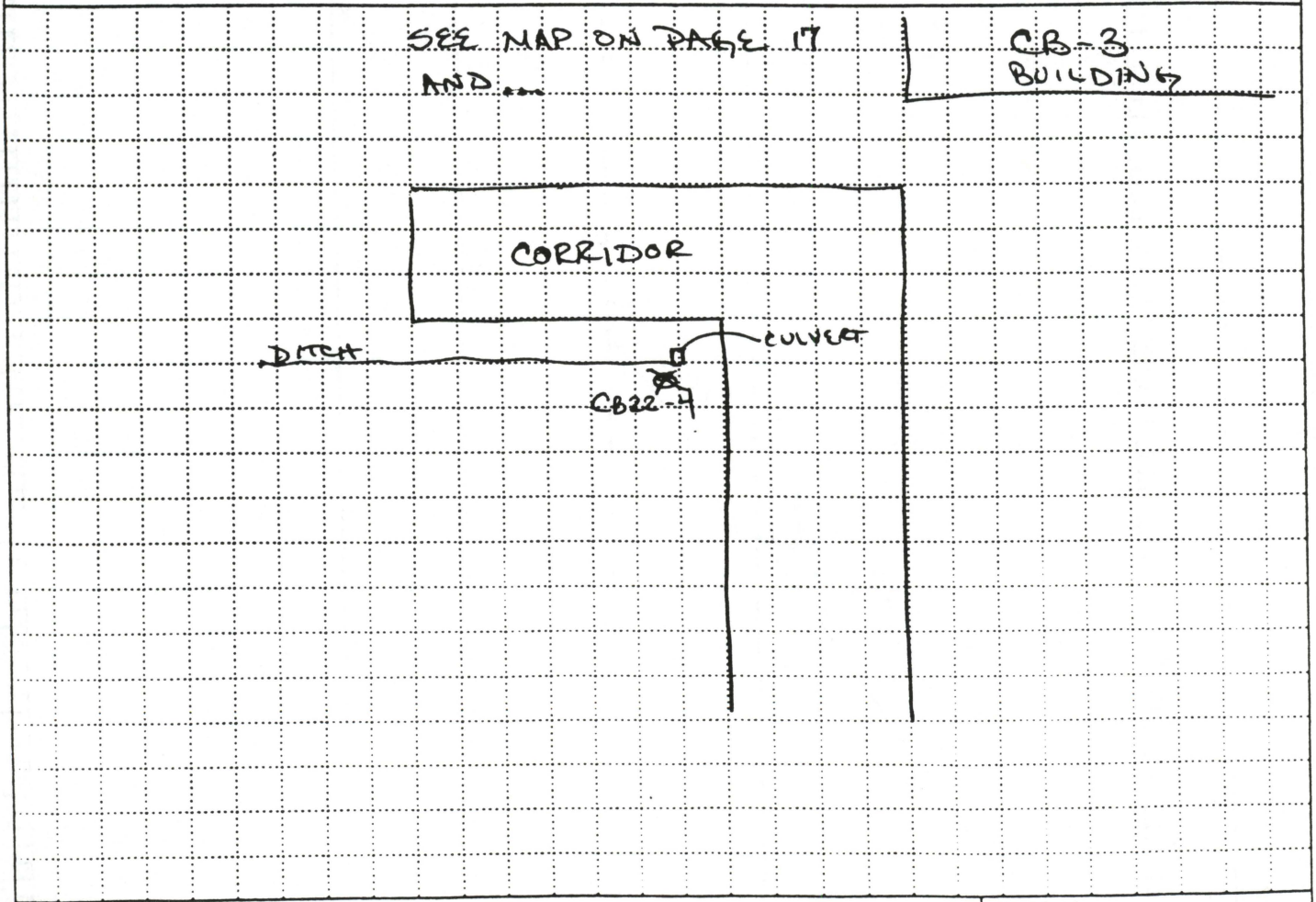
19. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	20. TOTAL NUMBER OF CORE BOXES
	N/A	N/A	N/A

21. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	22. TOTAL CORE RECOVERY
	SVOC PCB	CYANIDE	PESTICIDES	EXPLOSIVES	PROPELLANTS	N/A

23. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	24. SIGNATURE OF INSPECTOR
	—	—	—	Brian Hill

LOCATION SKETCH/COMMENTS

SCALE: NOT TO SCALE



PROJECT	HOLE NO
LL1/CB22-4 LOAD LINE 1 POTENTIAL DISPOSAL AREAS	LL1/CB22-4

DRILLING LOG

PROJECT: LL Potential Disp Area | INSPECTOR: B. Williams | HOLE NUMBER: CB22-4 | SHEET: 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		ML silt w/sand, <10% gravel	ØØ	n/a	LLØ737	Bedrock encountered
	0.5'	rootlets, moist, appx. 10YR 3/3 dark brown				B.O.B. 4" bgs

phw. Moore 11/04/99

PROJECT: LL1 - Potential Disp. Area | HOLE NO: CB22-4

Load Line 1
Building CB-23

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11/04/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

SS

BCW

DM

John D. Hurst 11/04/99

Narrative (include time and location):

1407 - Arrive at sample location LL1/CB23-01

1412 - Sample for explosives, cyanide, and metals.
Sample ID - LL0733

1416 - Leave site location LL1/CB23-01

John D. Hurst 11/04/99

Daily Weather Conditions: A.M. N/A

P.M. Sunny, 50's, breezy

Recorded By John Hurst QA Checked By KD

HTRW DRILLING LOG

	DISTRICT: Louisville	HOLE NUMBER: CB23-01
1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: SAIC	SHEET 1 of 2 SHEETS

3. PROJECT: LLI - Potential Disposal Area	4. LOCATION: CB23-01
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURERS DESIGNATION OF DRILL: SS. spoon
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: SS. spoon and bowl	8. HOLE LOCATION: see map
	9. SURFACE ELEVATION:
	10. DATE STARTED: 11/04/99 — 11. DATE COMPLETED: 11/04/99
12. OVERBURDEN THICKNESS: 1"	15. DEPTH GROUNDWATER ENCOUNTERED: N/A
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A
14. TOTAL DEPTH OF HOLE: 1"	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
LL0733	—	x	explosives	cyanide	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	Phil Moor

LOCATION SKETCH/COMMENTS — SCALE:

See Map on page 26.

References all locations at Building CB-23.

PROJECT	HOLE NO
LLI Potential Disposal Area	CB23-01

DRILLING LOG

PROJECT: LLI - Potential Disposal | INSPECTOR: John Moore | HOLE NUMBER: CB23-01 | SHEET: 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD DRILLING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		fine silty sand, f. grain,	0.0.	N/A	LL0733	Bedrock encountered
	0.5'	subangular, rootlets, moist to dry, loose, 10YR 3/3 dark brown				B.O.B. 1" bgs. 0.5'

John Moore 11/04/99

PROJECT: LLI - Potential Disposal Area | HOLE NO: CB23-01

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11/04/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

JM
SS
BW

11-04-99

Narrative (include time and location):

1523- Arrive at sample location LL1/CBJ3-02.
1528- Sample for explosives, metals, and cyanide.
Sample ID - LL0734
1533- Leave site location LL1/CBJ3-02

11/04/99

Daily Weather Conditions: A.M. W/H

P.M. Sunny, hi 40s, breezy

Recorded By _____ QA Checked By _____

HTRW DRILLING LOG

	DISTRICT: Louisville	HOLE NUMBER: CB23-02
1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: SAIC	SHEET 1 OF 2

3. PROJECT: LL1 - Potential Disposal Area	4. LOCATION: CB23-02
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURERS DESIGNATION OF DRILL: S.S. spoon
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: S.S. spoon and bowl	8. HOLE LOCATION: see map
	9. SURFACE ELEVATION: N/A
	10. DATE STARTED: 11/04/99 / 11. DATE COMPLETED: 11/04/99
12. OVERBURDEN THICKNESS: 2"	15. DEPTH GROUNDWATER ENCOUNTERED: N/A
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A
14. TOTAL DEPTH OF HOLE: 2"	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
LL-0734	—	X	cyanide	explosives	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	John Lowe

LOCATION SKETCH/COMMENTS — SCALE:

See Map on page 26.

Referenees all locations at Building CB23.

PROJECT	HOLE NO
LL1-Potential Disposal Area	CB23-02

ENG FORM 5056-R, AUG 94 — (Proponent CECW-EG)

DRILLING LOG

HOLE NUMBER CB23-02

PROJECT LL1 - Potential Disposal Area | INSPECTOR John W. Moore | SHEET 2 OF 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		ML silt w/sand, 30% gravel, soft,	0.0	N/A	LL0734	Bedrock encountered
	05'	moist, 10YR 3/3, dark brown, organics and rootlets				B.O.B. 2' bgs

John W. Moore 11/04/97

PROJECT LL1 - Potential Disposal Area

HOLE NO CB23-02

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11/04/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

DM
BW
SS

11/04/99

Narrative (include time and location):

1504- Arrive at sample location LL1/CB23-03
1510- Sample for explosives, metals, and cyanide
Sample ID - LL0735
1515- Leave site location LL1/CB23-03

11/04/99

Daily Weather Conditions: A.M. N/H

P.M. Sunny, 50s, breezy

Recorded By _____ QA Checked By _____

HTRW DRILLING LOG

	DISTRICT: Louisville	HOLE NUMBER: CB23-03
1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: SAIC	SHEET 1 OF 2

3. PROJECT: LL1 - Potential Disposal Area	4. LOCATION: CB23-03
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURERS DESIGNATION OF DRILL: S.S. spoon
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: S.S. spoon and bowl	8. HOLE LOCATION: see map
	9. SURFACE ELEVATION:
	10. DATE STARTED: 11/04/99 — 11. DATE COMPLETED: 11/04/99
12. OVERBURDEN THICKNESS: 5'	15. DEPTH GROUNDWATER ENCOUNTERED: N/A
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A
14. TOTAL DEPTH OF HOLE: 5'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
LL0735	—	X	explosives	cyanide	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	John Moore

LOCATION SKETCH/COMMENTS — SCALE:

See map on page 2c.

References all locations at

Building CB23.

PROJECT	HOLE NO
LL1 - Potential Disposal Area	CB23-03

ENG FORM 5056-R, AUG 94 — (Proponent CECW-EG)

DRILLING LOG

PROJECT: LL1 - Potential Disposal Area	INSPECTOR: John Moore	HOLE NUMBER: CB23-03	30
		SHEET: 2 of 2	

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	ML silt w/sand, F-M grain, moist, soft, <5% pebbles, rootlets	0.0	N/A	LL0735	Bedrock encountered
		10YR 3/3 dark brown.				B.O.B. 5" bgs
	0.5					

John W. Moore

PROJECT: LL1 - Potential Disposal Area

HOLE NO: CB23-03

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11/04-99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

DM

BCW

SS

Phil. Munn 11/04/99

Narrative (include time and location):

1425 - Arrive at Location LL1 CB23-04

1431 - Sample For explosives, cyanide, metals, VOCs, SVOCs, pesticides, PCBs, and Propellants.

