

APPENDIX B

SEDIMENT SAMPLING LOGS

Sediment Sampling Logs

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Sediment Sampling Logs

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HTRW DRILLING LOG

DISTRICT

LOUISVILLE

HOLE NUMBER

LL1-046

1. COMPANY NAME

SAIC

2. DRILL SUBCONTRACTOR

NIA

SHEET SHEETS

1 OF 1

3. PROJECT

RVAAP LL1 PHASE II RI

4. LOCATION

PHASE I

5. NAME OF DRILLER

6. MANUFACTURERS DESIGNATION OF DRILL

NIA

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT

SS BEWL

SS SPOON

8. HOLE LOCATION

9. SURFACE ELEVATION

NIA

10. DATE STARTED

17 SEPT 04

11. DATE COMPLETED

17 SEPT 04

12. OVERBURDEN THICKNESS

NIA

15. DEPTH GROUNDWATER ENCOUNTERED

NIA

13. DEPTH DRILLED INTO ROCK

N/A

16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

NIA

14. TOTAL DEPTH OF HOLE

0-0.5 FT

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

NO WATER IN DITCH, WATER AT BOTTOM OF HOLE

18. GEOTECHNICAL SAMPLES

DISTURBED

GRAIN SIZE

UNDISTURBED

NIA

19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS

X

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

22. DISPOSITION OF HOLE

TAC

EXPLOSIVES

PROPPELLANTS

NIA

NIA

NIA

BACKFILLED

MONITORING WELL

OTHER (SPECIFY)

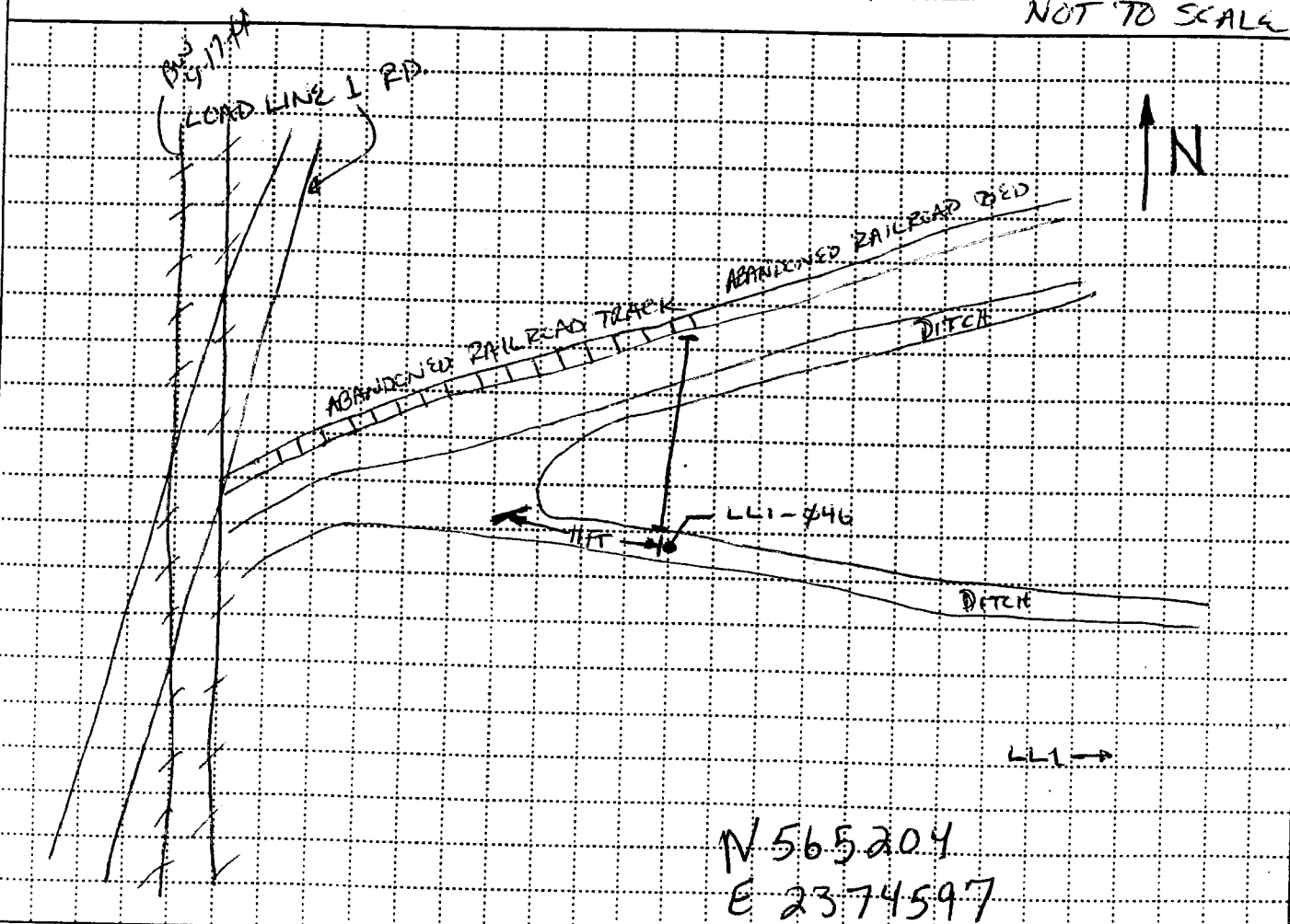
23. SIGNATURE OF INSPECTOR

B. Williams

LOCATION SKETCH/COMMENTS

SCALE:

NOT TO SCALE



PROJECT

RVAAP LL1 PHASE II RI

B-3

HOLE NO.

LL1-046

HTRW DRILLING LOG

1. COMPANY NAME

SAIC

(INSTR)

Louisville
NA

10. HOLE NUMBER

LI-047

99

2. DRILL SUBCONTRACTOR

3. PROJECT

RVAAP Loadline Phase II RT

4. LOCATION

Phase I

5. NAME OF DRILLER

NA

6. MANUFACTURERS DESIGNATION OF DRILL

NA

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT

55 Bowl

8. HOLE LOCATION

Where LI-047 should have been located.

9. SURFACE ELEVATION

NA

10. DATE STARTED

26 SEPT 00

11. DATE COMPLETED

26 SEPT 00

12. OVERBURDEN THICKNESS

NA

13. DEPTH GROUNDWATER ENCOUNTERED

NA

14. 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)

Depth of water = 1.5 inches

15. GEOTECHNICAL SAMPLES

DISTURBED

TOC Grainsize

UNDISTURBED

19. TOTAL NUMBER OF CORE BOXES

20. SAMPLES FOR CHEMICAL ANALYSIS

VOC

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

22. DISPOSITION OF HOLE

NA

BACKFILLED

MONITORING WELL

Explosives

Propellants

OTHER (SPECIFY)

23. SIGNATURE OF INSPECTOR

LOCATION SKETCH/COMMENTS

SCALE:

NOT TO SCALE

Yankee Charge

N564927

E2376851

3/9/01 vjb

LI-047

STATION
LI-346 RD

Contingency
Sample
for 047

LI-070

TO
LI-346

PROJECT

RVAAP LOADLINE I PHASE II

HOLE NO

Contingency for
LI-047

ENG FORM 5056-R, AUG 94

B-4

(Proponent CECW-EG)

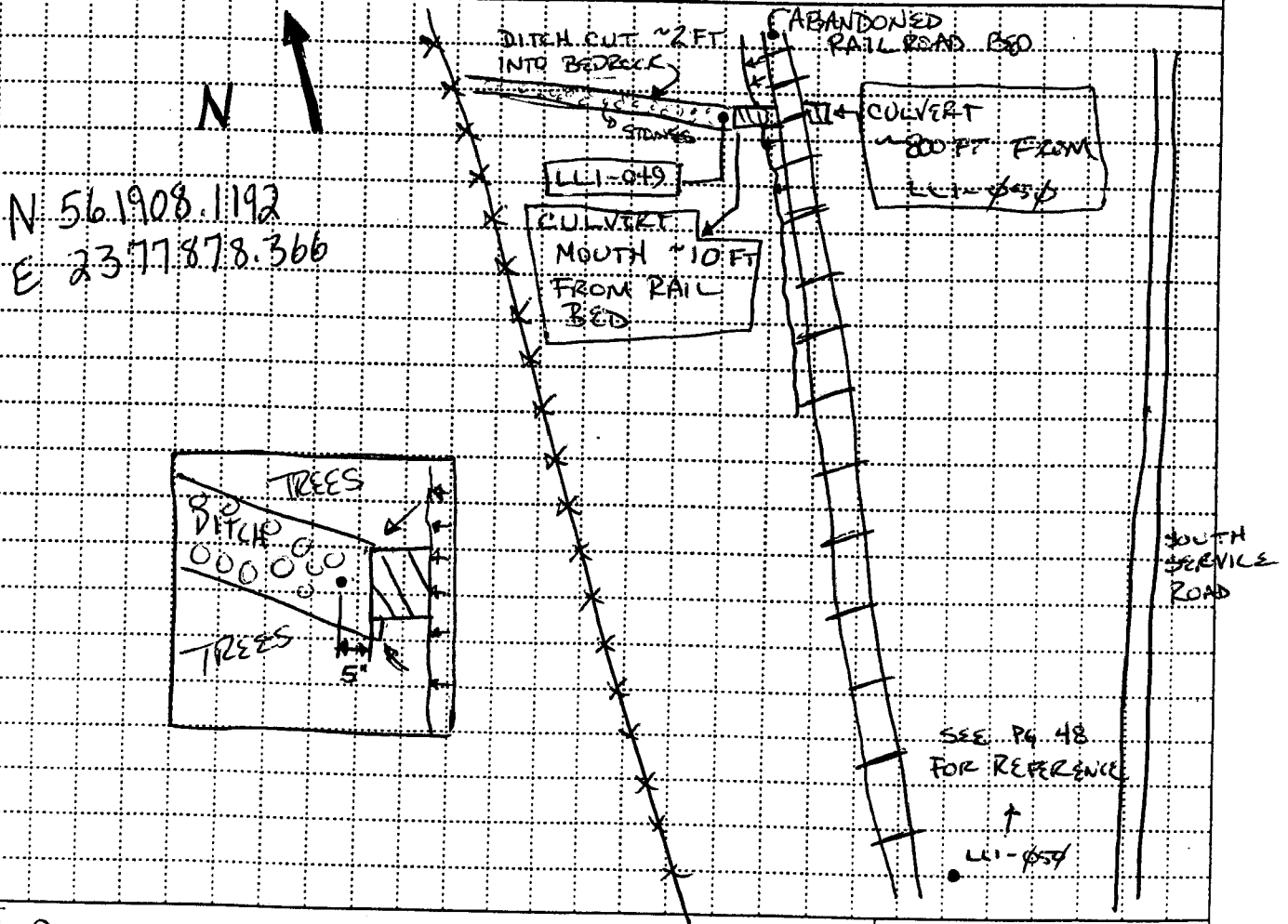
vjb
3/5/01

HTRW DRILLING LOG		DISTRICT		LOUISVILLE		HOLE NUMBER		LLI-049	
1. COMPANY NAME		SAIC		2. DRILL SUBCONTRACTOR		NA		SHEET 1 OF 1	
3. PROJECT				4. LOCATION					
RVAAP Load Line I Phase II RI				RVAAP					
5. NAME OF DRILLER				6. MANUFACTURERS DESIGNATION OF DRILL					
NA									
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT				8. HOLE LOCATION					
SS Bowl & Spoon				PHASE I					
				9. SURFACE ELEVATION					
				10. DATE STARTED					
				16 SEPT 00					
				11. DATE COMPLETED					
				16 SEPT 00					
12. OVERBURDEN THICKNESS				13. DEPTH GROUNDWATER ENCOUNTERED					
NA				NA					
13. DEPTH (DRILLED) INTO ROCK				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED					
NA				NA					
14. TOTAL DEPTH OF HOLE				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)					
NA				NA					
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES			
		Grainsize, TC				NA			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		OTHER (SPECIFY)	
				X		E&P, PROP.			
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY	
		w/ bentonite						NA	
23. SIGNATURE OF INSPECTOR									
Mark C. Clough									

LOCATION SKETCH/COMMENTS:

SCALE:

NOT TO SCALE

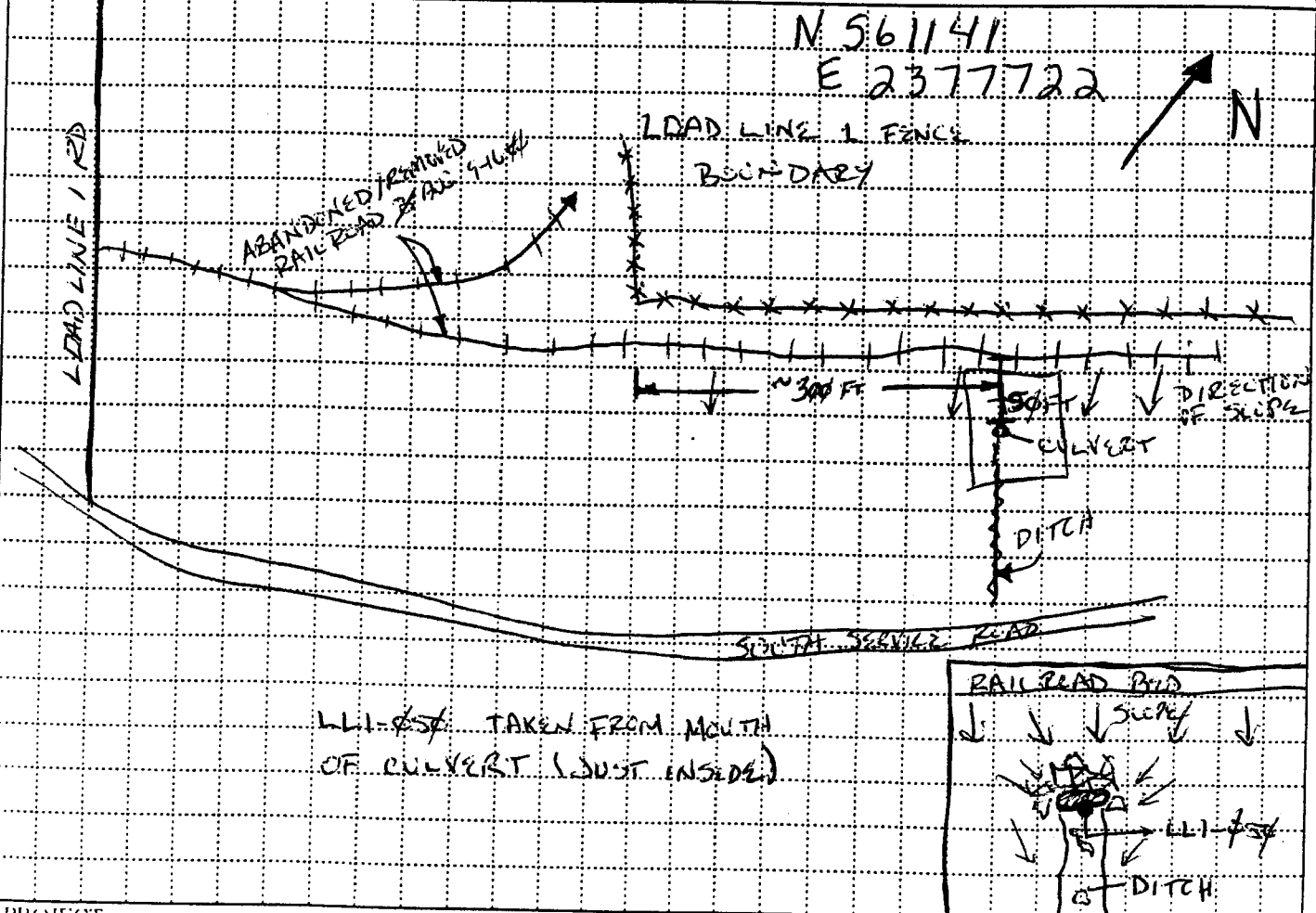


PROJECT		RVAAP Load Line I PHASE II		HOLE NO.		LLI-049	
ENG FORM 5056-R, AUG 94				B-6		(Proponent CECW-EG)	

