Stearns & Wheler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

Report

Remedial Construction Documentation Report Ava Research Facility Rome Laboratory

September 1998

Recycled Paper

REMEDIAL CONSTRUCTION DOCUMENTATION REPORT

AVA RESEARCH FACILITY

ROME LABORATORY

Prepared for

ROME LABORATORY

Prepared by

STEARNS & WHELER, LLC
Environmental Engineers and Scientists
One Remington Park Drive
Cazenovia, NY 13035

September 1998

Project No. 70018FA

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REMEDIAL CONSTRUCTION DOCUMENTATION REPORT
AVA RESEARCH FACILITY
ROME LABORATORY

SECTION 1 - INTRODUCTION AND OBJECTIVES

This report serves as documentation of remedial and investigative activities that occurred at the Ava Research Facility during June 1998. Investigative and remedial activities were conducted at three locations at the Ava site:

- Investigation - Building 1452 septic system leachfield
- Remediation - Building 1452, Room 116 drainage pipe and associated soil
- Remediation - Drum area

A description of these three locations and a summary of the background events that prompted the investigative and remedial activities are provided in Sections 1.1 through 1.3. For additional background details on these three locations, refer to the Ava Phase I and Phase II environmental baseline surveys. For details on the wastes removed from the site, refer to the waste manifest and bills of lading provided in Appendix A.

The three subject locations were assigned a Category 7 facility matrix designation in the Phase II environmental baseline survey (EBS) for the Ava facility. As defined in Air Force Instruction (AFI) 32-7066, a Category 7 facility matrix designated area is defined as follows:

> Category 7 - Further evaluation required. If the existence of contamination or potential for a release of hazardous substances into the environment or structures is indicated, but not well characterized, then further evaluation is required. Property which is not well characterized includes Air Force controlled property which has not been further characterized pursuant to the IRP. Conduct further evaluation before making a recommendation on whether to proceed with the transaction.

For a detailed description of facility matrix Categories 1 through 6, refer to Section 5 of this report.

1.1 BUILDING 1452 SEPTIC SYSTEM LEACHFIELD

In the Ava Phase I EBS, hazardous materials and petroleum products were identified as having potentially drained to the site septic system through the sinks and floor drains located in Building 1452 (Site Map, Figure 1). To determine if the septic system was impacted, the Phase I EBS recommended sampling of the septic tank.

In the Phase II EBS, a single water sample was collected from the bottom of the septic tank and submitted for analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and RCRA 8 metals.[1] The analytical results for the sample indicated the presence of five compounds at concentrations exceeding Class GA groundwater standards promulgated in Title 6 of the New York Code of Rules and Regulations, Part 703 (6 NYCRR Part 703). Table 1-1 lists the specific compounds, their concentrations, and the associated Class GA groundwater standards.

TABLE 1-1

SEPTIC SYSTEM GROUNDWATER SAMPLE RESULTS

COMPOUND (μg/l)(1)		WS-01	GROUNDWATER STANDARD(2)
PCBs	Aroclor 1242	0.59	0.1
	Aroclor 1254	3.4	0.1
	Aroclor 1260	1.2	0.1

(1) Refer to laboratory report in Appendix E of the Phase II EBS report for a complete listing of the laboratory results.
(2) Groundwater standards promulgated in 6 NYCRR Subpart 703.5, Table 1.

[1] Analytical methods are as follows: VOCs - USEPA Method 8260; SVOCs USEPA Method 8270; PCBs- USEPA Method 8082; RCRA 8 metals - USEPA Methods 6010 and 7471. Promulgated by the USEPA in the Resource, Conservation, and Recovery Act, the RCRA 8 metals include arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

The Phase II EBS recommended additional sampling to determine whether those compounds present in the septic tank were also present in the soil and groundwater beneath the septic system leachfield. This additional sampling was conducted in July 1998 and is described in Section 2.1.

1.2 ROOM 116 DRAINAGE PIPE AND ASSOCIATED SOIL

In the Ava Phase I EBS, hazardous materials and petroleum products were identified as having potentially drained to the unsealed sump located in the west corner of Room 116 in Building 1452 (site map). Based on interviews with Rome Research Site personnel, it was believed that the sump drained to a dry well located west of Building 1452. To determine if the dry well did exist and if hazardous materials or petroleum products were present, the Phase I EBS recommended the excavation of the dry well using a backhoe and the collection of samples for laboratory analysis.

In the Phase II EBS, while no dry well was found, the terminus of the drainage pipe associated with the sump was located beneath the drainage ditch west of the asphalt drive circling Building 1452 (site map). Based on the shallow depth of the pipe terminus (approximately 6 inches), it is believed that the pipe originally discharged to the bottom of a drainage ditch and that, over time, sediments accumulating in the ditch buried the pipe.

After the excavation was complete, the following three soil samples were collected:

- Sample SS-O1 was collected 0 to 1 foot below grade directly beneath the pipe terminus
- Sample SS-02 was collected from 5 to 6 feet below grade directly beneath the pipe terminus
- Sample SS-03 was collected from the interior of the drainage pipe

Each sample was submitted for analysis for VOCs, SVOCs, PCBs, and RCRA 8 metals.[2] The laboratory report for the soil samples indicated that nine SVOCs and lead were present at

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[2] Analytical methods are as follows VOCs - USEPA Method 8260; SVOCs - USEPA Method 8270; PCBs - USEPA Method 8082; RCRA 8 metals- USEPA Methods 6010 and 7471.

concentrations that exceed the associated Revised Technical Administrative Guidance Memorandum (TAGM) recommended cleanup objectives.[3] PCB Aroclor 1260 was also reported as being present at concentrations that fell below TAGM recommended cleanup objectives.

Table 1-2 lists the compounds reported for Soil Samples SS-O1, SS-02, and SS-03 that exceeded the TAGM recommended soil cleanup objectives.

As summarized in the Phase II EBS, it was determined that the excavation and disposal of the impacted soil at the pipe terminus was warranted. This work was conducted in July 1998 and is described in this report. Details of the excavation and disposal of the soil and the associated sampling are presented in Section 2.2.

1.3 DRUM AREA

In September 1997, 12 drums were discovered at the Ava site on the perimeter of the cleared area north of Building 1452 (site map). As part of the Phase II EBS, the drums were placed in overpacks, transported to Room 115 of Building 1452, and later disposed of. During the process of placing the drums in overpacks, the drum contents, the surface soil beneath each drum, and the water in the drum disposal area were all sampled.

Laboratory results from the drum samples indicated that the majority of the drums contained fuel or lubricating oils. Laboratory results from the soil samples indicated that these oils had released to the ground surface. The soil sampling results are summarized in Table 1-3. For a complete listing of the laboratory results for the drum, soil, and water samples, refer to Appendix F in the Phase II EBS report.

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[3] January 24, 1994 NYSDEC Division of Hazardous Waste Remediation, Revised Technical Administrative Guidance Memorandum. It is important to note that concentrations identified in the TAGM as cleanup objectives are directly applicable to NYSDEC-designated inactive hazardous waste sites only. Because the Ava Research Facility is not such a site, the TAGM concentrations are of value for comparison purposes only.

TABLE 1-2

ROOM 116 DRAINAGE PIPE AND ASSOCIATED SOIL SAMPLING RESULTS

COMPOUND[1]		SAMPLING RESULTS (MG/KG)			
		SS-01	SS-02	SS-03	TAGM OBJECTIVES[2]
SVOCs (μg/kg)	4-Methylphenol		17	980	900
	Dibenzofuran			27,000	6,200
	3-3'-Dichlorobenzidine			2,200	
	Benzo(a)anthracene	57		13,000	3,000
	Chrysene	84		120,000	400
	Benzo(b)fluoranthene	75		160,000	1,100
	Benzo(k)fluoranthene			140,000	1,100
	Benzo(a)pyrene	64		110,000	11,000
	Indeno(1,2,3-cd)pyrene	180		8,600	3,200
PCBs (μg/kg)	Aroclor 1260	87		570	1,000/10,000 [3]
Metals (mg/kg)	Lead	13.3	5.2	234	SB [4]

(1) Refer to laboratory report in Appendix E of the Phase II EBS report for a complete listing of laboratory results.
(2) January 24, 1994 NYSDEC Division of Hazardous Waste Remediation, Revised TAGM.
(3) TAGM objectives for PCBs are 1,000 μg/kg for surface concentrations and 10,000 μg/kg for subsurface concentrations.
(4) Site background.

Note: Empty cells indicate the compound was reported at a non-detectable concentration.

TABLE 1-3

DRUM AREA SOIL SAMPLING RESULTS

COMPOUND	SAMPLING RESULTS (MG/KG)							
	SS-02	SS-03	SS-04	SS-05	SS-06	SS-07	SS-09	SS-11
Fuel oil #2		250						
Lube oil	55		57	1700	67	78	270	200
Toluene								1.4
Xylenes (total)								0.98

Note: Empty cells indicate the compound was reported at a non-detectable concentration.

As summarized in the Phase II EBS, based on the presence of lube and fuel oils, excavation and disposal of the soil in the drum area was warranted. This work was conducted in July 1998. Details of the excavation and disposal of the soil and the associated sampling are presented in Section 2.3.

SECTION 2 - INVESTIGATIVE AND REMEDIAL ACTIVITIES

Details of the investigative and remedial activities conducted at the Ava Research Facility are described in Sections 2.1 through 2.3. For further details, refer to the daily field reports in Appendix B.

2.1 INVESTIGATION OF BUILDING 1452 SEPTIC SYSTEM LEACHFIELD

To investigate and sample the soil and groundwater (laboratory results included in Appendix C) beneath the leachfield, six borings were installed in the area south of Building 1452. This area is believed to be situated above the leachfield (Photograph 1, Appendix D). While an Ava site map indicating the location of the leachfield was available, the accuracy of the map was in doubt. A Geoprobe 5400 direct-push boring device was used to install the borings in depths ranging from 4 to 12 feet. Continuous split-spoon soil samples were collected from each boring. Details of the six soil borings (designated SB-01 through SB-06) are presented in Table 2-1.

TABLE 2-1

LOCATIONS OF SAMPLING DURING LEACHFIELD INVESTIGATION

NO.	DEPTH (FEET)	SAMPLING
SB-01	8	No sampling.
SB-02	12	Installed temporary well. Collected WS-33.
SB-03	8	No sampling.
SB-04	8	Installed temporary well. Collected WS-31.
SB-05	10	Installed temporary well. Well did not yield sufficient water for sampling.
SB-06	4	No sampling.

To determine if the borings were being installed in the leachfield, the split-spoon samples from the borings were visually inspected for evidence of a layer of sand or gravel indicative of a leachfield bedding material. This layer was not seen in the core samples from any of the six borings. Despite its absence, it is believed that the majority of the borings were installed in the leachfield. Leachfield piping is often placed without bedding, and the area where most borings were installed is graded and appears to have the approximate shape and dimensions of the leachfield shown on the site map.

Soil in the boring samples was generally comprised of dark brown sandy silt with medium to fine gravel in depths of 0 to 3 feet and medium gravel in depths of 3 to 12 feet. The densely packed material found at a depth of approximately 8 feet in each of the borings appears to define a partial lower confining layer.

To facilitate sampling of the groundwater, three temporary 1-inch diameter well casings with 0.020-inch well screen were installed in Soil Borings SB-02, SB-04, and SB-05 (site map). Following installation of the temporary wells, the boring holes were backfilled to grade using bentonite grout. At each of the three borings, groundwater sampling was attempted using hand-held disposable bailers. Samples were successfully collected from SB-02 (WS-33) and SB-04 (WS-31).[4] Soil Boring SB-05 did not yield a sufficient quantity of water for laboratory analysis. Groundwater sample WS-31 was submitted for analysis of SVOCs and PCBs. Groundwater sample WS-33 was submitted for analysis of PCBs.[5] Laboratory results indicate non-detectable levels of analytes in both water samples. The complete laboratory results for these samples are presented in Appendix C.

A single soil sample, SS-31, was collected from Soil Boring SB-06 and submitted for laboratory analysis of PCBs.[6] Laboratory results indicate non-detectable levels of PCBs in the sample. Complete laboratory results for SS-31 are presented in Appendix C.

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[4] Due to the low well yield, groundwater samples WS-31 and WS-33 were collected without three well volumes being removed from the wells prior to sampling.

[5] Analytical methods are as follows: SVOCs - USEPA Method 8270; PCBs - USEPA Method 8082.

[6] Analytical methods are as follows: PCBs - USEPA Method 8082.

