

**APPENDIX O**  
**ORDNANCE AND EXPLOSIVES**  
**AVOIDANCE SURVEY REPORT**

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**FINAL**

**UNEXPLODED ORDNANCE AVOIDANCE REPORT  
FOR THE  
PHASE II REMEDIAL INVESTIGATION  
OF  
LOAD LINES 2, 3, AND 4  
AT THE  
RAVENNA ARMY AMMUNITION PLANT,  
RAVENNA, OHIO**

**October 2001**

**Prepared for**

**U.S. Army Corps of Engineers  
Louisville District  
Contract No. F44650-99-D-0007  
Delivery Order No. CY01**

**Prepared by**

**EXPLOSIVE ORDNANCE TECHNOLOGIES, INC.  
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Rumson, New Jersey 07760**

**and**

**SCIENCE APPLICATIONS INTERNATIONAL CORPORATION  
151 Lafayette Drive, P.O. Box 2501  
Oak Ridge, Tennessee 37831**

**FINAL REPORT**

**Unexploded Ordnance Support Services  
Phase II Remedial Investigation  
Load Line 3  
Ravenna Army Ammunition Plant  
Ravenna, Ohio**

**FINAL REPORT  
RAVENNA ARMY AMMUNITION PLANT  
LOAD LINE 3  
RAVENNA, OHIO**

**1.0 INTRODUCTION**

**1.1 Project Authorization**

Explosive Ordnance Technologies Incorporated (EOTI), was contracted by Science Applications International Corporation (SAIC), to provide standard Ordnance Avoidance and Site Safety services for the Load Line 3 Remedial Investigation. The project commenced with mobilization of personnel on July 22nd, 2001. The following report contains a brief description of events and operational procedures used during the project.

The Load Line 3 project was completed as a portion of the larger Remedial Investigation of Load Lines 2,3, and 4. Although mobilization commenced on 22 July, the majority of the UXO support for Load Line 3 was conducted between 6 August and 21 August, 2001.

**1.2 Objectives**

The purpose of the project was to provide Ordnance and Explosive Safety support for SAIC and subcontractors during well drilling and soil sampling efforts. Specifically, the following tasks were to be completed:

1. Provide daily ordnance/explosive safety briefings for all site personnel.
2. Visually verify the extent of surface ordnance and explosive waste.
3. Use magnetometers/gradiometers to verify subsurface soil sample and well drilling locations to be free of anomalies.
4. Prepare final report.

**2.0 DAILY OPERATIONS**

**22 July, 2001** - Wayne Lewallen, EOTI Senior UXO Supervisor and Jeff Kapp, UXO Technician, and Joshua Rich, UXO Technician mobilize to Ravenna, Ohio.

**23 July, 2001** - EOTI personnel arrive for Site Safety meeting.

Mr. Kevin Jago (SAIC Project Manager), briefs site history, work assignments and objectives of the Phase II Remedial Investigation for Load Line 3.

Wayne Lewallen (Senior UXO Supervisor) provides a detailed UXO Safety Briefing to

include examples of ordnance previously located at Ravenna. All personnel signed the Site Work Plan and Health and Safety log during this meeting.

EOTI personnel depart to commence UXO Avoidance operations with soil sampling and well drilling crews.

Wayne Lewallen and Kevin Jago (SAIC Project Manager) identify preliminary locations for soil sampling and installation of Monitoring Wells.

EOTI team assists with equipment checkout and loading support vehicles.

Team departs Ravenna at 1815.

**6 August, 2001** - Arrive at site for 0800 Safety Briefing.

Arrive at LL3 at 0840. Begin assisting crews with Magnetometer checks.

UXO team rotates between the Well Drilling Team, the Soil Sampling Team throughout the day.

The following locations were checked and cleared of anomalies: MW236, MW266, 83, 85, 86, 87, 88, 89, 93, 208.

Team departs Ravenna at 1800.

**7 August, 2001** - Arrive at site for 0700 Safety Briefing.

Arrive at LL3 at 0730.

Begin magnetometer check and hand-auger 4' test hole for well drilling crews at point: MW267. Team continues with magnetometer checks for soil sample team and well drilling crews throughout the day. Soil Sample locations and approach paths for points: 92, 97, 98, 99, 100, 102, 103, 107, 108, 112, 113, magnetometer checked.

Team departs Ravenna at 1800.

**8 August, 2001** - Arrive at site for 0700 Safety Briefing.

Arrive at LL3 0730.

Josh Rich assists soil sample and well drilling team with magnetometer checks. The following sample points were cleared: MW135, MW140, 71, 104, 105, 106, 111, 114, 115, 116.

Team assists Robotic team with video operations for sanitary sewers and storm drains on

LL3.

Team departs Ravenna at 1800.

**9 August, 2001** - Arrive at site for 0700 Safety Brief.

Arrive at LL3 at 0730.

Begin magnetometer checks for well drilling and soil crews.

The following well locations were checked with the magnetometers: MW231, MW232, MW233, MW234, MW242, and MW243. Several of the MW sites required the UXO team to monitor while drilling. Team was unable to hand auger through some rock formations.

The following soil sample locations were checked and declared free of anomalies: 72, 73, 74, 75, 76, and 102.

Team also assisted camera crew with video operations on LL3.

Team departs Ravenna at 1800.

**10 August, 2001** - Arrive at site for 0700 Safety Brief.

Arrive at LL3 at 0730.

Team begins magnetometer checks at points 79, 80, 82, 132, 133, 134, 135, 136, 137, and 138.

Jeff Kapp assists soil sample crew with the following sample locations: 168, 169, 170, 171, 173, 176, 177, 178, 179, 180, 181, 182, and 183.

Team departs Ravenna at 1800.

**11 August, 2001** - Arrive at site for 0700 Safety Brief.

Arrive at LL3 at 0740.

