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THE MEMPHIS DEPOT
TENNESSEE

ADMINISTRATIVE RECORD
COVER SHEET

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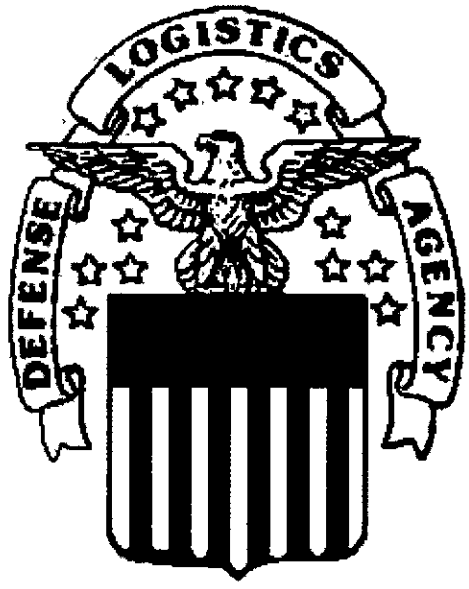
INTERIM REMEDIAL ACTION GROUNDWATER EXTRACTION SYSTEM



Project Documentation
For
Memphis Depot Caretaker

U.S. Army Corps of Engineers
Mobile District
Tennessee Area Office
Arnold AFB, Tennessee
OHM Remediation Services Corp.

VOLUME II May 1999

TAB

Appendix F-1

GROUNDWATER SAMPLES FROM RW-3, RW-4, RW-5, RW-6, RW-7, RW-8 & RW-9 FOLLOWING WELL DEVELOPMENT AND WATER SAMPLES FROM FRAC TANK 1 & 2

Dated Collected 02/18,19&20/98

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

NOTICE OF REVISION

To: Ms. Elena Rodriguez

Date: 3/12/98

Company: OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross,GA 30092

Report No. 92148

Project: DDMT\Dunn Field-Memphis, TN

lease find the revised analytical report for samples received on 2/21/98.

We appreciate the opportunity to provide analytical support for your project. If you have any questions regarding this data package, please do not hesitate to call.

Respectfully submitted,

Shari Harper
Project Manager

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
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05 March, 1998

Case Narrative Report 92148

The samples were collected 18-20 February, 1998 and received by ASI 21 February, 1998. As indicated on the Chain of Custody, the samples were received at 0°C. All other conditions for proper sample receipt were met. The samples were logged into the LIMS as report 92148 for the following analyses as per client request: VOA (EPA 8260), Mercury (EPA 7470), Selenium (EPA 7740), Lead (EPA 7421), Metals (EPA 6010) and pH (EPA 9040). Holding times for sample preparation and analysis were met with the exception of pH which should be analyzed in the field.

VOA analysis (EPA 8260) gave high MS/MSD recoveries for Trichloroethene due to this analyte being in the sample. No useable surrogate recoveries were obtained for Sample #92148-5 due to a power failure during analysis; the sample was re-run at a later date producing a low recovery for Toluene-d8 and a high recovery for 4-Bromofluorobenzene. This same sample was then analyzed at a dilution factor of two which gave a high recovery for 1,2-Dichloroethane-d4. The diluted sample was analyzed in duplicate; the second sample gave acceptable results for all surrogates. Sample #92148-10 gave a high surrogate recovery for 1,2-Dichloroethane-d4; the sample was then analyzed at a dilution factor of five, which gave a low recovery for Toluene-d8. The diluted sample was analyzed in duplicate; the second sample gave acceptable results for all surrogates. All other spike and surrogate recoveries were acceptable.

Mercury analysis (EPA 7470) met all data quality objectives with the exception of a high MSRPD.

Selenium analysis (EPA 7740) met all data quality objectives with the exception of a low PDS recovery.

Lead analysis (EPA 7421) met all data quality objectives.

Metals analysis (EPA 6010) gave high MS/MSD recoveries for Ag and Na, and high PDS recoveries for K and Na. All other spike recoveries were acceptable.

pH analysis (EPA 9040) met all data quality objectives.

Christina A. Perfetti
Quality Assurance

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-1

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-07-Dev., 02/18/98, 16:00, received 02/21/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	BDL	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.07	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	47	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	0.4	0.1
Total Lead (Pb) (EPA 7421)	0.006	0.003
Total Magnesium (Mg) (EPA 6010)	8.8	0.05
Total Manganese (Mn) (EPA 6010)	0.16	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	2.0	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-1

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-07-Dev., 02/18/98, 16:00, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na)(EPA 6010)	34	0.05
Total Thallium (Tl)(EPA 6010)	BDL	0.01
Total Vanadium (V)(EPA 6010)	BDL	0.05
Total Zinc (Zn)(EPA 6010)	BDL	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	4	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	54	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	16	2
Tetrachloroethene	8	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	83	2

BDL - Below Detection Limit

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-07-Dev., 02/18/98, 16:00, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina A. Riffett
Quality Assurance

cc: Mr. Steve Offner

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-2

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-03-Dev., 02/20/98, 14:40, received 02/21/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	BDL	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.09	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	15	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	1.2	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	6.5	0.05
Total Manganese (Mn) (EPA 6010)	0.18	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	0.9	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-2

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-03-Dev., 02/20/98, 14:40, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na)(EPA 6010)	27	0.05
Total Thallium (Tl)(EPA 6010)	BDL	0.01
Total Vanadium (V)(EPA 6010)	BDL	0.05
Total Zinc (Zn)(EPA 6010)	0.07	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	12	10
Carbon disulfide	BDL	10
Carbon tetrachloride	14	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	39	2

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-2

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-03-Dev., 02/20/98, 14:40, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Quality Assurance

cc: Mr. Steve Offner

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-3

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-04-Dev., 02/20/98, 14:20, received 02/21/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	BDL	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.05	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	15	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	0.7	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	7.0	0.05
Total Manganese (Mn) (EPA 6010)	0.07	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	0.6	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-3

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-04-Dev., 02/20/98, 14:20, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na)(EPA 6010)	25	0.05
Total Thallium (Tl)(EPA 6010)	BDL	0.01
Total Vanadium (V)(EPA 6010)	BDL	0.05
Total Zinc (Zn)(EPA 6010)	0.02	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	48	2

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
Page 3 of 3 Report No. 92148-3

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-04-Dev., 02/20/98, 14:20, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina C. Corbett
Quality Assurance

cc: Mr. Steve Offner

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-4

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-06-Dev., 02/20/98, 14:00, received 02/21/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	BDL	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.07	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	16	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	0.4	0.1
Total Lead (Pb) (EPA 7421)	0.008	0.003
Total Magnesium (Mg) (EPA 6010)	7.6	0.05
Total Manganese (Mn) (EPA 6010)	0.11	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	0.8	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
Page 2 of 3 Report No. 92148-4

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-06-Dev., 02/20/98, 14:00, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na) (EPA 6010)	27	0.05
Total Thallium (Tl) (EPA 6010)	BDL	0.01
Total Vanadium (V) (EPA 6010)	BDL	0.05
Total Zinc (Zn) (EPA 6010)	0.03	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	8	2

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-4

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-06-Dev., 02/20/98, 14:00, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christine C. Pruett
Quality Assurance

cc: Mr. Steve Offner

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-5

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-08-Dev., 02/19/98, 14:20, received 02/21/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	0.4	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.05	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	36	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	1.5	0.1
Total Lead (Pb) (EPA 7421)	0.008	0.003
Total Magnesium (Mg) (EPA 6010)	11	0.05
Total Manganese (Mn) (EPA 6010)	0.04	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	8.0	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-5

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-08-Dev., 02/19/98, 14:20, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na) (EPA 6010)	37	0.05
Total Thallium (Tl) (EPA 6010)	BDL	0.01
Total Vanadium (V) (EPA 6010)	BDL	0.05
Total Zinc (Zn) (EPA 6010)	0.02	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	220	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	190	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	13	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	15	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	58	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	10	2

BDL - Below Detection Limit

OHM Remediation Services Corp.

March 12, 1998
Report No. 92148-5

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-08-Dev., 02/19/98, 14:20, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Project Manager

Quality Assurance

cc: Mr. Steve Offner

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-6

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-09-Dev., 02/19/98, 14:00, received 02/21/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	BDL	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.07	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	43	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	0.2	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	2.2	0.05
Total Manganese (Mn) (EPA 6010)	BDL	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	4.6	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-6

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-09-Dev., 02/19/98, 14:00, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na)(EPA 6010)	34	0.05
Total Thallium (Tl)(EPA 6010)	BDL	0.01
Total Vanadium (V)(EPA 6010)	BDL	0.05
Total Zinc (Zn)(EPA 6010)	0.02	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	2	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	2	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	64	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	4	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	92	2

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-6

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-09-Dev., 02/19/98, 14:00, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Project Manager

Quality Assurance

cc: Mr. Steve Offner

ASI
ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-7

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, Tank 2-Dev., 02/20/98, 16:15, received 02/21/98

RESULTS

	Result	Detection Limit
pH (laboratory) (EPA 9040)	9.57	-

Target Analyte List - Metals

Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	1.8	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.04	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	19	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	6.0	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	3.7	0.05
Total Manganese (Mn) (EPA 6010)	0.04	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-7

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, Tank 2-Dev., 02/20/98, 16:15, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Nickel (Ni)(EPA 6010)	BDL	0.02
Total Potassium (K)(EPA 6010)	1.8	0.2
Total Selenium (Se)(EPA 7740)	BDL	0.005
Total Silver (Ag)(EPA 6010)	BDL	0.01
Total Sodium (Na)(EPA 6010)	28	0.05
Total Thallium (Tl)(EPA 6010)	BDL	0.01
Total Vanadium (V)(EPA 6010)	BDL	0.05
Total Zinc (Zn)(EPA 6010)	0.03	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	3	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	5	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	11	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	6	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	5	2

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 3 of 3

March 12, 1998
Report No. 92148-7

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, Tank 2-Dev., 02/20/98, 16:15, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Toluene	5	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	90	2
Vinyl chloride	BDL	1
Xylenes	13	5

BDL - Below Detection Limit

cc: Mr. Steve Offner

Respectfully submitted,

Shari Harper
Project Manager

Christina C. Pickett
Quality Assurance

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ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-8

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, Tank 1-Dev., 02/20/98, 16:00, received 02/21/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	2.2	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.07	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	28	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	9.3	0.1
Total Lead (Pb) (EPA 7421)	0.008	0.003
Total Magnesium (Mg) (EPA 6010)	6.4	0.05
Total Manganese (Mn) (EPA 6010)	0.19	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	2.2	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 2 of 3

March 12, 1998
Report No. 92148-8

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, Tank 1-Dev., 02/20/98, 16:00, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na) (EPA 6010)	33	0.05
Total Thallium (Tl) (EPA 6010)	BDL	0.01
Total Vanadium (V) (EPA 6010)	0.05	0.05
Total Zinc (Zn) (EPA 6010)	0.03	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	29	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	12	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	26	2
Toluene	4	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	21	2

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-8

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, Tank 1-Dev., 02/20/98, 16:00, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride.....	BDL	1
Xylenes.....	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina L. Bufkin
Quality Assurance

cc: Mr. Steve Offner

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-9

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-14-Dev., 02/20/98, 13:00, received 02/21/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	BDL	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.04	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	84	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	0.2	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	1.6	0.05
Total Manganese (Mn) (EPA 6010)	BDL	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	1.3	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-9

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-14-Dev., 02/20/98, 13:00, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na)(EPA 6010)	25	0.05
Total Thallium (Tl)(EPA 6010)	BDL	0.01
Total Vanadium (V)(EPA 6010)	BDL	0.05
Total Zinc (Zn)(EPA 6010)	0.04	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	11	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	39	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	2
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	17	2
Toluene	2	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	540	2

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 3 of 3

March 12, 1998
Report No. 92148-9

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-14-Dev., 02/20/98, 13:00, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christine C. Mayfield
Quality Assurance

cc: Mr. Steve Offner

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ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-10

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-05-Dev., 02/20/98, 17:00, received 02/21/98

RESULTS

	Result	Detection Limit
pH (laboratory) (EPA 9040)	11.8	-

Target Analyte List - Metals

Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	BDL	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.04	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	86	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	0.1	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	1.6	0.05
Total Manganese (Mn) (EPA 6010)	BDL	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-10

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-05-Dev., 02/20/98, 17:00, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	1.2	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01
Total Sodium (Na) (EPA 6010)	24	0.05
Total Thallium (Tl) (EPA 6010)	BDL	0.01
Total Vanadium (V) (EPA 6010)	BDL	0.05
Total Zinc (Zn) (EPA 6010)	0.04	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	16	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	30	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	11	2

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-10

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-05-Dev., 02/20/98, 17:00, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Toluene	2	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	540	2
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

cc: Mr. Steve Offner

Respectfully submitted,

Shari Harper
Project Manager

Christine L. Hobbs
Quality Assurance

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-11

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-EQB, 02/20/98, 16:55, received 02/21/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	BDL	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	BDL	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	0.30	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	BDL	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	BDL	0.05
Total Manganese (Mn) (EPA 6010)	BDL	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	BDL	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-11

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-EQB, 02/20/98, 16:55, received 02/21/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na) (EPA 6010)	0.07	0.05
Total Thallium (Tl) (EPA 6010)	BDL	0.01
Total Vanadium (V) (EPA 6010)	BDL	0.05
Total Zinc (Zn) (EPA 6010)	0.04	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	BDL	2

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-11

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, RW-EQB, 02/20/98, 16:55, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christine C. Corbett
Quality Assurance

cc: Mr. Steve Offner

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 12, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92148-12

Sample Description

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, Trip Blank, 02/20/98, received 02/21/98

RESULTS

Target Compound List

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp. March 12, 1998
 Report No. 92148-12

Water, grab, DDMT\Dunn Field Memphis TN, Project #20022, Trip Blank, 02/20/98, received 02/21/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	BDL	2
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Project Manager

Quality Assurance

cc: Mr. Steve Offner

Analytical Services Inc. Batch QC
For Report Number :92148
Volatile Organics

Matrix : Aqueous Batch # 36671 Method : EPA 8260

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	91	90	2	61 - 145	0 - 14
Trichloroethene	117	107	9	71 - 120	0 - 14
Benzene	118	114	3	76 - 127	0 - 11
Toluene	120	110	8	76 - 125	0 - 13
Chlorobenzene	120	115	5	75 - 130	0 - 13

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	104	90	14	61 - 145	0 - 14
Trichloroethene	121	122	1	71 - 120	0 - 14
Benzene	127	124	2	76 - 127	0 - 11
Toluene	121	110	10	76 - 125	0 - 13
Chlorobenzene	125	123	2	75 - 130	0 - 13

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Aqueous Batch # 36671 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	76 - 119
S2	Toluene-d8	88 - 110
S3	Ethylbenzene-d10	75 - 115
S4	4-Bromofluorobenzene	86 - 120

Sample	File	S1	S2	S3	S4	S5	S6
36671LCS	B3435	105	102	99	103		
36671LCSD	B3436	102	98	98	102		
92148-1MS	B3461	113	98	96	98		
92148-1MSD	B3456	113	91	92	95		
36671BLK	B3437	107	99	96	96		
36671BLK2	B3447	104	97	92	93		
36671BLK3	A1281	95	95	98	100		
36671BLK4	A1324	97	92	100	98		
92148-1	B3438	109	99	100	97		
92148-2	B3439	107	100	95	98		
92148-3	B3440	104	93	96	101		
92148-4	B3441	105	103	95	98		
92148-5	B3442						
92148-6	B3460	101	99	95	89		
92148-7	B3448	119	95	91	95		
92148-8	B3449	114	100	87	92		
92148-9	B3450	117	96	88	101		
92148-9D	A1301	93	96	101	93		
^^Note: 1:5 DILUTION							
92148-10	B3451	132	99	90	100		
92148-10D	A1302	95	62	99	92		
^^Note: DF=5							
92148-11	B3452	112	90	84	103		
92148-11DUP	C1636	105	95	95	99		
92148-12	B3453	119	96	90	98		
92148-12DUP	C1637	102	97	94	97		
92148-1DUP	B3454	114	96	90	98		
91904-1	A1246	106	96	96	97		
91904-2	A1247	108	96	99	98		
91904-3	A1248	105	98	95	98		
91904-3D	B3457	108	101	93	98		
^^Note: 1:10 DILUTION							
91904-3D2	A1303	95	95	100	94		
^^Note: DF=50							

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Aqueous Batch # 36671 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	76 - 119
S2	Toluene-d8	88 - 110
S3	Ethylbenzene-d10	75 - 115
S4	4-Bromofluorobenzene	86 - 120

Sample	File	S1	S2	S3	S4	S5	S6
91904-4	A1249	105	92	97	97		
91904-5	A1250	106	96	102	103		
91904-5D	B3458	133	101	85	102		
^^Note: DF=50							
91904-5D2	A1304	105	67	99	91		
^^Note: DF=100							
91904-6	A1251	101	94	97	98		
91904-6D	B3459	124	98	87	96		
^^Note: DF=1000							
91904-6D2	A1305	104	86	98	92		
^^Note: DF=10000							
91904-7	A1252	106	95	99	100		
91904-8	A1253	107	96	97	97		
92148-5DUP	A1331	100	84	98	149		
92148-5D	A1335	141	97	101	97		
^^Note: DF=2							
92148-10DDUP	A1337	102	95	98	86		
^^Note: DF=5							
92148-5DDUP	A1338	97	94	100	89		
^^Note: DF=2							

Q.C. Information for Batch # 36671 Printed: 03/09/98 19:45:43

Blank Results Information
Volatile Organics Method : EPA 8260

Analyte	Blank Result	Detection Limit
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	2
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	BDL	2
Vinyl chloride	BDL	10
Xylenes	BDL	5

Q.C. Information for Batch # 36671 Printed: 03/09/98 19:45:43

Sample Batch Information
Volatile Organics Method : EPA 8260

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
36671LCSD	/ /				02/24/98	1544	RFA	VOA2
92148-1MS	/ /				02/25/98	1411	RFA	VOA2
92148-1MSD	/ /				02/25/98	1136	RFA	VOA2
36671BLK	/ /				02/25/98	1608	RFA	VOA2
36671BLK2	/ /				02/25/98	0758	RFA	VOA2
36671BLK3	/ /				02/25/98	0733	RFA	VOA1
36671BLK4	/ /				02/26/98	1030	RFA	VOA1
92148-1	/ /				02/24/98	1632	RFA	VOA2
92148-2	/ /				02/24/98	1657	RFA	VOA2
92148-3	/ /				02/24/98	1721	RFA	VOA2
92148-4	/ /				02/24/98	1746	RFA	VOA2
92148-5	/ /				02/24/98	1811	RFA	VOA2
92148-6	/ /				02/25/98	1609	RFA	VOA2
92148-7	/ /				02/25/98	0822	RFA	VOA2
92148-8	/ /				02/25/98	0847	RFA	VOA2
92148-9	/ /				02/25/98	0911	RFA	VOA2
92148-9D	/ /				02/25/98	1629	RFA	VOA1
92148-10	/ /				02/25/98	0935	RFA	VOA2
92148-10D	/ /				02/25/98	1655	RFA	VOA1
92148-11	/ /				02/25/98	0959	RFA	VOA2
92148-11DUP	/ /				02/25/98	1821	LLP	VOA3
92148-12	/ /				02/25/98	1023	RFA	VOA2
92148-12DUP	/ /				02/25/98	1847	LLP	VOA3
92148-1DUP	/ /				02/25/98	1047	RFA	VOA2
91904-1	/ /				02/23/98	1837	RFA	VOA1
91904-2	/ /				02/23/98	1903	RFA	VOA1
91904-3	/ /				02/23/98	1928	RFA	VOA1
91904-3D	/ /				02/25/98	1234	RFA	VOA2
91904-3D2	/ /				02/25/98	1721	RFA	VOA1
91904-4	/ /				02/23/98	1954	RFA	VOA1
91904-5	/ /				02/23/98	2019	RFA	VOA1
91904-5D	/ /				02/25/98	1259	RFA	VOA2
91904-5D2	/ /				02/25/98	1747	RFA	VOA1
91904-6	/ /				02/23/98	2045	RFA	VOA1
91904-6D	/ /				02/25/98	1323	RFA	VOA2
91904-6D2	/ /				02/25/98	1820	RFA	VOA1
91904-7	/ /				02/23/98	2110	RFA	VOA1
91904-8	/ /				02/23/98	2135	RFA	VOA1
92148-5DUP	/ /				02/26/98	1340	RFA	VOA1
92148-5D	/ /				02/26/98	1528	RFA	VOA1
92148-10DDUP	/ /				02/26/98	1622	RFA	VOA1
92148-5DDUP	/ /				02/26/98	1648	RFA	VOA1

Analytical Services Inc. Batch QC
For Report Number :92148

QC Batch General Information

Batch Number	Analyte	Analysis Method	Matrix		Blank Result	Prep. Method
36112	Hg	EPA 7470	Aqueous	<	0.0002	
36200	Ag	EPA 6010	Aqueous	<	0.0100	
36200	Al	EPA 6010	Aqueous	<	0.1000	
36200	As	EPA 6010	Aqueous	<	0.0100	
36200	Ba	EPA 6010	Aqueous	<	0.0100	
36200	Be	EPA 6010	Aqueous	<	0.0010	
36200	Ca	EPA 6010	Aqueous	<	0.0500	
36200	Cd	EPA 6010	Aqueous	<	0.0050	
36200	Co	EPA 6010	Aqueous	<	0.0200	
36200	Cr	EPA 6010	Aqueous	<	0.0050	
36200	Cu	EPA 6010	Aqueous	<	0.0100	
36200	Fe	EPA 6010	Aqueous	<	0.0200	
36200	K	EPA 6010	Aqueous	<	0.2000	
36200	Mg	EPA 6010	Aqueous	<	0.0100	
36200	Mn	EPA 6010	Aqueous	<	0.0150	
36200	Na	EPA 6010	Aqueous	<	0.0500	
^^Note : QC PASSES ON LCS,LCSD						
36200	Ni	EPA 6010	Aqueous	<	0.0100	
36200	Sb	EPA 6010	Aqueous	<	0.0060	
36200	Tl	EPA 6010	Aqueous	<	0.0100	
36200	V	EPA 6010	Aqueous	<	0.0100	
36200	Zn	EPA 6010	Aqueous	<	0.0200	
36209	Se	EPA 7740	Aqueous	<	0.0050	
^^Note : QC PASSES ON LCS,LCSD,MS,MSD						
36209	Pb	EPA 7421	Aqueous	<	0.0030	
36578	pH	EPA 9040	Aqueous		0.0000	

Lab Control Information

Batch Number	Analyte	Method	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
36112	Hg	EPA 7470	89	105	16	76 - 124	0 - 20
36200	Ag	EPA 6010	120	120	0	76 - 124	0 - 20
36200	Al	EPA 6010	100	100	0	76 - 124	0 - 20
36200	As	EPA 6010	98	99	1	76 - 124	0 - 20
36200	Ba	EPA 6010	99	100	1	76 - 124	0 - 20
36200	Be	EPA 6010	100	100	0	76 - 124	0 - 20
36200	Ca	EPA 6010	94	91	3	76 - 124	0 - 20
36200	Cd	EPA 6010	99	100	1	76 - 124	0 - 20
36200	Co	EPA 6010	110	110	0	76 - 124	0 - 20
36200	Cr	EPA 6010	100	100	0	76 - 124	0 - 20
36200	Cu	EPA 6010	99	100	1	76 - 124	0 - 20

Analytical Services Inc. Batch QC
For Report Number :92148

Lab Control Information

Batch Number	Analyte	Method	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
36200	Fe	EPA 6010	100	100	0	76 - 124	0 - 20
36200	K	EPA 6010	120	120	0	76 - 124	0 - 20
36200	Mg	EPA 6010	100	100	0	76 - 124	0 - 20
36200	Mn	EPA 6010	100	100	0	76 - 124	0 - 20
36200	Na	EPA 6010	106	111	5	76 - 124	0 - 20
36200	Ni	EPA 6010	98	99	1	76 - 124	0 - 20
36200	Sb	EPA 6010	100	100	0	76 - 124	0 - 20
36200	Tl	EPA 6010	110	110	0	76 - 124	0 - 20
36200	V	EPA 6010	110	110	0	76 - 124	0 - 20
36200	Zn	EPA 6010	94	95	1	76 - 124	0 - 20
36209	Se	EPA 7740	110	118	7	76 - 124	0 - 20
36209	Pb	EPA 7421	95	100	5	76 - 124	0 - 20
36578	pH	EPA 9040	100	100	0	80 - 120	0 - 20

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
36112	Hg	EPA 7470	118	95	22	76 - 124	0 - 20
36200	Ag	EPA 6010	130	130	0	76 - 124	0 - 20
36200	Al	EPA 6010	100	100	0	76 - 124	0 - 20
36200	As	EPA 6010	100	98	2	76 - 124	0 - 20
36200	Ba	EPA 6010	100	97	3	76 - 124	0 - 20
36200	Be	EPA 6010	100	100	0	76 - 124	0 - 20
36200	Ca	EPA 6010	92	88	4	76 - 124	0 - 20
36200	Cd	EPA 6010	100	98	2	76 - 124	0 - 20
36200	Co	EPA 6010	110	100	10	76 - 124	0 - 20
36200	Cr	EPA 6010	100	99	1	76 - 124	0 - 20
36200	Cu	EPA 6010	100	99	1	76 - 124	0 - 20
36200	Fe	EPA 6010	100	98	2	76 - 124	0 - 20
36200	K	EPA 6010	120	120	0	76 - 124	0 - 20
36200	Mg	EPA 6010	100	100	0	76 - 124	0 - 20
36200	Mn	EPA 6010	100	100	0	76 - 124	0 - 20
36200	Na	EPA 6010	150	150	0	76 - 124	0 - 20
36200	Ni	EPA 6010	100	97	3	76 - 124	0 - 20
36200	Sb	EPA 6010	110	100	10	76 - 124	0 - 20
36200	Tl	EPA 6010	110	110	0	76 - 124	0 - 20
36200	V	EPA 6010	110	100	10	76 - 124	0 - 20
36200	Zn	EPA 6010	96	93	3	76 - 124	0 - 20
36209	Se	EPA 7740	106	107	1	76 - 124	0 - 20
36209	Pb	EPA 7421	96	98	2	76 - 124	0 - 20

Analytical Services Inc. Batch QC
For Report Number :92148

Post Digestion Spike Information

Batch Number	Analyte	Method	PDS %Rec	%Recovery Range
36200	Ag	EPA 6010	94	76 - 124
36200	Al	EPA 6010	100	76 - 124
36200	As	EPA 6010	98	76 - 124
36200	Ba	EPA 6010	97	76 - 124
36200	Be	EPA 6010	100	76 - 124
36200	Ca	EPA 6010	87	76 - 124
36200	Cd	EPA 6010	97	76 - 124
36200	Co	EPA 6010	100	76 - 124
36200	Cr	EPA 6010	99	76 - 124
36200	Cu	EPA 6010	98	76 - 124
36200	Fe	EPA 6010	100	76 - 124
36200	K	EPA 6010	130	76 - 124
36200	Mg	EPA 6010	100	76 - 124
36200	Mn	EPA 6010	100	76 - 124
36200	Na	EPA 6010	150	76 - 124
36200	Ni	EPA 6010	96	76 - 124
36200	Sb	EPA 6010	100	76 - 124
36200	Tl	EPA 6010	110	76 - 124
36200	V	EPA 6010	100	76 - 124
36200	Zn	EPA 6010	90	76 - 124
36209	Se	EPA 7740	57	76 - 124
36209	Pb	EPA 7421	110	76 - 124

Unspiked Sample Duplicate Information

Batch Number	Analyte	Method	Sample 1 RPD	Sample 2 RPD	RPD Range
36578	pH	EPA 9040	0	0	0 - 20

Q.C. Information for Batch # 36112 For Report Number :92148

Sample Batch Information
Analysis : Hg

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36112BLANK	HG	02/24/98	0800	FBS		02/24/98	1251	FBS	HG1
36112LCS	HG	02/24/98	0800	FBS		02/24/98	1253	FBS	HG1
36112LCSD	HG	02/24/98	0800	FBS		02/24/98	1255	FBS	HG1
92097MS	HG	02/24/98	0800	FBS		02/24/98	1258	FBS	HG1
92097MSD	HG	02/24/98	0800	FBS		02/24/98	1300	FBS	HG1
92148-1DUP	HG	02/24/98	0800	FBS		02/24/98	1302	FBS	HG1
92010-1	HG	02/24/98	0800	FBS		02/24/98	1337	FBS	HG1
92119-1	HG	02/24/98	0800	FBS		02/24/98	1339	FBS	HG1
92119-2	HG	02/24/98	0800	FBS		02/24/98	1347	FBS	HG1
92141	HG	02/24/98	0800	FBS		02/24/98	1349	FBS	HG1
92148-1	HG	02/24/98	0800	FBS		02/24/98	1307	FBS	HG1
92148-10	HG	02/24/98	0800	FBS		02/24/98	1333	FBS	HG1
92148-11	HG	02/24/98	0800	FBS		02/24/98	1335	FBS	HG1
92148-2	HG	02/24/98	0800	FBS		02/24/98	1309	FBS	HG1
92148-3	HG	02/24/98	0800	FBS		02/24/98	1312	FBS	HG1
92148-4	HG	02/24/98	0800	FBS		02/24/98	1319	FBS	HG1
92148-5	HG	02/24/98	0800	FBS		02/24/98	1321	FBS	HG1
92148-6	HG	02/24/98	0800	FBS		02/24/98	1323	FBS	HG1
92148-7	HG	02/24/98	0800	FBS		02/24/98	1326	FBS	HG1
92148-8	HG	02/24/98	0800	FBS		02/24/98	1328	FBS	HG1
92148-9	HG	02/24/98	0800	FBS		02/24/98	1330	FBS	HG1
91998	HG	02/24/98	0800	FBS		02/24/98	1356	FBS	HG1
92004-1	HG	02/24/98	0800	FBS		02/24/98	1351	FBS	HG1
92157	HG	02/24/98	0800	FBS		02/24/98	1403	FBS	HG1
92094-1	HG	02/24/98	0800	FBS		02/24/98	1354	FBS	HG1
92097	HG	02/24/98	0800	FBS		02/24/98	1305	FBS	HG1

Q.C. Information for Batch # 36200 For Report Number :92148

Sample Batch Information

Analysis : Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni Sb Tl V Zn

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36200BLANK		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	1938	MAB	ICP2
36200LCS		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	1941	MAB	ICP2
36200LCSD		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	1944	MAB	ICP2
92148-4MS		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	1947	MAB	ICP2
92148-4MSD		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	1951	MAB	ICP2
92148-6PDS		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	1954	MAB	ICP2
92148-6DUP		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	1957	MAB	ICP2
92148-1		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2007	MAB	ICP2
92148-10		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2037	MAB	ICP2
92148-11		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2040	MAB	ICP2
92148-2		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2017	MAB	ICP2
92148-3		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2020	MAB	ICP2
92148-4		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2001	MAB	ICP2
92148-5		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2024	MAB	ICP2
92148-6		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2004	MAB	ICP2
92148-7		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2027	MAB	ICP2
92148-8		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2030	MAB	ICP2
92148-9		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2034	MAB	ICP2
92119-1		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2044	MAB	ICP2
92119-2		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2047	MAB	ICP2
92153-1		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2057	MAB	ICP2
92153-2		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2100	MAB	ICP2
92153-3		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2103	MAB	ICP2
92153-4		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2107	MAB	ICP2
92153-5		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2110	MAB	ICP2
QC BLANK 1		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2113	MAB	ICP2
QC BLANK 2		02/24/98	0835	KSP	TRACE/BLK DIGES	02/24/98	2117	MAB	ICP2

Q.C. Information for Batch # 36209 For Report Number :92148

Sample Batch Information
Analysis : Se, Pb

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36209BLANK	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
36209LCS	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
36209LCSD	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92119-2MS	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92119-2MSD	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-2PDS	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-2DUP	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92119-1	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92119-2	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92141	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-1	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-10	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-11	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-2	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-3	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-4	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-5	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-6	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-7	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-8	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92148-9	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
91609-16	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
91609-17	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92075-1	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
92084-1	Se	02/25/98	0910	KSP	GFAA	02/26/98	1026	MLR	AA1
36209BLANK	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
36209LCS	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
36209LCSD	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92119-2MS	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92119-2MSD	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-2PDS	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-2DUP	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92119-1	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92119-2	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92141	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-1	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-10	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-11	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-2	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-3	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-4	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-5	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-6	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-7	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-8	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92148-9	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
91609-16	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
91609-17	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1

Q.C. Information for Batch # 36209 For Report Number :92148

Sample Batch Information
Analysis : Se, Pb

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
92075-1	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
92084-1	Pb	02/25/98	0910	KSP	GFAA	02/26/98	1416	MLR	AA1
36209BLANK	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
36209LCS	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
36209LCSD	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92119-2MS	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92119-2MSD	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-2PDS	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-2DUP	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92119-1	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92119-2	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92141	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-1	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-10	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-11	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-2	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-3	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-4	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-5	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-6	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-7	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-8	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92148-9	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
91609-16	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
91609-17	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92075-1	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
92084-1	Cd	02/25/98	0910	KSP	GFAA	02/27/98	1518	MLR	AA1
36209BLANK	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
36209LCS	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
36209LCSD	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92119-2MS	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92119-2MSD	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-2PDS	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-2DUP	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92119-1	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92119-2	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92141	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-1	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-10	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-11	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-2	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-3	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-4	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-5	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-6	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-7	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-8	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92148-9	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1

Q.C. Information for Batch # 36209 For Report Number :92148

Sample Batch Information
Analysis : Se, Pb

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
91609-16	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
91609-17	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92075-1	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
92084-1	Tl	02/25/98	0910	KSP	GFAA	02/27/98	1608	MLR	AA1
36209BLANK	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
36209LCS	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
36209LCSD	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92119-2MS	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92119-2MSD	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-2PDS	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-2DUP	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92119-1	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92119-2	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92141	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-1	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-10	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-11	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-2	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-3	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-4	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-5	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-6	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-7	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-8	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92148-9	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
91609-16	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
91609-17	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92075-1	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1
92084-1	As	02/25/98	0910	KSP	GFAA	03/02/98	0830	MLR	AA1

Q.C. Information for Batch # 36578 For Report Number : 92148

Sample Batch Information
Analysis : pH

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36578LCS		/ /				02/23/98	1800	JN	410A
36578LCSD		/ /				02/23/98	1800	JN	410A
36578CALCHK		/ /				02/23/98	1800	JN	410A
92011ATI		/ /				02/23/98	1800	JN	410A
92135-3		/ /				02/23/98	1800	JN	410A
92135-4		/ /				02/23/98	1800	JN	410A
92135-5		/ /				02/23/98	1800	JN	410A
92135-6		/ /				02/23/98	1800	JN	410A
92135-7		/ /				02/23/98	1800	JN	410A
92132-1		/ /				02/23/98	1800	JN	410A
92141		/ /				02/23/98	1800	JN	410A
92148-7		/ /				02/23/98	1800	JN	410A
92148-10		/ /				02/23/98	1800	JN	410A
92011ATIDUP		/ /				02/23/98	1800	JN	410A
92156-1		/ /				02/23/98	1800	JN	410A
92156-2		/ /				02/23/98	1800	JN	410A
92156-3		/ /				02/23/98	1800	JN	410A
92156-4		/ /				02/23/98	1800	JN	410A
92156-1DUP		/ /				02/23/98	1800	JN	410A

WO#92148 479 55

OHM Remediation Services Corp
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CHAIN-OF-CUSTODY RECORD 1 of 2

LABORATORY COPY
206494

FORM 0019 REV 2-97

OHM s LAB COORDINATOR	LAB COORDINATOR S PHONE	LAB COORDINATOR S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ASI	Shari Harper	OHM Remediation Services
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDMT/Dunn Field	Memphis, TN	20022	770-734-4200	770-734-4201	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-743-1117	901-743-1048	110 Technology Parkway		5445 Triangle Pkwy, Ste 400
PROJECT ADDRESS	**CITY STATE AND ZIPCODE**	**CLIENT**	**CITY STATE AND ZIPCODE**		**CITY STATE AND ZIPCODE**
1708 Dunn Ave.	Memphis, TN 38114	USACE	Norcross, GA 30092		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER S PHONE**	**PROJECT MANAGER S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T	Analyses: TAL Metals	TCL VOCs (8260)	pH (E&S)						Comments
1	RW-07-Dev.	Water	2/19/98	1600	HCL	4/5	OHM Stnd	3	X	X						-1	grabs per containers by 2/23
2	RW-03-Dev.	Water	2/20/98	1440	HCL	4/5	OHM Stnd	3	X	X						-2	
3	RW-04-Dev.	Water	2/20/98	1420	HCL	4/5	OHM Stnd	3	X	X						-3	
4	RW-06-Dev.	Water	2/20/98	1400	HCL	4/5	"	3	X	X						-4	
5	RW-08-Dev.	Water	2/19/98	1420	HCL	4/5	"	3	X	X						-5	
6	RW-09-Dev.	Water	2/19/98	1400	HCL	4/5	"	3	X	X						-6	
7	Tank 2-Dev.	Water	2/20/98	1615	HCL	5/5	"	3	X	X	X					-7	ALL Samples Three Day TAT
8	Tank 1-Dev.	Water	2/20/98	1600	HCL	4/5	"	3	X	X						-8	
9	RW-14-Dev	Water	2/20/98	1300	HCL	4/5	"	3	X	X						-9	
10	RW-05-Dev	Water	2/20/98	1700	HCL	5/5	"	3	X	X	X					-10	

SAMPLES COLLECTED BY	COURIER AND AIR BILL NUMBER			COOLER TEMPERATURE UPON RECEIPT
RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE S CONDITION UPON RECEIPT
[signature]	FedEx	2/20/98	1800	
Bonnie Hoge	OSI	2/21/98	1000	Ice, Temp = 0°C, pH - 1 (met) seal intact
Gooch 2/23/98				

Distribution: White - Laboratory (To be returned with Analytical Report), Goldenrod - Project File; Yellow - Project Data Manager

WO# 92148

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CHAIN-OF-CUSTODY RECORD

2 of 2

LABORATORY COPY
206495

FORM 0019 REV 2-97

OHM s LAB COORDINATOR	LAB COORDINATOR S PHONE	LAB COORDINATOR S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ASI	Shari Harper	OHM Remediation Services
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDMT/Dunn Field	Memphis, TN	20022	770-734-4200	770-734-4201	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-743-1117	901-743-1048	110 Technology Parkway		5445 Triangle Pkwy, Ste 400
PROJECT ADDRESS	**CITY STATE AND ZIPCODE**	**CLIENT**	**CITY STATE AND ZIPCODE**		**CITY STATE AND ZIPCODE**
1708 Dunn Ave.	Memphis, TN 38114	USACE	Norcross, GA 30092		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER S PHONE**	**PROJECT MANAGER S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	TAT	Analyses: TCL VOCs (8260)	Analyses: TAL Metals							Comments
1	RW-EQ13	Water	2/20/98	1655	HCL	4/5 Sep	SnA	3	X	X						-11	
2	Trip Blank	Water	2/20/98		HCL	3	SnA	3	X	X						-12	3 Day TAT
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

SAMPLES COLLECTED BY	COURIER AND AIR BILL NUMBER				COOLER TEMPERATURE UPON RECEIPT
RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE S CONDITION UPON RECEIPT	
	FedEx	2/21/98	1800		
	Bonnie Hogue	2/21/98	1000	Ice, Temp = 0°C, pH = Good 2/23/98	Seal intact

Distribution: White - Laboratory (To be returned with Analytical Report), Goldenrod - Project File, Yellow - Project Data Manager

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TAB

Appendix F-2

GROUNDWATER SAMPLE FROM RW-8
FOLLOWING CAPACITY TEST

Dated Collected 02/27/98

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

06 March, 1998

Case Narrative Report 92398

The samples were collected 27 February, 1998 and received by ASI 28 February, 1998. All conditions for proper sample receipt were met. The samples were logged into the LIMS as report 92398 for the following analyses as per client request: VOA (EPA 8260), Mercury (EPA 7470), Lead (EPA 7421), Selenium (EPA 7740) and Metals (EPA 6010). Holding times for sample preparation and analysis were met.

VOA analysis (EPA 8260) gave high MSRPD values for 1,1-Dichloroethene, Benzene, Toluene and Chlorobenzene. All other spike and surrogate recoveries were acceptable.

Mercury analysis (EPA 7470) met all data quality objectives.

Lead analysis (EPA 7421) gave low MS/MSD and PDS recoveries. The batch passes on LCS/LCSD.

Selenium analysis (EPA 7740) gave low MS/MSD and PDS recoveries. The batch passes on LCS/LCSD.

Metals analysis (EPA 6010) gave low MS recoveries for Al, Cr, Fe, Na, Ni and Zn, low MSD recoveries for Al, Ca, Fe, Mg and Na, and low PDS recoveries for Ag, Fe and Na. All other spike recoveries were acceptable. The detection limit was raised for Ca due to a high blank value, but the sample produced a hit which was higher than the elevated detection limit.

Christina A. Perfetti
Quality Assurance

479 60

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 9, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92398

Sample Description

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-08, 02/27/98, 08:30, received 03/02/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	0.3	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.15	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	57	0.11
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	0.64	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	18	0.05
Total Manganese (Mn) (EPA 6010)	0.06	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	0.3	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 9, 1998
 Report No. 92398

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-08, 02/27/98, 08:30, received 03/02/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na) (EPA 6010)	25	0.05
Total Thallium (Tl) (EPA 6010)	0.02	0.01
Total Vanadium (V) (EPA 6010)	BDL	0.05
Total Zinc (Zn) (EPA 6010)	1.4	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	24	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	14	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	30	2
Toluene	2	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	15	2

BDL - Below Detection Limit

OHM Remediation Services Corp.

March 9, 1998
Report No. 92398

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-08, 02/27/98, 08:30, received 03/02/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride.....	BDL	10
Xylenes.....	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Project Manager

Quality Assurance

cc: Mr. Steve Offner

Analytical Services Inc. Batch QC
For Report Number :92398
Volatile Organics

Matrix : Aqueous Batch # 36736 Method : EPA 8260

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	86	88	3	61 - 145	0 - 14
Trichloroethene	86	89	4	71 - 120	0 - 14
Benzene	87	86	1	76 - 127	0 - 11
Toluene	88	89	1	76 - 125	0 - 13
Chlorobenzene	90	85	5	75 - 130	0 - 13

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	117	99	17	61 - 145	0 - 14
Trichloroethene	115	106	8	71 - 120	0 - 14
Benzene	106	89	17	76 - 127	0 - 11
Toluene	109	90	19	76 - 125	0 - 13
Chlorobenzene	107	89	19	75 - 130	0 - 13

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Aqueous Batch # 36736 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	76 - 119
S2	Toluene-d8	88 - 110
S3	Ethylbenzene-d10	75 - 115
S4	4-Bromofluorobenzene	86 - 120

Sample	File	S1	S2	S3	S4	S5	S6
36736LCS	C1671	97	99	101	104		
36736LCSD	C1672	98	100	100	99		
36736BLK	C1669	101	98	95	96		
92154-1	C1676	98	94	91	93		
92154-2	C1677	98	96	98	97		
92154-3	C1678	100	100	95	94		
92154-4	C1679	103	97	93	95		
92154-5	C1680	102	98	93	97		
92154-6	C1681	98	96	97	97		
92154-7	C1682	100	94	90	94		
92154-8	C1683	103	95	91	93		
92154-1MS	C1684	96	99	97	102		
^^Note: AKA 92154-9							
92154-1MSD	C1685	100	98	99	101		
^^Note: AKA 92154-10							
92154-1DUP	C1686	101	95	91	96		
^^Note: AKA 92154-11							
36736BLK2	B3562	102	94	96	101		
92162	B3588	116	98	96	99		
92353-1	B3578	114	100	99	100		
92353-2	B3579	110	99	95	100		
92353-3	B3580	110	95	100	106		
92353-4	B3581	109	96	97	104		
92353-5	B3582	99	98	101	109		
92353-6	B3583	111	93	104	113		
92353-4D	B3596	105	96	99	102		
^^Note: DF=5							
92340-1	B3600	103	102	101	103		
92340-2	A1423	97	98	100	95		
92340-3	A1424	98	87	99	92		
36736BLK3	A1425	96	98	99	88		
92340-2D	A1435	102	89	98	95		
^^Note: DF=2500							

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Aqueous Batch # 36736 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	76 - 119
S2	Toluene-d8	88 - 110
S3	Ethylbenzene-d10	75 - 115
S4	4-Bromofluorobenzene	86 - 120

Sample	File	S1	S2	S3	S4	S5	S6
92398	B3660	100	94	100	102		
92205-3	B3657	102	97	97	99		
92205-3DUP	B3664	106	90	97	97		
92205-3DUP2	A1436	92	84	98	90		
92205-3DUP3	B3806	112	97	97	101		

Q.C. Information for Batch # 36736 Printed: 03/09/98 19:44:26

Blank Results Information
Volatile Organics Method : EPA 8260

Analyte	Blank Result	Detection Limit
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	BDL	2
Vinyl chloride	BDL	10
Xylenes	BDL	5

Q.C. Information for Batch # 36736 Printed: 03/09/98 19:44:26

Sample Batch Information
Volatile Organics Method : EPA 8260

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
36736LCS	/ /				02/27/98	1425	LLP	VOA3
36736LCSD	/ /				02/27/98	1451	LLP	VOA3
36736BLK	/ /				02/27/98	1314	LLP	VOA3
92154-1	/ /				02/27/98	1634	LLP	VOA3
92154-2	/ /				02/27/98	1700	LLP	VOA3
92154-3	/ /				02/27/98	1725	LLP	VOA3
92154-4	/ /				02/27/98	1751	LLP	VOA3
92154-5	/ /				02/27/98	1816	LLP	VOA3
92154-6	/ /				02/27/98	1842	LLP	VOA3
92154-7	/ /				02/27/98	1908	LLP	VOA3
92154-8	/ /				02/27/98	1933	LLP	VOA3
92154-1MS	/ /				02/27/98	1959	LLP	VOA3
92154-1MSD	/ /				02/27/98	2025	LLP	VOA3
92154-1DUP	/ /				02/27/98	2050	LLP	VOA3
36736BLK2	/ /				03/01/98	1322	TLW	VOA2
92162	/ /				03/01/98	2237	TLW	VOA2
92353-1	/ /				03/01/98	1836	TLW	VOA2
92353-2	/ /				03/01/98	1900	TLW	VOA2
92353-3	/ /				03/01/98	1924	TLW	VOA2
92353-4	/ /				03/01/98	1948	TLW	VOA2
92353-5	/ /				03/01/98	2012	TLW	VOA2
92353-6	/ /				03/01/98	2036	TLW	VOA2
92353-4D	/ /				03/02/98	1022	RFA	VOA2
92340-1	/ /				03/02/98	1111	RFA	VOA2
92340-2	/ /				03/02/98	2011	RFA	VOA1
92340-3	/ /				03/02/98	2036	RFA	VOA1
36736BLK3	/ /				03/02/98	2102	RFA	VOA1
92340-2D	/ /				03/03/98	0919	RFA	VOA1
92398	/ /				03/03/98	1441	TLW	VOA2
92205-3	/ /				03/03/98	1328	TLW	VOA2
92205-3DUP	/ /				03/03/98	1617	TLW	VOA2
92205-3DUP2	/ /				03/04/98	1040	RFA	VOA1
92205-3DUP3	/ /				03/06/98	2127	TLW	VOA2

Analytical Services Inc. Batch QC
For Report Number :92398

QC Batch General Information

Batch Number	Analyte	Analysis Method	Matrix		Blank Result	Prep. Method
36552	Hg	EPA 7470	Aqueous	<	0.0002	
36617	Pb	EPA 7421	Aqueous	<	0.0030	
^^Note : BATCH PASSES ON LCS/LCSD						
36617	Se	EPA 7740	Aqueous	<	0.0050	
36618	Ag	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD/MS/MSD						
36618	Al	EPA 6010	Aqueous	<	0.1000	
^^Note : BATCH PASSES ON LCS/LCS/PDS						
36618	As	EPA 6010	Aqueous	<	0.0100	
36618	Ba	EPA 6010	Aqueous	<	0.0100	
36618	Be	EPA 6010	Aqueous	<	0.0010	
36618	Ca	EPA 6010	Aqueous	<	0.1100	
^^Note : BATCH PASSES ON LCS/LCSD/MS/PDS - DL ADJUSTED						
36618	Cd	EPA 6010	Aqueous	<	0.0050	
36618	Co	EPA 6010	Aqueous	<	0.0100	
36618	Cr	EPA 6010	Aqueous	<	0.0050	
^^Note : BATCH PASSES ON LCS/LCSD/MSD/PDS						
36618	Cu	EPA 6010	Aqueous	<	0.0100	
36618	Fe	EPA 6010	Aqueous	<	0.0400	
^^Note : BATCH PASSES ON LCS/LCSD						
36618	K	EPA 6010	Aqueous	<	0.2000	
36618	Mg	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD/MS/PDS						
36618	Mn	EPA 6010	Aqueous	<	0.0100	
36618	Na	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD						
36618	Ni	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD/MSD/PDS						
36618	Sb	EPA 6010	Aqueous	<	0.0060	
36618	Tl	EPA 6010	Aqueous	<	0.0100	
36618	V	EPA 6010	Aqueous	<	0.0100	
36618	Zn	EPA 6010	Aqueous	<	0.0200	

Analytical Services Inc. Batch QC
For Report Number :92398

Lab Control Information

Batch Number	Analyte	Method	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
36552	Hg	EPA 7470	102	98	4	76 - 124	0 - 20
36617	Pb	EPA 7421	91	89	2	76 - 124	0 - 20
36617	Se	EPA 7740	113	116	3	76 - 124	0 - 20
36618	Ag	EPA 6010	100	100	0	76 - 124	0 - 20
36618	Al	EPA 6010	81	76	6	76 - 124	0 - 20
36618	As	EPA 6010	93	88	6	76 - 124	0 - 20
36618	Ba	EPA 6010	93	88	6	76 - 124	0 - 20
36618	Be	EPA 6010	92	87	6	76 - 124	0 - 20
36618	Ca	EPA 6010	95	92	3	76 - 124	0 - 20
36618	Cd	EPA 6010	89	84	6	76 - 124	0 - 20
36618	Co	EPA 6010	90	84	7	76 - 124	0 - 20
36618	Cr	EPA 6010	87	82	6	76 - 124	0 - 20
36618	Cu	EPA 6010	88	83	6	76 - 124	0 - 20
36618	Fe	EPA 6010	90	83	8	76 - 124	0 - 20
36618	K	EPA 6010	91	87	4	76 - 124	0 - 20
36618	Mg	EPA 6010	90	87	3	76 - 124	0 - 20
36618	Mn	EPA 6010	92	86	7	76 - 124	0 - 20
36618	Na	EPA 6010	87	84	4	76 - 124	0 - 20
36618	Ni	EPA 6010	87	82	6	76 - 124	0 - 20
36618	Sb	EPA 6010	99	93	6	76 - 124	0 - 20
36618	Tl	EPA 6010	90	85	6	76 - 124	0 - 20
36618	V	EPA 6010	90	84	7	76 - 124	0 - 20
36618	Zn	EPA 6010	89	83	7	76 - 124	0 - 20

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
36552	Hg	EPA 7470	84	88	5	76 - 124	0 - 20
36617	Pb	EPA 7421	45	50	11	76 - 124	0 - 20
36617	Se	EPA 7740	20	17	16	76 - 124	0 - 20
36618	Ag	EPA 6010	97	95	2	76 - 124	0 - 20
36618	Al	EPA 6010	66	71	7	76 - 124	0 - 20
36618	As	EPA 6010	83	88	6	76 - 124	0 - 20
36618	Ba	EPA 6010	80	85	6	76 - 124	0 - 20
36618	Be	EPA 6010	80	85	6	76 - 124	0 - 20
36618	Ca	EPA 6010	79	70	12	76 - 124	0 - 20
36618	Cd	EPA 6010	77	82	6	76 - 124	0 - 20
36618	Co	EPA 6010	76	79	4	76 - 124	0 - 20
36618	Cr	EPA 6010	73	78	7	76 - 124	0 - 20
36618	Cu	EPA 6010	76	81	6	76 - 124	0 - 20
36618	Fe	EPA 6010	52	49	6	76 - 124	0 - 20
36618	K	EPA 6010	93	87	7	76 - 124	0 - 20
36618	Mg	EPA 6010	79	74	7	76 - 124	0 - 20
36618	Mn	EPA 6010	77	82	6	76 - 124	0 - 20
36618	Na	EPA 6010	75	69	8	76 - 124	0 - 20

Analytical Services Inc. Batch QC
For Report Number :92398

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
36618	Ni	EPA 6010	75	79	5	76 - 124	0 - 20
36618	Sb	EPA 6010	88	92	4	76 - 124	0 - 20
36618	Tl	EPA 6010	77	81	5	76 - 124	0 - 20
36618	V	EPA 6010	79	82	4	76 - 124	0 - 20
36618	Zn	EPA 6010	73	80	9	76 - 124	0 - 20

Post Digestion Spike Information

Batch Number	Analyte	Method	PDS %Rec	%Recovery Range
36617	Pb	EPA 7421	47	76 - 124
36617	Se	EPA 7740	60	76 - 124
36618	Ag	EPA 6010	62	76 - 124
36618	Al	EPA 6010	78	76 - 124
36618	As	EPA 6010	93	76 - 124
36618	Ba	EPA 6010	91	76 - 124
36618	Be	EPA 6010	91	76 - 124
36618	Ca	EPA 6010	84	76 - 124
36618	Cd	EPA 6010	88	76 - 124
36618	Co	EPA 6010	88	76 - 124
36618	Cr	EPA 6010	84	76 - 124
36618	Cu	EPA 6010	87	76 - 124
36618	Fe	EPA 6010	75	76 - 124
36618	K	EPA 6010	88	76 - 124
36618	Mg	EPA 6010	81	76 - 124
36618	Mn	EPA 6010	90	76 - 124
36618	Na	EPA 6010	75	76 - 124
36618	Ni	EPA 6010	86	76 - 124
36618	Sb	EPA 6010	99	76 - 124
36618	Tl	EPA 6010	89	76 - 124
36618	V	EPA 6010	88	76 - 124
36618	Zn	EPA 6010	85	76 - 124

Q.C. Information for Batch # 36552 For Report Number :92398

Sample Batch Information
Analysis : Hg

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36552BLANK	hg	03/03/98	0830	fbs		03/03/98	1259	fbs	hg1
36552LCS	hg	03/03/98	0830	fbs		03/03/98	1301	fbs	hg1
36552LCSD	hg	03/03/98	0830	fbs		03/03/98	1303	fbs	hg1
92405-2MS	hg	03/03/98	0830	fbs		03/03/98	1306	fbs	hg1
92405-2MSD	hg	03/03/98	0830	fbs		03/03/98	1308	fbs	hg1
92405-1DUP	hg	03/03/98	0830	fbs		03/03/98	1310	fbs	hg1
92398	hg	03/03/98	0830	fbs		03/03/98	1317	fbs	hg1
92405-1	hg	03/03/98	0830	fbs		03/03/98	1313	fbs	hg1
92405-2	hg	03/03/98	0830	fbs		03/03/98	1315	fbs	hg1
92368	hg	03/03/98	0830	fbs		03/03/98	1319	fbs	hg1
92392-1	hg	03/03/98	0830	fbs		03/03/98	1327	fbs	hg1
92258-1	hg	03/03/98	0830	fbs		03/03/98	1329	fbs	hg1
92358	hg	03/03/98	0830	fbs		03/03/98	1406	fbs	hg1
92363-1	hg	03/03/98	0830	fbs		03/03/98	1331	fbs	hg1
92270-30	hg	03/03/98	0830	fbs		03/03/98	1334	fbs	hg1
92270-31	hg	03/03/98	0830	fbs		03/03/98	1336	fbs	hg1
92332-1	hg	03/03/98	0830	fbs		03/03/98	1338	fbs	hg1
92332-2	hg	03/03/98	0830	fbs		03/03/98	1340	fbs	hg1
92332-3	hg	03/03/98	0830	fbs		03/03/98	1343	fbs	hg1
92332-4	hg	03/03/98	0830	fbs		03/03/98	1345	fbs	hg1
92332-5	hg	03/03/98	0830	fbs		03/03/98	1347	fbs	hg1
92332-6	hg	03/03/98	0830	fbs		03/03/98	1355	fbs	hg1
92414-1	hg	03/03/98	0830	fbs		03/03/98	1357	fbs	hg1
92414-2	hg	03/03/98	0830	fbs		03/03/98	1359	fbs	hg1
92421-1	hg	03/03/98	0830	fbs		03/03/98	1402	fbs	hg1
92421-2	hg	03/03/98	0830	fbs		03/03/98	1404	fbs	hg1

Q.C. Information for Batch # 36617 For Report Number :92398

Sample Batch Information
Analysis : Pb, Se

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36617BLANK	Pb	03/03/98	0820	KSP	GFAA	03/04/98	1029	MCW	AA1
36617LCS	Pb	03/03/98	0820	KSP	GFAA	03/04/98	1029	MCW	AA1
36617LCSD	Pb	03/03/98	0820	KSP	GFAA	03/04/98	1029	MCW	AA1
92368MS	Pb	03/03/98	0820	KSP	GFAA	03/04/98	1029	MCW	AA1
92368MSD	Pb	03/03/98	0820	KSP	GFAA	03/04/98	1029	MCW	AA1
92398PDS	Pb	03/03/98	0820	KSP	GFAA	03/04/98	1029	MCW	AA1
92398DUP	Pb	03/03/98	0820	KSP	GFAA	03/04/98	1029	MCW	AA1
92368	Pb	03/03/98	0820	KSP	GFAA	03/04/98	1029	MCW	AA1
92398	Pb	03/03/98	0820	KSP	GFAA	03/04/98	1029	MCW	AA1
36617BLANK	Se	03/03/98	0820	KSP	GFAA	03/04/98	1250	MCW	AA1
36617LCS	Se	03/03/98	0820	KSP	GFAA	03/04/98	1250	MCW	AA1
36617LCSD	Se	03/03/98	0820	KSP	GFAA	03/04/98	1250	MCW	AA1
92368MS	Se	03/03/98	0820	KSP	GFAA	03/04/98	1250	MCW	AA1
92368MSD	Se	03/03/98	0820	KSP	GFAA	03/04/98	1250	MCW	AA1
92398PDS	Se	03/03/98	0820	KSP	GFAA	03/04/98	1250	MCW	AA1
92398DUP	Se	03/03/98	0820	KSP	GFAA	03/04/98	1250	MCW	AA1
92368	Se	03/03/98	0820	KSP	GFAA	03/04/98	1250	MCW	AA1
92398	Se	03/03/98	0820	KSP	GFAA	03/04/98	1250	MCW	AA1
36617BLANK	As	03/03/98	0820	KSP	GFAA	03/06/98	0940	MLR	AA1
36617LCS	As	03/03/98	0820	KSP	GFAA	03/06/98	0940	MLR	AA1
36617LCSD	As	03/03/98	0820	KSP	GFAA	03/06/98	0940	MLR	AA1
92368MS	As	03/03/98	0820	KSP	GFAA	03/06/98	0940	MLR	AA1
92368MSD	As	03/03/98	0820	KSP	GFAA	03/06/98	0940	MLR	AA1
92398PDS	As	03/03/98	0820	KSP	GFAA	03/06/98	0940	MLR	AA1
92398DUP	As	03/03/98	0820	KSP	GFAA	03/06/98	0940	MLR	AA1
92368	As	03/03/98	0820	KSP	GFAA	03/06/98	0940	MLR	AA1
92398	As	03/03/98	0820	KSP	GFAA	03/06/98	0940	MLR	AA1
36617BLANK	Cd	03/03/98	0820	KSP	GFAA	03/06/98	1553	MLR	AA1
36617LCS	Cd	03/03/98	0820	KSP	GFAA	03/06/98	1553	MLR	AA1
36617LCSD	Cd	03/03/98	0820	KSP	GFAA	03/06/98	1553	MLR	AA1
92368MS	Cd	03/03/98	0820	KSP	GFAA	03/06/98	1553	MLR	AA1
92368MSD	Cd	03/03/98	0820	KSP	GFAA	03/06/98	1553	MLR	AA1
92398PDS	Cd	03/03/98	0820	KSP	GFAA	03/06/98	1553	MLR	AA1
92398DUP	Cd	03/03/98	0820	KSP	GFAA	03/06/98	1553	MLR	AA1
92368	Cd	03/03/98	0820	KSP	GFAA	03/06/98	1553	MLR	AA1
92398	Cd	03/03/98	0820	KSP	GFAA	03/06/98	1553	MLR	AA1

Q.C. Information for Batch # 36618 For Report Number :92398

Sample Batch Information

Analysis : Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni Sb Tl V Zn

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36618BLANK		03/03/98	1005	DCM	TRACE	03/03/98	1915	MAB	ICP2
36618LCS		03/03/98	1005	DCM	TRACE	03/03/98	1918	MAB	ICP2
36618LCSD		03/03/98	1005	DCM	TRACE	03/03/98	1921	MAB	ICP2
92325-2MS		03/03/98	1005	DCM	TRACE	03/03/98	1925	MAB	ICP2
92325-2MSD		03/03/98	1005	DCM	TRACE	03/03/98	1928	MAB	ICP2
92325-6PDS		03/03/98	1005	DCM	TRACE	03/03/98	1931	MAB	ICP2
92325-6DUP		03/03/98	1005	DCM	TRACE	03/03/98	1935	MAB	ICP2
92352-1		03/03/98	1005	DCM	TRACE	03/03/98	2034	MAB	ICP2
92352-2		03/03/98	1005	DCM	TRACE	03/03/98	2037	MAB	ICP2
92228-12		03/03/98	1005	DCM	TRACE	03/03/98	2047	MAB	ICP2
92228-13		03/03/98	1005	DCM	TRACE	03/03/98	2050	MAB	ICP2
92228-14		03/03/98	1005	DCM	TRACE	03/03/98	2054	MAB	ICP2
92325-1		03/03/98	1005	DCM	TRACE	03/03/98	1944	MAB	ICP2
92325-10		03/03/98	1005	DCM	TRACE	03/03/98	2014	MAB	ICP2
92325-11		03/03/98	1005	DCM	TRACE	03/03/98	2017	MAB	ICP2
92325-12		03/03/98	1005	DCM	TRACE	03/03/98	2021	MAB	ICP2
92325-13		03/03/98	1005	DCM	TRACE	03/03/98	2024	MAB	ICP2
92325-2		03/03/98	1005	DCM	TRACE	03/03/98	1938	MAB	ICP2
92325-3		03/03/98	1005	DCM	TRACE	03/03/98	1954	MAB	ICP2
92325-4		03/03/98	1005	DCM	TRACE	03/03/98	1958	MAB	ICP2
92325-5		03/03/98	1005	DCM	TRACE	03/03/98	2001	MAB	ICP2
92325-6		03/03/98	1005	DCM	TRACE	03/03/98	1941	MAB	ICP2
92325-7		03/03/98	1005	DCM	TRACE	03/03/98	2004	MAB	ICP2
92325-8		03/03/98	1005	DCM	TRACE	03/03/98	2008	MAB	ICP2
92325-9		03/03/98	1005	DCM	TRACE	03/03/98	2011	MAB	ICP2
92398		03/03/98	1005	DCM	TRACE	03/03/98	2041	MAB	ICP2
92414-1		03/03/98	1005	DCM	TRACE	03/03/98	2044	MAB	ICP2
QC BLK		03/03/98	1005	DCM	TRACE	03/03/98	2057	MAB	ICP2

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CHAIN OF CUSTODY RECORD

V S

479 74

CLIENT NAME	USACE / OHM
CLIENT ADDRESS AND PHONE NUMBER	5445 TRIANGLE PKWY STE 400 NORCROSS GA 30092 (770) 729-3900
PROJECT MANAGER	STEVE OFFNER
COPY TO (if applicable)	
REQUESTED COMPLETION DATE	3/4/98
SAMPLING REQUIREMENTS	SDWA ☐ NPDES ☐ RCRA ☐ OTHER ☐ ____
PROJECT NAME	DUUN FIELD
PROJECT NUMBER	20022
PURCHASE ORDER NO	
FOR LAB USE ONLY	
LAB #	92398
PROJECT NO.	
ACK / VERIFIED	
QUOTE # / BS	
NO OF SAMP / PG / OF	1 / 1

SAMPLE ID	DATE	TIME	COMP	GRAB	SOIL	SAMPLE DESCRIPTIONS	# OF CONTAINERS	ANALYSES REQUESTED: TCL VOLATILES	ANALYSES REQUESTED: TAL METALS	LAB ID	REMARKS/ADDITIONAL INFORMATION
DFGW-RW08	2/27/98	0830		X		GROUNDWATER FROM RW08	3	X			SAMPLES COLLECTED FROM RW08 FOLLOWING CAPACITY TEST
DFGW-RW08	2/27/98	0830		X		GROUNDWATER FROM RW08	1		X		

SAMPLED BY AND TITLE	Thomas A McEvoy Hydro	DATE/TIME	2/27/98 0830	RELINQUISHED BY	Thomas A McEvoy
RECEIVED BY	FEDEX AIRBILL	DATE/TIME		RELINQUISHED BY	
RECEIVED BY		DATE/TIME		RELINQUISHED BY	
RECEIVED BY LAB		DATE/TIME	2/28/98 0930	SAMPLE SHIPPED VIA	UPS BUS (FED-EX) HAND OTHER ____
REMARKS	3 DAY TAT J. Mueller 3-2-98				

DATE/TIME	2/27/98 0830	HAZWRAP/NEESA	Y N
DATE/TIME		QC LEVEL	1 2 3
DATE/TIME		COC ✓	ICE ✓
		ANA REQ	TEMP 3.4
		CUST SEAL Intact	PH = 1C metals
		SAMPLE COND	
		AIR BILL #	6130752596
		ENTERED INTO LIMS	COC REVIEWD

TAB

Appendix F-3

GROUNDWATER SAMPLES FROM RW-4 & RW-7 FOLLOWING CAPACITY TESTS

Dated Collected 03/10&12/98

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25 March, 1998

Case Narrative Report 92884

The samples were collected on 10-12 March, 1998 and received by ASI 13 March, 1998. As indicated on the Chain of Custody, all conditions for proper sample receipt were met. The samples were logged into the LIMS as report 92884 for the following analyses as per client request: VOA (EPA 8260B), Mercury (EPA 7470), Selenium (EPA 7740), Lead (EPA 7421) and Metals (EPA 6010B). Holding times for sample preparation and analysis were met.

VOA analysis (EPA 8260B) gave a high MS recovery for Trichloroethene due to the matrix of the sample. Sample #92884-2 was analyzed straight, as well as at a dilution factor of five. Samples #92884-3 and 92884-4 gave high 1,2-Dichloroethane-d4 recoveries; the duplicate analysis of these samples provided acceptable surrogate recoveries. All other VOA spike and surrogate recoveries were acceptable.

Mercury analysis (EPA 7470) met all data quality objectives.

Selenium analysis (EPA 7740) gave low MS/MSD and PDS recoveries. The batch passes on LCS/LCSD.

Lead analysis (EPA 7421) met all data quality objectives.

Metals analysis (EPA 6010B) gave high MS spike recoveries for Ag, Fe, K and Na, a low MSD spike recovery for Mg, high MSRPD for Ca, Fe, K, Mg and Na, and high PDS recoveries for K and Na. All other spike recoveries were acceptable. The detection limit was raised for Ca due to a high blank value, but all samples produced hits which were equal to or greater than the elevated detection limit.

Christina A. Perfetti
Quality Assurance

ASI

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 25, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92884-1

Sample Description

Groundwater, Dunn Field Memphis TN, Project #20022, RW-7, 03/10/98, 19:00, received 03/13/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	3.1	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	0.01	0.01
Total Barium (Ba) (EPA 6010)	0.14	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	100	0.05
Total Chromium (Cr) (EPA 6010)	0.01	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	0.03	0.02
Total Iron (Fe) (EPA 6010)	4.9	0.1
Total Lead (Pb) (EPA 7421)	0.009	0.003
Total Magnesium (Mg) (EPA 6010)	11	0.05
Total Manganese (Mn) (EPA 6010)	0.24	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	19	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 25, 1998
Page 2 of 3 Report No. 92884-1

Groundwater, Dunn Field Memphis TN, Project #20022, RW-7, 03/10/98, 19:00, received 03/13/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na) (EPA 6010)	48	0.05
Total Thallium (Tl) (EPA 6010)	0.03	0.01
Total Vanadium (V) (EPA 6010)	BDL	0.05
Total Zinc (Zn) (EPA 6010)	0.45	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	5	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	14	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	4	2
Tetrachloroethene	6	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	38	2

BDL - Below Detection Limit

OHM Remediation Services Corp. March 25, 1998
 Report No. 92884-1

Groundwater, Dunn Field Memphis TN, Project #20022, RW-7, 03/10/98, 19:00, received 03/13/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Project Manager

Quality Assurance

cc: Mr. Steve Offner

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 25, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92884-2

Sample Description

Groundwater, Dunn Field Memphis TN, Project #20022, RW-4, 03/12/98, 09:00, received 03/13/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	0.6	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.08	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	19	0.05
Total Chromium (Cr) (EPA 6010)	0.02	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	0.03	0.02
Total Iron (Fe) (EPA 6010)	2.6	0.1
Total Lead (Pb) (EPA 7421)	0.005	0.003
Total Magnesium (Mg) (EPA 6010)	5.5	0.05
Total Manganese (Mn) (EPA 6010)	0.07	0.015
Total Mercury (Hg) (EPA 7470)	0.0004	0.0002
Total Nickel (Ni) (EPA 6010)	0.05	0.02
Total Potassium (K) (EPA 6010)	0.94	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. March 25, 1998
 Report No. 92884-2

Groundwater, Dunn Field Memphis TN, Project #20022, RW-4, 03/12/98, 09:00, received 03/13/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na)(EPA 6010)	22	0.05
Total Thallium (Tl)(EPA 6010)	0.01	0.01
Total Vanadium (V)(EPA 6010)	BDL	0.05
Total Zinc (Zn)(EPA 6010)	0.09	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	2	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	14	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	2	2
Toluene	10	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	180	2

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 3 of 3

March 25, 1998
Report No. 92884-2

Groundwater, Dunn Field Memphis TN, Project #20022, RW-4, 03/12/98, 09:00, received 03/13/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride.....	BDL	1
Xylenes.....	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina A. Pufahl
Quality Assurance

cc: Mr. Steve Offner

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 25, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92884-3

Sample Description

Water, Dunn Field Memphis TN, Project #20022, Equipment Blank, 03/11/98, 13:20, received 03/13/98

RESULTS

Target Compound List

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 2 of 2

March 25, 1998
Report No. 92884-3

Water, Dunn Field Memphis TN, Project #20022, Equipment Blank, 03/11/98, 13:20, received 03/13/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	BDL	2
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina C. Pickett
Quality Assurance

cc: Mr. Steve Offner

ASI

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ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 25, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92884-4

Sample Description

Water, Dunn Field Memphis TN, Project #20022, Trip Blank, received 03/13/98

RESULTS

Target Compound List

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 2 of 2

March 25, 1998
Report No. 92884-4

Water, Dunn Field Memphis TN, Project #20022, Trip Blank, received 03/13/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	BDL	2
Vinyl chloride	BDL	1
Xylenes	BDL	5

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina G. Pickett
Quality Assurance

cc: Mr. Steve Offner

Analytical Services Inc. Batch QC
For Report Number :92884
Volatile Organics

Matrix : Aqueous Batch # 37172 Method : EPA 8260

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	89	84	5	61 - 145	0 - 14
Trichloroethene	91	86	6	71 - 120	0 - 14
Benzene	87	84	3	76 - 127	0 - 11
Toluene	92	88	4	76 - 125	0 - 13
Chlorobenzene	92	91	1	75 - 130	0 - 13

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	143	132	8	61 - 145	0 - 14
Trichloroethene	132	115	14	71 - 120	0 - 14
Benzene	125	113	10	76 - 127	0 - 11
Toluene	124	112	10	76 - 125	0 - 13
Chlorobenzene	119	109	9	75 - 130	0 - 13

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Aqueous Batch # 37172 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	76 - 119
S2	Toluene-d8	88 - 110
S3	Ethylbenzene-d10	75 - 115
S4	4-Bromofluorobenzene	86 - 120

Sample	File	S1	S2	S3	S4	S5	S6
37172BLK	C1963	112	98	101	103		
37172LCSD	C1977	111	100	103	104		
37172	C1967	112	99	103	105		
92884-1MS	C1977	119	98	101	105		
92884-1MSD	C1978	116	96	101	105		
92693-1	C1950	111	96	95	102		
92693-2	C1951	115	98	101	102		
92693-3	C1952	114	99	99	103		
92693-4	C1953	111	97	100	102		
92693-5	C1954	115	98	100	103		
92693-6	C1955	116	98	101	104		
92693-7	C1956	115	98	101	103		
92693-8	C1957	117	98	100	102		
92693-9	C1958	113	99	99	101		
92693-13	C1959	113	98	99	104		
92693-14	C1966	115	99	102	104		
92693-10	C1967	114	99	99	102		
92693-10	A1729	100	88	101	97		
92693-11	A1730	98	99	98	95		
92693-12	A1731	101	88	99	96		
92693-11D	A1755	95	102	99	88		
^^Note: DF=500							
92693-13D	A1732	102	100	99	90		
^^Note: DF=5							
92693-10D	A1754	96	100	98	84		
^^Note: DF=200							
92693-16	A1756	96	99	98	86		
92693-10DDUP	A1766	97	98	100	91		
92884-1	C1972	115	97	98	102		
92884-2	C1973	119	97	98	102		
92884-3	C1974	120	95	93	103		
92884-4	C1975	120	92	94	101		
37172BLK2	A1786	107	93	97	105		
92884-2D	A1792	103	104	97	102		
^^Note: DF=5							

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Aqueous Batch # 37172 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	76 - 119
S2	Toluene-d8	88 - 110
S3	Ethylbenzene-d10	75 - 115
S4	4-Bromofluorobenzene	86 - 120

Sample	File	S1	S2	S3	S4	S5	S6
92884-3DUP	A1793	100	105	98	97		
92884-4DUP	A1794	101	99	96	97		
37172LCS	C1967	112	99	103	105		

Q.C. Information for Batch # 37172 Printed: 03/25/98 16:36:57

Blank Results Information
Volatile Organics Method : EPA 8260

Analyte	Blank Result	Detection Limit
Acetone	BDL	10
Benzene	BDL	2
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	2
Chloroethane	BDL	5
Chloroform	BDL	2
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	2
1,2-Dichloroethane	BDL	2
1,1-Dichloroethene	BDL	2
1,2-Dichloroethene	BDL	10
1,2-Dichloropropane	BDL	2
cis-1,3-Dichloropropene	BDL	2
trans-1,3-Dichloropropene	BDL	2
Ethylbenzene	BDL	2
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	5
Styrene	BDL	5
1,1,2,2-Tetrachloroethane	BDL	2
Tetrachloroethene	BDL	2
Toluene	BDL	2
1,1,1-Trichloroethane	BDL	2
1,1,2-Trichloroethane	BDL	2
Trichloroethene	BDL	2
Vinyl chloride	BDL	1
Xylenes	BDL	5

Q.C. Information for Batch # 37172 Printed: 03/25/98 16:36:57

Sample Batch Information
Volatile Organics Method : EPA 8260

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
37172BLK	/ /				03/17/98	1055	LLP	VOA3
37172LCSD	/ /				03/17/98	1529	LLP	VOA3
37172	/ /				03/17/98	1504	LLP	VOA3
92884-1MS	/ /				03/17/98	1924	LLP	VOA3
92884-1MSD	/ /				03/17/98	1949	LLP	VOA3
92693-1	/ /				03/16/98	1827	LLP	VOA3
92693-2	/ /				03/16/98	1853	LLP	VOA3
92693-3	/ /				03/16/98	1918	LLP	VOA3
92693-4	/ /				03/16/98	1944	LLP	VOA3
92693-5	/ /				03/16/98	2010	LLP	VOA3
92693-6	/ /				03/16/98	2035	LLP	VOA3
92693-7	/ /				03/16/98	2101	LLP	VOA3
92693-8	/ /				03/16/98	2127	LLP	VOA3
92693-9	/ /				03/16/98	2153	LLP	VOA3
92693-13	/ /				03/16/98	2218	LLP	VOA3
92693-14	/ /				03/17/98	1212	LLP	VOA3
92693-10	/ /				03/17/98	1238	LLP	VOA3
92693-11	/ /				03/17/98	1304	RFA	VOA1
92693-12	/ /				03/17/98	1329	RFA	VOA1
92693-11D	/ /				03/17/98	2230	RFA	VOA1
92693-13D	/ /				03/17/98	1355	RFA	VOA1
92693-10D	/ /				03/17/98	2204	RFA	VOA1
92693-16	/ /				03/17/98	2256	RFA	VOA1
92693-10DDUP	/ /				03/18/98	1223	TLW	VOA1
92884-1	/ /				03/17/98	1715	LLP	VOA3
92884-2	/ /				03/17/98	1741	LLP	VOA3
92884-3	/ /				03/17/98	1807	LLP	VOA3
92884-4	/ /				03/17/98	1832	LLP	VOA3
37172BLK2	/ /				03/18/98	2040	LLP	VOA1
92884-2D	/ /				03/18/98	2313	LLP	VOA1
92884-3DUP	/ /				03/18/98	2339	LLP	VOA1
92884-4DUP	/ /				03/19/98	0005	LLP	VOA1
37172LCS	/ /				03/17/98	1504	RFA	VOA1

Analytical Services Inc. Batch QC
For Report Number :92884

QC Batch General Information

Batch Number	Analyte	Analysis Method	Matrix		Blank Result	Prep. Method
36896	Se	EPA 7740	Aqueous	<	0.0030	
^^Note : Batch passes on LCS/LCSD due to MS/MSD matrix interference						
36896	Pb	EPA 7421	Aqueous	<	0.0020	
36907	Ag	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD/MSD/PDS						
36907	Al	EPA 6010	Aqueous	<	0.1000	
36907	As	EPA 6010	Aqueous	<	0.0100	
36907	Ba	EPA 6010	Aqueous	<	0.0100	
36907	Be	EPA 6010	Aqueous	<	0.0010	
36907	Ca	EPA 6010	Aqueous	<	0.0500	
^^Note : DL ADJUSTED						
36907	Cd	EPA 6010	Aqueous	<	0.0010	
36907	Co	EPA 6010	Aqueous	<	0.0100	
36907	Cr	EPA 6010	Aqueous	<	0.0050	
36907	Cu	EPA 6010	Aqueous	<	0.0100	
36907	Fe	EPA 6010	Aqueous	<	0.0400	
^^Note : BATCH PASSES ON LCS/LCSD/MSD/PDS						
36907	K	EPA 6010	Aqueous	<	0.2000	
^^Note : BATCH PASSES ON LCS/LCSD/MSD						
36907	Mg	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD/MS/PDS						
36907	Mn	EPA 6010	Aqueous	<	0.0150	
36907	Na	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD/MSD						
36907	Ni	EPA 6010	Aqueous	<	0.0100	
36907	Sb	EPA 6010	Aqueous	<	0.0060	
36907	Tl	EPA 6010	Aqueous	<	0.0100	
36907	V	EPA 6010	Aqueous	<	0.0100	
36907	Zn	EPA 6010	Aqueous	<	0.0200	
37023	Hg	EPA 7470	Aqueous	<	0.0002	

Analytical Services Inc. Batch QC
For Report Number :92884

Lab Control Information

Batch Number	Analyte	Method	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
36896	Se	EPA 7740	114	100	13	76 - 124	0 - 20
36896	Pb	EPA 7421	108	115	6	76 - 124	0 - 20
36907	Ag	EPA 6010	120	120	0	76 - 124	0 - 20
36907	Al	EPA 6010	84	90	7	76 - 124	0 - 20
36907	As	EPA 6010	86	92	7	76 - 124	0 - 20
36907	Ba	EPA 6010	87	93	7	76 - 124	0 - 20
36907	Be	EPA 6010	85	91	7	76 - 124	0 - 20
36907	Ca	EPA 6010	91	89	2	76 - 124	0 - 20
36907	Cd	EPA 6010	87	92	6	76 - 124	0 - 20
36907	Co	EPA 6010	82	87	6	76 - 124	0 - 20
36907	Cr	EPA 6010	83	88	6	76 - 124	0 - 20
36907	Cu	EPA 6010	87	92	6	76 - 124	0 - 20
36907	Fe	EPA 6010	76	81	6	76 - 124	0 - 20
36907	K	EPA 6010	110	110	0	76 - 124	0 - 20
36907	Mg	EPA 6010	88	87	1	76 - 124	0 - 20
36907	Mn	EPA 6010	79	84	6	76 - 124	0 - 20
36907	Na	EPA 6010	110	110	0	76 - 124	0 - 20
36907	Ni	EPA 6010	85	90	6	76 - 124	0 - 20
36907	Sb	EPA 6010	88	94	7	76 - 124	0 - 20
36907	Tl	EPA 6010	89	95	7	76 - 124	0 - 20
36907	V	EPA 6010	83	88	6	76 - 124	0 - 20
36907	Zn	EPA 6010	85	92	8	76 - 124	0 - 20
37023	Hg	EPA 7470	99	95	4	76 - 124	0 - 20