48

HTRW DRILLING LOG		DISTRICT LOUISVILLE		HOLE NUMBER LLI-050	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT RUAAP LOAD LINE I PHASE II RI			4. LOCATION PHASE I		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			8. HOLE LOCATION		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 16 SEPT 00		11. DATE COMPLETED 16 SEPT 00
12. OVERBURDEN THICKNESS NA			13. DEPTH GROUNDWATER ENCOUNTERED NA		
14. DEPTH DRILLED INTO ROCK NA			15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
16. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) DEPTH OF H₂O IN CULVERT = 1.1 INCH (FAN) (POOLED) IN NO WATER DITCH		
18. GEOTECHNICAL SAMPLES		DISTURBED TOC, Grain Size		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
		VOC		METALS	
				OTHER (SPECIFY) Exp. Propellants	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
		23. SIGNATURE OF INSPECTOR Yusef Clough			

LOCATION SKETCH/COMMENTS: SCALE: **NOT TO SCALE**

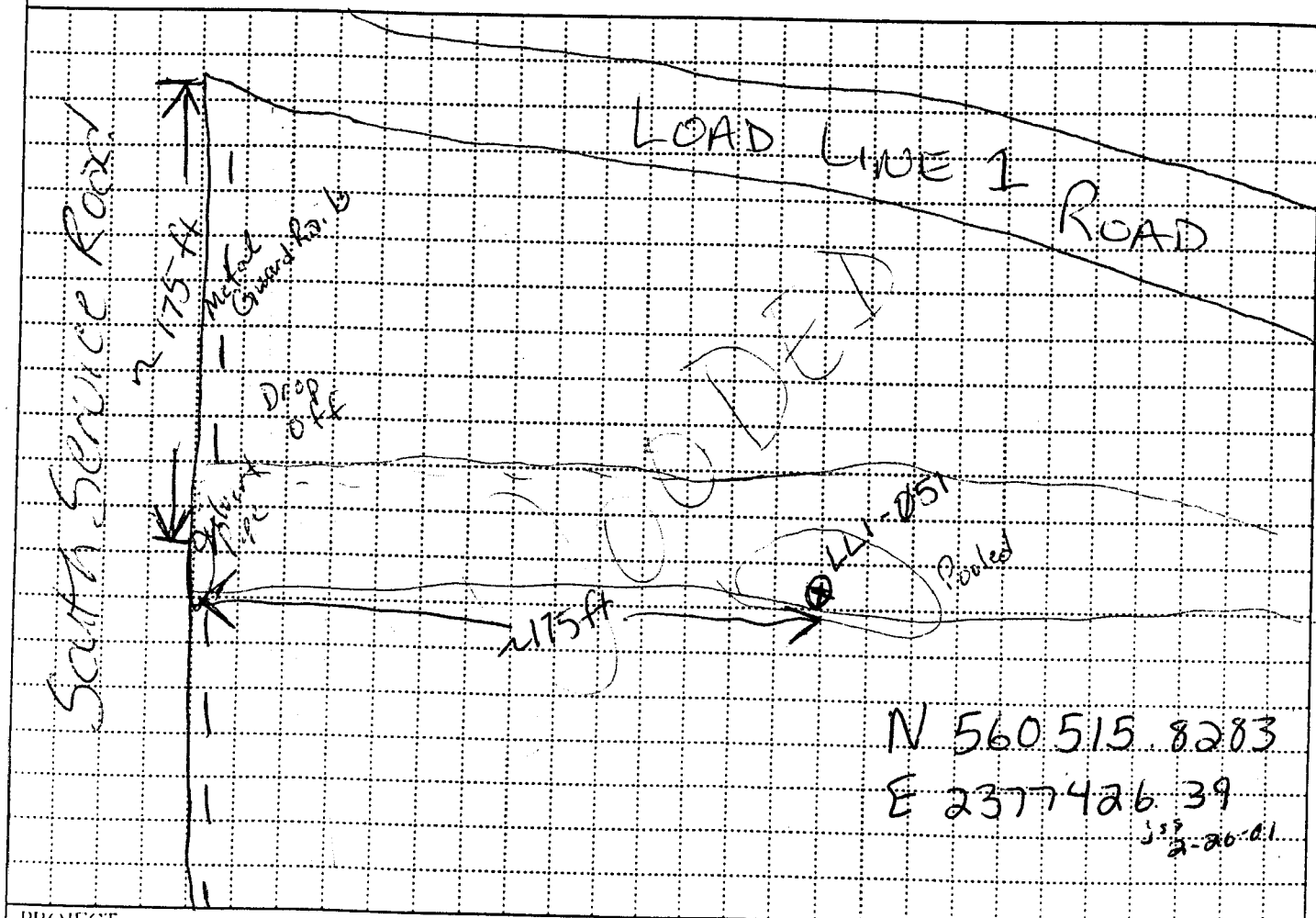


PROJECT RUAAP LOAD LINE I PHASE II RI		HOLE NO. LLI-050
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HTRW DRILLING LOG		DISTRICT	HOLE NUMBER
1 COMPANY NAME SAIC		LOUISVILLE	LLI-051
2 DRILL SUBCONTRACTOR N/A			SHEET SHEETS OF
3 PROJECT RVAAP RLI PHASE II RI		4 LOCATION PHASE 1 - NW of S. SERVICE RD, LULEB	
5 NAME OF DRILLER N/A		6 MANUFACTURER'S DESIGNATION OF DRILL N/A	
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS BOWL SS SPOON		8 HOLE LOCATION	
		9 SURFACE ELEVATION N/A	
		10. DATE STARTED 16 SEPT 04	11. DATE COMPLETED 16 SEPT 04
12 OVERBURDEN THICKNESS N/A		13. DEPTH GROUNDWATER ENCOUNTERED N/A	
13 DEPTH (DRILLED) INTO ROCK N/A		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
14 TOTAL DEPTH OF HOLE 0 - 0.5 FT		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) DEPTH OF POOLED WATER = 3 INCHES	
15 GEOTECHNICAL SAMPLES	DISTURBED GRAIN SIZE	UNDISTURBED N/A	19. TOTAL NUMBER OF CORE BOXES N/A
20. SAMPLES FOR CHEMICAL ANALYSIS	TOC	EXPLOSIVES	OTHER (SPECIFY) N/A
21. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY) N/A
	COLLAPSES, NO	N/A	23. SIGNATURE OF INSPECTOR B. J. J. L.

LOCATION SKETCH/COMMENTS :

SCALE:



N 560515.8283
E 2377426.39

359
2-20-01

PROJECT RVAAP LLI PHASE II RI	B-8	HOLE NO. LLI-051
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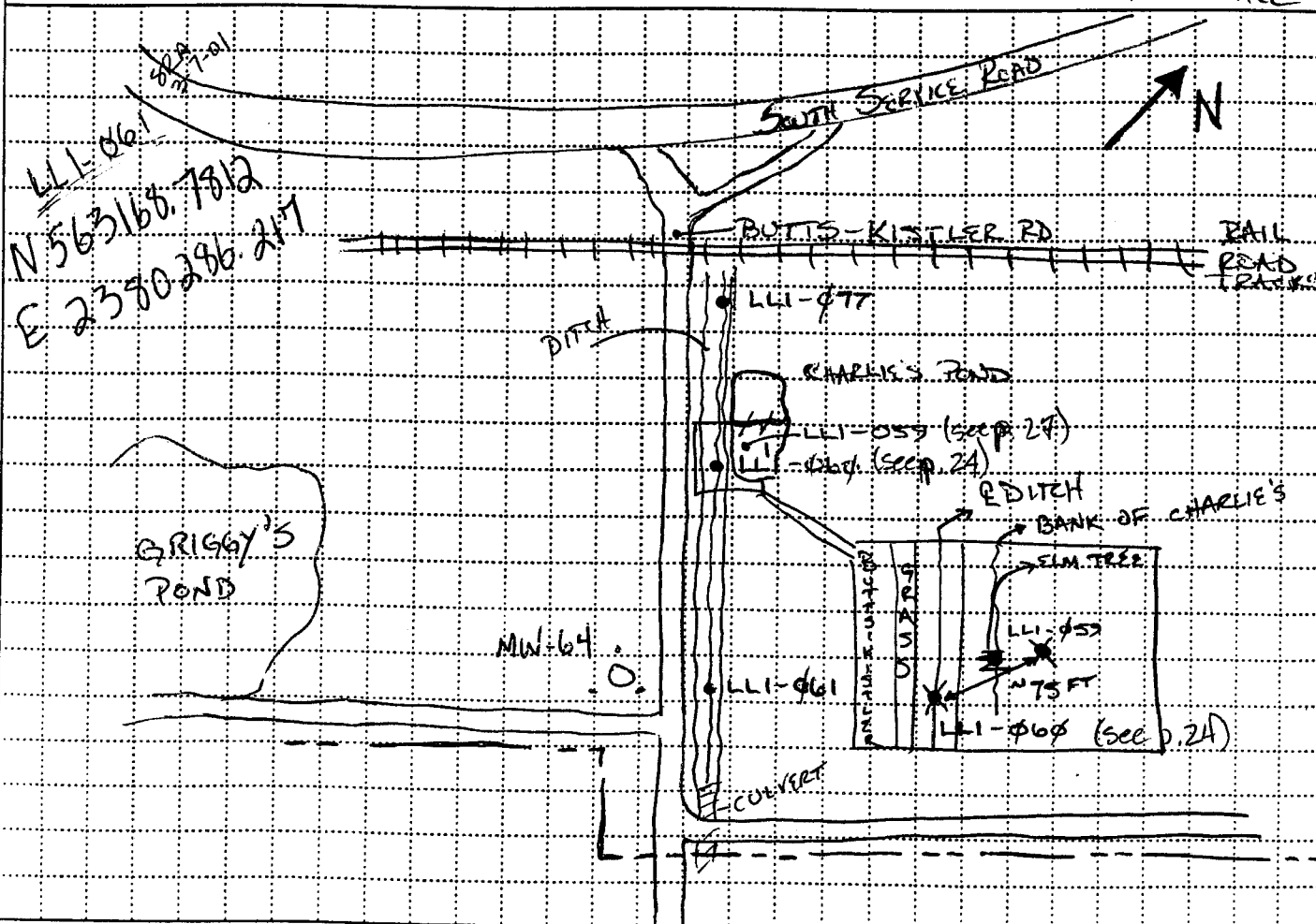
24

HTRW DRILLING LOG		DISTRICT LOUISVILLE		HOLE NUMBER LLI-060	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR N/A		SHEET 1 OF 1	
3. PROJECT RVAAP LLI PHASE II RI		4. LOCATION DITCHES FROM CHARLIE'S FOND			
5. NAME OF DRILLER N/A		6. MANUFACTURERS DESIGNATION OF DRILL N/A			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS SPECN SS BOWL		8. HOLE LOCATION			
		9. SURFACE ELEVATION N/A			
		10. DATE STARTED 15 SEPT 04		11. DATE COMPLETED 15 SEPT 04	
12. OVERBURDEN THICKNESS N/A		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 0.5 FT		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NO WATER IN DITCH			
18. GEOTECHNICAL SAMPLES		DISTURBED TOC GRAVIMETER		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES N/A		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY N/A	
		VOC		METALS	
		OTHER (SPECIFY) TNT/ROX		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED BENTONITE		23. SIGNATURE OF INSPECTOR Beau Williams (vjb)	
		MONITORING WELL		OTHER (SPECIFY)	
LOCATION SKETCH/COMMENTS : SCALE: N/A SEE PAGE 21 IN LOGBOOK 5 "SEDIMENT & SURFACE WATER" HOLE NUMBER LLI-061 N 563151.7271 E 2379683.627					
PROJECT RVAAP LLI PHASE II RI				HOLE NO. LLI-060	

HTRW DRILLING LOG		DISTRICT LOUISVILLE		HOLE NUMBER LLI-061	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR N/A		SHEET SHEETS 1 OF	
3. PROJECT BUAAP Load Line I Phase II RI		4. LOCATION LLI - SEDIMENT LOCATIONS CHARLIE'S ROAD			
5. NAME OF DRILLER		6. MANUFACTURERS DESIGNATION OF DRILL N/A			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS TRWd SS Bowl		8. HOLE LOCATION			
		9. SURFACE ELEVATION N/A			
		10. DATE STARTED 15 SEPT 06		11. DATE COMPLETED 15 SEPT 06	
12. OVERBURDEN THICKNESS N/A		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 N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NO WATER IN DITCH.			
18. GEOTECHNICAL SAMPLES		DISTURBED TOC, GRAINSIZE		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		OTHER (SPECIFY)	
		MONITORING WELL		OTHER (SPECIFY)	
				23. SIGNATURE OF INSPECTOR Beau Williams (yjb) 11-8-06	
				21. TOTAL CORE RECOVERY % N/A	

LOCATION SKETCH/COMMENTS:

SCALE: NOT TO SCALE



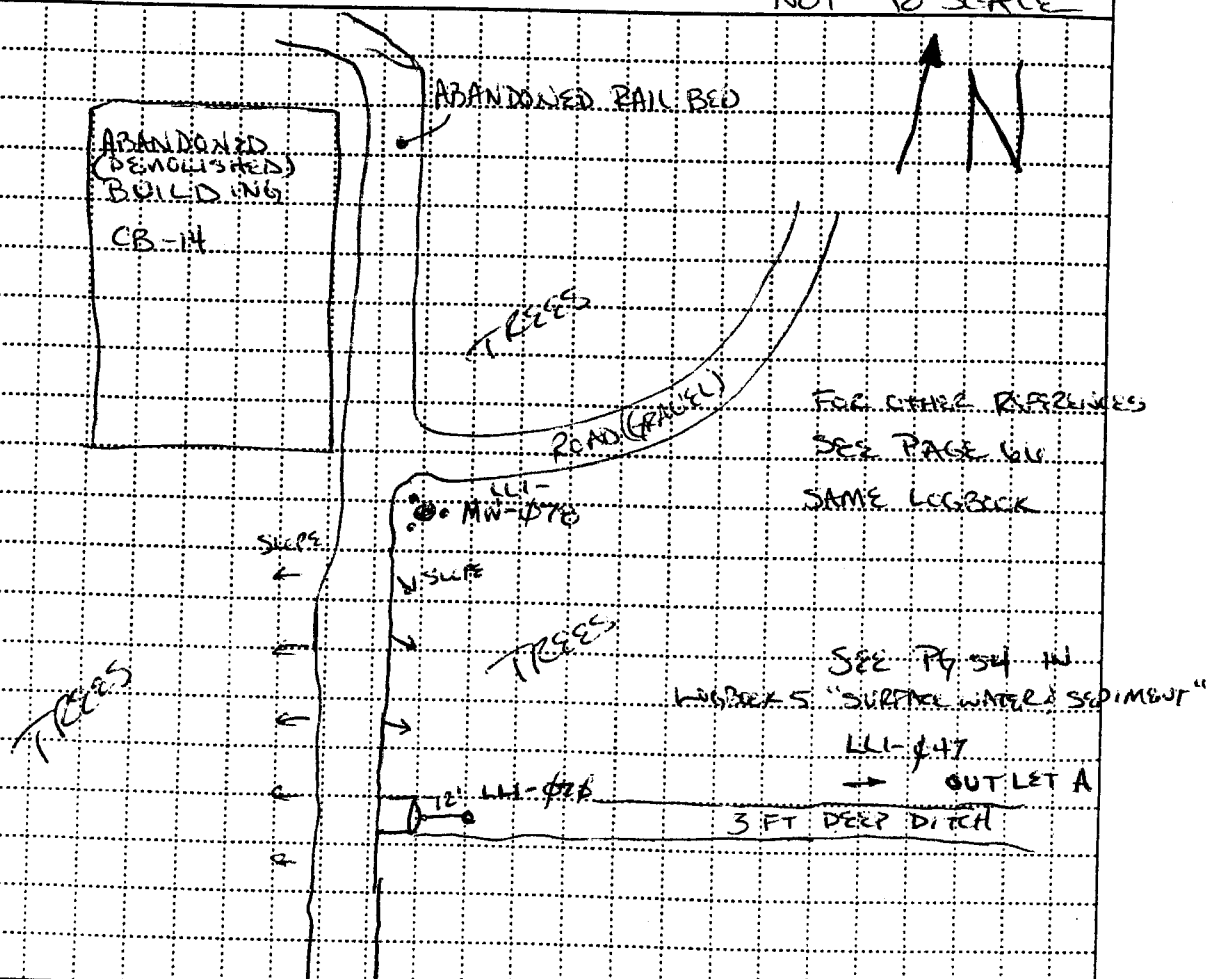
PROJECT BUAAP LLI PHASE II RI		HOLE NO. LLI-061	
B-10		(Proponent: C/CW-E/G)	

63

LOCATION SKETCH/COMMENTS

SCALE:

NOT TO SCALE



PROJECT	21AAP LLI PHASE II PI	B-11	HOLE NO.	LLI-570
ENG FORM 5056, 2-7-63, 0-1				

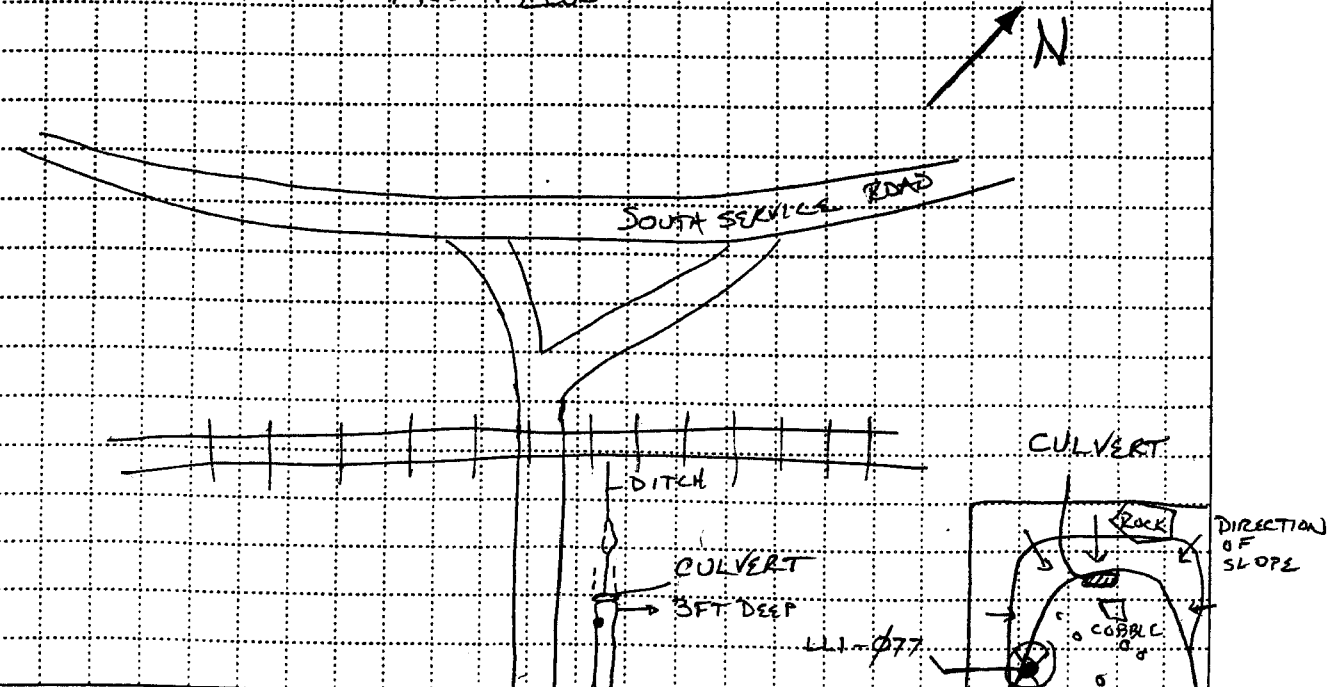
HTRW DRILLING LOG		INSTRUCT LOUISVILLE		HOLE NUMBER LL1-Ø77	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR N/A		SHEET 1 OF 1	
3. PROJECT RVAAP PHASE II RI (LOAD LINE 1)		4. LOCATION DITCHES TO CHARLIE'S POND			
5. NAME OF DRILLER N/A		6. MANUFACTURERS DESIGNATION OF DRILL N/A			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS-SPOON SS-BOWL		8. HOLE LOCATION N/A			
		9. SURFACE ELEVATION N/A			
		10. DATE STARTED 15 SEPT 00		11. DATE COMPLETED 15 SEPT 00	
12. OVERBURDEN THICKNESS N/A		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 0.5 FT		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) DEPTH OF WATER WHERE EXISTENT = 0.5 INCH			
18. GEOTECHNICAL SAMPLES		DISTURBED TOC; GRAIN SIZE		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		☒ VOC		☒ METALS	
		OTHER (SPECIFY) SVOCS, Est/PBS		OTHER (SPECIFY) Expl. Parameters, CN	
22. DISPOSITION OF HOLE		☒ BACKFILLED		☒ MONITORING WELL	
		N/A		Collapsed In	
				23. SIGNATURE OF INSPECTOR E. T. M. H.	
21. TOTAL CORE RECOVERY N/A					

LOCATION SKETCH/COMMENTS :

Naturally under H₂O

SCALE: NOT TO SCALE

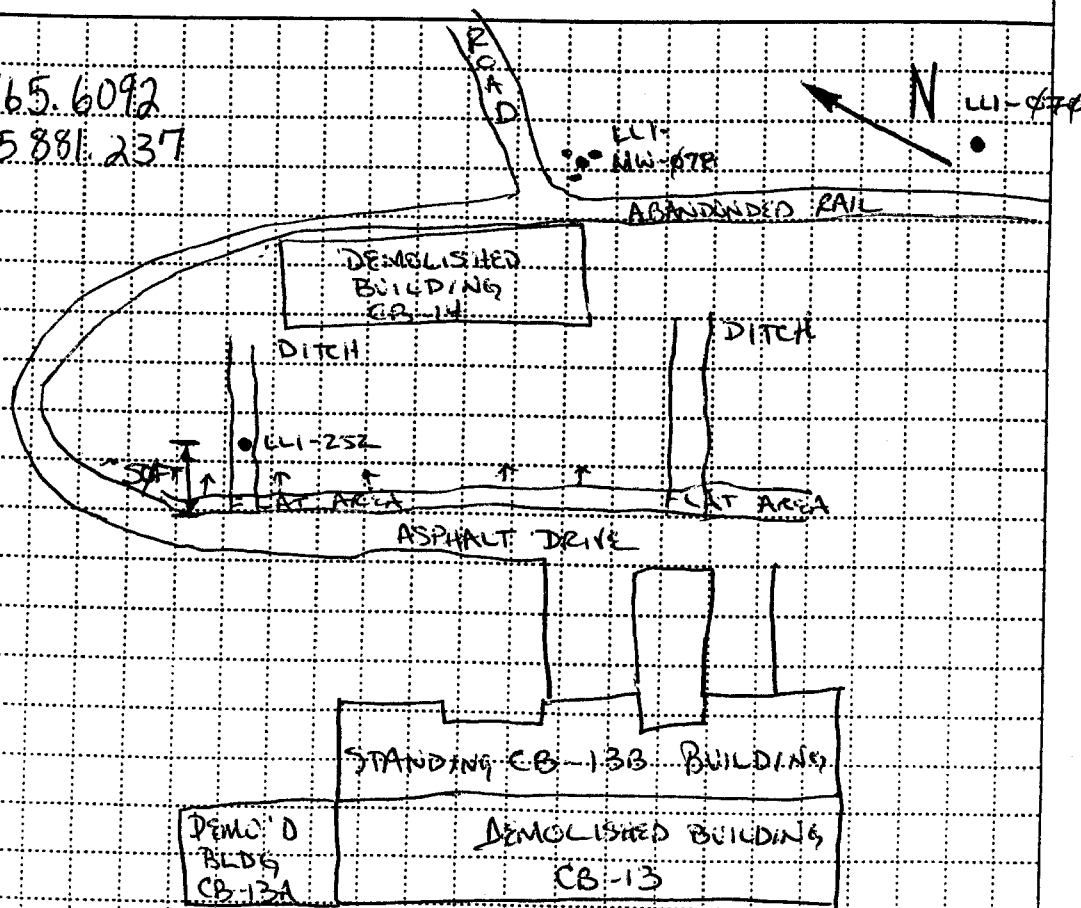
N56 3143.4914
E 2379332.311 Sec page 21 in Logbook 5
"SEDIMENT AND SURFACE WATER" HOLE
NUMBER LL1-Ø77
AND BELOW



PROJECT RVAAP LOAD LINE 1 PHASE II RI		HOLE NO. LL1-Ø77
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66

SCALE:



HTRW DRILLING LOG			DISTRICT		HOLE NUMBER	
1 COMPANY NAME SAIC			2 DRILL SUBCONTRACTOR N/A		HOLE NUMBER LLI-286	
3 PROJECT RVAAP LLI PHASE II RI			4 LOCATION DITCHES TO CHARLIE'S POND			
5 NAME OF DRILLER N/A			6 MANUFACTURERS DESIGNATION OF DRILL N/A			
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS Spoon SS Bowl			8 HOLE LOCATION N/A			
			9 SURFACE ELEVATION N/A			
			10 DATE STARTED 16 SEPT 06		11 DATE COMPLETED 16 SEPT 06	
12 OVERBURDEN THICKNESS N/A			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 8-0.5 FT			17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NO WATER IN DITCH OR HOLE			
18 GEOTECHNICAL SAMPLES		DISTURBED	UNDISTURBED		19 TOTAL NUMBER OF CORE BOXES	
		GRAIN SIZE			N/A	
20 SAMPLES FOR CHEMICAL ANALYSIS		TOC	EXPLOSIVES	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)
		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)		
22 DISPOSITION OF HOLE		BENTONITE	N/A	N/A	21 TOTAL CORE RECOVERY N/A	
23 SIGNATURE OF INSPECTOR B. Williams						
LOCATION SKETCH/COMMENTS : SCALE:						
SEE PAGE 33 IN LOGBOOK 5 "SURFACE WATER SEDIMENT", HOLE NUMBER LLI-410. 289 yb 12/7/00 N 563103.287 E 2378544.548						
PROJECT RVAAP LLI PHAS			B-15		HOLE NO. LLI-286	

HTRW DRILLING LOG		DISTRICT LOUISVILLE		HOLE NUMBER LLI-287	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR N/A		SHEET 1 OF 1	
3. PROJECT EVAAP LLI PHASE II RI		4. LOCATION DITCHES TO CHARLES POND			
5. NAME OF DRILLER N/A		6. MANUFACTURERS DESIGNATION OF DRILL N/A			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS SPIN SS BOWL		8. HOLE LOCATION			
		9. SURFACE ELEVATION N/A			
		10. DATE STARTED 16 SEPT 08		11. DATE COMPLETED 16 SEPT 08	
12. OVERBURDEN THICKNESS N/A		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 0-0.5 FT		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)			
18. GEOTECHNICAL SAMPLES		DISTURBED GRAIN SIZE		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		TOC		21. TOTAL CORE RECOVERY N/A	
		EXPLOSIVES		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		OTHER (SPECIFY)	
		BENTONITE		N/A	
		N/A		N/A	
LOCATION SKETCH/COMMENTS:		19. TOTAL NUMBER OF CORE BOXES			
		SCALE: N OT TO SCALE			
SEE PAGE 33 IN LOGBOOK 5 "SURFACE WATER & SEDIMENT", HOLE NUMBER LLI-287 289 vjb 12/16/00 N 563104.06 E 2378739.686					
PROJECT EVAAP LLI PHASE II RI		B-16		HOLE NO. LLI-287	