UXO team provides magnetometer checks for soil sample and well drilling crews. The following sample locations were cleared: 067, 078, 091, 092, 101, 111, 139, 140, 174, 194, 196, 197, 198, and 199.

Team departs Ravenna at 1730.

**12 August, 2001** - Arrive at site for 0800 Safety Brief

Arrive at LL3 at 0840

UXO team begins day by assisting with soil sample and well drilling teams.

UXO team performs magnetometer checks for the following well/soil sample locations: MW232, MW233, 80, 99, 132, 135, 136, and 137.

Team departs Ravenna at 1800.

**13 August, 2001** - Arrive at site for 0700 Safety Briefing

Team arrives at LL3 at 0730.

The following sample locations were checked for anomalies: 152, 153, 154, 157, 158, 159, 160, 161, 163, and 164.

Team departs Ravenna at 1800.

**21 August, 2001** - Arrive at site for 0700 Safety Briefing

Arrive at LL3 at 0730.

The following soil sample locations checked and declared free of magnetic anomalies: 200, 201, 202, 203, 204, and 205. Team also assists with trench clearance operations.

All personnel depart at 1800.  
Ravenna at 1800.

### **3.0 EQUIPMENT**

EOTI personnel conducted UXO Survey sweeps with GA52CX Shonstedt Magnetometers for all soil sample locations and approach paths. Monitoring Wells were surveyed with GA52CX Shonstedt Magnetometers and MG230 (downhole) gradiometers.

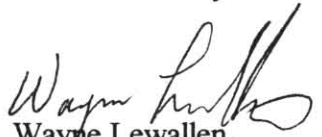
### **4.0 SUMMARY**

EOTI personnel conducted magnetometer/gradiometer check for all Monitoring Wells and Soil Sample locations. On some occasions sub-surface anomalies were detected in the proposed Monitoring Well or Soil Sample location requiring the selection of another location.

No UXO or hazardous components were identified on the LL3 site. All work was



conducted safely with no injuries to personnel.

  
Wayne Lewallen,  
Project Manager, EOTI

EOTI  
RAVENNA

JEFF KAPP RECORD



**Wilson Jones®**

**JEFF KAPP RAVENNA**

**Rulings Available:**

- 84101 Record
- 84102 Single Entry Ledger
- 84103 Cash
- 84104 Single Entry Ledger (Large)

**144 Pages**

*EOTI*

*1 (732) 673-6017 OFFICE*

*1 (732) 345-8099 WAYNE CELL*

*FAX 1 (732) 345-7399 7-7/8 in. x 5-1/4 in.*

*7399*



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MONDAY 07/23/01  
IN BRIEF OFFICE  
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16

2

3

5

TUESDAY

07/24/01

0715 MORNING SAFETY BRIEF  
 0725 END BRIEF  
 0740 DEPART FOR LL4 WITH CONCRETE COREING  
 0815 SET UP AND CUTTING LL4<sup>SS</sup> 124  
 0835 SET UP AND CUTTING LL4-123  
 0905 SET UP AND CUTTING LL4-120  
 0925 SET UP / CUTTING LL4-119  
 1035 SET UP / CUTTING LL4-109  
 1055 SET UP / CUTTING LL4-108  
 1115 SET UP / CUTTING LL4-079  
 1155 LUNCH  
 1255 DEPART FOR LL2 WITH CONCRETE COREING  
 1330 SET UP / CUTTING LL2-085  
 1400 SET UP / CUTTING LL2-084  
 1430 SET UP / CUTTING LL2-123  
 1455 SET UP / CUTTING LL2-124  
 1525 LL2-124 ENCOUNTERED FOUNDATION WALL  
 MOVED 2 1/2 - 3' CUT NEW HOLE.  
 1615 SET UP / CUTTING LL2-137  
 1630 SET UP / CUTTING LL2-136  
 1645 SET UP / CUTTING LL2-135  
 1710 SET UP / CUTTING LL2-070  
 1745 RETURN TO OFFICE  
 1815 SECURE FOR DAY

WEDNESDAY

07/25/01

0700 ARRIVE ON SITE  
 0715 MORNING SAFETY BRIEF  
 0730 DEPART FOR LL2 WITH CONCRETE COREING  
 0800 SET UP / CUTTING LL2-075  
 0830 SET UP / CUTTING LL2-077  
 0850 SET UP / CUTTING LL2-091  
 0910 SET UP / CUTTING LL2-092  
 0935 SET UP / CUTTING LL2-174  
 1000 SET UP / CUTTING LL2-173  
 1020 SET UP / CUTTING LL2-151  
 1040 SET UP / CUTTING LL2-152  
 1055 SET UP / CUTTING LL2-153  
 1125 RETURN TO OFFICE FUEL AND LUNCH  
 1230 DEPART FOR LL-3 WITH CONCRETE COREING  
 1245 SET UP / CUTTING LL3-062  
 1300 SET UP / CUTTING LL3-061  
 1320 SET UP / CUTTING LL3-068  
 1335 SET UP / CUTTING LL3-069  
 1355 SET UP / CUTTING LL3-094  
 1415 SET UP / CUTTING LL3-095  
 1515 SET UP / CUTTING LL3-~~123~~125  
 1530 SET UP / CUTTING " " LL3-124  
 1550 SET UP / CUTTING " " LL3-~~123~~123  
 1650 SET UP / CUTTING LL3-107  
 1700 SET UP / CUTTING LL3-108  
 1720 SET UP / CUTTING LL3-109  
 1800 RETURN TO OFFICE  
 1805 SECURE FOR DAY