Sample ID - LL0736

- LL0744 - Field duplicate

- LL0746 - split sample

1450 - Leave site location LL1/CB23-04

Phil. Munn 11/04/99

Daily Weather Conditions: A.M. N/A

P.M. Sunny, 50's, breezy

Recorded By Phil. Munn QA Checked By KD

HTRW DRILLING LOG

	DISTRICT: Louisville	HOLE NUMBER: CB23-04
1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: SAIC	SHEET 1 SHEETS OF 2

3. PROJECT: LL1 - Potential Disposal Area	4. LOCATION: CB23-04
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURERS DESIGNATION OF DRILL: S.S. spoon
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: S.S. spoon	8. HOLE LOCATION: see map
	9. SURFACE ELEVATION:
	10. DATE STARTED: 11/04/99 — 11. DATE COMPLETED: 11/04/99
12. OVERBURDEN THICKNESS: 3"	15. DEPTH GROUNDWATER ENCOUNTERED: N/A
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A
14. TOTAL DEPTH OF HOLE: 3"	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
LL0736, 0744, 0746	X	X	exp. propellants	SVOCs cyanide	PCBs, pesticides	N/A %

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	John Moore

LOCATION SKETCH/COMMENTS — SCALE:

See map on page 2a.

References all locations at Building CB23.

PROJECT	HOLE NO
LL1 - Potential Disposal Area	CB23-04

ENG FORM 5056-R, AUG 94 — (Proponent CECW-EG)

DRILLING LOG

BORE HOLE NO. CB23-Ø4

PROJECT LL1 Potential Disposal Area | INSPECTOR John D. Moore | SHEET 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		ML silt w/sand, moist soft, f. grain, subangular sand.	Ø.Ø	N/A	LLØ736 Ø744 - duplicate	Bedrock encountered
	0.5'	10YR 3/3 dark brown, rootlets, <10% gravel.			Ø746 - split	B.O.B. 3'' bgs

John D. Moore 11/04/99

PROJECT LL1 - Potential Disposal Area

HOLE NO CB23-Ø4

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO: 0005**

Date (mm/dd/yy): 11/04/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

SS

BW

DM

John Lum 11/04/99

Narrative (include time and location):

1340. Arrive at location LL1/CB23-05

1345. Sample for metals, explosives, and cyanide.
Sample ID - LL0742

1350. Leave site location LL1/CB23-05

John Lum 11/04/99

Daily Weather Conditions: A.M. N/A

P.M. Sunny, 50's, breezy

Recorded By John Lum QA Checked By

HTRW DRILLING LOG

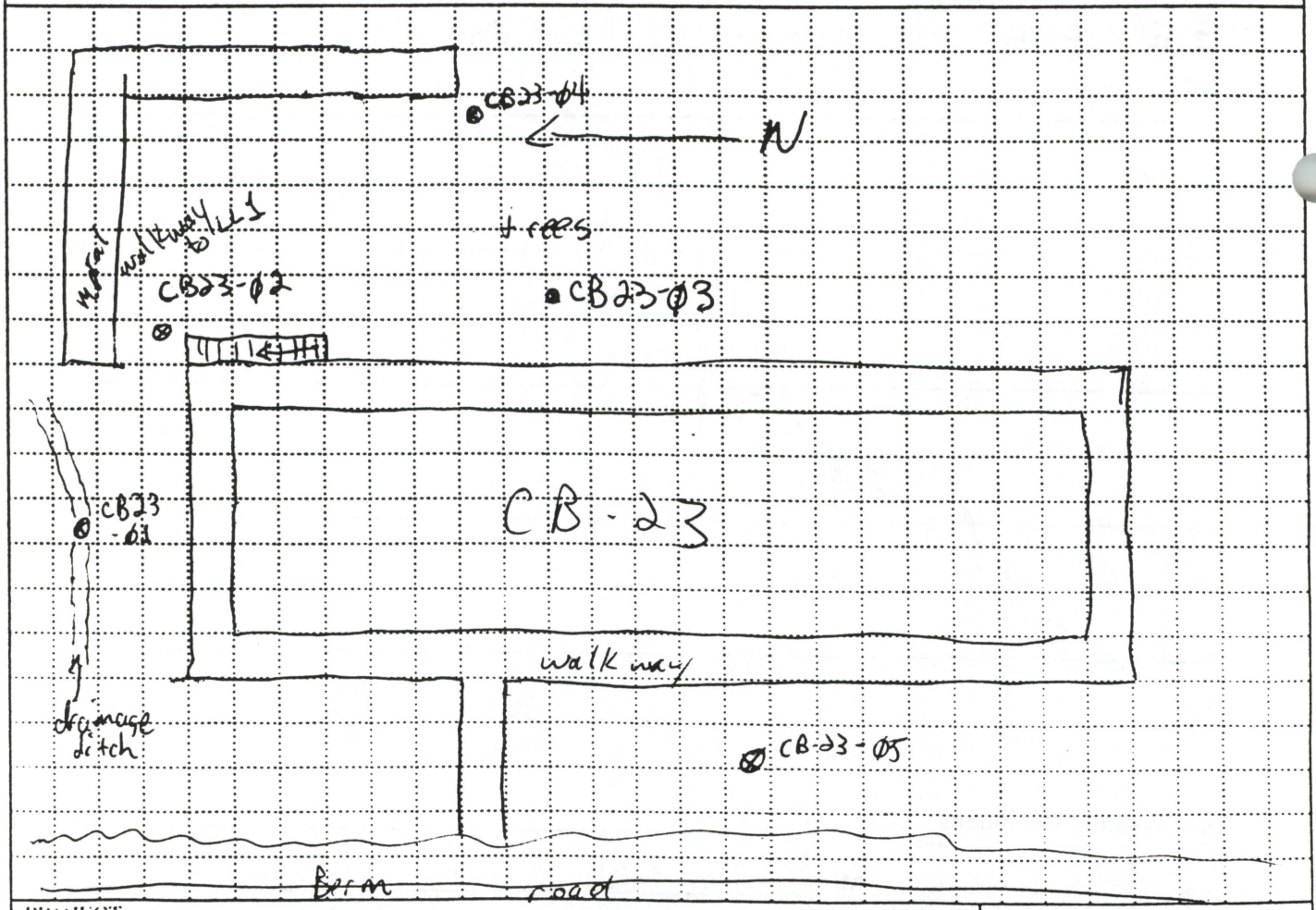
1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: SAIC	DISTRICT: Louisville; HOLE NUMBER: CB23-05; SHEET 1 OF 2
3. PROJECT: LL1 - Potential Disposal Area	4. LOCATION: CB23-05	
5. NAME OF DRILLER: Scott Stroud	6. MANUFACTURER'S DESIGNATION OF DRILL: SS. spoon	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: S.S. spoon and bowl	8. HOLE LOCATION: See map	
	9. SURFACE ELEVATION:	
	10. DATE STARTED: 11/04/99	11. DATE COMPLETED: 11/04/99
12. OVERBURDEN THICKNESS: 1"	15. DEPTH GROUNDWATER ENCOUNTERED: N/A	
13. DEPTH DRILLED INTO ROCK: N/A	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A	
14. TOTAL DEPTH OF HOLE: 1"	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	N/A	N/A	N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
LL0742	—	X	explosives	cyanide	—	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	John Moore

LOCATION SKETCH/COMMENTS — SCALE:



PROJECT	HOLE NO
LL1 - Potential Disposal Area	CB23-05

ENG FORM 5056-R, AUG 94 — (Proponent CECW-EG)

DRILLING LOG

PROJECT: LL1 - Potential Disposal Area | INSPECTOR: John Moore | HOLE NUMBER: CB23-05 | SHEET: 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		ML silt w/sand, F. grain,	0.0	N/A	LL0728	Bedrock encountered
		subangular, rootlets, moist to dry, loose, 10YR 3/3 dark brown				B.O.B. 1" bgs

John Moore 11/04/99

Load Line 2
Building DB-8A

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: NA	HOLE NUMBER: LL2-DB8-1
		SHEET 1 of 2

vjb 11/8/99

3. PROJECT: LL2	4. LOCATION: DB-8
5. NAME OF DRILLER: NA	6. MANUFACTURER'S DESIGNATION OF DRILL: Bucket Auger
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 3" dia. stainless steel bucket auger. Stainless steel bowls and spoons	8. HOLE LOCATION: Immediately north of walkway opening to DB8A
	9. SURFACE ELEVATION: NA
	10. DATE STARTED: 11/4/99 — 11. DATE COMPLETED: 11/4/99
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: NA
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA
14. TOTAL DEPTH OF HOLE: 1.0'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
LL0737/LL0743/LL0745	—	3	Cyanide (3)	Explosives (3)	→	100%

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
→	—	—	—	Paul Stuart

LOCATION SKETCH/COMMENTS: See page # 2

SCALE:

PROJECT	HOLE NO
LL2	LL2-DB-1

DRILLING LOG

PROJECT	INSPECTOR	HOLE NUMBER	SHEET
LL2	P. Lucot	LL2-DB8-1	~~1 of 1~~

6

vjb 11/9/99

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G) 2 of 2
	1.0'	Silty CLAY with gravel (CL), moist, moderately stiff, gravel consists of sandstone and is angular, light yellowish brown (2.5Y6/4), moderate plasticity Bottom of Boring = 1.0'	NA	NA	LL0737 LL0743 LL0745 1300	2 holes cored to 0.5' 1 hole cored to 1.0' Saturated soil in the hole closest to the drainage ditch.

PJL 11/4/99

PROJECT LL2

HOLE NO LL2-DB8-1

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO:** 0005

Date (mm/dd/yy): 11/4/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

Paul Lucat

Brad Baker

PSL 11/4/99

Narrative (include time and location):

1210: Set-up @ LL2-DB8-2. Vegetation is normal in this area.

1220: Two of the three holes were cored to 0.5'. The other hole was cored to 1.0'.

1225: Collect sample # LL0738 For explosives, metals, and cyanide analysis.

PSL 11/4/99

Daily Weather Conditions: A.M. Sunny, breezy, low 40s

P.M. "

Recorded By Paul Lucat QA Checked By Vicki Brumbaugh

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: NA	DISTRICT: Louisville
		HOLE NUMBER: LL2-DB8-2
		SHEET 1 of 2 SHEETS