HTRW DRILLING LOG		DISTRICT		HOLE NUMBER	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR LOUISVILLE		HOLE NUMBER LLI-289	
3. PROJECT RVAAP LLI PHASE II RI		4. LOCATION PHASE I (DITCHES TO CHARLIE'S POND)		SHEET SHEETS 1 OF 1	
5. NAME OF DRILLER N/A		6. MANUFACTURERS DESIGNATION OF DRILL N/A		DATE 9-16-94	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS BOWL SS 3/8" IN		8. HOLE LOCATION N/A		9. SURFACE ELEVATION N/A	
12. OVERBURDEN THICKNESS N/A		10. DATE STARTED 16 SEPT 94		11. DATE COMPLETED 16 SEPT 94	
13. DEPTH DRILLED INTO ROCK N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
14. TOTAL DEPTH OF HOLE N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NO WATER IN DITCH OR HOLE		19. TOTAL NUMBER OF CORE BOXES N/A	
18. GEOTECHNICAL SAMPLES		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY	
DISTURBED TOC GRAINSIZE UNDISTURBED (METALS) EXPLOSIVES OTHER (SPECIFY)		BACKFILLED BENTONITE OTHER (SPECIFY) OTHER (SPECIFY)		OTHER (SPECIFY) OTHER (SPECIFY)	
22. DISPOSITION OF HOLE BW 9-16-94		23. SIGNATURE OF DRILLER B.W. 11		21. TOTAL CORE RECOVERY N/A	
LOCATION SKETCH/COMMENTS: SCALE: NOT TO SCALE					
PROJECT RVAAP LLI PHASE II RI					
B-18		HOLE NO. 289 LLI-289 BW 9-16-94			

HTRW DRILLING LOG

DISTRICT

Louisville

HOLE NUMBER

LLI-295

1. COMPANY NAME

SAIC

2. DRILL SUBCONTRACTOR

NA

SHEET

SHEETS

1 OF 1

3. PROJECT

RVAAP LOADLINE I PHASE II RI

4. LOCATION

RVAAP

5. NAME OF DRILLER

6. MANUFACTURERS DESIGNATION OF DRILL

7. SIZES AND TYPES OF DRILLING
AND SAMPLING EQUIPMENTSS Eckman Sediment Sampler
SS Bowl and Spoon

8. HOLE LOCATION

MH-208

9. SURFACE ELEVATION

NA

10. DATE STARTED

9/18/04

11. DATE COMPLETED

9/18/04

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

NA

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

NA

18. GEOTECHNICAL SAMPLES

None

DISTURBED

UNDISTURBED

19. TOTAL NUMBER OF CORE BOXES

NA

20. SAMPLES FOR CHEMICAL ANALYSIS

VOC

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

NA

22. DISPOSITION OF HOLE

NA

BACKFILLED

MONITORING WELL

TOC, SUOCS

OTHER (SPECIFY)

Pest, PCB, EPC, Prop

23. SIGNATURE OF INSPECTOR

Yasir Clough

LOCATION SKETCH/COMMENTS

SCALE:

Not to Scale

MW-81

manhole
not sampledMH-208
(LLI-295) SEA 3/1/01N 563433.6887
E 2376655.42

N →

PROJECT

RVAAP LOAD LINE I PHASE II

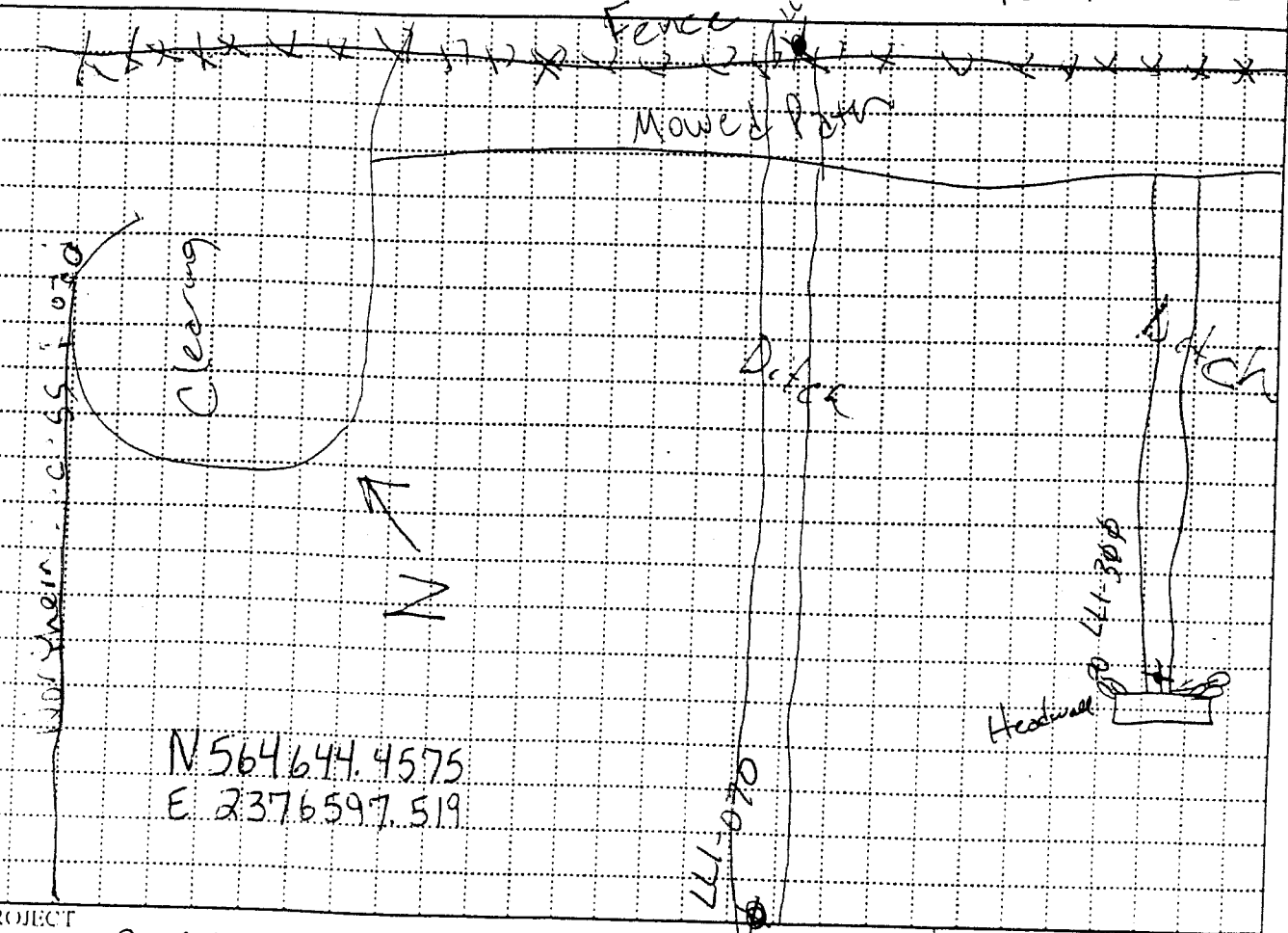
HOLE NO.

LLI-295

HTRW DRILLING LOG		INSTRUCT Louisville		HOLE NUMBER LLI-300	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT RVAAP Load Line 1 Phase II RT		4. LOCATION Headwall			
5. NAME OF DRILLER NA		6. MANUFACTURER'S DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS Bowl and Spoon		8. HOLE LOCATION Load Line 1			
		9. SURFACE ELEVATION NA			
12. OVERBURDEN THICKNESS NA		10. DATE STARTED 25 SEPT 00		11. DATE COMPLETED 25 SEPT 00	
13. DEPTH DRILLED INTO ROCK NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE 0.5 ft		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
15. GEOTECHNICAL SAMPLES		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) DEPTH OF WATER 2 1/2 inches			
20. SAMPLES FOR CHEMICAL ANALYSIS		19. TOTAL NUMBER OF CORE BOXES NA			
21. TOTAL CORE RECOVERY					
22. DISPOSITION OF HOLE NA		23. SIGNATURE OF INSPECTOR Martha Clough (vib) 11-8-00			

LOCATION SKETCH/COMMENTS:

SCALE: **Not to Scale**



PROJECT

RVAAP LOAD LINE 1 PHASE II

HOLE NO

LLI-300

HTRW DRILLING LOG

PROJECT

LOUISVILLE

HOLE NUMBER

B-21 LLI-301

1. COMPANY NAME

SAIC

2. DRILL SUBCONTRACTOR

N/A

SHEET SHEETS

1 OF 1

3. PROJECT

RVAAP LLI PHASE II RE

4. LOCATION

SANITARY SEWERS

5. NAME OF DRILLER

N/A

6. MANUFACTURER'S DESIGNATION OF DRILL

N/A

7. SIZES AND TYPES OF DRILLING
AND SAMPLING EQUIPMENT

SEDIMENT SS POND
(ECKMAN)
SS BOWL
3/2 SPOON
SW PLASTIC BAILER

8. HOLE LOCATION

N/A

9. SURFACE ELEVATION

N/A

10. DATE STARTED

25 SEPT 04

11. DATE COMPLETED

25 SEPT 04

12. OVERBURDEN THICKNESS

N/A

13. DEPTH GROUNDWATER ENCOUNTERED

N/A

13. (DEPTH DRILLED INTO ROCK)

N/A

14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

N/A

14. TOTAL DEPTH OF HOLE

6.2 FT

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

WATER IN SEWER MANHOLE 1.5 FT

18. GEOTECHNICAL SAMPLES

DISTURBED

N/A

UNDISTURBED

N/A

19. TOTAL NUMBER OF CORE BOXES

N/A

20. SAMPLES FOR CHEMICAL ANALYSIS

X

METALS

OTHER (SPECIFY)

N/A

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

N/A

22. DISPOSITION OF HOLE

EXPLOSIVES

PROPELLANT

N/A

N/A

N/A

BACKFILLED

MONITORING WELL

N/A

N/A

N/A

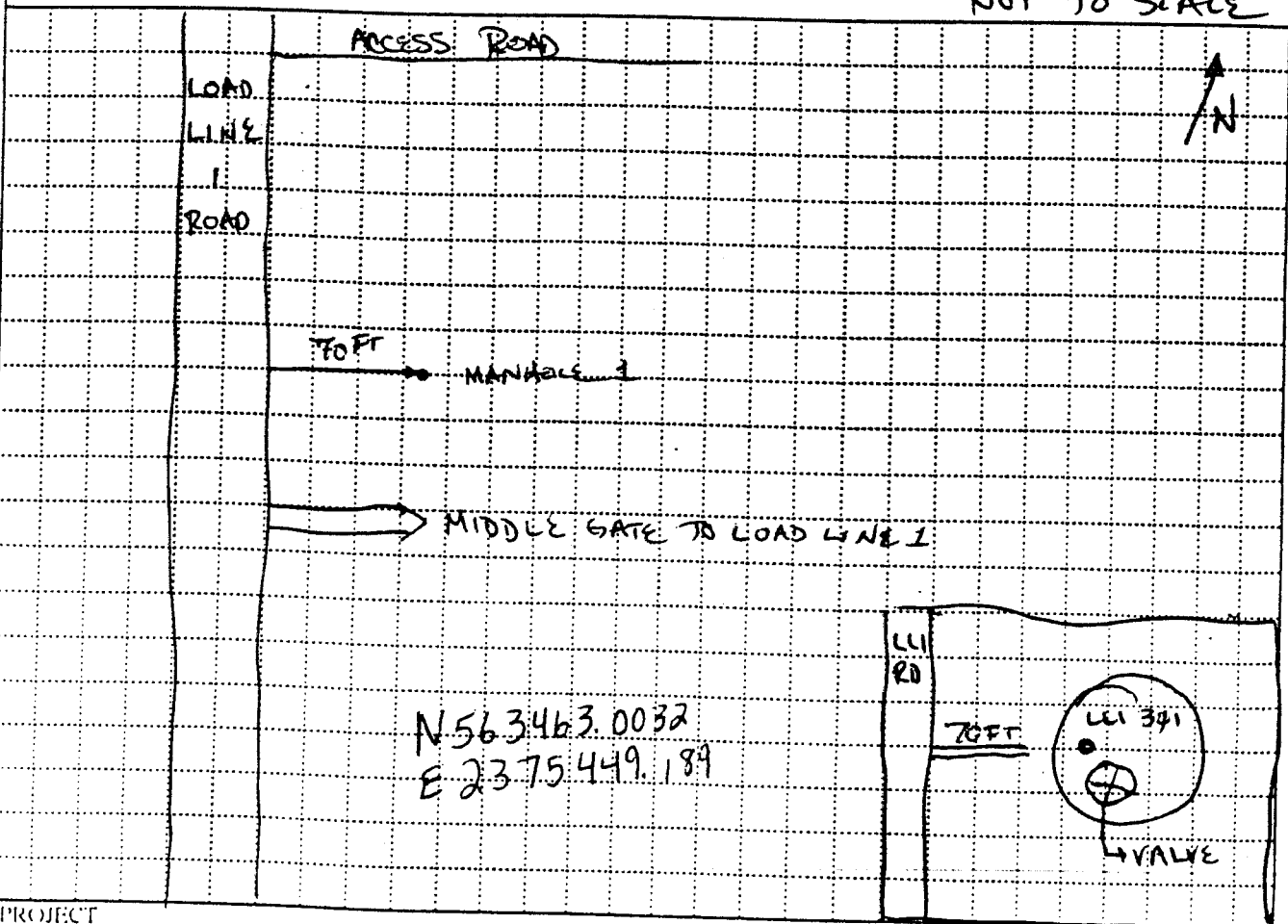
23. SIGNATURE OF INSPECTOR

B. Williams

LOCATION SKETCH/COMMENTS:

SCALE:

NOT TO SCALE



PROJECT

RVAAP LLI PHASE II RE B-21

HOLE NO

LLI-301

ENG. FORM 5056-R, AUG 94

(Proprietor: CEC W-EG)