0-13

THURSDAY 07/26/01

0700 ARRIVE ON SITE  
 0715 MORNING SAFETY BRIEF  
 0730 DEPART WITH WAYNE  
 0800 CHECK AND CLEAR W/P LL4-194  
 0835 WITH SOIL SAMPLE TEAM (JIMMY) SS LL2-100  
 0945 RETURN TO OFFICE WITH SAMPLES  
 0950 DEPART TO LL2  
 1005 CHECK + CLEAR LL2-132  
 1050 CHECK + CLEAR LL2-141  
 1150 CHECK + CLEAR LL2-140  
 1235 RETURN TO OFFICE - LUNCH  
 1335 DEPART FOR LL2  
 1345 CHECK + CLEAR LL2-126  
 1500 REPORTED TO KEVIN AT 0810 TO LOCATE MAIN HOE  
 1515 BACK WITH SOIL SAMPLE CHECK + CLEAR LL2-135  
 1536 CHECK + CLEAR LL2-128  
 1600 CHECK + CLEAR LL2-127  
 1655 CHECK + CLEAR LL2-139  
 1755 RETURN TO OFFICE  
 1800 SECURE FOR DAY

FRIDAY 07/27/01

0700 ARRIVE ON SITE  
 0720 MORNING SAFETY BRIEF  
 0755 DEPART FOR LL2 WITH SS TEAM (JIMMY)  
 0805 CHECK + CLEAR LL2-129  
 0905 CHECK + CLEAR LL2-130  
 0950 MEET WITH BACK HOE  
 1000 CLEARING BALAST FROM LL2-213/214/215/216/217  
 1115 CHECK + CLEAR LL2-112  
 1155 RETURN TO OFFICE  
 1205 CLEAN UP  
 1210 LUNCH  
 1315 AFSH WASH  
 1335 DEPART FOR LL2  
 1355 CHECK + CLEAR LL2-108  
 1430 CHECK + CLEAR LL2-217  
 1445 CHECK + CLEAR LL2-216  
 1515 CHECK + CLEAR LL2-215  
 1550 CHECK + CLEAR LL2-214  
 1640 CHECK + CLEAR LL2-213  
 1740 RETURN TO OFFICE  
 1800 SECURE FOR DAY

SATURDAY

07/28/01

0700 ARRIVE ON SITE  
0720 MORNING SAFETY BRIEF  
0730 DEPART FOR LL2 TO CHECK + CLEAR W.P.'S.  
0800 ON SITE WITH SS TEAM (JIMMY)  
0815 CHECK + CLEAR LL2 - 144  
0900 CHECK + CLEAR LL2 - 143  
0930 CHECK + CLEAR LL2 - 142  
1020 CHECK + CLEAR LL2 - 134  
1100 CHECK + CLEAR LL2 - 133  
1155 RETURN TO OFFICE  
1200 CLEAN UP / LUNCH  
1305 DEPART TO LL2  
1330 RETAKING SAMPLES AT LL2 - 132  
1515 RETAKING SAMPLES AT LL2 - 128  
1545 WAYNE DEPARTS  
1600 RETAKING SAMPLES AT LL2 - 130  
1630 CHECKING ON DRILL REGS  
1715 BACK WITH SOIL SAMPLE TEAM  
1745 RETURN TO OFFICE  
1800 SECURE FOR DAY

SUNDAY

07/29/01

0800 ARRIVE ON SITE CHECK JOHN SW  
0820 MORNING SAFETY BRIEF  
0855 DEPART FOR LL2  
0900 PREP. MW LL2 MW - 263 WITH JOSH  
0925 PREP LL2 MW - 267 WITH JOSH  
1000 DROP JOSH OFF WITH SOIL SAMPLE (MAT)  
1020 WITH SOIL SAMPLE TEAM (JIMMY)  
1025 RETAKING SAMPLES LL2 - 133  
1115 RETAKING SAMPLES LL2 - 134  
1220 RETURN TO OFFICE - LUNCH  
1358 DEPART FOR LL2 WITH TEAM JIMMY  
1420 TAKING WATER SAMPLES LL2 - 226  
1630 RETURN TO OFFICE / PAPER WORK  
1730 SECURE FOR DAY

MONDAY 07/30/01  
 0700 ARRIVE ON SITE  
 0725 MORNING SAFETY BRIEF  
 0755 DEPART FOR LL2 WITH JOHN  
 0805 CHECK SECOND LOCATION AT LL2-268  
 0845 COLLECTING SW/SED LL2-226  
 0950 COLLECTING SW/SED LL2-227  
 1100 COLLECTING SW/SED LL2-228  
 1220 RETURN TO OFFICE / LUNCH  
 1330 DEPART FOR LL2 WITH TEAM JIMMY  
 1345 COLLECTING SW/SED LL2-229 (PICTURES)  
 1445 COLLECTING SW/SED LL2-230 (PICTURES)  
 1600 RETURN TO OFFICE  
 1645 DEPART FOR LL3 - TROOP CHECK  
 1730 CHECKED SECOND HOLE FOR LL2-263  
 1755 RETURN TO OFFICE  
 1800 SECURE FOR DAY

TUESDAY 07/31/01  
 0700 ARRIVE ON SITE  
 0720 MORNING MEETING  
 0730 DEPART FOR LL2 WITH JOHN  
 0745 CHECK + CLEAR LL2 MW-262  
 0815 CHECK + CLEAR LL2 MW-266  
 0845 CHECK + CLEAR LL2 MW-267 \*  
 0910 CHECK + CLEAR LL2-270 \*  
 1030 DROPPED JOHN OFF WITH SS TEAM JIMMY  
 1100 RETURN TO OFFICE  
 1105 DEPART FOR LL2 WITH BRAD  
 1135 RETURN TO OFFICE  
 1145 CALL WAYNE  
 1200 LUNCH  
 1300 DEPART FOR LL2 + 3  
 1330 WITH SGIL SAMPLE "A" TEAM  
 1340 CHECK + CLEAR LL2-295  
 1400 CHECK + CLEAR LL2-296  
 1430 CHECK + CLEAR LL2-297  
 1510 CHECK ON DRILL RIGS  
 1545 TROOP CHECK  
 1620 RETURN TO OFFICE - DISHES  
 1800 SECURE FOR DAY



