

Appendix K.1

*After Action Report for the Surface UXE/OEW and
Ordinance Debris Removal at Woodbine, Georgia
Union Carbide Facility*

Law Environmental, Inc / EOD Technology, Inc

November 1992

77 Pages



Called Guy about changes

November 18, 1992

Mr. Matt Ligon
Law Environmental, Inc.
112 Townpark Drive
Kennesaw, Georgia 30144

Subject: Submission of After Action Report for UXO Support
Services, Former Union Carbide, Woodbine, Georgia

Dear Mr. Ligon:

Enclosed please find the EOD Technology, Inc. After Action Report for the subject project, per our subcontract requirements. Should you have any questions or comments, please contact either myself or Mr. John Stine at (615) 483-0007 at your earliest convenience.

I would like to express our thanks to the Law Environmental Field Team for their professionalism and efficiency. They were a pleasure to work with, and we look forward to an opportunity to work with Law Environmental again in the future.

Sincerely,

C.M. Read
Operations Director

AFTER ACTION REPORT

FOR THE

SURFACE UXO/OEW AND ORDNANCE DEBRIS REMOVAL

AT

WOODBINE, GEORGIA

UNION CARBIDE FACILITY

LAW PROJECT NUMBER 41-2590

Prepared For:

Law Environmental, Inc.
Kennesaw, Georgia

Prepared By:

EOD Technology, Inc.
Oak Ridge, Tennessee

November 1992

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
1.1 General Information	1
1.2 Right of Entry Permits	1
1.3 Public Relations	1
1.4 News Media	2
2.0 OPERATIONS	2
2.1 Mobilization	2
2.2 Key Personnel	2
2.3 Subsurface UXO/OEW Clearance Operations	2
2.4 Surface UXO/OEW Clearance Operations	3
2.4.1 Site Preparation	3
2.4.2 Solid Waste Management Unit Number 3	3
2.4.3 Solid Waste Management Unit Number 5	4
2.4.4 Solid Waste Management Unit Number 6	4
2.4.5 Solid Waste Management Unit Number 7	
2.5 On Site Training	5
2.5.1 Initial Site Training	5
2.5.2 Team Training	6
2.5.3 Visitors Training	6
2.5.4 Tailgate Safety Briefings	6
2.6 Equipment	6
2.7 Daily Activity/Weather/Terrain	7
2.8 Disposal Operations	7
3.0 QUALITY CONTROL	8
3.1 Surface Site Quality Control	8
4.0 SITE SAFETY	8
4.1 Tailgate Safety Briefing	8
4.2 Safety Violations	8
4.3 Safety Training	8
5.0 ORDNANCE ACCOUNTABILITY RECORD	9
6.0 DEMOBILIZATION	9

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
7.0 MANHOURS AND MILEAGE DATA	9
7.1 Total Manhours	9
7.2 Total Mileage	9
7.3 Total Airfare	9
8.0 TOTAL ITEMS DESTROYED	10
9.0 PROBLEM AREAS AND RECOMMENDATIONS	10

ATTACHMENTS

Attachment 1	Site Map
Attachment 2	Release of Liability
Attachment 3	Daily Site Log
Attachment 4	Site Safety Log
Attachment 5	UXO Accountability Log

1.0 INTRODUCTION

EOD Technology, Inc. (EODT) was contracted by Law Environmental, Inc., 112 Townpark Drive, Kennesaw, Georgia, to provide Unexploded Ordnance/Ordnance Explosive Waste (UXO/OEW) Services and Surface Remediation of the Former Union Carbide Plant, Woodbine, Georgia, Solid Waste Management Units (SWMUs). These services included downhole monitoring during soil boring activities in SWMUs #3, #6, and #7 and ordnance debris monitoring during excavation of observation trenches in SWMUs #3 and #6. In addition EODT personnel were task to remove and dispose of surface ordnance and debris in SWMUs #3 and #7. EODT supplied all labor, supplies, tools, and equipment required in the performance of describe responsibilities.

1.1 General Information

Union Carbide formerly operated an agricultural chemical formulation and manufacturing plant at what is now the Rhone-Polenc Plant located in Camden County southeast, Georgia. The property is located approximately 12 miles east of Woodbine, Georgia, and approximately 15 miles north of the Florida/Georgia state border. In 1986, Union Carbide sold its agricultural subsidiary to Rhone-Poulenc which included the formulating and manufacturing operations at the Woodbine Facility. However, approximately 2,965 acres of SWMUs were retained by Union Carbide. On September 20, 1992, EODT mobilized six (6) personnel in support of the required UXO/OEW Support Services. These six personnel supported the UXO/OEW portion of the project through October 7, 1992. On October 8, 1992, one individual was demobilized. From October 8 through October 16, 1992, work continued with five (5) EODT personnel. On October 17, 1992, two additional EODT personnel were released to demobilize on October 18, 1992. The remaining three (3) EODT personnel conducted disposal operation through October 21, 1992. Upon completion of the disposal operation EODT personnel, as directed by Law Environmental, Inc., accomplished demobilization on October 22, 1992.

1.2 Right of Entry Permits

Right of Entry permits were not required to be obtained by EODT personnel. The right of entry was obtained by Mr. Walter M. Ligon, Project Manager (Law Environmental, Inc.) and briefed to EODT personnel during the project in-brief conducted by Mr. Ligon on September 21, 1992, prior to entering the Former Union Carbide Facility.

1.3 Public Relations

Public Relations were the responsibility of Law Environmental, Inc. EODT personnel were not evolved establishing or conducting official public relations.

1.4 News Media

News media coverage was not the responsibility of EODT personnel. EODT conducted no news media or news releases associated with this project.

2.0 OPERATIONS

2.1 Mobilization

Six EODT personnel mobilized to the Former Union Carbide Plant on September 20, 1992, in support of UXO/OEW services. The team consisted of an EOD Site Supervisor, EOD Site Health and Safety Officer (SSHO), EOD Team Leader, and a cadre of three (3) EOD Technicians. Work commenced on September 21, 1992. The following EODT personnel were assigned to the site with respect to the dates listed:

Position	Name	Period Worked
Site Supervisor	John Stine	9/20/92 - 10/8/92
Health and Safety Officer	Mark Barrett	9/20/92 - 10/21/92
Team Leader	Billy Francis	9/20/92 - 10/8/92
EOD Technician	David Becker	9/20/92 - 10/16/92
EOD Technician	Glenn Zimmerman	9/20/92 - 10/16/92
EOD Technician	Kim Bellhorn	9/20/92 - 10/21/92
Site Supervisor	Billy Francis	10/9/92 - 10/21/92

2.2 Key Personnel

Law Environmental, Inc. Project Manager Mr. Walter M. Ligon and EODT Site Supervisor, Mr. John Stine arrived on site at approximately 7:45 AM on September 21, 1992 at which time Mr. Ligon performed a site briefing and highlighted duties, responsibilities, security procedures, site entrance and exit procedures and the overall view of project goals.

2.3 Subsurface UXO/OEW Clearance Operations

The contract agreement between EODT and Law Environmental, Inc. requested no subsurface clearance agreements. EODT did not perform any subsurface clearance activities.

2.4 Surface UXO/OEW Clearance Operations

Surface clearance operations were conducted in SWMUs 3, 5, 6, and 7. All ordnance items were located in SWMUs 3 and 7 with no ordnance located in SWMUs 5 and 6.

2.4.1 Site Preparation

Prior to commencing ordnance clearance operations a work center was established adjacent to SWMU 3 in an abandoned concrete hardened storage bunker. All tools and equipment required to support clearance operations were arranged and stored at this location. This bunker was used through out the project as the work center. Also in the SWMU 3 area a small munitions storage bunker was cleaned and prepared for future storage of recovered hazardous ordnance items and potentially hazardous ordnance debris.

2.4.2 Solid Waste Management Unit Number 3

SWMU 3 consist of an approximate two acres site located east, north, and south of Union Carbide Production Well Number 3. Surface and subsurface disposal activities occurred from 1967 through 1976. To facilitate the surface clearance, a close interval sweep line utilizing six (6) EODT personnel was established. Due to the extremely heavy brush in SWMU 3, sessile line could not be used to maintain sweep line integrity. White marker flags were used to mark the sweep path as the team moved from east to west, maintaining a close interval sweep formation, 6-8 feet between personnel. Three complete sweeps of the area were conducted alternating sweep path and direction of sweep. This was necessary to insure all ordnance items were recovered from the dense under brush and heavy ground cover.

Once clearance operations began, 2 each, 40 millimeter (mm) launcher fired, high explosive, expended grenades were encountered. Upon further investigation and interview with Former Union Carbide personnel it was determined that a special lot of 40mm, M-406 High Explosive Grenades were procured from the Department of Defense (DOD) and fired to establish required test velocity for the 40 millimeter CS Grenades being developed by Union Carbide for DOD. The 40mm, M-406 grenades encountered were marked with white stenciled letters "Inert Filler/Inert Fuze" with the grenade bodies painted blue which normally indicates a practice/inert filled round. The ogives were gold in color indicating a high explosive round. Normally the rounds would be considered inert filled and would present no imminent danger. Due to the combination of circumstances ie; the recovery of two exploded rounds of the same type, those rounds being produced for a special test project, the gold ogive installed indicating a high explosive filler, and no available shipping documents to substantiate the type filler loaded in the rounds, all M-406s were considered as high explosive rounds and treated as such. Once this determination was made all 40mm, M-406 grenades were explosively opened using the 1200 Dearmer Kit which allowed for positive identification of fuze or filler associated with each round. Once procedures were completed to "safe" the rounds, they were segregated and placed in the explosive storage bunker awaiting disposal.

