

DRILLING LOG

HOLE NUMBER
LL1-143

67

PROJECT RVAAP Phase II R1

INSPECTOR E. Martin

SHEET 1 of 1

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|------------------------------------|--|---|
| | 1 | silty clay some gravel plastic w/mottling 10yr 3/3 | P.D <.0 ppm CL | | LL1-079 LL1-111 LL1-111 LL1-116 | Samp time 10:20 no refusal TD @ 100 |
| | | | | | | N 563554.9705 E 2377040.592 JSS 2-23-01 |

A-205

PROJECT

RVAAP Phase II R1

HOLE NO

LL1 - 143

DRILLING LOG

4

| PROJECT RVAAP Phase II RI | | INSPECTOR J. DeVanglin | | | HOLE NUMBER LL1-144 | |
|------------------------------|--------------|---|-----------------------------------|--|---------------------------------|--|
| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
| | 0 | 104R3/1 sandy silt, abundant gravel/slag, loose, dry, not plastic | | GM | | 0 ppm collect LL10819 @ 1112 (map pg. 3) TD 9.12.00 |
| | 1 | REFUSAL 1.0' 09/29/00 | | | | N563350.7635 E2376671.975 302/23/01 |

A-206

PROJECT

RVAAP Phase II RI

HOLE NO

LL1-144

DRILLING LOG

HOLE NUMBER
LLI-145

5

PROJECT **RVAAP Phase II RI**

INSPECTOR **J. DeVanam**

SHEET **1 of 1**

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|---|-----------------------------|-----------------------------------|--|--|
| | 0 | 104R3/3 sandy silt, gravelly, trace metal debris, loose, dry, not plastic | | | | 0 ppm collect LLI0824 & 1137 (map pg. 3) |
| | 1 | MH Silt with clay, moist, dil. yellowish-brown (104R 4/4) | | | LLI1229 08/29/00 TD 9-12-00 | |
| | 2.0 | Elastic Silt, MH ^{SRA} 3/20/01 | | | LLI1229 METALS, CN EXPLOSIVES PERMANENTS @1105 | TD @ 2.0' 08/29/00 |
| | | REFUSAL @ 2.0' | | | | N563408.0763 E 2376690.734 j's 2-23-01 |

A-207

PROJECT **RVAAP Phase II RI**

HOLE NO
LLI-145

DRILLING LOG

HOLE NUMBER **LLI-146**

PROJECT **RVAPP Phase II RI**

INSPECTOR **J. DeVanham**

SHEET **1 of 1**

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|-----------------------------------|--------------------------|--|
| | 0 | Sandy silt, trace gravel, loose, dry, not plastic 104R 3/2 | | | | Open |
| | 0.4 | Sandstone at 0.4' bgs | | | | collect LLI0821 @ 1155 |
| | 1 | | | | | TD 9.12-00 (Map pg. 3) |
| | | | | | | N563410.7524 E 2376631.458 (ISS 2-23-01) |

A-208

PROJECT **RVAPP Phase II RI**

HOLE NO **LLI-146**

DRILLING LOG

HOLE NUMBER LLI-147

13

PROJECT RYAAP Phase II RI

INSPECTOR S. De Vanylm

SHEET 1 of 1

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|----------|-----------|---|-----------------------------|------------------------------------|---------------------------|--|
| | 0 | 104R3/3 silt/sand/gravel, loose, dry, not plastic | GM | | | collect LLI0822 @ 1020 (Map pg. 10) |
| | 1 | REFUSAL @ 1.1' 09/29/00 | | | | TD 9-12-00 |
| | | | | | | N563371.6579 E 2376548.392 jss 02-23-01 |

A-209

PROJECT RYAAP Phase II RI

HOLE NO LLI-147

DRILLING LOG

19

| PROJECT | | INSPECTOR | | | | HOLE NUMBER LL1-148 |
|-------------|---|---|-----------------------------------|---|--------------------------------|---|
| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
| | 10 9 8 7 6 5 4 3 2 1 | silty sand 75 yr 4/4 loose, moist | SM <i>[Signature]</i> | | | sample LL1-0923 -1106 Dup -1156 Split (Map pg. 17) |
| | 0 | | | | | TD refused @ 10' 12/11/00 N563327.2109 E 2376466.862 2-23-01 |

A-210

PROJECT
RVAAP Load line 1 Phase II RI

HOLE NO
LL1-148

DRILLING LOG

PROJECT

RVAAP Phase II RI

INSPECTOR

P. YESOUNIS

HOLE NUMBER

LL-149

SHEET

1 of 1

21

ELEV (A)

DEPTH (B)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (D)

GEOTECH SAMPLE OR CORE BOX NO. (E)

ANALYTICAL SAMPLE NO. (F)

REMARKS (G)

0.5

1.0

7.5 YR 2.5/1 (Very DK. Brown)
Fine sand and silt, Moist,
loose

SM

Collect U1-0824
@ 1410

7.5 YR 4/6 (Strong Brown)
Fine sand and silt, Moist,
loose

SM

T.O. 1.0'

N563305.6649
E 2376434.821
jss
2-23-01

A-211

PROJECT

RVAAP Phase II RI

HOLE NO

LL-149

DRILLING LOG

33

| PROJECT | | INSPECTOR | | | HOLE NUMBER | |
|-------------------|-----------|---|-----------------------------|------------------------------------|--------------------------|--|
| RVAAP Phase II RI | | P. YESCONOS | | | LLI-150 | |
| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
| | 0.5' | 0.0'-0.5' Fine sand and silt, 7.5YR 3/4 (Dark Brown), loose, moist | SP | | | Sample LL1-0825 ① 1017 |
| | 1.0' | 0.5'-1.0' Coarse sand (Fill around pipe) 10YR 6/6 (brownish yellow), very loose | SP | | | Sample LL1-8826 vjb 12-11-00 Map page 31 |
| | | | | | | T.O. 9/11/00 N 563296.2901 E 2376575.608 jss 2-23-01 |

A-212

DRILLING LOG

PROJECT: **RVAAP Drive II RI** INSPECTOR: **E. Martin** HOLE NUMBER: **LLI-151**
 SHEET: **1 of 1**

34

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|-----------------------------------|--------------------------|---|
| | 3" | Silty Sand (Dark Yellow Brown) 10YR 4/4 | SM | | LL10526 | sample fine 1045 |
| | 3" | Coarse Sand (Fillground pipe) 10YR 6/6 | SP | | | refusal @ 6" diam. pipe |
| | | | | | | N563274. 7009 E 2376536. 357 jss 2-23-01 |

A-213

PROJECT: **RVAAP Phase II RI**

HOLE NO: **LLI-151**

DRILLING LOG

PROJECT: **RVAAP Phase II RI** INSPECTOR: **E. Martin** HOLE NUMBER: **LI-152**
 SHEET: **1 of 2**

35

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-------------|---|-----------------------------|------------------------------------|--------------------------|--|
| | 0.0' - 0.9' | 10YR 3/4 (DK Yellowish Brown) Silty Sand, loose, moist (Coarse Sand from around pipe) | SM | | | Collect LLI-0827 @ 1110 FD 9/14/00 N563265.3094 E 2376519.143 22301 |
| | 0.4' | | | | | |

A-214

DRILLING LOG

| PROJECT RVAAD Phase II RE | | INSPECTOR E. Martin | | | HOLE NUMBER 44-153 |
|---|---|---|---|--------------------------------|---|
| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
| <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">36 in</div> <div style="margin-bottom: 10px;">9 1/2 in</div> <div style="margin-bottom: 10px;">3</div> <div style="margin-bottom: 10px;">4</div> </div> | <p>Silt loam (soft dry) 10YR 3/4 yellowish brown</p> <hr/> <p>gravel fill around pipe coarse sand</p> | <p>SM</p> <hr/> <p>em SP SW</p> | | <p>U1-0828</p> | <p> Samp time 11:35</p> <hr/> <p>refusal @ 9" p.p.e</p> |
| <p>N563254.6391 E 2376499.322 jss 2-23-01</p> | | | | | |

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A-215

PROJECT
RVAAD Phase II RE

HOLE NO
44-153

DRILLING LOG

26

PROJECT: RVAAP: LLI / Phase II RI. INSPECTOR: M. J. Root HOLE NUMBER: LLI-154
 SHEET: 3 OF 5

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|---|-----------|--|-----------------------------|------------------------------------|--------------------------|---|
| 1.0 | | SP-SM SAND WITH SILT AND GRAVEL, POORLY GRADED. DAMP, OLIVE BROWN (2.5, 4/3) | PID = 0.00 END OF BORING | | LL10843 | BZ = 0 fcm |
| 2.0 | | REFUSAL @ 0.2' | | | | METALS CN EXPLOSIVES PESPELERS @ 1445 |
| 3.0 | | | | | | TD @ 0.2' @ 11/13/00 REFUSAL |
| <div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block; transform: rotate(-45deg);"> (C) 09/30/00 </div> | | | | | | |
| N562926.9196 E2376905.539 333 2.23.01 | | | | | | |
| A-216 | | | | | | |

PROJECT: RVAAP: LLI / Phase II RI HOLE NO: LLI-154

DRILLING LOG

25

PROJECT: RVAAP: LLI/P II R.I. INSPECTOR: M.J. ROSE HOLE NUMBER: LLI-155
 SHEET: 2 OF

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|---|-----------|---|-----------------------------|-----------------------------------|------------------------------|---------------------------------|
| | | SP-SM SAND WITH S.I.C.T., FINE, POORLY GRADED, DK. BROWN (10YR 3/3) | PID=1.0ppm | | LL10844 | TD @ 0.7' 09/13/00 (REFUSAL) |
| 1.0 | | REFUSAL @ 0.7' | END OF CORING | | EXPLOSIVES PROPONENTS @ 1410 | BZ=0ppm |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">(LL) 09/30/00</p> | | | | | | |
| <p>N562922.4059 E 2376912.911 JSS 2.23.01</p> | | | | | | |
| A-217 | | | | | | |

PROJECT: RVAAP: LLI / PHASE II R.I.

HOLE NO: LLI-155

DRILLING LOG

21

PROJECT: RVAAP: LLI / P II RI INSPECTOR: M. J. Root HOLE NUMBER: LLI-156
 SHEET: 5 OF 5

| DEPTH (A) | DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|------------|---|-----------------------------|-----------------------------------|--------------------------|--|
| | 1.0 | SP-SM SAND, FINE, POORLY GRADED, WITH SILT. DAMP, DK. BRN (OVR 3/3) | PID = 0.4 ppm | | LL10845 | BZ = 0 ppm TD @ 1.0' 09/13/00 |
| | | | PID = 0 ppm | | @ 1350 | BZ = 0 ppm METALS, EXPLOSIVES, M.C. PERFORMANTS TD = 1.5' 09/13/00 |
| | 2.0 | REFUSAL @ 1.5' END OF BORING | | | @ 1240 | |
| | 3.0 | | | | LL1213 | METALS, CN- EXPLOSIVES PERFORMANTS @ 1240 |
| | | | | | | N 562912.6771 E 2376910.658 J55 2.23.01 |

CW 09/30/00

A-218

DRILLING LOG

27

PROJECT: **RVAAP: LLI / PHASE II R.I.** INSPECTOR: **M. J. ROOT** HOLE NUMBER: **LLI-157**
 SHEET: **4 OF 5**

| ELEV. (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|----------------|---|---------------------------------------|------------------------------------|--|---|
| | | SP-SM SAND W/TA SILT AND GRAVEL, PROBABLY GRADED, FINE, MOIST. BLACK (10YR 2/1) | P ₁₀ = 0 per C.I.O. BS. | | LL10846 | BZ = 0 ft. m |
| 1.0 | | REFUSAL @ 0.2' | | | METALS CN EXPLOSIVES PROPAGANTS @ 1520 | TD = 0.2' 01/13/00 (REFUSAL) |
| 2.4 | | | | | | |
| 3.0 | | | | | | |
| | | C.L.W. 01/15/00 | | | | N562973.7397 E2376875.308 2.23.01 |
| | | | A-219 | | | |

DRILLING LOG

28

PROJECT RVAAP: LLI / PII RI

HOLE NUMBER LLI-158

INSPECTOR

SHEET 5 of 5

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|---|-----------------------------|-----------------------------------|--|---|
| | 1.0 | SP-SM SAND WITH SILT, POORLY GRADED, MOIST, BROWN (UIC 4/3) | PIV = 0 ppm | | LL10247 VOC'S SVOC'S PCB'S | BZ = 0 ppm TVC @ 1.0' 09/13/00 |
| | 2.0 | END OF BORING | | | METALS CN- EXPLOSIVES PROPPELLANTS @ 16000 | |
| | 3.0 | | | | | |
| | | | | | | N562966.6542 E2376851.802 5 th 2-23-01 |

C. Lee
 09/30/00

A-220

PROJECT

RVAAP: LLI / PHASE II RI

HOLE NO

LLI-158

DRILLING LOG

PROJECT RVAAP: LLI / PHASE II R.I. INSPECTOR M. J. ROSE HOLE NUMBER LLI-159 SHEET 2 OF 2

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|-----------------------------------|--|--|
| 1.0 | | GP GRAVEL WITH SAND, FINE, POORLY GRADED, SUBGRANULAR, QUARTZ, MOIST, YELLOWISH BROWN (10YR 5/8) | PI0 = 0 ppm | | LL10849 LL11108 LL11153 | BZ = 0 ppm DUPLICATE SPLIT |
| | | | PI0 = 0 ppm | | METALS CN ⁻ EXPLOSIVES PROPAGANTS | TD @ 1.6' 09/14/00 BZ = 0 ppm METALS, M.C. EXPLOSIVES, PROPAGANTS @ 1310 09/19/00 |
| 2.0 | | REFUSAL @ 1.5' END OF BOREHOLE | | | @ 0740 | |
| 3.0 | | | | | LL11214 METALS, CN ⁻ EXPLOSIVES PROPAGANTS @ 1310 | |

CLW 09/30/00

N562930
E2376761
J 2-20-01

A-221

DRILLING LOG

PROJECT

RVAAP: LLI/PHASE II R.I.

INSPECTOR

M. J. ROOT

HOLE NUMBER

LLI-160

SHEET

5 OF 5

DEPTH (A)

DEPTH (B) (FT)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (D)

GEOTECH SAMPLE OR CORE BOX NO (E)

ANALYTICAL SAMPLE NO (F)

REMARKS (G)

FAL SILT (SANDY SILT)
DRY, V. DK BROWN (7.5Y 2.5/2)

PID=0.4

LL10850
METALS
CN-
EXPLOSIVES
PROPAGANTS
@1005

BZ = 0 ppm

TD @ 0.4' 09/14/00

1.0
2.0
3.0

CLD 09/30/00

N562898.9847
E2376748.184
322
2.22.01

A-222

PROJECT

RVAAP: LLI/PHASE II R.I.

HOLE NO

LLI-160

DRILLING LOG

39

PROJECT RVAAP: LLI / PHASE II R.I. INSPECTOR M. J. ROOT HOLE NUMBER LLI-161 SHEET 2 OF 5

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|--|-----------------------------|-----------------------------------|--|---|
| 1.0 | SP-SM SAND WITH S.I.T., FINE TO MEDIUM, POORLY GRADED, DAMP, DK. YELLOWISH BROWN (WYR 4/4) | PID = 1.1 ppm | | LL10851 METALS CN ⁻ EXPLOSIVES PESSTUANTS @ 1050 | BZ = 0 ppm TD = 0.5' 09/14/00 END OF BORING |
| 1.0 | REFUSAL @ 0.5' | | | | |
| 2.0 | <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>LL10851/30/00</p> </div> | | | | |
| 3.0 | <div style="position: absolute; top: 20%; left: 70%;"> <p>N 562887.6356 E 2376709.392 S 2.23'</p> </div> | | | | |

A-223

DRILLING LOG

HOLE NUMBER **LLI-162**

40

PROJECT **RVAAP: PHASE II RI / LLI**

INSPECTOR **M. J. ROSE**

SHEET **2 OF 5**

| DEPTH (A) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|---|--|-----------------------------|-----------------------------------|---|--|
| 1.0 | SP-SM SAND WITH SGT, AND GRAVEL, POORLY SORTED, BROWN, (DZR 4/3) REFUSAL @ 0.5' | PID = 0 ppm | | LL10852 METALS CN EXPLOSIVES PROPAGANTS @ 1500 | BZ = 0 ppm TD @ 0.5' on 1/4" dia END OF BORING |
| 2.0 | | | | | |
| 3.0 | | | | | |
| <div style="position: absolute; transform: rotate(-45deg); opacity: 0.5;"> <p>CLW 09/30/00</p> </div> | | | | | |
| <p>N 562867.2793 E 2376674.557 1/2 2-23-01</p> | | | | | |

A-224

PROJECT

RVAAP: LLI / PHASE II RI

HOLE NO

LLI-162

DRILLING LOG

HOLE NUMBER **LL1-163**

4

PROJECT **RVAAP: LL1 / PI I RI**

INSPECTOR **M. J. ROOT**

SHEET **2 of 5**

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | P.D. | EXP. | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|---|-----------------------------|------|--------|------------------------------------|--|---|
| 1.0 | SP-SM SAND WITH SILT AND GRAVEL, DRY, DK. YELLOWISH BROWN (10YR 4/6). POORLY GRADED | P.D. | Ø | METALS | DISTURBED FOR MC | Ø-1' LL10853 VUC, PUS, SUC, UN, METALS, EXAMINES, PROFILES | PID IN BREATHING ZONE (BZ) = Ø ppm TO @ 1.0' 02/12/00 |
| 2.0 3.0 | END OF BORING | | | | | Ø1040 | <p>N562801.2397 E 2376714.721 yjb 2/23/01</p> |

LL1 09/30/00

A-225

PROJECT **RVAAP: LL1 / PHASE II RI**

HOLE NO **LL1-163**

DRILLING LOG

164

5
 (CL) 09/12/00

PROJECT

RVAAP: LI/PI RI

INSPECTOR

M. J. Root

HOLE NUMBER

LI-165

SHEET

3 of 5

DEPTH (ft)

1.0
2.0
3.0

DESCRIPTION OF MATERIALS (C)

SP-SM SAND WITH SILT AND GRAVEL, POORLY GRADED DRY TO DAMP, DK. Y-BROWN (10% 4%)
 GP-GM GRAVEL WITH SAND, TRACED SILT, POORLY GRADED, DRY, DK. YELLOWISH-BROWN (10% 4%)

FIELD SCREENING RESULTS (D)

PI 0

0

GEO TECH SAMPLE OR CORE BOX NO (E)

M.C.

ANALYTICAL SAMPLE NO (F)

LI10855 METALS CN- EXPLOSIVES PROPELLANTS @1130

LI11215 METALS CN- EXPLOSIVES PROPELLANTS @1325

REMARKS (G)

BZ = 0 ppm
 TD @ 1.0' 09/12/00

BZ = 0 ppm
 TO = 2.3' 09/19/00

REFUSAL @ 2.3'

END OF BORING

N 562816.5678
 E 2376742.359
 JSS
 2-23-01

(CL) 09/30/00

A-226

PROJECT

RVAAP: LI / PHASE II RI

HOLE NO

LI-165-164

(CL) 09/12/00

DRILLING LOG

HOLE NUMBER **LLI-165**

PROJECT **RVAAP: LLI/P/II RI**

INSPECTOR **M. J. ROOST**

SHEET **4 OF 5**

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLI. NO (F) | REMARKS (G) |
|----------|-------------------|--|-----------------------------|-----------------------------------|--|--|
| | 1.0 | G.P.G.M GRAVEL WITH SAND AND TRACE SILT, DAMP, POORLY GRADED, OLIVE BROWN (2.5Y 4/4) | NO FID | | LL10856 METAL, CN EXPLOSIVES FLUORIMETS @ 1215 | (RAINING) |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | | | | | |
| | | | | | | N 562819.5299 E 2376773.244 JSS 2/23/01 |
| | | | | | | (CWD) 09/30/00 |

A-227

PROJECT

RVAAP: LLI / Phase II RI

HOLE NO

LLI-165

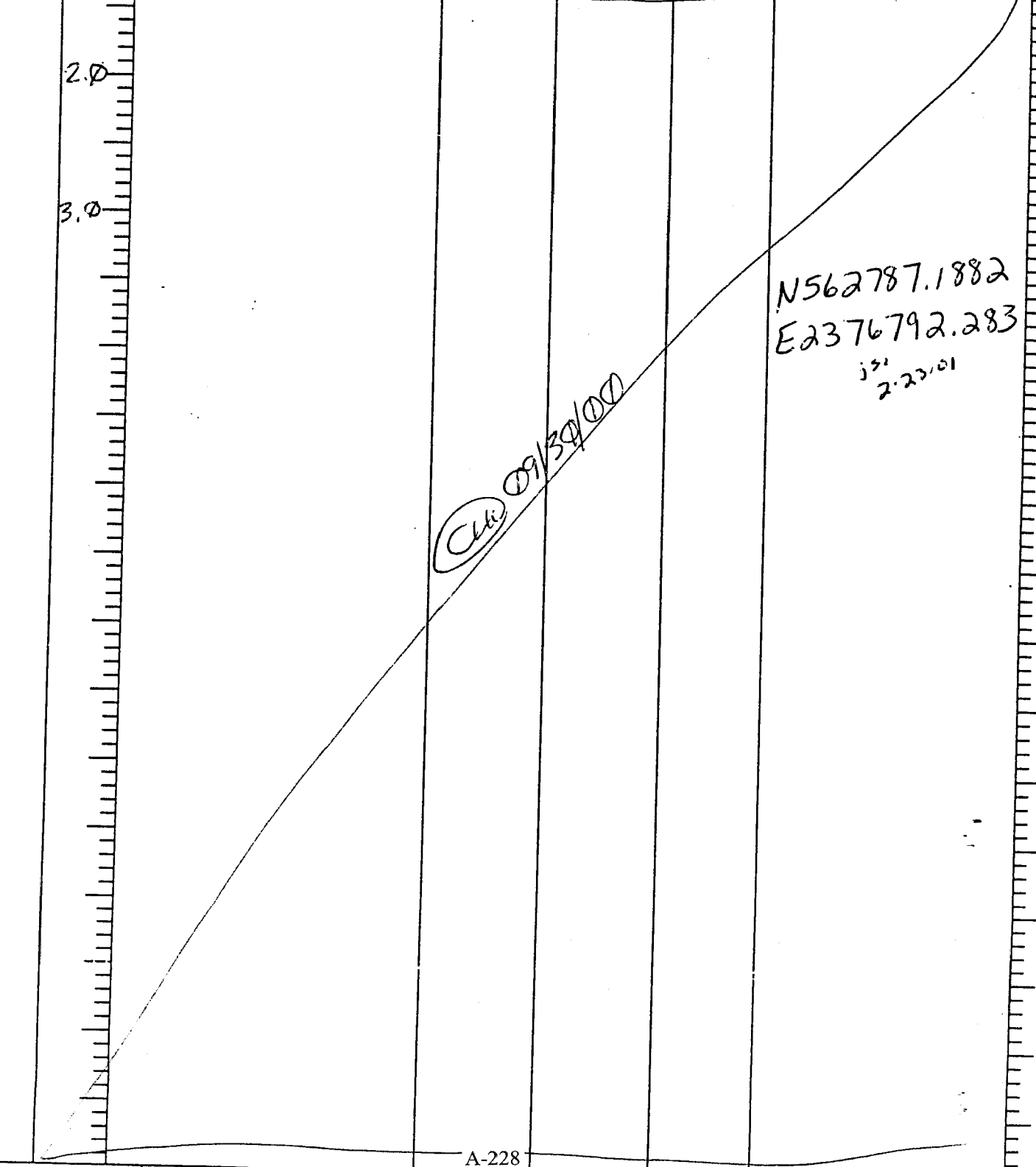
DRILLING LOG

PROJECT **RVAAAP. LLI/PII RI** INSPECTOR **M.J. ROOT** HOLE NUMBER **LLI-166**

ELEV (A) DEPTH (#) DESCRIPTION OF MATERIALS (C) FIELD SCREENING RESULTS (D) GEOTECH SAMPLE OR CORE BOX NO (E) ANALYTICAL SAMPLE NO (F) REMARKS (G)

1.0 ML SILT, TRACE SAND, DRY, LT. OLIVE BROWN (2.5Y 5/6) PID @ ppm
 LL0859 METALS CN⁻ EXPLOSIVES P&F ELEMENTS @ 1620
 BZ = @ ppm
 TD @ 1.0' 09/12/00

2.0 END OF BORING



A-228

DRILLING LOG

14

PROJECT: **RVAAP: LLI/PII RI** INSPECTOR: **M. J. ROOT** HOLE NUMBER: **LLI-167** SHEET: **5 of 5**

| ELEV (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--|------------|--|-----------------------------|-----------------------------------|-------------------------------|--|
| | | 0' - 0.6 ML SILT WITH GRAVEL, DRY, OLIVE BROWN (2.57 4/4) ON SANDSTONE BEDROCK | NO PID | | LL10861 METALS CN- | (RAINING HARD) |
| 1.0 | | REFUSAL @ 0.6' DUE TO BEDROCK | | | EXPLOSIVES PROPELLANTS @ 1640 | END OF BORING |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| <p><i>(Handwritten: EW 09/19/00)</i></p> | | | | | | <p>N562763.6363 E2376797.579 JSS 2-23-01</p> |
| | | | A-229 | | | |

DRILLING LOG

PROJECT RVAAP: LLI/PI RI INSPECTOR M. J. ROSE HOLE NUMBER LL1-168

SHEET 2 of 5

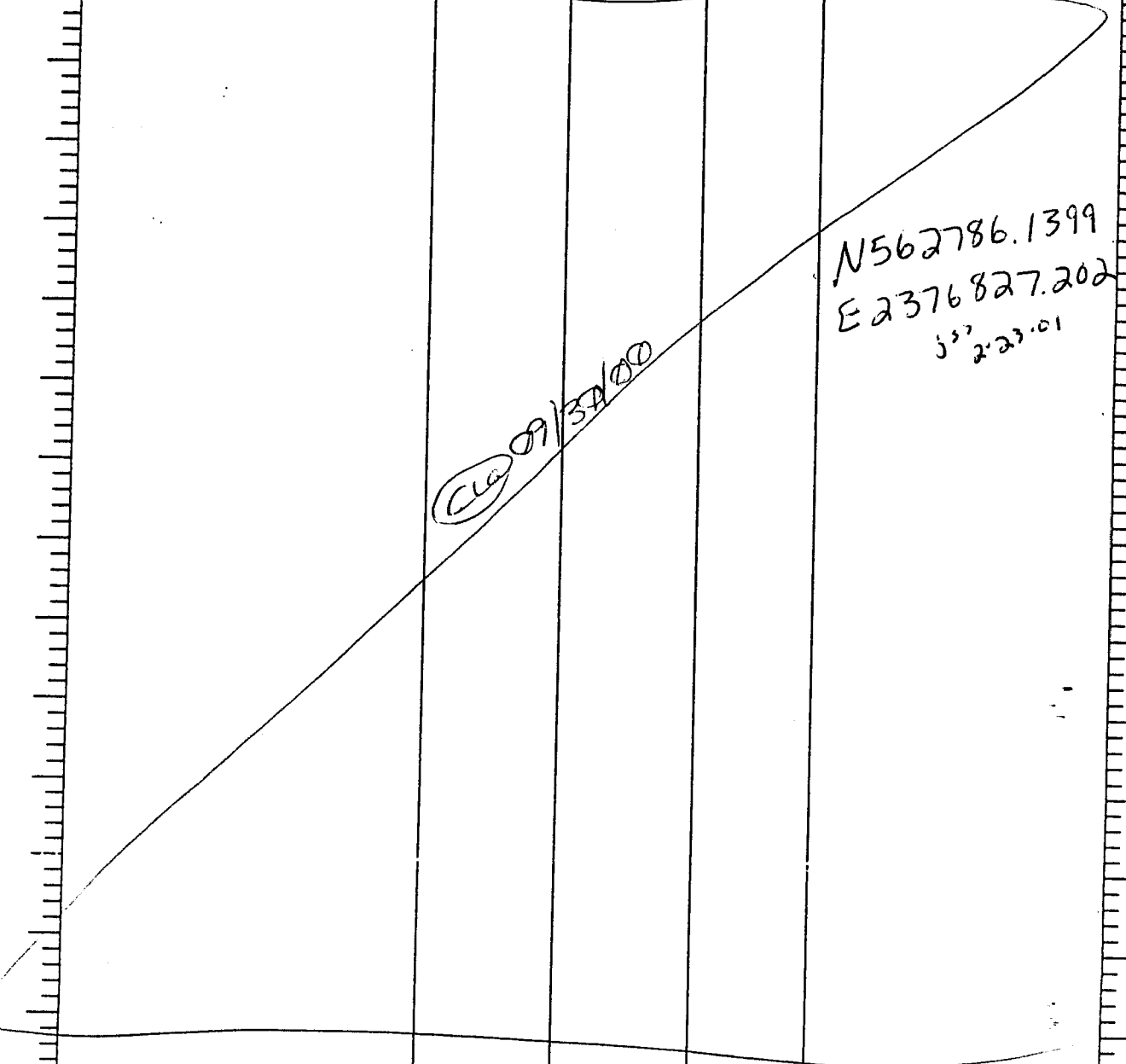
DEPTH (#) DESCRIPTION OF MATERIALS (C) FIELD SCREENING RESULTS (D) GEOTECH SAMPLE OR CORE BOX NO (E) ANALYTICAL SAMPLE NO (F) REMARKS (G)

1.0' ML SILT WITH SAND AND TRACED CLAY, DAMP, BROWN (7.5 YR 4/3) PID = 0 ft

BZ = 0 COLLECTED DUP + SPLIT TD @ 1.0' 08/13/00

1.0' END OF BOYLING

2.0' M.O.S.M.D CURRENT → M.C. C 0845



DRILLING LOG

PROJECT: **RVAAP: LLI/PHASE II R.I.** INSPECTOR: **M. J. ROSE** HOLE NUMBER: **LI-169**
 SHEET: **2 OF 2**

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|-----------------------------------|--------------------------|--|
| | | SP. SM SAND WITH SILT, POORLY GRADED, FINE, DAMP, DK YELLOWISH-BROWN (10YR4/4) | PID: 0ppm | M.C. | LL10869 | BZ = 0ppm |
| | 1.0 | REFUSAL @ 0.7' | | | | TD @ 0.7 07/18/00 |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| | | | | | | N562489.5413 E 2376842.305 jss 2/23/01 |
| | | | | | | (LI) 10/03/00 |
| | | | | | | |

A-231

PROJECT: **RVAAP: LLI/PHASE II R.I.**

HOLE NO: **LI-169**

DRILLING LOG

HOLE NUMBER **LLI-170**

PROJECT **RVAAP: LLI/PHASE II R.I.**

INSPECTOR **M. J. ROSE**

SHEET **2 OF 2**

12

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|-----------|--|-----------------------------|------------------------------------|---|--|
| | | SP-SM SAND WITH SILT, POORLY GRADED, FINE, DAMP, BROWN (7.5YR 4/4) | PI0-0ppm | | LL10870 METALS EXPLOSIVES PERCENTAGES @1025 | BZ=0ppm TDC @ 0.8' 01/18/00 |
| 1.8 | | REFUSAL @ 0.8' | | | | |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| | | | | | | N562497.7359 E 2376830.878 JCS 2-23-01 |
| | | | | | | (LL10) 10/03/00 |
| | | | | | | A-232 |

PROJECT

RVAAP: LLI/PHASE II R.I.