WEDNESDAY 08/01/01  
0700 ARRIVE ON SITE  
0715 MORNING SAFETY MEETING  
0745 DEPART FOR LL2 WITH TEAM JIMMY  
0800 CHECK + CLEAR LL2-066  
0825 CHECK LL2-094 SUSPICIOUS ROCK  
0905 RETURN TO OFFICE TO TALK TO JJ + BRAD  
0945 MEET JJ + BRAD AT LL2-094  
1030 MEET TEAM JIMMY AT LL2-084  
1210 RETURN TO OFFICE  
1300 SECURE FOR WEEKEND

END 1ST CYCLE

MONDAY 08/06/01  
0800 ARRIVE ON SITE  
0820 MORNING SAFETY MEETING  
0840 DEPART FOR LL3 WITH JOSH  
0900 CHECK CLEAR + ANGER LL3 MW-236  
0930 RETURN TO OFFICE  
0945 DEPART FOR LL2 DRILL CREW LL2 MW-260  
1015 RETURN TO OFFICE  
1030 DEPART FOR LL3  
1100 MEET UP WITH LEW  
1105 DEPART FOR LL2  
1115 MEET WITH SOIL SAMPLE TEAM JIMMY  
1130 DEPART FOR LL3  
1200 CHECK + CLEAR LL3-208  
1235 RETURN TO OFFICE / LUNCH  
1305 DEPART FOR LL2 WITH ROBOT GUYS  
1315 CHECK + CLEAR DB-21  
1355 CHECK + CLEAR DB-20  
1420 CHECK + CLEAR DB-11  
1440 " " DB-12  
1455 " " DB-11 (PICTURES)  
1525 " " MH-310  
1540 " " IN-14  
1555 " " MH-307  
1615 " " IN OA 12  
1700 " " OA-20  
1800 RETURN TO OFFICE  
1830 SECURE FOR DAY

TUESDAY

08/07/01

0700 ARRIVE ON SITE  
0715 MORNING SAFETY MEETING  
0745 DEPART FOR LL2 WITH ROBOT GUYS  
0800 CHECKING SEWERS AT LL2  
1030 MAJOR CAMERA PROBLEMS  
1150 BACK AT OFFICE  
1320 DEPART FOR LL3 WITH TEAM JIMMY  
1330 COLLECTING SURFACE WATER + SEDIMENT SAMPLES  
1735 RETURN TO OFFICE  
1800 SECURE FOR DAY

WEDNESDAY

08/08/01

0700 ARRIVE ON SITE  
0710 MORNING SAFETY BRIEF  
0725 DEPART FOR LL2 WITH CAMERA GUYS  
0735 TAKING VIDEO OF STORM DRAINS LL3  
0920 TAKING VIDEO OF SANITARY SEWERS LL3  
1215 RETURN TO OFFICE - LUNCH  
1325 DEPART FOR LL-4 WITH CAMERA GUYS  
1340 TAKING VIDEO OF SANITARY SEWERS LL4  
1520 TAKING VIDEO OF STORM DRAINS LL4  
1625 RETURN TO OFFICE CAMERA BROKE  
1630 MARTHA RECALLS ALL TEAMS  
1800 SECURE FOR THE DAY

THURSDAY

08/09/01

0700 ARRIVE ON SITE  
 0720 MORNING SAFETY BRIEF  
 0735 DEPART FOR LL4 WITH CAMERA GUYS  
 0750 TAKING VIDEO IN STORM DRAINS LL4  
 1115 RETURN TO OFFICE / LUNCH  
 1155 DEPART FOR LL2 WITH CAMERA GUYS  
 1215 TAKING VIDEO ON LL2  
 1255 DEPART FOR LL3 WITH CAMERA GUYS  
 1300 TAKING VIDEO ON LL3  
 1410 DEPART FOR LL4 WITH CAMERA GUYS  
 1425 TAKING VIDEO ON LL4  
 1555 RETURN TO OFFICE  
 1600 DEPART FOR LL3  
 1610 WITH SOIL SAMPLE TEAM JIMMY  
 1645 CALLED TO RETURN TO OFFICE DUE TO WEATHER  
 1700 RETURNED TO OFFICE  
 1730 SECURED FOR DAY DUE TO WEATHER

FRIDAY

08/10/01

0700 ARRIVE ON SITE  
 0715 MORNING SAFETY MEETING  
 0745 DEPART FOR LL3 WITH SOIL SAMPLE TEAM JIMMY  
 0800 CHECK + CLEAR RANDOM POINT LL3-181  
 0830 CHECK + CLEAR RANDOM POINT LL3-180  
 0900 CHECK + CLEAR RANDOM POINT LL3-179  
 0940 CHECK + CLEAR RANDOM POINT LL3-173  
 1015 CHECK + CLEAR RANDOM POINT LL3-178  
 1105 CHECK + CLEAR RANDOM POINT LL3-182  
 1155 CHECK + CLEAR RANDOM POINT LL3-176  
 1215 RETURN TO OFFICE CLEAN UP / LUNCH  
 1330 DEPART FOR LL3 WITH SOIL SAMPLE TEAM JIMMY  
 1345 CHECK + CLEAR RANDOM POINT LL3-177  
 1415 CHECK + CLEAR RANDOM POINT LL3-183  
 1510 " " " " LL3-171  
 1535 " " " " LL3-170  
 1605 " " " " LL3-169  
 1635 " " " " LL3-168  
 1710 RETURN TO OFFICE  
 1800 SECURED FOR DAY

SATURDAY

08/11/01

0700 ARRIVE ON SITE  
 0715 MORNING SAFETY BRIEF  
 0740 CHECK + CLEAR LL3-139  
 0815 CHECK + CLEAR LL3-140  
 0845 " " LL3-078  
 0910 " " LL3-101  
 1015 " " LL3-091  
 1050 " " LL3-092  
 1120 " " LL3-174  
 1145 " " LL3-061  
 1215 RETURN TO OFFICE LUNCH  
 1330 DEPART FOR LL-2 DRILL RIG PICTURES  
 1500 CHECK + CLEAR SEAPMENT POINT LL4-185  
 1555 CHECK + CLEAR SW/SCD LLA-177  
 1745 RETURN TO OFFICE  
 1800 SECURE FOR DAY