2.2 REMEDIAL ACTIVITIES - ROOM 116 DRAINAGE PIPE AND ASSOCIATED SOIL

The petroleum and PCB-impacted soil located at the terminus of the Room 116 drainage pipe was excavated using a tracked excavator with a 1.05 cubic yard bucket. The excavation was centered about the pipe discharge (site map). After excavation, the soil was transferred directly to a 6 cubic yard dump truck. The truck transferred the soil to a staging area adjacent to the site drive. Therefore, the excavated soil was staged on polyethylene sheeting for later disposal (Photograph 2, Appendix D).

The excavation of the impacted soil was temporarily interrupted to facilitate rinsing the drainage pipe. To rinse the pipe, an unused 55-gallon drum was placed in the partially excavated hole beneath the exposed pipe drain. The pipe was then rinsed with water by feeding a pressurized nozzle and hose into the pipe. Plastic sheeting taped to the top of the drum and the pipe outlet prevented the rinsate from spilling onto surrounding soil (Photograph 3, Appendix D). A total of 51 feet of pipe was rinsed.

After rinsing the pipe, the excavation was completed. The hole was excavated to an approximate depth of 7 feet below grade. Approximately 69 cubic yards (103.52 tons) of soil were excavated from the area around the drainage pipe terminus and the drum storage area.

After the excavation was complete, the hole was backfilled with soil collected from an area in the northern section of the site, located approximately 100 yards west of the drum area. The tracked excavator and dump truck were used to excavate and transport the soil used for backfill. Both were decontaminated with a shovel and heavy broom prior to the backfill process. After backfilling was complete, the area was compacted using the excavator, seeded with grass, and raked.

Prior to backfilling, four confirmatory soil samples (SS-21 through SS-24) were collected from the walls of the excavation, and the fifth from the bottom of the excavation (SS-25) (see the site map and Photograph 4, Appendix D). The samples were submitted for laboratory analysis of SVOCs and PCBs. The laboratory results show the concentrations of SVOCs and PCBs in all five confirmatory soils samples to be less than the associated TAGM recommended soil cleanup objectives.

To prevent liquids from flowing into the Room 116 sump and impacting the soil at the drainage system discharge again, the sump was sealed with concrete (Photograph 5, Appendix D).

2.3 REMEDIAL ACTIVITIES - DRUM AREA

The tracked excavator was also used to excavate the petroleum-impacted soil in the drum area (Photograph 6, Appendix D). The excavated soil was transferred directly to the dump truck, and the dump truck was used to transport and stage the soil on polyethylene sheeting located adjacent to the site drive (Photograph 2, Appendix D). The drum area was excavated to a depth of approximately 1 foot below grade. The "hot" area, where the highest concentrations of petroleum-related compounds were reported in the Phase II EBS (beneath Drums 1, 5, 9, and 11), was excavated to a depth of 3 feet below grade (Photograph 7, Appendix D). Approximately 69 cubic yards (103.52 tons) of soil were excavated from the drum area and the drainage pipe terminus.

After the excavation was complete, the hole was backfilled with soil collected from an area in the northern section of the site located approximately 100 yards west of the drum area. The decontaminated tracked excavator and dump truck were used to excavate and transport the soil used for backfill. After backfilling was complete, the area was compacted using the excavator, seeded with grass, and raked.

Prior to backfilling, a total of seven confirmatory soil samples (SS-01 through SS-07) were collected from the walls and base of the excavation and were submitted for laboratory analysis of SVOCs (site map). Because volatile organic compounds were reported as being present in the soil beneath Drum 11 in the Phase II EBS, an eighth confirmatory soil sample (SS-08) was collected from the base of the excavation at the location of Drum 11. The laboratory results show the SVOC concentrations in all seven confirmatory soil samples to be less than the associated TAGM-recommended soil cleanup objectives. The VOC concentrations in SS-08 were reported below laboratory detection limits. Complete laboratory results are presented in Appendix C.

SECTION 3 - WASTE DISPOSAL

The soil excavated from the terminus of the Room 116 drainage pipe was classified as a non-hazardous waste and was transported in a roll-off container for disposal at High Acres landfill in Fairport, NY. A copy of the bill of lading for this shipment is included in Appendix A.

The soil excavated from the drum area was classified as a non-hazardous waste and was transported in a roll-off container for disposal at High Acres landfill. A copy of the bill of lading for this shipment is included in Appendix A.

All drummed liquids from the cleaning of the drainage pipe and copper pipe found in the drum area excavation were classified as hazardous waste (No. D002) and disposed of at CWM Chemical Services (USEPA ID No. NY0049836679) in Model City, NY. A copy of the hazardous waste manifest (No. NYG0316782) is attached in Appendix A.

SECTION 4 - COMMUNICATION WITH NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

The findings of the investigative and remedial activities described within this document have been forwarded to the NYSDEC. Copies of all written correspondence with the NYSDEC are included in Appendix E.

SECTION 5 - CONCLUSIONS

5.1 FACILITY MATRIX DESIGNATIONS

A. **Categories.**

1. **Category 1.** No storage, release, or disposal has occurred. Property where no hazardous substances or petroleum products or their derivatives were stored, released into the environment or structures, or disposed on the subject property and where no migration from adjacent areas has occurred.

2. **Category 2.** Only storage has occurred. Property where hazardous or petroleum products or their derivatives were stored, but no release, disposal or migration from adjacent areas has occurred.

3. **Category 3.** Contamination below levels that requires any action. Property where contamination is present but falls below established action levels. For Air Force controlled property, base this conclusion on a characterization pursuant to the IRP. For non-Air Force controlled property, base this conclusion on an equivalent level of evaluation that includes sampling and laboratory analysis.

4. **Category 4.** Remedial action required and taken. Property where contamination above action levels existed, but all remedial actions necessary to protect human health and the environment have been taken to meet the provisions of CERCLA Section 120 (h)(3).

5. **Category 5.** Remedial or other action underway. Property is undergoing remedial action for known contamination. Remedial systems are partially or entirely in place, but have not been fully demonstrated. Category. Required response action implemented. Property contains known contamination and required remedial systems or other actions have not been selected or implemented.

6. **Category 6.** Required response action implemented. Property contains known contamination, and required remedial systems or other actions have not been selected or implemented.

7. **Category 7.** Further evaluation required. If the existence of contamination or potential for a release of hazardous substances into the environment or structures is indicated but not well characterized, then further evaluation is required. Property which is not well characterized includes Air Force controlled property which has not yet been further characterized pursuant to the IRP. Conduct further evaluation before making a recommendation on whether to proceed with the transaction.

B. **Category Assignments.** The original category assignments from the Phase II EBS and the category revisions for Phase III are presented in Table 5-1.

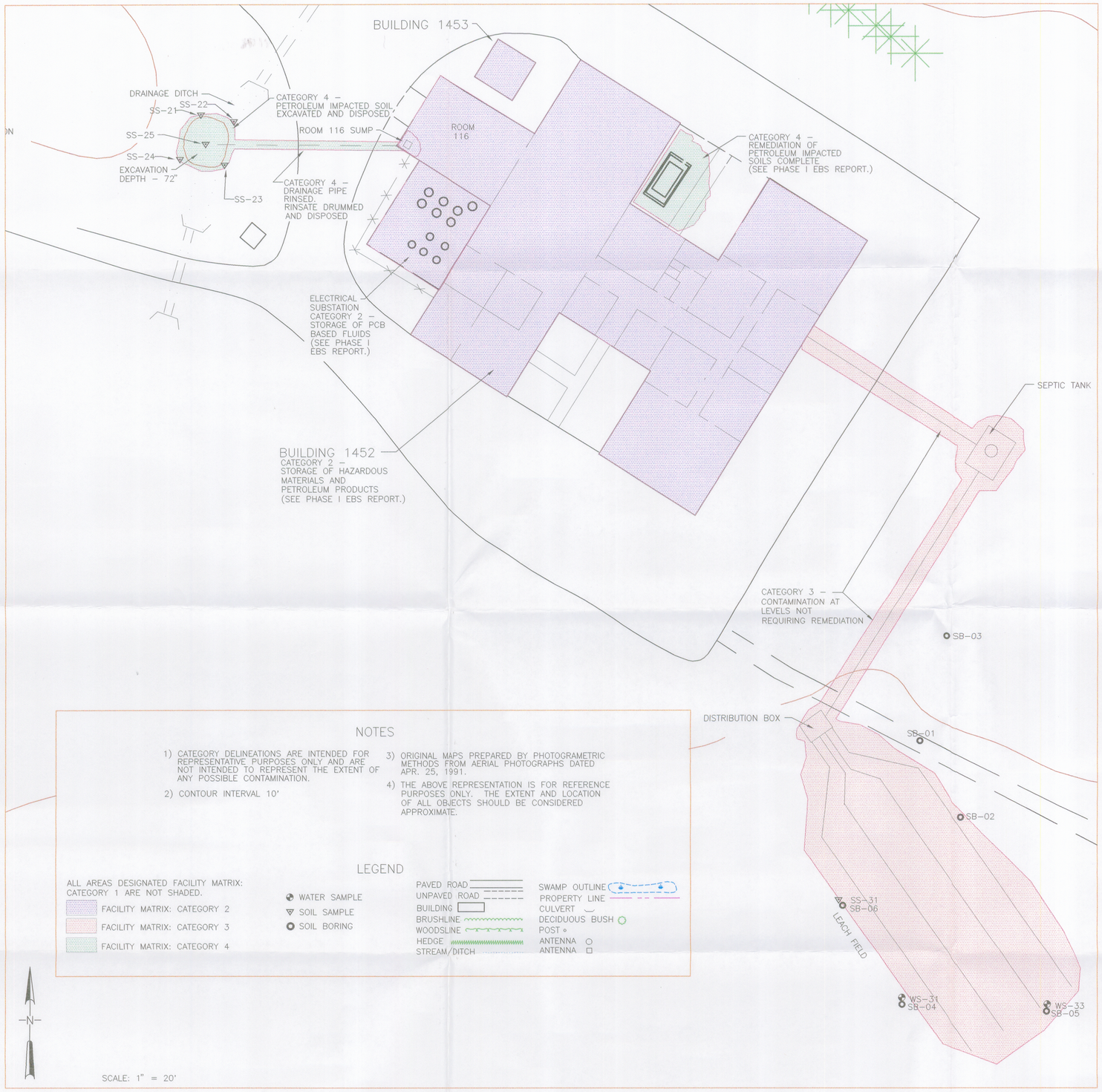
TABLE 5-1

AVA CATEGORY REVISIONS

AREA	PHASE II EBS	PHASE II REVISION
Room 116 drainage pipe terminus	Category 6	Category 4
Septic system and leachfield	Category 7	Category 3
Drums	Category 6	Category 4

5.2 SITE MAP

The facility matrix designations are also indicated on the site map.



NOTES

1) CATEGORY DELINEATIONS ARE INTENDED FOR REPRESENTATIVE PURPOSES ONLY AND ARE NOT INTENDED TO REPRESENT THE EXTENT OF ANY POSSIBLE CONTAMINATION.
2) CONTOUR INTERVAL 10'
3) ORIGINAL MAPS PREPARED BY PHOTOGRAMETRIC METHODS FROM AERIAL PHOTOGRAPHS DATED APR. 25, 1991.
4) THE ABOVE REPRESENTATION IS FOR REFERENCE PURPOSES ONLY. THE EXTENT AND LOCATION OF ALL OBJECTS SHOULD BE CONSIDERED APPROXIMATE.

LEGEND

ALL AREAS DESIGNATED FACILITY MATRIX:
CATEGORY 1 ARE NOT SHADED.

- FACILITY MATRIX: CATEGORY 2
- FACILITY MATRIX: CATEGORY 3
- FACILITY MATRIX: CATEGORY 4

- WATER SAMPLE
- SOIL SAMPLE
- SOIL BORING

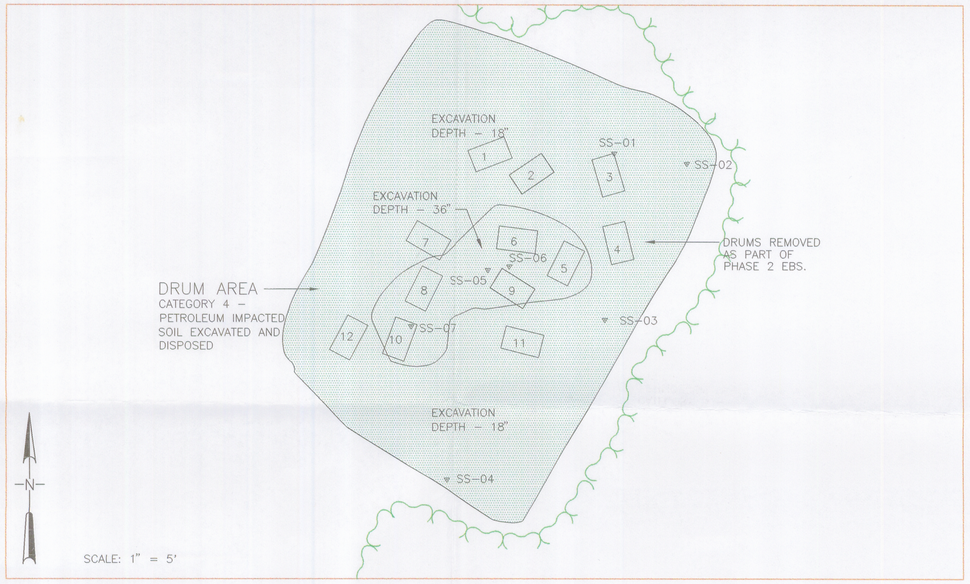
- PAVED ROAD
- UNPAVED ROAD
- BUILDING
- BRUSHLINE
- WOODSLINE
- HEDGE
- STREAM/DITCH
- SWAMP OUTLINE
- PROPERTY LINE
- CULVERT
- DECIDUOUS BUSH
- POST
- ANTENNA
- ANTENNA

AVA BUILDING COMPOUND



SEE COMPOUND AND BUILDING 1452 PANELS FOR CATEGORY DELINEATIONS IN THOSE AREAS.