The following ordnance items were encountered, cleared and disposed of:

ORDNANCE ENCOUNTERED
M-406, 40mm Grenades
40mm CS Grenades
XM15 CS Canisters
Ordnance Associated Debris

2.4.3 Solid Waste Management Unit Number 5

SWMU 5 consist of an area of less than 200 square feet located east of the intersection of Loop Road and the north/south roadway to the on site air strip. The area was reportedly used for a "one time" subsurface disposal actively which occurred in 1973. The material disposed of was less than 1000 pounds of aldicarb oxime. No ordnance disposal activities were reported in SWMU 5. A two man EOD Team perform a close interval surface clearance of the area. No ordnance items or ordnance debris were encountered.

2.4.4 Solid Waste Management Unit Number 6

SWMU 6 consist of approximately 1.5 acres located approximately 2000 feet north of the main plant entrance gate. Unknown quantities of gypsum granules, corn cob grit, aldicarb and orthochlorobenzalonnitrile were disposed of in this area. No ordnance disposal activities were reported in SWMU 5. A five man EOD Team conducted a close interval surface clearance of the area. No ordnance items or ordnance debris were encountered.

2.4.5 Solid Waste Management Unit Number 7

SWMU 7 consist of two areas. The area located on the east side of the road leading to Floyd Cemetery is approximately .52 acres while the area on the west side of the road leading to Floyd Cemetery is approximately .25 acres. Subsurface disposal of drums containing 25,000 pounds of M-49 Trip Flares, approximately 12,000 ponds of orthochlorobenzalmalononitrile, unknown quantities of fill dirt, unknown quantities of various ordnance items and unknown quantities of CS were disposed of or buried at these two locations. During the clearance of SWMU 7 EODT personnel were also providing support to the Law Environmental ground water monitoring installation crew. This resulted in varied numbers of EODT personnel available to support SWMU 7 on a day to day basis. Available personnel ranged from three to six personnel. Clearance operations of these areas were conducted using close interval sweep techniques. These areas contained a large quantity of ordnance debris. Due to the large amount of debris the most effective means to sweep and clear these areas was on hands and knees with the intervals reduced to three (3) feet. The sweep was conducted from south to north with the Quality Assurance check completed from west to east. All hazardous items were segregated and stored in the

explosive storage bunker awaiting disposal.

The following ordnance items were encountered, cleared and disposed of:

ORDNANCE ENCOUNTERED, CLEARED AND DISPOSED
M-84 Powder Train Time Fuse
M-84 Powder Train Time Fuse Components
M-49 Trip Flares
M-71A2 Primers
40mm CS Grenades
XM-15 CS Canisters

2.5 On Site Training

2.5.1 Initial Site Training

On September 21, 1992 Mark Barrett, Site Safety and Health Officer (SSHO) **EOD Technology, Inc. (EODT)**, conducted four hours of required site training. The training consisted of the following topics outlined in the Site Specific Safety and Health Plan:

TRAINING TOPICS
Project Objectives
UXO/OEW Briefing
Personnel Protective Equipment/Decontamination Procedures
Emergency Response Procedures

Additionally, general site safety procedures were briefed to all EODT personnel and Mr. Walter M. Ligon, Project Manager (Law Environmental, Inc.). After the training was conducted by Mark Barrett (EODT), all site personnel received a briefing on the chemical Temik by Mr. Joe Wimberly, Shift Supervisor, Rhone Poulenc.

2.5.2 Team Training

On site ordnance training was conducted throughout the entire project whenever a new ordnance item/component was recovered. All ordnance training was conducted by Mr. Barrett, SSHO. Ordnance training included the following items:

ORDNANCE TRAINING
M301 Series Illumination Mortar/Associated Components
M84 Powder Train Time Fuze
M71A2 Primers
M49 Trip Flare
XM651 40mm CS Grenade
XM15 CS Canister

2.5.3 Visitors Training

All site visitors were trained on associated hazards and safety procedures prior to entering work areas, as well as being escorted by the *EODT* Site Supervisor or SSHO.

2.5.4 Tailgate Safety Briefings

Tailgate Safety Briefings were conducted daily prior to commencement of work. Topics discussed were UXO safety, biological hazards, vehicle safety, emergency response procedures, and explosive safety. Also discussed were transportation of, explosive/UXO/OEW, demolition/burn operations, explosive tool procedures (*EODT* 1200 Dearmer), chemical hazards (CS, Temik), and physical hazards/associated with the work areas.

2.6 Equipment

EODT provided all necessary equipment, consumables and tools required in performance of this contract.

Primary equipment used is shown in table below:

EQUIPMENT LIST FOR WOODBINE
Site Vehicle - Pick Up Truck
Site Vehicle - Mid- Size Car
MG-220 Gradiometer
GA-72 CV Magnetometer
GA-52B Magnetometer
EODT 1200 Dearmer
Standard Hand Tools

2.7 Daily Activity/Weather/Terrain

EODT personnel's daily activities were logged throughout the entire project by the Site Supervisor and SSHO and began each morning with the Tailgate Safety Briefing. Weather throughout the thirty-one (31) days remained sunny and humid with temperatures ranging between 70° to 80°F. The only exception to the favorable weather was during the first week of operations when approximately 8.5 inches of rain fell causing flooding in SWMU 7. The terrain ranged from low level swampland in SWMU 7 to dense underbrush in SWMU 3.

2.8 Disposal Operations

Disposal operations began on the morning of October 15, 1992. The 193 M406 grenades scheduled for disposal were divided into 11 shots consisting of sixteen (16) grenades each with the final shot consisting of seventeen (17) grenades. Eight (8) disposal shots were performed October 15 with the following four (4) being performed October 16, 1992.

Burning operations were conducted from October 19 through October 20, 1992. The burns were set up and initiated at 1330 hrs on both days as requested by Mr. Dave Cunningham, Environmental Manager, Rhone-Poulenc. The following ordnance items were disposed of by burning on October 19, 1992: 8 each, M301 Illumination Mortars; 906 each, M84 Powder Train Time Fuzes; 200 each, M49 Trip Flares. The following items were disposed of by burning on October 20, 1992 : 347 each, M71A2 Primers; 57 each, XM15 CS Canisters; 260 each, and 40MM CS Grenades. Prior to the preparation of the second burn and relinquishing custody of the burned scrap, each individual items was checked and verified to ensure all hazardous residue was completely burned and presented no further hazard.

Final disposition for all ordnance related scrap was the responsibility of Law Environmental, Inc.

3.0 QUALITY CONTROL

3.1 Surface Site Quality Control

The final Quality Assurance (QA) sweep was performed by Matt Ligon, Program Manager, and John Stine, Site Supervisor, on September 29, 1992. Three (3) previous sweeps had been made by *EODT* personnel. It was necessary to performed cross-sectional sweeps because of the terrain, underbrush and amount of the UXO previously encountered throughout this area. The final QA resulted in zero ordnance items found. The final QA of SWMU's 5 and 6 were performed by Mark Barrett, SSHO, on September 29, 1992, resulting in zero ordnance items recovered.

Albert Sacchetta, Staff Engineer, Law Environmental, Inc., and Mark Barrett, SSHO, performed the final QA of SWMU 7 on October 13, 1992, also resulting in zero ordnance items found.

4.0 SITE SAFETY

Safety was, and always will be, the prime consideration for every project. All sites were equipped with the appropriate number of First aid kits, eye wash kits, and correct level of Personal Protective Equipment (PPE). In addition to the daily Tailgate Safety Briefings all local emergency telephones numbers were posted in plain view in the staging area bunker. In addition, quick reference emergency contact cards were placed inside the glove compartment of each site vehicle. Emergency response routes to the paramedic station located within the confines of the Rhone-Polenc facility, were also located in the glove compartment of each site vehicle. During the transportation of explosives and UXO/OEW guidelines mandated by DOT 49 CFR 100-199 were strictly adhered to.

4.1 Tailgate Safety Briefing

Tailgate Safety Briefings were conducted daily, prior to the commencement of daily operations. Topics discussed were UXO safety, biological hazards, vehicle safety, emergency response procedures, explosive safety to include transport of explosives, demolition/burn operations, explosive tool procedures (EODT 1200 Dearmer), chemical hazards (CS, Temik), and physical hazards.

4.2 Safety Violations

EODT's unblemished safety record continued throughout this project. No safety violations, injuries or accident/incidents occurred during the performance of this contract.

4.3 Safety Training

All suspected UXO/OEW and toxic chemicals were thoroughly briefed during the initial four (4) hour training class. Reoccurring training continued throughout the project. Known hazards,

associated with UXO/OEW encountered, as well as additional training classes were conducted whenever a new ordnance item was recovered. This training was given in conjunction with the daily Tailgate Safety Briefing.

All visitors received the Explosive Ordnance Recognition and Safety briefing in conjunction with the Toxic Chemical briefing prior to being escorted into the work area(s) by the Site Supervisor or SSHO.

5.0 ORDNANCE ACCOUNTABILITY RECORD

5.1 Numerous UXO/OEW items were located and cleared by *EODT* personnel. A specific list of items recovered is located in Section 9.0 of this document.