SUNDAY

08/12/01

0800 ARRIVE ON SITE  
 0810 MORNING SAFETY BRIEF  
 0820 DAVE GETTING IN BRIEF  
 0850 TAKE DAVE ON TOUR OF LL3 + LL4  
 0930 DROP DAVE WITH SOIL SAMPLE TEAM  
 0945 WITH DRILL RIG FOR LL3MW-233  
 1150 RETURN TO OFFICE / LUNCH  
 1255 DEPART FOR LL3 WITH DRILL RIG-(TODD + MOLLY)  
 1315 CHECK + CLEAR LL3MW-232  
 1430 LL4 WITH TEAM JIMMY  
 1710 RETURN TO OFFICE  
 1755 SECURE FOR DAY

MONDAY

08/13/01

0700 ARRIVE ON SITE  
0710 MORNING SAFETY BRIEF  
0720 DEPART FOR LL3 WITH TEAM JIMMY  
0745 CHECK + CLEAR LL3 - 163 + 164  
0810 DEPART FOR LL4  
0820 COLLECTING SW/SED LL4 WITH TEAM JIMMY  
1225 RETURN TO OFFICE / LUNCH  
1330 DEPART FOR LL4  
1400 COLLECTING SW/SED LL4 WITH TEAM JIMMY  
1745 RETURN TO OFFICE  
1800 SECURE FOR DAY

TUESDAY

08/14/01

0700 ARRIVE ON SITE  
0720 MORNING SAFETY MEETING  
0740 DEPART FOR LL4 WITH TEAM JIMMY  
0800 COLLECTING WATER FROM <sup>LL4</sup> POND  
1100 COLLECTING SW/SED  
1145 COLLECTING SW AT LL4-175  
1230 RETURN TO OFFICE LUNCH  
1330 DEPART FOR LL4 WITH TEAM JIMMY  
1400 COLLECTING SED SAMPLES LL4 POND  
1730 RETURN TO OFFICE  
1800 SECURE FOR DAY

WEDNESDAY

08/15/01

0700 ARRIVE ON SITE  
0715 MORNING SAFETY BRIEF  
0915 TEAM LEADERS MEETING  
0945 DEPART FOR LLZ  
1000 SPOTTING TRENCH SITES  
1200 RETURN TO OFFICE  
1300 SECURE FOR DAY

END OF CYCLE

MONDAY

08/20/01

0800 ARRIVE ON SITE  
0815 MORNING SAFETY BRIEF  
0915 GAVE WELCOME BRIEF TO 2 NEW JEWS  
0945 DEPART FOR LLZ  
1000 CHECK + CLEAR LLZ-218 TEST PIT 1 (TRENCH)  
1225 RETURN TO OFFICE LUNCH  
1325 DEPART FOR LLZ WITH TRENCH CREW  
1335 CHECK + CLEAR LLZ-220 TP 3  
1425 CHECK + CLEAR LLZ-219 TP 2  
1500 CHECK + CLEAR LLZ-221 TP 4  
1535 CHECK + CLEAR LLZ-222 TP 5  
1605 CHECK + CLEAR LLZ-223 TP 6  
1715 TRENCHING OPS ON LLZ COMPLETE  
1740 RETURN TO OFFICE  
1800 SECURE FOR DAY

TUESDAY

08/21/01

0700 ARRIVE ON SITE  
 0720 MORNING SAFETY BRIEF  
 0730 DEPART FOR LL3 TRENCH OPS  
 0840 CHECK + CLEAR LL3-202 TP3  
 0810 CHECK + CLEAR LL3-203 TP4  
 0900 CHECK + CLEAR LL3-204 TP5  
 0955 CHECK + CLEAR LL3-200 TP1 RELOCATED  
 1055 CHECK + CLEAR LL3-205 TP6  
 1210 RETURN TO OFFICE LUNCH  
 1310 DEPART FOR LL3  
 1325 CHECK + CLEAR LL3-201 TP2 RELOCATED  
 1410 TRENCH OPS COMPLETE LL3 DEPART FOR LL4  
 1515 CHECK + CLEAR LL4-170 TP4  
 1630 CHECK + CLEAR LL4-171 TP5  
 1730 RETURN TO OFFICE  
 1800 SECURE FOR DAY

WEDNESDAY

08/22/01

0700 ARRIVE ON SITE  
 0715 MORNING SAFETY BRIEF  
 0730 DEPART FOR LL4 TRENCH OPS  
 0740 CHECK + CLEAR LL4-172 TP6  
 0900 CHECK + CLEAR LL4-167 TP1 RELOCATED  
 1000 CHECK + CLEAR LL4-168 TP2  
 1120 CHECK + CLEAR LL4-169 TP3  
 1215 COMPLETE TRENCH OPS LL4  
 1230 RETURN TO OFFICE / LUNCH  
 1335 DEPART FOR LL4 WITH BRAD  
 1345 BACKHOE CLEARING BALAST  
 1530 CHECKING WITH ALL TEAMS  
 1730 RETURN TO OFFICE  
 1800 SECURE FOR DAY

0-23

THURSDAY

08/23/01

0700 ARRIVE ON SITE  
0715 MORNING SAFETY BRIEF  
0730 DEPART FOR LL4 WITH SOIL SAMPLE TEAM  
0745 CHECK + CLEAR RANDOM POINTS  
1200 RETURN TO OFFICE / LUNCH  
1335 DEPART FOR LL4 WITH SS TEAM JIMMY  
1345 CHECK + CLEAR RANDOM POINTS  
1630 RETURN TO OFFICE  
1730 SECURE FOR DAY

