

**APPENDIX A
SOIL SAMPLING LOGS**

THIS PAGE INTENTIONALLY LEFT BLANK.

HTRW DRILLING LOGS-MAPS

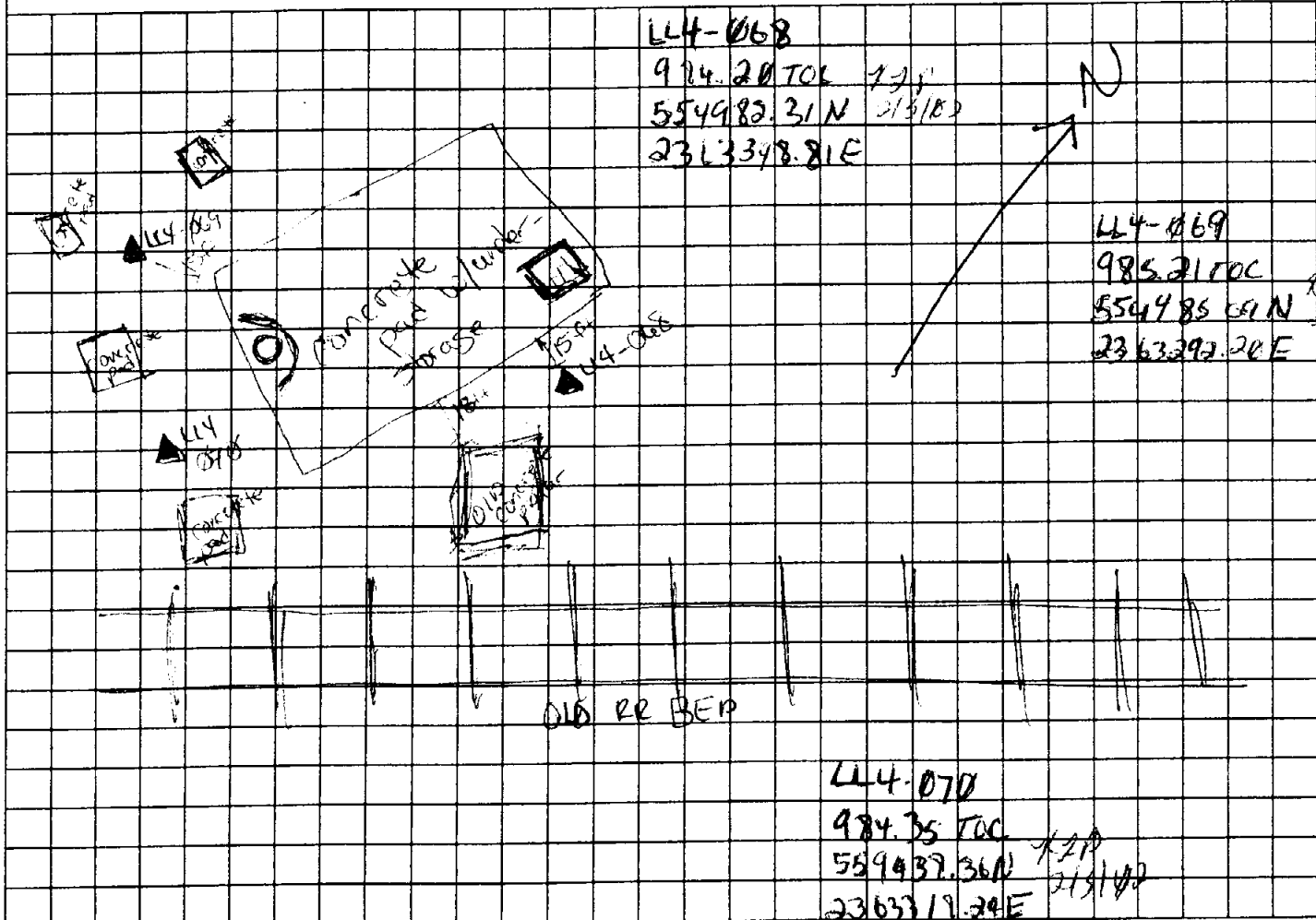
LL4-068,069,070.....	A-5
LL4-071,072,073,074.....	A-6
LL4-075,076,077,078,079.....	A-7
LL4-080,081,082,083.....	A-8
LL4-084,085,086,087.....	A-9
LL4-088,089,090,091.....	A-10
LL4-092,130,131,133,134,135.....	A-11
LL4-093,094,095,097,098.....	A-12
LL4-096,100,101,102,103.....	A-13
LL4-099,123,124,125,129.....	A-14
LL4-104,105,106,108,109.....	A-15
LL4-107,110,111.....	A-16
LL4-112,113,114.....	A-17
LL4-115,116.....	A-18
LL4-117,118,119,120,121,122.....	A-19
LL4-123,124.....	A-20
LL4-126,127,128.....	A-21
LL4-132.....	A-22
LL4-136,137,141.....	A-23
LL4-138,139.....	A-24
LL4-140.....	A-25
LL4-142.....	A-26
LL4-143,144.....	A-27
LL4-150,151,152,153,154,155,156,158,159,160,161,162,163,164,165,166.....	A-28
LL4-157.....	A-29

THIS PAGE INTENTIONALLY LEFT BLANK.

HTRW DRILLING LOG		DISTRICT: Louisville		HOLE NUMBER Multiple	
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: near old water tower		
5. NAME OF DRILLER: Mark Root			6. MANUFACTURERS DESIGNATION OF DRILL: bucket auger		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3 1/2" SS bucket auger SS sprayer - SS bowl		8. HOLE LOCATION: near old water tower	
			9. SURFACE ELEVATION: n/a		
			10. DATE STARTED: 8-21-01		11. DATE COMPLETED:
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): n/a		
18. GEOTECHNICAL SAMPLES		DISTURBED	UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES: n/a
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
see text page					
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
benignite plus					
				23. SIGNATURE OF INSPECTOR: [Signature]	

LOCATION SKETCH/COMMENTS

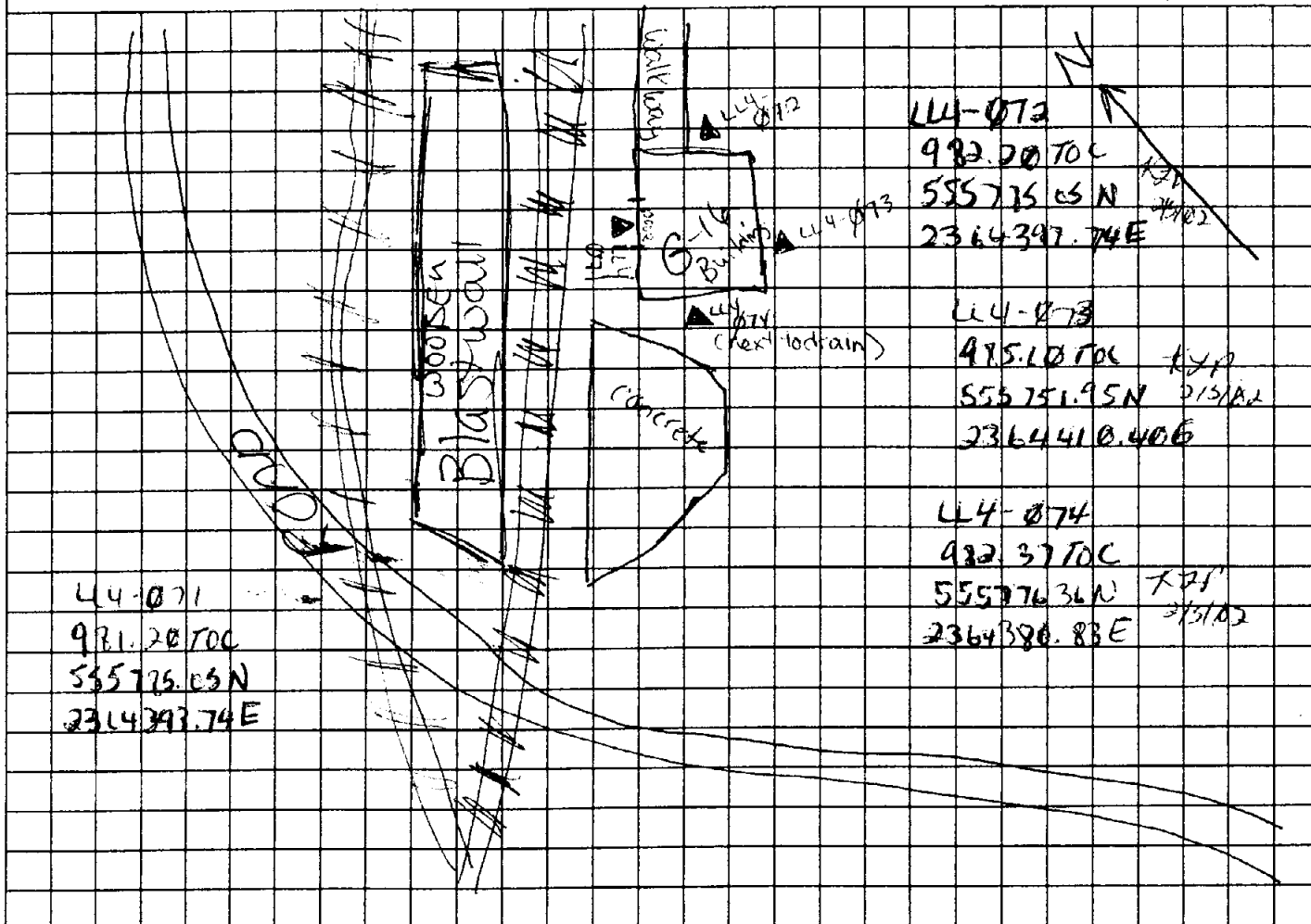
SCALE: not to scale



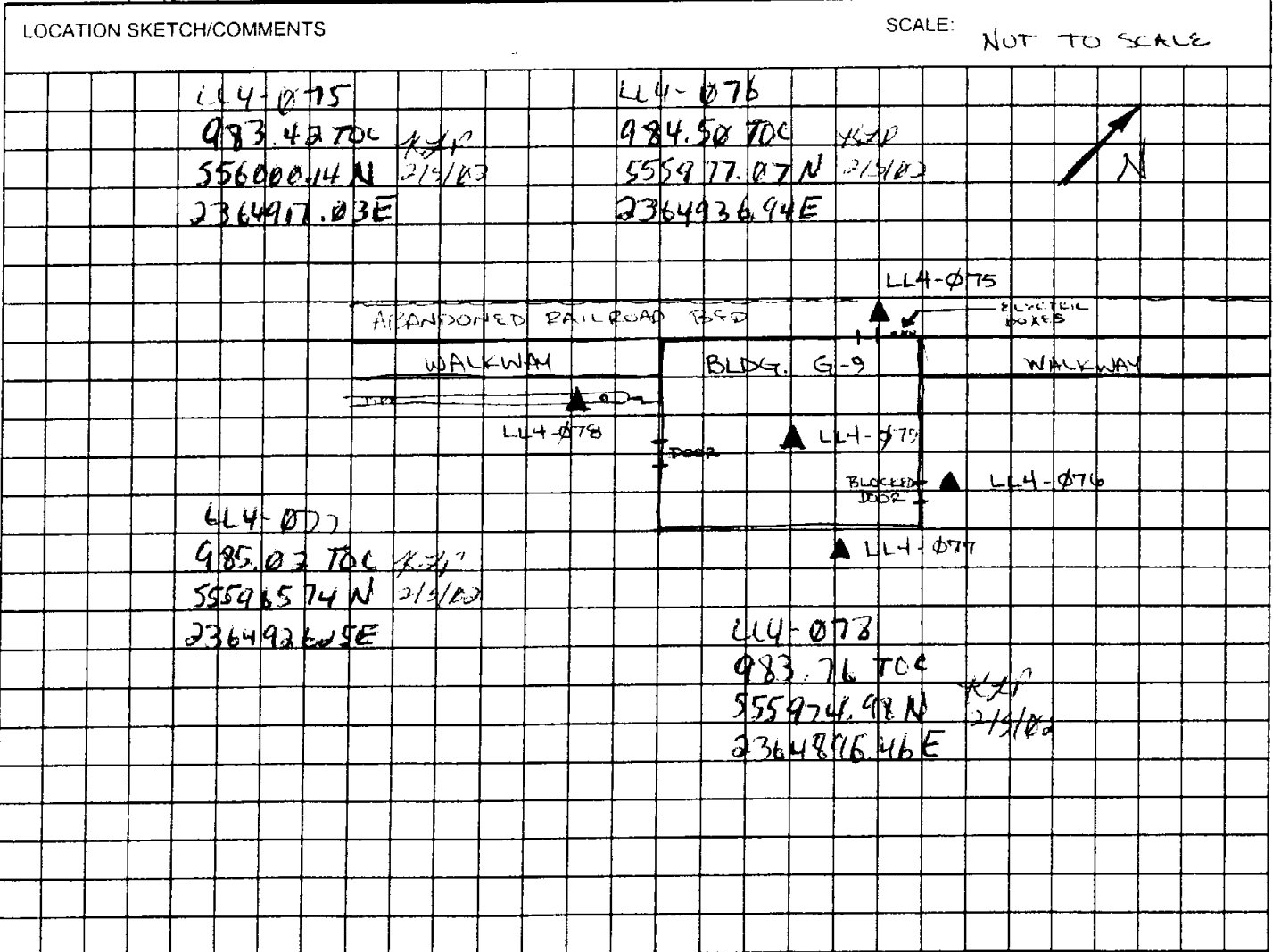
HTRW DRILLING LOG		DISTRICT: Louisville		HOLE NUMBER Multiple	
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: near building G-16		
5. NAME OF DRILLER: Mark Root			6. MANUFACTURERS DESIGNATION OF DRILL: Bucket auger		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: near building G-16			
3/2" SS bucket auger SS spool, SS bowl		9. SURFACE ELEVATION: n/a			
		10. DATE STARTED: 8/21/01		11. DATE COMPLETED:	
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): n/a			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
see text page					
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
benzite plug				23. SIGNATURE OF INSPECTOR: C. Canale	
19. TOTAL NUMBER OF CORE BOXES: n/a		21. TOTAL CORE RECOVERY %:			

LOCATION SKETCH/COMMENTS

SCALE: not to scale



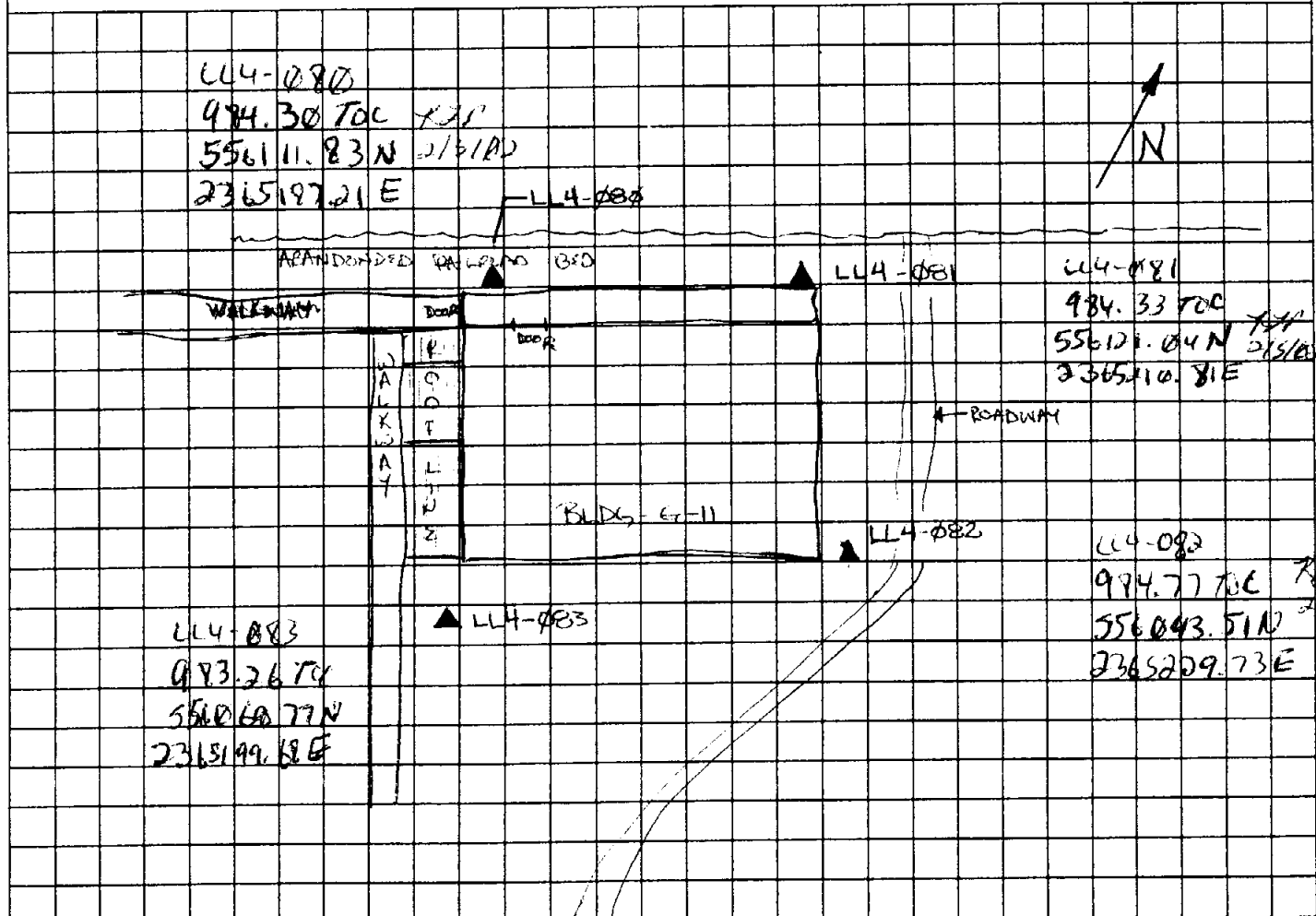
HTRW DRILLING LOG		DISTRICT: Louisville		CR 12-02	HOLE NUMBER <u>MULTIPLE</u>
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET <u>L</u> OF <u>1</u>	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: <u>LOAD LINE 4</u>		
5. NAME OF DRILLER: <u>PAUL LUCCI</u>			5. MANUFACTURERS DESIGNATION OF DRILL: <u>BUCKET AUGER</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: <u>NEAR AND AROUND BLDG G-9</u>			
<u>3" SS BUCKET AUGER</u>					
<u>SS. POWL</u>					
<u>SS. 2800</u>		9. SURFACE ELEVATION: <u>N/A</u>			
12. OVERBURDEN THICKNESS: <u>N/A</u>			15. DEPTH GROUNDWATER ENCOUNTERED: <u>N/A</u>		
13. DEPTH DRILLED INTO ROCK: <u>N/A</u>			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: <u>N/A</u>		
14. TOTAL DEPTH OF HOLE: <u>N/A</u>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): <u>N/A</u>		
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
<u>SS&P INDIVIDUAL SAMPLING LOGS</u>		<u>LOGS</u>			
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
<u>PERMIONITE TRUCK</u>		<u>LOGS</u>			
19. TOTAL NUMBER OF CORE BOXES: <u>N/A</u>				21. TOTAL CORE RECOVERY: <u>N/A</u>	
23. SIGNATURE OF INSPECTOR: <u>B. W. H. [Signature]</u>					



PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: <u>MULTIPLE</u>
---	------------------------------

HTRW DRILLING LOG		DISTRICT: Louisville		CR 12-02	HOLE NUMBER MULTIPLE
1 COMPANY NAME: SAIC			2 DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1
3 PROJECT: RVAAP, Load Line 4 Phase II RI			4 LOCATION: Load Line 4		
5 NAME OF DRILLER: PAUL LUGST			6 MANUFACTURERS DESIGNATION OF DRILL: BUCKET AUGER		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8 HOLE LOCATION: Near Adams Bldg. Grill			
2 50 BUCKET AUGER		9 SURFACE ELEVATION: N/A			
50 PAWL		10 DATE STARTED: 8/22/01		11 DATE COMPLETED: 8/24/01	
50 BRUSH				8/22/01	
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): N/A			
18 GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
19 TOTAL NUMBER OF CORE BOXES: N/A		20 SAMPLES FOR CHEMICAL ANALYSIS		21 TOTAL CORE RECOVERY: N/A%	
VOC		METALS		OTHER (SPECIFY)	
22 DISPOSITION OF HOLE: MONITORING WELL		BACKFILLED		OTHER (SPECIFY)	
KENTONITE				23 SIGNATURE OF INSPECTOR: B. J. Hill	