6.0 DEMOBILIZATION

John Stine (*EODT*) was demobilized on October 8, 1992, two additional (*EODT*) personnel were demobilized on October 16, 1992 and the three remaining (*EODT*) personnel were demobilized on October 21, 1992.

7.0 MANHOURS AND MILEAGE DATA

7.1 Total Manhours

The total manhours expended for this project, by EODT personnel, was 931.5 hours. The following is a breakdown of the total hours:

Site Personnel:	908.5 hours
Project Manager:	13 Hours
Secretary:	10 Hours

7.2 Total Mileage

The total number of cumulative miles for this project was 8,620 miles.

7.3 Total Airfare

The total amount of funds expended in airfare for this project totaled \$956.00.

8.0 TOTAL ITEMS DESTROYED

The following ordnance items were recovered and destroyed by burning:

M-301 Series Illuminating Mortars	8
M-84 Powder Train Time Fuze Components	906
M-49 Trip Flares	200
M71A2 Primers	347
XM15 CS Canisters	57
40mm CS Grenades	<u>260</u>

Total Ordnance Destroyed By Burning 1,778

The following ordnance item was destroyed by detonation:

M409 - 40mm rounds	193
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Total Ordnance Destroyed By Detonation 193

Total Ordnance Destroyed 1,971

9.0 PROBLEM AREAS AND RECOMMENDATIONS

9.1 Problem: The 40mm, M-406 Grenades encountered in SWMU 3 were unique as compared with the standard military issue grenade. Due to time limitations caused by difficult weather conditions on the day of the Initial Site Visit a through background and site investigation of SWMU 3 could not be conducted. Once the EODT team arrived on site and upon further investigation and interview with Former Union Carbide personnel it was determined that a special lot of 40mm, M-406 High Explosive Grenades were procured from the Department of Defense (DOD) and fired to establish required test velocity for the 40 millimeter CS Grenades being developed by Union Carbide for DOD. The 40mm, M-406 grenades encountered were marked with white stenciled letters "Inert Filler/Inert Fuze" with the grenade bodies painted blue which normally indicates a practice/inert filled round. The ogives were gold in color indicating a high explosive round. Normally the rounds would be considered inert filled and would present no imminent danger. Due to the combination of circumstances ie; the recovery of two exploded rounds, of the same type containing high explosive residue, those rounds being produced for a special test project, the gold ogive installed indicating a high explosive filler, and no available shipping documents to substantiate the type filler loaded in the rounds, all M-406s were considered as high explosive rounds and treated as such. Once this determination was made all 40mm, M-406 grenades were dynamically opened using the 1200 Dearmer Kit which allowed for positive identification of fuze or filler associated with each round. Due to the circumstances involved, additional time was required to properly clear SWMU 3.

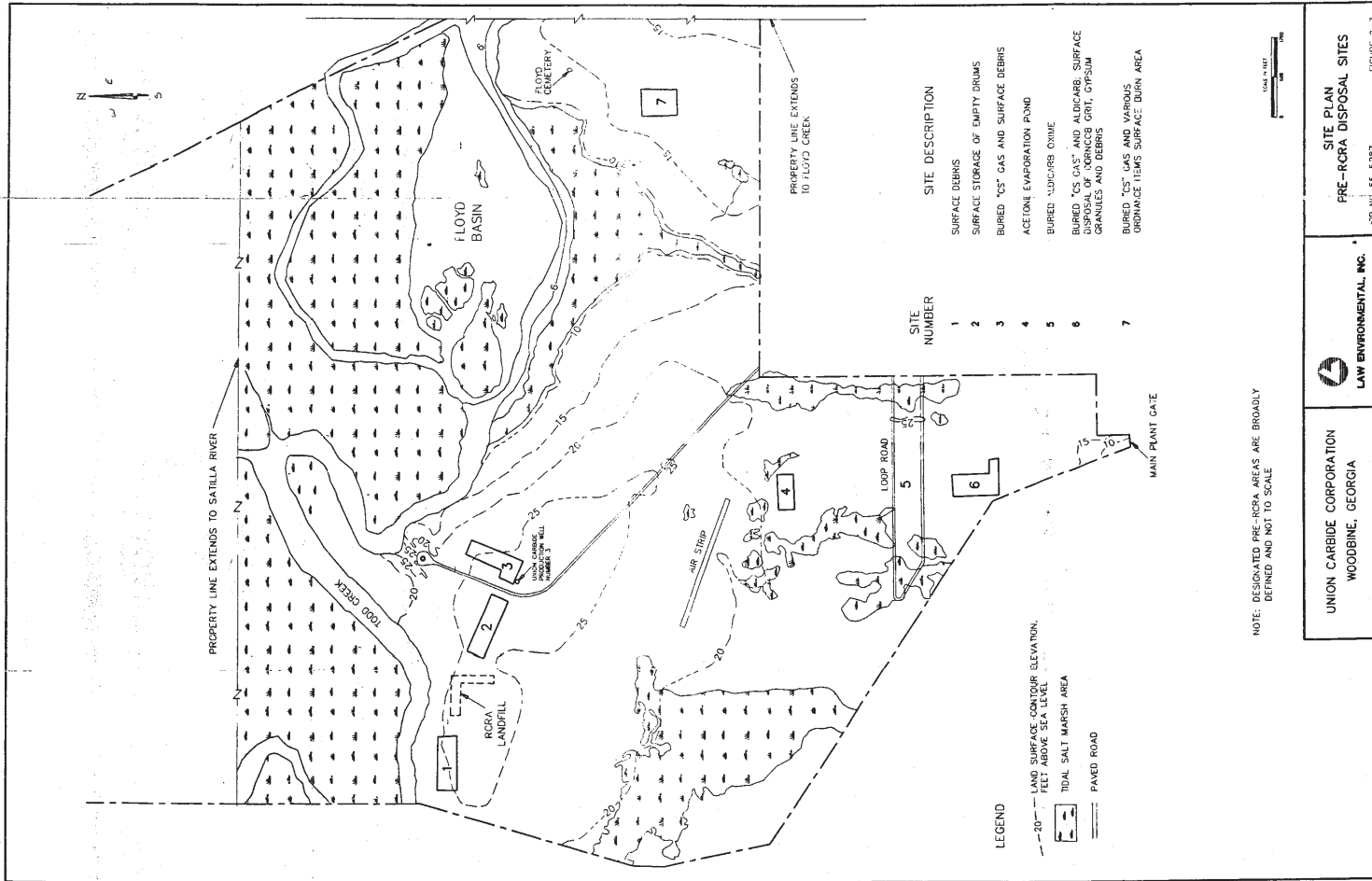
Recommendation: For future Initial Site Visits, a contingency plan should be considered which covers the need for additional time on site due to uncontrollable circumstances such as weather, airline scheduling/late departures and any other complications that may arise.

9.2 Problem: Although SWMU 3 and SWMU 7 were surface cleared of all visible UXO/OEW and ordnance related debris, the area is saturated to the point that any disturbance of the ground cover may reveal additional UXO/OEW and ordnance debris. The heavy ground matting of SWMU 3 has covered many items of ordnance which may resurface. SWMU 7 is highly saturated with "live" UXO, ordnance components, and ordnance debris. Heavy rains and soil erosion in these areas will expose additional items.

Recommendation: Perform a complete surface/subsurface UXO/OEW clearance of these areas. This would eliminate future exposure of UXO/OEW and any ordnance related debris.

ATTACHMENT 1

SITE MAP




ATTACHMENT 2
RELEASE OF LIABILITY

LAW ENVIRONMENTAL, INC.
112 TOWNPARK DRIVE
KENNESAW, GEORGIA 30144-5599

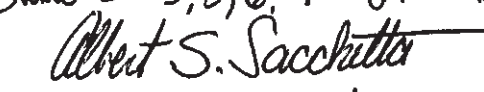
OCT 21, 1992


SUBJECT: TRANSFER OF LIABILITY FOR ALL
UNEXPLORED ORDNANCE-RELATED SCRAP
RECOVERED AT FORMER UNION CARBIDE
PLANT, WOODBINE, GEORGIA.

PURSUANT TO THE CONTRACTUAL AGREEMENT
BETWEEN LAW ENVIRONMENTAL, INC. AND EOD TECHNOLOGY, INC.
I hereby transfer ALL liability to Mr. Albert S. Sacchetta,
LAW ENVIRONMENTAL, INC. Representative, for ALL ordnance-related
Scrap recovered from SOLID WASTE Management Units (SWMU)
#3, 5, 6, 7 on the date stated Above.


MARK A. Barrett
SAFETY AND HEALTH OFFICER
EOD TECHNOLOGY, INC.

I hereby assume liability for the final disposition
for ALL ordnance-related scrap recovered from
SWMU'S 3, 5, 6, 7 on this date of October 21, 1992.


Albert S. Sacchetta
STAFF ENGINEER
LAW ENVIRONMENTAL, INC.


WITNESS: Billy J. Francis
SITE SUPERVISOR
EOD TECHNOLOGY, INC.