11/4/99 vjb

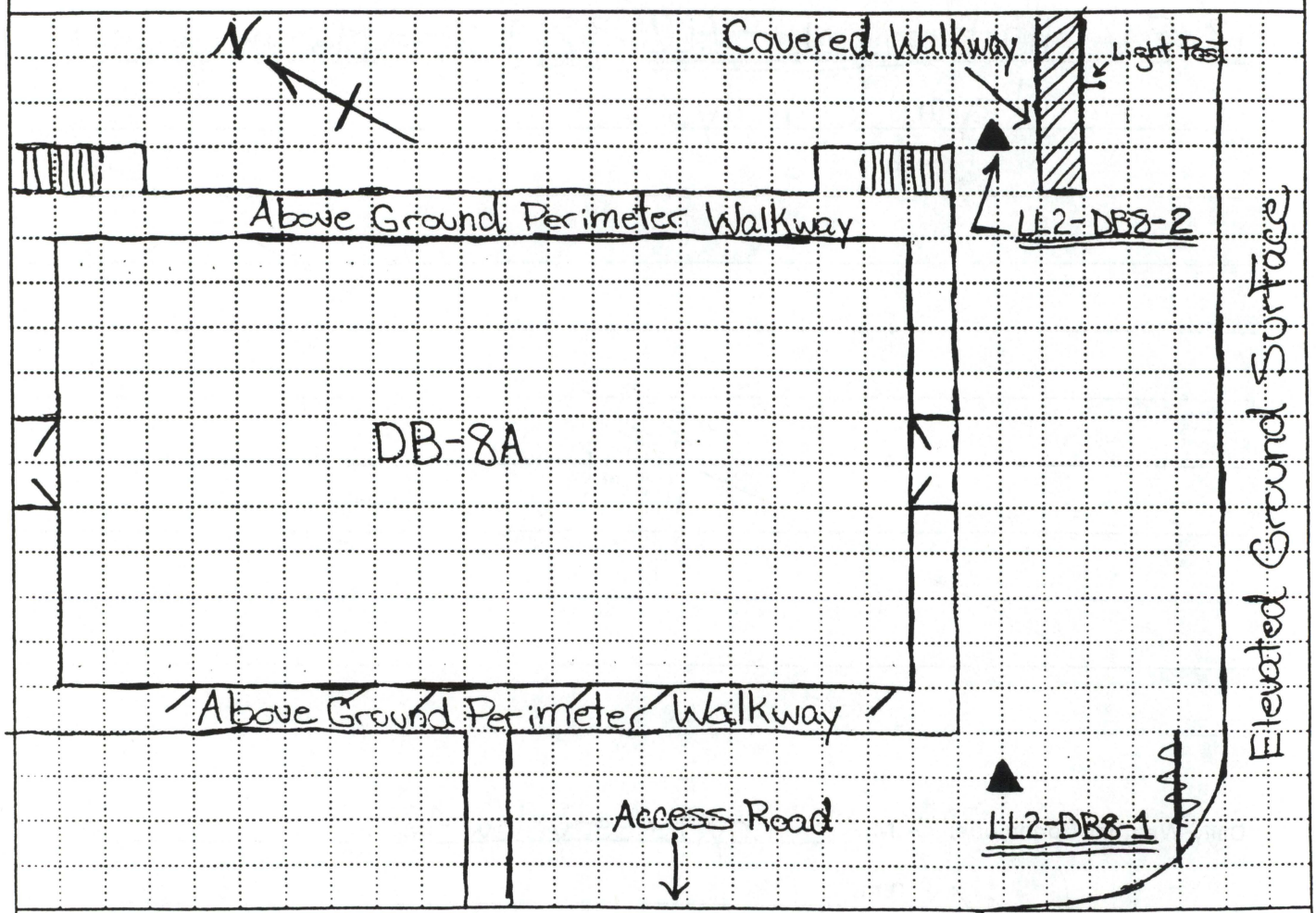
3. PROJECT: LL2	4. LOCATION: SW of DB-8A
5. NAME OF DRILLER: NA	6. MANUFACTURERS DESIGNATION OF DRILL: Bucket Auger
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 3" dia. Stainless Steel bucket augers. Stainless steel bowls and spoons.	8. HOLE LOCATION: SW of the SW corner of the ditch
	9. SURFACE ELEVATION: NA
	10. DATE STARTED: 11/4/99 — 11. DATE COMPLETED: 11/4/99
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: NA
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA
14. TOTAL DEPTH OF HOLE: 1.0'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
LL0738	—	✓	Cyanide	Explosives	—	100

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	Paul J. Smith

LOCATION SKETCH/COMMENTS — SCALE:



PROJECT	HOLE NO
LL2	LL2-DB8-2

ENG FORM 5056-R, AUG 94 (Proponent CECW-EG)

DRILLING LOG

PROJECT

INSPECTOR P. Lusot

HOLE NUMBER LL2-DB8-2

SHEET ~~1 of 1~~ 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GLOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	1.0'	Gravelly SAND with silt (SW) moist, loose, Fine to medium sand, grains are subrounded. 25% sandstone gravel, very dark grayish brown (2.5Y 3/2), banded pale brown (10YR 6/3). Well graded.	NA	NA	LL0738 1225	2 holes cored to 0.5' 1 hole cored to 1.0'
	1.0'	Bottom of Boring = 1.0'				

PSL 11/4/99

PROJECT LL2

HOLE NO LL2-DB8-2

5

VJ b 11-4-99

Load Line 2
Building DB-22

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO:** 0005

Date (mm/dd/yy): 11/4/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

Brad Baker

Paul Lucat

PJL 11/4/99

Narrative (include time and location):

1410: Set-up @ LL2-DB22-1. Vegetation appears unimpacted.

1420: Encounter refusal @ ~~0.3'~~ 0.6'.

1430: Collect sample# LL0739 for metals, explosives, and cyanide analysis.

PJL 11/4/99

Daily Weather Conditions: A.M. Sunny, windy, low 40's

P.M.

Recorded By Paul J. Lucat QA Checked By Vicki Brumbaugh

11

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DISTRICT: Louisville	HOLE NUMBER: LL2-DB22-1
	3. DRILL SUBCONTRACTOR: NA	SHEET 1 of 2

vjb 11/9/99

4. PROJECT: LL2	5. LOCATION: DB-22
6. NAME OF DRILLER: NA	7. MANUFACTURERS DESIGNATION OF DRILL: Bucket Auger
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 3" dia, stainless steel bucket augers, Stainless steel bowls and spoons	9. HOLE LOCATION: South of walkway opening to DB-22.
	10. SURFACE ELEVATION: NA
	11. DATE STARTED: 11/4/99 — 12. DATE COMPLETED: 11/4/99
13. OVERBURDEN THICKNESS: NA	14. DEPTH GROUNDWATER ENCOUNTERED: NA
15. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA
17. TOTAL DEPTH OF HOLE: Ø,3'	18. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA

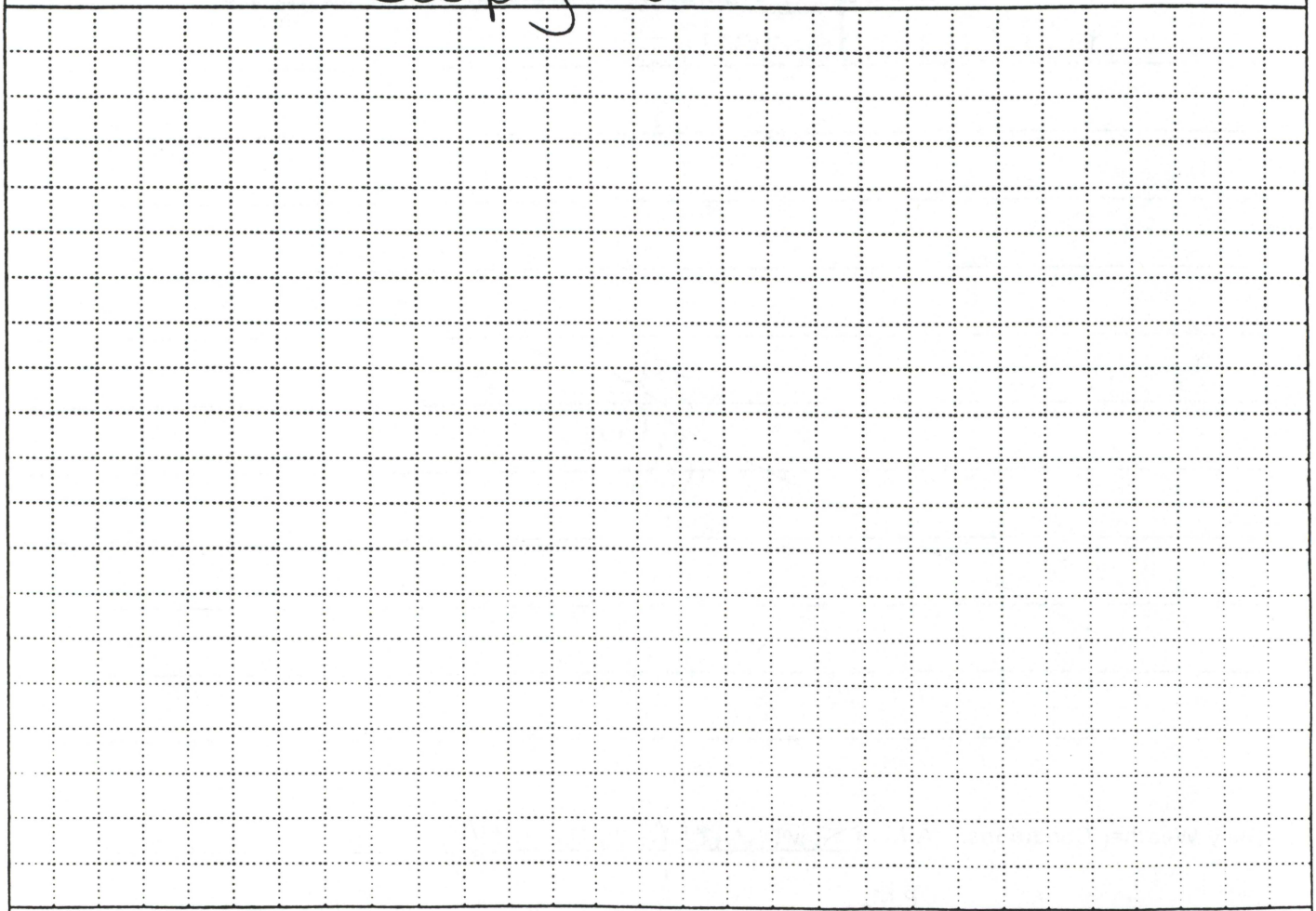
19. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	20. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

21. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	22. TOTAL CORE RECOVERY
LLØ739	→	✓	Cyanide	Explosives		100

23. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	24. SIGNATURE OF INSPECTOR
				Paul Hinds

LOCATION SKETCH/COMMENTS: See page #8

SCALE:



PROJECT	HOLE NO
LL2	LL2-DB22-1

ENG FORM 5056-R, AUG 94 (Proponent CECW-EG)

13

DRILLING LOG

PROJECT	INSPECTOR	HOLE NUMBER	SHEET
LL2	P. Lucost	LL2-DB22-1	~~1 of 1~~ 2 of 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		Silty CLAY (CL), moist, soft, moderate to high plasticity, olive brown (5Y 4/4).	NA	NA	LLØ739 143Ø	vjb 11/9/99
		Bottom of Boring = Ø.6'				Refusal @ Ø.6'
	1.Ø					1.Ø'

DSL 11/4/99

PROJECT	HOLE NO
LL2	LL2-DB22-1

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO:** 0005

Date (mm/dd/yy): 11/4/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

Ecol Baker

Paul Lucot

Narrative (include time and location):

1340: Set-up @ LL2-DB22-2. No sign of impacted vegetation in the area of sampling.

1350: Refusal was encountered in all three holes @ 0.5'

1400: Collect soil sample # LL00740 For metals, explosives, and cyanide analysis.