FRIDAY

08/24/01

0700 ARRIVE ON SITE  
0720 MORNING SAFETY BRIEF  
0740 DEPART FOR LL4 WITH SS TEAM JIMMY  
0800 CHECK + CLEAR RANDOM POINTS  
1045 JIMMY GETS VAN STUCK HARD!  
1150 TOLTEST GETS VAN UNSTUCK WITH BACKHOE!  
1200 RETURN TO OFFICE / ~~OFFICE~~ LUNCH  
1330 DEPART FOR LL4 WITH SS TEAM  
1345 CHECK + CLEAR RANDOM POINTS  
1700 RETURN TO OFFICE  
1800 SECURE FOR DAY



SATURDAY

08/25/01

0700 ARRIVE ON SITE  
0720 MORNING SAFETY BRIEF  
0830 DEPART FOR LLS CALL FROM MEG.  
1000 CHECKING WITH ALL TEAMS  
1200 RETURN TO OFFICE LUNCH  
1330 MOVING BETWEEN ALL TEAMS  
1730 RETURN TO OFFICE  
1800 SECURE FOR DAY

08/26/01

SUNDAY

0800 ARRIVE ON SITE  
0815 MORNING SAFETY BRIEF  
0845 DEPART WITH SUSAN + JEN FOR WELL INSPECTION  
1200 RETURN TO OFFICE LUNCH  
1310 DEPART WITH SUSAN + JEN FOR WELL INSPECTIONS  
1710 RETURN TO OFFICE  
1800 SECURE FOR DAY

MONDAY

08/27/01

0700 ARRIVE ON SITE  
0720 MORNING SAFETY BRIEF  
0800 DEPART WITH KATIE CONTINUE WELL INSPECTION  
1155 RETURN TO OFFICE LUNCH  
1320 DEPART FOR MORE SITE WIDE WELL INSPECTION  
1720 RETURN TO OFFICE  
1800 SECURE FOR DAY

TUESDAY

08/28/01

0700 ARRIVE ON SITE  
0725 MORNING SAFETY BRIEF  
0800 SITE WIDE WELL DEPTH CHECK  
1205 RETURN TO OFFICE  
1320 CONTINUE WELL DEPTH CHECKS  
1430 RETURN TO OFFICE CLEANUP  
1800 SECURE FOR DAY

END OF CYCLE

WEDNESDAY 08/29/01

0700 ARRIVE AT SUPER 8

0705 DEPART FOR CLEVELAND AIRPORT W/DAVE

0810 DROP DAVE AT AIRPORT,

0920 RETURN TO HOME

TUESDAY

09/04/01

0800 ARRIVE ON SITE

0820 MARTHA ARRIVES ON SITE

0900 GIVE BRIEF TO TWO PEOPLE FROM DL2

1520 DEPART FOR LL4 WITH BEA + MARTHA

1845 RETURN TO OFFICE CLEAN UP

1900 SECURE FOR DAY

AIRPORT RUN

WEDNESDAY 09/05/01

0700 ARRIVE ON SITE  
0710 MORNING SAFETY BRIEF  
0800 DEPART FOR LL4 WITH 2 WATER SAMPLE TEAMS  
1155 RETURN TO OFFICE LUNCH  
1310 DEPART FOR LL4 WITH WS TEAMS  
1810 RETURN TO OFFICE CLEAN UP  
1900 SECURE FOR DAY

THURSDAY 09/06/01

0700 ARRIVE ON SITE  
0730 MORNING SAFETY MEETING  
0815 DEPART FOR LL4 WITH WS TEAMS  
1210 RETURN TO OFFICE LUNCH  
1345 DEPART FOR LL4 WITH WS TEAMS  
1735 RETURN TO OFFICE  
1800 SECURE FOR DAY