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
36896	Se	EPA 7740	71	63	12	76 - 124	0 - 20
36896	Pb	EPA 7421	103	90	13	76 - 124	0 - 20
36907	Ag	EPA 6010	130	120	8	76 - 124	0 - 20
36907	Al	EPA 6010	110	96	14	76 - 124	0 - 20
36907	As	EPA 6010	100	91	9	76 - 124	0 - 20
36907	Ba	EPA 6010	100	92	8	76 - 124	0 - 20
36907	Be	EPA 6010	99	89	11	76 - 124	0 - 20
36907	Ca	EPA 6010	100	78	25	76 - 124	0 - 20
36907	Cd	EPA 6010	100	91	9	76 - 124	0 - 20
36907	Co	EPA 6010	95	86	10	76 - 124	0 - 20
36907	Cr	EPA 6010	95	85	11	76 - 124	0 - 20
36907	Cu	EPA 6010	100	91	9	76 - 124	0 - 20
36907	Fe	EPA 6010	140	110	24	76 - 124	0 - 20
36907	K	EPA 6010	130	100	26	76 - 124	0 - 20
36907	Mg	EPA 6010	97	74	27	76 - 124	0 - 20
36907	Mn	EPA 6010	92	82	11	76 - 124	0 - 20
36907	Na	EPA 6010	150	110	31	76 - 124	0 - 20
36907	Ni	EPA 6010	98	88	11	76 - 124	0 - 20

Analytical Services Inc. Batch QC
For Report Number :92884

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
36907	Sb	EPA 6010	100	93	7	76 - 124	0 - 20
36907	Tl	EPA 6010	100	94	6	76 - 124	0 - 20
36907	V	EPA 6010	95	87	9	76 - 124	0 - 20
36907	Zn	EPA 6010	95	86	10	76 - 124	0 - 20
37023	Hg	EPA 7470	82	80	2	76 - 124	0 - 20

Post Digestion Spike Information

Batch Number	Analyte	Method	PDS %Rec	%Recovery Range
36896	Se	EPA 7740	69	76 - 124
36896	Pb	EPA 7421	99	76 - 124
36907	Ag	EPA 6010	84	76 - 124
36907	Al	EPA 6010	98	76 - 124
36907	As	EPA 6010	93	76 - 124
36907	Ba	EPA 6010	93	76 - 124
36907	Be	EPA 6010	91	76 - 124
36907	Ca	EPA 6010	87	76 - 124
36907	Cd	EPA 6010	92	76 - 124
36907	Co	EPA 6010	86	76 - 124
36907	Cr	EPA 6010	87	76 - 124
36907	Cu	EPA 6010	92	76 - 124
36907	Fe	EPA 6010	79	76 - 124
36907	K	EPA 6010	130	76 - 124
36907	Mg	EPA 6010	85	76 - 124
36907	Mn	EPA 6010	83	76 - 124
36907	Na	EPA 6010	140	76 - 124
36907	Ni	EPA 6010	90	76 - 124
36907	Sb	EPA 6010	94	76 - 124
36907	Tl	EPA 6010	96	76 - 124
36907	V	EPA 6010	88	76 - 124
36907	Zn	EPA 6010	91	76 - 124

Q.C. Information for Batch # 36896 For Report Number :92884

Sample Batch Information
Analysis : Se, Pb

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36896BLANK	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
36896LCS	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
36896LCSD	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92891-1MS	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92891-1MSD	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92891-2PDS	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92891-2DUP	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92839-3	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92884-1	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92884-2	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92891-1	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92891-2	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92913-2	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92724-6	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92770-1	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92774	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92813-21	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92813-22	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92813-23	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92813-24	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
92813-25	Tl	03/17/98	0910	KSP	GFAA	03/17/98	1542	MLR	AA1
36896BLANK	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
36896LCS	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
36896LCSD	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92891-1MS	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92891-1MSD	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92891-2PDS	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92891-2DUP	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92839-3	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92884-1	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92884-2	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92891-1	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92891-2	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92913-2	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92724-6	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92770-1	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92774	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92813-21	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92813-22	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92813-23	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92813-24	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
92813-25	Se	03/17/98	0910	KSP	GFAA	03/18/98	0927	MLR	AA1
36896BLANK	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
36896LCS	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
36896LCSD	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92891-1MS	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92891-1MSD	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92891-2PDS	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1

Q.C. Information for Batch # 36896 For Report Number :92884

Sample Batch Information
Analysis : Se, Pb

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
92891-2DUP	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92839-3	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92884-1	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92884-2	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92891-1	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92891-2	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92913-2	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92724-6	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92770-1	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92774	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92813-21	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92813-22	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92813-23	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92813-24	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
92813-25	As	03/17/98	0910	KSP	GFAA	03/18/98	1351	MLR	AA1
36896BLANK	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
36896LCS	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
36896LCSD	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
[redacted]1-1MS	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
[redacted]1-1MSD	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92891-2PDS	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92891-2DUP	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92839-3	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92884-1	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92884-2	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92891-1	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92891-2	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92913-2	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92724-6	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92770-1	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92774	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92813-21	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92813-22	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92813-23	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92813-24	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
92813-25	Pb	03/17/98	0910	KSP	GFAA	03/19/98	0905	MLR	AA1
36896BLANK	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
36896LCS	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
36896LCSD	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92891-1MS	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92891-1MSD	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92891-2PDS	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92891-2DUP	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
[redacted]39-3	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
[redacted]84-1	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92884-2	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92891-1	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92891-2	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1

Q.C. Information for Batch # 36896 For Report Number :92884

Sample Batch Information
Analysis : Se, Pb

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
92913-2	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92724-6	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92770-1	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92774	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92813-21	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92813-22	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92813-23	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92813-24	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
92813-25	Cd	03/17/98	0910	KSP	GFAA	03/19/98	1153	MLR	AA1
36896BLANK	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
36896LCS	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
36896LCSD	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92891-1MS	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92891-1MSD	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92891-2PDS	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92891-2DUP	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92839-3	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92884-1	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92884-2	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92891-1	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92891-2	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92913-2	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92724-6	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92770-1	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92774	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92813-21	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92813-22	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92813-23	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92813-24	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
92813-25	Sb	03/17/98	0910	KSP	GFAA	03/23/98	1346	MLR	AA1
36896BLANK	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
36896LCS	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
36896LCSD	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92891-1MS	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92891-1MSD	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92891-2PDS	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92891-2DUP	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92839-3	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92884-1	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92884-2	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92891-1	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92891-2	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92913-2	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92724-6	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92770-1	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92774	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92813-21	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92813-22	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1

Q.C. Information for Batch # 36896 For Report Number :92884

Sample Batch Information
Analysis : Se, Pb

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
92813-23	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92813-24	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1
92813-25	Be	03/17/98	0910	KSP	GFAA	03/23/98	1549	MLR	AA1

Q.C. Information for Batch # 36907 For Report Number :92884

Sample Batch Information

Analysis : Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni Sb Tl V Zn

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36907BLANK		03/18/98	0905	DCM	TRACE	03/19/98	1040	MCW	ICP2
36907LCS		03/18/98	0905	DCM	TRACE	03/19/98	1044	MCW	ICP2
36907LCSD		03/18/98	0905	DCM	TRACE	03/19/98	1047	MCW	ICP2
92951-2MS		03/18/98	0905	DCM	TRACE	03/19/98	1051	MCW	ICP2
92951-2MSD		03/18/98	0905	DCM	TRACE	03/19/98	1103	MCW	ICP2
92693-9PDS		03/18/98	0905	DCM	TRACE	03/19/98	1106	MCW	ICP2
92951-3DUP		03/18/98	0905	DCM	TRACE	03/19/98	1110	MCW	ICP2
92693-9		03/18/98	0905	DCM	TRACE	03/19/98	1114	MCW	ICP2
92719-3		03/18/98	0905	DCM	TRACE	03/19/98	1133	MCW	ICP2
92719-4		03/18/98	0905	DCM	TRACE	03/19/98	1137	MCW	ICP2
92719-5		03/18/98	0905	DCM	TRACE	03/19/98	1141	MCW	ICP2
92884-1		03/18/98	0905	DCM	TRACE	03/19/98	1156	MCW	ICP2
92822-2		03/18/98	0905	DCM	TRACE	03/19/98	1200	MCW	ICP2
92822-1		03/18/98	0905	DCM	TRACE	03/19/98	1200	MCW	ICP2
92884-2		03/18/98	0905	DCM	TRACE	03/19/98	1208	MCW	ICP2
92951-1		03/18/98	0905	DCM	TRACE	03/19/98	1219	MCW	ICP2
92951-2		03/18/98	0905	DCM	TRACE	03/19/98	1118	MCW	ICP2
92951-3		03/18/98	0905	DCM	TRACE	03/19/98	1122	MCW	ICP2
92951-4		03/18/98	0905	DCM	TRACE	03/19/98	1223	MCW	ICP2
92951-5		03/18/98	0905	DCM	TRACE	03/19/98	1227	MCW	ICP2
92724-1		03/18/98	0905	DCM	TRACE	03/19/98	1231	MCW	ICP2
92813-1		03/18/98	0905	DCM	TRACE	03/19/98	1235	MCW	ICP2
92813-10		03/18/98	0905	DCM	TRACE	03/19/98	1238	MCW	ICP2
92839-3		03/18/98	0905	DCM	TRACE	03/19/98	1242	MCW	ICP2
92719-3D		03/18/98	0905	DCM	TRACE	03/19/98	1145	MCW	ICP2
92719-4D		03/18/98	0905	DCM	TRACE	03/19/98	1149	MCW	ICP2
92719-5D		03/18/98	0905	DCM	TRACE	03/19/98	1153	MCW	ICP2
92719-3MSD		03/18/98	0905	DCM	TRACE	03/19/98	1250	MCW	ICP2
92719-3DUP		03/18/98	0905	DCM	TRACE	03/19/98	1254	MCW	ICP2
92719-3MS		03/18/98	0905	DCM	TRACE	03/19/98	1246	MCW	ICP2
QC BLANK		03/18/98	0905	DCM	TRACE	03/19/98	1305	MCW	ICP2

Q.C. Information for Batch # 37023 For Report Number :92884

Sample Batch Information
Analysis : Hg

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
37023BLANK	HG	03/16/98	0740	FBS		03/16/98	1451	FBS	HG1
37023LCS	HG	03/16/98	0740	FBS		03/16/98	1453	FBS	HG1
37023LCSD	HG	03/16/98	0740	FBS		03/16/98	1456	FBS	HG1
92804-1MS	HG	03/16/98	0740	FBS		03/16/98	1458	FBS	HG1
92804-1MSD	HG	03/16/98	0740	FBS		03/16/98	1500	FBS	HG1
92804-2DUP	HG	03/16/98	0740	FBS		03/16/98	1502	FBS	HG1
92839-3	HG	03/16/98	0740	FBS		03/16/98	1523	FBS	HG1
92884-1	HG	03/16/98	0740	FBS		03/16/98	1526	FBS	HG1
92884-2	HG	03/16/98	0740	FBS		03/16/98	1528	FBS	HG1
92891-1	HG	03/16/98	0740	FBS		03/16/98	1530	FBS	HG1
92891-2	HG	03/16/98	0740	FBS		03/16/98	1533	FBS	HG1
92724-6	HG	03/16/98	0740	FBS		03/16/98	1535	FBS	HG1
92761-1	HG	03/16/98	0740	FBS		03/16/98	1537	FBS	HG1
92770-1	HG	03/16/98	0740	FBS		03/16/98	1540	FBS	HG1
92771	HG	03/16/98	0740	FBS		03/16/98	1547	FBS	HG1
92774	HG	03/16/98	0740	FBS		03/16/98	1621	FBS	HG1
92804-1	HG	03/16/98	0740	FBS		03/16/98	1505	FBS	HG1
92804-2	HG	03/16/98	0740	FBS		03/16/98	1507	FBS	HG1
92804-3	HG	03/16/98	0740	FBS		03/16/98	1509	FBS	HG1
92804-4	HG	03/16/98	0740	FBS		03/16/98	1512	FBS	HG1
92804-5	HG	03/16/98	0740	FBS		03/16/98	1519	FBS	HG1
92804-6	HG	03/16/98	0740	FBS		03/16/98	1521	FBS	HG1
92853-1	HG	03/16/98	0740	FBS		03/16/98	1549	FBS	HG1
92888-2	HG	03/16/98	0740	FBS		03/16/98	1552	FBS	HG1
92813-10	HG	03/16/98	0740	FBS		03/16/98	1615	FBS	HG1
92813-12	HG	03/16/98	0740	FBS		03/16/98	1618	FBS	HG1

OHM Remediation Services Corp
Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

WO#92884 206520

FORM 0019 REV 2-97

OHM's LAB COORDINATOR: Elena Rodriguez	LAB COORDINATOR'S PHONE: 770-734-8060	LAB COORDINATOR'S FAX: 770-453-7716	LABORATORY SERVICE ID: ASI	LABORATORY CONTACT: Shari Harper	MAIL REPORT (COMPANY NAME): OHM Remediation Services
PROJECT NAME: DDMT/Dunn Field	PROJECT LOCATION: Memphis, TN	PROJECT NUMBER: 20022	LABORATORY PHONE: 770-734-4200	LABORATORY FAX: 770-734-4201	RECIPIENT NAME: Elena Rodriguez
PROJECT CONTACT: Steve Offner	PROJECT PHONE NUMBER: 901-743-1117	PROJECT FAX: 901-743-1048	LABORATORY ADDRESS: 110 Technology Parkway		ADDRESS: 5445 Triangle Pkwy, Ste 400
PROJECT ADDRESS: 1708 Dunn Ave.	CITY STATE AND ZIPCODE: Memphis, TN 38114	CLIENT: USACE	CITY STATE AND ZIPCODE: Norcross, GA 30092		CITY STATE AND ZIPCODE: Norcross, GA 30092
PROJECT MANAGER: Steve Offner	PROJECT MANAGER'S PHONE: 770-326-2571	PROJECT MANAGER'S FAX: 770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	TAT	Analyses: TCL-Volatiles	TAL Metals	TCLP Volatiles		Comments
1	RW-7	GW	3.11.98	1900	HCl	4			✓	✓		-1	
2	SB-015A	Soil	3.11.98	1300		1					✓		
3	SB-015B	Soil	3.11.98	1310		1					✓		
4	Equipment blank	Water	3.11.98	1320		3			✓			-3	
5	RW-4	GW	3.12.98	0940		4			✓	✓		-2	
6												-4	Trip Blank as required 3/13
7													7 Day TAT per BH bg 3/13
8													
9													
10													

SAMPLES COLLECTED BY: Gary W. Crowe

COURIER AND AIR BILL NUMBER: Fed-Ex 613075248 2

RELINQUISHED BY	RECEIVED BY	DATE	TIME
Gary W Crowe	Fed-Ex	3.12.98	1545
	A Moore	3/13/98	1015

COOLER TEMPERATURE UPON RECEIPT

SAMPLE'S CONDITION UPON RECEIPT

Fed Ex 3/13/98 10:15 - 613075253 0
Ice, seal intact, Temp - 5°C pH = (not tested)

Distribution White - Laboratory (To be returned with Analytical Report), Goldenrod - Project File; Yellow - Project Data Manager

479 102

TAB

Appendix F-4

GROUNDWATER SAMPLES FROM RW-3, RW-6 & RW-9 FOLLOWING CAPACITY TESTS

Dated Collected 03/12,13&14/98

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

06 April, 1998

Case Narrative Report 92951

The samples were collected on 12-14 March, 1998 and received by ASI 17 March, 1998. As indicated on the Chain of Custody, the samples were received at 0°C with no custody seals present. All other conditions for proper sample receipt were met. The samples were logged into the LIMS as report 92951 for the following analyses as per client request: VOA (EPA 8260B), Metals (EPA 6010B), Selenium (EPA 7740), Lead (EPA 7421) and Mercury (EPA 7470). Holding times for samples preparation and analysis were met.

VOA analysis (EPA 8260B) gave a low MS recovery for 1,1-Dichloroethene and high MSRPD values for 1,1-Dichloroethene and Trichloroethene. All other spike and surrogate recoveries were acceptable.

Metals analysis (EPA 6010B) gave high MS recoveries for Ag, Fe, K and Na, a low MSD recovery for Mg, high MSRPD values for Ca, Fe, K, Mg and Na, and high PDS recoveries for K and Na. The batch passes on LCS/LCSD and all other acceptable spike recoveries. The detection limit was raised for Ca, but all samples produced hits which were higher than the elevated detection limit.

Selenium analysis (EPA 7740) met all data quality objectives with the exception of a low PDS recovery.

Lead analysis (EPA 7421) met all data quality objectives.

Mercury analysis (EPA 7470) met all data quality objectives. 92951-5 was re-run in a second batch to confirm the result; both batches met all data quality objectives.

Christina A. Perfetti
Quality Assurance

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

April 7, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92951-1

Sample Description

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-6, 03/12/98, 16:00, received 03/17/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	BDL	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.10	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	22	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	BDL	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	0.08	0.05
Total Manganese (Mn) (EPA 6010)	BDL	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	1.2	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp.
age 2 of 3

April 7, 1998
Report No. 92951-1

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-6, 03/12/98, 16:00, received 03/17/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na) (EPA 6010)	1.9	0.05
Total Thallium (Tl) (EPA 6010)	0.01	0.01
Total Vanadium (V) (EPA 6010)	BDL	0.05
Total Zinc (Zn) (EPA 6010)	0.20	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	BDL	10
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	BDL	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 3 of 3

April 7, 1998
Report No. 92951-1

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-6, 03/12/98, 16:00, received 03/17/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	10
Xylenes	BDL	10

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Quality Assurance

cc: Mr. Steve Offner

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

April 7, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92951-2

Sample Description

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-3, 03/13/98, 16:00, received 03/17/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	0.2	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.08	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	13	0.05
Total Chromium (Cr) (EPA 6010)	0.01	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	1.8	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	4.7	0.05
Total Manganese (Mn) (EPA 6010)	0.03	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	0.02	0.02
Total Potassium (K) (EPA 6010)	0.8	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. April 7, 1998
Page 2 of 3 Report No. 92951-2

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-3, 03/13/98, 16:00, received 03/17/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na)(EPA 6010)	20	0.05
Total Thallium (Tl)(EPA 6010)	0.01	0.01
Total Vanadium (V)(EPA 6010)	BDL	0.05
Total Zinc (Zn)(EPA 6010)	0.04	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	BDL	10
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	14	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 3 of 3

April 7, 1998
Report No. 92951-2

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-3, 03/13/98, 16:00, received 03/17/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	10
Xylenes	BDL	10

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina C. Roberts
Quality Assurance

cc: Mr. Steve Offner

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ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

April 7, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92951-3

Sample Description

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-9, 03/14/98, 16:00, received 03/17/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	0.5	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.14	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	42	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	2.8	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	12	0.05
Total Manganese (Mn) (EPA 6010)	0.05	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	1.6	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 2 of 3

April 7, 1998
Report No. 92951-3

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-9, 03/14/98, 16:00, received 03/17/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na) (EPA 6010)	28	0.05
Total Thallium (Tl) (EPA 6010)	0.02	0.01
Total Vanadium (V) (EPA 6010)	BDL	0.05
Total Zinc (Zn) (EPA 6010)	0.10	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	61	10
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	140	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	68	10

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 3 of 3

April 7, 1998
Report No. 92951-3

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-9, 03/14/98, 16:00, received 03/17/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	10
Xylenes	BDL	10

BDL - Below Detection Limit

Respectfully submitted,

Project Manager

Quality Assurance

cc: Mr. Steve Offner

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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

April 7, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92951-4

Sample Description

Water, grab, Dunn Field Memphis TN, Project #20022, Equipment Blank, 03/14/98, 15:50, received 03/17/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	0.5	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	BDL	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	1.2	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	4.0	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	15	0.05
Total Manganese (Mn) (EPA 6010)	0.06	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	BDL	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp. April 7, 1998
Page 2 of 3 Report No. 92951-4

Water, grab, Dunn Field Memphis TN, Project #20022, Equipment Blank, 03/14/98, 15:50, received 03/17/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na)(EPA 6010)	31	0.05
Total Thallium (Tl)(EPA 6010)	BDL	0.01
Total Vanadium (V)(EPA 6010)	BDL	0.05
Total Zinc (Zn)(EPA 6010)	0.06	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	BDL	10
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	BDL	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	BDL	10

BDL - Below Detection Limit

April 7, 1998
Report No. 92951-4

Water, grab, Dunn Field Memphis TN, Project #20022, Equipment Blank, 03/14/98, 15:50, received 03/17/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	10
Xylenes	BDL	10

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina L. Bufkin
Quality Assurance

cc: Mr. Steve Offner

ASI ANALYTICAL SERVICES, INC.
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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

April 7, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92951-5

Sample Description

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-16, 03/14/98, 16:10, received 03/17/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	0.5	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	BDL	0.01
Total Barium (Ba) (EPA 6010)	0.14	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	43	0.05
Total Chromium (Cr) (EPA 6010)	BDL	0.01
Total Cobalt (Co) (EPA 6010)	BDL	0.05
Total Copper (Cu) (EPA 6010)	BDL	0.02
Total Iron (Fe) (EPA 6010)	4.1	0.1
Total Lead (Pb) (EPA 7421)	BDL	0.003
Total Magnesium (Mg) (EPA 6010)	8.2	0.05
Total Manganese (Mn) (EPA 6010)	0.11	0.015
Total Mercury (Hg) (EPA 7470)	BDL	0.0002
Total Nickel (Ni) (EPA 6010)	BDL	0.02
Total Potassium (K) (EPA 6010)	1.6	0.2
Total Selenium (Se) (EPA 7740)	BDL	0.005
Total Silver (Ag) (EPA 6010)	BDL	0.01

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 2 of 3

April 7, 1998
Report No. 92951-5

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-16, 03/14/98, 16:10, received 03/17/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Sodium (Na) (EPA 6010)	29	0.05
Total Thallium (Tl) (EPA 6010)	0.02	0.01
Total Vanadium (V) (EPA 6010)	BDL	0.05
Total Zinc (Zn) (EPA 6010)	0.08	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	BDL	10
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	76	10
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	170	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	91	10

BDL - Below Detection Limit

OHM Remediation Services Corp.
Page 3 of 3

April 7, 1998
Report No. 92951-5

Groundwater, grab, Dunn Field Memphis TN, Project #20022, RW-16, 03/14/98, 16:10, received 03/17/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Vinyl chloride	BDL	10
Xylenes	BDL	10

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christine D. Pickett
Quality Assurance

cc: Mr. Steve Offner

Analytical Services Inc. Batch QC
For Report Number :92951
Volatile Organics

Matrix : Aqueous Batch # 37198 Method : EPA 8260

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	77	79	3	61 - 145	0 - 14
Trichloroethene	98	99	1	71 - 120	0 - 14
Benzene	94	90	4	76 - 127	0 - 11
Toluene	99	101	2	76 - 125	0 - 13
Chlorobenzene	96	98	2	75 - 130	0 - 13

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	90	59	42	61 - 145	0 - 14
Trichloroethene	108	91	17	71 - 120	0 - 14
Benzene	107	96	11	76 - 127	0 - 11
Toluene	112	107	5	76 - 125	0 - 13
Chlorobenzene	115	101	13	75 - 130	0 - 13

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Aqueous Batch # 37198 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	76 - 119
S2	Toluene-d8	88 - 110
S3	Ethylbenzene-d10	75 - 115
S4	4-Bromofluorobenzene	86 - 120

Sample	File	S1	S2	S3	S4	S5	S6
37198BLK	B4140	105	100	94	98		
37198LCS	B4095	97	98	94	96		
37198LCSD	B4096	97	103	102	101		
92951-3MS	B4150	105	99	101	106		
92951-3MSD	B4151	113	102	98	105		
92888-1	B4143	110	100	96	100		
92888-1D1	B4144	104	99	98	102		
^^Note: DF=5							
92951-1	B4145	107	98	99	98		
92951-2	B4146	110	98	99	97		
92951-3	B4147	103	93	98	102		
92951-4	B4148	109	99	95	100		
92951-5	B4149	115	98	93	94		
92951-3DUP	B4152	114	95	97	104		
92938	A1838	105	102	101	102		
92888-1D2	A1845	101	102	100	107		
^^Note: DF=50							
92834	A1844	99	104	103	102		
92977-6	A1840	105	104	100	99		
93031-3	A1841	100	97	102	100		
92916-1	A1846	101	99	101	96		
92916-2	A1847	100	105	102	102		
92916-3	A1848	103	104	101	103		
92916-4	A1849	103	97	99	103		
92916-5	A1850	106	95	100	104		
92916-6	A1851	107	92	104	101		
92916-6D	A1884	101	91	103	100		
^^Note: DF=2							
92766-2	A1918	100	92	94	101		
93137-3	A1919	95	98	95	95		
93137-4	A1920	97	93	91	92		
93077-1	A1940	96	96	91	87		

Blank Results Information
Volatile Organics Method : EPA 8260

Analyte	Blank Result	Detection Limit
Acetone	BDL	10
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	BDL	10
1,2-Dichloroethene	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	BDL	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	BDL	10
Vinyl chloride	BDL	10
Xylenes	BDL	10

Sample Batch Information
Volatile Organics Method : EPA 8260

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
37198BLK	/ /				03/19/98	0947	TLW	VOA2
37198LCS	/ /				03/17/98	1559	RFA	VOA2
37198LCSD	/ /				03/17/98	1623	RFA	VOA2
92951-3MS	/ /				03/19/98	1347	TLW	VOA2
92951-3MSD	/ /				03/19/98	1411	TLW	VOA2
92888-1	/ /				03/19/98	1059	TLW	VOA2
92888-1D1	/ /				03/19/98	1123	TLW	VOA2
92951-1	/ /				03/19/98	1147	TLW	VOA2
92951-2	/ /				03/19/98	1211	TLW	VOA2
92951-3	/ /				03/19/98	1235	TLW	VOA2
92951-4	/ /				03/19/98	1259	TLW	VOA2
92951-5	/ /				03/19/98	1323	TLW	VOA2
92951-3DUP	/ /				03/19/98	1435	TLW	VOA2
92938	/ /				03/20/98	0945	RFA	VOA1
92888-1D2	/ /				03/20/98	1244	RFA	VOA1
92834	/ /				03/20/98	1218	RFA	VOA1
92977-6	/ /				03/20/98	1036	RFA	VOA1
93031-3	/ /				03/20/98	1101	RFA	VOA1
92916-1	/ /				03/20/98	1310	LLP	VOA1
92916-2	/ /				03/20/98	1335	LLP	VOA1
92916-3	/ /				03/20/98	1401	LLP	VOA1
92916-4	/ /				03/20/98	1427	LLP	VOA1
92916-5	/ /				03/20/98	1452	LLP	VOA1
92916-6	/ /				03/20/98	1518	LLP	VOA1
92916-6D	/ /				03/23/98	1311	RFA	VOA1
92766-2	/ /				03/24/98	1110	TLW	VOA1
93137-3	/ /				03/24/98	1136	TLW	VOA1
93137-4	/ /				03/24/98	1202	TLW	VOA1
93077-1	/ /				03/24/98	2106	RFA	VOA1

Analytical Services Inc. Batch QC
For Report Number :92951

QC Batch General Information

Batch Number	Analyte	Analysis Method	Matrix		Blank Result	Prep. Method
36907	Ag	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD/MSD/PDS						
36907	Al	EPA 6010	Aqueous	<	0.1000	
36907	As	EPA 6010	Aqueous	<	0.0100	
36907	Ba	EPA 6010	Aqueous	<	0.0100	
36907	Be	EPA 6010	Aqueous	<	0.0010	
36907	Ca	EPA 6010	Aqueous	<	0.0500	
^^Note : DL ADJUSTED						
36907	Cd	EPA 6010	Aqueous	<	0.0010	
36907	Co	EPA 6010	Aqueous	<	0.0100	
36907	Cr	EPA 6010	Aqueous	<	0.0050	
36907	Cu	EPA 6010	Aqueous	<	0.0100	
36907	Fe	EPA 6010	Aqueous	<	0.0400	
^^Note : BATCH PASSES ON LCS/LCSD/MSD/PDS						
36907	K	EPA 6010	Aqueous	<	0.2000	
^^Note : BATCH PASSES ON LCS/LCSD/MSD						
36907	Mg	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD/MS/PDS						
36907	Mn	EPA 6010	Aqueous	<	0.0150	
36907	Na	EPA 6010	Aqueous	<	0.0100	
^^Note : BATCH PASSES ON LCS/LCSD/MSD						
36907	Ni	EPA 6010	Aqueous	<	0.0100	
36907	Sb	EPA 6010	Aqueous	<	0.0060	
36907	Tl	EPA 6010	Aqueous	<	0.0100	
36907	V	EPA 6010	Aqueous	<	0.0100	
36907	Zn	EPA 6010	Aqueous	<	0.0200	
36908	Se	EPA 7740	Aqueous	<	0.0050	
^^Note : Batch passes on LCS/LCSD/MS/MSD						
36908	Pb	EPA 7421	Aqueous	<	0.0030	
37028	Hg	EPA 7470	Aqueous	<	0.0002	
37030	Hg	EPA 7470	Aqueous	<	0.0002	

Analytical Services Inc. Batch QC
For Report Number :92951

Lab Control Information

Batch Number	Analyte	Method	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
36907	Ag	EPA 6010	120	120	0	76 - 124	0 - 20
36907	Al	EPA 6010	84	90	7	76 - 124	0 - 20
36907	As	EPA 6010	86	92	7	76 - 124	0 - 20
36907	Ba	EPA 6010	87	93	7	76 - 124	0 - 20
36907	Be	EPA 6010	85	91	7	76 - 124	0 - 20
36907	Ca	EPA 6010	91	89	2	76 - 124	0 - 20
36907	Cd	EPA 6010	87	92	6	76 - 124	0 - 20
36907	Co	EPA 6010	82	87	6	76 - 124	0 - 20
36907	Cr	EPA 6010	83	88	6	76 - 124	0 - 20
36907	Cu	EPA 6010	87	92	6	76 - 124	0 - 20
36907	Fe	EPA 6010	76	81	6	76 - 124	0 - 20
36907	K	EPA 6010	110	110	0	76 - 124	0 - 20
36907	Mg	EPA 6010	88	87	1	76 - 124	0 - 20
36907	Mn	EPA 6010	79	84	6	76 - 124	0 - 20
36907	Na	EPA 6010	110	110	0	76 - 124	0 - 20
36907	Ni	EPA 6010	85	90	6	76 - 124	0 - 20
36907	Sb	EPA 6010	88	94	7	76 - 124	0 - 20
36907	Tl	EPA 6010	89	95	7	76 - 124	0 - 20
36907	V	EPA 6010	83	88	6	76 - 124	0 - 20
36907	Zn	EPA 6010	85	92	8	76 - 124	0 - 20
36908	Se	EPA 7740	101	93	8	76 - 124	0 - 20
36908	Pb	EPA 7421	100	101	1	76 - 124	0 - 20
37028	Hg	EPA 7470	102	101	1	76 - 124	0 - 20
37030	Hg	EPA 7470	84	84	0	76 - 124	0 - 20

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
36907	Ag	EPA 6010	130	120	8	76 - 124	0 - 20
36907	Al	EPA 6010	110	96	14	76 - 124	0 - 20
36907	As	EPA 6010	100	91	9	76 - 124	0 - 20
36907	Ba	EPA 6010	100	92	8	76 - 124	0 - 20
36907	Be	EPA 6010	99	89	11	76 - 124	0 - 20
36907	Ca	EPA 6010	100	78	25	76 - 124	0 - 20
36907	Cd	EPA 6010	100	91	9	76 - 124	0 - 20
36907	Co	EPA 6010	95	86	10	76 - 124	0 - 20
36907	Cr	EPA 6010	95	85	11	76 - 124	0 - 20
36907	Cu	EPA 6010	100	91	9	76 - 124	0 - 20
36907	Fe	EPA 6010	140	110	24	76 - 124	0 - 20
36907	K	EPA 6010	130	100	26	76 - 124	0 - 20
36907	Mg	EPA 6010	97	74	27	76 - 124	0 - 20
36907	Mn	EPA 6010	92	82	11	76 - 124	0 - 20
36907	Na	EPA 6010	150	110	31	76 - 124	0 - 20
36907	Ni	EPA 6010	98	88	11	76 - 124	0 - 20
36907	Sb	EPA 6010	100	93	7	76 - 124	0 - 20

Analytical Services Inc. Batch QC
For Report Number :92951

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
36907	Tl	EPA 6010	100	94	6	76 - 124	0 - 20
36907	V	EPA 6010	95	87	9	76 - 124	0 - 20
36907	Zn	EPA 6010	95	86	10	76 - 124	0 - 20
36908	Se	EPA 7740	85	82	4	76 - 124	0 - 20
36908	Pb	EPA 7421	95	88	8	76 - 124	0 - 20
37028	Hg	EPA 7470	97	97	0	76 - 124	0 - 20
37030	Hg	EPA 7470	111	99	11	76 - 124	0 - 20

Post Digestion Spike Information

Batch Number	Analyte	Method	PDS %Rec	%Recovery Range
36907	Ag	EPA 6010	84	76 - 124
36907	Al	EPA 6010	98	76 - 124
36907	As	EPA 6010	93	76 - 124
36907	Ba	EPA 6010	93	76 - 124
36907	Be	EPA 6010	91	76 - 124
36907	Ca	EPA 6010	87	76 - 124
36907	Cd	EPA 6010	92	76 - 124
36907	Co	EPA 6010	86	76 - 124
36907	Cr	EPA 6010	87	76 - 124
36907	Cu	EPA 6010	92	76 - 124
36907	Fe	EPA 6010	79	76 - 124
36907	K	EPA 6010	130	76 - 124
36907	Mg	EPA 6010	85	76 - 124
36907	Mn	EPA 6010	83	76 - 124
36907	Na	EPA 6010	140	76 - 124
36907	Ni	EPA 6010	90	76 - 124
36907	Sb	EPA 6010	94	76 - 124
36907	Tl	EPA 6010	96	76 - 124
36907	V	EPA 6010	88	76 - 124
36907	Zn	EPA 6010	91	76 - 124
36908	Se	EPA 7740	66	76 - 124
36908	Pb	EPA 7421	84	76 - 124

Q.C. Information for Batch # 36907 For Report Number :92951

Sample Batch Information

Analysis : Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni Sb Tl V Zn

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36907BLANK		03/18/98	0905	DCM	TRACE	03/19/98	1040	MCW	ICP2
36907LCS		03/18/98	0905	DCM	TRACE	03/19/98	1044	MCW	ICP2
36907LCSD		03/18/98	0905	DCM	TRACE	03/19/98	1047	MCW	ICP2
92951-2MS		03/18/98	0905	DCM	TRACE	03/19/98	1051	MCW	ICP2
92951-2MSD		03/18/98	0905	DCM	TRACE	03/19/98	1103	MCW	ICP2
92693-9PDS		03/18/98	0905	DCM	TRACE	03/19/98	1106	MCW	ICP2
92951-3DUP		03/18/98	0905	DCM	TRACE	03/19/98	1110	MCW	ICP2
92693-9		03/18/98	0905	DCM	TRACE	03/19/98	1114	MCW	ICP2
92719-3		03/18/98	0905	DCM	TRACE	03/19/98	1133	MCW	ICP2
92719-4		03/18/98	0905	DCM	TRACE	03/19/98	1137	MCW	ICP2
92719-5		03/18/98	0905	DCM	TRACE	03/19/98	1141	MCW	ICP2
92884-1		03/18/98	0905	DCM	TRACE	03/19/98	1156	MCW	ICP2
92822-2		03/18/98	0905	DCM	TRACE	03/19/98	1200	MCW	ICP2
92822-1		03/18/98	0905	DCM	TRACE	03/19/98	1200	MCW	ICP2
92884-2		03/18/98	0905	DCM	TRACE	03/19/98	1208	MCW	ICP2
92951-1		03/18/98	0905	DCM	TRACE	03/19/98	1219	MCW	ICP2
92951-2		03/18/98	0905	DCM	TRACE	03/19/98	1118	MCW	ICP2
92951-3		03/18/98	0905	DCM	TRACE	03/19/98	1122	MCW	ICP
92951-4		03/18/98	0905	DCM	TRACE	03/19/98	1223	MCW	ICP
92951-5		03/18/98	0905	DCM	TRACE	03/19/98	1227	MCW	ICP2
92724-1		03/18/98	0905	DCM	TRACE	03/19/98	1231	MCW	ICP2
92813-1		03/18/98	0905	DCM	TRACE	03/19/98	1235	MCW	ICP2
92813-10		03/18/98	0905	DCM	TRACE	03/19/98	1238	MCW	ICP2
92839-3		03/18/98	0905	DCM	TRACE	03/19/98	1242	MCW	ICP2
92719-3D		03/18/98	0905	DCM	TRACE	03/19/98	1145	MCW	ICP2
92719-4D		03/18/98	0905	DCM	TRACE	03/19/98	1149	MCW	ICP2
92719-5D		03/18/98	0905	DCM	TRACE	03/19/98	1153	MCW	ICP2
92719-3MSD		03/18/98	0905	DCM	TRACE	03/19/98	1250	MCW	ICP2
92719-3DUP		03/18/98	0905	DCM	TRACE	03/19/98	1254	MCW	ICP2
92719-3MS		03/18/98	0905	DCM	TRACE	03/19/98	1246	MCW	ICP2
QC BLANK		03/18/98	0905	DCM	TRACE	03/19/98	1305	MCW	ICP2

Q.C. Information for Batch # 36908 For Report Number :92951

Sample Batch Information
Analysis : Se, Pb

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
36908BLANK	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
36908LCS	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
36908LCSD	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92951-4MS	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92951-4MSD	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92951-3PDS	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92951-5DUP	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92887-3	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92887-4D	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92887-5	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92887-6D	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-1	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-10D	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-2D	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-3	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-4D	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-5	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-6D	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-7	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-8D	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92889-9	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92951-1	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92951-2	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92951-3	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92951-4	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
92951-5	As	03/19/98	0900	KSP	GFAA	03/20/98	1523	MLR	AA1
36908BLANK	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
36908LCS	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
36908LCSD	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92951-4MS	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92951-4MSD	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92951-3PDS	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92951-5DUP	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92887-3	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92887-4D	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92887-5	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92887-6D	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-1	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-10D	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-2D	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-3	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-4D	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-5	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-6D	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-7	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-8D	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92889-9	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92951-1	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1

Q.C. Information for Batch # 36908 For Report Number :92951

Sample Batch Information
Analysis : Se, Pb

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
92951-2	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92951-3	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92951-4	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
92951-5	Se	03/19/98	0900	KSP	GFAA	03/23/98	1049	MLR	AA1
36908BLANK	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
36908LCS	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
36908LCSD	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92951-4MS	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92951-4MSD	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92951-3PDS	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92951-5DUP	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92887-3	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92887-4D	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92887-5	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92887-6D	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-1	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-10D	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-2D	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-3	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-4D	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-5	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-6D	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-7	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-8D	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92889-9	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92951-1	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92951-2	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92951-3	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92951-4	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2
92951-5	Pb	03/19/98	0900	KSP	GFAA	03/23/98	1157	MLR	AA2

TAB

Appendix F-5

WATER SAMPLE FROM FRAC TANK 3

Dated Collected 04/27/98

ASI
ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

04 May, 1998

Case Narrative Report 94194

The samples were collected on 21 April, 1998 and received by ASI on 22 April, 1998. Additional sample was requested by ASI; this sample was collected on 27 April, 1998 and received by ASI on 28 April, 1998. As indicated on the Chain of Custody, custody seals were not present. All other conditions for proper sample receipt were met. The samples were logged into the LIMS for the following analyses as per client request: BNA (EPA 8270C), PEST (EPA 8081A), VOA (EPA 8260B), Mercury (EPA 7470), Lead (EPA 7421), Selenium (EPA 7740), Thallium (EPA 7841), Metals (EPA 6010B), Reactive CN (EPA 7.3.3 2), Reactive Sulfide (EPA 7.3.4.2), Ignitability (EPA 1010) and pH (EPA 9040) Holding times for sample preparation and analysis were met with the exception of pH which should be analyzed in the field.

BNA analysis (EPA 8270C) gave a slightly low 1,2,4-Trichlorobenzene recovery and high 1,4-Dichlorobenzene and 1,2,4-Trichlorobenzene values. 94194-1 was analyzed straight as well as at a dilution factor of ten, both analyses gave acceptable recoveries. All other BNA spike and surrogate recoveries were acceptable.

PEST analysis (EPA 8081A) met all data quality objectives.

VOA analysis (EPA 8260B) gave a low MSD and high MSRPD for 1,1-Dichloroethene 94194-1 was analyzed straight as well as at a dilution factor of five, both analyses gave acceptable recoveries. All other VOA spike and surrogate recoveries were acceptable.

Mercury analysis (EPA 7470) met all data quality objectives.

Lead analysis (EPA 7421) met all data quality objectives.

Selenium analysis (EPA 7740) met all data quality objectives

Thallium analysis (EPA 7841) met all data quality objectives

Metals analysis (EPA 6010B) met all data quality objectives with the exception of low PDS recoveries for Ag and Mn The detection limits were raised for Ca and Na, but the sample produced hits which were higher than the elevated detection limits.

Reactive CN analysis (EPA 7.3.3.2) met all data quality objectives.

Reactive Sulfide analysis (EPA 7 3.4.2) met all data quality objectives.

Ignitability analysis (EPA 1010) met all data quality objectives.

pH analysis (EPA 9040) met all data quality objectives

Christina A Perfetti
Quality Assurance

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

May 4, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 94194-1

Sample Description

Water, DDMT\Dunn Field Memphis TN, Project #20022, Tank 3, 04/21/98, 16:52, received 04/22/98

RESULTS

	Result	Detection Limit
Ignitability (°F) (EPA 1010)	>212	70
pH (laboratory) (EPA 9040)	8.04	-
Reactive Cyanide (mg/l) (EPA 7.3.3.2)	BDL	1
Reactive Sulfide (mg/l) (EPA 7.3.4.2)	BDL	5

Target Analyte List - Metals

Metals	(mg/l)	(mg/l)
Total Aluminum (Al) (EPA 6010)	100	0.2
Total Antimony (Sb) (EPA 6010)	BDL	0.05
Total Arsenic (As) (EPA 6010)	0.09	0.01
Total Barium (Ba) (EPA 6010)	23	0.01
Total Beryllium (Be) (EPA 6010)	BDL	0.005
Total Cadmium (Cd) (EPA 6010)	BDL	0.005
Total Calcium (Ca) (EPA 6010)	97	1.7
Total Chromium (Cr) (EPA 6010)	0.17	0.01
Total Cobalt (Co) (EPA 6010)	0.17	0.05
Total Copper (Cu) (EPA 6010)	1.6	0.02
Total Iron (Fe) (EPA 6010)	500	0.2
Total Lead (Pb) (EPA 7421)	0.47	0.003

BDL - Below Detection Limit

OHM Remediation Services Corp.
age 2 of 5

May 4, 1998
Report No. 94194-1

Water, DDMT\Dunn Field Memphis TN, Project #20022, Tank 3, 04/21/98, 16:52, received 04/22/98

RESULTS

Metals	Result (mg/l)	Detection Limit (mg/l)
Total Magnesium (Mg)(EPA 6010)	20	0.05
Total Manganese (Mn)(EPA 6010)	6.0	0.015
Total Mercury (Hg)(EPA 7470)	0.016	0.0002
Total Nickel (Ni)(EPA 6010)	0.33	0.02
Total Potassium (K)(EPA 6010)	7.6	0.2
Total Selenium (Se)(EPA 7740)	BDL	0.005
Total Silver (Ag)(EPA 6010)	BDL	0.01
Total Sodium (Na)(EPA 6010)	26	0.09
Total Thallium (Tl)(EPA 7841)	BDL	0.002
Total Vanadium (V)(EPA 6010)	0.34	0.05
Total Zinc (Zn)(EPA 6010)	1.1	0.02
Target Compound List		
Volatile Organics (EPA 8260)	(ug/l)	(ug/l)
Acetone	640	10
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	BDL	10
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp. May 4, 1998
 Report No. 94194-1

Water, DDMT\Dunn Field Memphis TN, Project #20022, Tank 3, 04/21/98, 16:52, received 04/22/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	BDL	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	BDL	10
Vinyl chloride	BDL	10
Xylenes	BDL	10
Acid Extractable Organics (EPA 8270)	**(ug/l)**	**(ug/l)**
4-Chloro-3-methylphenol	BDL	10
2-Chlorophenol	BDL	10
2,4-Dichlorophenol	BDL	10
2,4-Dimethylphenol	BDL	10
4,6-Dinitro-2-methylphenol	BDL	20
2,4-Dinitrophenol	BDL	20
2-Methylphenol	BDL	10
4-Methylphenol	BDL	10
2-Nitrophenol	BDL	10
4-Nitrophenol	BDL	20
Pentachlorophenol	BDL	20
Phenol	310	10
2,4,5-Trichlorophenol	BDL	10
2,4,6-Trichlorophenol	BDL	10
Base/Neutral Extractable Organics (EPA 8270)	**(ug/l)**	**(ug/l)**
Acenaphthene	BDL	10
Acenaphthylene	BDL	10
Anthracene	BDL	10
Benzo(a)anthracene	17	10
Benzo(b)fluoranthene	14	10
Benzo(k)fluoranthene	18	10
Benzo(a)pyrene	13	10
Benzo(ghi)perylene	BDL	10
Benzyl butyl phthalate	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp.
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May 4, 1998
Report No. 94194-1

Water, DDMT\Dunn Field Memphis TN, Project #20022, Tank 3, 04/21/98, 16:52, received 04/22/98

RESULTS

Base/Neutral Extractable Organics (EPA 8270)	Result (ug/l)	Detection Limit (ug/l)
Bis(2-chloroethyl)ether	BDL	10
Bis(2-chloroethoxy)methane	BDL	10
Bis(2-ethylhexyl)phthalate	95	10
Bis(2-chloroisopropyl)ether	BDL	10
4-Bromophenyl phenyl ether	BDL	10
Carbazole	BDL	10
4-Chloroaniline	BDL	10
2-Chloronaphthalene	BDL	10
4-Chlorophenyl phenyl ether	BDL	10
Chrysene	15	10
Dibenzo(a,h)anthracene	BDL	10
Dibenzofuran	BDL	10
Di-n-butylphthalate	BDL	10
1,3-Dichlorobenzene	BDL	10
1,2-Dichlorobenzene	BDL	10
1,4-Dichlorobenzene	BDL	10
3,3'-Dichlorobenzidine	BDL	10
Diethylphthalate	BDL	10
Dimethylphthalate	BDL	10
2,4-Dinitrotoluene	BDL	10
2,6-Dinitrotoluene	BDL	10
Di-n-octylphthalate	BDL	10
Fluoranthene	34	10
Fluorene	BDL	10
Hexachlorobenzene	BDL	10
Hexachlorobutadiene	BDL	10
Hexachlorocyclopentadiene	BDL	10
Hexachloroethane	BDL	10
Indeno(1,2,3-cd)pyrene	BDL	10
Isophorone	BDL	10
2-Methylnaphthalene	BDL	10
2-Nitroaniline	BDL	20
3-Nitroaniline	BDL	20
4-Nitroaniline	BDL	20
Naphthalene	13	10
Nitrobenzene	BDL	10
N-Nitrosodiphenylamine	BDL	10
N-Nitrosodi-n-propylamine	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp. May 4, 1998
 Report No. 94194-1

Water, DDMT\Dunn Field Memphis TN, Project #20022, Tank 3, 04/21/98, 16:52, received 04/22/98

RESULTS

Base/Neutral Extractable Organics (EPA 8270)	Result (ug/l)	Detection Limit (ug/l)
Phenanthrene	20	10
Pyrene	26	10
1,2,4-Trichlorobenzene	BDL	10
Pesticides (EPA 8081)	**(ug/l)**	**(ug/l)**
Aldrin	BDL	0.10
BHC-alpha	BDL	0.10
BHC-beta	BDL	0.10
BHC-delta	BDL	0.10
BHC-gamma (Lindane)	BDL	0.10
Chlordane-alpha	BDL	0.10
Chlordane-gamma	BDL	0.10
4,4'-DDD	BDL	0.20
4,4'-DDE	BDL	0.20
4,4'-DDT	BDL	0.20
Dieldrin	BDL	0.20
Endosulfan I	BDL	0.10
Endosulfan II	BDL	0.20
Endosulfan sulfate	BDL	0.20
Endrin	BDL	0.20
Endrin aldehyde	BDL	0.20
Endrin ketone	BDL	0.20
Heptachlor	BDL	0.10
Heptachlor epoxide	BDL	0.10
Methoxychlor	BDL	0.30
Toxaphene	BDL	2.0

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christine L. Nufer
Quality Assurance

cc: Mr. Steve Offner

ASI
ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
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LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

May 4, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 94194-2

Sample Description

Water, DDMT\Dunn Field Memphis TN, Project #20022, Trip Blank, received 04/22/98

RESULTS

Target Compound List

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
Acetone	BDL	10
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	BDL	10
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp.
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May 4, 1998
Report No. 94194-2

Water, DDMT\Dunn Field Memphis TN, Project #20022, Trip Blank, received 04/22/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/l)	Detection Limit (ug/l)
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	BDL	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	BDL	10
Vinyl chloride	BDL	10
Xylenes	BDL	10

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina C. Mylott
Quality Assurance

cc: Mr. Steve Offner

Analytical Services Inc. Batch QC
For Report Number :94194
Base Neutrals / Acids

Matrix : Aqueous Batch # 37940 Method : EPA 8270

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
Phenol	30	35	16	12 - 89	0 - 42
2-Chlorophenol	61	62	1	27 - 123	0 - 40
1,4-Dichlorobenzene	43	46	6	36 - 97	0 - 28
N-Nitrosodipropylamine	74	73	1	41 - 116	0 - 38
1,2,4-Trichlorobenzene	57	56	1	44 - 142	0 - 28
4-Chloro-3-methylphenol	67	66	2	23 - 97	0 - 42
Acenaphthene	81	84	4	46 - 118	0 - 31
2,4-Dinitrotoluene	51	37	31	24 - 96	0 - 38
4-Nitrophenol	24	25	2	10 - 80	0 - 50
Pentachlorophenol	67	42	47	9 - 103	0 - 50
Pyrene	90	114	23	26 - 127	0 - 31

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
[redacted]nol	39	45	16	12 - 89	0 - 42
2-Chlorophenol	50	58	16	27 - 123	0 - 40
1,4-Dichlorobenzene	36	49	32	36 - 97	0 - 28
N-Nitrosodipropylamine	76	88	15	41 - 116	0 - 38
1,2,4-Trichlorobenzene	43	59	32	44 - 142	0 - 28
4-Chloro-3-methylphenol	61	66	9	23 - 97	0 - 42
Acenaphthene	71	86	19	46 - 118	0 - 31
2,4-Dinitrotoluene	48	61	23	24 - 96	0 - 38
4-Nitrophenol	26	26	1	10 - 80	0 - 50
Pentachlorophenol	49	58	18	9 - 103	0 - 50
Pyrene	92	106	14	26 - 127	0 - 31

Analytical Services Inc. Batch QC
Surrogate Recovery
Base Neutrals / Acids

Matrix : Aqueous Batch # 37940 Method : EPA 8270

% Recovery Objectives

S1	2-Fluorophenol	21 - 100
S2	Phenol-d5	10 - 94
S3	Nitrobenzene-d5	35 - 114
S4	2-Fluorobiphenyl	43 - 116
S5	2,4,6-Tribromophenol	10 - 123
S6	Terphenyl-d14	33 - 141

Sample	File	S1	S2	S3	S4	S5	S6
37940BLK	A8930	23	20	36	46	37	54
37940LCS	A8955	39	25	68	81	105	102
37940LCSD	A8932	47	34	64	79	70	112
94014-1MS	A8961	39	33	61	67	88	97
94014-1MSD	A8962	47	41	75	82	90	103
94014-1	A8960	31	23	69	78	87	98
94014-2	A8963	25	16	60	68	74	84
94014-3	A8964	39	24	73	87	78	79
94014-4	A8965	25	19	47	61	61	66
94014-5	A8966	34	21	83	99	88	89
94014-6	A8967				1		2
94014-7	A8968	32	23	51	63	72	85
94014-6RR	B5415	42	26	61	64	75	81
94009	B5342	51	32	62	64	73	77
94194-1	A9007	31	19	65	58	56	48
94226	A9008			35	45		49
^^Note: BN only							
94194-1D	A9043	25	23	63	93	39	51
^^Note: 1:10 DILUTION							
94282	A9042			75	96		61
^^Note: BN only							
94329	A9084			38	20		35
^^Note: BN ONLY;MATRIX EFFECT							
94360-2	B5505			78	75		61
^^Note: PAH only							
94368	B5504		2	49	55	1	65
^^Note: RA for surrogate							
94368RA	B5526		2	46	54	1	81
94368RR	B5527	27	17	35	49	36	75

Analytical Services Inc. Batch QC
Surrogate Recovery
Base Neutrals / Acids

Matrix : Aqueous Batch # 37940 Method : EPA 8270

% Recovery Objectives

S1	2-Fluorophenol	21 - 100
S2	Phenol-d5	10 - 94
S3	Nitrobenzene-d5	35 - 114
S4	2-Fluorobiphenyl	43 - 116
S5	2,4,6-Tribromophenol	10 - 123
S6	Terphenyl-d14	33 - 141

Sample	File	S1	S2	S3	S4	S5	S6
94443	B5528			71	65		128
^^Note: BN ONLY							
94510-11	A9111			58	81		79
^^Note: BN ONLY							

Blank Results Information
Base Neutrals / Acids Method : EPA 8270

Analyte	Blank Result	Detection Limit
4-Chloro-3-methylphenol	BDL	10
2-Chlorophenol	BDL	10
2,4-Dichlorophenol	BDL	10
2,4-Dimethylphenol	BDL	10
4,6-Dinitro-2-methylphenol	BDL	20
2,4-Dinitrophenol	BDL	20
2-Methylphenol	BDL	10
4-Methylphenol	BDL	10
2-Nitrophenol	BDL	10
4-Nitrophenol	BDL	20
Pentachlorophenol	BDL	20
Phenol	BDL	10
2,4,5-Trichlorophenol	BDL	10
2,4,6-Trichlorophenol	BDL	10
Acenaphthene	BDL	10
Acenaphthylene	BDL	10
Anthracene	BDL	10
Benzo(a)anthracene	BDL	10
Benzo(b)fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10
Benzo(a)pyrene	BDL	10
Benzo(ghi)perylene	BDL	10
Benzyl butyl phthalate	BDL	10
Bis(2-chloroethyl)ether	BDL	10
Bis(2-chloroethoxy)methane	BDL	10
Bis(2-ethylhexyl)phthalate	BDL	10
Bis(2-chloroisopropyl)ether	BDL	10
4-Bromophenyl phenyl ether	BDL	10
Carbazole	BDL	10
4-Chloroaniline	BDL	10
2-Chloronaphthalene	BDL	10
4-Chlorophenyl phenyl ether	BDL	10
Chrysene	BDL	10
Dibenzo(a,h)anthracene	BDL	10
Dibenzofuran	BDL	10
Di-n-butylphthalate	BDL	10
1,3-Dichlorobenzene	BDL	10
1,2-Dichlorobenzene	BDL	10
1,4-Dichlorobenzene	BDL	10
3,3'-Dichlorobenzidine	BDL	10
Diethylphthalate	BDL	10
Dimethylphthalate	BDL	10
2,4-Dinitrotoluene	BDL	10
2,6-Dinitrotoluene	BDL	10
Di-n-octylphthalate	BDL	10
Fluoranthene	BDL	10
Fluorene	BDL	10
Hexachlorobenzene	BDL	10
Hexachlorobutadiene	BDL	10

Q.C. Information for Batch # 37940 Printed: 05/04/98 18:04:05

Blank Results Information
Base Neutrals / Acids Method : EPA 8270

Analyte	Blank Result	Detection Limit
Hexachlorocyclopentadiene	BDL	10
Hexachloroethane	BDL	10
Indeno(1,2,3-cd)pyrene	BDL	10
Isophorone	BDL	10
2-Methylnaphthalene	BDL	10
2-Nitroaniline	BDL	20
3-Nitroaniline	BDL	20
4-Nitroaniline	BDL	20
Naphthalene	BDL	10
Nitrobenzene	BDL	10
N-Nitrosodiphenylamine	BDL	10
N-Nitrosodi-n-propylamine	BDL	10
Phenanthrene	BDL	10
Pyrene	BDL	10
1,2,4-Trichlorobenzene	BDL	10

Q.C. Information for Batch # 37940 Printed: 05/04/98 18:04:05

Sample Batch Information
Base Neutrals / Acids Method : EPA 8270

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
37940BLK	04/17/98	0900	JW/SB		04/17/98	2040	RAC	5970
37940LCS	04/17/98	0900	JW/SB		04/17/98	1222	RAC	5970
37940LCSD	04/17/98	0900	JW/SB		04/17/98	2155	RAC	5970
94014-1	04/17/98	0900	JW/SB		04/18/98	1530	RAC	5970
94014-1MS	04/17/98	0900	JW/SB		04/18/98	1607	RAC	5970
94014-1MSD	04/17/98	0900	JW/SB		04/18/98	1645	RAC	5970
94014-2	04/17/98	0900	JW/SB		04/18/98	1722	RAC	5970
94014-3	04/17/98	0900	JW/SB		04/18/98	1800	RAC	5970
94014-4	04/17/98	0900	JW/SB		04/18/98	1837	RAC	5970
94014-5	04/17/98	0900	JW/SB		04/18/98	1915	RAC	5970
94014-6	04/17/98	0900	JW/SB		04/18/98	1952	RAC	5970
94014-7	04/17/98	0900	JW/SB		04/18/98	2030	RAC	5970
94009	04/17/98	0900	JW/SB		04/17/98	2024	TAS	5971
94014-6RR	04/20/98	1000	JW/SB		04/20/98	1856	TAS	5971
94194-1	04/23/98	0900	SB/LR		04/23/98	1921	RAC	5970
94226	04/23/98	0900	SB/LR	BN ONLY	04/23/98	1955	RAC	5970
94282	04/24/98	1100	SB/LR	BN ONLY	04/24/98	1733	RAC	5970
94194-1D	/ /				04/27/98	1808	RAC	5970
94329	04/24/98	0900	JW/SB		04/27/98	1828	TAS	5970
94360-2	04/30/98				04/29/98	1732	RAC	5971
94368	04/30/98				04/29/98	1656	RAC	5971
94443	04/30/98				04/30/98	1751	RAC	5971
94368RA	/ /				04/30/98	1639	RAC	5971
94368RR	/ /				04/30/98	1715	RAC	5971
94510-11	/ /				05/01/98	2102	TAS	5970

Analytical Services Inc. Batch QC
For Report Number :94194
Organochlorine Pesticides

Matrix : Aqueous Batch # 37973 Method : EPA 8081

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
BHC-gamma (Lindane)	52	56	8	32 - 127	0 - 40
Heptachlor	38	54	34	34 - 111	0 - 40
Aldrin	46	53	13	42 - 122	0 - 40
Dieldrin	50	56	11	36 - 146	0 - 40
Endrin	50	57	11	30 - 147	0 - 40
4,4'-DDT	52	59	12	25 - 160	0 - 40

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
BHC-gamma (Lindane)	55	57	3	32 - 127	0 - 40
Heptachlor	55	57	3	34 - 111	0 - 40
Aldrin	55	56	3	42 - 122	0 - 40
Dieldrin	55	57	4	36 - 146	0 - 40
Endrin	56	58	5	30 - 147	0 - 40
[redacted]-DDT	57	60	5	25 - 160	0 - 40

Analytical Services Inc. Batch QC
Surrogate Recovery
Organochlorine Pesticides

Matrix : Aqueous Batch # 37973 Method : EPA 8081

% Recovery Objectives

S1	Dibutylchlorendate	14 - 161
S2	Tetrachloro-m-xylene	47 - 113
S3	Decachlorobiphenyl	10 - 139

Sample	File	S1	S2	S3	S4	S5	S6
37973BLK	042198994R	100	53	59			
37973LCS	042198005R	149	69	61			
37973LCSD	042198006R	102	56	44			
94009	042198007R	118	47	39			
94014-1	042198008R	104	58	65			
94014-2	042198009R	100	55	52			
94014-2MS	042198010R	93	63	43			
94014-2	042198011R	100	64	44			
94014-3	042198012R	116	62	81			
94014-4	042198013R	50	21	36			
94014-5	042198015R	118	55	82			
94014-6	042198016R	104	60	75			
94014-7	042198017R	143	64	111			
94014-2MSD	042198011R	100	64	44			
94194-1	042398016R	127	62	75			
94368	042998012R	65	55	78			

Q.C. Information for Batch # 37973 Printed: 05/04/98 18:04:06

Blank Results Information
Organochlorine Pesticides Method : EPA 8081

Analyte	Blank Result	Detection Limit
Aldrin	BDL	0.10
BHC-alpha	BDL	0.10
BHC-beta	BDL	0.10
BHC-delta	BDL	0.10
BHC-gamma	BDL	0.10
Chlordane-alpha	BDL	0.10
Chlordane-gamma	BDL	0.10
4,4'-DDD	BDL	0.20
4,4'-DDE	BDL	0.20
4,4'-DDT	BDL	0.20
Dieldrin	BDL	0.20
Endosulfan I	BDL	0.10
Endosulfan II	BDL	0.20
Endosulfan sulfate	BDL	0.20
Endrin	BDL	0.20
Endrin aldehyde	BDL	0.20
Endrin ketone	BDL	0.20
Heptachlor	BDL	0.10
Heptachlor epoxide	BDL	0.10
Methoxychlor	BDL	0.30
Toxaphene	BDL	2.0

Sample Batch Information
Organochlorine Pesticides Method : EPA 8081

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
37973BLK	04/20/98	1500	JW/SB		04/21/98	1557	JQZ	GC-3
37973LCS	04/20/98	1500	JW/SB		04/21/98	1651	JQZ	GC-3
37973LCSD	04/20/98	1500	JW/SB		04/21/98	1651	JQZ	GC-3
94009	04/20/98	1500	JW/SB		04/21/98	1718	JQZ	GC-3
94014-1	04/20/98	1500	JW/SB		04/21/98	1745	JQZ	GC-3
94014-2	04/20/98	1500	JW/SB		04/21/98	1906	JQZ	GC-3
94014-2MS	04/20/98	1500	JW/SB		04/21/98	1839	JQZ	GC-3
94014-2MSD	04/20/98	1500	JW/SB		04/21/98	1906	JQZ	GC-3
94014-3	04/20/98	1500	JW/SB		04/21/98	1934	JQZ	GC-3
94014-4	04/20/98	1500	JW/SB		04/21/98	2001	JQZ	GC-3
94014-5	04/20/98	1500	JW/SB		04/21/98	2055	JQZ	GC-3
94014-6	04/20/98	1500	JW/SB		04/21/98	2122	JQZ	GC-3
94014-7	04/20/98	1500	JW/SB		04/21/98	2216	JQZ	GC-3
94368	04/29/98	0900	JW/SB		04/30/98	1736	JQZ	GC-3
94194-1	04/23/98	0900	LR/SB		04/23/98	1710	JQZ	GC-3

Analytical Services Inc. Batch QC
For Report Number :94194
Volatile Organics

Matrix : Aqueous Batch # 38015 Method : EPA 8260

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	82	73	12	61 - 145	0 - 14
Trichloroethene	89	88	1	71 - 120	0 - 14
Benzene	93	93	0	76 - 127	0 - 11
Toluene	91	93	2	76 - 125	0 - 13
Chlorobenzene	86	90	4	75 - 130	0 - 13

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	74	57	27	61 - 145	0 - 14
Trichloroethene	105	105	0	71 - 120	0 - 14
Benzene	96	96	1	76 - 127	0 - 11
Toluene	85	87	3	76 - 125	0 - 13
Chlorobenzene	98	98	0	75 - 130	0 - 13

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Aqueous Batch # 38015 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	76 - 119
S2	Toluene-d8	88 - 110
S3	Ethylbenzene-d10	75 - 115
S4	4-Bromofluorobenzene	86 - 120

Sample	File	S1	S2	S3	S4	S5	S6
38015BLK	B4937	100	104	94	100		
38015LCS	B4935	94	105	97	101		
38015LCSD	B4936	99	102	95	97		
93910-10DUP	B4940	95	100	99	101		
93910-10	A2730	105	102	100	69		
93965	B4941	104	99	98	99		
94073	B4942	103	99	94	95		
94050-12	B4943	101	98	99	101		
94050-16	B4944	107	99	96	96		
93930-1	B4951	107	95	93	96		
93930-2	B4952	103	98	99	91		
93930-3	B4953	107	98	102	104		
93930-4	B4954	103	98	94	96		
93930-5	B4955	108	96	93	94		
93932-3	B4956	109	96	95	90		
93932-3MS	B4957	97	93	102	94		
93932-3MSD	B4958	118	94	96	99		
93932-1	C2496	111	97	97	99		
93932-2	C2497	105	95	100	100		
94194-1	B4964	100	99	96	90		
94194-2	B4965	105	98	97	94		
94033	B4968	102	100	96	92		
94000-1	B4969	105	97	99	94		
94000-2	B4970	102	100	99	95		
94000-3	B4971	105	100	100	94		
94000-5	B4972	105	100	97	93		
94194-1D	B4976	111	97	90	93		

^^Note: 1:5 DILUTION

Q.C. Information for Batch # 38015 Printed: 05/04/98 18:04:07

Blank Results Information
Volatile Organics Method : EPA 8260

Analyte	Blank Result	Detection Limit
Acetone	BDL	10
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	10
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	BDL	10
1,2-Dichloroethene	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	BDL	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	BDL	10
Vinyl chloride	BDL	10
Xylenes	BDL	10

Q.C. Information for Batch # 38015 Printed: 05/04/98 18:04:07

Sample Batch Information
Volatile Organics Method : EPA 8260

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
38015BLK	/ /				04/22/98	1528	LLP	VOA2
38015LCS	/ /				04/22/98	1348	LLP	VOA2
38015LCSD	/ /				04/22/98	1504	LLP	VOA2
93910-10DUP	/ /				04/22/98	1659	LLP	VOA2
93910-10	/ /				04/22/98	0000	RFA	VOA1
93965	/ /				04/22/98	1724	LLP	VOA2
94073	/ /				04/22/98	1749	LLP	VOA2
94050-12	/ /				04/22/98	1812	LLP	VOA2
94050-16	/ /				04/22/98	1836	LLP	VOA2
93930-1	/ /				04/22/98	2125	LLP	VOA2
93930-2	/ /				04/22/98	2149	LLP	VOA2
93930-3	/ /				04/22/98	2214	LLP	VOA2
93930-4	/ /				04/22/98	2238	LLP	VOA2
93930-5	/ /				04/22/98	2315	LLP	VOA2
93932-3	/ /				04/22/98	2352	LLP	VOA2
93932-3MS	/ /				04/23/98	0029	LLP	VOA2
93932-3MSD	/ /				04/23/98	0107	LLP	VOA2
93932-1	/ /				04/23/98	0056	LLP	VOA3
93932-2	/ /				04/23/98	0121	LLP	VOA3
94194-1	/ /				04/23/98	1038	RFA	VOA2
94194-2	/ /				04/23/98	1102	RFA	VOA2
94033	/ /				04/23/98	1216	RFA	VOA2
94000-1	/ /				04/23/98	1241	RFA	VOA2
94000-2	/ /				04/23/98	1305	RFA	VOA2
94000-5	/ /				04/23/98	1354	RFA	VOA2
94194-1D	/ /				04/23/98	1546	RFA	VOA2
94000-3	/ /				04/23/98	1330	RFA	VOA2

Analytical Services Inc. Batch QC
For Report Number :94194

QC Batch General Information

Batch Number	Analyte	Analysis Method	Matrix		Blank Result	Prep. Method
37528	Hg	EPA 7470	Aqueous	<	0.0002	
37739	Pb	EPA 7421	Aqueous	<	0.0030	
37739	Se	EPA 7740	Aqueous	<	0.0050	
37739	Tl	EPA 7841	Aqueous	<	0.0020	
37942	React S2	EPA 7.3.4.2	Aq/Soil	<	5.0000	
38045	Ag	EPA 6010	Aqueous	<	0.0100	
^^Note : Batch passes on LCS/LCSD/MS/MSD						
38045	Al	EPA 6010	Aqueous	<	0.0200	
38045	As	EPA 6010	Aqueous	<	0.0100	
38045	Ba	EPA 6010	Aqueous	<	0.0100	
38045	Be	EPA 6010	Aqueous	<	0.0030	
38045	Ca	EPA 6010	Aqueous	<	1.7000	
38045	Cd	EPA 6010	Aqueous	<	0.0050	
38045	Co	EPA 6010	Aqueous	<	0.0400	
38045	Cr	EPA 6010	Aqueous	<	0.0100	
38045	Cu	EPA 6010	Aqueous	<	0.0200	
38045	Fe	EPA 6010	Aqueous	<	0.0200	
^^Note : Batch passes on LCS/LCSD/MS/MSD						
38045	K	EPA 6010	Aqueous	<	0.2000	
38045	Mg	EPA 6010	Aqueous	<	0.0500	
38045	Mn	EPA 6010	Aqueous	<	0.0150	
^^Note : Batch passes on LCS/LCSD/MS/MSD						
38045	Na	EPA 6010	Aqueous	<	0.0900	
38045	Ni	EPA 6010	Aqueous	<	0.0100	
38045	Sb	EPA 6010	Aqueous	<	0.0060	
38045	V	EPA 6010	Aqueous	<	0.0200	
38045	Zn	EPA 6010	Aqueous	<	0.0200	
38098	pH	EPA 9040	Aqueous		0.0000	
38111	Ign	EPA 1010	Aq/Solid		0.0000	
38163	React. CN	EPA 7.3.3.2	Aq/Soil	<	1.0000	

Analytical Services Inc. Batch QC
For Report Number :94194

Lab Control Information

Batch Number	Analyte	Method	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
37528	Hg	EPA 7470	93	96	3	76 - 124	0 - 20
37739	Pb	EPA 7421	86	85	1	76 - 124	0 - 20
37739	Se	EPA 7740	115	120	4	76 - 124	0 - 20
37739	Tl	EPA 7841	111	113	2	76 - 124	0 - 20
37942	React S2	EPA 7.3.4.2	98	106	8	60 - 140	0 - 40
38045	Ag	EPA 6010	97	96	1	76 - 124	0 - 20
38045	Al	EPA 6010	94	93	1	76 - 124	0 - 20
38045	As	EPA 6010	100	100	0	76 - 124	0 - 20
38045	Ba	EPA 6010	96	95	1	76 - 124	0 - 20
38045	Be	EPA 6010	94	93	1	76 - 124	0 - 20
38045	Ca	EPA 6010	96	94	2	76 - 124	0 - 20
38045	Cd	EPA 6010	93	93	0	76 - 124	0 - 20
38045	Co	EPA 6010	91	91	0	76 - 124	0 - 20
38045	Cr	EPA 6010	93	92	1	76 - 124	0 - 20
38045	Cu	EPA 6010	94	93	1	76 - 124	0 - 20
38045	Fe	EPA 6010	93	92	1	76 - 124	0 - 20
38045	K	EPA 6010	110	110	0	76 - 124	0 - 20
38045	Mg	EPA 6010	98	96	2	76 - 124	0 - 20
38045	Mn	EPA 6010	95	94	1	76 - 124	0 - 20
38045	Na	EPA 6010	120	110	9	76 - 124	0 - 20
38045	Ni	EPA 6010	92	92	0	76 - 124	0 - 20
38045	Sb	EPA 6010	97	97	0	76 - 124	0 - 20
38045	V	EPA 6010	110	110	0	76 - 124	0 - 20
38045	Zn	EPA 6010	93	96	3	76 - 124	0 - 20
38098	pH	EPA 9040	98	98	0	80 - 120	0 - 20
38163	React. CN	EPA 7.3.3.2	98	95	3	75 - 125	0 - 30

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
37528	Hg	EPA 7470	99	103	4	76 - 124	0 - 20
37739	Pb	EPA 7421	104	97	7	76 - 124	0 - 20
37739	Se	EPA 7740	114	100	13	76 - 124	0 - 20
37739	Tl	EPA 7841	83	79	5	76 - 124	0 - 20
38045	Ag	EPA 6010	91	91	0	76 - 124	0 - 20
38045	Al	EPA 6010	89	89	0	76 - 124	0 - 20
38045	As	EPA 6010	96	96	0	76 - 124	0 - 20
38045	Ba	EPA 6010	91	90	1	76 - 124	0 - 20
38045	Be	EPA 6010	90	89	1	76 - 124	0 - 20
38045	Ca	EPA 6010	88	91	3	76 - 124	0 - 20
38045	Cd	EPA 6010	88	88	0	76 - 124	0 - 20
38045	Co	EPA 6010	85	85	0	76 - 124	0 - 20
38045	Cr	EPA 6010	88	88	0	76 - 124	0 - 20
38045	Cu	EPA 6010	89	92	3	76 - 124	0 - 20
38045	Fe	EPA 6010	85	87	2	76 - 124	0 - 20

Analytical Services Inc. Batch QC
For Report Number :94194

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
38045	K	EPA 6010	110	120	9	76 - 124	0 - 20
38045	Mg	EPA 6010	91	92	1	76 - 124	0 - 20
38045	Mn	EPA 6010	88	89	1	76 - 124	0 - 20
38045	Na	EPA 6010	110	120	9	76 - 124	0 - 20
38045	Ni	EPA 6010	86	86	0	76 - 124	0 - 20
38045	Sb	EPA 6010	92	92	0	76 - 124	0 - 20
38045	V	EPA 6010	100	100	0	76 - 124	0 - 20
38045	Zn	EPA 6010	86	84	2	76 - 124	0 - 20

Post Digestion Spike Information

Batch Number	Analyte	Method	PDS %Rec	%Recovery Range
37739	Pb	EPA 7421	91	76 - 124
37739	Se	EPA 7740	98	76 - 124
37739	Tl	EPA 7841	93	76 - 124
[illegible]45	Ag	EPA 6010	58	76 - 124
[illegible]45	Al	EPA 6010	94	76 - 124
38045	As	EPA 6010	100	76 - 124
38045	Ba	EPA 6010	97	76 - 124
38045	Be	EPA 6010	95	76 - 124
38045	Ca	EPA 6010	91	76 - 124
38045	Cd	EPA 6010	95	76 - 124
38045	Co	EPA 6010	90	76 - 124
38045	Cr	EPA 6010	88	76 - 124
38045	Cu	EPA 6010	97	76 - 124
38045	K	EPA 6010	120	76 - 124
38045	Mg	EPA 6010	97	76 - 124
38045	Mn	EPA 6010	26	76 - 124
38045	Na	EPA 6010	120	76 - 124
38045	Ni	EPA 6010	94	76 - 124
38045	Sb	EPA 6010	100	76 - 124
38045	V	EPA 6010	110	76 - 124
38045	Zn	EPA 6010	83	76 - 124

Unspiked Sample Duplicate Information

Batch Number	Analyte	Method	Sample 1 RPD	Sample 2 RPD	RPD Range
[illegible]2	React S2	EPA 7.3.4.2	0		0 - 40
38098	pH	EPA 9040	0	0	0 - 20
38163	React. CN	EPA 7.3.3.2	0		0 - 30

Q.C. Information for Batch # 37528 For Report Number :94194

Sample Batch Information
Analysis : Hg

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
37528BLANK	HG	04/23/98	0745	FBS		04/23/98	1210	FBS	HG1
37528LCS	HG	04/23/98	0745	FBS		04/23/98	1240	FBS	HG1
37528LCSD	HG	04/23/98	0745	FBS		04/23/98	1242	FBS	HG1
94140-1MS	HG	04/23/98	0745	FBS		04/23/98	1218	FBS	HG1
94140-1MSD	HG	04/23/98	0745	FBS		04/23/98	1220	FBS	HG1
94140-2DUP	HG	04/23/98	0745	FBS		04/23/98	1222	FBS	HG1
94222-1	HG	04/23/98	0745	FBS		04/23/98	1306	FBS	HG1
94218-27	HG	04/23/98	0745	FBS		04/23/98	1302	FBS	HG1
94218-26	HG	04/23/98	0745	FBS		04/23/98	1304	FBS	HG1
94208-1	HG	04/23/98	0745	FBS		04/23/98	1259	FBS	HG1
94194-1	HG	04/23/98	0745	FBS		04/23/98	1257	FBS	HG1
94191	HG	04/23/98	0745	FBS		04/23/98	1248	FBS	HG1
94148	HG	04/23/98	0745	FBS		04/23/98	1334	FBS	HG1
94140-6	HG	04/23/98	0745	FBS		04/23/98	1232	FBS	HG1
94140-4	HG	04/23/98	0745	FBS		04/23/98	1229	FBS	HG1
94140-2	HG	04/23/98	0745	FBS		04/23/98	1227	FBS	HG1
94140-11	HG	04/23/98	0745	FBS		04/23/98	1245	FBS	HG1
94140-1	HG	04/23/98	0745	FBS		04/23/98	1225	FBS	HG1
94093	HG	04/23/98	0745	FBS		04/23/98	1319	FBS	HG1

Q.C. Information for Batch # 37739 For Report Number :94194

Sample Batch Information
Analysis : Pb, Se, Tl

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
93976-3	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
93976-1	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
93976-7	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
93976-9	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
93993	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94014-5	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
37739BLANK	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
37739LCS	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
37739LCSD	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
93976-1MS	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
93976-1MSD	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
93976-9PDS	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
93976-3DUP	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94014-6	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94014-7	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94032-4	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94032-7	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94051	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
9[illegible]5	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
9[illegible]3	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94103-18	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94103-19	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94111-1	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94111-2	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94111-3	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94111-4	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
94194-1	Pb	04/23/98	0835	DCM	GFAA	04/24/98	1724	MLR	AA1
37739BLANK	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
37739LCS	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
37739LCSD	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
93976-1MS	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
93976-1MSD	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
93976-9PDS	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
93976-3DUP	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
93976-1	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
93976-3	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
93976-7	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
93976-9	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
93993	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94014-5	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94014-6	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94014-7	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94032-4	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94032-7	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
9[illegible]1	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94055	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94093	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94103-18	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1

Q.C. Information for Batch # 37739 For Report Number :94194

Sample Batch Information
Analysis : Pb, Se, Tl

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
94103-19	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94111-1	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94111-2	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94111-3	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94111-4	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
94194-1	Se	04/23/98	0835	DCM	GFAA	04/27/98	1249	MLR	AA1
37739BLANK	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
37739LCS	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
37739LCSD	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
93976-1MS	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
93976-1MSD	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
93976-9PDS	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
93976-3DUP	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
93976-1	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
93976-3	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
93976-7	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
93976-9	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
93993	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94014-5	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94014-6	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94014-7	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94032-4	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94032-7	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94051	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94055	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94093	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94103-18	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94103-19	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94111-1	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94111-2	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94111-3	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94111-4	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
94194-1	As	04/23/98	0835	DCM	GFAA	04/27/98	1600	MLR	AA1
37739BLANK	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
37739LCS	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
37739LCSD	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
93976-1MS	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
93976-1MSD	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
93976-9PDS	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
93976-3DUP	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
93976-1	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
93976-3	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
93976-7	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
93976-9	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
93993	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94014-5	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94014-6	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94014-7	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1

Q.C. Information for Batch # 37739 For Report Number :94194

Sample Batch Information
Analysis : Pb, Se, Tl

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
94032-4	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94032-7	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94051	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94055	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94093	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94103-18	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94103-19	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94111-1	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94111-2	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94111-3	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94111-4	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1
94194-1	Tl	04/23/98	0835	DCM	GFAA	04/28/98	1248	MLR	AA1

Q.C. Information for Batch # 37942 For Report Number :94194

Sample Batch Information
Analysis : React S2

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
37942BLK	Q	04/16/98	1600	JN		04/17/98	1300	JN	
37942LCS		04/17/98	1100	JN		04/17/98	1300	JN	
37942LCSD		04/17/98	1100	JN		04/17/98	1300	JN	
93978-1		04/16/98	1600	JN		04/17/98	1300	JN	
93978-2		04/16/98	1600	JN		04/17/98	1300	JN	
93978-3		04/16/98	1600	JN		04/17/98	1300	JN	
93908		04/17/98	0945	JN		04/17/98	1300	JN	
94256		04/28/98	1300	JN		04/28/98	1439	JN	
94194-1		04/28/98	1300	JN		04/28/98	1439	JN	
94194-1DUP		04/28/98	1300	JN		04/28/98	1439	JN	
94281		04/29/98	1000	JN		04/30/98	1100	JN	

Q.C. Information for Batch # 38045 For Report Number :94194

Sample Batch Information

Analysis : Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni Sb V Zn

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
94140-1		04/27/98	1100	RCP	TRACE	04/27/98	1712	MCW	ICP2
94140-10		04/27/98	1100	RCP	TRACE	04/27/98	1811	MCW	ICP2
38045BLANK		04/27/98	1100	RCP	TRACE	04/27/98	1645	MCW	ICP2
38045LCS		04/27/98	1100	RCP	TRACE	04/27/98	1649	MCW	ICP2
38045LCSD		04/27/98	1100	RCP	TRACE	04/27/98	1653	MCW	ICP2
94140-1MS		04/27/98	1100	RCP	TRACE	04/27/98	1657	MCW	ICP2
94140-1MSD		04/27/98	1100	RCP	TRACE	04/27/98	1701	MCW	ICP2
94140-13PDS		04/27/98	1100	RCP	TRACE	04/27/98	1704	MCW	ICP2
94140-13DUP		04/27/98	1100	RCP	TRACE	04/27/98	1708	MCW	ICP2
94226		04/27/98	1100	RCP	TRACE	04/27/98	1748	MCW	ICP2
94131-21RR		04/27/98	1100	RCP	TRACE	04/27/98	1752	MCW	ICP2
94194-1		04/27/98	1100	RCP	TRACE	04/27/98	1720	MCW	ICP2
94140-11		04/27/98	1100	RCP	TRACE	04/27/98	1815	MCW	ICP2
94140-12		04/27/98	1100	RCP	TRACE	04/27/98	1819	MCW	ICP2
94140-13		04/27/98	1100	RCP	TRACE	04/27/98	1716	MCW	ICP2
94140-14		04/27/98	1100	RCP	TRACE	04/27/98	1823	MCW	ICP2
94140-15		04/27/98	1100	RCP	TRACE	04/27/98	1834	MCW	ICP2
94140-16		04/27/98	1100	RCP	TRACE	04/27/98	1838	MCW	ICP2
94140-2		04/27/98	1100	RCP	TRACE	04/27/98	1756	MCW	ICP2
94140-4		04/27/98	1100	RCP	TRACE	04/27/98	1800	MCW	ICP2
94140-5		04/27/98	1100	RCP	TRACE	04/27/98	1804	MCW	ICP2
94140-6		04/27/98	1100	RCP	TRACE	04/27/98	1807	MCW	ICP2
94107-11		04/27/98	1100	RCP	TRACE	04/27/98	1842	MCW	ICP2
94218-26		04/27/98	1100	RCP	TRACE	04/27/98	1846	MCW	ICP2
94218-27		04/27/98	1100	RCP	TRACE	04/27/98	1850	MCW	ICP2

Q.C. Information for Batch # 38098 For Report Number :94194

Sample Batch Information
Analysis : pH

Sample ID	Tag	Preparation Date	Preparation Time	By	Preparation Notes	Analysis Date	Analysis Time	By	Inst
38098BLK		/ /				04/22/98	1600	JN	410A
38098LCS		/ /				04/22/98	1600	JN	410A
38098LCSD		/ /				04/22/98	1600	JN	410A
38098COND		/ /				04/22/98	1600	JN	410A
38098CALCHK		/ /				04/22/98	1600	JN	410A
94198		/ /				04/22/98	1600	JN	410A
94194-1		/ /				04/22/98	1600	JN	410A
94217-1		/ /				04/22/98	1600	JN	410A
94222-2		/ /				04/22/98	1600	JN	410A
94224		/ /				04/22/98	1600	JN	410A
94229-2		/ /				04/22/98	1600	JN	410A
94210-1		/ /				04/22/98	1600	JN	410A
94210-2		/ /				04/22/98	1600	JN	410A
94198DUP		/ /				04/22/98	1600	JN	410A
94194-1DUP		/ /				04/22/98	1600	JN	410A

Q.C. Information for Batch # 38111 For Report Number :94194

Sample Batch Information
Analysis : Ign

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
94256		/ /				04/24/98	1700	NL	
94256DUP		/ /				04/24/98	1700	NL	
94281		/ /				04/24/98	1700	NL	
CALCK		/ /				04/24/98	1700	NL	
94323		/ /				04/28/98	1510	NL	
94194-1		/ /				04/28/98	1510	NL	
94194-1DUP		/ /				04/28/98	1510	NL	
94407		/ /				04/30/98	1410	NL	
94366		/ /				04/30/98	1410	NL	

Q.C. Information for Batch # 38163 For Report Number :94194

Sample Batch Information
Analysis : React. CN

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
38163BLK		/ /				04/28/98	1530	LH	GENE5
38163LCS		/ /				04/28/98	1530	LH	GENE5
38163LCSD		/ /				04/28/98	1530	LH	GENE5
38163CAL5		/ /				04/28/98	1530	LH	GENE5
94256		/ /				04/28/98	1530	LH	GENE5
94194-1		/ /				04/28/98	1530	LH	GENE5
94194-1DUP		/ /				04/28/98	1530	LH	GENE5
94281		/ /				04/30/98	1645	LH	GENE5

OHM Remediation Services Corp

Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

WO#94194 206503

FORM 0019 REV 2-97

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ASI	Shari Harper	OHM Remediation Services
PROJECT NAME: DDMT/Dunn Field	PROJECT LOCATION: Memphis, TN	PROJECT NUMBER: 20022	LABORATORY PHONE: 770-734-4200	LABORATORY FAX: 770-734-4201	RECIPIENT NAME: Elena Rodriguez
PROJECT CONTACT: Steve Offner	PROJECT PHONE NUMBER: 901-743-1117	PROJECT FAX: 901-743-1048	LABORATORY ADDRESS: 110 Technology Parkway		ADDRESS: 5445 Triangle Pkwy, Ste 400
PROJECT ADDRESS: ~~1708 Dunn Ave.~~ 3419 American Way	CITY STATE AND ZIPCODE: ~~38114~~ Memphis, TN ~~38118~~	CLIENT: USACE	CITY STATE AND ZIPCODE: Norcross, GA 30092		CITY STATE AND ZIPCODE: Norcross, GA 30092
PROJECT MANAGER: Steve Offner	PROJECT MANAGER'S PHONE: 770-326-2571	PROJECT MANAGER'S FAX: 770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T	Analyses Requested by Lab	Comments
1	tank-3	water	4/27	10:20		1				
2										
3										
4										
5										
6										
7										
8										
9										
10										

SAMPLES COLLECTED BY	COURIER AND AIR BILL NUMBER				COOLER TEMPERATURE UPON RECEIPT
RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT	
John McCarthy	Fed Ex	4/27/98	11:30		
	Steve	4/28/98	0920		

Distribution: White - Laboratory (To be returned with Analytical Report), Goldenrod - Project File; Yellow - Project Data Manager

479 187

TAB

Appendix G

DISPOSAL CHARACTERIZATION SAMPLES
SOIL EXCAVATED FROM SB-15

Date Collected 03/11/98

ASI
ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

20 March, 1998

Case Narrative Report 92883

The samples were collected on 10-12 March, 1998 and received by ASI 13 March, 1998. All conditions for proper sample receipt were met as indicated on the Chain of Custody. The samples were logged into the LIMS as report 92883 for the following analysis as per client request: TCLP VOA (EPA 1311/8260B). Holding times for sample preparation and analysis were met.