PSL
11/4/99

Daily Weather Conditions: A.M. Sunny, low 40s

P.M. "

Recorded By [signature] QA Checked By Vicki Brumbach

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DISTRICT: Louisville	HOLE NUMBER: LL2-DB22-2
	2. DRILL SUBCONTRACTOR: NA	SHEET 1 of 2

vjb 11-9-99

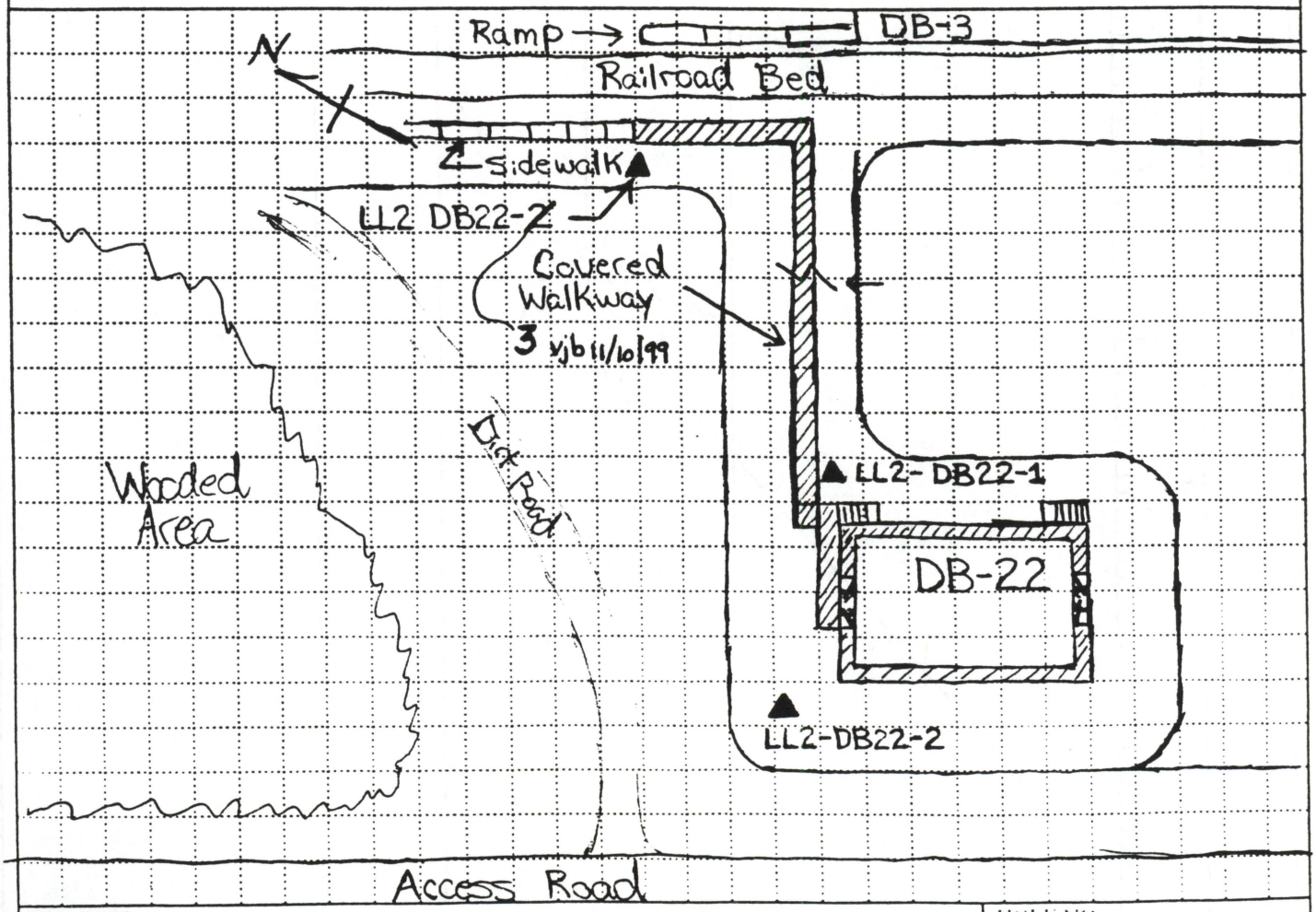
3. PROJECT: LL2	4. LOCATION: DB-22
5. NAME OF DRILLER: NA	6. MANUFACTURERS DESIGNATION OF DRILL: Bucket Auger
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 3" dia. stainless steel bucket auger. Stainless steel bowls and spoons	8. HOLE LOCATION: NW of DB-22
	9. SURFACE ELEVATION: NA
	10. DATE STARTED: 11/4/99 — 11. DATE COMPLETED: 11/4/99
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: NA
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA
14. TOTAL DEPTH OF HOLE: 0.5'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
LL0740	—	✓	Explosives	Cyanide	—	100 %

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
—	—	—	—	Paul J. Lucas

LOCATION SKETCH/COMMENTS — SCALE:



PROJECT	HOLE NO
LL2	LL2-DB22-2

ENG FORM 5056-R, AUG 94 — (Proponent CECW-EG)

DRILLING LOG

PROJECT: LL2- | INSPECTOR: P. Lucas | HOLE NO: LL2-DB22-2 | SHEET: 1 of 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G) 2 of 2
	1.0'	Silty CLAY with organic matter (CL), moist, soft, moderate to high plasticity, 25% Silt, very fine sand 15%, and 60% clay, olive (5Y 4/4). 1.0' Refusal @ 0.5'	NA	NA	LL0740 1400	V, b 11/9/99

Actual Refusal @ 0.5'

PSL 11/4/99

PROJECT: LL2 | HOLE NO: LL2-DB22-2

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: LL1/LL2 Potential Disposal Areas **DELIVERY ORDER NO:** 0005

Date (mm/dd/yy): 11/4/99 Su M Tu W (Th) F Sa PAGE 1 OF 1

Task Team Members:

Brad Baker

Paul Lucat

PSL 11/4/99

Narrative (include time and location):

1450: Set-up @ LL2-DB22-3.

1505: Encounter refusal in all 3 holes @ 0.7'

1520: Collect sample # LL0741 For VOCs, SVOCs, pesticides, PCBs, propellants, explosives, metals, and cyanide analysis.

PSL 11/4/99

Daily Weather Conditions: A.M. Sunny, slightly breezy, low 40's

P.M.

Recorded By Paul J. Lucat QA Checked By Helen Brumbach

14

HTRW DRILLING LOG

DISTRICT	HOLE NUMBER
Louisville	LL2-DB22-3

1. COMPANY NAME	2. DRILL SUBCONTRACTOR	SHEET / SHEETS
SAIC	NA	1 of ~~1~~ 2

vjb 11/9/99

3. PROJECT: LL2	4. LOCATION: DB-22
5. NAME OF DRILLER: NA	6. MANUFACTURERS DESIGNATION OF DRILL: Bucket Auger
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 3" dia. stainless steel bucket auger. Stainless steel bowls and spoons	8. HOLE LOCATION: West of covered walkway end @ R.R. tracks
	9. SURFACE ELEVATION: NA
	10. DATE STARTED: 11/4/99 — 11. DATE COMPLETED: 11/4/99
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: NA
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA
14. TOTAL DEPTH OF HOLE: 0.7'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
LL0741	✓	✓	Explosives, Propellants, SVOCs, metals, CN			100

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Bentonite	—	—	—	Paul J. Lucas

LOCATION SKETCH/COMMENTS See page #8 SCALE:

PROJECT	HOLE NO.
LL2	LL2-DB22-3

DRILLING LOG

PROJECT	INSPECTOR	HOLE NUMBER	SHEET
LL2	P. Lucot	LL2-DB22-3	1 of 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		Silty CLAY (CL), moist, soft, moderate to high plasticity, olive brown (5Y 4/4),	NA	NA	LL0741 1520	2 of 2 vjb 11/9/99
	1.0'	Bottom of Boring = 0.7'				Refusal @ 0.7'

1.0'

DX
11/4/99

PROJECT	HOLE NO
LL2	LL2-DB22-3

Attachment 3

Unscheduled Deliverable –
Sampling of Potential Disposal Areas at Load Line 1 and Load Line 2

Field Chain-of-Custody Records

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423)

CHAIN OF CUSTODY RECORD

PROJECT NAME: LL1/LL2 Potential Disposal Areas

DELIVERY ORDER NUMBER: 0005

PROJECT MANAGER: Steve Selecman 423-481-8761

Sampler (Signature): Vicki Brumback (Printed Name): Vicki Brumback

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Drive NW, North Canton, Ohio 44720, Attn: Becky Strait

PHONE NO: 330-996-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs a1	SVOCs b1, Metals c1, CN d1	Pesticides e1, PCBs e1	Explosives f1	Propellants f1	Metals c1, CN d1	No. of Containers	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
LL0738	11-4-99	1225	Soil				1		1	2	
LL0737		1300					1		1	2	
LL0743		1300					1		1	2	
LL0740		1400					1		1	2	
LL0739		1430					1		1	2	
LL0741		1520		1	1	1	1	1	1	6	USE EXTRA METALS/CN JAR FOR MS/MSD?
LL0730		1605					1		1	2	
LL0731		1625					1		1	2	
LL0729		1650					1		1	2	
LL0736		1431		1	1	1	1	1		5	
LL0744		1431		1	1	1	1	1		5	
LL0725		1201					1		1	2	
LL0726		1228					1		1	2	

	Date/Time		Date/Time		
RELINQUISHED BY: Vicki Brumback	11-5-99 1430	RECEIVED BY:	11.5.99 1430	TOTAL NUMBER OF 36	Cooler Temperature: 4°C
COMPANY NAME: SAIC		COMPANY NAME: SAIC		Cooler ID: Quanterra G39	FEDEX NUMBER: NA SAIC delivery
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time	SOIL METHODS	NEED 30-DAY TURNAROUND.
COMPANY NAME:		COMPANY NAME: SAIC	11.5.99 1625	a SW-846, 5035/8260B b SW-846, 8270C c SW-846, 6010B/7471 d SW-846, 9011/9010 e SW-846, 8082 f SW-846, 8330 g SW-846, 9060	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME: Quanterra	991105 1625P	1 Cool,4C 2 HCL, pH<2 3 HNO3, pH<2 4 NaOH, pH>12	

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423)

COC NO.: LLQES- 1
page 2 of 2

CHAIN OF CUSTODY RECORD

PROJECT NAME: LL1/LL2 Potential Disposal Areas

DELIVERY ORDER NUMBER: 0005

PROJECT MANAGER: Steve Selecman 423-481-8761

Sampler (Signature): Vicki Brumback (Printed Name): Vicki Brumback

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Drive NW, North Canton, Ohio 44720, Attn: Becky Strait

PHONE NO: 330-996-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs a1	SVOCs b1, Metals c1, CN d1	Pesticides e1, PCBs e1	Explosives f1	Propellants f1	Metals c1, CN d1	No. of Containers	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
LLΦ727	11-4-99	1245	Soil				1		1	2	
LLΦ728	↓	1315	↓				1		1	2	
LLΦ742		1345					1		1	2	
LLΦ733		1412					1		1	2	
LLΦ735		151Φ					1		1	2	
LLΦ734		1528					1		1	2	
LLΦ722		16Φ5					1		1	2	
LLΦ723		162Φ					1		1	2	
LLΦ724		1633					1		1	2	
LLΦ732	↓	1656	↓	1	1	1	1	1	1	6	EXTRA METALS/CN JAR FOR MS/MSD ?