ATTACHMENT 3

DAILY SITE LOG

FORMER UNION CARBID PLANT

WOODBINE, GA. JOB# 2042-1

94°F / Sunny

10 SEP. 82

- 1) All personnel arrive Ramada Inn by 1750. Intro brief completed.
- 2) Personnel complete mobilization / travel paperwork.
- 3) Personnel available for work are:

JOHN STINE

DAVID BECKER

MARK BARRET

GLENN ZIMMERMAN

BILLY FRANCIS

KIM BELLHORN

- 4) J. STINE, M. BARRETT & B. FRANCIS proceed by POV to pick-up rental vehicles. Vehicles have full coverage (100%) insurance at a charge of an additional \$199.⁰⁰ per month per vehicle. Total vehicle charge per month @ \$1556.⁰⁰

- 5) Additional POV mileage incurred for pick-up of G. ZIMMERMAN at Jacksonville, FL. airport by M. Barrett. Additional POV mileage incurred by J. Stine for pick-up of rental vehicles.

- 6) Petty cash expenditure of \$68.⁸⁴ for below listed items:

1 ea - 5 GAL WATER CONTAINER @ 5.⁸⁶ ea.

2 ea - IGLOO WATER COOLERS @ 16.⁹⁴ ea.

1 bx - 30 GAL. TRASH BAGS @ 2.⁹² ea.

2 ea - 1500 LB. TIE DOWN STRAPS @ 8.¹² ea.

3 ea - COMPOSITION NOTEBOOKS @ 1.¹⁸ ea.

1 ea - INSECT / TICK REPELLANT @ 2.⁹² ea.

GA. SALES TAX @ 3.²⁸

Petty cash fund starting - 150.⁰⁰

Petty cash remaining - \$81.¹⁶

- 7) Reported arrival of team to M. Ligon and arranged meeting location

88°F - Sunny

21 Sept. 92

- 1) Team load out and depart Ramada Inn Kingsland.
- 2) Arrive. Union Carbide 0745 and meet with Matt Ligin and Dave Cunningham (Union Carbide)
- 3) Safety briefing conducted. Complete at 0910.
- 4) Site tour conducted, complete at 1110. all areas visited (SWMU 3, 5, 6, 7)
- 5) At 1130 Mr. Weatherly conducted an Alducarb briefing for all EODT & Law personnel.
- 6) Team cleaned out a large bunker to be used as control center.
- 7) After review of site and discussion of hazards with Mr. M. Ligin, site PPE was reduced from level "C" to level "D" except for drilling operations.
- 8) Sweep of area SWMU #3 began.
- 9) M 406, 40mm grenades encounter. Was gold O-give with blue body with Dummy fuse stenciled on body. Will be treated as live item until determined otherwise.
- 10) Load in area, grassy meadow completed
- 11) Team elected to work through lunch and depart at 1500.
- 12) Outbrief completed.
- 13) Requirements to complete site set up are:
 - 1 ea. 24" chain to secure ops area.
 - 1 ea. 24" chain to secure ordnance storage bunker
 - 1 ea. portapotty
 - 1 lb. rope, yellow
 - 1 ea. exclusion area sign / Hazardous explosives
 - 1 ea. work area sign
- 14) Requested Porta-Potty for site and a work station (table & chair)

90°F / Sunny

Sept. 92

- 1) Team arrives at 0700. Downloads equipment.
- 2) Safety / Tailgate briefing complete at 0720.
- 3) Work begins at area - SWMU #3 - Team begins clearance of surface ordnance and ordnance related debris. Team working in heavy brush. "Load Area" has heavy surface debris.
- 4) Request 17H storage containers for ordnance debris. Salvaged plastic 55 gallon drum for ordnance related debris. Live ordnance stored in Bunker #2 in non-sparking containers.
- 5) Requested a porta-pot for the 2nd day in a row. Slow response to requests for porta-pot. This item must be available in order to meet minimum OSHA standards. Area still requires exclusion area signs. M. Barrett making.
- 6) Crew breaks for lunch at 1200.
- 7) Crew returns to Area SWMU #3
- 8) 103 M-406 marked for disruption. All M-406 uncovered with ogive missing have dummy fuzes installed. HE warhead still intact. All M-406 which have ogive installed will be considered to be live and armed.
- 9) 60% of SWMU 3 cleared of ordnance debris. 104 M-406 40MM flagged for disposal.
- 10) Team secures area and departs at 1600.

85°F / Overcast

23 Sept. 82

- 1) Team arrives site 0700. Download of equipment.
- 2) Tailgate safety briefing complete. Days ops. briefed.
- 3) Team begins ops at SWMU 3. Continuing with surface clearance of ordnance.
- 4) J. Stone departs site at 0940 to work permitting for burn & det.
- 5) Talked with Howie Lowry, Air Quality Branch, Atlanta GA. concerning burn permit. He requested letter detailing request. Working.
- 6) Called ATF Atlanta GA. to discuss permits for blasting/demo. ops with Lance Kern 912-658-4251. He stated our explosive license should be all that's required. He suggested I contact local Fire Marshal (Tommy E. Stalvey or ^{YOEMANS} Kevlan ~~Stendran~~) at Kingstone GA. Called, Stalvey out for four weeks. ~~Stendran~~ ^{YOEMANS} gone to lunch, # is 912-729-6198
- 7) Attempted contact with local fire marshall, still out to lunch at 1450. Returned to field.
- 8) M. Ligin offered computer in order ~~to~~ for me to complete permitting letter at hotel. Informed M. Ligin he was getting 2-3 hours each night of my time and the work should be completed ~~in~~ during normal hours.
- 9) Requested pallets and storage drums prior to start of SWMU #7. Working from scrounged pallet and 55 gallon ~~metal~~ ^{plastic} drum that I cut the top out of. Still no response from Law P.M. (M. Ligin)
- 10) M. Ligin informed he couldn't follow team during sweep operations due to area hazard. He complied with request.
- 11) Will procure 3/4" plywood and saw horses

83°F / Overcast w/ light rain

- 24 Sept. 92
- 1) Tailgate safety briefing complete after team arrival at 8700.
 - 2) Steel drums for storage have not arrived. Estimated arrival by end of week, maybe sooner.
 - 3) Steel slugs are not retaining shape when fired into M406 fuze. Deairing is being accomplished. Called Joe and informed him of problem. Requested an additional deairer.
 - 4) Requested additional slugs be sent. Was informed by Joe that enough slugs were not available. Will work the problem.
 - 5) M. Bennett suggested using wooden slugs to remove ogive to determine type fuze. Will attempt tomorrow (25 Sept. 92) This procedure used at BEAT school for light opening.
 - 6) Will need to buy wooden dowels.
 - 7) Continued operations with steel slugs.
 - 8) 4 slots completed with steel slugs.
 - 9) Should move operations to SWMU #7.
 - 10) Will continue deairer operation and split crew members to area SWMU #7 for set-up.
 - 11) Have meeting set up with local Probate Court to insure compliance with GA. regulations for disposal by detonation.
 - 12) M. Legion (Law) informed of duty hours of S/Supervisor. He wants S/Supervisor available for paperwork after hours. A few hours a week I don't mind, but 2-4^{hours} per night won't be acceptable.

81°F / Rainy)

Sept 25, 92

- 1) Team arrives at 0700. Tailgate safety briefing complete.
- 2) Team will work SWMU #3 and SWMU #7
- 3) Metal barrels requested as standard ops for the day.
- 4) Debris on area 7 is heavy. Will procure more buckets for trash.
- 5) All containment barrels used. Notified M. Ligier of situation.
- 6) Team still working 40 mm at SWMU #3
- 7) Talked with M. Ligier concerning containment drums for debris from SWMU #7. Until drums arrive debris will be placed on plywood. M. Ligier advised of problem of double handling. He stated "no problem". Extra time involved is not a consideration.
- 8) Set up appointment with probate judge concerning county permits for blasting. Judge (Candor County) could find no restrictions which apply to private property dislocated from public access.
- 9) Problem developing with burn permit. Dave Cunningham (Gloucester-Pauline) believes no diesel fuel will be allowed. Will check with EPD Regional.
- 10) Crew outbriefed.

26 Sept. 1) Off for the day - Saturday -

27 Sept. 82 1) Off day - Sunday -

79°/overcast/occasional Rain

28 Sept.

- 1) Team safety brief conducted.
- 2) Team completing area 3. Should be ready for QA of Area #3.
- 3) Located 55 gal. drum on site for scrap storage. Request storage containers from M. Ligin (Law). He stated they would arrive here on Friday. Scrap currently being placed on plywood. M. Ligin informed of double handling requirements.
- 4) Area #3 QA to be completed 29 Sept. 92.
- 5) Probate court Judge not available today. Set up meeting for 1430, 29 Sept. 92.
- 6) M. Ligin requested a minimum of 3 people at SWMU #3 when work in progress. I informed him our requirements are 2 people. He requested 3. Complied with request.
- 7) Team taking 1/2 hour hour for lunch.
- 8) SWMU #7 exclusion area: contamination gone established.
- 9) Need to change warning sign at SWMU #3 ordinance storage area.
- 10) Team debrief at 1520.
- 11) Team secures for the day.