TCLP analysis for VOA (EPA 1311/8260B) gave high MS for Chlorobenzene, 1,1-Dichloroethane, Tetrachloroethene, Trichloroethene and Vinyl chloride, high MSD for Trichloroethene and Vinyl chloride, and high MSRPD for Vinyl chloride. All other VOA spike and surrogate recoveries were acceptable.

Christina A. Perfetti
Quality Assurance

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 24, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92883-1

Sample Description

Soil, Dunn Field Memphis TN, Project #20022, SB-015A, 03/11/98, 13:00, received 03/13/98

RESULTS

Toxicity Characteristic Leaching Procedure
TCLP Zero Headspace Extraction (EPA 1311)

EPA HW Number	Parameter	Result (mg/l)	Detection Limit (mg/l)	Regulatory Limit (mg/l)
D018	Benzene	BDL	0.02	0.5
D019	Carbon tetrachloride	BDL	0.02	0.5
D021	Chlorobenzene	BDL	0.02	100.0
D022	Chloroform	BDL	0.02	6.0
D028	1,2-Dichloroethane	BDL	0.02	0.5
D029	1,1-Dichloroethene	BDL	0.02	0.7
D035	Methyl ethyl ketone	BDL	0.5	200.0
D039	Tetrachloroethene	BDL	0.02	0.7
D040	Trichloroethene	BDL	0.02	0.5
D043	Vinyl chloride	BDL	0.02	0.2

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina C. Pufahl
Quality Assurance

cc: Mr. Steve Offner

ASI
ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

March 24, 1998

P.O. No. 1041997

Attention: Ms. Elena Rodriguez

Report No. 92883-2

Sample Description

Soil, Dunn Field Memphis TN, Project #20022, SB-015B, 03/11/98, 13:10, received 03/13/98

RESULTS

Toxicity Characteristic Leaching Procedure
TCLP Zero Headspace Extraction (EPA 1311)

EPA HW Number	Parameter	Result (mg/l)	Detection Limit (mg/l)	Regulatory Limit (mg/l)
D018	Benzene	BDL	0.02	0.5
D019	Carbon tetrachloride	BDL	0.02	0.5
D021	Chlorobenzene	BDL	0.02	100.0
D022	Chloroform	BDL	0.02	6.0
D028	1,2-Dichloroethane	BDL	0.02	0.5
D029	1,1-Dichloroethene	BDL	0.02	0.7
D035	Methyl ethyl ketone	BDL	0.5	200.0
D039	Tetrachloroethene	BDL	0.02	0.7
D040	Trichloroethene	BDL	0.02	0.5
D043	Vinyl chloride	BDL	0.02	0.2

BDL - Below Detection Limit

Respectfully submitted,

Shari Harper
Project Manager

Christina C. Privette
Quality Assurance

cc: Mr. Steve Offner

Analytical Services Inc. Batch QC
For Report Number :92883
Volatile Organics

Matrix : TCLP Batch # 37158 Method : EPA 8260

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
Benzene	111	110	1	90 - 115	0 - 13
Carbon tetrachloride	115	115	0	55 - 115	0 - 15
Chlorobenzene	109	109	0	87 - 109	0 - 10
Chloroform	110	113	3	55 - 115	0 - 15
1,2-Dichloroethane	114	113	0	90 - 115	0 - 13
1,1-Dichloroethene	103	104	1	55 - 111	0 - 15
MEK (2-Butanone)	102	107	5	55 - 115	0 - 15
Tetrachloroethene	115	115	0	55 - 115	0 - 15
Trichloroethene	107	109	2	78 - 110	0 - 11
Vinyl chloride	103	102	1	55 - 115	0 - 15

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
Benzene	109	104	6	90 - 115	0 - 13
Carbon tetrachloride	108	103	5	55 - 115	0 - 15
Chlorobenzene	116	109	7	87 - 109	0 - 10
Chloroform	107	102	5	55 - 115	0 - 15
1,2-Dichloroethane	111	107	4	90 - 115	0 - 13
1,1-Dichloroethene	120	106	13	55 - 111	0 - 15
MEK (2-Butanone)	58	60	4	55 - 115	0 - 15
Tetrachloroethene	119	109	9	55 - 115	0 - 15
Trichloroethene	124	114	8	78 - 110	0 - 11
Vinyl chloride	138	116	17	55 - 115	0 - 15

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : TCLP Batch # 37158 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	76 - 119
S2	Toluene-d8	88 - 110
S3	Ethylbenzene-d10	75 - 115
S4	4-Bromofluorobenzene	86 - 115

Sample	File	S1	S2	S3	S4	S5	S6
37158BLK	A1726	96	100	98	94		
92776-1	A1747	89	105	100	90		
92776-2	A1748	89	96	100	86		
92776-3	A1749	91	91	98	94		
92776-4	A1750	87	101	101	84		
92839-1	A1752	94	100	100	91		
92839-2	A1753	90	98	99	84		
92883-1	A1735	98	103	101	97		
92883-2	A1736	97	100	96	92		
92883-1DUP	A1737	95	108	97	90		
92883-1MS	A1738	96	106	101	90		
92883-1MSD	A1739	94	103	99	93		
92776-4DUP	A1763	96	98	101	92		
37158BLK2	A1786	107	93	97	105		
92837-2	A1795	103	101	97	92		
92852-1	A1796	104	98	99	96		
92732	A1797	103	76	84	67		
92839-2DUP	A1765	95	105	99	93		
92732DUP	B4153	105	83	84	67		
^^Note: Matrix interference							
37158LCS	A1810	99	103	102	101		
37158LCSD	A1811	99	103	103	103		
92977-3	A1889	104	89	94	91		
92977-4	A1890	95	82	99	104		
^^Note: MATRIX EFFECT							
92977-5	A1891	97	88	98	95		
93036	A1892	100	92	99	99		
92977-4DUP	A1900	95	83	99	102		
^^Note: MATRIX EFFECT							

Blank Results Information
Volatile Organics Method : EPA 8260

	Analyte	Blank Result	Detection Limit
D018	Benzene	BDL	0.02
D019	Carbon tetrachloride	BDL	0.02
D021	Chlorobenzene	BDL	0.02
D022	Chloroform	BDL	0.02
D028	1,2-Dichloroethane	BDL	0.02
D029	1,1-Dichloroethene	BDL	0.02
D035	Methyl ethyl ketone	BDL	0.5
D039	Tetrachloroethene	BDL	0.02
D040	Trichloroethene	BDL	0.02
D043	Vinyl chloride	BDL	0.02

Q.C. Information for Batch # 37158 Printed: 03/24/98 15:12:12

Sample Batch Information
Volatile Organics Method : EPA 8260

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
37158BLK	/ /				03/17/98	1122	LLP	VOA1
92776-1	/ /				03/17/98	1607	LLP	VOA1
92776-2	/ /				03/17/98	1633	LLP	VOA1
92776-3	/ /				03/17/98	1658	LLP	VOA1
92776-4	/ /				03/17/98	1724	LLP	VOA1
92839-1	/ /				03/17/98	1815	LLP	VOA1
92839-2	/ /				03/17/98	1840	LLP	VOA1
92883-1	/ /				03/17/98	1957	LLP	VOA1
92883-2	/ /				03/17/98	2023	LLP	VOA1
92883-1DUP	/ /				03/17/98	2048	LLP	VOA1
92883-1MS	/ /				03/17/98	2113	LLP	VOA1
92883-1MSD	/ /				03/17/98	2139	LLP	VOA1
92776-4DUP	/ /				03/18/98	1107	LLP	VOA1
37158BLK2	/ /				03/18/98	2040	LLP	VOA1
92837-2	/ /				03/19/98	0030	LLP	VOA1
92852-1	/ /				03/19/98	0056	LLP	VOA1
92732	/ /				03/19/98	0122	LLP	VOA1
92839-2DUP	/ /				03/18/98	1158	RFA	VOA1
[redacted]2DUP	/ /				03/19/98	1507	TLW	VOA2
[redacted]8LCS	/ /				03/19/98	1456	RFA	VOA1
37158LCSD	/ /				03/19/98	1522	RFA	VOA1
92977-3	/ /				03/23/98	1453	RFA	VOA1
92977-4	/ /				03/23/98	1518	RFA	VOA1
92977-5	/ /				03/23/98	1544	RFA	VOA1
93036	/ /				03/23/98	1610	RFA	VOA1
92977-4DUP	/ /				03/23/98	1935	RFA	VOA1

OHM Remediation Services Corp
Subsidiary of OHM Corporation
U.S Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

LVO#92883 206520

FORM 0019 REV 2-97

OHM LAB COORDINATOR	LAB COORDINATOR S PHONE	LAB COORDINATOR S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ASI	Shari Harper	OHM Remediation Services
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDMT/Dunn Field	Memphis, TN	20022	770-734-4200	770-734-4201	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-743-1117	901-743-1048	110 Technology Parkway		5445 Triangle Pkwy, Ste 400
PROJECT ADDRESS	**CITY STATE AND ZIPCODE**	**CLIENT**	**CITY STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
1706 Dunn Ave.	Memphis, TN 38114	USACE	Norcross, GA 30092		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER S PHONE**	**PROJECT MANAGER S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: TCL-Volatiles	TAL Metals	TCLP Volatiles					Comments
1	RW-7	GW	3.12.98	1900	HCL	4			✓	✓	✓					470 1147
2	SB-015A	soil	3.11.98	1300		1					✓				-1	S-2.1 3/13
3	SB-015B	soil	3.11.98	1310		1					✓				-2	S-2.2 3/10
4	Equipment blank	water	3.11.98	1320		3			✓							
5	RW-4	GW	3.12.98	0900		4			✓	✓						3 Day DAZ this work order per SH
6																
7																
8																
9																
10																

SAMPLES COLLECTED BY: Gary W. Crowe — COURIER AND AIR BILL NUMBER: Fed-Ex 613075248 2 — COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE S CONDITION UPON RECEIPT
Gary W Crowe	Fed-Ex	3.12.98	1545	
[illegible] 3/13	A Moore	3/13/98	1015	FedEx 3/13/98 10:15 613075258D in, Relinq'd, Temp=5 pH=NA

Distribution: White - Laboratory (To be returned with Analytical Report), Goldenrod - Project File; Yellow - Project Data Manager

TAB

Appendix H

IMPORTED CLEAN TRENCH BACKFILL

Dated Collected 01/19/98

ASI
ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

29 January, 1998

Case Narrative Report 90957

The samples were collected on 19 January, 1998 and received by ASI 20 January, 1998. As indicated on the Chain of Custody, custody seals were not present on the sample containers. All other conditions for proper sample receipt were met. The samples were logged into the LIMS as report 90957 for the following analyses as per client request: PEST (EPA 8080), BNA (EPA 8270), VOA (EPA 8260), Mercury (EPA 7471), Tl (EPA 7841), As (EPA 7060), Se (EPA 7740) and Metals (EPA 6010). Holding times for sample preparation and analysis were met.

PEST analysis (EPA 8080) met all data quality objectives.

BNA analysis (EPA 8270) met all data quality objectives.

VOA analysis (EPA 8260) gave a high MS and MSD for Toluene due to a matrix effect. All other spike and surrogate recoveries were acceptable.

Mercury analysis (EPA 7471) met all data quality objectives.

Tl analysis (EPA 7841) met all data quality objectives.

As analysis (EPA 7060) gave a low MS. The batch passes on LCS/LCSD

Se analysis (EPA 7740) met all data quality objectives.

Metals analysis (EPA 6010) gave high MS recoveries for Al, Ca, K, Mg, Na, low MS recoveries for Sb, Fe, a high MSD for Al, low MSD recoveries for Mn, Sb, Zn, Fe, high MSRPD for Ca, K, Mg, Na, and low PDS recoveries for Al, Sb, Zn. The batch passes on LCS/LCSD.

Christina A. Perfetti
Quality Assurance

ASI

ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS

110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

LABORATORY REPORT

OHM Remediation Services Corp.
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

January 29, 1998

P.O. No. 1041997

Attention: Mr. Steve Offner

Report No. 90957

Sample Description

Soil, grab, Memphis Defense Depot, Project #20022, BF1, 01/19/98, 16:00, received 01/20/98

RESULTS

Target Analyte List - Metals	Result	Detection Limit
Metals	(mg/kg)	(mg/kg)
Total Aluminum (Al) (EPA 6010)	2100	22
Total Antimony (Sb) (EPA 6010)	BDL	10
Total Arsenic (As) (EPA 7060)	BDL	0.5
Total Barium (Ba) (EPA 6010)	8.0	1.0
Total Beryllium (Be) (EPA 6010)	BDL	1.0
Total Cadmium (Cd) (EPA 6010)	BDL	0.50
Total Calcium (Ca) (EPA 6010)	300	100
Total Chromium (Cr) (EPA 6010)	BDL	20
Total Cobalt (Co) (EPA 6010)	BDL	10
Total Copper (Cu) (EPA 6010)	BDL	2.0
Total Iron (Fe) (EPA 6010)	7800	3.0
Total Lead (Pb) (EPA 6010)	BDL	10
Total Magnesium (Mg) (EPA 6010)	120	100
Total Manganese (Mn) (EPA 6010)	61	2.0
Total Mercury (Hg) (EPA 7471)	BDL	0.25
Total Nickel (Ni) (EPA 6010)	BDL	2.0
Total Potassium (K) (EPA 6010)	BDL	600
Total Selenium (Se) (EPA 7740)	BDL	0.5
Total Silver (Ag) (EPA 6010)	BDL	1.0

BDL - Below Detection Limit

OHM Remediation Services Corp. January 29, 1998
Page 2 of 5 Report No. 90957

Soil, grab, Memphis Defense Depot, Project #20022, BF1, 01/19/98, 16:00, received 01/20/98

RESULTS

Metals	Result (mg/kg)	Detection Limit (mg/kg)
Total Sodium (Na)(EPA 6010)	230	10
Total Thallium (Tl)(EPA 7841)	BDL	0.1
Total Vanadium (V)(EPA 6010)	9.2	1.0
Total Zinc (Zn)(EPA 6010)	9.4	1.0
Target Compound List		
Volatile Organics (EPA 8260)	(ug/kg)	(ug/kg)
Acetone	BDL	100
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	100
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chlorobenzene	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	BDL	10
1,2-Dichloroethene (total)	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	BDL	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10

BDL - Below Detection Limit

OHM Remediation Services Corp. January 29, 1998
Page 3 of 5 Report No. 90957

Soil, grab, Memphis Defense Depot, Project #20022, BF1, 01/19/98, 16:00, received 01/20/98

RESULTS

Volatile Organics (EPA 8260)	Result (ug/kg)	Detection Limit (ug/kg)
Trichloroethene	BDL	10
Vinyl chloride	BDL	10
Xylenes	BDL	10
Acid Extractable Organics (EPA 8270)	**(ug/kg)**	**(ug/kg)**
4-Chloro-3-methylphenol	BDL	330
2-Chlorophenol	BDL	330
2,4-Dichlorophenol	BDL	330
2,4-Dimethylphenol	BDL	330
4,6-Dinitro-2-methylphenol	BDL	800
2,4-Dinitrophenol	BDL	800
2-Methylphenol	BDL	330
4-Methylphenol	BDL	330
2-Nitrophenol	BDL	330
4-Nitrophenol	BDL	800
Pentachlorophenol	BDL	800
Phenol	BDL	330
2,4,5-Trichlorophenol	BDL	800
2,4,6-Trichlorophenol	BDL	330
Base/Neutral Extractable Organics (EPA 8270)	**(ug/kg)**	**(ug/kg)**
Acenaphthene	BDL	330
Acenaphthylene	BDL	330
Anthracene	BDL	330
Benzo(a)anthracene	BDL	330
Benzo(b)fluoranthene	BDL	330
Benzo(k)fluoranthene	BDL	330
Benzo(a)pyrene	BDL	830
Benzo(ghi)perylene	BDL	330
Benzyl butyl phthalate	BDL	330
Bis(2-chloroethyl)ether	BDL	330
Bis(2-chloroethoxy)methane	BDL	330
Bis(2-ethylhexyl)phthalate	BDL	330
Bis(2-chloroisopropyl)ether	BDL	330
4-Bromophenyl phenyl ether	BDL	330
Carbazole	BDL	330

BDL - Below Detection Limit

OHM Remediation Services Corp. January 29, 1998
Page 4 of 5 Report No. 90957

Soil, grab, Memphis Defense Depot, Project #20022, BF1, 01/19/98, 16:00, received 01/20/98

RESULTS

Base/Neutral Extractable Organics (EPA 8270)	Result (ug/kg)	Detection Limit (ug/kg)
4-Chloroaniline	BDL	330
2-Chloronaphthalene	BDL	330
4-Chlorophenyl phenyl ether	BDL	330
Chrysene	BDL	330
Dibenzo(a,h)anthracene	BDL	330
Dibenzofuran	BDL	330
Di-n-butylphthalate	BDL	330
1,3-Dichlorobenzene	BDL	330
1,2-Dichlorobenzene	BDL	330
1,4-Dichlorobenzene	BDL	330
3,3'-Dichlorobenzidine	BDL	330
Diethylphthalate	BDL	330
Dimethylphthalate	BDL	330
2,4-Dinitrotoluene	BDL	330
2,6-Dinitrotoluene	BDL	330
Di-n-octylphthalate	BDL	330
Fluoranthene	BDL	330
Fluorene	BDL	330
Hexachlorobenzene	BDL	330
Hexachlorobutadiene	BDL	330
Hexachlorocyclopentadiene	BDL	330
Hexachloroethane	BDL	330
Indeno(1,2,3-cd)pyrene	BDL	330
Isophorone	BDL	330
2-Methylnaphthalene	BDL	330
2-Nitroaniline	BDL	800
3-Nitroaniline	BDL	800
4-Nitroaniline	BDL	660
Naphthalene	BDL	330
Nitrobenzene	BDL	330
N-Nitrosodiphenylamine	BDL	330
N-Nitrosodi-n-propylamine	BDL	330
Phenanthrene	BDL	330
Pyrene	BDL	330
1,2,4-Trichlorobenzene	BDL	330

BDL - Below Detection Limit

OHM Remediation Services Corp. January 29, 1998
 Report No. 90957

Soil, grab, Memphis Defense Depot, Project #20022, BF1, 01/19/98, 16:00, received 01/20/98

RESULTS

Pesticides (EPA 8081)	Result (ug/kg)	Detection Limit (ug/kg)
Aldrin	BDL	3.3
BHC-alpha	BDL	3.3
BHC-beta	BDL	3.3
BHC-delta	BDL	3.3
BHC-gamma (Lindane)	BDL	3.3
Chlordane-alpha	BDL	3.3
Chlordane-gamma	BDL	3.3
4,4'-DDD	BDL	6.6
4,4'-DDE	BDL	6.6
4,4'-DDT	BDL	6.6
Dieldrin	BDL	6.6
Endosulfan I	BDL	3.3
Endosulfan II	BDL	6.6
Endosulfan sulfate	BDL	6.6
Endrin	BDL	6.6
Endrin aldehyde	BDL	6.6
Endrin ketone	BDL	6.6
Heptachlor	BDL	3.3
Heptachlor epoxide	BDL	3.3
Methoxychlor	BDL	17
Toxaphene	BDL	170
PCB's (EPA 8082)	**(ug/kg)**	**(ug/kg)**
PCB 1016	BDL	33
PCB 1221	BDL	33
PCB 1232	BDL	33
PCB 1242	BDL	33
PCB 1248	BDL	33
PCB 1254	BDL	33
PCB 1260	BDL	33

BDL - Below Detection Limit

Respectfully submitted,

Project Manager

Quality Assurance

cc: Mr. John Lore

Analytical Services Inc. Batch QC
For Report Number :90957
Organochlorine Pesticides

Matrix : Soil/Sediment Batch # 35333 Method : EPA 8080

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
BHC-gamma (Lindane)	79	79	0	10 - 150	0 - 50
Heptachlor	76	76	0	10 - 192	0 - 37
Aldrin	85	82	4	10 - 166	0 - 40
Dieldrin	85	82	4	29 - 136	0 - 40
Endrin	77	77	0	10 - 150	0 - 50
4,4'-DDT	63	64	2	10 - 203	0 - 62

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
BHC-gamma (Lindane)	50	39	25	10 - 150	0 - 50
Heptachlor	42	33	24	10 - 192	0 - 37
Aldrin	52	41	23	10 - 166	0 - 40
Dieldrin	52	41	24	29 - 136	0 - 40
Endrin	52	41	24	10 - 150	0 - 50
[redacted]'-DDT	39	30	25	10 - 203	0 - 62

Analytical Services Inc. Batch QC
Surrogate Recovery
Organochlorine Pesticides

Matrix : Soil/Sediment Batch # 35333 Method : EPA 8080

% Recovery Objectives

S1	Dibutylchlorendate	11 - 130
S2	Tetrachloro-m-xylene	13 - 104
S3	Decachlorobiphenyl	8 - 135

Sample	File	S1	S2	S3	S4	S5	S6
35333BLK	010898009F	107	95	123			
90504-1	010898014F	76	63	99			
90504-2	010898015F	82	59	106			
35333LCS	010898016F	98	103	117			
35333LCSD	010898017F	90	97	111			
90734	011698001F	77	76	99			
90746-1D	011698075F	13		8			
^^Note: 10X							
90957	012198031R	39	31	53			
90957DUP	012198032R	37	28	47			
90957MS	012198033R	123	57	89			
90957MSD	012198034R	78	55	82			

Q.C. Information for Batch # 35333 Printed: 01/29/98 19:08:33

Blank Results Information
Organochlorine Pesticides Method : EPA 8080

Analyte	Blank Result	Detection Limit
Aldrin	BDL	3.3
BHC-alpha	BDL	3.3
BHC-beta	BDL	3.3
BHC-delta	BDL	3.3
BHC-gamma	BDL	3.3
Chlordane-alpha	BDL	3.3
Chlordane-gamma	BDL	3.3
4,4'-DDD	BDL	6.6
4,4'-DDE	BDL	6.6
4,4'-DDT	BDL	6.6
Dieldrin	BDL	6.6
Endosulfan I	BDL	3.3
Endosulfan II	BDL	6.6
Endosulfan sulfate	BDL	6.6
Endrin	BDL	6.6
Endrin aldehyde	BDL	6.6
Endrin ketone	BDL	6.6
Heptachlor	BDL	3.3
Heptachlor epoxide	BDL	3.3
Methoxychlor	BDL	17
Toxaphene	BDL	170
PCB 1016	BDL	33
PCB 1221	BDL	33
PCB 1232	BDL	33
PCB 1242	BDL	33
PCB 1248	BDL	33
PCB 1254	BDL	33
PCB 1260	BDL	33

Q.C. Information for Batch # 35333 Printed: 01/29/98 19:08:33

Sample Batch Information
Organochlorine Pesticides Method : EPA 8080

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
35333BLK	01/07/98	0300	KLF		01/08/98	1245	JQZ	GC-3
35333LCS	01/07/98	0300	KLF		01/09/98	1636	JQZ	GC-3
35333LCSD	01/07/98	0300	KLF		01/09/98	1709	JQZ	GC-3
90504-1	01/07/98	0300	KLF		01/09/98	1530	JQZ	GC-3
90504-2	01/07/98	0300	KLF		01/09/98	1603	JQZ	GC-3
90746-1	01/14/98	1000	KLF	PCB ONLY	/ /			
90734-1	01/14/98	1000	KLF		/ /			
35333BLKPCB	01/14/98	1000	KLF	PCB ONLY	/ /			
90957	01/21/98	1030	KLF		01/22/98	0120	JQZ	GC-3
90957DUP	01/21/98	1030	KLF		01/22/98	0152	JQZ	GC-3
90957MS	01/21/98	1030	KLF		01/22/98	0226	JQZ	GC-3
90957MSD	01/21/98	1030	KLF		01/22/98	0258	JQZ	GC-3

Analytical Services Inc. Batch QC
For Report Number :90957
Volatile Organics

Matrix : Soil/Sediment Batch # 35639 Method : EPA 8260

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	83	89	8	61 - 145	0 - 14
Trichloroethene	106	112	6	71 - 120	0 - 14
Benzene	114	102	10	76 - 127	0 - 11
Toluene	110	108	2	76 - 125	0 - 13
Chlorobenzene	110	104	5	75 - 130	0 - 13

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
1,1-Dichloroethene	86	89	4	61 - 145	0 - 14
Trichloroethene	107	103	4	71 - 120	0 - 14
Benzene	101	100	2	76 - 127	0 - 11
Toluene	141	141	0	76 - 125	0 - 13
Chlorobenzene	104	97	7	75 - 130	0 - 13

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Soil/Sediment Batch # 35639 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	70 - 121
S2	Toluene-d8	81 - 117
S3	Ethylbenzene-d10	79 - 115
S4	4-Bromofluorobenzene	74 - 121

Sample	File	S1	S2	S3	S4	S5	S6
90706-2	B2258	96	103	92	98		
90706-3	B2259	101	96	97	92		
90706-4	B2260	106	104	98	93		
90706-4MS	B2261	109	103	96	96		
90706-4MSD	B2262	104	99	91	94		
35639BLK	B2265	103	101	95	95		
35639LCS	B2263	105	101	97	100		
35369LCSD	B2273	107	99	94	99		
90706-5	B2267	101	97	90	93		
90706-6	B2268	112	100	98	94		
90706-7	B2269	127	84	101	78		
90706-8	B2270	140	93	94	75		
90706-9	B2271	131	89	97	77		
90706-7DUP	B2280	113	93	93	80		
90706-8DUP	B2281	115	80	83	73		
90706-9DUP	B2282	126	87	94	75		
90697-11	B2248	123	92	6	35		
^^Note: MATRIX EFFECT							
90697-11D	B2274	55	34	4	20		
^^Note: MATRIX EFFECT							
90697-12	B2249	100	278	57	130		
^^Note: MATRIX EFFECT							
90697-12D	B2275	1	3	1	3		
^^Note: MATRIX EFFECT							
90697-13	B2250	108	237	32	114		
^^Note: MATRIX EFFECT							
90697-13D	B2276	45	88	4	30		
^^Note: MATRIX EFFECT							
90697-14	B2251	72	80	27	37		
^^Note: MATRIX EFFECT							

Analytical Services Inc. Batch QC
Surrogate Recovery
Volatile Organics

Matrix : Soil/Sediment Batch # 35639 Method : EPA 8260

% Recovery Objectives

S1	1,2-Dichloroethane-d4	70 - 121
S2	Toluene-d8	81 - 117
S3	Ethylbenzene-d10	79 - 115
S4	4-Bromofluorobenzene	74 - 121

Sample	File	S1	S2	S3	S4	S5	S6
90697-14D	B2277	15	12	1	4		
^^Note: MATRIX EFFECT							
90697-15	B2252	97	256	57	140		
^^Note: MATRIX EFFECT							
90697-15D	B2278	1	2	1	1		
^^Note: MATRIX EFFECT							
90697-16	B2253	69	15	16	12		
^^Note: MATRIX EFFECT							
90697-16DUP	B2279	61	1	1	2		
^^Note: MATRIX EFFECT							
90957	B2403	110	97	93	96		
90991-1	B2404	116	100	97	102		
90991-1DUP	B2447	114	101	92	100		
35639BLK2	B2298	106	100	91	96		
91031-3	B2604	123	100	92	99		
91031-4	B2605	109	95	95	98		
91031-5	B2606	114	98	94	97		
91031-3DUP	B2616	107	97	103	100		

Blank Results Information
Volatile Organics Method : EPA 8260

Analyte	Blank Result	Detection Limit
Acetone	BDL	100
Benzene	BDL	10
Bromodichloromethane	BDL	10
Bromoform	BDL	10
Bromomethane	BDL	10
2-Butanone	BDL	100
Carbon disulfide	BDL	10
Carbon tetrachloride	BDL	10
Chlorobenzene	BDL	10
Chloroethane	BDL	10
Chloroform	BDL	10
Chloromethane	BDL	10
Dibromochloromethane	BDL	10
1,1-Dichloroethane	BDL	10
1,2-Dichloroethane	BDL	10
1,1-Dichloroethene	BDL	10
1,2-Dichloroethene	BDL	10
1,2-Dichloropropane	BDL	10
cis-1,3-Dichloropropene	BDL	10
trans-1,3-Dichloropropene	BDL	10
Ethylbenzene	BDL	10
2-Hexanone	BDL	10
4-Methyl-2-pentanone	BDL	10
Methylene chloride	BDL	10
Styrene	BDL	10
1,1,2,2-Tetrachloroethane	BDL	10
Tetrachloroethene	BDL	10
Toluene	BDL	10
1,1,1-Trichloroethane	BDL	10
1,1,2-Trichloroethane	BDL	10
Trichloroethene	BDL	10
Vinyl chloride	BDL	10
Xylenes	BDL	10

Q.C. Information for Batch # 35639 Printed: 01/29/98 19:08:34

Sample Batch Information
Volatile Organics Method : EPA 8260

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
90706-2	/ /				01/17/98	2341	RFA	VOA2
90706-3	/ /				01/18/98	0006	RFA	VOA2
90706-4	/ /				01/18/98	0031	RFA	VOA2
90706-4MS	/ /				01/18/98	0056	RFA	VOA2
90706-4MSD	/ /				01/18/98	0120	RFA	VOA2
35639BLK	/ /				01/18/98	1126	RFA	VOA2
35639LCS	/ /				01/18/98	1036	RFA	VOA2
35369LCSD	/ /				01/18/98	1446	RFA	VOA2
90706-5	/ /				01/18/98	1216	RFA	VOA2
90706-6	/ /				01/18/98	1241	RFA	VOA2
90706-7	/ /				01/18/98	1306	RFA	VOA2
90706-8	/ /				01/18/98	1331	RFA	VOA2
90706-9	/ /				01/18/98	1356	RFA	VOA2
90706-7DUP	/ /				01/18/98	2027	LLP	VOA2
90706-8DUP	/ /				01/18/98	2052	LLP	VOA2
90706-9DUP	/ /				01/18/98	2117	LLP	VOA2
90697-11	/ /				01/17/98	1933	RFA	VOA2
90697-11D	/ /				01/18/98		RFA	VOA2
90697-12	/ /				01/17/98	1958	RFA	VOA2
[redacted]97-12D	/ /				01/18/98	1817	RFA	VOA2
90697-13	/ /				01/17/98	2023	RFA	VOA2
90697-13D	/ /				01/18/98	1847	RFA	VOA2
90697-14	/ /				01/17/98	2047	RFA	VOA2
90697-14D	/ /				01/18/98	1912	RFA	VOA2
90697-15	/ /				01/17/98	2112	RFA	VOA2
90697-15D	/ /				01/18/98	1937	RFA	VOA2
90697-16	/ /				01/17/98	2137	RFA	VOA2
90697-16DUP	/ /				01/17/98	2002	RFA	VOA2
90957	/ /				01/22/98	1621	RFA	VOA2
90991-1	/ /				01/22/98	1647	RFA	VOA2
90991-1DUP	/ /				01/23/98	1527	RFA	VOA2
35639BLK2	/ /				01/28/98	0857	LLP	VOA2
91031-3	/ /				01/28/98	1125	LLP	VOA2
91031-4	/ /				01/28/98	1149	LLP	VOA2
91031-5	/ /				01/28/98	1214	LLP	VOA2
91031-3DUP	/ /				01/28/98	1621	RFA	VOA2

Analytical Services Inc. Batch QC
For Report Number :90957
Base Neutrals / Acids

Matrix : Soil/Sediment Batch # 35661 Method : EPA 8270

Lab Control Information Analyte	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
Phenol	53	44	20	26 - 90	0 - 35
2-Chlorophenol	52	42	21	25 - 102	0 - 50
1,4-Dichlorobenzene	53	43	21	28 - 104	0 - 27
N-Nitrosodipropylamine	63	51	20	41 - 126	0 - 38
1,2,4-Trichlorobenzene	58	49	18	38 - 107	0 - 23
4-Chloro-3-methylphenol	57	48	16	26 - 103	0 - 33
Acenaphthene	63	52	19	31 - 137	0 - 19
2,4-Dinitrotoluene	40	39	2	28 - 89	0 - 47
4-Nitrophenol	35	39	10	11 - 114	0 - 50
Pentachlorophenol	39	40	3	17 - 109	0 - 47
Pyrene	74	70	5	35 - 142	0 - 36

Matrix Spike Information Analyte	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
Phenol	61	65	7	26 - 90	0 - 35
2-Chlorophenol	61	66	8	25 - 102	0 - 50
1,4-Dichlorobenzene	52	56	8	28 - 104	0 - 27
N-Nitrosodipropylamine	66	68	3	41 - 126	0 - 38
1,2,4-Trichlorobenzene	54	59	9	38 - 107	0 - 23
4-Chloro-3-methylphenol	65	70	6	26 - 103	0 - 33
Acenaphthene	66	70	7	31 - 137	0 - 19
2,4-Dinitrotoluene	70	73	4	28 - 89	0 - 47
4-Nitrophenol	64	73	12	11 - 114	0 - 50
Pentachlorophenol	63	72	13	17 - 109	0 - 47
Pyrene	82	89	7	35 - 142	0 - 36

Analytical Services Inc. Batch QC
Surrogate Recovery
Base Neutrals / Acids

Matrix : Soil/Sediment Batch # 35661 Method : EPA 8270

% Recovery Objectives

S1	2-Fluorophenol	25 - 121
S2	Phenol-d5	24 - 113
S3	Nitrobenzene-d5	23 - 120
S4	2-Fluorobiphenyl	30 - 115
S5	2,4,6-Tribromophenol	19 - 122
S6	Terphenyl-d14	18 - 137

Sample	File	S1	S2	S3	S4	S5	S6
35661BLK	A7543	45	53	50	57	56	74
35661LCS	A7544	52	54	55	69	64	75
35661LCSD	A7545	43	45	47	56	59	73
90945-1	A7546	56	62	58	74	62	90
90945-2	A7547	52	60	58	67	64	93
90945-3	A7548	54	61	58	71	75	86
90945-4	A7549	50	56	52	64	59	75
90945-5	B3442	62	67	66	67	69	81
90945-6	B3443	48	51	52	51	47	63
90945-7	B3444	62	62	64	56	65	78
90945-8	B3465	75	76	92	77	68	77
90945-5DUP	B3466	64	63	66	65	55	78
90945-3MS	B3467	57	57	60	59	64	70
90945-3MSD	B3468	64	65	70	65	72	76
90945-8D	B3471	73	72	80	68	52	71
^^Note: 1:10							
90957	B3488	55	59	58	59	59	70
91031-3	A7633	46	59	56	50	58	68
91031-4	A7634	58	69	64	59	57	103
91031-5	A7635	58	67	62	58	64	94
91139-2	B3603	69	42	80	85	103	98
^^Note: FV=5ML							

Blank Results Information
Base Neutrals / Acids Method : EPA 8270

Analyte	Blank Result	Detection Limit
4-Chloro-3-methylphenol	BDL	330
2-Chlorophenol	BDL	330
2,4-Dichlorophenol	BDL	330
2,4-Dimethylphenol	BDL	330
4,6-Dinitro-2-methylphenol	BDL	800
2,4-Dinitrophenol	BDL	800
2-Methylphenol	BDL	330
4-Methylphenol	BDL	330
2-Nitrophenol	BDL	330
4-Nitrophenol	BDL	800
Pentachlorophenol	BDL	800
Phenol	BDL	330
2,4,5-Trichlorophenol	BDL	800
2,4,6-Trichlorophenol	BDL	330
Acenaphthene	BDL	330
Acenaphthylene	BDL	330
Anthracene	BDL	330
Benzo	BDL	330
Benzyl butyl phthalate	BDL	330
Bis	BDL	330
4-Bromophenyl phenyl ether	BDL	330
Carbazole	BDL	330
4-Chloroaniline	BDL	330
2-Chloronaphthalene	BDL	330
4-Chlorophenyl phenyl ether	BDL	330
Chrysene	BDL	330
Dibenzo	BDL	330
Dibenzofuran	BDL	330
Di-n-butylphthalate	BDL	330
1,3-Dichlorobenzene	BDL	330
1,2-Dichlorobenzene	BDL	330
1,4-Dichlorobenzene	BDL	330
3,3'-Dichlorobenzidine	BDL	330
Diethylphthalate	BDL	330
Dimethylphthalate	BDL	330
2,4-Dinitrotoluene	BDL	330
2,6-Dinitrotoluene	BDL	330
Di-n-octylphthalate	BDL	330
Fluoranthene	BDL	330
Fluorene	BDL	330
Hexachlorobenzene	BDL	330
Hexachlorobutadiene	BDL	330
Hexachlorocyclopentadiene	BDL	330
Hexachloroethane	BDL	330
Indeno	BDL	330
Isophorone	BDL	330
2-Methylnaphthalene	BDL	330
2-Nitroaniline	BDL	800
3-Nitroaniline	BDL	800

Q.C. Information for Batch # 35661 Printed: 01/29/98 19:08:36

Blank Results Information
Base Neutrals / Acids Method : EPA 8270

Analyte	Blank Result	Detection Limit
4-Nitroaniline	BDL	660
Naphthalene	BDL	330
Nitrobenzene	BDL	330
N-Nitrosodiphenylamine	BDL	330
N-Nitrosodi-n-propylamine	BDL	330
Phenanthrene	BDL	330
Pyrene	BDL	330
1,2,4-Trichlorobenzene	BDL	330

Sample Batch Information
Base Neutrals / Acids Method : EPA 8270

Sample ID	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst #
35661BLK	01/20/98	1030	KLF		01/20/98	1841	TAS	5970
35661LCS	01/20/98	1030	KLF		01/20/98	1915	TAS	5970
35661LCSD	01/20/98	1030	KLF		01/20/98	1949	TAS	5970
90945-1	01/20/98	1030	KLF	PAH	01/20/98	2023	TAS	5970
90945-2	01/20/98	1030	KLF	PAH	01/20/98	2057	TAS	5970
90945-3	01/20/98	1030	KLF	PAH	01/20/98	2130	TAS	5970
90945-4	01/20/98	1030	KLF	PAH	01/20/98	2204	TAS	5970
90945-5	01/20/98	1030	KLF	PAH	01/20/98	1742	TAS	5971
90945-6	01/20/98	1030	KLF	PAH	01/20/98	1818	TAS	5971
90945-7	01/20/98	1030	KLF	PAH	01/20/98	1853	TAS	5971
90945-8	01/20/98	1030	KLF	PAH	01/21/98	0634	TAS	5971
90945-5DUP	01/20/98	1030	KLF	PAH	01/21/98	0709	TAS	5971
90945-3MS	01/20/98	1030	KLF	PAH	01/21/98	0745	TAS	5971
90945-3MSD	01/20/98	1030	KLF	PAH	01/21/98	0820	TAS	5971
90945-8D	/ /				01/21/98	1006	TAS	5971
90957	01/21/98	1030	KLF		01/21/98	2302	TAS	5971
91031-3	01/26/98	1530	KLF		01/27/98	1308	TAS	5970
91031-4	01/26/98	1530	KLF		01/27/98	1341	TAS	5970
91031-5	01/26/98	1530	KLF		01/27/98	1413	TAS	5970
91139-2	01/28/98	0840	KLF		01/28/98	1602	TAS	597

Analytical Services Inc. Batch QC
For Report Number :90957

Batch General Information

Batch Number	Analyte	Analysis Method	Matrix		Blank Result	Prep. Method
34886	Hg	EPA 7471	Soil	<	0.0002	
35387	Tl	EPA 7841	Soil	<	0.0150	
35387	As	EPA 7060	Soil	<	0.0050	
^^Note : QC PASSES ON LCS,LCSD,MSD,PDS						
35387	Se	EPA 7740	Soil	<	0.0050	
35388	Ag	EPA 6010	Soil	<	0.0100	
35388	Al	EPA 6010	Soil	<	0.1000	
^^Note : QC PASSES ON LCS,LCSD						
35388	Ba	EPA 6010	Soil	<	0.0100	
35388	Be	EPA 6010	Soil	<	0.0100	
35388	Ca	EPA 6010	Soil	<	0.0500	
^^Note : QC PASSES ON LCS,LCSD,MSD,PDS						
35388	Cd	EPA 6010	Soil	<	0.0050	
35388	Co	EPA 6010	Soil	<	0.0400	
35388	Cr	EPA 6010	Soil	<	0.0100	
35388	Cu	EPA 6010	Soil	<	0.0200	
35388	Fe	EPA 6010	Soil	<	0.0300	
^^Note : QC PASSES ON LCS,LCSD						
35388	K	EPA 6010	Soil	<	0.2000	
^^Note : QC PASSES ON LCS,LCSD,MSD,PDS						
35388	Mg	EPA 6010	Soil	<	0.0500	
^^Note : QC PASSES ON LCS,LCSD,MSD,PDS						
35388	Mn	EPA 6010	Soil	<	0.0400	
^^Note : QC PASSES ON LCS,LCSD,MS,PDS						
35388	Na	EPA 6010	Soil	<	0.0500	
^^Note : QC PASSES ON LCS,LCSD,MSD,PDS						
35388	Ni	EPA 6010	Soil	<	0.0200	
35388	Pb	EPA 6010	Soil	<	0.0250	
35388	Sb	EPA 6010	Soil	<	0.0500	
^^Note : QC PASSES ON LCS,LCSD						
35388	V	EPA 6010	Soil	<	0.0100	
35388	Zn	EPA 6010	Soil	<	0.0100	
^^Note : QC PASSES ON LCS,LCSD,MS,PDS						

Analytical Services Inc. Batch QC
For Report Number :90957

Lab Control Information

Batch Number	Analyte	Method	LC %Rec	LCD %Rec	LC RPD	%Recovery Range	RPD Range
34886	Hg	EPA 7471	96	91	5	76 - 124	0 - 30
35387	Tl	EPA 7841	95	100	5	76 - 124	0 - 30
35387	As	EPA 7060	89	98	10	76 - 124	0 - 30
35387	Se	EPA 7740	107	115	7	76 - 124	0 - 30
35388	Ag	EPA 6010	89	92	3	76 - 124	0 - 30
35388	Al	EPA 6010	83	83	0	76 - 124	0 - 30
35388	Ba	EPA 6010	89	89	0	76 - 124	0 - 30
35388	Be	EPA 6010	89	89	0	76 - 124	0 - 30
35388	Ca	EPA 6010	82	84	2	76 - 124	0 - 30
35388	Cd	EPA 6010	87	94	8	76 - 124	0 - 30
35388	Co	EPA 6010	83	84	1	76 - 124	0 - 30
35388	Cr	EPA 6010	83	83	0	76 - 124	0 - 30
35388	Cu	EPA 6010	84	84	0	76 - 124	0 - 30
35388	Fe	EPA 6010	87	85	2	76 - 124	0 - 30
35388	K	EPA 6010	84	83	1	76 - 124	0 - 30
35388	Mg	EPA 6010	84	84	0	76 - 124	0 - 30
35388	Mn	EPA 6010	85	86	1	76 - 124	0 - 30
35388	Na	EPA 6010	84	83	1	76 - 124	0 - 30
35388	Ni	EPA 6010	83	84	1	76 - 124	0 - 30
35388	Pb	EPA 6010	80	81	1	76 - 124	0 - 30
35388	Sb	EPA 6010	82	83	1	76 - 124	0 - 30
35388	V	EPA 6010	85	86	1	76 - 124	0 - 30
35388	Zn	EPA 6010	80	81	1	76 - 124	0 - 30

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
34886	Hg	EPA 7471	96	100	4	76 - 124	0 - 30
35387	Tl	EPA 7841	77	81	5	76 - 124	0 - 30
35387	As	EPA 7060	75	80	6	76 - 124	0 - 30
35387	Se	EPA 7740	94	104	10	76 - 124	0 - 30
35388	Ag	EPA 6010	84	84	0	76 - 124	0 - 30
35388	Al	EPA 6010	350	260	30	76 - 124	0 - 30
35388	Ba	EPA 6010	87	85	2	76 - 124	0 - 30
35388	Be	EPA 6010	86	84	2	76 - 124	0 - 30
35388	Ca	EPA 6010	160	77	70	76 - 124	0 - 30
35388	Cd	EPA 6010	86	86	0	76 - 124	0 - 30
35388	Co	EPA 6010	80	79	1	76 - 124	0 - 30
35388	Cr	EPA 6010	80	79	1	76 - 124	0 - 30
35388	Cu	EPA 6010	85	82	4	76 - 124	0 - 30
35388	K	EPA 6010	160	78	69	76 - 124	0 - 30
35388	Mg	EPA 6010	160	78	69	76 - 124	0 - 30
35388	Mn	EPA 6010	86	69	22	76 - 124	0 - 30
35388	Na	EPA 6010	160	78	69	76 - 124	0 - 30
35388	Ni	EPA 6010	80	80	0	76 - 124	0 - 30

Analytical Services Inc. Batch QC
For Report Number :90957

Matrix Spike Information

Batch Number	Analyte	Method	MS %Rec	MSD %Rec	MS RPD	%Recovery Range	RPD Range
35388	Pb	EPA 6010	79	77	3	76 - 124	0 - 30
35388	Sb	EPA 6010	75	73	3	76 - 124	0 - 30
35388	V	EPA 6010	82	80	2	76 - 124	0 - 30
35388	Zn	EPA 6010	77	75	3	76 - 124	0 - 30

Post Digestion Spike Information

Batch Number	Analyte	Method	PDS %Rec	%Recovery Range
35387	Tl	EPA 7841	85	76 - 124
35387	As	EPA 7060	95	76 - 124
35387	Se	EPA 7740	123	76 - 124
35388	Ag	EPA 6010	88	76 - 124
35388	Al	EPA 6010	18	76 - 124
35388	Ba	EPA 6010	86	76 - 124
35388	Be	EPA 6010	85	76 - 124
35388	Ca	EPA 6010	78	76 - 124
35388	Cd	EPA 6010	89	76 - 124
35388	Co	EPA 6010	81	76 - 124
35388	Cr	EPA 6010	79	76 - 124
35388	Cu	EPA 6010	83	76 - 124
35388	K	EPA 6010	80	76 - 124
35388	Mg	EPA 6010	80	76 - 124
35388	Mn	EPA 6010	84	76 - 124
35388	Na	EPA 6010	79	76 - 124
35388	Ni	EPA 6010	81	76 - 124
35388	Pb	EPA 6010	79	76 - 124
35388	Sb	EPA 6010	70	76 - 124
35388	V	EPA 6010	82	76 - 124
35388	Zn	EPA 6010	76	76 - 124

Q.C. Information for Batch # 34886 For Report Number :90957

Sample Batch Information
Analysis : Hg

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
34886BLANK	HG	01/22/98	0730	FBS		01/22/98	1541	FBS	HG1
34886LCS	HG	01/22/98	0730	FBS		01/22/98	1616	FBS	HG1
34886LCSD	HG	01/22/98	0730	FBS		01/22/98	1546	FBS	HG1
90957MS	HG	01/22/98	0730	FBS		01/22/98	1548	FBS	HG1
90957MSD	HG	01/22/98	0730	FBS		01/22/98	1550	FBS	HG1
90957DUP	HG	01/22/98	0730	FBS		01/22/98	1553	FBS	HG1
90858-5	HG	01/22/98	0730	FBS		01/22/98	1609	FBS	HG1
90957	HG	01/22/98	0730	FBS		01/22/98	1555	FBS	HG1
EHPS-SAND	HG	01/22/98	0730	FBS		01/22/98	1602	FBS	HG1

Q.C. Information for Batch # 35387 For Report Number :90957

Sample Batch Information
Analysis : Tl, As, Se

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
35387BLANK	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
35387LCS	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
35387LCSD	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
90957MS	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
90957MSD	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
90957PDS	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
90957DUP	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
90957	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
S-BLK	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
HPS	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
HPS	Tl	01/21/98	0835	DCM	GFAA	01/21/98	1655	MLR	AA1
35387BLANK	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
35387LCS	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
35387LCSD	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
90957MS	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
90957MSD	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
90957PDS	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
90957DUP	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
90957	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
S-BLK	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
HPS	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
HPS	As	01/21/98	0835	DCM	GFAA	01/22/98	0814	MCW	AA1
35387BLANK	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
35387LCS	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
35387LCSD	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
90957MS	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
90957MSD	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
90957PDS	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
90957DUP	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
90957	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
S-BLK	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
HPS	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1
HPS	Se	01/21/98	0835	DCM	GFAA	01/22/98	0954	MLR	AA1

Q.C. Information for Batch # 35388 For Report Number :90957

Sample Batch Information

Analysis : Ag, Al, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, Pb Sb V Zn

Sample ID	Tag	Preparation Date	Time	By	Preparation Notes	Analysis Date	Time	By	Inst
35388BLANK		01/21/98	0835	DCM	36	01/21/98	1642	MCW	ICP1
35388LCS		01/21/98	0835	DCM	36	01/21/98	1647	MCW	ICP1
35388LCSD		01/21/98	0835	DCM	36	01/21/98	1651	MCW	ICP1
90957MS		01/21/98	0835	DCM	36	01/21/98	1655	MCW	ICP1
90957MSD		01/21/98	0835	DCM	36	01/21/98	1700	MCW	ICP1
90957PDS		01/21/98	0835	DCM	36	01/21/98	1704	MCW	ICP1
90957DUP		01/21/98	0835	DCM	36	01/21/98	1708	MCW	ICP1
90957		01/21/98	0835	DCM	36	01/21/98	1713	MCW	ICP1
90984-5		01/21/98	0835	DCM	36	01/21/98	1717	MCW	ICP1
S-BLK		01/21/98	0835	DCM	36	01/21/98	1721	MCW	ICP1
HPS		01/21/98	0835	DCM	36	01/21/98	1734	MCW	ICP1
HPS		01/21/98	0835	DCM	36	01/21/98	1739	MCW	ICP1

ASI ANALYTICAL SERVICES, INC.

ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY • NORCROSS, GA 30092
(770) 734-4200 • FAX (770) 734-4201

CHAIN OF CUSTODY RECORD

CLIENT NAME: OHM CORP / GREG BURGRESS

CLIENT ADDRESS AND PHONE NUMBER: EXTENDED STAY AMERICA, 5885 SHELBY OAKS DRIVE, MEMPHIS, TN 38134 — PHONE (901) 573-5238 — FAX (901) 386-5198

PROJECT MANAGER: JOHN LORE — ATN: COPY TO (if applicable): STEVE OFFNER

REQUESTED COMPLETION DATE: 1/23/98

SAMPLING REQUIREMENTS: SDWA ☐ NPDES ☐ RCRA ☐ OTHER ☐ _____

PROJECT NAME: MEMPHIS DEFENSE DEPOT

PROJECT NUMBER: 20022

PURCHASE ORDER NO:

FOR LAB USE ONLY

LAB #: 90957

PROJECT NO.:

ACK: VERIFIED:

QUOTE #: BS:

NO OF SAMP: 4 by PG: 1 OF: 1

SAMPLE ID	DATE	TIME	COMP	GRAB	SOIL	SAMPLE DESCRIPTIONS	# OF CONTAINERS	TCL VOLATILES 8260 B	TCL SVOCs 8270 C	TCL PESTICIDES 8081	TAL METALS 6010A / 7471B	LAB ID	REMARKS/ADDITIONAL INFORMATION
BF1	1/19/98	1600	X	X	X	SOIL	1 4oz	X				1a	SOIL FROM PROPOSED
BF1	1/19/98	1600	X	X	X	SOIL	1 4oz		X			2b	CLEAN BACKFILL
BF1	1/19/98	1600	X	X	X	SOIL	1 4oz			X		3c	BORROW PIT
BF1	1/19/98	1600	X	X	X	SOIL	1 4oz				X	4d	

grab per cont.

SAMPLED BY AND TITLE: GEOLOGIST THOMAS A McCRORY — DATE/TIME: 1/19/98

RELINQUISHED BY: THOMAS A. McCRORY — DATE/TIME: 1/19/98

RECEIVED BY: FEDEX TAM — DATE/TIME: 1/19/98

AIRBILL NO. [redacted]

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY: 394103606 1 — DATE/TIME:

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY LAB: — DATE/TIME: 1/20/98 0930

SAMPLE SHIPPED VIA: UPS BUS (FED-EX) HAND OTHER _____ — AIR BILL # TAM [redacted] 394103606 1

HAZWRAP/NEESA Y N

QC LEVEL 1 2 3

COC Y — ICE Y

ANA REQ — TEMP 4C

CUST SEAL NO — PH N/A

SAMPLE COND Good

REMARKS: ALL SAMPLES SHIPPED ON ICE 4 cont.

ENTERED INTO LIMS _____ COC REVIEWD _____

479 206

TAB

Appendix I

OHM Remediation
Services Corp.
A subsidiary of OHM Corporation

Pressure Testing of pipe at Dunn Field

During the construction of the Groundwater Interim Remedial Action at Dunn Field on the Defense Depot, Memphis, Tennessee, a pipeline consisting of approximately 2100 feet of 6" and 8" high density polyethylene (HDPE) piping was installed. Seven wells were installed; 2" stainless steel pipe was used to connect the discharge of the well pumps to the top of the wells, and 1"-2" chlorinated polyvinyl chloride (CPVC) piping and valves were installed to connect the Wells to the pipeline. A recirculation line was installed at each well, consisting of ¾" and 1½" pipe, valves, a Scaltrol unit, and a spin down filter. In order to comply with section 15992 of the specifications the piping has to be leakage tested.

OHM foresaw a problem with testing the 2" stainless steel drop pipe after construction because there was no way of isolating one end of the piping. The government's representative allowed OHM to assemble 100' of the stainless steel piping and leakage test it above ground to ensure that our method of installing pipe would not cause leaks. This test occurred on 4/15/98. The Pipe was pressurized, and after 3 hours the pressure went up because the pipe was exposed to the sunlight; no visible signs of any leakage were present.

The HDPE pipeline was leakage tested on 4/17/98. The pipe was pumped up to a pressure of 190 PSIG. After two hours, 11 gallons were pumped into the pipeline to allow for the expansion of the polyethylene pipe. The 11 gallons of water was within the allowance for expansion of 18.33 gallons. The government's representative, Dana Conkin was present for this test.

The CPVC piping at wells RW-3,4,6,7,8,9 was tested at a pressure of 140 PSIG during 5/7/98 and 5/8/98. No visible signs of leakage were present; the piping at each well held the pressure for more than 2 hours.

Due to changes in design, RW-5 was installed much later than the other wells, therefore, it has not been tested for leakage yet. In order to test RW-5 and to test more of the interconnecting piping between the pipeline and the well piping, OHM will conduct leakage testing for the HDPE pipeline and the CPVC piping at all seven wells simultaneously. A hydrostatic test with a pressure of 140 PSIG will be used. The system will be filled with water at RW-5, using the fire hydrant at Dunn Field; this should provide about 50 PSIG. Air will be vented at the seven wells, the meter and bypass line, and the end of the pipeline at the corner of Hays Road and Person Avenue. The system will then be pumped up to 140 PSIG. The system was constructed with a 0 to 160 PSIG gauge at each well; the gauge at RW-5 will be used to monitor the pressure. A two hour test will be conducted. The procedure recommended by the manufacturer of the HDPE pipe will be followed. This procedure calls for an initial expansion period followed by repressurization and a test period; if the system can be pumped up to test pressure with the amount of water that is specified in manufacturer's allowance for expansion under test pressure at the end of the test period, then the test will pass. All visible piping will be inspected for leakage.

TESTING POLYETHYLENE PIPELINES

Driscopipe piping systems should be hydrostatically pressure tested before being put into service. Water is the preferred test medium. After all free air is removed from the test section, raise the pressure at a steady rate to the required pressure. The pressure in the section shall be measured as close as possible to the lowest point of the test section.

Pressure Piping Systems

The initial pressure test can be conducted before or after the line is backfilled. However, it is advisable to cover the pipe at intervals, or particularly at curves to hold the pipe in place during pressure tests. Flanged connections may be left exposed for visual leak inspection.

Test pressure should not exceed 1.5 times the rated operating pressure of the pipe or the lowest rated component in the system The initial pressure test shall be applied and allowed to stand without makeup pressure for a sufficient time to allow for diametric expansion or pipe stretching to stabilize. This usually occurs within 2-3 hours. After this equilibrium period, the test section can be returned to the 1.5 times operating pressure, the pump turned off and a final test pressure held for 1-3 hours.

Remember that pressure drop will not only occur due to pressure expansion, but also due to fluctuations in temperature during the test. As the temperature increases, the gauge pressure will decrease Allowable amounts of makeup water for expansion during the pressure test is shown in Chart 6, taken from PPI Technical Report TR 31/9-79 If there are no visual leaks or significant pressure drops during the final test period, the pipeline passes the test.

Chart 6.

Allowance for Expansion Under Test Pressure*

Nominal Pipe Size (in.)	Allowance for Expansion (U.S. Gals./100 Feet of Pipe)		
	1-Hour Test	2-Hour Test	3-Hour Test
3	0 10	0.15	0 25
4	0.13	0.25	0 40
6	0 30	0 60	0 90
8	0 50	1 0	1 5
10	0.75	1.3	2 1
11	1 0	2.0	3 0
12	1.1	2.3	3 4
14	1.4	2 8	4 2
16	1 7	3.3	5 0
18	2.2	4 3	6.5
20	2 8	5 5	8 0
22	3 5	7 0	10 5
24	4 5	8 9	13.3
28	5 5	11 1	16 8
32	7 0	14.3	21.5
36	9 0	18.0	27.0
40	11 0	22.0	33.0
48	15 0	27 0	43.0

*These allowances only apply to the test period and not to the initial expansion phase

1320' 8" pipe

840' 6" pipe

60' 3" pipe

$(1320\ ft)\ \frac{1\ gal}{100\ ft} = 13.2\ gal$

$(840\ ft)\ \frac{.6\ gal}{100\ ft} = 5.04\ gal$

$(60\ ft)\ \frac{.15}{100\ ft} = 0.09\ gal$

---

total = 18.33 gal

OHM Remediation
Services Corp.
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Pressure Testing of pipe at Dunn Field on 8/13/98

In order to test the CPVC piping at RW-5 and to test more of the interconnecting piping between the pipeline and the well piping, OHM conducted leakage testing on 8/13/98. The manufacturer's procedure for testing HDPE pipe was followed. The pressure was applied to the CPVC piping at RW-5, using a hydrostatic test pump that was equipped with a tank at the top of the pump. The isolation valve that connects RW-5 to the HDPE pipeline was left open, therefore the HDPE pipeline and the meter and bypass piping was tested as well. At 9:47 AM the pipe was pressurized to 140 psi. The pipe was allowed to sit until 1:49 to allow for expansion. At 1:51 PM the pipe was repressurized to 140 psi. At 3:51 PM expansion of the HDPE pipe had casused the pressure to drop to 131 psi. The pipe was then repressurized to 140 psi. The level in the tank dropped from 9" to 6½". The volume of water injected into the pipe was calculated with the following equation:

$$\frac{V = lw\Delta h}{231}$$

Where V is the volume, l is the length of the tank (23.5"), w is the width of the tank (16.5"), and Δh is the change in height of the water (2.5"). It was assumed that 1 gallon is equivalent to 231 cubic inches. The volume of water injected into the pipe to restore the pressure to 140 psi was calculated to be 4.2 gallons. This was well within the manufacturer's allowance of 18.3 gallons.

The pressure test was successful according to the above allowance criteria, however, a few very small leaks were observed visually. These leaks occurred at the 3" threaded connections between the 3" CPVC flanges and the 3" x 2" reducing bushings. The leaks were too small to affect the pressure test. OHM's experience has shown that glued connections have a much lower incidence of leakage than threaded connections, therefore, OHM will replace the leaking threaded 3" flanges and 3" x 2" reducing bushings with socket ones. During system startup the replaced connections will be observed visually to ensure that no leaks are present.

The piping at recovery wells 3, 4, 6, 7, 8, & 9 was exposed to test pressure from the flanged connections with the pipeline to the bottom of the check valves; the piping above the check valves was previously tested in May. All of the CPVC piping at the top of the recovery well has now been tested except for the recirculation lines that contain the Scaltrol phosphate dispensing units These lines cannot be exposed to test pressure because the Scaltrol phosphate dispensing units are rated at only 50 psi, and there is no way to isolate the line that goes back into the well; OHM will visually inspect these line to ensure no leakage is present during system startup.

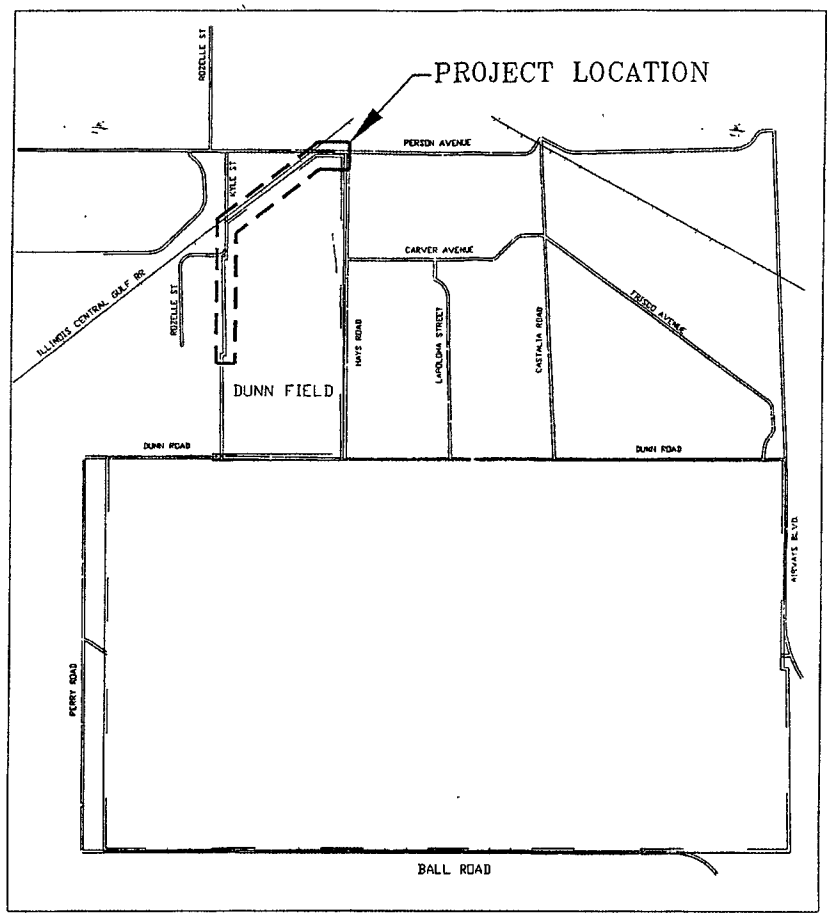
TAB

Appendix J

TAB

As-Built Drawings

GROUNDWATER EXTRACTION SYSTEM
INSTALLATION & CONSTRUCTION
AS-BUILT DRAWINGS



LEGEND

——— MEMPHIS DEPOT BOUNDARY

MEMPHIS DEPOT LOCATION MAP

FIGURE NUMBER	DESCRIPTION OF AS BUILT DRAWING
1	COVER SHEET
2	GROUNDWATER EXTRACTION LAYOUT
3	RECOVERY WELL CONSTRUCTION DETAILS
4	PIPING TRENCH SECTIONS AND GROUND ROD DETAILS
5	RECOVERY WELL & METER BYPASS PIPING DETAILS
6	CONTROL BUILDING PLAN ELEVATION, DETAILS AND PANEL ELEMENTARY
7	ELECTRICAL ONE LINE DIAGRAM, AND MAIN DISTRIBUTION PANEL AND METER
8	TYPICAL RECOVERY WELL PLAN, CONTROL DIAGRAM AND PANEL ELEMENTARY
9	FUTURE RECOVERY WELL WIRE TERMINATIONS

RECORD DRAWING

J:\DDMT\20022\AS-BUILT\FIG-01.DWG

OHM Remediation Services Corp.
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AT FULL SCALE (IF NOT 1"-SCALE ACCORDINGLY)
CADD FILE:
DRAWN: L. SHULMAN
DESIGNED: J. McCARTHY
CHECKED: S. OFFNER
APPROVED

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP.
	1	AS BUILT	LS	3/16/99	

U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT

CONTRACT NO. DACA45-96-D-0014 DELIVERY ORDER NO. 0007
OHM PROJECT No. 920022 MEMPHIS, SHELBY COUNTY, TENNESSEE

COVER SHEET

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEPOT, TENNESSEE

DRAWING NUMBER: FIG. 1
SHEET NUMBER: 1 of 9
DATE: 4/6/99

RECORD DRAWING

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(IF NOT 1"-SCALE ACCORDINGLY)	
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DRAWN: L. SHULLMAN	
DESIGNED: J. MCCARTHY	
CHECKED: S. OFENER	
APPROVED:	

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP
	1	AS BUILT	LS	3/16/99	

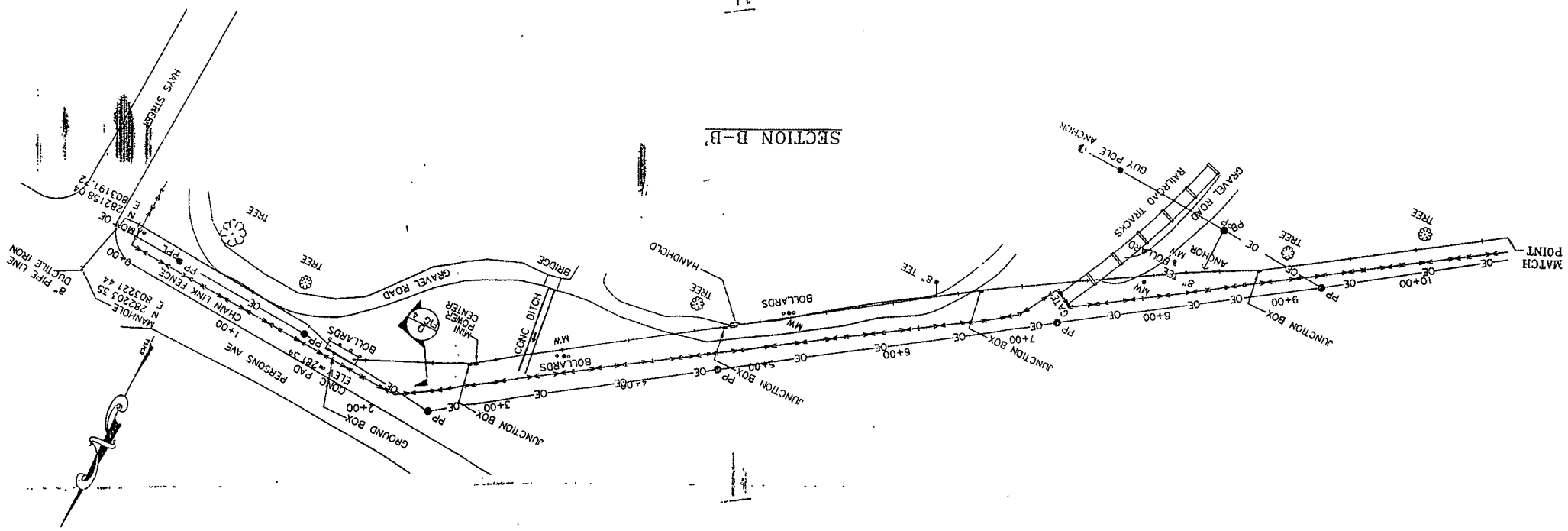
U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT

CONTRACT NO. DACA45-96-D-0014 DELIVERY ORDER NO. 0007
OHM PROJECT No. 820022 MEMPHIS, SHELBY COUNTY, TENNESSEE

GROUNDWATER EXTRACTION LAYOUT
DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEPOT, TENNESSEE

DRAWING NUMBER:	SHEET NUMBER:	DATE:
FIG. 2	2 of 9	4/6/99

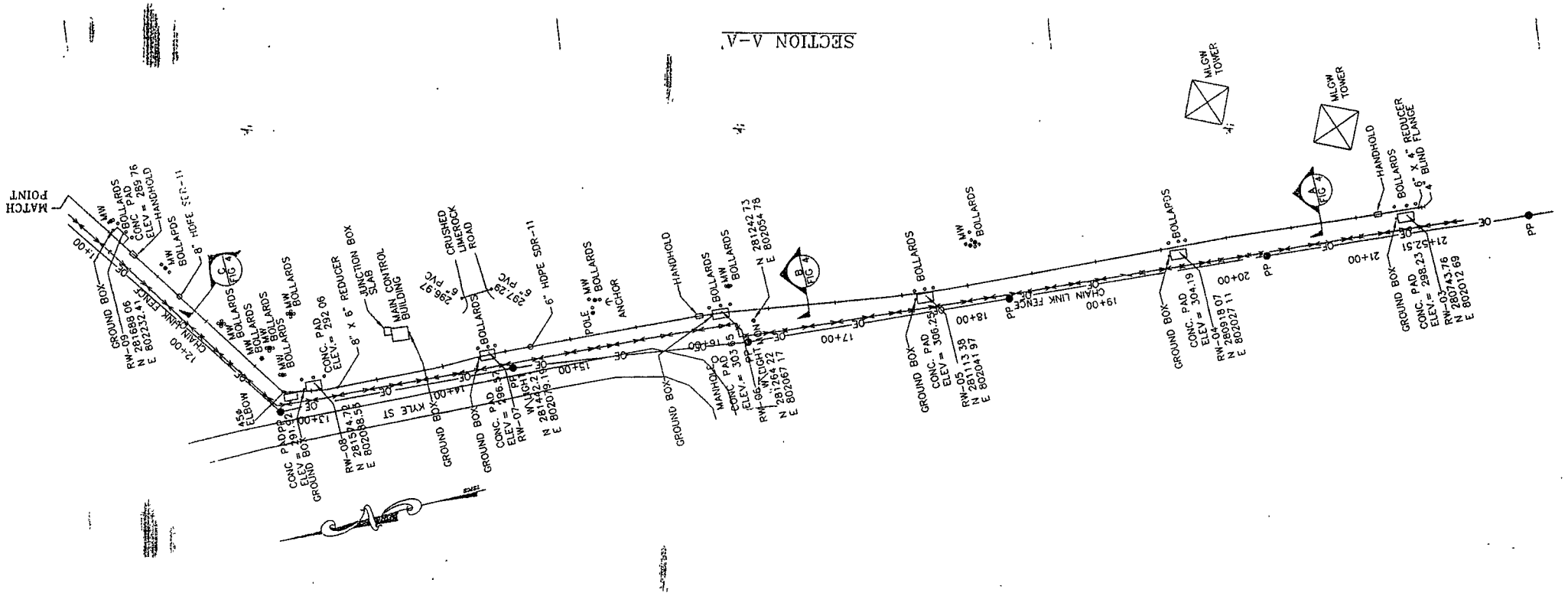
SECTION B-B'



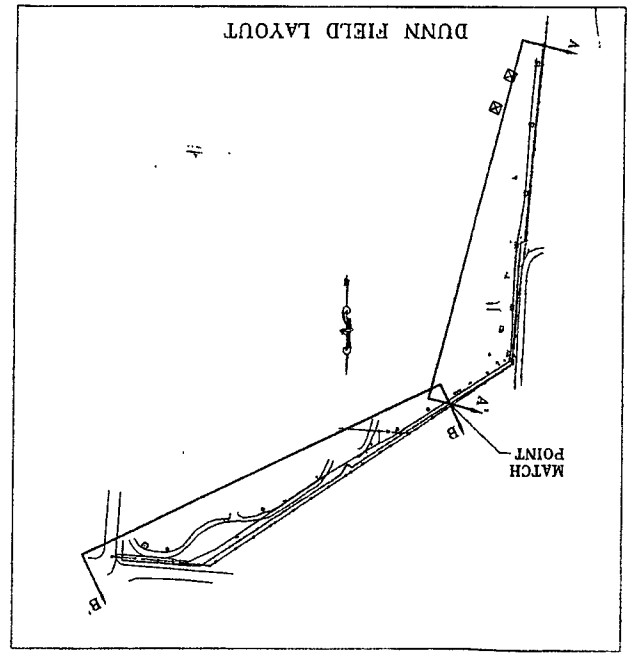
LEGEND

PP ●	PP - POWER POLE
—OE—	OVERHEAD LINE
	ANCHOR
⊗	MW - MONITORING WELL
○	BOLLARDS
□	CONCRETE PAD WITH RECOVERY WELL
——	FENCE
——	36" WIDE TRENCH
MON●	MONUMENT
□	HANDHOLD BOX

SECTION A-A'

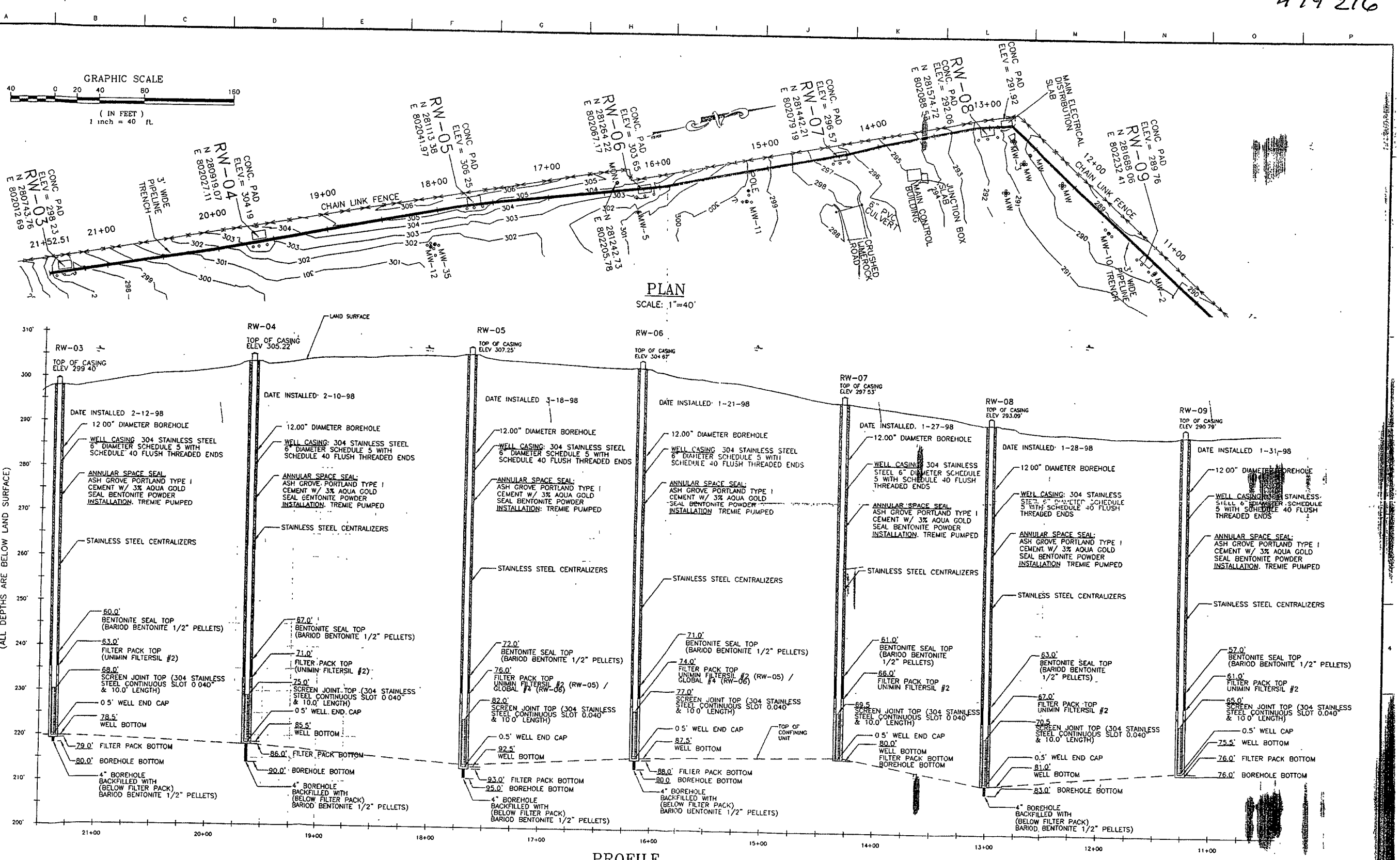


DUNN FIELD LAYOUT



479215

479216



PLAN

SCALE: 1"=40'

PROFILE

HORIZONTAL SCALE: 1"=40'

RECORD DRAWING

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DESIGNED:	J. McCARTHY
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ZONE	REV.	DESCRIPTION	BY	DATE	APP
	1	AS BUILT	LS	3/16/99	

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CONTRACT NO. DACA45-96-D-0014 DELIVERY ORDER NO. 0007