VOA 11-5-99

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
Vicki Brumback	11-5-99 1430	[signature]	11-5-99 1430
COMPANY NAME: SAIC		COMPANY NAME: SAIC	
RECEIVED BY:	Date/Time	RELINQUISHED BY: [signature]	Date/Time 11-5-99 1625
COMPANY NAME:		COMPANY NAME: SAIC	
RELINQUISHED BY:	Date/Time	RECEIVED BY: Jennifer Giard	Date/Time 991105 1610
COMPANY NAME:		COMPANY NAME: Quanterra	

TOTAL NUMBER OF 24

Cooler Temperature: 4°C

Cooler ID: Quanterra G39

FEDEX NUMBER: NA SAIC delivery

SOIL METHODS
a SW-846, 5035/8260B
b SW-846, 8270C
c SW-846, 6010B/7471
d SW-846, 9011/9010
e SW-846, 8082
f SW-846, 8330
g SW-846, 9060

NEED 30-DAY TURN-AROUND

1 Cool, 4C 2 HCL, pH < 2 3 HNO3, pH < 2 4 NaOH, pH > 12

Attachment 4

Unscheduled Deliverable –
Sampling of Potential Disposal Areas at Load Line 1 and Load Line 2

Topographic Survey Data

CHW PROJECT # 99726.0
JOB: 7260TS4.CR5 TIME: 14:30 DATE: 11-15-1999
LOAD LINE 1 at RAAP

Point	Northing	Easting	Elevation	Note
1	5000.000000	5000.000000	100.000	START
2	5798.317459	5000.000000	105.839	PK 2
3	5756.650389	4811.922543	102.856	NCH 3
4	6220.704058	4992.125343	105.738	PK 4
5	7129.784674	5031.198473	111.682	ACHW00 3
51	4988.618811	4586.076296	86.185	CB 12 4
52	4993.237527	4882.120734	88.979	CB 12 1
53	4985.395987	4959.702647	89.487	CB 12 3
54	4922.451499	4902.677772	89.774	CB 12 2
55	5810.055114	4887.826718	89.612	CB-23-3
56	5796.127604	4915.905416	88.710	CB-23-1
57	5920.316236	4946.442754	88.996	CB-23-5
58	5863.452810	4889.610060	89.362	CB 23 2
59	5925.876910	4560.810754	86.651	CB 23 4
60	6236.597938	4861.025214	88.858	CB 8 1
61	6231.737414	4918.894560	89.874	CB 8 2
62	6217.136329	4560.524127	87.520	CB 8 3
63	7129.520092	4641.383965	86.181	CB 22 4
64	7138.061470	4906.126864	89.590	CB 22 2
65	7125.248601	4899.285371	89.075	CB 22 3
66	7197.148050	4963.491306	90.034	CB 22 1

ACHW Project # 99726.0
Load Line 2 at RAAP

Point	Easting	Northing	Elevation	Note
900	2373862.33232	560134.23406	1009.52226	DB22 1
901	2373811.86326	560112.50510	1010.44745	DB22 2
902	2374054.37590	560305.24094	1008.56426	DB22 3
903	2372784.55560	561901.78630	1011.19220	DB8 1
904	2372837.71494	561930.17207	1010.61806	DB8 2
905	2367417.83405	555004.36243	983.83990	RAV 10

Attachment 5

Unscheduled Deliverable –
Sampling of Potential Disposal Areas at Load Line 1 and Load Line 2

Data Summary Statistics and Analytical Results for Load Line 1

Surface Soil Data Summary Statistics and Results of Screening for Load Line 1 Potential Disposal Areas

Analyte	Units	Results > Detection Limit	Average Result	Minimum Detect	Maximum Detect	Facility-Wide Background Criteria	Max Detect > Facility-Wide Background?	Region IX Residential Soil	Max Detect > Residential Soil Criteria?	Region IX Industrial Soil	Max Detect > Industrial Soil Criteria ?
Metals (mg/kg)											
Aluminum	mg/kg	16/ 16	6138.00	3650.00	16200.00	17700.00	No	7614.20	Yes	10000.00	Yes
Antimony	mg/kg	3/ 16	1.46	0.90	12.90	0.96	Yes	3.13	Yes	81.76	No
Arsenic	mg/kg	16/ 16	10.39	2.50	27.80	15.40	Yes	0.04	Yes	0.27	Yes
Barium	mg/kg	16/ 16	56.19	18.00	183.00	88.40	Yes	537.49	No	10000.00	No
Beryllium	mg/kg	1/ 16	0.23	1.20	1.20	0.88	Yes	15.44	No	224.16	No
Cadmium	mg/kg	11/ 16	1.96	0.27	11.10	0.00	Yes	3.70	Yes	81.00	No
Calcium *	mg/kg	16/ 16	13110.00	1120.00	179000.00	15800.00	No	None	N/A	None	N/A
Chromium	mg/kg	16/ 16	12.70	6.40	26.50	17.40	Yes	3.01	Yes	6.40	Yes
Cobalt	mg/kg	16/ 16	5.52	1.90	8.70	10.40	No	469.28	No	10000.00	No
Copper	mg/kg	16/ 16	21.26	5.70	51.10	17.70	Yes	290.51	No	7590.85	No
Iron *	mg/kg	16/ 16	15110.00	3190.00	28500.00	23100.00	No	2346.32	Yes	10000.00	Yes
Lead	mg/kg	16/ 16	130.10	28.70	532.00	26.10	Yes	40.00	Yes	100.00	Yes
Magnesium *	mg/kg	16/ 16	2025.00	771.00	11800.00	3030.00	No	None	N/A	None	N/A
Manganese	mg/kg	16/ 16	638.70	67.80	2040.00	1450.00	Yes	176.24	Yes	3225.02	No
Mercury	mg/kg	3/ 10	0.10	0.19	0.29	0.04	Yes	2.35	No	61.32	No
Nickel	mg/kg	16/ 16	14.23	3.50	23.10	21.10	Yes	156.43	No	4087.67	No
Potassium *	mg/kg	16/ 16	848.30	513.00	1490.00	927.00	No	None	N/A	None	N/A
Selenium	mg/kg	5/ 16	0.41	0.53	0.77	1.40	No	39.11	No	1021.98	No
Silver	mg/kg	1/ 16	0.64	0.35	0.35	0.00	Yes	39.11	No	1021.98	No
Sodium *	mg/kg	1/ 16	337.30	426.00	426.00	123.00	No	None	N/A	None	N/A
Thallium	mg/kg	1/ 16	0.26	0.69	0.69	0.00	Yes	0.63	Yes	16.35	No
Vanadium	mg/kg	16/ 16	10.54	5.10	14.60	31.10	No	54.75	No	1430.76	No
Zinc	mg/kg	16/ 16	312.60	34.30	1590.00	61.80	Yes	2346.32	No	10000.00	No

Surface Soil Data Summary Statistics and Results of Screening for Load Line 1 Potential Disposal Areas (continued)

Analyte	Units	Results > Detection Limit	Average Result	Minimum Detect	Maximum Detect	Facility-Wide Background Criteria	Max Detect > Facility-Wide Background?	Region IX Residential Soil	Max Detect > Residential Soil Criteria?	Region IX Industrial Soil	Max Detect > Industrial Soil Criteria ?
Pesticides/PCBs (mg/kg)											
4,4'-DDE	mg/kg	1/ 2	0.001	0.002	0.002	N/A	Yes	0.17	No	1.21	No
Endrin aldehyde	mg/kg	1/ 1	0.001	0.001	0.001	N/A	Yes	None	N/A	None	N/A
PCB-1254	mg/kg	2/ 2	0.08	0.04	0.11	N/A	Yes	0.02	Yes	0.10	Yes
Semivolatile Organic Constituents (mg/kg)											
Benz(a)anthracene	mg/kg	2/ 2	0.06	0.05	0.07	N/A	Yes	0.06	Yes	0.29	No
Benzo(a)pyrene	mg/kg	2/ 2	0.08	0.06	0.09	N/A	Yes	0.01	Yes	0.03	Yes
Benzo(b)fluoranthene	mg/kg	2/ 2	0.12	0.08	0.15	N/A	Yes	0.06	Yes	0.29	No
Benzo(ghi)perylene	mg/kg	1/ 2	0.15	0.07	0.07	N/A	Yes	None	N/A	None	N/A
Benzo(k)fluoranthene	mg/kg	1/ 2	0.15	0.07	0.07	N/A	Yes	0.62	No	2.89	No
Bis(2-ethylhexyl)phthalate	mg/kg	1/ 2	0.14	0.06	0.06	N/A	Yes	3.47	No	17.62	No
Chrysene	mg/kg	2/ 2	0.09	0.06	0.11	N/A	Yes	6.21	No	28.86	No
Fluoranthene	mg/kg	2/ 2	0.13	0.09	0.17	N/A	Yes	229.36	No	3009.97	No
Indeno(1,2,3-cd)pyrene	mg/kg	1/ 2	0.15	0.08	0.08	N/A	Yes	0.06	Yes	0.29	No
Phenanthrene	mg/kg	2/ 2	0.08	0.05	0.11	N/A	Yes	None	N/A	None	N/A
Pyrene	mg/kg	2/ 2	0.10	0.07	0.12	N/A	Yes	230.87	No	5422.41	No
Volatile Organic Constituents (mg/kg)											
Methylene chloride	mg/kg	2/ 2	0.001	0.001	0.002	N/A	Yes	0.89	No	2.05	No
Toluene	mg/kg	2/ 2	0.002	0.002	0.003	N/A	Yes	52.00	No	52.00	No

* Essential Element

N/A = Not Applicable

Note: Any detected organic compound was denoted as above facility-wide background.

Analytical Results for Load Line 1 Potential Disposal Areas - Explosives, Propellants, and Metals

Location		LL1	LL1	LL1	LL1	LL1	LL1
Station		CB8-01	CB8-02	CB8-03	CB12-01	CB12-02	CB12-03
Customer ID		LL1so-01-0722-SO	LL1so-02-0723-SO	LL1so-03-0724-SO	LL1so-01-0725-SO	LL1so-02-0726-SO	LL1so-03-0727-SO
Date		11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
Field Type		Grab	Grab	Grab	Grab	Grab	Grab
Analysis	Units						
Explosives and Propellants							
1,3,5-Trinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4,6-Trinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,6-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
3-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HMX	MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Nitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Nitrocellulose	MG/KG	N/A	N/A	N/A	N/A	N/A	N/A
Nitroglycerin	MG/KG	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Nitroguanidine	MG/KG	N/A	N/A	N/A	N/A	N/A	N/A
RDX	MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetryl	MG/KG	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Metals							
Aluminum	MG/KG	4400 J	5600 J	16200 J	6200 J	5980 J	3810 J
Antimony	MG/KG	1.3 UJ	1.3 UJ	1.2 UJ	1.3 UJ	1.4 UJ	1.3 UJ
Arsenic	MG/KG	9.9 =	10 =	2.5 =	8.3 =	9.8 =	6.3 =
Barium	MG/KG	58.8 =	43.4 =	183 = *	41.1 =	60.9 =	29 =
Beryllium	MG/KG	0.37 U	0.29 U	1.2 = *	0.25 U	0.19 U	0.24 U
Cadmium	MG/KG	1.3 = *	0.56 J *	0.58 U	1 = *	6 = *	0.67 U
Calcium	MG/KG	1970 =	2670 =	179000 = *	1860 =	2760 =	1120 =
Chromium	MG/KG	9.4 =	13.4 =	7.1 =	10.4 =	26.5 = *	8.1 =
Cobalt	MG/KG	6.2 J	5.9 J	1.9 J	4.6 J	6 =	3.8 J
Copper	MG/KG	18.6 J *	11.9 J	5.7 J	15.1 J	43.5 J *	10.6 J
Iron	MG/KG	13300 =	12500 =	3190 =	17300 =	28500 = *	12500 =
Lead	MG/KG	98.1 = *	150 J *	31.4 J *	39.4 = *	532 = *	38.1 = *
Magnesium	MG/KG	771 =	954 =	11800 = *	1380 =	2140 =	890 =
Manganese	MG/KG	1250 =	723 =	2040 = *	482 =	528 =	352 =
Mercury	MG/KG	0.19 = *	0.08 R	0.04 R	0.08 U	0.29 = *	0.06 U
Nickel	MG/KG	17.5 =	11.4 =	3.5 J	12.9 =	19.2 =	9.8 =
Potassium	MG/KG	576 J	637 J	994 = *	992 = *	895 =	754 =
Selenium	MG/KG	0.65 U	0.67 U	0.77 =	0.67 U	0.68 U	0.67 U
Silver	MG/KG	1.3 U	1.3 U	1.2 U	1.3 U	1.4 U	1.3 U
Sodium	MG/KG	650 UJ	665 UJ	426 J *	669 UJ	683 UJ	669 UJ
Thallium	MG/KG	0.23 U	0.43 U	2.9 U	0.27 U	0.38 U	0.21 U
Vanadium	MG/KG	9.1 =	12 =	5.1 J	12.6 =	11.9 =	8.2 =
Zinc	MG/KG	273 = *	290 = *	34.3 =	263 = *	1590 = *	71.5 = *