HOLE NO

LLI-170

DRILLING LOG

13

PROJECT: **RVAAP: LLI / PHASE II R.I.** INSPECTOR: **M. J. Ross** HOLE NUMBER: **LLI-171**

SHEET: **2 OF 2**

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|-----------------------------------|---|----------------------------------|
| | 1.0 | SP-SM SAND WITH SILT, POORLY GRADED, FINE, DAMP, BROWN (7.5YR 4/4) Silty Sand, SM SEA 3/20/01 | PID = 0 ppm | M.C. | LL10872 LL1114 LL11164 METALS EXPLOSIVES PROPAGANTS P1040 | DUPLICATE SPLIT BZ = 0 ppm |
| | 2.0 | REFUSAL @ 1.0 (CONFIRMED 09/29/00 (CC)) | | | | |
| | 3.0 | | | | | |
| | | <div style="position: absolute; transform: rotate(-45deg); opacity: 0.5; font-size: 2em;"> (CC) 10/P 3/00 </div> | | | | |
| | | N 562491.6605 E 2376847.371 355 2-23-01 | | | | |
| | | | A-233 | | | |

PROJECT: **RVAAP, LLI / PHASE II R.I.**

HOLE NO: **LLI-171**

DRILLING LOG

18

PROJECT RVAAP: LLI / PHASE II R.I.

INSPECTOR M.J. ROOS

HOLE NUMBER LL-173

SHEET 2 OF 2

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|--|-----------------------------|-----------------------------------|---------------------------------------|---|
| | | SP-SM SAND WITH SILT, POORLY GRADED, FINE, AMP, BROWN (5% R 4/4) | FID = 0 ppm | M.C. | LL10874 | BZ = 0 ppm |
| | | | | | VOC, SW, PCBs, CN, METALS, EXPLOSIVES | TD @ 0.7 @ 1181000 |
| 1.0 | | REFUSAL @ 0.7' | | | PROPAGATION @ 1140 | |
| 2.0 | | <div style="position: relative; height: 100px;"> </div> | | | | |
| 3.0 | | | | | | |
| | | | | | | N 562481.8959 E 2376838.467 j 22300 |
| | | | | | | (Circled signature) 10/25/09 |
| | | | | | | A-235 |

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LLI-173

DRILLING LOG

WELL NUMBER LLI-174

21

PROJECT RVAAP: LLI / PHASE II R.I.

INSPECTOR M. J. ROSE

SHEET 2 OF 2

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|---|-----------------------------|-----------------------------------|---|--|
| | | <p>SP-SM SP-SM SP-SM SP-SM SAND WITH SILT, POORLY GRADED, FINE, DAMP, BROWN (1.572 4/4)</p> | <p>AD = 0ppm</p> | | <p>LL10876 METALS EXPLOSIVES PROPELLANTS @ 1410</p> | <p>BZ = 0ppm TD @ 0.6' @ 11:21:00</p> |
| 1.10 | | REFUSAL @ 0.6' | | | | |
| 2.10 | | | | | | |
| 3.10 | | | | | | |
| | | | | | | <p>N 562461.0107 E 2376887.264 33' 233-01</p> |
| | | | | | | <p>CLL 10876/00</p> |
| | | | | | | <p>A-236</p> |

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LLI-174

DRILLING LOG

HOLE NUMBER **LLI-175**

14

PROJECT **RVAAP: LLI/Phase II R.I.**

INSPECTOR **M.J. ROSE**

SHEET **2 of 2**

| ELEV (ft) | DEPTH (ft) | DESCRIPTION OF MATERIALS (c) | FIELD SCREENING RESULTS (d) | GEO TECH SAMPLE OR CORE BOX NO (e) | ANALYTICAL SAMPLE NO (f) | REMARKS (g) |
|-----------|------------|--|-----------------------------|------------------------------------|---|-----------------------------------|
| | | SP-SM SAND WITH SILT; POORLY GRADED, FINE, DAMP, BROWN (7.5TR 4/4) | P10 = 0 ppm | | LL10877 METALS EXPLOSIVES PROPPELLANTS @ 1115 | B2 = 0 ppm TDC @ 0.7' 09118/00 |
| 1.0 | | REFUSAL @ 0.7' | | | | |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| | | N562481.8618 E 2376857.834 JSS 22301 | | | | |
| | | A-237 | | | | |

PROJECT **RVAAP: LLI/Phase II R.I.**

HOLE NO **LLI-175**

DRILLING LOG

HOLE NUMBER **LLI-176**

21

PROJECT **RVAAP LLI / PHASE II R.I.**

INSPECTOR **M. J. ROOST**

SHEET **2 OF 2**

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|---|-----------------------------|-----------------------------------|-------------------------------|---|
| | | SP-SM SAND WITH SILT, POORLY GRADED, FINE, GRAMP, BROWN (7.5YR 4/4) | PID = 0 ppm | | LL10878 | BZ = 0 ppm TD = 0.6' 09/18/00 |
| | 1.0 | REFUSAL @ 0.6' | | | EXPLOSIVES PROPRIETARY @ 1425 | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| | | | | | | N 562490.4507 E 2376842.818 2-23-01 |
| | | | | | | (LL1) 10/03/00 |
| | | | | | | A-238 |

PROJECT **RVAAP: LLI / PHASE II R.I.**

HOLE NO **LLI-176**

DRILLING LOG

HOLE NUMBER **LLI-177**

25

PROJECT **RVAAP: LLI/PHASE II R.I**

INSPECTOR **M.J. ROSS**

SHEET **2 of 2**

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|--|--------------------------------|-----------------------------------|---|---|
| | | SP-SM SAND WITH SILT AND GRAVEL, POORLY GRADED, FINE, DAMP, BRUND (ISYR 4/3) | PID 0.0ppm | | LL10880 METAS EXPLOSIVES PROPAGATION @ 1435 | BL = 0ppm TD @ 0.7' 09/18/00 |
| 1.0 | | REFUSAL @ 0.7 | | | | |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| | | | | | | N562490.8221 E 2376877.227 2-23-01 |
| | | | | | | (Elev) 10/18/00 |
| | | | | | | A-239 |

PROJECT

RVAAP: LLI/PHASE II R.I

HOLE NO

LLI-177

DRILLING LOG

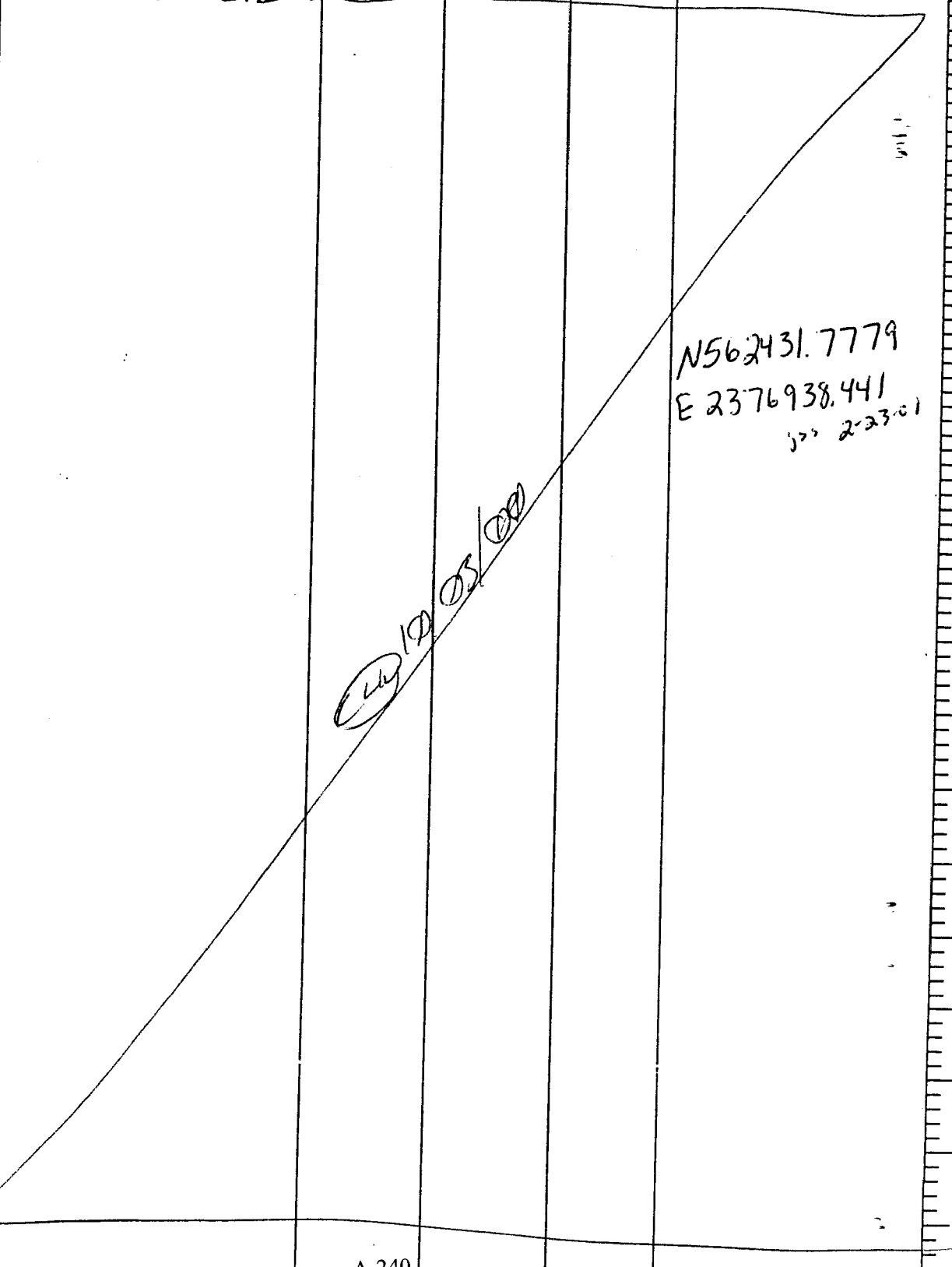
HOLE NUMBER **LLI-178**

24'

PROJECT **RVAAP: LLI / PHASE II R.T.**

INSPECTOR **M. J. Root**

SHEET **2 OF 2**

| ELEV (A) | DEPTH (B) (Ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|--|-----------------------------|---|--------------------------|--|
| | | SP-5M SAND WITH SILT, ROUGHLY GRADED, FINE, SAND, VERY DR. GRAY (1.5% 3/1) HIGH ORGANIC MATTER | PID < 40 ppm | LL10881 METALS EXPLOSIVES RADIOISOTOPES @ 15400 | | BZ = 0 ppm TD @ 10.2' 09/18/00 SCALES? OF TOP OF BEDROCK |
| 1.0 | | REFUSAL @ 10.2' | | | | |
| 2.0 | |  | | | | |
| 3.0 | | <p style="text-align: center;">(Circled) 19 05/00</p> | | | | |
| | | <p style="text-align: right;">N562431.7779 E 2376938.441 JUN 2-23-01</p> | | | | |

A-240

PROJECT **RVAAP: LLI / PHASE II R.T.**

HOLE NO **LLI-178**

DRILLING LOG

HOLE NUMBER **LLI-179**

PROJECT **RVAAP: LLI / PHASE II R.I.**

INSPECTOR **M. J. ROSE**

SHEET **2 OF 2**

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|---|-----------------------------|-----------------------------------|--|----------------------------------|
| | | SP-SM SAND WITH SILT, POORLY GRADED, MEDIUM TO FINE. DRY, DIL. GRAYISH BROWN (LQYR 4/L) | PID = Open | M.L. | LL10334 Fem VSC SUCR, PCB METALS, LQYR EXPLOSIVES PILFERMATS @1045 | BZ = 0 ppm TD @ 0.6' 09/17/00 |
| | 1.0 | REFUSAL @ 0.6' END OF BORING | | | | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |

CLW 09/30/00

N 562019.4016
E 2377182.934
555
2-23-01

A-241

PROJECT **RVAAP: LLI / PHASE II R.I.**

HOLE NO **LLI-179**

DRILLING LOG

92

PROJECT: **RVAAP: LLI/PHASE II R.I.** INSPECTOR: **M.J. ROSE** HOLE NUMBER: **LLI-180**
 SHEET: **2 OF 2**

| ELEV (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|------------|--|-----------------------------|-----------------------------------|---|---------------------------------|
| 1.0 | | SP-5M SAND WITH SILT POORLY GRADED, MED. VM, DAMP, BROWN (7.5% 4/3) | PI0-0 ppm | | LL10885 METALS EXPLOSIVES PROPAGANTS @ 1200 | BZ=0 ppm TDC @ 1.0' 09/17/00 |
| 2.0 | | REFUSAL @ 1.0' END OF BORING (CONFIRMED 09/29/00 @) | | | | |
| 3.0 | | <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>NS61929.8682 E2377139.888 2-23-01</p> </div> | | | | |
| A-242 | | | | | | |

PROJECT: **RVAAP: LLI/PHASE II R.I.** HOLE NO: **LLI-180**

DRILLING LOG

HOLE NUMBER LLI-181

PROJECT RVAAP: LLI/PHASE II R.I.

INSPECTOR M.J. ROY

SHEET 2 OF 2

| LEV (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|------------|---------------|--|-----------------------------------|--|--|---|
| | | SP-SM SAND WITH S.LT, POORLY GRADED, MEDIUM, DAMP BROWN (10YR 4/3) | PID= | M.C. | LL10886 VOL, SOLIDS P.C. CN, METALS EXPLOSIVES PROPAGATORS C1140 | BZ=0 per TD @ 0.5' 09/17/00 |
| | 1.0 | REFUSAL @ 0.5' END OF BORING. | | | | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| | | | | | | <p>N561937.0079 E 2377136.491 522 2-23-01</p> |
| | | | | | | <p>Call 09/30/00</p> |
| | | | | | | <p>NS61937.0079 E 2377136.491 522 2-23-01</p> |

A-243

PROJECT

RVAAP: LLI/PHASE II R.I.

HOLE NO

LLI-181

DRILLING LOG

96

PROJECT: RVAAP: LLI / PHASE II R.I. INSPECTOR: M. J. ROOY HOLE NUMBER: LLI-182
SHEET: 2 OF 2

| DEPTH (A) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--------------------|--|-----------------------------|-------------------------------------|--|--|
| 0.0 | MH SICT WITH CLAY AND SAND, DAMP, BROWN (7.5 YR 4/4) | PID = 0ppm | | LLI 08333 | P10 BZ = 0ppm T2 = 0.3' 09/17/00 |
| 1.0 | END OF BORING | | | METALS EXPLOSIVES PROPPELLANTS @ 1345 | |
| 2.0 | | | | | |
| 3.0 | | | | | |
| (Circled) 09/17/00 | | | | | |
| | | | | | N 561922.7466 E 2377143.597 J" 2-23-01 |

A-244

PROJECT: RVAAP: LLI / PHASE II R.I. HOLE NO: LLI-182

DRILLING LOG

PROJECT: **RVAAP: LLI/PHASE II R.I.** INSPECTOR: **M. J. ROSE** HOLE NUMBER: **LLI-183**
 SHEET: **2 OF 2**

| ELEV (A) | DEPTH (B) (F) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|---------------|---|-----------------------------|-----------------------------------|---|-------------------------------|
| | | SP-SM SAND WITH SILT, POORLY GRADED, MEDIUM, DAMP, BROWN (1012 4/3) | PID=0ppm | | LL10887 METALS EXPANDED PENETRAMETER @ 1115 | BZ=0ppm TD @ 0.7' 09/17/00 |
| 1.0 | | REFUSAL @ 0.7' END OF BORING | | | | |
| 2.0 | | | | | | |
| 3.0 | | <p style="font-size: 2em; opacity: 0.5;">(C) 09/30/00</p> <p style="font-size: 1.5em; opacity: 0.5;">N 561932.642 E 2377129.161 2-23-01</p> | | | | |

A-245

DRILLING LOG

PROJECT: RVAAP: LLI / Phase II R.I. INSPECTOR: M. J. ROSE HOLE NUMBER: LLI-184
 SHEET: 2 OF 2

| ELEV (A) | DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|---|------------|---|-----------------------------|-----------------------------------|--------------------------|--|
| | 1.0 | SP-SM SAND WITH S.C.T., POORLY GRADED, FINE, DAMP, DK. GRAYISH BROWN (10YR 4/2) | RD = 0.0 | | LL10870 | BZ = 0.0 ft SAMPLE SCRAPED FROM SURFACE 0 - 0.2' ON TOP OF BEARING |
| | | REFUSAL @ 0.2' | | | | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">LLI 1083/00</p> <p style="font-size: 1.5em; text-align: right;">N561907 E 2377106 is 2.2701</p> | | | | | | |
| A-246 | | | | | | |

DRILLING LOG

5

PROJECT: RVAAP LLI / PHASE II R.I. SUPERVISOR: M.J. ROSE HOLE NUMBER: LLI-185
 SHEET: 2 OF 2

| DEPTH (A) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--|---|-----------------------------|------------------------------------|--|---|
| 1.0 | SP-SM SAND WITH SILT, POORLY GRADED, FINE, POMP, DK. GRAYISH BROWN (10YR 4/2) | PID = 0 ppm | M.C. | LL10891 VIX; SVX; PCB; CN; METALS EXPLOSIVES PROPAGANTS @ 0845 | BZ = 0 ppm SOIL COLLECTED FROM 0-0.2' FROM TOP OF BEDROCK |
| 2.0 | REFUSAL @ 0.2' | | | | |
| 3.0 | | | | | |
| <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">(LL1) 10/03/00</p> <p style="font-size: 1.5em; transform: rotate(-15deg); opacity: 0.5;">N561869 E 2377128 2230'</p> | | | | | |
| | | A-247 | | | |

PROJECT: RVAAP: LLI / PHASE II R.I. HOLE NO: LLI-185

DRILLING LOG

PROJECT RVAAP: LLI / PHASE II R.I. INSPECTOR M. J. ROOT HOLE NUMBER LLI-186 SHEET 2 of 2

99

| DEPTH (A) | DEPTH (Ft.) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|---|-------------|---|-----------------------------|------------------------------------|---|---|
| | | SP-SM SAND WITH SILT POORLY GRADED, MEDIUM, DRY, BROWN (7.5% 4/3) | | LL0893 → LL1100 → MR. | LL1100 METALS EXPANSIVE PROGRAMS | BZ = 0 ft. DUPLICATE 07/17/00 SPLIT TV = 0.5' |
| | 1.0 | REFUSAL @ 0.5' E.O.B. | | | | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| <p>CLW 09/30/00</p> <p>N561903.5341 E 2377144.563 599 2-23-01</p> | | | | | | |

A-248

DRILLING LOG

98

PROJECT RVAAP. LLI/PHASE II R.I.

INSPECTOR M.J. ROSE

HOLE NUMBER LLI-187

SHEET 2 OF 2

| DEPTH (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|------------|---|-----------------------------|-----------------------------------|---|----------------------------------|
| | | SP-SM SAND WITH SILT, POORLY GRADED, DRY, BROWN (7.5 YR 4/4) | PID = 0 ppm | | LL10874 METALS EXPLOSIVES PERMEABILITY @ 1435 | BZ = 0 ppm TD @ 0.8' @ 11/100 |
| 1.0 | | REFUSAL @ 0.8' END OF BORING | | | | |
| 2.0 | | | | | | |
| 3.0 | | <p style="font-size: 2em; transform: rotate(-45deg);">AW 09/30/00</p> | | | | |

N 561908. 2623
E 2377152. 291
197
2-23-01

A-249

PROJECT

RVAAP. LLI/PHASE II R.I.

HOLE NO

LLI-187

DRILLING LOG

PROJECT RVAAP. LLI/Phase II R.I.

SUPERVISOR Eric E. Moran

LOG NUMBER LU-183

SHEET 2 of 2

82

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|-----------------------------------|---|----------------|
| | 1.0 | ML SILT WITH SAND, FINE MOIST DK. BROWN (10YR 3/3) TO 0.4' CHANGING TO BROWN (10YR 5/3) CHANGING TO LT. BROWNISH GRAY (10YR 4/2) | | MC. | LI0875 METALS, CN- EXPLOSIVES PERMEABILITY C10000 | RD NOT WORKING |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>CU 09/30/00</p> </div> | | | | |
| | | <p>N 565458.4571 E 2375149.628 22-01</p> | | | | |

A-250

PROJECT RVAAP. Phase II R.I.

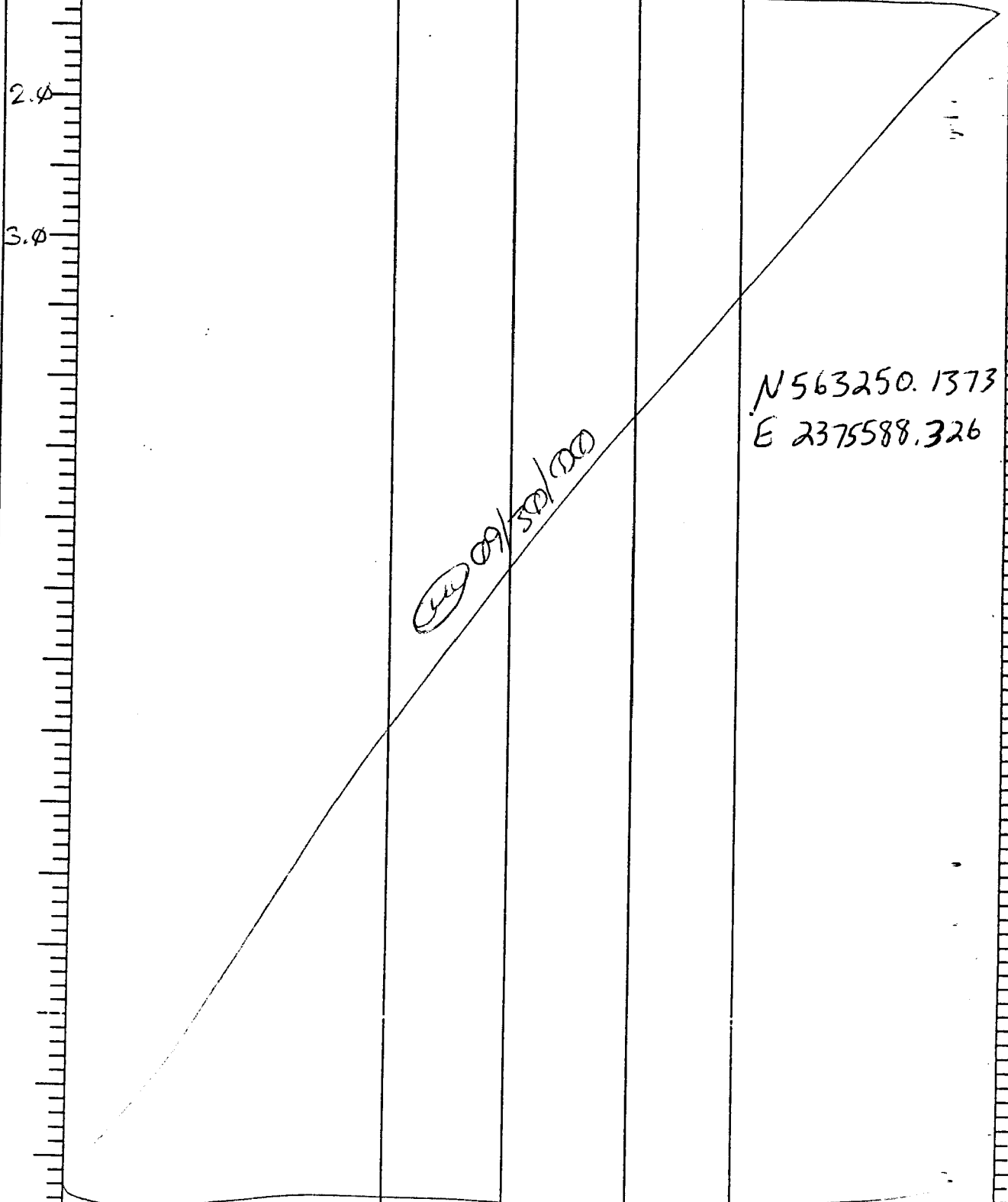
HOLE NO LU-183

DRILLING LOG

PROJECT: **RVAAP: LLI/PHASE II R.I.** INSPECTOR: **ERIC E. MARTIN** HOLE NUMBER: **LLI-190** SHEET: **2 OF 2**

| ELEV. (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|------------|---|-----------------------------|------------------------------------|--|---|
| 1.0 | | ML SILT WITH FINE SAND, MO. ST, TRACE GRAVEL. V. DK. GRAYISH BROWN (10X2 1/2) TO 0.13', CHANGING TO LT. OVR. BROWN (2.54 5/4) | PID = 0 ppm | | LL10897 METALS, CN EXPLOSIVES PROPELLANTS @ 1755 | BZ = 0 ppm ALSO COLLECTED SOIL FOR DUPLICATE (#LL1132) AND SLIT (#LL1132) SAMPLES. TD = 1.0 09/25/00 |

END OF BORING



A-251

PROJECT: **RVAAP: LLI/PHASE II R.I.**

HOLE NO: **LLI-190**

77

DRILLING LOG

HOLE NUMBER **LLI-191**
 SHEET **2022**

7U

PROJECT **RVAAP: LLI/Phase II R.I** DIRECTOR **ERIC E. MARTIN**

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|----------------|---|-----------------------------|------------------------------------|---|---|
| | 1.0 | CL CLAY WITH SILT, V. MOIST GRAY (GLEY) (0.42 G/I) WITH COMMON YELLOWISH BROWN (0.42 S/B) MOTTLES NAD ORGAN. MAT (0.1) AT SURFACE | PID = 0 ppm | | LL0898 METALS, CN EXPLOSIVES RESIDUALS @ 1715 | BZ = 0 ppm TD @ 1.0' 09/28/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | | | | | |
| | | | | | | N562171.6258 E 2376233.349 i ² 2.23 01 |

Cur 09/30/00

A-252

PROJECT **RVAAP: LLI/Phase II R.I**

HOLE NO **LLI-191**

DRILLING LOG

HOLE NUMBER **LLI-193**

74

PROJECT **RVAAP: LLI/PHASE II R.I.**

INSPECTOR **ERIC E. MARTIN**

SHEET **2 OF 2**

| ELEV (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|------------|--|-----------------------------|-----------------------------------|--|---|
| | 1.0 | ML SILT, TRACE FINE SAND, DAMP, BRN (10YR 4/3) | PI = 0 ppm | M.C. | LL10701 VOL% SiO2 P2O5, Ca, METALS, EXPLOSIVES FROE WAT | BZ = 0 ppm TD @ 1.0' 09/23/00 |
| | | END OF BORING | | | @ ISSD | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| | | CLL 09/30/00 | | | | N 560902.3353 E 2377372.13 JSS 27301 |

A-253

PROJECT

RVAAP: LLI/PHASE II R.I.

HOLE NO

LLI-193

DRILLING LOG

HOLE NUMBER LL-194

PROJECT RVAAP: LLI/PHASE II R.I.

INSPECTOR ERIC E. MARTIN

SHEET 2 OF 2

UM

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|-----------------------------------|--------------------------|------------------------------|
| 1.0 | | ML SILT GRADING TO SILT WITH FINE SAND; TRACE CLAY. DAMP, BROWN (1.5Y 4/3) CHANGING TO OUB YELLOW (2.5Y 6/6) AT 0.6' | PIV=0 ppm | | LL10902 | BZ=0 ppm TD@1.0' 04/22/00 |
| | | | END OF BORING | | | |

1.0
2.0
3.0

N 564285. 7105
E 2375589. 29
j²²
223⁰¹

(C) 07/20/00

A-254

PROJECT RVAAP: LLI/PHASE II R.I.

HOLE NO LL-194

DRILLING LOG

HOLE NUMBER LL-195

PROJECT RVAAP: LL / PHASE II R.I.

INSPECTOR ERIC E. MARTIN

SHEET 2 OF 2

68

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) | |
|-------------|----------------------|---|-----------------------------------|---|---|--|--|
| | 1.0 | ML SILT WITH TRACE LAY, DAMP, L. OLIVE BROWN (2.5Y 5/4) | PI0=1.0 (NO. STURE) | | LL10903 LL11126 LL11176 METALS, CN EXPLOSIVES PROPAGANTS | QUALITE 82=0.0mm SALT TD @ 1.0' 09128/00 | |
| | 1.0 | END OF BORING | | | E 1130 | | |
| | 3.0 | (09130/00) | | | | | |
| | | | | | | N563897.2051 E 2375627.653 JSS 2.23.01 | |
| | | | | A-255 | | | |

DRILLING LOG

HOLE NUMBER **LLI-196****69**PROJECT **RVAAP: LLI/PHASE II R.I.**INSPECTOR **ERIC E. MARON**SHEET **2 OF 2**

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|-----------------------------------|--------------------------|--|
| | 1.0 | MH SILT WITH CLAY, MOIST DK. GRAYISH BROWN (1.54 4/2) SAND WITH BAND OF YELLOWISH BROWN (1042 5/8) MOTTLES BELOW 0.3' CLW 09/128/00 | PID=0 ppm | | LL10905 | BZ=0 ppm ALSO COLLECTED SAMPLE EVALUATE (LL11127) AND SPLIT (LL11177) TD @ 1.0' 09/128/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | | | | | |
| | | | | | | N 562536.0369 E 2376582.358 jss 2/23/01 |
| | | | | | | |

CLW 09/150/00

A-256

PROJECT

RVAAP: LLI/PHASE II R.I.