LOCATION SKETCH/COMMENTS SCALE: NOT TO SCALE

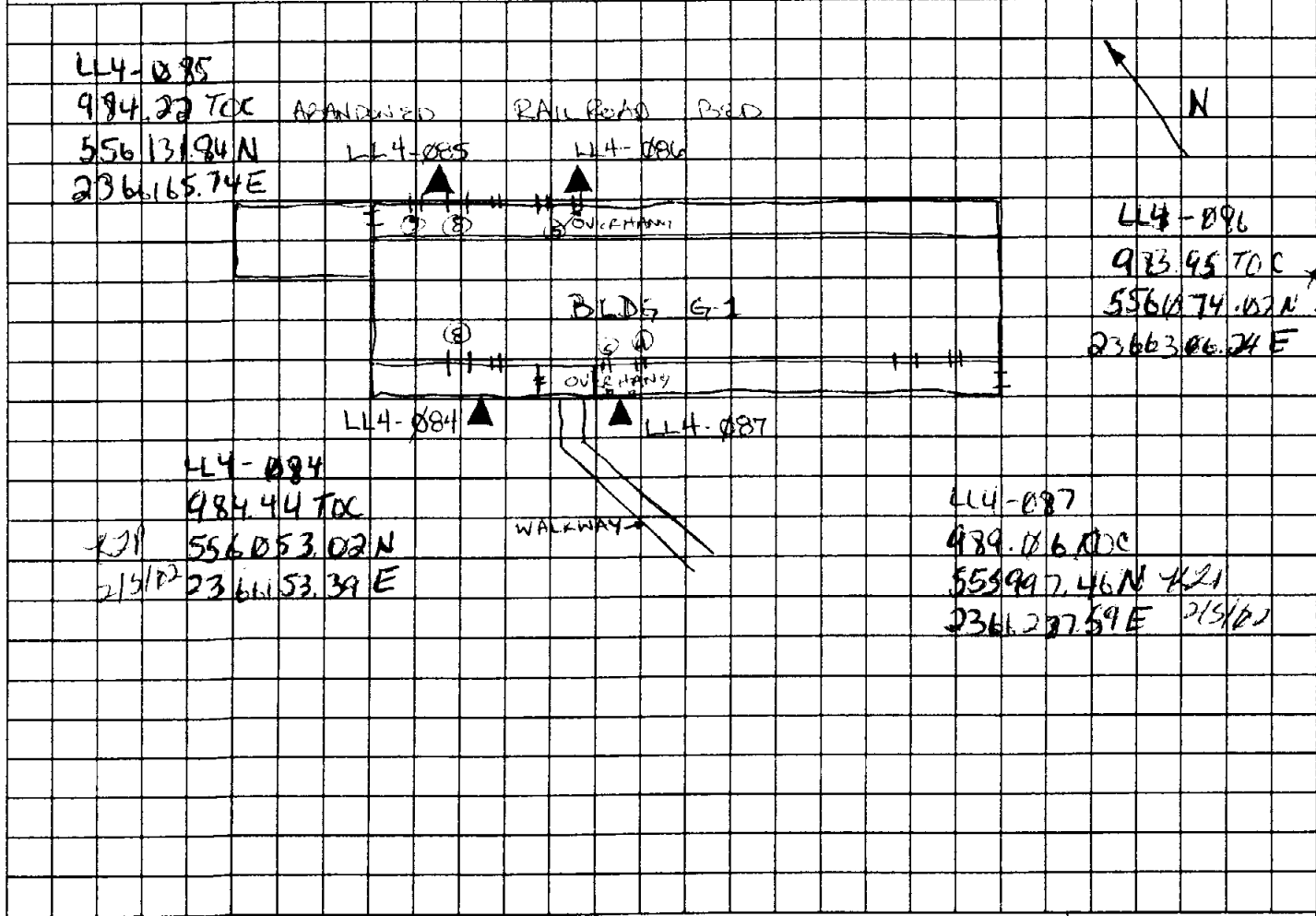


PROJECT RVAAP, Load Line 4 Phase II RI HOLE NUMBER MULTIPLE

LL4-084, 085, 086, 087

HTRW DRILLING LOG		DISTRICT: Louisville		CR 12-2	HOLE NUMBER MULTIPLE
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: Load Line 4		
5. NAME OF DRILLER:			6. MANUFACTURERS DESIGNATION OF DRILL: BUCKET AUGER		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: AROUND NEAR BLDG. C-1A			
3" AUGER BUCKET SS BOWL SS SCREEN		9. SURFACE ELEVATION: N/A			
12. OVERBURDEN THICKNESS: N/A		10. DATE STARTED: N/A			
13. DEPTH DRILLED INTO ROCK: N/A		11. DATE COMPLETED: N/A			
14. TOTAL DEPTH OF HOLE: N/A		15. DEPTH GROUNDWATER ENCOUNTERED: N/A			
		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A			
		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
SEE INDIVIDUAL BORING LOG					
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
CONCRETE PLUG				23. SIGNATURE OF INSPECTOR: B. Williams	
19. TOTAL NUMBER OF CORE BOXES: N/A		21. TOTAL CORE RECOVERY: N/A %			

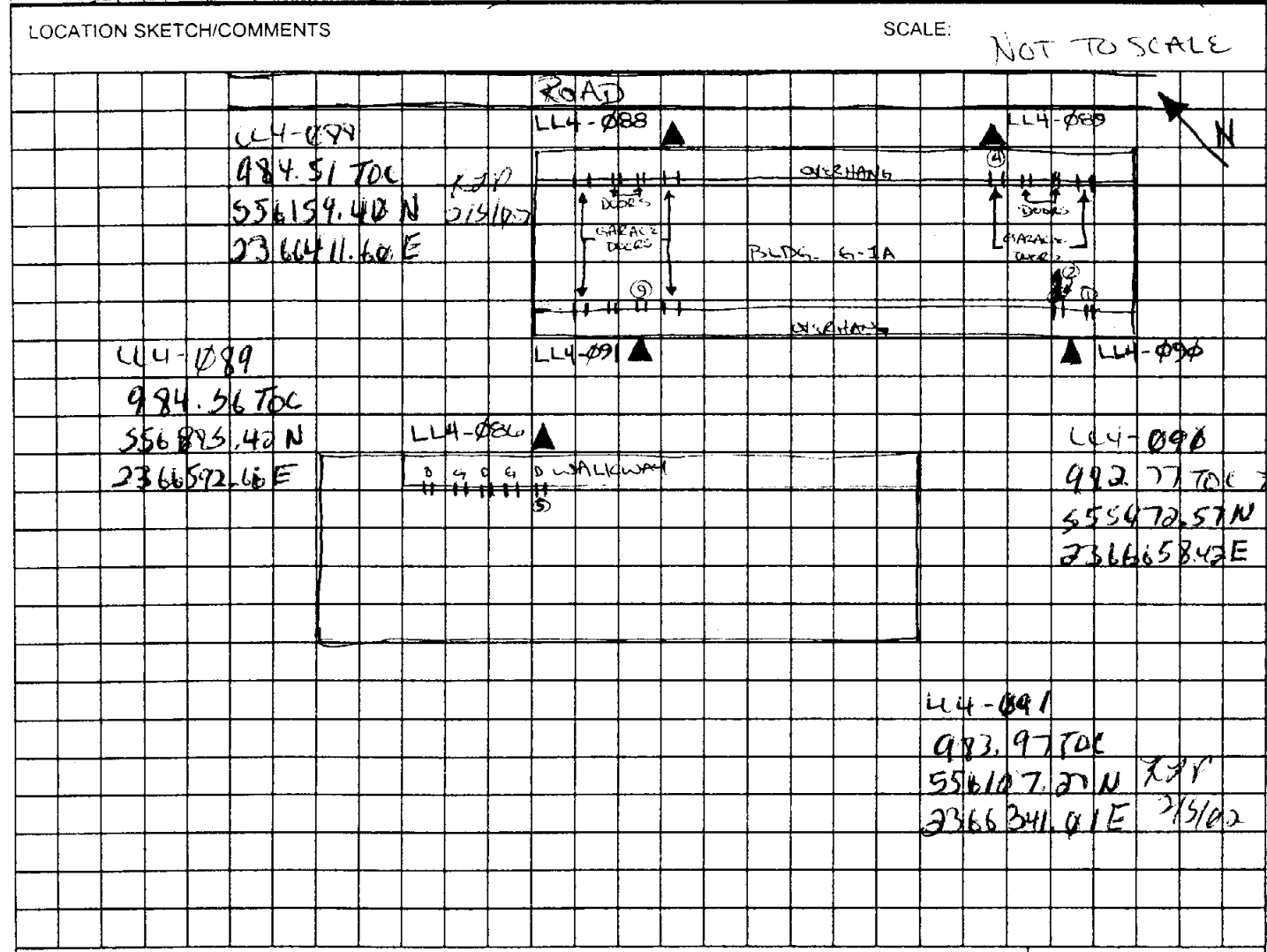
LOCATION SKETCH/COMMENTS SCALE: NOT TO SCALE



PROJECT RVAAP, Load Line 4 Phase II RI HOLE NUMBER MULTIPLE

LL4-084, 085, 086, 087

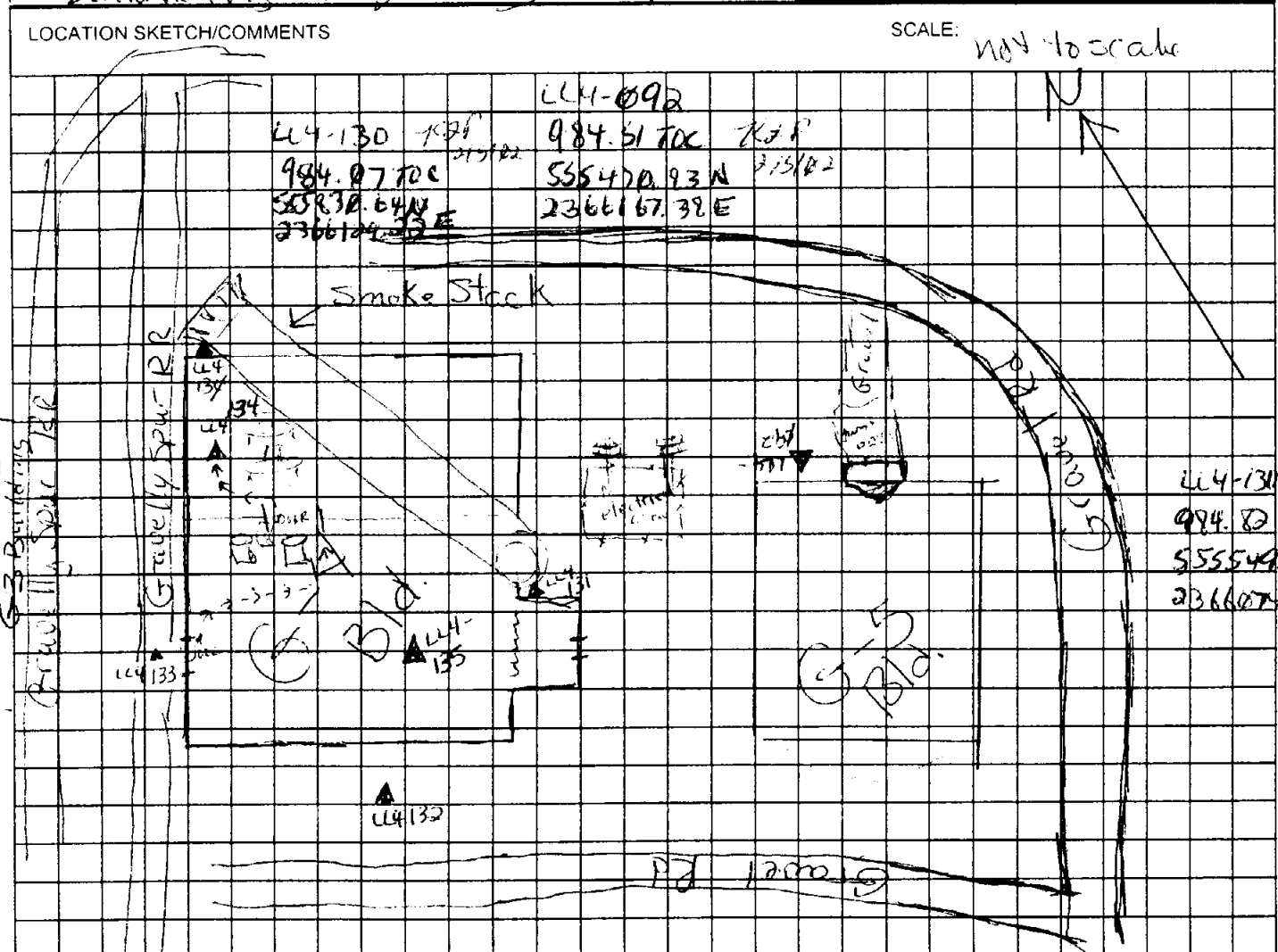
HTRW DRILLING LOG		DISTRICT: Louisville		CR 17-02	HOLE NUMBER MULTIPLE
1 COMPANY NAME: SAIC		2 DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3 PROJECT: RVAAP, Load Line 4 Phase II RI			4 LOCATION: Load Line 4		
5 NAME OF DRILLER: Paul Lucot			5. MANUFACTURERS DESIGNATION OF DRILL: Bucket auger		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: NEAR AND AROUND BLDG. G-1A			
3/2 SS AUGER (BUCKET)		9 SURFACE ELEVATION: N/A			
SS BOWL		10. DATE STARTED: 8/22/01			
SS SPOON		11. DATE COMPLETED: 8/24/01			
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): N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES: N/A		20 SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY: N/A%	
VOC		METALS		OTHER (SPECIFY)	
22 DISPOSITION OF HOLE: PENTONITE PLUG		BACKFILLED		MONITORING WELL	
OTHER (SPECIFY)		OTHER (SPECIFY)		OTHER (SPECIFY)	
23 SIGNATURE OF INSPECTOR: B.W. Williams					



PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER MULTIPLE
---	----------------------

LL4-092, 130, 131, 133, 135
134

HTRW DRILLING LOG		DISTRICT: Louisville		CR 12-02	HOLE NUMBER Multiple
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA			SHEET 1 OF 1
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: near Bld G5 and G4		
5. NAME OF DRILLER: Brian Williams, Dave Guenther			6. MANUFACTURERS DESIGNATION OF DRILL: Bucket auger		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3 1/2" SS bucket auger		8. HOLE LOCATION: near Bld. G5 and G4	
		SS pean. SS bowl		9. SURFACE ELEVATION: N/A	
		10. DATE STARTED: 6/14/01		11. DATE COMPLETED: 8/14/01	
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): N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
OTHER (SPECIFY):		OTHER (SPECIFY):		OTHER (SPECIFY):	
21. TOTAL CORE RECOVERY %		N/A			
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
OTHER (SPECIFY):		OTHER (SPECIFY):		OTHER (SPECIFY):	
23. SIGNATURE OF INSPECTOR		[Signature]			

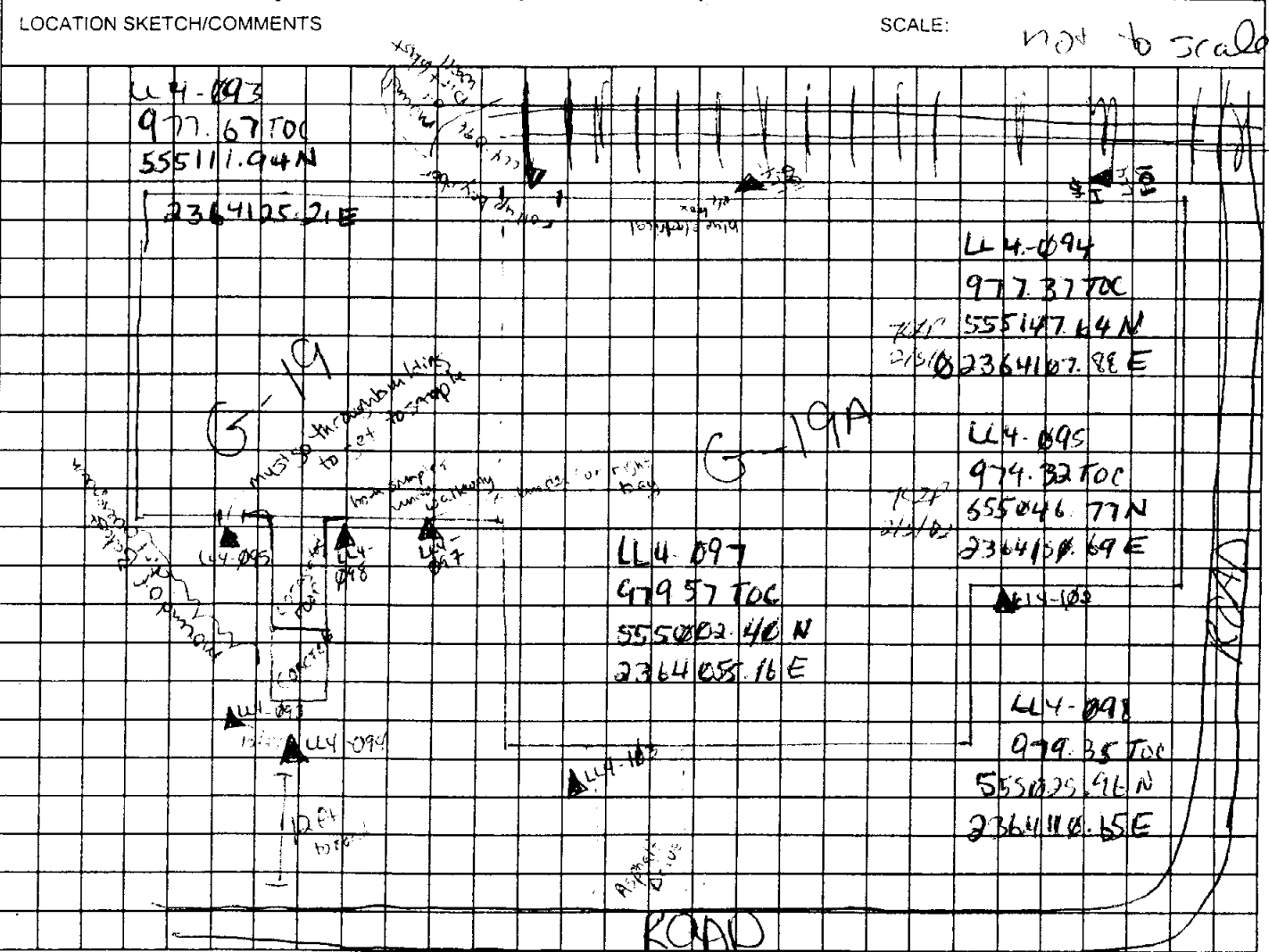


PROJECT: RVAAP, Load Line 4 Phase II RI

HOLE NUMBER: Multiple

LL4-093, 094, 095, ~~097, 098~~
CR 12.02

HTRW DRILLING LOG		DISTRICT: Louisville		CR 12.02	HOLE NUMBER Multiple
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: near building G-19A : G-19		
5. NAME OF DRILLER: Matt Root			6. MANUFACTURERS DESIGNATION OF DRILL: bucket auger		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: near building G-19A : G-19			
3 1/2" SS bucket auger SS spoon, SS bowl		9. SURFACE ELEVATION: n/a			
12. OVERBURDEN THICKNESS: n/a		10. DATE STARTED: 8-22-01			
13. DEPTH DRILLED INTO ROCK: n/a		11. DATE COMPLETED:			
14. TOTAL DEPTH OF HOLE: n/a		15. DEPTH GROUNDWATER ENCOUNTERED: n/a			
		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: n/a			
		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): n/a			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
see text page				OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
bentonite plug				OTHER (SPECIFY)	
				19. TOTAL NUMBER OF CORE BOXES: n/a	
				21. TOTAL CORE RECOVERY %	
				23. SIGNATURE OF INSPECTOR: Canall	