AVA RESEARCH FACILITY – SITE BOUNDARIES



DRUM AREA

8/98 CAZ DLW
N:\CADUSE\70018\70018F03.DWG

NOTES:

Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.

It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in any way. If an item is altered, the altering engineer shall affix to the item his/her seal and the notation "altered by" followed by his/her signature and the date of such alteration, and a specific description of the alteration.

ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE
1	DLW	8/98		JPD	FOR APPROVAL	

PROJECT SUPERVISOR — DEPARTMENT SUPERVISOR

Stearns & Wheler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS
CAZENOVIA, NEW YORK

ROME LABORATORY
AVA RESEARCH FACILITY

SITE MAP AND CATEGORY DELINEATIONS

JOB NO. 70018FA | CONTRACT | SHEET 1

APPENDICES

APPENDIX A

SHIPPING MANIFEST AND BILLS OF LADING

PRESS HARD—You Are Writing Through Eight Copies (See Reverse Side)

NYG0316782

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple. (Rev. 3/97)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NY157001330 | Manifest Doc. No.: 00001
2. Page 1 of: 1
Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address: Rome Research Facility, 11518 Webster Hill Road, Boonville, NY 13309
4. Generator's Telephone Number: (315) 330-2098

A. NYG0316782
B. Generator's ID: NY157001330

5. Transporter 1 (Company Name): MARLOR Remediation Inc
6. US EPA ID Number: MDR000013854
C. State Transporter's ID: NYSDEC # MD023
D. Transporter's Telephone: (716) 247-1955

7. Transporter 2 (Company Name): Tonawanda Tank
8. US EPA ID Number: NYD097644801
E. State Transporter's ID: 9569 4/E N.Y
F. Transporter's Telephone: 1800 8888265

9. Designated Facility Name and Site Address: CWM Chemical Services, 1550 Balmer Road, Model City, NY
10. US EPA ID Number: NYD049836679
G. State Facility ID
H. Facility Telephone: (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers: Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Hazardous Waste liquid, N.O.S. (D002, D008) 9 NA3082 PG III	001	DM	EST 700	lbs	EPA D002 / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above: a. D008
K. Handling Codes for Wastes Listed Above: a. T

15. Special Handling Instructions and Additional Information
Approval CJ3200 RO-02377-001 (3)
In Case of Emergency Call MARLOR @ 1-800-388-5933

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Mo.	Day	Year
Eugene McDonough	Eugene McDonough	07	02	98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
Albert Rescorl	Albert Rescorl	07	02	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
Tom Waterson	T. Waterson	07	06	98

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year

GENERATOR / TRANSPORTER / FACILITY

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

Date Printed 07/14/98

GENERATOR'S WASTE PROFILE SHEET

Profile # MDC CJ3200

(_) Check here if this is a Recertification LOCATION OF ORIGINAL CWM MODEL CITY FACILITY

GENERAL INFORMATION

1. Generator Name: US ARMY Generator USEPA ID: NY1570013309

Generator Address: 11518 WEBSTER HILL RD Billing Address: (_) Same MARCOR REMEDIATION INC

52 MARWAY CIR

BOONVILLE NY 13309-3849 ROCHESTER NY 14624-2363

Technical Contact/Phone: 315/330-2098

2. Alternate Contact/Phone:

Billing Contact/Phone: MS JESSICA A WOJICK 716/247-6955

PROPERTIES AND COMPOSITION

5. Process Generating Waste: CLEANING OF THE DISCHARGE PIPE FROM THE RESEARCH FACILITY GENERATED A DRUM OF RINSATE, LEAD SLUDG

Waste Name: LEAD & PETROLEUM CONT RINSE WATER

7A. Is this a USEPA hazardous waste (40 CFR Part 261)? Yes (X) No (_)

B. Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): D002 D008

State Waste Codes: Same as USEPA Codes

8. Physical State @ 70F: A. Solid(_) Liquid(X) Both(_) Gas(_) B. Single Layer (X) Multilayer (_) C. Free liq. range 90 to 100%

9. pH: Range to 13.0 or Not applicable (_) B. Strong Odor (_);describe

10. Liquid Flash Point: < 73F (_) 73-99F (_) 100-139F (_) 140-199F (_) >= 200F (_) N.A. (_) Closed Cup (_) Open Cup (_)

11. CHEMICAL COMPOSITION: List ALL constituents (incl. halogenated organics) present in any concentration and forward analysis

Constituents	Range		Unit Description
RINSE WATER	to	85	%
LEAD SLUDGE	to	10	%
LA175 (SEE MSDS)	to	5	%
	to		
	to		
	to		
TOTAL COMPOSITION (MUST EQUAL OR EXCEED 100%):		100.000000	

12. OTHER: PCBs if yes, concentration _____ ppm, PCBs regulated by 40 CFR 761 (_). Pyrophoric (_) Explosive (_) Radioactive (_) Benzene if yes, concentration _____ ppm. NESHAP (N) Shock Sensitive (_) Oxidizer (_) Carcinogen (_) Infectious (_) Other

13. If waste subject to the land ban & meets treatment standards, check here: _ & supply analytical results where applicable.

SHIPPING INFORMATION

14. PACKAGING: Bulk Solid (_) Bulk Liquid (_) Drum (X) Type/Size: 55 GALLON DRUM Other

15. ANTICIPATED ANNUAL VOLUME: 1 Units: DRUMS Shipping Frequency: ONE TIME

SAMPLING INFORMATION Sample Tracking Number: 4521099

16a. Sample source (drum, lagoon, pond, tank, vat, etc.):

Date Sampled: _____ Sampler's Name/Company:

16b. Generator's Agent Supervising Sampling: 17. (X) No sample required (See instructions.)

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize CWM to obtain a sample from any waste shipment for purposes of recertification.

Signature	B H MERO Name and Title	CHIEF ESORT OFFICE	6/29/98 Date

18. Check ONE: This is a _ Wastewater _ Nonwastewater.

19. If this waste is subject to any California list restrictions enter the letter from below (either A, B.1 or B.2) next to each restriction that is applicable:
___ HOCs, ___ PCBs, ___ Acid, ___ Metals, ___ Cyanides

20. Identify ALL Characteristic and Listed USEPA hazardous waste numbers that apply (as defined by 40 CFR 261). For each waste number, identify the subcategory (as applicable, check none, or write in the description from 40 CFR 268.41, 268.42, and 268.43).

REF #	A. US EPA HAZARDOUS WASTE CODE(S)	B. SUBCATEGORY Enter the subcategory description. If not applicable, simply check none		C. APPLICABLE TREATMENT STANDARDS			D. HOW MUST THE WASTE BE MANAGED? Enter letter from below
				PERFORMANCE-BASED: Check as applicable		SPECIFIED TECHNOLOGY: If applicable enter the 40 CFR 268.42 table 1 treatment code(s)	
		DESCRIPTION	NONE	268.41(a)	268.43(a)	268.42	
1	D002	Non-CWA, Non-Class 1 managed corrosive char. wastes		X	X	DEACT	A
2	D002	CWA or Class 1 managed corrosive char. wastes				DEACT	A
3	D008		X	X			A
4							
5							
6							
7							
8							
9							
10							

Management under the land disposal restrictions:
A. RESTRICTED WASTE REQUIRES TREATMENT

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS

B.2 RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS EXPRESSED AS A SPECIFIED TECHNOLOGY (AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY)

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS

C. RESTRICTED WASTE SUBJECT TO A VARIANCE

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT

E. NOT CURRENTLY SUBJECT TO LAND DISPOSAL RESTRICTIONS

21. Is this waste a soil or debris? No: _ Yes, Soil: _ Yes, Debris: _

22. Specific Gravity Range: ____ to ____

23. Indicate the range of each: Units

Cyanides: _ _____ to _____ _____ Type (free, total, amenable, etc.) _____

Cyanides: _ _____ to _____ _____ Type (free, total, amenable, etc.) _____

Sulfides: _ _____ to _____ _____ Type _____

Optional
Phenolics: _ _____ to _____ _____

24. Identify the waste color _____, DOT physical state _____,

and physical appearance _____

OTHER HAZARDOUS CONSTITUENTS Indicate if the waste contains any of the following.

METALS	TCLP Information: Check only ONE for each constituent Use units: ppm, mg/l				TCLP Data	TCA or TOTAL Use units: ppm, mg/l, mg/kg or percent			
						California List			
	Less Than	TC Regulated Level	Equal or More	Waste No.	TCLP Actual	Less Than	Regulated Level	Equal or More	Actual
Arsenic as As	X	5.0 mg/l		D004			500 mg/l		
rium as Ba	X	100.0 mg/l		D005					
Cadmium as Cd	X	1.0 mg/l		D006			100 mg/l		
hromium tot Cr	X	5.0 mg/l		D007					
ead as Pb	X	5.0 mg/l		D008			500 mg/l		
Mercury as Hg	X	.2 mg/l		D009			20 mg/l		
lenium as Se	X	1.0 mg/l		D010			100 mg/l		
Silver as Ag	X	5.0 mg/l		D011					
ckel as Ni							134 mg/l		
Thallium as Tl							130 mg/l		
romium Hex							500 mg/l		
Antimony									
eryllium									
opper									
Vanadium									
nc									

32. OTHER HAZARDOUS CONSTITUENTS Indicate if the waste contains any of the following.

ORGANICS	TCLP Information: Check only ONE for each constituent				TCLP Data	TCA or TOTAL Use units: ppm, mg/l or %
	Less Than	Regulated Level	Equal or More	Waste No.	TCLP Analytical Test Results Use units: ppm or mg/l	
Benzene	X	0.5 mg/l		D018		
Carbon Tetrachloride	X	0.5 mg/l		D019		
Chlordane	X	0.03 mg/l		D020		
Chlorobenzene	X	100.0 mg/l		D021		
Chloroform	X	6.0 mg/l		D022		
m-Cresol	X	200 mg/l		D024		
o-Cresol	X	200.0 mg/l		D023		
p-Cresol	X	200.0 mg/l		D025		
Cresol	X	200.0 mg/l		D026		
2,4-D	X	10.0 mg/l		D016		
1,4 Dichlorobenzene	X	7.5 mg/l		D027		
1,2-Dichloroethane	X	0.5 mg/l		D028		
1,1-Dichloroethylene	X	0.7 mg/l		D029		
2,4-Dinitrotoluene	X	0.13 mg/l		D030		
Endrin	X	.02 mg/l		D012		
Heptachlor, & Hydroxide	X	0.008 mg/l		D031		
Hexachloro-1,3 Butadiene	X	0.5 mg/l		D033		
Hexachlorobenzene	X	0.13 mg/l		D032		
Hexachloroethane	X	3.0 mg/l		D034		
Lindane	X	0.4 mg/l		D013		
Methoxychlor	X	10.0 mg/l		D014		
Methyl Ethyl Ketone	X	200.0 mg/l		D035		
Nitrobenzene	X	2.0 mg/l		D036		
Pentachlorophenol	X	100.0 mg/l		D037		
Pyridine	X	5.0 mg/l		D038		
Tetrachloroethylene	X	0.7 mg/l		D039		
Toxaphene	X	0.5 mg/l		D015		
2,4,5-TP Silvex	X	1.0 mg/l		D017		
Trichloroethylene	X	0.5 mg/l		D040		
2,4,5-Trichlorophenol	X	400.0 mg/l		D041		
2,4,6-Trichlorophenol	X	2.0 mg/l		D042		
Vinyl Chloride	X	0.2 mg/l		D043		