HTRW DRILLING LOG

DISTRICT

LOUISVILLE

LLI-304

HOLE NUMBER

1. COMPANY NAME

SACC

2. DRILL SUBCONTRACTOR

N/A

BW

MH

9-18-94

SHEET SHEETS

1 OF 1

3. PROJECT

RJAAP LLI PHASE II RT

4. LOCATION

5. NAME OF DRILLER

N/A

6. MANUFACTURER'S DESIGNATION OF DRILL

N/A

7. SIZES AND TYPES OF DRILLING
AND SAMPLING EQUIPMENT

SS SPEED

SS 800X

8. HOLE LOCATION

N/A

9. SURFACE ELEVATION

N/A

10. DATE STARTED

18 SEPT 94

11. DATE COMPLETED

18 SEPT 94

12. OVERBURDEN THICKNESS

N/A

13. DEPTH GROUNDWATER ENCOUNTERED

N/A

14. DEPTH DRILLED INTO ROCK

N/A

16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

N/A

14. TOTAL DEPTH OF HOLE

0-0.5 FT

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

NO WATER IN DITCH OR HOLE

18. GEOTECHNICAL SAMPLES

DISTURBED

UNDISTURBED

19. TOTAL NUMBER OF CORE BOXES

N/A

20. SAMPLES FOR CHEMICAL ANALYSIS

GRAIN SIZES

POSS

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

N/A

22. DISPOSITION OF HOLE

TOC

SVOE PCB

CYANIDE

EXPLOSIVES

PROPELLANTS PESTICIDES

BACKFILLED

MONITORING WELL

OTHER (SPECIFY)

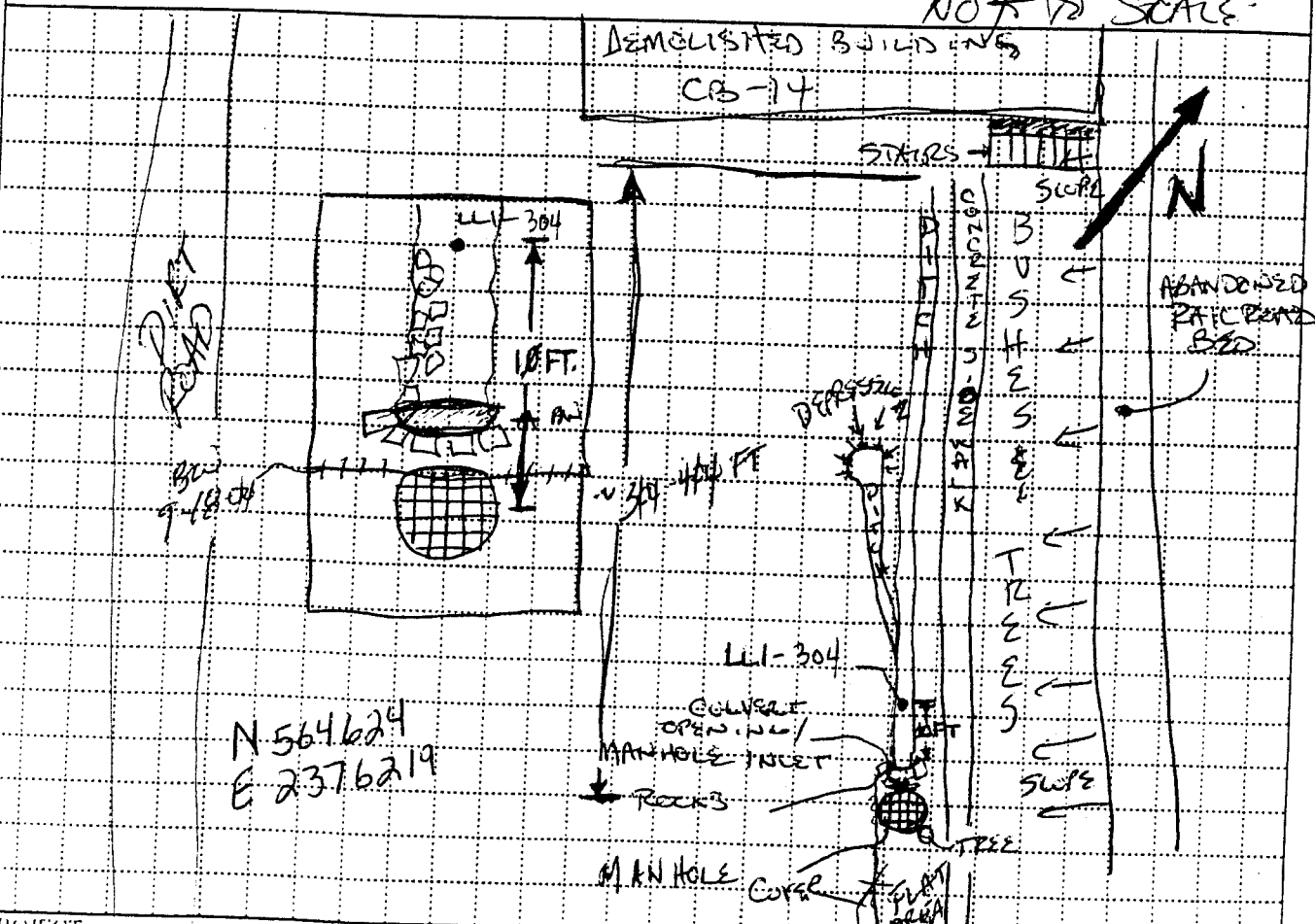
23. SIGNATURE OF INSPECTOR

B. Williams

LOCATION SKETCH/COMMENTS

SCALE:

NOT TO SCALE



PROJECT

RJAAP LLI PHASE II RT B-22

HOLE NO.

LLI-304

ENG FORM 5056-R, AUG 94

(Proponent C/CW/EG)

HTRW DRILLING LOG

DISTRICT

LOUISVILLE

HOLE NUMBER

LLI-306

1. COMPANY NAME

SAR

2. DRILL SUBCONTRACTOR

N/A

SHEET SHEETS

1 OF 1

3. PROJECT

RYAAP LLI PHASE II RI

4. LOCATION

INLET 88

5. NAME OF DRILLER

N/A

6. MANUFACTURER'S DESIGNATION OF DRILL

N/A

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT

SS SPDR

SS BOWL

8. HOLE LOCATION

N/A

9. SURFACE ELEVATION

N/A

10. DATE STARTED

19 SEPT 00

11. DATE COMPLETED

19 SEPT 00

12. OVERBURDEN THICKNESS

N/A

13. DEPTH DRILLED INTO ROCK

N/A

15. DEPTH GROUNDWATER ENCOUNTERED

N/A

16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

N/A

14. TOTAL DEPTH OF HOLE

0-0.2 FT

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

NO WATER IN INLET OR SAMPLE ACES

18. GEOTECHNICAL SAMPLES

DISTURBED

N/A

UNDISTURBED

N/A

19. TOTAL NUMBER OF CORE BOXES

N/A

20. SAMPLES FOR CHEMICAL ANALYSIS

EXPLOSIVES

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

N/A

22. DISPOSITION OF HOLE

BACKFILL

MONITORING WELL

OTHER (SPECIFY)

N/A

N/A

23. SIGNATURE OF INSPECTOR

B.W. Williams

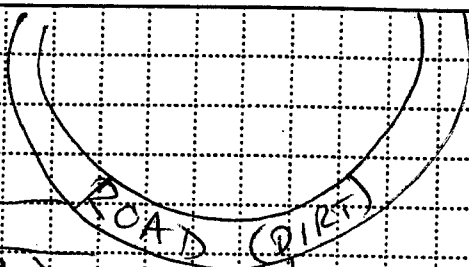
LOCATION SKETCH/COMMENTS:

SCALE:

NOT TO SCALE

N 563354.0309

E 2376676.438



PROJECT

RYAAP LLI PHASE II RI

B-23

HOLE NO.

LLI-306

ENG FORM 5056-R, AUG 94

(Proponent CECW-EG)

HTRW DRILLING LOG

DISTRICT

LOUISVILLE

HOLE NUMBER

LL1-308

1 COMPANY NAME

GALC

2 DRILL SUBCONTRACTOR

SHEET SHEETS

1 OF 1

3 PROJECT

RUAAP PHASE II RI LOAD LINE I

4 LOCATION

Inlet CL6

5 NAME OF DRILLER

NA

6 MANUFACTURERS DESIGNATION OF DRILL

NA

7 SIZES AND TYPES OF DRILLING
AND SAMPLING EQUIPMENT

55 Bowl and Spoon

8 HOLE LOCATION

CL6

9 SURFACE ELEVATION

NA

10 DATE STARTED

19 SEPT 00

11 DATE COMPLETED

19 SEPT 00

12 OVERBURDEN THICKNESS

NA

13 DEPTH GROUNDWATER ENCOUNTERED

NA

14 DEPTH DRILLED INTO ROCK

NA

15 DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

NA

16 TOTAL DEPTH OF HOLE

NA

17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

NA

18 GEOTECHNICAL SAMPLES

None

DISTURBED

UNDISTURBED

19 TOTAL NUMBER OF CORE BOXES

NA

20 SAMPLES FOR CHEMICAL ANALYSIS

VOC

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21 TOTAL CORE
RECOVERY %

22 DISPOSITION OF HOLE

NA

BACKFILLED

MONITORING WELL

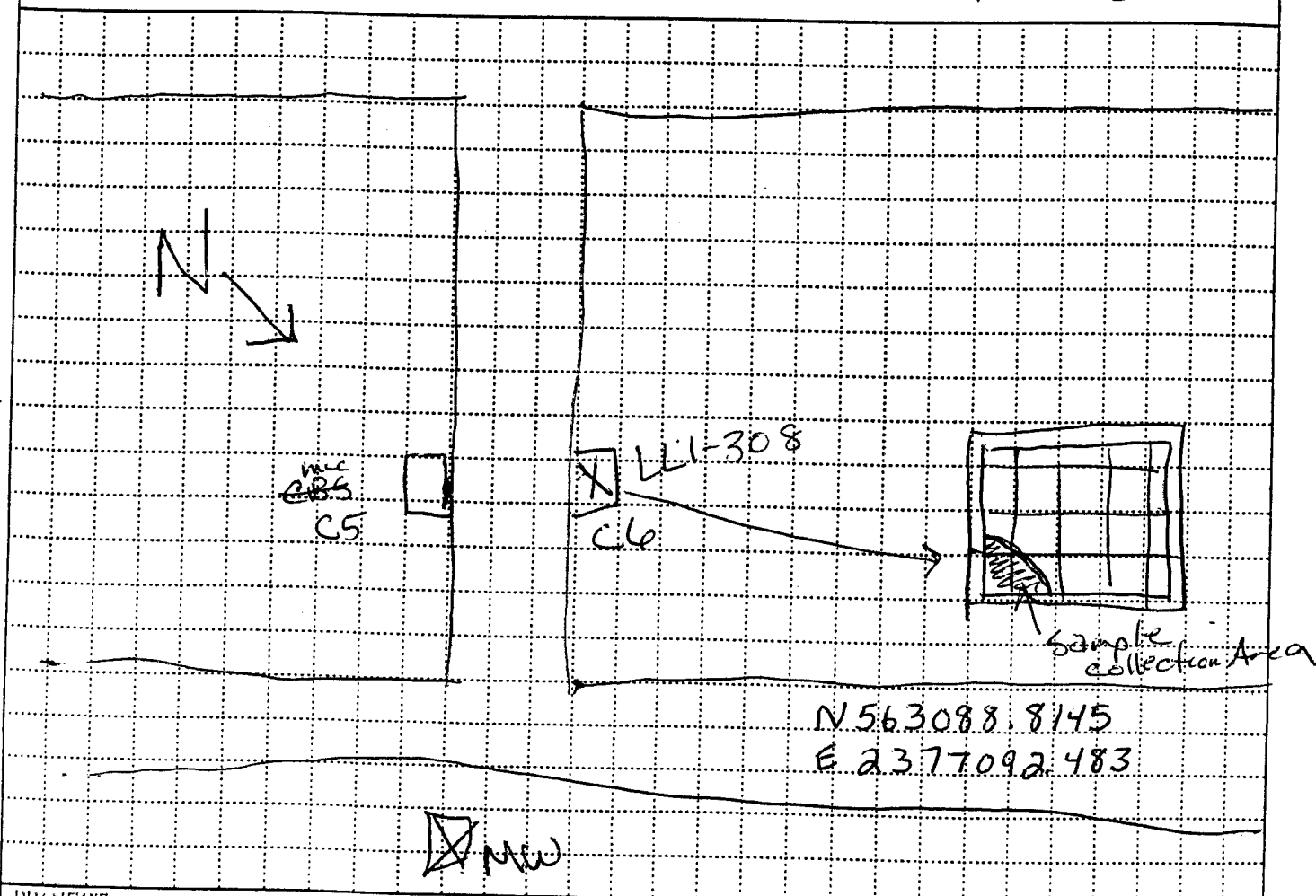
OTHER (SPECIFY)

23 SIGNATURE OF INSPECTOR

Maubel Clough

LOCATION SKETCH/COMMENTS :

SCALE: Not to Scale



PROJECT

RUAAP LOAD LINE I PHASE II RI

HOLE NO.