PROJECT: RVAAP, Load Line 4 Phase II RI

HOLE NUMBER: Multiple

LL4-093, 094, 095,
~~097, 098~~
CR 12.02

CR 12-02

HTRW DRILLING LOG		DISTRICT: Louisville		HOLE NUMBER multiple	
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET <u>1</u> OF <u>1</u>	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: near Building 19A: 19		
5. NAME OF DRILLER: Matt Root			6. MANUFACTURERS DESIGNATION OF DRILL: Bucket auger		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: near Building 19A: 19			
3 1/2" SS bucket auger SS spoon: SS bucket		9. SURFACE ELEVATION: n/a			
		10. DATE STARTED: 8-22-01		11. DATE COMPLETED:	
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): n/a			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
see text page					
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
bentonite plug					
				19. TOTAL NUMBER OF CORE BOXES: n/a	
				21. TOTAL CORE RECOVERY: %	
				23. SIGNATURE OF INSPECTOR: C. Canall	

LOCATION SKETCH/COMMENTS

SCALE:

LL4-096	979.63 TOC	ZZP	
554967.92 N		2/5/02	
236416.20 E			
LL4-100	479.04 TOC		
554922.02 N			
236402.45 E			
LL4-101	970.04 TOC	ZZP	
554861.73 N		2/5/02	
236291.04 E			
LL4-102	980.67 TOC	ZZP	
554951.59 N		2/5/02	
23639.05.49 E			
LL4-103	978.39 TOC	ZZP	
555042.59 N		2/5/02	
2383936.54 E			

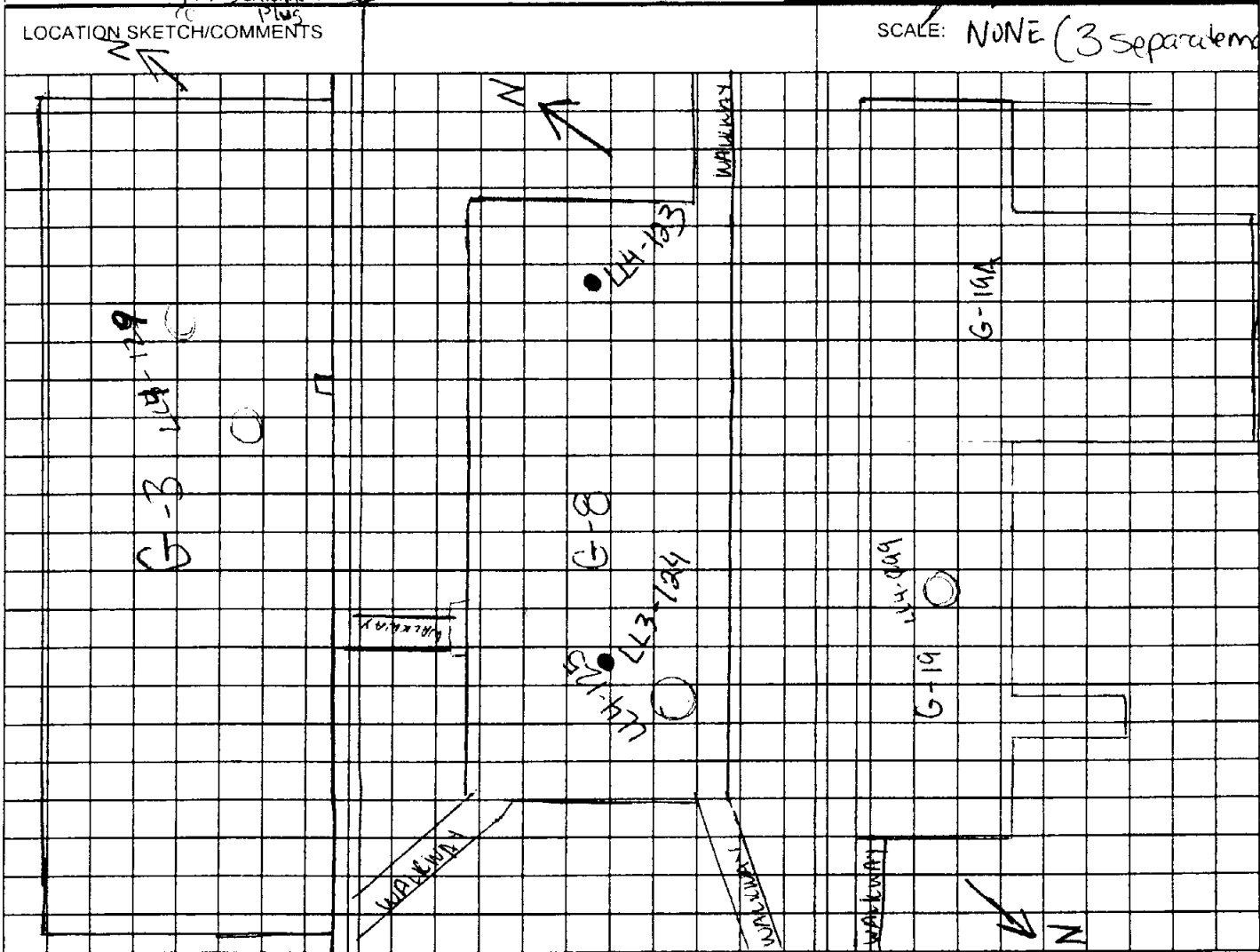
See page 27 of the Load Line 4
Soils Sampling Logbook #4
for the locations

PROJECT: RVAAP, Load Line 4 Phase II RI

HOLE NUMBER multiple

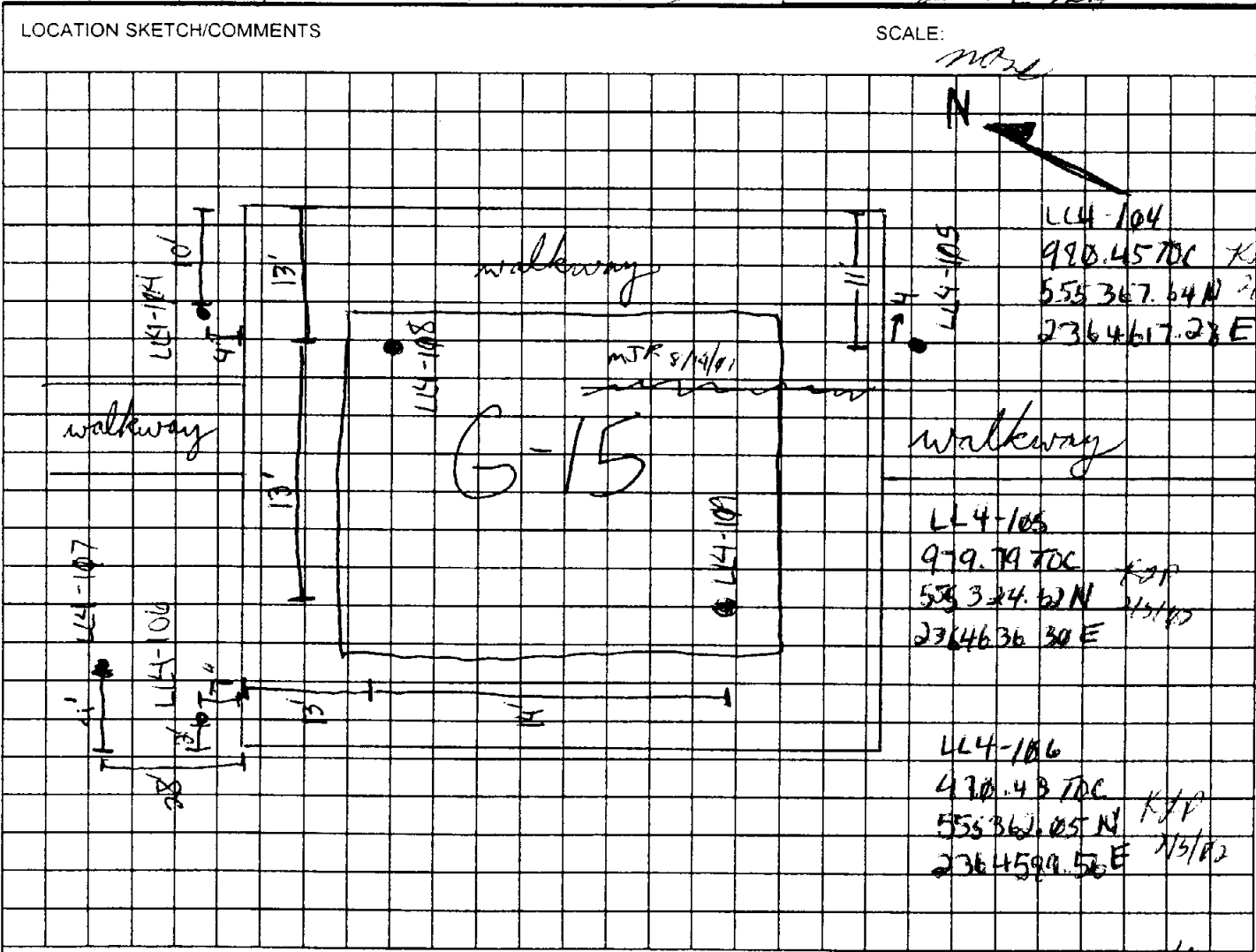
HTRW DRILLING LOG		DISTRICT Louisville		CR 1202	HOLE NUMBER NA
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET <u>1</u> OF <u>1</u>	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: LOAD LINE 4, Bld's G-3, G-8, G-19, G-19A		
5. NAME OF DRILLER: NA			6. MANUFACTURERS DESIGNATION OF DRILL: NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: LL4 Bldg's G-3, G-8, G-19, G-19A			
NA 5536" bucket auger 33" spoon, 55 bowl Sleeve pipe, 25" span and detached boom		9. SURFACE ELEVATION: NA			
12. OVERBURDEN THICKNESS: NA		10. DATE STARTED: 8/20/01			
13. DEPTH DRILLED INTO ROCK: NA		11. DATE COMPLETED: 8/20/01			
14. TOTAL DEPTH OF HOLE: NA		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	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)
see text page					
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR	
n/a Bentonite plus				<i>[Signature]</i>	
21. TOTAL CORE RECOVERY: NA					



PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: NA
---	-----------------

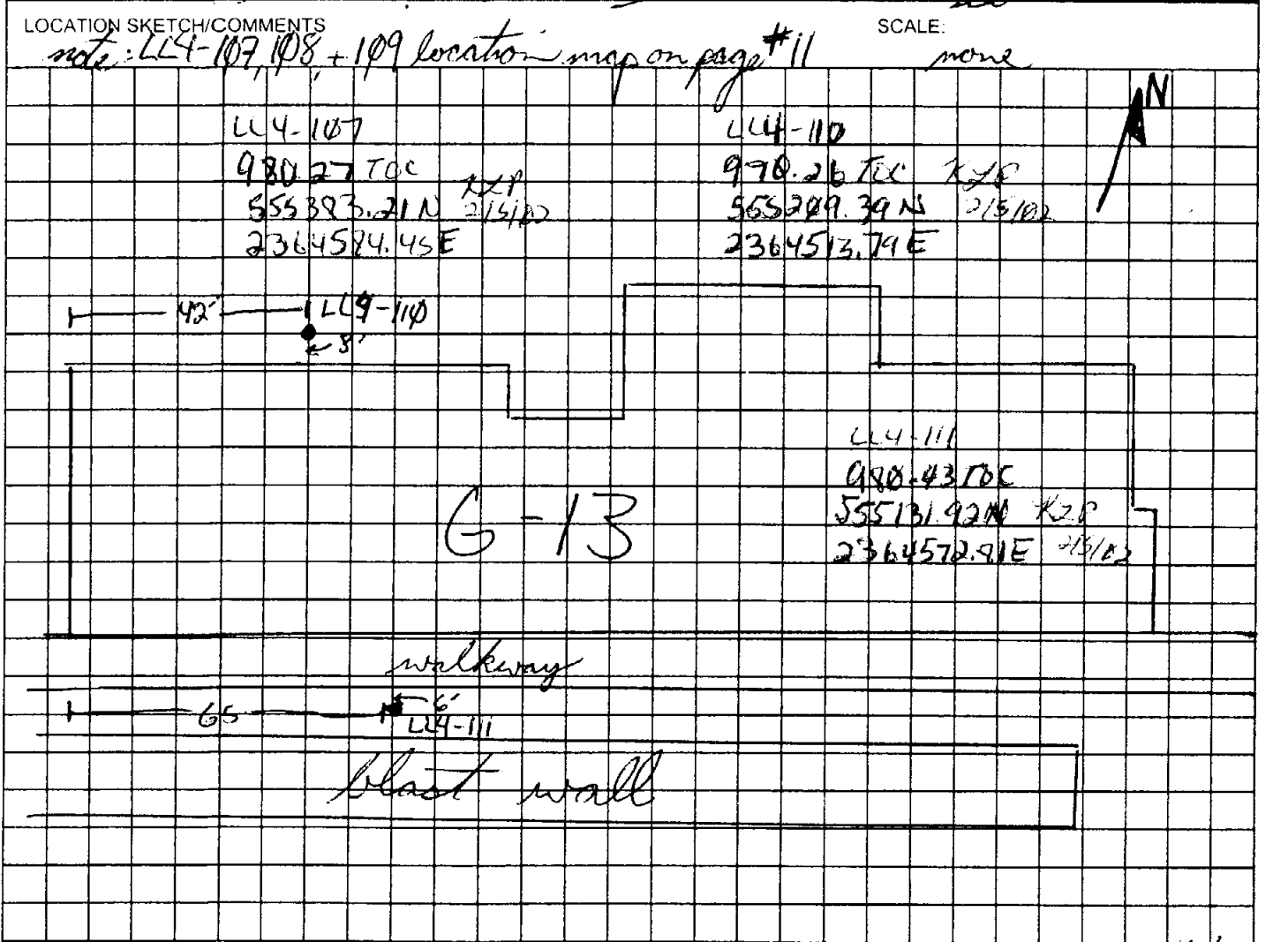
HTRW DRILLING LOG		DISTRICT Louisville		CR 12-02	HOLE NUMBER <i>NA</i> multiple
1 COMPANY NAME: SAIC		2 DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3 PROJECT: RVAAP, Load Line 4 Phase II RI			4 LOCATION: <i>LL4</i>		
5 NAME OF DRILLER: <i>SAIC</i>			6 MANUFACTURERS DESIGNATION OF DRILL: <i>NA</i>		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: <i>3 1/2 bucket auger, 55' spoon</i>		8 HOLE LOCATION: <i>near building G-15^{CC}</i>			
<i>with 100 8/13/01</i>		9 SURFACE ELEVATION: <i>NA</i>		10 DATE STARTED: <i>8/13/01</i>	
12 OVERBURDEN THICKNESS: <i>NA</i>		11 DATE COMPLETED: <i>8/14/01 8/23/01</i>			
13 DEPTH DRILLED INTO ROCK: <i>NA</i>		15 DEPTH GROUNDWATER ENCOUNTERED: <i>NA</i>			
14 TOTAL DEPTH OF HOLE: <i>NA</i>		16 DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: <i>NA</i>			
18 GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
19 TOTAL NUMBER OF CORE BOXES		20 SAMPLES FOR CHEMICAL ANALYSIS: <i>see text page</i>		21 TOTAL CORE RECOVERY: <i>NA</i> %	
22 DISPOSITION OF HOLE: <i>ben tonite plug</i>		BACKFILLED <input checked="" type="checkbox"/>		MONITORING WELL <input type="checkbox"/>	
23 SIGNATURE OF INSPECTOR: <i>with 100</i>		OTHER (SPECIFY): <i>various</i>		OTHER (SPECIFY):	



PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: <i>NA</i>
---	------------------------

LL4-107, 110, 111

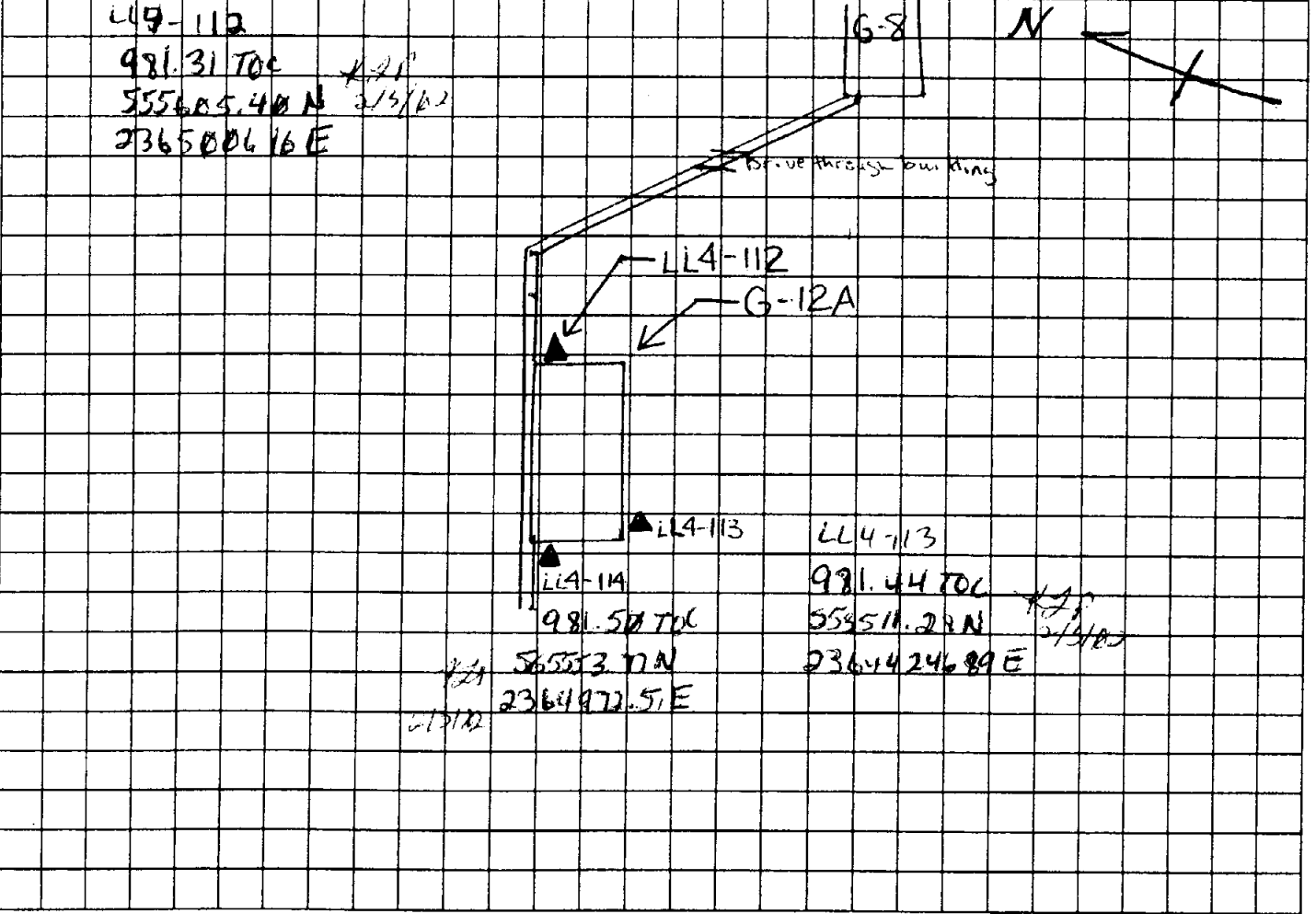
HTRW DRILLING LOG		DISTRICT Louisville		CR 12-02	HOLE NUMBER NA/multiple
1 COMPANY NAME: SAIC		2 DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3 PROJECT: RVAAP, Load Line 4 Phase II RI			4 LOCATION: LL4		
5 NAME OF DRILLER: SAK			6 MANUFACTURERS DESIGNATION OF DRILL: NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8 HOLE LOCATION: near building, G-13			
30 bucket auger SS spoon and SS bowl		9 SURFACE ELEVATION: NA			
8/12/01		10 DATE STARTED: 8/12/01		11 DATE COMPLETED: 8/13/01	
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		DISTURBED		UNDISTURBED	
20 SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
300-100 pass		X		OTHER (SPECIFY):	
22 DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
benzene filter		X		OTHER (SPECIFY):	
				23 SIGNATURE OF INSPECTOR: [Signature]	
19 TOTAL NUMBER OF CORE BOXES: NA				21 TOTAL CORE RECOVERY: NA%	



PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: NA/multiple
---	--------------------------

HTRW DRILLING LOG		DISTRICT: Louisville		CR 12-02	HOLE NUMBER Multiple
1 COMPANY NAME: SAIC		2 DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3 PROJECT: RVAAP, Load Line 4 Phase II RI			4 LOCATION: near Building G-12A, LL4		
5 NAME OF DRILLER: Beau Williams			6 MANUFACTURERS DESIGNATION OF DRILL: Bucket Auger		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3 1/4" S.S. bucket auger S.S. Bows & spears		8 HOLE LOCATION: G-12A building area	
9 SURFACE ELEVATION: N/A			10 DATE STARTED: 8/21/01 N/A, cc		
11 DATE COMPLETED: N/A 8/23/01 N/A, cc			12 OVERBURDEN THICKNESS: N/A		
13 DEPTH DRILLED INTO ROCK: N/A			15 DEPTH GROUNDWATER ENCOUNTERED: N/A		
14 TOTAL DEPTH OF HOLE: N/A			16 DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: N/A		
17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY): N/A			18 GEOTECHNICAL SAMPLES		
20 SAMPLES FOR CHEMICAL ANALYSIS		DISTURBED		UNDISTURBED	
21 TOTAL CORE RECOVERY: N/A		VOC		METALS	
22 DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
23 SIGNATURE OF INSPECTOR: Paul J. Puroh		OTHER (SPECIFY)		OTHER (SPECIFY)	
See Individual Borings Logs		OTHER (SPECIFY)		OTHER (SPECIFY)	
Plugged w/ Bentonite		OTHER (SPECIFY)		OTHER (SPECIFY)	

LOCATION SKETCH/COMMENTS SCALE: 1" = 125'



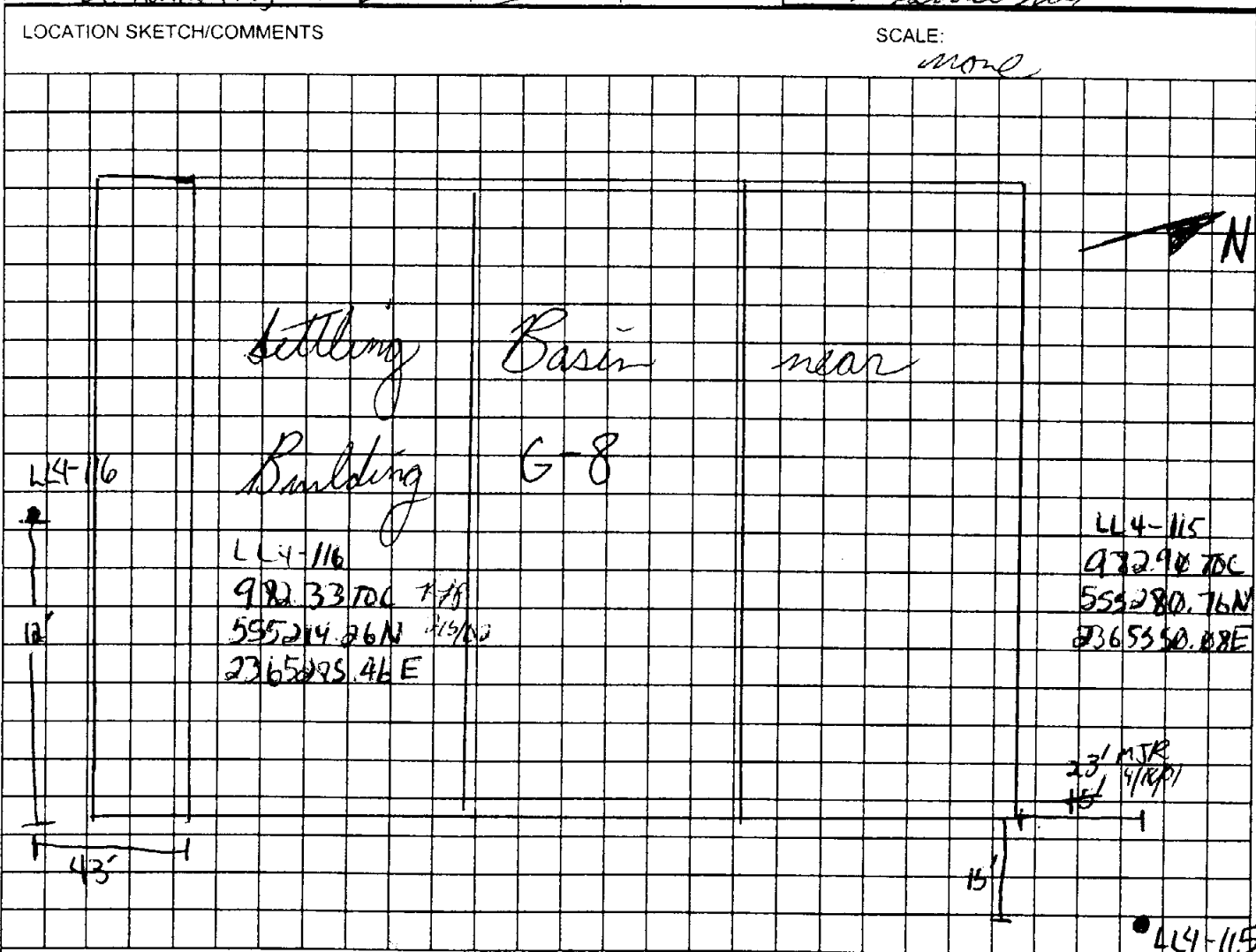
PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: Multiple
---	-----------------------

LL4-115,116

HTRW DRILLING LOG		DISTRICT: Louisville	CR 12-02	HOLE NUMBER NA
1 COMPANY NAME: SAIC		2 DRILL SUBCONTRACTOR: NA		SHEET <u>L</u> OF <u>L</u>

3 PROJECT: RVAAP, Load Line 4 Phase II RI		4 LOCATION: <u>Settling Basin near Bld. G-8</u>		
5 NAME OF DRILLER: <u>B. Buckwalter, S. Geller</u>		6 MANUFACTURERS DESIGNATION OF DRILL: <u>Bucket auger</u>		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>3 bucket auger (SS)</u> <u>SS spoon - 55mm</u> 1/2" dia. 3" long 1/2" dia. 3" long 1/2" dia. 3" long		8 HOLE LOCATION: <u>Settling Basin near Bld. G-8</u>		
		9 SURFACE ELEVATION: <u>N/A</u>		
		10 DATE STARTED: <u>8/14/01</u>	11 DATE COMPLETED: <u>8/14/01</u>	
12 OVERBURDEN THICKNESS: <u>NA</u>		15 DEPTH GROUNDWATER ENCOUNTERED: <u>NA</u>		
13 DEPTH DRILLED INTO ROCK: <u>NA</u>		16 DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: <u>NA</u>		
14 TOTAL DEPTH OF HOLE: <u>NA</u>		17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY): <u>NA</u>		

18 GEOTECHNICAL SAMPLES	DISTURBED		UNDISTURBED		19 TOTAL NUMBER OF CORE BOXES: <u>NA</u>	
20 SAMPLES FOR CHEMICAL ANALYSIS <u>see text page</u>	VOC	METALS	OTHER (SPECIFY): <u>WATERWAYS</u>	OTHER (SPECIFY):	OTHER (SPECIFY):	21 TOTAL CORE RECOVERY: <u>NA</u>
22 DISPOSITION OF HOLE <u>benzoinite Plug</u>	BACKFILLED	MONITORING WELL	OTHER (SPECIFY):	23 SIGNATURE OF INSPECTOR: <u>[Signature]</u>		

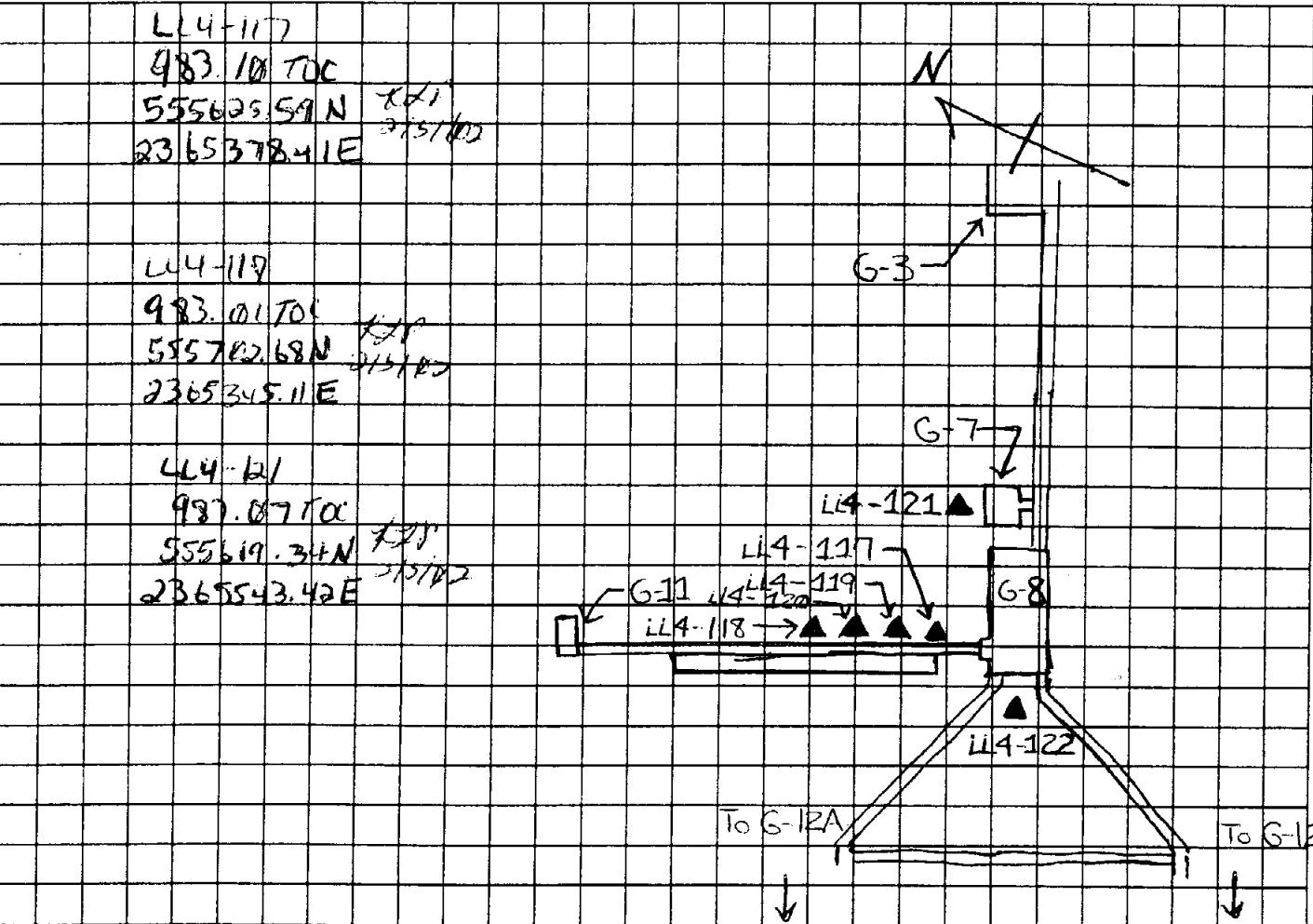


PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: <u>NA</u>
---	------------------------

LL4-117, 118, 121, 122

HTRW DRILLING LOG		DISTRICT: Louisville		HOLE NUMBER Multiple	
1 COMPANY NAME: SAIC		2 DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3 PROJECT: RVAAP, Load Line 4 Phase II RI			4 LOCATION: Load Line 4		
5 NAME OF DRILLER: Beau Williams			6 MANUFACTURERS DESIGNATION OF DRILL: Bucket Auger		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8 HOLE LOCATION:		9 SURFACE ELEVATION:	
3 1/4" S.S. Bucket Auger, S.S. Bawls & spoons		Near G-8		N/A	
12 OVERBURDEN THICKNESS		15 DEPTH GROUNDWATER ENCOUNTERED:		11 DATE COMPLETED:	
N/A		N/A		N/A	
13 DEPTH DRILLED INTO ROCK		16 DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED:		17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY):	
N/A		N/A		N/A	
14 TOTAL DEPTH OF HOLE		18 GEOTECHNICAL SAMPLES		19 TOTAL NUMBER OF CORE BOXES	
N/A		N/A		N/A	
20 SAMPLES FOR CHEMICAL ANALYSIS		21 TOTAL CORE RECOVERY		23 SIGNATURE OF INSPECTOR	
See Individual Boring logs		N/A		Paul J. Jacob	
22 DISPOSITION OF HOLE		23 SIGNATURE OF INSPECTOR		23 SIGNATURE OF INSPECTOR	
Bentonite Plug		Paul J. Jacob		Paul J. Jacob	

LOCATION SKETCH/COMMENTS SCALE: 1" = 250'



PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: Multiple
---	-----------------------

HTRW DRILLING LOG		DISTRICT: Louisville		4-23, 124 CR 02 12		HOLE NUMBER NA	
1 COMPANY NAME: SAIC		2 DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1			
3 PROJECT: RVAAP, Load Line 4 Phase II RI				4 LOCATION: LL4			
5 NAME OF DRILLER: SAIC				6 MANUFACTURERS DESIGNATION OF DRILL: NA			
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" bucket auger (SS) SS Spade SS bowl		8 HOLE LOCATION: NA ^{MTR} 8/14/01 near building 6-8		9 SURFACE ELEVATION: NA	
NA		NA		10 DATE STARTED: 8/14/01		11 DATE COMPLETED: 8/14/01	
12 OVERBURDEN THICKNESS: NA		13 DEPTH DRILLED INTO ROCK: NA		14 TOTAL DEPTH OF HOLE: NA		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		DISTURBED		UNDISTURBED		19 TOTAL NUMBER OF CORE BOXES: NA	
20 SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY):	
Set text page				X		OTHER (SPECIFY): Substrate	
22 DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY):	
bentonite Plug		X				23 SIGNATURE OF INSPECTOR: <i>Matthew Root</i>	

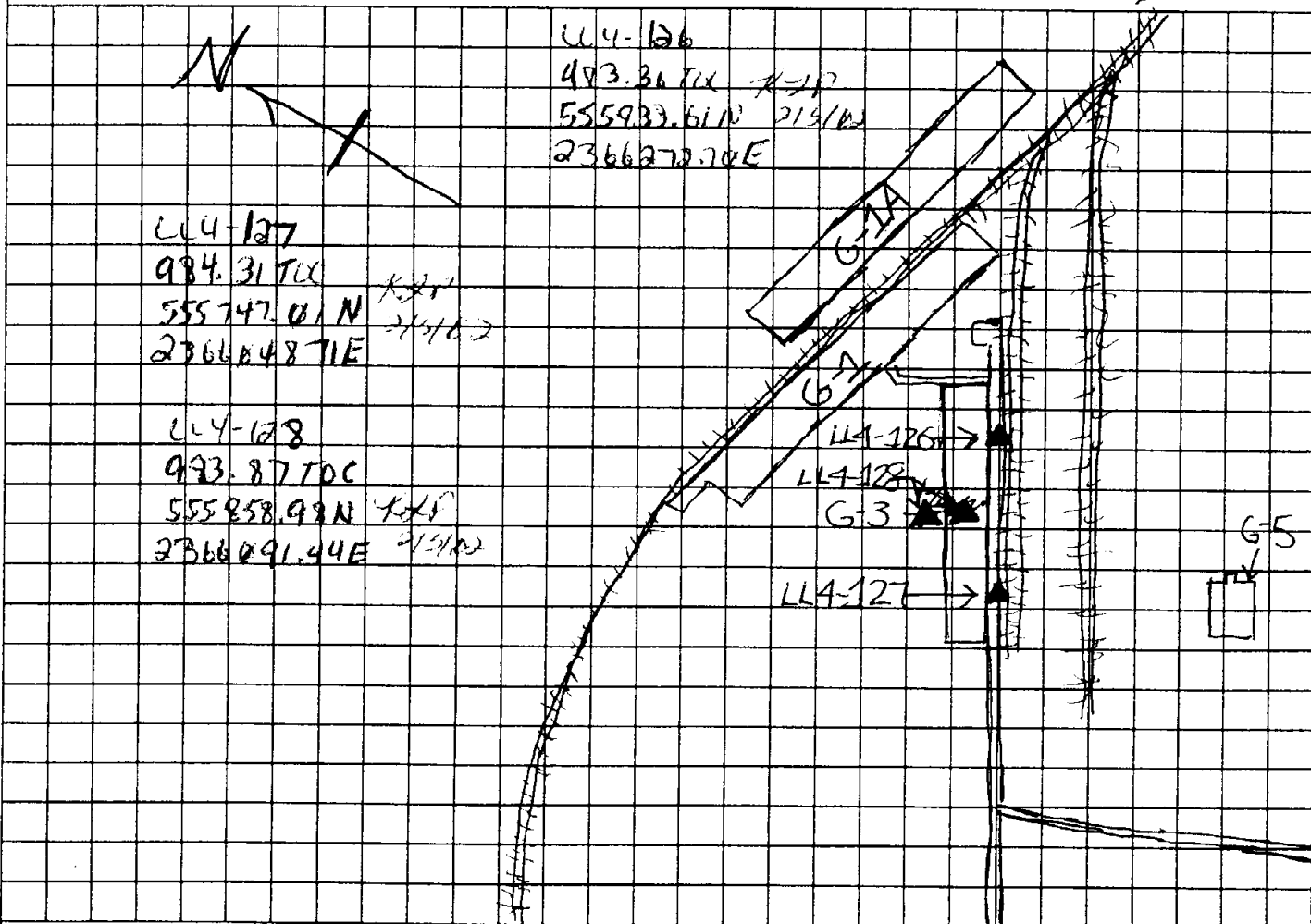
LOCATION SKETCH/COMMENTS SCALE: NA

See map on page 47
of the Load Line 4
Soil Sampling Logbook #1
book 12

HTRW DRILLING LOG		DISTRICT Louisville		C.R. 12-2		HOLE NUMBER Multiple	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1			
3. PROJECT RVAAP, Load Line 4 Phase II RI			4. LOCATION: ^{D32} G-3 (Load Line 4)				
5. NAME OF DRILLER <u>Bow Williams</u>			6. MANUFACTURERS DESIGNATION OF DRILL: <u>Bucket Auger</u>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		<u>3 1/4" O.D. SS Bucket Auger.</u>		8. HOLE LOCATION		<u>Near G-3</u>	
		<u>SS Spoons & Bowls</u>		9. SURFACE ELEVATION		<u>N/A</u>	
				10. DATE STARTED		11. DATE COMPLETED	
				<u>N/A</u>		<u>N/A</u>	
12. OVERBURDEN THICKNESS			15. DEPTH GROUNDWATER ENCOUNTERED:				
<u>N/A</u>			<u>N/A</u>				
13. DEPTH DRILLED INTO ROCK			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED:				
<u>N/A</u>			<u>N/A</u>				
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):				
<u>N/A</u>			<u>N/A</u>				
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES	
<u>N/A</u>							
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
<u>See Boring Logs</u>							
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
<u>Bentonite Plug</u>							
23. SIGNATURE OF INSPECTOR						21. TOTAL CORE RECOVERY	
<u>[Signature]</u>						<u>N/A</u>	

LOCATION SKETCH/COMMENTS

SCALE: 1" ~ 250'