76°F / Overcast w/ light rain

29 Sept. 92

30 Sept.

- 1) Tailgate safety briefing complete after team arrives at 0700.
- 2) Drilling team delayed arrival until 30 Sept.
- 3) Team working QA in area SWMU #3. Each sweep results in more rounds recovered. Leaves and underbrush have covered many ordnance items. M. Ligin briefed of problem. Locating ordnance depends on the angle the ordnance is viewed from. Discussion with M. Ligin results in a third sweep of SWMU #3. Team sweeping at 5' close interval sweep. Team concentrating on areas the HAZMAT team will be working in.
- 4) SWMU #3 cross section sweep completed. M. Ligin advised to have HAZMAT team be aware of ordnance when moving debris. M. Ligin briefed that without a subsurface sweep, due to heavy leaf cover of forest floor we would not guarantee no ordnance would be encountered by HAZMAT team once they wandered away from cleared zones.
- 5) Two man team detailed to SWMU #5 to conduct ordnance clearance. 3 more team members dispatched once work in SWMU #3 completed.
- 6) Sweep of SWMU #5 complete. Team dispatched to SWMU #6. No ordnance debris encountered in SWMU #5.
- 7) Team encounters no ordnance or ordnance debris encountered in SWMU #6.
- 8) Debrief complete, team departs at 1530.

75°F - Overcast

- 1) Team arrives worksite at 0700.
- 2) Safety briefing complete.
- 3) Team will work SWMU #7.
- 4) SWMU #7 boundaries established from data supplied by former Union Carbide personnel who worked area 7.
- 5) Once suspected areas were established, team cleared 40 yards of additional area to ensure no ordnance would be encountered outside proposed boundaries. Area marked by yellow surveyors tape to identify boundaries.
- 6) Work area established in SWMU #7.
- 7) Clearance begins at SWMU #7.
- 8) M. Ligin briefed on the need for containers for scrap metal. Advised by M. Ligin containers would arrive by Friday at the latest.
- 9) Turned team over to Billy Francis in order to meet with Camden County Probate Judge.
- 10) After 1½ hours of searching GA. Titles no requirements for permits could be found for private property blasting which is dislocated from public access. Will contact GA. state Fire Marshal again to explain ~~the~~ findings of Probate Judge and ensure no additional permitting, with exception of ATF explosive license, is required. Demo looks good as far as permit requirements.
- 10) Work continues in SWMU #7.
- 11) Team debrief completed. Team departs at 1530.

75°F - Overcast

1 OCT.

- 1) Team arrives at 0700. Safety briefing complete.
- 2) Team begins work at SWMU #7. Working section #1. Area broken into for clearance sectors.
- 3) M. Legin briefed on the need for storage barrels for ordnance debris. He stated they will arrive soon.
- 4) Team breaks for lunch (1/2 hour)
- 5) Law Environmental arrive at SWMU #7.

Ellis: Gross arrive Area to clear access routes. Safety briefing for Area 7 conducted by J. Stine in law of M. Barnett. Munitions & chemical hazards covered. Junior Mole dog operator briefed. His assistant also briefed.

I understand hazards of area and will remain with EOD-T representative at all times.

R Mole Jr.

CSP. Roubin

- 6) Law Environmental drill crew P.M. arrive. Discussed areas to be cleared for well access.
- 7) Safety briefing will be covered at 1800 tomorrow by M. Barnett.
- 8) Operations in ~~area~~ SWMU #7 suspended while drill team inside exclusion zone. Drill team personnel briefed on hazards and escorted by B. Francis.
- 9) Chris Mabry: Page Allen (Law) discussed SWMU #7 in detail concerning drill team requirements.
- 10) M. Legin instructed J. Stine that no personnel would be assigned to C. Mabry without his specific approval.
- 10) Team debrief conducted. Team departs at 1530.

74°F - Overcast

- 2d.
- 1) Team arrives at 0700. Safety briefing conducted.
 - 2) Team departs to SWMU#7 to complete section 1 of area.
 - 3) M. Barnett conducts safety briefing to HAZMAT team and drill team.
 - 4) HAZMAT team using half cover mask for removal of CS contaminated air handler. Advised M. Ligin of hazards. M. Ligin stated due to liability issues the HAZMAT team had their own safety up and he would not "get involved." EOD-T holds no responsibility for HAZMAT team while on site. M. Barnett noted in Safety Log.
 - 4) HAZMAT team enter area in half mask. CS air handler work begins. HAZMAT team exposed to heavy concentrations of CS. Depart area rapidly.
 - 5) Section 2, SWMU#7, work complete.
 - 6) J. Stine escorts driver to clear entrance areas.
 - * Assigned to job #2042-2; 0900 - 1100
 - 7) Clearance paths marked by J. Stine & K. Bellman
 - * Assigned to job # 2042-2;
 - J. Stine - 1300 to 1500
 - K. Bellman - 1400 to 1500 - 1 2 hours
 - 9) Team secures from ~~area~~ SWMU#7.
 - 10) Debrief complete. Team departs site at 1600. (1 hour for lunch)
 - 11) Two personnel will provide EOD support to C. Mabry (job #2042-2) Personnel - Billy Francis & Dave Becker.

80°F - Heavy Rain & Thunderstorms

3 Oct.

1) Team arrives site at 0800. Safety brief conducted by B. Francis. Team consist of B. Francis & D. Becker

2) Team placed on standby by Chris Mayby (Laser). Thunderstorms continue.

3) Team released by C. Mayby at 1200.

4) B. Francis - 4 hours; job 2042-2

D. Becker - 4 hours; job 2042-2

5) J. Stine & G. Zimmerman to support 4 Oct. 92. Will be notified at 0900 if conditions will permit work at site.

82° / Overcast / Rainy

ECT.

1) Notified by Chris Mabry (Law, Drilling Team) at 0900 to arrive site at 1000.

2) J. Stine & G. Zimmerman arrive site at 1000. Safety briefing completed. Decor station set-up highlighted during safety briefing.

3) Chris Mabry briefed J. Stine on drill site locations.

4) J. Stine & G. Zimmerman set up decor area.

5) Two drill sites in ~~area~~ SWMU#3 cleared for drill rigs. Downhole performed at 2' foot intervals. Two wells completed. 3rd site cleared for rig / drilling. 3rd drill site has heavy trash / debris pile. SWMU#3 heavy with trash & industrial debris.

6) Assisted C. Mabry at SWMU#6. Due to heavy rains (8" in two days) SWMU#6 has 2" - 12" of standing water. Vehicle stuck! Work 1 1/2 hours to get out of SWMU#6 with no success. Will bring backhoe from SWMU#3 first thing 5 OCT. 92.

7) David Allen and J. Stine tour site SWMU#6 & 7 for discussion on drilling location accessibility. 1 of 4 wells can be done at SWMU#6. 3 of 4 might be accessible at SWMU#7. Demobilization of drill crews may be required due to severe flooding and continued rain. If this happens crew has 3 days at SWMU#7 plus demo. of 5-6 days.

8) J. Stine & G. Zimmerman released at 1730.

2042-2 - J. Stine 7.5 hours

2042-2 - G. Zimmerman 7.5 hours

9) Full crew instructed to arrive job site at 0700 5 Oct. Team departs after debrief at 1730.

74° / Overcast

5 Oct.

1) Team arrives at 0700. Safety briefing completed.

2) Two people - M. Barrett & K. Bellhorn working 0800 - 1200. Assigned to M. Ligin after 1200

M. Barrett - 2042-2 - 4 hours

K. Bellhorn - 2042-2 - 4 hours

3) Talked with Dave Cunningham to find a burn pan. He gave me a business in Jacksonville FL. Tom Hartley - 904-724-7477
Will call ASAP

4) M. BARRETT - 1500 - 1700 - 2 hrs - 2042-2

K. BELLHORN - 1500 - 1700 - 2 hrs - 2042-2

5) Area extremely waterlogged. Creating problems

6) Called Tom Hartley. Not in will find out tomorrow if a containment vessel is available

7) Crew working ~~area~~ SWMU #7 in ankle deep water.

8) Moved work site at SWMU #7 to high ground. Will work as long as possible.

9) Personnel, with exception of shift assigned personnel, depart area for the day at 1530

10) M. Barrett / K. Bellhorn depart site at 1700

75°/overcast

- at
- 1) Team arrives at 0700. Safety briefing complete.
 - 2) Chris Mabry & Dave Allen (LAW Drilling Crew) informed me that they would be departing site. M. Ligin wants to demob. two personnel due to drill rigs leaving. Drill rigs may return sometime next week, should be Monday.
 - 3) Informed C. Mabry & M. Ligin of the importance of notifying me of work schedule and that it's an error in judgement to demob. if personnel will be need Monday or Tues. Requested Law P.M.'s decide what direction to pursue and make a command decision.
 - 3) Personnel working ~~at~~ SWMU #7.
 - 4) Requested M. Ligin schedule meeting with Mr. Brandt at the Camden County Landfill to check on disposal of ordnance associated scrap. He stated he'll work the issue.
 - 5) Al Sacchetta arrived to relieve M. Ligin. M. Barrett conducted initial safety briefing and M. Ligin completed site familiarization.
 - 6) M. Ligin notified me I would need to demob. two personnel Friday or Saturday. Drill crew doesn't know when they will return.
 - 7) Advised M. Ligin to release team to scheduled four day break to allow for water drainage. Drill crew may return Monday or Tuesday.
 - 8) 1530 - Outbrief complete, team departs.

* ADDITIONAL ENTRY - M. Ligin notifies me to demob. two personnel on Friday. Notified at 1730 at motel.