LL1-308

ENG FORM 5056-R, AUG 94

B-24

(Proponent CECW-EG)

HTRW DRILLING LOG		INSTRUMENT		INLET NUMBER	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR N/A		3. INLET NUMBER LL1-318	
4. PROJECT RVAP LEAD LINE 1 PHASE II RI		5. LOCATION OFF-ACC STATIONS		6. MANUFACTURER'S DESIGNATION OF DRILL N/A	
7. NAME OF DRILLER		8. HOLE LOCATION		9. SURFACE ELEVATION N/A	
10. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS AUGER SS SPECN SS BRWL		11. DATE STARTED 15 SEPT 90		12. DATE COMPLETED 15 SEPT 90	
13. OVERBURDEN THICKNESS N/A		14. DEPTH GROUNDWATER ENCOUNTERED N/A		15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A	
16. DEPTH (DRILLED) INTO ROCK N/A		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) DEPTH OF WATER = 20"		18. TOTAL NUMBER OF CORE BOXES	
19. GEOTECHNICAL SAMPLES		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY N/A	
22. DISPOSITION OF HOLE N/A		23. SIGNATURE OF INSPECTOR D. Williams		24. SCALE NOT TO SCALE	

LOCATION SKETCH/COMMENTS:

PROJECT

RVAP LEAD LINE 1 PHASE II RI

HOLE NO

LL1-318

ENG FORM 5056-R, AUG 94

B-26

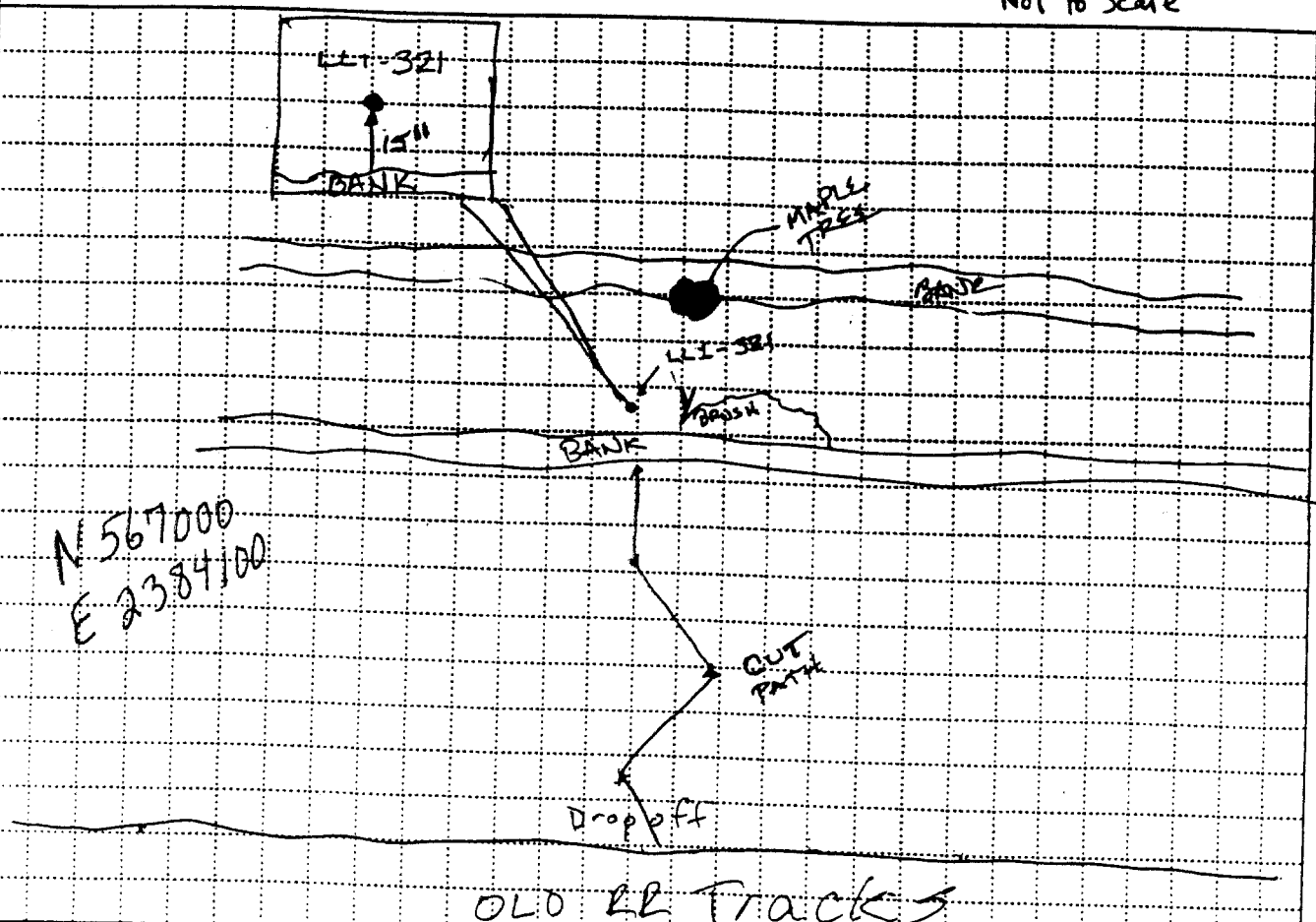
(Proponent: CECW-EG)

HTRW DRILLING LOG			(TRACT)			HOLE NUMBER		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR LOUISVILLE			3. HOLE NUMBER LL1-319		
4. PROJECT ZVAP LL1 PHASE II RI			5. LOCATION OFF AOC STREAMS			6. SHEET 1 of 1		
7. NAME OF DRILLER N/A			8. MANUFACTURERS DESIGNATION OF DRILL N/A			9. HOLE LOCATION		
10. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS TROWEL SS CORER			11. SURFACE ELEVATION N/A			12. DATE STARTED SEPT 13 00		
13. OVERBURDEN THICKNESS N/A			14. DATE COMPLETED SEPT 13 00			15. DEPTH GROUNDWATER ENCOUNTERED N/A		
16. DEPTH DRILLED INTO ROCK N/A			17. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			18. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) DEPTH OF WATER = 3"		
19. TOTAL DEPTH OF HOLE 0 - 0.5"			20. GEOTECHNICAL SAMPLES			21. TOTAL NUMBER OF CORE BOXES N/A		
22. DISTURBED TCC, GRAIN SIZE			23. UNDISTURBED			24. TOTAL NUMBER OF CORE BOXES		
25. SAMPLES FOR CHEMICAL ANALYSIS VOC			26. METALS X			27. OTHER (SPECIFY) EXPLOSIVES		
28. OTHER (SPECIFY) PROPELLANT			29. OTHER (SPECIFY) Ca			30. TOTAL CORE RECOVERY N/A		
31. DISPOSITION OF HOLE N/A			32. BACKFILLED			33. MONITORING WELL		
34. SIGNATURE OF INSPECTOR Martha Clough (v/b)			35. DATE 11-8-00			36. SCALE		
LOCATION SKETCH/COMMENTS:								
PROJECT ZVAP LL1 PHASE II - RI B-27						HOLE NO LL1 - 319		

HTRW DRILLING LOG		DISTRICT Louisville		HOLE NUMBER LL-321	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT RUAAP Phase II RI			4. LOCATION OFFSITE AOC STREAMS, 1st Round		
5. NAME OF DRILLER NA			6. MANUFACTURER'S DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS Bowl and Spoon			8. HOLE LOCATION		
12. OVERBURDEN THICKNESS NA			9. SURFACE ELEVATION NA		
13. DEPTH DRILLED INTO ROCK NA			10. DATE STARTED 14 SEPT 00		
14. TOTAL DEPTH OF HOLE NA			11. DATE COMPLETED 14 SEPT 00		
15. GEOTECHNICAL SAMPLES			15. DEPTH GROUNDWATER ENCOUNTERED		
16. SAMPLES FOR CHEMICAL ANALYSIS			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
17. DISPOSITION OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) Depth of water = 12 inches		
18. DISTURBED TOC, Grain Size			19. TOTAL NUMBER OF CORE BOXES NA		
20. UNDISTURBED φ			21. TOTAL CORE RECOVERY NA		
22. SIGNATURE OF INSPECTOR Martha Clough (vib)			23. OTHER (SPECIFY)		

LOCATION SKETCH/COMMENTS:

SCALE: Not to Scale



PROJECT RUAAP LL-1 Phase II		HOLE NO. LL-321
ENG FORM 5056-R, AUG 94		(Proponent CECW-EG)

HTRW DRILLING LOG

DISTRICT

Louisville

PROJECT NUMBER
LLI-323

1. COMPANY NAME

SAIC

2. DRILL SUBCONTRACTOR

NA

SHEET 1 OF 1

3. PROJECT

Phase II RI

4. LOCATION

RUAAP

5. NAME OF DRILLER

NA

6. MANUFACTURERS DESIGNATION OF DRILL

NA

7. SIZES AND TYPES OF DRILLING
AND SAMPLING EQUIPMENTSS Hand Auger
SS Bore and Spoon

8. HOLE LOCATION

Parshal Flume

9. SURFACE ELEVATION

NA

10. DATE STARTED

13 SEPT 00

11. DATE COMPLETED

13 SEPT 00

12. OVERBURDEN THICKNESS

NA

13. DEPTH GROUNDWATER ENCOUNTERED

NA

14. DEPTH DRILLED INTO ROCK

NA

15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

NA

16. TOTAL DEPTH OF HOLE

0.5'

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

Depth of water

18. GEOTECHNICAL SAMPLES

DISTURBED

Toc, Gr, S, etc.

UNDISTURBED

19. TOTAL NUMBER OF CORE BOXES

NA

20. SAMPLES FOR CHEMICAL ANALYSIS

VOC

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

NA

22. DISPOSITION OF HOLE

NA

X
BACKFILLEDX
MONITORING WELLexp.
OTHER (SPECIFY)drop.
OTHER (SPECIFY)

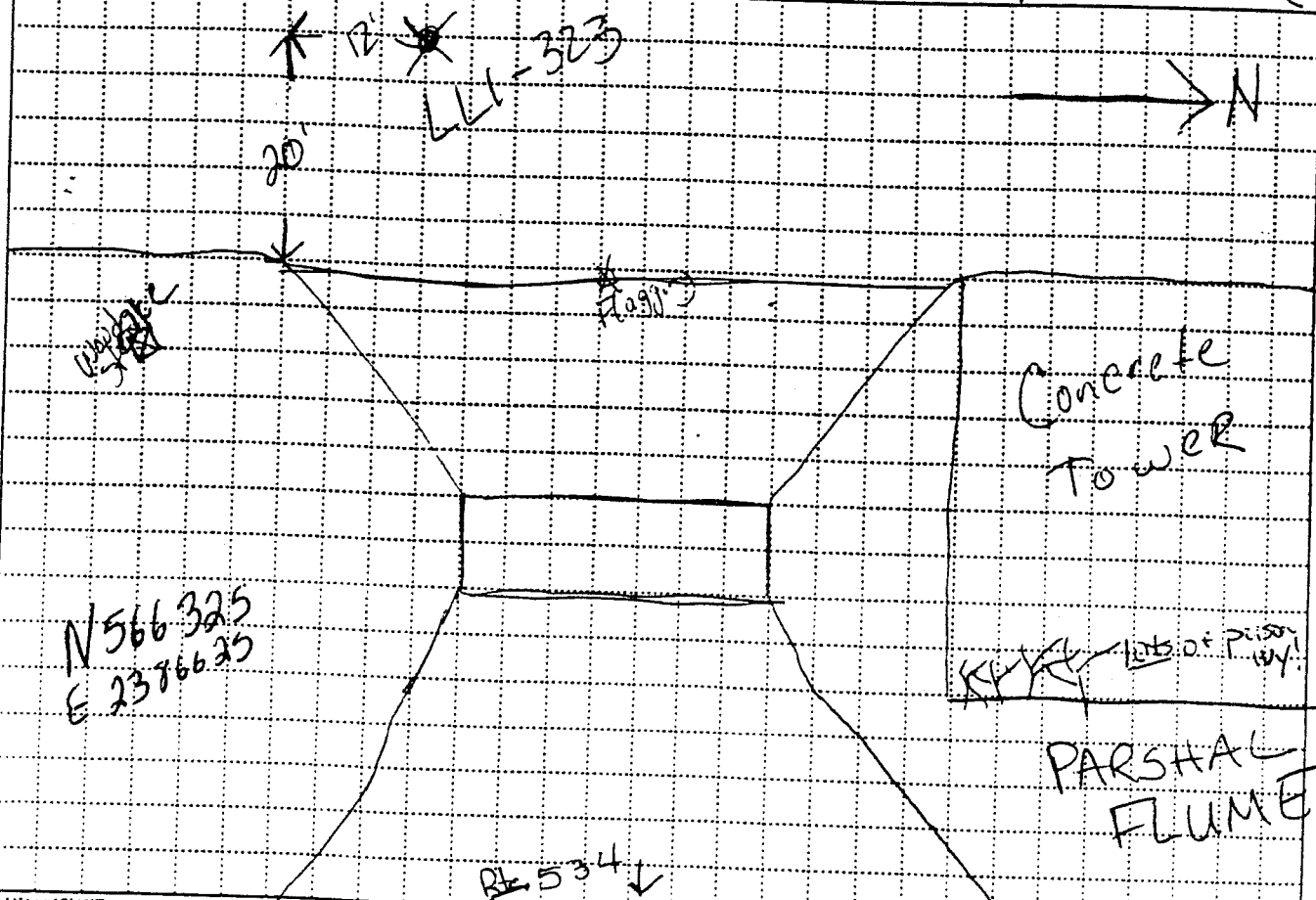
23. SIGNATURE OF INSPECTOR

Hansel C. Clough

LOCATION SKETCH/COMMENTS

SCALE:

Not to Scale



PROJECT

Phase II RI Load Line 1 - RUAAP

HOLE NO.