HIGH ACRES LANDFILL - WASTE MANAGEMENT
RED CREEK DRIVE
FAIRPORT, NY 14450
(716) 223-6132

DATE: 07/02/1998 # 263659
TIME: 12:46

CUSTOMER: 4306 MARCOR-ROME RESEARCH FACILITY

WEIGHMASTER: PAULA SCHWEIZER

TRUCK: PS74 WASTE: CON CONT. SOIL(C)

ORIGIN: 208 BOONVILLE(DD) PROFILE: CJ3198
ROME RESEARCH FACILITY SOIL(C)

GROSS: 110160 LBS CELL: 4

TARE: 35460 LBS

NET: 74700 LBS 37.35 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

0124306 REMARKS: _____ SIGN _____

HIGH ACRES LANDFILL - WASTE MANAGEMENT
425 PERINTON PARKWAY
FAIRPORT, NY 14450
(716) 223-6132

DATE: 07/02/1998 # 063660
TIME: 12:57

CUSTOMER: 4306 MARCOR-ROME RESEARCH FACILITY

WEIGH MASTER: PAULA SCHWEIZER

TRUCK: PS70 WASTE: CON CONT. SOIL(C)

ORIGIN: 208 BOONVILLE(OD)

PROFILE: CJ3198
ROME RESEARCH FACILITY SOIL(C)

GROSS: 116540 LBS CELL: 4

TARE: 33680 LBS

NET: 82860 LBS = 41.43 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

124306 REMARKS: _____ SIGN _____

HIGH ACRES LANDFILL - WASTE MANAGEMENT
425 PERINTON PARKWAY
FAIRPORT, NY 14450
(716) 223-6132

DATE: 07/02/1998 # 063661
TIME: 12:59

USTOMER: 4306 MARCOR-ROME RESEARCH FACILITY

WEIGH MASTER: PAULA SCHWEIZER

TRUCK: ST91 WASTE: CON CONT. SOIL(C)

ORIGIN: 208 BOONVILLE(OD)

PROFILE: CJ3198
ROME RESEARCH FACILITY SOIL(C)

GROSS: 85820 LBS CELL: 4

TARE: 36340 LBS

NET: 49480 LBS = 24.74 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

UT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my nowledge and belief.

Mark Hall

Waste Management of New York, Inc.
Landfills, Transfer Stations, & Recycling Centers
Administrative Office
25 Perinton Parkway
Fairport, New York 14450

A Waste Management Company

July 1, 1998

Ms. Jessica Wojick
Marcor Remediation, Inc.
52 Marway Circle
Rochester, NY 14624

RE: Approvals

Dear Ms. Wojick,

Enclosed is your approval for the following waste stream:

Generator:	**Rome Research Facility**
Waste Profile:	**CJ3199**
Waste Name:	**Petroleum impacted soil**
Approximate volume:	**75 tons**
Valid Until:	**02/01/99**

Please review the approved profile and note any precautions or conditions in Section D. Should you have any questions at all, please contact me directly @ (716)754-0365.

Sincerely,

James L. Callahan
Inside Sales Representative

Enc.
cc: File

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☐YES ☐NO

☐Hazardous ☒Non-Hazardous ☐TSCA

Profile Number: WMI CJ 3199

Renewal Date: 2 / 1 / 99

A. Waste Generator Information

1. Generator Name: Rowe Research Facility
2. SIC Code:
3. Facility Street Address: 11518 Webster Hill Road
4. Phone: (315) 839-2098
5. Facility City: Boonville
6. State/Province: New York
7. Zip/Postal Code: 13309
8. Generator USEPA/Federal ID #: N/A
9. County:
10. State/Province ID #: N/A
11. Customer Name: HARLOR Remediation, Inc.
12. Customer Phone: (716) 247-6955
13. Customer Contact: Ms. Jessica A. Wojik
14. Customer Fax: (716) 247-6852
15. Billing Address: 52 Harlow Park, Rochester NY 14624 ☐Same as above

B. Waste Stream Information

1. Description
   a. Name of Waste: Petroleum Impacted Soil
   b. Process Generating Waste: Excavation of soils contaminated at location B due to the staging of drums of various petroleum products.

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range
brown	none	☒Solid ☐Liquid ☐Gas ☐Sludge ☐Other	☒Single Layer ☐Multi-layer	0 to 1 %
				h. pH: Range 6 to 9 %

i. Liquid Flash Point: ☐<73°F ☐73-99°F ☐100-139°F ☐140-199°F ☒≥ 200°F ☐Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil	>95%		
Petroleum Products	<5%		

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. ☐Oxidizer ☐Pyrophoric ☐Explosive ☐Radioactive ☐Carcinogen ☐Infectious ☐Shock Sensitive ☐Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j)..... ☐YES ☒NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j)..... ☐YES ☒NO

n. Does the waste represented by this profile contain asbestos?..... ☐YES ☒NO

If yes..... ☐friable ☐non-friable

o. Does the waste represented by this profile contain benzene?..... ☐YES ☒NO

If yes, concentration ——— ppm

Is the waste subject to the benzene waste operations NESHAP?..... ☐YES ☒NO

p. Is the waste subject to RCRA Subpart CC controls?..... ☐YES ☒NO

If yes, volatile organic concentration ——— ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances?..... ☐YES ☒NO

r. Does the waste contain debris? (list in Section B.1.j)..... ☐YES ☒NO

2. Quantity of Waste

Estimated Annual Volume 275 ☒Tons ☐Yards ☐Drums ☐Other (specify)

3. Shipping Information

a. Packaging:

☒Bulk Solid; Type/Size: Dump Truck ☐Bulk Liquid; Type/Size:

☐Drum; Type; Size: ☐Other:

b. Shipping Frequency: Units Once Per: ☐Month ☐Quarter ☐Year ☒One time ☐Other

c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f)..... ☐YES ☒NO

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

d. Reportable Quantity (lbs.; kgs.): N/A e. Hazard Class/ID #: N/A

f. USDOT Shipping Name: Non-Regulated Material

g. Personal Protective Equipment Requirements: None

h. Transporter/Transfer Station: Schaefer Trucking

1.	Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2	☐YES ☒NO
	If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U)	
	If a characteristic hazardous waste, do exceeding hazardous constituents (AHCs) apply? If yes, list in Section B.1.j	☐YES ☐NO
	Does this waste contain dioxin? [If yes, list this and type in Chemical Composition - B.1.j	☐YES ☐NO
2.	Is this a state hazardous waste? Identify ALL state hazardous waste codes	☐YES ☒NO
3.	Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.	☐YES ☒NO
4.	Does the waste represented by this waste profile sheet contain radioactive material, or is shipment regulated by the Nuclear Regulatory Commission?	☐YES ☒NO
5.	Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? If yes, list in Chemical Composition - B.1.j.	☐YES ☒NO
	If yes, were the PCBs imported into the U.S.?	☐YES ☐NO
6.	Do the waste profile sheet and all documents contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor?	☒YES ☐NO
7.	Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?	☒YES ☐NO

☒Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize YMI to obtain a sample from any waste shipment for purposes of reclassification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: [signature] Title: Chief ESOH Office

Name (Type or Print): B.H. MEAD Company Name: U.S.A.F Date: 6/29/98

☒Check if additional information is attached. Indicate the number of attached pages _____

FOR YMI USE ONLY

1. Management Method ☒Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify)
2. Proposed Ultimate Management Facility: High Acres
3. Precautions, Special Handling Procedures, or Limitation on Approval: Use as daily cover material
4. Waste Form _____ 5. Source _____ 6. System Type _____

Special Waste Decision ☐Approved ☐Disapproved

Salesperson's Signature: _____ Date: _____

Division Approval Signature (Optional): _____ Date: _____

Special Waste Approvals Person Signature: [signature] Date: 7/1/98

Form YMI-4153

Waste Management of New York, Inc.
Landfills, Transfer Stations, & Recycling Centers
Administrative Office
[illegible] Parkway
[illegible], New York 14450

A Waste Management Company

July 1, 1998

Ms. Jessica Wojick
Marcor Remediation, Inc.
52 Marway Circle
Rochester, NY 14624

RE: Approvals

Dear Ms. Wojick,

Enclosed is your approval for the following waste stream:

Generator:	**Rome Research Facility**
Waste Profile:	**CJ3198**
Waste Name:	**Petroleum impacted soil**
Approximate volume:	**60 yards**
Valid Until:	**02/01/99**

Please review the approved profile and note any precautions or conditions in Section D. Should you have any questions at all, please contact me directly @ (716)754-0365.

Sincerely,

James L. Callahan
Inside Sales Representative

Enc.
cc: File

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☐YES ☐NO
☐Hazardous ☒Non-Hazardous ☐TSCA

Profile Number: WMI CJ 3198
Renewal Date: 2/1/99

A. Waste Generator Information

1. Generator Name: Pope Research Facility
2. SIC Code:
3. Facility Street Address: 11519 Webster Hill Road
4. Phone: (315) 330-2098
5. Facility City: Boonville
6. State/Province: New York
7. Zip/Postal Code: 13309
8. Generator USEPA/Federal ID #: N/A
9. County:
10. State/Province ID #: N/A
11. Customer Name: MARCOR Remediation Inc
12. Customer Phone: (716) 247-6955
13. Customer Contact: Ms. Jessica A. Waitek
14. Customer Fax: (716) 247-6862
15. Billing Address: 52 Hermes Circle, Rochester, NY 14624 ☐Same as above

B. Waste Stream Information

1. Description
   a. Name of Waste: Petroleum Impacted Soil
   b. Process Generating Waste: Excavation of location A where the outfall of the building drain was located.

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range
		☒Solid ☐Liquid ☐Gas ☐Sludge ☐Other	☒Single Layer ☐Multi-layer	0 to 1 %
Brown	none			h. pH: Range 6 to 8 %

i. Liquid Flash Point: ☐<73°F ☐73-99°F ☐100-139°F ☐140-199°F ☒≥ 200°F ☐Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil	>99%		
Petroleum	<1%		

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. ☐Oxidizer ☐Pyrophoric ☐Explosive ☐Radioactive ☐Carcinogen ☐Infectious ☐Shock Sensitive ☐Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j)..... ☐YES ☒NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j)..... ☐YES ☒NO

n. Does the waste represented by this profile contain asbestos?..... ☐YES ☒NO
If yes..... ☐friable ☐non friable

o. Does the waste represented by this profile contain benzene?..... ☐YES ☒NO
If yes, concentration _____ ppm
Is the waste subject to the benzene waste operations NESHAP?..... ☐YES ☒NO

p. Is the waste subject to RCRA Subpart CC controls?..... ☐YES ☒NO
If yes, volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances?..... ☐YES ☒NO

r. Does the waste contain debris? (list in Section B.1.j)..... ☐YES ☒NO

2. Quantity of Waste
Estimated Annual Volume 260 ☒Tons ☐Yards ☐Drums ☐Other (specify) _____

3. Shipping Information
   a. Packaging:
   ☒Bulk Solid; Type/Size: Dump Truck ☐Bulk Liquid; Type/Size: _____
   ☐Drum; Type; Size: _____ ☐Other: _____
   b. Shipping Frequency: Units One Per: ☐Month ☐Quarter ☐Year ☒One time ☐Other _____
   c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f)..... ☐YES ☒NO

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

d. Reportable Quantity (lbs.; kgs.): N/A e. Hazard Class/ID #: N/A
f. USDOT Shipping Name: Non-Regulated Material
g. Personal Protective Equipment Requirements: None
h. Transporter/Transfer Station: Scarab Trucking

1.	Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2	☐YES ☒NO
	A. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U)	
	B. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (If yes, list in Section B.1.j)	☐YES ☐NO
	C. Does this waste contain debris? (If yes, list size and type in Chemical Composition - B.1.j)	☐YES ☐NO
2.	Is this a state hazardous waste? Identify ALL state hazardous waste codes	☐YES ☒NO
3.	Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.	☐YES ☒NO
4.	Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission?	☐YES ☒NO
5.	Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (If yes, list in Chemical Composition - B.1.j)	☐YES ☒NO
	A. If yes, were the PCBs imported into the U.S.?	☐YES ☐NO
6.	Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor?	☒YES ☐NO
7.	Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?	☒YES ☐NO

☒Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 – Appendix I or by using an equivalent method. I authorize WMI to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by the approved profile.