OHM PROJECT No. 920022 MEMPHIS, SHELBY COUNTY, TENNESSEE

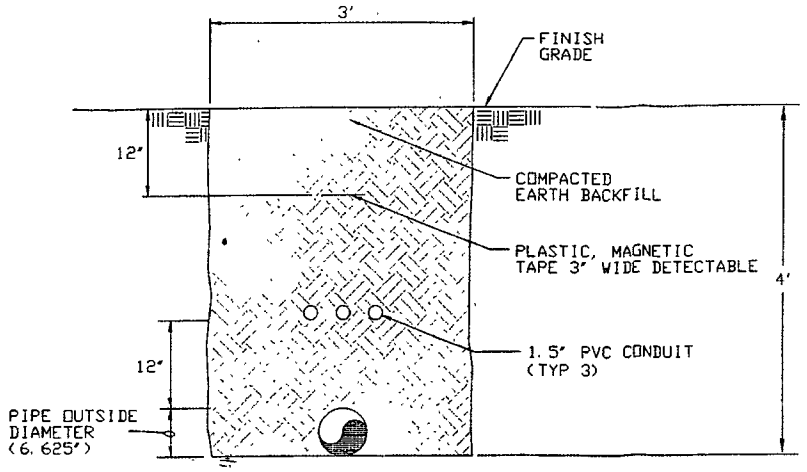
RECOVERY WELL CONSTRUCTION DETAILS

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEPOT, TENNESSEE

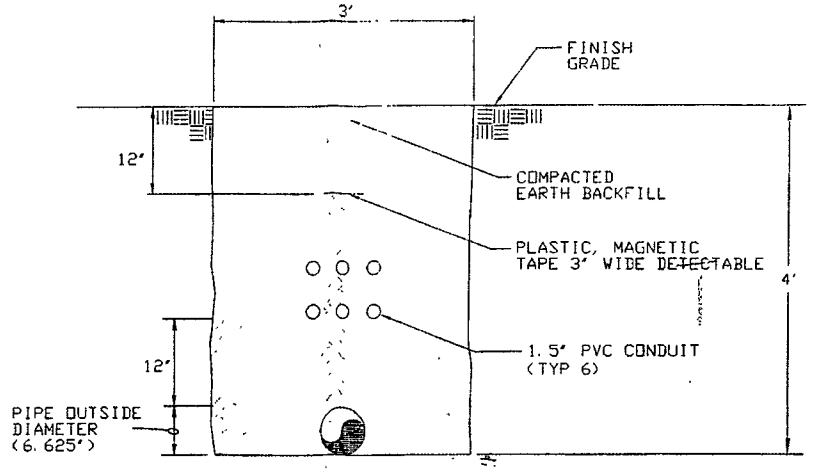
DRAWING NUMBER: FIG. 3

SHEET NUMBER: 3 of 9

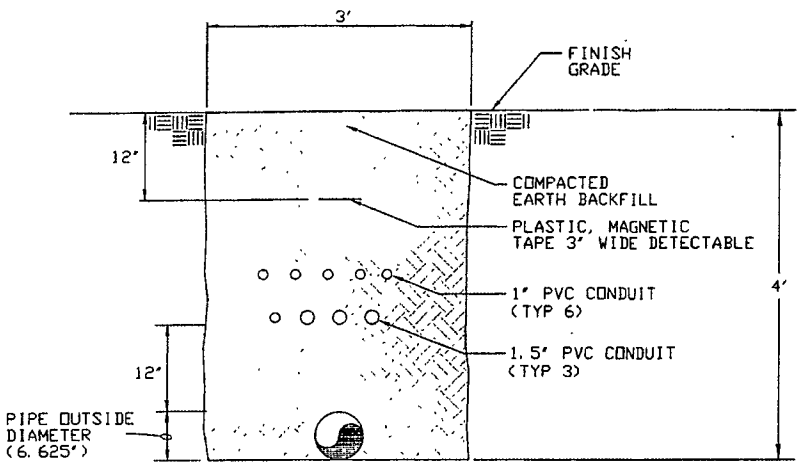
DATE:



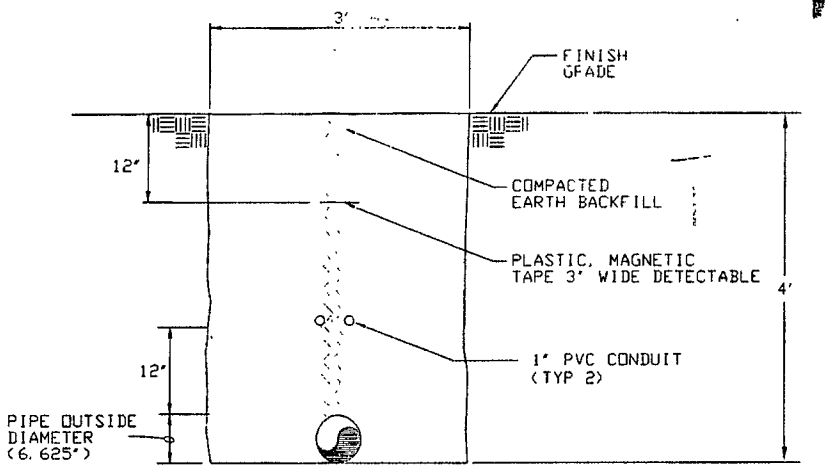
TRENCH SECTION A FIG 2
NTS



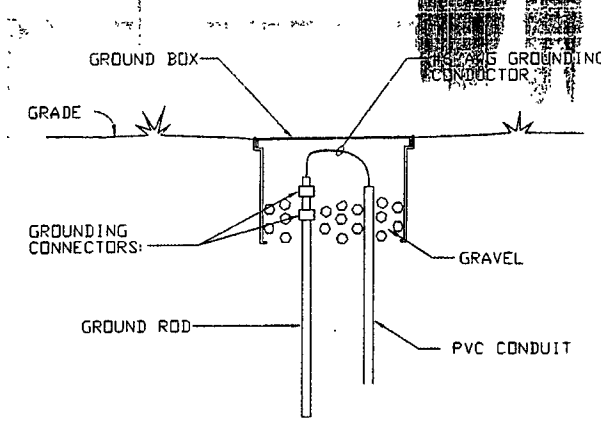
TRENCH SECTION C FIG 2
NTS



TRENCH SECTION B FIG 2
NTS



TRENCH SECTION D FIG 2
NTS



TYPICAL GROUND ROD DETAIL
NTS

RECORD DRAWING

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MOBILE DISTRICT

CONTRACT NO. DACA45-96-D-0014 DELIVERY ORDER NO. 0007
OHM PROJECT No. 920022 MEMPHIS, SHELBY COUNTY TENNESSEE

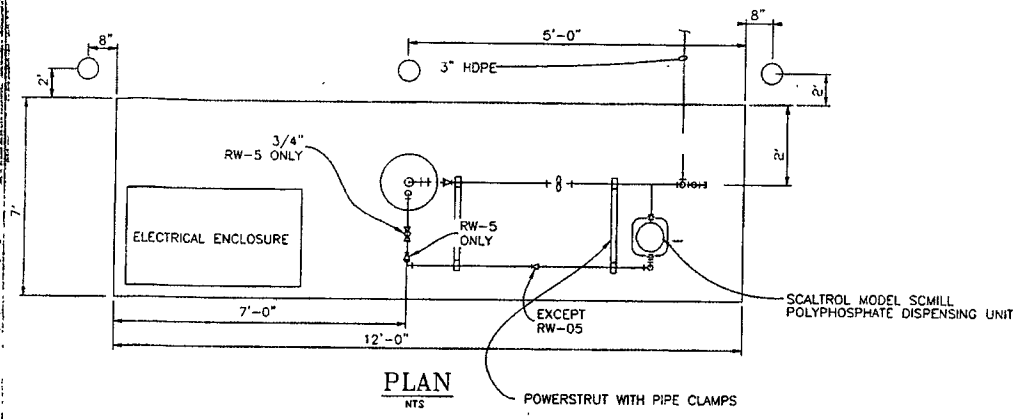
PIPING TRENCH SECTIONS, AND GROUND ROD DETAILS

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEPOT, TENNESSEE

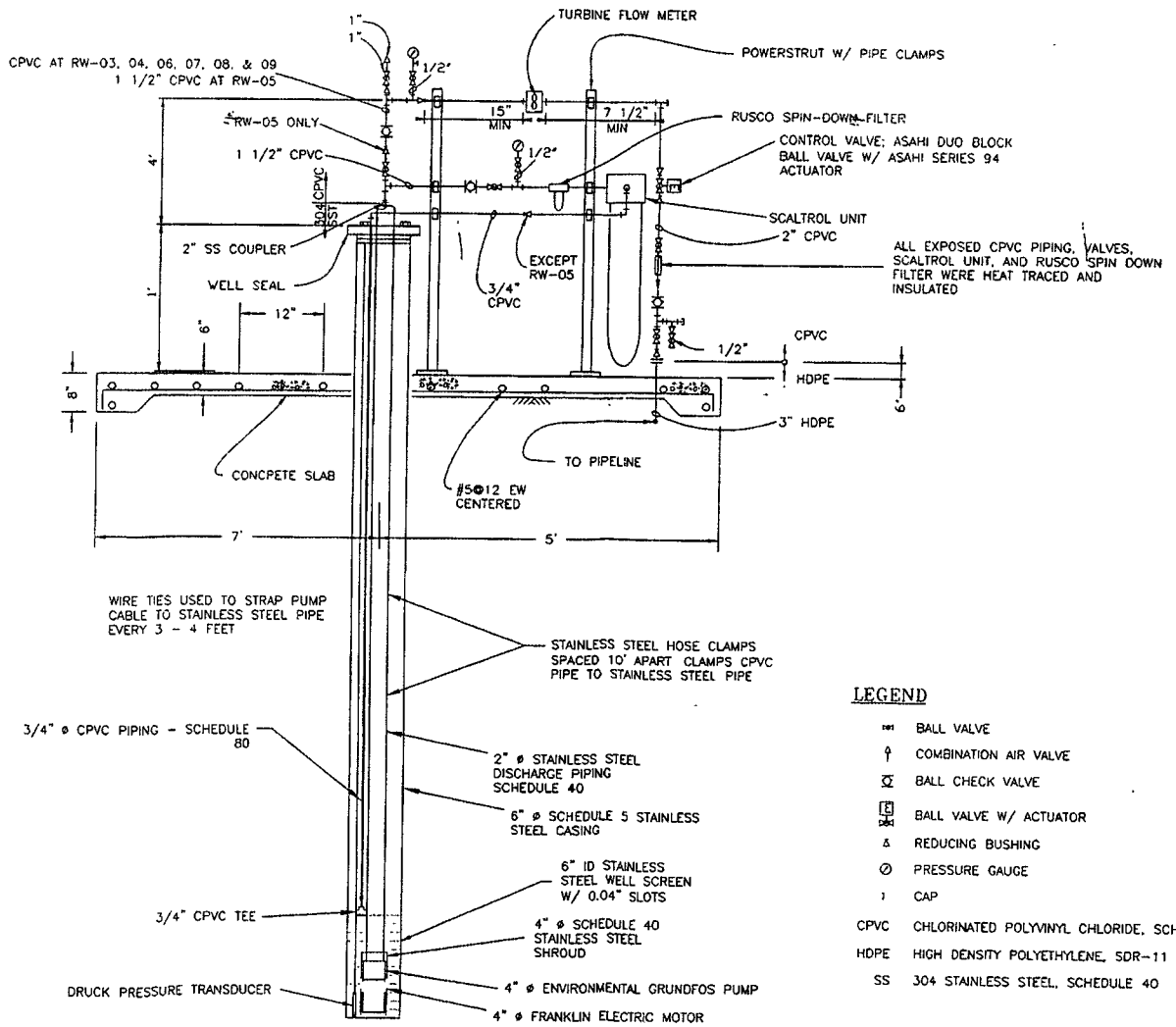
DRAWING NUMBER: FIG. 4
SHEET NUMBER: 4 of 9
DATE: 4/6/99

479 217

479 218



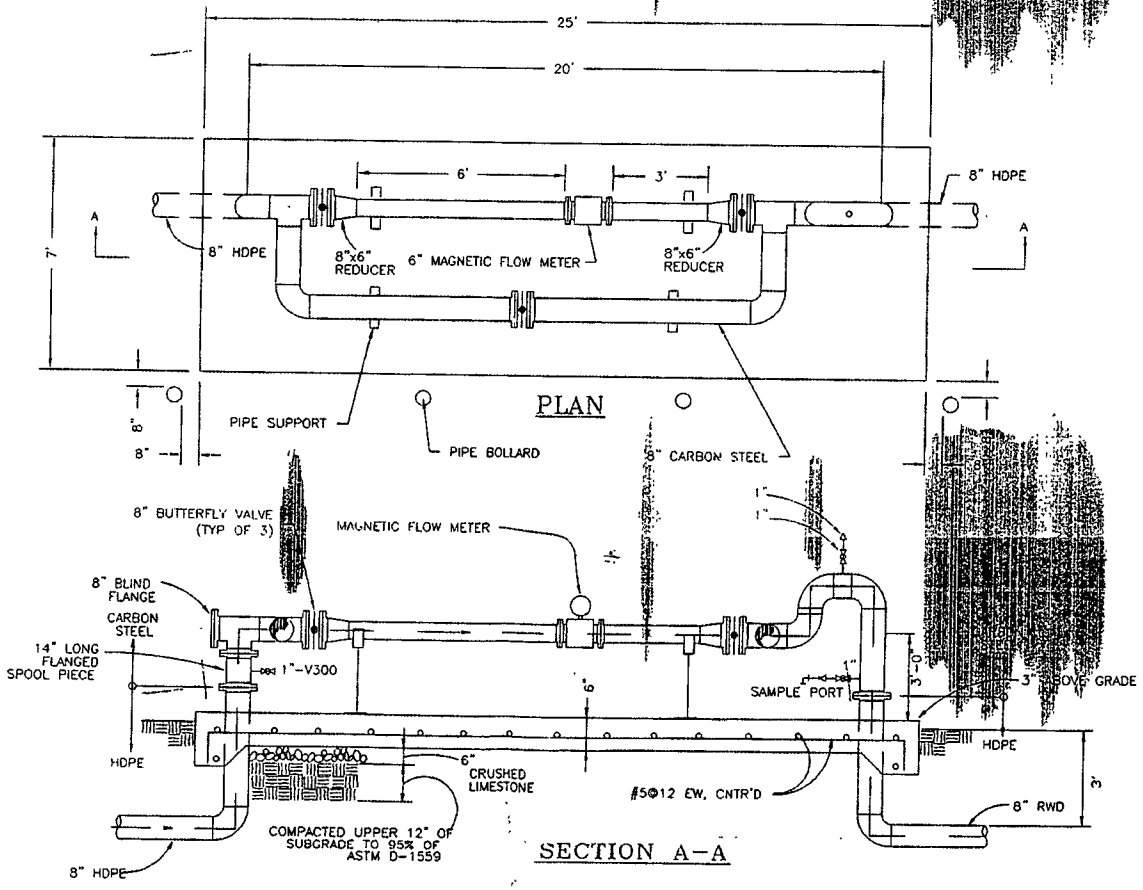
PLAN
NTS



TYPICAL WELL DETAIL
NOT TO SCALE

LEGEND

	BALL VALVE
	COMBINATION AIR VALVE
	BALL CHECK VALVE
	BALL VALVE W/ ACTUATOR
	REDUCING BUSHING
	PRESSURE GAUGE
	CAP
CPVC	CHLORINATED POLYVINYL CHLORIDE, SCHEDULE 80
HDPE	HIGH DENSITY POLYETHYLENE, SDR-11
SS	304 STAINLESS STEEL, SCHEDULE 40



METER AND BYPASS PAD DETAIL
NOT TO SCALE

RECOVERY WELL PUMP

WELL NAME	GRUNDFOS PUMP	FRANKLIN MOTOR	CONTROL VALVE SIZE (in)	HALLIBURTON METER SIZE
RW-03	40S30-9	3 HP	1	1 1/2
RW-04	40S50-12	5 HP	1	1 1/2
RW-05	16E7	3/4 HP	3/4	3/4
RW-06	60S50-9	5 HP	1	1 1/2
RW-07	40S20-7	2 HP	1	1 1/2
RW-08	60S50-9	5 HP	1	1 1/2
RW-09	60S50-9	5 HP	1	1 1/2

RECORD DRAWING

479 218

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DESIGNED: J. McCARTHY
CHECKED: S. OFFNER
APPROVED:

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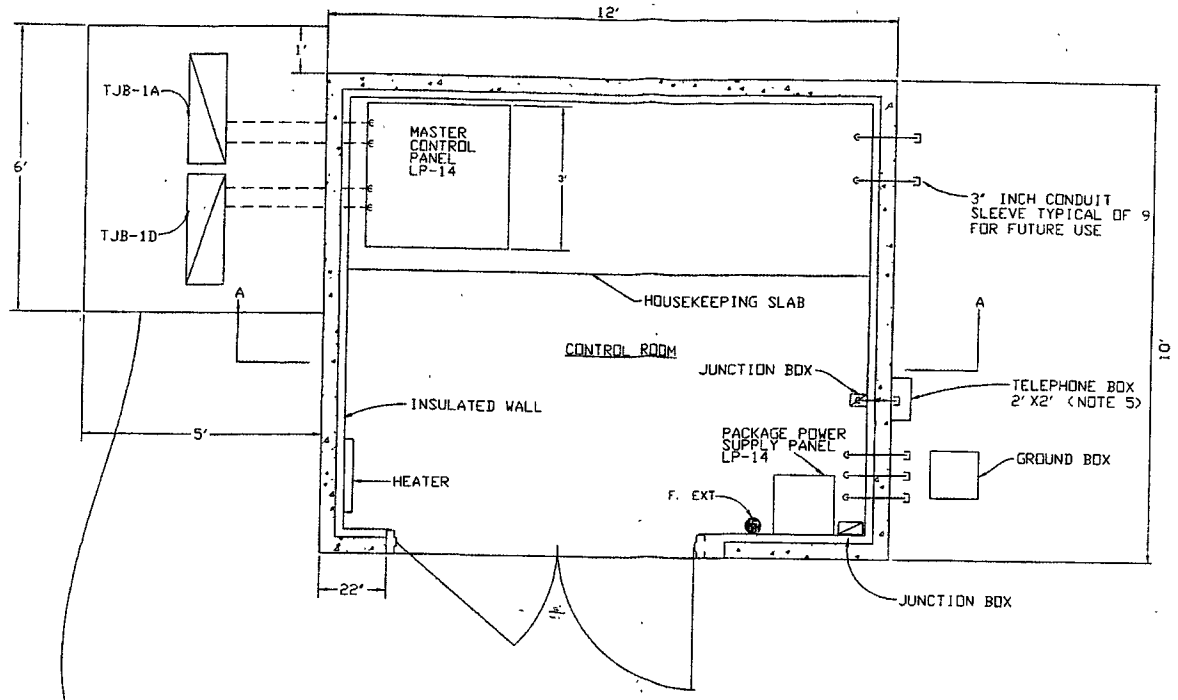
U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT

CONTRACT NO. DACA65-96-D-0014 DELIVERY ORDER NO. 0007
OHM PROJECT No. 920022 MEMPHIS, SHELBY COUNTY, TENNESSEE

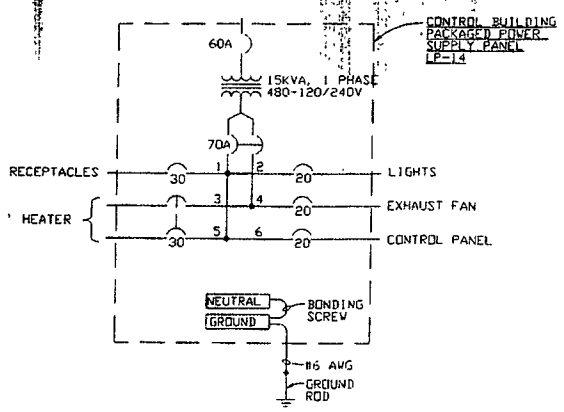
RECOVERY WELL & METER BYPASS PIPING DETAILS

DUNN FIELD
GROUNDWATER EXTRACTION
DEFENSE DEPOT, MEMPHIS, T

DRAWING NUMBER: FIG. 5
SHEET NUMBER: 5 of 9
4/6/99

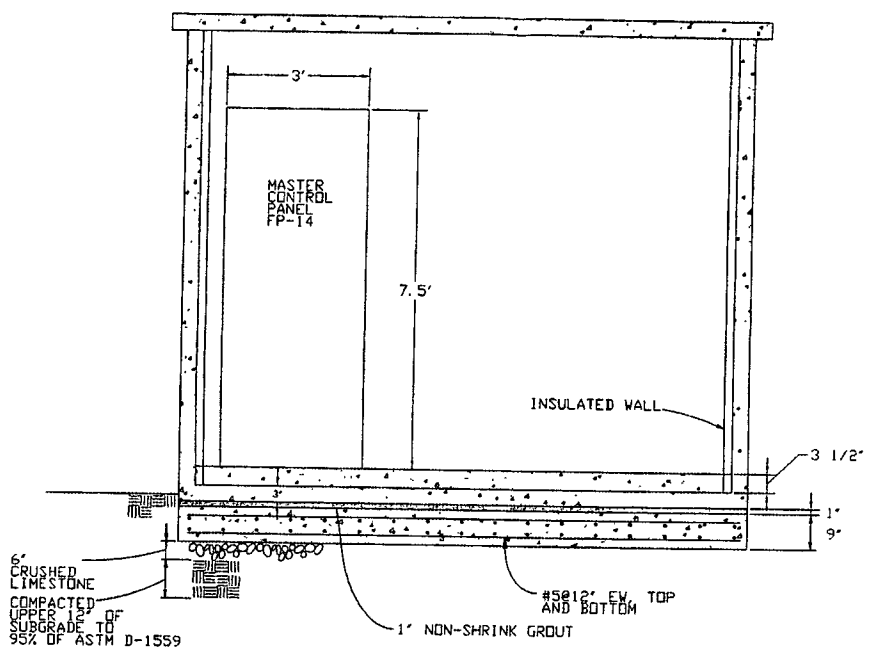


PLAN
NOT TO SCALE

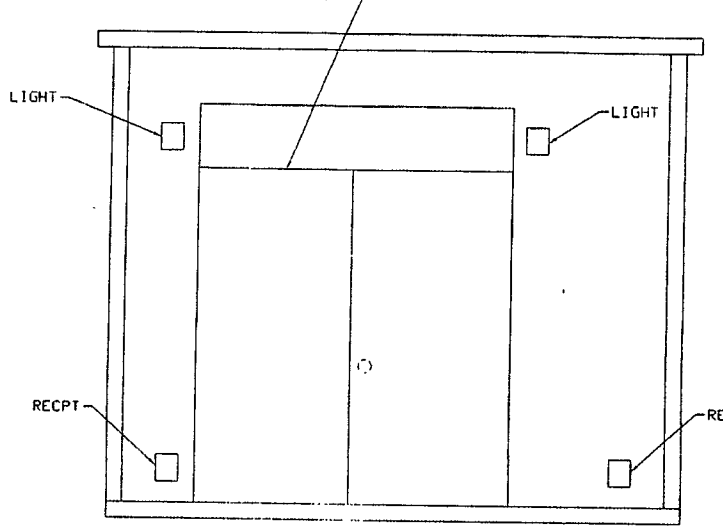


CONTROL BUILDING, PANEL LP-14
ELEMENTARY

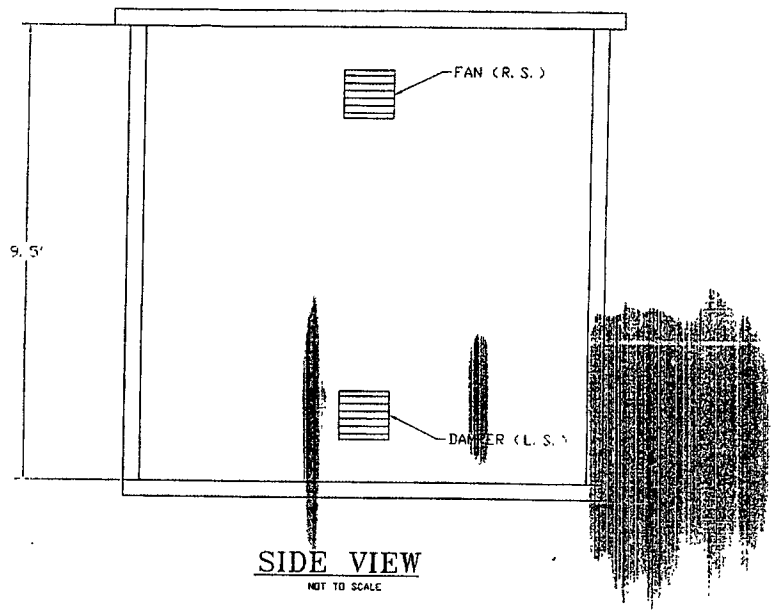
6' X 7' METAL DOOR W/ REMOVABLE TRANSOM TO PROVIDE CLEAR DOOR OPENING HT. OF 8'-4"



SECTION A-A
NOT TO SCALE



FRONT VIEW
NOT TO SCALE



SIDE VIEW
NOT TO SCALE

RECORD DRAWING

479 219

OHM Remediation Services Corp.
Norcross, Georgia
A Member of The IT Group

AT FULL SCALE (IF NOT 1"--SCALE ACCORDINGLY)
CADD FILE.
DRAWN: L. SHULMAN
DESIGNED: J. McCARTHY
CHECKED: S. OFFNER
APPROVED:

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP.
	1	AS BUILT	LS	3/16/99	

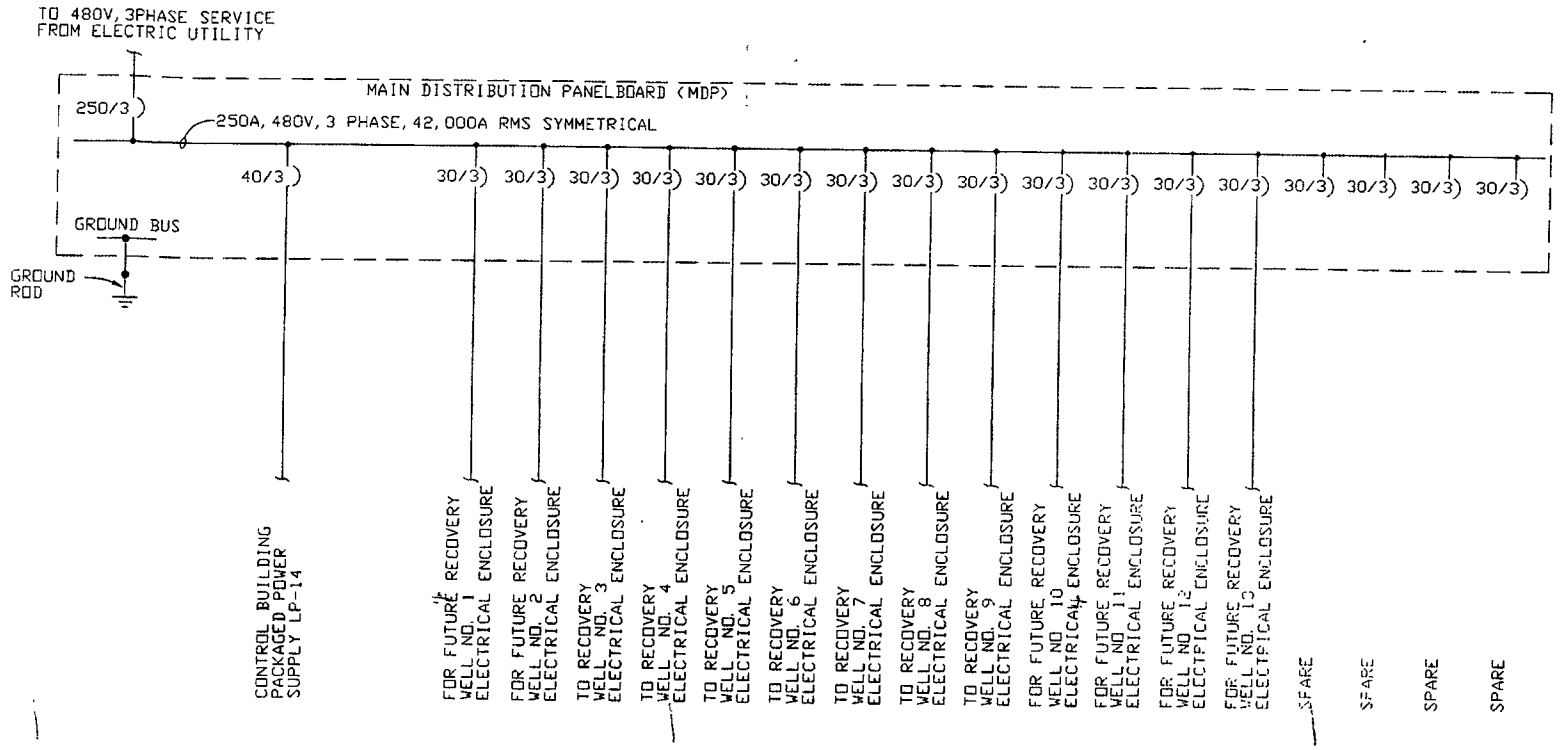
U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT

CONTRACT NO. DACA45-96-D-0014 DELIVERY ORDER NO. 0007
OHM PROJECT No. 920022 MEMPHIS, SHELBY COUNTY, TENNESSEE

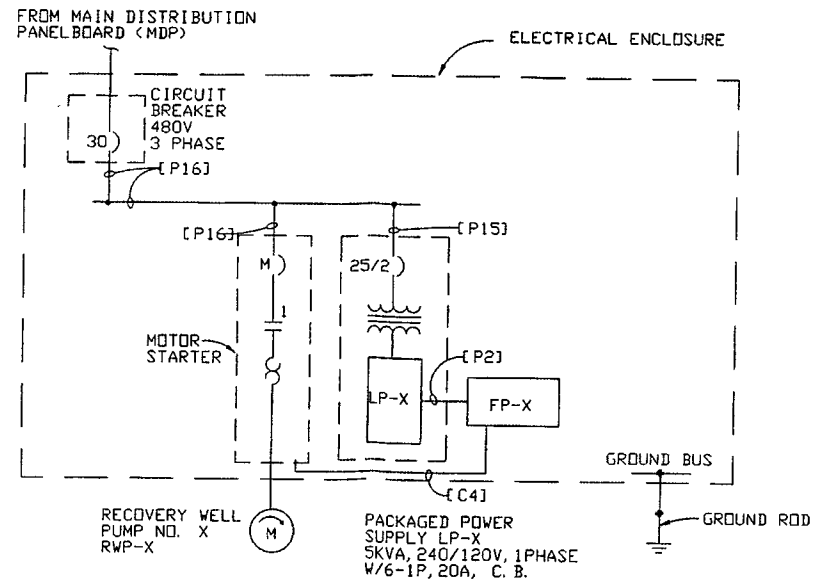
CONTROL BUILDING PLAN ELEVATION, DETAILS AND PANEL ELEMENTARY

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEPOT, TENNESSEE

DRAWING NUMBER: FIG. 6
SHEET NUMBER: 6 of 9
DATE: 4/6/99



MAIN DISTRIBUTION PANELBOARD – ONE LINE DIAGRAM



CIRCUIT CALLOUTS:

[C4] = [3/4 "C, 4#14, 1#14G]

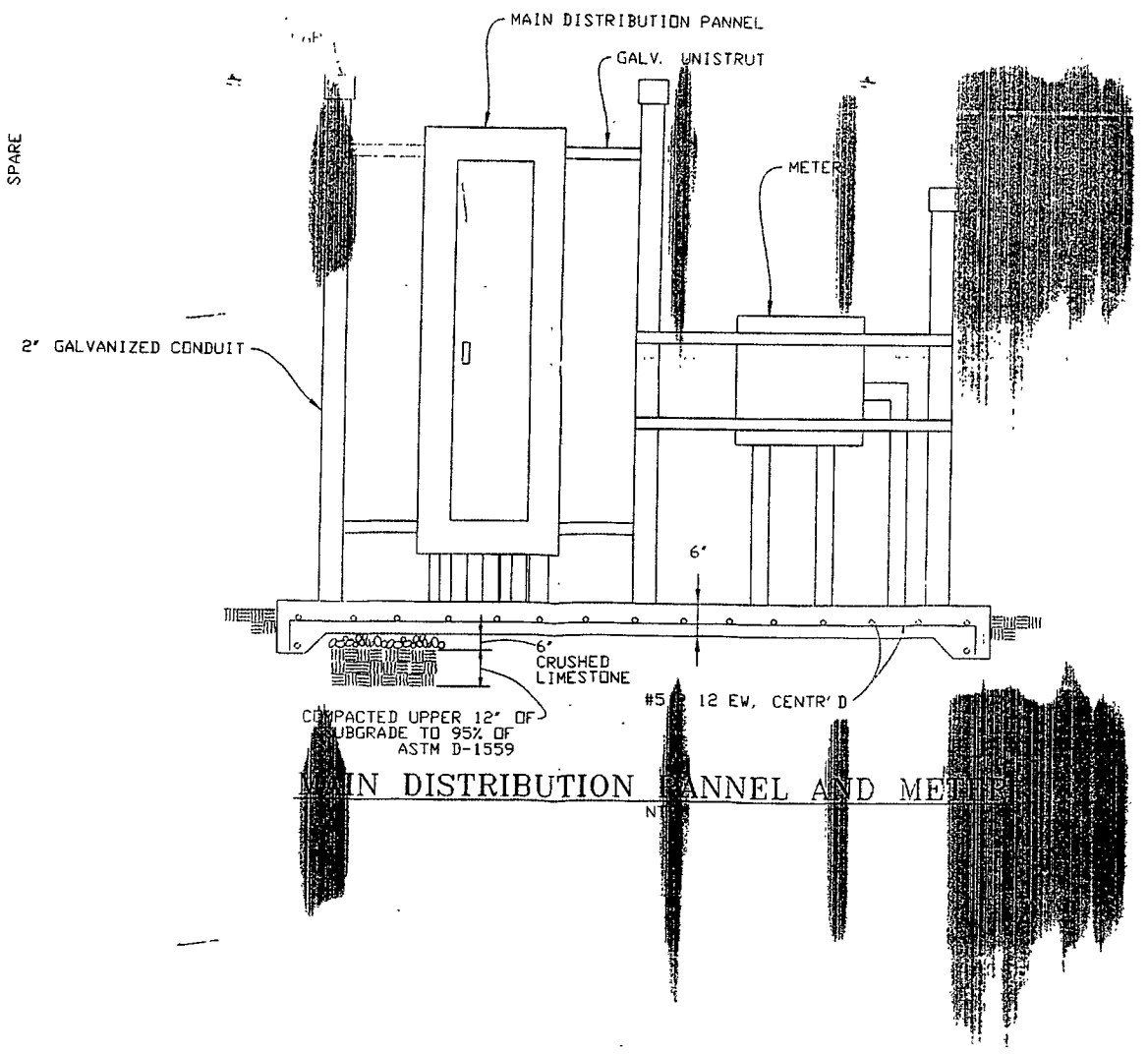
[P2] = [3/4 "C, 2#12, 1#12G]

[P15] = [3/4 "C, 2#10, 1#10G]

[P16] = [3/4 "C, 3#10, 1#10G]

TYPICAL RECOVERY WELL – ONE LINE DIAGRAM

(X = 3, 4, 5, 6, 7, 8, 9)



MAIN DISTRIBUTION PANNEL AND METER

RECORD DRAWING

479 220

OHM Remediation Services Corp.
Norcross, Georgia
A Member of The IT Group

AT FULL SCALE (IF NOT 1"-SCALE ACCORDINGLY)
CADD FILE:
DRAWN: L. SHULMAN
DESIGNED: J. McCARTHY
CHECKED: S. OFFNER
APPROVED:

REVISIONS

ZONE	REV	DESCRIPTION	BY	DATE	APP
	1	AS BUILT	LS	3/16/99	

U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT

CONTRACT NO. DACA45-96-D-0014 DELIVERY ORDER NO. 0007

OHM PROJECT No. 920022 MEMPHIS, SHELBY COUNTY, TENNESSEE

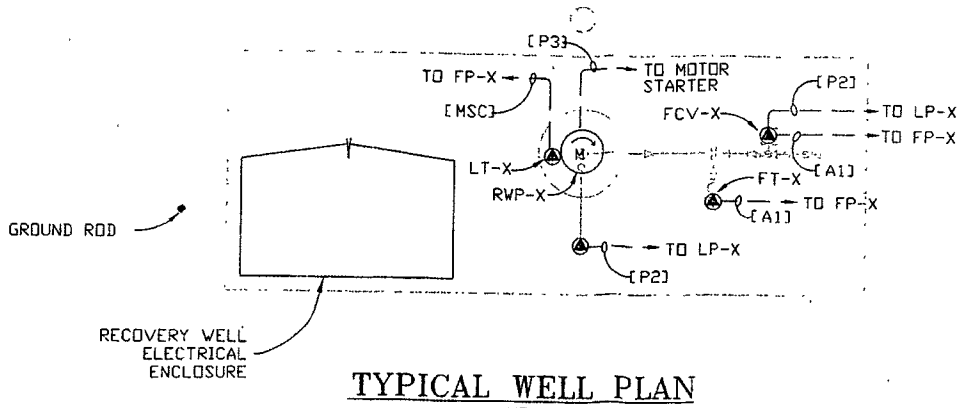
ELECTRICAL ONE LINE DIAGRAM, AND MAIN DISTRIBUTION PANEL AND METER

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEPOT, TENNESSEE

DRAWING NUMBER: FIG. 7

SHEET NUMBER: 7 of 9

DATE:



TYPICAL WELL PLAN

NTS

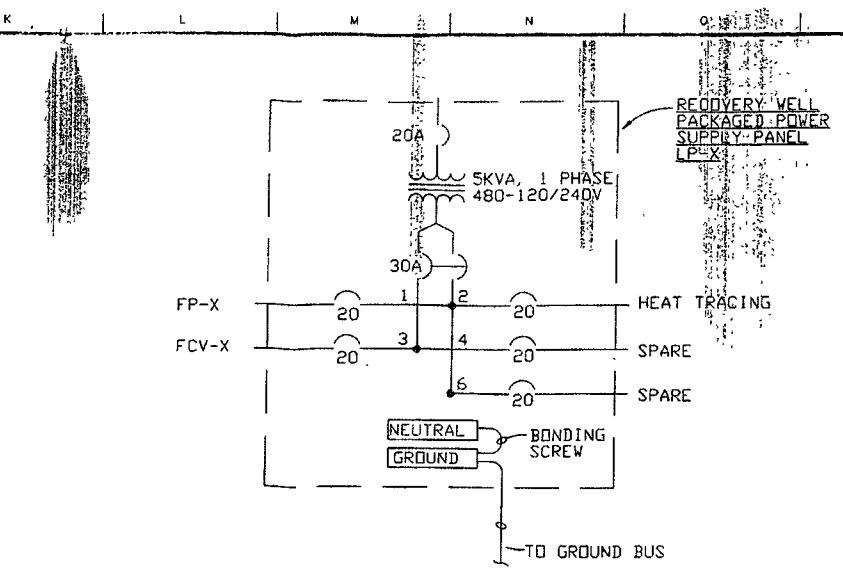
CIRCUIT CALLOUTS:

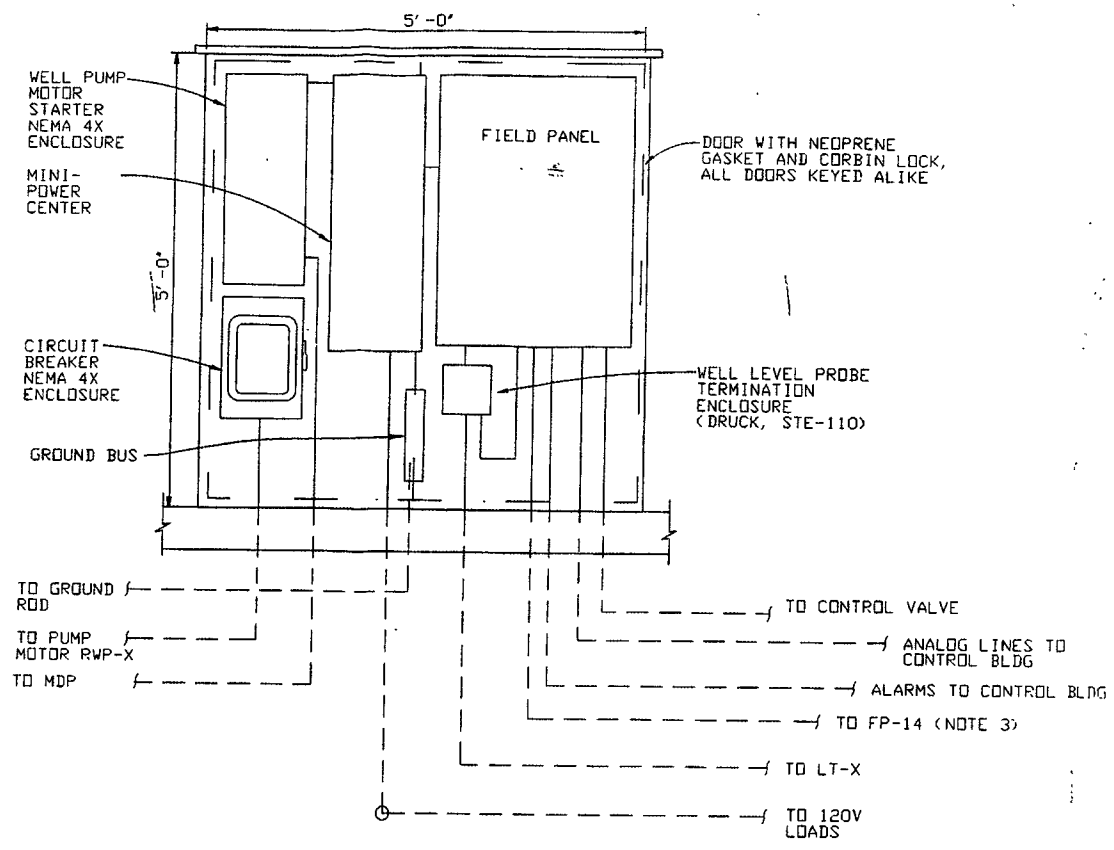
[A1] = [3/4 "C, 1 TYPE 3]

[P2] = [3/4 "C, 2#12 [#12G]

[P3] = [3/4 "C, 3#12, [#12G]

[MSC] = [1"C, MANUFACTURER SUPPLIED CABLE]



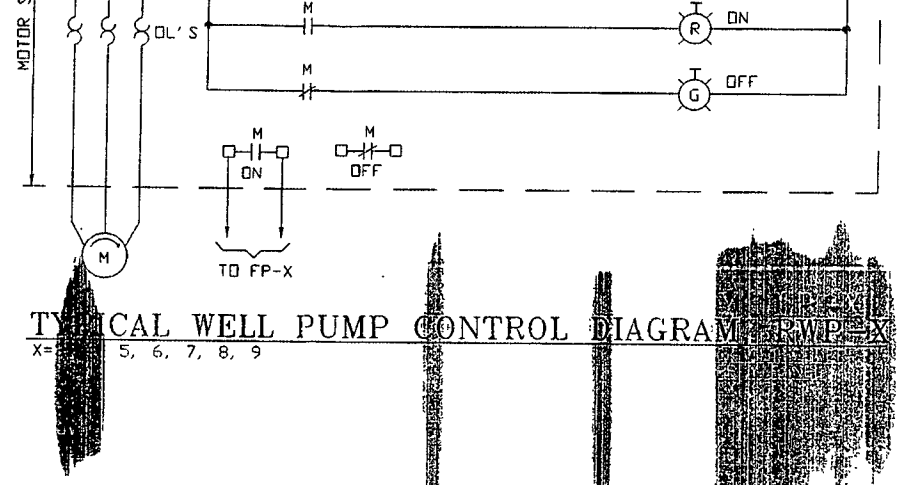


TYPICAL WELL ELECTRICAL ENCLOSURE LAYOUT

NTS

TYPICAL WELL PANEL ELEMENTARY, LP-X

X = 3, 4, 5, 6, 7, 8, 9



TYPICAL WELL PUMP CONTROL DIAGRAM, PWP-X

X= 5, 6, 7, 8, 9

RECORD DRAWING

479 221

OHM Remediation Services Corp.
Norcross, Georgia
A Member of The IT Group

AT FULL SCALE (IF NOT 1"-SCALE ACCORDINGLY)
CADD FILE:
DRAWN: L SHULMAN
DESIGNED J. McCARTHY
CHECKED S. OFFNER
APPROVED:

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.
	1	AS BUILT	LS	3/16/99	

U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT

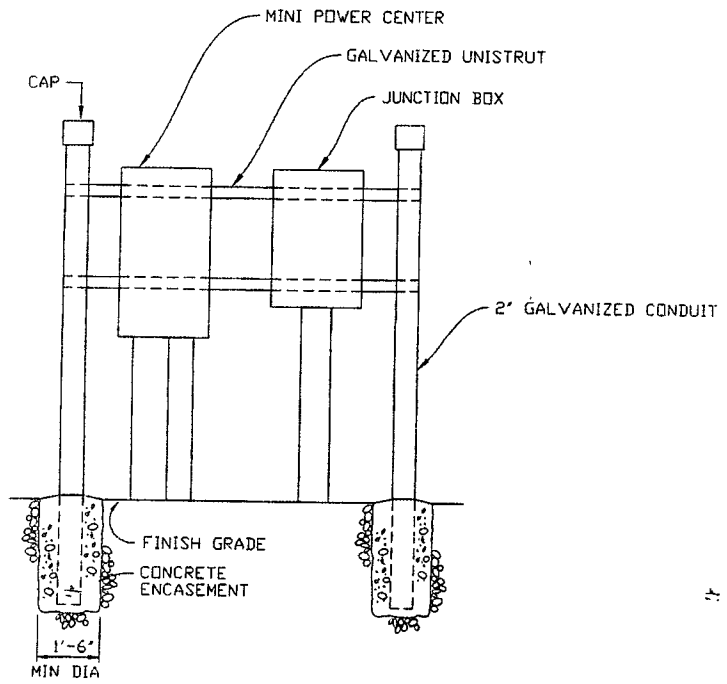
CONTRACT NO. DACA45-96-D-0014 DELIVERY ORDER NO. 0007

OHM PROJECT No. 920022 MEMPHIS, SHELBY COUNTY, TENNESSEE

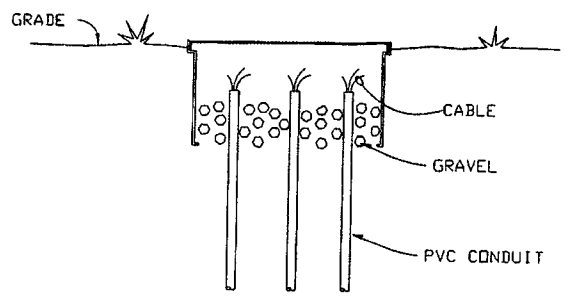
TYPICAL RECOVERY WELL PLAN, CONTROL DIAGRAM AND PANEL ELEMENTARY

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEPOT, TENNESSEE

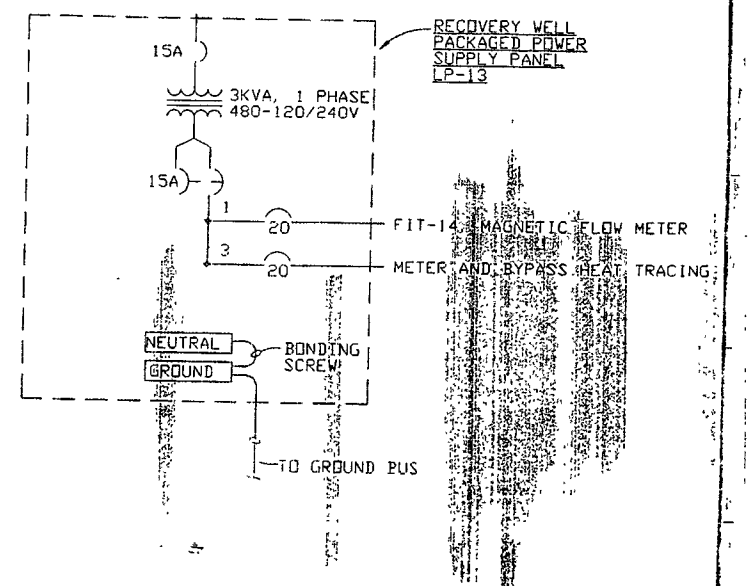
DRAWING NUMBER: FIG. 8
SHEET NUMBER: 8 of 9
DATE: 4/6/99



FUTURE RW-13 TEMPORARY POWER BOXES
NTS



GROUND JUNCTION BOXES FOR
FUTURE WELL LOCATIONS (10 THROUGH 12)
NTS



TEMPORARY PANEL AT FUTURE RW-13

479 222

RECORD DRAWING

OHM Remediation Services Corp.
Norcross, Georgia
A Member of The IT Group

AT FULL SCALE (IF NOT 1"--SCALE ACCORDINGLY)
CADD FILE:
DRAWN: L SHULMAN
DESIGNED: J. McCARTHY
CHECKED: S OFFNER
APPROVED:

REVISIONS

ZONE	REV	DESCRIPTION	BY	DATE	APP
	1	AS BUILT	LS	3/16/99	

U.S. ARMY CORPS OF ENGINEERS
MOBILE DIST

CONTRACT NO. DACA45-96-D-0014 — DELIVERY ORDER NO. 0007
OHM PROJECT No. 920022 — MEMPHIS — COUNTY TENNESSEE

FUTURE RECOVERY WE[LL] [WIRE] TERMINATIONS
DUNN FIELD
GROUNDWATER EXTRACTION
MEMPHIS DEPOT TENNES

DRAWING NUMBER G. 9
SHEET NUMBER of 9

479 223

SITE REMEDIATION
MEMPHIS, TENNESSEE

DRAWING INDEX		
DWG. NO.	SHEET	DESCRIPTION
97144-01-CV-01	1	COVER SHEET
97144-01-CP-01	1	MASTER CONTROL PANEL
97144-01-CP-02	2	MASTER CONTROL PANEL
97144-01-ES-01	1	ELECTRICAL SCHEMATIC
97144-01-ES-02	2	ELECTRICAL SCHEMATIC
97144-01-ES-03	3	ELECTRICAL SCHEMATIC
97144-01-CP-04	4	ELECTRICAL SCHEMATIC
97144-01-CP-05	5	ELECTRICAL SCHEMATIC
97144-02-CP-01	1	FIELD PANEL(S)
97144-02-CP-02	2	FIELD PANEL(S)
97144-02-ES-01	1	ELECTRICAL SCHEMATIC
97144-02-ES-02	2	ELECTRICAL SCHEMATIC

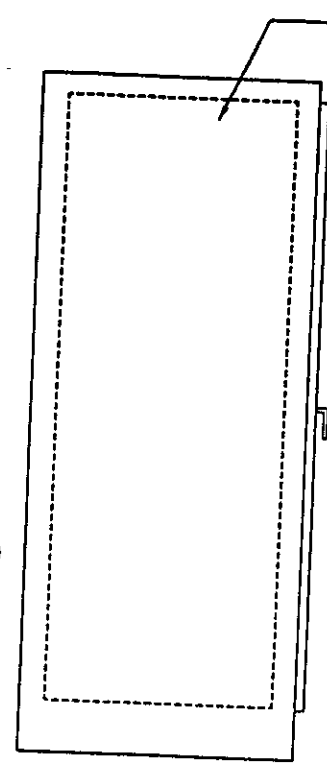
AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

REV	DESC	BY	DATE
A	RELEASE FOR APPROVAL	JAR	3-12-98

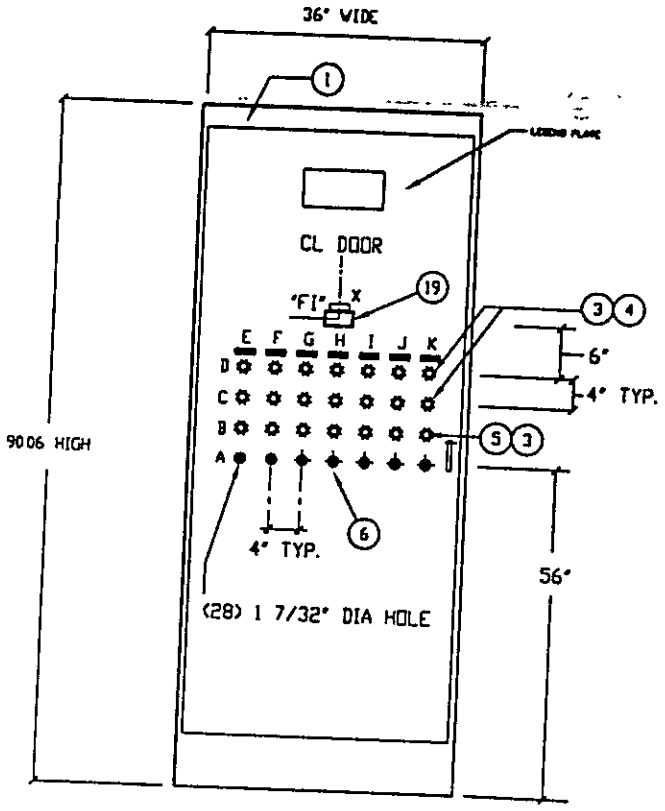
DRAWING TITLE
SITE REMEDIATION
MEMPHIS, TENN

APVD	SCALE	DATE
	1:1	1/22/98

DWG. NO	REV	SIZE
97144-01-CV-01	A	D

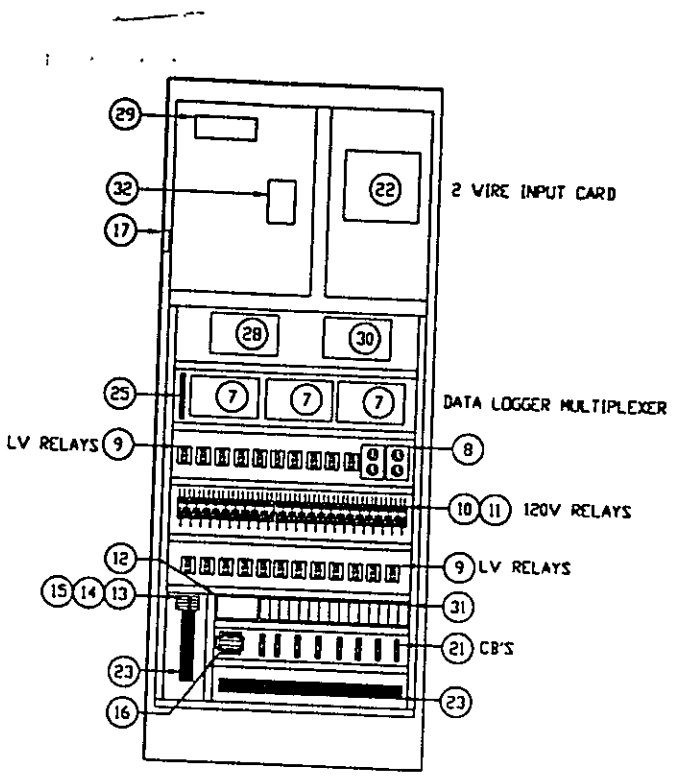


LEFT SIDE ELEVATION

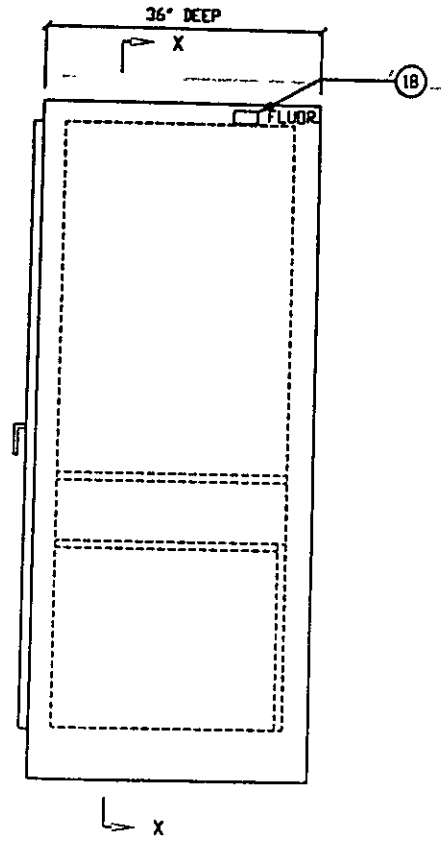


FRONT ELEVATION

FIELD PANEL 14



BACKPANEL ELEVATION



RIGHT SIDE ELEVATION

ITEM	QTY	DESCRIPTION
1	1	ENCLOSURE-90X36X36 HOFFMAN A-903636FS
2	1	BACKPANEL HOFFMAN A-90P36F1
3	21	PILOT LIGHT 120V CUTLER HAMMER 10250T181N
4	14	AMBER LENS CUTLER HAMMER 10250TC19N
5	7	GREEN LENS CUTLER HAMMER 10250TC1N
6	7	SELECTOR SWITCH 2-POSITION CUTLER HAMMER 10250T1311
7	3	CAMPBELL SCIENTIFIC DATA LOGGER MULTIPLEXER #SDM-SW8A
8	2	GFI RECEPTACLE WITH "FS" BOX
9	24	RELAY-SOLID STATE OPTO 22 120D10
10	24	RELAY-BASE IDEC SH1B-05
11	24	RELAY-120V IDEC RH1B-U
12	1	TRANSIENT SURGE SUPPRESOR EDCO HSP121BT - IRU
13	1	DIN-RAIL CIRCUIT BREAKER 15A ALLEN BRADLEY 1492GH150
14	2	DIN-RAIL CIRCUIT BREAKER 5A ALLEN BRADLEY 1492GH050
15	1	DIN-RAIL CIRCUIT BREAKER 1A ALLEN BRADLEY 1492GH010
16	1	24VDC POWER SUPPLY OMRON S82K-05024
17	1	TOGGLE SWITCH W/ "FS" BOX A-20GV2-B7-K
18	1	FLUORESCENT LIGHT PACKAGE HOFFMAN A-LTDB1
19	1	INDICATOR NEWPORT SERIES 500 MODEL 5588
20	2	SIDE MOUNT PANELS HOFFMAN A-90SMP20
21	8	2-CHANNEL SURGE PROTECTOR EDCO PC642-36 BASE PCB1B
22	1	2 WIRE SENSOR INPUT CARD CAMPBELL SCIENTIFIC AM416
23	75	TERMINALS ENTRELEC 115-116.07
24	6	TERMINAL ENDS ENTRELEC
25	A/R	1" COPPER BAR GROUND BAR & LUG

AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

REV	DESC.	BY	DATE
B	AS BUILT	CDB	5-11-98
A	RELEASE FOR APPROVAL	BK/DB	1/9/98

DRAWING TITLE

REMEDIATION C/P-MASTER-(FP14)
DEFENSE DEPOT MEMPHIS, TENN.

APVD	SCALE	DATE
	1:1	1/9/98

DWG. NO.	REV.	SIZE
9714401CP01	B	D

ENGRAVING			
N/P LTR SYM		N/P LTR SYM	
A	REMOTE OFF ON	C	LOW FLOW
B	PUMP ON	D	LOW LOW LEVEL

QUANTITY OF EACH–(7) WHITE–STANDARD 30.5 MM HOLE

CONTROL PANEL NAMEPLATE	
PNL	
FP14	MASTER CONTROL PANEL

QUANTITY OF EACH–(1) 4"W X 1"H
3/16" WHITE LETTERS
ON BLACK BACKGROUND

ITEM	QTY	DESCRIPTION
26	28	NAMEPLATE–WHITE–STANDARD –
27	7	CONTACT BLOCKS CUTLER HAMMER 10250T1
28	1	BATTERY PACK W/CHARGER PS12LA
29	1	MODEM BAUD 9600 #COM 200
30	1	CAMPBELL SCIENTIFIC DATALOGGER #CR10X–1M
31	1	OPTICALLY ISOLATED INTERFACE #SC32A
32	15	SIGNAL TRANSMITTERS #MV2S

N/P LTR SYM	ENGRAVING
X	FLOW TO SEWER

QUANTITY OF EACH–(1) 2.5"W X .75"H
1/8" BLACK LETTERS
ON A WHITE BACKGROUND

CONTROL PANEL NAMEPLATE			
E	RECOVERY WELL 3 –	J	RECOVERY WELL 8 –
F	RECOVERY WELL 4 –	K	RECOVERY WELL 9 –
G	RECOVERY WELL 5 –		
H	RECOVERY WELL 6 –		
I	RECOVERY WELL 7 –		

QUANTITY OF EACH–(1) 2.5"W X .75"H
1/2" WHITE LETTERS
ON BLACK BACKGROUND

AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

REV	DESC.	BY	DATE
B	AS BUILT	CDB	5/11/98
A	RELEASE FOR APPROVAL	RM/ML	1/9/98

DRAWING TITLE
REMEDIATION C/P–MASTER
DEFENSE DEPOT MEMPHIS, TENN.

APVD	SCALE	DATE
	1:1	1/9/98

DWG. NO.	REV.	SIZE
9714401CP02	B	D

120VAC & DISCONNECT SUPPLIED BY OTHERS

CB1 15A

TRANSIENT SURGE SUPPRESSOR
EDCO HSP121BT
LINE SIDE
AC NEUT
AC NEUT.
LINE GRD

14H 14N G GND GND N

CB2 5A FU1 5A

CB3 1A

CB4 5A

GFI

LIMIT SWITCH 109 FLOURESCENT PANEL LIGHT N

GROUND BUSS
#10 WIRE
SHIELD BUSS
GND ROD
FROM SHIELD OF EA. LOOP

D.C. POWER SUPPLY
OMRON S82K-05024
L N
+24 VDC-
(+) (-) BLUE
503 503

WELL 1

WELL 8 REC. PNL.
314 2CR 315
LEVEL OK
OPTO 22A MODEL 120D10
R1

WELL 8 REC. PNL.
316 3CR 317
FLOW OK
OPTO 22B MODEL 120D10
R2

WELL 8 REC. PNL.
318 4CR 319
PUMP "ON"
OPTO 22C MODEL 120D10
R3

14H N

MASTER CONTROL PANEL WIRING

14H BLUE N BLUE

WELL 2

WELL 9 REC. PNL.
414 2CR 415
LEVEL OK
OPTO 22D MODEL 120D10
R4

WELL 9 REC. PNL.
416 3CR 417
FLOW OK
OPTO 22E MODEL 120D10
R5

WELL 9 REC. PNL.
418 4CR 419
PUMP "ON"
OPTO 22F MODEL 120D10
R6

WELL 3

WELL 3 REC. PNL.
514 2CR 515
LEVEL OK
OPTO 22G MODEL 120D10
R7

WELL 3 REC. PNL.
516 3CR 517
FLOW OK
OPTO 22H MODEL 120D10
R8

WELL 3 REC. PNL.
518 4CR 519
PUMP "ON"
OPTO 22I MODEL 120D10
R9

14H N

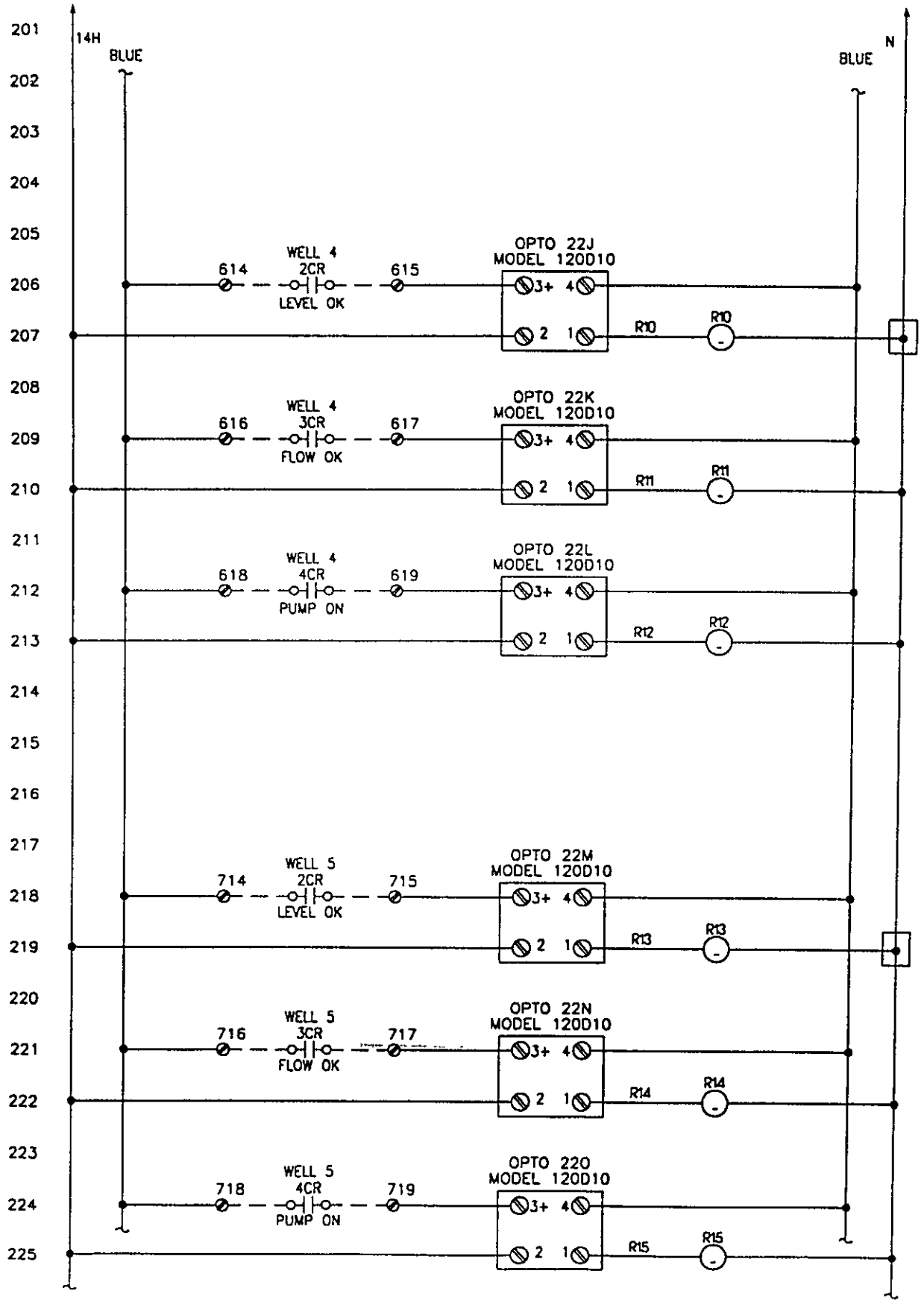
AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

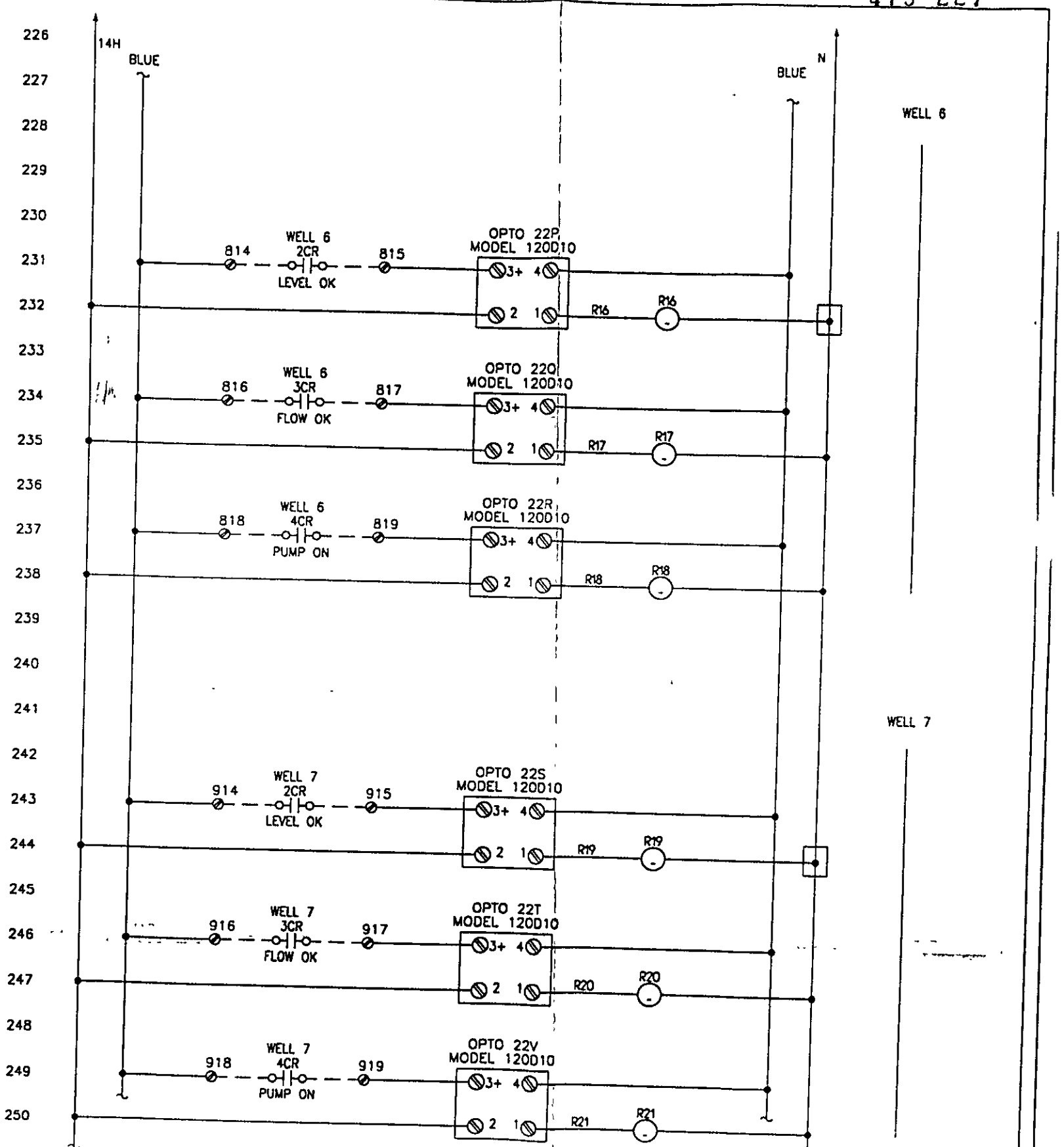
REV	DESC.	BY	DATE
B	AS BUILT	CDB	5/11/98
A	RELEASE FOR APPROVAL	RM/ML	1/9/98

DRAWING TITLE
REMEDIATION C/P-MASTER
DEFENSE DEPOT MEMPHIS,-TENN.

APVD	SCALE	DATE
M.L.	1:1	1/9/98

DWG. NO. 97144-01-ES-01 | REV. B | SIZE D





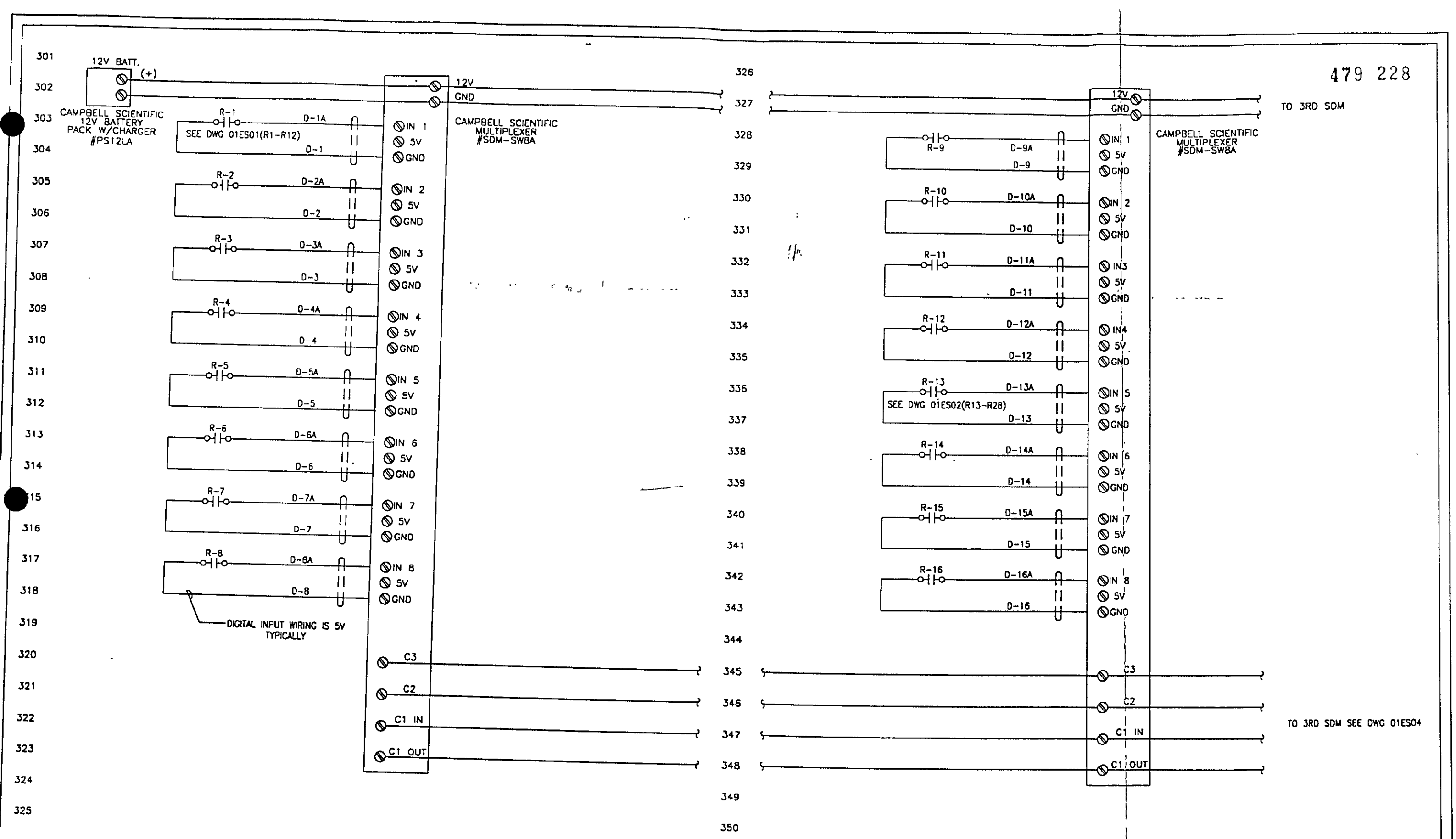
AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

REV	DESC.	BY	DATE
B	AS BUILT	CDB	5/11/98
A	RELEASE FOR APPROVAL	RM/ML	1/9/98

DRAWING TITLE
REMEDIATION C/P-MASTER
DEFENSE DEPOT MEMPHIS, TENN.

APVD	SCALE	DATE
M.L.	1:1	1/9/98

DWG. NO.	REV.	SIZE
97144-01-ES-02	B	D



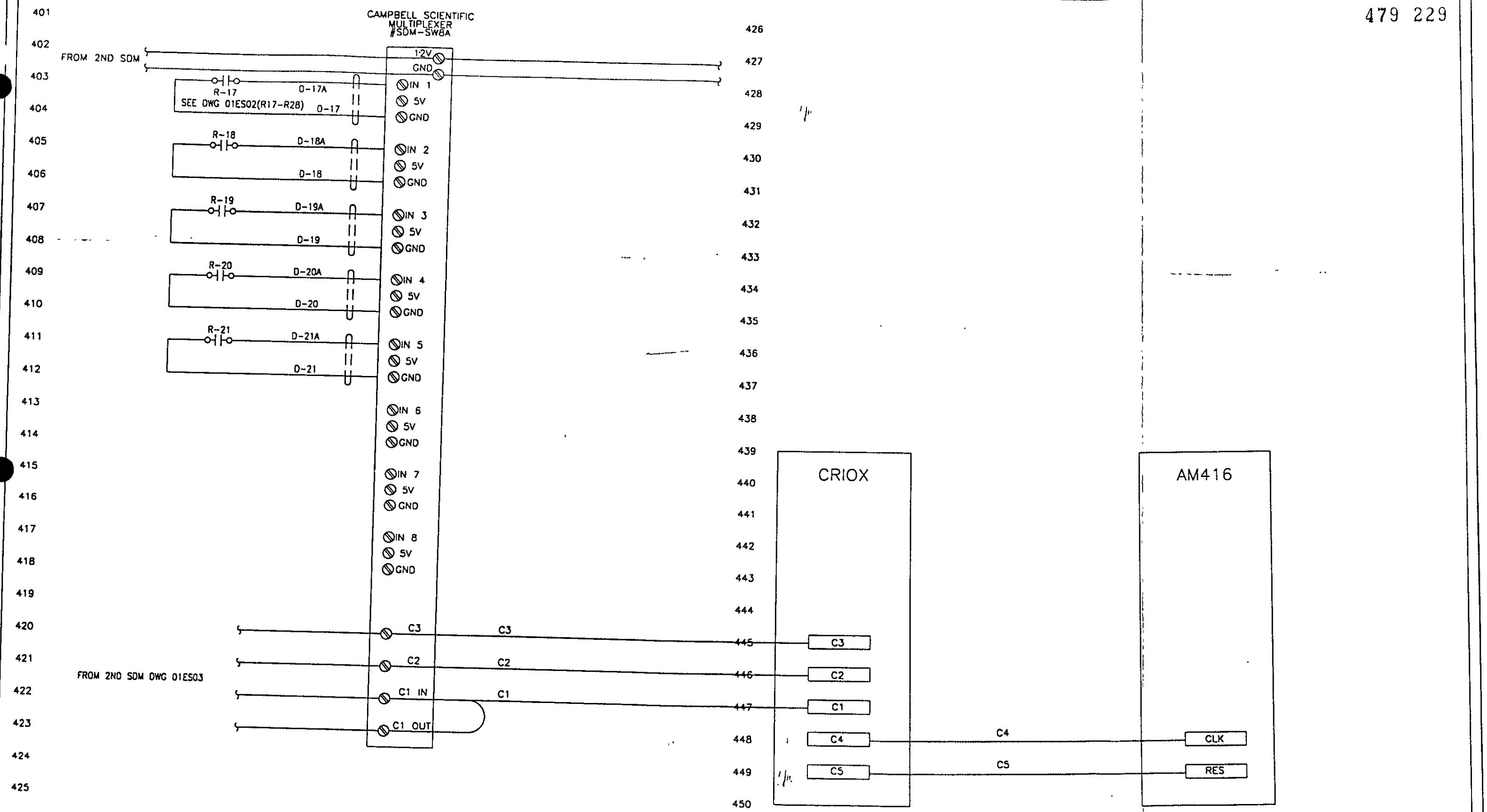
AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

REV	DESC.	BY	DATE
B	AS BUILT	CDB	5/11/98
A	RELEASE FOR APPROVAL	RM/ML	1/9/98

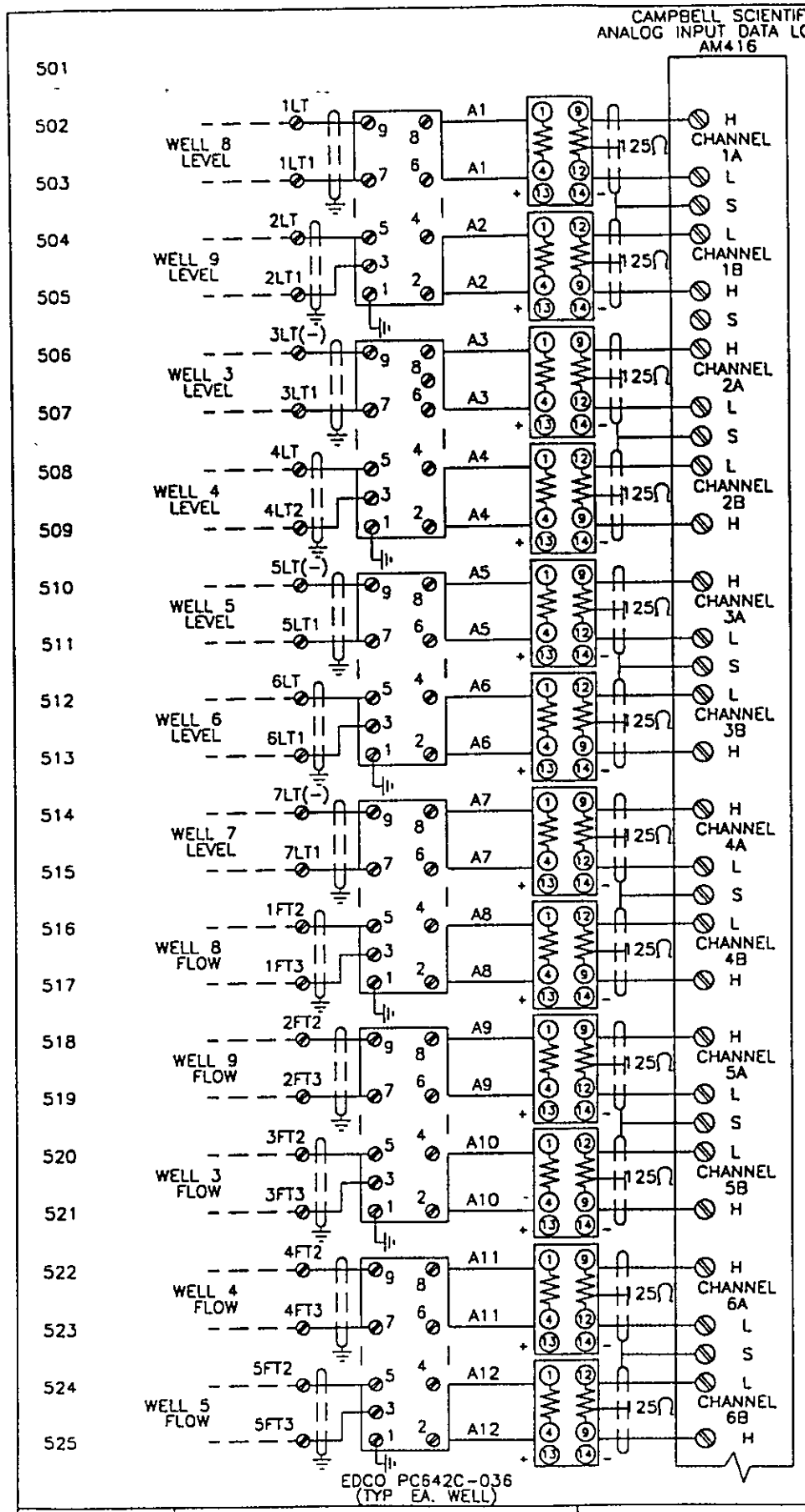
DRAWING TITLE
REMEDIATION C/P-MASTER
DEFENSE DEPOT MEMPHIS, TENN.