HOLE NO

LLI-196

DRILLING LOG

PROJECT: **RVAAP: LLI/Phase II R.I.** INSPECTOR: _____ HOLE NUMBER: **LLI-197**
 SHEET: **2 of 2**

70

| ELEV (A) | DEPTH (B) (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|---|-----------------------------|--|--------------------------|---------------------|
| | | MLSilt, trace gravel DAMP, BROWN (10YR 4/3) | P10 = 0 ppm | LI 0706 | | BZ = 0 ppm |
| | | REFUSAL @ 0.4' | | VOIDS, SUCC. PLBS METALS, CN, EXPLS, VBS FROPELWATS | M.C. @ 15000 | TO @ 0.4' 0712310XP |
| 1.0 | | END OF BORING | | | | |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| | | (circled) 09/30/00 N 561589.2875 E 2377004.824 22.21 | | | | |
| | | | A-257 | | | |

DRILLING LOG

HOLE NUMBER LL-198

39

PROJECT RVAAP LLI / PHASE II R.I.

INSPECTOR PAUL R. YESSENI

SHEET 2 OF 2

| ELEV (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--|------------|---|-----------------------------|------------------------------------|---|---|
| | 1.0 | MH SILT WITH CLAY, MOIST, GRAYISH-BROWN (10YR 5/2) WITH YELLOWISH-RED (5YR 5/6) MOTTLES | | | LL10707 METALS CN EXPLOSIVES PRESERVATIVES C1520 | ALSO COLLECTED DUPLICATE (LL11119) AND SPLIT (LL11169) TO ELEV 0.9126/000 |
| | | END OF BORING | | | | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| <p><i>(circled)</i> LL10103/000</p> <p>N565350.2299 E 2375543.756 i'' 223'01</p> | | | | | | |
| | | | A-258 | | | |

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LLI-198

DRILLING LOG

HOLE NUMBER LL1-199

PROJECT RVAAP: LL1/PHASE II R.I.

INSPECTOR Paul R. YESCONIS

SHEET 2 OF 2

61

| DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|---|-----------------------------|-----------------------------------|--|--|
| 1.0 | MH SILT WITH CLAY, DAMP, BROWN (T.S.Y.R. 413) | → | PID = 50 ppm | LL10908 METALS, LN, EXPLOSIVES, PROPELLANTS @ 1755 | BL = 0 ppm ALSO COLLECTED DUPLICATE (#LL1125) AND SPLIT (#LL1175) SAMPLES TD @ 1.0' 09/27/00 |
| 2.0 3.0 | END OF BORING | | | | <p style="text-align: right;">N 564855.5529 E 2375872.585 1st 22301</p> <p style="text-align: center; transform: rotate(-45deg);">File 09/30/00</p> |
| | | A-259 | | | |

PROJECT

RVAAP: LL1/PHASE II R.I.

HOLE NO

LL1-199

DRILLING LOG

HOLE NUMBER LLI-200

PROJECT RVAAP. LLI/Phase II R.I.

INSPECTOR ERIC E. MARIN

SHEET 2 OF 2

103

| ELEV (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|------------|---|-----------------------------|-----------------------------------|---|---|
| | 1.0 | ML SILT WITH SAND, FINE, DAMP, DK. YELLOWISH-BROWN (10YR 4/4) | PIV=0 | | LL10910 METALS LN EXPLOSIVES PGM POLYARS @ 0745 | BZ=0ppm TD @ 1.0' 09/23/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>CLW 09/30/00</p> </div> | | | | |
| | | | | | | |
| | | | A-260 | | | N564346.1516 E 2375940.863 55 2.23 01 |

PROJECT

RVAAP. LLI/Phase II R.I.

HOLE NO

LLI-200

DRILLING LOG

PROJECT: RVAAP Phase II RI INSPECTOR: J. DeVaughn HOLE NUMBER: LL1-202 SHEET: 1 of 1

32

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|---|--------------------------------------|-----------------------------------|------------------------------------|---|
| | 7" | sandy silt (ML) 10YR 4/2 SEA 3/20/01 Clayey sand silt w/ trace clay bolts found in soil | cm 9/14 SE cm 4/4 AAE OL | | LL1-0492 912 yjb 12/11/00 | refusal @ 7" samp + me 09:10am (Map pg. 31) N563273.8121 E2376631.619 jss 22301 |
| | | | | | | |

A-262

PROJECT: RVAAP Phase II RI

HOLE NO: LL1-202

DRILLING LOG

PROJECT: RVAAP Phase II RI INSPECTOR: E. Martin HOLE NUMBER: LL1-203

SHEET: 1 of 1 40

| BLV (A) | DEPTH (B) ft | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|---------|-----------------|---|-----------------------------|------------------------------------|---------------------------|---|
| | 1.0 | silty clay clayey silt (dry loose) 7.5 yr S/B | | | LL 109.3 | sample time 12:10 dry |
| | | | | | | N563041.1057 E 2376581.144 355 2-23-01 |

A-263

PROJECT: RVAAP Phase II RI.

HOLE NO: LL1203

DRILLING LOG

PROJECT: RVAAP: LLI / PHASE II R1 | INSPECTOR: M. J. ROOT | HOLE NUMBER: LLI-284
 SHEET: 4 OF 5

20

| ELEV (A) | DEPTH (B) (FEET) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------------|------------------------|--|-----------------------------------|---|--|---------------------------------|
| | | ML SILT WITH SAND AND TRACE LAY. DAMP, BROWN (7.5 PR 4/3) | PIU = 40ppm | | LL10714 | BZ = 0.7m |
| | 1.10 | REFUSAL @ 0.7' END OF BOREHOLE | | | CN- | TD @ 0.17 01/13/00 (REFUSAL) |
| | 2.10 | | | | EXPLOSIVES PENETRANTS | |
| | 3.10 | | | | @ 1012 | |
| | | | | | N562828.0472 E2376816.863 355 2-23-01 | |
| (Low) 09/29/00 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

A-264

PROJECT: RVAAP: LLI / PHASE II R1 | HOLE NO: LLI-284

DRILLING LOG

PROJECT: **RVAAP: LLI/Phase II R.I.** INSPECTOR: **Paul R. YESKINIS** PLAN NUMBER: **LLI-205**
 SHEET: **2 OF 2**

let

| ELEV (A) | DEPTH (B) (FE) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|---|-----------------------------|-----------------------------------|--|--|
| | 1.0 | GM GRAVEL WITH SILT, DAMP, V. GR. GRAYISH-BROWN (10YR 3/2), GRAVELS ARE SANDSTONE AND SLAG | PI0=0ppm | | LL10915 METAL, CN PROPELLANTS EXPLOSIVES @1725 | BZ=0ppm TD @ 0.6' 01/27/00 |
| | 1.6 | REFUSAL @ 0.6' END OF BORING | | | | |
| | 2.0 | <div style="position: relative; height: 200px;"> (CW) 09/30/00 </div> | | | | |
| | 3.0 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | A-265 | | | N 562026.2644 E 2377272.525 S 223° |

PROJECT: **RVAAP: LLI/Phase II R.I.**

HOLE NO: **LLI-205**

DRILLING LOG

40

PROJECT: **RVAAP: LLI / PHASE II R.I.** INSPECTOR: **PAUL R. YESKOVIS** HOLE NUMBER: **LLI-206** SHEET: **2 OF 2**

| H.H.V. (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|------------|----------------|---|-----------------------------|------------------------------------|---------------------------|---|
| | 1.0 | MH SILT WITH CLAY, MOIST; DK. YELLOWISH-BROWN (1.0YR 3/3) | FID = 0 ppm | | LL10717 | BZ = 0 ppm METALS, CN - EXPLOSIVES PROPELLANTS @ 1555 TO @ 1.0' 09/26/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | | | | | |
| | | | | | | N565392.0859 E 2376147.86 JSS 2.2301 |
| | | | | A-266 | | |

CW 09/30/00

DRILLING LOG

HOLE NUMBER LLI-207

PROJECT RVAAP/LLI/Phase II R.I

INSPECTOR PAUL R. YESCONIS

SHEET 2 OF 2

41

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) | |
|--------------|----------------------|--|-----------------------------------|---|--|---------------------------------------|---|
| | 1.0 | ML SILT WITH SAND, 1, FINE TO MEDIUM, MOIST, V. DR. GRAY (OYR 3/1) | P16 = 0 ppm | | LL10918 METALS EXPLOSIVES FREQUENTERS @ 1625 | BZ = 0 ppm TD @ 11.0' 09/26/00 | |
| | 2.0 | END OF BORING | | | | | |
| | 3.0 | (circled) LLI 10918 / 00 | | | | | |
| | | | | | | | N 565068. 333 E 2376475. 385 2.230' |
| | | | | | | | |

A-267

PROJECT

RVAAP/LLI/Phase II R.I.

HOLE NO

LLI-207

DRILLING LOG

FACILITY NUMBER: **LLI-208**

PROJECT: **RVAAP: LLI / Phase II R.I.**

INSPECTOR: **PAUL K. VESILINIS**

SHEET: **2 OF 2**

| ELEV (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|------------|---|-----------------------------|-----------------------------------|--|--------------------------------------|
| | 1.0 | ML SILT, TRAPE CLAY, MOIST, V. D.K. GRAYISH-BROWN (2.5Y 3/2) CHANGES TO LT. BROWNISH GRAY (10YR 6/2) MATRIX WITH STRONG BROWN (7.5YR 5/8) MOTTLES | PID = 0 ppm | | LL0919 METALS CN, CP EXPLOSIVES PERSEQUANTS @ 1.540 | BZ = 0 ppm TD @ 1.0' 09/27/00 |
| | | END OF BORING | | | | |
| | 2.0 | | | | | N564205.1309 E 2376928.777 |
| | 3.0 | | | | | |
| | | | | LLC 09/30/00 | | |

A-268

PROJECT: **RVAAP: LLI / Phase II R.I.**

HOLE NO: **LLI-208**

SS

DRILLING LOG

HOLE NUMBER
LL1-209
SHEET
1 of 1

601

PROJECT **RVAAP Phase II RI** INSPECTOR **E. Martin**

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|------------------------------------|--------------------------|---|
| | .6 | silt loam trace gravel 10yr 412 dry not plastic soft | ML | | 6610920 | Sample time 14:40 organic roots no refusal |
| | .4 | silt loam dry yellowish 10yr 616 | OL | | | |
| | | | | | | N563530.5734 E 2377199.835 JSS 2.23.01 |

A-269

PROJECT **RVAAP Phase II**

HOLE NO
LL1-209

DRILLING LOG

HOLE NUMBER **LLI-210**

56

PROJECT **RVAAP: LLI / PHASE II R.I.**

INSPECTOR **PAUL R. YESCONIS**

SHEET **2 OF 2**

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|-----------------------------------|--------------------------|--|
| | 1.0 | MH SILT WITH CLAY, DAMP, YELLOWISH-BROWN (10YR 5/4) | AD = 0 ppm | | LL10921 | BZ = 0 ppm ALSO COLLECTED DUPLICATE (#LL11124) AND SPLIT (#LL11174) SAMPLES |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | | | | | |
| | | <div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> CW 08/30/00 </div> | | | | |
| | | | | | | N 562739.3878 E 2377738.53 JSS 22301 |
| | | A-270 | | | | |

PROJECT **RVAAP: LLI / PHASE II R.I.**

HOLE NO **LLI-210**

DRILLING LOG

HOLE NUMBER **LLI-211****110**PROJECT **RVAAP LLI / PHASE II R.I.**INSPECTOR **PAUL R. YESCONIS**SHEET **2 OF 2**

| DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|---|-----------------------------|-----------------------------------|---|--------------------|
| 1.0 | ML SILT, DAMP, V. DC. BROWN (10YR 3/2) CHANGING TO BROWNISH-YELLOW (10YR 6/6) AT 0.5' | | | LL10724 METALS, CN EXPLOSIVES PRESENTS @ 0.50 | TD @ 1.0' 09/27/00 |
| 2.0 | END OF BORING | | | | |
| 3.0 | | | | | |

(Circled) **CLW 09/30/00**

N 563580.4754
E 2377952.223
22301

A-271

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LLI-211

DRILLING LOG

47

PROJECT: **RVAAP: LLI / PHASE II R.I.** INSPECTOR: **PAUL R. YESCONIS** HOLE NUMBER: **LLI-212**

SHEET: **2 OF 2**

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-------------------|--|-----------------------------|-----------------------------------|---|--|
| | 1.0 | MH SILT WITH CLAY, DAMP, DE. BROWN (10YR 4/3) TO (L) 25/12/100 @ 0.8' CHANGING TO BROWNISH- YELLOW (10YR 6/6). | | | LL10925 METAL, CH- EXPLOSIVES PRESENTS @ 1025 | PID NOT WORKING TO @ 1.0' 09/27/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | | | | | N563580.4754 E 2378687.332 55 223 01 |
| | | | | | | (Circled) 09/30/00 |

A-272

PROJECT: **RVAAP: LLI / PHASE II R.I.**

HOLE NO: **LLI-212**

DRILLING LOG

| PROJECT | | INSPECTOR | | | HOLE NUMBER | |
|--------------------------|----------------|--|-----------------------------|------------------------------------|---|--|
| RVAAP: LL1/PHASE II R.I. | | PAUL R. YESUINIS | | | LL1-213 | |
| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
| | 1.0 | ML SILT TRACE SAND, FINE, DAMP, OLIVE BROWN (2.5Y 4/3) CHANGING TO BROWN TO YELLOW (10YR 6/8) | PID = 0.1 ppm | | LL10926 LL11123 LL11173 METALS, CN EXPLOSIVES PROPPELLANTS | ALSO COLLECTED DUPLICATE AND SPLIT SAMPLES |
| | 2.0 | END OF BORING | | | E1105 | |
| | 3.0 | <div style="position: relative; height: 100px;"> E1105 09/30/00 </div> | | | | |
| | | | | | N 562675.9186 E 2378464.254 j ^{ss} 2-23-01 | |

A-273

PROJECT

RVAAP: LL1/PHASE II R.I.

HOLE NO

LL1-213

45

DRILLING LOG

P: LL/PHASE II R.I.

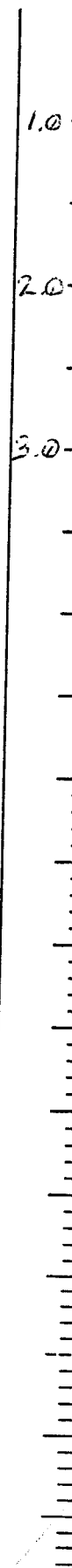
INSPECTOR PAUL R. YESCANIS

TOTAL NUMBER **LL-214**

SHEET **2 OF 2**

49

| DESCRIPTION OF MATERIALS (1) | FIELD SCREENING RESULTS (2) | GEOTECH SAMPLE OR CORE BOX NO (3) | ANALYTICAL SAMPLE NO (4) | REMARKS (5) |
|--|--------------------------------|--------------------------------------|--|---|
| <p>ML SILT WITH SAND AND TRACE GRAVELS, FINE, DAMP, DR. YELLOWISH-BROWN (10YR 4/4)</p> | <p>PI0 = 0 ppm</p> | | <p>LL10727 METALS, CN EXPLOSIVES PENGUINETS @ 1145</p> | <p>BZ = 0 ppm TC @ 1.0' 09/27/00</p> |
| <p>REFUSAL @ 1.0' END OF BORING</p> | | | | |
| <p style="font-size: 2em; opacity: 0.5;">(circled) 09/30/00</p> | | | | |
| <p>N 561486.4504 E 2377899.609 ISS 2-23-01</p> | | | | |



A-274

PROJECT

RVAAP LL/Phase II R.I.

HOLE NO

LL-214

DRILLING LOG

HOLE NUMBER **LI-215**

54

PROJECT **RVAAP: LI / PHASE II R.I.**

INSPECTOR **PAUL R. VESONIS**

SHEET **2 OF 2**

| ELEV (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPL. NO (F) | REMARKS (G) |
|----------|------------|--|-----------------------------|------------------------------------|--|--|
| | 1.0 | ML SILT WITH GRAV SAND, FINE, DAMP, DL. GRAYISH-BROWN (10YR 4/2) CHANGING TO LT. YELLOWISH BROWN (10YR 6/4) | PID | | LI0928 METALS, CH EXPLOSIVES PROPPELLANTS @ 1450 | BZ = OPEN SPLIT AND CALCULATE FCN C-6 TD @ 1.0' 08/27/00 |
| | | END OF BORING | | | | |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| | | | | | | N561317.4946 E 2379502.004 223.01 |
| | | | | | | 09/30/00 |
| | | | A-275 | | | |

PROJECT

RVAAP: LI / PHASE II R.I

HOLE NO

LI-215

DRILLING LOG

HOLE NUMBER **LLI-216**

53

PROJECT **RVAAP: LLI / PHASE II R I**

INSPECTOR **PAUL R. YESCON'S**

SHEET **2 OF 2**

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|--|-----------------------------|------------------------------------|--|--|
| | 1.0 | ML Silt with FINE SAND, DAMP, BROWN (10YR 4/3) (CHANGING TO LT. YELLOWISH-BROWN (10YR 6/4) AT 1.6' | PID = 0 ppm | | LL10929 METALS, CH EXPLOSIVES PROPELLANTS @ 1350 | BL = 0 ppm TD @ 1.6' 09/27/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | | | | | |
| | | | | | | N560000.6619 E 2377798.62 325 223'00" |
| | | | | | | (CLEAN) 09/30/00 |
| | | | A-276 | | | |

PROJECT

RVAAP: LLI / PHASE II R I

HOLE NO

LLI-216

DRILLING LOG

HOLE NUMBER LL-217

42

PROJECT RVAAP: LL1/ PHASE II R.I

INSPECTOR PAUL R. YESKONIS

SHEET 2 OF 2

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|--|-----------------------------|--|---|-------------|
| | 1.0 | ML SILT WITH TRACE SAND, FINE, DAMP, BROWN. (10YR 4/3) | POC @ ppm | | LL10730 METALS, CN EXPLOSIVES PERMEABILITY @ DBSS | BZ = C ppm |
| | 1.0 | END OF BORING | | | | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| | | (CW) 09/20/00 | | N 562249.3414 E 2379522.477 j ² 2.23 01 | | |
| | | A-277 | | | | |

PROJECT

RVAAP: LL1/ PHASE II R.I.

HOLE NO

LL-217

DRILLING LOG

HOLE NUMBER **LI-218**

33

PROJECT **RVAAP: LI / PHASE II R.I.**

INSPECTOR **M.J. Root**

SHEET **2 OF 2**

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|---|-----------------------------|-----------------------------------|------------------------------------|--------------------------------------|
| | 1.0 | SP-5M SAND WITH SILT, POORLY GRADED, FINE, DRY, DK. YELLOW SA-BROWN (WIR 4/4) | PIG = 0 ppm | | LI0931 METALS PCB = @0955 | BZ = 0 ppm TD @ 1.0' 01/20/00 |
| | | END OF BORING | | | | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| | | | | | | N561955 E 2377584, ss 23881 |
| | | | LI 10/05/00 | | | |
| | | | A-278 | | | |

PROJECT

RVAAP: LI / PHASE II R.I.

HOLE NO

LI-218

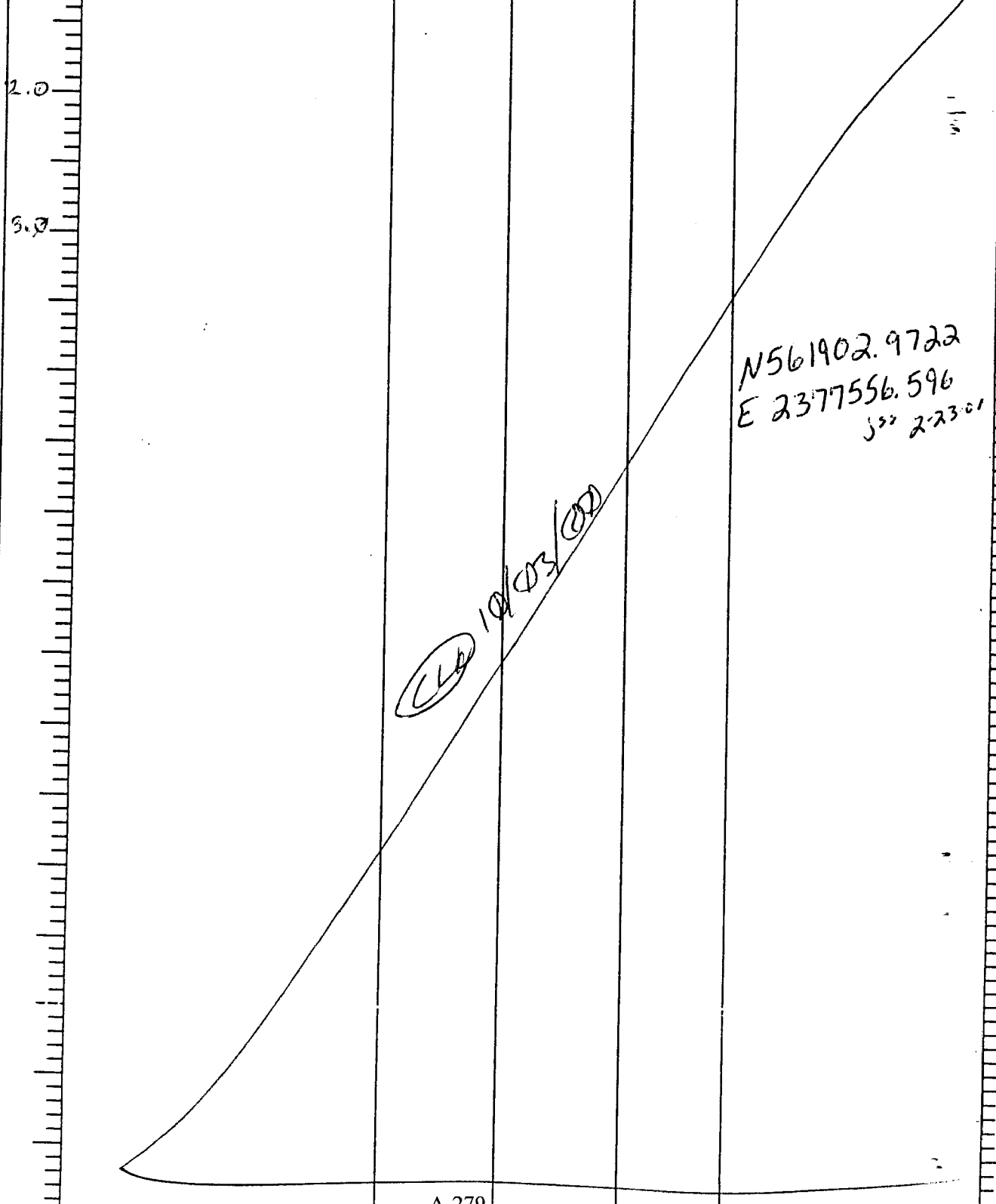
DRILLING LOG

34

PROJECT: **RVAAP: LLI / PHASE II R.I.** INSPECTOR: **M. J. ROSS** HOLE NUMBER: **LLI-219**
 SHEET: **2 OF 2**

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|---|---|--------------------------|------------------------------------|
| | 1.0 | SP-SM SAND WITH SILT, POORLY GRADED, FINE, DRY, DK. YELLOWISH-BROWN (1042 4/4) | PIU - 0.1 g/cm ³ MOISTURE CONTENT | LL1013Z M6123 PLB3 → M.L. E1020 | | BZ = 0.4 TD @ 1.0' 09/20/00 |

END OF BORING



A-279

PROJECT: **RVAAP: LLI / PHASE II R.I.** HOLE NO: **LLI-219**

DRILLING LOG

HOLE NUMBER **LU-220**
 SHEET **2 OF 2**

25

PROJECT **RVAAP: LU / Phase II R.I.** INSPECTOR **M. J. ROSS**

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|--|-----------------------------|-----------------------------------|--------------------------|----------------------------------|
| | | SP-SM SAND WITH SILT, PROBABLY GRADED, FINE, GRAY OR YELLOWISH-BROWN (WTR 4/4) | P10-0 psm | | LU0933 METALS FLCS | BZ = 0 psm TD @ 0.5' 01/20/00 |
| | | REFUSAL @ 0.5' | | | @ 1035 | |
| 1.0 | | | | | | |
| 2.0 | | | | | | |
| 3.0 | | N561960 E 2377527 353 22301 | | | | |
| A-280 | | | | | | |

DRILLING LOG

HOLE NUMBER **LLI-221**

UC

PROJECT **RVAAP: LLI / PHASE II R.I.**

INSPECTOR **M. S. ROY**

SHEET **2 OF 2**

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|--|-----------------------------|-----------------------------------|---|-------------|
| 1.0 | (SP-SC) POORLY GRADED SAND w/ SILT AND GRAVEL; MOIST - DARK YELLOWISH BROWN (LOVR 4/3) | PID = 0 PPM | | LL10934 - METALS - EXPLOSIVES - PROPERTIES | NO REFUSAL |
| 2.0 | <p>END OF BORING (CLD)</p> <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">CLD 10/03/00</p> <p style="font-size: 1.5em; text-align: right;">N 564603.1207 E 2375679.006 JSS 2-23-01</p> | | | | |
| | | | | | A-281 |

PROJECT **RVAAP: LLI / PHASE II R.I.**

HOLE NO **LLI-221, 222, 223, 105**
 Date: **09/26/00**

DRILLING LOG

PROJECT: RVAAP: LLI/PHASE II R. I. INSPECTOR: M. J. FOOT HOLE NUMBER: LLI-222
 SHEET: 2 OF 2

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|-----------|--|-----------------------------|------------------------------------|---|---|
| 1.0 | | (SP-SC) POORLY GRADED SAND w/silt and coarse MIST - DARK PURPLISH BROWN (10%R 4/3) | PIID: 0 ppm | | LL10936 - VOL, SPEC - MOISTURE CONTENT - METALS/ CYANIDE - EXPLOSIVES - PEROXIDES - FIELD METALS | |
| | | END OF BORING (CLO) | | | | |
| 2.0 | | | | | | |
| | | | | | | N 564521.8184 E 2375734.128 JCS 22301 |
| | | | | | | (CLO) 10/03/00 |
| | | | | | | A-282 |

DRILLING LOG

HOLE NUMBER **LLI-223**

62

PROJECT **RVAAP: LLI/PHASE II R.1**

INSPECTOR **M. RIST**

SHEET **2 OF 2**

| ELEV (A) | DEPTH (B) (FEET) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLI. NO (F) | REMARKS (G) |
|----------|------------------|--|-----------------------------|-----------------------------------|--|---|
| | | (CL) LEAN CLAY, DMP 0.0 - 0.15' - OLIVE BROWN (2.5Y 4/4) 0.15 - 1.0' - DARK GRAYISH BROWN (2.5Y 4/2) | P.O. | | 2410935 - METALS - CERAMICS - EXPLOSIVES - ARCHEOLOGICAL | |
| 10.0 | | END OF BORING (CL) | | | | |
| 20.0 | | | | | | N 564414.6739 E 2375815.643 52° 23' 01" |
| | | | | | | (CL) 10/03/00 |
| | | | | | | A-283 |

PROJECT

RVAAP: LLI/PHASE II R.1.