(1) Certification Signature: [signature] Title: Chief ESOH Officer
Name (Type or Print): B.H. MARR Company Name: U.S.A.F Date: 6/29/98
☒Check if additional information is attached. Indicate the number of attached pages

For WMI Management Use Only

1. Management Method: ☒Landfill ☐Non-Hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify)
2. Proposed Ultimate Management Facility: High Acres
3. Precautions, Special Handling Procedures, or Limitation on Approval: Use as daily cover material
4. Waste Form 5. Source 6. System Type
Special Waste Decision: ☐Approved ☐Disapproved
Salesperson's Signature: Date:
Division Approval Signature (Optional): Date:
Special Waste Approvals Person Signature: [signature] Date: 7/1/98

Form WMI-4163

APPENDIX B

DAILY FIELD REPORTS

Stearns & Wheler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

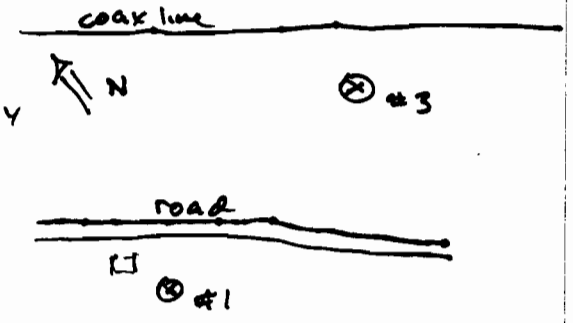
DAILY FIELD REPORT

REPORT NO. 70018FA

DATE	6/19/08	CONTRACT NO.	
JOB	Ava - Phase III		
CONTRACTOR	Marcor Env.		
PROJECT REPRESENTATIVE	John Dana		
SIGNATURE	John B. Dana		

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

=> Leach field investigation.
=> Objective - Determine if PCBs present in septic tank are present in leach field soils or associated groundwater.
=> Hole #1 → ~4' strom "believed" location of distribution box. 8' deep. No evidence of leach field materials
=> Hole #2 ~ 35' south of believed distribution box. 12' deep. Installed temporary well.
=> Hole #3 ~ see map. No evidence of leachfield of materials. 8' deep.
=> Hole #4 ~ see map Installed temporary well 8' deep.
=> Hole #5 ~ see map. Installed temporary well. 10' deep.
=> soil overall - sandy silt, medium to fine gravels. dark brown, angular gravel
=> 0-3' little gravel
=> 3-12' more gravel



2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

=> Geoprobe Model 5400, 4' pushes, direct push
=> Jay
=> 20 slot, well casing schedule 80 PVC

=> Hole #6, ~4' deep no evidence of leach field materials
Soil sample 53.31 collected here

#6
#4 Temp well
#5 Temp well

Landmark Hole	Prop. Bldg. Corner	Prop. Bldg. Corner	#1	Existing Manhole	#3	#4	Prop. Manhole	
#1	107'.10"		112'.3"	112.3"				
#2			34'.3"		66'.8"			
#3	63'.9"		35'.5"					
#4						63'.5"	102'.3"	
#5						72'.5"	129'.5"	
Prop Box *	110'	70'						
#6						53'.1"	62'.10"	

=> * Bill Young provided Gene McDonald w/ septic tank location. Dist. box

S&W Form 85

3. What special incidents happened?

___ Deliveries ___ Blasting ___ Strikes ___ Accidents ___ Other X None

4. What special instructions were given to the Contractor and what was Contractor's response?

___ Tests ___ Defective Work ___ Schedules ___ Damages ___ Other ___ None

5. Were there any damages to property? ___ Yes ___ No

If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.

___ Changes ___ Relocations ___ Delays ___ Quantities ___ Other ___ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
9:00 a.m.	None	Clear	~70°F	Dry
Noon				
3:00 p.m.				

8. Who were the visitors that came to the site? List names.

X Owner X Engineer ___ Photographer ___ Other ___ None

9. Did observations reveal any work *not* in compliance with the Contract Documents? ___ Yes ___ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? X Yes ___ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

11. Additional Comments:

_____ Continued on separate page(s).

Stearns & Wheler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

		REPORT NO.	
DATE		CONTRACT NO.	
JOB			
CONTRACTOR			
PROJECT REPRESENTATIVE			
SIGNATURE			

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

3. What special incidents happened?

___ Deliveries ___ Blasting ___ Strikes ___ Accidents ___ Other X None

4. What special instructions were given to the Contractor and what was Contractor's response?

___ Tests ___ Defective Work ___ Schedules ___ Damages ___ Other X None

5. Were there any damages to property? ___ Yes X No

If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.

___ Changes ___ Relocations ___ Delays ___ Quantities ___ Other X None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
9:00 a.m.	None	Clear	~70°F	None
Noon	None	Clear	~75°F	None
3:00 p.m.	None	Clear	~75°F	None

8. Who were the visitors that came to the site? List names.

X Owner X Engineer ___ Photographer ___ Other ___ None

9. Did observations reveal any work *not* in compliance with the Contract Documents? ___ Yes X No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? X Yes ___ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

11. Additional Comments:

_____ Continued on separate page(s).

Stearns & Wheler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

		REPORT NO.	70018FA
DATE	6/22/98	CONTRACT NO.	
JOB	Ava		
CONTRACTOR	Marcor Environmental		
PROJECT REPRESENTATIVE	JPD		
SIGNATURE	John P. Dum		

1. What significant construction work was accomplished today and where?

Arrival
0800. Approximately 75 deg. F. Clear.
Excavation of Drain Area
- Center of excavation will be located above original pipe discharge.
- 5'-2" of pipe broken off during previous excavation.
  - Broken section now next to 1452.
  - Will rinse into pipe rinse drums and dispose.
- Pipe rinse process
  - Hole is excavated to accommodate 55-gallon drum beneath pipe drain.
  - Pipe is initially rinsed with hose. Water into sump in Room 116.
  - Pressurized nozzle is used for final rinse.
  - Water from site well is used for rinse.
  - Plastic sheeting is taped to top of drum and pipe outlet to prevent spillage.
  - 51 feet of remaining pipe in rinsed.
- Excavation process
  - Starts late. Digger does not arrive at site until 1300. Excavation begins at 1330.
  - Excavation resumes after pipe rinse is complete.
  - Hole with dimensions of approximately L = 12' x W = 10' x D = 6'.
  - Apparent "seam" of stained soil and subsurface rocks found on N bottom of hole at depth of approximately 24".
  - Seam may be mineral staining.
  - No free flowing material.
- Soil types
  - 0-12" topsoil
  - 12"-24" brown silt, with 20% sand
  - 24"-bottom of hole, gray clay, with 30% coarse sand and gravel
- Soil samples
  - SS-21 - Collected from N bottom of hole at depth of 24".
  - SS-22 - Collected from E bottom of hole at depth of 24".
  - SS-23 - Collected from S bottom of hole at depth of 24".
  - SS-24 - Collected from W bottom of hole at depth of 24".
  - SS-25 - Collected from bottom of hole at depth of 72".
  - All samples will be submitted for analysis of SVOCs (USEPA Method 8260)

Decontamination
- Shovel and heavy broom used for decontamination.

Leach Field Temporary Well Sampling
- WS-31 collected from Hole #4. Well yields approximately 100 ml.

WS-32 collected from Hole #5. Well yields approximately 50 ml.
- WS-33 collected from Hole #4. Well yields full 1 liter.
- All samples will be submitted for analysis of PCBs (USEPA Method 8082)
- Do to poor well yields, did not bail 3 well volumes prior to sampling.

Departure
- Offsite at 1700.

What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

Equipment
- Excavator, tracked, Komatsu, 1.05 cu yard bucket
- Dump Truck, 6 cu yard capacity
- Pressurized jet and water pump.

3. What special incidents happened?

__ Deliveries __ Blasting __ Strikes __ Accidents __ Other X None

4. What special instructions were given to the Contractor and what was Contractor's response?

__ Tests __ Defective Work __ Schedules __ Damages __ Other X None

5. Were there any damages to property? __ Yes X No

If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.

__ Changes __ Relocations __ Delays __ Quantities __ Other X None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
9:00 a.m.	None.	Clear.	Appr. 75 °F	None.
12:00 p.m.	None.	Clear.	Appr 80 °F	None.
3:00 p.m.	None.	Clear.	Appr. 80 °F	None.

8. Who were the visitors that came to the site? List names.

X Owner __ Engineer __ Photographer __ Other __ None

Gene McDonald - Rome Research Corporation/Site Manager

9. Did observations reveal any work *not* in compliance with the Contract Documents? __ Yes X No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? X Yes __ No

11. Additional Comments:

_____ Continued on separate page(s).

Stearns & Wheler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

		REPORT NO.	70018FA
DATE	6/23/98	CONTRACT NO.	
JOB	Ava		
CONTRACTOR	Marcor Environmental		
PROJECT REPRESENTATIVE	JPD		
SIGNATURE	John P. Dan		

1. What significant construction work was accomplished today and where?

Arrival
0800. Approximately 70 deg. F. Heavy fog.
Excavation of Drum Area
- Area as a whole will be excavated to depth of 1'.
- "Hot" area will be excavated to depth of 3' (near drum 1 and drums 5, 9, and 11)
- Excavation process
  - Excavation begins at 0830.
  - Entire area excavated to depth of 1'.
  - Hole with dimensions of approximately L = 25' x W = 17' x D = 1'.
  - Several pieces of 1" diameter copper piping found during excavation
  - Hot area excavated to depth of 3'.
  - Additional excavation dimensions of approximately L = 15' x W = 7' x D = 3' (below grade).
- Soil types
  - 0-8" topsoil
  - 8"-18" clay, yellow-orange, with < 5% sand
  - 18"-bottom of hole, light brown sand with 30% coarse sand and gravel and gray clay, with 20% coarse sand and gravel
- Soil samples
  - SS-01 - Collected from N bottom of hole at depth of 12".
  - SS-00 - Collected from E bottom of hole at depth of 12".
  - SS-03 - Collected from S bottom of hole at depth of 12".
  - SS-04 - Collected from W bottom of hole at depth of 12".
  - SS-05 - Collected from N bottom of hole at depth of 36".
  - SS-06 - Collected from E bottom of hole at depth of 36".
  - SS-07 - Collected from S bottom of hole at depth of 36".
  - All samples will be submitted for analysis of SVOCs (USEPA Method 8060)

Decontamination
- Shovel and heavy broom used for decontamination.

Additional Excavation from Drain Area
- Tar-like substance found along N edge of excavation.
- Excavated an additional 5 yards to remove it. Were able to remove most of it.

Backfill Two Areas
- Backfill for drain area and drum area obtained from soil pile west of drum area.
- Areas backfilled using deconned truck and excavator.
- After backfilling, areas compacted using excavator, seeded with grass, and raked.

Additional Pipe Rinse
- Broken segments of pipe rinsed with rinsate being depositted in drum containing rinsate from previous pipe rinse.

Sump Sealed
- Sump in Room 116 sealed with concrete.

Leach Field Temporary Well Sampling
- Additional water collected for WS-31 from Hole #4. Well yields approximately 250 ml.
- Additional water collected for WS-31 from Hole #4. Well does not yield any additional water.
- All samples will be submitted for analysis of PCBs (USEPA Method 8080)
- Do to poor well yields, did not bail 3 well volumes prior to sampling.

Departure
- Offsite at 1800.

What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

Equipment
- Excavator, tracked, Komatsu, 1.05 cu yard bucket

Dump Truck, 6 cu yard capacity

3. What special incidents happened?

___ Deliveries ___ Blasting ___ Strikes ___ Accidents ___ Other _X_ None

4. What special instructions were given to the Contractor and what was Contractor's response?

___ Tests ___ Defective Work ___ Schedules ___ Damages ___ Other _X_ None

5. Were there any damages to property? ___ Yes _X_ No

If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.

___ Changes ___ Relocations ___ Delays ___ Quantities ___ Other _X_ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
9:00 a.m.	None.	Fog.	Appr. 70 °F	None.
12:00 p.m.	None.	Clearing.	Appr 75 °F	None.
3:00 p.m.	None.	Clear.	Appr. 75 °F	None.

8. Who were the visitors that came to the site? List names.

_X_ Owner ___ Engineer ___ Photographer ___ Other ___ None

Gene McDonald - Rome Research Corporation/Site Manager

9. Did observations reveal any work *not* in compliance with the Contract Documents? ___ Yes _X_ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? _X_ Yes ___ No

11. Additional Comments:

_____ Continued on separate page(s).

APPENDIX C

LABORATORY RESULTS

LSL

Laboratory Analysis Report

LSL Project Number: 9804513

Karen Balkema QDO 08/07/98

Reviewed By **Date**

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc.

Life Science Laboratories, Inc.