PROJECT RVAAP, Load Line 4 Phase II RI

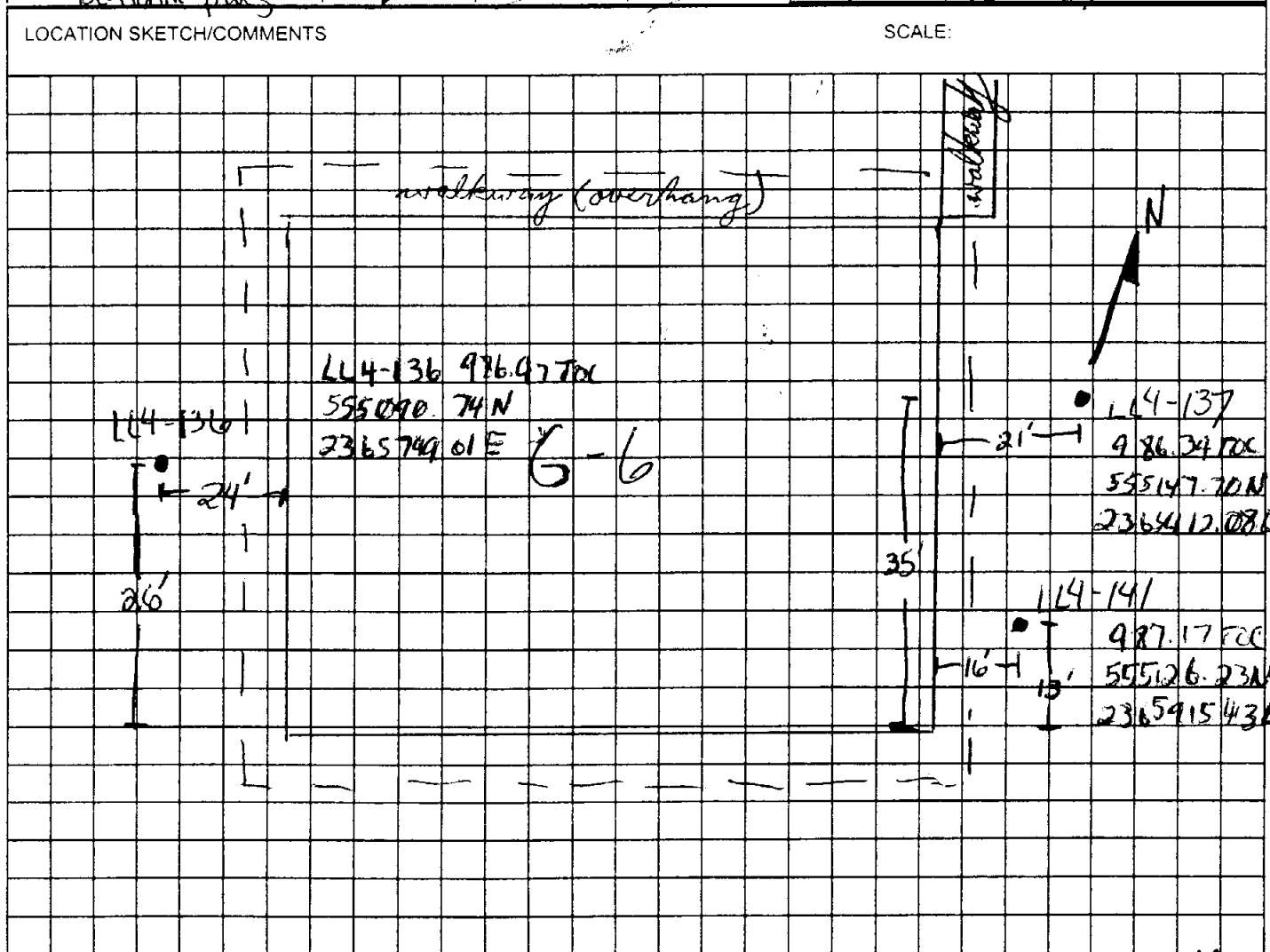
HOLE NUMBER Multiple

HTRW DRILLING LOG		DISTRICT Louisville		CR 12-02	HOLE NUMBER Multiple
1 COMPANY NAME: SAIC		2 DRILL SUBCONTRACTOR: NA		SHEET <u>L</u> OF <u>1</u>	
3 PROJECT: RVAAP, Load Line 4 Phase II RI			4 LOCATION: near Bld. G4		
5 NAME OF DRILLER: Beau Williams, Dave Guenther			6 MANUFACTURERS DESIGNATION OF DRILL: Bucket Auger		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3/2" SS bucket Auger SS Bowl & SS Spoon		8 HOLE LOCATION: near Bld G4	
			9 SURFACE ELEVATION: N/A		
			10. DATE STARTED: 8/14/01		11. DATE COMPLETED: 8/14/01
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): N/A		
18 GEOTECHNICAL SAMPLES		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES: N/A	
20 SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
See text page					
22 DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21 TOTAL CORE RECOVERY: N/A
Bentrite Plug		<input checked="" type="checkbox"/>			Signature of Inspector: [Signature]

LOCATION SKETCH/COMMENTS SCALE:

<p>LL4-132 983.48 TOC 738 555 565.54 N 215/0 2366 836.82 E</p> <p>See map page 3 of the LL4 Soil Sampling Log, book # [] for locations</p>									
--	--	--	--	--	--	--	--	--	--

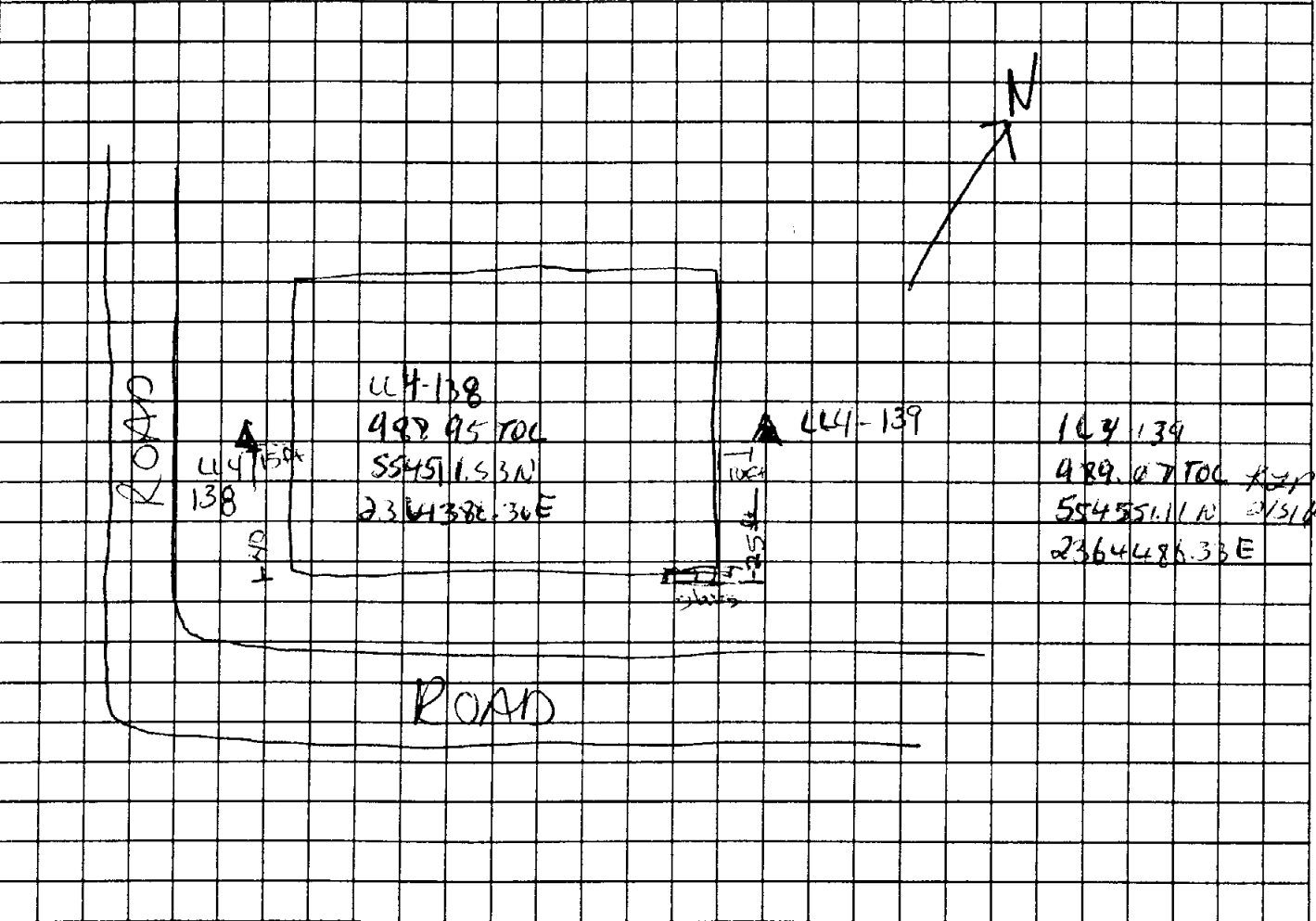
HTRW DRILLING LOG		DISTRICT Louisville		CR 12-02	HOLE NUMBER NA/multiple
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET 1 of 1	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: LL4		
5. NAME OF DRILLER: SAIC			6. MANUFACTURERS DESIGNATION OF DRILL: NA Bucket auger		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket auger (SS) SS 3" core, SS 2" core		8. HOLE LOCATION near G-6		9. SURFACE ELEVATION NA	
2 Walker Road 8/14/01		10. DATE STARTED 8/14/01		11. DATE COMPLETED 8/14/01	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED: NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
13. DEPTH DRILLED INTO ROCK NA		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA		14. TOTAL DEPTH OF HOLE NA	
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS see text page		VOC		OTHER (SPECIFY) various	
22. DISPOSITION OF HOLE bentonite plug		BACKFILLED		MONITORING WELL	
21. TOTAL CORE RECOVERY NA%		19. TOTAL NUMBER OF CORE BOXES NA		23. SIGNATURE OF INSPECTOR Walker Road	



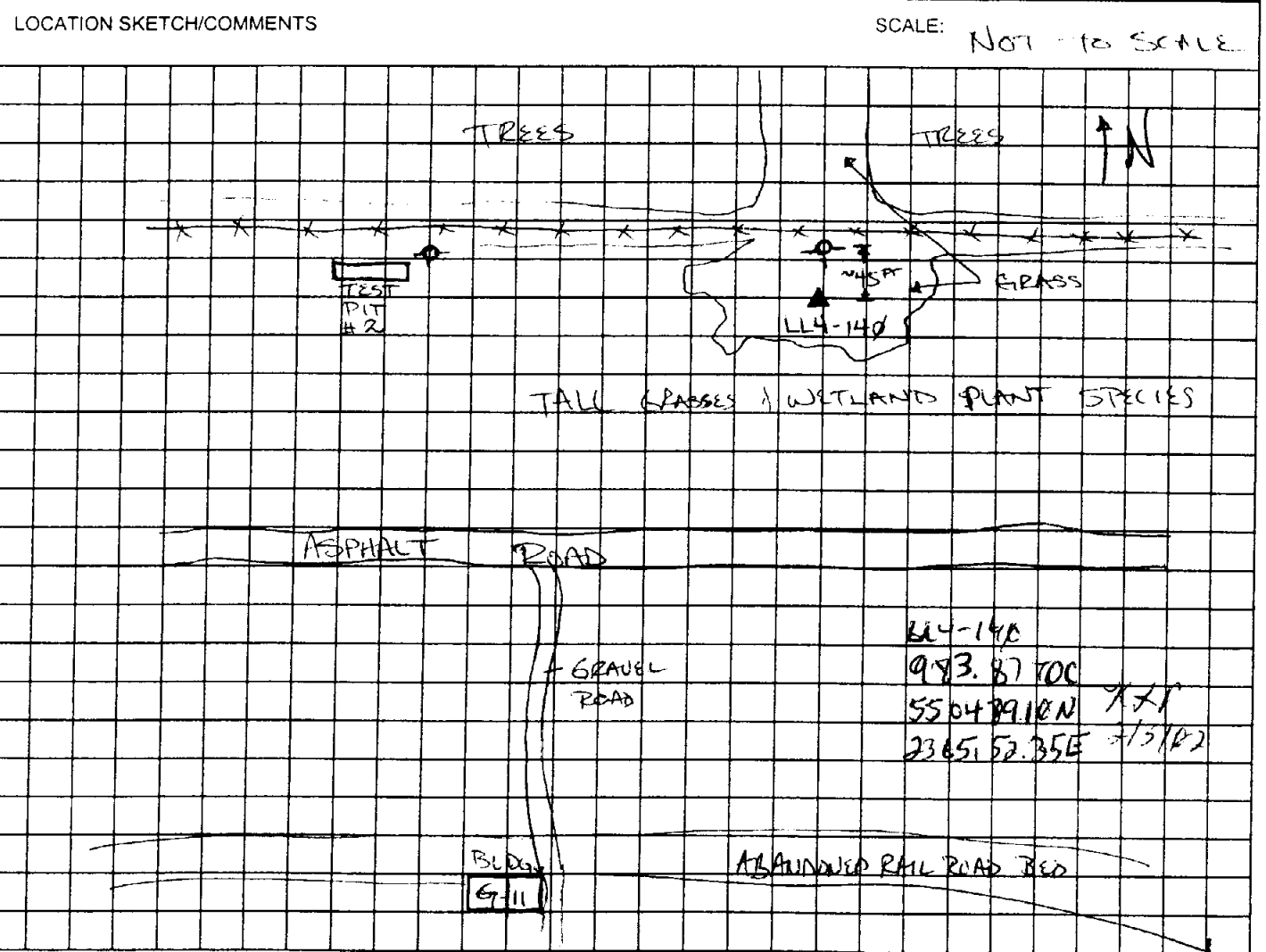
PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: NA/multiple
---	--------------------------

HTRW DRILLING LOG		DISTRICT: Louisville		HOLE NUMBER <i>multiple</i>	
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET <u>1</u> OF <u>1</u>	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: <i>G-6A building</i>		
5. NAME OF DRILLER: <i>Math Root</i>			6. MANUFACTURERS DESIGNATION OF DRILL: <i>Bucket auger</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: <i>G-6A building</i>			
<i>3 1/2" SS auger bucket SS' spoon & SS. bowl</i>		9. SURFACE ELEVATION: <i>N/A</i>			
		10. DATE STARTED: <i>8-21-01</i>		11. DATE COMPLETED:	
12. OVERBURDEN THICKNESS: <i>N/A</i>		15. DEPTH GROUNDWATER ENCOUNTERED: <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK: <i>N/A</i>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: <i>N/A</i>			
14. TOTAL DEPTH OF HOLE: <i>N/A</i>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): <i>N/A</i>			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
<i>see text page</i>					
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
<i>benzene plus</i>					
				19. TOTAL NUMBER OF CORE BOXES: <i>N/A</i>	
				21. TOTAL CORE RECOVERY %	
				23. SIGNATURE OF INSPECTOR	
				<i>Chawli Canall</i>	

LOCATION SKETCH/COMMENTS SCALE: *not to scale*



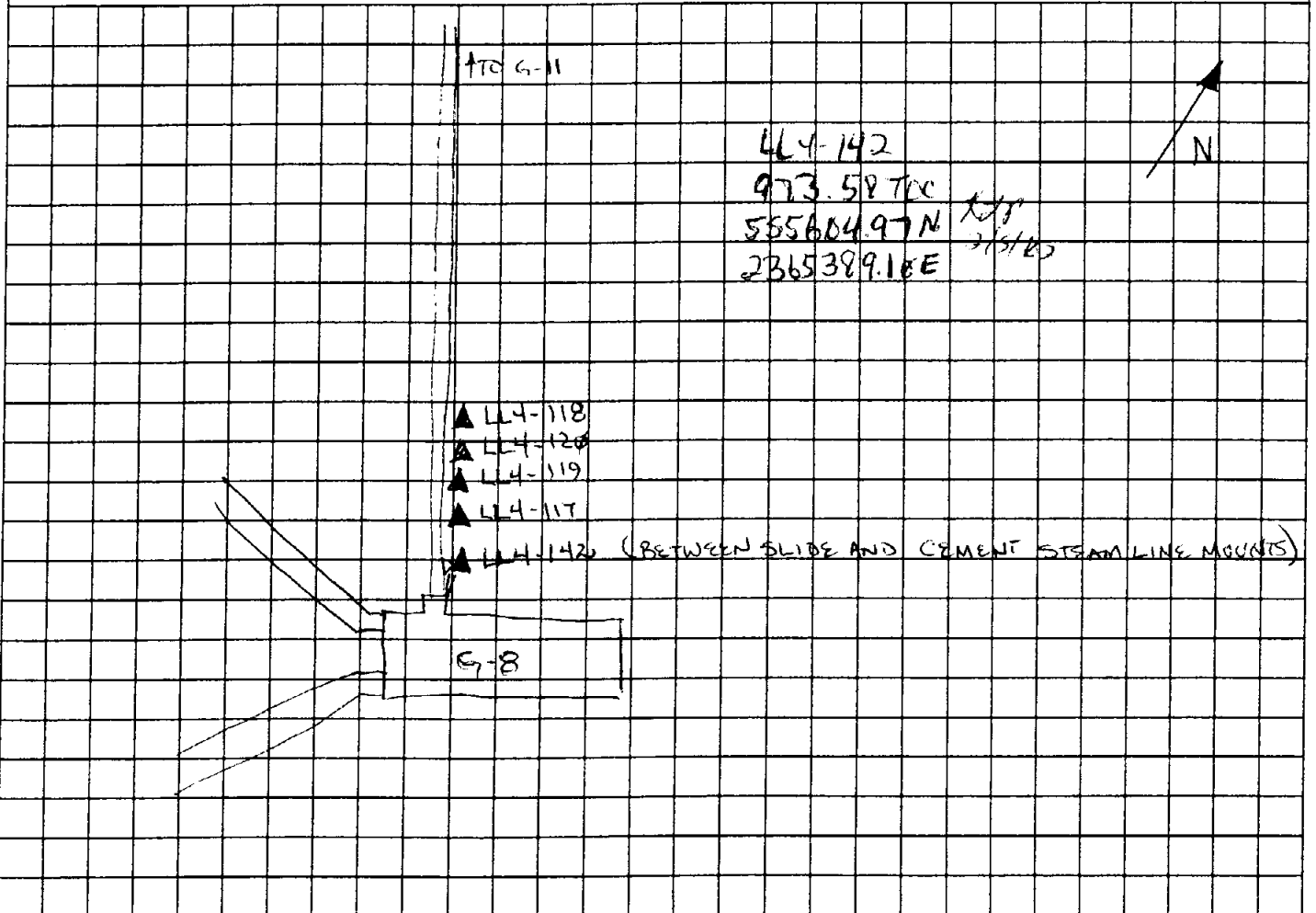
HTRW DRILLING LOG		DISTRICT: Louisville		HOLE NUMBER LL4-140	
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET <u>1</u> OF <u>1</u>	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: LOAD LINE 4		
5. NAME OF DRILLER: Paul Lucet			6. MANUFACTURERS DESIGNATION OF DRILL: BUCKET AUGER		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: NORTH OF BLDG. G-11 NEAR N. FENCE			
3" SS BUCKET AUGER		9. SURFACE ELEVATION: N/A			
SS BOWL		10. DATE STARTED: N/A		11. DATE COMPLETED: N/A	
SS SPOON		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): N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES: N/A		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY: N/A %	
VOC		METALS		OTHER (SPECIFY)	
SEE INDIVIDUAL BENTONITE LOG		TRAM ACTIVITY LOG SHEET		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR: B. Williams		OTHER (SPECIFY)	
BENTONITE PLUG		MONITORING WELL		OTHER (SPECIFY)	



LL4-140
 943.87 TOC
 55048910N X-1
 2385152.35E +/-1/2"