HOLE NO

LLI-223

DRILLING LOG

PROJECT: **RVAAP: LLI/ PHASE II R.I** INSPECTOR: **M. J. ROOT** HOLE NUMBER: **LLI-224** SHEET: **2 OF 2**

32

| ELEV (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|------------|---|-----------------------------|-----------------------------------|--|---|
| | 1.0 | SP-SM SAND WITH SILT, POORLY GRADED, FINE, DAMP, BROWN (7.5YR 4/4) | PIV=0 ppm | | LL10939 METALS EXPLOSIVES POTENTIALS @1610 | BZ=0 ppm TD @ 1610 07/19/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | <div style="position: relative; height: 100px;"> LLI 10/03/00 </div> | | | | |
| | | | | | | N563927.4158 E 2376057.173 555 22301 |

A-284

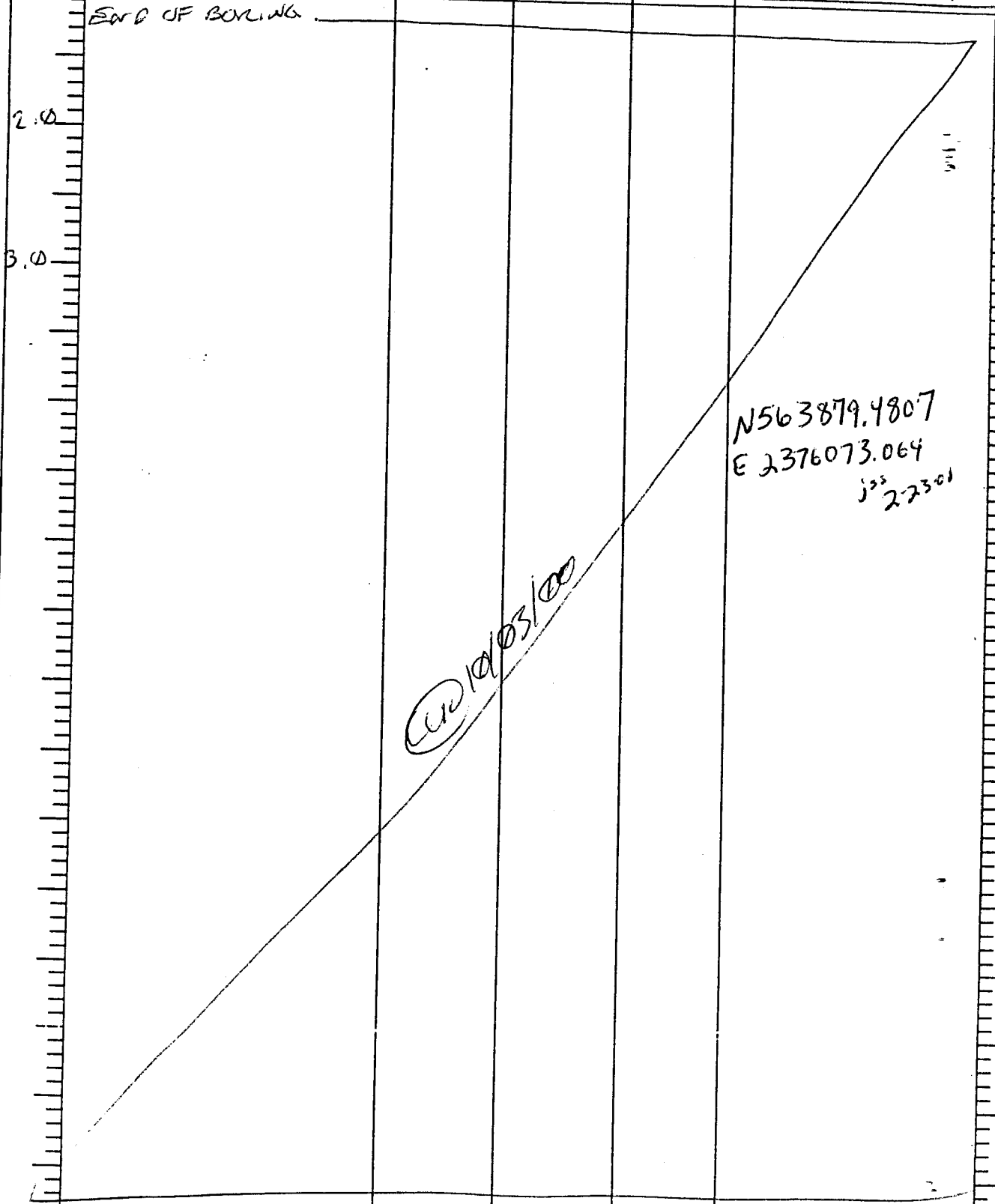
PROJECT: **RVAAP: LLI/ PHASE II R.I** HOLE NO: **LLI-224**

DRILLING LOG

28

PROJECT **RVAAP, LLI/PHASE II R.I.** INSPECTOR **M. J. Root** HOLE NUMBER **LLI-225**
 SHEET **2 OF 2**

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|------------------------------------|--------------------------|--------------------|
| | 1.0 | SP-SM SAND WITH SILT, POORLY GRADED, FINE, DAMP, BROWN (7.5YR 4/4) | PI0 = CD ppm | | LL10940 | BZ = CD. |
| | 1.0 | END OF BORING | | | | TD @ 1.0' 10/19/00 |



A-285

DRILLING LOG

27

PROJECT: **RVAAP: LLI/PHASE II R.I** INSPECTOR: **M.J. ROSE** HOLE NUMBER: **LLI-226**
 SHEET: **2 OF 2**

| DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|---|--|-----------------------------|------------------------------------|--------------------------|--|
| 1.0 | SP-SM SAND WITH SILT, POORLY GRADED, FINE, DAMP, BROWN (7.5% 4/4) Silty sand, SM (SEA 3/20/01) | PID-0 p.p.m | M.C. | LL10942 | ISL=0 p.p.m VOL%, SIZE%, PCB%, CNT, METALS, EXPLOSIVES, PCP/PCP/MS. |
| 2.0 | REFUSAL @ 0.8' | | | | |
| 3.0 | | | | | |
| <div style="border: 1px solid black; padding: 5px; display: inline-block; transform: rotate(-45deg);"> (LL) 10/03/00 </div> | | | | | |
| N563706.6309 E 2376162.03 2-2300' | | | | | |

A-286

PROJECT: **RVAAP: LLI/PHASE II R.I** HOLE NO: **LLI-226**

DRILLING LOG

47

PROJECT: **RVAAP Phase II RI** INSPECTOR: **P. YESCONIS** FORM NUMBER: **LL1-227**

SHEET: **1 of 1**

| ELEV. (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|--------------|---|-----------------------------|------------------------------------|---------------------------|---|
| | 0.0' 1.0' | 0.0' - 1.0' Silty clay & Gravel, 7.5YR 4/2 Wet, Dense | CL | | | <p>(Wet due to coring through concrete)</p> <p>Collected (42-0944)</p> <p>© 1450ppm</p> <p>400ppm VOC 250ppm</p> <p>TD 4/14/00</p> <p>7" of Concrete that was cored, sample starts from bottom of concrete floor</p> <p style="font-size: 1.2em;">N 563302. 785.7</p> <p style="font-size: 1.2em;">E 2376478. 867</p> <p style="font-size: 0.8em;">jjs 2-23-01</p> |

A-287

PROJECT: **RVAAP Phase II RI**

HOLE NO: **LL1-227**

DRILLING LOG

46

PROJECT RVAAP Phase II RI INSPECTOR P. VESCONIS HOLE NUMBER LL1-228

SHEET 1 of 1

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|-----------------------------------|--------------------------|---|
| | 1.0' | Silty Clay & Gravel wet 7.5 YR 6/4 ^{em} 4/6 ^{em} 4/2 | CL | | LL1-0146 | (wet due to coring) through concrete through collected @ 1430 *VOC 400 ppm TD 9/14/00 7" of concrete was cored through through, sample starts from bottom of concrete floor N 563364.5164 E 2376.587.445 jds 2-23-01 |
| | | | | | | |

A-288

PROJECT RVAAP Phase II RI

HOLE NO LL1-228

DRILLING LOG

HOLE NUMBER
LL1-229

PROJECT
RVAP Phase II RI

INSPECTOR
P. YESCONIS

SHEET
1 of 1

48

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|----------|-----------|---|-----------------------------|------------------------------------|---------------------------|--|
| | 1.0 | 0.0'-1.0' Silty clay & Gravel, 7.5YR 4/2 (mottled w/gray and orange), wet, dense | CL | | | Wet due to coring through concrete through Collect LL-0948 ⊙ 1515 * VOC 1400 ppm |
| | | | | | | TD 9/14/00 through 7" of concrete, sample starts from bottom of concrete. N563351.2338 E 2376630.847 jss 2-23-01 |
| | | | A-289 | | | |

PROJECT

RVAP Phase II RI

HOLE NO

~~LL1-229~~ LL1-229

DRILLING LOG

HOLE NUMBER LLI-230

PROJECT RVAAP: LLI / PHASE II R.I

INSPECTOR M. J. Root

SHEET 5 of 5

| DEPTH (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|------------|--|-----------------------------|-----------------------------------|--------------------------|--------------------|
| | 1.0 | SP-SM SAND WITH SILT AND GRAVEL, MEDIUM, POORLY SORTED MOIST, BROWN (10YR 4/3) | PIV = 0 ppm | | LLI0749 | BZ = 0 ppm |
| | 1.0 | | | | METALS | |
| | 1.0 | | | | CN- | 1.0' |
| | 1.0 | | | | EXPLOSIVES | TD @ 1.0' 09/14/00 |
| | 1.0 | | | | PROPELLANTS | (CLL) |
| | 1.0 | END OF BORING | | | @ 1345 | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| | | | | | | N562876.3279 |
| | | | | | | E 2376778.485 |
| | | | | | | ISS 2-25-01 |
| | | | | | | (CLL) 09/30/00 |

A-290

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LLI-230

DRILLING LOG

HOLE NUMBER LL-231

PROJECT RVAAP LLI / Phase II RI

INSPECTOR M.J. RUST

SHEET 3 OF 5

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------------|---|-----------------------------|-----------------------------------|--|--|
| 1.0 | SP SAND WITH GRAVEL, FINE. POORLY GRADED, MOIST, DK YELLOWISH-BROWN (10YR 2.4/4) SANDY SILT SM (SEA 420.12) | PID=3.16 | | LL0950 LL0950 | BZ=6 ppm TD=1.10' 09/14/00 (REFUSAL) |
| REFUSAL @ 1.0' | REFUSAL @ 1.0' END OF RIG | CP AIR NA | NA | SVOC PCB'S METALS CN | |
| 2.0 | | | | EXPLOSIVES P&H ELEMENTS M.C. @ 1315 | |
| 3.0 | | | | | |
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N562906.6539
E2376858.388
JSS
0227-1

09/30/00

A-291

PROJECT RVAAP: LLI / Phase II RI

HOLE NO LL-231

DRILLING LOG

HOLE NUMBER LL-232

PROJECT RVAAP LLI / PHASE II RI

INSPECTOR M. J. ROOT

SHEET 4 OF 5

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--|-----------|---|-----------------------------|------------------------------------|---|--------------------|
| | 1.0 | SF. SC SAND WITH CLAY, POORLY GRADED, MEDIUM, WET, BROWN (04R4/3) | PI0 = 0 ppm | | LL0952 | BZ = 0 ppm |
| | 1.0 | END OF BORING | | | METALS CN- EXPLOSIVES PROPELLANTS @1335 | TD @ 1.0' 09/14/00 |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| <p>ENCLOSURE 09/30/00</p> <p>N 562927.8839 E 2376846.215 J23 2-23-01</p> | | | | | | |
| A-292 | | | | | | |

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LL-232

DRILLING LOG

HOLE NUMBER
261-233
SHEET
1 of 1

71

PROJECT **RVAAP Phase II R1**

INSPECTOR **E. Martin**

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|---|--|---|-----------------------------------|--------------------------|---|
| <div style="display: flex; align-items: center;"> <div style="width: 100px; border-left: 1px solid black; border-right: 1px solid black; margin-right: 5px;"> <!-- Vertical scale markings --> </div> <div style="width: 10px; border-left: 1px solid black; border-right: 1px solid black; margin-right: 5px;"> <!-- Vertical scale markings --> </div> </div> | <p><i>sandy silty sand, wet</i> <i>10 yk 416</i></p> | <p><i>PID = 9 ppm</i> <i>SM</i></p> | | <p><i>LL10954</i></p> | <p><i>no refusal</i> <i>sample time 14:40</i> <i>see p. 66 map</i></p> |
| <div style="display: flex; align-items: center;"> <div style="width: 100px; border-left: 1px solid black; border-right: 1px solid black; margin-right: 5px;"> <!-- Vertical scale markings --> </div> <div style="width: 10px; border-left: 1px solid black; border-right: 1px solid black; margin-right: 5px;"> <!-- Vertical scale markings --> </div> </div> | | | | | <p><i>N563583.1059</i> <i>E 2377018.651-</i> <i>js</i> <i>2-23-01</i></p> |

A-293

PROJECT **RVAAP Phase II R1**

HOLE NO **261-233**

DRILLING LOG

HOLE NUMBER **LLI-235**

PROJECT **RVAAP: LLI / PHASE II R.I.**

INSPECTOR **M. J. ROSE**

SHEET **2 OF 2**

| DEPTH (A) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-------------------|--|--|-------------------------------------|--|----------------------------------|
| 1.0 | SP-SC SAND WITH CLAY, POORLY SORTED, WET, MEDIUM, BROWN (7.5% 4/3) | PID = 0 ppm | M.L. | LL10757 METALS CN EXPLOSIVES PROPAGANTS @1410 | BZ = 0 ppm TD @ 1.0' 09/16/00 |
| 1.0 | END OF BORING | | | | |
| 2.0 | | | | | |
| 3.0 | | | | | |
| A-294 | | <p style="text-align: right;"> N 563133.5331 E 2377243.946 11/27/01 </p> | | | |

(Signature) 09/30/00

| DRILLING LOG | | | | | HOLE NUMBER | |
|--------------|----------------|--|-----------------------------|---------------------------------------|---|----------------------------------|
| PROJECT | | INSPECTOR | | SHEET | | |
| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEMICAL SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
| | 1.0 | SP-SC SAND WITH CLAY, POORLY SORTED, MEDIUM, WET, BROWN (7.5% A/B) | PID = 0 ppm | | LL10757 METALS EXPLOSIVES P/P/W/ELU:MS @ 1430 | BZ = 0 ppm TDC @ 1.0' @ 14/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | | | | | |
| | | | (LL) @ 1.50/00 | | N 563153.9912 E 2377251.837 J22 2-23-01 | |
| | | | A-295 | | | |

PROJECT

RVAAP.LLI/PHASE II R.I.

HOLE NO

LLI-236

DRILLING LOG

WELL NUMBER
LLI 234
SHEET
1 of 1

75

PROJECT RVAAP Phase II RI

INSPECTOR E. Martin

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|---------------------------------|-----------------------------|-----------------------------------|--------------------------|--|
| | 1 | silty cl sand, wet 10 yr 4/6 | PID = 0.0ppm Sm | | LL10956 | Sample time 15:10 no refusal see map p. 66 |
| | | | | | | N563586.4767 E 2377005.173 jss 2-23-01 |

A-296

PROJECT RVAAP Phase II RI

WELL NO LLI 234

DRILLING LOG

HOLE NUMBER **LLI-239, 238**

PROJECT **RUAAP Phase # R E L-1**

INSPECTOR **M. Cloud**

SHEET **of 1**

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|-----------|---|-----------------------------|-------------------------------------|---------------------------|--|
| | 0.0 | LLI-239 | | | | |
| | | Ballast | | | | |
| | 2.0 | Same as LLI-243 | | | LLI-1341 | |
| | 2.2 | | | | | |
| | | LLI-238 | | | | N564177.6967 E 2375865.547 11/02/29.01 |
| | | Ballast | | | | |
| | 2.0 | Fine Grained Sand, Loose, moist Some Gravel, 10TR 5/4 Yellowish brown | | | LLI-1342 | |
| | 2.2 | | | | | N563510.7618 E 2376259.182 11/02/29.01 |



DRILLING LOG

HOLE NUMBER LLI-241, 240

PROJECT RUAAP LLI Phase II RT

INSPECTOR M. Clough

SHEET 1071

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|------------------------------|-----------------------------|-----------------------------------|--------------------------|---|
| | 0 | LLI-241 | | | | |
| | | Ballast | | | | |
| | 2.0 | | | | | |
| | 2.3 | Same as LLI-243 | | | LI-1339 | Duplicate LI-1293 Split LI-1296 |
| | | | | | | |
| | | LLI-240 | | | | |
| | | Ballast | | | | |
| | 2.0 | | | | | |
| | 2.2 | Same as LLI-243 | | | LI-1340 | N563036.8576 E 2376540.764 AL 02-27-01 |
| | | | | | | |
| | | | | | | N563262.9591 E 2376410.61 AL 02-27-01 |

DRILLING LOG

243

91

| PROJECT | | INSPECTOR | | | HOLE NUMBER | SHEET |
|-------------------|-----------|---|-----------------------------|------------------------------------|----------------------------|--|
| RVAAD Phase # R.I | | M. Clump | | | LLI-243 | 1 of 1 |
| DEPTH (ft) | DEPTH (m) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLING NO (F) | REMARKS (G) |
| | | LLI-243 Ballast | | | | |
| | 2.0 | 10YR 4/4 - dk. yellowish brown | | | | |
| | 2.3 | Fine Grained Sand, w/ Gravel trace silt, loose, slightly moist | | | LI-1337 | |
| | | ... | | | | |
| | | LLI- 243 ²⁴² 242 | | | | |
| | | Ballast | | | | |
| | 2.0 | | | | | |
| | 2.3 | same as LLI-243 | | | LI-1338 | |
| | | | | | | N 562455.5439 E 2376910.808 14 01-22-01 |

A-299

PROJECT RVAAD LLI Phase # R.I

HOLE NO LLI 243 242

DRILLING LOG

HOLE NUMBER LU-244

90

PROJECT

INSPECTOR

SHEET

ELLV (A)

DEPTH (B)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (D)

GEOTECH SAMPLE OR CORE BOX NO. (E)

ANALYTICAL SAMPLE NO. (F)

REMARKS (G)

10

Ballast

20

23

Fine Grained Sand w/ Gravel,
loose, slightly moist,
7.54R 413 brown

Refusal on rock

LL-1336

N 562303.9822
E 2376864.083
12
02.23.01

A-300

PROJECT

HOLE NO

89

DRILLING LOG:

HOLE NUMBER ²⁴⁵
661-~~246~~ ^{mc}

PROJECT RVAAP Phase II EE LL-1

INSPECTOR Eric E Martin

SHEET 1 of 1

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|-----------|-------------------------------|-----------------------------|------------------------------------|---|---|
| | 2' | SLAG | | PID=NR | LL1 1326 vjb 12-11-00 | Slag removed prior sampling |
| | 9' | sandy silt loose 10 yr 5/8 | | PID=NR | LL1 1326 | refusal |
| | | | | | | N561992.7303 E 2377051.7 02-25-01 A2 |

PROJECT RVAAP Phase II

A-301

HOLE NO 661-246^{mc} 245

DRILLING LOG

HOLE NUMBER **LLI-246**

88

PROJECT **RUAAP LLI-Phase II PI**

INSPECTOR *M. Clough*

SHEET **1 of 1**

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|------------------------------|-----------------------------|-----------------------------------|--------------------------|--|
| | | Ballast | | | | |
| | | Sand, Silt loose | PID = NR | | LLI-246 | |
| | | | | | | N561502.0356 E 2377312.697 <i>L^h</i> <i>02.23.01</i> |

A-302

PROJECT **RUAAP LLI-Phase II PI**

HOLE NO **LLI-246**

DRILLING LOG

HOLE NUMBER LL1-247

PROJECT RUAAP: LL1/PHASE II R.I.

INSPECTOR M. ROOT

SHEET 2 OF 2

95

| DEPTH (A) | DEPTH (Fe) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--|------------|---|-----------------------------|-----------------------------------|--------------------------|----------------|
| | 1.0 | (SP-SM) POORLY GRADED FINE SAND W/SILT AND FINE SUB-ROUND GRAVEL MEDIUM - DARK YELLOWISH BROWN (10%R 1/4) | D10 = 0.075 | NA | LL10972 | REFUSAL @ 0.7' |
| | 2.0 | | END OF BORING (CW) | | | |
| <p>(CW) 10/03/00</p> <p>N563053 E 2376067</p> <p>155 22-01</p> | | | | | | |
| | | | A-303 | | | |

PROJECT RUAAP: LL1/PHASE II R.I.

HOLE NO LL1-247

DRILLING LOG

HOLE NUMBER
211-248
SHEET
2 OF 2

PROJECT
RVAAP: 211/PHASE II R.I.

INSPECTOR
M J ROOT

96

| DEPTH (FEET) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--------------|---|-----------------------------|-----------------------------------|--------------------------|---------------|
| 1.0 | (S.P. SM) POORLY GRADED FINE SAND w/ SILT AND SUB-ANGULAR GRAVEL - DAMP BROWN (10YR 4/3) | PID: 01PM | NA | 2110973 | REFUSE @ 0.6' |
| 2.0 | <p>END OF BORING (LL)</p> <p style="font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">LL 19/07/00</p> <p style="font-size: 1.5em; text-align: right;">N 563020 = E 2376092 J 23 2-23-01</p> | | | | |

A-304

PROJECT
RVAAP: 211/PHASE II R.I.

HOLE NO
211-248

DRILLING LOG

HOLE NUMBER **LL-249**

97

PROJECT **RVAAP: LLI/PHASE II**

INSPECTOR **M J ROE**

SHEET **2 OF 2**

| DEPTH (FEET) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--------------|---|-----------------------------|-----------------------------------|--------------------------|--|
| 1.0 | (SP-SM) POORLY GRADED FINE SAND w/ SILT AND FINE SUB-ANGULAR GRAVEL, DAMP - DARK OLIVE BROWN (2.54 3/3) | P10= | NA | LL10974 | REFUSAL @ 1.0' |
| 2.0 | END OF BORING (CLL) | | | | <p>N 561920 E 2376682</p> <p>ISS 22301</p> <p>(CLL) 10/03/08</p> |

A-305

PROJECT **RVAAP: LLI/PHASE II R.1.**

HOLE NO **LLI-249**

DRILLING LOG

HOLE NUMBER
LLI-250

PROJECT
RVAAP/LLI/PHASE II R.1

INSPECTOR
A. ROOF

SHEET
2622

68

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|---|-----------------------------|------------------------------------|--------------------------|------------------------------|
| | 1.0 | (MH) SANDY ELASTIC SILT W/ GRAVEL - DRY - OLIVE BROWN (2.5Y 4/3) | PI0 | LL10975 WA | LL10975 | REFUSAL @ 1.0' |
| | 2.0 | END OF BORING | | | | |
| | | | | | | N563732.576 E 2377012.459 |
| | | | | | | 14/04/00 |
| | | | | | | A-306 |

PROJECT
RVAAP/LLI/PHASE II R.1

HOLE NO
LLI-250

69

DRILLING LOG

HOLE NUMBER
LLI-251
SHEET
2 OF 2

PROJECT
RVAAP: LLI / PHASE II R.1

INSPECTOR
VA ROOT

| DEPTH (A) (FE) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | GEO TECH SAMPLE OR CORE BOX NO (N) | ANALYTICAL SAMPLE NO (O) | REMARKS (P) |
|-------------------|--|-----------------------------|------------------------------------|--------------------------|-------------|
| 1.0 | (MH) ELASTIC SILT W/SAND - DRY - VERY DARK GRAYISH BROWN (Q.54 3/2) | PID- | NA | LL10978 | NO REFUSAL |
| 2.0 | <p>End of Boring</p> <p style="text-align: right;">N563727 E 2377083</p> <p style="text-align: center;">10/14/00</p> | | | | |

A-307

PROJECT
RVAAP: LLI / PHASE II R.1.

HOLE NO
LLI-251

DRILLING LOG

HOLE NUMBER
661-254

98

PROJECT RVAAP III/Phase II R.I

INSPECTOR E. Martin

SHEET 1 of 1

| DEPTH (ft) | DESCRIPTION OF MATERIALS (c) | FIELD SCREENING RESULTS (d) | GEOTECH SAMPLE OR CORE BOX NO (e) | ANALYTICAL SAMPLE NO (f) | REMARKS (g) |
|------------|---|-----------------------------|-----------------------------------|--------------------------|--|
| 1 | organic s.ty gravel, loam roots. 10 yr 4/4 6L | PID: 0.0 | | LL10982 | time 1409 See map. p 87 |
| | REFUSAL @ 1.1' 09/30/00 | | | | N563538.6725 E 2376751.124 j?? x23=01 |

1.0'

A-308

PROJECT RVAAP Phase II R1

HOLE NO 661 254

91

DRILLING LOG

HOLE NUMBER
LL 1 255

PROJECT
RVAAP Phase II R1

INSPECTOR
E. Martin

SHEET
1 of 6

| SLEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLECT SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|---|-----------------------------|-----------------------------------|--------------------------|---|
| | 6 4 | silt loam trace gravel 10 yr 4/2 OL dry not plastic silt loam dry yellowish 10YR 6/6 OL | PID: 0.0 | | LL10983 | time 16:20 organic root no refusal |
| | | | | | | N563561.7975 E 2376767.881 JSS 2.23.01 |

A-309

PROJECT
RVAAP Phase II R1

HOLE NO
LL 1 255

DRILLING LOG

HOLE NUMBER
 LL1 256
 SHEET
 1 of 1

90

PROJECT RVAAP Phase II R1

INSPECTOR E. Mout

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|-----------------------------------|--------------------------|---|
| | 1 | SCA Sandy Silt, ML 3120/01 Silt loam, trace gravel dry, not plastic, soft to firm OL 10yr 5/4 | PID 0.0ppm | | LL 2984 | time 16:00 map P. 87 |
| | | | | | | N563585.5456 E 2376779.786 j22 2-23-01 |

A-310

PROJECT RVAAP Phase II R1

HOLE NO LL1-256

89

DRILLING LOG

HOLE NUMBER
LL1 257

PROJECT

INSPECTOR
E. Martin

SHEET
1 of 1

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|--|-----------------------------|-----------------------------------|--------------------------|-------------------------------|
| 1 | Silty, clay. slightly plastic organic OH 10 yr 4/4 | PID=0.0ppm | | LL1 0985 | time Map P. 80 |
| | | | | | N563604.4671 E 2376794.521 |

A-311

PROJECT

RVAAP Phase II RI

HOLE NO

LL1 257

DRILLING LOG

83

HOLE NUMBER
LL1 258
SHEET
1 of 1

PROJECT **RVAAP Phase II R1**

INSPECTOR **E. Martin**

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLING NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|------------------------------------|----------------------------|---|
| | 1 | Silty Clay, Organic mottled OH 10 yr #6 3/3 | PID=0.0ppm | | LL10996 | Time 11:55 |
| | | | | | | N 563601.2207 E 2376801.05 JSS 2-23-01 |

A-312

PROJECT **RVAAP Phase II R1**

HOLE NO
LL1 258

DRILLING LOG

84

PROJECT RVAAP Phase II A1

INSPECTOR E. M...

HOLE NUMBER LL1-259
SHEET 1 of 1

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|-----------------------------------|-----------------------------|------------------------------------|--------------------------|---|
| 1 | Silty Clay, mottled, orange OH | PID = 0.0 ppm | | LL10997 | Time 12:00 12:10 vjb 12/11/00 N563599.366 E 2376810.604 jss 2.23' = |
| | | | A-313 | | |

PROJECT RVAAP Phase II R1

HOLE NO LL1-259

76

DRILLING LOG

WELL NUMBER
LLI-260

PROJECT
RVAAP Phase II R1

INSPECTOR

SHEET
1 of 1

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|---------------------------------------|-----------------------------|-----------------------------------|---|--|
| | | Silty Sand, gravel 5m 10 YR 414 | PID = 0.0ppm | | LLI 0999 0988 yb 12-11-00 | 15:45 sample refusal @ 6' of 1 see map p 73 80 |
| | | | | | | N 563599.1838 E 2376824.534 jss 223.01 = |

A-314

PROJECT
~~RVA~~ RVAAP Phase II R1

HOLE NO
LLI 260

DRILLING LOG

HOLE NUMBER
LL1-261

PROJECT RVAAP Phase II R1

INSPECTOR E. Martin

SHEET 1 of 1

77

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|----------|-----------|-------------------------------------|-----------------------------|------------------------------------|---------------------------|---|
| | | silty sand large gravel 10YR 4/4 | Sm PID=00ppm | | LL10989 | Samp time 1615 see map p. 7380 |
| | | | | | | N 56 3602.9459 E 2376835.724 J ²³ 2-23-01 |

A-315

PROJECT RVAAP Phase II R1

HOLE NO LL1 261

DRILLING LOG

HOLE NUMBER
LL1-262
SHEET
1 of 1

PROJECT
RVAAP Phase II R1

DIRECTOR
E. Martin

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|-----------|------------------------------|-----------------------------|------------------------------------|---------------------------|--|
| | 8 | silty clay, slightly plastic | PI 0.0 | | LL10990 | fine LL10990 1450 map P. 80 refusal @ .8 of 1 |
| | | | | | | N 563613.1907 E 2376845.504 JSS 02-23-01 |

A-316

PROJECT
RVAAP Phase II R1

HOLE NO
LL1-262

88

DRILLING LOG

HOLE NUMBER
LL1 263
SHEET
1 of 1

82

PROJECT

INSPECTOR E. Martin

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLECTH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|---|-----------------------------|------------------------------------|--------------------------|---|
| | 1 1 | Silty clay, plastic, gravel 10yr 4/4 CL | PI0 = 0.0ppm | | LL10991 | Time 11:30 |
| | | | | | | N563629.5203 E 2376841.822 j's 2-23-01 |

A-317

PROJECT
RVAA P Phase II R1

HOLE NO
LL1 263

DRILLING LOG

HOLE NUMBER
LLI-264
SHEET 1 of 1

96
FT.

PROJECT RUAAP: LLI/Phase II R.I.

INSPECTOR E. Marti

| DEPTH (A) | DEPTH (F) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|---|-----------------------------|-----------------------------------|--|--|
| | 1 | organic, clay, plastic 10YR 3/3 OH | P 100.0ppm | | LL10992 | fine 1325 map p. 80 |
| | 2.5 | ML SILT WITH SAND, FINE, SATURATED, YELLOWISH-BROWN MATRIX WITH YELLOWISH-BROWN AND GRAY MOTTLES COMMON (10YR 5/4), (10YR 5/3) AND (10YR 6/1) RESPECTIVELY | NO P10 REAG. NO | M.C. | LL11232 METALS, CN, EXPLOSIVES PROPPELLANTS @ 10000 | TD @ 2.5' 09/30/00 |
| | 3.0 | REVERSAL @ 2.5' 09/30/00 | | | | N563636.8795 E 2376836.69 j?? 2-22-01 |

A-318

PROJECT RUAAP Phase II R.I

HOLE NO LLI-264

DRILLING LOG

HOLE NUMBER
LL1 265
SHEET 1 of 1

97

PROJECT R/VAAP-LL1/PHASE II R.I

INSPECTOR E. Martin / C.L. Klinger

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|-----------------------------------|--|---|
| | | Dark clay, plastic gravel, 10% 3/2 organic | PI 0.0 | | LL10993 | time 1352 90 map |
| | 2.0 | ML SILT WITH SAND, FINE, SATURATED, YELLOWISH-BROWN MATRIX (10% 5/4) WITH YELLOWISH-BROWN (10% 5/8) AND GRAY (10% 6/1) MOTTLES LEAN | NO PID | M.C. | LL11233 METALS, CN EXPLOSIVES PETROLEUMS @ 2.0 | ALSO COLLECTED DUPLICATE (LL1279) AND SPLIT (LL11286) SAME TD @ 2.9' 09/30/00 |
| | 3.0 | REFUSAL @ 2.9' 09/30/00 | | | | |
| | 4.0 | | | | | N 563622.0523 E 2376794.187 2' 23" 01 |

A-319

PROJECT R VAAP Phase II R1

HOLE NO LL1 265

DRILLING LOG

HOLE NUMBER
LL1 266
SHEET
1 of 1

PROJECT
RVAAP: LL1 PHASE II R.I.