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

-- LABORATORY ANALYSIS REPORT --

Stearns & Wheler Engineering
1 Remington Park Drive
Cazenovia, NY 13035

Attn: Mr. John Dana
Phone: (315) 655-8161
FAX: (315) 655-4180

Project No.:
Authorization:

LSL Project No.: 9804513
Report Date: 8/7/98

Sample ID: WS-31

Source:
Sample Matrix: NPW

LSL Sample ID: 9804513-001
Date Sampled: 7/24/98

Analytical Method

Parameter(s)	*Results*	*Units*	*Analysis Date*	*Comment*
EPA 8260B TCL Volatiles				
Acetone	<10	ug/l	8/4/98	
Benzene	<5	ug/l	8/4/98	
Bromodichloromethane	<5	ug/l	8/4/98	
Bromoform	<5	ug/l	8/4/98	
Bromomethane	<5	ug/l	8/4/98	
2-Butanone (MEK)	<10	ug/l	8/4/98	
Carbon disulfide	<5	ug/l	8/4/98	
Carbon tetrachloride	<5	ug/l	8/4/98	
Chlorobenzene	<5	ug/l	8/4/98	
Chloroethane	<5	ug/l	8/4/98	
Chloroform	<5	ug/l	8/4/98	
Chloromethane	<5	ug/l	8/4/98	
Dibromochloromethane	<5	ug/l	8/4/98	
1,1-Dichloroethane	<5	ug/l	8/4/98	
1,2-Dichloroethane	<5	ug/l	8/4/98	
1,1-Dichloroethene	<5	ug/l	8/4/98	
1,2-Dichloroethene, Total	<5	ug/l	8/4/98	
1,2-Dichloropropane	<5	ug/l	8/4/98	
cis-1,3-Dichloropropene	<5	ug/l	8/4/98	
trans-1,3-Dichloropropene	<5	ug/l	8/4/98	
Ethyl benzene	<5	ug/l	8/4/98	
2-Hexanone	<10	ug/l	8/4/98	
Methylene chloride	<10	ug/l	8/4/98	(11)
(11) This result has been blank corrected.				
4-Methyl-2-pentanone (MIBK)	<10	ug/l	8/4/98	
Styrene	<5	ug/l	8/4/98	
1,1,2,2-Tetrachloroethane	<5	ug/l	8/4/98	
Tetrachloroethene	<5	ug/l	8/4/98	
Toluene	<5	ug/l	8/4/98	

-- LABORATORY ANALYSIS REPORT --

Stearns & Wheler Engineering
1 Remington Park Drive
Cazenovia, NY 13035

Attn: Mr. John Dana
Phone: (315) 655-8161
FAX: (315) 655-4180

Project No.:
Authorization:

LSL Project No.: 9804513
Report Date: 8/7/98

1,1,1-Trichloroethane	<5	ug/l	8/4/98
1,1,2-Trichloroethane	<5	ug/l	8/4/98
Trichloroethene	<5	ug/l	8/4/98
Vinyl chloride	<5	ug/l	8/4/98
Xylenes (Total)	<5	ug/l	8/4/98
1,4-Dichlorobenzene	<5	ug/l	8/4/98

Sample ID: SS-08

Source:
Sample Matrix: SHW

LSL Sample ID: 9804513-002
Date Sampled: 7/24/98

Analytical Method

Parameter(s)	*Results*	*Units*	*Analysis Date*	*Comment*
EPA 8021 BTEX				
Benzene	<5	ug/kg	8/4/98	
Toluene	<5	ug/kg	8/4/98	
Ethyl benzene	<5	ug/kg	8/4/98	
Xylenes (Total)	<5	ug/kg	8/4/98	

Sample ID: Trip Blank

Source:
Sample Matrix: NPW

LSL Sample ID: 9804513-003
Date Sampled: 7/24/98

Analytical Method

Parameter(s)	*Results*	*Units*	*Analysis Date*	*Comment*
EPA 8260B TCL Volatiles				
Acetone	<10	ug/l	8/4/98	
Benzene	<5	ug/l	8/4/98	
Bromodichloromethane	<5	ug/l	8/4/98	
Bromoform	<5	ug/l	8/4/98	
Bromomethane	<5	ug/l	8/4/98	
2-Butanone (MEK)	<10	ug/l	8/4/98	
Carbon disulfide	<5	ug/l	8/4/98	
Carbon tetrachloride	<5	ug/l	8/4/98	
Chlorobenzene	<5	ug/l	8/4/98	
Chloroethane	<5	ug/l	8/4/98	
Chloroform	<5	ug/l	8/4/98	

-- LABORATORY ANALYSIS REPORT --

Stearns & Wheler Engineering
1 Remington Park Drive
Cazenovia, NY 13035

Attn: Mr. John Dana
Phone: (315) 655-8161
FAX: (315) 655-4180

Project No.:
Authorization:

LSL Project No.: 9804513
Report Date: 8/7/98

Chloromethane	<5	ug/l	8/4/98	
Dibromochloromethane	<5	ug/l	8/4/98	
1,1-Dichloroethane	<5	ug/l	8/4/98	
1,2-Dichloroethane	<5	ug/l	8/4/98	
1,1-Dichloroethene	<5	ug/l	8/4/98	
1,2-Dichloroethene, Total	<5	ug/l	8/4/98	
1,2-Dichloropropane	<5	ug/l	8/4/98	
cis-1,3-Dichloropropene	<5	ug/l	8/4/98	
trans-1,3-Dichloropropene	<5	ug/l	8/4/98	
Ethyl benzene	<5	ug/l	8/4/98	
2-Hexanone	<10	ug/l	8/4/98	
Methylene chloride	<10	ug/l	8/4/98	(11)
(11) This result has been blank corrected.				
4-Methyl-2-pentanone (MIBK)	<10	ug/l	8/4/98	
Styrene	<5	ug/l	8/4/98	
1,1,2,2-Tetrachloroethane	<5	ug/l	8/4/98	
Tetrachloroethene	<5	ug/l	8/4/98	
Toluene	<5	ug/l	8/4/98	
1,1,1-Trichloroethane	<5	ug/l	8/4/98	
1,1,2-Trichloroethane	<5	ug/l	8/4/98	
Trichloroethene	<5	ug/l	8/4/98	
Vinyl chloride	<5	ug/l	8/4/98	
Xylenes (Total)	<5	ug/l	8/4/98	
1,4-Dichlorobenzene	<5	ug/l	8/4/98	

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057
Phone # (315) 445-1105 Telefax # (315) 445-1301

Chain of Custody Record

Stearns & Wheler, LLC

Client: John Dana Phone # 655-8161
Address: 1 Remington Park Dr. Telefax# 655-4180
Cazenovia, NY 13035

Contact Person: Authorization:

LSL Project #: 9804513
Client's Site I.D.:
Client's Project I.D.:

Turnaround Time (Please circle one)
24 Hr 48 Hr 72 Hr 1 Week 2 Weeks 3 Weeks

Client's Sample Identifications	Sample Date	Sample Time	Type grab	Type comp.	Matrix	Preserv. Added	Containers #	Containers size/type	Analyses	~~Preserv.~~ Check	LSL ID#
WS-01 *	7/24		X		WTW	HCl	4	40ml	VOCs, 8260 w/ TICs (include 1,4-Dichlorobenzene)		001
SS-08	7/24		X		Soil	-	1	4oz	BTEX, 8021		002
TRIP Blank									8260		003

Notes and Hazard identifications:
* Change Sample ID to WS-31 as per J. Dana 7/29/98 NS

Custody Transfers		Date	Time
Sampled By: John P. Dana	Received By:	7/24/98	
Relinquished By: John P. Dana	Received By:	7/24/98	
Relinquished By:	Received for Lab By: M Boehning	7/24/98	1415

Shipment Method: Samples Received Intact: Y N

STEARNS & WHELER L.L.C.

JUL 2 3 1998



Committed To *Your* Success

July 22, 1998

Severn Trent Laboratories
200 Monroe Turnpike
Monroe CT 06468

Tel: (203) 261-4458
Fax: (203) 268-5346

Mr. John Dana
STEARNS & WHELER
One Remington Park Drive
Cazenovia, NY 13035

Dear Mr. Dana :

Please find enclosed the analytical results of 12 sample(s) received at our laboratory on June 26, 1998. This report contains sections addressing the following information at a minimum:

- sample summary
- analytical methodology
- state certifications
- definition of data qualifiers and terminology
- analytical results
- chain-of-custody

STL Report #7098-1484A	Purchase Order #70018FA-1400
Project ID: 70018FA-1400	

Copies of this analytical report and supporting data are maintained in our files for a minimum of five years unless special arrangements have been made. Unless specifically indicated, all analytical testing was performed at this laboratory location and no portion of the testing was subcontracted.

We appreciate your selection of our services and welcome any questions or suggestions you may have relative to this report. Please contact your customer service representative at (203) 261-4458 for any additional information. Thank you for utilizing our services; we hope you will consider us for your future analytical needs.

I have reviewed and approved the enclosed data for final release.

Very truly yours,

Jeffrey C. Curran
Laboratory Manager

JCC

7098-1484A
STEARNS & WHELER

Case Narrative

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS using guidance provided in Methods 3550/8270B. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

All samples were extracted, concentrated and analyzed without any apparent problems.

TABLE SV-1.0
7098-1484A
STEARNS & WHELER
TCL SEMI-VOLATILE ORGANICS

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	SS-01	SS-02	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKUJ	981484A-01	981484A-02	
Method Blank I.D.	SBLKUJ	SBLKUJ	SBLKUJ	
Quant. Factor	1.00	1.20	1.16	
Phenol	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
Benzyl alcohol	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
',4-Dimethylphenol	U	U	U	330
enzoic acid	U	U	U	1600
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	1600
2,4,5-Trichlorophenol	U	U	U	330
2-Chloronaphthalene	U	U	U	1600
2-Nitroaniline	U	U	U	330
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	1600
3-Nitroaniline	U	U	U	330
Acenaphthene	U	U	U	330
Date Received		06/26/98	06/26/98	
Date Extracted	07/01/98	07/01/98	07/01/98	
Date Analyzed	07/15/98	07/15/98	07/15/98	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	SS-01	SS-02	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKUJ	981484A-01	981484A-02	
Method Blank I.D.	SBLKUJ	SBLKUJ	SBLKUJ	
Quant. Factor	1.00	1.20	1.16	
2,4-Dinitrophenol	U	U	U	1600
4-Nitrophenol	U	U	U	1600
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	10J	U	13JB	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	1600
4,6-Dinitro-2-methylphenol	U	U	U	1600
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	1600
Phenanthrene	U	U	U	330
Anthracene	U	U	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	14J	8JB	7JB	330
Fluoranthene	U	U	U	330
Pyrene	U	U	U	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	660
Benzo(a)anthracene	U	U	U	330
Chrysene	U	U	U	330
bis(2-Ethylhexyl)phthalate	41J	12JB	10JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	U	U	330
Benzo(k)fluoranthene	U	U	U	330
Benzo(a)pyrene	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenzo(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received		06/26/98	06/26/98	
Date Extracted	07/01/98	07/01/98	07/01/98	
Date Analyzed	07/15/98	07/15/98	07/15/98	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.1
7098-1484A
STEARNS & WHELER
TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	SS-03	SS-04	SS-05	Quant. Limits with no Dilution
Lab Sample I.D.	981484A-03	981484A-04	981484A-05	
Method Blank I.D.	SBLKUJ	SBLKUJ	SBLKUJ	
Quant. Factor	1.25	1.15	1.12	
Phenol	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
Benzyl alcohol	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
Benzoic acid	U	U	U	1600
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	1600
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	1600
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	1600
Acenaphthene	U	U	U	330
Date Received	06/26/98	06/26/98	06/26/98	
Date Extracted	07/01/98	07/01/98	07/01/98	
Date Analyzed	07/15/98	07/16/98	07/16/98	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.1 Soil
7098-1484A
STEARNS & WHELER page 2 of 4
TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	SS-03	SS-04	SS-05	Quant. Limits with no Dilution
Lab Sample I.D.	981484A-03	981484A-04	981484A-05	
Method Blank I.D.	SBLKUJ	SBLKUJ	SBLKUJ	
Quant. Factor	1.25	1.15	1.12	
2,4-Dinitrophenol	U	U	U	1600
4-Nitrophenol	U	U	U	1600
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	10JB	95JB	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	1600
4,6-Dinitro-2-methylphenol	U	U	U	1600
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	1600
Phenanthrene	U	U	U	330
Anthracene	U	U	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	10JB	10JB	7JB	330
Fluoranthene	U	U	U	330
Pyrene	U	U	U	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	660
Benzo(a)anthracene	U	U	U	330
Chrysene	U	U	U	330
bis(2-Ethylhexyl)phthalate	U	13JB	11JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	U	U	330
Benzo(k)fluoranthene	U	U	U	330
Benzo(a)pyrene	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenzo(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received	06/26/98	06/26/98	06/26/98	
Date Extracted	07/01/98	07/01/98	07/01/98	
Date Analyzed	07/15/98	07/16/98	07/16/98	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.2
7098-1484A
STEARNS & WHELER
TCL SEMI-VOLATILE ORGANICS

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	SS-06	SS-07	SS-21	Quant. Limits with no Dilution
Lab Sample I.D.	981484A-06	981484A-07	981484A-08	
Method Blank I.D.	SBLKUJ	SBLKUJ	SBLKUJ	
Quant. Factor	1.28	1.14	1.10	
Phenol	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
Benzyl alcohol	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
Benzoic acid	U	U	U	1600
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	1600
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	1600
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	1600
Acenaphthene	U	U	U	330
Date Received	06/26/98	06/26/98	06/26/98	
Date Extracted	07/01/98	07/01/98	07/01/98	
Date Analyzed	07/16/98	07/16/98	07/16/98	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

All values are ug/Kg dry weight basis.