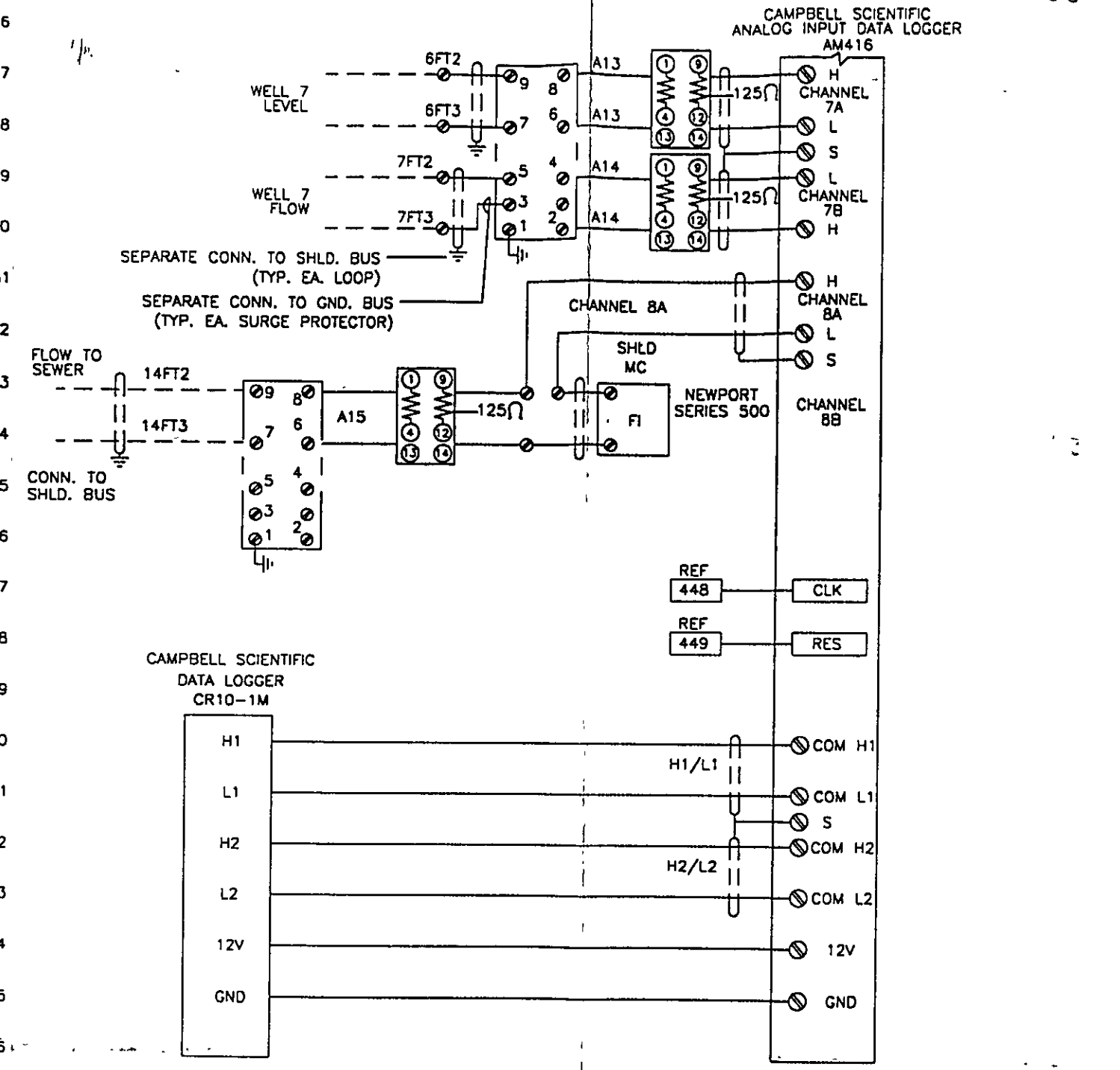
APVD	SCALE	DATE
	1:1	1/9/98

DWG. NO.	REV.	SIZE
97144-01-ES-03	B	D

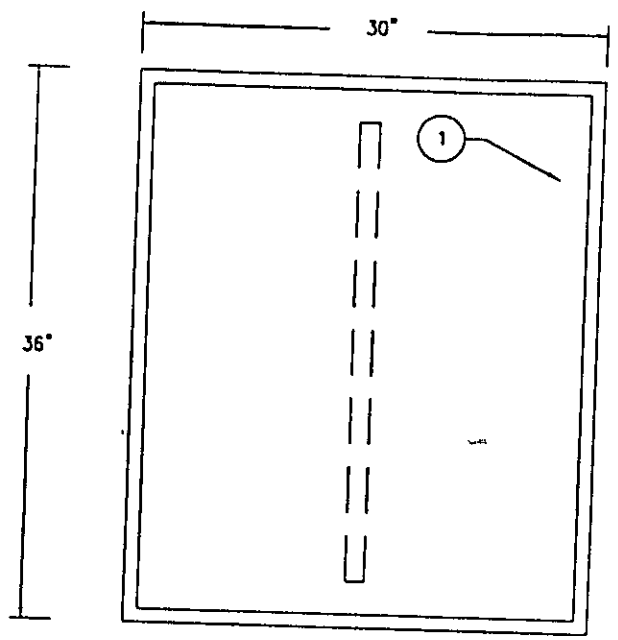


	AUTOMATION SPECIALTIES ENTERPRISES, INC. BRADENTON, FLORIDA 34205 (941) 748-6376			DRAWING TITLE: REMEDIATION C/P-MASTER DEFENSE DEPOT MEMPHIS, TENN.	APVD / SCALE 1:1 / DATE 1/9/98
		B	AS BUILT — CDB 5/11/98		DWG. NO. 97144-01-ES-04 / REV. B / SIZE D
		A	RELEASE FOR APPROVAL — RM/ML 1/9/98		
		REV	DESC. — BY — DATE		

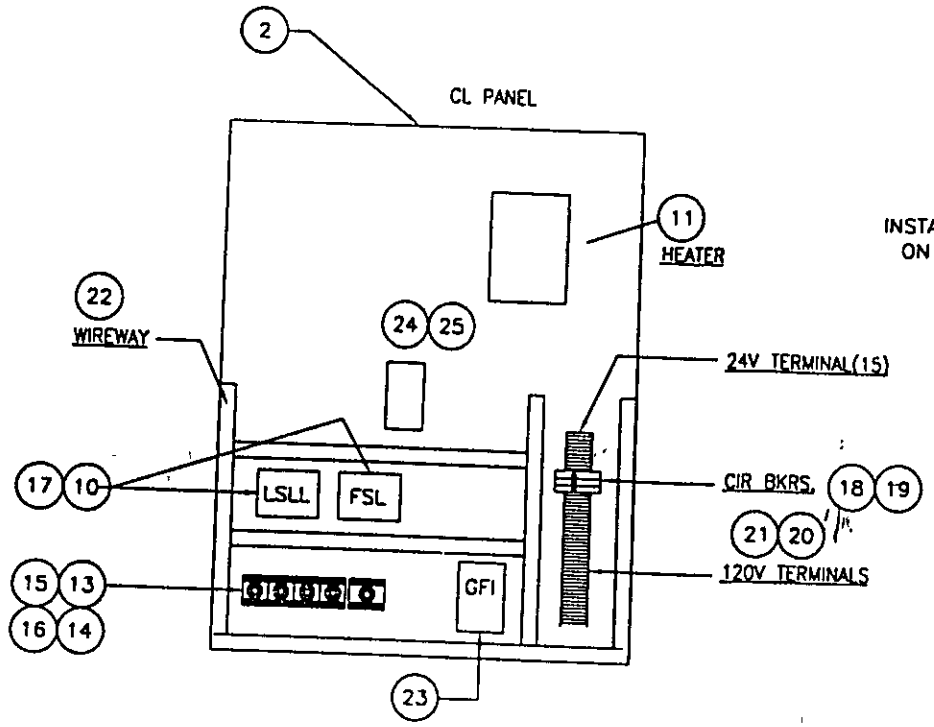




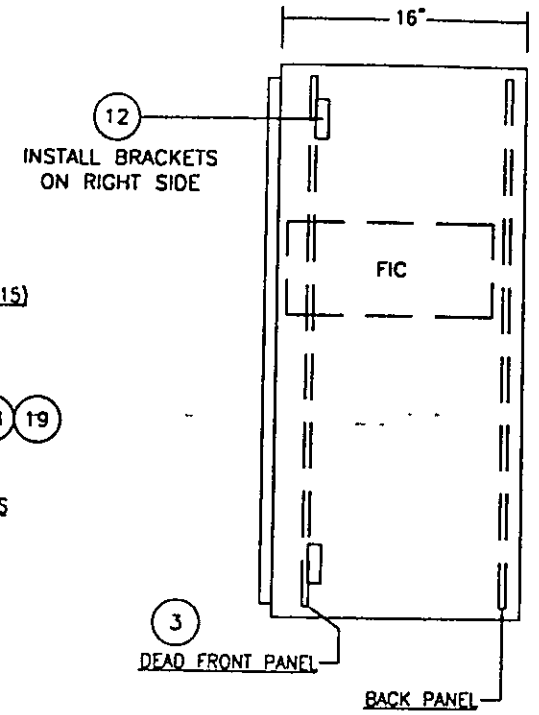
AUTOMATION SPECIALTIES ENTERPRISES, INC. BRADENTON, FLORIDA 34205 (941) 748-6376					DRAWING TITLE	APVD	SCALE	DATE
					REMEDIATION C/P-MASTER		1:1	1/9/98
		B	AS BUILT	CDB 5/11/98	DEFENSE DEPOT MEMPHIS, TENN.	DWG. NO.	REV.	SIZE
		A	RELEASE FOR APPROVAL			97144-01-ES-05	B	D
		REV	DESC.	BY DATE				



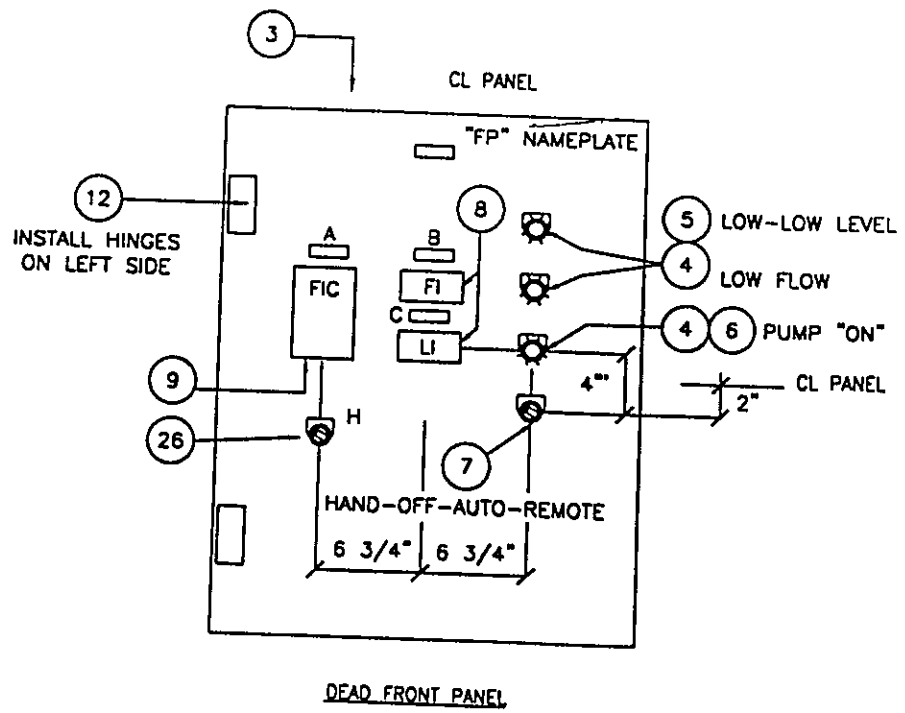
FRONT VIEW



BACK PANEL



RIGHT SIDE VIEW



DEAD FRONT PANEL

QUANTITIES SHOWN ARE FOR (1) PANEL

(7) PANELS ARE REQUIRED

ITEM	QTY	DESCRIPTION
1	1	ENCLOSURE 36X30X16 (TYPE 304) HOFFMAN A-36H3016SSLP
2	1	BACKPANEL FOR 36X30 HOFFMAN #A-36P30
3	1	DEADFRONT PANEL FOR 36X30 HOFFMAN #A-36P30
4	3	PILOT LIGHT 120V CUTLER HAMMER 10250T181N
5	1	RED LENS CUTLER HAMMER 10250TC1N
6	1	GREEN LENS CUTLER HAMMER 10250TC2N
7	1	SEL. SWITCH 4-POSITION CUTLER HAMMER 10250T1367
8	2	INDICATOR NEWPORT SERIES 500
9	1	FLOW INDICATOR/CONTROLLER FOXBORO 762CNA-AT
10	2	CURRENT ALARM ACTION INST. AP1080
11	1	HEATER DESIGNAIR D-AH1001A
12	1	SWING-OUT PANEL KIT HOFFMAN A-JCDFK
13	4	RELAY (PLUG-IN) 120V (8-PIN) IDEC RR2KP
14	4	RELAY BASE-(8-PIN) IDEC SERIES SR
15	1	TIMER "ON" DELAY (PLUG-IN) 120V IDEC GT5Y-2SN3A100
16	1	TIMER BASE FOR GT5Y TIMER IDEC
17	2	CURRENT ALARM BASE ONLY FOT ACTION INST. AP1080
18	1	DIN-RAIL 10A CB ALLEN BRADLEY 1492GH100
19	2	DIN-RAIL 5A CB ALLEN BRADLEY 1492GH050
20	42	TERMINALS ENTRELEC 115-116.07
21	A/R	TERMINAL ENDS ENTRELEC
22	A/R	WIREWAY 1"X3"H
23	1	GFI RECEPTACLE WITH "FS" BOX
24	1	TRANSIENT SURGE SUPPRESSOR EDCO HSP121BT-IRU
25	1	2-CHANNEL SURGE PROTECTOR EDCO PC642-36 BASEPC818
26	7	SEL. SWITCH 2-POSITION CUTLER HAMMER 10250T1311

AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

REV	DESC.	BY	DATE
C	ADD 2-POSITION SWITCH	JAR	9-23-98
B	AS BUILT	JAR	4-15-98
A	RELEASE FOR APPROVAL	RM/ML	1/5/98

DRAWING TITLE

REMEDIATION C/P-REC. PNLS. (TYP.7)
DEFENSE DEPOT MEMPHIS, TENN.

APVD	SCALE	DATE
	1:1	1/9/98

DWG. NO.	REV.	SIZE
97144-02-CP-01	C	D

ENGRAVING					
N/P LTR SYM		N/P LTR SYM		N/P LTR SYM	
D	REMOTE ON OFF AUTO	F	LOW FLOW	H	CONTROL BY FLOW LEVEL
E	PUMP ON	G	LOW LOW LEVEL		

QUANTITY OF EACH–(7)

N/P LTR SYM	ENGRAVING	N/P LTR SYM	
A	FLOW/INDICATOR CONTROLLER		
B	FLOW INDICATOR		
C	LEVEL INDICATOR		

QUANTITY OF EACH–(7) 2.5"W X .75"H
1/8" BLACK LETTERS
ON A WHITE BACKGROUND

CONTROL PANEL NAMEPLATES			
PNL		PNL	
FP1	RECOVERY WELL FIELD PANEL 3	FP6	RECOVERY WELL FIELD PANEL 8
FP2	RECOVERY WELL FIELD PANEL 4	FP7	RECOVERY WELL FIELD PANEL 9
FP3	RECOVERY WELL FIELD PANEL 5		
FP4	RECOVERY WELL FIELD PANEL 6		
FP5	RECOVERY WELL FIELD PANEL 7		

QUANTITY OF EACH–(1) 2.5"W X .75"H
1/8" BLACK LETTERS
ON A WHITE BACKGROUND

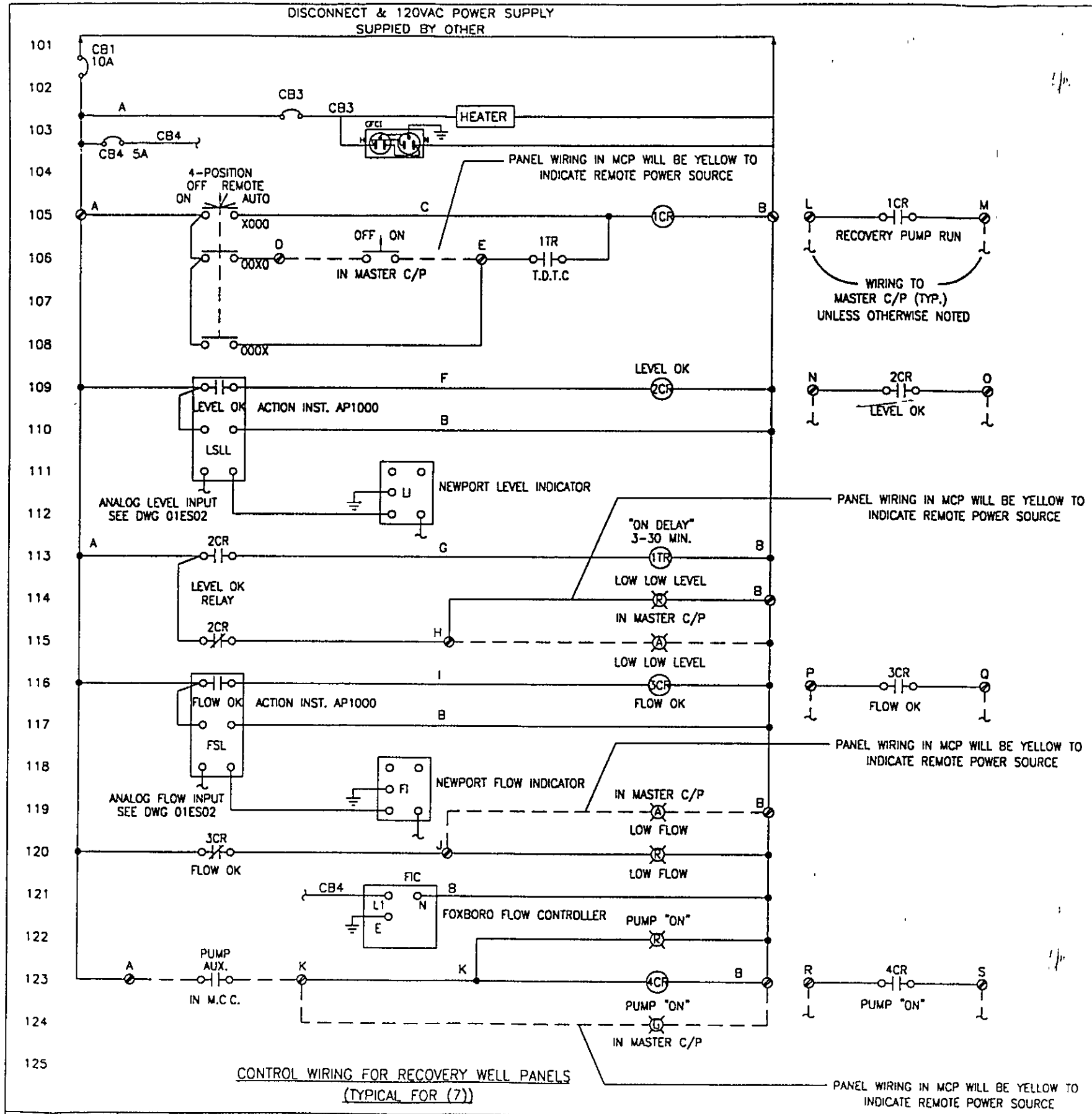
AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

REV	DESC.	BY	DATE
C	ADD "H"	JAR	4-15-98
B	AS BUILT	JAR	4-15-98
A	RELEASE FOR APPROVAL	RM/ML	1/9/98

DRAWING TITLE
REMEDIATION C/P
DEFENSE DEPOT MEMPHIS, TENN.

APVD	SCALE	DATE
	1:1	1/9/98

DWG. NO.	REV.	SIZE
97144-02-CP-02	C	D



CONTROL WIRING FOR RECOVERY WELL PANELS
(TYPICAL FOR (7))

WIRING SCHEDULE

	CP	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
REC. WELL 8	FP8	801	802	803	804	805	806	807	808	809	810	111	112	113	114	115	116	117	118	119
REC. WELL 9	FP9	901	902	903	904	905	906	907	908	909	910	211	212	213	214	215	216	217	218	219
REC. WELL 3	FP3	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319
REC. WELL 4	FP4	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419
REC. WELL 5	FP5	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519
REC. WELL 6	FP6	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619
REC. WELL 7	FP7	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719

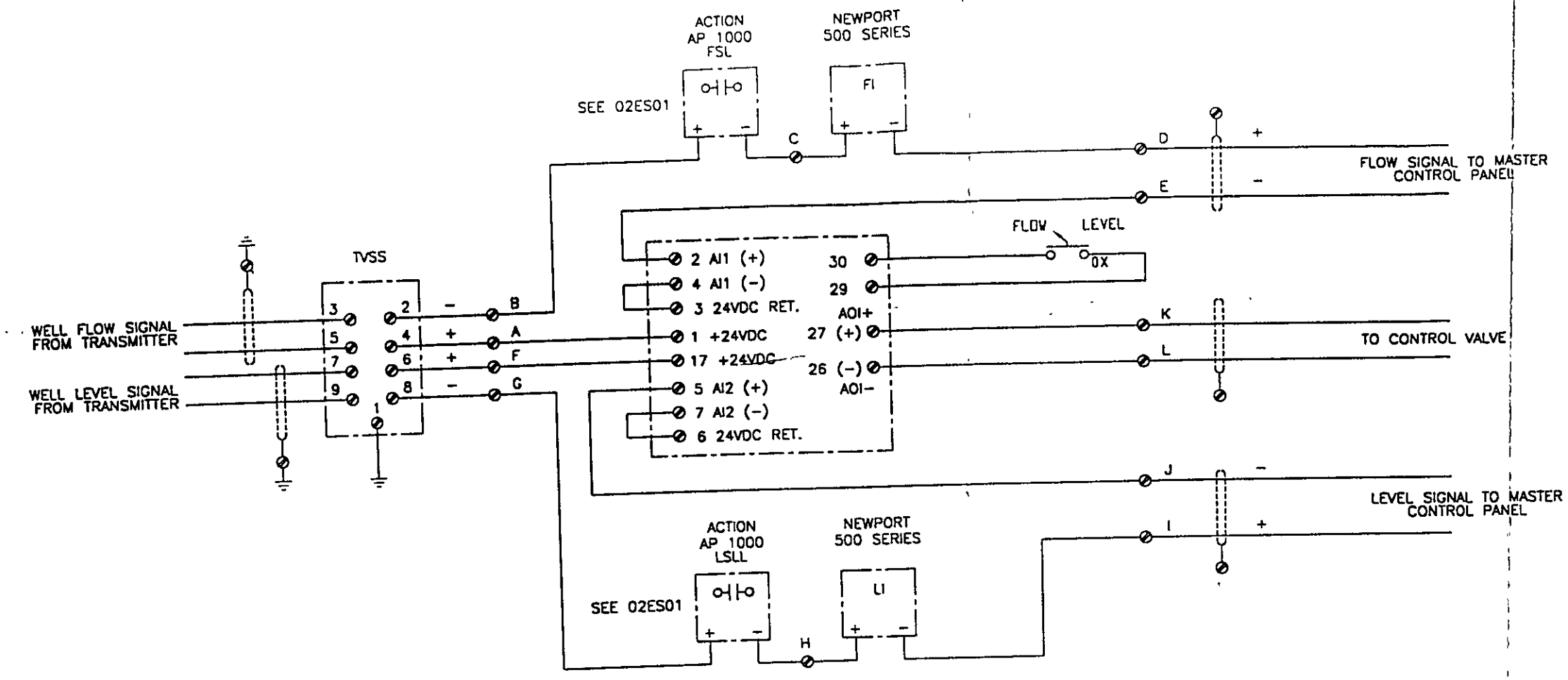
AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

REV	DESC.	BY	DATE
B	AS BUILT	JAR	4-15-98
A	RELEASE FOR APPROVAL	RM/ML	1/9/98

DRAWING TITLE
REMEDIATION C/P-RECOVERY PNLS.
DEFENSE DEPOT MEMPHIS, TENN.

APVD	SCALE	DATE
-	1:1	1/9/98

DWG. NO. 97144-02-ES-01 | REV. B | SIZE D



WIRING SCHEDULE

	A	B	C	D	E	F	G	H	I	J	K	L	M
FP8	1FT+	1FT-	1FT1	1FT2	1FT3	1LT+	1LT-	1LT1	1LT2	1LT3	1CV+	1CV-	
FP9	2FT+	2FT-	2FT1	2FT2	2FT3	2LT+	2LT-	2LT1	2LT2	2LT3	2CV+	2CV-	
FP3	3FT+	3FT-	3FT1	3FT2	3FT3	3LT+	3LT-	3LT1	3LT2	3LT3	3CV+	3CV-	
FP4	4FT+	4FT-	4FT1	4FT2	4FT3	4LT+	4LT-	4LT1	4LT2	4LT3	4CV+	4CV-	
FP5	5FT+	5FT-	5FT1	5FT2	5FT3	5LT+	5LT-	5LT1	5LT2	5LT3	5CV+	5CV-	
FP6	6FT+	6FT-	6FT1	6FT2	6FT3	6LT+	6LT-	6LT1	6LT2	6LT3	6CV+	6CV-	
FP7	7FT+	7FT-	7FT1	7FT2	7FT3	7LT+	7LT-	7LT1	7LT2	7LT3	7CV+	7CV-	

AUTOMATION SPECIALTIES ENTERPRISES, INC.
BRADENTON, FLORIDA 34205 (941) 748-6376

REV	DESC.	BY	DATE
C	ADD 2 POSITION SWITCH	JAR	9-23-98
B	AS BUILT	JAR	4-15-98
A	RELEASE FOR APPROVAL	RM/ML	1/9/98

DRAWING TITLE
REMEDIATION C/P-RECOVERY PNLS
DEFENSE DEPOT MEMPHIS, TENN.

APVD	SCALE	DATE
	1:1	1/9/98

DWG. NO.	REV.	SIZE
97144-02-ES-02	C	D

TAB

Appendix K

TAB

Construction Photos

received
JUN 04 1999

OHM Remediation Services Corp.
5445 Triangle Parkway, Suite 400
Norcross, GA 30092-2575
Tel. 770.729.3900
Fax. 770.729.3905

A Member of The IT Group

the IT group

June 3, 1999
OH-TA-0014-0007

U.S. Army Corps of Engineers, Mobile District
Tennessee Area Office, Construction Div.
1433 5th Street
Arnold AFB, TN 37389-9102

Attn: Area Engineering (Mr. John Rollyson, P.E.)

Re: TRANSMITTAL LETTER
Construction Photographs – Groundwater Extraction System
Memphis Depot, Tennessee
Contract No. DACA45-96-D-0014, D.O. 0007

Dear Mr. Rollyson:

Attached please find one set of photographs documenting the construction of the groundwater extraction system. The dates of the photographs are from 12/18/97 to 09/22/98. This set of photographs has been compiled at the request of Mr. Kurt Braun for the Memphis Depot. Additional originals of this set of construction photographs have been distributed as outlined below.

Should you require any additional information or have any questions, please contact me at 770.326.2571.

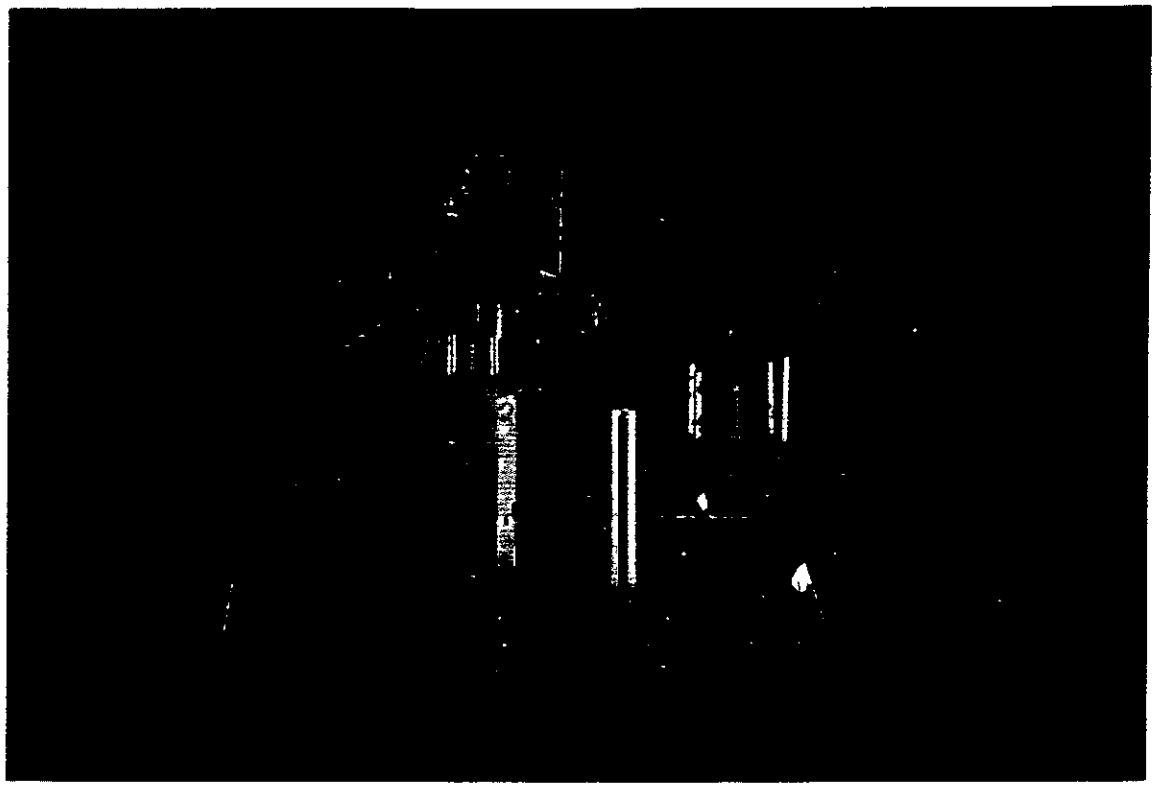
Respectfully submitted,

OHM Remediation Services Corp./A Member of the IT Group

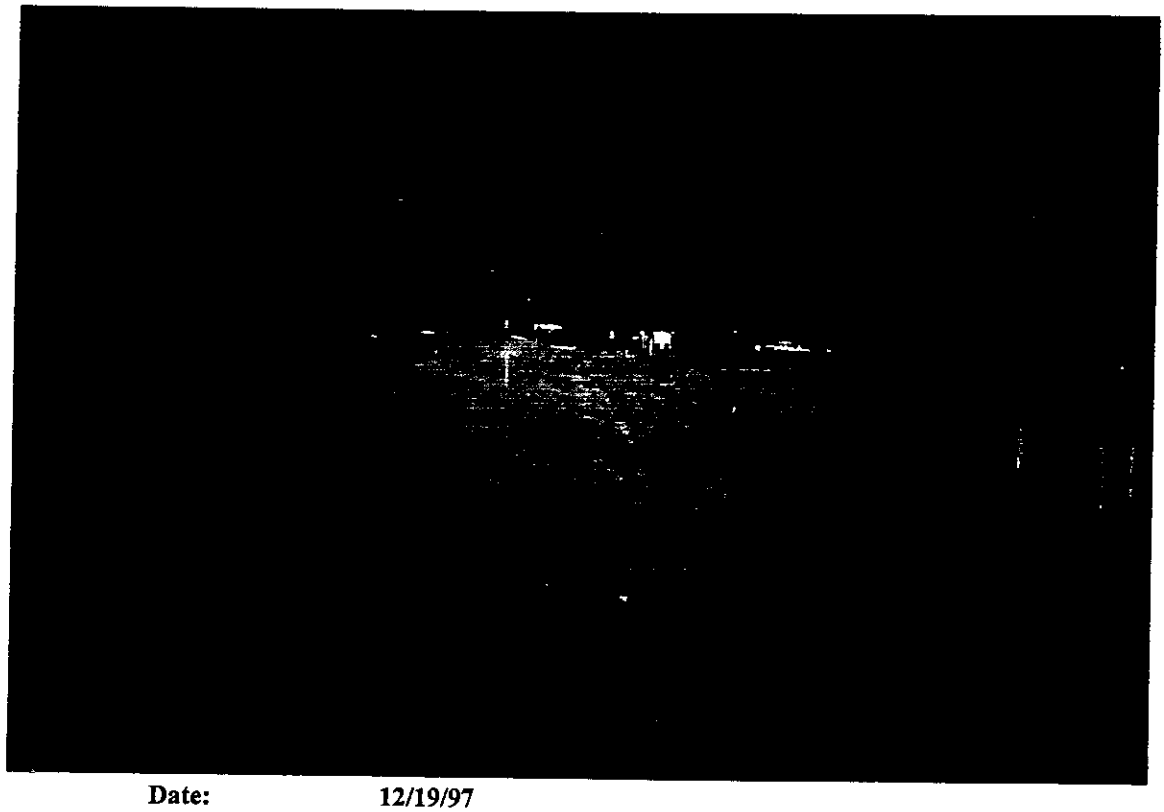
Stephen D. Offner, P.G.
Project Manager

distribution: USACE-Mobile/Kurt Braun (w/out attachments)
DDSP-Shawn Phillips (12 copies)
USACE-Huntsville/Dorothy Richards (1 copy)
OHM Project File No. 920022 (1 copy)

GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT



Date: 12/18/97
Description: GEOPHYSICAL SURVEY PRIOR TO SITE MOBILIZATION
View Direction: NORTHEAST



Date: 12/19/97
Description: GEOPHYSICAL SURVEY PRIOR TO SITE MOBILIZATION
View Direction: NORTH

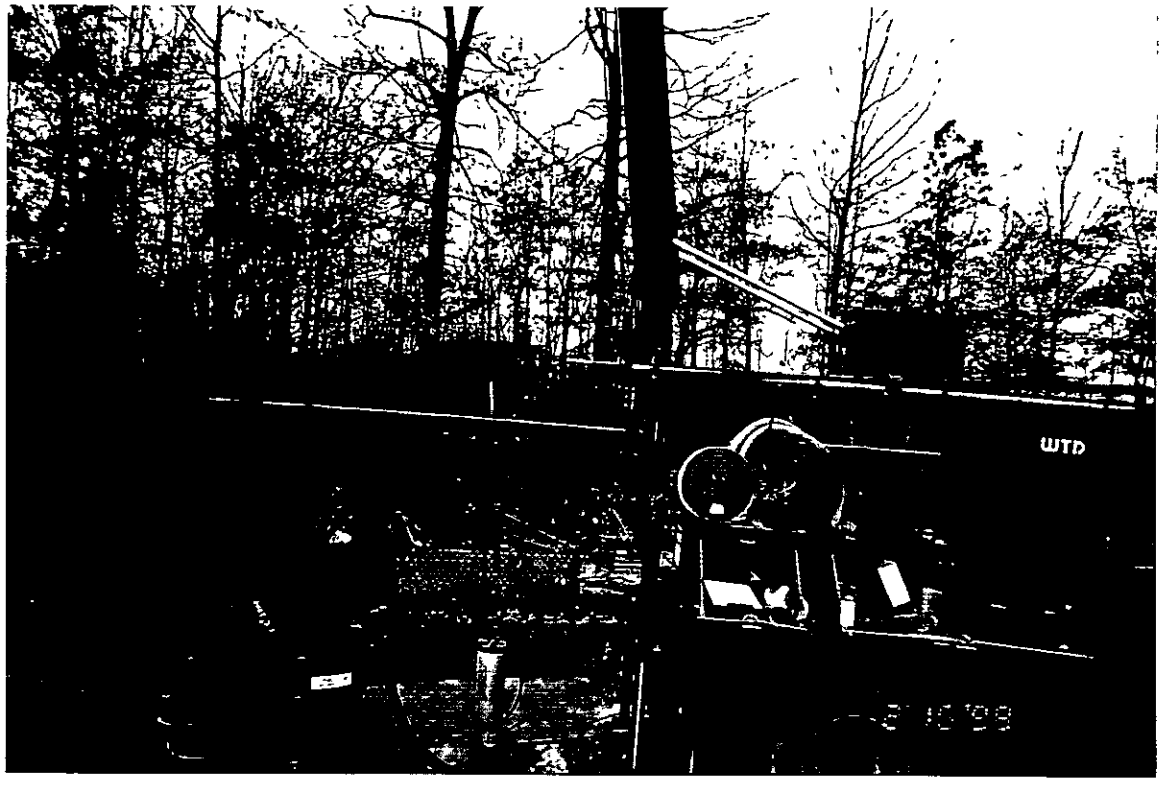
GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT

Date: 01/13/98
Description: INITIAL SOIL SAMPLING IN LEVEL B
View Direction: SOUTH

Date: 02/11/98
Description: SOIL INSPECTION DURING WELL INSTALLATION
View Direction: WEST

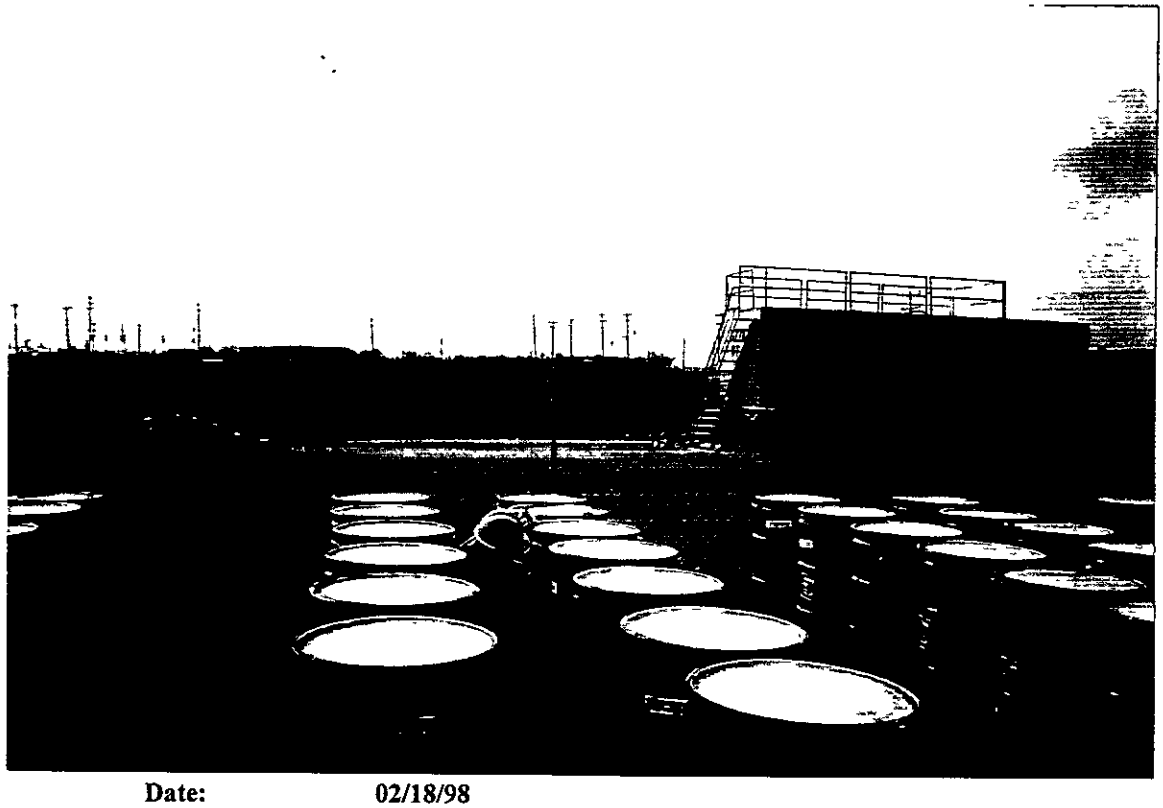
GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT

Date: 02/13/98
Description: RECOVERY WELL INSTALLATION
View Direction: WEST



Date: 02/16/98
Description: RECOVERY WELL DEVELOPMENT
View Direction: WEST

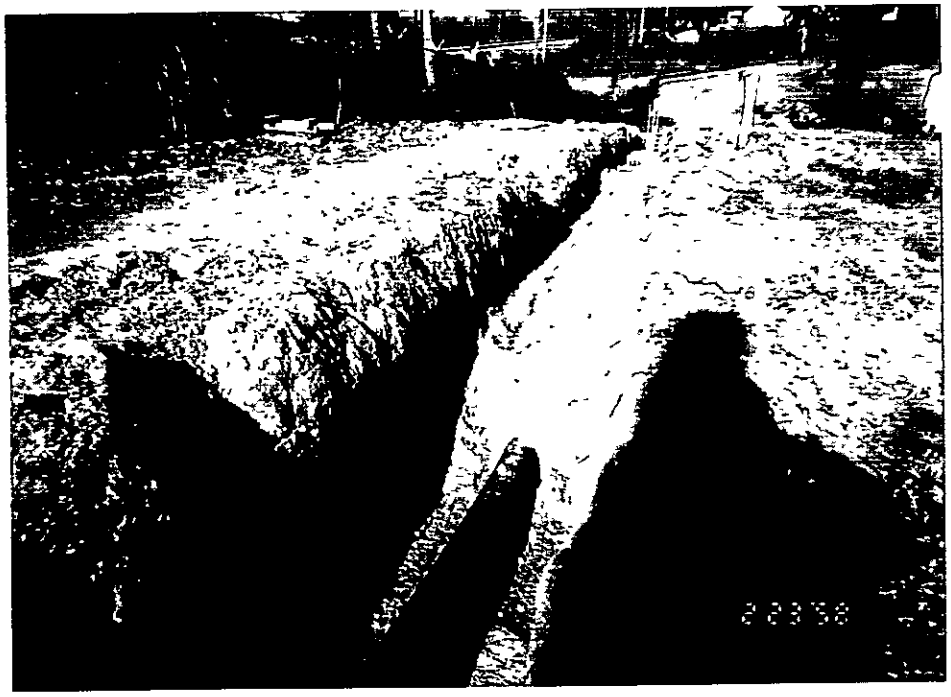
GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT



Date: 02/18/98
Description: LABELING DRUMS OF SOIL FOR TRANSPORTATION AND DISPOSAL
View Direction: SOUTH

Date: 02/18/98
Description: POSITIONING 8 INCH HDPE PIPE FOR INSTALLATION
View Direction: SOUTHWEST

GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT



Date: 02/23/98
Description: BACKFILLING OF 8 INCH HDPE PIPE IN TRENCH
View Direction: NORTHEAST

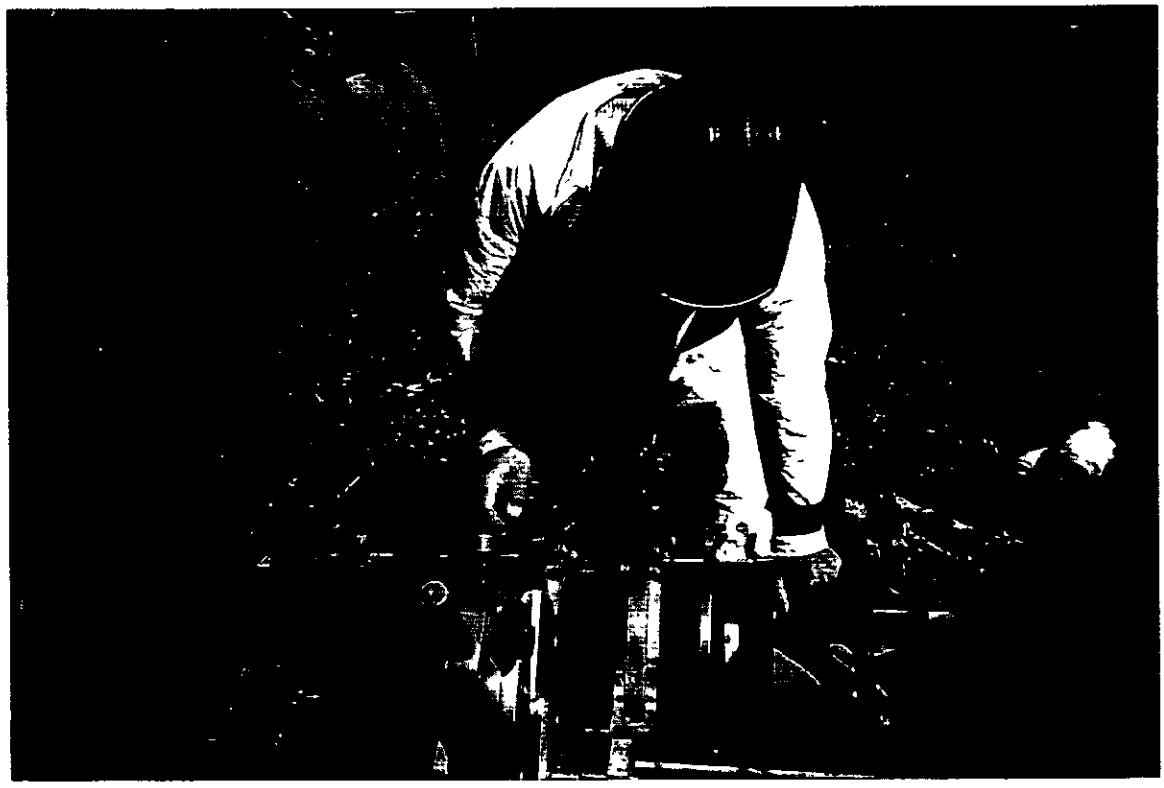
Date: 02/23/98
Description: POSITIONING ELECTRICAL CONDUIT IN TRENCH
View Direction: NORTHEAST

GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT

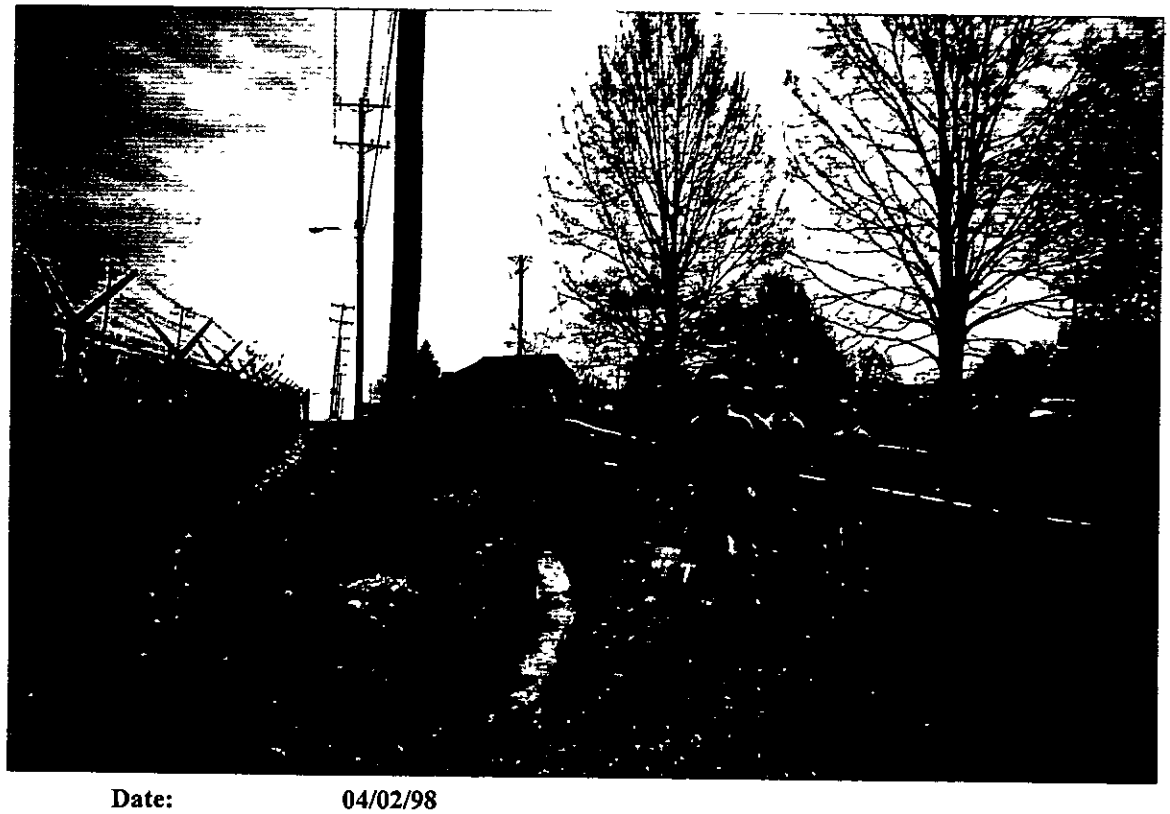
Date: 3/18/98
Description: EXCAVATION ACTIVITIES
View Direction: WEST

Date: 3/18/98
Description: REINSTALLATION OF RECOVERY WELL RW-5
View Direction: WEST

GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT



Date: 04/02/98
Description: BUTT FUSION OF HDPE PIPE
View Direction: NORTHWEST



Date: 04/02/98
Description: TRENCH PRIOR TO PIPE INSTALLATION
View Direction: EAST

GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT

Date: 04/04/98
Description: RECOVERY WELL PAD GRADING
View Direction: WEST

Date: 04/06/98
Description: COMPACTING CRUSHED LIMESTONE
View Direction: EAST

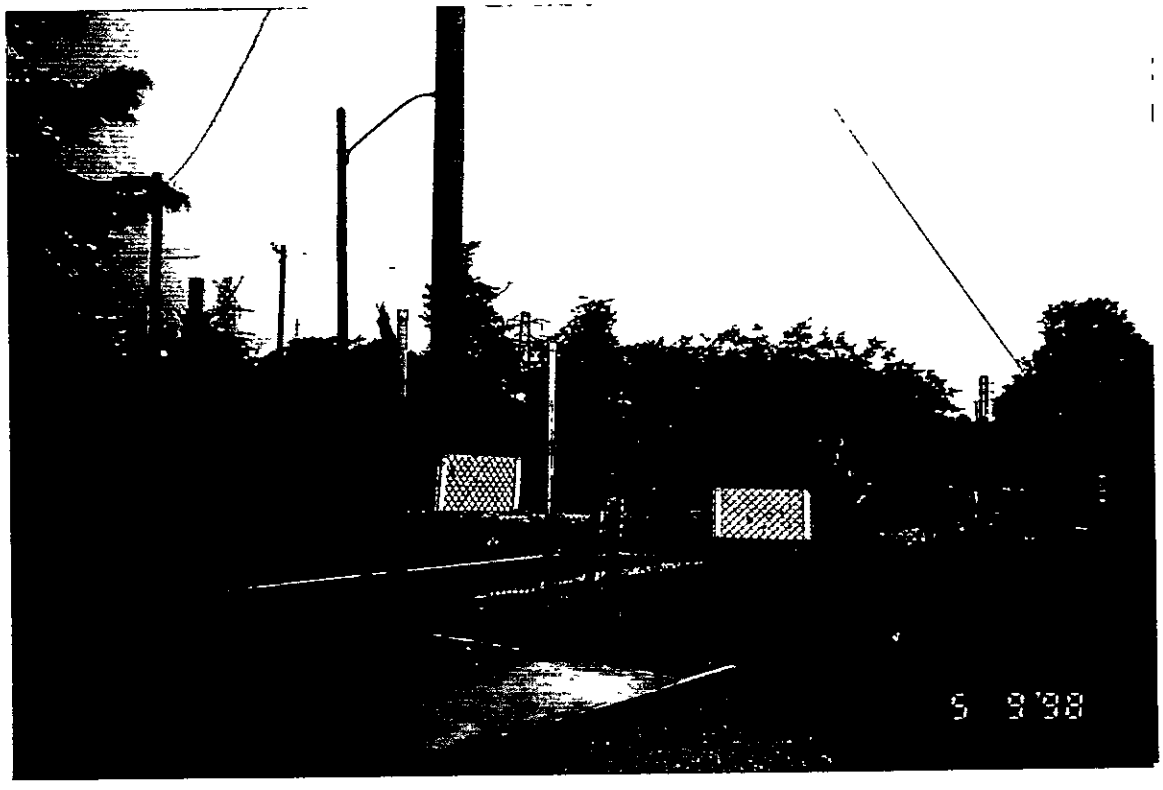
GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT

Date: 04/07/98
Description: CONSTRUCTION OF METER AND BYPASS STATION
View Direction: WEST

Date: 05/04/98
Description: INSPECTING BUILDING AT MANUFACTURER'S FACILITY
View Direction: UNKNOWN

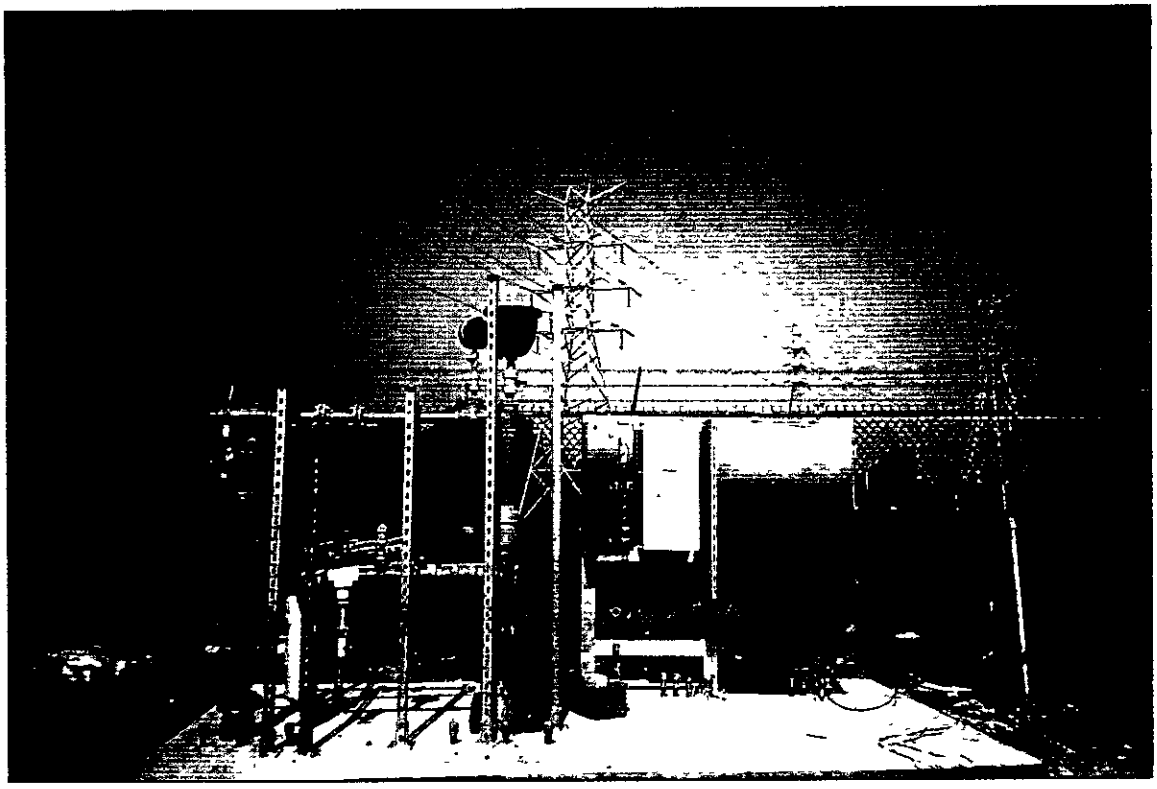
GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT

Date: 05/05/98
Description: PULLING ELECTRICAL CABLE THROUGH CONDUIT
View Direction: NORTHEAST

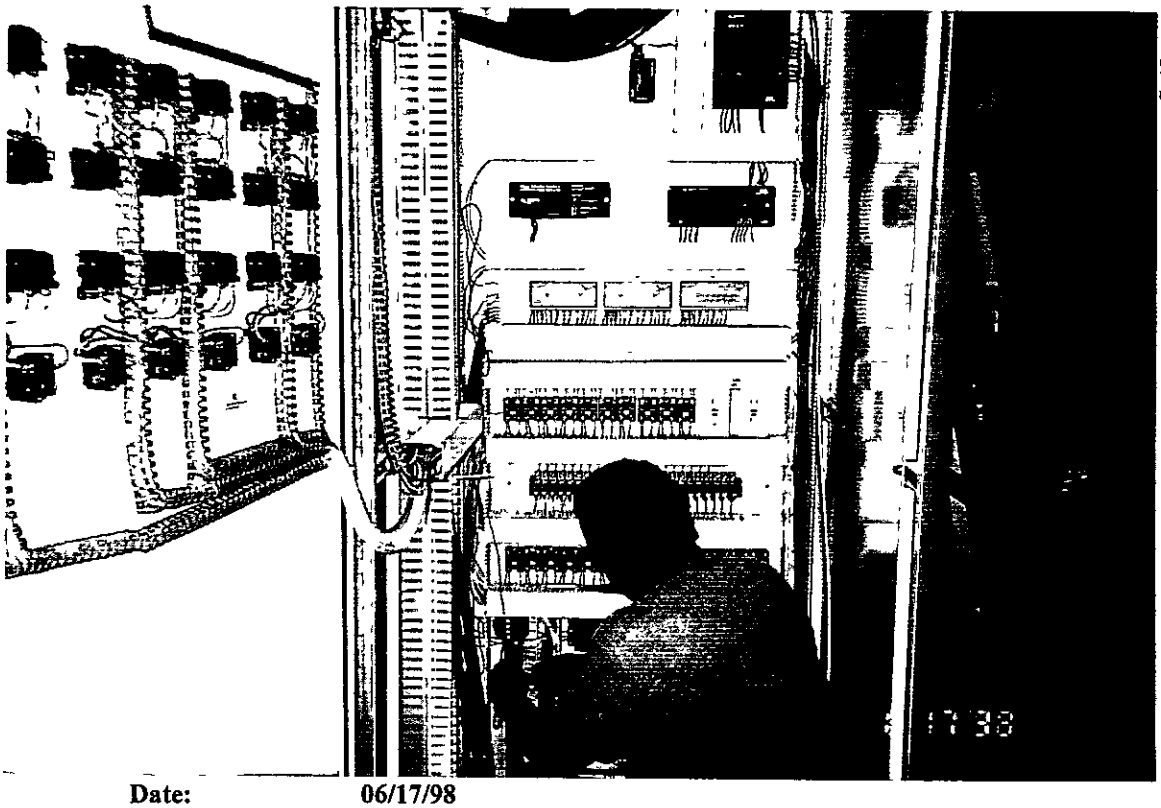


Date: 05/09/98
Description: CONSTRUCTION OF MAIN DISTRIBUTION PANEL SLAB
View Direction: NORTHWEST

GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT



Date: 05/13/98
Description: CONSTRUCTION OF RECOVERY WELL DISCHARGE PIPING
View Direction: WEST



Date: 06/17/98
Description: WIRING OF THE MAIN CONTROL PANEL
View Direction: EAST

GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT

Date: 07/10/98
Description: RECOVERY WELLS RW-5 and RW-4
View Direction: SOUTH

Date: 07/30/98
Description: RECOVERY WELL COMPLETION PRIOR TO PIPING INSULATION
View Direction: WEST

GROUNDWATER EXTRACTION SYSTEM CONSTRUCTION
DUNN FIELD, MEMPHIS DEPOT

Date: 09/14/98
Description: CONSTRUCTION OF SEWER DISCHARGE PIPE
View Direction: SOUTHWEST

Date: 09/22/98
Description: NEAR COMPLETION OF SEWER DISCHARGE PIPE
View Direction: NORTH

TAB

Appendix L

City of Memphis
TENNESSEE

DR. W. W. HERENTON - Mayor
RICK MASSON - Chief Administrative Officer
DIVISION OF PUBLIC WORKS
BENNY LENDERMON - Director
Maynard C. Stiles Wastewater Treatment Plant

March 2, 1998

Mr. Stephen Offner
5445 Triangle Parkway
Suite 400
P.O. Box 926050
Norcross, GA 30092

Dear Mr. Offner:

We have received and approve your request to discharge 85,000 gallons of treated ground water into the sanitary sewer at a rate of 30 gpm. This wastewater was generated during the pump test at the Memphis Defense Depot. The discharge point is a manhole located at Kyle street at the west property line of the Defense Depot.

This approval is for this batch of treated ground water only.

You will be billed for this discharge based on a volume of 85,000 gallons. This amounts to a charge of $49.88 for one time only.

If you should have any questions, please feel free to contact me at (901)353-2392.

Sincerely,

Rodney S. Thomas

Rodney S. Thomas, Administrator
Wastewater Treatment Facilities

xc: Jerry Collins
Akil AL-Chokhachi
Tammeria Martin
Shawn Phillips

479 253

City of Memphis
TENNESSEE

DR. W. W HERENTON - Mayor
RICK MASSON - Chief Administrative Officer
DIVISION OF PUBLIC WORKS
BENNY LENDERMON - Director
Maynard C. Stiles Wastewater Treatment Plant

May 4, 1998

Mr. Stephen Offner
5445 Triangle Parkway
Suite 400
P.O. Box 926050
Norcross, GA 30092

RE: Request for disposal of 15,000 gallons of groundwater at the Dunn Field, Defense Depot, Memphis, TN

Dear Mr. Offner:

We have received and approve your request to discharge 15,000 gallons of treated groundwater into the sanitary sewer at a rate of 30 gpm. This wastewater was generated during the pump test at the Memphis Defense Depot. The discharge point is a manhole located at Kyle Street at the west property line of the Defense Depot.

This approval is for this batch of treated groundwater only.

You will be billed for this discharge based on a volume of 15,000 gallons. This amounts to a total charge of $8.80 for one time only.

If you should have any questions, please contact me at (901)353-2392.

Sincerely,

Akil AL-Chokhachi
Environmental Engineer

xc: Jerry Collins
Rodney Thomas
Tammeria Martin
Shawn Phillips

Summary of Analytical Results for Recovery Well Development Water
Dunn Field, Defense Depot
Memphis, Tennessee

Sample Identification Number			RW-03-Dev	RW-03-Cap	RW-04-Dev	RW-04-Cap	RW-05-Dev	RW-06-Dev	RW-06-Cap	RW-07-Dev	RW-07-Cap	RW-08-Dev	RW-08-Cap	RW-09-Dev	RW-09-Cap	City of Memphis Wastewater Standards Monthly/One Day Max
Laboratory ID No			92148-2	92951-2	92148-3	92884-2	92148-10	92148-4	92951-1	92148-1	92884-1	92148-5	92398	92148-6	92951-3	
Date Sample Collected			20-Feb-98	17-Mar-98	20-Feb-98	12-Mar-98	20-Feb-98	20-Feb-98	17-Mar-98	18-Feb-98	13-Mar-98	19-Feb-98	2-Mar-98	19-Feb-98	17-Mar-98	
LABORATORY ANALYSES	**DL**	**Units**														
Metals																
Aluminum (EPA 6010)	0 2	mg/L	BDL	0 2	BDL	0 6	BDL	BDL	BDL	BDL	**3 1**	0 4	0 3	BDL	0 5	1 / 2
Arsenic (EPA 6010)	0 05	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 01	BDL	BDL	BDL	BDL	0 04 / 0 1
Barium (EPA 6010)	0 01	mg/L	0 09	0 08	0 05	0 08	0 04	0 07	0 01	0 07	0 14	0 05	0 15	0 07	0 14	NS
Calcium (EPA 6010)	0 05	mg/L	15	13	15	19	86	16	22	47	100	36	57	43	42	NS
Chromium (EPA 6010)	0 01	mg/L	BDL	0 01	BDL	**0 02**	BDL	BDL	BDL	BDL	0 01	BDL	BDL	BDL	BDL	0 2 / 0 4
Copper (EPA 6010)	0 02	mg/L	BDL	BDL	BDL	**0 03**	BDL	BDL	BDL	BDL	**0 03**	BDL	BDL	BDL	BDL	0 2 / 0 4
Iron (EPA 6010)	0 1	mg/L	1 2	1 8	0 7	2 6	0 1	0 4	BDL	0 4	4 9	1 5	0 64	0 2	2 8	10 / 20
Lead (EPA 7421)	0 003	mg/L	BDL	BDL	BDL	0 005	BDL	0 008	BDL	0 006	0 009	0 008	BDL	BDL	BDL	0 15 / 0 30
Magnesium (EPA 6010)	0 05	mg/L	6 5	4 7	7	5 5	1 6	7 6	0 08	8 8	11	11	18	2 2	12	NS
Manganese (EPA 6010)	0 015	mg/L	0 18	0 03	0 07	0 07	BDL	0 11	BDL	0 16	0 24	0 04	0 06	BDL	0 05	NS
Mercury (EPA 7470)	0 0002	mg/L	BDL	BDL	BDL	0 0004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 001 / 0 002
Nickel (EPA 6010)	0 02	mg/L	BDL	0 02	BDL	0 05	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 1 / 0 3
Potassium (EPA 6010)	0 2	mg/L	0 9	0 8	0 6	0 94	1 2	0 8	1 2	2	19	8	0 3	4 6	1 6	NS
Sodium (EPA 6010)	0 05	mg/L	27	20	25	22	24	27	1 9	34	48	37	25	34	28	NS
Thallium (EPA 6010)	0 01	mg/L	BDL	0 01	BDL	0 01	BDL	BDL	0 01	BDL	0 03	BDL	0 02	BDL	0 02	NS
Zinc (EPA 6010)	0 02	mg/L	0 07	0 04	0 02	0 09	0 04	0 03	0 2	BDL	**0 45**	0 02	1 4	0 02	0 01	0 3 / 1 0
Volatile Organics																
Acetone (EPA 8260)	0 01	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 220	BDL	BDL	BDL	NS
2-Butanone (EPA 8260)	0 01	mg/L	0 012	BDL	BDL	BDL	0 016	BDL	BDL	BDL	BDL	0 190	BDL	BDL	BDL	NS
Carbon Tetrachloride (EPA 8260)	0 002	mg/L	0 014	BDL	BDL	0 002	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 02 / 0 04
Chloroform (EPA 8260)	0 002	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 004	0 005	0 013	0 024	0 002	BDL	0 02 / 0 04
1,1-Dichloroethane (EPA 8260)	0 002	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 002	BDL	NS
1,1-Dichloroethene (EPA 8260)	0 002	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 015	0 014	0 064	0 061	NS
1,2-Dichloroethene (EPA 8260)	0 01	mg/L	BDL	BDL	BDL	0 014	0 030	BDL	BDL	0 054	0 014	BDL	BDL	BDL	BDL	0 05 / 0 10
1 1,2,2-Tetrachloroethane (EPA 8260)	0 002	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 016	0 004	BDL	BDL	BDL	BDL	NS
Tetrachloroethene (EPA 8260)	0 002	mg/L	BDL	0 014	BDL	0 002	0 011	BDL	BDL	0 008	0 006	BDL	0 030	BDL	**0 140**	0 06 / 0 120
Toluene (EPA 8260)	0 002	mg/L	BDL	BDL	BDL	0 010	0 002	BDL	BDL	BDL	BDL	**0 058**	0 002	BDL	BDL	0 02 / 0 04
1 1,1-Trichloroethane (EPA 8260)	0 002	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 004	BDL	NS
Trichloroethene (EPA 8260)	0 002	mg/L	0 039	BDL	0 048	0 180	**0 540**	0 008	BDL	0 083	0 038	0 010	0 015	0 092	0 068	0 400 / 0 800

mg/L = milligrams per liter
DL = detection limit
BDL = below detection limit

Only compounds detected are listed in the table
NS = no standard

479 254

Summary of Analytical Results for Recovery Well Development Water
Dunn Field, Defense Depot
Memphis, Tenness e

Sample Identification Number			Tank 1-Dev	Tank 2-Dev
Laboratory ID No.			92148-8	92148-7
Date Sample Collected			20-Feb-98	20-Feb-98
LABORATORY ANALYSES	**DL**	**Units**		
Metals				
Aluminum (EPA 6010)	0 2	mg/L	2 2	1 8
Barium (EPA 6010)	0 01	mg/L	0.07	0 04
Calcium (EPA 6010)	0.05	mg/L	28	19
Iron (EPA 6010)	0.1	mg/L	9 3	6
Lead (EPA 7421)	0 003	mg/L	0.008	BDL
Magnesium (EPA 6010)	0 05	mg/L	6 4	3 7
Manganese (EPA 6010)	0 015	mg/L	0 19	0 04
Potassium (EPA 6010)	0 2	mg/L	2 2	1 8
Sodium (EPA 6010)	0 05	mg/L	33	28
Vanadium (EPA 6010)	0 05	mg/L	0 05	BDL
Zinc (EPA 6010)	0 02	mg/L	0 03	0 03
Volatile Organics				
Acetone (EPA 8260)	0.01	mg/L	0.029	BDL
Benzene (EPA 8260)	0 002	mg/L	BDL	0 003
Carbon Tetrachloride (EPA 8260)	0 002	mg/L	BDL	0 005
1,1-Dichloroethene (EPA 8260)	0 002	mg/L	0 012	BDL
1,2-Dichloroethene (EPA 8260)	0 01	mg/L	BDL	0.011
Ethylbenzene (EPA 8260)	0 002	mg/L	BDL	0 006
Tetrachloroethene (EPA 8260)	0 002	mg/L	0 026	0.005
Toluene (EPA 8260)	0.002	mg/L	0 004	0 005
Trichloroethene (EPA 8260)	0 002	mg/L	0.021	0 09
Xylenes (EPA 8260)	0 005	mg/L	BDL	0 013

mg/L = milligrams per liter

DL = detection limit

BDL = below detection limit

Only compounds detected are listed in the table

Summary of Analytical Results for Wastewater in Frac Tank No. 3
Dunn Field, Defense Depot
Memphis, Tennessee

Sample Identification Number		Tank No 3
Laboratory ID No.		94194-1
Date Sample Collected		21-Apr-98
LABORATORY ANALYSES	**Units**	
Ignitability (EPA 1010)	°F	>212
pH (EPA 9045)	stnd units	8 04
Reactive Cyanide (EPA 7 3 3 2)	mg/L	<1
Reactive Sulfide (EPA 7 3 4.2)	mg/L	<5
METALS		
Aluminum (EPA 6010)	mg/L	100
Arsenic (EPA 6010)	mg/L	0 09
Barium (EPA 6010)	mg/L	23 0
Calcium (EPA 6010)	mg/L	97
Chromium (EPA 6010)	mg/L	0 17
Cobalt (EPA 6010)	mg/L	0 17
Copper (EPA 6010)	mg/L	1 6
Iron (EPA 6010)	mg/L	500
Lead (EPA 7421)	mg/L	0 47
Magnesium (EPA 6010)	mg/L	18
Manganese (EPA 6010)	mg/L	6
Mercury (EPA 7470)	mg/L	0 016
Nickel (EPA 6010)	mg/L	0 37
Potassium (EPA 6010)	mg/L	10
Sodium (EPA 6010)	mg/L	26
Vanadium (EPA 6010)	mg/L	0 34
Zinc (EPA 6010)	mg/L	1 1
VOLATILE ORGANICS (EPA 8260)		
Acetone	mg/L	0 64
SEMIVOLATILE ORGANICS (EPA 8270)		
Phenol	mg/L	0.31
Benzo(a)anthracene	mg/L	0 017
Benzo(b)fluoranthene	mg/L	0 014
Benzo(k)fluoranthene	mg/L	0 018
Benzo(a)pyrene	mg/L	0 013
Bis(2-ethylhexyl)phthalate	mg/L	0 095
Chrysene	mg/L	0 015
Fluoranthene	mg/L	0 034
Naphthalene	mg/L	0 013
Phenanthrene	mg/L	0 02
Pyrene	mg/L	0 026
PESTICIDES (EPA 8081)		
All Compounds	mg/L	BDL

Only compounds present above the detection limits are listed

mg/L = milligrams per liter

BDL = below detection limit

* = as defined in SW-846 7 3 3 2 and 7 3 4 2

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
MEMPHIS ENVIRONMENTAL FIELD OFFICE
SUITE E-645, PERIMETER PARK
2510 MT. MORIAH
MEMPHIS, TENNESSEE 38115-1520

February 10 1998

Defense distribution Center Memphis
Attn: Hearn W Tidwell
2163 Airways Blvd.
Memphis TN. 38114

RE: Disposal of Remedial Action Derived waste. Control Number sp8013c

Dear Sir

This office has received a Special Waste Approval Request from Defense distribution depot Memphis. It was submitted according to Tennessee Rule Chapter 1200-1-7-.01(4). Considering a review of the submitted data, the Division has determined that the request to dispose approximately 1500 to tons (one time only) of waste derived from an Interim Remedial Action consisting of soil cuttings from recovery well installation, trenching, and test pit excavation, is suitable for disposal at the Browning-Ferris Industries north Shelby(SNL 791060224) or South Shelby (SNL 791060135) landfill.

Note that the facility operator may refuse to accept any special waste, even if it has been approved in writing by the Division.

Sincerely,

Rodney Lumpkins
Division of Solid Waste Management
Memphis Environmental Field Office

RL/sp8013c/rl
c: DSWM Nashville
BFI, Memphis

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
MEMPHIS ENVIRONMENTAL FIELD OFFICE
SUITE E-645, PERIMETER PARK
2510 MT. MORIAH ROAD
MEMPHIS, TENNESSEE 38115-1520

March 12, 1998

Defense Distribution Depot
Attn: Mr. John Rhyne
2163 Airways Boulevard
Memphis, TN 38114

RE: Soil Cuttings Excavated Soils Canisters Vials and Debris 98020C

Dear Mr. Rhyne

This office has received a Special Waste Approval Request from Defense Distribution Deport Memphis. It was submitted according to Tennessee Rule Chapter 1200-1-7-.01(4). Considering a review of the submitted data, the Division has determined that the request to dispose of up to 250 tons (one time only) of Soil Cuttings canisters Vials and related Debris from excavation for installation of grown water recovery system is suitable for disposal at the Browning-Ferris Industries North Shelby (SNL791060224) or South Shelby (SNL791060135) Landfill.

Note that the facility operator may refuse to accept any special waste, even if it has been approved in writing by the Division.

If you have any questions, please contact me at (901) 368-7951.

Sincerely,

Rodney Lumpkins
Division of Solid Waste Management
Memphis Environmental Assistance Center

RL/sp8020c/rl

c: DSWM Nashville(SNL 79-106-0135)

T & D LOG FOR DEFENSE DEPOT MEMPHIS, TN.

PROJECT #920022 CLIENT: USACE

CONTRACT #DACA45-96-D-0014 DO# 0007

DATE	MANIFEST#	AREA	TONS	TONS TO DATE	TRUCK CO.	TRUCK #	FACILITY
2/20/98	12001	Dunn	21.08	21.08	INMAN	35	BFI - South
2/20/98	12002	Dunn	19.91	40.99	INMAN	3	BFI - South
2/20/98	12003	Dunn	19.91	60.90	INMAN	21	BFI - South
2/20/98	12004	Dunn	13.92	74.82	INMAN	35	BFI - South
2/23/98	12005	Dunn	21.10	95.92	INMAN	35	BFI - South
2/23/98	12006	Dunn	16.27	112.19	INMAN	3	BFI - South
2/23/98	12007	Dunn	17.18	129.37	INMAN	35	BFI - South
2/23/98	12008	Dunn	16.70	146.07	INMAN	3	BFI - South
2/23/98	12009	Dunn	18.02	164.09	INMAN	35	BFI - South
2/23/98	12010	Dunn	16.01	180.10	INMAN	3	BFI - South
2/23/98	12011	Dunn	17.42	197.52	INMAN	35	BFI - South
2/23/98	12012	Dunn	17.29	214.81	INMAN	3	BFI - South
2/23/98	12013	Dunn	16.00	230.81	INMAN	35	BFI - South
2/23/98	12014	Dunn	16.47	247.28	INMAN	3	BFI - South
2/23/98	12015	Dunn	15.15	262.43	INMAN	35	BFI - South
2/23/98	12016	Dunn	13.99	276.42	INMAN	3	BFI - South
2/23/98	12017	Dunn	17.13	293.55	INMAN	36	BFI - South
2/24/98	12018	Dunn	19.51	313.06	INMAN	35	BFI - South
2/24/98	12019	Dunn	18.58	330.19	INMAN	36	BFI - South
2/24/98	12020	Dunn	18.67	349.70	INMAN	35	BFI - South
2/24/98	12021	Dunn	16.70	368.28	INMAN	36	BFI - South
2/24/98	12022	Dunn	16.27	386.95	INMAN	35	BFI - South
2/24/98	12023	Dunn	18.28	405.23	INMAN	36	BFI - South
2/24/98	12024	Dunn	19.98	421.50	INMAN	35	BFI - South
2/24/98	12025	Dunn	19.34	440.84	INMAN	36	BFI - South
2/25/98	12026	Dunn	20.16	461.00	INMAN	35	BFI - South
2/25/98	12027	Dunn	21.93	482.93	INMAN	3	BFI - South
2/25/98	12028	Dunn	20.49	503.42	INMAN	35	BFI - South
2/25/98	12029	Dunn	21.47	524.89	INMAN	3	BFI - South
2/25/98	12030	Dunn	21.66	546.55	INMAN	35	BFI - South
2/25/98	12031	Dunn	21.98	568.53	INMAN	3	BFI - South
2/25/98	12032	Dunn	20.12	588.65	INMAN	35	BFI - South
2/27/98	12033	Dunn	22.37	611.02	INMAN	21	BFI - South
2/27/98	12034	Dunn	23.25	634.27	INMAN	21	BFI - South
2/27/98	12035	Dunn	22.71	656.98	INMAN	21	BFI - South
3/14/98	12036	Dunn	20.42	677.40	INMAN	3	BFI - South
3/14/98	12037	Dunn	25.20	702.60	INMAN	32	BFI - South
3/14/98	12038	Dunn	23.91	726.51	INMAN	3	BFI - South
3/14/98	12039	Dunn	23.16	749.67	INMAN	32	BFI - South
3/14/98	12040	Dunn	24.29	773.96	INMAN	3	BFI - South
3/14/98	12041	Dunn	19.31	793.27	INMAN	32	BFI - South
3/14/98	12042	Dunn	19.39	812.66	INMAN	3	BFI - South
3/14/98	12043	Dunn	23.04	835.70	INMAN	32	BFI - South
3/14/98	12044	Dunn	17.51	853.21	INMAN	3	BFI - South

T & D LOG FOR DEFENSE DEPOT MEMPHIS, TN.

PROJECT #920022 CLIENT: USACE

CONTRACT #DACA45-96-D-0014 DO# 0007

DATE	MANIFEST#	AREA	TONS	TONS TO DATE	TRUCK CO.	TRUCK #	FACILITY
3/14/98	12045	Dunn	19.72	872.93	INMAN	32	BFI - South
3/16/98	12046	Dunn	21.93	894.86	INMAN	32	BFI - South
3/16/98	12047	Dunn	23.32	918.18	INMAN	35	BFI - South
3/16/98	12048	Dunn	24.07	942.25	INMAN	32	BFI - South
3/16/98	12049	Dunn	21.98	964.23	INMAN	35	BFI - South
3/16/98	12050	Dunn	19.44	983.67	INMAN	32	BFI - South
3/17/98	12051	Dunn	22.67	1006.34	INMAN	35	BFI - South
3/17/98	12052	Dunn	22.26	1028.60	INMAN	32	BFI - South
3/17/98	12053	Dunn	23.54	1052.14	INMAN	35	BFI - South
3/17/98	12054	Dunn	20.31	1072.45	INMAN	32	BFI - South
3/24/98	12055	Dunn	22.19	1094.64	INMAN	36	BFI - South
3/24/98	12056	Dunn	19.85	1114.49	INMAN	36	BFI - South
3/24/98	12057	Dunn	23.66	1138.15	INMAN	32	BFI - South
3/24/98	12058	Dunn	23.44	1161.59	INMAN	36	BFI - South
3/24/98	12059	Dunn	23.40	1184.99	INMAN	32	BFI - South
3/24/98	12060	Dunn	24.25	1209.24	INMAN	36	BFI - South
3/24/98	12061	Dunn	23.45	1232.69	INMAN	32	BFI - South
3/24/98	12062	Dunn	23.16	1255.85	INMAN	32	BFI - South
3/24/98	12063	Dunn	24.97	1280.82	INMAN	36	BFI - South
3/24/98	12064	Dunn	22.22	1303.04	INMAN	32	BFI - South
3/24/98	12065	Dunn	24.75	1327.79	INMAN	36	BFI - South
3/24/98	12066	Dunn	24.90	1352.69	INMAN	32	BFI - South
3/25/98	12067	Dunn	20.94	1373.63	INMAN	36	BFI - South
3/25/98	12068	Dunn	20.82	1394.45	INMAN	32	BFI - South
3/25/98	12069	Dunn	20.47	1414.92	INMAN	32	BFI - South
3/25/98	12070	Dunn	23.71	1438.63	INMAN	36	BFI - South
3/25/98	12071	Dunn	25.30	1463.93	INMAN	32	BFI - South
3/25/98	12072	Dunn	24.94	1488.87	INMAN	36	BFI - South
3/25/98	12073	Dunn	22.89	1511.76	INMAN	32	BFI - South
3/25/98	12074	Dunn	23.30	1535.06	INMAN	36	BFI - South
3/25/98	12075	Dunn	22.74	1557.80	INMAN	32	BFI - South
3/25/98	12076	Dunn	20.22	1578.02	INMAN	36	BFI - South
3/25/98	12077	Dunn	25.81	1603.83	INMAN	32	BFI - South
3/25/98	12078	Dunn	24.53	1628.36	INMAN	36	BFI - South
3/27/98	12079	Dunn	21.14	1649.50	INMAN	32	BFI - South
3/27/98	12080	Dunn	22.07	1671.57	INMAN	36	BFI - South
3/27/98	12081	Dunn	6.31	1677.88	INMAN	32	BFI - South
3/27/98	12082	Dunn	24.50	1702.38	INMAN	36	BFI - South
3/27/98	12083	Dunn	23.66	1726.04	INMAN	36	BFI - South
3/31/98	12084	Dunn	21.54	1747.58	INMAN	35	BFI - South
3/27/98	12085	Dunn	24.21	1771.79	INMAN	36	BFI - South
3/27/98	12086	Dunn	22.21	1794.00	INMAN	32	BFI - South
3/27/98	12087	Dunn	24.66	1818.66	INMAN	36	BFI - South

T & D LOG FOR DEFENSE DEPOT MEMPHIS, TN.