INSPECTOR
E. Martin

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|---|------------------------------------|-----------------------------------|---|---|
| 1 | Dark Clay Highly Plastic 10YR 3/2 wet "anoxic" | P1000ppm | | LL10944 | Time 11:00 1050 vjb 12-11-00 |
| 1.0 | OH | REFUSAL @ 1.0' 09/30/00 | SEE T1AL | | FUR EXPLANATION (P578) |
| 2.0 | MH SITE WITH GRAVEL, FINE SATURATED. HIGH O.M., ROOTS. OLIGONIS. CROWN (2.57 4/2) | | M.C. | LL11247 METALS, W EXPLOSIVES PROGRAM @ 1135 | TC @ 2.1' @ 130/00 |
| 2.1 | REFUSAL @ 2.1' 09/30/00 | | | | |
| 3.0 | | | | | N563650.7046 E 2376805.881 jss 2-23-07 |

A-320

PROJECT

RVAAP Phase II R1

HOLE NO

LL1 266

25

DRILLING LOG

HOLE NUMBER **LLI-267**

PROJECT **RVAAP: PHASE II RI / LLI**

INSPECTOR **Paul R. YESON'S**

SHEET **2 OF 2**

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|--|-----------------------------|------------------------------------|--|--|
| | 1.0 | MH SILT WITH CLAY AND SAND, TRACE GRAVEL, FINE TO MEDIUM, SATURATED, DK. GREENISH GRAY WITH LOW TO HIGH CHROMA MOTTLES | | | LL10995 METALS EXPLOSIVES PROPPELLANTS @1623 | TD @ 1.0' 09/25/00 |
| | 1.0 | END OF BORING | | | | |
| | 2.0 | | | | | |
| | 3.0 | | | | | |
| | | | | | | N563636.1017 E 2376819.123 J 2-23-01 |
| | | | | | | CLD 09/30/00 |
| | | | | | | A-321 |

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LLI-267

DRILLING LOG

HOLE NUMBER
LLI-268
SHEET 1 of 1

95

PROJECT RVAAP-LLI/Phase II R.I.

INSPECTOR E. Martin

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|---|-----------------------------|------------------------------------|---|---------------------------------------|
| | 1.0 | Dark Clay Highly Plastic OH 10 y/r 3/2 | PID=0.0 | | LL10996 | Time 13:05 p. 80 map |
| | 2.0 | MH SILT WITH CLAY, SAND, COARSE TO FINE, SATURATED, MANY FINE ROOTS, GRAY (2.5Y 5/1) SLIGHTLY STICKY, PLASTIC | | M.C. | LL1240 METALS CN _T EXPLOSIVES PERFORMANCES @ 1040 | TO @ 2.8' @ 1/30/00 |
| | 3.0 | REFUSAL @ 2.8' @ 1/30/00 | | | | N563734.9447 E2376839.023 2230' |
| | 4.0 | | | | | |

10/30/00

1.0'

A-322

PROJECT RVAAP Phase II R.I.

HOLE NO LLI-268

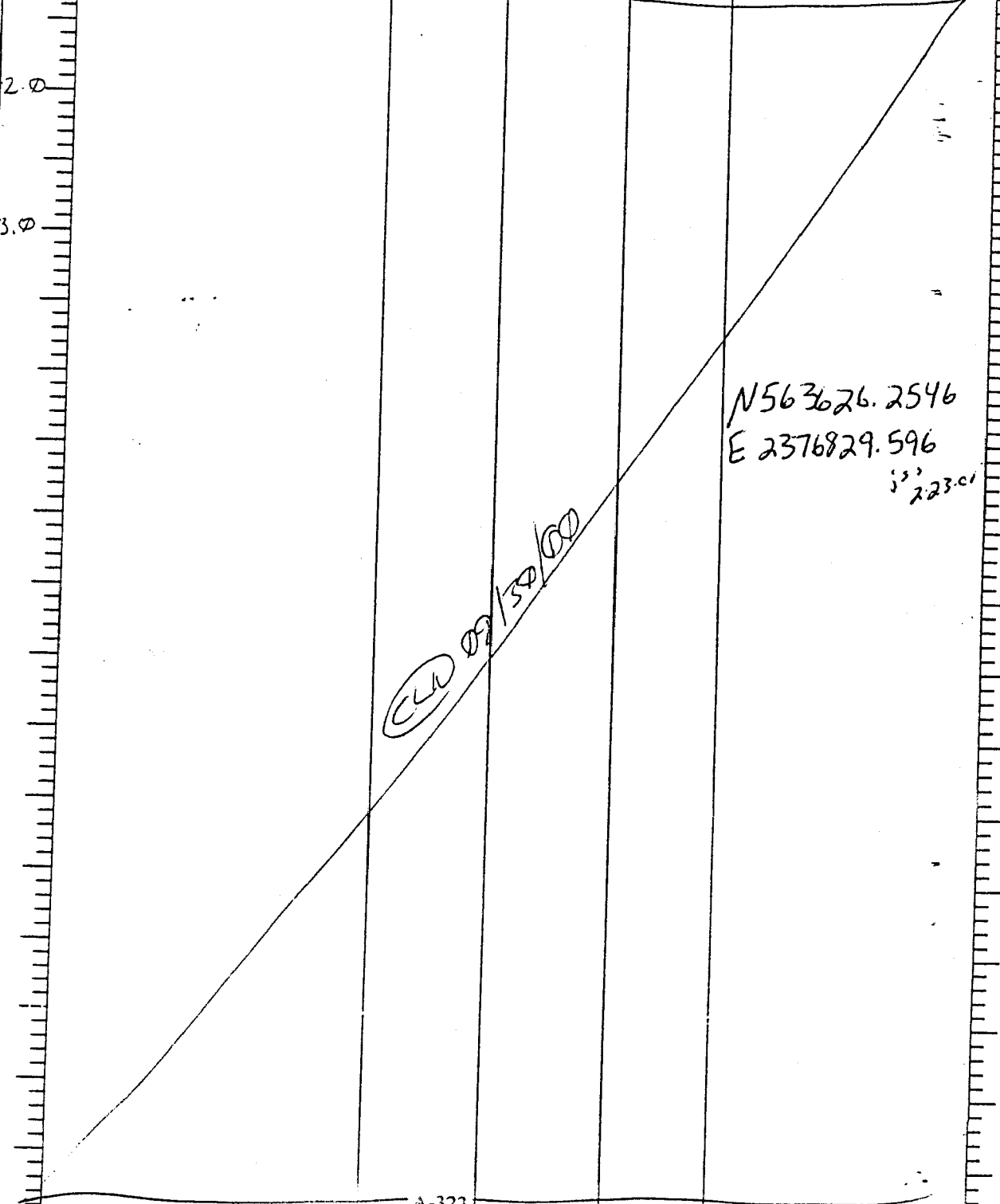
DRILLING LOG

PROJECT: **RVAAP: LLI / PHASE II R.I.** INSPECTOR: **C.L. KLINGER** HOLE NUMBER: **LLI-269**
 SHEET: **2 OF 2**

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|------------------------------|-----------------------------|-----------------------------------|--------------------------|-------------|
|-----------|-----------|------------------------------|-----------------------------|-----------------------------------|--------------------------|-------------|

| | | | | | | |
|--|--|---|--|---|--|---|
| | | ML SILT WITH GAY AND THIN SAND. SATURATED, DK. GRAYISH-BROWN (2.5Y 4/2) SOME REDUCED MOTTLING | | LL10977 METALS EXPLOSIVES PROPAGANTS @ 1400 | | STANDING WATER NO PIV READINGS TD @ 1.0' 09/25/00 |
|--|--|---|--|---|--|---|

1.0' END OF BORING



2.0'
3.0'

N 563626.2546
E 2376829.596
i^s 223.0'

CLW 09/25/00

A-323

PROJECT: **RVAAP: LLI / PHASE II R.I.** HOLE NO: **LLI-269**

DRILLING LOG

20

PROJECT **RVAAP: LLI/PHASE II R.I.** INSPECTOR **C.L. KUNWAP** HOLE NUMBER **LLI-270**

DEPTH (FT) DESCRIPTION OF MATERIALS (C) FIELD SCREENING RESULTS (D) GEOTECH SAMPLE OR CORE BOX NO (E) ANALYTICAL SAMPLE NO (F) REMARKS (G)

1.0
2.0
3.0

MH SILT WITH CLAY AND SAND,
SATURATED, DK. GRAY/TA-
BROWN (2.5Y 4/2)

LL10988
METALS
CN-
EXPLOSIVES
PROPAGATORS
@1515

STANDING WATER
NO PID REAGINGS

TD @ 1.0' 07/25/20

END OF BORING

CUE 09/30/20

N 563622.7488
E 2376811.55
j 2.2301

A-324

PROJECT **RVAAP: LLI/PHASE II R.I.**

HOLE NO **LLI-270**

DRILLING LOG

HOLE NUMBER **LI-271**

21

PROJECT **RVAAP: LLI/PHASE II R.I**

INSPECTOR **PAUL R. YESCONIS**

SHEET **2 OF 2**

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|---|---|------------------------------------|--|--|
| | 1.10 | MH/ML SILT WITH CLAY AND SAND, FINE TO MEDIUM. SATURATED, DK. GREENISH GRAY (10YR 4/1) MATERIAL, WITH BLUEISH-GRAY (5P8.5) REDUCED AND DK. YELLOWISH BROWN (10YR 4/6) OXIDIZED MOTTLING | | | LL10999 METALS EXPLOSIVES PROPAGANTS @1550 | STANDING WATER NO PID READING TO @ 1.6' 01/25/00 |
| | | END OF BORING | | | | |
| | 2.0 | | | | | <p style="font-size: 1.5em;">NS63629.2492</p> <p style="font-size: 1.5em;">E 2376809.424</p> <p style="font-size: 1.2em;">3°C</p> <p style="font-size: 1.2em;">2.23.01</p> |
| | 3.0 | | | | | |
| | | | | | | |
| | | | <p style="font-size: 1.5em;">CL6 09/30/00</p> | | | |
| | | | A-325 | | | |

PROJECT **RVAAP: LLI/PHASE II R.I**

HOLE NO **LI-271**

DRILLING LOG

HOLE NUMBER LLI-272

PROJECT RVAAP: LLI / Phase II R.I.

INSPECTOR C.L. KUNCER

SHEET 2 OF 2

| DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|---------------|--|-----------------------------|-----------------------------------|---|--|
| 1.0 | MH / ML SILT WITH CLAY AND TRACE MED. TO COARSE SAND, MANY FINE ROOTS, SATURATED, DK. GRAYISH BROWN MOTTLES (2.5Y 4/2) WITH (C) MINOR MOTTLES, DK. BLUE-GRAY (5B 4/1). | | | LL110000 METALS EASINESS PERMEABILITY @1425 | STANDING WATER NO PID READINGS TO @1.0' 09/25/00 |
| END OF BORING | | | | | |
| 2.0 | | | | | |
| 3.0 | <p>N 563624.7212 E 2376818.904 J 223.01</p> <p style="transform: rotate(-45deg); font-size: 2em;">C.W. 09/30/00</p> | | | | |
| A-326 | | | | | |

PROJECT

RVAAP: LLI / Phase II R.I.

HOLE NO

LLI-272

210

DRILLING LOG

HOLE NUMBER **LLI-273**

PROJECT **RVAAP: LLI / PHASE II R.I.**

INSPECTOR **PAUL R. YESCONIS**

SHEET **2 OF 2**

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|---|-----------------------------|---|--------------------------|---|
| | 1.0 | ML SILT TRACE SAND, WET, OLIVE YELLOW (2.5Y 6/8) MATRIX W. FA DK. GRAY (2.5Y 4/1) MOTTLED | | LL11001 METALS EXPLOSIVES PHEWELINETS Q0830 | | NO PIC RECORDING, STAND. N.L. WATER OVER 30.0 TD @ 1.0' 01/20/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>CLL 09/30/00</p> </div> | | | | |
| | | <p>N563615.3807 E 2376820.056 J² 2.23"</p> | | | | |
| | | A-327 | | | | |

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LLI-273

DRILLING LOG

HOLE NUMBER LL-274

PROJECT RVAAP LL/Phase II RI

INSPECTOR M. J. Root

SHEET 4 OF 5

| DEPTH (ft) | DESCRIPTION OF MATERIALS (c) | FIELD SCREENING RESULTS (m) | GEO TECH SAMPLE OR CORE BOX NO. (n) | ANALYTICAL SAMPLE NO. (o) | REMARKS (p) |
|------------|---|-----------------------------|-------------------------------------|---|---------------------------------|
| 1.0 | MH Silt with clay, trace fine sand. Dry, yellowish-brown (10yr 5/6) | PID = Open | MS. | LL11002 METALS CN EXPLOSIVES PROPAGANTS @ 1125 | BZ = Open TD = 1.0' OR 15/00 |
| 1.0 | END OF BORING | | | | |
| 2.0 | | | | | |
| 3.0 | | | | | |
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N 562992.9772
E 2376995.962
J 2-23-01

CLL 09/30/00

A-328

PROJECT RVAAP: LL/Phase II RI

HOLE NO LL-274

LLI-275

49

DRILLING LOG

HOLE NUMBER ~~50-5000~~ 1/5/00

PROJECT RVAAP: PHASE II / LLI

INSPECTOR M.J. ROOS

SHEET 5 OF 5

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|--|-----------------------------|-----------------------------------|--|--------------------------|
| | | MH SILT WITH CLAY. TRACE SAND, DRY, YELLOWISH-BROWN (10YR 5/6) | PID=1.3 ppm | | LL11003 METALS EXPLOSIVES PROPAGANTS @1200 | BZ=0 ppm TD=0.9 09/15/00 |
| 1.0 | | REFUSAL @ 0.9' END OF BIRING | | | | |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| | | | | | | |

CLL 09/30/00

N563007.9177
E 2377025.005
5' 2.23' 01

A-329

PROJECT RVAAP: LLI / PHASE II RE

HOLE NO LLI-275

DRILLING LOG

HOLE NUMBER LLI-276

5-

PROJECT RVAAP LLI / PHASE II R.I

INSPECTOR M. J. ROSE

SHEET 2 of 25

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|--|-----------------------------|------------------------------------|---|--|
| 1.0 | | MH SILT WITH CLAY AND TRACE FINE SAND, DRY, YELLOWISH-BROWN. (10YR 5/6) | PI = 0 ppm | | LL11004 LL1107 LL11157 METALS EXPLOSIVES POLYMER @12200 | BZ = 0 ppm TOOL DUPLICATE AND SPLIT SAMPLE TD = 1.0' OF 1.5/00 |
| 2.0 | | REFUSAL @ 1.0' ENCLOSURE BONDING | | | | |
| 3.0 | | <div style="position: absolute; transform: rotate(-45deg); opacity: 0.5;"> CCW 09/15/00 </div> | | | | |
| | | | | | | N 563019.5385 E 2377045.834 J 273.01 |

A-330

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LLI-276

DRILLING LOG

HOLE NUMBER **LLI-277**

54

PROJECT **RVAAP: LLI/PHASE II R.I**

INSPECTOR **M.J. ROSE**

SHEET **2 of 2**

| DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | GEOLOGIC SAMPLE OR CORE BOX NO (D) | ANALYTICAL SAMPLE NO (E) | REMARKS (G) |
|------------|---|-----------------------------|------------------------------------|---|-----------------------------------|
| 1.0 | MH SILT WITH CLAY AND TRACE SAND, GRAY, YELLOWISH-BROWN (10YR 5/6) | PID = 0 ppm | | LLI10005 METALS CN- EXPLOSIVES PROPPELLANTS @ 1250 | BZ = 0 ppm TO = 0.9' (9/15/00) |
| 1.0 | REFUSAL @ 0.9' END OF BAILING | | | | |
| 2.0 | | | | | |
| 3.0 | | | | | |
| | <p style="text-align: right;">N563029.2051 E 2377061.266 JUN 2 2001</p> | | | | |
| | <p style="text-align: center;">(CLEAN) 30/00</p> | | | | |
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vjb
12-11-00

A-331

PROJECT **RVAAP: LLI/PHASE II R.I.**

HOLE NO **LLI-277**

DRILLING LOG

HOLE NUMBER **LLI-278**

55

PROJECT **RVAAP LLI / PHASE II RI**

INSPECTOR **M. J. ROOT**

SHEET **2 of 2**

vjb
12/1/00

| DEPTH (A) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|---|---|--|------------------------------------|--|--|
| 1.0 | MH SILT WITH CLAY AND TRACE SAND, DRY, YELLOWISH BROWN (10YR 5/6) | PID = 0 ppm | | LL1006 METALS EXPLOSIVES ISOPHALLATE @1330 | BZ = 0 ppm TDC @ 1.0' 09/15/00 |
| 2.0 | END OF BORING | | | | |
| 3.0 | | | | | |
| <p style="text-align: center;">(CLO) 09/30/00</p> | | <p style="text-align: center;">N 563043.5633 E 2377090.677 jss 2/23/01</p> | | | <p style="text-align: center;">A-332</p> |

PROJECT

RVAAP: LLI / PHASE II RI

HOLE NO

LLI-278

DRILLING LOG

HOLE NUMBER **LI-279**

PROJECT **RVAAP: LI / PHASE II R.I.**

INSPECTOR **M. J. Root**

SHEET **2 of 2**

DEPTH (A)

DEPTH (B) (FT)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (D)

GEOCHEM SAMPLE OR CORE BOX NO (E)

ANALYTICAL SAMPLING NO (F)

REMARKS (G)

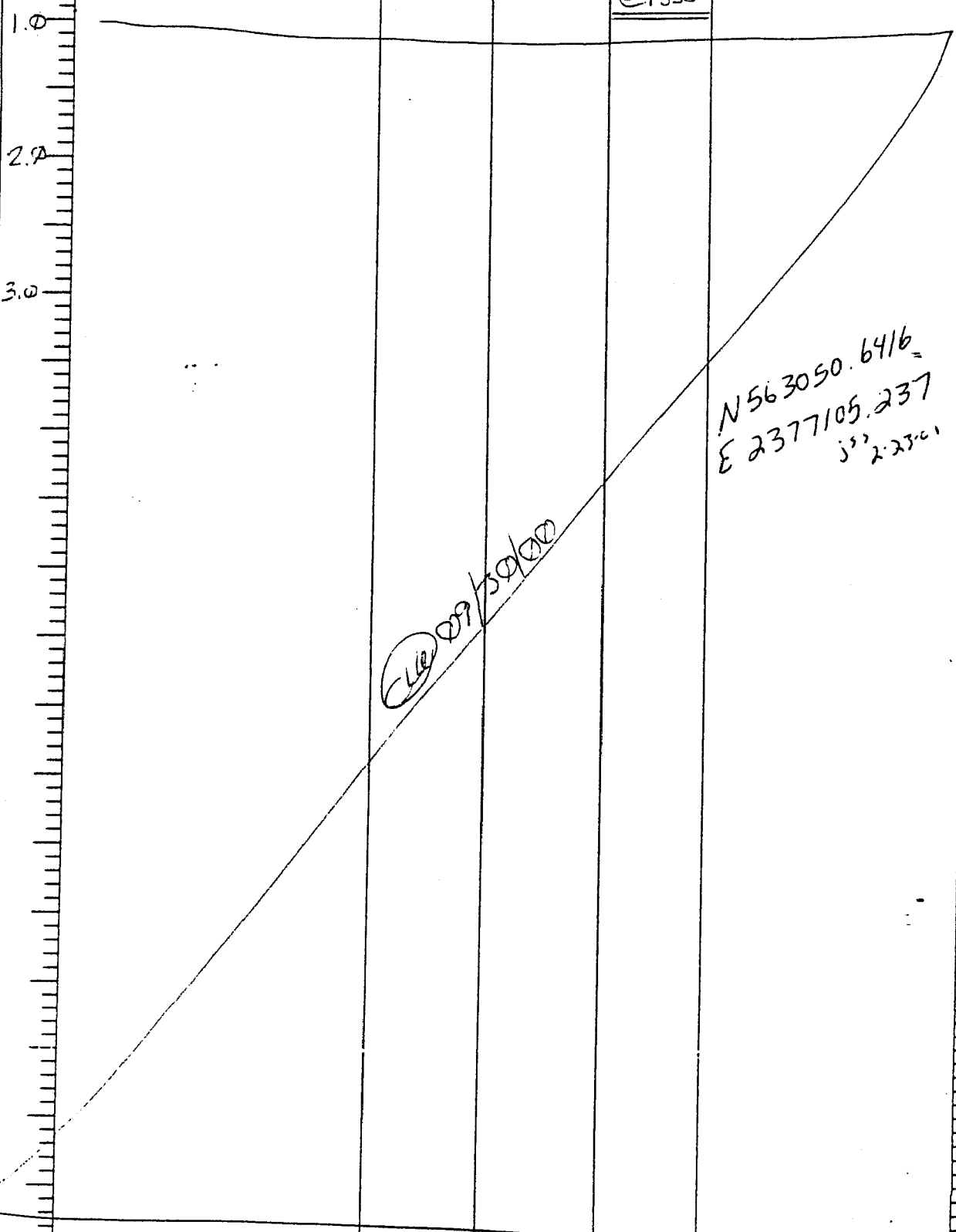
MH Silt with clay and trace sand, dry brown, (10YR 4/3)

FID = 0.00m

LI 100' METALS EXPLOSIVES PROCEDURES @ 1355

BZ = 0.00m
TU @ 0.5 @ 1.5 @ 0.0

REFUSAL @ 0.5' END OF BAKING



56
vb
12/1/00

A-333

PROJECT **RVAAP: LI / PHASE II R.I.**

HOLE NO **LI-279**

61

DRILLING LOG

HOLE NUMBER LLI-280

PROJECT RVAAP: LLI / PHASE II R.I

INSPECTOR M.J. ROSE

SHEET 2 OF 2

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|----------------|---|-----------------------------|------------------------------------|--|--|
| | | MH SILT WITH CLAY AND TRACE SAND, DRY, BROWN (10YR 4/3) | PIU = 0 ppm | | LUI0008 METALS EXPLOSIVES PAH/PETRO. @1422 | BZ = 0 ppm TD = 0.8' 09/15/00 |
| 1.0 | | REBASAL @ 0.8' END OF BORING | | | | |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| | | | <p>CLW 09/30/00</p> | | | <p>N 563060.7624 E 2377124.514 2-23-01</p> |
| | | | A-334 | | | |

PROJECT

RVAAP: LLI / PHASE II R.I.

HOLE NO

LLI-280

DRILLING LOG

HOLE NUMBER LU-282

PROJECT RVAAP: LLI/PHASE II R.I.

INSPECTOR

SHEET 2 OF 2 281

| DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|---|-----------------------------|-----------------------------------|---|----------------|
| | MH SICT WITH CLAY AND SAND, DRY, BROWN (1072 4/3) | PID = 0 ppm | | LL1009 | BZ = 0 ppm |
| | REFUSAL @ 0.3' | END OF BORING | | METALS EXPLOSIVES PROPAGANTS @1455 | |
| 1.0 | | | | | |
| 2.0 | | | | | STATION LU-281 |
| 3.0 | | | | | |
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| | | A-335 | | | |

N 563079.3273
E 2377161.126
JAN 27 2001

CU 09/30/00

PROJECT RVAAP: LLI/PHASE II R.I.

HOLE NO LU-281
281
LU-282
09/15/00

63

DRILLING LOG

HOLE NUMBER LLI-324

PROJECT RVAAP: LLI / PHASE II RI

INSPECTOR M. J. ROSE

SHEET 2 OF 2

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--|--|-----------------------------|-----------------------------------|--|----------------------------------|
| 1.0 | MH SILT WITH CLAY AND TRACE SAND, DRY, BROWN (DYK 4/3) | P1030 ppm | | LL1195 NOCS SVOCs PCBS METALS CN ⁻ EXPLOSIVES PERFUMANTS @ 1515 | BZ = 0 ppm TD @ 1.0' 09/15/00 |
| 2.9 | END OF BORING | | | | |
| 3.0 | | | | | |
| <p><i>(Circled)</i> 09/30/00</p> <p>N563136 E 2377200 323-01</p> | | | | | |
| A-336 | | | | | |

PROJECT

RVAAP: LLI / PHASE II RI

HOLE NO

LLI-324

DRILLING LOG

HOLE NUMBER LLI-325

PROJECT RVAAP: LLI/PHASE II R.I.

INSPECTOR M.J. ROSE

SHEET 2 OF 2

| ELEV (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|--|----------------|---|-----------------------------|-----------------------------------|---|---|
| | 1.0 | MH S.L.T WITH CLAY AND SAND, DAMP, (1.5 YR 3/2) | PID = 0 ppm | | LL11177 METALS CN - EXPLOSIVES PROFESSIONAL @ 0745 | BZ = 0 ppm TD @ 1.0' @ 1/7/00 |
| | 2.0 | | | | LL11245 METALS CN - EXPLOSIVES PROFESSIONAL @ 1720 | ALSO COLLECTED DUPLICATE (LL11133) AND SPLIT (LL11133) |
| | 3.0 | | | | | TD @ 3.0' @ 1/29/00 |
| | 4.0 | END OF Boring | | | | |
| <p> (LL1) 09/30/00 </p> | | | | | | |
| <p> N 563150.0342 E 2377225.189 127 X-23-01 </p> | | | | | | |
| A-337 | | | | | | |

PROJECT

RVAAP: LLI/PHASE II R.I.

HOLE NO

LLI-325

DRILLING LOG

84

| PROJECT RVAAP: LLI/PHASE II R.I | | | | INSPECTOR M. J. ROSE | | HOLE NUMBER LLI-326 |
|---|-----------|---|-----------------------------|-----------------------------------|---|---------------------------------|
| DEPTH (FT) | | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (E) | GEOTECH SAMPLE OR CORE BOX NO (D) | ANALYTICAL SAMPLE NO (F) | SHEET 2 OF 2 |
| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (E) | GEOTECH SAMPLE OR CORE BOX NO (D) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
| 1.0 | | SP-SC SAND WITH CLAY, MED. M, POORLY GRADED. DAMP, DK, YELLOWISH-BROWN (10YR 4/4) | Pipe Open | | LL11178 METALS EXPLOSIVES PIPE FRACTIONS @ 0915 | BZ = Open TO @ 11.0' (09/17/00) |
| 2.0 | | END OF BORING | | | | |
| 3.0 | | | | | | |
| N 563159.7273 E 2377226.73 223-01 | | | | | | |
| | | | (EW) on 10/10/00 | | | |
| | | | A-338 | | | |

PROJECT RVAAP: LLI/PHASE II R.I.

HOLE NO LLI-326

DRILLING LOG

PROJECT RVAAP: LLI / PHASE II R.I.

INSPECTOR M. J. ROOT

HOLE NUMBER LLI-327

SHEET 2 of 2

| DEPTH (A) | DEPTH (B) (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|----------------|--|-----------------------------|------------------------------------|-------------------------------------|---|
| | 1.0 | MH SILT WITH CLAY, MOIST BROWN (10 YR 4/3) | AD = 0.65 | | LL1199 LL1109 LL1159 @1545 | BZ = 0.65 m (DUPLICATE) (SPLT) TD @ 1.0' 07/16/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | | | | | |
| | | | | | | |
| | | | | | | <p>N 56 3171.2745</p> <p>E 2377249.207</p> <p>JSS 2-23-01</p> <p>(circled) 07/30/00</p> |
| | | | A-339 | | | |

PROJECT RVAAP: LLI / PHASE II R.I.

HOLE NO LLI-327

DRILLING LOG

PROJECT RVAAP: LLI / PHASE II R.I. INSPECTOR M. J. ROSE HOLE NUMBER LLI-328 SHEET 2 OF 2

| DEPTH (ft) | DESCRIPTION OF MATERIALS (1) | FIELD SCREENING RESULTS (2) | GEO TECH SAMPLE OR CORE BOX NO (3) | ANALYTICAL SAMPLE NO (4) | REMARKS (5) |
|------------|--|-----------------------------|------------------------------------|---|----------------------------------|
| 1.0 | MH S.I.T WITH CLAY AND SAND, DAMP, BROWN (10YR 4/2) | PID = 0 ppm | | LLI 200 METALS EXPLOSIVES PROPPELLANTS @ 1445 | B2 = 0 ppm TD @ 1.0' 07/16/00 |
| 2.0 3.0 | <p>END OF BORING</p> <p style="text-align: center;">(CLW) 09/23/00</p> <p style="text-align: right;">N 563205.2403 E 2377226.782 JSS 2-23-01</p> | | | | |

A-340

PROJECT RVAAP: LLI / PHASE II R.I.

HOLE NO LLI-328

| PROJECT RVAAP: LLI / PHASE II R.I. | | | | | INSPECTOR M. J. ROOS | | HOLE NUMBER LLI-330 |
|------------------------------------|----------|---|-----------------------------|-----------------------------------|--|-----------------------------------|---------------------|
| DEPTH (FT) | ELEV (A) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) | |
| 1.0 | | MH SILT WITH CLAY AND SAND, DAMP, BROWN (DYE 4/3) | PID = 0 ppm | | LLI 2902 | BZ = 0 ppm | |
| | | REFUSAL @ 0.3' | E.O.B. | | METALS EXPLOSIVES PROPAGANTS @ 1350 | TO @ 0.3' OF 11/6/00 (REFUSAL) | |

(Lb) 09/30/00

N 563109.9459
E 2377279.198
3rd 23rd 2001

A-342

PROJECT RVAAP: LLI / PHASE II R.I.

HOLE NO LLI-330

DRILLING LOG

HOLE NUMBER LW-331

PROJECT RVAAP. LLI/PHASE II R.I

INSPECTOR M.J. ROO

SHEET 2 OF 2

| DEPTH (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|------------|---|-----------------------------|------------------------------------|---|--|
| | | MH SILT WITH CLAY AND SAND, MOIST, BROWN (12YR 4/3) | PID= | | LL11203 METALS CN EXPLOSIVES PCU-POLLUTANTS @ 1135 | BZ = 0 ppm TO @ 1.0' 09/14/00 |
| 1.0 | | REFUSAL @ 1.0' (09/19/00) END OF BORING | | | | |
| 2.0 | | | | | | |
| 3.0 | | | | | | |
| | | | | | | <p style="text-align: center;">(Circled) 09/30/00</p> <p style="text-align: right;">N 563096.6129 E 2377290.721 2-2301</p> |

A-343

PROJECT

RVAAP. LLI/PHASE II R.I.