Client Sample I.D.	SS-06	SS-07	SS-21	Quant. Limits with no Dilution
Lab Sample I.D.	981484A-06	981484A-07	981484A-08	
Method Blank I.D.	SBLKUJ	SBLKUJ	SBLKUJ	
Quant. Factor	1.28	1.14	1.10	
2,4-Dinitrophenol	U	U	U	1600
4-Nitrophenol	U	U	U	1600
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	11JB	U	9JB	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	1600
4,6-Dinitro-2-methylphenol	U	U	U	1600
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	1600
Phenanthrene	U	U	U	330
Anthracene	U	U	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	11JB	6JB	7JB	330
Fluoranthene	12J	U	U	330
Pyrene	10J	U	U	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	660
Benzo(a)anthracene	8J	U	U	330
Chrysene	8J	U	U	330
bis(2-Ethylhexyl)phthalate	33JB	14JB	14JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	10J	U	U	330
Benzo(k)fluoranthene	7J	U	U	330
Benzo(a)pyrene	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenzo(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received	06/26/98	06/26/98	06/26/98	
Date Extracted	07/01/98	07/01/98	07/01/98	
Date Analyzed	07/16/98	07/16/98	07/16/98	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.3
7098-1484A
STEARNS & WHELER
TCL SEMI-VOLATILE ORGANICS

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	SS-22	SS-23	SS-24	Quant. Limits with no Dilution
Lab Sample I.D.	981484A-09	981484A-10	981484A-11	
Method Blank I.D.	SBLKUJ	SBLKUJ	SBLKUJ	
Quant. Factor	1.12	1.11	1.14	
Phenol	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
Benzyl alcohol	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
Benzoic acid	U	U	U	1600
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	1600
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	1600
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	1600
Acenaphthene	U	U	U	330
Date Received	06/26/98	06/26/98	06/26/98	
Date Extracted	07/01/98	07/01/98	07/01/98	
Date Analyzed	07/16/98	07/16/98	07/16/98	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.3
7098-1484A
STEARNS & WHELER
TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	SS-22	SS-23	SS-24	
Lab Sample I.D.	981484A-09	981484A-10	981484A-11	Quant. Limits with no Dilution
Method Blank I.D.	SBLKUJ	SBLKUJ	SBLKUJ	
Quant. Factor	1.12	1.11	1.14	
2,4-Dinitrophenol	U	U	U	1600
4-Nitrophenol	U	U	U	1600
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	U	8JB	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	1600
4,6-Dinitro-2-methylphenol	U	U	U	1600
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	1600
Phenanthrene	U	U	U	330
Anthracene	U	U	U	330
Carbazole	U	U	U	330
Di-n-butylphthalate	9JB	9JB	9JB	330
Fluoranthene	8J	U	U	330
Pyrene	6J	U	U	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	660
Benzo(a)anthracene	U	U	U	330
Chrysene	U	U	U	330
bis(2-Ethylhexyl)phthalate	140JB	19JB	16JB	330
Di-n-octylphthalate	U	U	U	330
Benzo(b)fluoranthene	U	U	U	330
Benzo(k)fluoranthene	U	U	U	330
Benzo(a)pyrene	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenzo(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330
Date Received	06/26/98	06/26/98	06/26/98	
Date Extracted	07/01/98	07/01/98	07/01/98	
Date Analyzed	07/16/98	07/16/98	07/16/98	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.4
7098-1484A
STEARNS & WHELER
TCL SEMI-VOLATILE ORGANICS

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	SS-25			Quant. Limits with no Dilution
Lab Sample I.D.	981484A-12			
Method Blank I.D.	SBLKUJ			
Quant. Factor	1.11			
Phenol	U			330
bis(2-Chloroethyl)ether	U			330
2-Chlorophenol	U			330
1,3-Dichlorobenzene	U			330
1,4-Dichlorobenzene	U			330
Benzyl alcohol	U			330
1,2-Dichlorobenzene	U			330
2-Methylphenol	U			330
2,2'-oxybis(1-Chloropropane)	U			330
4-Methylphenol	U			330
N-Nitroso-di-n-propylamine	U			330
Hexachloroethane	U			330
Nitrobenzene	U			330
Isophorone	U			330
2-Nitrophenol	U			330
',4-Dimethylphenol	U			330
Benzoic acid	U			1600
bis(2-Chloroethoxy)methane	U			330
2,4-Dichlorophenol	U			330
1,2,4-Trichlorobenzene	U			330
Naphthalene	U			330
4-Chloroaniline	U			330
Hexachlorobutadiene	U			330
4-Chloro-3-methylphenol	U			330
2-Methylnaphthalene	U			330
Hexachlorocyclopentadiene	U			330
2,4,6-Trichlorophenol	U			330
2,4,5-Trichlorophenol	U			1600
2-Chloronaphthalene	U			330
2-Nitroaniline	U			1600
Dimethylphthalate	U			330
Acenaphthylene	U			330
2,6-Dinitrotoluene	U			330
3-Nitroaniline	U			1600
Acenaphthene	U			330
Date Received	06/26/98			
Date Extracted	07/01/98			
Date Analyzed	07/16/98			

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

All values are ug/Kg dry weight basis.

Client Sample I.D.	SS-25			
Lab Sample I.D.	981484A-12			
Method Blank I.D.	SBLKUJ			
Quant. Factor	1.11			Quant. Limits with no Dilution
2,4-Dinitrophenol	U			1600
4-Nitrophenol	U			1600
Dibenzofuran	U			330
2,4-Dinitrotoluene	U			330
Diethylphthalate	U			330
4-Chlorophenyl-phenylether	U			330
Fluorene	U			330
4-Nitroaniline	U			1600
4,6-Dinitro-2-methylphenol	U			1600
N-Nitrosodiphenylamine (1)	U			330
4-Bromophenyl-phenylether	U			330
Hexachlorobenzene	U			330
Pentachlorophenol	U			1600
Phenanthrene	U			330
Anthracene	U			330
Carbazole	U			330
Di-n-butylphthalate	8JB			330
Fluoranthene	U			330
Pyrene	U			330
Butylbenzylphthalate	U			330
3,3'-Dichlorobenzidine	U			660
Benzo(a)anthracene	U			330
Chrysene	U			330
bis(2-Ethylhexyl)phthalate	10JB			330
Di-n-octylphthalate	U			330
Benzo(b)fluoranthene	U			330
Benzo(k)fluoranthene	U			330
Benzo(a)pyrene	U			330
Indeno(1,2,3-cd)pyrene	U			330
Dibenzo(a,h)anthracene	U			330
Benzo(g,h,i)perylene	U			330
Date Received	06/26/98			
Date Extracted	07/01/98			
Date Analyzed	07/16/98			

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

ORGANICS APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

S - Estimated due to surrogate outliers.

X - Matrix spike compound.

(1) - Cannot be separated.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

C - Confirmed by GC/MS.

T - Compound present in TCLP blank.

P - This flag is used for a pesticide/aroclor target analyte when there is a greater than 25 percent difference for detected concentrations between the two GC columns (see Form X).

STATE CERTIFICATIONS

In some instances it may be necessary for environmental data to be reported to a regulatory authority with reference to a certified laboratory. For your convenience, the laboratory identification numbers for the AEN-Connecticut laboratory are provided in the following table. Many states certify laboratories for specific parameters or tests within a category (i.e. method 325.2 for wastewater). The information in the following table indicates the lab is certified in a general category of testing such as drinking water or wastewater analysis. The laboratory should be contacted directly if parameter-specific certification information is required.

AEN-Connecticut
Certification Summary (as of September 1997)

State	Responsible Agency	Certifications	Lab Number
Connecticut	Department of Health Services	Drinking Water, Wastewater	PH-0497
Maine	Department of Human Services	Wastewater	CT023
Massachusetts	Department of Environmental Protection	Potable/Non-Potable Water	CT023
New Hampshire	Department of Environmental Services	Drinking Water, Wastewater	2528
New Jersey	Department of Environmental Protection	Drinking Water, Wastewater	46410
New York	Department of Health	CLP, Drinking Water, Wastewater, Solid/ Hazardous Waste	10602
North Carolina	Division of Environmental Management	Wastewater Hazardous Waste	388
North Dakota	Department of Health and Consolidated Laboratories	Non-Potible/Potable Hazardous Waste	R-138
Oklahoma	Department of Environmental Quality	General Water Quality/ Sludge Testing	9614
Rhode Island	Department of Health	Chemistry...Non-Potable Water and Wastewater	A43
Washington	Department of Ecology	Wastewater/ Hazardous Waste	C231
West Virginia	Division of Environmental Protection	Wastewater/ Hazardous Waste	263
Wisconsin	Department of Natural Resources	Wastewater/ Hazardous Waste	998355710

7098-1484A
STEARNS & WHELER
SAMPLE SUMMARY

CLIENT ID	LAB ID	MATRIX	DATE COLLECTED	DATE RECEIVED
SS-01	981484A-01	SOIL	06/23/98	06/26/98
SS-02	981484A-02	SOIL	06/23/98	06/26/98
SS-03	981484A-03	SOIL	06/23/98	06/26/98
SS-04	981484A-04	SOIL	06/23/98	06/26/98
SS-05	981484A-05	SOIL	06/23/98	06/26/98
SS-06	981484A-06	SOIL	06/23/98	06/26/98
SS-07	981484A-07	SOIL	06/23/98	06/26/98
SS-21	981484A-08	SOIL	06/23/98	06/26/98
SS-22	981484A-09	SOIL	06/22/98	06/26/98
SS-23	981484A-10	SOIL	06/22/98	06/26/98
SS-24	981484A-11	SOIL	06/22/98	06/26/98
SS-25	981484A-12	SOIL	06/22/98	06/26/98

IEA-CT ANALYTICAL SUMMARY

Client ID: SS-01, SS-02, SS-03, SS-04, SS-05, SS-06, SS-07, SS-21, SS-22, SS-23, SS-24, SS-25
Job Number: 7098-1484A

Date: 7/22/98

Qty	Matrix	Analysis	Description
1	None	DISK	Diskette Prep.
12	SOIL	BNA-8270B-TCL	TCL Semi-Volatile Or

AEN

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CHAIN OF CUSTODY RECORD

PAGE 1 OF 2 NO.

AEN JOB #: 7098-1484A

CLIENT: Stearns & Wheler - John Dane

PROJECT ID:

AEN PROJECT MGR: SNP

RUSH [ ] YES [X] NO DUE DATE

BOTTLE SET #	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N	TESTS: BNA-C (BOTTLE TYPE AND PRESERVATION: 6250) FIELD FILTERED - CIRCLE Y or N	GENERAL REMARKS / SAMPLE REMARKS
01	SS-01	6/28/98	S	01	N	Y / N	
02	SS-02		S	02	N	Y / N	
03	SS-03		S	03	N	Y / N	
04	SS-04		S	04	N	Y / N	
05	SS-05		S	05	N	Y / N	
06	SS-06		S	06	N	Y / N	
07	SS-07		S	07	N	Y / N	
08	SS-21		S	08	N	Y / N	Damaged Bad Screen 6/26/98
09	SS-22	6/22/98	S	09	N	Y / N	

MATRIX CODES

A	AIR	S	SOIL
AQ	AQUEOUS	SL	SLUDGE
C	COMPLEX	W	WIPE
D	DRUM WASTE	O	OTHER
OI	OIL	FB	FIELD BLANK
		TB	TRIP BLANK

BOTTLES PREPARED BY — DATE / TIME

SIGNATURE: Stephanie N. Plunkett 6/18/98

SAMPLES COLLECTED BY — DATE / TIME: John P. Dane 6/23/98

SIGNATURE: John P. Dane

BOTTLES RECEIVED BY — DATE / TIME

SIGNATURE

RECEIVED IN LAB BY: T. Brzezinski — DATE / TIME: 6/26/98 10:00

SIGNATURE

REMARKS ON SAMPLE RECEIPT

[X] BOTTLES INTACT [ ] CUSTODY SEAL

[ ] PRESERVED [ ] SEALS INTACT

[ ] RECEIVED [ ] SEE REMARKS

LABORATORY COPY

American Environmental Network
200 Monroe Turnpike • Monroe, CT 06468 • 203-261-4458

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2 | NO.