HTRW DRILLING LOG		DISTRICT: Louisville		HOLE NUMBER LL4-142	
1 COMPANY NAME: SAIC		2 DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: LOAD LINE 4		
5. NAME OF DRILLER: PAUL LUCOT			6. MANUFACTURERS DESIGNATION OF DRILL: BUCKET AUGER		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" AUGER BUCKET (S.S.)		8. HOLE LOCATION: NEAR BLDG. G-8	
		SS. PILE		9. SURFACE ELEVATION: N/A	
		SS. PILE		10. DATE STARTED: N/A	
				11. DATE COMPLETED: N/A	
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): N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES: N/A		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY: N/A %	
VOC		METALS		OTHER (SPECIFY)	
SEE INDIVIDUAL BORING LOGS					
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR			
BENTONITE PLUG		BACKFILLED		MONITORING WELL	
		OTHER (SPECIFY)		B. Williams	

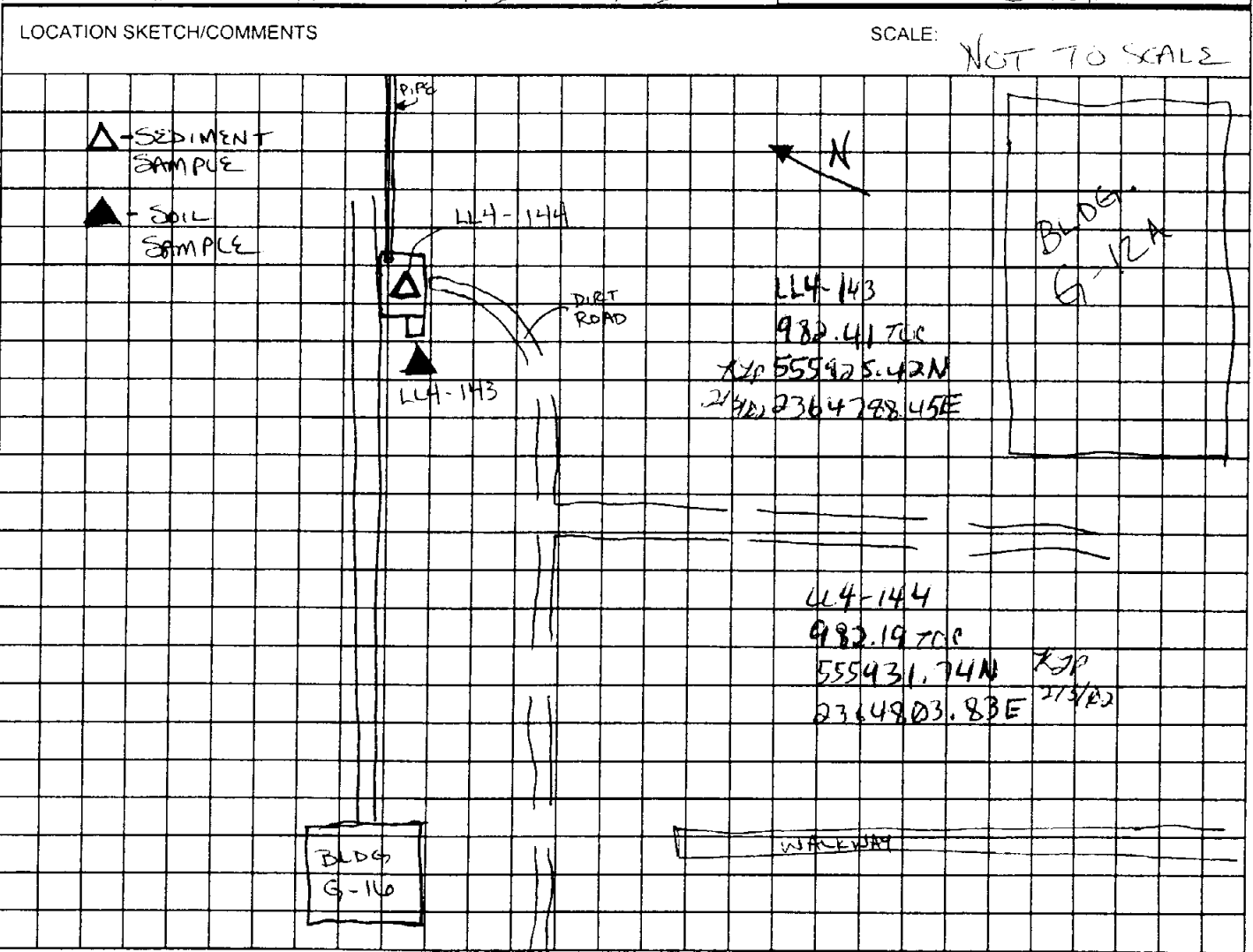
LOCATION SKETCH/COMMENTS SCALE: NOT TO SCALE



PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: LL4-142
---	----------------------

LL4-143, 144

HTRW DRILLING LOG		DISTRICT: Louisville		CR 1222	HOLE NUMBER MULTIPLE
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET 1 OF 1	
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION: LDAT (LINE 4)		
5. NAME OF DRILLER: N/A			6. MANUFACTURERS DESIGNATION OF DRILL: N/A		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION: SEDIMENT BASIN N.E. OF G-16			
ECKMAN S ³ SAMPLER 36" SS BUCKET AUGER SS BOWL SS SCREEN		9. SURFACE ELEVATION: N/A			
		10. DATE STARTED: 8/24/01 N/A CC		11. DATE COMPLETED: 8/24/01 N/A CC	
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): N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES: N/A		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY: N/A %	
VOC		METALS		OTHER (SPECIFY)	
SEE INDIVIDUAL BORING LOG					
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR			
HOLE: PENNONTZ AUG		BACKFILLED <input checked="" type="checkbox"/>		MONITORING WELL <input type="checkbox"/>	
		OTHER (SPECIFY)		B. Williams	



PROJECT: RVAAP, Load Line 4 Phase II RI	HOLE NUMBER: MULTIPLE
---	-----------------------

HTRW DRILLING LOG		DISTRICT: Louisville		LL4-150-144 CR 12-02		HOLE NUMBER	
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA		SHEET <u>1</u> OF <u>1</u>			
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION:				
5. NAME OF DRILLER:			6. MANUFACTURERS DESIGNATION OF DRILL:				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION:					
		9. SURFACE ELEVATION:					
		10. DATE STARTED:			11. DATE COMPLETED:		
12. OVERBURDEN THICKNESS			15. DEPTH GROUNDWATER ENCOUNTERED:				
13. DEPTH DRILLED INTO ROCK			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED:				
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):				
18. GEOTECHNICAL SAMPLES		DISTURBED		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		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR		
LOCATION SKETCH/COMMENTS						SCALE:	
<p>See PG 4-54</p> <p>Fig 4-14</p> <p>of LL 2, 3, 4</p> <p>SAP Addendum</p>							
PROJECT: RVAAP, Load Line 4 Phase II RI						HOLE NUMBER	

LL4-157

HTRW DRILLING LOG		DISTRICT: Louisville		CR 12-22	HOLE NUMBER
1. COMPANY NAME: SAIC		2. DRILL SUBCONTRACTOR: NA			SHEET ___ OF ___
3. PROJECT: RVAAP, Load Line 4 Phase II RI			4. LOCATION:		
5. NAME OF DRILLER			6. MANUFACTURERS DESIGNATION OF DRILL:		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION:			
9. SURFACE ELEVATION:					
10. DATE STARTED:			11. DATE COMPLETED:		
12. OVERBURDEN THICKNESS			15. DEPTH GROUNDWATER ENCOUNTERED:		
13. DEPTH DRILLED INTO ROCK			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED:		
14. TOTAL DEPTH OF HOLE			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):		
18. GEOTECHNICAL SAMPLES		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
23. SIGNATURE OF INSPECTOR					

LOCATION SKETCH/COMMENTS

SCALE:

<p>Location map</p> <p>pg 4-54, Fig 4-14</p> <p>LL 2, 3, 4</p> <p>SAP Addendum</p>										LL4-157	
										981.49 TC	
										555050.75M	
										2365307.61E	

PROJECT: RVAAP, Load Line 4 Phase II RI

HOLE NUMBER

THIS PAGE INTENTIONALLY LEFT BLANK.

**HTRW
DRILLING LOG – LOGS**

LL4-068.....	A-33
LL4-069.....	A-34
LL4-070.....	A-35
LL4-071.....	A-36
LL4-072.....	A-37
LL4-073.....	A-38
LL4-074.....	A-39
LL4-075.....	A-40
LL4-076.....	A-41
LL4-077.....	A-42
LL4-078.....	A-43
LL4-079.....	A-44
LL4-080.....	A-45
LL4-081.....	A-46
LL4-082.....	A-47
LL4-083.....	A-48
LL4-084.....	A-49
LL4-085.....	A-50
LL4-086.....	A-51
LL4-087.....	A-52
LL4-088.....	A-53
LL4-089.....	A-54
LL4-090.....	A-55
LL4-091.....	A-56
LL4-092.....	A-57
LL4-093.....	A-58
LL4-094.....	A-59
LL4-095.....	A-60
LL4-096.....	A-61
LL4-097.....	A-62
LL4-098.....	A-63
LL4-100.....	A-64
LL4-101.....	A-65
LL4-102.....	A-66
LL4-103.....	A-67
LL4-104.....	A-68
LL4-105.....	A-69
LL4-106.....	A-70
LL4-107.....	A-71
LL4-108.....	A-72
LL4-109.....	A-73
LL4-110.....	A-74
LL4-111.....	A-75
LL4-112.....	A-76
LL4-113.....	A-77
LL4-114.....	A-78
LL4-115.....	A-79

LL4-116.....	A-80
LL4-117.....	A-81
LL4-118.....	A-82
LL4-119.....	A-83
LL4-120.....	A-84
LL4-121.....	A-85
LL4-122.....	A-86
LL4-123.....	A-87
LL4-124.....	A-88
LL4-126.....	A-89
LL4-127.....	A-90
LL4-128.....	A-91
LL4-130.....	A-92
LL4-131.....	A-93
LL4-132.....	A-94
LL4-133.....	A-95
LL4-134.....	A-96
LL4-135.....	A-97
LL4-136.....	A-98
LL4-137.....	A-99
LL4-138.....	A-100
LL4-139.....	A-101
LL4-140.....	A-102
LL4-141.....	A-103
LL4-142.....	A-104
LL4-143.....	A-105
LL4-144.....	A-106
LL4-150.....	A-107
LL4-151.....	A-108
LL4-152.....	A-109
LL4-153.....	A-110
LL4-154.....	A-111
LL4-155.....	A-112
LL4-156.....	A-113
LL4-157.....	A-114
LL4-158.....	A-115
LL4-159.....	A-116
LL4-160.....	A-117
LL4-161.....	A-118
LL4-162.....	A-119
LL4-163.....	A-120
LL4-164.....	A-121
LL4-165.....	A-122
LL4-166.....	A-123

HTRW DRILLING LOG

HOLE NUMBER 2408

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canell

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	(ml) Clay silt with traces of fine grain poorly graded sand dry med to low plasticity mottled	0.0 ppm	N/A	LL4-0680 8-21-01 15-48	- roots - nails
	1.0'	(10% 7/1) light gray c (10% 4/6) at 0.8 grades to a finer sand grain content				
	1.5'		Pid not functions properly due to rain	N/A	LL4-0681 LL4-0680 (propellant - surface) 8-23-01 9:48	
	2.0'	same as above - but stronger mottling of the (10% 4/6)				
	2.5'					
	3.0'					
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">No Hits From 11-3'</p> <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">PSC 8/27/01</p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-069

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canall

SHEET (OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)	
	0.5'	(ML) Clay silt with traces of sand, fine grain-poorly sorted sand, dry, med to low plasticity color change @ 0.8 (2.54 1/4) light yellowish brown to 2.54 7/8 light gray same as above but color change @ 1.6 (2.54 1/4) light yellowish brown	0.0 pm	N/A	LL4-0683 16.30 8-21-01	roots	
	1.0'						
	1.5'			Did not functioning properly due to rain	N/A	LL4-0684 9.25 8-23-01	
	2.0'						
	2.5'						
	3.0'						
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">No Hits From 1-3'</p> <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">PSC 8/27/01</p>							

HTRW DRILLING LOG

HOLE NUMBER LL4 070

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canall

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	(MH) Sandy silt w/ some clay dry, firm, low plasticity color change @ 0.8 (10% 1/2) dark grayish brown (10% 1/2) Gray	0.0 ppm	N/A	LL4-0686 8-21-01 16.10	roots metal parts
	1.0'					
	1.5'	Same as above but grades to finer sands @ 1.3	rainy - PID not operating, property	N/A	LL4-0687 LL4-1151 (DUP) LL4-1169 (DUP)	
	2.0'					
	2.5'					
	3.0'	<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>NO HITS FROM 1.3'</p> </div>				
		<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>10/27/01</p> </div>				

HTRW DRILLING LOG

HOLE NUMBER LL4-071

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canall

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5' 1.0'	0m-OH organic with 90% RR balast (slag)	∅∅ ppm	N/A	LL4-071-89 14.10 8-21-01	-lots of RR balast on surface - refusal @ 0.7 dw to balast - almost no organic or soil matter. all samples are 1/2 to 3/4 full (except VOC jar)
<p>NO HITS</p> <p>REL 8/27/01</p>						

HTRW DRILLING LOG

HOLE NUMBER -072

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *C. Canall*

SHEET (OF)

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5' 1.0'	<p style="text-align: center;"><i>CL</i></p> <p>Foot silty CLAY <i>CL</i> with traces of sand, soft, high plastic, moist, with graded fine gravel 1/4 to .8 (10% to 24%) yellowish brown</p>	0.4 ppr	n/a	LL4-072 8-21-01 13:45	roots, top layer
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p style="font-size: 2em; font-weight: bold;">No Hits</p> <p style="font-size: 1.5em;">8/27/01</p> </div>						

HTRW DRILLING LOG

HOLE NUMBER U4073

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canall

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5' 1.0'	CL - silty clay with traces of fine sand, firm, medium plastic, mottled (10% 52) grayish brown and (10% 44) light yellowish brown	60 ppm	N/A	U4-0695 8-21-01 10:50 @	Center hole refusal @ 3 due to concrete slab - roots & worms - refusal in hole @ 5 close to building
<p><i>1.0 H/L</i></p> <p><i>10/27/01</i></p>						

HTRW DRILLING LOG

HOLE NUMBER LL4074

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Cecchi

SHEET (OF 1)

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<div style="text-align: center;">0.5'</div> <div style="text-align: center;">1.0'</div>	<p>CL - Clean clay with traces of silt and sand, soft, med plasticity, moist, mottled (2.5% 6/1) Grey and (2.5% 1/4) Olive brown</p>	<p>D.O. ppm</p>	<p>N/A</p>	<p>LL40678 LL41148 dup LL41166 split 8-21-01 @ 10.10</p>	<p>roots 2 of 3 explor holes refused @ 07 due to concrete doorway - paint chips</p>
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">No Hits</p> <p style="font-size: 1.5em; transform: rotate(-45deg); opacity: 0.5;">MSL 3/27/01</p>						

14

HTRW DRILLING LOG

HOLE NUMBER **LL4-075**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **B. Williams**

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	SANDY GRAVEL WITH SOME SILT AND TRACES OF CLAY (GW-GM), MOIST, DENSE, GRAVEL IS ANGULAR TO SUB-ANGULAR AND WELL GRADDED CONSISTING OF MOSTLY RAILROAD BED, PEWEE (18" x 4") SILT IS PRIMARILY ORGANIC.	0.0 PPM	N/A	LL4-0701 FOR: VOC, ENOC, PCB, METALS, AND EXPLOSIVES. 08/22/01 0750	PAINT CHIPS AND NAILS IN SAMPLE. RAILROAD BALLAST ON SURFACE.
	1.0'					
	1.5'	Same as above but PC ballast makes up 95% of sample	Refusal @ 2.0'	N/A	LL4-0702 8-23-01 @ 15:15 CC	
	2.0'					
	2.5'					
	3.0'					

8-23-01 CC

HTRW DRILLING LOG

HOLE NUMBER **LL4-876**

PROJECT: **RVAAP, Load Line 4 Phase II RI**

INSPECTOR **B. Williams**

SHEET **OF**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<p>0.5</p> <p>1.0</p>	<p>GRAVELLY SILT WITH SOME SAND (60%) MOIST, STIFF, NON PLASTIC TO SLIGHTLY PLASTIC, GRAVEL IS WELL GRADED, MEDIUM TO FINE GRAINED, AND ANGULAR TO SUBANGULAR, LIGHT OLIVE BROWN (2 BY 5/4)</p>	<p>Ø.Ø PPM</p>	<p>N/A</p>	<p>LL4Ø7Ø4 DUPLICATE: LL4113Ø SPLIT: LL4115Ø ØØ/22/Ø1 ØØØØ</p>	<p>NOIL, RUBBER, GLASS ANALYZED FOR: V.C.C., SWC., PCBs, PESTICIDES, METALS, CYANIDE, AND EXPLOSIVES</p> <p>Ø.5</p> <p>1.0</p>
<p>no hits 8/26/Ø1 CC</p>						

16

HTRW DRILLING LOG

HOLE NUMBER LL4-077

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR B. Williams

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5 1.0	GRAVELLY SILT WITH SOME SAND AND GRAVEL (ML), MOIST, STIFF, NON PLASTIC TO SLIGHTLY PLASTIC, GRAVEL IS WELL GRADED, MEDIUM TO FINE GRAINED AND ANGULAR TO SUB ANGULAR, OLIVE BROWN (2.5Y 4/4)	φ. φ 7PM	N/A	LL4-077 FOR: METALS, P.C.S. AND EXPLOSIVES 08/22/01 0845	SMELL OF SULPHUR SULPHUR FROM ADJACENT RAILROAD SWAY COBBLE REFUSAL AT 0.8 FT
<p>Refusal @ 1.0 returned 8-23-01 15:40 to dig the 1-3 ft C. Powell</p> <p>8-23-01 CC</p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-078

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR B. Williams

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		<p style="text-align: center;">CLAYEY GRAVEL WITH SOME GRAVELLY CLAY AND SILT WITH TRACES OF SAND (CL), MOIST, SOFT, SLIGHTLY TO MODERATELY PLASTIC, GRAVEL IS PEBBLY GRADED, ANGULAR, MEDIUM GRAINED, AND FLAG, DARK YELLOWISH BROWN (10 YR 4/4)</p>	φ. φ PPM	N/A	LL40716 FOR: METALS, PCBS, AND EXPLOSIVES φ2/22/φ1 φ9φ5	SUNES, RECTS
	0.5					φ.5
	1.0					1.0
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">no hets 8/23/01 CE</p>						

48

HTRW DRILLING LOG

HOLE NUMBER LL4-079

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR B. S. H.