HOLE NO

LLI-331

69

DRILLING LOG

HOLE NUMBER LU-332

PROJECT RVAAP - LI / PHASE II R.I.

INSPECTOR M.J. Romy

SHEET 2 of 2

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|--|-----------------------------|-----------------------------------|--|-----------------------------------|
| 1.0 | MH SILT WITH CLAY AND SAND, MOIST, BROWN (QYR 4/3) | PID = 0.25 m | | LI204 METALS EXPLOSIVES PERMEABILITY @ 10 40 | BZ = 0.25 m TD @ 1.0' 05/16/00 |
| 1.0 | END OF BORING | | | | |
| 2.0 | | | | | |
| 3.0 | | | | | |
| | | | | | |

N 563106.2268
E 2377243.967
ISS 2-23-01

LU 09/15/00

A-344

PROJECT RVAAP: LI / PHASE II R.I.

HOLE NO LU-332

| DRILLING LOG | | | | | WELL NUMBER | LLI-353 |
|---|---|-----------------------------|--|--|---|---------|
| PROJECT | | INSPECTOR | | | SHEET | |
| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | ANALYTICAL SAMPLING NO (N) | REMARKS (G) | | |
| 1.0 | MA SILT WITH CLAY AND SAND, DAMP, BROWN (QYR 4/3) | PID = 0 ppm | LL1205 METALS CN- EXPLOSIVES PROPENALTS @ 1100 | LL1205 METALS CN- EXPLOSIVES PROPENALTS @ 1100 | BZ = 0 ppm TDE @ 1.0' 09/14/00 | |
| END OF BORING | | | | | | |
| 2.0 | | | | | N 563121.4642 E 2377268.16 500 2.23.01 | |
| 3.0 | | | | | | |
| <div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;"> OK 09/30/00 </div> | | | | | | |
| A-345 | | | | | | |

PROJECT RVAAP: LLI / PHASE II R.I

HOLE NO LLI-353

68

DRILLING LOG

HOLE NUMBER LLI-334

PROJECT RVAAP: LLI / PHASE II RI

INSPECTOR M.J. ROST

SHEET 2 of 2

| LLI# (A) | DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|------------|---|-----------------------------|-----------------------------------|---|--------------------------------|
| | 1.0 | MH Silt with clay and sand DAMP, BROWN (W/R 4/3) | PID \approx 0.00 | | LL206 METALS EXPLOSIVES PERMEABILITY @ 1025 | BZ=0 ppm TD @ 1.0' 09/16/00 |
| | 2.0 | END OF BORING | | | | |
| | 3.0 | <p style="text-align: center;">(circled) 09/30/00</p> <p style="text-align: right;">N 563101.4895 E 2377243.022 jss 3-23-01</p> | | | | |
| | | | | | | |

A-346

PROJECT RVAAP: LLI / PHASE II RI

HOLE NO LLI-334

DRILLING LOG

HOLE NUMBER **LLI-335**

PROJECT **RVAAF: LLI/Phase II RI**

INSPECTOR **M. J. ROST**

SHEET **2 of 2**

| DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (F) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (D) | REMARKS (G) |
|---------------|---|-----------------------------|-----------------------------------|--|----------------------------------|
| 1.0 | MH SILT WITH CLAY AND SAND, DAMP, DARK OLIVE/BROWN (10YR 4/3) | PID = 0 ppm | | LLI 207 METALS CN - EXPLOSIVES PROPPELLANTS @ 1000 | BZ = 0 ppm TD @ 1.0' 09/16/00 |
| 2.0 | ML SANDY SILT WITH GRAVEL POOR TO MODERATELY SORTED, WARM/NOY, BROWN (10YR 4/3) | PID = 0 ppm | | LLI 208 METALS EXPLOSIVES PROPPELLANTS @ 1510 | BZ = 0 ppm |
| 3.0 | CL LEAN CLAY WITH SAND, MOIST, OLIVE GRAY (5Y 5/2) | | | | TD @ 3.0' 09/17/00 |
| END OF BORING | | | | | |
| | | | | | |

A-347

PROJECT

RVAAF: LLI/Phase II R.I.

HOLE NO

LLI-335

74

DRILLING LOG

WELL NUMBER LL-336

PROJECT

RVAAD: LLI/PHASE II R.1

INSPECTOR

MJ ROBT

SHEET 2 OF 2

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------------------------|-----------|---|-----------------------------|-----------------------------------|--------------------------|----------------|
| | | (MH) SANDY ELASTIC SILT w/ANGULAR GRAVEL - DRY - OLIVE BROWN (2.5% 4/4) | PI0 = 0.11m | MOISTURE CONTENT | LL11244 | REFUSAL @ 0.6' |
| 1.0 | | | | | | |
| 2.0 | | | | | | |
| End of Boring | | | | | | |
| NS63356.907 E2376436.041 | | | | | | |
| 10' / 04' / 00' | | | | | | |
| A-348 | | | | | | |

PROJECT

RVAAD: LLI/PHASE II R.1.

HOLE NO

LL-336 336

vjb 12/1/00

75

DRILLING LOG

HOLE NUMBER **LLI-337**

PROJECT

RVAAP, LLI/PHASE II R.1

INSPECTOR

M. J. ROOT

SHEET

2 OF 2

DEPTH (A)

DEPTH (FEET)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (D)

GEOTECH SAMPLE OR CORE BOX NO (E)

ANALYTICAL SAMPLE NO (F)

REMARKS (G)

(60-6m) POORLY GRADED
 SUB ANGULAR GRAVEL
 w/ SILT AND SAND
 - DRY
 - OLIVE BROWN
 (2.5Y 4/4)

PI: 0ppm

MOISTURE CONTENT

LL1226

REFUSAL @ 0.3'

End OF Boring

N 563373.6579
 E 2376514.579

A-349

PROJECT

RVAAP; LLI/PHASE II R.1.

HOLE NO

LLI-337

DRILLING LOG

TRIAL NUMBER
LLI-338
 SHEET
2 OF 2

70

PROJECT

INSPECTOR

M J Root

DEPTH
(A)

Et

DESCRIPTION OF MATERIALS
(C)

FIELD SCREENING
RESULTS
(D)

GEOTECH SAMPLE
OR CORE BOX NO
(E)

ANALYTICAL
SAMPLE NO
(F)

REMARKS
(G)

7.0
 (Sp) POORLY GRADED
 FINE SAND
 - DAMP
 - YELLOWISH BROWN
 (10 PR 5/6)

P10 = 10 ppm

MOISTURE
CONTENT

LL1227

NO REFUSAL

2.0
End of Boring

N 563422.704
E 2376584.819

10/24/88

A-350

PROJECT

RVAAP: LLI/PHASE II R.1.

HOLE NO

LLI-338

DRILLING LOG

77

PROJECT

RVAAP: LLI/PHASE II R.1.

INSPECTOR

M. ROBT

INSTR. NUMBER

LLI-339

SHEET

2 OF 2

DATE

DEPTH (ft)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (D)

GEOTECH SAMPLE OR CORE BOX NO (E)

ANALYTICAL SAMPLE NO (F)

REMARKS (G)

(SP) POORLY GRADED FINE SAND W/ ANGULAR GRAVEL
- DRY
- BROWN (10YR 5/3)

D₁₀ = 0.075mm

MOISTURE CONTENT

LL11241

REFUSAL @ 0.3'

1.0

2.0

END OF BORING

N 563299.626
E 2376435.539

~~10/04/07~~

A-351

PROJECT

RVAAP: LLI/PHASE II R.1.

HOLE NO

LLI-339

DRILLING LOG

LLI-340

74

| PROJECT | | INSPECTOR | | SHEET | | |
|------------|------------------------------|-----------------------------|------------------------------------|--------------------------|-------------|--|
| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) | |
| 04 | Silt Refusal | PIP=NR. | | LLI-1328 | | |

N 563352.7627
E 2376526.601
2.22"

A-352

PROJECT RUAAP LL-1 Phase # RI

HOLE NO LLI-340

DRILLING LOG

74

| PROJECT | INSPECTOR | HOLE NUMBER | SHEET | | |
|---|---|------------------------------|------------------------------------|---------------------------|--|
| RVAAP LLI Phase II RI | M. Clays | LLI-341 | lot 1 | | |
| DEPTH (ft) | DESCRIPTION OF MATERIALS (ft) | FIELD SCREENING RESULTS (ft) | GEOTECH SAMPLE OR CORE BOX NO (ft) | ANALYTICAL SAMPLE NO (ft) | REMARKS (ft) |
| <div style="position: relative; height: 800px;"> 0 100 200 300 400 500 600 700 800 </div> | <p>Silt</p> <hr style="border: 1px solid black;"/> <p>Refusal</p> | | | <p>LLI-1329</p> | <p>N 563393.1185</p> <p>E 2376638.15</p> <p>M 022301</p> |

PROJECT RVAAP Phase II RI @ LLI

A-353

HOLE NO LLI-341

DRILLING LOG

HOLE NUMBER
LLI-342

PROJECT
RVAAP: LLI/PHASE II R.1.

INSPECTOR
M. ROOT

SHEET
2 OF 2

DEPTH (ft)

DEPTH (ft)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (D)

GEOTECH SAMPLE OR CORE BOX NO (E)

ANALYTICAL SAMPLE NO (F)

REMARKS (G)

1.0
2.0
3.0

(SP) POORLY GRADED SAND W/ GRAVEL
- DRY
- YELLOWISH BROWN (10% 4/4)

P10 = 0.075

moisture content

LL1243

End of Boring

N 563250.0834
E 2376465.647

M. ROOT
10/24/00

A-354

PROJECT

RVAAP: LLI/PHASE II R.1

HOLE NO

LLI-342

DRILLING LOG

PROJECT

RVAAP: LLI / PHASE II R.1.

INSPECTOR

MJ ROOT

LOG NUMBER

21-343

SHEET

84

DEPTH (ft)

(ft)

DESCRIPTION OF MATERIALS (1)

FIELD SCREENING RESULTS (2)

GEOTECH SAMPLE OR CORE BOX NO (3)

ANALYTICAL SAMPLE NO (4)

REMARKS (5)

(5m) SILTY SAND
w/ FINE ROUNDED
GRAVEL, DAMP
- DARK YELLOWISH BROWN
(10YR 4/4)

PIPE

MOISTURE
CONTENT

1.0
2.0

End of Boring

N 563319.1628
E 2376598.606

10/04/00

A-355

PROJECT

RVAAP: LLI / PHASE II R.1.

HOLE NO

21-343

DRILLING LOG

89

| DEPTH (ft) | DESCRIPTION OF MATERIALS (c) | FIELD SCREENING RESULTS (m) | GEOLOGIC SAMPLE OR CORE BOX NO (b) | ANALYTICAL SAMPLE NO (n) | REMARKS (d) |
|---|---|-----------------------------|------------------------------------|--------------------------|----------------|
| <p>PROJECT: RVAAP: LL1/PHASE II R.I. HOLE NUMBER: LL1-344 SHEET: 2 OF 2</p> | | | | | |
| 1.0 | (SP-SM) POORLY GRADED FINE SAND W/SILT AND GRAVEL - DAMP - DARK YELLOWISH BROWN (OYR 4/6) | P10 | MOISTURE CONTENT | LL 1300 | REFUSAL @ 0.1' |
| 2.0 | <h2 style="font-size: 2em;">End of Boring</h2> | | | | |
| N563352.0882 E 2376655.446 | | | | | |
| 10/04/04 | | | | | |
| A-356 | | | | | |

PROJECT: RVAAP: LL1/PHASE II R.I.

HOLE NO: LL1-344

81

DRILLING LOG

PROJECT

RVAAP: LLI/PHASE II R.1.

INSPECTOR

M. J. ROOT

HOLE NUMBER

LLI-345

SHEET

2 OF 2

DEPTH (ft)

(ft)

DESCRIPTION OF MATERIALS (c)

FIELD SCREENING RESULTS (f)

GEOLOGICAL SAMPLE OR CORE BOX NO (g)

ANALYTICAL SAMPLE NO (h)

REMARKS (i)

(MH) SANDY ELASTIC SILT w/ANGULAR GRAVEL.
DRY - DARK YELLOWISH BROWN
(10KR 4/4)

PID: DAM

MOISTURE CONTENT

LL11242
LL11170
LL11180

REFUSAL @ 0.2'

1.0

2.0

End of Boring

N 563231.3199
E 2376502.488

[Signature]
10/04/00

A-357

PROJECT

RVAAP: LLI/PHASE II R.1.

HOLE NO

LLI-345

DRILLING LOG

| PROJECT | | INSPECTOR | | | HOLE NUMBER | |
|-------------------------|-----------|---|-----------------------------|-------------------------------------|---------------------------|----------------|
| RVAAP: LLI/PHASE II R.1 | | M. ROBT | | | LLI-346 | |
| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
| | | (MH) GRAVELY ELASTIC SILT, DRY - DARK YELLOWISH BROWN (OHR 3/4) | P ₁₀ = 0.1 mm | MOISTURE CONTENT | LL1 1210 | REFUSAL @ 0.6' |
| 1.0 | | <p>End of Boring</p> <p style="text-align: right;">NS63287.1308 E 2376594.78 17 2-23-01</p> <p style="text-align: center;">10/04/00</p> | | | | |
| 2.0 | | | | | | |
| | | | | | | |

82

A-358

PROJECT

RVAAP: LLI/PHASE II R.1.

HOLE NO

LLI-346

DRILLING LOG

HOLE NUMBER 227-347

PROJECT

INSPECTOR

M. ROSE

SHEET

88

DEPTH (A)

DEPTH (B)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (D)

GEOLOGIC SAMPLE OR CORE BOX NO (E)

ANALYTICAL SAMPLE NO (F)

REMARKS (G)

(SP-SM) POORLY GRADED
 VERY FINE SAND
 W/SILT AND SUB-
 BOUNDED, GRAVEL
 -DAMP
 -DARK YELLOWISH BROWN
 (10 YR 4/4)

P10 = 0 ppm

MOISTURE
CONSIST

LI 1299

REFUSAL @ 0.1'

1.0
2.0

End of Boring

N563317.6909
E 2376657.839

~~10/24/00~~

A-359

PROJECT

RVAAP: LI/PHASE II R.1.

HOLE NO

227-347

DRILLING LOG

HOLE NUMBER
LLI-349

75

PROJECT RUAAP Phase I RE I LL-1

INSPECTOR M. O'Leary

SHEET 1 of 1

| DEPTH (ft) | DESCRIPTION OF MATERIALS (c) | FIELD SCREENING RESULTS (m) | GEOTECH SAMPLE OR CORE BOX NO (e) | ANALYTICAL SAMPLE NO (f) | REMARKS (g) |
|------------|--|-----------------------------|-----------------------------------|--------------------------|--|
| | <p>Silt</p> <hr/> <p>Refusal on Rock</p> | <p>Pip = NR.</p> | <p>A-360</p> | | <p>N563367.4804 E 2376699.963= N 2330'</p> |

PROJECT RUAAP Phase I RE I LL-1

HOLE NO LLI-349

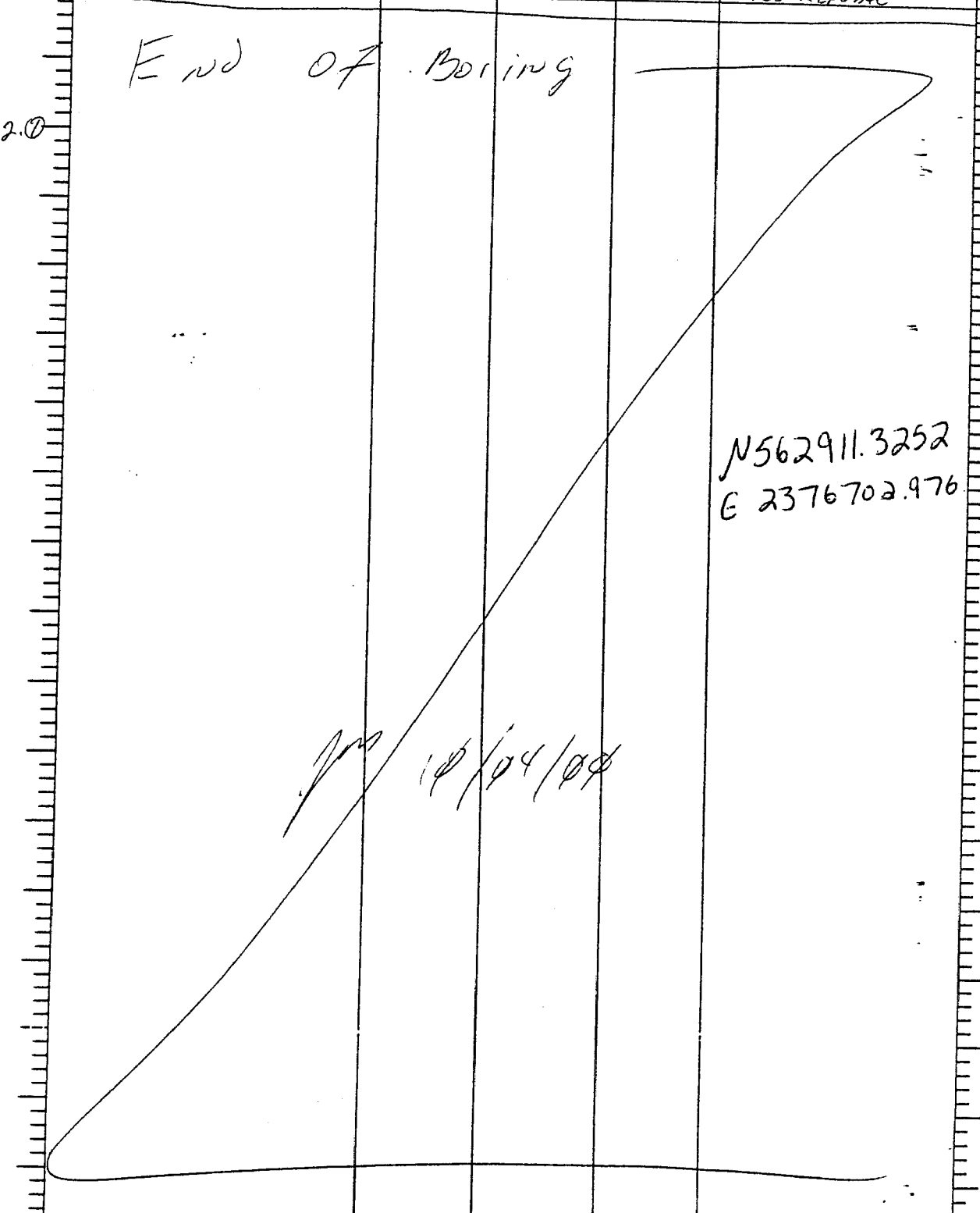
95

DRILLING LOG

PROJECT R VAAP: LLI/PHASE II R. I. HOLE NUMBER 21-350

INSPECTOR M J ROOT SHEET 2 OF 2

| DEPTH (ft) | DESCRIPTION OF MATERIALS | FIELD SCREENING RESULTS | GEOTECH SAMPLE OR CORE BOX NO | ANALYTICAL SAMPLE NO | REMARKS |
|------------|---|-------------------------|-------------------------------|----------------------|------------|
| 1.0 | (MH) ELASTIC SILT W/SAND, DAMP - YELLOWISH BROWN (IDGR 5/4) | P10 = 0ppm | MOISTURE CONTENT | LL1 1304 | NO REFUSAL |



A-361

DRILLING LOG

96

| PROJECT | | INSPECTOR | | | INCL NUMBER | |
|----------------------------|-----------|---|-----------------------------|-----------------------------------|--------------------------|--------------------------------|
| RVAAP: LLI / PHASE II R.1. | | M J ROOT | | | LLI-351 | |
| LEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
| | 1.0' | (MH) ELASTIC SILT W/ORGANIC MATTER - DRY - YELLOWISH BROWN (10YR 5/6) | PI = 0 ppm | MOISTURE CONTENT | LI- 1305 | NO REFUSAL |
| | 2.0' | End of Boring | | | | |
| | | | | | | N 562943.1057 E 2376776.646 |
| | | | | | | 10/04/00 |
| | | | | | | A-362 |

PROJECT

RVAAP: LLI / PHASE II R.1.

HOLE NO

LLI-351

DRILLING LOG

| PROJECT | | INSPECTOR | | | | INCL. NUMBER |
|----------------------------|----------------|--|-----------------------------|-----------------------------------|--------------------------|----------------------------------|
| RVAAP: LLI / PHASE II R.I. | | M J ROBT | | | | LLI-352 |
| ELEV (A) | DEPTH (B) (FE) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
| | 1.0 | (SP-SM) POORLY GRADED SAND W/SILT, DRY - DARK YELLOWISH BROWN (10FR 4/4) | PI0 | MOISTURE CONTENT | LI1301 | |
| | 2.0 | END OF Boring | | | | NO REFUSAL |
| | | | | | | N 562960. 6401 E 2376866. 352 |
| | | | | | | 14/04/00 |

A-363

PROJECT RVAAP: LLI / PHASE II R.I.

HOLE NO 261-352

DRILLING LOG

98

PROJECT

RVAAP:LLI/PHASE II R.1

INSPECTOR

M. ROOT

HOLE NUMBER

LLI-353

SHEET

2 OF 2

BLV

(A)

DEPTH
(FE)

DESCRIPTION OF MATERIALS
(C)

FIELD SCREENING
RESULTS
(D)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)

REMARKS
(G)

(SP-SM) POORLY GRADED
FINE SAND W/SILT
AND GRAVEL, DRY
(DARK YELLOWISH BROWN)
(16YR 4/4)

Pd = 3.6 ppm

MOISTURE
CONTENT

LL1311

0.1'

0.2'

END OF BORING

N 562853.8135
E 2376674.133

~~M~~
10/04/04

A-364

PROJECT

RVAAP:LLI/PHASE II R.1.

HOLE NO

LLI-353

DRILLING LOG

gm

PROJECT

RVAAP: LLI / PHASE II R. I.

INSPECTOR

M. ROOT

HOLE NUMBER

LLI-354

SHEET

2 OF 2

DEPTH (A)

DEPTH (B)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (D)

GEOTECH SAMPLE OR CORE BOX NO (E)

ANALYTICAL SAMPLE NO (F)

REMARKS (G)

(SP) VERY FINE POORLY GRADED SAND
- BRY
- BROWNISH YELLOW (10YR 6/6)

P10 = 0.07mm

MOISTURE CONTENT

LL-1303

REFUSAL @ 0.2'

1.0'

2.0'

END OF BORING

N 562916.7591
E 2376751.954

[Signature]
10/04/04

A-365

PROJECT

RVAAP: LLI / PHASE II R. I.

HOLE NO

LLI-354

DRILLING LOG

PROJECT: RVAAD: LLI / PHASE II R.I. INSPECTOR: M.J. ROOT HOLE NUMBER: LLI-355

DEPTH (FEET) DESCRIPTION OF MATERIALS (C) FIELD SCREENING RESULTS (D) GEOTECH. SAMPLE OR CORE BOX NO. (E) ANALYTICAL SAMPLE NO. (F) REMARKS (G)

91

1.0' (SP-SM) POORLY GRADED FINE SAND W/SILT
- DAMP
- DARK YELLOWISH BROWN (OYR 4/4) PIDE MOISTURE CONTENT LLI 1302 REFUSAL @ 0.4'

End of Boring

N 562949.0484
E 2376945.998

M.J. Root
10/10/00

A-366

PROJECT: RVAAD: LLI / PHASE II R.I.

HOLE NO: LLI-355

DRILLING LOG

HOLE NUMBER LLI-357

PROJECT RVAAP: LLI/PHASE II R.I.

INSPECTOR M.J. ROOT

SHEET 2 OF 2

40

| ELEV. (ft) | DEPTH (ft) | DESCRIPTION OF MATERIALS (1) | FIELD SPOILING RESULTS (2) | GEOTECH SAMPLE OR CORE BOX NO. (3) | ANALYTICAL SAMPLE NO. (4) | REMARKS (5) |
|------------|------------|------------------------------|----------------------------|------------------------------------|---------------------------|-------------|
|------------|------------|------------------------------|----------------------------|------------------------------------|---------------------------|-------------|

| | | | | | | |
|--|-----|--|------------|------------------|---------|--|
| | 1.0 | (SP-SM) POORLY GRADED FINE SAND w/ S<D - DRY - DARK YELLOWISH BROWN (10 YR 3/6) | P10 0.0 PM | MOISTURE CONTENT | LL-1313 | |
| | 2.0 | | | | | |
| | | | | | | N 562890.5577 E 2376865.654 M. J. ROOT |

A-368

PROJECT

RVAAP: LLI/PHASE II R.I.

HOLE NO

LLI-357

| DRILLING LOG | | | | | | HOLE NUMBER LLI-358 |
|------------------------------------|---------------|---|-----------------------------------|--|--------------------------------|--|
| PROJECT KVAAP: LLI/PHASE II R.1 | | | INSPECTOR MD ROOT | | SHEET 2 OF 2 | |
| BLV (A) | DEPTH (FE) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | GEOLOGIC SAMPLE OR CORE BOX NO (B) | ANALYTICAL SAMPLE NO (N) | REMARKS (G) |
| | 1.0 | (SP-SM) POORLY GRADED FINE SAND W/SILT AND GRAVEL, DRY (DARK YELLOWISH BROWN) (10 YR 4/4) | P10 @ 0pm | MOISTURE CONTENT | UL-1314 | No REFUSAL |
| | 2.0 | | | | | N 562782.3932 E 2376746.33 L 622301 |
| | | | A-369 | | | |

PROJECT
KVAAP: LLI/PHASE II R.1.

HOLE NO
LLI-358

DRILLING LOG

HOLE NUMBER
LLI-359
SHEET
2 OF 2

PROJECT
RVAAP: LLI / PHASE II R.1. INSPECTOR
M. ROOT

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|--|-----------------------------|------------------------------------|--------------------------|--|
| | 1.0 | (MH) ELASTIC SILT W/SAND, DRY (DARK YELLOWISH BROWN) (10YR 4/4) | ND @ ppm | MOISTURE CONTAIN | LI-1315 | NO REFUSAL |
| | 2.0 | | | | | |
| | | | | | | N562803.6553 E 2376773.051 L 02-27-01 |

A-370

PROJECT
RVAAP: LLI / PHASE II R.1.

HOLE NO
LLI-359

DRILLING LOG

HOLE NUMBER 211-360

PROJECT RVAAP: LLI/PHASE II R. I.

INSPECTOR M. J. ROOT

SHEET 2 OF 2

| ELEV (A) | DEPTH (FE) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|------------|---|-----------------------------|------------------------------------|--------------------------|--|
| | 1.0 | (ML) SILT W/ FINE SAND - DRY - DARK YELLOWISH BROWN 10YR 4/1 | PI0 = 0.44 6.1ppm | MOISTURE CONTENT | LL1 1316 | REFUSAL @ 0.3' |
| | 2.0 | | | | | |
| | | | | | | N 562857.0564 E 2376871.172 12 022301 |

A-371

PROJECT RVAAP: LLI/PHASE II R. I.