AFN JOB #: 7098-1484A

CLIENT: Dearmot Wheler - John Dana

PROJECT ID:

AFN PROJECT MGR: SNP

RUSH [ ] YES [X] NO | DUE DATE

BOTTLE SET #	CLIENT SAMPLE ID	DATE / TIME SAMPLED	MATRIX	LAB ID	QC Y / N
10	55-23	6/22/98	S	10	N
11	55-24	↓	S	11	N
12	55-25	↓	S	12	N

TESTS: BNA's, Reactivity, Corrosivity, TCLP Metals, TCLP VOA, TCLP BNA, TCLP Pest/PCB, TCLP Herb, TCLP SVOA

BOTTLE TYPE AND PRESERVATION: 6L250 | SEPTA60

FIELD FILTERED - CIRCLE Y or N: Y / N | Y / N | Y / N | Y / N | Y / N | Y / N | Y / N | Y / N

GENERAL REMARKS

SAMPLE REMARKS

Passed Rad Screen 6/26/98

26°C

MATRIX CODES

A	AIR	S	SOIL
AQ	AQUEOUS	SL	SLUDGE
C	COMPLEX	W	WIPE
D	DRUM WASTE	O	OTHER
OI	OIL	FB	FIELD BLANK
		TB	TRIP BLANK

BOTTLES PREPARED BY — DATE / TIME: 6/18/98

SIGNATURE: Stephanie N Plunkett

SAMPLES COLLECTED BY: John P. Dana — DATE / TIME: 6/23/98

SIGNATURE: J. P. Dana

BOTTLES REC'D BY — DATE / TIME

SIGNATURE

RECEIVED IN LAB BY: [illegible] — DATE / TIME: 10:00 6/26/98

SIGNATURE

REMARKS ON SAMPLE RECEIPT

[X] BOTTLES INTACT [ ] CUSTODY SEAL

[ ] PRESERVED [ ] SEALS INTACT

[ ] CHILLED [ ]

LABORATORY COPY

..EN nec...

Internal Chain-of-Custody

Client: S+W

AEN Job #: 7098-1484A

Custody Seal: present / absent
intact / not intact

Airbill #: FE

Sample #s. 01-12

Field C-O-C present / absent

Locations: A8

Laboratory Sample #	Relinquished by	Accepted by	Date	Time	Reason	Relinquished by	Accepted by	Date	Time
1-12		DL	7-8	0750	BTEX	SBW		07/01/98	15:32
01-12		SBW	7/1	14.20	BNA	TB		7/14	15:15

AEN Form# SMF00501.CT

AEN GC-GC/MS Extract Chain-of-Custody

Fraction: (BNA) / Pesticide-PCB / Herbicide / O/P Pest / DRO / Other (Circle one)

CLIENT : SAW

JOB NO(s). : 1484A

SAMPLE IN (Extractions)					SAMPLE IN (Extractions)				
Sample(s)	Date	Time	Sign.	Location	Sample(s)	Date	Time	Sign.	Location
1-12	7/13/98	16:00	JW	29					

SAMPLE OUT					SAMPLE IN			
Sample(s)	Date	Time	Code	Sign.	Date	Time	Location	Sign.
10-12	07/13/98	1700	~~SC~~ AN	CL	07/13/98	1900	29	CL
1-3	07/15/98	1000	AN	CL	07/15/98	1115	29	CL
4-12	07/16/98	0830	AN	CL	07/16/98	1030	29	CL

Codes. SC = Screening AN = Analysis

Verified by M. Carter Date 7/21/98

Form: SMF01201.CT

LSL

Laboratory Analysis Report

LSL Project Number: 9803601

Reviewed By Date

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc.

Life Science Laboratories, Inc.

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NYS DOH ELAP No. 10248

— LABORATORY ANALYSIS REPORT —

Stearns & Wheler Engineering
1 Remington Park Drive
Cazenovia, NY 13035

Attn: Mr. John Dana
Phone: (315) 655-8161
FAX: (315) 655-4180

Project No.:
Authorization:

LSL Project No.: 9803601
Report Date: 7/2/98

Sample ID: SS-01
Source: Verona
Sample Matrix: NPW

LSL Sample ID: 9803601-001
Date Sampled: 6/19/98

Analytical Method / *Parameter(s)*	*Results*	*Units*	*Analysis Date*	*Comment*
EPA 8082 PCB's				
Arochlor-1016	<0.1	ug/l	6/24/98	
Arochlor-1221	<0.1	ug/l	6/24/98	
Arochlor-1232	<0.1	ug/l	6/24/98	
Arochlor-1242	<0.1	ug/l	6/24/98	
Arochlor-1248	<0.1	ug/l	6/24/98	
Arochlor-1254	<0.1	ug/l	6/24/98	
Arochlor-1260	2.0	ug/l	6/24/98	

Sample ID: SS-31
Source: Ava
Sample Matrix: NPW

LSL Sample ID: 9803601-002
Date Sampled: 6/19/98

Analytical Method / *Parameter(s)*	*Results*	*Units*	*Analysis Date*	*Comment*
EPA 8082 PCB's				
Arochlor-1016	<0.2	mg/kg	6/25/98	
Arochlor-1221	<0.2	mg/kg	6/25/98	
Arochlor-1232	<0.2	mg/kg	6/25/98	
Arochlor-1242	<0.2	mg/kg	6/25/98	
Arochlor-1248	<0.2	mg/kg	6/25/98	
Arochlor-1254	<0.2	mg/kg	6/25/98	
Arochlor-1260	<0.2	mg/kg	6/25/98	

Life Science Laboratories, Inc.
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NYS DOH ELAP No. 10248

LSL

Laboratory Analysis Report

LSL Project Number: 9803716

Karen Bellavia QDO 07/03/98

Reviewed By **Date**

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc.

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NYS DOH ELAP No. 10248

-- LABORATORY ANALYSIS REPORT --

Stearns & Wheler Engineering
1 Remington Park Drive
Cazenovia, NY 13035

Attn: John Dana
Phone: (315) 655-8161
FAX: (315) 655-4180

Project No.:
Authorization:

LSL Project No.: 9803716
Report Date: 7/2/98

Sample ID: Ava WS-31

Source: Ava
Sample Matrix: NPW

LSL Sample ID: 9803716-001
Date Sampled: 6/23/98

Analytical Method

Parameter(s)	*Results*	*Units*	*Analysis Date*	*Comment*
EPA 8082 PCB's				
Arochlor-1016	<0.1	ug/l	6/25/98	
Arochlor-1221	<0.1	ug/l	6/25/98	
Arochlor-1232	<0.1	ug/l	6/25/98	
Arochlor-1242	<0.1	ug/l	6/25/98	
Arochlor-1248	<0.1	ug/l	6/25/98	
Arochlor-1254	<0.1	ug/l	6/25/98	
Arochlor-1260	<0.1	ug/l	6/25/98	

Sample ID: Ava WS-33

Source: Ava
Sample Matrix: NPW

LSL Sample ID: 9803716-002
Date Sampled: 6/23/98

Analytical Method

Parameter(s)	*Results*	*Units*	*Analysis Date*	*Comment*
EPA 8082 PCB's				
Arochlor-1016	<0.1	ug/l	6/25/98	
Arochlor-1221	<0.1	ug/l	6/25/98	
Arochlor-1232	<0.1	ug/l	6/25/98	
Arochlor-1242	<0.1	ug/l	6/25/98	
Arochlor-1248	<0.1	ug/l	6/25/98	
Arochlor-1254	<0.1	ug/l	6/25/98	
Arochlor-1260	<0.1	ug/l	6/25/98	

Life Science Laboratories, Inc.
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NYS DOH ELAP No. 10248

APPENDIX D

PHOTOGRAPHS



Photograph 1 – Installation of Borings South of Building 1452



Photograph 2 – Staging of Soil on Polyethylene Sheeting



Photograph 3 – Rinsing of Drain Pipe



Photograph 4 – Collection of Confirmatory Samples from Excavation



Photograph 5 – Sump Sealed with Concrete



Photograph 6 – Excavation of Petroleum-Impacted Soil in Drum Area



Photograph 7 – "Hot Spot" Area Excavation (3-feet deep)

APPENDIX E

COMMUNICATION WITH NYSDEC

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Hazardous Site Control, Room 252
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-0639 FAX: (518) 457-8989

John P. Cahill
Commissioner

July 6, 1998

Mr. Bruce H. Mero, REM
Chief
Environmental, Safety, and Occupational Health Office
Rome Research Site
Air Force Research Laboratory
153 Brooks Road
Rome, NY 13441

Re: **Phase 2 Environmental Baseline Survey (EBS)**
Ava Research Facility
Oneida County

Dear Mr. Mero:

I have received and reviewed the Phase 2 EBS prepared by your consultant (Stems & Wheler) in May 1998 for the above-mentioned site. I offer the following comments:

1. **Room 116 Sump:** The soil samples (SS-01, SS-02 and SS-03) collected from the drainage ditch associated with this sump indicate contamination with SVOCs and lead above TAGM #4046 levels. Based on this information, it is my opinion that: (A) the drainage pipe should be rinsed and sealed; (B) the soils surrounding this area should be excavated and disposed off-site; (C) confirmatory samples should be collected from the sidewalls and bottom of the excavation and analyzed for SVOCs and lead; and (D) the excavated area should be backfilled with clean soil that meets TAGM #4046 objectives.

2. **Bldg. 1452 Septic System:** The water sample (WS-02) collected from this septic tank indicated the presence of six compounds (2 VOCs, 1 SVOC, and 3 PCBs) at levels above Part 703.5 Class GA standards. Based on this data, it is my opinion that the soil and groundwater located within the septic tank's leach field be sampled and analyzed for VOCs, SVOCs, and PCBs

3. **Drum Disposal Area:** The soil samples collected (SS-01 through SS-12) from beneath the drums indicate contamination with petroleum-related compounds. Based on this information, it is my opinion that: (A) additional soil sampling be conducted in this area to determine the extent of contamination, with analysis for VOCs and SVOCs; (B) soils identified as having contamination be excavated and disposed off-site; (C) confirmatory samples be collected from the excavation bottom and analyzed for VOCs and SVOCs; and (D) the excavated area be backfilled with clean soil that meets TAGM #4046 objectives.

The additional investigative and remedial work previously outlined that is not included in Section 6 of the Phase 2 EBS report should be included in the work plan to be prepared by your consultant (Stems & Wheler) as referenced in Section 6.4, item C. Once received, this work plan should be submitted to this office for review and comment. This work plan should include a map depicting the sampling locations proposed for the leach field portion of the investigation.

If you have any questions or comments on this letter, please contact me at the above address or telephone number.

Sincerely,

David K. Harrington

David K. Harrington
Environmental Engineer 1
Eastern Investigation Section
Bureau of Hazardous Site Control

A:\ava2.ltr.wpd

FROM : PLYCEU PHONE NO. : 315 338 3418 Jul. 09 1998 12:05PM P2
RCV BY: 7- 9-98 ; 12:08 ; 315 530 3410- 315 455 4180;# 3

Stearns & Wheler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

July 21, 1998

Mr. David Harrington
NYS Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Hazardous Site Control, Room 252
50 Wolf Road
Albany, NY 12233-7010

Re: Additional Sampling at the Ava Research Facility
S&W No. 70018FA.0

Dear Mr. Harrington:

As per our July 14, 1998 conversation, the following additional sampling will be conducted at the Ava Research Facility:

- *Building 1452 Leachfield* – An additional water sample will be collected from the temporary monitoring well located in the Building 1452 leachfield and submitted for laboratory analysis of VOCs (EPA Method 8260) and SVOCs (EPA Method 8270).

- *Excavated Soil Associated with Room 116 Sump and Drainage Pipe* – The impacted soil located at the terminus of the drainage pipe associated with the Room 116 sump has been excavated, transported, and disposed of. Five confirmatory samples were collected from the excavation and submitted for laboratory analysis of SVOCs. No additional confirmatory sampling will be required.

- *Excavated Soil Associated with Drum Area* – The drums and associated impacted soil located in the northern section of the Ava site has been properly disposed of. Six confirmatory samples were collected from the excavation and submitted for laboratory analysis of SVOCs. One additional sample will be collected from the soil above which drum 12 was located and submitted for analysis of VOCs. The soil will be collected from a depth of 18 inches to assure that original soil is sampled rather than fill material.

Very truly yours,

John P. Dana
Environmental Engineer

JPD/smp
Enclosure
pc: Mr. Bruce Mero, Rome Labs

J:\7000\70018FA\WORDPROC\LETTERS\1998\HARJAC01.WPD

One Remington Park Drive
Cazenovia, New York 13035
(315) 655-8161 Fax (315) 655-4180