Analytical Results for Load Line 1 Potential Disposal Areas - Explosives, Propellants, and Metals

Location		LL1	LL1	LL1	LL1	LL1	LL1
Station		CB12-04	CB22-01	CB22-02	CB22-03	CB22-04	CB23-01
Customer ID		LL1so-04-0728-SO	LL1so-01-0729-SO	LL1so-02-0730-SO	LL1so-03-0731-SO	LL1so-04-0732-SO	LL1so-01-0733-SO
Date		11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
Field Type		Grab	Grab	Grab	Grab	Grab	Grab
Analysis	Units						
Explosives and Propellants							
1,3,5-Trinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4,6-Trinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,6-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
3-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HMX	MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Nitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Nitrocellulose	MG/KG	N/A	N/A	N/A	N/A	2 U	N/A
Nitroglycerin	MG/KG	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Nitroguanidine	MG/KG	N/A	N/A	N/A	N/A	0.25 U	N/A
RDX	MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetryl	MG/KG	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Metals							
Aluminum	MG/KG	6460 J	3790 J	4990 J	7400 J	4220 J	7290 J
Antimony	MG/KG	0.9 J	1.5 UJ	1.1 UJ	1.3 UJ	12.9 J *	0.98 J *
Arsenic	MG/KG	9.2 =	27.8 = *	11.6 =	10.8 =	9.3 =	8.6 =
Barium	MG/KG	61.1 =	18 J	30.7 =	52.7 =	38.5 =	87.8 =
Beryllium	MG/KG	0.28 U	0.44 U	0.18 U	0.45 U	0.31 U	0.38 U
Cadmium	MG/KG	11.1 = *	0.76 U	0.27 J *	0.64 U	0.63 U	3.7 = *
Calcium	MG/KG	2600 =	1420 =	1290 =	1190 =	1890 =	2870 =
Chromium	MG/KG	14.2 =	11.7 =	8.4 =	15.1 =	10.2 =	18.7 = *
Cobalt	MG/KG	6.6 J	5.5 J	5.6 =	8.7 =	5.1 J	5.4 J
Copper	MG/KG	36.8 J *	10.2 J	19.2 J *	17 J	16.1 J	51.1 J *
Iron	MG/KG	15200 =	12000 =	16000 =	19500 =	15400 =	16500 =
Lead	MG/KG	80.2 = *	30.8 = *	28.7 = *	34 = *	55.4 J *	426 = *
Magnesium	MG/KG	1260 =	1140 =	1490 =	2040 =	1060 =	1250 =
Manganese	MG/KG	597 =	67.8 =	354 =	343 =	517 =	679 =
Mercury	MG/KG	0.11 U	0.08 R	0.03 R	0.04 U	0.09 R	0.26 = *
Nickel	MG/KG	12.4 =	15.1 =	13.8 =	23.1 = *	14.2 =	15.5 =
Potassium	MG/KG	891 =	1490 = *	719 =	1090 = *	572 J	892 =
Selenium	MG/KG	0.69 U	0.76 U	0.56 U	0.55 J	0.63 U	0.53 J
Silver	MG/KG	1.4 U	1.5 U	1.1 U	1.3 U	1.3 U	0.35 J *
Sodium	MG/KG	693 UJ	756 UJ	561 UJ	643 UJ	628 UJ	682 UJ
Thallium	MG/KG	0.33 U	0.23 U	0.28 U	0.28 U	0.69 J *	0.27 U
Vanadium	MG/KG	12.7 =	8.5 =	9.3 =	13.8 =	8.8 =	11.9 =
Zinc	MG/KG	173 = *	82.2 = *	163 = *	86.8 = *	129 = *	740 = *

Analytical Results for Load Line 1 Potential Disposal Areas - Explosives, Propellants, and Metals

Location		LL1	LL1	LL1	LL1	LL1
Station		CB23-02	CB23-03	CB23-04	CB23-04	CB23-05
Customer ID		LL1so-02-0734-SO	LL1so-03-0735-SO	LL1so-04-0736-SO	LL1so-04-0744-SO	LL1so-05-0742-SO
Date		11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
Field Type		Grab	Grab	Grab	Field Duplicate	Grab
Analysis	Units					
Explosives and Propellants						
1,3,5-Trinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4,6-Trinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,6-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
3-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HMX	MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Nitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Nitrocellulose	MG/KG	N/A	N/A	2 U	2 U	N/A
Nitroglycerin	MG/KG	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Nitroguanidine	MG/KG	N/A	N/A	0.25 U	0.25 U	N/A
RDX	MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetryl	MG/KG	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Metals						
Aluminum	MG/KG	6260 J	4790 J	3650 J	4040 J	7160 J
Antimony	MG/KG	1.3 UJ	1.4 UJ	1.4 UJ	1.4 UJ	1.2 UJ
Arsenic	MG/KG	12.9 =	9.2 =	9.5 =	10 =	10.6 =
Barium	MG/KG	51.3 =	38.6 =	57.5 =	55.4 =	46.7 =
Beryllium	MG/KG	0.67 U	0.16 U	0.25 U	0.28 U	0.6 U
Cadmium	MG/KG	2.7 = *	1.2 = *	0.55 J *	0.53 J *	1.4 = *
Calcium	MG/KG	2570 =	4120 =	1150 =	1390 =	1330 =
Chromium	MG/KG	15.5 =	9.9 =	6.4 =	6.9 =	18.2 = *
Cobalt	MG/KG	6 J	4.5 J	5.4 J	5.3 J	7.1 =
Copper	MG/KG	31.4 J *	24.8 J *	13.3 J	13.1 J	14.8 J
Iron	MG/KG	16900 =	14100 =	10900 =	11200 =	18000 =
Lead	MG/KG	315 = *	84.6 = *	51.7 = *	50.5 = *	85.8 = *
Magnesium	MG/KG	2590 =	1320 =	839 =	888 =	1470 =
Manganese	MG/KG	506 =	422 =	867 =	864 =	492 =
Mercury	MG/KG	0.13 U	0.07 U	0.21 R	0.26 = *	0.06 U
Nickel	MG/KG	21.7 = *	11.6 =	11.8 =	11.5 =	14.2 =
Potassium	MG/KG	561 J	846 =	513 J	557 J	1150 = *
Selenium	MG/KG	0.53 J	0.68 U	0.69 U	0.77 =	0.57 J
Silver	MG/KG	1.3 U	1.4 U	1.4 U	1.4 U	1.2 U
Sodium	MG/KG	666 UJ	683 UJ	693 UJ	690 UJ	599 UJ
Thallium	MG/KG	0.36 U	0.29 U	0.29 U	0.25 U	0.29 U
Vanadium	MG/KG	13.7 =	9.2 =	7.2 =	7.8 =	14.6 =
Zinc	MG/KG	725 = *	175 = *	96.1 = *	91.1 = *	110 = *

*Indicates that the result was above its respective facility-wide background value.
U - Not detected at indicated reporting limit.
J - Estimated value less than reporting limit.
= Detected above reporting limit at the indicated value.
R -Rejected value as a result of validation.
N/A = Not analyzed.

Analytical Results for Load Line 1 Potential Disposal Areas - Pesticides/PCBs, SVOCs, and VOCs

Location		LL1	LL1	LL1
Station		CB22-04	CB23-04	CB23-04
Customer ID		LL1so-04-0732-SO	LL1so-04-0736-SO	LL1so-04-0744-SO
Date		11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1
Field Type		Grab	Grab	Field Duplicate
Analysis	Units			
		Pesticides and PCBs		
4,4'-DDD	UG/KG	2.1 R	2.4 U	2.3 U
4,4'-DDE	UG/KG	2.1 U	1.6 J	1.8 J
4,4'-DDT	UG/KG	2.1 U	2.4 U	2.3 U
Aldrin	UG/KG	2.1 U	2.4 U	2.3 U
Dieldrin	UG/KG	2.1 R	2.4 U	2.3 U
Endosulfan I	UG/KG	2.1 R	2.4 U	2.3 U
Endosulfan II	UG/KG	2.1 R	2.4 U	2.3 U
Endosulfan sulfate	UG/KG	2.1 R	2.4 U	2.3 U
Endrin	UG/KG	2.1 R	2.4 U	2.3 U
Endrin aldehyde	UG/KG	2.1 R	1.4 J	1.3 J
Endrin ketone	UG/KG	2.1 R	2.4 U	2.3 U
Heptachlor	UG/KG	2.1 R	2.4 U	2.3 U
Heptachlor epoxide	UG/KG	2.1 R	2.4 U	2.3 U
Lindane	UG/KG	2.1 R	2.4 U	2.3 U
Methoxychlor	UG/KG	4.1 R	4.6 U	4.6 U
PCB-1016	UG/KG	41 U	46 U	46 U
PCB-1221	UG/KG	41 U	46 U	46 U
PCB-1232	UG/KG	41 U	46 U	46 U
PCB-1242	UG/KG	41 U	46 U	46 U
PCB-1248	UG/KG	41 U	46 U	46 U
PCB-1254	UG/KG	43 =	110 =	99 =
PCB-1260	UG/KG	41 U	46 U	46 U
Toxaphene	UG/KG	84 U	93 U	92 U
alpha-BHC	UG/KG	2.1 R	2.4 U	2.3 U
alpha-Chlordane	UG/KG	2.1 R	2.4 U	2.3 U
beta-BHC	UG/KG	2.1 R	2.4 U	2.3 U
delta-BHC	UG/KG	2.1 R	2.4 U	2.3 U
gamma-Chlordane	UG/KG	2.1 R	2.4 U	2.3 U
		Semivolatile Organic Constituents		
1,2,4-Trichlorobenzene	UG/KG	410 U	460 U	460 U
1,2-Dichlorobenzene	UG/KG	410 U	460 U	460 U
1,3-Dichlorobenzene	UG/KG	410 U	460 U	460 U
1,4-Dichlorobenzene	UG/KG	410 U	460 U	460 U
2,4,5-Trichlorophenol	UG/KG	410 U	460 U	460 U
2,4,6-Trichlorophenol	UG/KG	410 U	460 U	460 U
2,4-Dichlorophenol	UG/KG	410 U	460 U	460 U
2,4-Dimethylphenol	UG/KG	410 U	460 U	460 U
2,4-Dinitrophenol	UG/KG	1000 U	1100 U	1100 U
2,4-Dinitrotoluene	UG/KG	410 U	460 U	460 U
2,6-Dinitrotoluene	UG/KG	410 U	460 U	460 U
2-Chloronaphthalene	UG/KG	410 U	460 U	460 U
2-Chlorophenol	UG/KG	410 U	460 U	460 U
2-Methyl-4,6-dinitrophenol	UG/KG	1000 U	1100 U	1100 U
2-Methylnaphthalene	UG/KG	410 U	460 U	460 U
2-Methylphenol	UG/KG	410 U	460 U	460 U
2-Nitrobenzenamine	UG/KG	1000 U	1100 U	1100 U
2-Nitrophenol	UG/KG	410 U	460 U	460 U