HOLE NO 211-360

DRILLING LOG

HOLE NUMBER **LLI-361**
 SHEET **1 of 1**

82

PROJECT **RVAAP Load Line 1 Phase II RI**

INSPECTOR **M. Clough**

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|------------------------------|-----------------------------|------------------------------------|--------------------------|--|
| | 08 | Silt | PID = N.R. | | | N 562993.8315 E 2376929.298 M ^h = 227.4 |

A-372

PROJECT **RVAAP LLI Phase II RI**

HOLE NO **LLI-361**

DRILLING LOG

HOLE NUMBER *LLI-362*

PROJECT *RVAAP LLI-Phase II RI*

INSPECTOR *M. Christ*

SHEET

81

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|------------------------------|-----------------------------|-----------------------------------|--------------------------|--|
| <p>0.4</p> | <p>Silt Refusal</p> | | | | <p>N562945.1772 E 2376985.037 M 02/23/04</p> |
| | | | A-373 | | |

PROJECT *RVAAP LLI-Phase II RI*

HOLE NO *LLI-362*

DRILLING LOG

HOLE NUMBER 111-363

PROJECT RVAAP Phase II RI

INSPECTOR P. YESCONIS

SHEET 1 of 1

| DEPTH (ft) | DESCRIPTION OF MATERIALS (c) | FIELD SCREENING RESULTS (d) | GEOCHEM SAMPLE OR CORE BOX NO (e) | ANALYTICAL SAMPLE NO (f) | REMARKS (g) |
|------------|---|-----------------------------|-----------------------------------|--|---|
| 0.5 | 5M) S. lty Sand with gravel, damp. Brown (10YR 4/3) | | | LL11250 metals, F, metals TNT/ROX, Uradon | Collect sample @ 0.928 map on page 17 TD-0.4 on 7/24/80 |
| 1.0 | Rebussal @ 0.4' | | | | |
| 1.5 | | | | | |
| 2.0 | | | | | |
| 2.5 | | | | | |
| 3.0 | | | | | |
| 3.5 | | | | | |
| 4.0 | | | | | |
| 4.5 | | | | | |
| 5.0 | | | | | |
| 5.5 | | | | | |
| 6.0 | | | | | |
| 6.5 | | | | | |
| 7.0 | | | | | |
| 7.5 | | | | | |
| 8.0 | | | | | |
| 8.5 | | | | | |
| 9.0 | | | | | |
| 9.5 | | | | | |
| 10.0 | | | | | |
| 10.5 | | | | | |
| 11.0 | | | | | |
| 11.5 | | | | | |
| 12.0 | | | | | |
| 12.5 | | | | | |
| 13.0 | | | | | |
| 13.5 | | | | | |
| 14.0 | | | | | |
| 14.5 | | | | | |
| 15.0 | | | | | |
| 15.5 | | | | | |
| 16.0 | | | | | |
| 16.5 | | | | | |
| 17.0 | | | | | |

N562444.0362
E 2376982.066
L
A
2330

A-374

PROJECT RVAAP Phase II RI

HOLE NO LL1-363

DRILLING LOG

HOLE NUMBER
LLI-364

25

PROJECT RYAAP Phase II RI

INSPECTOR

SHEET 1 of 1

| DEPTH (ft) | DESCRIPTION OF MATERIALS (1) | FIELD SCREENING RESULTS (2) | GEOTECH SAMPLE OR CORE BOX NO. (3) | ANALYTICAL SAMPLE NO. (4) | REMARKS (5) |
|------------|--|-----------------------------|------------------------------------|--|--|
| | (5m) Silty Sand, trace gravel, damp, Dark Yellowish brown (10gr 1/4) | SM | | LL1240, 17 F. Mohr LL11240 TNT/RDX. Gravel | Collected Sample @ 1030 Map on Page 17 TD - 0.3 on 1/24/60 |
| | Refuse @ 0.3' | | | | <p>N562515.9091 E 2376900.983 NF 2.23⁰¹</p> |

A-375

PROJECT RYAAP Phase II RI

HOLE NO LLI-364

DRILLING LOG

HOLE NUMBER
LLI-365

21

PROJECT RVAAP Phase II RI

INSPECTOR DYESCONIS

SHEET 10/1

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|--|-----------------------------|------------------------------------|------------------------------------|--|
| 0.5 | (SP) sand with gravel, trace silt, damp, Brown (107R 43) | SP | | LL1238, Mtd. Grnd TNT/ROP, beledch | Collected sample @ 1010 Page 17 map RD-04 on 7/29/00 |
| 1.0 | Retosil @ 0.4' | | | | |
| 2.0 | | | | | |
| | | | | | N562512.1894 E 2376824.655 1/2 2-23-01 |

A-376

PROJECT

RVAAP Phase II RI

HOLE NO

LLI-365

DRILLING LOG

HOLE NUMBER
LLI-366

20

PROJECT RVAAD Phase II RI

INSPECTOR P. Yescovis

SHEET 1 of 1

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-------------|--------------|--|-----------------------------------|---|---|---|
| | | (Sm) Sandy silt with gravel, damp, Dark Yellowish brown (10YR 4/4) | SM | | LL11225 metals, F metal TNT/RDX, Geotech | Collect sample @ 0950 Map on page 17 TD 1.0' on 7/27/00 |
| | | | | | | <p>N 562454.0891 E 2376857.876 ISS 2-23-01</p> |

A-377

PROJECT

RVAAD Phase II RI

HOLE NO

LLI-366

34

DRILLING LOG

HOLE NUMBER
LC1-367
SHEET 2 OF 2

PROJECT

RVAAP: LC1/PHASE II R.1

INSPECTOR

M. J. RUIZ

SHEET

2 OF 2

DEPTH
(A)

DEPTH
IN
FEET

DESCRIPTION OF MATERIALS
(C)

FIELD SCREENING
RESULTS
(D)

GEOTECH SAMPLE
OR CORE BOX NO
(E)

ANALYTICAL
SAMPLE NO
(F)

REMARKS
(G)

0.0-0.4' (MH) ELASTIC
SILT W/FINE SAND, DRY
DARK YELLOWISH BROWN
(10YR 4/4)

PI = 0.00

MOISTURE
CONTENT

LC11257

0.4'-1.0' (MH) ELASTIC
SILT, DRY
YELLOWISH BROWN
(10YR 5/6)

NO REFUSAL

1.0

2.0

END OF BORING

N 564006.0339
E 2376138.544

10/04/00

A-378

PROJECT

RVAAP: LC1/PHASE II R.1.

HOLE NO

LC1-367

DRILLING LOG

HOLE NUMBER 211-368

PROJECT RVAAP: LU / PHASE II R.1 INSPECTOR M. P. J. T.

SHEET 2 OF 2

| DEPTH (ft) | DESCRIPTION OF MATERIALS | FIELD SCREENING RESULTS | GEOLOGIC SAMPLE OR CORE BOX NO. | ANALYTICAL SAMPLE NO. | REMARKS |
|------------|---|-------------------------|---------------------------------|-------------------------------|--------------------------------|
| 1.00 | Blk 9125/00 (G) W/SL L. SAND GRAY W/ SAND (M) ELASTIC SILT, DAMP OLIVE BROWN (2.54 4/4) | PID: 0777 | MOISTURE CONTENT | LL11255 LL11138 LL11224 | NO REFUSEL |
| 2.00 | END OF BORING | | | | |
| | | | | | N 563866.4395 E 2376219.195 |
| | | | | | 10/04/04 |

A-379

PROJECT RVAAP: LU / PHASE II R.1.

HOLE NO LU-368

DRILLING LOG

HOLE NUMBER
LLI-369
SHEET
2072

41

PROJECT

RVAAP

INSPECTOR

M. J. REED

ELEV (A)

DEPTH (Fe)

DESCRIPTION OF MATERIALS (C)

FIELD SCREENING RESULTS (M)

GEOCHEM SAMPLE OR CORE BOX NO (N)

ANALYTICAL SAMPLE NO (O)

REMARKS (P)

1.0

2.0

(GP-6M) POORLY GRADED
LARGE ANGLE ANG
GRAVEL w/ SILT AND
FINE SAND, DRY
- DRY YELLOWISH BROWN
(10YR 3/7)

PID: 01814

MUSTY
CONTINENT

LL1212

REFUSAL @ 0.4'

END OF BORING

N 563721.5671
E 2376257.004

1/4" 404/00

A-380

PROJECT

RVAAP: LLI/PHASE II R.I.

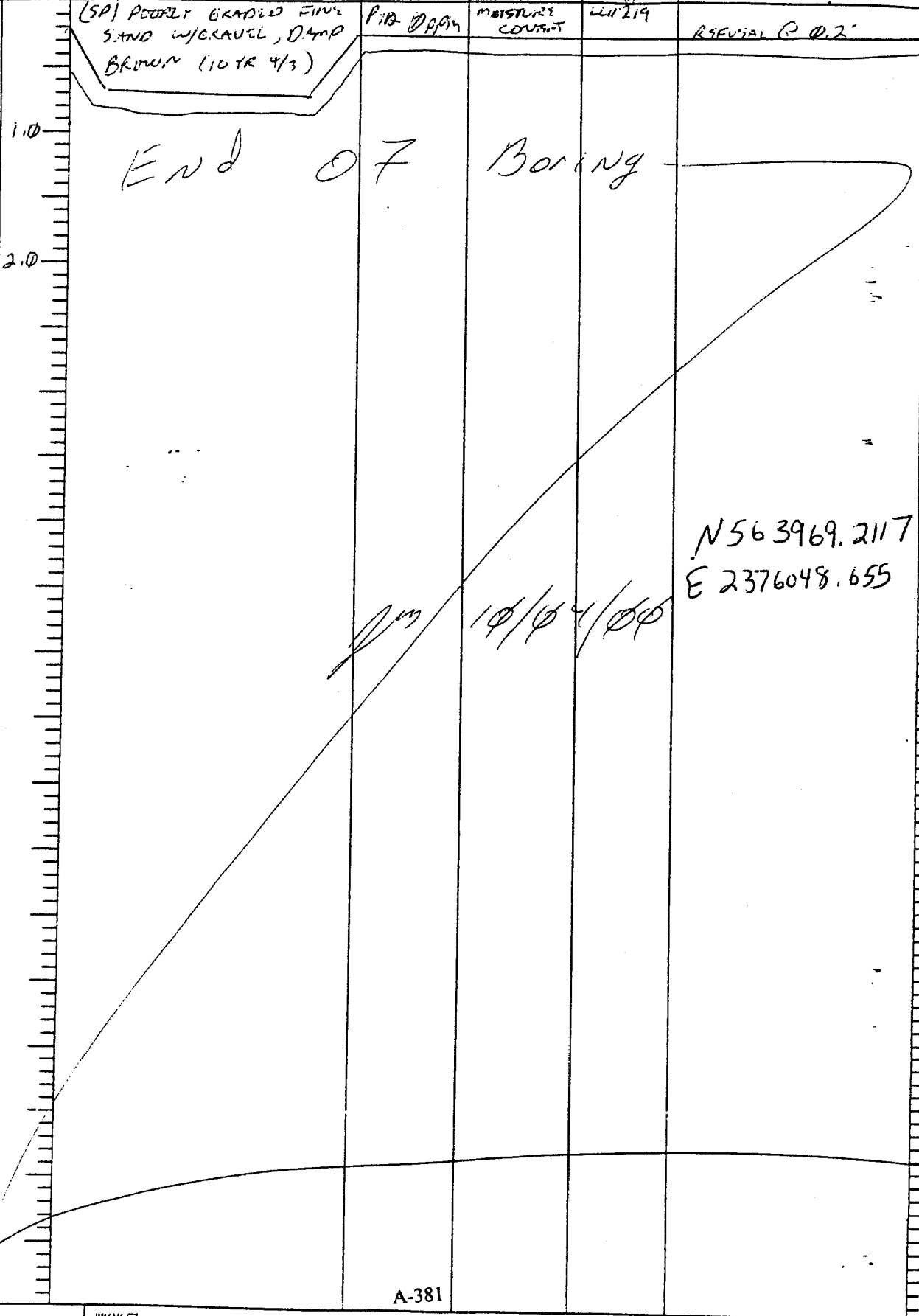
HOLE NO

LLI-369

DRILLING LOG

HOLE NUMBER
LLI-370
SHEET
2 OF 2

PROJECT
RVAAP: LLI / PHASE II A INSPECTOR M J ROBT

| DEPTH (ft) | DESCRIPTION OF MATERIALS (1) | FIELD SCREENING RESULTS (2) | GEO TECH SAMPLE OR CORE BOX NO (3) | ANALYTICAL SAMPLE NO (4) | REMARKS (5) |
|------------|---|-----------------------------|------------------------------------|--------------------------|--------------------------------|
| | (SP) POORLY GRADED FINE SAND W/ GRAVEL, DAMP BROWN (10 TR 4/3) | P10 DPM | MISTURE CONTROL | LLI 219 | REFUSAL @ 0.2' |
| 1.0 | END OF BORING | | | | |
| 2.0 |  | | | | |
| | | | | | N 563969.2117 E 2376048.655 |

A-381

PROJECT
RVAAP: LLI / PHASE II R. 1

HOLE NO
LLI-370

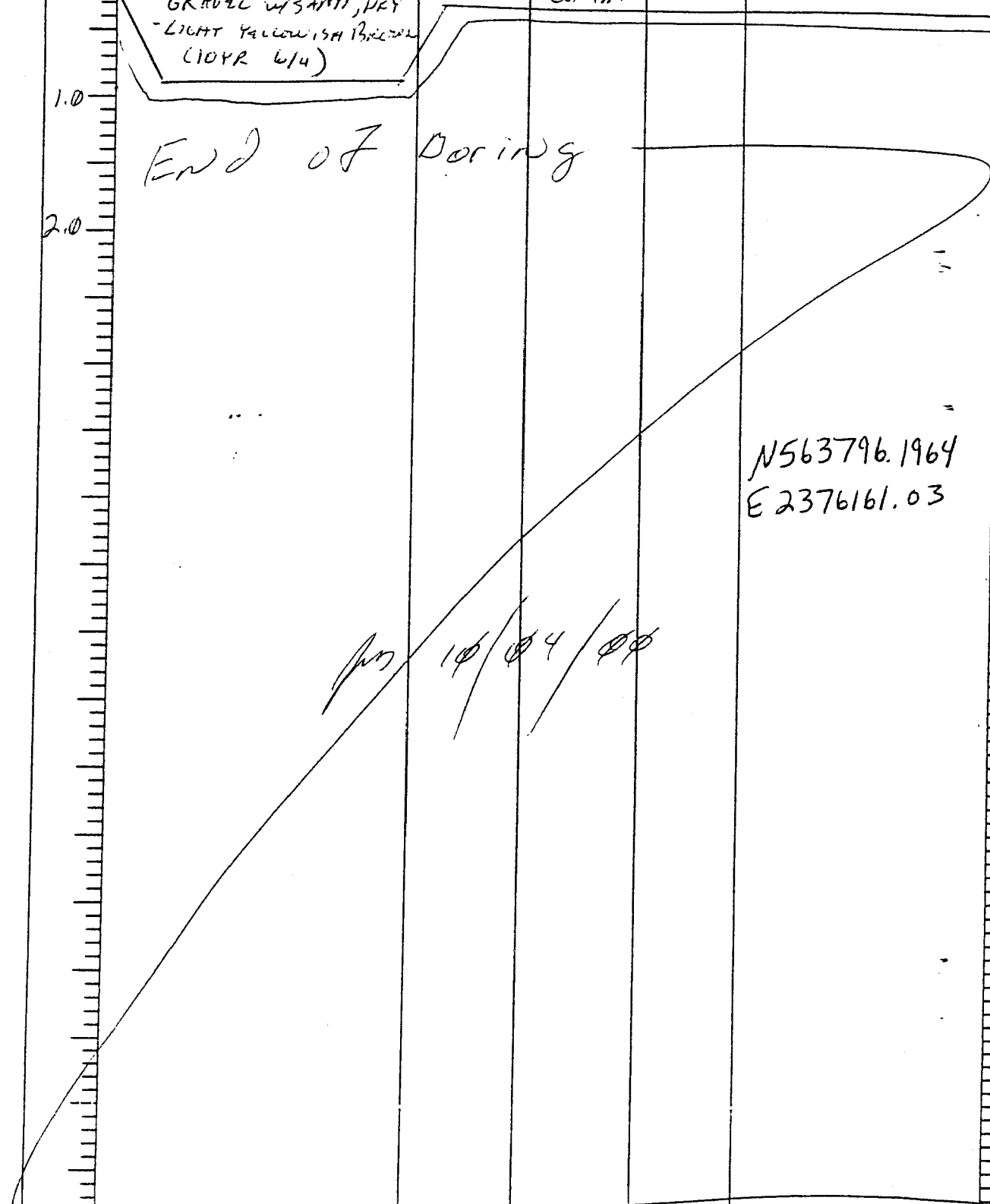
DRILLING LOG

HOLE NUMBER
LLI-371

PROJECT
RVAAP: LLI/PHASE II R.1

INSPECTOR
M. ROOT

SHEET
2 OF 2

| DEPTH (A) | DEPTH (Fe) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (B) | GEOTECH SAMPLE OR CORE BOX NO (D) | ANALYTICAL SAMPLE NO (E) | REMARKS (F) |
|-----------|------------|---|-----------------------------|-----------------------------------|--------------------------|-------------|
| | 0.0 | (GW) WELL GRADED SAND, D. 0.075mm GRAVEL W/ SAND, DRY - LIGHT YELLOWISH BROWN (10%R 6/4) | | MOISTURE CONTENT | LL1220 | |
| | 1.0 | END OF DRILLING | | | | |
| | 2.0 |  | | | | |
| | | <p>NS63796.1964</p> <p>E2376161.03</p> <p>Jan 10/04/00</p> | | | | |
| | | A-382 | | | | |

PROJECT

RVAAP: LLI/PHASE II R.1

HOLE NO

LLI-371

42

DRILLING LOG

HOLE NUMBER 221-372

PROJECT

RVAAP: LI / PHASE II R. 1.

INSPECTOR

A. J. ROOT

SHEET

2 OF 2

| ELEV (A) | DEPTH (FE) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (E) | GEOCHEM SAMPLE OR CORE BOX NO. (F) | ANALYTICAL SAMPLE NO. (G) | REMARKS (H) |
|----------|------------|--|-----------------------------|------------------------------------|---------------------------|--|
| | | (sm) SILTY SAND w/ GRAVEL - DRY - DARK YELLOWISH BROWN (104R 4/4) | PID- | MOISTURE CONTENT | LL1256 | REFUSAL @ 0.2' |
| 1.0 | | <p>END OF BORING</p> | | | | |
| 2.0 | | | | | | |
| | | | | | | <p>N 563698.2485</p> <p>E 2376214.05</p> <p>10/04/00</p> |
| | | | A-383 | | | |

PROJECT

RVAAP: LI / PHASE II R. 1.

HOLE NO

221-372

DRILLING LOG

HOLE NUMBER
221 373
SHEET
2 OF 2

PROJECT R V A A P : L L I / P H A S E I I R . 1
INSPECTOR M J R O O T

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|---|-----------------------------|-----------------------------------|--------------------------|---------------------------------------|
| | 1.0 | (SANDY (MH) SANDY ELASTIC SILT W/ GRAVEL - DAMP - DARK BROWN (OYR 3/3)) | P10 = 0 ppm | MOISTURE CONTENT | LI-1321 | No REFUSAL |
| | 2.0 | | | | | N565082 E 2376322 M 02-23-01 |

A-384

PROJECT R V A A P : L L I / P H A S E I I R . 1

HOLE NO 221-373

2/6

DRILLING LOG

HOLE NUMBER
221-375

PROJECT

RVAAP: LL1/PHASE II R.1

INSPECTOR
M. R. RICE

SHEET
2 OF 2

| ELEV (A) | DEPTH (Fe) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (E) | GEOLOGIC SAMPLE OR CORE BOX NO (D) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|------------|---|-----------------------------|------------------------------------|--------------------------|-------------------------------|
| | 1.0 | LL) LEAN CLAY w/ sand - DARK YELLOWISH BROWN (10%R 4/4) - DAMP | PID = 0.37% | MOISTURE CONTENT | LL1223 | NO REFUSAL |
| | 2.0 | END OF BORING | | | | |
| | | | | | | N563586.3082 E 2377059.602 |
| | | | | | | 10/04/00 |

A-386

PROJECT

RVAAP: LL1/PHASE II R.1

HOLE NO

221-375

DRILLING LOG

HOLE NUMBER
LLI-376

47

PROJECT

RVAH: LLI/PHASE II R.I.

INSPECTOR

M. ROET

SHEET
2 OF 3

| DEPTH (ft) | DESCRIPTION OF MATERIALS (1) | FIELD SCREENING RESULTS (2) | GEO TECH SAMPLE OR CORE BOX NO (3) | ANALYTICAL SAMPLE NO (4) | REMARKS (5) |
|------------|---|-----------------------------|------------------------------------|--------------------------|--------------------------------|
| 1.0 | LOW-GM) WELL GRADED ANGULAR GRAVEL w/SILT AND FINE SAND - DAMP - DARK YELLOWISH BROWN (10)R 4(4) | P10 | MOISTURE CONTENT | LL1255 | REFUSAL @ 0.6' |
| 3.0 | End of Boring | | | | |
| | | | | | N 563613.7385 E 2376953.214 |
| | | | | | Jan 10/04/08 |
| | | | | | A-387 |

PROJECT

RVAH: LLI/PHASE II R.I.

HOLE NO

LLI-376

DRILLING LOG

HOLE NUMBER 221-377

PROJECT RUAAP; LL1/PHASE II R.I.

INSPECTOR M. J. LESTER

SHEET 2 OF 2

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|--|-----------------------------|------------------------------------|--------------------------|-------------------------------|
| 1.0 | (CL) LEAN SILTY CLAY - DAMP - DARK YELLOWISH BROWN (10PR 4/6) | P.D. = 0.99m | MOISTURE CONTENT | LL1254 | REFUSAL @ 1.0' |
| 2.0 | End of Boring | | | | |
| | | | | | N 563520.8173 E 2377003.64 |
| | | P.M. | 10/04/00 | | |

A-388

PROJECT

RUAAP; LL1/PHASE II R.I.

HOLE NO

221-377

DRILLING LOG

HOLE NUMBER 227-378

PROJECT

RVAAP: LLI/PASS II R.1

INSPECTOR

M. ROOT

SHEET 2 OF 2

| DEPTH (FEET) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | GEOLOGIC SAMPLE OR CORE BOX NO (N) | ANALYTICAL SAMPLE NO (O) | REMARKS (P) |
|--------------|--|-----------------------------|------------------------------------|--------------------------|-------------|
| 1.0 | 6MH) ELASTIC SILT - BROWN (104R 4/3) | P.O. = 0.000 | MOISTURE CONTENT | LL11253 | no Refusal |
| 2.0 | <p>END OF Boring</p> <p style="text-align: right;">N 563546.9093 E 2376922.345</p> <p style="text-align: center;">10/24/00</p> | | | | |

A-389

PROJECT

RVAAP: LLI/PASS II R.1

HOLE NO

LLI-378

DRILLING LOG

INSTR. NUMBER
LLI-379

53

PROJECT

RVAAP/LLI/PHASE II R.1

INSPECTOR

M. ROOT

SHEET 2 OF 2

| ELEV (A) | DEPTH (B) (FEET) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|------------------|---|-----------------------------|-----------------------------------|--------------------------|-------------|
| | 1.0 | (MH) ELASTIC SILT - DRY - OLIVE BROWN (2.5Y 4/3) | P.D. = 0 ppm | MOISTURE CONTENT | LL11221 | NO REFUSAL |
| | 2.0 | End of Boring | | | | |
| | | | | | | |
| | | <p>N 563167.0126 E 2377291.635</p> <p>pm 10/04/00</p> | | | | |
| | | A-390 | | | | |

PROJECT

RVAAP/LLI/PHASE II R.1

HOLE NO

LLI-379

DRILLING LOG

HOLE NUMBER
LLI-380

PROJECT RVAAD LLI/PHASE II R¹ INSPECTOR M J ROBERTS SHEET 2 OF 2

| DEPTH (A) DEPTH (FE) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | GEOTECH SAMPLE OR CORE BOX NO (N) | ANALYTICAL SAMPLE NO (O) | REMARKS (Q) |
|-------------------------|---|-----------------------------|-----------------------------------|--------------------------|---|
| 1.0 | (MH) ELASTIC SILT W/FINE SAND - Damp - OLIVE BROWN (2.5Y 4/3) | P10-011A | MOISTURE CONTENT | LL1721 | NO REFUSAL |
| 2.0 | End of Boring | | | | N 563208.9186 E 2377180.61 5.5 2.230 |
| A-391 | | | | | |

PROJECT RVAAD LLI/PHASE II R¹

HOLE NO LLI-380

55

| DRILLING LOG | | | | | | WELL NUMBER 227-381 |
|-------------------------------------|---|-----------------------------------|---|---------------------------------|----------------|-------------------------------|
| PROJECT RVAAP: LI/PINSEL II R.I. | | INSPECTOR M.J. POTT | | SHEET 2 OF 2 | | |
| DEPTH (FT) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) | |
| 0.1 | (ML) FINE SAND; SILT w/ well graded GRAVEL, DUNE -DARK YELLOWISH BROWN (10YR 4/4) | PI0: 0.07 | MOISTURE CONTENT | LL1211 | REFUSAL 0.3' | |
| 0.2 | End of Boring | | | | | |
| | | | | | | N563072.2307 E 2377259.936 |
| | | | | | | 10/04/00 |
| | | | | | | A-392 |

PROJECT RVAAP; LI/PINSEL II R.I.

HOLE NO 227-381

56

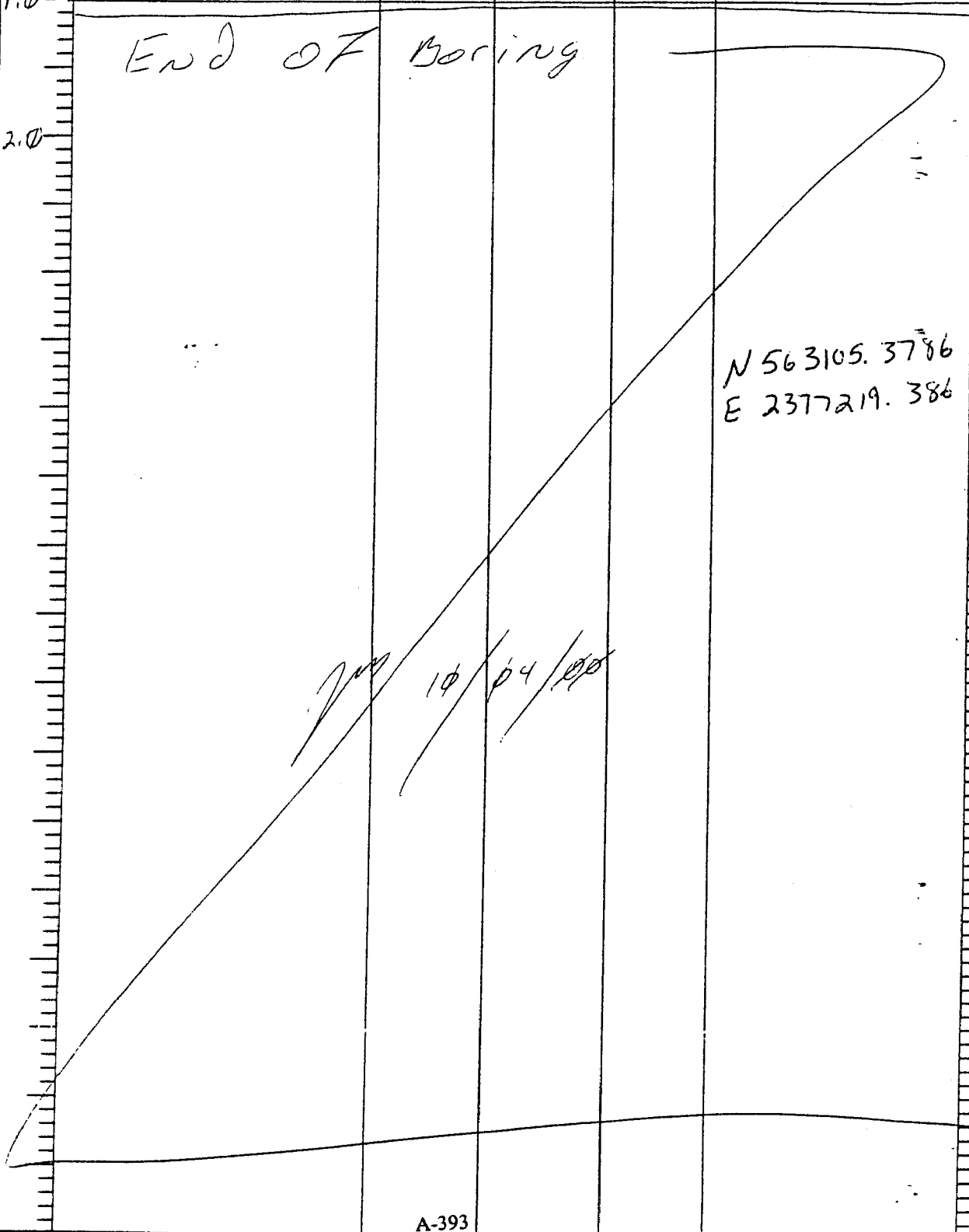
DRILLING LOG

HOLE NUMBER
LLI-382

PROJECT
RVAAP: LLI/PHASE II R.1.

INSPECTOR
M. ROBT

SHEET
2 OF 2

| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|---|-----------------------------|------------------------------------|--------------------------|-------------|
| 1.0 | (MH) ELASTIC SILT - DAMP - YELLOWISH BROWN (10YR 5/4) | P10-D 114 | MOISTURE CONTENT | LL1 | NO REFUSAL |
| 2.0 | <p>END OF Boring</p>  <p style="text-align: right; margin-right: 10%;">N 563105. 3786 E 2377219. 386</p> <p style="text-align: center; font-size: 2em; opacity: 0.5;">10/04/00</p> | | | | |

A-393

PROJECT
RVAAP: LLI/PHASE II R.1.