PROJECT #920022 CLIENT: USACE

CONTRACT #DACA45-96-D-0014 DO# 0007

DATE	MANIFEST#	AREA	TONS	TONS TO DATE	TRUCK CO.	TRUCK #	FACILITY
3/27/98	12088	Dunn	23.26	1841.92	INMAN	32	BFI - South
3/27/98	12089	Dunn	22.26	1864.18	INMAN	36	BFI - South
3/27/98	12090	Dunn	24.22	1888.40	INMAN	32	BFI - South
3/31/98	12091	Dunn	22.69	1911.09	INMAN	35	BFI - South
3/31/98	12092	Dunn	22.47	1933.56	INMAN	35	BFI - South
4/1/98	12093	Dunn	24.15	1957.71	INMAN	35	BFI - South
4/1/98	12094	Dunn	19.94	1977.65	INMAN	35	BFI - South
4/1/98	12095	Dunn	22.34	1999.99	INMAN	35	BFI - South
4/28/98	12098	Dunn	17.08	2017.07	INMAN	36	BFI - South
4/28/98	12099	Dunn	18.57	2035.64	INMAN	21	BFI - South

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. 479-262

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — **GENERATING LOCATION** PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil	1	T	Yd3

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M3–CUBIC METER; Y3–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER
Print / Type Name / Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print / Type Name / Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print / Type Name — Signature / Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 263 #4U

No: 2274322

Date : 02-20-96 Time In: 10:21:55 Time Out: 10:33:15
Ticket # : A04378 CMS # : 0010280 LMS #: 0010280 South Shelby Landfill
Customer : CH2M REMEDIATION SERVICES (901)-794-8070
Vehicle # : 000003 Lic Plate:
NOT APPLICABLE SHELBY COUNTY
Manifest # : 012001 Transporter: OUT
Source Co : Generator : DEF DEFENSE DEPOT
Comment : Operator: PATRICIA O'NEAL
Capacity : 18.00 yd Scale In #: 1 Scale Out #: 2
Gross Wt : 33.80 Tare Wt: 12.72 Net Wt: 21.08 tn

4/Bin Price

Item	Desc	Actual	Bill Qty	$/Unit	Extended
262245	CONTAMINAT	18.00	21.06 TN	19.20000	404.74
	Sub Total..... $				404.74
STATE SURCHARGE					16.86
	Total..... $				421.60

Thanks & Have A Great Day!!!!

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE: _____

REORDER ONLY THROUGH BFI / UARCO CONTRACT

260-1[illegible](4)

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. 479 264

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE- COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114
GENERATING LOCATION PHONE NO.
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil	1	T	Yd3

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER

UNITS: P–POUND; Y–YARDS; M³–CUBIC METER; Y³–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

Print/Type Name & Title — Shipment Date

Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date

Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER
Print / Type Name / Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials

Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print / Type Name / Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials

Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print / Type Name — Signature / Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 265

BFI

No: 2274277

Date : 02-20-98 Time In: 08:59:59 Time Out: 09:32:11
Ticket # : 004318 CMS # : 0010288 LMS #: 0010288 South Shelby Landfill
Customer : O&M REMEDIATION SERVICES (901)-794-8070
Vehicle # : 000035 Lic Plate:
DEFENSE DEPOT NOT APPLICABLE SHELBY COUNTY
Manifest # : 012001 Transporter: OUT
Source Cd : Generator : DEF - DEFENSE DEPOT
Consent : Operator: PATRICIA O'NEAL
Capacity : 16.00 yd Scale In # : 1 Scale Out #: 2
Gross Wt : 32.70 Tare Wt: 12.79 Net Wt: 19.91 tn

20 ton

Item	Descr	Actual	Bill Qty	$/Unit	Extended
262245	CONTAMINAT	18.00	19.91 TN	19.20000	382.27
	Sub Total..... $				382.27
STATE SURCHARGE					15.93
	Total..... $				398.20

Thanks & Have A Great Day!!!!

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE Billy Mowers

REORDER ONLY THROUGH BFI / UARCO CONTRACT

260-1 (4)

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. 479 266

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — **GENERATING LOCATION**
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil	1	T	Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER
Print / Type Name / Title
TRUCK NO ____ PHONE NO ____
Acknowledgement of receipt of materials
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print / Type Name / Title
TRUCK NO ____ PHONE NO ____
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print / Type Name — Signature / Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 267

No: 2274371

South Shelby Landfill
(901)-794-8070

Date : 02-20-98 Time In: 11:12:49 Time Out: 11:45:47
Ticket # : A04411 CMS # : 0016288 LMS #: 0010280
Customer : CHM-REMEDIATION SERVICES
Vehicle # : 000021 Lic Plate:
DEFENSE DEPOT NOT APPLICABLE SHELBY COUNTY
Manifest # : 01E003 Transporter: GUT
Source Cd : Generator : DEF DEFENSE DEPOT
Consent : Operator: PATRICIA O'NEAL
Capacity : 18.00 yd Scale In # : 1 Scale Out #: 2
Gross Wt : 32.67 Tare Wt: 12.76 Net Wt: 19.91 tn

Item	Descr	Actual	Bill Qty	$/Unit	Extended
262245	CONTAMINAT	18.00	19.91 TN	19.20000	382.27
	Sub Total..... $				382.27
STATE SURCHARGE					15.93
	Total..... $				398.20

Thanks & Have A Great Day!!!

4 pk
mw

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE.

260

REORDER ONLY THROUGH BFI / UARCO CONTRACT

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. 479 268

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil	1	T	Yd3

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M3–CUBIC METER; Y3–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 269

BFI

No: 2274398

Date : 02-20-98 Time In: 12:21:48 Time Out: 12:21:48
Ticket # : A04463 CMS # : 0010280 LMS #: 0010280 South Shelby Landfill
Customer : DAN REMEDIATION SERVICES (901)-794-8070
Vehicle # : 000035 Lic Plate:
DEFENSE DEPOT NOT APPLICABLE SHELBY COUNTY
Manifest # : 012004 Transporter: OUT
Source Cd : Generator : DEF - DEFENSE DEPOT
Comment : Operator: PATRICIA O'NEAL
Capacity : 18.00 yd Scale In # : 1 Scale Out #: Stored
Gross Wt : 26.71 Tare Wt: 12.79 Net Wt: 13.92 tn

20 tons per

Item	Desc	Actual	Bill Qty	$/Unit	Extended
2o2245	CONTAMINAT	16.00	13.92 TN	19.20000	267.26
	Sub Total..... $				267.26
STATE SURCHARGE					11.14
	Total..... $				278.40

Thanks & Have A Great Day!!!!

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE: Billy Warren

EORDER ONLY THROUGH BFI / UARCO CONTRACT

260-1[illegible]4)

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 04852

479 270
Nº 012005

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-023-SB022 ~~SB005~~ ~~SB-024 SB-023~~	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris
Print/Type Name/Title
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris 2-23-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia Owen
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-23-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 271

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A04861

№ 012006

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteris

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-025 SO-023 SB-024 SO-022	1	T	Yd3 18	DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER	P–POUND, Y–YARDS, M³–CUBIC METER, Y³–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations. AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper (Print/Type Name/Title)
TRUCK NO 3 PHONE NO 837-0160
Acknowledgement of receipt of materials
William Cooper 2-23-98 (Signature / Date)

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature / Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print/Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.
Lloyd Lott (AUTHORIZED AGENT (PLEASE PRINT))
Lloyd Lott 02-23-98 (SIGNATURE OF AUTHORIZED AGENT / Receipt Date)

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A04911

479 272
№ 012007

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, II required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-005 SB-023 SB-024 SB-022	1	T	Yd3 1.8	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris
Print/Type Name/Title
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris — 2-23-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-23-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 273

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A04985

Nº 012008

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristi

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-020 SB-022 SB-024 SB-021	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title — Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper
Print/Type Name/Title
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 7-7.3-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print/Type Name

DISPOSAL COORDINATES
(Landfill use only)
Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
Patricia O'Neal 02-23-98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 04975 479 274 Nº 012009

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil RM SB-025 SD-022 RM SB-024 SD-021	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris (Print/Type Name/Title)
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris 2-23-98 — Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print/Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia O'Neal — AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-23-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 275

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A04984

№ 012010

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristi

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil ~~PM-SB-025~~ SB-021 ~~PM-SB-024~~ SB-020	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper
Print/Type Name/Title
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 7-23-96
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print/Type Name

DISPOSAL COORDINATES
(Landfill use only)

Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia D Wood
AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 07-23-96

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A05 048

479 276
Nº 012011

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-6-21 SB-6-20	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris
Print/Type Name/Title
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris 2-23-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO — PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — 02-23-98 Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

479 277

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO: A 05062

№ 012012

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristic

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

GENERATING LOCATION

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-021 SB-020	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER WILLIAM Cooper — Print / Type Name / Title
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 2-23-98 — Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER — Print / Type Name / Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print / Type Name — Signature / Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia Head
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-23-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A-05105

479 278
No 012013

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-021 SB-020	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature — 2-23-98

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris — Print/Type Name/Title
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris — Signature — 2-23-98 Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER — Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Floyd Loft — AUTHORIZED AGENT (PLEASE PRINT)
Floyd Loft — SIGNATURE OF AUTHORIZED AGENT — 2-23-98 Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE · DISTRICT OFFICE – GREEN · LANDFILL – YELLOW · TRANSPORTER – PINK · GENERATOR FILE – GOLDENROD

479 279

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A-05113

№ 012014

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristic

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-021 SB020	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9 NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title
Signature — Shipment Date 2-23-98

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper
Print/Type Name/Title
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — Date 2-23-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Lloyd Lott
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 2-23-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A-05730

479 280
Nº 012015

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SD 021 SO020	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date 2-23-98
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris (Print / Type Name / Title)
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris 2-23-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print / Type Name / Title)
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print / Type Name — Signature / Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

S.H. Colbert
AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 2-23-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

TOP OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 281

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A-0514D

№ 012016

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

ATOR
JCTIONS

SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

ION I BFI WASTE CODE TN / 211 / 990213 / 262245

ION II GENERATOR
Defense Distribution Depot
NG ADDRESS 2163 Airways Blvd., Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

ION III OPERATOR/CONTRACTOR
OHM Remediation Services
ESS 5445 Triangle Pkwy., Suite 400 Norcross, GA
PHONE NO (770) 453-7649

ION IV OWNER
PHONE NO

ION V WASTE DISPOSAL SITE
North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHYSICAL SITE LOCATION
PHONE NO (901) 872-7200

ION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
s & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105
(901) 576-7588
n Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

ON VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil 3021 3020	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

STOS WASTE RQ, Asbestos, 9, NA2212, PG III
FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

ON VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

N IX GENERATOR CERTIFICATION

by certify that the above named material is not a hazardous waste as defined FR Part 261 or any applicable state law has been properly described, classified kaged, and is in proper condition for transportation according to applicable ions, AND, if the waste is a treatment residue of a previously restricted hazar aste subject to the Land Disposal Restrictions, I certify and warrant that the as been treated in accordance with the requirements of 40 CFR Part 268 and nger a hazardous waste as defined by 40 CFR Part 261

AWN PHILLIPS
pe Name & Title
Shipment Date
re
Dawn Phillips 2-23-98

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title
Shipment Date
Operators Signature

TRANSPORTER

ON XI TRANSPORTER I
OF CO Inman Trucking
ESS P.O. Box 53 Brighton, TN
R William Cooper
Print/Type Name/Title
K NO 3 PHONE NO 837-6161
wledgement of receipt of materials
William Cooper 2-23-98
e
Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature
Date

DISPOSAL SITE

EPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

pe Name
Signature/Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
ORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
ertify that the above material has been accepted and to the best of edge the foregoing is true and accurate
H. COLBER
AUTHORIZED AGENT (PLEASE PRINT)
URE OF AUTHORIZED AGENT
2-23-98
Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

PERATOR ORIGINAL - WHITE • DISTRICT OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER - PINK GENER

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 05350

479 282
№ 012017

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105
(901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB 0-20 SB 0-19	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title
Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title
Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O. Box 53 Brighton, TN
DRIVER
Print / Type Name / Title
TRUCK NO ____ PHONE NO ____
Acknowledgement of receipt of materials
MS
Signature
Date

SECTION XII TRANSPORTER 2
NAME OF CO INMAN TKS CO
ADDRESS PO Box 53 Brighton TN
DRIVER Michael K Shell
Print / Type Name / Title
TRUCK NO 36 PHONE NO 837-0161
Acknowledgement of receipt of materials
Michael K Shell 2-24-98
Signature
Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print / Type Name

DISPOSAL COORDINATES
(Landfill use only)

Signature / Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Lloyd Lott
AUTHORIZED AGENT (PLEASE PRINT)
Lloyd Lott
SIGNATURE OF AUTHORIZED AGENT
02-24-98
Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 233

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. D 05373

№ 012018

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB.020 SB.019	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris — Print/Type Name/Title
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris — Signature — Date 2-24-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER — Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE — Print/Type Name

DISPOSAL COORDINATES (Landfill use only) — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Olea — AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-24-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL - WHITE • DISTRICT OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER - PINK • GENERATOR FILE - GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 05434

479 284
№ 012019

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-020 SB-019	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Shelly
Print / Type Name / Title
TRUCK NO 36 PHONE NO 837-0161
Acknowledgement of receipt of materials
Michael K Shelly 2-24-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print / Type Name / Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print / Type Name — Signature / Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Peggy Ann Reed
AUTHORIZED AGENT (PLEASE PRINT)

Peggy Ann Reed 02-24-98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 285

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A05453

№ 012020

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristic

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB10-019 SB10-018	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris (Print/Type Name/Title)
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris — Signature — Date 2-24-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal — AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-24-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 05519

479 286

№ 012021

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114
GENERATING LOCATION
PHONE NO.
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB-020 SB-019	1	T	18 Yd3

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M3–CUBIC METER; Y3–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title
Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title
Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Shelly
Print/Type Name/Title
TRUCK NO 36 PHONE NO 837 0161
Acknowledgement of receipt of materials
Michael K Shelly 2-24-98
Signature
Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature
Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print/Type Name

DISPOSAL COORDINATES
(Landfill use only)

Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT
02-24-98
Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 287

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A-05536

№ 012022

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II., V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB 019 SB 018	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date 2-24-98
Print/Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris (Print/Type Name/Title)
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris 2-24-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.

S. H. COLBERT
(AUTHORIZED AGENT/PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 2-24-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A-05569

479 288
№ 012023

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO.
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB019 SB018	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Shawn Phillips 2.24.98
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER Michael K Shelly
Print/Type Name/Title
TRUCK NO 36 PHONE NO 837-0161
Acknowledgement of receipt of materials
Michael K Shelly 2-24-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print/Type Name

DISPOSAL COORDINATES
(Landfill use only)

Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

S.H. GEIBER
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 2-24-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 289

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A-055583 № 012024

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB019 SB018	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title
Signature — Shipment Date 2-24-98

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris (Print/Type Name/Title)
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris — Signature — 2-24-98 Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.
S. R. GILBERT — AUTHORIZED AGENT (PLEASE PRINT)
S. R. Gilbert 2-24-98 — SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A-05596

479 290
№ 012025

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — **GENERATING LOCATION**
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-019 SB-018	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips 2-24-98 — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Shelly — Print/Type Name/Title
TRUCK NO 36 — PHONE NO 837-0161
Acknowledgement of receipt of materials
Michael K Shelly 2-24-98 — Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER — Print/Type Name/Title
TRUCK NO — PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print/Type Name — Signature/Date

DISPOSAL COORDINATES (Landfill use only)

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

S. H. GILBERT — AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 291

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A05783

№ 012026

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB024 SD023	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris
Print/Type Name/Title
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris 2-25-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — 2-25-98 Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A05293

479 292
№ 012027

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

ERATOR STRUCTIONS

SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SP024 SB623	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER I
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper
Print/Type Name/Title
TRUCK NO 5 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 2-25-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print/Type Name

DISPOSAL COORDINATES
(Landfill use only)
Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.
Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
Patricia O'Neal 02-25-98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 293

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A 05841

Nº 012028

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II., V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB 024 SD 023	1	T	Yd3 18

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M3–CUBIC METER; Y3–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris (Print/Type Name/Title)
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris 2-25-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-25-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 05862

479 294
№ 012029

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

NERATOR STRUCTIONS — SPECIAL WASTE- COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB023 SB022	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper — Print/Type Name/Title
TRUCK NO 3 PHONE NO 537-0161
Acknowledgement of receipt of materials
Signature — Date 2-25-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER — Print/Type Name/Title
TRUCK NO — PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE — Print/Type Name

DISPOSAL COORDINATES (Landfill use only) — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal — AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-25-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 295

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A05911

№ 012030

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII., IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
SB023 Contaminated Soil SO022	1	T	Yd3 18

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M3–CUBIC METER; Y3–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris
Print/Type Name/Title
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris 2-25-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
Patricia O'Neal 02-25-98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A05941

479 296

Nº 012031

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , X
ASBESTOS WASTE– COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-023 SB-022	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper
Print/Type Name/Title
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 2-27-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Patricia Mead
AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-25-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

470 297

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A06766

№ 012033

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB-018 SB-017	1	T	Yd3 18

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M³–CUBIC METER; Y³–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Darrel D Jordan BARREL D. JORDAN
Print/Type Name/Title
TRUCK NO 21 PHONE NO 8370161
Acknowledgement of receipt of materials
Darrel D Jordan 2-27-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-27-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO A05983

479 298
Nº 012032

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II., V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-023 SB-024	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Billy Morris
Print/Type Name/Title
TRUCK NO 35 PHONE NO 837-0161
Acknowledgement of receipt of materials
Billy Morris 2-25-98
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-25-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 299

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 06814

№ 012034

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO.
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA 30092 PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SO-018 SO-017	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Garnel D. JORDAN (Print/Type Name/Title)
TRUCK NO 21 PHONE NO 837 0161
Acknowledgement of receipt of materials
Daniel Jordan — Signature — Date 2-27-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print/Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Oneal — AUTHORIZED AGENT (PLEASE PRINT)
Pat O'Neal — SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-27-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A06845

470 300
№ 012035

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SD-017 SD-018	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Garnell D. Jordan
Print/Type Name/Title
TRUCK NO 21 PHONE NO 837 0161
Acknowledgement of receipt of materials
Signature — Date 2-27-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO — PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 02-27-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 301

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 11080

№ 012036

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB13 SB14	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper (Print/Type Name/Title)
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 3-14-98 — Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print/Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-14-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 11081

479 302
№ 012037

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SO43 SO44	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9 NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER Buford McCalvin
Print/Type Name/Title
TRUCK NO 32 PHONE NO 862-0161
Acknowledgement of receipt of materials
Buford McCalvin 3-14-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO — PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — 03-14-98 Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 303

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 11094

№ 012038

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SD-13 SD-14	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper
Print/Type Name/Title
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 3-14-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Oneal
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — 08-14-98 Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 11097

479 304
№ 012039

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII., IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SOY3 SB 14	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Shawn Phillips — Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Buford McCabe — Print/Type Name/Title
TRUCK NO 32 — PHONE NO 837-0161
Acknowledgement of receipt of materials
Buford McCabe 3-14-98 — Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER — Print/Type Name/Title
TRUCK NO — PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Owen — AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — 03-14-98 Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 305

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A1115

№ 012040

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-16 SB-17	1	T	18 Yd3	DM–METAL DRUM DP–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper
Print/Type Name/Title
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 3-14-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia Cheek
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-14-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 11114

479 306
№ 012041

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO.
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil 5016 5017	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER BUFORD (Print/Type Name/Title)
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — Date 3-14-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03/14/98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 307

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A 11139

№ 012042

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO.
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SO 13 SO 12	1	T	Yd3 18	DM–METAL DRUM DP–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper (Print/Type Name/Title)
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 3-14-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print/Type Name/Title)
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print/Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
Patricia O'Neal 03/14/98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

E TENNESSEE, INC
X 1207
TON, TN 38083
0/2-7200

LMS TICKET NO. A 11138

479 308
Nº 012043

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I , II , V , VII , VIII , IX , XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characterstics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB12 SD13	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print/Type Name & Title
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER BUFORD
Print/Type Name/Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — Date 3-14-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print/Type Name — Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.
PATRICIA O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
Pat O'Neal — 03/14/98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR/OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 309

BFI OF TENNESSEE, INC
PO BOX 1207
MILLINGTON, TN 38083
(901) 872-7200

LMS TICKET NO. A11161

Nº 012044

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS: I., II., V., VII., VIII., IX., XI
ASBESTOS WASTE–COMPLETE SECTIONS: I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114
GENERATING LOCATION
PHONE NO.
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn. 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY	UNIT
Contaminated Soil SB-12 SB-13	1	T	18	Yd3

TYPE
DM–METAL DRUM
DM–PLASTIC DRUM
BA–6MIL PLASTIC BAGS/WRAP
T–TRUCK
O–OTHER

UNITS
P–POUND
Y–YARDS
M³–CUBIC METER
Y³–CUBIC YARDS
O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations, AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title
Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title
Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER William Cooper
Print/Type Name/Title
TRUCK NO 3 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 3-11-98
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name/Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A11662

479 310
NO 012045

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105
(901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB12 Contaminated Soil SB13	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos, 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title
Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title
Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER BURRD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature
3-14-98
Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print / Type Name / Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature
Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name
Signature / Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT
03-11-98
Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

479 311

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A11314

№ 012046

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — **GENERATING LOCATION**
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-011 SD-012	1	T	18 Yds	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M–CUBIC METER Y–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER BUFORD (Print Type Name Title)
TRUCK NO 32 PHONE NO 837- 0161
Acknowledgement of receipt of materials
Signature Buford — Date 3-16-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER (Print / Type Name / Title)
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Quanta Parker
AUTHORIZED AGENT (PLEASE PRINT)
Quanta Parker
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A11326

479 312
№ 012047

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II, V, VII VIII, IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy, Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SD 011 SD -012	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations, AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER Billy Morris
Print Type Name Title
TRUCK NO 35 PHONE NO
Acknowledgement of receipt of materials
Billy Morris 3 16 98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79 106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Kyle Conte Parker
AUTHORIZED AGENT (PLEASE PRINT)
Kyle Conte Parker 3-16-98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

EP

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 313

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 11375 NO 012048

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy, Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SD-11 SD-12	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print/Type Name & Title — Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Buford
Print/Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Buford 3-16-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name

DISPOSAL COORDINATES
(Landfill use only)
Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
Patricia O'Neal 03-16-98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A 11392

479 314
№ 012049

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I , II V VII VIII , IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE D - OSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-11 SB-12	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M–CUBIC METER Y–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos 9 NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined 40 CFR Part 261 or any applicable state law has been properly described classified d packaged and is in proper condition for transportation according to applicable gulations AND if the waste is a treatment residue of a previously restricted hazar ous waste subject to the Land Disposal Restrictions I certify and warrant that the aste has been treated in accordance with the requirements of 40 CFR Part 268 and no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
int Type Name & Title — Shipment Date
Shawn Phillips
ignature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

I hereby declare that the contents of this consignment are fully and accurately de scribed 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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
AME OF CO Inman Trucking
DDRESS P O. Box 53 Brighton, TN
RIVER Billy Morris
Print Type Name Title
RUCK NO 35 PHONE NO
Knowledgement of receipt of materials
Billy Morris 3-16 98
ignature Da e

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

SCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

1 Type Name — Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
reby certify that the above material has been accepted and to the best of knowledge the foregoing is true and accurate
Patricia Vega
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT
03-16-98
Recd. Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

ERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

479 315

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 11445

№ 012050

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SO-011 Contaminated Soil SO-012	1	T	18 Yd3	DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER	P–POUND; Y–YARDS; M3–CUBIC METER; Y3–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ, Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O. Box 53 Brighton, TN
DRIVER Buford
Print/Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — 3-16-98 Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print/Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print Type Name

DISPOSAL COORDINATES
(Landfill use only)

Signature/Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — 03-16-98 Receip Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER PINK GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872 7200

LMS TICKET NO A11561

479 316
NO 012051

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SD.011 SD-012	1	T	18 Yd3

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M³–CUBIC METER; Y³–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER Billy Morris
Print / Type Name Title
TRUCK NO 35 PHONE NO
Acknowledgement of receipt of materials
Billy Morris 3-12-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print / Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Amanda Parker
AUTHORIZED AGENT (PLEASE PRINT)
Amanda Parker 3-17-98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse
K P

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

479 317

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 11572

№ 012052

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — **GENERATING LOCATION**
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SP-011 SB-012	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M–CUBIC METER Y–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos, 9 NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a nazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — Date 3-17-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print / Type Name / Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-17-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK — GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A11927

479 318
No 012053

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105
(901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil	1	T	Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y –CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title
Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title
Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER Billy Morris
Print Type Name Title
TRUCK NO 35 PHONE NO
Acknowledgement of receipt of materials
Signature 3-17-98
Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature
Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print Type Name

DISPOSAL COORDINATES
(Landfill use only)

Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT
3/17/98
Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR OR SIGNATURE DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER PINK GENERATOR FILE – GOLDENROD

479 319

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A-11933 NE 012054

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-14 SB-12	1	T	18 Yd3	DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER	P–POUND, Y–YARDS, M–CUBIC METER, Y–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3-17-98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O. Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Buford — 3-17-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
_ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
E.L. Colbert
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Date 3-17-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR OR GENERATOR – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER PINK GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A14164

479 320
NS 012055

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-013 Contaminated Soil SB-014	1	T	18 Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M–CUBIC METER Y–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Smith
Print Type Name Title
TRUCK NO 36 PHONE NO 878 6161
Acknowledgement of receipt of materials
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.
Patricia Chea
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Received Date 3-24-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR OR DRIVER – PINK • DISTRICT OFFICE – GREEN LANDFILL – YELLOW • TRANSPORTER PINK • GENERATOR FILE – GOLDENROD

479 321

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872 7200

LMS TICKET NO. 413948

№ 012056

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB-09 SD-010	1	T	18 Yd3

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M3–CUBIC METER; Y–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos, 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations. AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Shelly
Print Type Name Title
TRUCK NO 36 PHONE NO 837-6161
Acknowledgement of receipt of materials
Signature — Date 5-24-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO — PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Brown/orange dirt & Wood
Print Type Name

DISPOSAL COORDINATES
(Landfill use only)
Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Cuevas
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 05-21-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR OR GENERATOR - WHITE • DISPOSAL OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER - PINK GENERATOR FILE - GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A 13969

479 322
NO 012057

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — GENERATING LOCATION
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-09 SB-010	1	T	Yd3 18	DM-METAL DRUM DP-PLASTIC DRUM BA-6MIL PLASTIC BAGS/WRAP T-TRUCK O-OTHER	P-POUND Y-YARDS M-CUBIC METER Y-CUBIC YARDS O-OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 867-0161
Acknowledgement of receipt of materials
Signature — Date 3-24-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

PATRICIA IVEY
AUTHORIZED AGENT PLEASE PRINT

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-24-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR OR SITE • DISPOSAL SITE - GREEN • LANDFILL - YELLOW • TRANSPORTER P... GENERATOR FILE - GOLDENROD

479 323

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 14010

NE 012058

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB 09 SB 010	1	T	Yd3 18

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M–CUBIC METER; Y–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER Michael K Shelly
Print Type Name Title
TRUCK NO 36 PHONE NO 853-0161
Acknowledgement of receipt of materials
Michael K Shelly 3-24-98
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name

DISPOSAL COORDINATES
(Landfill use only)
Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79 106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79 106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-24-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIG. – PINK • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A 11/05C

479 324
Nº 012059

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS

SPECIAL WASTE– COMPLETE SECTIONS I , II., V., VII., VIII., IX., XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR

NAME Defense Distribution Depot — PHONE NO.

MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

GENERATING LOCATION

SECTION III OPERATOR/CONTRACTOR

NAME OHM Remediation Services

ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER

NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**

☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn. 38053

☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)

Mphs. & Shelby Cty Health Dept. 814 Jefferson Memphis, TN 38105 (901) 576-7588

Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-09 SB C10	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ, Asbestos, 9 NA2212, PG III

____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date

Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date

Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER I

NAME OF CO Inman Trucking

ADDRESS P.O. Box 53 Brighton, TN

DRIVER BUFORD
Print / Type Name Title

TRUCK NO 32 PHONE NO 837-0161

Acknowledgement of receipt of materials

Signature — Date 3-24-98

SECTION XII TRANSPORTER 2

NAME OF CO

ADDRESS

DRIVER
Print / Type Name / Title

TRUCK NO ____ PHONE NO

Acknowledgement of receipt of materials

Signature — Date

479 325

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A14100

NE 012060

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-09 SB 010	1	T	Yd3 18	DM-METAL DRUM, DM-PLASTIC DRUM, BA-6MIL PLASTIC BAGS 'WRAP, T-TRUCK, O-OTHER	P-POUND, Y-YARDS, M-CUBIC METER, Y-CUBIC YARDS, O-OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Shelly
Print Type Name Title
TRUCK NO 26 PHONE NO 853-6161
Acknowledgement of receipt of materials
Signature — Date 3-24-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name

DISPOSAL COORDINATES
(Landfill use only)
Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Ivey
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Date 03-24-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR OR BROKER - WHITE • DISTRICT OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER - PINK • GENERATOR FILE - GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 1411-7

479 326
NE 012061

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB-09 SB-010	1	T	Yd3 18

TYPE: DM–METAL DRUM; DP–PLASTIC DRUM; BA–6MIL PLASTIC BAGS WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M–CUBIC METER; Y–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/13/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Buford — 3-21-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
Patricia O'Neal — 03-24-98
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 327

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 12180

NE 012062

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-013 Contaminated Soil SB-014	1	T	18 Yd3	DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER	P–POUND; Y–YARDS; M³–CUBIC METER; Y–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Buford
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0164
Acknowledgement of receipt of materials
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Chead
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — 03-20-98 Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR OR SITE – WHITE • DISPOSAL OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A-14209

479 328
NO 012063

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-013 Contaminated Soil SB-014	1	T	18 Yd3	DM–METAL DRUM, DP–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER	P–POUND, Y–YARDS, M3–CUBIC METER, Y3–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION
I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)
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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Shelly
Print Type Name Title
TRUCK NO 30 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — Date 3-24-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 3-24-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL - WHITE • DISPOSAL OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER PINK • GENERATOR FILE - GOLDENROD

479 329

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A-14218 № 012064

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics.

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd, Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs. & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SOO/3 Contaminated Soil SB-014	1	T	18 Yd3	DM-METAL DRUM DM-PLASTIC DRUM BA-6MIL PLASTIC BAGS 'WRAP T-TRUCK O-OTHER	P-POUND Y-YARDS M-CUBIC METER Y-CUBIC YARDS O-OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
___ FRIABLE ___ NON FRIABLE ___ BOTH ___% FRIABLE ___% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined 40 CFR Part 261 or any applicable state law has been properly described classified d packaged and is in proper condition for transportation according to applicable gulations AND if the waste is a treatment residue of a previously restricted hazar us waste subject to the Land Disposal Restrictions I certify and warrant that the ste has been treated in accordance with the requirements of 40 CFR Part 268 and no longer a hazardous waste as defined b 40 CFR Par. 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature 3-24-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ___ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Type Name — Signature Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224

I hereby certify that the above material has been accepted and is in best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR ORIGINAL - WHITE • DISPOSAL OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER - PINK GENERATOR FILE - GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A-14544 479 330
NO 012065

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII . VIII . IX . XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-014 Contaminated Soil SB-013	1	T	18 Yd3	DM–METAL DRUM, DP–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER	P–POUND, Y–YARDS, M3–CUBIC METER, Y3–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
___ FRIABLE ___ NON FRIABLE ___ BOTH ___% FRIABLE ___% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION
I hereby certify that the above named material is not a hazardous waste as defined 40 CFR Part 261 or any applicable state law has been properly described classified d packaged, and is in proper condition for transportation according to applicable ulations, AND if the waste is a treatment residue of a previously restricted hazar us waste subject to the Land Disposal Restrictions I certify and warrant that the ste has been treated in accordance with the requirements of 40 CFR Part 268 and no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)
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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Shelly
Print Type Name Title
TRUCK NO 36 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature 3-24-98 Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ___ PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Type Name — Signature Date

DISPOSAL COORDINATES (Landfill use only)

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106 0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
S. H. Collier JR
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 3-24-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR OR G... - WHITE • DISTRICT OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER P... GENERATOR FILE - GOLDENROD

479 331

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A-14254 NO 012066

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
SB-014 Contaminated Soil SB-013	1	T	18 Yd3

TYPE: DM-METAL DRUM; DM-PLASTIC DRUM; BA-6MIL PLASTIC BAGS/WRAP; T-TRUCK; O-OTHER
UNITS: P-POUND; Y-YARDS; M-CUBIC METER; Y-CUBIC YARDS; O-OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION
I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)
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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER Buford
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0164
Acknowledgement of receipt of materials
Signature Buford Date 3/24/98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO ____
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE 5

DISPOSAL COORDINATES (Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
S. H. GILBERT
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT Date 3-24-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL - WHITE DISPOSAL OFFICE - GREEN LANDFILL - YELLOW TRANSPORTER - PINK GENERATOR FILE - GOLDENROD

479 332

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 14445

Nº 012067

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SG-09 SB-010	1	T	Yd3 18	DM–METAL DRUM DP–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M³–CUBIC METER Y³–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged, and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print/Type Name & Title Shipment Date

Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title Shipment Date

Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K. Shelly
Print/Type Name Title
TRUCK NO 36 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature Date 3-25-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print Type Name

DISPOSAL COORDINATES
(Landfill use only)

Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Olson
AUTHORIZED AGENT – PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT 03-25-98
Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER PINK GENERATOR FILE – GOLDENROD

479 333

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A14438

№ 012068

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII, IX, XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd, Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy, Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-09 SB-010	1	T	Yd3 18	DM-METAL DRUM DM-PLASTIC DRUM BA-6MIL PLASTIC BAGS 'WRAP T-TRUCK O-OTHER	P-POUND Y-YARDS M3-CUBIC METER Y-CUBIC YARDS O-OTHER

ASBESTOS WASTE RQ, Asbestos 9, NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Buford
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Buford 3-25-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print Type Name

DISPOSAL COORDINATES
(Landfill use only)

Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-25-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR OR OWNER - WHITE • DISPOSAL SITE - GREEN • LANDFILL - YELLOW • TRANSPORTER PINK GENERATOR FILE - GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A/L/486

NO 479 334
012069

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

GENERATING LOCATION

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB-08 SB-09	1	T	Yd3 18

TYPE: DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS 'WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M–CUBIC METER, Y–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named materials is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify, and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print Type Name & Title — Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Buford 3-25-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO — PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print Type Name — Signature Date

DISPOSAL COORDINATES
(Landfill use only)

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Cruz
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-25-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR COPY – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 335

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A 14501

№ 012070

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd. Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-08 SB-09	1	T	Yd3 18	DM–METAL DRUM DP–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M–CUBIC METER Y–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos, 9 NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER MICHAEL R SHELLY
Print Type Name Title
TRUCK NO 36 PHONE NO 837 5161
Acknowledgement of receipt of materials
Signature — Date 3-25-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO — PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-25-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A/U557

479 336
NO 012071

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd, Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-09 Contaminated Soil SB-010	1	T	18 Yd3	DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER	P–POUND; Y–YARDS; M3–CUBIC METER; Y3–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged, and is in proper condition for transportation according to applicable regulations, AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Stuford
Print/Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — Date 3-25-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name/Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print/Type Name

DISPOSAL COORDINATES
(Landfill use only)
Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
PATRICIA OWEN
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-25-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL - WHITE • DISTRICT OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER - PINK GENERATOR FILE - GOLDENROD

479 337

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A14548

NO 012072

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div. of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
SB-09 Contaminated Soil SB-010	1	T	18 Yd3

TYPE: DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M3–CUBIC METER, Y3–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K. Shelly
Print Type Name Title
TRUCK NO 36 PHONE NO 837 0161
Acknowledgement of receipt of materials
Signature — Date 3-20-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Jeffrie Cinca
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 3.25.98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A14599

479 338
NO 012073

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I, II, V, VII, VIII, IX, XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd, Memphis, TN 38114 — PHONE NO (901) 544-0611

GENERATING LOCATION

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy, Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-013 Contaminated Soil SB-014	1	T	18 Yd3	DM–METAL DRUM, DP–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER	P–POUND, Y–YARDS, M3–CUBIC METER, Y3–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print/Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Buford
Print/Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — Date 3-25-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 3-25-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISPOSAL SITE OFFICE – GREEN • DISPOSAL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 339

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 14598

Nº 012074

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
SB - 013 Contaminated Soil SB - 014	1	T	18 Yd3

TYPE: DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M³–CUBIC METER, Y –CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER M. Cloyd K. Shelly
Print Type Name Title
TRUCK NO 3K PHONE NO 837 0461
Acknowledgement of receipt of materials
Signature — Date 3-25-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
AUTHORIZED AGENT – PLEASE PRINT

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-25-98

DISPOSAL INSTRUCTIONS

Mix With Refuse BL

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872 7200

LMS TICKET NO. A-14633

479 340
NO 012075

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I , II , V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
SB-013 Contaminated Soil SB-014	1	T	Yd3 18

TYPE: DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M–CUBIC METER, Y–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos, 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — 3-25-98 Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

BUFORD
AUTHORIZED AGENT PLEASE PRINT

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 3-25-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

479 341

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A-14634

№ 012076

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 , 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-013 Contaminated Soil SB-014	1	T	Yd3 18	DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS WRAP, T–TRUCK, O–OTHER	P–POUND, Y–YARDS, M3–CUBIC METER, Y3–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9, NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Shelby
Print Type Name Title
TRUCK NO 30 PHONE NO 837-6161
Acknowledgement of receipt of materials
Signature Michael K Shelby Date 3-25-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge is true and accurate

AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Received Date 3-25-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

OPERATOR ORIGINAL – WHITE • DISPOSAL SITE – GREEN LANDFILL – YELLOW • TRANSPORTER PINK GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO: A-14666

479 342
NE 012077

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd, Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-014 Contaminated Soil SB-013	1	T	18 Yd3	DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS WRAP, T–TRUCK, O–OTHER	P–POUND, Y–YARDS, M–CUBIC METER, Y–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos, 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O. Box 53 Brighton, TN
DRIVER Buso Ed
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature Buford 3-25-98
Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT= SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT= SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR OR CARRIER – WHITE • DISPOSAL SITE – GREEN • DISPOSAL – YELLOW • TRANSPORTER PINK • GENERATOR FILE – GOLDENROD

479 343

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A-14678 NO 012078

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
SB-014 Contaminated Soil SB-013	1	T	18 Yd3

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M–CUBIC METER; Y–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER Print Type Name Title
TRUCK NO 36 PHONE NO 383-6161
Acknowledgement of receipt of materials
Signature — Date 3-25-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name

DISPOSAL COORDINATES (Landfill use only)
Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Date 3-25-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR OR STATE COPY • DISPOSAL OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A 15276

479 344
№ 012079

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1. if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
~~SB-04~~ SB-06 Contaminated Soil ~~SB-08~~ SB-07	1	T	18 Yd3

TYPE: DM-METAL DRUM, DM-PLASTIC DRUM, BA-6MIL PLASTIC BAGS/WRAP, T-TRUCK, O-OTHER
UNITS: P-POUND, Y-YARDS, M3-CUBIC METER, Y3-CUBIC YARDS, O-OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER Buford
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Buford 3-27-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 03-27-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR ORIGINAL - WHITE • DISPOSAL OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER - PINK • GENERATOR FILE - GOLDENROD

479 345

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A15514

No 012060

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114
GENERATING LOCATION PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil	1	T	Yd3	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS 'WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M–CUBIC METER Y–CUBIC YARDS O–OTHER
SS-			18		
SB-					

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations. AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify, and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 26

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operator's Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER
Print Type Name Title
TRUCK NO 36 PHONE NO
Acknowledgement of receipt of materials
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Guanita Parker
AUTHORIZED AGENT PLEASE PRINT

SIGNATURE OF AUTHORIZED AGENT — Received Date 3-27-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR OR D... FILE • D... OFFICE - GREEN • ... OF ... - YELLOW • TRANSPORTER ... • GENERATOR FILE - GOLDENROD

479 346

NE 012081

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A1: 223

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics.

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

GENERATING LOCATION

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd Millington Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB-06 SB-07	1	T	Yd3 18

TYPE: DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M–CUBIC METER, Y–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print Type Name & Title — Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operator's Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature — Date 3-27-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print Type Name — Signature Date

DISPOSAL COORDINATES
(Landfill use only)

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 3-27-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR OR CARRIER - WHITE • DISPOSAL SITE - GREEN • BFI OFFICE - YELLOW TRANSPORTER - P • GENERATOR FILE - GOLDENROD

479 347

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872 7200

LMS TICKET NO. 1745545 NO 012082

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN . 211 . 990213 . 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM-Remediation-Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB 06	1	T	Yd3
SB 07	1		18

TYPE: DM–METAL DRUM, DP–PLASTIC DRUM, BA–6MIL PLASTIC BAGS WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M–CUBIC METER, Y–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
___ FRIABLE ___ NON FRIABLE ___ BOTH ___% FRIABLE ___% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named materials not a hazardous waste as defined 40 CFR Part 261 or any applicable state law has been properly described classified d packaged and is in proper condition for transportation according to applicable gulations AND if the waste is a treatment residue or a prohibited restricted hazar us waste subject to the Land Disposal Restrictions I certify and warrant that the ste has been treated in accordance with the requirements of 40 CFR Part 268 and no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O. Box 53 Brighton, TN
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Type Name — Signature Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224

I hereby certify that the above materials has been accepted and to the best of knowledge the foregoing is true and accurate

AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Received Date 3-21-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR PRINT NAME DATE OF DISPOSAL SIGNATURE TRANSPORTER # OPERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A15562

479 348
NO 012083

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
SB-08 Contaminated Soil SB-09	1	T	Yd3 18

TYPE: DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M³–CUBIC METER, Y–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION
I hereby certify that the above named materials is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue or a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)
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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Michael K Shelly
Print Type Name Title
TRUCK NO 36 PHONE NO 878 2161
Acknowledgement of receipt of materials
Michael K Shelly 3-27-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE
Print Type Name — Signature Date

DISPOSAL COORDINATES
(Landfill use only)

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106-0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Walter Burke
AUTHORIZED AGENT PLEASE PRINT
Walter Burke
SIGNATURE OF AUTHORIZED AGENT — Receipt Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR OPERATOR COPY — DATE — DATE OF DISPOSAL/FEE — DRIVER COPY — TRANSPORTER COPY — GENERATOR FILE – GOLDENROD

479 349

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A160358

Nº 012084

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN 211 990213 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy, Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-024 Contaminated Soil SB-025	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M–CUBIC METER Y–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law and has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a prohibited restricted hazardous waste subject to the Land Disposal Restrictions I/we have and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 3/16/98
Print Type Name & Title — Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER Billy Mollis
Print Type Name Title
TRUCK NO 35 PHONE NO
Acknowledgement of receipt of materials
Billy Mollis 3-3-98
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106-0224

I hereby certify that the above materials were accepted and to the best of my knowledge the foregoing is true and accurate

PATRICIA O'NEAL
AUTHORIZED AGENT (PLEASE PRINT)
AUTHORIZED AGENT'S SIGNATURE 03-3-98
DATE

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR/TRANSPORTER — TRANSPORTER/DISPOSAL SITE — GENERATOR FILE - GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO F15295

479 350
NS 012085

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN 211 990213 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB-06 SB 07	1	T	Yd3 18

TYPE: DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS 'WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M–CUBIC METER, Y–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named materials is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations AND that the waste is a segment of a regulated but unrestricted hazardous waste subject to the Land Disposal Restrictions (LDR) and warrant that the waste has been treated in accordance with the applicable regulations of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date
Print Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 transportation by highway according to applicable international and governmental regulations

Print Type Name & Title — Shipment Date
Operator's Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER Michael K Shelly
Print Type Name Title
TRUCK NO 36 PHONE NO 837-6161
Acknowledgement of receipt of materials
Michael K Shelly 3-27-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Quincy Pickens
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — Date 3-27-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

OPERATOR OPERATOR'S — DATE — PERMIT NUMBER — TIME IN — TIME OUT — TRUCK NUMBER — GATE — OPERATOR FILE - GOLDENROD

479 351

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A15334

NO 012086

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN 211 ' 990213 ' 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105
(901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-06 SB-07	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M–CUBIC METER Y–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named materials are not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined in 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title
Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 governmental regulations

Print Type Name & Title
Shipment Date
Operator's Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER Buford
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Buford 3-27-98
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name
Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Gillian Parker
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT
3-27-98
Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR FINAL DESTINATION GREEN CANARY BLUE TRANSPORTER GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A-15364

479 352
NE 012087

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN 211 990213 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB-06 SB-07	1	T	Yds 18

TYPE: DM-METAL DRUM, DM-PLASTIC DRUM, BA-6MIL PLASTIC BAGS WRAP, T-TRUCK, O-OTHER
UNITS: P-POUND, Y-YARDS, M-CUBIC METER, Y-CUBIC YARDS, O-OTHER

ASBESTOS WASTE RC Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named materials is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a hazardous waste subject to the Land Disposal Restrictions, I further certify and warrant that the waste has been treated in accordance with the applicable requirements of 40 CFR Pt. 268 and is no longer a hazardous waste as defined in 40 CFR Pt. 261.

SHAWN PHILLIPS — Shipment Date
Print Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operator's Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER [illegible] — Print Type Name Title
TRUCK NO 24 PHONE NO 837-6161
Acknowledgement of receipt of materials
Signature

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER — Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 105 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 105 0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Nita Parker
AUTHORIZED AGENT PLEASE PRINT
Nita Parker 3-27-98
SIGNATURE OF AUTHORIZED AGENT — DATE

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR — DATE — TIME — DATE RECEIVED — TIME — TRANSPORTER — GENERATOR FILE - GOLDENROD

479 353

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872 7200

LMS TICKET NO A1535C

NO 012088

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS: SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristic.

SECTION I BFI WASTE CODE TN 211 990213 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB 06 SB 07	1	T	Yd3 18

TYPE: DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M–CUBIC METER, Y–CUBIC YARDS, Q–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named materials are properly classified as described by 40 CFR Part 261 or any applicable state law and are packaged and in proper condition for transportation according to applicable regulations AND if I have a written agreement with the designated facility that the hazardous waste listed on this manifest may be delivered to another facility for treatment, storage or disposal, then I certify that the waste has been treated in accordance with the applicable regulations of 40 CFR Part 268 and is no longer a hazardous waste as defined in 40 CFR Part 261.

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operator's Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Signature Buford 3-27-98

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT- SNL 79 106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT= SNL 79 106 0224
I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Graniela Parker
AUTHORIZED FACILITY REPRESENTATIVE
SIGNATURE OF AUTHORIZED FACILITY REPRESENTATIVE 3-27-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

OPERATOR (OPERATING UNDER PERMIT) — GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A-15457

479 354
№ 012009

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN 211 990213 262245

SECTION II GENERATOR — **GENERATING LOCATION**

NAME Defense Distribution Depot — PHONE NO

MAILING ADDRESS 2163 Airways Blvd, Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR CONTRACTOR

NAME OHM-Remediation Services

ADDRESS 5445 Triangle Pkwy, Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER

NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**

☐ North Shelby Landfill 7111 Old Millington Rd Millington Tenn 38053

☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE EPA)

Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588

Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB-06 SB-07	1	T	Yd3 18	DM-METAL DRUM DM-PLASTIC DRUM BA-6MIL PLASTIC BAGS WRAP T-TRUCK O-OTHER	P-POUND Y-YARDS M-CUBIC METER Y-CUBIC YARDS O-OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III

____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named materials and containers are not subject to Federal hazardous waste as defined by 40 CFR Part 261 or any applicable state law and has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a hazardous restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date

Print Type Name & Title

Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date

Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1

NAME OF CO Inman Trucking

ADDRESS P O Box 53 Brighton, TN

DRIVER Michael K Shelly
Print Type Name Title

TRUCK NO 36 PHONE NO 837-6161

Acknowledgement of receipt of materials

Signature 5-27-98

SECTION XII TRANSPORTER 2

NAME OF CO

ADDRESS

DRIVER
Print Type Name Title

TRUCK NO PHONE NO

Acknowledgement of receipt of materials

Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print Type Name

DISPOSAL COORDINATES
(Landfill use only)

Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT - SNL 79 106 0224

I hereby certify that the above materials have been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT/BROKER

SIGNATURE OF AUTHORIZED AGENT — DATE

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR DRIVER — TRANSPORTER — DISPOSAL SITE — GENERATOR FILE - GOLDENROD

479 355

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872 7200

LMS TICKET NO. A15477

NE 012090

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis TN 38105 (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
Contaminated Soil SB-06 SB-07	1	T	18 Yd3

TYPE: DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER
UNITS: P–POUND, Y–YARDS, M–CUBIC METER, Y–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named materials is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 26

SHAWN PHILLIPS
Print Type Name & Title
Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title
Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER BUFORD
Print Type Name Title
TRUCK NO 32 PHONE NO 837-0161
Acknowledgement of receipt of materials
Buford 3-27-98
Signature

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature
Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name
Signature Date

SITE AND ADDRESS
X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79 106 0224
I hereby certify that the above materials have been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia O'Neal
AUTHORIZED AGENT – PLEASE PRINT
AUTHORIZED AGENT
Date

DISPOSAL INSTRUCTIONS
Mix With Refuse

GENERATOR (OPERATOR'S) ... GENERATOR FILE – GOLDENROD

479 356

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872 7200

LMS TICKET NO A 164406

NO 012091

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics

SECTION I BFI WASTE CODE TN 211 990213 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHYSICAL SITE LOCATION
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis TN 38105
(901) 576-7588
Tenn Div of Air Poilution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
SB-024 Contaminated Soil SB-025	1	T	Yd3 18

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M–CUBIC METER; Y–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____ % FRIABLE ____ % NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named materials is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations. AND if the waste is a treatment residue of a prior listed restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined in 40 CFR Part 261.

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 governmental regulations

Print Type Name & Title — Shipment Date
Operator's Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER Billy Morris
Print Type Name Title
TRUCK NO 35 PHONE NO
Acknowledgement of receipt of materials
Billy Morris 3-31-98
Signature

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Company — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79 106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106 0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia O'Neal
PRINT OR DESTRUCTION RELEASE PERSON

SIGNATURE OF RELEASE PERSON — Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR/DRIVER — DISPOSAL SITE — TRANSPORTER — GENERATOR FILE - GOLDENROD

479 357

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A 16509

NO 012092

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN 211 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
SB-025 Contaminated Soil SB-026	1	T	Yd3 18

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M3–CUBIC METER; Y–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
___ FRIABLE ___ NON FRIABLE ___ BOTH ___% FRIABLE ___% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION
I hereby certify that the above named materials are not a hazardous waste as defined 40 CFR Part 261 or any applicable state law, has been properly described classified d packaged and is in proper condition for transportation according to applicable gulations AND if the waste is a treatment residue or a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the ste has been treated in accordance with the requirements of 40 CFR Part 268 and no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)
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 according to applicable international and government regulations
Print Type Name & Title — Shipment Date
Operator's Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER Billy Morris
Print Type Name
TRUCK NO 34 PHONE NO
Acknowledgement of receipt of materials
Billy Morris 3-31-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Type Name — Signature — Date

SITE AND ADDRESS
☒ SOUTH SHELBY 5494 MALONE RD PERMIT= SNL 79 106 0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT= SNL 79 106-0224
I hereby certify that the above materials has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia O'Neal
AUTHORIZED AGENT PLEASE PRINT
SIGNATURE OF AUTHORIZED AGENT — DATE 03-31-98

DISPOSAL INSTRUCTIONS
Mix With Refuse

OPERATOR OPERATOR COPY — SITE — SITE AUTHORIZED AGENT COPY — GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872 7200

LMS TICKET NO A16832

Nº 012093

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFES

GENERATOR

ERATOR
RUCTIONS

SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN 211 990213 262245

SECTION II GENERATOR
NAME Defense Distribution Depot
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114
GENERATING LOCATION
PHONE NO
PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA
PHONE NO (770) 453-7649

SECTION IV OWNER
NAME
PHONE NO

SECTION V WASTE DISPOSAL SITE
☐ North Shelby Landfill 7111 Old Millington Rd Millington Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116
PHYSICAL SITE LOCATION
PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105
(901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984
PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE

SB-025
Contaminated Soil
SB-026

CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT
1	T	18 Yd3

TYPE: DM–METAL DRUM; DM–PLASTIC DRUM; BA–6MIL PLASTIC BAGS/WRAP; T–TRUCK; O–OTHER
UNITS: P–POUND; Y–YARDS; M3–CUBIC METER; Y3–CUBIC YARDS; O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state la has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 26

SHAWN PHILLIPS
Print Type Name & Title
Shipment Date 4-1-98
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title
Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P O Box 53 Brighton, TN
DRIVER Billy Morris
Print Type Name Title
TRUCK NO 35 PHONE NO
Acknowledgement of receipt of materials
Billy Morris 4-1-98
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Type Name
Signature Date

DISPOSAL COORDINATES
(Landfill use only)

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224
I certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate
Patricia Owen
SIGNATURE OF DISPOSAL SITE REPRESENTATIVE – PLEASE PRINT
04-01-98
SIGNATURE OF DISPOSAL SITE REPRESENTATIVE Receipt Date

DISPOSAL INSTRUCTIONS

Mix With Refuse

BFI OF TENNESSEE – DISPOSAL SITE COPY – TRANSPORTER – PINK – GENERATOR FILE – GOLDENROD

479 359

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO A-16913

№ 012094

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE- COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE-COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd , Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-025 Contaminated Soil SB-026	1	T	18 Yd3	DM-METAL DRUM, DM-PLASTIC DRUM, BA-6MIL PLASTIC BAGS/WRAP, T-TRUCK, O-OTHER	P-POUND, Y-YARDS, M3-CUBIC METER, Y3-CUBIC YARDS, O-OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — Shipment Date 4-1-98
Print Type Name & Title
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER Billy Morris
Print Type Name Title
TRUCK NO 35 PHONE NO
Acknowledgement of receipt of materials
Billy Morris 4-1-98
Signature Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO PHONE NO
Acknowledgement of receipt of materials
Signature Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES (Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT# SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT# SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Katrina Owens
AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 04-01-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR OR SMALL - WHITE • DISTRICT OFFICE - GREEN • LANDFILL - YELLOW • TRANSPORTER - PINK • GENERATOR FILE - GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 17637

479 360
№ 012095

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

GENERATING LOCATION

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy , Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn. Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
SB-025 Contaminated Soil SB-026	1	T	18 Yd3	DM–METAL DRUM, DM–PLASTIC DRUM, BA–6MIL PLASTIC BAGS/WRAP, T–TRUCK, O–OTHER	P–POUND, Y–YARDS, M³–CUBIC METER, Y³–CUBIC YARDS, O–OTHER

ASBESTOS WASTE RQ Asbestos 9 NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations AND if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 4.1.98
Print Type Name & Title — Shipment Date
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER Billy Morris
Print Type Name Title
TRUCK NO 35 PHONE NO
Acknowledgement of receipt of materials
Billy Morris 4-1-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT = SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT = SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Victor Rivera
AUTHORIZED AGENT PLEASE PRINT

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 04-01-98

DISPOSAL INSTRUCTIONS

Mix With Refuse 38

GENERATOR OPERATOR OR ... WHITE • DISTRICT OFFICE - GREEN • ... - YELLOW • TRANSPORTER PINK • GENERATOR FILE - GOLDENROD

479 36i

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 26572

№ 012098

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS — SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1, if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR — **GENERATING LOCATION**
NAME Defense Distribution Depot — PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy., Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — **PHYSICAL SITE LOCATION**
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
Contaminated Soil SB 12	1	T	Yd3 18	DM–METAL DRUM DM–PLASTIC DRUM BA–6MIL PLASTIC BAGS/WRAP T–TRUCK O–OTHER	P–POUND Y–YARDS M3–CUBIC METER Y3–CUBIC YARDS O–OTHER

ASBESTOS WASTE RQ Asbestos, 9 NA2212, PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law has been properly described classified and packaged and is in proper condition for transportation according to applicable regulations, AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261

SHAWN PHILLIPS — 4-28-98
Print/Type Name & Title — Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O Box 53 Brighton, TN
DRIVER William Cooper
Print Type Name Title
TRUCK NO 36 PHONE NO 837-0161
Acknowledgement of receipt of materials
William Cooper 4-28-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

Print Type Name

DISPOSAL COORDINATES (Landfill use only)

Signature Date

SITE AND ADDRESS

X SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79 106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

AUTHORIZED AGENT (PLEASE PRINT)
SIGNATURE OF AUTHORIZED AGENT — Receipt Date 04 2098

DISPOSAL INSTRUCTIONS

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GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK GENERATOR FILE – GOLDENROD

BFI OF TENNESSEE INC
PO BOX 1207
MILLINGTON TN 38083
(901) 872-7200

LMS TICKET NO. A 26577

479 362
Nº 012099

NON-HAZARDOUS SPECIAL AND ASBESTOS WASTE MANIFEST

GENERATOR

GENERATOR INSTRUCTIONS
SPECIAL WASTE– COMPLETE SECTIONS I II V VII VIII, IX XI
ASBESTOS WASTE–COMPLETE SECTIONS I thru XII (Section 1 if required to analyze for hazardous waste characteristics)

SECTION I BFI WASTE CODE TN / 211 / 990213 / 262245

SECTION II GENERATOR
NAME Defense Distribution Depot — GENERATING LOCATION PHONE NO
MAILING ADDRESS 2163 Airways Blvd., Memphis, TN 38114 — PHONE NO (901) 544-0611

SECTION III OPERATOR/CONTRACTOR
NAME OHM Remediation Services
ADDRESS 5445 Triangle Pkwy, Suite 400 Norcross, GA — PHONE NO (770) 453-7649

SECTION IV OWNER
NAME — PHONE NO

SECTION V WASTE DISPOSAL SITE — PHYSICAL SITE LOCATION
☐ North Shelby Landfill 7111 Old Millington Rd Millington, Tenn 38053
☒ South Shelby Landfill 5494 Malone Rd. Memphis, Tenn. 38116 — PHONE NO (901) 872-7200

SECTION VI RESPONSIBLE AGENCY (LOCAL, STATE, EPA)
Mphs & Shelby Cty Health Dept 814 Jefferson Memphis, TN 38105 — (901) 576-7588
Tenn Div of Air Pollution 295 Summer Jackson, TN 38301-3984 — PHONE NO (901) 423-6484

SECTION VII DESCRIPTION OF WASTE	CONTAINERS NO	CONTAINERS TYPE	TOTAL QUANTITY UNIT	TYPE	UNITS
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ASBESTOS WASTE RQ Asbestos, 9, NA2212 PG III
____ FRIABLE ____ NON FRIABLE ____ BOTH ____% FRIABLE ____% NON FRIABLE

SECTION VIII SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION

SECTION IX GENERATOR CERTIFICATION

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SHAWN PHILLIPS — 4-28-98
Print/Type Name & Title — Shipment Date
Shawn Phillips
Signature

SECTION X OPERATOR CERTIFICATION (ASBESTOS)

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 government regulations

Print/Type Name & Title — Shipment Date
Operators Signature

TRANSPORTER

SECTION XI TRANSPORTER 1
NAME OF CO Inman Trucking
ADDRESS P.O. Box 53 Brighton, TN
DRIVER GARREL D JORDAN
Print Type Name Title
TRUCK NO 21 PHONE NO 2370161
Acknowledgement of receipt of materials
Garrel D Jordan — 4-28-98
Signature — Date

SECTION XII TRANSPORTER 2
NAME OF CO
ADDRESS
DRIVER
Print Type Name Title
TRUCK NO ____ PHONE NO
Acknowledgement of receipt of materials
Signature — Date

DISPOSAL SITE

DISCREPANCY INDICATION SPACE

DISPOSAL COORDINATES
(Landfill use only)

Print Type Name — Signature Date

SITE AND ADDRESS

☒ SOUTH SHELBY 5494 MALONE RD PERMIT # SNL 79-106-0135
☐ NORTH SHELBY 7111 OLD MILLINGTON RD PERMIT # SNL 79-106-0224

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate

Patricia Owens
AUTHORIZED AGENT (PLEASE PRINT)

SIGNATURE OF AUTHORIZED AGENT — Receipt Date 04-28-98

DISPOSAL INSTRUCTIONS

Mix With Refuse

GENERATOR OPERATOR ORIGINAL – WHITE • DISTRICT OFFICE – GREEN • LANDFILL – YELLOW • TRANSPORTER – PINK • GENERATOR FILE – GOLDENROD

TAB

Appendix M

received
MAY 27 1998

City of Memphis
TENNESSEE

DR. W. W. HERENTON - Mayor
RICK MASSON - Chief Administrative Officer
DIVISION OF PUBLIC WORKS
BENNY LENDERMON - Director
Maynard C. Stiles Wastewater Treatment Plant

Friday, May 22, 1998

Mr. Shawn Phillips
Remedial Project Manager
Memphis Depot Caretaker
2163 Airways Blvd.
Memphis, TN 38114

RE: Industrial Wastewater Discharge Agreement
Permit No. S-NN3-097
Dunn Field groundwater recovery system

Dear Mr. Phillips

Please find enclosed singed and approved copy Memphis Depot Caretaker's Discharge Agreement for your record keeping

If you Should have any questions, please contact me at 353-2392

Sincerely,

Akil AL-Chokhachi
Environmental Engineer

c Jerry Collins
Rodney Thomas

479 365
ORIGINAL
S-NN3-097
MEMPHIS DEPO

received
MAY 27 1998

City of Memphis

Division of Public Works

Industrial Wastewater Discharge Agreement

made by and between the

City of Memphis

and

Memphis Depot Caretaker

on

May 01, 1998

Approved by: _____

Benny Lendermon, Director
Public Works

S-NN3-097
MEMPHIS DEPO

City Of Memphis Industrial Wastewater Discharge Agreement

» » » Intent and Purpose « « «

The City of Memphis in enacting the revised Sewer Use Ordinance deemed it necessary to identify certain significant contributors to the municipal sewer system and regulate the significant contributors on the discharge quantity and characteristics which would be permitted to be discharged into the municipal wastewater system. The basis for the values shown in the following sections are primarily to comply with the State of Tennessee and the Environmental Protection Agency regulations and to preserve the integrity of the publicly owned treatment works.

The agreement serves as a firm understanding between the user and the City for a specified period of time not to exceed five (5) years. The parameters which have been identified in this document reflect the best estimate of the user as to the characteristics of his discharge and will remain in effect until modified by amendemnts to the discharge agreement. The allowable levels for each parameter are determined by limitations imposed by the Sewer Use Ordinance and for compunds, not specifically limited by the Sewer Use Ordinance or EPA Categorical limitatins, the best professional judgement of the City staff engineers and chemists. Primary in the determination is the protection of the integrity of the publicly owned treatment works. Accordingly, tables of guidance for criteria influent levels for specific incompatible wastes have been developed and are part of the Sewer Use Ordinance.

Willful failure of an industrial user to report significant changes in operations which affect wastewater constituents and characteristics can result in the revoking of his discharge agreement. If a public sewer becomes obstructed or damaged because of any substances improperly discharged into it, Memphis Depot Caretaker if responsible for such discharge shall be billed and shall pay for all the expenses incurred by the City in cleaning out, repairing, or rebuilding the sewer.

According to Section 33-173 of the Sewer Use Ordinance, violations of the Discharge Agreement and the Sewer Use Ordinance requiments may result in civil penalties up to ten thousand dollars ($10,000) for each day during which the acts or omission continues or occurs.

Each industrial user discharging compounds regulated by the pretreatment program or other programs identified by the Environmental Protection Agency (EPA) must also pretreat to the point as required by the EPA. In addition to this, the State of Tennessee has identified certain allowable levels for incompatibles entering a publicly owned treatment works. The pretreatment values set by the City are listed in Table 1 and Table 2, Section 33-104 of the Sewer Use Ordinance.

Wastewater discharge agreements are issued to a specific user for a specific operation. A wastewater discharge agreement shall not be reassigned or transferred or sold to a new owner, new user different premises, or a new or changed operation which will significantly affect wastewater characteristics, Section 33-85 of the Sewer Use Ordinance.

The industrial user shall comply with the record-keeping requirements outlined in the general pretreatment Standards in part 403.12 (o) of the Federal Regulations and Section 33-83(f) of the Sewer Use ordinance.

City Of Memphis Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

» » » Intent and Purpose « « «

According to Section 33-110 of the Sewer Use Ordinance, the Industrial User shall notify the Control Authority immediately in the event of spill, bypass, upset and slug or accidental discharges, including any discharges that would violate a prohibition under Section 33-103, with procedures for the follow-up written notification within five days. The Control Authority will evaluate the Industrial User every two years or as needed for slug discharge control plan, if not required then, the Industrial User shall submit a signed statement stating that there is no potential nor any need for developing such a plan. However, if required then the Control Authority will attach a copy of the plan to this Agreement.

Whereas, Chapter 33 of the Code of Ordinances of the City of Memphis requires that "dischargers to the muncipal wastewater treatment facilities designated by the approving authority as requiring agreements shall not discharge to the system without said agreement"; and

Whereas, Memphis Depot Caretaker located at 2163 Airways Blvd desires to discharge to the Memphis sewer system; and

Whereas, Memphis Depot Caretaker agrees to comply with all requirements specified in Chapter 33 of the Code of Ordinances and any revision thereof.

Now therefore, Memphis Depot Caretaker is granted the right to discharge the wastewater of such characteristics and volume as described in this wastewater discharge permit into the City of Memphis sewer system from May 01, 1998 to April 30, 2003.

Signed by:

Rodney Thomas

City of Memphis

Authorized Industrial User Representative:

[signature]

BRAC Environmental Coordinator

2163 Airways Blvd

Memphis Depot Caretaker

Memphis, TN 38114

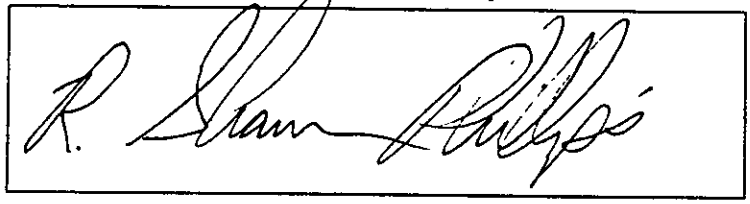
City Of Memphis Industrial Wastewater Discharge Agreement

S-	N	N	3	-	097
MEMPHIS DEPO					

Start Date	Expiration Date
May 01, 1998	April 30, 2003

A.1 Corporate Name	Memphis Depot Caretaker			
Corporate Address	2163 Airways Blvd			
	Memphis		TN	38114
A.2 Company Name	Memphis Depot Caretaker			
Mailing Address	2163 Airways Blvd			
	Memphis		TN	38114
A.3 Facility Name	Memphis Depot Caretaker			
Facility Address	2163 Airways Blvd			
	Memphis		TN	38114
A.4 Contact Official	Shawn Phillips			
Title	Remedial Project Manager			
Phone	(901)-544-0611			
A 5 Signing Official	Shawn Phillips			
Title	Base Environmental Coordinator			
Signee Address	2163 Airways Blvd			
	Memphis		TN	38114

A.6 I certify that the information contained in this industrial wastewater discharge agreement consisting of twenty one pages (and any appendices) is familiar to me and to the best of my knowledge and belief, such information is true, complete and correct.



Authorized Industrial User Representative:

May 01, 1998
Date

City Of Memphis Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

SECTION B - FACILITY OPERATIONAL CHARACTERISTICS

B.1 Description of manufacturing or service activities

The operation to be permitted is a ground water recovery system located in an open area, Dunn Field, adjacent to the northern perimeter of the DDMT main installation. The DDMT facility is currently being closed with the intent of transferring much of the facility to private ownership. Manufacturing of goods does not occur in the Dunn Field portion of the facility.

*Note: The ground water (GW) recovery and discharge system will operate on a continual basis once the system is completely operational. The federal government will operate and maintain the system.

B.2 Standard Industrial Classification(s)

a. 9711 b. c. d. e. f.

B.3 Weekly days of operation are 7 Days/Week (GW)

B.4 The hours of operation and the number of employees per shift.

	Times		Number of Employees		
Shift	Start	Stop	Weekday	Saturday	Sunday
Day	8:00 am	2:00 pm	50	10	10
Evening	2:00 pm	12:00 pm	10	10	10
Night					

B.5 Is production operation subject to seasonal variation? No

If so, complete the following:

a. Seasonal maximum wastewater discharged into the municipal sewer system is _____ gallons/day, during the months of _____

b. Seasonal minimum wastewater discharged into the municipal sewer system is _____ gallons/day, during the months of _____

City Of Memphis Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

B.6 Description of other operational schedule characteristics / scheduled shutdown

No operational variations are currently planned. The pumping rate may be altered based on the hydraulic capacity of the city sewer collection system, if required.

This discharge agreement application is for the following groundwater recovery system:

* One 40 - gpm wells
* One 50 - gpm wells
* Five 60 - gpm wells

This seven well groundwater recovery system will result in a total estimated discharge flow of 390 gpm (0.562 mgd) .

Requests for permits for additional wells beyond the sevent identified may be submitted in the future, if required. The ground water design currently requires up to seventeen total wells to be installed in up to two phases.

B 7 Description of operational variables and frequency of occurrances which may result in unusual discharges

Fluctuations in the discharge of the system may occur due to changes in ground water conditions. The discharges described in Section B.6 are expected to be macximum discharges.

City Of Memphis
Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

B.8 Raw Materials

Type	Quantity	Units
N / A		

City Of Memphis
Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

B.9 Catalysts, Intermediates

Type	Quantity	Units
N / A		

City Of Memphis
Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

B.10 Principal Products

Type	Quantity	Units
No Manufacturing Activities		

City Of Memphis
Industrial Wastewater Discharge Agreement

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MEMPHIS DEPO

B.11 Byproducts and Waste Products

Type	Quantity	Units
None		

City Of Memphis
Industrial Wastewater Discharge Agreement

B.12 Components of Non-contact Cooling Water

Type	Quantity	Units
N / A		

City Of Memphis Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

B.13 The person (or position) on the plant site who shall be contacted for emergency situations during plant operating hours.

Name	Shawn Phillips
Title	Remedial Project Manager
Phone	(901)-544-0611

B.14 The person(s) who shall be contacted at any time during emergency situations.

Name	Phone
Shawn Phillips - Remedial Project Manager	(901)-544-0611
Dennis Cooper - Environ. Proj. Specialist	(901)-544-0610

B.15 Description of spill prevention controls and counter measure plans / accidental and slug discharges

DDMT has an approved spill prevention control plan, countermeasure plan, and spill control plan dated August 1994. Also, DDMT has a storm water pollution prevention plan dated December 1994. An on-site employee spill response team is trained for spillresponse procedures.

A spill of any material or contaminated stormwater run-off as a result of an excavation of hazardous materials or any wastewater other than recovered groundwater shall not be discharged into the sanitary sewer without a written approval from the City of Memphis.

City Of Memphis
Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

SECTION C - WATER USAGE CHARACTERISTICS

C.1 MLG&W Account number(s)

124708000

C.4 f. & C.5 a. - Recovered ground water only

C.2 MLG&W Billing address (if different from A.3)

C.3 Annual water usage by source:

From	Million Gallons Per Year
a. Public water supply	
b. Private well	
c. Surface stream	

C.4 Daily average water consumption:

In	Gallons Per Day
a. Process (industrial)	
b. Non-contact cooling	
c. Boiler Feed	
d. Product	
e. Domestic/Sanitary	
f. Other	561,600

C.5 Daily average water discharge:

To	Gallons Per Day
a. Wastewater sewer	561,600
b. Storm drain	
c. Waste hauler	
d. Evaporative loss	
e. Product	

City Of Memphis
Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

SECTION D - WASTEWATER CHARACTERISTICS

POINT 1 OF 2 Ground Water with a flow of 561,600 gallons / day

D.1 Analysis of wastewater discharged into the municipal sewer system

Parameter	Daily Average (Monthly Average) Maximum Level mg/l	Daily Average (Monthly Average) Maximum Level lbs/day	Instantaneous (One Day) Maximum Level mg/l	Instantaneous (One Day) Maximum Level lbs/day
Biochemical Oxygen Demand (BOD_5)	250.000	1,170.936	400.000	1,873.498
Total Suspended Solids	300.000	1,405.123	500.000	2,341.872
Total Solids				
Oil & Grease (Hydrocarbons)				
Oil & Grease (Total)	10.000	46.837	10.000	46.837
Ammonia Nitrogen (NH_3 - N)				
Total Kjeldahl Nitrogen (TKN)				

	Pounds
Alkalinity (Pounds of 100% sulfuric acid per day. See Attachment)	
Acidity (Pounds of 100% sodium hydroxide per day. See Attachment)	

	Minimum	Maximum
Maximum Temperature (Degrees Fahrenheit)		
pH Range (Standard Units) (See Attachment)	5.5	10.0

D.2 Description of wastewater sampling location. Method of sample collection see attachment.

Sampling point is at the final discharge prior to the City Sanitary Sewer.

No Priority Pollutants or other substances listed in Appendix A are being discharged into the sanitary sewer.

12/2/1998 Revised to include four(4) new parameters, page 12.1

Note: Blank = parameters not quantified.

12/07/98 MON 11:12 FAX 901 544 0638 ASCE-A(MEMPHIS) 003

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City Of Memphis
Industrial Wastewater Discharge Agreement

S-NN3-097
MEMPHIS DEPO

SECTION D - WASTEWATER CHARACTERISTICS

POINT 2 OF 2 Ground Water with a flow of 561,600 gallons / day

D.1 Analysis of wastewater discharged into the municipal sewer system

Parameter	Daily Average (Monthly Average) Maximum Level mg/l	Daily Average (Monthly Average) Maximum Level lbs/day	Instantaneous (One Day) Maximum Level mg/l	Instantaneous (One Day) Maximum Level lbs/day
Biochemical Oxygen Demand (BOD_5)				
Total Suspended Solids				
Total Solids				
Oil & Grease (Hydrocarbons)				
Oil & Grease (Total)				
Ammonia Nitrogen (NH_3 - N)				
Total Kjeldahl Nitrogen (TKN)				

	Pounds
Alkalinity (Pounds of 100% sulfuric acid per day. See Attachment)	
Acidity (Pounds of 100% sodium hydroxide per day. See Attachment)	

	Minimum	Maximum
Maximum Temperature (Degrees Fahrenheit)		
pH Range (Standard Units) (See Attachment)		

D.2 Description of wastewater sampling location. Method of sample collection see attachment.

This page is inserted due to additional space required for priority pollutants (Page 13-2).

12/07/98 MON 11:13 FAX 901 514 0638 ASCE K(MEMPHIS) 005

exceeded at three wells; RW-07 (aluminum and zinc), RW08 (zinc and toluene), and RW-09 (tetrachloroethene). However, as presented below, average concentrations for all seven wells indicate that concentrations of these chemicals will be below the permitted one-day-maximum concentrations when the entire system is operational.

Average Concentrations for Chemicals Exceeding Individual Well One-Day Maximum Permitted Values (units are in mg/L)

Chemical	Average Value from Capacity Testing	One-Day Maximum Value
Aluminum	0.817	2
Zinc	0.365	1
Tetrachloroethene	0.032	0.120
Toluene	0.003	0.04

Note: Averages calculated using detection limit when the chemical was not detected above the detection limit.

During well installation and development, groundwater from each well was blended and held in two tanks before discharge. Each filled tank was sampled and the analytical data is presented in Table 2. The concentrations of all chemicals tested are below the one-day maximum permitted concentration, supporting the previous discussion based on the average of the well-specific concentrations.

CH2M HILL proposes bringing the extraction system online by initially pumping wells for which there are no chemicals in concentrations exceeding the one-day maximum permitted values: RW-03, RW-04, RW-05, and RW-06. Wells RW-07, RW-08, and RW-09 will be subsequently brought online so the blended extraction system discharges are at or below the average concentrations presented above. The system discharge will be sampled after all the wells are brought online, then weekly for the first six weeks of operation as required in Section F of the permit.

Please contact me or Steve Offner at OHM (770/326-2571) by June 26th with your evaluation of this proposal. Your consideration of this alternative approach is greatly appreciated.

Sincerely,

CH2M HILL

Greg Underberg
Program Manager

ORO/Dunn Well Data Letter.doc
c: Dorothy Richards/CEHNC
Shawn Phillips/DDSP-FE
Steve Offner/OHM
Dana Conkin/USACE TN Field Office
Kurt Braun/CEMDO

Table 2. Summary of Analytical Results for Recovery Well Development Water
Dunn Field, Defense Depot
Memphis, Tennessee

Sample Identification Number			Tank 1-Dev.	Tank 2-Dev.
Laboratory ID No.			92148-6	92148-7
Date Sample Collected			20-Feb-98	20-Feb-98
LABORATORY ANALYSES	**DL**	**Units**		
Metals				
Aluminum (EPA 6010)	0.2	mg/L	2.2	1.8
Barium (EPA 6010)	0.01	mg/L	0.07	0.04
Calcium (EPA 6010)	0.05	mg/L	28	19
Iron (EPA 6010)	0.1	mg/L	9.3	6
Lead (EPA 7421)	0.003	mg/L	0.008	BDL
Magnesium (EPA 6010)	0.05	mg/L	6.4	3.7
Manganese (EPA 6010)	0.015	mg/L	0.19	0.04
Potassium (EPA 6010)	0.2	mg/L	2.2	1.8
Sodium (EPA 6010)	0.05	mg/L	33	28
Vanadium (EPA 6010)	0.05	mg/L	0.05	BDL
Zinc (EPA 6010)	0.02	mg/L	0.03	0.03
Volatile Organics				
Acetone (EPA 8260)	0.01	mg/L	0.029	BDL
Benzene (EPA 8260)	0.002	mg/L	BDL	0.003
Carbon Tetrachlonde (EPA 8260)	0.002	mg/L	BDL	0.005
1,1-Dichloroethene (EPA 8260)	0.002	mg/L	0.012	BDL
1,2-Dichloroethene (EPA 8260)	0.01	mg/L	BDL	0.011
Ethylbenzene (EPA 8260)	0.002	mg/L	BDL	0.006
Tetrachloroethene (EPA 8260)	0.002	mg/L	0.026	0.005
Toluene (EPA 8260)	0.002	mg/L	0.004	0.005
Trichloroethene (EPA 8260)	0.002	mg/L	0.021	0.09
Xylenes (EPA 8260)	0.005	mg/L	BDL	0.013

mg/L = milligrams per liter
Only compounds detected are listed in the table
DL = detection limit
BDL = below detection limit

Table 1. Summary of Analytical Results for Recovery Well Development Water
Dunn Field, Defense Depot
Memphis, Tennessee
(all data are in mg/L)

		RW-03-Dev	RW-03-Cap.	RW-04-Dev	RW-04-Cap	RW-05-Dev.	RW-06-Dev.	RW-06-Cap	RW-07-Dev	RW-07-Cap	RW-08-Dev.	RW-08-Cap	RW-09-Dev	RW-09-Cap	City of Memphis
		92148-2	92951-2	92148-3	92884-2	92148-10	92148-4	92951-1	92148-1	92884-1	92148-5	92398	92148-6	92951-3	Wastewater Standard
		20-Feb-98	17-Mar-98	20-Feb-98	12-Mar-98	20-Feb-98	20-Feb-98	17-Mar-98	18-Feb-98	13-Mar-98	19-Feb-98	2-Mar-98	19-Feb-98	17-Mar-98	Monthly/One Day Max
LABORATORY ANALYSES	**DL**														
Metals															
Aluminum (EPA 6010)	0 2	BDL	0 2	BDL	0 6	BDL	BDL	BDL	BDL	3.1	0 4	0 3	BDL	0 5	1 / 2
Arsenic (EPA 6010)	0 05	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 01	BDL	BDL	BDL	BDL	0 04 / 0 1
Barium (EPA 6010)	0 01	0 09	0 08	0 05	0 08	0 04	0.07	0 01	0 07	0 14	0 05	0 15	0 07	0 14	NS
Calcium (EPA 6010)	0 05	15	13	15	19	86	16	22	47	100	36	57	43	42	NS
Chromium (EPA 6010)	0 01	BDL	0 01	BDL	0 02	BDL	BDL	BDL	BDL	0.01	BDL	BDL	BDL	BDL	0 2 / 0 4
Copper (EPA 6010)	0 02	BDL	BDL	BDL	0 03	BDL	BDL	BDL	BDL	0 03	BDL	BDL	BDL	BDL	0 2 / 0 4
Iron (EPA 6010)	0 1	1.2	1 8	0 7	2 6	0 1	0 4	BDL	0 4	4 9	1 5	0 64	0 2	2 8	10 / 20
Lead (EPA 7421)	0 003	BDL	BDL	BDL	0 005	BDL	0.006	BDL	0 006	0 009	0 008	BDL	BDL	BDL	0 15 / 0 30
Magnesium (EPA 6010)	0 05	6 5	4 7	7	5 5	1 6	7.6	0 08	8 8	11	11	18	2 2	12	NS
Manganese (EPA 6010)	0 015	0 18	0 03	0 07	0 07	BDL	0.11	BDL	0 16	0 24	0 04	0 06	BDL	0 05	NS
Mercury (EPA 7470)	0 0002	BDL	BDL	BDL	0 0004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 001 / 0 002
Nickel (EPA 6010)	0 02	BDL	0.02	BDL	0 05	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 1 / 0 3
Potassium (EPA 6010)	0 2	0 9	0 8	0 6	0 94	1.2	0.8	1.2	2	19	8	0 3	4 6	1 6	NS
Sodium (EPA 6010)	0 05	27	20	25	22	24	27	1 9	34	48	37	25	34	28	NS
Thallium (EPA 6010)	0 01	BDL	0 01	BDL	0 01	BDL	BDL	0 01	BDL	0 03	BDL	0 02	BDL	0 02	NS
Zinc (EPA 6010)	0 02	0 07	0 04	0 02	0 09	0 04	0 03	0.2	BDL	0.45	0 02	1.4	0 02	0 01	0 3 / 1 0
Volatile Organics															
Acetone (EPA 8260)	0 01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 220	BDL	BDL	BDL	NS
2-Butanone (EPA 8260)	0 01	0 012	BDL	BDL	BDL	0 016	BDL	BDL	BDL	BDL	0 190	BDL	BDL	BDL	NS
Carbon Tetrachloride (EPA 8260)	0 002	0 014	BDL	BDL	0 002	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 02 / 0 04
Chloroform (EPA 8260)	0 002	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 004	0 005	0 013	0 024	0 002	BDL	0 02 / 0 04
1,1-Dichloroethane (EPA 8260)	0 002	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 002	BDL	NS
1,1-Dichloroethene (EPA 8260)	0 002	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 015	0 014	0 064	0 061	NS
1,2-Dichloroethene (EPA 8260)	0 01	BDL	BDL	BDL	0 014	0 030	BDL	BDL	0 054	0 014	BDL	BDL	BDL	BDL	0 05 / 0 10
1,1,2,2-Tetrachloroethane (EPA 8260)	0 002	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 016	0 004	BDL	BDL	BDL	BDL	NS
Tetrachloroethene (EPA 8260)	0 002	BDL	0 014	BDL	0 002	0 011	BDL	BDL	0 008	0 006	BDL	0 030	BDL	0.140	0 06 / 0 120
Toluene (EPA 8260)	0 002	BDL	BDL	BDL	0 010	0 002	BDL	BDL	BDL	BDL	0.058	0 002	BDL	BDL	0 02 / 0 04
1,1,1-Trichloroethane (EPA 8260)	0 002	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 004	BDL	NS
Trichloroethene (EPA 8260)	0 002	0 039	BDL	0 048	0 180	0 540	0.008	BDL	0 083	0 038	0.010	0 015	0 092	0 068	0 400 / 0 800

mg/L = milligrams per liter
DL = detection limit
BDL = below detection limit
Dev. = Development Sample Results
Cap. = Capacity Sampling Results

Only compounds detected are listed in the table
NS = no standard
Bold values exceed the one-day maximum concentrations allowed in the wastewater discharge permit with the City of Memphis

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D.3 Priority Pollutants and other substances that may be present in the wastewater discharge

(See Appendix A for complete listing.)