Analytical Results for Load Line 1 Potential Disposal Areas - Pesticides/PCBs, SVOCs, and VOCs

Location		LL1	LL1	LL1
Station		CB22-04	CB23-04	CB23-04
Customer ID		LL1so-04-0732-SO	LL1so-04-0736-SO	LL1so-04-0744-SO
Date		11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1
Field Type		Grab	Grab	Field Duplicate
Analysis	Units			
3,3'-Dichlorobenzidine	UG/KG	410 R	460 U	460 U
3-Nitrobenzenamine	UG/KG	1000 R	1100 U	1100 U
4-Bromophenyl phenyl ether	UG/KG	410 U	460 U	460 U
4-Chloro-3-methylphenol	UG/KG	410 U	460 U	460 U
4-Chlorobenzenamine	UG/KG	410 R	460 U	460 U
4-Chlorophenyl phenyl ether	UG/KG	410 U	460 U	460 U
4-Methylphenol	UG/KG	410 U	460 U	460 U
4-Nitrobenzenamine	UG/KG	1000 R	1100 U	1100 U
4-Nitrophenol	UG/KG	1000 U	1100 U	1100 U
Acenaphthene	UG/KG	410 U	460 U	460 U
Acenaphthylene	UG/KG	410 U	460 U	460 U
Anthracene	UG/KG	410 U	460 U	460 U
Benz(a)anthracene	UG/KG	72 J	50 J	50 J
Benzo(a)pyrene	UG/KG	92 J	60 J	68 J
Benzo(b)fluoranthene	UG/KG	150 J	84 J	90 J
Benzo(ghi)perylene	UG/KG	74 J	460 U	460 U
Benzo(k)fluoranthene	UG/KG	65 J	460 U	58 J
Bis(2-chloroisopropyl) ether	UG/KG	410 U	460 U	460 U
Bis(2-ethylhexyl)phthalate	UG/KG	57 J	460 U	460 U
Butyl benzyl phthalate	UG/KG	410 U	460 U	460 U
Carbazole	UG/KG	410 U	460 U	460 U
Chrysene	UG/KG	110 J	62 J	66 J
Di-n-butyl phthalate	UG/KG	410 U	460 U	460 U
Di-n-octylphthalate	UG/KG	410 U	460 U	460 U
Dibenz(a,h)anthracene	UG/KG	410 U	460 U	460 U
Dibenzofuran	UG/KG	410 U	460 U	460 U
Diethyl phthalate	UG/KG	410 U	460 U	460 U
Dimethyl phthalate	UG/KG	410 U	460 U	460 U
Fluoranthene	UG/KG	170 J	93 J	100 J
Fluorene	UG/KG	410 U	460 U	460 U
Hexachlorobenzene	UG/KG	410 U	460 U	460 U
Hexachlorobutadiene	UG/KG	410 U	460 U	460 U
Hexachlorocyclopentadiene	UG/KG	410 U	460 U	460 U
Hexachloroethane	UG/KG	410 U	460 U	460 U
Indeno(1,2,3-cd)pyrene	UG/KG	75 J	460 U	59 J
Isophorone	UG/KG	410 U	460 U	460 U
N-Nitroso-di-n-propylamine	UG/KG	410 U	460 U	460 U
N-Nitrosodiphenylamine	UG/KG	410 U	460 U	460 U
Naphthalene	UG/KG	410 U	460 U	460 U
Nitrobenzene	UG/KG	410 U	460 U	460 U
Pentachlorophenol	UG/KG	1000 U	1100 U	1100 U
Phenanthrene	UG/KG	110 J	46 J	60 J
Phenol	UG/KG	410 U	460 U	460 U
Pyrene	UG/KG	120 J	70 J	85 J
bis(2-Chloroethoxy)methane	UG/KG	410 U	460 U	460 U
bis(2-Chloroethyl) ether	UG/KG	410 U	460 U	460 U
		Volatile Organic Constituents		
1,1,1-Trichloroethane	UG/KG	6.3 U	6.9 U	6.9 U

Analytical Results for Load Line 1 Potential Disposal Areas - Pesticides/PCBs, SVOCs, and VOCs

Location		LL1	LL1	LL1
Station		CB22-04	CB23-04	CB23-04
Customer ID		LL1so-04-0732-SO	LL1so-04-0736-SO	LL1so-04-0744-SO
Date		11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1
Field Type		Grab	Grab	Field Duplicate
Analysis	Units			
1,1,2,2-Tetrachloroethane	UG/KG	6.3 UJ	6.9 UJ	6.9 UJ
1,1,2-Trichloroethane	UG/KG	6.3 U	6.9 U	6.9 U
1,1-Dichloroethane	UG/KG	6.3 U	6.9 U	6.9 U
1,1-Dichloroethene	UG/KG	6.3 U	6.9 U	6.9 U
1,2-Dibromoethane	UG/KG	6.3 U	6.9 U	6.9 U
1,2-Dichloroethane	UG/KG	6.3 U	6.9 U	6.9 U
1,2-Dichloroethene	UG/KG	6.3 U	6.9 U	6.9 U
1,2-Dichloropropane	UG/KG	6.3 U	6.9 U	6.9 U
2-Butanone	UG/KG	13 UJ	14 UJ	14 UJ
2-Hexanone	UG/KG	13 UJ	14 UJ	14 UJ
4-Methyl-2-pentanone	UG/KG	13 U	14 U	14 U
Acetone	UG/KG	13 UJ	14 UJ	14 UJ
Benzene	UG/KG	6.3 U	6.9 U	6.9 U
Bromochloromethane	UG/KG	6.3 U	6.9 U	6.9 U
Bromodichloromethane	UG/KG	6.3 U	6.9 U	6.9 U
Bromoform	UG/KG	6.3 U	6.9 U	6.9 U
Bromomethane	UG/KG	13 U	14 U	14 U
Carbon disulfide	UG/KG	6.3 U	6.9 U	6.9 U
Carbon tetrachloride	UG/KG	6.3 U	6.9 U	6.9 U
Chlorobenzene	UG/KG	6.3 U	6.9 U	6.9 U
Chloroethane	UG/KG	13 U	14 U	14 U
Chloroform	UG/KG	6.3 U	6.9 U	6.9 U
Chloromethane	UG/KG	13 U	14 U	14 U
Dibromochloromethane	UG/KG	6.3 U	6.9 U	6.9 U
Dimethylbenzene	UG/KG	6.3 U	6.9 U	6.9 U
Ethylbenzene	UG/KG	6.3 U	6.9 U	6.9 U
Methylene chloride	UG/KG	1 J	1.9 J	4.7 J
Styrene	UG/KG	6.3 U	6.9 U	6.9 U
Tetrachloroethene	UG/KG	6.3 U	6.9 U	6.9 U
Toluene	UG/KG	3.1 J	1.5 J	3 J
Trichloroethene	UG/KG	6.3 U	6.9 U	6.9 U
Vinyl chloride	UG/KG	13 U	14 U	14 U
cis-1,3-Dichloropropene	UG/KG	6.3 U	6.9 U	6.9 U
trans-1,3-Dichloropropene	UG/KG	6.3 U	6.9 U	6.9 U

U - Not detected at indicated reporting limit.
J - Estimated value less than reporting limit.
= Detected above reporting limit at the indicated value.
R -Rejected value as a result of validation.
N/A = Not analyzed.

Attachment 6

Unscheduled Deliverable –
Sampling of Potential Disposal Areas at Load Line 1 and Load Line 2

Data Summary Statistics and Analytical Results for Load Line 2

Surface Soil Data Summary Statistics and Screening Results for Load Line 2 Potential Disposal Areas

Analyte	Units	Results > Detection Limit	Average Result	Minimum Detect	Maximum Detect	Facility-Wide Background Criteria	Max Detect > Facility-Wide Background?	Region IX Residential Soil	Max Detect > Residential Soil Criteria?	Region IX Industrial Soil	Max Detect > Industrial Soil Criteria ?
Metals (mg/kg)											
Aluminum	mg/kg	5/ 5	8564.00	4060.00	14100.00	17700.00	No	7614.20	Yes	10000.00	Yes
Antimony	mg/kg	3/ 5	0.71	0.56	1.20	0.96	Yes	3.13	No	81.76	No
Arsenic	mg/kg	5/ 5	9.58	4.80	13.80	15.40	No	0.04	Yes	0.27	Yes
Barium	mg/kg	5/ 5	56.60	38.40	70.30	88.40	No	537.49	No	10000.00	No
Cadmium	mg/kg	3/ 5	0.66	0.51	1.50	0.00	Yes	3.70	No	81.00	No
Calcium *	mg/kg	5/ 5	5046.00	1150.00	17100.00	15800.00	No	None	N/A	None	N/A
Chromium	mg/kg	5/ 5	15.06	8.10	19.90	17.40	Yes	3.01	Yes	6.40	Yes
Cobalt	mg/kg	4/ 5	7.52	5.00	11.20	10.40	Yes	469.28	No	10000.00	No
Copper	mg/kg	5/ 5	18.86	14.10	24.60	17.70	Yes	290.51	No	7590.85	No
Iron *	mg/kg	5/ 5	18820.00	13700.00	26700.00	23100.00	No	2346.32	Yes	10000.00	Yes
Lead	mg/kg	5/ 5	50.72	17.30	94.70	26.10	Yes	40.00	Yes	100.00	No
Magnesium *	mg/kg	5/ 5	2805.00	915.00	7690.00	3030.00	No	None	N/A	None	N/A
Manganese	mg/kg	5/ 5	406.00	298.00	548.00	1450.00	No	176.24	Yes	3225.02	No
Nickel	mg/kg	5/ 5	18.22	9.00	27.30	21.10	Yes	156.43	No	4087.67	No
Potassium *	mg/kg	5/ 5	1453.00	637.00	3020.00	927.00	No	None	N/A	None	N/A
Selenium	mg/kg	1/ 5	0.37	0.64	0.64	1.40	No	39.11	No	1021.98	No
Vanadium	mg/kg	5/ 5	15.30	7.40	23.30	31.10	No	54.75	No	1430.76	No
Zinc	mg/kg	5/ 5	119.60	56.80	264.00	61.80	Yes	2346.32	No	10000.00	No
Volatile Organic Constituents (mg/kg)											
Acetone	mg/kg	1/ 1	0.01	0.01	0.01	N/A	Yes	156.96	No	621.96	No
Toluene	mg/kg	1/ 1	0.00	0.00	0.00	N/A	Yes	52.00	No	52.00	No

* Essential Element
N/A = Not Applicable
Note: Any detected organic compound was denoted as above facility-wide background.