FRIAA/

09/07/01

0700

ARRIVE ON SITE

0730

MORNING SAFETY BRIEF

0815

TEAMS DEPART FOR LL4

1200

LUNCH

1745

TEAMS RETURN

18W

SECURE FOR DAY WEEKEND

MONDAY

09/10/01

0800

ARRIVE ON SITE

0845

MORNING SAFETY BRIEF

0930

TEAMS DEPART FOR LL2

1045

DEPART FOR LL2

1215

RETURN TO OFFICE LUNCH

1345

DEPART FOR LL2

1710

RETURN TO OFFICE

1825

LAST TEAM RETURNS

1900

SECURE FOR DAY

TUESDAY

09 / 11 / 01

0700

ARRIVE ON SITE

0720

MORNING SAFETY BRIEF

0830

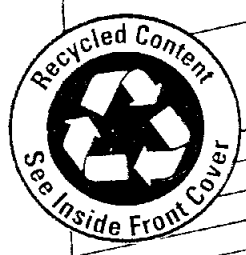
TEAMS DEPART FOR LLZ

0915

CALL "LEW" NOT IN OFFICE CELL BUSY

Record 144  
Ruled Pages

**Wilson Jones**



**RECORD BOOK**

Keep home and  
business information  
organized

ACCO Brands, Inc.  
100 Tower Parkway  
Lincolnshire, IL 60469-3640

Stock #84101

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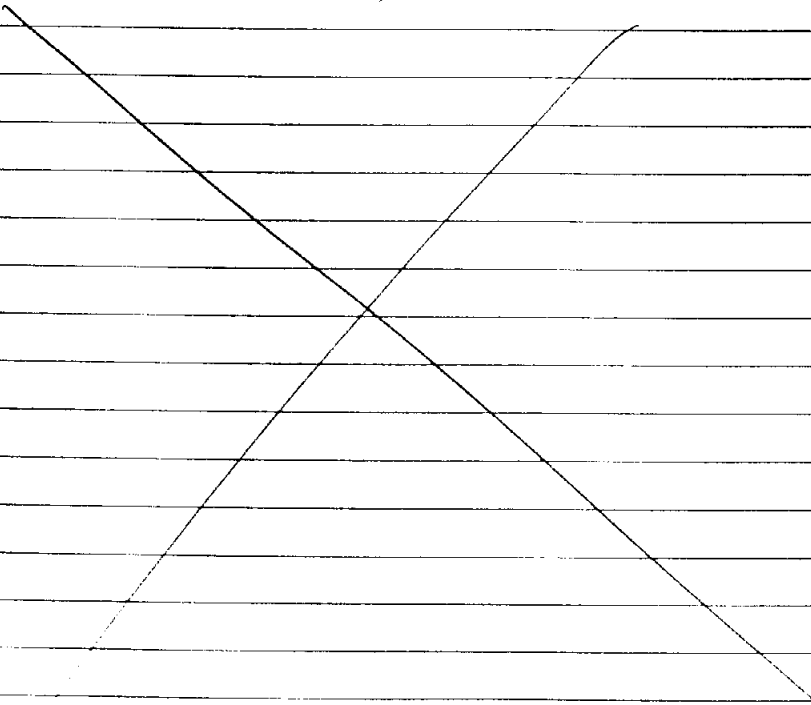
**RECORD**

Monday July 23

0800 - safety brief

1330 - started laying out points  
LL 4

1815 End of Day





Tuesday July 24

0700 - Safety Brief

0730 - LL2 Pt. 265 hauled up to  
4" "Clear"

0800 - LL2 started marking points

1200 - Break for lunch

1300 - End Lunch

1310 - started drilling #200

1545 - Well 200 drilled waiting to

cap.

1645 - Grouted well

1715 - Sealed and delivered samples

1730 - placed tarp over roll away

1800 - End of Day

Wednesday July 25

0700 - Safety Brief

0730 - Auger LL4 test holes  
196, 197, 199

0830 - LL2 help soil sample  
team, #103, 106, 107, 105

1200 - Lunch

1300 - cleared test holes 195, 193

1430 - LL2 help soil sample team  
80, 81, 83, 84, 85, 82

1615 - return for cleanup

1800 - End of Day

Thursday July 26

0700 - Safety Brief

0730 - LL2 work with sample  
core. Pt. 86

0810 - ~~clear~~ LL2, clear pts.  
87, 93, 98, 99

1145 - LL2 work w/ sample core  
pts. ~~87~~ 87, 88, 89, 90, 91, 92, 93

1200 - break for lunch

1300 - LL2 work w/ sample core. pt. 98

1500 - LL4 clear well site for drill core

1630 - LL2 work w/ sample core. pts.  
95, 99, 173, ~~174~~, 174

1715 - finished sampling ~~and~~ return to  
main building for cleanup and decon.

1800 - End of Day

Friday July 27

0700 - safety brief

0730 - clear pts for sample teams +  
clear wells for ballends of rig.

0830 work w/ sample team pts, # 148, 149  
151, 152, 153, 158, 159, 150

12.0 - Lunch

1300 - clear pts for sample teams

1400 - work w/ sample team pts, #  
145, 146, 147, 154, 155, 156, 157

1730 - Review / cleanup

1800 - End of Day

Saturday July 28

0700 - safety brief

0730 - clear well pts LL2  
pts 264, 268, (220?)

0830 - work with sample team

pts, 110, 186, 187, 189, 86,  
149

1200 - Lunch

1300 - work w/ sample team pts DB802,  
DB20, DB12, DB8, DD11  
DB6, DB2, DA18

1730 - cleanup / Power

1800 - End of Day

Sunday July 29

0800 - Safety Brief

0830 - check well pts 263, 267

1000 - work w/ sample cans pts

DA 12, pt 235, 244

1230 - Lunch

1300 - work w/ sample tech pts 248

046, 238, 231, 232

1700 - End of Day

Monday July 30

0700 - Safety Brief

0730 - work ~~up~~ w/ sample

team pts. 86, 87, 71, 133, 162

1130 - Cleanup / Decon

1200 - Lunch

1300 work w/ sample team pts. 94,

210, 209, 206, 207, 208

205

1730 - cleanup / Decon

1800 - end of Day

Tuesday July 31

0700 - safety brief

0730 - work w/ sample team, pts,

057, 058, 064, 062, 063

1200 - Lunch

1300 - work w/ sample team, pts, 59, 60,

67, 68, 69, 64,

1730 - cleanup / Decon

1800 - End of Day



Wednesday Aug 01

0700 - Safety brief

0730 - work by sample @ tear BS  
points 122, 123, 124, 125

1100 - cleanup / Decon

1700 - End of Day

Monday August 06

0800 - safety Brief

0830 - clear well pt, 266, LL3

0900 - give Wayne royal base of  
LL3

1000 - LL3 work w/ sample techs  
pts, 86, 88

1230 - Lunch

1300 LL3 work w/ sample techs  
pts, 87, 89, 93, 83, 85

1730 - cleanup / Pdown

1830 End of Day

Tuesday August 07

0700 - Safety Brief

0730 - Clear Well pt. 267-LL3

0845 - Work w/ sample team

LL3 pts 92, 97, 98, 99, 100

1200 - Lunch

1300 - Work w/ sample team LL3-pts,

112, 113, 102, 103, 107, 108

1715 - Cleanup/Decon

1800 - End of Day

Wednesday August 08

0700 - Safety Brief

0730 - clear well pts. 135, 140 LL3

0830 - work w/ sample team LL3

pts. 104, 114, 105, 115, 106

1200 - Lunch

1300 - work w/ sample team LL3

pts. 116, 114, 71

1700 - cleanup / Down

1800 - End of Day

Thursday August 09

0700 - Safety brief

0730 - Work up sample team LL3 - Pts.