LLI-323

ENG FORM 5056-R, AUG 94

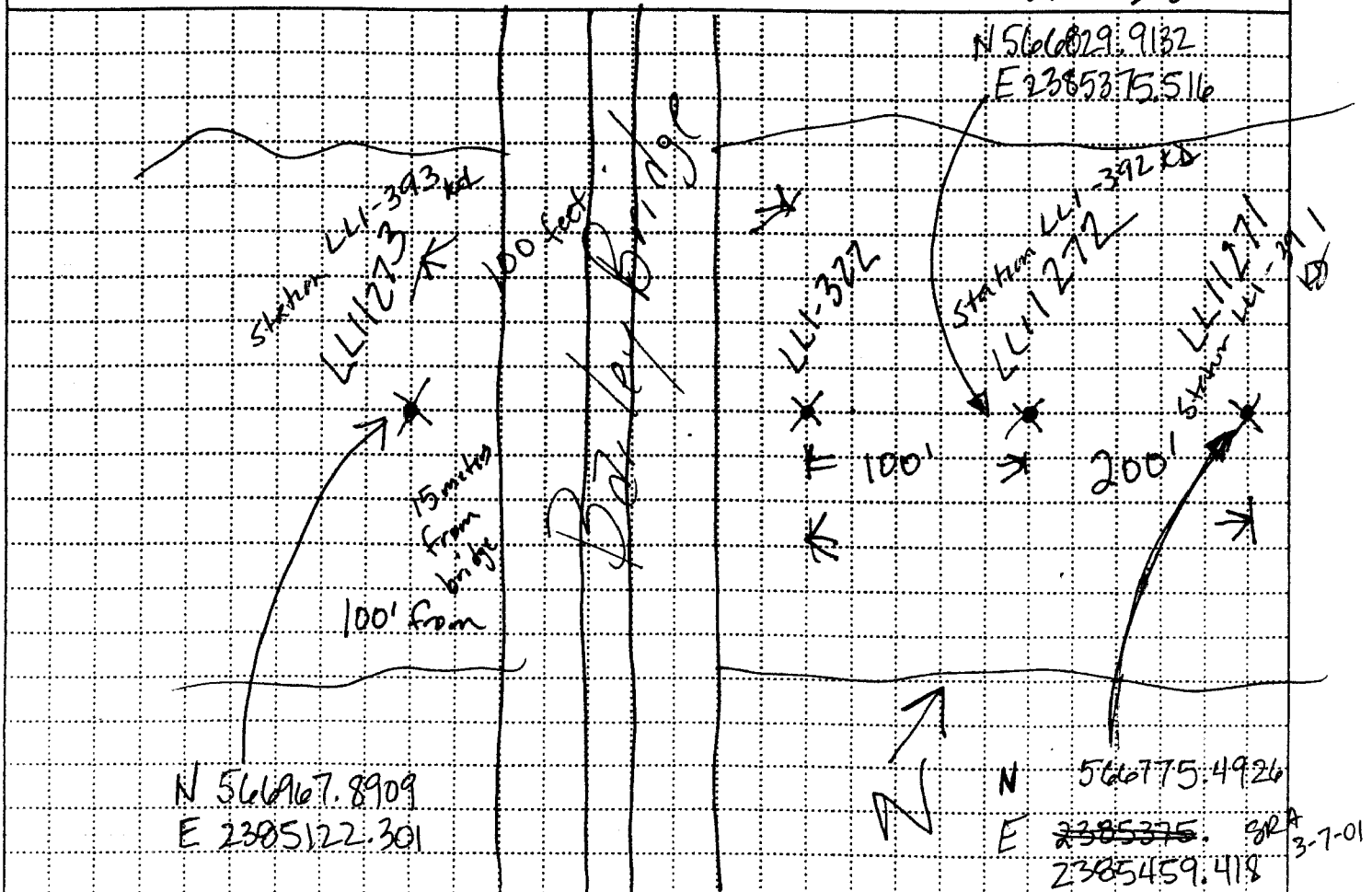
B-31

(Proponent CECW-EG)

HTRW DRILLING LOG		DISTRICT Louisville		HOLE NUMBER LLI-391	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT RVAAP Loadline I Phase II R1			4. LOCATION		
5. NAME OF DRILLER NA			6. MANUFACTURER'S DESIGNATION OF DRILL		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			8. HOLE LOCATION N 566775.4926 E 2385459.418		
			9. SURFACE ELEVATION		
			10. DATE STARTED 9/27/01		
			11. DATE COMPLETED 9/27/01		
12. OVERBURDEN THICKNESS NA			13. DEPTH GROUNDWATER ENCOUNTERED		
13. DEPTH (MILLED) INTO ROCK NA			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED		
14. TOTAL DEPTH OF HOLE NA			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)		
16. GEOTECHNICAL SAMPLES		DISTURBED grain size		UNDISTURBED NA	
17. SAMPLES FOR CHEMICAL ANALYSIS		METALS X		OTHER (SPECIFY) NA	
18. DISPOSITION OF HOLE		BACKFILLED NA		MONITORING WELL NA	
		OTHER (SPECIFY) NA		19. TOTAL NUMBER OF CORE BOXES NA	
				20. TOTAL CORE RECOVERY NA	
				21. SIGNATURE OF INSPECTOR	

LOCATION SKETCH/COMMENTS:

SCALE: **Not to Scale**



PROJECT RVAAP Loadline I Phase II R1		HOLE NO. LLI-391	
---	--	-------------------------	--

HTRW DRILLING LOG			DISTRICT Louisville			HOLE NUMBER LL1-392					
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1					
3. PROJECT BVAAP Loadline I Phase II R1			4. LOCATION								
5. NAME OF DRILLER			6. MANUFACTURERS DESIGNATION OF DRILL								
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			8. HOLE LOCATION N 56.829. 9132 E 2385375.516								
			9. SURFACE ELEVATION								
			10. DATE STARTED 9/27/00			11. DATE COMPLETED 9/27/00					
12. OVERBURDEN THICKNESS NA			13. DEPTH GROUNDWATER ENCOUNTERED								
13. DEPTH DRILLED INTO ROCK NA			14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED								
14. TOTAL DEPTH OF HOLE NA			15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)								
16. GEOTECHNICAL SAMPLES			DISTURBED grainsize		UNDISTURBED NA		17. TOTAL NUMBER OF CORE BOXES NA				
18. SAMPLES FOR CHEMICAL ANALYSIS			EXPLOSIVES		METALS X		OTHER (SPECIFY) TOC		20. TOTAL CORE RECOVERY NA		
21. DISPOSITION OF HOLE			BACKFILL NA		MONITORING WELL NA		OTHER (SPECIFY) NA		22. SIGNATURE OF INSPECTOR		
LOCATION SKETCH/COMMENTS			SCALE:								
See Map Page #105 Surface Water / Sediment Logbook (#5)											
PROJECT BVAAP Loadline I Phase II R1								HOLE NO. LL1-392			

HTRW DRILLING LOG		DISTRICT		HOLE NUMBER	
1. COMPANY NAME SAIC		LOUISVILLE		LLI-393	
2. DRILL SUBCONTRACTOR		3. DRILLER		SHEET 1 OF 1	
4. PROJECT BVAAP Loadline I Phase II R1		5. LOCATION			
6. NAME OF DRILLER NA		7. MANUFACTURERS DESIGNATION OF DRILL			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		9. HOLE LOCATION N 540967.8909 E 2385122.301			
		10. SURFACE ELEVATION			
		11. DATE STARTED 9/27/00		12. DATE COMPLETED 9/27/00	
13. OVERBURDEN THICKNESS NA		14. DEPTH GROUNDWATER ENCOUNTERED			
15. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED			
17. TOTAL DEPTH OF HOLE NA		18. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)			
19. GEOTECHNICAL SAMPLES		20. TOTAL NUMBER OF CORE BOXES			
DISTURBED grain size		UNDISTURBED			
21. SAMPLES FOR CHEMICAL ANALYSIS		METALS		OTHER (SPECIFY)	
EXPLOSIVES		X		TOC	
BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE NA		23. SIGNATURE OF INSPECTOR		24. TOTAL CORE RECOVERY NA	
LOCATION SKETCH/COMMENTS		SCALE:			
SEE MAP PAGE # 105 SURFACE WATER / SEDIMENT LOGBOOK (#5)					
PROJECT BVAAP Loadline I Phase II R1				HOLE NO. LLI-393	

HTRW DRILLING LOG

1. COMPANY NAME SAC		DISTRICT Louisville		394 3-9-01		INVOICE NUMBER LLI-394	
2. DRILL SUBCONTRACTOR NA		3. PROJECT RUAAP Load Line Phase II RI		4. LOCATION Cont. 70' D.S. of LLI-109		SHEET 1 OF 1	
5. NAME OF DRILLER NA		6. MANUFACTURER'S DESIGNATION OF DRILL NA		7. HOLE LOCATION			
8. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 55 Bowl and Spoon		9. SURFACE ELEVATION NA		10. DATE STARTED 26 SEPT 00		11. DATE COMPLETED 28 SEPT 00	
12. OVERBURDEN THICKNESS NA		13. DEPTH DRILLED INTO ROCK NA		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA	
16. TOTAL DEPTH OF HOLE 0.5		17. GEOLOGICAL SAMPLES		18. TOTAL NUMBER OF CORE BOXES NA			
19. SAMPLES FOR CHEMICAL ANALYSIS		DISTURBED TDC, Gram size		UNDISTURBED			
20. DISPOSITION OF HOLE NA		VOC		METALS		OTHER (SPECIFY) Explosives	
21. BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Propellants		22. TOTAL CORE RECOVERY	
23. SIGNATURE OF INSPECTOR Handwritten Signature							

LOCATION SKETCH/COMMENTS:

SCALE: **Not to Scale**

CB13A

**N 564420
E 2375927**

**LLI-253
LLI-109**

LLI 276

STATION LLI-394

**394
12/16/00
vjb**

K

~ 70'

**N 561127
E 2377755**

PROJECT

RUAAP Load Line Phase II RI

HOLE NO

LLI-394

ENG FORM 5056-R, AUG 94

B-35

(Proponent CECW-134)

HTRW DRILLING LOG

DISTRICT

LOUISVILLE

LLI-395

SEP 3-7-01

CONTINGENCY

30 FT

1. COMPANY NAME

SAIC

2. DRILL SUBCONTRACTOR

N/A

HOLE NUMBER

DOWNSTREAM

SHEET SHEETS

1 OF 1

3. PROJECT

RVAAP LLI PHASE II RI

4. LOCATION

CONTINGENCY NEAR PHASE I LLI-048

5. NAME OF DRILLER

N/A

6. MANUFACTURERS DESIGNATION OF DRILL

N/A

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT

SS SPDR

SS BOWL

8. HOLE LOCATION

N/A

9. SURFACE ELEVATION

N/A

12. OVERBURDEN THICKNESS

N/A

10. DATE STARTED

26 SEPT 01

11. DATE COMPLETED

26 SEPT 01

13. DEPTH DRILLED INTO ROCK

N/A

15. DEPTH GROUNDWATER ENCOUNTERED

N/A

14. TOTAL DEPTH OF HOLE

0-0.5 FT

16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

N/A

18. GEOTECHNICAL SAMPLES

DISTURBED

GRAIN SIZE

UNDISTURBED

N/A

19. TOTAL NUMBER OF CORE BOXES

N/A

20. SAMPLES FOR CHEMICAL ANALYSIS

X

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

N/A

22. DISPOSITION OF HOLE

EXPLOSIVES

PROPELANTS

TOC

N/A

N/A

23. SIGNATURE OF INSPECTOR

B. W. H.

LOCATION SKETCH/COMMENTS

SCALE:

NOT TO SCALE

NOTE: SEE ALSO PG 60 OF LOGBOOK #5:

"SURFACE WATER & SEDIMENT"

ABANDONED
PILE 600

LI-MW 604

CULVERT
OPENING

LLI-048

30 FT

CONTINGENCY SAMPLE
LOCATION LLI-395

N 563036

E 2377524

PROJECT

RVAAP LLI PHASE II RI B-36

HOLE NO

ENG FORM 5056-R, AUG 94

(Proponent CECW/RC)

HTRW DRILLING LOG

DISTRICT

LOUISVILLE

HOLE NUMBER

LL1-~~447~~

1 COMPANY NAME

SAIC

2 DRILL SUBCONTRACTOR

N/A

SHEET SHEETS

1 OF 1

3 PROJECT

RVAAP LL1 PHASE II RI

4 LOCATION

PHASE I

5 NAME OF DRILLER

N/A

6 MANUFACTURERS DESIGNATION OF DRILL

N/A

7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT

SS BOWL
SS SPOON

8 HOLE LOCATION

9 SURFACE ELEVATION

N/A

10 DATE STARTED

17 SEPT 04

11 DATE COMPLETED

17 SEPT 04

12 OVERBURDEN THICKNESS

N/A

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

0-0.5 FT

17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

NO WATER IN DITCH OR HOLE

18 GEOTECHNICAL SAMPLES

DISTURBED

GRAIN SIZE

UNDISTURBED

19 TOTAL NUMBER OF CORE BOXES

20 SAMPLES FOR CHEMICAL ANALYSIS

TDC

EXPLOSIVES

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21 TOTAL CORE RECOVERY %

22 DISPOSITION OF HOLE

BACKFILLED

MONITORING WELL

OTHER (SPECIFY)

23 SIGNATURE OF INSPECTOR

N/A

N/A

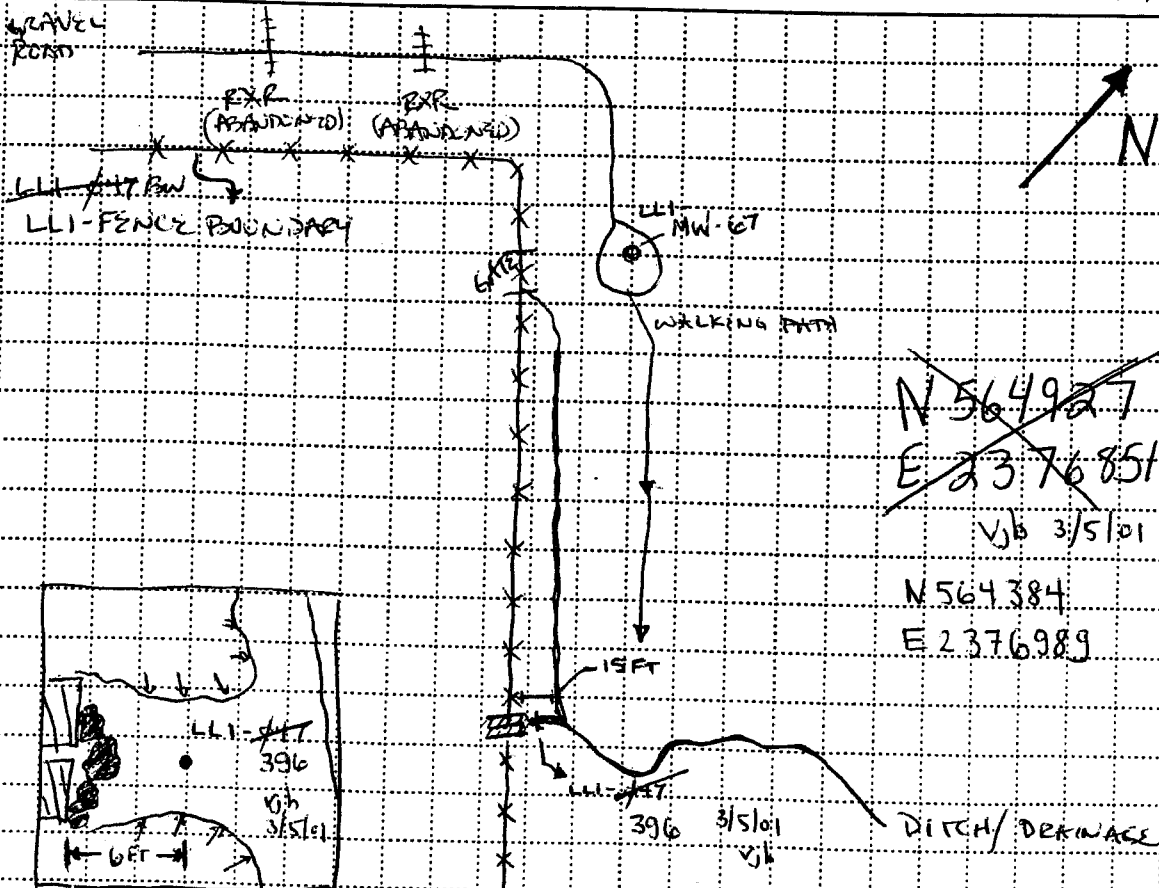
N/A

B. W. H.

LOCATION SKETCH/COMMENTS:

SCALE:

NOT TO SCALE



PROJECT

RVAAP LL1 PHASE II RI B-37

HOLE NO.