- 7 OCT
- 1) Team arrives 0700. Safety briefing completed.
 - 2) M. Barrett, while talking with Dave Allen at supper mentioned demol. of EOD-T personnel. M. Barrett notified me that LAW drilling crews will mob. Monday to site (Woodbine). Al Sacchetta asked why team demoling if drill crew moving back to Woodbine on Monday. He didn't know. I explained to A. Sacchetta the cost and logistic problems involved with mob. ~~demol.~~ demol. Also asked who was holding the rabbit and who ~~was~~ owned the rabbit (what the hell is going on?) Al will wait for M. Ligin.
 - 3) M. Ligin arrives site. J. Stum requested this matter be settled ASAP. Instructed M. Ligin we should remain with ~~our~~ original schedule and stop picking me and the crew around. Stated if he couldn't settle the matter I'd settle it for him. M. Ligin contacted Dave Whukis, LAW project director. M. Ligin departed site for Kennesaw, Ga. D. Whukis called back talking to Al Sacchetta and ~~was~~ stated he wasn't aware of any schedule change and to proceed on established schedule. Alls well. Team should demol 21 Oct. 92
 - 4) Crew continues work SWMU #7
 - 5) Explosives ordered from Slurry Corp.
 - 6) Contacted Marvin Lourey's office. He was called out of town and won't be returning until Tuesday, 13 Oct. 92. 404-656-6900
 - 7) Billy Francis advised of situation
 - 8) Team departs at 1530.

OCT.

* ADDITIONAL ENTRY * 1830

Crew and paperwork turned over to Billy Francis. Briefed Billy on most items and some he didn't want to know about.

Petty cash balanced -

8.23 Turned off over to Billy -

John J. 10 OCT. 92 / 1833

oct

Received This Date & time

Billy Francis

7 October 1992 Billy J Francis

8 oct. Team Secured 8 Oct. Thru 11 Oct
92 - for Team (4) Day Break, will
resume operations 12 Oct 1992. at
0700 Hours.

Billy Francis

- (1) *additional Entry Enterprise Car Rental
called at Motel wanted to know mileage on
Truck and if we would need additional
time on vehicles, Informed them I would
let them know next week 1030 Hours
This Sat. 8 Oct 92 (912-262-1436)

Billy Francis

- (2) End of Entry^s this Date

Billy Francis

8th October 1992 Billy Francis

24. Team off for this Day:
2nd Day of Four (4) day Break

(1) Received per Diem checks from
EOD-T, Distributed checks to
Individuals concerned. also Received
check for Edward King. This Individual
not at this site: will hold check
until word from Home office as to
Distribution. 12:44 Hours This Date
Billy Francis

(2) phone conversation with John
Stein EOD-T office 13:44 Hours This
Date, Invoices concerning LAW Eng. also
contracts to be returned to EOD-T of ^{BF} ~~BF~~
to Giblin a copy of petty cash Log: next
^{BF} ~~BF~~ Fed x ~~arriving~~

Billy Francis

Billy Francis

9 Oct, 92

10. Oct.

Saturday: Team off today:

11.

10 October 92

Gally Francis

11 Sunday: Team off today

Billy French

11 October 22

12 Oct Temperature - 76 Sunny

- (1) Team arrives Site 6700 Safety Brief at 0710, Hour: by Mark Barrett all hours today & he charged to 2642-1
- (2) Team Dispatched to Area 7 to complete this area - (David Becker & Glen Zimmerman)
- (3) Mark Barrett & Ken Bellhorn inventorying Explosive Bunker to ascertain how many items are for Demo. & how many items are for burning
- (4) Called John Stein EOD-T references charges pertaining to Instruments on standby: for last week.
- (5) Area Seven (7) cleared & Secured for this operation:
- (6) Call from Drill Team from Low Environmental Inc. They requested Two (2) men for Drilling operations tomorrow 13 Oct. 92
- (7) Demo area is prepared & ready for Demo operations this date:
- (8) Explosives have not been received as of this date: will check with UPS first thing tomorrow:
- (9) Team Departs 15:30 HRS

not 92 Bulk Franks

AT Temperature 80° & Sunny (Beautiful Day)

- (1) EOD Team arrive Site 0700.
Safety Briefing Mark Bonnett: Covered
Drilling operations & Range Safety & operations
- (2) Mark Bonnett & ~~Fran~~ Albert Succatella Low
Engineering project manager departed @ 730 HRS.
to QA area "7"
- (3) @ 830 Drill Team from Low Engineering
arrived on Site, Dave Becker & Elly Zimmerman
assigned to Drill Team for Drilling operations
- (4) Called Slurry Corporation, Columbus
Kansas, Explosives ordered & shipped by
Truck. Have not received Explosives this
date. Slurry Corporation is checking
& will call back to inform us the
Shipment. 12:30 Hours.
- (5) Explosives found in Savannah GA. will
be delivered tomorrow AM
- (6) Well Drilling Team arrived
will start drilling
operation tomorrow

Bully ~~Fran~~ ~~Boat 92~~

14 at. Temperature 80° Sunny Day.

(1) Safety Briefing, by Kim Bellhorn
Covered Drilling operations & Range
Safety & Demo operations

(2) 0730 Team of Dave Becker &
Glen Zimmerman, assigned to
well Drilling operations Area "7"

(3) 0745, EOD Team Mark Barrett
Bill Fronis, Kim Bellhorn start
Demo operations today.

(4) Dave Becker & Glen Zimmerman
2042-2 Hqs. Becker
2042-2 Hqs. Zimmerman

(5) 10:00 Hqs. Called Atlanta Ga. Concerning
Burn permit for State of Ga. 404-686-6400
Marvin Lowery:

(6) Have not received any information from
Matt Ligon (LAW) on the Disposition of
ordnance items recovered for burning at
this time 1400 Hqs.

(7) Have not received explosives. Have
made numerous phone calls to ~~the~~
Jacksonville Fto concerning shipment to
EOD-T here at Woodbine GA. John Little
Mark Barrett has been on the phone
numerous times inquiring about this
shipment 1400 Hqs. this date!

11104

(8) Explosives arrived 1500 hours.

Explosives inventoried & signed for
Stored in bunker area 3 - This Date.

(9) Team Secured 1530 hours.

Billy J. Ponder

14 October 92 Billy J. Ponder

15 Oct. Temperature 80° Sunny

16

- (1) 6796 Team arrives area 3
- (2) 6715 Safety Briefing, Covered Demo operations, Covered well drilling Safety for well drilling crew information
- (3) David Becker & Glen Zimmerman dispatched with well drilling crew for the Drilling operation this date.
- (4) Bill Frons & Mark Banett & Kim Bellhorn Three Man Demo team for Demo operations this date:
- (5) Demo operations consist of Destroying 46 mm ~~40~~ Frag Grenades M406,
- (6) Demo operations consisted of Eight (8) shots today: will resume Demo operation tomorrow 2 AM -
- (7) Range Clear & Demo Team Secured Demo operations at 1530 HRS this Date:
- (8) Team Secured at 1545 HRS

Billy J Frons

- (9) * additional entry message from Debbie Home office, to call her. I called at 1630 HRS. Information concerning invoices & to add

id. (10) hours to this week invoice
for Clerical Services:

10) * additional entry:

Matt Ligon called me in Motel Room
at 1720 Hours. He informed me he has
Burning permit and wants the ordnance
that we recovered for burning to be
destroyed by burning. He authorized
Three more Team (3) for Three (3)
more day operations for the burn.
Monday thru Wednesday next week
Oct 19 thru Oct 21st ask Matt
Ligon to Fax Copy of Burn permit to
us tomorrow 16 Oct 92, we are
working under contract # 2042-1
for this operation.

Billy J. Froun

15 Oct 92 Billy J. Froun

16 Oct Temperature 80° Beautiful Sunny day =

- (1) Safety Briefing Mark Barrett:
Topics covered Range Safety for
Demo operations; Safety for Well
Drilling crew. Local Hazards for
the area:
- (2) Demo operations commenced 0830
Hours this date.
- (3) Well drilling crew of Dave Becker &
Glen Zimmerman standing by for
well drilling operations this date.
- (4) Demo operations completed this
date 1100 Hours.
- (5) EOP Team preparing for Burning operation
to commence Monday Morning at 0700
Hours.
- (6) Bill Francis & Kim Bell Horn dispatched
to Jacksonville Fl. to procure two (2)
containers to safely burn stems of
ordnance recovered from area "7"
- (7) Team Secured 1530 Hours.
- (8) 1600 Hours. FOP received from Mark Lyon
FAA Engineering. Giving permission
to commence Burning operations starting
Monday Morning Oct 19 Oct 92

R. M. T. P. 1

Oct. (1) EOD Team Demobilizing Two (2) men this date. David Becker & Glen Zimmerman, David Becker By P.O.V. & Glen Zimmerman by air travel.

(2) Three remaining members Mark Bonet Kim Bellhorn & Bill Francis are authorized Three (3) more day² operations for Burning of remaining ordnance to commence Monday Morning 19 Oct 92.

(3) ^{Billy} Two men Dispatched to Jackson Hill Fl. to Berman Bros. Salvage yard. To pick up Two (2) Containers to Burn remaining ordnance starting Monday Morning 19 Oct 92.