POINT 1 OF 2 Ground Water with a flow of 561,600 gallons / day

	Parameter	PPN	Class	Daily Average (Monthly Average) Maximum Level mg/l	Daily Average (Monthly Average) Maximum Level lbs/day	Instantaneous (One Day) Maximum Level mg/l	Instantaneous (One Day) Maximum Level lbs/day
	1,1,1-trichloroethane	11	Volat	0.010	0 047	0.020	0.094
*	1,1,2,2-tetrachloroethane	15	Volat	0 500	2.342	1.000	4.684
*	1,1,2-trichloroethane	14	Volat	0.050	0.234	0.100	0.468
*	1,1-dichloroethene		Volta	0.050	0.234	0.100	0.468
	Aluminum		Metal	1.000	4 684	2.000	9.367
	Arsenic	115	Metal	0.040	0.187	0.100	0.468
	Bis(2-ethylhexyl) Phthalate	66	Semiv	0.010	0.047	0 020	0.094
	Cadmium (total)	118	Metal	0.010	0.047	0.020	0.094
	Chloroform	23	Volat	0.020	0.094	0.040	0 187
	Chromium (total)	119	Metal	0.200	0.937	0.400	1 873
*	Cis-1,2-dichloroethene		Volat	0.050	0.234	0 100	0 468
	Copper (total)	120	Metal	0.200	0.937	0.400	1.873
	Di-n-butyl Phthalate	68	Semiv	0.030	0.141	0.060	0.281
	Iron		Metal	10.000	46.837	20.000	93.675
	Lead (total)	122	Metal	0.150	0.703	0.300	1.405
	Mercury	123	Metal	0.001	0 005	0.002	0.009
	Methylene Chloride	44	Volat	0.010	0.047	0.020	0.094
	Naphthalene	55	Semiv	0.010	0.047	0.020	0.094
	Nickel (total)	124	Metal	0.100	0.468	0.300	1.405
	Phenol	65	Semiv	0.010	0 047	0.020	0.094
	Tetrachloroethene		Volat	0.060	0.281	0.120	0.562
	Tetrachloromethane (carbon Tetrac)	6	Volat	0.020	0.094	0.040	0.187
	Toluene	86	Volat	0 020	0.094	0.040	0.187
	Trans-1,2-dichloroethene		Volat	0 050	0.234	0.100	0 468
	Trichloroethene	87	Volat	0.400	1 873	0.800	3 747

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Industrial Wastewater Discharge Agreement

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D.3 Priority Pollutants and other substances that may be present in the wastewater discharge

(See Appendix A for complete listing.)

POINT 2 OF 2 Ground Water with a flow of 561,600 gallons / day

Parameter	PPN	Class	Daily Average (Monthly Average) Maximum Level mg/l	Daily Average (Monthly Average) Maximum Level lbs/day	Instantaneous (One Day) Maximum Level mg/l	Instantaneous (One Day) Maximum Level lbs/day
Zinc (total)	128	Metal	0.300	1.405	1.000	4.684

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D.4 The person or laboratory responsible for wastewater sampling and analysis

The name of the laboratory will be provided once a contract is in place, the groundwater recovery system (described in B . 6) is installed, and sampling begins.

D.5 Type and description of wastewater metering and sampling facilities

A continuous direct reading meter, flow totalizer, and sampling tap will be provided just prior to the discharge pipe leaving DDMT property.

D.6 Any batch wastewater discharges? No

If yes, describe type, volume, strength and time of discharges

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D.7 Is wastewater treated prior to discharge into the municipal sewer system? No

If yes, complete the following:

a. Description of unit processes used and wastewater quality before and after treatment

b. Description of production characteristics and any persistent or normal operational problems which may affect treatment system operations

c. Description of quality testing or process control methodology which shall ensure acceptable treatment levels

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SECTION E - SEWER FLOW PLAN, SITE PLAN AND PROCESS SCHEMATICS

E.1 The area of plant site in acres 642.0

E.2 Sewer flow plan or list of outlets, size and flow

PART 1 OF 3

The proposed layout of the groundwater recovery wells and piping system are shown on the figure provided in Attachment 2. Groundwater from the recovery wells will be combined into a common pipeline, conveyed and discharged (i.e., single discharge) into the sewer manhole located at Rozelle Street on the South side of Cane Creek (as shown on the Attachment 2 figure).

Initially, the groundwater discharge rates will be approximately 830 gpm. Each well will be brought on line by discharging flow from an 8-hour period into a holding tank. The groundwater in the holding tank will be analyzed to confirm concentrations are below the proposed discharge limits, prior to discharge to the sewer system.

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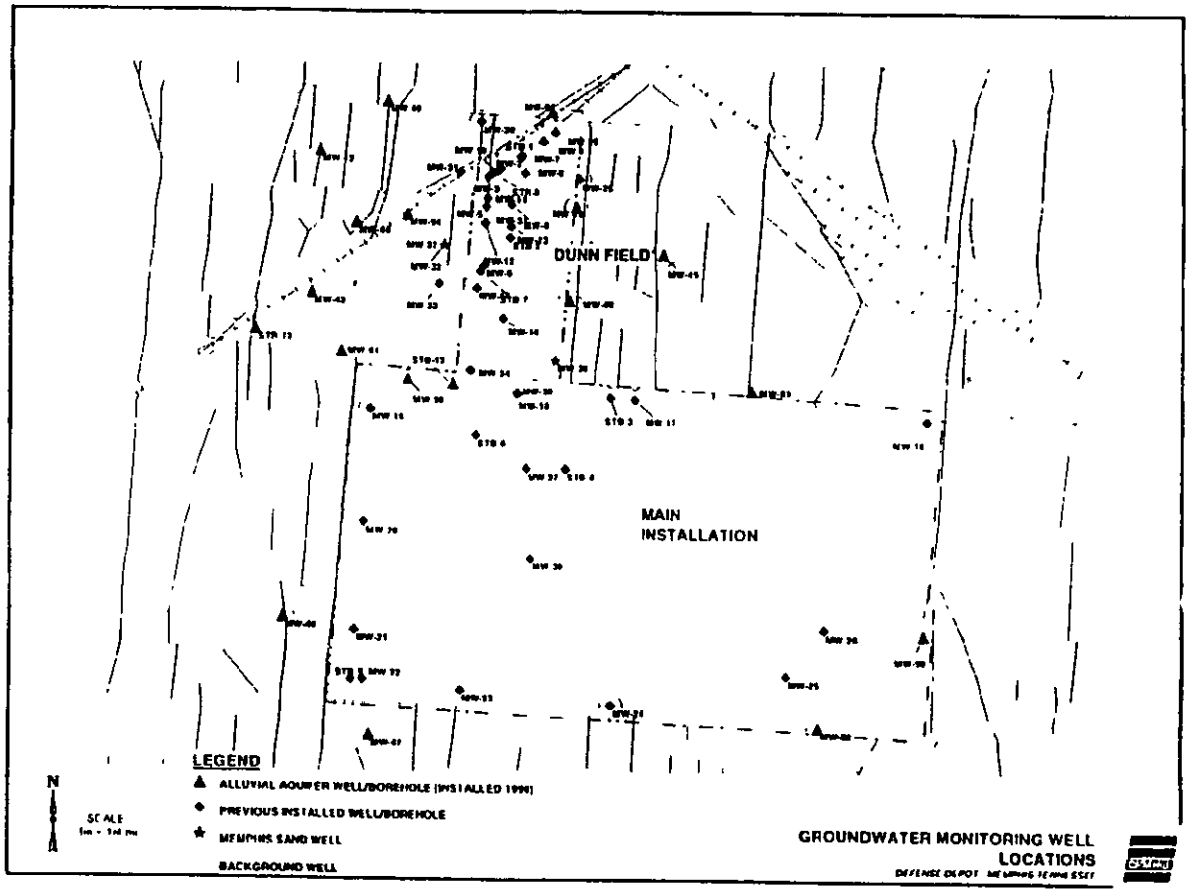
SECTION E - SEWER FLOW PLAN, SITE PLAN AND PROCESS SCHEMATICS

E.1 The area of plant site in acres 642.0

E.2 Sewer flow plan or list of outlets, size and flow

PART 2 OF 3



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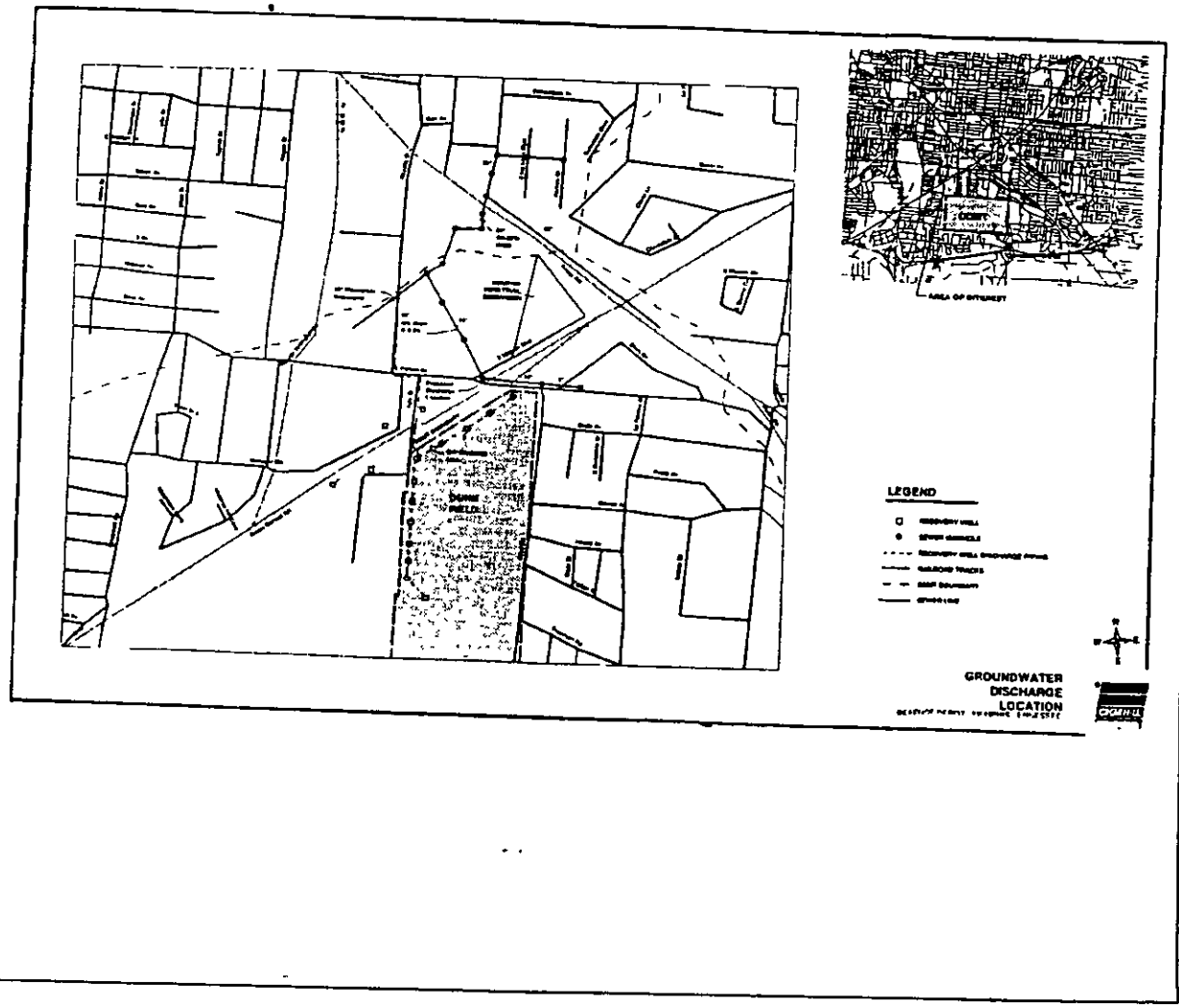
SECTION E - SEWER FLOW PLAN, SITE PLAN AND PROCESS SCHEMATICS

E.1 The area of plant site in acres 642.0

E.2 Sewer flow plan or list of outlets, size and flow

PART 3 OF 3



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E.3 Plan indicating major structures and locations of hazardous materials and certain sewer appurtenances

PART 1 OF 1

See attached plan

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E.4 Flow diagram of materials or processes

PART 1 OF 1

N/A

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E.5 Diagram and description of areas with quantified acreage where storm waters (run-off) are discharged into the municipal sewer system

Storm water total acreage 0.0

PART 1 OF 1

No storm water is being discharged into the sanitary sewer

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SECTION F - SELF-MONITORING SCHEDULE PART 1 OF 2

F.1 The self monitoring requirements to be performed and/or reported to the City of Memphis.

All monitoring records should be kept on file for a minimum of 3 years.

According to Section 33-83 of the Sewer Use Ordinance, if sampling performed by an Industrial User indicates a violation, the User shall notify the Control Authority within 24 hours of becoming aware of the violation. The User shall repeat the sampling and analysis and submit the results of the repeated analysis to the City within 30 days after becoming aware of the violation or sooner if so directed by the City Authorized representatives.

If any pollutant is monitored more frequently than required, using EPA approved methods, the results of this monitoring shall be included in the report.

SELF-MONITORING REQUIREMENT:

During initial startup of the recovery wells, the parameters described below will be analyzed prior to discharging the first 8 hours of recovered groundwater.

1) One (1) grab sample will be collected once a week from the final discharge for the first six (6) week of the initial start-up discharge into the sewer.

   Flow rate (instantaneous and totalized)
   pH
   VOCs (SW846 Method 8240)
   SVOCs (SW846 Method 8270)
   TAL Metals (EPA 200 Series)

2) First 6 months, at a frequency of one (1) sample/month for the following parameters:

   Flow rate (instantaneous and totalized)
   pH
   VOCs (SW846 Method 8240)
   SVOCs (SW846 Method 8270)
   TAL Metals (EPA 200 Series)

   After 6 months, DDMT requests that the following constituents in the above methods be eliminated from the self-monitoring program:

   a) Any parameter that provides results below method detection limits for all samples,
   b) Any parameter for which the highest concentration for all data has not exceeded 1/10 the permitted value, and c) Any parameter that the City of Memphis deems notrequired.

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Industrial Wastewater Discharge Agreement

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SECTION F - SELF-MONITORING SCHEDULE PART 2 OF 2

F.1 The self monitoring requirements to be performed and/or reported to the City of Memphis.

All monitoring records should be kept on file for a minimum of 3 years.

B. REPORTING REQUIREMENT:

Monthly reports detailing all anlyses and volumes discharged shall be sent by the 10th of each month, data of the previous month to:

Mr. Akil AL-Chokhachi
City of Memphis
2303 North Second Street
Memphis, Tennessee 38127-7500

Monthly volumes discharged shall be sent to :

Sewer Fee Billing Department
Room 622, City Hall
125 Mid-America Mall
Memphis, TN 38103

A spill of any material or contaminated stormwater run-off as a result of an excavation of hazardous materials or any wastewater other than recovered groundwater shall not be discharged into the sanitary sewer without a written approval from the City ofMemphis.

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SECTION G - COMPLIANCE SCHEDULE PART 1 OF 1

G.1 The compliance schedule as required to meet categorical pretreatment standards and other requirements required by the City of Memphis pretreatment program.

None required

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SECTION H - HAZARDOUS MATERIALS PART 1 OF 1

H.1 All hazardous, toxic, noxious or malodorous materials used, produced or formed as by-product or waste.

NOT APPLICABLE FOR DDMT INSTALLATION

DUNN FIELD:

Historically, Dunn Field was used as a burial area on DDMT. The individual burial sites within Dunn Field have the following suspected buried contaminants:

- thiodiglycol
- arsenic
- chloroform
- ammonia hydroxide
- acetic acid
- ammonia salts
- metals
- orthotoluidine dihydrochloride
- VOCs
- SVOCs
- methyl bromide
- nitric acid PAHs
- trichloroacetic acid
- sulphuric acid
- hydrochloric acid
- lead
- pesticides

APPENDIX A

A listing of priority pollutants and other chemical compounds.
Priority pollutants are preceded with a number.

*** METALS AND NONMETALLIC ELEMENTS ***

ALUMINUM
114 ANTIMONY
115 ARSENIC
BARIUM
117 BERYLLIUM
BISMUTH
BORON
118 CADMIUM
CALCIUM
CERIUM
119 CHROMIUM (TOTAL)
CHROMIUM (HEXVALENT)
COBALT
120 COPPER
DYSPROSIUM
ERBIUM
EUROPIUM
GADOLINIUM
GALLIUM
GERMANIUIM
GOLD
HAFNIUM
HOLMIUM
INDIUM
IODINE
IRIDIUM
IRON
LATHANUM
122 LEAD
LITHIUM
LUTETIUM
MAGNESIUM
MANGANESE
123 MERCURY
MOLYBDENUM
NEODYMIUM
124 NICKEL
NIOBIUM
OSMIUM
PALLADIUM
PHOSPHORUS
PLATINUM
POTASSIUM
PRASEODYMIUM
RHENIUM
RHODIUM
RUTHENIUM
SAMARIUM
SCANDIUM
125 SELENIUM
SILICON
126 SILVER
SODIUM
STRONTIUM
SULFUR
TANTALUM
TELLURIUM
TERBIUM
127 THALLIUM
THORIUM
THULIUM
TIN
TITANIUM
TUNGSTEN
URANIUM
VANADIUM
YTTERBIUM
YTTRIUM
128 ZINC
ZIRCONIUM

*** CLASSICAL ***

CHLORIDE
CHLORINE (OXIDIZING FORMS)
121 CYANIDE (TOTAL)
CYANIDE (OXIDIZABLE)
FLUORIDE
NITRATE - NITROGEN
NITRITE - NITROGEN
RADIOACTIVE MATERIAL
SULFATE
SULFIDES
SURFACTANTS (DETERGENTS, WETTING AGENTS AND EMULSIFIERS)
PHOSPHATE (ORTHO AND CONDENSED FORMS BOTH INORGANIC & ORGANIC)

*** DIOXINS/FURANS ***

OCTACHLORODIBENZO-P-DIOXIN
OCTACHLORODIBENZOFURAN
TOTAL HEPTACHLORODIBENZO-P-DIOXIN
TOTAL HEPTACHLORODIBENZOFURANS
TOTAL HEXACHLORODIBENZO-P-DIOXINS
TOTAL HEXACHLORODIBENZOFURANS
TOTAL PENTACHLORODIBENZO-P-DIOXINS
TOTAL PENTACHLORODIBENZOFURANS
TOTAL TETRACHLORODIBENZO-P-DIOXINS
TOTAL TETRACHLORODIBENZOFURANS
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN
1,2,3,6,7,8-

HEXACHLORODIBENZO-P-DIOXIN
1,2,3,6,7,8-
HEXACHLORODIBENZOFURAN
1,2,3,7,8-
PENTACHLORODIBENZO-P-DIOXIN
1,2,3,7,8-
PENTACHLORODIBENZOFURAN
1,2,3,7,8,9-
HEXACHLORODIBENZO-P-DIOXIN
1,2,3,7,8,9-
HEXACHLORODIBENZOFURAN
2,3,4,6,7,8-
HEXACHLORODIBENZOFURAN
2,3,4,7,8-
PENTACHLORODIBENZOFURAN
129 2,3,7,8-TETRACHLORODIBENZO-
P-DIOXIN (TCCD)
2,3,7,8-TETRACHLORODIBENZOFURAN

*** FIBROUS ***

116 ASBESTOS

*** VOLATILE ORGANICS ***

3 ACRYLONITRILE
4 BENZENE
BROMODICHLOROMETHANE
46 BROMOMETHANE (METHYL BROMIDE)
CARBON DISULFIDE
50 CHLOROACETONITRILE
7 CHLOROBENZENE
51 CHLORODIBROMOMETHANE
16 CHLOROETHANE
23 CHLOROFORM (TRICHLOROMETHANE)
45 CHLOROMETHANE (METHYL CHLORIDE)
CIS-1,3-DICHLOROPROPENE
CROTONALDEHYDE
48 DICHLOROBROMOMETHANE
DIBROMOMETHANE
DIETHYL ETHER
ETHYL CYANIDE
ETHYL METHACRYLATE
38 ETHYLBENZENE
IODOMETHANE
ISOBUTYL ALCOHOL
M-XYLENE
METHYL METHACRYLATE
44 METHYLENE CHLORIDE
(DICHLOROMETHANE)
O+P XYLENE
85 TETRACHLOROETHYLENE
(PERCHLOROETHYLENE)
(TETRACHLOROETHENE)
6 TETRACHLOROMETHANE
(CARBON TETRACHLORIDE)
86 TOLUENE
TRANS-1,2-DICHLOROETHENE
TRANS-1,3-DICHLOROPROPENE
TRANS-1,4-DICHLORO-2-BUTENE
47 TRIBROMOMETHANE (BROMOFORM)
87 TRICHLOROETHENE
(TRICHLOROETHYLENE)
49 TRICHLOROFLUOROMETHANE
VINYL ACETATE
88 VINYL CHLORIDE (CHLOROETHYLENE)
13 1,1-DICHLOROETHANE
1,1-DICHLOROETHENE
29 1,1-DICHLOROETHYLENE
30 1,2-TRANS-DICHLOROETHYLENE
11 1,1,1-TRICHLOROETHANE
1,1,1,2-TETRACHLOROETHANE
14 1,1,2-TRICHLOROETHANE
15 1,1,2,2-TETRACHLOROETHANE
1,2-DIBROMOETHANE
10 1,2-DICHLOROETHANE
1,2-DICHLOROPROPANE
1,2,3-TRICHLOROPROPANE
1,3-BUTADIENE, 2-CHLORO
32 1,3-DICHLOROPROPANE
33 1,3-DICHLOROPROPYLENE
1,4-DIOXANE
2-BUTANONE
19 2-CHLOROETHYVINYL ETHER (MIXED)
2-HEXANONE
2-PROPANONE
2-PROPEN-1-OL
2 2-PROPENAL (ACROLEIN)
2-PROPENENITRILE, 2-METHYL
3-CHLOROPROPENE
4-METHYL-2-PENTANONE

*** SEMIVOLATILE ORGANICS ***

1 ACENAPHTHENE
77 ACENAPHTHYLENE
ACETOPHENONE
ALPHA-TERPINEOL
ANILINE
ANILINE, 2,4,5-TRIMETHYL
78 ANTHRACENE
ARAMITE
BENZANTHRONE
BENZENETHIOL
5 BENZIDINE
72 BENZO(A)ANTHRACENE
(1,2 BENZANTHRACENE)
73 BENZO(A)PYRENE (3,4-BENZOPYRENE)
74 BENZO(B)FLUORANTHENE
(3,4-BENZOFLUORANTHENE)
79 BENZO(GHI)PERYLENE
(1,12-BENZOPERYLENE)
75 BENZO(K)FLUORANTHANE
(11,12-BENZOFLUORANTHENE)
BENZOIC ACID
BENZONITRILE,3,5-DIBROMO-4-
HYDROXY
BENZYL ALCOHOL
BETA-NAPHTHYLAMINE
BIPHENYL
BIPHENYL, 4-NITRO
17 BIS(CHLOROMETHYL) ETHER
43 BIS(2-CHLOROETHOXY)METHANE
18 BIS(2-CHLOROETHYL) ETHER
42 BIS(2-CHLOROISOPROPYL) ETHER
66 BIS(2-ETHYLHEXYL) PHTHALATE
67 BUTYL BENZYL PHTHALATE
CARBAZOLE
76 CHRYSENE

CROTOXYPHOS
68 DI-N-BUTYL PHTHALATE
69 DI-N-OCTYL PHTHALATE
63 DI-N-PROPYLNITROSAMINE
(N-NITROSODI-N-PROPYLAMINE)
DIBENZO(A,H)ANTHRACENE
DIBENZOFURAN
DIBENZOTHIOPHENE
70 DIETHYL PHTHALATE
71 DIMETHYL PHTHALATE
DIMETHYL SULFONE
DIPHENYL ETHER
DIPHENYLAMINE
DIPHENYLDISULFIDE
ETHANE, PENTACHLORO
ETHYL METHANESULFONATE
ETHYLENETHIOUREA
39 FLUORANTHENE
80 FLUORENE
9 HEXACHLOROBENZENE
52 HEXACHLOROBUTADIENE
53 HEXACHLOROCYCLOPENTADIENE
12 HEXACHLOROETHANE
HEXACHLOROPROPENE
HEXANOIC ACID
83 INDENO(1,2,3-CD)PYRENE
54 ISOPHORONE
ISOSAFROLE
LONGIFOLENE
MALACHITE GREEN
MESTRANOL
METHAPYRILENE
METHYL METHANESULFONATE
N-DECANE
N-DOCOSANE
N-DODECANE
N-EICOSANE
N-HEXACOSANE
N-HEXADECANE
N-NITROSODI-N-BUTYLAMINE
N-NITROSODIETHYLAMINE
61 N-NITROSODIMETHYLAMINE
N-NITROSODIPHENYLAMINE
N-NITROSOMETHYLETHYLAMINE
62 N-NITROSOMETHYLPHENYLAMINE
N-NITROSOMORPHOLINE
N-NITROSOPIPERDINE
N-OCTACOSANE
N-OCTADECANE
N-TETRACOSANE
N-TETRADECANE
N-TRIACONTANE
N,N-DIMETHYLFORMAMIDE
55 NAPHTHALENE
66 NITROBENZENE
O-ANISIDINE
O-CRESOL
O-TOLUIDINE
O-TOLUIDINE, 5-CHLORO
22 PARACHLOROMETACRESOL
P-CHLOROANILINE
P-CRESOL
P-CYMENE
P-DIMETHYIAMINOAZOBENZENE
P-NITROANILINE
PENTACHLOROBENZENE
64 PENTACHLOROPHENOL
PENTAMETHYLBENZENE
PERYLENE
PHENACETIN
81 PHENANTHRENE
65 PHENOL
PHENOTHIAZINE
PRONAMIDE
84 PYRENE
PYRIDINE
RESORCINOL
SAFROLE
SQUALENE
STYRENE
THIANAPHTHENE
THIOACETAMIDE
THIOXANTHE-9-ONE
TOLUENE, 2,4-DIAMINO
TRIPHENYLENE
TRIPROPYLENEGLYCOL METHYL
ETHER
1-BROMO-2-CHLOROBENZENE
1-BROMO-3-CHLDROBENZENE
1-CHLORO-3-NITROBENZENE
1-METHYLFLUORENE
1-METHYLPHENANTHRENE
1-NAPHTHYLAMINE
1-PHENYLNAPHTHALENE
1,2-DIBROMO-3-CHLOROPROPANE
25 1,2-DICHLOROBENZENE
37 1,2-DIPHENYLHYDRAZINE
1,2,3-TRICHLOROBENZENE
1,2,3-TRIMETHOXYBENZENE
8 1,2,4-TRICHLOROBENZENE
1,2,4,5-TETRACHLOROBENZENE
82 1,2,5,6-DIBENZANTHRACENE
1,2,3,4-DIEPOXYBUTANE
1,3-DICHLORO-2-PROPANOL
26 1,3-DICHLOROBENZENE
1,3,5-TRITHIANE
27 1,4-DICHLOROBENZENE
1,4-DINITROBENZENE
1,4-NAPHTHOQUINONE
1,5-NAPHTHALENEDIAMINE
2-(METHYLTHIO)BENZOTHIAZOLE
20 2-CHLORONAPHTHALENE
24 2-CHLOROPHENOL
2-IOSPROPYLNAPHTHALENE
2-METHYLBENZOTHIOAZOLE
2-METHYLNAPHTHALENE
2-NITROANILINE
57 2-NITROPHENOL
2-PHENYLNAPHTHALENE
2-PICOLINE
2,3-BENZOFLUORENE
2,3-DICHLOROANILINE
2,3-DICHLORONITROBENZENE
2,3,4,6-TETRACHLOROPHENOL
2,3,6-TRICHLOROPHENOL
31 2,4-DICHLOROPHENOL
34 2,4-DIMETHYLPHENOL
59 2,4-DINITROPHENOL
35 2,4-DINITROTOLUENE
2,4,5-TRICHLOROPHENOL
2,4,6-TRICHLOROPHENOL
2,6-DI-TERT-BUTYL-P-BENZOQUINONE
2,6-DICHLORO-4-NITROANILINE
2,6-DICHLOROPHENOL
36 2,6-DINITROTOLUENE
3-METYLCHOLANTHRENE

3-NITROANILINE
28 3,3'-DICHLOROBENZIDINE
3,3'-DIMETHOXYBENZIDINE
3,6-DIMETHYLPHENANTHRENE
4-AMINOBIPHENYL
41 4-BROMOPHENYL PHENYL ETHER
4-CHLORO-2-NITROANILINE
4-CHLORO-3-METHYLPHENOL
40 4-CHLOROPHENYL PHENYL ETHER
60 4,6-DINITRO-O-CRESOL

*** PESTICIDES HERBICIDES ***

58 4-NITROPHENOL
4,4'-METHYLENEBIS
(2-CHLOROANILINE)
5-NITRO-O-TOLUIDINE
7,12-DIMETHYLBENZ(A)ANTHRACENE
ACETIC ACID (2,4-DICHLOROPHENOXY)
89 ALDRIN
102 ALPHA-BHC
AZINPHOS ETHYL
AZINPHOS MERHYL
103 BETA-BHC
CAPTAFOL
CAPTAN
CARBOPHENOTHION (TRITHION)
91 CHLORDANE
CHLOROBENZILATE
CHLOROFENVINPHOS
CHLORPYRIFOS
CIODRIN
COUMAPHOS
105 DELTA-BHC
DEMETON
DIALLATE
DIAZINON
DICHLORVOS
DICROTOPHOS (BIDRIN)
90 DIELDRIN
DIMETHOATE
DIOXATHION
DISULFOTON
97 ENDOSULFAN SULFATE
95 ENDOSULFAN-1 (ALPHA-ENDOSULFAN)
96 ENDOSULFAN-2 (BETA-ENDOSULFAN)
98 ENDRIN
99 ENDRIN ALDEHYDE
ENDRIN KETONE
ETHION
FAMPHUR
FENSULFOTHION
FENTHION
100 HEPTACHLOR
101 HEPTACHLOR EPOXIDE
ISODRIN
LEPTOPHOS
104 LINDANE (GAMMA-BHC)
MALATHION
METHOXYCHLOR
METHYL PARATHION
MEVINPHOA (PHOSDRIN)
MIREX
MONOCROTOPOS
NALED (DIBROM)
NITROFEN (TOK)
PARATHION
112 PCB-1016 (AROCHLOR 1016)
108 PCB-1221 (AROCHLOR 1221)
109 PCB-1232 (AROCHLOR 1232)
106 PCB-1242 (M OCHLOR 1242)
110 PCB-1248 (M OCHLOR 1248)
107 PCB-1254 (M OCHLOR 1254)
111 PCB-1260 (M OCHLOR 1260)
PENTACHLORONITROBENZENE
PHORATE
PHOSMET
PHOSPHAMIDON
PHOSPHORIC ACID,TRI-O-TOLYL ESTER
PHOSPHORIC ACID,TRIMETHYL ESTER
PHOSPHORIC TRIAMIDE, HEXAMETHYL-
SANTOX (EPN)
TERBUFOS
TETRACHLORVINPHOS
TETRAETHYLDITHIOPYROPHOSPHATE
TETRAETHYLPYROPHOSPHATE
113 TOXAPHENE
TRICHLOROFON
TRIFLURALIN (TREFLAN)
1,4-NAPHTHOQUINONE,2,3-DICHLORO
2,4,5-TRICHLOROPHENOXYACETIC ACID
2,4,5-TRICHLOROPHENOXYPROPIONIC
ACID
21 2,4,6-TRICHLOROPHENOL
94 4,4'-DDD (P,P'-TPE)
93 4,4'-DDE (P,P'DDX)
92 4,4'-DDT

CITY OF MEMPHIS
Division of Public Works

APPENDIX B

ACIDITY AND ALKALINITY

Acidity is defined as the quantity of sodium hydroxide (NaOH) that is required to neutralize a given waste to a pH of 7.00. It is expressed in pounds per day.

Alkalinity is defined as the quantity of sulfuric acid (H_2SO_4) that is required to neutralize a given waste to a pH of 7.00. It is expressed in pounds per day.

Either of these values are determined by a laboratory analysis of a representative sample of the waste The sample is titrated with a standardized acid (or base) to a pH of 7 00. A pH meter capable of measuring +/- 0.01 pH units must be used. The procedure is outlined as follows:

1. Pipet an appropriate volume of homogeneous sample into a beaker. Use a wide bore pipet for this. Measure the pH of the sample.

2. If the pH of the sample is less than 7.00, then proceed to titrate the sample with a standardized sodium hydroxide (NaOH) solution to a pH of exactly 7.00 (See Note 1)

$$\text{ACIDITY} = \text{pounds of NaOH} = \frac{A \times B \times C \times E \times F \times 1000}{V}$$

Where.

A = volume of standardized sodium hydroxide used to titrate the sample to a pH of exactly 7 00, in milliliters

B = concentration of the standardized sodium hydroxide in moles/liter.

C = the milli-molecular weight of sodium hydroxide and is 0.040 grams per millimole.

D = the conversion factor for converting grams into pounds and is 0 002204 pounds per gram.

E = the conversion factor for changing gallons per day into liters per day and is 3.785 liters per gallon.

F = the volume of waste discharged that is represented by the sample titrated, in gallons.

V = volume of sample titrated, in milliliters.

Note: the "1000" term is for converting milliliters into liters (mls/L)

CITY OF MEMPHIS
Division of Public Works

APPENDIX B

ACIDITY AND ALKALINITY (continued)

3. If the pH of a sample is greater than 7.00, then proceed to titrate the sample with a standardized hydrochloric acid (HCl) solution to a pH of exactly 7.00 (See Note 1).

$$\underline{\text{ALKALINITY}} = \text{pounds of } H_2SO_4 = \frac{G \times H \times K \times D \times E \times F \times 1000}{V \times 2}$$

Where:

G = volume of standardized hydrochloric acid required to titrate the sample to a pH of exactly 7.00, in milliliters

H = concentration of the standardized hydrochloric acid in moles/liter

K = the milli-molecular weight of sulfuric acid is 0.09808 grams per millimole.

The "D", "E", "F", "V", and "1000" terms have the same meaning as in the acidity calculation. The "2" term is due to the fact that sulfuric acid (H_2SO_4) has two (2) hydrogens that react with any alkalinity present.

NOTE 1: In many wastewater samples the reaction of the titrant with the sample is sluggish. This is because of the presence of buffers and/or solids matter which is slow to react In some cases it may take as much as 20 minutes to carry out a titration If the titration is sluggish then the most practical guide is to titrate slowly by adding titrant step wise and allowing the pH to stabilize. Do this until a pH of 7.00 is achieved and maintained for a period of at least 1 minute. It may require going beyond the end point by 0.01 pH units in order to ensure that a steady pH of 7 00 has been reached.

CITY OF MEMPHIS
Division of Public Works
TABLE I

Benzotrichloride
Beryllium
Bis(2-ethylhexl)phathalate (DEHP)
Bromobenzene
Bromodichloromethane
Bromoform
Carbon tetrachloride
Chlorodane
Chlorobenzene
Chlorodibromomethane
Chloroethane
Chloroform
2-Chlorophenol
O-hlorotoluene
P-Chlorotoluene
Cumene
DDT/DDE/DDD
1,2-Dibromo-3-Chloropane
Dibutylphathalate
1,4-Dichlorobenzene(p)
Hexachlorobutadiene
Isopropylbenzene
Lindane
Methyl chloride (Chloromethane)
Molybdenum
PCB-1260
Phenols
Pyrene
Octachlorodibenzo-P-Dioxin
Octachlorodibenzofuran
Total Heptachlorodibenzo-P-Dioxins
Total Heptachlorodibenzofurans
Total Hexachlorodibenzo-P-Dioxins
Total Hexachlorodibenzofurans
Total Pentachlorodibenzo-P-Dioxins
Total Pentachlorodibenzofurans
Total Tetrachlorodibenzo-P-Dioxins
Total Tetrachlorodibenzofurans
1,2,3,4,6,7,8-Heptchlorodibenzo-P-Dioxins
1,2,3,4,6,7,8-Heptachlorodibenzofuran
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin

1,2-Trans,dichloroethylene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropane
1,3-Dichloropropene
M-Dichlorobenzene
O-Dichlorobenzene
Para-Dichlorobenzene
Dieldrin
Diisobutylenes
Dimethlnitrosamine
2,4-Dinitrophenol
2,4-Dinitroluene
Ethyl benzene
Heptachlor
Hexachlorobenzene

Tin
Titanium
Toluene
Toxaphene (chlorinated camphene)
1,1,2-Trichloroethane
Trichloroethylene
1,2,3-Trichloropropane
Vinyl chloride
O,M, P-Xylenes
1, 1, 1,2-Tetrachloroethane

CITY OF MEMPHIS
Division of Public Works
TABLE I

1,2,3,4,7,8-Hexachlorodibenzofuran
1,2,3,4,7,8,9-Heptachlorodibenzofuran
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin
1,2,3,6,7,8-Hexachlorodibenzofuran
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin
1,2,3,7,8-Pentachlorodibenzofuran
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin
1,2,3,7,8,9-Hexachlorodibenzofuran
2,3,4,6,7,8-Hexachlorodibenzofuran
2,3,4,7,8-Pentachlorodibenzofuran
2,3,7,8-Tetrachlorodibenzo-P-Dioxin
2,3,7,8-Tetrachlorodibenzofuran

Approving Authority reserves the right to modify this list of materials prohibited from entering the POTW as may become necessary

CITY OF MEMPHIS
Division of Public Works

APPENDIX C

DAILY AVERAGE MAXIMUM LEVEL: For industries regularly furnishing sample results is the maximum monthly daily average during a year's time period computed using the average of any number of samples taken during the maximum month period.

DAILY AVERAGE MAXIMUM LEVEL: For industries not furnishing sample results each month is a maximum average for a week of operation for a year's duration. Reduced operation times, for example weekend reduction in production, are not to be included.

INSTANTANEOUS MAXIMUM LEVEL is defined according to the type of pollutants:

a). for compatible pollutants, it is defined as the maximum average concentration for a year's duration of a 24 hour period or daily operation period for a flow proportionate sample or if flow proportionate samples are not attainable, then a time proportionate sample during hours of operation

b) for incompatible pollutants, it is defined as the maximum level a any point in time and is determined by a grab sample at the time of maximum discharge of a parameter.

All priority pollutants are considered as incompatible. The pollutants that are considered compatible are listed below·

Biological Oxygen Demand (BOD_5)
Suspended Solids
Settleable Solids
Total Solids

Chemical Oxygen Demand (COD)
Total Organic Carbon (TOC)

Oil and Grease (Hydrocarbon Origin) limited to 100 ppm
Oil and Grease (Total)

Chlorides
Phosphate
Sulfates
Color
Acidity
Alkalinity

Temperature may never be above 150° F

pH limited range 5.5 to 10 0 Standard Units.

CITY 0F MEMPHIS
Division of Public Works

APPENDIX C

pH DISCHARGE LIMIT is an instantaneous reading of any discharge into the sanitary sewer and not an average of any kind, unless specified.

MINIMUM pH LIMIT is 5.5 Standard Units as specified in the Sewer Use Ordinance Sec. 33-103(c) and is an instantaneous minimum or a "at no time to fall below" this limit.

MAXIMUM pH LIMIT is 10.0 Standard Units as specified in the Sewer Use Ordinance Sec. 33103(c) and is an instantaneous maximum or a "at no time be above" this limit. Any discharge into the sanitary sewer above 10.0 Standard Units must have prior approval from the City of Memphis.

TO CONVERT CONCENTRATION GIVEN IN milligrams per liter (mg/l) to pounds per day (#/day) for a given pollutant, the following formula is used:

Pounds per day = volume of wastewater discharged (MGD) X concentration (mg/l) X 8.34 (conversion factor)

The volume of wastewater discharged in MGD (million gallons per day) is obtained from data shown in Section D of D.I - Wastewater Characteristics, List of Daily average volume of discharge into the sanitary sewer in gallons per day Divide the data in gallons per day by one million to convert it to MGD

CITY OF MEMPHIS
Division of Public Works
TABLE 2

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GUIDANCE CONCENTRATIONS IN MUNICIPAL SEWAGE TREATMENT INFLUENT

Parameter	South Plant Average Influent Concentrations	North Plant Average Influent Concentrations
BOD (Biochemical oxygen demand)	(1)	(1)
SS (Settleable solids)	(1)	(1)
TSS (Total suspended solids)	(1)	(1)
Nitrogen (Total Kjeldahl)	(1)	(1)
pH	6-9	6-9
Temperature	(2)	(2)
Arsenic	-	-
Cadmium	0.005 ppm	0.005 ppm
Chromium (Hexavalent)	-	-
Chromium (Total)	0.375 ppm	0.375 ppm
Cyanide (Oxidizable)	-	-
Cyanide (Total)	0.605 ppm	0.605 ppm
Lead	0.25 ppm	0.25 ppm
Mercury	0.0042 ppm	0.0042 ppm
Nickel	0.273 ppm	0.273 ppm
Zinc	1.0 ppm	1 0 ppm
Copper	0.5 ppm	0 5 ppm
Silver	0.0294 ppm	0.0294 ppm
Phenols	4 5 ppm	4 5 ppm
Oil & Grease	100 ppm	100 ppm
Toluene	0 429 ppm	2.0 ppm
Phenol	1.273 ppm	0.909 ppm
Methylene Chloride	0.25 ppm	0.25 ppm
Benzene	0.043 ppm	0.043 ppm
1,1,1-Trichloroethane	0.5 ppm	0.25 ppm
Ethyl Benzene	0.04 ppm	0.04 ppm
Carbon Tetrachloride	0.075 ppm	0.075 ppm
Chloroform	0.224 ppm	0.368 ppm
Tetrachloroethylene	0.139 ppm	0.139 ppm
Trichloethylene	0.150 ppm	0 150 ppm
1,2 Transdichloroethylene	0.030 ppm	0.030 ppm
Napthalene	0.312 ppm	0.312 ppm
Bis(2 Ethyl Hexyl Phthalate)	0.105 ppm	0.105 ppm
Butyl Benzl Phthalate	0.333 ppm	0.333 ppm
Di-n-butyl Phthalate	0.0625 ppm	0.0625 ppm
Diethyl Phthalate	0 222 ppm	0.222 ppm

CITY OF MEMPHIS
Division of Public Works
TABLE I

MAXIMUM EFFLUENT STANDARDS FOR DISCHARGE OF WASTE INTO THE MUNICIPAL SEWERAGE SYSTEM.

Constituent	Daily Average* Maximum Concentration mg/l	Instantaneous Maximum Concentration mg/l
Biochemical oxygen demand	(1)	(1)
Settleable solids (ml/l)	(1)	(1)
Total suspended solids	(1)	(1)
Nitrogen (total Kjeldahl)	(1)	(1)
Arsenic	1.0	2.0
Cadmium	(2)	(2)
Chromium (hexavalent)	1.0	2.0
Chromium (total)	5.0	10 0
Copper	5.0	10.0
Cyanide (oxidizable)	2.0	4.0
Cyanide (total)	4.0	8.0
Lead	(2)	(2)
Mercury	(2)	(2)
Nickel	5.0	10 0
Zinc	5.0	10 0
Ammonia NH_3N	125	250

* Based on 24-hour flow-proportionate composite sample (1) consistent with treatment plant capacity (2) Cadmium, mercury, and lead discharges are severely restricted due to limitations placed on the disposal of sewage sludge containing cadmium, mercury, and/or lead. Actual allowable discharge concentrations for these constituents will be determined on a case by case basis.

No person shall discharge wastewater containing any of the materials listed herein into the municipal sewer system or shall have any connection to the municipal sewer system without obtaining written permission from the Approving Authority

Acrylonitrile
Alpha BHC
Aldrin
Aluminum
Barium
Benzene
Benzo (a) pyrene
3,3-Dichlorobenzidene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethlyene
Dichloroethyl ether(Bis(2-chloroethyl))
1,2-Cis,dichloroethylene

CITY OF MEMPHIS
Division of Public Works
TABLE 2

MASS LIMITATIONS No individual shall discharge a mass loading of the compounds detailed in Table 2 more than 15% of the average allowable influent loading on an average maximum level. When comparing these mass limitations and the concentration based on limitation in Table 1, whichever limitation that is more restrictive will apply, unless a variance is obtained as described in paragraph (c) of this section.

(1) Consistent with treatment plant capacity as determined by the Division of Public Works. (2) Temperature always to be less than 104 degree Fahrenheit (40 degrees Centigrade)

APPENDIX D

METHOD OF SAMPLE COLLECTION FOR DETERMINATION
OF INSTANTANEOUS MAXIMUM LEVEL CONCENTRATION

(1) 24 HOUR FLOW PROPORTIONATE COMPOSITE SAMPLE, OR IF NECESSARY TIME COMPOSITE SAMPLE
(2) GRAB SAMPLE

PARAMETER	TYPE SAMPLE REQUIRED	CLASSIFICATION
BOD_5	1	COMPATIBLE
BOD_{20}	1	COMPATIBLE
SUSPENDED SOLIDS	1	COMPATIBLE
SETTLEABLE SOLIDS	1	COMPATIBLE
TOTAL SOLIDS	1	COMPATIBLE
TEMPERATURE - MAY NEVER BE ABOVE 150°F	2	INCOMPATIBLE ABOVE 150°F
PH RANGE 5.5 - 10.0 STANDARD UNITS MAY NEVER BE BELOW 5.5	2	INCOMPATIBLE BELOW 5.5
COD	1	COMPATIBLE
OIL & GREASE (HYDROCARBON ORIGIN)	2	INCOMPATIBLE ABOVE 100 PPM
OIL & GREASE (TOTAL)	2	INCOMPATIBLE ABOVE 100 PPM
CYANIDES	2	INCOMPATIBLE
PESTICIDES	2	INCOMPATIBLE
VOLATILE COMPOUNDS	2	INCOMPATIBLE
SULFIDES	2	INCOMPATIBLE
SULFATES	1	COMPATIBLE
CHLORIDES	1	COMPATIBLE
COLOR	1	COMPATIBLE
TOC	1	COMPATIBLE
RADIOACTIVE MATERIAL	2	INCOMPATIBLE
CHLORINE DEMAND	2	INCOMPATIBLE
ACIDITY	1	COMPATIBLE
ALKALINITY	1	COMPATIBLE
ARSENIC	2	INCOMPATIBLE
PHOSPHATE	1	COMPATIBLE
AMMONIA NITROGEN	2	INCOMPATIBLE
MERCURY	2	INCOMPATIBLE
CHROMIUM, HEXV.	2	INCOMPATIBLE
CHROMIUM TOTAL	2	INCOMPATIBLE
CADMIUM	2	INCOMPATIBLE
ZINC	2	INCOMPATIBLE
PHENOLS	2	INCOMPATIBLE
LEAD	2	INCOMPATIBLE
NICKEL	2	INCOMPATIBLE
COPPER	2	INCOMPATIBLE
IRON	2	INCOMPATIBLE
SILVER	2	INCOMPATIBLE
BARIUM	2	INCOMPATIBLE
PRIORITY POLLUTANTS	2	INCOMPATIBLE

CH2M HILL
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Oak Ridge TN
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CH2MHILL

June 17, 1998

110491.0M.ZZ

Mr. Rodney Thomas
Mr. Akil Al-Chokhachi
Division of Public Works
City of Memphis
Maynard C. Stiles Wastewater Treatment Plant
2303 North Second Street
Memphis, TN 38127-7500

Dear Mr. Thomas and Mr. Al-Chokhachi:

Subject: Use of Existing Groundwater Analytical Data During Startup of the Dunn Field Extraction Wells

Section F-1 of the Industrial Wastewater Discharge Agreement made between the City of Memphis and the Memphis Depot Caretaker, and signed on May 1st, 1998, requires sampling and analysis of the first 8 hours of recovered groundwater prior to discharge into the sanitary sewer. It is anticipated that operation of seven wells at a total of 390 gallons per minute (see Section B.6 of the permit) for eight hours will generate about 190,000 gallons requiring onsite storage for at least 14 days while the samples are analyzed and the data evaluated. Storage of this water will result in considerable expense and likely generate concern from residents along the northern perimeter of Dunn Field where the tanks would be located.

To avoid these issues, it is proposed that existing groundwater quality data be used instead of the initial 8-hour sampling currently required in Section F-1. Table 1 presents data obtained from sampling each of the seven groundwater recovery wells after development and capacity testing. The development water data was obtained from sampling the recovery wells after they were developed by pumping and surging. Development at each well typically required several hours of alternate pumping, at variable pumping rates, and surging. Capacity testing was performed after well development and consisted of pumping the wells at near their maximum capacity for about 90 minutes. The capacity testing groundwater quality samples were obtained soon after the pumping was completed.

Table 1 compares the well data to the monthly and one-day-maximum discharge water concentrations allowed in the permit. Maximum one-day permitted concentrations are

479 413

received
DEC 10 1998

City of Memphis
TENNESSEE

DR. W. W HERENTON - Mayor
RICK MASSON - Chief Administrative Officer
DIVISION OF PUBLIC WORKS
BENNY LENDERMON - Director
Maynard C. Stiles Wastewater Treatment Plant

December 8, 1998

Mr. Shawn Phillips
BRAC Environment Coordinator
Memphis Depot Caretaker
2163 Airways Blvd.
Memphis, TN 38114-5210

RE: Groundwater Remediation, Dunn Field
Discharge Agreement # S-NN3-097

Dear Mr. Phillips:

Please find enclosed a copy of the revised section (D) of Memphis Depot Caretaker's Industrial Wastewater Discharge Agreement. This revision is to include new limit for 1, 1, 2, 2, tetrachoroethaine with daily average of 0.500 mg/l and one day max of 1.00 mg/l.

If you should have any questions, please contact me at 353-2392.

Best regards,

Akil AL-Chokhachi
Environmental Engineer

xc: Jerry Collins
Rodney Thomas

2808 North Second Street, Memphis, Tennessee 38127-7500

received
DEC 4 1998

City of Memphis
TENNESSEE

DR. W. W HERENTON - Mayor
RICK MASSON - Chief Administrative Officer
DIVISION OF PUBLIC WORKS
BENNY LENDERMON - Director
Maynard C. Stiles Wastewater Treatment Plant

December 2, 1998

Mr. Shawn Phillips
BRAC Environment Coordinator
Memphis Depot Caretaker
2163 Airways Blvd.
Memphis, TN 38114-5210

RE: Groundwater Remediation, Dunn Field
Discharge Agreement # S-NN3-097

Dear Mr. Phillips:

Please find enclosed a copy of the revised section (D) of Memphis Depot Caretaker's Industrial Wastewater Discharge Agreement. This revision is to include limits for four (4) new parameters found to be present in the recent analysis of samples collected from the final discharge into the sanitary sewer.

If you should have any questions, please contact me at 353-2392.

Best regards,

Akil AL-Chokhachi
Environmental Engineer

xc: Jerry Collins
Rodney Thomas

2303 North Second Street, Memphis, Tennessee

12/07/98 MON 11:12 FAX 901 544 0638

479 415

City of Memphis
TENNESSEE

DR. W. W. HERENTON - Mayor
RICK MASSON - Chief Administrative Officer
DIVISION OF PUBLIC WORKS
BENNY LENDERMON - Director
Maynard C. Stiles Wastewater Treatment Plant

June 24, 1998

Mr. Greg Underberg
Program Manager
CH2MHill
151 Lafayotte Drive
Suite 110
Oak Ridge, Tennessee 37830-7187

RE: Discharge of Groundwater generated at the Dunn Field, Memphis
Discharge Agreement No. S-NN3-097

Dear Mr. Underberg:

This letter is in reference to your letter of June 17, 1998, regarding the self monitoring schedule Section F. 1 of the Industrial Wastewater Discharge Agreement issued to the Memphis Depot Caretaker for the above referenced site.

Your proposal to change the initial monitoring of the recovered groundwater has been approved as outlined in your letter. This approval is with the understanding that when all recovery wells are brought online, the monitoring of the discharge will be as required in Section F. of the permit.

If you should have any questions, please contact me at (901)353-2392.

Sincerely,

Akil AL-Chokhachi
Environmental Engineer

xc: Jerry Collins
Rodney Thomas
Shawn Phillips/DDSP-FE

T. Nathan Hasn

received
FEB 2 1999

479 416

City of Memphis

TENNESSEE

DR. W. W. HERENTON - Mayor
RICK MASSON - Chief Administrative Officer
DIVISION OF PUBLIC WORKS
BENNY LENDERMON - Director
Maynard C. Stiles Wastewater Treatment Plant

Thursday, January 28, 1999

Mr. Shawn Phillips
BRAC Environmental Coordinator
Memphis Depot Caretaker
2163 Airways Blvd
Memphis, Tennessee 38114-5210

Re. Industrial Wastewater Discharge Agreement No. S-NN3-097

Dear Mr. Phillips:

EPA is in the process of imposing a tighter Mercury discharge limit on the (POTW) Treatment Plant effluent discharge using a new analytical tests with a new detection limit (Method 1631 and detection limit of 0 2 ng/l).

The Industrial Discharge Agreement issued for Memphis Depot Caretaker shows a Mercury discharge limits of 0.001 mg/l daily average maximum level and 0 002 mg/l instantaneous maximum level, these levels were estimated at the time when the Discharge Agreement was established and were not based on actual data. We need to quantify a new Mercury limit that reflects the actual concentration in the groundwater recovered from the Dunn field site located at the Memphis Depot property.

Memphis Depot Caretaker is required to conduct a monitoring program which consist of collecting a minimum of four (4) grab or composite samples from the final discharge during one (1) week of a normal plant operation and analyze these samples for Mercury using the current detection limit of 0.2 ug/l or a lower detection limit of 0.2 ng/l. This program should be conducted during the month of February 1999 and the data should be submitted by March 15, 1999 to our office for review.

We will schedule a meeting at our office at a later date to review the Mercury issue and determine the discharge limit if needed.

If you should have any questions, please contact me at 353-2392.

Sincerely,

Akil AL-Chokhachi
Environmental Engineer

c: Jerry Collins
Rodney Thomas

TAB

Appendix N

TAB

Monthly Operations Report

479 419

DEFENSE LOGISTICS AGENCY
MEMPHIS DEPOT CARETAKER
2163 AIRWAYS BOULEVARD
MEMPHIS, TENNESSEE 38114-5210

IN REPLY REFER TO DDSP-FE

Jun. 11, 1999

Mr. Akil Al-Chokhachi
City of Memphis
Division of Public Works
2303 North Second Street
Memphis, TN 38127-7500

Dear Mr. Al-Chokhachi:

Please find enclosed the following documents for the sampling results from the groundwater we are extracting from Dunn Field for May 1999. We do not exceed any discharge agreement parameters.

1 Spreadsheet Summary of Analytical Results.
2. Analytical Data from sampling the groundwater.
3 Monthly Discharged Report Groundwater Flow for May 1999.

Please contact me at 544-0611 if you have any other questions.

Sincerely,

SHAWN PHILLIPS
BRAC Environmental Coordinator

Enclosure

cc:
Rodney Thomas, City of Memphis
Jordan English, TDEC
Turpin Ballard, USEPA

Summary of Analytical Results for Total Effluent (through May 1999)
of the Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Sample Identification Number			ST-EFF-11	ST-INF-11 (Duplicate)	ST-EFF-12	City of Memphis
Laboratory ID No			9904750-01	9904750-02	9905639-01	Industrial Wastewater
Total System Effluent Sample Description			Week 26 of System Operation (O&M)		Week 30 of System Operation (O&M)	
Date Effluent Sample Collected			27-Apr-99		24-May-99	–
Instantaneous Flow Rate			105 3 GPM/151,632 GPD		87 9 GPM/126,576 GP	561,600 GPD
Totalized Flow			32,187,260 GAL		36,220,118 GAL	–
LABORATORY ANALYSE	DL	Units				*Monthly Ave / One Day Max.*
pH (Method 150 1)	–	SU	6 6	6 2	6 0	5 5 to 10 0
TAL Metals (EPA 200 Series)						*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	ND	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	ND	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 108	0 114	0 11	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	ND	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	23	22 8	23 1	NS
Chromium (Method 200 7)	0 009	mg/L	ND	ND	ND	0.2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 025	0 034	0 012	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	11 6	11 7	11 4	NS
Manganese (Method 200 7)	0 003	mg/L	0 029	0 03	0 031	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	ND	0 1 / 0 3
Potassium (Method 200 7)	0 25	mg/L	0 728	0 859	0 844	NS
Sodium (Method 200 7)	0 05	mg/L	22 9	24 1	24.2	NS
Zinc (Method 200 7)	0 01	mg/L	0 04	0 045	0 047	0 3 / 1 0
TCL Volatile Organics (Method 8260B)						*ug/L*
Carbon Tetrachloride	1	ug/L	1 47	1 61	2.25	20 / 40
Chloroform	1	ug/L	6 63	7 15	4 54	20 / 40
1,1-Dichloroethane	1	ug/L	11 8	11 8	16 2	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	37	37 2	42 8	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	9 77	9 7	12 0	50 / 100
Methylene Chloride	5	ug/L	ND	ND	ND	10 / 20
1,1,2,2-Tetrachloroethane	1/10/50	ug/L	38 9	39 2	58 1	500 / 1000
Tetrachloroethene	1	ug/L	12 9	13 6	16 1	60 / 120
Toluene	1	ug/L	ND	ND	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	10 / 20
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	50 / 100
Trichloroethene	1/10/50	ug/L	116	117	150	400 / 800
TCL Semi-Volatile Organics (Method 8270C)						*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	14 1B	13 6B	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	ND	10 / 20

NOTE. Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement

All analyses performed by Environmental Testing & Consulting Inc., Memphis TN

* = Recovery well RW-09 was not in operation at the time of sample collection

** = Recovery well RW-06 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

ND = not detected

mg/L = milligrams per liter

DL = detection limit

GPD = gallons per day

B = analyte detected in associated method and/or equipment blank

ug/L = micrograms per liter

GPM = gallons per minute

91.2 = bold number indicates that value exceeds Discharge Max. Levels

479 420

479 421

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

June 3, 1999

Ms. Betsy McDaniel
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Ref: Analytical Testing
ETC Order # 9905639
Project Description DDMT

Project # 920022 Defense Depot - Memphis, TN

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 422

ANALYTICAL SUMMARY TABLE

Client Name OHM Remediation Services
Site ID DDMT
Memphis, TN

Sample ID	Field ID	Matrix	Method	Method Description
0563901	ST-EFF-12	AQUEOUS	200.7	Silver
0563901	ST-EFF-12	AQUEOUS	200.7	Aluminum
0563901	ST-EFF-12	AQUEOUS	206.2	Arsenic
0563901	ST-EFF-12	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
0563901	ST-EFF-12	AQUEOUS	200.7	Barium
0563901	ST-EFF-12	AQUEOUS	200.7	Beryllium
0563901	ST-EFF-12	AQUEOUS	200.7	Calcium
0563901	ST-EFF-12	AQUEOUS	200.7	Cadmium
0563901	ST-EFF-12	AQUEOUS	200.7	Cobalt
0563901	ST-EFF-12	AQUEOUS	200.7	Chromium
0563901	ST-EFF-12	AQUEOUS	200.7	Copper
0563901	ST-EFF-12	AQUEOUS	200.7	Iron
0563901	ST-EFF-12	AQUEOUS	245.1	Mercury
0563901	ST-EFF-12	AQUEOUS	200.7	Potassium
0563901	ST-EFF-12	AQUEOUS	200.7	Magnesium
0563901	ST-EFF-12	AQUEOUS	200.7	Manganese
0563901	ST-EFF-12	AQUEOUS	200.7	Sodium
0563901	ST-EFF-12	AQUEOUS	200.7	Nickel
0563901	ST-EFF-12	AQUEOUS	200.7	Lead
0563901	ST-EFF-12	AQUEOUS	150.1	pH
0563901	ST-EFF-12	AQUEOUS	200.7	Antimony
0563901	ST-EFF-12	AQUEOUS	200.7	Selenium
0563901	ST-EFF-12	AQUEOUS	200.7	Thallium
0563901	ST-EFF-12	AQUEOUS	8260B	GC/MS Volatile Organics
0563901	ST-EFF-12	AQUEOUS	200.7	Vanadium
0563901	ST-EFF-12	AQUEOUS	200.7	Zinc
0563902	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 423

ORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 05/25/99
C Order Number 9905639

C Lab ID 9905639-01
mple ID: ST-EFF-12

Matrix :AQUEOUS
Sample Date :05/24/99

:T	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
MS Volatile Organics							8260B
					05/29/99	LS	
C Batch	V1052901	ug/L					
cetone	ND	ug/L	50.0				
enzene	ND	ug/L	1.00				
romodichloromethane	ND	ug/L	1.00				
romoform	ND	ug/L	1.00				
romomethane	ND	ug/L	1.00				
arbon Disulfide	ND	ug/L	1.00				
arbon Tetrachloride	2.25	ug/L	1.00				
hlorobenzene	ND	ug/L	1.00				
hlorodibromomethane	ND	ug/L	1.00				
hloroethane	ND	ug/L	1.00				
hloroform	4.54	ug/L	1.00				
hloromethane	ND	ug/L	1.00				
,1-Dichloroethane	ND	ug/L	1.00				
,2-Dichloroethane	ND	ug/L	1.00				
,1-Dichloroethene	16.2	ug/L	1.00				
rans-1,2-Dichloroethene	12.0	ug/L	1.00				
,2-Dichloropropane	ND	ug/L	1.00				
is-1,3-Dichloropropene	ND	ug/L	1.00				
rans-1,3-Dichloropropene	ND	ug/L	1.00				
thylbenzene	ND	ug/L	1.00				
-Hexanone (MBK)	ND	ug/L	5.00				
-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
-Butanone (MEK)	ND	ug/L	20.0				
ethylene Chloride	ND	ug/L	5.00				
tyrene	ND	ug/L	1.00				
,1,2,2-Tetrachloroethane	56.1	ug/L	1.00				
etrachloroethene	16.1	ug/L	1.00				
oluene	ND	ug/L	1.00				
,1,1-Trichloroethane	ND	ug/L	1.00				
,1,2-Trichloroethane	ND	ug/L	1.00				
richloroethene	150	ug/L	1.00				
inyl Acetate	ND	ug/L	20.0				
inyl Chloride	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
is-1,2-Dichloroethene	42.8	ug/L	1.00				

rr ate Standard	% Recovery	QC Limits	
bromofluoromethane	98	74	123
oluene-d8	100	86	112
4-Bromofluorobenzene	98	81	115

ORATORY MANAGER

ND - Not Detected

P.6/11

ENVIRONMENTAL TESTING & CONSULTING, INC. 479 424

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

lient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 05/25/99
C Order Number 9905639

C Lab ID 9905639-02 Matrix :AQUEOUS
mple ID: Trip Blank Sample Date :05/24/99

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Volatile Organics							8260B
					05/29/99	LS	
QC Batch	V1052901	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
Dibromofluoromethane	100	74	123
Toluene-d8	100	86	112
4-Bromofluorobenzene	98	91	115

BORATORY MANAGER

ND - Not Detected

P.7/11

479 425

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

.ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

.te ID DDMT
Memphis, TN

.te Arrived 05/25/99
C Order Number 9905639

C Lab ID 9905639-01
mple ID: ST-EFF-12

Matrix :AQUEOUS
Sample Date :05/24/99

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	6.0	SU		1700	05/25/99	RB	150.1

BORATORY MANAGER

P.8/11

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

lient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

ite ID DDMT
Memphis, TN

ate Arrived 05/25/99
TC Order Number 9905639

TC Lab ID 9905639-01
ample ID: ST-EFF-12

Matrix :AQUEOUS
Sample Date :05/24/99

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
rcury Digestion Batch	V5-AQ-17					RM	245.1
tals Digestion Batch	V15-AQ-84					NR	3030K
lver	<0.009	mg/L	0.009	1305	05/28/99	TD	200.7
uminum	<0.060	mg/L	0.060	1305	05/28/99	TD	200.7
senic	<0.003	mg/L	0.003	1329	06/01/99	JF	206.2
rium	0.110	mg/L	0.003	1305	05/28/99	TD	200.7
ry ium	<0.002	mg/L	0.002	1305	05/28/99	TD	200.7
l	23.1	mg/L	0.015	1305	05/28/99	TD	200.7
dmium	<0.005	mg/L	0.005	1305	05/28/99	TD	200.7
balt	<0.009	mg/L	0.009	1305	05/28/99	TD	200.7
romium	<0.009	mg/L	0.009	1305	05/28/99	TD	200.7
pper	<0.008	mg/L	0.008	1305	05/28/99	TD	200.7
on	0.012	mg/L	0.009	1305	05/28/99	TD	200.7
rcury	<0.0002	mg/L	0.0002	0954	05/28/99	RM	245.1
tassium	0.844	mg/L	0.250	1305	05/28/99	TD	200.7
gnesium	11.4	mg/L	0.040	1305	05/28/99	TD	200.7
nganese	0.031	mg/L	0.003	1305	05/28/99	TD	200.7
dium	24.2	mg/L	0.050	1305	05/28/99	TD	200.7
ckel	<0.020	mg/L	0.020	1305	05/28/99	TD	200.7
ad	<0.060	mg/L	0.060	1305	05/28/99	TD	200.7
timony	<0.040	mg/L	0.040	1305	05/28/99	TD	200.7
lenium	<0.100	mg/L	0.100	1305	05/28/99	TD	200.7
allium	<0.065	mg/L	0.065	1305	05/28/99	TD	200.7
nadium	<0.010	mg/L	0.010	1305	05/28/99	TD	200.7
nc	0.047	mg/L	0.010	1305	05/28/99	TD	200.7

BORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 427

ORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

Site ID DDMT
Memphis, TN

Date Arrived 05/25/99
TC Order Number 9905639

TC Lab ID 9905639-01
Sample ID: ST-EFF-12

Matrix :AQUEOUS
Sample Date :05/24/99

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Base/Neutral & Acid							8270C
				05/27/99	05/27/99	CB	
QC Batch	P05181	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Be (a)pyrene	ND	ug/L	2.00				
Be ic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	13.6B	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
,2-Dichlorobenzene	ND	ug/L	5.00				
,3-Dichlorobenzene	ND	ug/L	5.00				
,4-Dichlorobenzene	ND	ug/L	5.00				
,3'-Dichlorobenzidine	ND	ug/L	10.0				
,4-Dichlorophenol	ND	ug/L	5.00				
,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
,4-Dinitrophenol	ND	ug/L	50.0				
,4-Dinitrotoluene	ND	ug/L	5.00				
,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fl anthene	ND	ug/L	2.00				
Fl ne	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

ND - Not Detected

LABORATORY MANAGER

P.10/11

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 428

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

Site ID DDMT
Memphis, TN

Date Arrived 05/25/99
TC Order Number 9905639

TC Lab ID 9905639-01
Sample ID: ST-EFF-12

Matrix :AQUEOUS
Sample Date :05/24/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				05/27/99	05/27/99	CB	8270C
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
1 - Nitrobenzene-d5	92	29	110
2 - 2-Fluorobiphenyl	72	38	107
3 - 4-Terphenyl-d14	144 Q	33	122
4 - Phenol-d6	40	7	58
5 - 2,4,6-Tribromophenol	119	16	138
6 - 2-Fluorophenol	50	8	88

LABORATORY MANAGER

ND - Not Detected

P.11/11

May 1999 Monthly Discharge Report
Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Groundwater Recovery System Operation - May 1999

Total Effluent Discharge through April 30, 1999	33,346,115 Gallons	
Duration of System Operation:	30-Apr-99 to 31-May-99	

System Operational Notes:

1). The totalizing effluent meter was repaired by the manufacturer and installed back on-line 01-May-99

2). The totalizing effluent meter functioned for approximately seven (7) days before failing again for unknown reasons. The module was returned to the manufacturer for a diagnostic evaluation on 21-May-99. The need for additional power surge protection at this location or a different meter will need to be decided upon receipt of the manufacturer's evaluation.

3). RW-9 encountered low-level shutoff conditions several times this month. The recovery well was tuned to achieve a lower pumping rate which should allow for a greater run time percentage for June-99.

Recovery Well Operational Notes:	9-May-99	All wells shut down for 3 hours due to power outage.
	9-May-99 to 12-May-99	RW-5 and RW-6 remained down from power outage and required manual start-up, due to high pumping rates at startup which engage the low-level shutoffs within seconds.

Low groundwater level conditions continue to cause an overall decrease in recovery well pumping rates. Program tuning during April-99 has demonstrated to be effective as recovery wells pumping run times have increased to nearly 100%. The exception, RW-9, was recently tuned as described above. The tracking of each recovery well's operation was conducted manually as a check on telemetry operation. Recordings were compiled to estimate each well's performance using optimal flow rates, totalized discharged volume and low level cycling to yield the following run time percentages.

Well I.D.	% Run Time in May-99
RW - 3	99%
RW - 4	97%
RW - 5	99%
RW - 6	92%
RW - 7	100%
RW - 8	100%
RW - 9	90%

Total May 1999 Effluent Discharge Volume:	**3,769,235 Gallons**	30-Apr-99 through 31-May-99
May 1999 Average Discharge Flow Rate	83.2 GPM	
May 1999 Maximum Discharge Flow Rate	90.1 GPM	on 19-May-99
May 1999 Minimum Discharge Flow Rate	63.8 GPM	on 9-May-99
System Effluent Sample Collected:	24-May-99	Week 30 of System Operation
Total System Effluent through 31 May 1999:	**37,115,350 Gallons**	

DEFENSE LOGISTICS AGENCY
DEFENSE DEPOT SUSQUEHANNA, PENNSYLVANIA
MEMPHIS DEPOT CARETAKER DIVISION
2163 AIRWAYS BOULEVARD
MEMPHIS, TENNESSEE 38114-5210

479 430

IN REPLY REFER TO DDSP-FE

May 10, 1999

Mr. Akil Al-Chokhachi
City of Memphis
Division of Public Works
2303 North Second Street
Memphis, TN 38127-7500

Dear Mr. Al-Chokhachi:

Please find enclosed the following documents for the sampling results from the groundwater we are extracting from Dunn Field for April 1999. We do not exceed any discharge agreement parameters.

1. Spreadsheet Summary of Analytical Results.
2. Analytical Data from sampling the groundwater.
3. Monthly Discharge Report Groundwater Flow for April 1999.

Please contact me at 544-0611, if you have any questions.

Sincerely,

SHAWN PHILLIPS
BRAC Environmental Coordinator

Enclosure

cc:
Rodney Thomas, City of Memphis
Jordan English, TDEC
Turpin Ballard, USEPA

Summary of Analytical Results for Total Effluent (through April 1999) of the Groundwater Recovery System Dunn Field, Memphis Depot, Tennessee

Sample Identification Number			ST-EFF-10	ST-EFF-11	ST-INF-11 (Duplicate	City of Memphis Industrial Wastewater Discharge Max Levels
Laboratory ID No.				9904750-01	9904750-02	
Total System Effluent Sample Description			Week 21 of System Operation (O&M)	Week 26 of System Operation (O&M)		
Date Effluent Sample Collected			26-Mar-99	27-Apr-99		--
Instantaneous Flow Rate			94 3 GPM/135,792 GPD	105 3 GPM/151,632 GPD		561,600 GPD
Totalized Flow			28,964,822 GAL	32,187,260 GAL		--
LABORATORY ANALYSE	DL	Units				*Monthly Ave / One Day Max.*
pH (Method 150 1)	--	SU	5 7	6 6	6 2	5 5 to 10 0
TAL Metals (EPA 200 Series)						*mg/L*
Aluminum (Method 200 7)	0.06	mg/L	ND	ND	ND	1 / 2
Arsenic (Method 206 2)	0.003	mg/L	ND	ND	ND	0 04 / 0 1
Barium (Method 200 7)	0.003	mg/L	0 106	0 108	0 114	NS
Cadmium (Method 200 7)	0.005	mg/L	ND	ND	ND	0 01 / 0 02
Calcium (Method 200.7)	0 015	mg/L	22 7	23	22 8	NS
Chromium (Method 200 7)	0 009	mg/L	ND	ND	ND	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	0 2 / 0 4
Iron (Method 200.7)	0 009	mg/L	0 034	0 025	0 034	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	11 3	11 6	11 7	NS
Manganese (Method 200 7)	0 003	mg/L	0 04	0 029	0 03	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	ND	0 1 / 0 3
Potassium (Method 200 7)	0.25	mg/L	0 861	0 728	0 859	NS
Sodium (Method 200 7)	0 05	mg/L	23 8	22 9	24 1	NS
Zinc (Method 200 7)	0.01	mg/L	0 069	0 04	0 045	0 3 / 1 0
TCL Volatile Organics (Method 8260B)						*ug/L*
Carbon Tetrachloride	1	ug/L	2 17	1 47	1 61	20 / 40
Chloroform	1	ug/L	5 59	6 63	7 15	20 / 40
1,1-Dichloroethene	1	ug/L	13 9	11 6	11 8	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	37	37	37 2	50 / 100
Trans 1 2-Dichloroethene	1	ug/L	10 8	9 77	9 7	50 / 100
Methylene Chloride	5	ug/L	ND	ND	ND	10 / 20
1 1,2,2-Tetrachloroethane	1/10/50	ug/L	29 3	38 9	39 2	500 / 1000
Tetrachloroethene	1	ug/L	18 7	12 9	13 6	60 / 120
Toluene	1	ug/L	ND	ND	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	10 / 20
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	50 / 100
Trichloroethene	1/10/50	ug/L	116	116	117	400 / 800
TCL Semi-Volatile Organics (Method 8270C)						*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	24 4B	ND	14 1B	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	ND	10 / 20

NOTE Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement.

All analyses performed by Environmental Testing & Consulting Inc Memphis, TN

* = Recovery well RW-09 was not in operation at the time of sample collection

** = Recovery well RW-08 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

ND = not detected

B = analyte detected in associated method and/or equipment blank

mg/L = milligrams per liter

ug/L = micrograms per liter

DL = detection limit

GPM = gallons per minute

GPD = gallons per day

91.2 = bold number indicates that value exceeds Discharge Max. Levels

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

May 4, 1999

Ms. Betsy McDaniel
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Ref: Analytical Testing
ETC Order # 9904750
Project Description DDMT

Project # 920022 Defense Depot - Memphis, TN

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

RECEIVED
MAY 7 1999

THU 10 99 09:31AM OHM NORCROSS

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY TABLE

479 434

Client Name OHM Remediation Services
Site ID DDMT
Memphis, TN

ETC Sample ID	Field ID	Matrix	Method	Method Description
990475001	ST-EFF-11	AQUEOUS	200.7	Silver
990475001	ST-EFF-11	AQUEOUS	200.7	Aluminum
990475001	ST-EFF-11	AQUEOUS	206.2	Arsenic
990475001	ST-EFF-11	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
990475001	ST-EFF-11	AQUEOUS	200.7	Barium
990475001	ST-EFF-11	AQUEOUS	200.7	Beryllium
990475001	ST-EFF-11	AQUEOUS	200.7	Calcium
990475001	ST-EFF-11	AQUEOUS	200.7	Cadmium
990475001	ST-EFF-11	AQUEOUS	200.7	Cobalt
990475001	ST-EFF-11	AQUEOUS	200.7	Chromium
990475001	ST-EFF-11	AQUEOUS	200.7	Copper
990475001	ST-EFF-11	AQUEOUS	200.7	Iron
990475001	ST-EFF-11	AQUEOUS	245.1	Mercury
990475001	ST-EFF-11	AQUEOUS	200.7	Potassium
990475001	ST-EFF-11	AQUEOUS	200.7	Magnesium
990475001	ST-EFF-11	AQUEOUS	200.7	Manganese
990475001	ST-EFF-11	AQUEOUS	200.7	Sodium
990475001	ST-EFF-11	AQUEOUS	200.7	Nickel
990475001	ST-EFF-11	AQUEOUS	200.7	Lead
990475001	ST-EFF-11	AQUEOUS	150.1	pH
990475001	ST-EFF-11	AQUEOUS	200.7	Antimony
990475001	ST-EFF-11	AQUEOUS	200.7	Selenium
990475001	ST-EFF-11	AQUEOUS	200.7	Thallium
990475001	ST-EFF-11	AQUEOUS	8260B	GC/MS Volatile Organics
990475001	ST-EFF-11	AQUEOUS	200.7	Vanadium
990475001	ST-EFF-11	AQUEOUS	200.7	Zinc
990475002	ST-INF-11	AQUEOUS	200.7	Silver
990475002	ST-INF-11	AQUEOUS	200.7	Aluminum
990475002	ST-INF-11	AQUEOUS	206.2	Arsenic
990475002	ST-INF-11	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
990475002	ST-INF-11	AQUEOUS	200.7	Barium
990475002	ST-INF-11	AQUEOUS	200.7	Beryllium
990475002	ST-INF-11	AQUEOUS	200.7	Calcium
990475002	ST-INF-11	AQUEOUS	200.7	Cadmium
990475002	ST-INF-11	AQUEOUS	200.7	Cobalt
990475002	ST-INF-11	AQUEOUS	200.7	Chromium
990475002	ST-INF-11	AQUEOUS	200.7	Copper
990475002	ST-INF-11	AQUEOUS	200.7	Iron
990475002	ST-INF-11	AQUEOUS	245.1	Mercury
990475002	ST-INF-11	AQUEOUS	200.7	Potassium
990475002	ST-INF-11	AQUEOUS	200.7	Magnesium
990475002	ST-INF-11	AQUEOUS	200.7	Manganese
990475002	ST-INF-11	AQUEOUS	200.7	Sodium
990475002	ST-INF-11	AQUEOUS	200.7	Nickel
990475002	ST-INF-11	AQUEOUS	200.7	Lead
990475002	ST-INF-11	AQUEOUS	150.1	pH
990475002	ST-INF-11	AQUEOUS	200.7	Antimony
990475002	ST-INF-11	AQUEOUS	200.7	Selenium
990475002	ST-INF-11	AQUEOUS	200.7	Thallium
990475002	ST-INF-11	AQUEOUS	8260B	GC/MS Volatile Organics
990475002	ST-INF-11	AQUEOUS	200.7	Vanadium
990475002	ST-INF-11	AQUEOUS	200.7	Zinc
990475003	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

000002

P.4/19

MAY 10 '99 09:32AM OHM NORCROSS

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

MAY 10 '99 09:32AM OHM NORCROSS
P.5/19

9904750

479 436

OHM Remediation Services Corp

Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

PROJECT# 920022 WBS# 89000000 PO#

LABORATORY COPY
218175
FORM 0019 REV. 2

360004

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
~~Elena Rodriguez~~ Betsy McDaniel	770-734-8060	770-453-7716	ETC	Nathan Pera	OHM Remediation Services/IT Corp.
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDMT	Memphis, TN	920022	901-327-2750	901-327-6334	~~Elena Rodriguez~~ Betsy McDaniel
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-775-0173	901-775-2517	2924 Walnut Grove Road		5445 Triangle Pkwy, Suite 400
PROJECT ADDRESS	**CITY STATE AND ZIPCODE**	**CLIENT**	**CITY STATE AND ZIPCODE**		**CITY STATE AND ZIPCODE**
1708 Dunn Ave.	Memphis, TN 38114	USACE	Memphis, TN 38111		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: TCL VOC 8260B	TCL SVOC 8270C	TAL Metals 6010B/7000s	pH	Comments
1	ST-EFF-11	WATER	4/27/99	1205	HCl HNO3	21	level 3	7 days	X	X	X	X	Please fax results on DUE DATE to SITE and to Lab Coordinator.
2	ST-INF-11	WATER	4/27/99	1209	HCl HNO3	7	level 3	7 days	X	X	X	X	
3	TRIP BLANK	WATER	—	—	HCl	2	level 3	7 days	X				Please run matrix spike and matrix spike duplicate with the bottles of water from sample ST-EFF-11.
4													
5													
6													
7													
8													
9													
10													

SAMPLES COLLECTED BY: Greg Schaefer

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
Greg Schaefer (Sampler)	FEDEX	4/27/99	1315	4°C

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

MAY 10 '99 09:32AM OHM NORCROSS P.6/19

COOLER RECEIPT FORM

LIMS #: 9904-750 Number of Coolers: 1
Date Received: 4/27/99
VDTSR: 4/27/99 1600

PROJECT: UDMT

USE OTHER SIDE OF THIS FORM TO NOTE DETAILS CONCERNING CHECK-IN PROBLEMS

A. PRELIMINARY EXAMINATION PHASE: Date cooler was opened: 4/27/99
by (print): Rebekah Barger (sign): RBarger

1. Did cooler come with a shipping slip (airbill,etc.)? ..... NO
If YES, enter carrier name & airbill number: Hand-Delivered

2a. Were custody seals on outside of cooler? ..... NO
2b. Were custody seals on sample containers? ..... NO

3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES

4. Did you screen samples for radioactivity using a Geiger Counter? ..... NO

5. Were custody papers sealed in a plastic bag & taped inside to the lid? ..... YES

6. Were custody papers filled out properly (ink, signed, etc.)? ..... YES

7. Did you sign custody papers in the appropriate place? ..... YES

8. Was project identifiable from custody papers? If YES, enter project name at top of this form ..... YES

9. If required, was enough ice used? cooler temp: <4oC c, Type of ice: Bagged ..... YES

10. Have designated person initial here to acknowledge receipt of cooler: RB date: 4/27/99

B. LOG-IN PHASE: Date samples were logged-in: 4/27/99
by (print): Rebekah Barger (sign): RBarger

11. Describe type of packing in cooler: Loose Ice,Bubble Wrap

12. Were all bottles sealed in separate plastic bags? ..... NO

13. Did all bottles arrive unbroken and were labels in good condition? ..... YES

14. Were all bottle labels complete (ID, date, time, signature, preserved, etc.)? ..... YES

15. Did all bottle labels agree with custody papers? ..... YES

16. Were correct containers used for the tests indicated? ..... YES

17. Were correct preservatives added to samples? ..... YES

18. Was a sufficient amount of sample sent for tests indicated? ..... YES

19. Were bubbles absent in VOA samples? If NO, list by sample#: ..... YES

20. Was the project manager called and status discussed? If YES, give details on the back of this form.... NO

21. Who was called? NA By whom ? NA (date) NA

VDTSR - Validated Date/Time of Sample Receipt (Date sample is logged into LIMS system)

MAY 19 99 09:33AM OHM NORCROSS P.7/19

Environmental Testing & Consulting, Inc.