LL1-~~447~~ 396 Vb 3/5/01

HTRW DRILLING LOG

DISTRICT

LOUISVILLE

HOLE NUMBER

LLI-397

1. COMPANY NAME

SAIC

2. DRILL SUBCONTRACTOR

N/A

SHEET SHEETS

1 OF 1

3. PROJECT

EVAAP LLI PHASE II RI

4. LOCATION

37 FT DOWNSTREAM OF PHASE I LLI-454

5. NAME OF DRILLER

N/A

6. MANUFACTURERS DESIGNATION OF DRILL

N/A

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT

SS SPOON
SS BOWL

8. HOLE LOCATION

N 561124 E 237755

9. SURFACE ELEVATION

N/A

12. OVERBURDEN THICKNESS

N/A

10. DATE STARTED

27 SEPT 04

11. DATE COMPLETED

27 SEPT 04

13. DEPTH DRILLED INTO ROCK

N/A

15. DEPTH GROUNDWATER ENCOUNTERED

N/A

14. TOTAL DEPTH OF HOLE

0-0.5 FT

16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

N/A

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

NO WATER IN DITCH OR HOLE (SAMPLE)

18. GEOTECHNICAL SAMPLES

19D (22-40)

DISTURBED

GRAIN SIZE

UNDISTURBED

N/A

19. TOTAL NUMBER OF CORE BOXES

N/A

20. SAMPLES FOR CHEMICAL ANALYSIS

EXPLOSIVES

PROPELLANTS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

N/A

22. DISPOSITION OF HOLE

BACKFILLED

MONITORING WELL

OTHER (SPECIFY)

23. SIGNATURE OF INSPECTOR

B. Will.

LOCATION SKETCH/COMMENTS

SCALE:

ABANDONED
WELL
#40

SEE ALSO PAGE 48 OF LOGBOOK

#5 "SURFACE WATER AND SEDIMENT"

N

SOUTH
SERVICE
ROAD

SLOPE

rock

LLI-454

PHASE I (?) "005B-SD"

(SEE ACTIVITY LOG SHEET PG. 112-113)

CONTINGENCY 37 FT DOWNSTREAM
OF LLI-454 (LLI-397)

DITCH

2 FT

37 FT

N 561124

E 237755

PROJECT

EVAAP LLI PHASE II RI

B-38

HOLE NO.

LLI-397

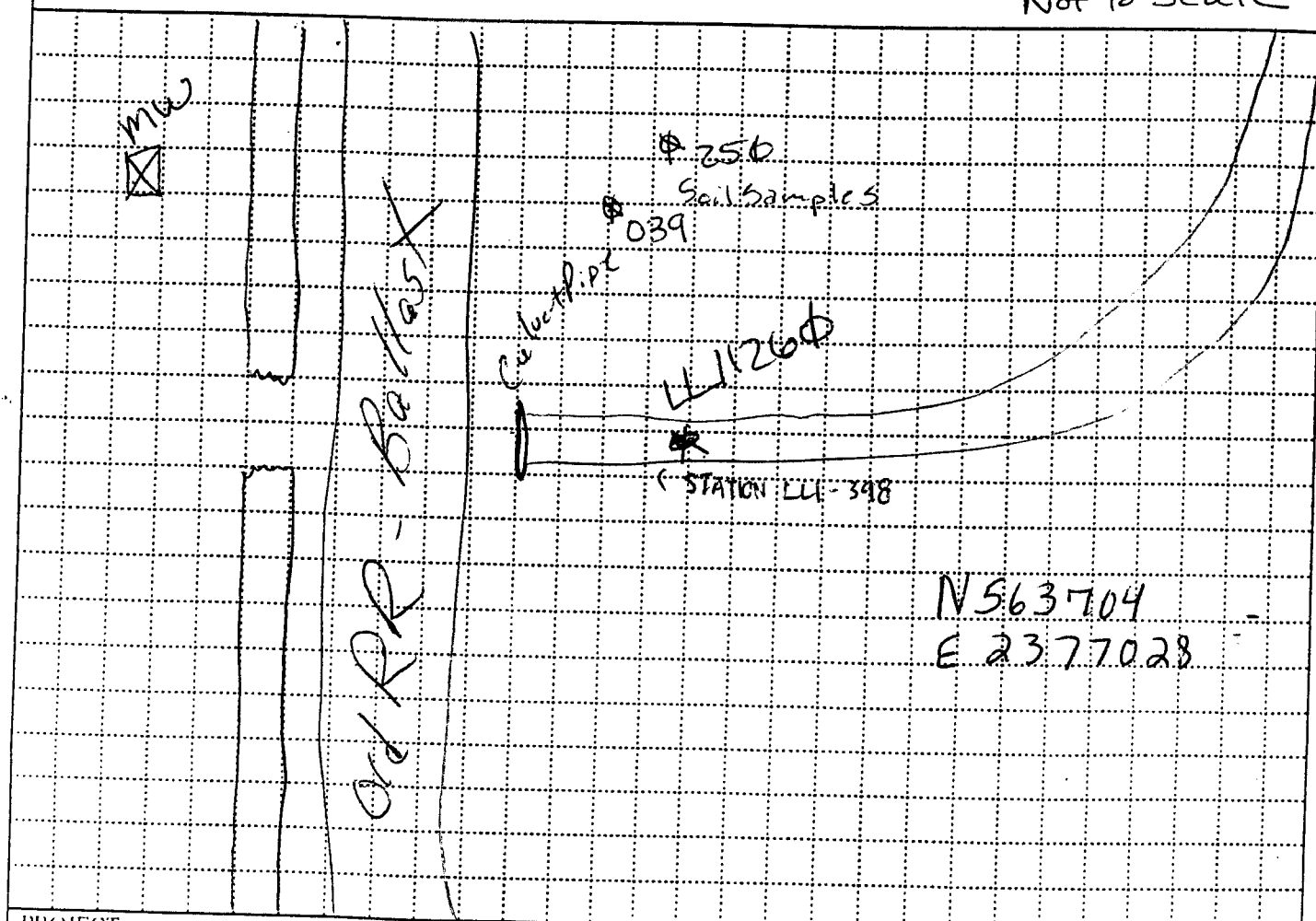
ENG FORM 5056-R, AUG 94

(Proponent CECW-EG)

HTRW DRILLING LOG		DISTRICT	Louisville		HOLE NUMBER	LL-398	
1. COMPANY NAME		SAIC		2. DRILL SUBCONTRACTOR		NA	
3. PROJECT		RVAAP Load Line Phase II RI		4. LOCATION		Cont. NE of CAL	
5. NAME OF DRILLER		NA		6. MANUFACTURERS DESIGNATION OF DRILL			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		55 Bowland Spoon		8. HOLE LOCATION		15' DS of Culvert Pipe	
				9. SURFACE ELEVATION		NA	
12. OVERBURDEN THICKNESS		NA		10. DATE STARTED		28 SEPT 06	
13. DEPTH (DRILL) INTO ROCK		NA		11. DATE COMPLETED		28 SEPT 06	
14. TOTAL DEPTH OF HOLE		0.3'		15. DEPTH GROUNDWATER ENCOUNTERED		NA	
18. GEOTECHNICAL SAMPLES		DISTURBED TOC Grain Size		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BAKILLED		MONITORING WELL		OTHER (SPECIFY)	
						21. TOTAL CORE RECOVERY	
						23. SIGNATURE OF INSPECTOR	
						Mark E. Clough	

LOCATION SKETCH/COMMENTS:

SCALE: Not to Scale



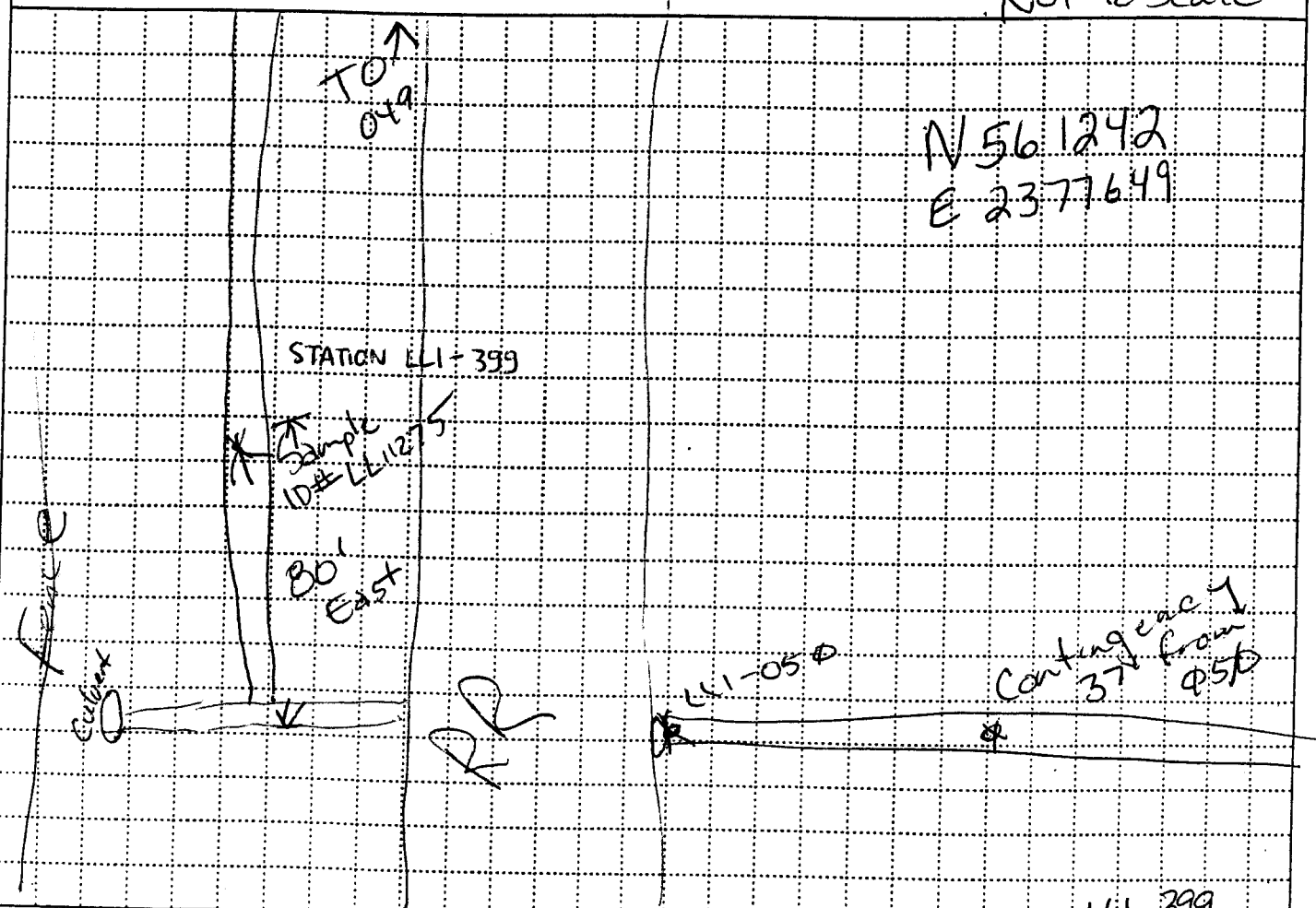
PROJECT	RVAAP Load Line (Phase II RI)	HOLE NO.	Cont. NE of CAL
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HTRW DRILLING LOG		DISTRICT Louisville		HOLE NUMBER LLI-399	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT RUAAP Load Line I Phase II RI		4. LOCATION Contingency between 049 and 050			
5. NAME OF DRILLER NA		6. MANUFACTURER'S DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 55 Bowl and Spoon		8. HOLE LOCATION 80' East of Culvert opposite LLI-050			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 9/28/00		11. DATE COMPLETED 9/28/00	
12. OVERBURDEN THICKNESS NA		13. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 0.3		15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
16. GEOTECHNICAL SAMPLES		DISTURBED TOC, Grainsize		UNDISTURBED	
17. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
		OTHER (SPECIFY)		OTHER (SPECIFY)	
18. DISPOSITION OF HOLE NA		BACKFILL		OTHER (SPECIFY)	
		EXPLOSIVES		PROPPELLANTS	
		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY	
				22. SIGNATURE OF INSPECTOR Yous e Clough	

LOCATION SKETCH/COMMENTS:

SCALE:

Not to Scale



PROJECT

RUAAP Load Line I Phase II RI

HOLE NO.

Cont. between 049 and 050

HTRW DRILLING LOG

DISTRICT

LOUISVILLE

HOLE NUMBER

LLI-400

1. COMPANY NAME

SAIC

2. DRILL SUBCONTRACTOR

NA

SHEET

SHEETS

1 OF 1

3. PROJECT

RVAAP LOAD LINE I - PHASE II RI

4. LOCATION

77' DS of LLI-050

5. NAME OF DRILLER

NA

6. MANUFACTURER'S DESIGNATION OF DRILL

NA

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT

SS Bow and Spoon

8. HOLE LOCATION

9. SURFACE ELEVATION

NA

10. DATE STARTED

28 SEPT 00

11. DATE COMPLETED

28 SEPT 00

12. OVERBURDEN THICKNESS

NA

13. DEPTH GROUNDWATER ENCOUNTERED

NA

14. DEPTH DRILLED INTO ROCK

NA

15. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

NA

16. TOTAL DEPTH OF HOLE

0.5

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

NA

18. GEOTECHNICAL SAMPLES

DISTURBED

UNDISTURBED

19. TOTAL NUMBER OF CORE BOXES

TOC Sample

20. SAMPLES FOR CHEMICAL ANALYSIS

VOC

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY

22. DISPOSITION OF HOLE

NA

BACKFILLED

MONITORING WELL

EXPLOSIVES

PROPELLANTS

OTHER (SPECIFY)

23. SIGNATURE OF INSPECTOR

Marian C. Clough

LOCATION SKETCH/COMMENTS

SCALE:

Not to Scale

N 56.11.06
E 237.77.91

RR Bailly

LLI-050

Contingency
Sample
37' DS of LLI-050
LLI-397Sample ID
LLI-277STATION
LLI-400

77 ft

PROJECT

RVAAP LOAD LINE I PHASE II RI

HOLE NO.

LLI-400

ENG FORM 5056-R, AUG 94

B-41

(Proponent: CE/CW/E/G)

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