103, ~~104~~, 72, 73, 74, 75, 76

1200 - ~~Break~~ Lunch

1300 - clear well pts. LL3 - 243,

242, ~~243~~, 241 / LL2 - 261 /

LL3 - 232 refusal 1' needs

to be checked while drilling /

LL3 - 233 refusal 1' needs to be

checked while drilling /

LL3 - 234 clear

1705 - Cleanup / Decon

1800 - End of Day

Friday August 10

0700 - Safety brief

0730 - Look up sample team LL3 - PHS,

82, 137, 138, 80, 136,

1200 - Lunch

1300 - Clear soil sample pts 79, 132, 133

134, 135 - LL3

1345 - Look up bucket clearing  
ballast.

1420 - Look up sample team LL3 - PHS

079, 132 - 135

1715 - Cleanup / Decon

1800 - End of Day

Sat August 11

0700 - safety brief

0730 - work w/ sample teams LL3 - ptr  
111,

1200 - Lunch

1300 - work with sample teams LL3 - ptrs  
194, 196, 197, 198, 199

1715 - Cleanup / Decon

1800 - End of Day

Sunday Aug 17

0800 - safety brief

0800 - work w/ sample team LL2 - pts.

111, ~~109~~, 132, 135, 136

11:30 - lunch

1230 - work w/ sample team LL3 - pts 99,

80, 137, ~~109, 110~~ LL4 - pts

110, 111, 107

1645 - Cleanup/Drawn

1900 - End of Day



Monday August 13

0700 - Safety Brief

0730 - Work w/ sample team

LL3 - pts. 153, 158, 157, 159,  
160, 161

1215 - Lunch

1315 - Work w/ sample team LL3 - pts.  
152, 154

1545 - Work w/ sample team

LL4 - pts 108, 109, 105

1715 - Cleanup/Decon

1800 - End of Day

Tuesday August 14

0700 - Safety brief

0730 - ~~Work~~ work w/ sample team

LL4 - pts. 106, 104, 137, 141  
136.

1215 - Lunch

1315 - work w/ sample team

LL4 - pts. 116, 115, 123, 124

1700 - Cleanup/Decon

1800 - End of Day

Wednesday August 15

0700 - Safety brief

0710 - Look ~~up~~ in support of drilling  
activities.

1300 - cleanup/Decon

1320 End of Day

Monday August 20

0800 - Safety Brief

0830 - work w/ sample team

LLY-PT 186, 48, 49

1200 - Lunch

1300 - work w/ sample team LLY-PT

58, 188, 187

1510 - work w/ sample team LL-2

1745 - cleanup / Decon

1900 - End of Day

Tuesday August 21

0700 - safety brief

0730 - work w/ sample team / plug and  
geotech sampler

1200 - lunch

1300 - work w/ sample team / plug and  
geotech sampler

1730 - cleanup / Decon

1800 - end of day

Wednesday August 22

0700 - Safety brief

0730 - Look up sample team LL4-pts,  
97, 98, 94, 93, 95

1200 - Lunch

1300 - Look up sample team LL4-pts,  
100, 101, 102, 103, 96

1700 - check/Dean

1800 - End of Day

Thursday August 23

0700 - Safety brief

0730 - Work w/ sample team LL4-pts  
68, 69, 70, ~~97~~, 98, 105

1200 - Lunch

1300 - Work w/ sample team LL4-pts.  
113 ~~74~~ 75,

1700 - cleanup / Prep

1800 - End of Day

Friday August 24

0700 - safety brief

0730 - work w/ sample team

LL4 - pts. 127

LL3 - pts. 229, 226, 227, 230, 231

1200 - lunch

1300 - worked with well backpicks team

LL4 - 139

1730 - cleanup/Decon

1800 - End of Day



Saturday August 25

0700 - safety brief

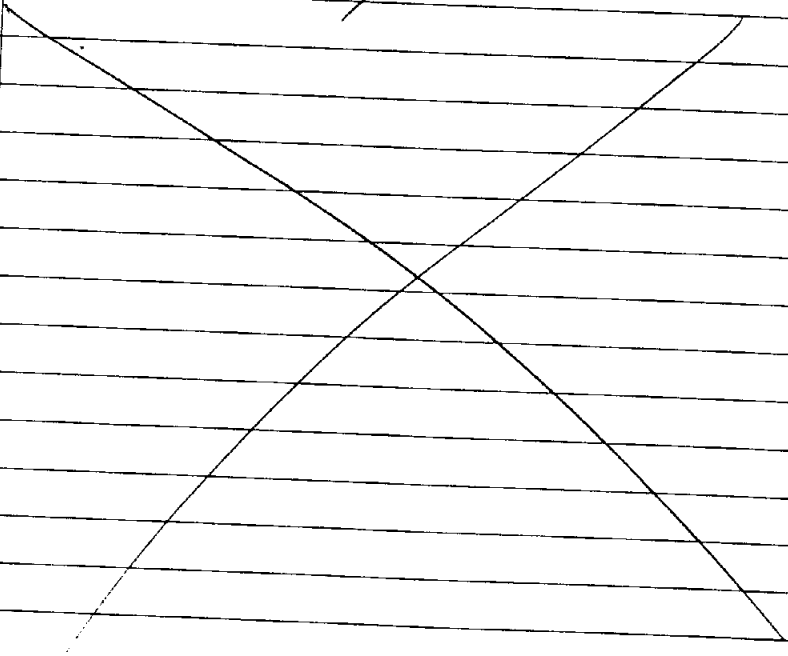
0730 - work w/ well sampling team  
LL3

1200 - lunch

1300 - work w/ well sampling team  
LL3

1700 - cleanup / Decon

1800 - End of Day



Sunday August 26

0800 - safety brief

0830 - work w/ sample team / bootech samples  
LL2 and LL3

1715 - Cleanup / Down

1800 - End of Day

Monday August 27

0700 - safety brief

0730 - Work with sample team / Goodrich  
samples LLY

1200 - Lunch

1300 - Work w/ sample team / site side  
well sampling

1730 - cleanup / shower

1800 - End of Day

Tuesday August 28

0700 - safety brief

0730 - work with script, trees, site wide  
well mapping.

1600 - cleanup Bacon

1700 - End of Day / End of Job!!!