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	<p>0.5</p> <p>1.0</p>	<p>GRAVELLY SAND (SP), MOIST, GRAVEL IS WELL GRADED, ROUNDED, SAND IS POORLY GRADED, MEDIUM GRAINED TO COARSE GRAINED, SUB ROUNDED, DARK YELLOWISH BROWN (10YR 4/4)</p>	<p>∅.∅ PPM</p>	<p>N/A</p>	<p>LL4 0713 FOR: PCBs, METALS, CYANIDE, MUT + PLEASURES</p>	<p>∅/22/∅1, ∅95∅</p>
<p>no hit 8/26/01 cc</p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-080**

PROJECT: **RVAAP, Load Line 4 Phase II RI**

INSPECTOR

B. Williams

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<div style="text-align: center;">0.5</div> <div style="text-align: center;">1.0</div>	<p>SANDY GRAVEL WITH SOME ORGANIC SILT (G.W.), GRAVEL IS ANGULAR TO SUB-ROUND, WELL GRADED, MODERATELY DENSE, MOIST, VEIN DARK BROWN (1042 2/2)</p>	<p>φ φ 7M</p>	<p>N/A</p>	<p>LL4-0714 φ8/22/φ1 1042 FEE: VOL, SWEL, PCB, METALS, AND, EXPLOSIVES</p>	<p>RAILROAD BALLAST BENEATH GRADE SURFACE.</p>
		<p><i>Refusal @ 1.0 due to ballast subsidence</i></p>				
				<p>cc</p>	<p>8-24-01 8:15</p>	
<p><i>8-24-01 CC</i></p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-081**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **B. Williams**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	SANDY GRAVEL WITH SOME ORGANIC SILT (GWS), GRAVEL IS ANGULAR TO SUB-ANGULAR, AND WELL GRADED, MODERATELY DENSE, MOIST, VERY DARK BROWN (10% AT 0.5 2/2)	0.6 PPM	N/A	LL4081T 08/22/01 1126 TEST: 28/100 PCB, AND METALS	CRACK ON SURFACE, FAIL- URE BALLAST BEHIND 0.8 FT TOTAL DEPTH DUE TO BALLAST BALLAST SUBSIDENCE
	1.0			Retained @ 0.9	8-23-01 116.17 cc	
				8-23-01		

HTRW DRILLING LOG

HOLE NUMBER **LL4-082**

PROJECT: **RVAAP, Load Line 4 Phase II RI**

INSPECTOR **B. Williams**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	<p>0.5</p> <p>1.0</p>	<p>SANDY GRAVEL WITH SOME ORGANIC SILT (FIN), GRAVEL IS ANGULAR TO SUB ROUNDED, AND WELL GRADED, MODERATELY DENSE, MOIST, VERY DARK BROWN (10 YR 2/2)</p>	<p>0.0 PPM</p>	<p>N/A</p>	<p>LL40724 08/22/01 1128 FOR: PCBs, METALS, AND EXPLOSIVES</p>	<p>RAILROAD BALLAST (BENTONITE GRASS ON SURFACE) CORBBLE REFUSAL AT 1.0 FT</p>
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">8/26/01 no hits CC</p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-083

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *B. Williams*

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5 1.0	<p>SILT CLAY (CL), MOIST, STIFF, SLIGHTLY TO MODERATELY PLASTIC, DARK YELLOWISH BROWN (10/42 4/4)</p> <p>SAME AS ABOVE BUT WITH COARSE, ANGULAR GRAVEL</p>	0.5 TPM	N/A	<p>LL4-083-23 08/22/01 1549</p> <p>FOR: METALS, PCBs, AND 2X PCBs</p>	0.5 1.0
<p><i>no hits</i></p> <p><i>7/26/01</i></p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-084**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **B. Williams**

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	SANDY GRAVEL WITH SOME SILT (GW-GM), MOIST, DENSE, GRAVEL IS ANGULAR, AND WELL GRADED 0.0 - 0.3 FT: GRAVEL IS CONSISTANT OF SILT, 0.3 - 1.0 FT: GRAVEL IS CONSISTANT OF COARSE SANDSTONE GRANIC WITH L APPEAL VERY DRY & GRAYISH BROWN (10YR 3/2)	0.0 PPM	N/A	LL4 0726 08/24/01 0832 FOR METALS, PCBs, AND EXPLOSIVES	GRASS ON SURFACE, LESS THAN 0.1 FT ORGANIC SILT (OL-OH)
	1.5		2.0'	0.0 PPM	N/A	LL4 0727 08/25/01 1128 FOR METALS, AND EXPLOSIVES
	2.4	CLAY WITH SOME SILT AND TRACES OF GRAVEL (CL), MOIST, MEDIUM STIFF, MODERATELY PLASTIC, BROWN (10YR 5/3)	0.0 PPM	N/A		
	2.5	3.0'				
	3.4					
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">PSC 8/27/01</p> <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">No Hits From 1'-3'</p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-085**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **B. Williams**

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	RAILROAD BALLAST	Ø.Ø PPM <small>(SW) ØB/23/Ø1</small>	N/A <small>(SW) ØB/23/Ø1</small>	LL4 Ø725 ØB/23/Ø1 141Ø <small>(SW) ØB/23/Ø1</small>	
	1.0	CLAY WITH SOME SAND ^(SW) (CL)	Ø.Ø PPM	N/A	LL4 Ø725 ØB/23/Ø1 141Ø FOR: METALS, PCBS, AND EXPLOSIVES	
	1.5	MOIST, SOFT, MODERATELY TO HIGHLY PLASTIC, LIGHT OLIVE BROWN (2.5% S/H)				
	2.0					
<div style="position: relative; height: 400px;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 2em; opacity: 0.5;"> No Hits </div> <div style="position: absolute; bottom: 10%; left: 40%; transform: rotate(-45deg); font-size: 1.5em;"> PSC 8/27/01 </div> </div>						

HTRW DRILLING LOG

HOLE NUMBER LL4-086

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR B Williams

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	RAILROAD BALLAST				
	1.0					
	1.5					
	2.0	SILTY CLAY WITH SOME VERY FINE SAND AND TRACES OF COURSE SAND AND FINE GRAVEL, (CL),	Ø.ØTPM	N/A	LL4Ø732 (18/23/Ø1)	
	2.5	MOIST, SOFT, MODERATELY PLASTIC, MOTTLED, DARK BROWNISH BROWN (ØYR 4/6)			1535 FOR: METALS, PCBs, AND EXPLOSIVES	
	3.0	AND GRAY (ØYR 6/1)				
<p>1535 3/27/01</p> <p>16 Hits</p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-087

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR B.W.II

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	CLAYEY GRAVEL WITH SOME SAND (W/S), GRAVEL IS WELL GRADED, ROUNDED TO SUB-ANGULAR, LOOSE, MOIST, VERY DARK GRAYISH BROWN (10YR 3/2)	∅ ∅ PPM	N/A	LL4 0735 08/24/01 0935 FOR: METALS, PCBs, AND EXPLOSIVES	POISONOUS IVY AND ROOTS ON SURFACE
	1.0		∅ ∅ PPM	N/A	LL4 0736 08/24/01 1615 FOR: METALS & EXPLOSIVES	
	1.5	1.7'				PJL 8/27/01
	2.0	CLAY WITH SOME SILT (C-), WET, VERY SOFT, MODERATELY PLASTIC, LIGHT OLIVE BROWN (2.5Y 4/3)	∅ ∅ PPM			
	2.5	2.4-3.0 FT SAME AS ABOVE BUT MOIST AND MOTTLED LIGHT BROWNISH GRAY (2.5Y 6/2) AND YELLOWISH BROWN (2.5Y 5/4)				
	3.0					
<p>No Hits From 11-3'</p> <p>PJL 8/27/01</p>						

601

HTRW DRILLING LOG

HOLE NUMBER LL4-089

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *B. Williams*

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	0.5	SILTY GRAVEL WITH SAND AND SOME CLAY (GW-GM), MOIST, MEDIUM DENSITY, SILT IS ORGANIC (OL-OH). GRAVEL IS WELL GRAINED, AND ^{LOW TO 25%} AND ^{AND} COURSE TO FINE, AND ANGULAR TO SUB ROUNDED, VERY DARK BRASSH BROWN (2.5-3/2)	0.0 PPM	N/A	LL4-0741 8/25/01 FOR: METAS, PCBs, AND EXPLOSIVES	RAILROAD BALLAST ON SURFACE GRABS OF 2 BROWNS RAILROAD BALLAST NAIL
	1.0	SILTY SAND (SP) & MOIST, MEDIUM GRAINED, LOOSE, LIGHT OLIVE BROWN (2.5-5/4) (< 0.9 FT. 1.0 FT.)				

0.5
1.0

8/26/01 cc no bits

HTRW DRILLING LOG

HOLE NUMBER LL4-097

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR B. Williams

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	RAILROAD BALLAST				
	1.0					
	1.5					
	2.0	CLAYEY GRAVEL WITH SAND (SW-GC), MOIST, GRAVEL IS SUB ANGULAR TO ROUNDED, DENSE, LACK YELLOWISH BROWN (10YR 4/4)	Ø. Ø PPM	N/A	LL4 0744 DUPLICATE: LL4 1135 SPLIT: LL4 1157	ANALYZED FOR: VOCs, SVOCs, PCBs, METALS, AND EXPLOSIVES
	2.5					
	3.0					
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">NO NYS 8/26/01 CC</p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-091**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **B.W.H.**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (E)	REMARKS (G)
	0.5	RAILROAD BALL AST				
	1.0					
	1.5	CLAY WITH SOME SILT AND TRACES OF FINE TO MEDIUM SAND (CL), WET, GRAY ^{LOW} GRAY ^{LOW}	0.0 PPM	N/A	LL40747 08/23/01 1055	
	2.0	SOFT, MODERATELY TO HIGHLY PLASTIC DARK GREENISH GRAY 1.7 SHY (4/1)			FOR: METALS, ICBS, AND EXPLOSIVES	
	2.5	PT-25 ^{LOW} PT-25 ^{LOW} : SAME AS ABOVE BUT MOIST AND MOTTLED BROWNISH YELLOW (104R 6/8) AND LIGHT GRAY (104R 7/1)				
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">NO HIB 8/24/01 CC</p>						

HTRW DRILLING LOG

HOLE NUMBER LL4 012

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canall

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<div style="position: relative; height: 100px;"> 05 0.9 1.8 </div>	<p>Sandy @ gravel w/ silt (60 gm) m³ dense, silt is organic, gravel is angular, well graded, sands is well graded angular, Very Dark Grayish brown (10423/2)</p>		N/A	<p>LL4 0150 8-14-01 10.25</p>	<p>2 holes @ 0.7 refusal - lots of gravel</p>
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">PSC 8/14/01</p> <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">Canters hole refusal @ 9</p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-093

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Carro

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5' 1.0'	Sandy gravel with 90% RR balast (GW-GC) gravel is well graded angular, damp, (10% R 3/2) very dark grayish brown	PID jumped around from .7-11.2	N/A	LL4-0753 8-22-01 9:50	- RR balast on surface w/ vegetation - high PID reading - likely due to high moisture content in soil
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">No Hits</p> <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">PJM 8/27/01</p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-094

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Carroll

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	Fast silty clay (CH) with organics moist, med. plasticity, moist 7.5% (1/4) - strong brown gray 7.5% (1/4)	D. 0 ppm	N/A	LL4-0756 LL4-1146 LL4-1164 8-22-01 @ 9:05	- refusal @ .8 in center hole - standing water @ v. 6 refusal @ .04 in @ 3 holes
	1.0'	(H) sandy clay with weathered sandstone, angular, firm, low plastic moist (104e 5/1) gray; (104e 4/8) brownish yellow				
<div style="position: absolute; top: 10%; left: 10%; transform: rotate(-45deg); font-size: 2em; opacity: 0.5;"> PSC 8/27/01 </div> <div style="position: absolute; top: 30%; left: 50%; transform: translate(-50%, -50%); font-size: 3em; opacity: 0.5;"> No Hits </div>						

HTRW DRILLING LOG

HOLE NUMBER LL4095

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canell

SHEET A OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	Organic silt w/ RR balast very little soils 99% balast	0.0 ppm	N/A	LL4-0759 8-22-01 10:55	- Glass - punchps - samples not full (1/2 to 3/4 each)
	1.0'	Refusal @ 1.0' @ 23-01 10:45				
<p style="font-size: 2em; transform: rotate(-45deg);">PSC 8/27/01</p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-096

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canell

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<div style="text-align: center;">0.5'</div> <div style="text-align: center;">1.0'</div>	<p>Silty sand w/ fine silt and gravel (3m), soft, damp, 10 yr 4/3 brown</p>	<p>7.2 ppm PID - not functioning properly - turned off due to weather/humidity</p>	<p>N/A</p>	<p>LL4-0762 15:45 @ 8-22-01</p>	<p>-RR balast on surface -centerhole refusal @ 0.5</p>
<div style="position: absolute; top: 20%; left: 20%; transform: rotate(-45deg); font-size: 2em; opacity: 0.5;"> No Hits </div> <div style="position: absolute; top: 50%; left: 40%; transform: rotate(-45deg); font-size: 2em; opacity: 0.5;"> PJC 8/27/01 </div>						

HTRW DRILLING LOG

HOLE NUMBER **097**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **C. Canall**

SHEET **1** OF **7**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5' 1.0'	Silty Sand (3m) with some gravel, gravel is sub rounded to angular, dry, well graded (10% 4/10) light yellowish brown	0.0 ppm	N/A	LL-0765 8-22-01 @ 8:25	-nails -metals
			Refusal @ 1.0'	@ 1.0'	8-23-01 @ 1:25	
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p style="font-size: 2em; font-weight: bold;">PSL</p> <p style="font-size: 1.5em;">8/27/01</p> </div>						

HTRW DRILLING LOG

HOLE NUMBER 098

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Cecol

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	Silty sand (Sm) with some gravel. Gravel is sub-rounded to angular, dry well graded color change @ 0.8 (2.5 x 1/4) olive brown	3.0 ppm	n/A	LL4-0798 8-22-01 8:30	- units - glass
	1.0'	(CL) clay with silt, firm, dry low plasticity, mottled (10-20% grey yellowish brown and (10-20% light brownish gray	did not function properly due to rain	n/A	LL4-0799 8-23-01 10:50	- units - glass
	1.5'					
	2.0'			Refusal @ 2.0'		
	2.5'					
	3.0'					
<p>PSL 3/27/01</p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-100

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Amos

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.2 0.5 1.0	<p>sand from blast ball collapsed Silty sand (Sh) 10% 4% yellowish brown lean clay (CL) with little fine gravel, damp, firm, low to med plasticity, mottled 2.54% gray & 2.54% light olive brown</p>	0.0 ppm However has sulfur smell	N/A	LL4-0772 8-22-01 15.65	- roots, some slag - some "blue" slag - one hole in RL balast
<p>NO HITS</p> <p>17 JL 8/27/01</p>						

HTRW DRILLING LOG

HOLE NUMBER 101

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canoll

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<div style="text-align: center;">05</div> <div style="text-align: center;">1.0</div>	Poorly graded, very fine silty sand (Sm) moist 10% to 4% Dark yellowish brown	ϕ ppm	n/a	C14-D775 8-22-01 14.40	highly prob came from inside blast wall when bulking wall collapsed
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> No Hits </div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> PSC 8/27/01 </div>						

HTRW DRILLING LOG

HOLE NUMBER LL4-102

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Cocco

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	Clayey Fine Sand, poorly graded (SP-SC), moist 10 PR 4/6 Crk; yellowish brown	0.8 per	N/A	LL4-0778 8-22-01 13:35	LL4 1175 - equipment rinse Aid
	1.0'	Sandy Clay (CH), low sand, high plastic, moist, mottled gray (2.54 S ₂) and 10% yellowish brown				
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5; font-size: 2em;"> No Hit </div> <div style="position: absolute; bottom: 10%; left: 30%; transform: rotate(-45deg); opacity: 0.5; font-size: 1.5em;"> PSL 8/27/01 </div>						

HTRW DRILLING LOG

HOLE NUMBER LL4-103

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canall

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.2	organic layer is (OL-04) for	0.8 ppm	N/A	LL4-0781	vegetation roots throughout
	0.5	(CH) silty clay, some mod. plasticity, moist, 10% yellowish brown			13.55 @ 8-22-01	- standing water in center hole (2.2)
	1.0	2.5% silt, Gray				
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">No Hit</p> <p style="font-size: 1.5em; transform: rotate(-45deg); opacity: 0.5;">2/27/01</p>						

4

HTRW DRILLING LOG

LL9-104

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *Matthew Root*

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5 1.0	CH-sandy clay, med. plasticity, soft, mottled 10YR7/1, light gray, and 2.5Y5/6, light olive brown, damp	NA	NA	LL40784 00900	
						<i>Matthew Root</i> 8/14/01
				8/26/01 no hits		

HTRW DRILLING LOG

LL# 105

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *Wally Root*

SHEET 6 of 11

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	MH - clayey silt, very dark gray, 10/13/01, damp to moist, organic matter present	NA	NA	LL4-0787 16.30	
	1.0'	CH - sandy clay w/ silt, mottled, (10/13/01), dark yellowish brown, moist	^{NJR}			
	2.0'	same as above	PWD not functioning properly due to weather	N/A	LL4-0788 LL4-1144 (cont.) LL4-1162 (cont.) 8-23-01 11.25 C	<i>Wally Root</i> 8/13/01
	3.0'					
<p><i>8/24/01 CC</i> <i>no hits @ 1-3 ft</i></p>						

HTRW DRILLING LOG

LL4-107

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR

J. J. [Signature]

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOCHEM SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	CL - silty clay medium plastitic, mottled, 10YR 5/1, gray and 10YR 5/8, yellowish brown, vegetation present	N/A (rounding irregular PID)	N/A	LL4793 @ 1610	
	1.0					<p style="font-size: 1.5em; font-family: cursive;">J. J. [Signature]</p> <p style="font-size: 1.5em; font-family: cursive;">8/12/01</p>
<p style="font-size: 2em; font-family: cursive;">No hits</p>						

LL4^{cc}
LL3-108

HTRW DRILLING LOG

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	CONCRETE SLAB	NA	NA	NA	
	1.0	GW - well graded gravel w/ sand, subbase, dark yellowish brown, (PKR-1), dry	NA	NA	LL30796 @ 1605 NA 8/13/01	
	1.5	Cl - silty clay, stiff, low plasticity, (PKR-2), light brown gray, damp	8/13/01			
	2.0					11' depth Rod 8/13/01
						8-26-01 CC 10' w/ 105

HTRW DRILLING LOG

LL3-109

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR: *Mathy Root*

SHEET OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	GW - well graded gravel w/ sand, subbase, dark yellowish brown, 10R4, damp;	NA	NA	LL40797 @ 1555	This log starts at the bottom of the concrete slab, which was 0.6' thick
	1.0	CL - silty clay, stiff, low plasticity, light brownish gray, 10R12, damp				<i>Mathy Root</i> 8/13/01
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>8-26-01</p> <p>CC</p> <p>no hits</p> </div>						

HTRW DRILLING LOG

LL4-110

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *Matthew Root*

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	<p>OL/PH - organic clay w/ sand, 10YR5/2 grayish brown, moist CH - sandy clay, soft, 2.5% H₂O, dark gray, moist, 87% plastic</p>	NA (raining irregular PID reading)	NA	LL40798 @ K55	
	1.0					<p><i>Matthew Root</i> 8/12/99</p>
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">8-26-81 CC no hils</p>						

HTRW DRILLING LOG

HOLE NUMBER ~~LL4-110~~ 111 cc

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR ~~Matthew Reed~~

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5 1.0	CH - silty clay, high plasticity, mottled (gray, brown, 10YR5/0, standing surface water present, surface veg. present)	NA - raining irregular PID readings	NA	LL40801 @ 1535	
						Matthew Reed 8/12/01
8-26-01 no mb cc						

38

HTRW DRILLING LOG

HOLE NUMBER LL4-112

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR P. Lucot

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5' 1.0'	Clayey GRAVEL with sand (GW-CC) moist, gravel is well graded and angular, and has appearance of R.R. balast, dark grayish brown (MVR 4/2)	0.0 ppm	N/A	LL40804 8/21/01 @ 1446	- Poison Ivy on surface. - Decomposing leaves overlying slag. - Center hole to 2.0' for sample volume due to cobbles.
<p>no hits CC 8/26/01</p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-113**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **P. Luot**

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEO TECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	Gravelly CLAY with some sand and silt (CL), moist, soft, slightly to moderately plastic, gravel is well graded subangular to rounded, very dark grayish brown (10YR 3/2).	∅.∅ ppm	N/A	LL40807 8/21/01 @ 1600	- Glass pieces on surface. - RR balast
	1.0'					
	1.5'		DID not working properly	N/A	LL4-0808 LL4-0807 (Surface interval) 8/23/01 14.15	- RR balast
	2.0'			Refusal @ 2.0'		
<p>8-23-01 CC</p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-114**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **P. Luot**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	1.0'	Sandy GRAVEL with silt and clay (GW-GC), moist, moderately dense, gravel is rounded to subrounded, brown (10YR4/5)	Ø. Ø ppm	N/A	LL40810 8/21/01 @ 1442	-Removed an elongated angular sandstone boulder from surface before boring.
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5; font-size: 2em;"> no hits 8/26/01 CC </div>						

HTRW DRILLING LOG

LL4-116

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *J. Walker*

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	ML - sandy silt w/ well graded gravel, olive brown, d. 5/4/4, dry, surface veg. present	NA	NA	LL40816 LL41141 LL41159 @ 1410	
	0.6	Refusal @ 0.6' BGS				
	1.0	Refusal @ 0.6' BGS				<i>J. Walker</i> 8/14/01
<p><i>8-26-01 CC</i></p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-117