Billy J Francis

16 Oct 92 Billy J Francis

16 Not Saturday: Team off today

(1) Bill Francis transports Glenn Zimmerman
to Jacksonville FL. airport for return
Flight to Portland Oregon. 0630 Hour.
This date:

(2)

17 Oct 92

Bill J. Francis

30 Oct Sunday: Team off today

30 Oct 92: July 1992

16 Oct

Temperature 70[°] Beautiful Sunny Day:

- (1) Team report Area 3 (3), 0748
 - EOD team prepares Burn area for Burn this afternoon.
- (2) Two Metal Containers, are Filled with Wooden Pallets & ordnance recovered for Burn
 Burn initiated at 1330 Hours. Excellent ignition & Burn on Both Containers, ignition was Electrical. Mark Barrett has Total Count of Ordnance items logged in ordnance log after Burn tomorrow will log Total Count of items & type.
- (3) Dave Cunningham, Liaison man for Union Carbide notified of Burn today & tomorrow. He informed the Fire Dept. on this installation and I also talked to the Fire Dept people. Also Dave called the Georgia Forest Division and all systems were OK for today & tomorrow.
- (4) Burn Successful, Area Secured Will Clean & Check Containers tomorrow.
- (5) Team Secured for the Day 1530 hrs
 19 Oct 92 Billy J. Francis

- + Temperature 70° ^{0 High} Beautiful Sunny Day
- (1) Team Reports To area 3 @ 2000
Prepare Burn Containers for today's Burn
Yesterday's Burn was successful as all
items were consumed by the fire
all ordnance scrap put into 55
gal drums & labeled Scrap for Law
Engineering Disposal.
 - (2) Albert S Sacchetta Law Engineering
has advised us that he will sign for
all scrap and they plan to Haul this
to Atlanta to Dispose of: 0830 Hours
 - (3) Burn area is clear & Final burn ignited
1030 Hours this date.
 - (4) Albert S Sacchetta Law Engineering
has advised EOD Team that all items
purchased for the Job Site under contract
2042-1 & 2042-2 are the property of
EOD Technology- 1400 Hours This Date
 - (5) Area Three Secured 1530 Hours &
EOD Team Secures for the day.

Ricky J Francis 20 Oct 92

21 Oct

Temperature 70° High Beautiful Sunny day

(1) EOD team arrived area 3 Site - Team Safety Brief & Burn area cleaned and checked - all burned items placed in drums & labeled Scrap.

(2) Kim Bellhorn returned the Burn Containers to Jacksonville FL. Salvage yard - Report 08401

3. Kim Bellhorn, Bill Francis & Mark Barrett returning rental car & Truck to Enterprise Rental Brunswick GA. 1230 hours

(4) Items of ordnance Burned on the 19th Oct & 20th Oct 1992 are as follows

M-301 ILLUM. MORTAR-	8-EACH
M-84 POWDER TRAIN TIME FUZE	— 906 EACH
M-49-TRIP FLARES	— 200 EACH
M-71A2-PRIMERS	— 347-EACH
XM 15 C-5 CANISTERS	— 57-EACH
40 MM-C-5 GRENADES	— 260 EACH

The above listed items were destroyed by burning:

(5) Burn area policed & cleared, area is secure

(6) EOD Team Securing & packing tools & equipment for Demobilization - Tomorrow

Bill Francis

22 Oct. Demobilization Day.

(1) EOD team of Mark Barrett, Kim Belhorn
& Billy Francis Demobilizing this date.

(2) all "Hands" away safe & sound.

= End of Log =

Billy J Francis

Billy J Francis

22 Oct 92

ATTACHMENT 4
SITE SAFETY LOG

20 Sept

1992

8:00 AM

Mobilization TRNG / Safety brief

covered: Weather conditions, HNT related injuries,
Site History, UXO/ANU surface clearance, General safety,
Site specific hazards for tick, chiggers, snakes, emergency
response procedures, Material lifting, UXO/Fuze Hazards,
review of work plan.

	<u>Name</u>	<u>Position</u>	<u>Company</u>
①	Matt Wiggin	S. Proj. Manager	Low Environmental
②	John Stine	EDDT Site Supv.	EDDT
③	Mark Barnett	SSIB	EDDT
④	Glenn Zimmerman	UXO Specialist	EDDT
⑤	Billy Francis	UXO Supv.	EDDT
⑥	Dave Becker	UXO Specialist	EDDT
⑦	Kim Bollman	UXO Specialist	EDDT

10:00 AM

Joe Winklerby, gave all personnel
briefing on ~~ALDICARB~~, Toxic pesticide.

21 Sept

0700 AM

Tailgate Safety briefing

covered UXO/General safety, work condition, emergency response
procedure, tick/snake procedures. Weather: 88°F, 93% humidity

Personnel list: Matt Wiggin, Low Environmental, John Stine EDDT

1 Mark Barnett SSB, EORT, Billy Francis EORT, Glenn Zimmerman EORT, David Becker EORT, Kim Pullman EORT.

10-11-78 10:00 AM 10:00 AM 10:00 AM 10:00 AM 10:00 AM 10:00 AM
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23 Sept

0915

Tailgate Safety Briefing given by Kim Bellhorn, 2:00 hr

All EORT Personnel Present and Matt Ligon, Law Environmental

Covered: UXO safety, Biological hazards, Vehicle Safety, emergency response procedures. Weather: 85°F, 95% humidity

24 Sept

0900

Tailgate Safety Briefing given by Mark Barnett, SSO.

All EORT Personnel Present. Covered: UXO safety

Biological hazards, vehicle safety / weather conditions, emergency response procedures, i.e. radio / cellular phone procedures.

Weather: 82°F, 92% humidity rain expected throughout day.

0940

Matt Ligon, Law Environmental, arrived on site, briefed on Safety issues discussed.

25 Sept

0902

Tailgate Safety Briefing given by Mark Barnett, SSO.

All EORT Personnel Present: UXO / deanner safety, Biological hazards, Vehicle safety / adverse weather conditions, emergency response procedures.

Weather: 78°F, 87% humidity, rain expected throughout

day

0915

Matt Ligon, Law Environmental, arrived on site, briefed on issues of Safety briefing.

Sep 28 Tailgate Briefing performed by M. Barnett, SSWO
0659 1990 All EORT personnel present and Matt Ligon, Law Environmental
Covered UXO Safety, Vehicle Safety, Emergency response
Procedures, Biological Hazards, weather conditions: high 80's
projected, humidity 89%

Sep 29 Tailgate Safety Briefing performed by M. Barnett, SSWO
0920 1990 All EORT personnel present including Matt Ligon,
Law Environmental. Covered hurricane evacuation route
procedures due to tropical depression off Coast, UXO
Safety, Vehicle Safety, Biological Hazards, Weather
conditions: High 70's, partly cloudy w/ light drizzle,
Humidity 89%.

11:35 Simulated Exercise 1. Rattle snake bite (John Sines)

11:38 Team arrived Dispensary for Medical attention.

11:50 Exercise terminated.

Exercise initiated by Matt Ligon, Law Environmental

Sep 30 Tailgate Safety Briefing performed by M. Barnett, SSWO
0654 All EORT personnel present including Matt Ligon,
Law Environmental: Covered UXO Safety, Vehicle Safety,
Biological Hazards, Weather: 72°F high 75° humidity.

Cont - Sept 30, 1992

0800 Subcontractor Matech arrived on site, signed Visitors
log. Milton Thompson, Matech
Superv. Bruce

1000 Ordinance Briefing given to all Matech Personnel.
Discussed Procedures for Identifying, marking,
and notification of Potential Hazard to UXO/EOO
Personnel. Brief full face mask vs. half mask.

1035 Notified Matt Lyon of OSHA Safety Violations
of Heavy Equipment Operator.

- ① No Personal Protection Equipment i.e. Hardhat, hearing Protection.
 - ② Backhoe 560 has no backlight, no side Protection
 - ③ No Rear fire set up, no Continuation control
- Matt Lyon, notified Personnel, individual Put on
hardhat put no hearing protection and nothing was done
about the heavy equipment violation.

Also Personnel left equipment running and started
working with another person in front of running vehicle.

0900 Oct 1, 1992. Tailgate Safety briefing given
by Mark Burnett, SSgt. Personnel Present:

John Stine EORT

Billy Francis EORT

Mark Zimmerman EORT

Ken Bellhorn EORT

Dave Becker EORT

Mark Burnett EORT

Items covered: ORO safety, Decon Procedures, Atropine
Auto injector training, Vehicle Safety, Biological hazards,
Emergency Response Procedures, Weather conditions: Rainy
Mid 70's, 80% humidity.

0800 Marked crew entered exclusion zone to move
an sample which is covered with Cls residue.
2 items exposed to Cls because of being
downwind and NOT taking my advice to wear
Full face protection. No side effect.

0800 Arrived at SWMD # 3 to see no contamination
control, no Decon line set up. Brief Matt Logan,
basically he doesn't care. Notice Marked personnel
having fun in Tyvek to go to break area to
drink, eat, and relax.

1200 Matt Logan, started to set up area properly,
finally!

0700 Oct 2, Friday Tailgate Safety briefing given by Dave Becker

All EOD Personnel present; discussed UXO/CEN Hazards,

Chemical Hazards, Biological Hazards, Vehicle Safety.

Weather: Raining and 70's, 82% humidity.

Oct 3: Drilling ops, stand by crew of

Bill Francis / Dave Becker on site. TDD 5010

Work stopped at 12:30

Oct 4: Drilling ops / intrusive work

Jim Selive / Glenn Zimmerman

1000 Decan Line Set up

Team stood by as Safety for drilling work

0000 Oct 5, Monday, 1992:

Tailgate Safety Brief given by Dave Becker

Discussed: Biological Hazards, Vehicle Safety,

Decan Procedures, UXO/CEN Hazards, Chemical Hazards,

Weather conditions: Weather to site in under 3" of

water in low lying places or projected. High 72°F, 75% humidity.