Analytical Results for Load Line 2 Potential Disposal Areas

Location		LL2	LL2	LL2	LL2	LL2	LL2
Station		DB8-01	DB8-01	DB8-02	DB22-01	DB22-02	DB22-03
Customer ID		LL2so-01-0737-SO	LL2so-01-0743-SO	LL2so-02-0738-SO	LL2so-01-0739-SO	LL2so-02-0740-SO	LL2so-03-0741-SO
Date		11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
Field Type		Grab	Field Duplicate	Grab	Grab	Grab	Grab
Analysis	Units						
Explosives and Propellants							
1,3,5-Trinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4,6-Trinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,6-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
3-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HMX	MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Nitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Nitrocellulose	MG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Nitroglycerin	MG/KG	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Nitroguanidine	MG/KG	N/A	N/A	N/A	N/A	N/A	0.25 U
RDX	MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetryl	MG/KG	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Metals							
Aluminum	MG/KG	14100 J	10600 J	4060 J	5510 J	7150 J	12000 J
Antimony	MG/KG	1.2 UJ	1.2 UJ	0.56 J	1.2 J *	0.61 J	1.2 UJ
Arsenic	MG/KG	13.8 =	10.5 =	4.8 =	8.1 =	9.1 =	12.1 =
Barium	MG/KG	67 =	53.2 =	38.4 =	38.5 =	68.8 =	70.3 =
Beryllium	MG/KG	0.61 U	0.51 U	0.22 U	0.25 U	0.49 U	0.41 U
Cadmium	MG/KG	0.59 U	0.59 U	0.51 J *	0.68 = *	1.5 = *	0.6 U
Calcium	MG/KG	17100 = *	8880 =	1150 =	2520 =	2210 =	2250 =
Chromium	MG/KG	19.5 = *	16 =	8.1 =	11.9 =	19.9 = *	15.9 =
Cobalt	MG/KG	10.6 = *	9.3 =	4.2 U	5 =	11.2 = *	8.7 =
Copper	MG/KG	19.8 J *	26 J *	24.6 J *	17.1 J	18.7 J *	14.1 J
Iron	MG/KG	26700 = *	21600 =	13700 =	13700 =	17700 =	22300 =
Lead	MG/KG	17.3 =	12.7 =	44.5 = *	73.8 = *	94.7 = *	23.3 =
Magnesium	MG/KG	7690 = *	3830 = *	915 =	1450 =	1870 =	2100 =
Manganese	MG/KG	375 =	306 =	356 =	298 =	548 =	453 =
Mercury	MG/KG	0.04 U	0.05 U	0.07 U	0.09 U	0.1 U	0.06 U
Nickel	MG/KG	25.3 = *	22 = *	9 =	13 =	27.3 = *	16.5 =
Potassium	MG/KG	3020 = *	2160 = *	637 =	758 =	1550 = *	1300 = *
Selenium	MG/KG	0.59 U	0.59 U	0.59 U	0.64 U	0.64 J	0.6 U
Silver	MG/KG	1.2 U	1.2 U	1.2 U	1.3 U	1.4 U	1.2 U
Sodium	MG/KG	587 UJ	593 UJ	587 UJ	643 UJ	689 UJ	603 UJ
Thallium	MG/KG	0.36 U	0.37 U	0.33 U	0.3 U	0.41 U	0.33 U
Vanadium	MG/KG	23.3 =	17.2 =	7.4 =	9.6 =	14.2 =	22 =

Analytical Results for Load Line 2 Potential Disposal Areas

Location		LL2	LL2	LL2	LL2	LL2	LL2
Station		DB8-01	DB8-01	DB8-02	DB22-01	DB22-02	DB22-03
Customer ID		LL2so-01-0737-SO	LL2so-01-0743-SO	LL2so-02-0738-SO	LL2so-01-0739-SO	LL2so-02-0740-SO	LL2so-03-0741-SO
Date		11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
Field Type		Grab	Field Duplicate	Grab	Grab	Grab	Grab
Analysis	Units						
Zinc	MG/KG	68 = *	60.3 =	73.1 = *	136 = *	264 = *	56.8 =
Pesticides and PCBs							
4,4'-DDD	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
4,4'-DDE	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
4,4'-DDT	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Aldrin	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Dieldrin	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Endosulfan I	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Endosulfan II	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Endosulfan sulfate	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Endrin	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Endrin aldehyde	UG/KG	N/A	N/A	N/A	N/A	N/A	2 UJ
Endrin ketone	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Heptachlor	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Heptachlor epoxide	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Lindane	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Methoxychlor	UG/KG	N/A	N/A	N/A	N/A	N/A	4.1 U
PCB-1016	UG/KG	N/A	N/A	N/A	N/A	N/A	40 U
PCB-1221	UG/KG	N/A	N/A	N/A	N/A	N/A	40 U
PCB-1232	UG/KG	N/A	N/A	N/A	N/A	N/A	40 U
PCB-1242	UG/KG	N/A	N/A	N/A	N/A	N/A	40 U
PCB-1248	UG/KG	N/A	N/A	N/A	N/A	N/A	40 U
PCB-1254	UG/KG	N/A	N/A	N/A	N/A	N/A	40 U
PCB-1260	UG/KG	N/A	N/A	N/A	N/A	N/A	40 U
Toxaphene	UG/KG	N/A	N/A	N/A	N/A	N/A	81 U
alpha-BHC	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
alpha-Chlordane	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
beta-BHC	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
delta-BHC	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
gamma-Chlordane	UG/KG	N/A	N/A	N/A	N/A	N/A	2 U
Semivolatile Organic Constituents							
1,2,4-Trichlorobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
1,2-Dichlorobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
1,3-Dichlorobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
1,4-Dichlorobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2,4,5-Trichlorophenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2,4,6-Trichlorophenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2,4-Dichlorophenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2,4-Dimethylphenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U

Analytical Results for Load Line 2 Potential Disposal Areas

Location		LL2	LL2	LL2	LL2	LL2	LL2
Station		DB8-01	DB8-01	DB8-02	DB22-01	DB22-02	DB22-03
Customer ID		LL2so-01-0737-SO	LL2so-01-0743-SO	LL2so-02-0738-SO	LL2so-01-0739-SO	LL2so-02-0740-SO	LL2so-03-0741-SO
Date		11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
Field Type		Grab	Field Duplicate	Grab	Grab	Grab	Grab
Analysis	Units						
2,4-Dinitrophenol	UG/KG	N/A	N/A	N/A	N/A	N/A	960 U
2,4-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2,6-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2-Chloronaphthalene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2-Chlorophenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2-Methyl-4,6-dinitrophenol	UG/KG	N/A	N/A	N/A	N/A	N/A	960 U
2-Methylnaphthalene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2-Methylphenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
2-Nitrobenzenamine	UG/KG	N/A	N/A	N/A	N/A	N/A	960 U
2-Nitrophenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
3,3'-Dichlorobenzidine	UG/KG	N/A	N/A	N/A	N/A	N/A	400 R
3-Nitrobenzenamine	UG/KG	N/A	N/A	N/A	N/A	N/A	960 U
4-Bromophenyl phenyl ether	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
4-Chloro-3-methylphenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
4-Chlorobenzenamine	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
4-Chlorophenyl phenyl ether	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
4-Methylphenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
4-Nitrobenzenamine	UG/KG	N/A	N/A	N/A	N/A	N/A	960 U
4-Nitrophenol	UG/KG	N/A	N/A	N/A	N/A	N/A	960 U
Acenaphthene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Acenaphthylene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Anthracene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Benz(a)anthracene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Benzo(a)pyrene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Benzo(b)fluoranthene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Benzo(ghi)perylene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Benzo(k)fluoranthene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Bis(2-chloroisopropyl) ether	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Bis(2-ethylhexyl)phthalate	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Butyl benzyl phthalate	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Carbazole	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Chrysene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Di-n-butyl phthalate	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Di-n-octylphthalate	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Dibenz(a,h)anthracene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Dibenzofuran	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Diethyl phthalate	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Dimethyl phthalate	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Fluoranthene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U

Analytical Results for Load Line 2 Potential Disposal Areas

Location		LL2	LL2	LL2	LL2	LL2	LL2
Station		DB8-01	DB8-01	DB8-02	DB22-01	DB22-02	DB22-03
Customer ID		LL2so-01-0737-SO	LL2so-01-0743-SO	LL2so-02-0738-SO	LL2so-01-0739-SO	LL2so-02-0740-SO	LL2so-03-0741-SO
Date		11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
Field Type		Grab	Field Duplicate	Grab	Grab	Grab	Grab
Analysis	Units						
Fluorene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Hexachlorobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Hexachlorobutadiene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Hexachlorocyclopentadiene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 R
Hexachloroethane	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Indeno(1,2,3-cd)pyrene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Isophorone	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
N-Nitroso-di-n-propylamine	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
N-Nitrosodiphenylamine	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Naphthalene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Nitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Pentachlorophenol	UG/KG	N/A	N/A	N/A	N/A	N/A	960 R
Phenanthrene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Phenol	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Pyrene	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
bis(2-Chloroethoxy)methane	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
bis(2-Chloroethyl) ether	UG/KG	N/A	N/A	N/A	N/A	N/A	400 U
Volatile Organic Constituents							
1,1,1-Trichloroethane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
1,1,2,2-Tetrachloroethane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 UJ
1,1,2-Trichloroethane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
1,1-Dichloroethane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
1,1-Dichloroethene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
1,2-Dibromoethane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
1,2-Dichloroethane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
1,2-Dichloroethene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
1,2-Dichloropropane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
2-Butanone	UG/KG	N/A	N/A	N/A	N/A	N/A	12 U
2-Hexanone	UG/KG	N/A	N/A	N/A	N/A	N/A	12 U
4-Methyl-2-pentanone	UG/KG	N/A	N/A	N/A	N/A	N/A	12 U
Acetone	UG/KG	N/A	N/A	N/A	N/A	N/A	8.1 J
Benzene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Bromochloromethane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Bromodichloromethane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Bromoform	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Bromomethane	UG/KG	N/A	N/A	N/A	N/A	N/A	12 U
Carbon disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Carbon tetrachloride	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Chlorobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U

Analytical Results for Load Line 2 Potential Disposal Areas

Location		LL2	LL2	LL2	LL2	LL2	LL2
Station		DB8-01	DB8-01	DB8-02	DB22-01	DB22-02	DB22-03
Customer ID		LL2so-01-0737-SO	LL2so-01-0743-SO	LL2so-02-0738-SO	LL2so-01-0739-SO	LL2so-02-0740-SO	LL2so-03-0741-SO
Date		11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999	11/04/1999
Depth (ft)		0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
Field Type		Grab	Field Duplicate	Grab	Grab	Grab	Grab
Analysis	Units						
Chloroethane	UG/KG	N/A	N/A	N/A	N/A	N/A	12 U
Chloroform	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Chloromethane	UG/KG	N/A	N/A	N/A	N/A	N/A	12 U
Dibromochloromethane	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Dimethylbenzene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Ethylbenzene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Methylene chloride	UG/KG	N/A	N/A	N/A	N/A	N/A	9.8 U
Styrene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Tetrachloroethene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Toluene	UG/KG	N/A	N/A	N/A	N/A	N/A	1.8 J
Trichloroethene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
Vinyl chloride	UG/KG	N/A	N/A	N/A	N/A	N/A	12 U
cis-1,3-Dichloropropene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U
trans-1,3-Dichloropropene	UG/KG	N/A	N/A	N/A	N/A	N/A	6 U

*Indicates that the result was above facility-wide background criteria.
U - Not detected at indicated reporting limit.
J - Estimated value less than reporting limit.
= Detected above reporting limit at the indicated value.
R -Rejected value as a result of validation.
N/A = Not analyzed.