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	1.0'	Gravelly SAND with some silt and traces of sand (SW-SH), moist moderately dense gravel is well graded & rounded, light olive brown (2.5/5A). Silty CLAY (LL) moist, stiff, slightly to moderately plastic, mottled yellowish brown (10YR 5/6) and light brownish gray (10YR 6/2).	D.O ppm	N/A	LL40819 8/21/01 @ 1035	- This location is on top of a soil pile PSC 8/21/01 - glass on surface
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5; font-size: 2em;"> 8/26/01 CC to HHS </div>						

30

HTRW DRILLING LOG

HOLE NUMBER **LL4-118**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **P. Lucot**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5' 1.0'	Gravelly SILT with some clay (GW-GM), moist, moderately dense, gravel is well graded and rounded, olive brown (10YR 4/4).	N/A	N/A	LL40822 8/21/01@ 1000	- Grass on surface & several roots below.
<p>8/26/01 no hits</p> <p>CC</p>						

28

HTRW DRILLING LOG

HOLE NUMBER LL-119

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR P. Lucot

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	Concrete	N/A	N/A	LL40825 8/21/01 @ 0915	
	1.0'	Sandy CLAY with some 0.5' gravel (CL), moist, stiff, non plastic to slightly plastic, brown (10 PR 4/3), gravel is Fine, poorly sorted, and subangular.				
	1.5'	Bottom of Boring = 1.5'				

PJL
8/21/01

HTRW DRILLING LOG

HOLE NUMBER **LL4-120**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **P. Lucat**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	Concrete	0.0 ppm	N/A	LL40826 8/21/01 @ 0930	-Approximately 3 Ft. From expansion joint in concrete.
	1.0'	Gravelly SAND with 0.6' some clay (SW), moist, med. dense, gravel is subangular and well graded.				
	1.5'	From fine to medium, brown. 0.4' to 1.6'				
		Bottom of Boring = 1.6'				
<div style="border: 1px solid black; padding: 10px; transform: rotate(-45deg); display: inline-block;"> P.J.L. 8/21/01 </div>						

HTRW DRILLING LOG

HOLE NUMBER LL4-17

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR P. Lucot

SHEET 1 OF 1

CR 1202

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5' 1.0'	Silty CLAY with traces of sand (CL), (moist) ^{PFL 8/21/01} moist to dry, soft, moderately plastic, dark grayish brown. (2.5Y 4/2)	0.0 ppm	N/A	LL40827 8/21/01 @ 1030	(Glass) PFL 8/21/01 - This location is on top of a soil pile
<p style="transform: rotate(-45deg); font-size: 2em;">5/26/01 10/19/01 OC no hits</p>						

310

HTRW DRILLING LOG

HOLE NUMBER LL4-122

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR P. Lucot

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.7'	Silty SAND with gravel (SM), moist, medium dense, gravel is angular and pieces of sandstone,	0.0 ppm	N/A	LL40830 8/21/01 1341	Map on page #27 of LL4 Logbook #13
	1.0'	Refusal @ 0.7'				
DJL 8/21/01						

HTRW DRILLING LOG

LL4-123

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR

Walter Root

SHEET 1 OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	Concrete Slab	NA	NA	NA	
	1.4	GW-sandy well graded gravel subbase, yellowish brown, 10TR54, dry	NA	NA	LL4 833 @ 16" φ	
	1.5					
	2.0					

8/26/01

CC

HTRW DRILLING LOG

LL4-124

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR: *Matthew Root*

SHEET OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	CONCRETE SLAB	NA	NA	NA	
	1.0 - 1.5	GW - sandy well graded gravel, subbase, yellowish brown, 1/2" - 3/4" dry	NA	NA	LL40834 @ 1545	
	2.0					<i>Matthew Root 8/14/01</i>
<i>S/26/01</i>						

HTRW DRILLING LOG

 HOLE NUMBER **LL4-126**

 PROJECT: **RVAAP, Load Line 4 Phase II RI**

 INSPECTOR **B. Williams**

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5 1.0 1.5 2.0 2.5	RAILROAD BALLAST				
	3.0 3.5	CLAY WITH SOME SILT AND TRACES OF SAND (CL), MOIST, SOFT, MODERATELY PLASTIC, MOTTLED GRAY (10YR 6/1) BROWNISH YELLOW (10YR 6/8)	D.P PPM	N/A	LL40836 1458 8/22/91 FOR: VOL, SEC RCB, TEST, METALS, AND EXPLOSIVES	RAILROAD BALLAST
				no hits 8/26/91	C	

HTRW DRILLING LOG

HOLE NUMBER **LL4-127**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **P. Lucot**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5' 1.0'	Sandy GRAVEL with some silt (GW), moist, dense, gravel is angular to subrounded, and well graded, dark yellowish brown. (10 YR 5/4).	φ.φ ppm	N/A	LL40839 8/24/01 @ 1136	- R.R. Balast on Surface - Pieces of glass, nails, & traces of paint chips.
				Refusal @ 1.0' due to subsidence	8-24-01 ce 8:45	

8-24-01
@

HTRW DRILLING LOG

HOLE NUMBER **44-128**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **P. Lucot**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5'	Silty CLAY (CL), moist, silt is organic, soft, moderately plastic, dark grayish brown (2.5Y4/2).	5.1	N/A	LL40842 8/20/01@ 1200	Grass on surface
	1.0'	Silty SAND (SM), moist, dense, sand is mostly fine grained and angular, yellowish brown (10YR5/6).				
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5; font-size: 2em;"> 8-26-01 CC NO HHS </div>						

HTRW DRILLING LOG

HOLE NUMBER LL4-130

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canall

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEO TECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<div style="text-align: center;">0.5</div> <div style="text-align: center;">1.0</div>	<p><u>sandy Gravel with silt (6-8 cm)</u> <u>gravel is rounded fine to coarse</u> <u>lots of balast intermix, dense,</u> <u>non plastic</u> <u>Dark greyish brown (10/24/2)</u></p>	<p><u>0.0 ppm</u></p>	<p><u>N/A</u></p>	<p><u>LL4-130</u> <u>LL4-130</u> <u>5</u> <u>8/14/01</u></p>	<p><u>- nails, glass</u> <u>- metal fragments</u></p> <p><u>basically made 4th 1.0'</u></p>
<p><u>yib</u> <u>8-26-01</u></p>						

HTRW DRILLING LOG

HOLE NUMBER LL4-131

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR Cannell

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<p>0.50 ft</p> <p>1.0 ft</p>	<p>Gravelly fine sand, some silt (0.5-0.7) gravel pebbles, rounded med. dense, non-plastic, Very Dark Grey (10FR 3) Sandy silt, sand pebbles, some trace gravel, some fine grain (ML) sand Poor sorted, SOCL (10FR 4/3) Pale Brown</p>	<p>0.7 ppm</p>	<p>N/A</p>	<p>LL4-0844 LL4-1143 LL4-1161 8-14-01 @ 11.05</p>	

6.6 8-26-01

HTRW DRILLING LOG

HOLE NUMBER LL4132

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR C. Canall

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	CLAY (CL) moist, traces of fine sand, mod plastic, soft olive brown (2.54 43)	0.0 ppm	N/A	LL4-085 8-14-01 16.05	
	1.0					
yjb 8-26-01						

HTRW DRILLING LOG

HOLE NUMBER **LL4 133**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **C. Canall**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.3	Gravelly fine sand, organic silt (CL-OH) gravel poor - silt dense rounded, ve. y. clay (10% 3/16)			LL4-0855	- RR Balast on surface
	0.5	Sandy silt (ML) ^{trace} gravel / sand poorly sorted, soft, Pale Brown (10% 4/3)	φ. φ ppm	N/A	8-14-01 15:10	
	1.0					
<div style="position: relative; height: 400px;"> y/b 8-26-01 </div>						

12

HTRW DRILLING LOG

HOLE NUMBER **U4134**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **C. Canall**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.1	AIR VOID				
	0.5	Janky Gravel w/Clay (G.W.G.C) moist, med. dense, coarse grained gravel is rounded (building subfloor?) well graded from med to fine grain yellowish brown (P4294)	0.0 ppm	N/A	U4134-01 8-14-01 15:25	(w/ side building under concrete base-hole) Start @: water under concrete ^{base} removed
	1.0					

HTRW DRILLING LOG						HOLE NUMBER
PROJECT: RVAAP, Load Line 4 Phase II RI			INSPECTOR		C. Canall	
PROJECT: RVAAP, Load Line 4 Phase II RI			INSPECTOR		C. Canall	
ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	65	Sandy gravel w/ silt (G.W. 64) mass, dense, fine gravel is rounded, well sorted - prob. fill for building		LL4-0859 8-14-01 @ 11:20 ← →	N/A	- lots of cobble to big (4" dia) rocks to a 12" rock under to go past
	10	Brown (1092413)	Refusal @ 10	Rinseate sample LL4 1174		(inside building concrete cutting) 8" start ^{start} under after concrete removed
PSC 8/14/01						

HTRW DRILLING LOG

LL4-136

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR

V. J. Root

SHEET 1 OF 1

BLEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5 1.0	MH-clayey silt, light olive brown, 2.5% S ₆ , dry, surface veg. present	NA	NA	LL40860 @1145	
						<p><i>V. J. Root</i> 8/14/01</p> <p>20 hrs</p> <p>8/26/01</p>

4

HTRW DRILLING LOG

HOLE NUMBER **U4138**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **C. Small**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5 1.0	ml / fine sandy silt w/ some clay fine to med. poorly graded gravel dark yellowish brown 10YR 4/4	Ø.Ø per	N/A	U4-Ø866 8-1Ø@ 8-21-Ø1	-roots, worms -bricks
<p><i>No Detections</i></p> <p><i>PSC 8/27/01</i></p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4 139**

PROJECT: **RVAAP, Load Line 4 Phase II RI**

INSPECTOR **C. Canall**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<div style="position: relative; height: 100px;"> </div>	<p>(ML) Fine to med grain sandy silt w/ some clay poorly graded gravel Banded to sub-banded (10% 3%) Dark brown color change at .6 to 10% silt yellowish brown</p>	<p>0.0 ppm</p>	<p>N/A</p>	<p>LL4-0869 8-21-01 8:50</p>	<p>- roots, worms</p>
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">No Detections</p> <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">LSC 8/27/01</p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-140**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **B. Williams**

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	GRAVELLY ORGANIC SILT WITH SOME SAND, MOIST (OL-OH), SOFT, GRAVEL IS ROUNDED, ϕ 1/4	ϕ ϕ RPM	N/A	LL4-0872 ϕ 261/01	PIL 8/27/01 GRAVEL IS BLUE IN CENTER SIMILAR TO BALLAST.
	1.0	VERY DARK GRAYISH BROWN (10YR 3/2) ϕ 1/4 - 1.0: GRAVELLY SANDS WITH SOME SILT, GRAVEL IS ANGULAR, COURSE, LOOSE, SAND IS WELL GRADED, LIGHT OLIVE BROWN (2.5Y 5/3)	ϕ ϕ RPM	N/A	FOR: VCCS, SUCC, PCBS, CN, METALS, AND EXPLOS	
<div style="position: relative; width: 100%; height: 100%;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 2em; opacity: 0.5;"> No Hits </div> <div style="position: absolute; top: 20%; left: 20%; font-size: 1.5em; opacity: 0.5;"> PIL 8/27/01 </div> </div>						

HTRW DRILLING LOG

LL4-141

HOLE NUMBER

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR

Matthew Root

SHEET / OF /

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	GW-GC - well graded gravel w/sand + clay, dark olive brown, 2.5Y 3/3, damp, surface veg. present			LL40875 @ 1120	
	1.0	CH - sandy clay w/ silt, stiff, med. plasticity, 2.5Y 3/3, dark olive brown				<i>Matthew Root</i> 8/14/01

8/14/01 no hgt

52

HTRW DRILLING LOG

HOLE NUMBER **LL4-142**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **B. Williams**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5	CLAY WITH SOME SILT AND TRACES OF GRAVEL, (CL), NOISE, MEDIUM STIFF, MODERATELY PLASTIC, BROWN (104R 5/3)	Ø. Ø PPM	N/A	LL40878 DUPLICATE: LL41142 SPLIT: LL41168 98/24/01 1045	LL40878: METALS, PCBs, C ₁₀ , EXPLOSIVES DIP: SPLIT: METALS, PCBs, AND C ₁₀
	1.5	3.0 BW 98/25/01 1.5-2.5 FT: SAME AS ABOVE BUT MOTTLED LIGHT BROWNISH GRAY (2.54 6/2) AND YELLOWISH BROWN (2.54 5/8) AND NO GRAVEL	Ø. Ø PPM	N/A	LL40879 98/25/01 1643 FER: METALS AND EXPLOSIVES	
<p><i>END</i> <i>8/27/01</i></p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-143**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **B. Will...**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0.5 1.0	SILT CLAY WITH SOME GRAVEL (CL), MOIST, MODERATELY STIFF, MODERATELY PLASTIC, GRAVEL IS ANGULAR AND COARSE BROWN (10% (93))	0.0 PPM	N/A	LL40881 08/24/01 1410 FOR METALS, PCBs, AND EXPLOSIVES	NAIL
<p><i>8/26/01 CC no hits</i></p>						

HTRW DRILLING LOG

HOLE NUMBER **LL4-144**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **B. Williams**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		TOTAL DEPTH OF WATER AND SEDIMENT IS 1 INCH DEEP.	0.0 PPM	N/A	LL4-004 08/24/01 1402 FOR: METALS PCBs, AND 22 PLOSTIS	SMALL FRACTION IN BASIN GRASS AND ALGAE IN SETTLING BASIN. SEDIMENT SAMPLE
<p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">ce 8/26/01 no hits</p>						

HTRW DRILLING LOG

HOLE NUMBER **154**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **Groton**

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (P)	REMARKS (G)
	<p>A</p>	<p>dry, brown silt (10YR 5/3)</p> <hr/> <p>dry, gray (10YR 6/1) clay with silt & yellowish brown (10YR 5/8) mottles</p>	<p>φ. φ ppm</p>	<p>NA</p>	<p>440902 441149 441167</p>	<p>earthworm</p>
	<p>1.0</p>					

HTRW DRILLING LOG						HOLE NUMBER
PROJECT: RVAAP, Load Line 4 Phase II RI			INSPECTOR: <i>Crotan</i>		SHEET OF	
ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<i>(FA)</i>	<i>moist, very dark grayish brown (10YR 3/2) silt</i>	<i>0.0 ppm</i>	<i>NA</i>	<i>U40903</i>	<i>earthworms</i>
		<i>dry, brown (10YR 5/3) silt w/clay</i>	<i>PI D</i>			
	<i>1.0</i>					

HTRW DRILLING LOG

HOLE NUMBER **152**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *Groton*

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	1.0	moist to dry, yellowish brown (1042 5/4) silt	D.O ppm PID	NA	LL47904	

HTRW DRILLING LOG

HOLE NUMBER **153**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *Groton*

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<i>(A)</i>	<i>dry yellowish brown (1/4" 5/16") silt w/ clay and gravel</i>	<i>0.0 ppm PID</i>	<i>NA</i>	<i>LL48905</i>	<i>worms</i>
	<i>1.0</i>					

HTRW DRILLING LOG

HOLE NUMBER **154**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **Groton**

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<p>1.0</p>	<p>dry, very dark grayish brown (10YR 3/2) silt</p> <p>dry, gray (10YR 6/1) silt w/ clay; yellowish brown (10YR 5/8) nodules</p>	<p>0.0 ppm PID</p>	<p>NA</p>	<p>U40906</p>	<p>earthworms</p>

HTRW DRILLING LOG

HOLE NUMBER 155

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR Grotm

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<u>1.0</u>	<u>very very dry yellowish brown silt (10YR 5/4)</u>	<u>0.0 ppm</u> <u>PTD</u>	<u>NA</u>	<u>L40107</u>	
		<u>dry, gray (10YR 5/1 silt)</u>				

HTRW DRILLING LOG

HOLE NUMBER **156**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *Grotov*

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (E)	REMARKS (G)
	<p>(4)</p> <p>1.0</p>	<p>moist, lean clay with silt dark brown (10YR 3/3) and grayish brown (10YR 5/2) with yellowish brown (10YR 5/4 mottles</p>	<p>0.0 ppm ?ID</p>	<p>NA</p>	<p>L40968</p>	<p>earthworms</p> <p style="text-align: right;">1.0</p>

Handwritten notes and symbols on the right margin.

HTRW DRILLING LOG

HOLE NUMBER 157

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR Grotton

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	ft 1.0	Very moist, plastic, sticky gray (U4R 5/1) clay with silt and yellowish brown (U4R 5/8) mottles	φ.φ ppm PI 1	NA	U40909	

HTRW DRILLING LOG

HOLE NUMBER **158**

PROJECT RVAAP, Load Line 4 Phase II RI

INSPECTOR **Grotton**

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	(A)	dry, dark brown (10YR 7/3) silt	0.0 ppm	NA	LL40910	
	1.0	dry, gray (10YR 6/1) silt w/ clay & a hint of gravels w/ yellowish brown (10YR 5/4) mottles				

HTRW DRILLING LOG

HOLE NUMBER **159**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **Grotan**

SHEET **1** OF **1**

ELEV (A)	DEPTH (B) ft	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1.0	dry, light brownish gray (10YR 6/2) silt with numerous fine to medium roots	0.0 ppm PID	NA	LU4911	

HTRW DRILLING LOG

HOLE NUMBER **160**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *Griston*

SHEET **1** OF **1**

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	(A)	dry, gray (10YR 5/1) silt w/ clay. Also has yellowish brown (10YR 6/6) mottles throughout	Q. φ ppm PPM PI 15	NA	LL40412	
	1.0					

HTRW DRILLING LOG

HOLE NUMBER **161**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	(1)	dry, dark brown (10 VR 3/3) silt w/ old building rubble (bricks & slag)	Φ. Φ ppm PID	NA	LL40913 LL41150 LL41160	
	1.0	dry, gray (10 VR 01) silt w/ clay and yellowish brown (10 VR 5/0) mottles				

HTRW DRILLING LOG

HOLE NUMBER **102**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **Groton**

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<div style="text-align: center;">1.0</div>	very dry grayish brown (104R 5/2) silt <hr/> very dry, light gray (104R 7/2) ID silt w/ dark yellowish brown (104R 4/6) mottles	0.0 ppm	NA	104R14	worms & grubs
Empty section for additional data						

HTRW DRILLING LOG

HOLE NUMBER **163**

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR **Grotan**

SHEET OF

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<p>90.5</p> <p>1.0</p>	<p>moist clay, yellowish brown (10 YR 5/6) silt with clay gray mottles (10 YR 6/1)</p>	<p>0.0 ppm</p> <p>PID</p>	<p>NA</p>	<p>LL4915</p>	

HTRW DRILLING LOG

HOLE NUMBER 164

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR Grotz

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		moist dark yellowish brown LI ₀ 4R 4/4 poorly sorted sand with gravel	Ø. Ø ppm PI 13	NA	LL40916	
	1.0	refusal at Ø. 75 ft				

HTRW DRILLING LOG

HOLE NUMBER 165
SHEET OF

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR Grotan

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	1.0	moist, gray (10YR 5/1) lean clay (plastic) with yellowish red (5YR 5/8) mottles & stains in root channels	D. D ppm PID	NA	440917	button bush swamp

HTRW DRILLING LOG

HOLE NUMBER *K06*

PROJECT: RVAAP, Load Line 4 Phase II RI

INSPECTOR *Graton*

SHEET 1 OF 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	HEADSPACE SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	<i>0.5</i> <i>1.0</i>	<i>dry, dark grayish brown silt (104R 412)</i> <i>dry gray (104R 611) silt with clay with yellowish brown mottles (104R 510)</i>	<i>0.0 ppm</i> <i>? ID</i>	<i>NA</i>	<i>LL40918</i>	<i>earthworms are here</i> <i>Very very dry soil</i>

0.5
1.0

THIS PAGE INTENTIONALLY LEFT BLANK.