All EOD Personnel present.

0100 Oct 6, 1992 Tailgate Safety Briefing given by
Ken Bellhorn. Topic Discussed were: Uxo/cow
Safety, Vehicle Safety, Ocean Procedures, Biological Hazards,
Glass/Hypodermic Needles SWW #7, Water Hazards, in Ship
man's foot, Chemical Hazards.

All EOT Personnel Present, and Matt Logan
Law Environmental.

0102 Oct 7, 1992 Tailgate Safety Briefing given by
Mark A. Bennett. Topic Discussed were: Uxo/cow
Safety, Vehicle Safety, Ocean Procedures, Biological
Hazards, Glass/Hypodermic Needles SWW #7, Water
Hazards, Chemical Hazards. Weather: 77°, rainy.

All EOT Personnel Present and Albert Sacchetti,
Law Environmental Inc.

OCT 8-11 Stand down Days All Personnel briefed
on travel requirements.

0700 OCT 12, 1992

Tailgate Safety Brief given by Billy Francis
Topic Discussed were: Uxo/cow safety, vehicle safety,
chemical Hazards (Tank), Biological Hazards. All

EOT Present, except John Stine, left site Oct 7, 1992.

Also Present Albert Sacchetti. Weather 81°F, 80% humidity.

0700

OCT 13, 1992

SPP, at 1000

0700

Tailgate Safety Briefing given by Mark Bennett.

Topic Discussed were: Uxo/ocw safety, vehicle safety, Demo procedures, Chemical Hazards, Biohazard Hazards, Decon procedures. All EORT personnel including Albert Sacchetta, Law Environmental present.

Weather 82°F, 85% Humidity

7th 81-11 to 10

0702

OCT 14, 1992

Tailgate Safety Briefing given by Mark Bennett.

All EORT personnel present. Topic Discussed were: Range SOP, vehicle safety, Demo procedures, Chemical hazards, Decon procedures. Weather 80°F, 82% humidity.

0700

OCT 15, 1992

Tailgate Safety brief given by M. Bennett.

EORT personnel present including Law Environmental's Albert Sacchetta. Weather: 78°F, humidity 85%.

Topic discussed were: Range SOP, Demo ops, vehicle safety, Demo Chemical Hazards, Decon procedures.

Weather 78°F, 80% humidity

0700 October 16, 1992

Tailgate Safety briefing given all EOD personnel present. Dave Becker / Glenn Zimmerman will Debrief tomorrow. Topic Discussed: Personal ops, Travel Safety, Vehicle Safety, Explosive Safety
Weather: 83°F humidity 75%

Oct 17-18 off

0800 17/10 1000 1000

0700 Oct 19, 1992

Tailgate Safety brief given by EOD M. Barnett personnel present: Billy Francis, Glenn Beckman. Items discussed: Lifting hazards, Chaisaw Safety, Vehicle safety, Transportation of UO/OEW, Explosive Safety
Weather: 82°F 80% humidity

0800 21/10 1000 1000

0700 Oct 20, 1992

Tailgate Safety brief given by EOD M. Barnett, Billy Francis, Glenn Beckman (EOD personnel) and Albert Sacchetti present. Weather: 79°F 70% humidity. Items discussed: Burn ops, Lifting hazards, Hooks, Chigger etc, Vehicle Safety, Emergency Response Route.

oro Oct 21, 1992

Last entry: Tailgate Safety brief given by
ki

ATTACHMENT 5
UXO ACCOUNTABILITY LOG

Ordnance Accountability Log

Project #

Woodline, Ga. SWW # 3

1300 hrs, Sept 21, 1992; Monday:

(Running total)

Began flagging operation in area after perimeter was marked. Area is roughly

41 ea. M406 Grenades flagged.

41 ea. - M406

0130, Sept 22, 1992, Tuesday: Began flagging ops.

Flagged 54 40mm M406 Grenades

101 ea. - M406

End of Day Accountability: 162 ea. - 40mm C/S Grenades

162 ea. - C/S

0118, Sept 23, 1992, Wednesday: Began flagging ops.

Flagged 70 40mm, M406 Grenades

171 ea. - M406

End of Day Accountability: 98 ea. - 40mm C/S Grenades

260 ea. - C/S

52 ea. - XM15 C/S canisters

52 ea. - XM15

Finished flagging operations in SWW # 3, will begin Deanner attack on flagged 40mm, M406 Grenades.

total M406 Grenades flagged: 171 ea.

0120, Sept 24, 1992, Thursday:

Began disarmer attack, 3 personnel injured
John Zimmerman, Kim Ballhorn, and
Nysaf as Safety.

4 shots were performed, all items dummy
fuzed for ballistic purposes, with what appears
to be the Camp B filler used primarily in
these mentions.

shots
(Running total)

4 ea.

0830: Field test burn on filler, negative result.
looks and burns like a plastic composition.

Flagged additional 20 ea. M409, total

191 ea., shot 4, total number

to be shot: 187 ea.

Friday Sept 25, 1992: Continued disarmer
attack on M406 Grenades:

Performed 37 ea.

41 ea.

0115 Monday, Sept 28, 1992: Continued disarmed 2
attack on M406 Grenades, with 2 Disarmers (Pennington)
80 shots performed 121 shots

Shots
being total
4 EA.

* Instructed Team to use wooden Darts
in live of sub standard slugs. Darts work
great but increase load when using Rynox
vs. black powder. (FFFG)

0120 Sept 29, 1992: Tuesday: Continued attack
w/ 2 Disarmers. Flagged 1 M409 Grenade.

71 shots performed 192 shots
performed walk thru w/ Kim Bellhorn,
Merr Zimmerman, and myself as other team
is working on SWW #17.

0125 Sept 30, 1992 Wednesday: OA performed
over entire Area II items uncalculated due
to weather / animals in area.

10 - M409 Grenade

10 - 40mm C/S Grenades

4 EA.

Shot - M409 total M409 Grenade shot - 193 shot.

Area cleared - SWW #3 complete.

Mark A. Barrett, SSG

Project # 2042-1

Woodbine, GA SUMO #7

Ordinance Accountability

Personnel on Site: John Stue, Billy Francis, and David Becker.

Friday Sept 25, 1992:

Live item recovered

81mm, M301 Series Illumination Mortar: 1 EA.

M84 Powder Train Time Fuse (PTTF): 1 EA.

M49 Trip Flare: 1 EA.

Monday Sept 28, 1992: Live item recovered

81mm, M301 Series Illum. Mortar (Cordless) - 8 EA.

M84 PTTF: 257 EA.

M49 Trip Flares: 2 EA.

Fus Assembly w/ M71A2 Primer: 17 EA.

M71A2 Primer: 2 EA.

M415 CS canister: 2 EA.

Tuesday Sept 29, 1992:

M84 PTTF: 45 EA.

M49 Trip Flare: 30 EA.

M71A2 Primers - 135 ea

Fin Assembly w/ Primer - 0

XU15 C/S container - 2 ea

illumination candles - 9 ea

Sept 30, Wednesday, 1992:

M84 PTF - 3 ea

M49 Trip Flares - 50 ea

Tail fin Assembly w/ M71A2 Primer - 6 ea

Primers, M71A2 - 23 ea

XU15 C/S container - 1

Oct 1, Thursday:

M84 PTF - 4 ea

M49 trip Flares: 7 ea

M71A2 Primers: 25 ea

100% Inventory performed items segregated and
marked in containers:

M301 series illum works: 1 ea

M84 Powder train time Fuz: 310 ea

Continued - Inventory

M49 trip flares - 90 ea.

M1A2 Primers - 85 ea.

Fm Assembly w/ M1A2 - 23 ea.

Illumination Candles - 19 ea.

M15 C/S canister : 5 ea.

OCT 2 Friday:

M84 PTF - 22 ea.

Time Charge Lugs off M84 PTF - 54

M49 trip flare : 1 ea.

M1A2 Primer : 1 ea.

OCT 5 Monday:

M84 PTF: 124 ea.

M49 trip Flare: 30 ea.

M1A2 Primers: 38 ea.

M301 Illumin. Markers: 2 ea.

M301 Illumin. Candles: 1 ea.

OCT 6 Tuesday:

M84 PTF - 30 ea.

M49 Trip Flares - 74 ea.

M1A2 Primers - 38 ea.

Illum. Candles - 1

M301 Illum. Markers - 1

Oct 7, 1992

M84 PTF - 366

M49 Trip Flare - 5

M7A1 Primers - 77

Illumin. Candle - 4

M301 Illum mortars - 4

Oct 8 - 11 Stand Down

Oct 12 - Ø Finished area

100% Inventory Performed - Oct 13

- ① M301 series illumination mortars (full) - 8 ea.
- ② M84 Powder Train Time Fuz. / including time charge rings - 906
852 ea.
- ③ M49 Trip Flares - 200 ea.
- ④ M71A2 Primer including Tail Fin Assembly with
primer installed - 347 ea.
- ⑤ XM15 C/S Cannisters - 57 ea.
- ⑥ 40 mm, M409 Grenades - 193 ea.
- ⑦ 40 mm C/S Grenade - 260 ea.