HOLE NO
LLI-382

DRILLING LOG

TRNJ. NUMBER
221-383

5

PROJECT RVAAP Phase II RI

INSPECTOR P. ESCOBAR

SHEET 1 of 1

| HLY (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|---------|-----------|--|-----------------------------|-----------------------------------|---|--|
| | 0.5 | (SM) Silty Sand with fine gravel, damp, Brown (104R 4/3) | SM | | LL1234 collected for Mechls, Finel, Fin/200, Gravel | Collected @ 1635 TD = 0.5' on 9/28/00 |
| | 1.0 | R = bowl @ 0.5' | | | | |
| | 2.0 | | | | | |
| | | | | | | N561887 E 2377155 1/2 23301 |

A-394

PROJECT RVAAP Phase II RI

HOLE NO LL1-383

DRILLING LOG

PROJECT RVAAP Phase II RE

INSPECTOR P. YESCONIS

HOLE NUMBER LL1-384

SHEET 1 of 1

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|---|-----------------------------|-----------------------------------|--------------------------|---|
| | | s.m. silty sand, little gravel, damp, brown (104R 4/3) Retoxed @ 0.3' | SM | | LL1220 | Collected @ 1440 T.D.C. on 4/28/00 |
| | | | | | | N 561861. 3168 E 2377184. 666 X = 230 |

A-395

PROJECT

RVAAP Phase II RE

HOLE NO

LL1-384

4

DRILLING LOG

11

| PROJECT RVAAD Phase II RE | | INSPECTOR P. YESCOMIS | | | | HOLE NUMBER LL1-385 |
|--|--|-----------------------------------|---|--|---|------------------------|
| DEPTH (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (M) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (D) | |
| <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">0.9</div> <div style="margin-bottom: 10px;">1.0</div> <div style="margin-bottom: 10px;">2.0</div> <div style="margin-bottom: 10px;">3.0</div> </div> | <p>(5m) Sandy silt with gravel, damp, very dark brown (101R 2/2)</p> | <p>SM</p> | | <p>LL11237 (D) LL11278 (D) (p) LL11225 (Spl #) incl. F, M, H TNF/DXF, Geotech.</p> | <p>collected @ 1525</p> | |
| | <p>Retrial @ 0.9'</p> | | | | <p>TD = 0.9' on 4/28/06</p> | |
| | | | | | <p>N562091.638 E 2377264.108 1" 2/20/06</p> | |

A-396

PROJECT
RVAAD Phase II RE

HOLE NO
LL1-385

DRILLING LOG

HOLE NUMBER
LLI-386

PROJECT
RVAAP Phase II RI

INSPECTOR
P. YESSONIS

SHEET
1 of 1

| DEPTH (ft) | DESCRIPTION OF MATERIALS (1) | FIELD SCREENING RESULTS (2) | GEOTECH SAMPLE OR CORE BOX NO (3) | ANALYTICAL SAMPLE NO (4) | REMARKS (5) |
|------------|--|-----------------------------|-----------------------------------|---|--|
| 0.5 | (5m) Silty Sands with gravels, damp, very dark grayish brown (10R 3/2) | SM | | LL 11229 for metal, 200 R.O., 2 Metals Geotech | (Broken glass in sample) Collected @ 1710 FD - 0.5' on 7/28/00 |
| 1.0 | Retusal @ 0.5' | | | | |
| 1.5 | | | | | |
| 2.0 | | | | | |
| 2.5 | | | | | |
| 3.0 | | | | | |
| 3.5 | | | | | |
| 4.0 | | | | | |
| 4.5 | | | | | |
| 5.0 | | | | | |
| 5.5 | | | | | |
| 6.0 | | | | | |
| 6.5 | | | | | |
| 7.0 | | | | | |
| 7.5 | | | | | |
| 8.0 | | | | | |
| 8.5 | | | | | |
| 9.0 | | | | | |
| 9.5 | | | | | |
| 10.0 | | | | | |
| 10.5 | | | | | |

N 562143.8304
E 2377066.826
N 203-1

A-397

PROJECT
RVAAP Phase II RI

HOLE NO
LLI-386

DRILLING LOG

INSTR. NUMBER
LLI-387
SHEET
1 of 1

18

PROJECT
RVAMP Phase II RI

INSPECTOR
D. Yezunis

| DEPTH (ft) | DESCRIPTION OF MATERIALS (c) | FIELD SCREENING RESULTS (d) | GEOCHEM SAMPLE OR CORE BOX NO (e) | ANALYTICAL SAMPLING NO (f) | REMARKS (g) |
|------------|---|-----------------------------|-----------------------------------|---|---|
| 0-5 | (5m) Silty sand with gravel, damp, very dark grayish brown (10YR 3/2) | SM | | LL11251 metals, F, metals TNT/ROX, grain | Collect Sample @ 0850 See Page 10 for map TD - 1.0 on 7/29/00 |
| | | | | | <p style="text-align: right;">NS6228.9826 E 2377021.899 M 2/23/01</p> |

A-398

PROJECT
RVAMP Phase II RI

HOLE NO
LLI-387

DRILLING LOG

28

| PROJECT RVAAP Phase II RI | | DIAMETER PYESCONIS | | | HOLE NUMBER LL1-388 |
|------------------------------|---|-----------------------------------|---|--|---|
| DEPTH (ft) | DESCRIPTION OF MATERIALS (1) | FIELD SCREENING RESULTS (2) | GEOCHEM SAMPLE OR CORE BOX NO (3) | ANALYTICAL SAMPLE NO (4) | REMARKS (5) |
| 0.5' | (Gm) Silty Gravel with sand, Damp, very dark grayish brown (10yr 3/2) | GM | | U1-1306 Metals, F. metals TNT/RDX, gutech | Collected Sample @ 1432 TD - 0.8' on 7/24/00 |
| 1.0' | Retox 1 @ 0.8' | | | | |
| 2.0' | | | | | |
| 3.0' | | | | | <p style="font-size: 1.5em; margin: 0;">N561785.5044</p> <p style="font-size: 1.5em; margin: 0;">E 2377327.702</p> <p style="font-size: 0.8em; margin: 0;">A 012300</p> |

A-399

PROJECT

RVAAP Phase II RI

HOLE NO

LL1-388

DRILLING LOG

32

PROJECT RVAAP Phase II RI

INSPECTOR P. YESCONIS

HOLE NUMBER LLI-389

SHEET 10F1

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLING NO (F) | REMARKS (G) |
|----------|-----------|---|-----------------------------|-----------------------------------|------------------------------------|---|
| | | (ML) Sandy silt with clay and gravel, damp, very dark grayish brown (2.5/3/2) | ML | | Metals, F. Metals TNT/RDX Geotech. | Collected Sample @ 1450 WI-1307 TD - 0.2' 9/29/00 |
| | | Refusal @ 0.2' | | | | |
| | | | | | | NS61681.0917 E 2377363-953 10 027701 |

A-400

PROJECT RVAAP Phase II RI

HOLE NO LLI-389

DRILLING LOG

HOLE NUMBER
LL1-390

33

PROJECT
RVAAD Phase II RE

INSPECTOR
P. YESCUNIS

SHEET
1 of 1

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-------------|--------------|--|-----------------------------------|---|--|--|
| | | ML Silt with clay and fine sand, loose; yellowish brown (D ₅₀ 5/4) | ML | | Metl, F, Metals TNT/ROX, geotech | Collect sample @ 1528 LL1308 -D.O.C. 4/24/02 |
| | | Rebore @ 0.6' | | | | <p>N 561495.6149 E 2377476.378 L 162730'</p> |

A-401

PROJECT
RVAAD Phase II RE

HOLE NO
LL1-390

DRILLING LOG

HOLE NUMBER
LLI-401

20

PROJECT

KVAAP: LLI/PHASE II R. 1.

INSPECTOR

M. J. ROET

SHEET

2 OF 2

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|---|-----------------------------|-----------------------------------|--------------------------|---|
| | 0.1 | (0.0-0.1M) WELL GRADED ANGULAR GRAVEL W/ SILT AND SAND - DAMP - DARK OLIVE BROWN (2.54 3/3) | Pin: 0.07m | MOISTURE CONTENT | LL1/218 | NO REFUSAL |
| | 0.2 | END OF BORING | | | | |
| | | | | | | <p>N 56228.3935 E 2375733.683</p> <p>10/04/04</p> |

A-402

PROJECT

KVAAP: LLI/PHASE II R. 1.

HOLE NO

LLI-401

DRILLING LOG

HOLE NUMBER
LLI-402

PROJECT RVAAP: LLI/PHASE II R.I.

INSPECTOR M. ROOT

SHEET 2 OF 2

DEPTH (ft)

DEPTH (ft)

DESCRIPTION OF MATERIALS (c)

FIELD SCREENING RESULTS (d)

GEOTECH SAMPLE OR CORE BOX NO (e)

ANALYTICAL SAMPLE NO (f)

REMARKS (g)

1.0

(CH) SANDY FAT CLAY
- DAMP
- DARK BROWN
(10YR 3/3)

PID 0PPM

MOISTURE CONTENT

LLI-1318

NO REFUSAL

2.0

End of Boring

N 565172.9817
E 2375854.953

~~10 1/4" / 10 1/4" / 10 1/4"~~

A-403

PROJECT

RVAAP: LLI/PHASE II R.I.

HOLE NO

LLI-402

DRILLING LOG

HOLE NUMBER LLI-403

102

PROJECT

RVAAP: LLI/PHASE II R.I.

INSPECTOR

M. ROOT

SHEET

2 OF 2

DEPTH (ft)

(ft)

DESCRIPTION OF MATERIALS (c)

FIELD SCREENING RESULTS (d)

GEO TECH SAMPLE OR CORE BOX NO (e)

ANALYTICAL SAMPLE NO (f)

REMARKS (g)

(BP-5m) POORLY GRADED MED. GRAINED SAND W/SILT AND GRAVEL DARK BROWN (104R 3/3)

1.0 ppm

MOISTURE CONTENT

LLI 1319

NO REFUSAL

END OF BORING

N56516.7
E 2375904

10/04/00

A-404

PROJECT RVAAP: LLI/PHASE II R.I.

HOLE NO

LLI-403

DRILLING LOG

63

| PROJECT | | INSPECTOR | | | HOLE NUMBER | |
|----------------------------|-----------|---|-----------------------------|-----------------------------------|--------------------------|----------------------|
| RVAAP: LLI / PHASE II R.1. | | M. ROOT | | | LLI-404 | |
| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
| | 0-1.0 | (CL) LEAN SILTY CLAY W/ GRAVEL, DAMP DARK YELLOWISH BROWN (10YR 4/4) | R10 OPM | MOISTURE CONTENT | LL1320 | |
| | 1.0-2.0 | NO REFUSAL | | | | |
| | 2.0 | END OF BORING | | | | |
| | | | | | | N565324 E 2375880 |
| | | | | | | PM 10/04/04 |
| | | | | | | A-405 |

PROJECT

RVAAP: LLI / PHASE II R.1.

HOLE NO

LLI-404

DRILLING LOG

HOLE NUMBER
LLI-405
SHEET
2 OF 2

47

PROJECT RVAAP: LLI/PHASE II R. I.

INSPECTOR M. J. ROOT

| DEPTH (ft) (A) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------------|--|-----------------------------|-----------------------------------|--------------------------|-----------------------------------|
| 1.0 | (CL) LEAN SILTY CLAY VERY DARK BROWN (10YR 2/2) -DAMP | PI0 = 0 ppm | MOISTURE CONTENT | LLI 1217 | NO REFUSAL |
| 2.0 | | | | | N564553 E 2376217 M 6323-01 |

A-406

PROJECT RVAAP: LLI/PHASE II R. I.

HOLE NO LLI-405

61

DRILLING LOG

HOLE NUMBER
LLI-406
SHEET
1 of 1

PROJECT
RVAAP Phase II

INSPECTOR
Eric F. Martin

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-------------|--------------|--|-----------------------------------|---|--------------------------------|--|
| | 3 | silt w/ gravel very dark grey brown 10 yr 3/2 | PID = NP | | 641249 | large plates of sandstone |
| | 7 | sandy silt yellowish brown 10 yr 5/6 | | | | |
| | | | | | | N 562756.7209 E 2376850.867 327201 |

A-407

PROJECT
RVAAP Phase II

HOLE NO
LLI-406

DRILLING LOG

| PROJECT RVAAP LLI Phase II | | | | INSPECTOR Eric E. Martin | | HOLE NUMBER LLI-407 | |
|----------------------------|-----------|---|-----------------------------|-----------------------------------|--------------------------|---|--|
| | | | | | | SHEET 1 of 1 | |
| LLV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) | |
| | 2 | silt w/ gravel very dark gray brown 10 yr 3/2 | PID=NR | | LL11248 | Large gravel on top | |
| | 10 | elastic silt yellow brown 10 yr 5/6 | | | | TD 11' | |
| | | | | | | N 562732.3392 E 2376819.039 53° 23' 01" | |

110

A-408

PROJECT

RVAAP LLI Phase II

HOLE NO

LLI-407

63

DRILLING LOG

HOLE NUMBER LL1-408
SHEET 1 of 1

PROJECT RUAAP LL1 - Phase II RI

INSPECTOR E. Martin

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|-----------|-----------|------------------------------|-----------------------------|-----------------------------------|--------------------------|-------------------------------|
| | 2 | Silt brown 10 YR 3/2 | FDNR | | 7 | refusal @ rock |
| | | | | | | N 561822.838 E 2372417.153 |

A-409

PROJECT RUAAP LL1 Phase II RI

HOLE NO LL1-408

62

DRILLING LOG

HOLE NUMBER
LLI-408
SHEET
1 of 1

PROJECT

INSPECTOR

| ELEV. (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|---|--------------|---------------------------------|-----------------------------------|--|---------------------------------|----------------|
| <p>VOID</p> <p><i>mc</i></p> <p>N 561822.838 E 2377417.153 <i>1/1 02/22/01</i></p> | | | | | | |

PROJECT

A-410

HOLE NO

LLI-408

DRILLING LOG

HOLE NUMBER
LLI-409
SHEET
16fl

PROJECT
RVAAP Phase II RI

INSPECTOR
P. Y. Escobedo

| DEPTH (ft) | DESCRIPTION OF MATERIALS (c) | FIELD SCREENING RESULTS (m) | GEO TECH SAMPLE OR CORE BOX NO (b) | ANALYTICAL SAMPLE NO (f) | REMARKS (d) |
|------------|---|-----------------------------|------------------------------------|--|---|
| | (GM) Gravels with sand and silt, damp, very dark grayish brown (2.5y 3/2) Refusal @ 0.4' | GM | | LL11209 Voc, succ, metals up side, F. and metals geotech | Collected Sample @ 1410 (Gravel & silt mix) TO-154 on 9/24/00 |
| | | | | | N561951.497 E 2377393.259 R 2-23-01 |

A-411

PROJECT
RVAAP Phase II RI

HOLE NO
LLI-409

DRILLING LOG

ENGINE NUMBER
LLI-410

26

PROJECT
RVAAAP Phase II

INSPECTOR
P. YEDEONIS

SHEET
1 of

| HLLV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|------------------------------------|--|--|
| | | (6M) Gravels with sand and silt, damp. very dark grayish brown (SY 3/2), Gravel & sley mix | GM | | LL11228 metal, F. Metal TNT/ROX Geotech | Collected sample @ 1345 TD: 0.3 on 9/24/00 |
| | | Retest @ 0.3' | | | | |
| | | | | | | <p>N 561885.1849</p> <p>E 2377272.932</p> <p>At 202001</p> |

A-412

PROJECT
RVAAAP Phase II RE

HOLE NO
LLI-410

DRILLING LOG

HOLE NUMBER
LLI-411
SHEET
1, 2

35

PROJECT RVAMP Phase II RI

INSPECTOR P. ESCOBAR

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|-----------------------------------|--|--|
| | | (MH) Silt with clay, moist, (moist) matrix bluish gray (10B61) with strong brown (7.5YR 5/4) | MH | | Metals F. Metals TNT/ROX Gravel | Collect sample @ 16.25 LI-1310 FD 66 7/24/66 |
| | | | | | | <p>N 561957.7935 E 2377513.323 0277-01</p> |

A-413

PROJECT RVAMP Phase II RI

HOLE NO LLI-411

DRILLING LOG

HOLE NUMBER
LLI-412
SHEET
1 of 1

34

PROJECT RVAAP Phase II RI

INSPECTOR P. YESCONIS

| DEPTH (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEO TECH SAMPLE OR CORE BOX NO. (E) | ANALYTICAL SAMPLE NO. (F) | REMARKS (G) |
|-----------|-----------|---|-----------------------------|-------------------------------------|-----------------------------------|--|
| | | (ML) Silt with sand, damp. Olive brown (2.57 4/3) | ML | | Mtels, F, Metals TNT/RDX, Geotech | Collect sample @ 1605 U-1309 TO 0.2' 1/24/00 |
| | | Refusal @ 0.2' in all tubes | | | | (Possible concrete pile) |
| | | | | | | N 561859.2745 E 2377550.175 1/2 0223-01 |

A-414

PROJECT RVAAP Phase II RI

HOLE NO LLI-412

DRILLING LOG

HOLE NUMBER
LLI 413
SHEET
2 OF 2

PROJECT
RVAAP: LLI/PHASE II R.I.
INSPECTOR
M. ROOT

| DEPTH (A) (ft) | DEPTH (B) (ft) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOLOGIC SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------------------|----------------------|--|-----------------------------------|--|--------------------------------|---|
| | | (CL) SILTY CLAY w/ SAND - DAMP - DARK BROWN (10 IR 3/3) | PID= | MOISTURE | LLI 1323 | N564550 E 2375973 LR OK 3/3/01 |

A-415

PROJECT

HOLE NO

LLI-413

DRILLING LOG

HOLE NUMBER **LLI-0414**

68

PROJECT **RVAAP Phase # RT**

INSPECTOR **M. Clough**

SHEET **1 of 1**

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|------------------------------|-----------------------------|-----------------------------------|--------------------------|---|
| | | Silt | | | | |
| | 1.0 | End of boring | | | | |
| | | | | A-416 | | <p>N 564019</p> <p>E 2376010</p> <p>LL 022301</p> |

PROJECT **RVAAP LLI Phase # RT**

HOLE NO **LLI-0414**

DRILLING LOG

HOLE NUMBER ^{MLC} B LLI-4415 67
SHEET 2 of 2

PROJECT RVAAP LLI - Phase II RI

INSPECTOR M. Clough

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOCHEM SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|------------------------------|-----------------------------|-----------------------------------|--------------------------|---|
| | | Silt | P.D. = NR | M. moisture content | | |
| | 1.0 | End of Boring | | | | |
| | | | | | | N 563878. 3977 E 2376251. 181 N.Y. 01-2301 |

A-417

PROJECT RVAAP LLI - Phase II RI

HOLE NO 111-4415

DRILLING LOG

PROJECT: **RVAAP: LI/PHASE II R. 1.** INSPECTOR: **M. Clancy** HOLE NUMBER: **416, 417, 418, 419** 98
 SHEET: **1 of 1**

| DEPTH (ft) | DEPTH (m) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|------------|-----------|--|-----------------------------|-----------------------------------|--------------------------|---|
| | 0 | LLI-418 (ML) SILT w/SAND BROWN (10YR 4/3) -DRY | | | | N 563540 E 2376779 NO REFUSAL |
| | 1.0 | LLI-417 (ML) SANDY SILT w/GRAVEL VERY DARK GRAYISH BROWN (10YR 3/2) | | | | N 563579 E 2376708 REFUSAL @ 0.6' |
| | 1.0 | LLI-419 (ML) SILT w/SAND -DRY, FINE SAND BROWN (10YR 4/3) | | | | N 563199 E 2376599 NO REFUSAL |
| | 1.0 | LLI-416 (MH) ELASTIC SILT w/SAND -DAMP 0.4' - 0.4' - DARK BROWN (10YR 3/2) 0.4' - 1.0' - BROWN (10YR 4/3) | | | | N 563618 E 2378026 NO REFUSAL |

13/24
10/05/09

A-418

DRILLING LOG

420 + 421
 HOLE NUMBER
 LL1-420 + 421
 SHEET
 1 of 1

97

PROJECT
 RVAAP LL1 Phase II RI

INSPECTOR
 M. Clough

| ELEV (A) | DEPTH (B) | DESCRIPTION OF MATERIALS (C) | FIELD SCREENING RESULTS (D) | GEOTECH SAMPLE OR CORE BOX NO (E) | ANALYTICAL SAMPLE NO (F) | REMARKS (G) |
|----------|-----------|--|-----------------------------|-----------------------------------|--------------------------|--|
| | | LLI-419 420 SRA 3/26/01 Ballast | | | | N 564736.4111 E 2375684.747 12 02-23-01 |
| 2.0 | 23 | Sand and Gravel, trace silt, loose, slightly moist 10-12 1/4 dk. yellowish brown | | | | |
| | | LLI-418 421 SRA 3/26/01 Ballast | | | | N 564711.4916 E 2375696.908 12 02-23-01 |
| | 2.4 | Same as LLI-420 | | | | |

A-419

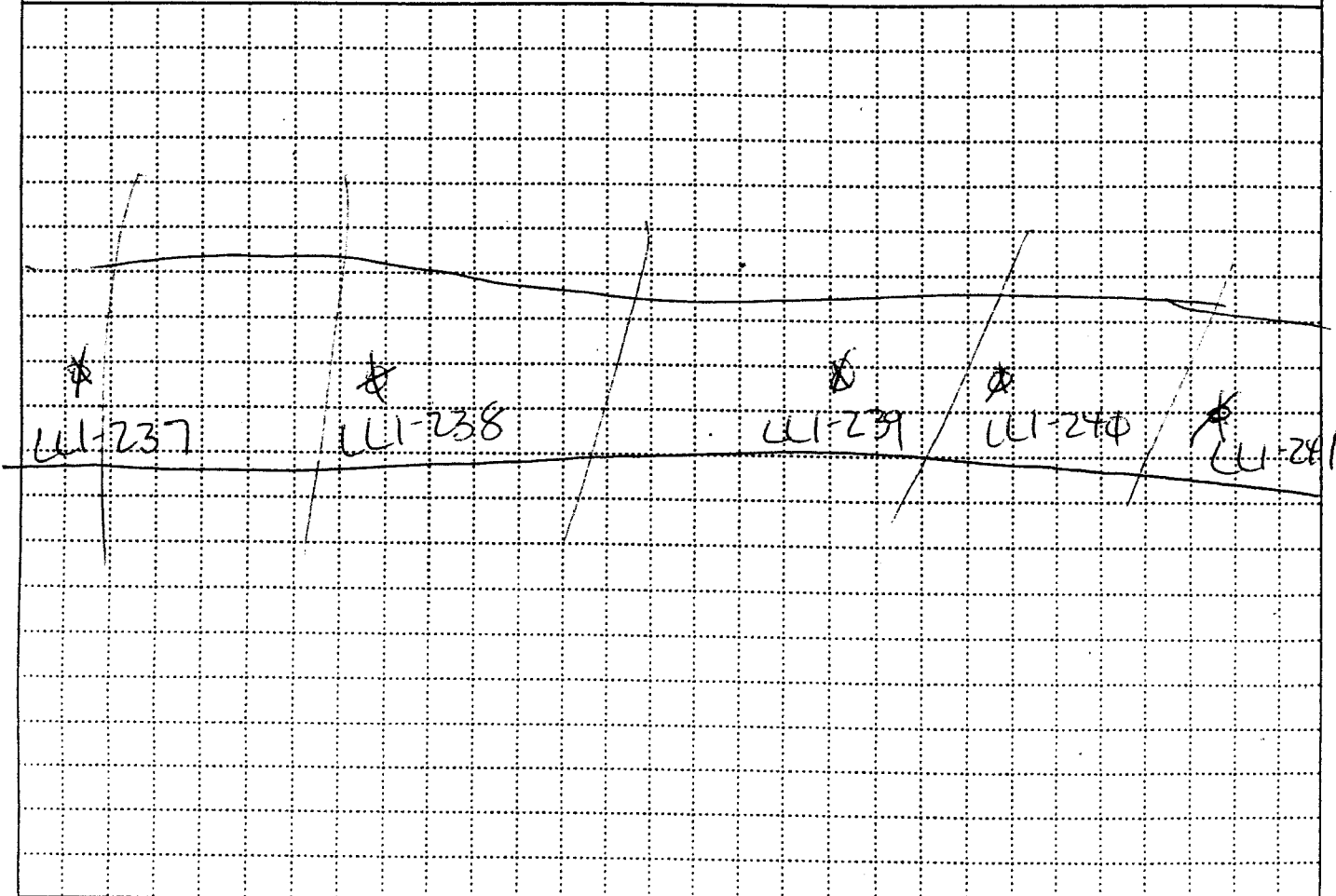
PROJECT
 RVAAP LL1-Phase II RI

HOLE NO
 LL1-420 + 421

| | | | | | |
|--|--|---|--|---|-------------------------|
| HTRW DRILLING LOG | | DISTRICT <i>Louisville COE</i> | | HOLE NUMBER <i>LLI 241, 240, 239, 238, 237</i> | |
| 1. COMPANY NAME <i>SAIC</i> | | 2. DRILL SUBCONTRACTOR <i>NA</i> | | SHEET SHEETS <i>1 OF 1</i> | |
| 3. PROJECT <i>RVAAP LLI - Phase II RI</i> | | | 4. LOCATION <i>LL-1</i> | | |
| 5. NAME OF DRILLER <i>NA</i> | | | 6. MANUFACTURERS DESIGNATION OF DRILL <i>NA</i> | | |
| 7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>55 Bowt, Spoon Auger</i> | | 8. HOLE LOCATION <i>Old RR Tracks</i> | | 9. SURFACE ELEVATION <i>NA</i> | |
| 12. OVERBURDEN THICKNESS <i>NA</i> | | 10. DATE STARTED <i>10/3/00</i> | | 11. DATE COMPLETED <i>10/3/00</i> | |
| 13. DEPTH DRILLED INTO ROCK <i>NA</i> | | 15. DEPTH GROUNDWATER ENCOUNTERED <i>NA</i> | | 16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i> | |
| 14. TOTAL DEPTH OF HOLE <i>See logs</i> | | 17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i> | | | |
| 18. GEOTECHNICAL SAMPLES | | DISTURBED | UNDISTURBED | 19. TOTAL NUMBER OF CORE BOXES <i>NA</i> | |
| 20. SAMPLES FOR CHEMICAL ANALYSIS | | VOC | METALS | OTHER (SPECIFY) | OTHER (SPECIFY) |
| | | | <i>X</i> | <i>EXP</i> | <i>PROP</i> |
| 22. DISPOSITION OF HOLE | | BACKFILLED | MONITORING WELL | OTHER (SPECIFY) | 21. TOTAL CORE RECOVERY |
| <i>UB Bentonite</i> | | | | | |
| 23. SIGNATURE OF INSPECTOR <i>M. Clough</i> | | | | | |

LOCATION SKETCH/COMMENTS

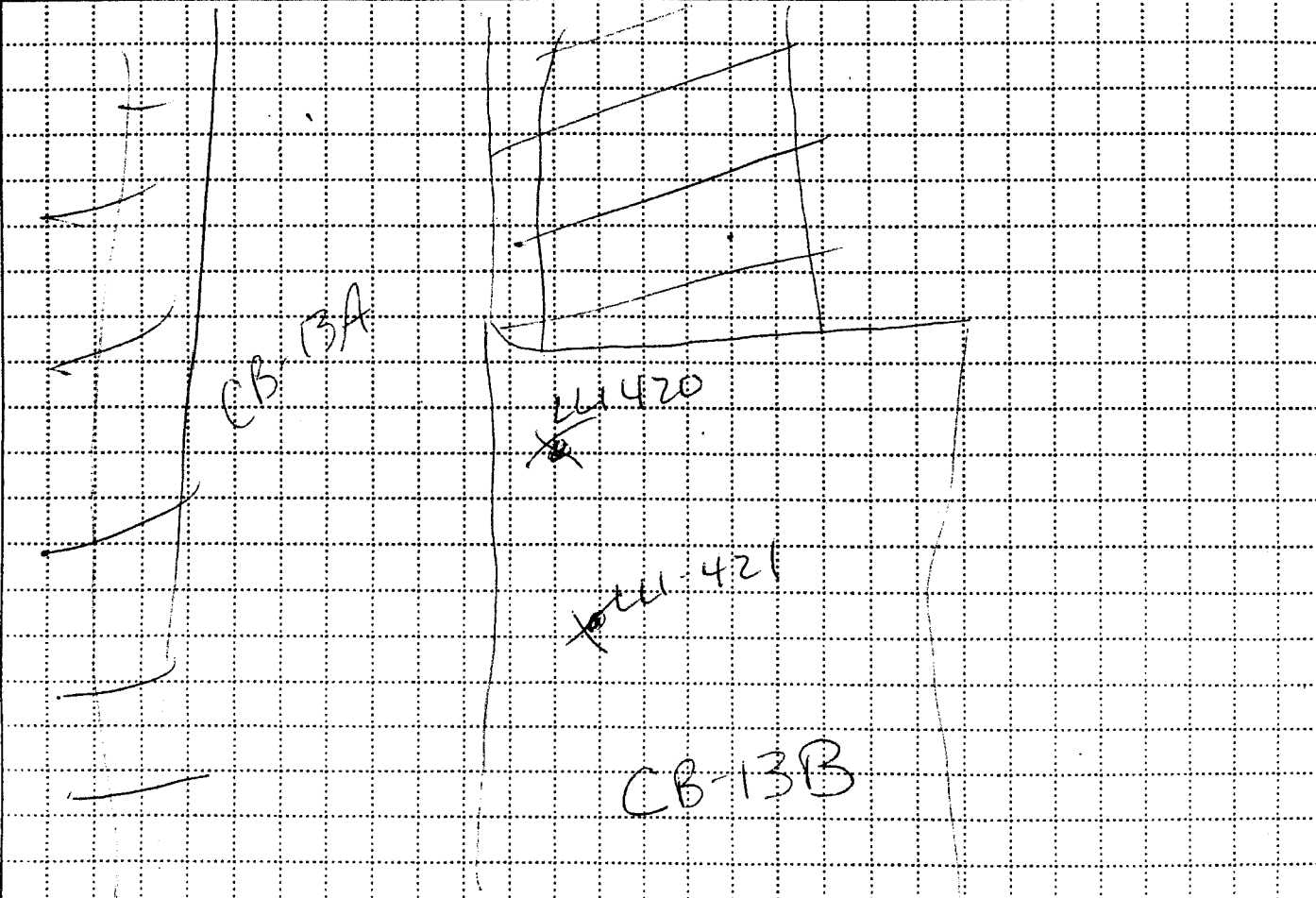
SCALE: *Not to Scale*



| | | | |
|---|--|--|--|
| PROJECT <i>RVAAP LLI - Phase II RI</i> | | HOLE NO. <i>LLI - 241, 240, 239, 238, 237</i> | |
|---|--|--|--|

| | | | | | |
|---|--|---|--|---|--|
| HTRW DRILLING LOG | | DISTRICT <i>Louisville COE</i> | | HOLE NUMBER <i>420,421</i> | |
| 1 COMPANY NAME <i>SAIC</i> | | 2 DRILL SUBCONTRACTOR | | SHEET SHEETS <i>1 of 1</i> | |
| 3 PROJECT <i>RUAAP LL-1 Phase II RI</i> | | | 4 LOCATION <i>LL-1</i> | | |
| 5 NAME OF DRILLER <i>NA</i> | | | 6. MANUFACTURERS DESIGNATION OF DRILL <i>NA</i> | | |
| 7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>SS Bowl, Spoon</i> | | 8. HOLE LOCATION <i>Inside CB-13B</i> | | | |
| | | 9 SURFACE ELEVATION <i>NA</i> | | | |
| | | 10. DATE STARTED <i>10/3/00</i> | | 11. DATE COMPLETED <i>10/3/00</i> | |
| 12. OVERBURDEN THICKNESS <i>NA</i> | | 15. DEPTH GROUNDWATER ENCOUNTERED <i>NA</i> | | | |
| 13. DEPTH DRILLED INTO ROCK <i>NA</i> | | 16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i> | | | |
| 14 TOTAL DEPTH OF HOLE <i>SBC Log</i> | | 17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i> | | | |
| 18 GEOTECHNICAL SAMPLES | | DISTURBED | | UNDISTURBED | |
| | | | | 19. TOTAL NUMBER OF CORE BOXES <i>NA</i> | |
| 20. SAMPLES FOR CHEMICAL ANALYSIS | | VOC | METALS | OTHER (SPECIFY) | OTHER (SPECIFY) |
| | | | <i>X</i> | <i>EXP</i> | <i>PROP</i> |
| 22. DISPOSITION OF HOLE | | BACKFILLED | MONITORING WELL | OTHER (SPECIFY) | 21. TOTAL CORE RECOVERY % |
| | | | | | |
| | | | | | 23. SIGNATURE OF INSPECTOR <i>M. Clough</i> |

LOCATION SKETCH/COMMENTS: SCALE: *Not to Scale*



| | | | |
|--|--|----------------------------|--|
| PROJECT <i>RUAAP Phase II RI LL-1</i> | | HOLE NO <i>420, 421</i> | |
|--|--|----------------------------|--|

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