Sample Reports

MAY 10 99 09:33AM OHM NORCROSS P.8/19

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
Site ID DDMT
Memphis, TN

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID **9904750-01** Matrix :AQUEOUS
Sample ID: ST-EFF-11 Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE PREPARED	DATE ANALYZED	ANALYSIS METHOD	QC BATCH
pH	6.6	SU			04/27/99	150.1	PH042799

LABORATORY MANAGER

P.9/19

MAY 10 '99 09:33AM OHM NORCROSS

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

Client Name **OHM Remediation Services**
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
Site ID DDMT
Memphis, TN

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID **9904750-02** Matrix :AQUEOUS
Sample ID: ST-INF-11 Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE PREPARED	DATE ANALYZED	ANALYSIS METHOD	QC BATCH
pH	6.2	SU			04/27/99	150.1	PH042799

LABORATORY MANAGER

MAY 10 '99 09:34AM OHM NORCROSS P.10/19

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

Client Name: OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

Site ID: DDMT
Memphis, TN

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID **9904750-01**
Sample ID: ST-EFF-11

Matrix :AQUEOUS
Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
Mercury Digestion Batch	V5-AQ-01			0806		RM	245.1
Metals Digestion Batch	V15-AQ-33			1035		NR	3030K
Silver	<0.009	mg/L	0.009	1247	05/03/99	TD	200.7
Aluminum	<0.060	mg/L	0.060	1247	05/03/99	TD	200.7
Arsenic	<0.003	mg/L	0.003	1033	05/04/99	JF	206.2
Barium	0.108	mg/L	0.003	1247	05/03/99	TD	200.7
Beryllium	<0.002	mg/L	0.002	1247	05/03/99	TD	200.7
Calcium	23.0	mg/L	0.015	1247	05/03/99	TD	200.7
Cadmium	<0.005	mg/L	0.005	1247	05/03/99	TD	200.7
Cobalt	<0.009	mg/L	0.009	1247	05/03/99	TD	200.7
Chromium	<0.009	mg/L	0.009	1247	05/03/99	TD	200.7
Copper	<0.008	mg/L	0.008	1247	05/03/99	TD	200.7
Iron	0.025	mg/L	0.009	1247	05/03/99	TD	200.7
Mercury	<0.0002	mg/L	0.0002	1520	04/29/99	RM	245.1
Potassium	0.728	mg/L	0.250	1247	05/03/99	TD	200.7
Magnesium	11.6	mg/L	0.040	1247	05/03/99	TD	200.7
Manganese	0.029	mg/L	0.003	1247	05/03/99	TD	200.7
Sodium	22.9	mg/L	0.050	1247	05/03/99	TD	200.7
Nickel	<0.020	mg/L	0.020	1247	05/03/99	TD	200.7
Lead	<0.060	mg/L	0.060	1247	05/03/99	TD	200.7
Antimony	<0.040	mg/L	0.040	1247	05/03/99	TD	200.7
Selenium	<0.100	mg/L	0.100	1247	05/03/99	TD	200.7
Thallium	<0.065	mg/L	0.065	1247	05/03/99	TD	200.7
Vanadium	<0.010	mg/L	0.010	1247	05/03/99	TD	200.7
Zinc	0.040	mg/L	0.010	1247	05/03/99	TD	200.7

LABORATORY MANAGER

P.11/19

MAY 10 '99 09:34AM OHM NORCROSS

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

Client Name: OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

Site ID: DDMT
Memphis, TN

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID **9904750-02**
Sample ID: ST-INF-11

Matrix :AQUEOUS
Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
Mercury Digestion Batch	V5-AQ-01			0806		RM	245.1
Metals Digestion Batch	V15-AQ-33			1035		NR	3030K
Silver	<0.009	mg/L	0.009	1309	05/03/99	TD	200.7
Aluminum	<0.060	mg/L	0.060	1309	05/03/99	TD	200.7
Arsenic	<0.003	mg/L	0.003	1041	05/04/99	JF	206.2
Barium	0.114	mg/L	0.003	1309	05/03/99	TD	200.7
[illegible]llium	<0.002	mg/L	0.002	1309	05/03/99	TD	200.7
[illegible]ium	22.8	mg/L	0.015	1309	05/03/99	TD	200.7
Cadmium	<0.005	mg/L	0.005	1309	05/03/99	TD	200.7
Cobalt	<0.009	mg/L	0.009	1309	05/03/99	TD	200.7
Chromium	<0.009	mg/L	0.009	1309	05/03/99	TD	200.7
Copper	<0.008	mg/L	0.008	1309	05/03/99	TD	200.7
Iron	0.034	mg/L	0.009	1309	05/03/99	TD	200.7
Mercury	<0.0002	mg/L	0.0002	1541	04/29/99	RM	245.1
Potassium	0.859	mg/L	0.250	1309	05/03/99	TD	200.7
Magnesium	11.7	mg/L	0.040	1309	05/03/99	TD	200.7
Manganese	0.030	mg/L	0.003	1309	05/03/99	TD	200.7
Sodium	24.1	mg/L	0.050	1309	05/03/99	TD	200.7
Nickel	<0.020	mg/L	0.020	1309	05/03/99	TD	200.7
Lead	<0.060	mg/L	0.060	1309	05/03/99	TD	200.7
Antimony	<0.040	mg/L	0.040	1309	05/03/99	TD	200.7
Selenium	<0.100	mg/L	0.100	1309	05/03/99	TD	200.7
Thallium	<0.065	mg/L	0.065	1309	05/03/99	TD	200.7
Vanadium	<0.010	mg/L	0.010	1309	05/03/99	TD	200.7
Zinc	0.045	mg/L	0.010	1309	05/03/99	TD	200.7

LABORATORY MANAGER

P.12/19

MAY 10 '99 09:34AM OHM NORCROSS

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

Site ID DDMT
Memphis, TN

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID 9904750-01
Sample ID: ST-EFF-11

Matrix :AQUEOUS
Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
					04/30/99	LS	
QC Batch	V2043001	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	1.47	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	6.63	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	11.8	ug/L	1.00				
trans-1,2-Dichloroethene	9.77	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	38.9	ug/L	1.00				
Tetrachloroethene	12.9	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	116	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	37.0	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	108	74	123
S2 - Toluene-d8	96	86	112
S3 - 4-Bromofluorobenzene	95	81	115

LABORATORY MANAGER

ND - Not Detected

MAY 10 '99 09:34AM OHM NORCROSS P.13/19

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

9904-750-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 9904-750

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0901008

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/30/99

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

Client Name: OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

Site ID: DDMT
Memphis, TN

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID 9904750-02
Sample ID: ST-INF-11

Matrix :AQUEOUS
Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
QC Batch	V2043001	ug/L			04/30/99	LS	
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	1.61	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	7.15	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	11.8	ug/L	1.00				
trans-1,2-Dichloroethene	9.70	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	39.2	ug/L	1.00				
Tetrachloroethene	13.6	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	117	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	37.2	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	107	74	123
S2 - Toluene-d8	94	86	112
S3 - 4-Bromofluorobenzene	96	81	115

LABORATORY MANAGER

ND - Not Detected

P.14/19
MAY 10 '99 09:35AM OHM NORCROSS

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: 9904-750-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 9904-750

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1001009

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/30/99

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
Site ID DDMT
Memphis, TN

Project # 920022
FID # DACA45-96-D-0014

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID **9904750-03**
Sample ID: Trip Blank

Matrix :AQUEOUS
Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
					04/30/99	LS	
QC Batch	V2043001	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
lorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	107	74	123
S2 - Toluene-d8	94	86	112
S3 - 4-Bromofluorobenzene	96	81	115

LABORATORY MANAGER

ND - Not Detected

P.15/19
MAY 10 '99 09:35AM OHM NORCROSS

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

9904-750-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 9904-750

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1201011

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/30/99

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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MAY 10 '99 01:30PM OHM NORCROSS P.4/6

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

Client Name: OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Site ID: DDMT
Memphis, TN

Project # 920022
FID # DACA45-96-D-0014

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID **9904750-01**
Sample ID: ST-EFF-11

Matrix :AQUEOUS
Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid							8270C
QC Batch	P05169	ug/L		04/30/99	05/04/99	CB	
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
nzo(a)pyrene	ND	ug/L	2.00				
enzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
-n-octyl phthalate	ND	ug/L	5.00				
luoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

LABORATORY MANAGER

ND - Not Detected

P.16/19

MAY 10 '99 09:36AM OHM NORCROSS

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 450

ORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

Site ID DDMT
Memphis, TN

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID **9904750-01**
Sampl ID: ST-EFF-11

Matrix :AQUEOUS
Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				04/30/99	05/04/99	CB	8270C
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	85	29	110
S2 - 2-Fluorobiphenyl	78	38	107
S3 - 4-Terphenyl-d14	84	33	122
S4 - Phenol-d6	39	7	58
S5 - 2,4,6-Tribromophenol	96	16	138
S6 - 2-Fluorophenol	56	8	88

LABORATORY MANAGER

ND - Not Detected

P.17/19
MAY 10 '99 09:36AM OHM NORCROSS

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

9904-750-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 9904-750

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1401014

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 05/04/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	314-40-9	BROMACIL	13.02	6.5	NJ
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

Site ID DDMT
Memphis, TN

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID **9904750-02**
Sample ID: ST-INF-11

Matrix :AQUEOUS
Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				04/30/99	05/04/99	CB	8270C
QC Batch	P05169	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	14.1B	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

LABORATORY MANAGER

ND - Not Detected

P.18/19
MAY 10 '99 09:36AM OHM NORCROSS

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

Site ID DDMT
Memphis, TN

Date Arrived 04/27/99
ETC Order Number 9904750

ETC Lab ID **9904750-02**
Sample ID: ST-INF-11

Matrix :AQUEOUS
Sample Date :04/27/99

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				04/30/99	05/04/99	CB	8270C
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	69	29	110
S2 - 2-Fluorobiphenyl	65	38	107
S3 - 4-Terphenyl-d14	100	33	122
S4 - Phenol-d6	34	7	58
S5 - 2,4,6-Tribromophenol	94	16	138
S6 - 2-Fluorophenol	45	8	88

LABORATORY MANAGER

ND - Not Detected

P.19/19
JUN 10 '99 09:57AM OHM NORCROSS

479 454

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

9904-750-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 9904-750

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1701017

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 05/04/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	314-40-9	BROMACIL	13.01	6.9	NJ
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
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30.					

April 1999 Monthly Discharge Report
Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Groundwater Recovery System Operation - April 1999

Total Effluent Discharge through March 31, 1999	29,643,220 Gallons	
Duration of System Operation:	01-Apr-99 30-Apr-99	

System Operational Notes:

1). The totalizing effluent meter experienced a power surge on April 1st causing failure. The meter was removed and sent to the manufacturer for repairs on April 7th and remained down for the month of April.
2). A potential power surge caused failure in the datalogger on April 1st and remained down for the month of April; therefore, the system was not available for remote modem connection The datalogger has been repaired as of May 6, 1999.
3). Pumps throughout the system have been cycling off due to low groundwater level conditions.
4). Instrumentation and control adjustments were made April 13th & 14th and April 29th & 30th in effort to maintain effective flow rates during existing low level conditions We are currently operating at the lowest range of instrumentation and control capabilities.

Recovery Well Operational Notes:	20-Apr-99	RW-08 down for one day for unknown reasons.
	29-Apr-99	All wells shut down for one hour to establish and record static groundwater levels.
	30-Apr-99	RW-06 shut down for two hours due to thermal overload

Total April 1999 Effluent Discharge Volume:	**3,702,895 Gallons**	31-Mar-99 thru 30-Apr-99
April 1999 Average Discharge Flow Rate	87 6 GPM	
April 1999 Maximum Discharge Flow Rate	111 6 GPM	on 4-Apr-99
April 1999 Minimum Discharge Flow Rate	22 2 GPM	on 19-Apr-99

Recovery well pumps cycled on and off during April due to low groundwater level conditions. The tracking of each recovery well's operation during this time was conducted manually while the telemetry was off-line. Manual recordings were then compiled to estimate each well's performance using optimal flow rates, totalized discharged volume and low level cycling.

Well I.D.	% Run Time
RW - 3	87%
RW - 4	98%
RW - 5	83%
RW - 6	96%
RW - 7	93%
RW - 8	66%
RW - 9	93%

System Effluent Samples Collected:	27-Apr-99	Week 26 of System Operation
Total System Effluent through 30 April 1999	33,346,115 Gallons	

DEFENSE LOGISTICS AGENCY
MEMPHIS DEPOT CARETAKER
2163 AIRWAYS BOULEVARD
MEMPHIS, TENNESSEE 38114-5210

IN REPLY REFER TO DDSP-FE

April 9, 1999

Mr. Akil Al-Chokhachi
City of Memphis
Division of Public Works
2303 North Second Street
Memphis, TN 38127-7500

Dear Mr. Al-Chokhachi:

Please find enclosed the following documents for the sampling results from the groundwater we are extracting from Dunn Field for March 1999. We do not exceed any discharge agreement parameters. Please note that bis(2-ethylhexyl)phthalate has been detected in sample ST-EFF-10 at a concentration greater than the discharged criteria. This compound was detected in the method blank for the analytical batch and in the equipment blank. Its presence is suspect and has been qualified. According to Mr. Steve Offner of OHM it is a lab contaminant, and is commonly seen as such.

1. Spreadsheet Summary of Analytical Results.
2. Analytical Data from sampling the groundwater.
3. Monthly Discharged Report Groundwater Flow for March 1999.

Please contact me at 544-0611 if you have any other questions.

Sincerely,

for

SHAWN PHILLIPS
BRAC Environmental Coordinator

Enclosure

cc:
Rodney Thomas, City of Memphis
Jordan English, TDEC
Turpin Ballard, USEPA

Summary of Analytical Results for Total Effluent (through March 1999)
of the Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Sample Identification Number			ST-EFF-10	City of Memphis Industrial Wastewater Discharge Max Levels
Laboratory ID No.				
Total System Effluent Sample Description			Week 21 of System Operation (O&M)	
Date Effluent Sample Collected			26-Mar-99	--
Instantaneous Flow Rate			94 3 GPM/135,792 GPD	561,600 GPD
Totalized Flow			28,964,822 GAL	--
LABORATORY ANALYSE	**DL**	**Units**		*Monthly Ave / One Day Max*
pH (Method 150.1)	--	SU	5.7	5 5 to 10 0
TAL Metals (EPA 200 Series)				*mg/L*
Aluminum (Method 200.7)	0.06	mg/L	ND	1 / 2
Arsenic (Method 206.2)	0.003	mg/L	ND	0 04 / 0 1
Barium (Method 200.7)	0 003	mg/L	0.106	NS
Cadmium (Method 200.7)	0 005	mg/L	ND	0 01 / 0 02
Calcium (Method 200.7)	0.015	mg/L	22.7	NS
Chromium (Method 200.7)	0.009	mg/L	ND	0 2 / 0 4
Copper (Method 200.7)	0 008	mg/L	ND	0 2 / 0 4
Iron (Method 200.7)	0.009	mg/L	0.034	10 / 20
Lead (Method 200.7)	0 06	mg/L	ND	0.15 / 0 3
Magnesium (Method 200.7)	0 04	mg/L	11.3	NS
Manganese (Method 200.7)	0 003	mg/L	0.04	NS
Mercury (Method 245.1)	0.0002	mg/L	ND	0 001 / 0 002
Nickel (Method 200.7)	0.02	mg/L	ND	0 1 / 0 3
Potassium (Method 200 7)	0.25	mg/L	0 861	NS
Sodium (Method 200.7)	0.05	mg/L	23 8	NS
Zinc (Method 200.7)	0.01	mg/L	0.069	0 3 / 1 0
TCL Volatile Organics (Method 8260B)				*ug/L*
Carbon Tetrachloride	1	ug/L	2.17	20 / 40
Chloroform	1	ug/L	5.59	20 / 40
1,1-Dichloroethene	1	ug/L	13 9	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	37	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	10 8	50 / 100
Methylene Chloride	5	ug/L	ND	10 / 20
1,1,2,2-Tetrachloroethane	1/10/50	ug/L	29.3	500 / 1000
Tetrachloroethene	1	ug/L	18.7	60 / 120
Toluene	1	ug/L	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	10 / 20
1,1,2-Trichloroethane	1	ug/L	ND	50 / 100
Trichloroethene	1/10/50	ug/L	116	400 / 800
TCL Semi-Volatile Organics (Method 8270C)				*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	24.4B	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	30 / 60
Naphthalene	2	ug/L	ND	10 / 20
Phenol	5	ug/L	ND	10 / 20

NOTE: Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement.

All analyses performed by Environmental Testing & Consulting, Inc., Memphis, TN

* = Recovery well RW-09 was not in operation at the time of sample collection

** = Recovery well RW-08 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

ND = not detected

B = analyte detected in associated method and/or equipment blank

mg/L = milligrams per liter

ug/L = micrograms per liter

DL = detection limit

GPM = gallons per minute

GPD = gallons per day

91.2 = bold number indicates that value exceeds Discharge Max Levels

479 457

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

479 458

April 7, 1999

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Ref: Analytical Testing
ETC Order # 9903916
Project Description Defense Depot - Memphis, TN

Project # 20022,

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

479 459

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 460

ANALYTICAL SUMMARY TABLE

ent Name OHM Remediation Services
a ID DDMT

le ID	Field ID	Matrix	Method	Method Description
91601	ST-EFF-10	AQUEOUS	200.7	Silver
91601	ST-EFF-10	AQUEOUS	200.7	Aluminum
91601	ST-EFF-10	AQUEOUS	206.2	Arsenic
91601	ST-EFF-10	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
91601	ST-EFF-10	AQUEOUS	200.7	Barium
91601	ST-EFF-10	AQUEOUS	200.7	Beryllium
91601	ST-EFF-10	AQUEOUS	200.7	Calcium
91601	ST-EFF-10	AQUEOUS	200.7	Cadmium
91601	ST-EFF-10	AQUEOUS	200.7	Cobalt
91601	ST-EFF-10	AQUEOUS	200.7	Chromium
91601	ST-EFF-10	AQUEOUS	200.7	Copper
91601	ST-EFF-10	AQUEOUS	200.7	Iron
91601	ST-EFF-10	AQUEOUS	245.1	Mercury
91601	ST-EFF-10	AQUEOUS	200.7	Potassium
91601	ST-EFF-10	AQUEOUS	200.7	Magnesium
91601	ST-EFF-10	AQUEOUS	200.7	Manganese
91601	ST-EFF-10	AQUEOUS	200.7	Sodium
91601	ST-EFF-10	AQUEOUS	200.7	Nickel
91601	ST-EFF-10	AQUEOUS	200.7	Lead
91601	ST-EFF-10	AQUEOUS	150.1	pH
91601	ST-EFF-10	AQUEOUS	200.7	Antimony
91601	ST-EFF-10	AQUEOUS	200.7	Selenium
91601	ST-EFF-10	AQUEOUS	200.7	Thallium
91601	ST-EFF-10	AQUEOUS	160.2	Total Suspended Solids
91601	ST-EFF-10	AQUEOUS	8260B	GC/MS Volatile Organics
91601	ST-EFF-10	AQUEOUS	200.7	Vanadium
91601	ST-EFF-10	AQUEOUS	200.7	Zinc
91602	ST-INF-10	AQUEOUS	200.7	Silver
91602	ST-INF-10	AQUEOUS	200.7	Aluminum
91602	ST-INF-10	AQUEOUS	206.2	Arsenic
91602	ST-INF-10	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
91602	ST-INF-10	AQUEOUS	200.7	Barium
91602	ST-INF-10	AQUEOUS	200.7	Beryllium
91602	ST-INF-10	AQUEOUS	200.7	Calcium
91602	ST-INF-10	AQUEOUS	200.7	Cadmium
91602	ST-INF-10	AQUEOUS	200.7	Cobalt
91602	ST-INF-10	AQUEOUS	200.7	Chromium
91602	ST-INF-10	AQUEOUS	200.7	Copper
91602	ST-INF-10	AQUEOUS	200.7	Iron
91602	ST-INF-10	AQUEOUS	245.1	Mercury
91602	ST-INF-10	AQUEOUS	200.7	Potassium
91602	ST-INF-10	AQUEOUS	200.7	Magnesium
91602	ST-INF-10	AQUEOUS	200.7	Manganese
91602	ST-INF-10	AQUEOUS	200.7	Sodium
91602	ST-INF-10	AQUEOUS	200.7	Nickel
91602	ST-INF-10	AQUEOUS	200.7	Lead
91602	ST-INF-10	AQUEOUS	150.1	pH
91602	ST-INF-10	AQUEOUS	200.7	Antimony
91602	ST-INF-10	AQUEOUS	200.7	Selenium
91602	ST-INF-10	AQUEOUS	200.7	Thallium
91602	ST-INF-10	AQUEOUS	160.2	Total Suspended Solids
91602	ST-INF-10	AQUEOUS	8260B	GC/MS Volatile Organics
91602	ST-INF-10	AQUEOUS	200.7	Vanadium
91602	ST-INF-10	AQUEOUS	200.7	Zinc
91603	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

EQB-10 (8260)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 461

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT

e Arrived 03/27/99
Order Number 9903916

Lab ID 9903916-01
ple ID: ST-EFF-10

Matrix :AQUEOUS
Sample Date :03/26/99

T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	5.7	SU		0915	03/27/99	RB	150.1
l Suspended Solids	ND	mg/L	2		03/30/99	JM	160.2

BORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

479 462

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT

e Arrived 03/27/99
Order Number 9903916

Lab ID 9903916-02
~~ple ID: ST-INF-10~~ EQB-10

Matrix :AQUEOUS
Sample Date :03/26/99

T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	6.4	SU		0915	03/27/99	RB	150.1
l Suspended Solids	ND	mg/L	2		03/30/99	JM	160.2

ORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT

e Arrived 03/27/99
Order Number 9903916

Lab ID 9903916-01
ple ID: ST-EFF-10

Matrix :AQUEOUS
Sample Date :03/26/99

	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
ury Digestion Batch	V4-AQ-110				04/03/99	RM	245.1
s Digestion Batch	V14-AQ-98				04/02/99	NR	3030K
r	<0.009	mg/L	0.009	1329	04/05/99	TD	200.7
num	<0.060	mg/L	0.060	1329	04/05/99	TD	200.7
ic	<0.003	mg/L	0.003	2145	04/04/99	JF	206.2
m	0.106	mg/L	0.003	1329	04/05/99	TD	200.7
lium	<0.002	mg/L	0.002	1329	04/05/99	TD	200.7
um	22.7	mg/L	0.015	1329	04/05/99	TD	200.7
um	<0.005	mg/L	0.005	1329	04/05/99	TD	200.7
t	<0.009	mg/L	0.009	1329	04/05/99	TD	200.7
ium	<0.009	mg/L	0.009	1329	04/05/99	TD	200.7
r	<0.008	mg/L	0.008	1329	04/05/99	TD	200.7
	0.034	mg/L	0.009	1329	04/05/99	TD	200.7
ry	<0.0002	mg/L	0.0002	1035	04/03/99	RM	245.1
sium	0.861	mg/L	0.250	1329	04/05/99	TD	200.7
sium	11.3	mg/L	0.040	1329	04/05/99	TD	200.7
nese	0.040	mg/L	0.003	1329	04/05/99	TD	200.7
n	23.8	mg/L	0.050	1329	04/05/99	TD	200.7
l	<0.020	mg/L	0.020	1329	04/05/99	TD	200.7
	<0.060	mg/L	0.060	1329	04/05/99	TD	200.7
ony	<0.040	mg/L	0.040	1329	04/05/99	TD	200.7
lum	<0.100	mg/L	0.100	1329	04/05/99	TD	200.7
lum	<0.065	mg/L	0.065	1329	04/05/99	TD	200.7
ium	<0.010	mg/L	0.010	1329	04/05/99	TD	200.7
	0.069	mg/L	0.010	1329	04/05/99	TD	200.7

ATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

479 464

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT

e Arrived 03/27/99
Order Number 9903916

Lab ID 9903916-02
ıple ID: ~~ST-INF-10~~ EQB-10 Matrix :AQUEOUS
Sample Date :03/26/99

T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
ury Digestion Batch	V4-AQ-110				04/03/99	RM	245.1
ls Digestion Batch	V14-AQ-98				04/02/99	NR	3030K
er	<0.009	mg/L	0.009	1350	04/05/99	TD	200.7
inum	<0.060	mg/L	0.060	1350	04/05/99	TD	200.7
nic	<0.003	mg/L	0.003	2154	04/04/99	JP	206.2
um	<0.003	mg/L	0.003	1350	04/05/99	TD	200.7
llium	<0.002	mg/L	0.002	1350	04/05/99	TD	200.7
ium	0.037	mg/L	0.015	1350	04/05/99	TD	200.7
ium	<0.005	mg/L	0.005	1350	04/05/99	TD	200.7
lt	<0.009	mg/L	0.009	1350	04/05/99	TD	200.7
mium	<0.009	mg/L	0.009	1350	04/05/99	TD	200.7
er	<0.008	mg/L	0.008	1350	04/05/99	TD	200.7
	<0.009	mg/L	0.009	1350	04/05/99	TD	200.7
ury	<0.0002	mg/L	0.0002	1038	04/03/99	RM	245.1
ssium	<0.250	mg/L	0.250	1350	04/05/99	TD	200.7
esium	<0.040	mg/L	0.040	1350	04/05/99	TD	200.7
anese	<0.003	mg/L	0.003	1350	04/05/99	TD	200.7
um	0.150	mg/L	0.050	1350	04/05/99	TD	200.7
el	<0.020	mg/L	0.020	1350	04/05/99	TD	200.7
	<0.060	mg/L	0.060	1350	04/05/99	TD	200.7
mony	<0.040	mg/L	0.040	1350	04/05/99	TD	200.7
nium	<0.100	mg/L	0.100	1350	04/05/99	TD	200.7
lium	<0.065	mg/L	0.065	1350	04/05/99	TD	200.7
dium	<0.010	mg/L	0.010	1350	04/05/99	TD	200.7
	<0.010	mg/L	0.010	1350	04/05/99	TD	200.7

ORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

:e ID DDMT

:e Arrived 03/27/99
: Order Number 9903916

: Lab ID 9903916-01
nple ID: ST-EFF-10

Matrix :AQUEOUS
Sample Date :03/26/99

t	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
49 Volatile Organics							8260B
					03/30/99	LS	
: Batch	V1033001	ug/L					
:etone	ND	ug/L	50.0				
enzene	ND	ug/L	1.00				
romodichloromethane	ND	ug/L	1.00				
romoform	ND	ug/L	1.00				
romomethane	ND	ug/L	1.00				
arbon Disulfide	ND	ug/L	1.00				
arbon Tetrachloride	2.17	ug/L	1.00				
hlorobenzene	ND	ug/L	1.00				
hlorodibromomethane	ND	ug/L	1.00				
hloroethane	ND	ug/L	1.00				
hloroform	5.59	ug/L	1.00				
hloromethane	ND	ug/L	1.00				
,1-Dichloroethane	ND	ug/L	1.00				
2-Dichloroethane	ND	ug/L	1.00				
1-Dichloroethene	13.9	ug/L	1.00				
:ans-1,2-Dichloroethene	10.8	ug/L	1.00				
2-Dichloropropane	ND	ug/L	1.00				
is-1,3-Dichloropropene	ND	ug/L	1.00				
:ans-1,3-Dichloropropene	ND	ug/L	1.00				
:hylbenzene	ND	ug/L	1.00				
-Hexanone (MBK)	ND	ug/L	5.00				
-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
-Butanone (MEK)	ND	ug/L	20.0				
ethylene Chloride	ND	ug/L	5.00				
:yrene	ND	ug/L	1.00				
,1,2,2-Tetrachloroethane	29.3	ug/L	1.00				
:trachloroethene	18.7	ug/L	1.00				
oluene	ND	ug/L	1.00				
1,1-Trichloroethane	ND	ug/L	1.00				
1,2-Trichloroethane	ND	ug/L	1.00				
:ichloroethene	116	ug/L	1.00				
inyl Acetate	ND	ug/L	20.0				
inyl Chloride	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
is-1,2-Dichloroethene	37.0	ug/L	1.00				

rogate Standard	% Recovery	QC Limits	
- Dibromofluoromethane	102	74	123
- Toluene-d8	98	86	112
- 4-Bromofluorobenzene	90	81	115

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 466

ORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT

e Arrived 03/27/99
Order Number 9903916

Lab ID 9903916-02
ple ID: ~~ST-INF-10~~ EQB-10

Matrix :AQUEOUS
Sample Date :03/26/99

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
S Volatile Organics							8260B
					03/31/99	LS	
Batch	V1033001	ug/L					
etone	ND	ug/L	50.0				
nzene	ND	ug/L	1.00				
omodichloromethane	ND	ug/L	1.00				
omoform	ND	ug/L	1.00				
omomethane	ND	ug/L	1.00				
rbon Disulfide	ND	ug/L	1.00				
rbon Tetrachloride	ND	ug/L	1.00				
lorobenzene	ND	ug/L	1.00				
lorodibromomethane	ND	ug/L	1.00				
loroethane	ND	ug/L	1.00				
loroform	ND	ug/L	1.00				
loromethane	ND	ug/L	1.00				
1-Dichloroethane	ND	ug/L	1.00				
2-Dichloroethane	ND	ug/L	1.00				
1-Dichloroethene	ND	ug/L	1.00				
ans-1,2-Dichloroethene	ND	ug/L	1.00				
2-Dichloropropane	ND	ug/L	1.00				
s-1,3-Dichloropropene	ND	ug/L	1.00				
ans-1,3-Dichloropropene	ND	ug/L	1.00				
hylbenzene	ND	ug/L	1.00				
Hexanone (MBK)	ND	ug/L	5.00				
Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Butanone (MEK)	ND	ug/L	20.0				
thylene Chloride	ND	ug/L	5.00				
yrene	ND	ug/L	1.00				
1,2,2-Tetrachloroethane	ND	ug/L	1.00				
trachloroethene	ND	ug/L	1.00				
luene	ND	ug/L	1.00				
1,1-Trichloroethane	ND	ug/L	1.00				
1,2-Trichloroethane	ND	ug/L	1.00				
ichloroethene	ND	ug/L	1.00				
nyl Acetate	ND	ug/L	20.0				
nyl Chloride	ND	ug/L	1.00				
Xylenes	ND	ug/L	1.00				
Xylenes	ND	ug/L	1.00				
Xylenes	ND	ug/L	1.00				
s-1,2-Dichloroethene	ND	ug/L	1.00				

rogate Standard	% Recovery	QC Limits	
- Dibromofluoromethane	96	74	123
- Toluene-d8	100	86	112
- 4-Bromofluorobenzene	94	81	115

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT

e Arrived 03/27/99
Order Number 9903916

Lab ID 9903916-03
ple ID: Trip Blank

Matrix :AQUEOUS
Sample Date :03/26/99

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
S Volatile Organics							8260B
					03/30/99	LS	
Batch	V1033001	ug/L					
etone	ND	ug/L	50.0				
nzene	ND	ug/L	1.00				
omodichloromethane	ND	ug/L	1.00				
omoform	ND	ug/L	1.00				
omomethane	ND	ug/L	1.00				
rbon Disulfide	ND	ug/L	1.00				
rbon Tetrachloride	ND	ug/L	1.00				
lorobenzene	ND	ug/L	1.00				
lorodibromomethane	ND	ug/L	1.00				
loroethane	ND	ug/L	1.00				
loroform	ND	ug/L	1.00				
loromethane	ND	ug/L	1.00				
1-Dichloroethane	ND	ug/L	1.00				
2-Dichloroethane	ND	ug/L	1.00				
1-Dichloroethene	ND	ug/L	1.00				
ans-1,2-Dichloroethene	ND	ug/L	1.00				
2-Dichloropropane	ND	ug/L	1.00				
is-1,3-Dichloropropene	ND	ug/L	1.00				
rans-1,3-Dichloropropene	ND	ug/L	1.00				
thylbenzene	ND	ug/L	1.00				
-Hexanone (MBK)	ND	ug/L	5.00				
-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
-Butanone (MEK)	ND	ug/L	20.0				
ethylene Chloride	ND	ug/L	5.00				
tyrene	ND	ug/L	1.00				
1,2,2-Tetrachloroethane	ND	ug/L	1.00				
etrachloroethene	ND	ug/L	1.00				
oluene	ND	ug/L	1.00				
1,1-Trichloroethane	ND	ug/L	1.00				
1,2-Trichloroethane	ND	ug/L	1.00				
richloroethene	ND	ug/L	1.00				
inyl Acetate	ND	ug/L	20.0				
inyl Chloride	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
is-1,2-Dichloroethene	ND	ug/L	1.00				

rogate Standard	% Recovery	QC Limits	
- Dibromofluoromethane	96	74	123
- Toluene-d8	97	86	112
- 4-Bromofluorobenzene	91	81	115

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & C NSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 468

ORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

:e ID DDMT

:e Arrived 03/27/99
: Order Number 9903916

: Lab ID 9903916-01
mpl ID: ST-EFF-10

Matrix :AQUEOUS
Sample Date :03/26/99

r	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
MS Base/Neutral & Acid							8270C
: Batch	P05154	ug/L		03/31/99	03/31/99	CB	
cenaphthene	ND	ug/L	2.00				
cenaphthylene	ND	ug/L	2.00				
ıthracene	ND	ug/L	2.00				
enzo(a)anthracene	ND	ug/L	2.00				
enzo(b)fluoranthene	ND	ug/L	2.00				
enzo(k)fluoranthene	ND	ug/L	2.00				
enzo(g,h,i)perylene	ND	ug/L	2.00				
enzo(a)pyrene	ND	ug/L	2.00				
enzoic Acid	ND	ug/L	50.0				
enzyl Alcohol	ND	ug/L	10.0				
is(2-chloroethoxy)methane	ND	ug/L	5.00				
is(2-chloroethyl)ether	ND	ug/L	5.00				
is(2-chloroisopropyl)ether	ND	ug/L	5.00				
is(2-ethylhexyl)phthalate	24.4B	ug/L	10.0				
-Bromophenyl phenyl ether	ND	ug/L	5.00				
ıtyl benzyl phthalate	ND	ug/L	5.00				
-Chloroaniline	ND	ug/L	5.00				
-Chloronaphthalene	ND	ug/L	5.00				
-Chloro-3-methylphenol	ND	ug/L	5.00				
-Chlorophenol	ND	ug/L	5.00				
-Chlorophenyl phenyl ether	ND	ug/L	5.00				
ırysene	ND	ug/L	2.00				
ibenzo(a,h)anthracene	ND	ug/L	2.00				
ibenzofuran	ND	ug/L	5.00				
.-n-butyl phthalate	ND	ug/L	5.00				
2-Dichlorobenzene	ND	ug/L	5.00				
3-Dichlorobenzene	ND	ug/L	5.00				
4-Dichlorobenzene	ND	ug/L	5.00				
3'-Dichlorobenzidine	ND	ug/L	10.0				
4-Dichlorophenol	ND	ug/L	5.00				
6-Dichlorophenol	ND	ug/L	5.00				
.ethyl phthalate	ND	ug/L	5.00				
4-Dimethylphenol	ND	ug/L	5.00				
methyl phthalate	ND	ug/L	5.00				
6-Dinitro-2-methylphenol	ND	ug/L	10.0				
4-Dinitrophenol	ND	ug/L	50.0				
4-Dinitrotoluene	ND	ug/L	5.00				
6-Dinitrotoluene	ND	ug/L	5.00				
.-n-octyl phthalate	ND	ug/L	5.00				
ıoranthene	ND	ug/L	2.00				
.uorene	ND	ug/L	2.00				
ıexachlorobenzene	ND	ug/L	5.00				

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 469

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT

e Arrived 03/27/99
Order Number 9903916

Lab ID 9903916-01
ıple ID: ST-EFF-10

Matrix :AQUEOUS
Sample Date :03/26/99

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
S Base/Neutral & Acid				03/31/99	03/31/99	CB	8270C
xachlorobutadiene	ND	ug/L	5.00				
xachlorocyclopentadiene	ND	ug/L	5.00				
xachloroethane	ND	ug/L	5.00				
deno(1,2,3-cd)pyrene	ND	ug/L	2.00				
ophorone	ND	ug/L	5.00				
Methylnaphthalene	ND	ug/L	2.00				
Methylphenol (o-cresol)	ND	ug/L	5.00				
Methylphenol (m-cresol)	ND	ug/L	5.00				
Methylphenol (p-cresol)	ND	ug/L	5.00				
phthalene	ND	ug/L	2.00				
trobenzene	ND	ug/L	5.00				
Nitroaniline	ND	ug/L	5.00				
Nitroaniline	ND	ug/L	10.0				
Nitroaniline	ND	ug/L	5.00				
Nitrophenol	ND	ug/L	5.00				
Nitrophenol	ND	ug/L	5.00				
Nitrosodiphenylamine	ND	ug/L	5.00				
Nitrosodipropylamine	ND	ug/L	5.00				
ntachlorophenol	ND	ug/L	10.0				
enanthrene	ND	ug/L	2.00				
enol	ND	ug/L	5.00				
rene	ND	ug/L	2.00				
2,4-Trichlorobenzene	ND	ug/L	5.00				
4,5-Trichlorphenol	ND	ug/L	5.00				
4,6-Trichlorophenol	ND	ug/L	5.00				

rogate Standard	% Recovery	QC Limits	
- Nitrobenzene-d5	59	29	110
- 2-Fluorobiphenyl	53	38	107
- 4-Terphenyl-d14	67	33	122
- Phenol-d6	25	7	58
- 2,4,6-Tribromophenol	81	16	138
- 2-Fluorophenol	35	8	88

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 470

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
e ID DDMT

Project # 920022
FID # DACA45-96-D-0014

e Arrived 03/27/99
Order Number 9903916

Lab ID 9903916-02
~~ple ID: ST-INF-10~~ EQB-10

Matrix :AQUEOUS
Sample Date :03/26/99

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
IS Base/Neutral & Acid				03/31/99	03/31/99	CB	8270C
Batch	P05154	ug/L					
enaphthene	ND	ug/L	2.00				
enaphthylene	ND	ug/L	2.00				
thracene	ND	ug/L	2.00				
nzo(a)anthracene	ND	ug/L	2.00				
nzo(b)fluoranthene	ND	ug/L	2.00				
nzo(k)fluoranthene	ND	ug/L	2.00				
nzo(g,h,i)perylene	ND	ug/L	2.00				
nzo(a)pyrene	ND	ug/L	2.00				
nzoic Acid	ND	ug/L	50.0				
nzyl Alcohol	ND	ug/L	10.0				
s(2-chloroethoxy)methane	ND	ug/L	5.00				
s(2-chloroethyl)ether	ND	ug/L	5.00				
s(2-chloroisopropyl)ether	ND	ug/L	5.00				
s(2-ethylhexyl)phthalate	16.4B	ug/L	10.0				
Bromophenyl phenyl ether	ND	ug/L	5.00				
tyl benzyl phthalate	ND	ug/L	5.00				
Chloroaniline	ND	ug/L	5.00				
Chloronaphthalene	ND	ug/L	5.00				
Chloro-3-methylphenol	ND	ug/L	5.00				
Chlorophenol	ND	ug/L	5.00				
Chlorophenyl phenyl ether	ND	ug/L	5.00				
rysene	ND	ug/L	2.00				
benzo(a,h)anthracene	ND	ug/L	2.00				
benzofuran	ND	ug/L	5.00				
-n-butyl phthalate	ND	ug/L	5.00				
2-Dichlorobenzene	ND	ug/L	5.00				
3-Dichlorobenzene	ND	ug/L	5.00				
4-Dichlorobenzene	ND	ug/L	5.00				
3'-Dichlorobenzidine	ND	ug/L	10.0				
4-Dichlorophenol	ND	ug/L	5.00				
6-Dichlorophenol	ND	ug/L	5.00				
ethyl phthalate	ND	ug/L	5.00				
4-Dimethylphenol	ND	ug/L	5.00				
methyl phthalate	ND	ug/L	5.00				
6-Dinitro-2-methylphenol	ND	ug/L	10.0				
4-Dinitrophenol	ND	ug/L	50.0				
4-Dinitrotoluene	ND	ug/L	5.00				
6-Dinitrotoluene	ND	ug/L	5.00				
-n-octyl phthalate	ND	ug/L	5.00				
uoranthene	ND	ug/L	2.00				
uorene	ND	ug/L	2.00				
xachlorobenzene	ND	ug/L	5.00				

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 471

ORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
.e ID DDMT

Project # 920022
FID # DACA45-96-D-0014

.e Arrived 03/27/99
: Order Number 9903916

: Lab ID 9903916-02
nple ID: ~~ST-INF-10~~ EQB-10

Matrix :AQUEOUS
Sample Date :03/26/99

r	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
4S Base/Neutral & Acid				03/31/99	03/31/99	CB	8270C
exachlorobutadiene	ND	ug/L	5.00				
exachlorocyclopentadiene	ND	ug/L	5.00				
exachloroethane	ND	ug/L	5.00				
ideno(1,2,3-cd)pyrene	ND	ug/L	2.00				
sophorone	ND	ug/L	5.00				
-Methylnaphthalene	ND	ug/L	2.00				
-Methylphenol (o-cresol)	ND	ug/L	5.00				
-Methylphenol (m-cresol)	ND	ug/L	5.00				
-Methylphenol (p-cresol)	ND	ug/L	5.00				
aphthalene	ND	ug/L	2.00				
itrobenzene	ND	ug/L	5.00				
-Nitroaniline	ND	ug/L	5.00				
-Nitroaniline	ND	ug/L	10.0				
-Nitroaniline	ND	ug/L	5.00				
-Nitrophenol	ND	ug/L	5.00				
-Nitrophenol	ND	ug/L	5.00				
-Nitrosodiphenylamine	ND	ug/L	5.00				
-Nitrosodipropylamine	ND	ug/L	5.00				
entachlorophenol	ND	ug/L	10.0				
henanthrene	ND	ug/L	2.00				
henol	ND	ug/L	5.00				
yrene	ND	ug/L	2.00				
,2,4-Trichlorobenzene	ND	ug/L	5.00				
,4,5-Trichlorphenol	ND	ug/L	5.00				
,4,6-Trichlorophenol	ND	ug/L	5.00				

rogate Standard	% Recovery	QC Limits	
- Nitrobenzene-d5	61	29	110
- 2-Fluorobiphenyl	55	38	107
- 4-Terphenyl-d14	72	33	122
- Phenol-d6	27	7	58
- 2,4,6-Tribromophenol	80	16	138
- 2-Fluorophenol	39	8	88

BORATORY MANAGER

ND - Not Detected

March 1999 Monthly Discharge Report
Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Groundwater Recovery System Operation - March 1999		
Total Effluent Discharge through February 28, 1999	25,505,878 Gallons	
Duration of System Operation:	1-Mar-99 through 31-Mar-99	
System On-line:	31 Days	One hour system shutdown in Mar-99
Recovery Wells Off-line:	18-Mar-99	RW-03 thru RW-09 down from 16.00 to 17:00 for unknown reason(s).
	18-Mar-99 to 22-Mar-99	RW - 05 cycled on and off until the
System Effluent Samples Collected:	26-Mar-99	Week 21 of System Operation
Total March 1999 Effluent Discharge Volume:	**4,137,342 Gallons**	28-Feb-99 through 31-Mar-99
March 1999 Average Discharge Flow Rate	94.9 GPM	
March 1999 Maximum Discharge Flow Rate	104 4 GPM	on 3-Mar-99
March 1999 Minimum Discharge Flow Rate	0 GPM	on 4-18-99 (for one hour)
Total System Effluent through 31 March 1999	29,643,220 Gallons	

DEFENSE LOGISTICS AGENCY
DEFENSE DEPOT SUSQUEHANNA, PENNSYLVANIA
MEMPHIS DEPOT CARETAKER DIVISION
2163 AIRWAYS BOULEVARD, BUILDING 144
MEMPHIS, TENNESSEE 38114-5210

479 473

REPLY REFER TO DDSP-F

March 10, 1999

Mr. Akil Al-Chokhachi
City of Memphis
Division of Public Works
2303 North Second Street
Memphis, TN 38127-7500

Dear Mr. Al-Chokhachi:

Please find enclosed the following documents for the sampling results from the groundwater we are extracting from Dunn Field for February 1999. We do not exceed any discharge agreement parameters. The slight delay in this letter was due to the supplemental mercury sampling your office requested. Hopefully this has caused no problem for you.

1. Spreadsheet Summary of Analytical Results.
2. Analytical Data from sampling the groundwater.
3 Monthly Discharged Report Groundwater Flow for February 1999.

Please contact me at 544-0611 if you have any other questions.

Sincerely,

SHAWN PHILLIPS
BRAC Environmental Coordinator

Enclosure

cc:
Rodney Thomas, City of Memphis
Jordan English, TDEC
Turpin Ballard, USEPA

Summary of Analytical Results for Total Effluent of the Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Sample Identification Number			ST-EFF-08	ST-EFF-09	ST-EFF-HG-09A	T-EFF-HG-05 (Duplica	ST-EFF-HG-09B	ST-EFF-HG-09C	City of Memphis Industrial Wastewater Discharge Max. Levels
Laboratory ID No.			9901688-01	9902684-01	9902702-01	9902702-02	9902756-01	9902775-01	
Total System Effluent Sample Description			Week 13 of System Operation (O&M)	Week 17 of System Operation (O&M)					
Date Effluent Sample Collected			26-Jan-99	22-Feb-99	23-Feb-99		24-Feb-99	25-Feb-99	--
Instantaneous Flow Rate			115 7 GPM/166,048 GPD	108 1 GPM/155,664 GPD	80 7 GPM**/116,208 GPD		79.2 GPM** / 114,048 GPD	104.2 GPM/150,048 GPD	561,800 GPD
Totalized Flow			20,527,972 GAL	24,668,250 GAL	24,817,070 GAL		24,924,750 GAL	25,017,630 GAL	--
LABORATORY ANALYSES:	DL	Units							*Monthly Ave / One Day Max.*
pH (Method 150 1)	--	SU	6 5	6 1	--	--	--	--	5 5 to 10 0
TAL Metals (EPA 200 Series)									*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	--	--	--	--	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	--	--	--	--	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 119	0 109	--	--	--	--	NS
Cadmium (Method 200.7)	0 005	mg/L	ND	ND	--	--	--	--	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	27 1	23 1	--	--	--	--	NS
Chromium (Method 200.7)	0 009	mg/L	ND	ND	--	--	--	--	0.2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	--	--	--	--	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 044	0 151	--	--	--	--	10 / 20
Lead (Method 200.7)	0 06	mg/L	ND	ND	--	--	--	--	0 15 / 0 3
Magnesium (Method 200.7)	0 04	mg/L	12 5	11 3	--	--	--	--	NS
Manganese (Method 200.7)	0 003	mg/L	0 175	0 049	--	--	--	--	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	--	--	--	--	0 1 / 0 3
Potassium (Method 200.7)	0.25	mg/L	0 927	0 951	--	--	--	--	NS
Sodium (Method 200.7)	0 05	mg/L	26 5	24 1	--	--	--	--	NS
Zinc (Method 200 7)	0 01	mg/L	0 048	0 065	--	--	--	--	0 3 / 1 0
TCL Volatile Organics (Method 8260B)									*ug/L*
Carbon Tetrachloride	1	ug/L	2 32	2 53	--	--	--	--	20 / 40
Chloroform	1	ug/L	9 95	6 84	--	--	--	--	20 / 40
1,1-Dichloroethene	1	ug/L	13 3	19 5	--	--	--	--	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	34	36 2	--	--	--	--	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	7 85	11	--	--	--	--	50 / 100
Methylene Chloride	5	ug/L	ND	ND	--	--	--	--	10 / 20
1,1,2,2-Tetrachloroethane	1/10/50	ug/L	60 1	46 8	--	--	--	--	500 / 1000
Tetrachloroethene	1	ug/L	17 9	16 5	--	--	--	--	60 / 120
Toluene	1	ug/L	ND	ND	--	--	--	--	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	ND	--	--	--	--	10 / 20
1,1,2-Trichloroethane	1	ug/L	ND	ND	--	--	--	--	50 / 100
Trichloroethene	1/10/50	ug/L	116	144	--	--	--	--	400 / 800
TCL Semi-Volatile Organics (Method 8270C)									*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	ND	--	--	--	--	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	ND	--	--	--	--	30 / 60
Naphthalene	2	ug/L	ND	ND	--	--	--	--	10 / 20
Phenol	5	ug/L	ND	ND	--	--	--	--	10 / 20

NOTE Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F.1 of Industrial Wastewater Discharge Agreement.

All analyses performed by Environmental Testing & Consulting, Inc , Memphis, TN

* = Recovery well RW-09 was not in operation at the time of sample collection

** = Recovery well RW-08 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

ND = not detected

B = analyte detected in associated method blank

mg/L = milligrams per liter

ug/L = micrograms per liter

DL = detection limit

GPM = gallons per minute

GPD = gallons per day

91 2 = bold number indicates that value exceeds Discharge Max Levels

received
MAR 9 1999

the IT group

IT Corporation
A Member of The IT Group

FACSIMILE

To: MICHAEL LEE

From: STEVE OFFNER

Location: MEMPHIS DEPOT

Fax Number: 901.544.0639

Page 1 of 18

Date: 3/9/99

Remarks: Feb-99 Analytical results

Supplemental monitoring samples to follow.

479 476

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

March 1, 1999

RECEIVED
MAR - 9 1999

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Ref: Analytical Testing
ETC Order # 9902664
Project Description DDMT

Project # 920022 Defense Depot - Memphis, TN

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY TABLE

ient Name OHM Remediation Services
te ID DDMT

ple ID	Field ID	Matrix	Method	Method Description
266401	ST-EFF-09	AQUEOUS	200.7	Silver
266401	ST-EFF-09	AQUEOUS	200.7	Aluminum
266401	ST-EFF-09	AQUEOUS	206.2	Arsenic
266401	ST-EFF-09	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
266401	ST-EFF-09	AQUEOUS	200.7	Barium
266401	ST-EFF-09	AQUEOUS	200.7	Beryllium
266401	ST-EFF-09	AQUEOUS	200.7	Calcium
266401	ST-EFF-09	AQUEOUS	200.7	Cadmium
266401	ST-EFF-09	AQUEOUS	200.7	Cobalt
266401	ST-EFF-09	AQUEOUS	200.7	Chromium
266401	ST-EFF-09	AQUEOUS	200.7	Copper
266401	ST-EFF-09	AQUEOUS	200.7	Iron
266401	ST-EFF-09	AQUEOUS	245.1	Mercury
266401	ST-EFF-09	AQUEOUS	200.7	Potassium
266401	ST-EFF-09	AQUEOUS	200.7	Magnesium
266401	ST-EFF-09	AQUEOUS	200.7	Manganese
266401	ST-EFF-09	AQUEOUS	200.7	Sodium
266401	ST-EFF-09	AQUEOUS	200.7	Nickel
266401	ST-EFF-09	AQUEOUS	200.7	Lead
266401	ST-EFF-09	AQUEOUS	150.1	pH
266401	ST-EFF-09	AQUEOUS	200.7	Antimony
266401	ST-EFF-09	AQUEOUS	200.7	Selenium
266401	ST-EFF-09	AQUEOUS	200.7	Thallium
266401	ST-EFF-09	AQUEOUS	8260B	GC/MS Volatile Organics
266401	ST-EFF-09	AQUEOUS	200.7	Vanadium
266401	ST-EFF-09	AQUEOUS	200.7	Zinc
266402	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics
266403	Equipment Blank	AQUEOUS	200.7	Silver
266403	Equipment Blank	AQUEOUS	200.7	Aluminum
266403	Equipment Blank	AQUEOUS	206.2	Arsenic
266403	Equipment Blank	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
266403	Equipment Blank	AQUEOUS	200.7	Barium
266403	Equipment Blank	AQUEOUS	200.7	Beryllium
266403	Equipment Blank	AQUEOUS	200.7	Calcium
266403	Equipment Blank	AQUEOUS	200.7	Cadmium
266403	Equipment Blank	AQUEOUS	200.7	Cobalt
266403	Equipment Blank	AQUEOUS	200.7	Chromium
266403	Equipment Blank	AQUEOUS	200.7	Copper
266403	Equipment Blank	AQUEOUS	200.7	Iron
266403	Equipment Blank	AQUEOUS	245.1	Mercury
266403	Equipment Blank	AQUEOUS	200.7	Potassium
266403	Equipment Blank	AQUEOUS	200.7	Magnesium
266403	Equipment Blank	AQUEOUS	200.7	Manganese
266403	Equipment Blank	AQUEOUS	200.7	Sodium
266403	Equipment Blank	AQUEOUS	200.7	Nickel
266403	Equipment Blank	AQUEOUS	200.7	Lead
266403	Equipment Blank	AQUEOUS	150.1	pH
266403	Equipment Blank	AQUEOUS	200.7	Antimony
266403	Equipment Blank	AQUEOUS	200.7	Selenium
266403	Equipment Blank	AQUEOUS	200.7	Thallium
266403	Equipment Blank	AQUEOUS	8260B	GC/MS Volatile Organics
266403	Equipment Blank	AQUEOUS	200.7	Vanadium
266403	Equipment Blank	AQUEOUS	200.7	Zinc

479.479

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

#990226064

OHM Remediation Services Corp

Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY
206574

FORM 0019 REV 2-97

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770 734 8060	770 453-7716	ETC	Nathan Pera	OHM/IT
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
Dunn Field	Memphis, TN	920022	901 327 2750	901 327 6334	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	770 326 2571	770 453 7716	2924 Walnut Creek Rd		5445 Triangle Pkwy
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY, STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
1708 Dunn Ave	Memphis, TN 38106	USACE	Memphis, TN 38111		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770 826 2571	770 453 7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: TCL VOC 8260B	TCL SVOC 8270B	TAL Metals 6010	pH 150.1	Comments
1	ST-EFF-09	H_2O	2/2/99	1330	HCl Thio None	21	3	7 day	X	X	X	X	Please run matrix spike and Matrix Spike Duplicate w/ our bottles of water from ST-EFF-09
2	Trip Blank	H_2O	2/2/99		HCl	3	3	7day	X				
3	Equipment Blank	H_2O	2/2/99	1330	HCl Thio None	7	3	7day	X	X	X	X	
4													
5													FLOW RATE = 108.1 GPM
6													total Flow = 42 8806 GAL.
7													
8													
9													
10													

SAMPLES COLLECTED BY	COURIER AND AIR BILL NUMBER:			COOLER TEMPERATURE UPON RECEIPT:
RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
[signature]	R. Barge	2/2/99	1500	4°C (23)

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

479 480
MAR 09 '99 03:47PM OHM NORCROSS

Environmental Testing & Consulting, Inc.

Sample Reports

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT

e Arrived 02/22/99
Order Number 9902664

Lab ID 9902664-01
ple ID: ST-EFF-09

Matrix :AQUEOUS
Sample Date :02/22/99

T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	6.1	SU		1530	02/22/99	RB	150.1

ORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT

e Arrived 02/22/99
Order Number 9902664

Lab ID 9902664-03
nple ID: Equipment Blank

Matrix :AQUEOUS
Sample Date :02/22/99

T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	6.8	SU		1530	02/22/99	RB	150.1

ORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479-484

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT

e Arrived 02/22/99
Order Number 9902664

Lab ID 9902664-01
ple ID: ST-EFF-09

Matrix :AQUEOUS
Sample Date :02/22/99

T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
ury Digestion Batch	V4-AQ-90				02/25/99	RM	245.1
ls Digestion Batch	V14-AQ-42				02/25/99	NR	3030K
er	<0.009	mg/L	0.009	1258	02/26/99	TD	200.7
inum	<0.060	mg/L	0.060	1258	02/26/99	TD	200.7
nic	<0.003	mg/L	0.003	1222	02/25/99	TD	206.2
um	0.109	mg/L	0.003	1258	02/26/99	TD	200.7
llium	<0.002	mg/L	0.002	1258	02/26/99	TD	200.7
ium	23.1	mg/L	0.015	1258	02/26/99	TD	200.7
ium	<0.005	mg/L	0.005	1258	02/26/99	TD	200.7
lt	<0.009	mg/L	0.009	1258	02/26/99	TD	200.7
mium	<0.009	mg/L	0.009	1258	02/26/99	TD	200.7
er	<0.008	mg/L	0.008	1258	02/26/99	TD	200.7
	0.151	mg/L	0.009	1258	02/26/99	TD	200.7
ury	<0.0002	mg/L	0.0002	1448	02/25/99	RM	245.1
ssium	0.951	mg/L	0.250	1258	02/26/99	TD	200.7
esium	11.3	mg/L	0.040	1258	02/26/99	TD	200.7
anese	0.049	mg/L	0.003	1258	02/26/99	TD	200.7
um	24.1	mg/L	0.050	1258	02/26/99	TD	200.7
el	<0.020	mg/L	0.020	1258	02/26/99	TD	200.7
	<0.060	mg/L	0.060	1258	02/26/99	TD	200.7
mony	<0.040	mg/L	0.040	1258	02/26/99	TD	200.7
nium	<0.100	mg/L	0.100	1258	02/26/99	TD	200.7
llium	<0.065	mg/L	0.065	1258	02/26/99	TD	200.7
dium	<0.010	mg/L	0.010	1258	02/26/99	TD	200.7
	0.065	mg/L	0.010	1258	02/26/99	TD	200.7

BORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 485

INORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

te ID DDMT

te Arrived 02/22/99
C Order Number 9902664

C Lab ID 9902664-03
mple ID: Equipment Blank

Matrix :AQUEOUS
Sample Date :02/22/99

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
:cury Digestion Batch	V4-AQ-90				02/25/99	RM	245.1
:als Digestion Batch	V14-AQ-42				02/25/99	NR	3030K
.ver	<0.009	mg/L	0.009	1321	02/26/99	TD	200.7
ıminum	<0.060	mg/L	0.060	1321	02/26/99	TD	200.7
;enic	<0.003	mg/L	0.003	1234	02/25/99	TD	206.2
·ium	<0.003	mg/L	0.003	1321	02/26/99	TD	200.7
·yllium	<0.002	mg/L	0.002	1321	02/26/99	TD	200.7
.cium	0.026	mg/L	0.015	1321	02/26/99	TD	200.7
ımium	<0.005	mg/L	0.005	1321	02/26/99	TD	200.7
›alt	<0.009	mg/L	0.009	1321	02/26/99	TD	200.7
:omium	<0.009	mg/L	0.009	1321	02/26/99	TD	200.7
›per	<0.008	mg/L	0.008	1321	02/26/99	TD	200.7
›n	<0.009	mg/L	0.009	1321	02/26/99	TD	200.7
·cury	<0.0002	mg/L	0.0002	1454	02/25/99	RM	245.1
.assium	<0.250	mg/L	0.250	1321	02/26/99	TD	200.7
ɲnesium	<0.040	mg/L	0.040	1321	02/26/99	TD	200.7
ıganese	<0.003	mg/L	0.003	1321	02/26/99	TD	200.7
ɨium	0.155	mg/L	0.050	1321	02/26/99	TD	200.7
:kel	<0.020	mg/L	0.020	1321	02/26/99	TD	200.7
ıd	<0.060	mg/L	0.060	1321	02/26/99	TD	200.7
:imony	<0.040	mg/L	0.040	1321	02/26/99	TD	200.7
ɛenium	<0.100	mg/L	0.100	1321	02/26/99	TD	200.7
ıllium	<0.065	mg/L	0.065	1321	02/26/99	TD	200.7
ıadium	<0.010	mg/L	0.010	1321	02/26/99	TD	200.7
ıc	<0.010	mg/L	0.010	1321	02/26/99	TD	200.7

BORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT

e Arrived 02/22/99
Order Number 9902664

Lab ID 9902664-01
ıple ID: ST-EFF-09

Matrix :AQUEOUS
Sample Date :02/22/99

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
S Volatile Organics							8260B
Batch	V4022601	ug/L			02/26/99	RM	
etone	ND	ug/L	50.0				
nzene	ND	ug/L	1.00				
omodichloromethane	ND	ug/L	1.00				
omoform	ND	ug/L	1.00				
omomethane	ND	ug/L	1.00				
rbon Disulfide	ND	ug/L	1.00				
rbon Tetrachloride	2.53	ug/L	1.00				
lorobenzene	ND	ug/L	1.00				
lorodibromomethane	ND	ug/L	1.00				
loroethane	ND	ug/L	1.00				
loroform	6.64	ug/L	1.00				
loromethane	ND	ug/L	1.00				
1-Dichloroethane	ND	ug/L	1.00				
2-Dichloroethane	ND	ug/L	1.00				
1-Dichloroethene	19.5	ug/L	1.00				
ans-1,2-Dichloroethene	11.0	ug/L	1.00				
2-Dichloropropane	ND	ug/L	1.00				
s-1,3-Dichloropropene	ND	ug/L	1.00				
ans-1,3-Dichloropropene	ND	ug/L	1.00				
hylbenzene	ND	ug/L	1.00				
Hexanone (MBK)	ND	ug/L	5.00				
Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Butanone (MEK)	ND	ug/L	20.0				
thylene Chloride	ND	ug/L	5.00				
yrene	ND	ug/L	1.00				
1,2,2-Tetrachloroethane	46.8	ug/L	1.00				
trachloroethene	16.5	ug/L	1.00				
luene	ND	ug/L	1.00				
1,1-Trichloroethane	ND	ug/L	1.00				
1,2-Trichloroethane	ND	ug/L	1.00				
ichloroethene	144	ug/L	1.00				
nyl Acetate	ND	ug/L	20.0				
nyl Chloride	ND	ug/L	1.00				
Xylenes	ND	ug/L	1.00				
Xylenes	ND	ug/L	1.00				
Xylenes	ND	ug/L	1.00				
s-1,2-Dichloroethene	36.2	ug/L	1.00				

rogate Standard	% Recovery	QC Limits	
- Dibromofluoromethane	105	74	123
- Toluene-d8	100	86	112
- 4-Bromofluorobenzene	105	81	115

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT

e Arrived 02/22/99
Order Number 9902664

Lab ID 9902664-02
nple ID: Trip Blank

Matrix :AQUEOUS
Sample Date :02/22/99

t	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
1S Volatile Organics							8260B
					02/26/99	RM	
Batch	V4022601	ug/L					
etone	ND	ug/L	50.0				
enzene	ND	ug/L	1.00				
romodichloromethane	ND	ug/L	1.00				
romoform	ND	ug/L	1.00				
romomethane	ND	ug/L	1.00				
arbon Disulfide	ND	ug/L	1.00				
arbon Tetrachloride	ND	ug/L	1.00				
lorobenzene	ND	ug/L	1.00				
lorodibromomethane	ND	ug/L	1.00				
loroethane	ND	ug/L	1.00				
loroform	ND	ug/L	1.00				
loromethane	ND	ug/L	1.00				
,1-Dichloroethane	ND	ug/L	1.00				
,2-Dichloroethane	ND	ug/L	1.00				
,1-Dichloroethene	ND	ug/L	1.00				
rans-1,2-Dichloroethene	ND	ug/L	1.00				
,2-Dichloropropane	ND	ug/L	1.00				
is-1,3-Dichloropropene	ND	ug/L	1.00				
rans-1,3-Dichloropropene	ND	ug/L	1.00				
thylbenzene	ND	ug/L	1.00				
-Hexanone (MBK)	ND	ug/L	5.00				
-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
-Butanone (MEK)	ND	ug/L	20.0				
ethylene Chloride	ND	ug/L	5.00				
tyrene	ND	ug/L	1.00				
,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
etrachloroethene	ND	ug/L	1.00				
oluene	ND	ug/L	1.00				
,1,1-Trichloroethane	ND	ug/L	1.00				
,1,2-Trichloroethane	ND	ug/L	1.00				
richloroethene	ND	ug/L	1.00				
inyl Acetate	ND	ug/L	20.0				
inyl Chloride	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
is-1,2-Dichloroethene	ND	ug/L	1.00				

rogate Standard	% Recovery	QC Limits	
- Dibromofluoromethane	105	74	123
- Toluene-d8	97	86	112
- 4-Bromofluorobenzene	102	81	115

000013

BORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 488

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT

te Arrived 02/22/99
'C Order Number 9902664

'C Lab ID 9902664-03
mple ID: Equipment Blank

Matrix :AQUEOUS
Sample Date :02/22/99

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Volatile Organics							8260B
					02/26/99	RM	
QC Batch	V4022601	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

urrogate Standard	% Recovery	QC Limits	
1 - Dibromofluoromethane	106	74	123
2 - Toluene-d8	103	86	112
3 - 4-Bromofluorobenzene	103	81	115

000015

BORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT

e Arrived 02/22/99
Order Number 9902664

Lab ID 9902664-01
ıple ID: ST-EFF-09

Matrix :AQUEOUS
Sample Date :02/22/99

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
ıS Base/Neutral & Acid				02/23/99	02/23/99	CB	8270C
: Batch	P05135	ug/L					
:enaphthene	ND	ug/L	2.00				
:enaphthylene	ND	ug/L	2.00				
ıthracene	ND	ug/L	2.00				
'nzo(a)anthracene	ND	ug/L	2.00				
'nzo(b)fluoranthene	ND	ug/L	2.00				
:nzo(k)fluoranthene	ND	ug/L	2.00				
:nzo(g,h,i)perylene	ND	ug/L	2.00				
:nzo(a)pyrene	ND	ug/L	2.00				
:nzoic Acid	ND	ug/L	50.0				
:nzyl Alcohol	ND	ug/L	10.0				
.s(2-chloroethoxy)methane	ND	ug/L	5.00				
.s(2-chloroethyl)ether	ND	ug/L	5.00				
.s(2-chloroisopropyl)ether	ND	ug/L	5.00				
s(2-ethylhexyl)phthalate	ND	ug/L	10.0				
Bromophenyl phenyl ether	ND	ug/L	5.00				
ıtyl benzyl phthalate	ND	ug/L	5.00				
Chloroanıline	ND	ug/L	5.00				
Chloronaphthalene	ND	ug/L	5.00				
Chloro-3-methylphenol	ND	ug/L	5.00				
Chlorophenol	ND	ug/L	5.00				
-Chlorophenyl phenyl ether	ND	ug/L	5.00				
ırysene	ND	ug/L	2.00				
.benzo(a,h)anthracene	ND	ug/L	2.00				
.benzofuran	ND	ug/L	5.00				
.-n-butyl phthalate	ND	ug/L	5.00				
2-Dichlorobenzene	ND	ug/L	5.00				
3-Dichlorobenzene	ND	ug/L	5.00				
4-Dichlorobenzene	ND	ug/L	5.00				
3'-Dichlorobenzidine	ND	ug/L	10.0				
4-Dichlorophenol	ND	ug/L	5.00				
6-Dichlorophenol	ND	ug/L	5.00				
.ethyl phthalate	ND	ug/L	5.00				
4-Dimethylphenol	ND	ug/L	5.00				
.methyl phthalate	ND	ug/L	5.00				
6-Dinitro-2-methylphenol	ND	ug/L	10.0				
4-Dinitrophenol	ND	ug/L	50.0				
4-Dinitrotoluene	ND	ug/L	5.00				
.6-Dinitrotoluene	ND	ug/L	5.00				
ı-n-octyl phthalate	ND	ug/L	5.00				
luoranthene	ND	ug/L	2.00				
luorene	ND	ug/L	2.00				
exachlorobenzene	ND	ug/L	5.00				

000017

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 490

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT

e Arrived 02/22/99
Order Number 9902664

Lab ID 9902664-01
ıple ID: ST-EFF-09

Matrix :AQUEOUS
Sample Date :02/22/99

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
ıS Base/Neutral & Acid				02/23/99	02/23/99	CB	8270C
.xachlorobutadiene	ND	ug/L	5.00				
·xachlorocyclopentadiene	ND	ug/L	5.00				
·xachloroethane	ND	ug/L	5.00				
.deno(1,2,3-cd)pyrene	ND	ug/L	2.00				
ophorone	ND	ug/L	5.00				
Methylnaphthalene	ND	ug/L	2.00				
Methylphenol (o-cresol)	ND	ug/L	5.00				
Methylphenol (m-cresol)	ND	ug/L	5.00				
Methylphenol (p-cresol)	ND	ug/L	5.00				
phthalene	ND	ug/L	2.00				
trobenzene	ND	ug/L	5.00				
Nitroaniline	ND	ug/L	5.00				
Nitroaniline	ND	ug/L	10.0				
Nitroaniline	ND	ug/L	5.00				
Nitrophenol	ND	ug/L	5.00				
Nitrophenol	ND	ug/L	5.00				
Nitrosodiphenylamine	ND	ug/L	5.00				
Nitrosodipropylamine	ND	ug/L	5.00				
:ntachlorophenol	ND	ug/L	10.0				
ıenanthrene	ND	ug/L	2.00				
ıenol	ND	ug/L	5.00				
·rene	ND	ug/L	2.00				
2,4-Trichlorobenzene	ND	ug/L	5.00				
4,5-Trichlorphenol	ND	ug/L	5.00				
4,6-Trichlorophenol	ND	ug/L	5.00				

rogate Standard	% Recovery	QC Limits	
- Nitrobenzene-d5	79	29	110
- 2-Fluorobiphenyl	74	38	107
- 4-Terphenyl-d14	98	33	122
- Phenol-d6	32	7	58
- 2,4,6-Tribromophenol	91	16	138
- 2-Fluorophenol	50	8	88

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 491

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
e ID DDMT

Project # 920022
FID # DACA45-96-D-0014

e Arrived 02/22/99
Order Number 9902664

Lab ID 9902664-03
ıple ID: Equipment Blank

Matrix :AQUEOUS
Sample Date :02/22/99

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
S Base/Neutral & Acid							8270C
Batch	P05135	ug/L		02/23/99	02/26/99	CB	
enaphthene	ND	ug/L	2.00				
enaphthylene	ND	ug/L	2.00				
thracene	ND	ug/L	2.00				
nzo(a)anthracene	ND	ug/L	2.00				
nzo(b)fluoranthene	ND	ug/L	2.00				
nzo(k)fluoranthene	ND	ug/L	2.00				
nzo(g,h,i)perylene	ND	ug/L	2.00				
nzo(a)pyrene	ND	ug/L	2.00				
nzoic Acid	ND	ug/L	50.0				
nzyl Alcohol	ND	ug/L	10.0				
s(2-chloroethoxy)methane	ND	ug/L	5.00				
s(2-chloroethyl)ether	ND	ug/L	5.00				
s(2-chloroisopropyl)ether	ND	ug/L	5.00				
s(2-ethylhexyl)phthalate	ND	ug/L	10.0				
Bromophenyl phenyl ether	ND	ug/L	5.00				
tyl benzyl phthalate	ND	ug/L	5.00				
Chloroaniline	ND	ug/L	5.00				
Chloronaphthalene	ND	ug/L	5.00				
Chloro-3-methylphenol	ND	ug/L	5.00				
Chlorophenol	ND	ug/L	5.00				
Chlorophenyl phenyl ether	ND	ug/L	5.00				
rysene	ND	ug/L	2.00				
benzo(a,h)anthracene	ND	ug/L	2.00				
benzofuran	ND	ug/L	5.00				
-n-butyl phthalate	ND	ug/L	5.00				
2-Dichlorobenzene	ND	ug/L	5.00				
3-Dichlorobenzene	ND	ug/L	5.00				
4-Dichlorobenzene	ND	ug/L	5.00				
3'-Dichlorobenzidine	ND	ug/L	10.0				
4-Dichlorophenol	ND	ug/L	5.00				
6-Dichlorophenol	ND	ug/L	5.00				
ethyl phthalate	ND	ug/L	5.00				
4-Dimethylphenol	ND	ug/L	5.00				
methyl phthalate	ND	ug/L	5.00				
6-Dinitro-2-methylphenol	ND	ug/L	10.0				
4-Dinitrophenol	ND	ug/L	50.0				
4-Dinitrotoluene	ND	ug/L	5.00				
6-Dinitrotoluene	ND	ug/L	5.00				
-n-octyl phthalate	ND	ug/L	5.00				
uoranthene	ND	ug/L	2.00				
uorene	ND	ug/L	2.00				
xachlorobenzene	ND	ug/L	5.00				

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

nt Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
ID DDMT

Project # 920022
FID # DACA45-96-D-0014

Arrived 02/22/99
Order Number 9902664

Lab ID 9902664-03
ple ID: Equipment Blank

Matrix :AQUEOUS
Sample Date :02/22/99

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
Base/Neutral & Acid							8270C
achlorobutadiene	ND	ug/L	5.00	02/23/99	02/26/99	CB	
achlorocyclopentadiene	ND	ug/L	5.00				
achloroethane	ND	ug/L	5.00				
eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
phorone	ND	ug/L	5.00				
ethylnaphthalene	ND	ug/L	2.00				
ethylphenol (o-cresol)	ND	ug/L	5.00				
ethylphenol (m-cresol)	ND	ug/L	5.00				
ethylphenol (p-cresol)	ND	ug/L	5.00				
ithalene	ND	ug/L	2.00				
cobenzene	ND	ug/L	5.00				
itroaniline	ND	ug/L	5.00				
itroaniline	ND	ug/L	10.0				
itroaniline	ND	ug/L	5.00				
trophenol	ND	ug/L	5.00				
itrophenol	ND	ug/L	5.00				
trosodiphenylamine	ND	ug/L	5.00				
trosodipropylamine	ND	ug/L	5.00				
achlorophenol	ND	ug/L	10.0				
anthrene	ND	ug/L	2.00				
ol	ND	ug/L	5.00				
ne	ND	ug/L	2.00				
4-Trichlorobenzene	ND	ug/L	5.00				
5-Trichlorphenol	ND	ug/L	5.00				
6-Trichlorophenol	ND	ug/L	5.00				

gate Standard	% Recovery	QC Limits	
Nitrobenzene-d5	71	29	110
2-Fluorobiphenyl	67	38	107
4-Terphenyl-d14	97	33	122
Phenol-d6	30	7	58
2,4,6-Tribromophenol	85	16	138
2-Fluorophenol	52	8	88

ATORY MANAGER

ND - Not Detected

received
MAR 10 1999

the i group

IT Corporation
A Member of The IT Group

FACSIMILE

To: MICHAEL LEE

From: STEVE OFFNER

Location: MEMPHIS DEPOT

Fax Number: 901.544.0639

Page 1 of 8

Date: 3/10/99

Remarks: Results of supplemental mercury analysis

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 494

INORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

te ID Dunn Field
Memphis, TN

te Arrived 02/23/99
C Order Number 9902702

C Lab ID 9902702-01
mple ID: ST-EFF-Hg-9A

Matrix :AQUEOUS
Sample Date :02/23/99

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
:cury Digestion Batch	V4-AQ-90				02/25/99	RM	245.1
:cury	<0.0002	mg/L	0.0002	1415	02/25/99	RM	245.1

BORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479-495

INORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

Site ID Dunn Field
Memphis, TN

Date Arrived 02/23/99
TC Order Number 9902702

TC Lab ID 9902702-02
Sample ID: ST-EFF-Hg-5

Matrix :AQUEOUS
Sample Date :02/23/99

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
rcury Digestion Batch	V4-AQ-90				02/25/99	RM	245.1
rcury	<0.0002	mg/L	0.0002	1415	02/25/99	RM	245.1

LABORATORY MANAGER

OHM Remediation Services Corp
Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

FORM 0019 REV. 2

OHM's LAB COORDINATOR: Elena Rodriguez	LAB COORDINATOR'S PHONE: 770 734 8660	LAB COORDINATOR'S FAX: 770 453 7716	LABORATORY SERVICE ID: EIC	LABORATORY CONTACT: Nathan Perea	MAIL REPORT (COMPANY NAME): OHM/IT
PROJECT NAME: Dunn Field	PROJECT LOCATION: Memphis, TN	PROJECT NUMBER: 920022	LABORATORY PHONE: 901 327 2750	LABORATORY FAX: 901 327 6334	RECIPIENT NAME: Elena Rodriguez
PROJECT CONTACT: Steve Offner	PROJECT PHONE NUMBER: 901-775-0173	PROJECT FAX: 901 775 2517	LABORATORY ADDRESS: 2924 Walnut Creek Rd		ADDRESS: 5445 Triangle Pkwy
PROJECT ADDRESS: 1708 Dunn Ave	CITY, STATE AND ZIPCODE: Memphis, TN	CLIENT: USACE	CITY, STATE AND ZIPCODE: Memphis, TN 38111		CITY, STATE AND ZIPCODE: Norcross, GA 30092
PROJECT MANAGER: Steve Offner	PROJECT MANAGER'S PHONE: 770 326 2571	PROJECT MANAGER'S FAX: 770 453 7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: Mercury 245.1	Comments
1	ST-EFF-Hg-9A	H_2O	2/23/99	1430	HNO_3	1	3	7 day	X	
2	ST-EFF-Hg-5	H_2O	2/23/99	1430	HNO_3	1	3	7 day	X	Average Flow = 80.1gpm Total Flow = 443688 gal.
3										
4										
5										
6										
7										
8										
9										
10										

SAMPLES COLLECTED BY:

COURIER AND AIR BILL NUMBER

COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
[signature]	Greg Schmidt	2/23/99	1435	ICED in Cooler
Greg Schmidt	Ron Parker	2/23/99	1458	EIC

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

MAR 10 '99 09:26AM OHM NORCROSS P.4/8
479 496

479 497

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

.ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

:e ID Dunn Field
Memphis, TN

:e Arrived 02/24/99
: Order Number 9902756

: Lab ID 9902756-01
mple ID: ST-EFF-Hg-9B

Matrix :AQUEOUS
Sample Date :02/24/99

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
:cury Digestion Batch	V4-AQ-94				03/01/99	RM	245.1
:cury	<0.0002	mg/L	0.0002	1657	03/01/99	RM	245.1

ABORATORY MANAGER

OHM Remediation Services Corp
Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

PROJECT FILE CARD
206976

FORM 0019 REV. 2-97

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770 734 8060	770 453 7716	ETC	Nathan Pera	OHM/IT
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
Intl Field	Memphis, TN	420022	901 327 2750	901 327 6334	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901 775 0173	901 775 2517	2924 Walnut Creek Rd		5445 Triangle Pkwy
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY, STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
3163 Airways	Memphis, TN 38114	USACE	Memphis, TN 38111		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770 326 ~~2517~~ 2571	770 453 7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: Mercury 245.1	Comments
1	ST-EFF-Hg-9B	H_2O	2/24/99	2:00	HNO_3	1	3	7day	X	
2										
3										Flow Rate: 99.24
4										
5										Total Flow: 0000454
6										
7										
8										
9										
10										

SAMPLES COLLECTED BY:

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
Steve P. Offner	RBarge	2/24/99	3:30	

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

479 493

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT
Memphis, TN

e Arrived 02/25/99
Order Number 9902775

Lab ID 9902775-01
mple ID: ST-EFF-Hg-9C

Matrix :AQUEOUS
Sample Date :02/25/99

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
cury Digestion Batch	V4-AQ-94				03/01/99	RM	245.1
cury	<0.0002	mg/L	0.0002	1701	03/01/99	RM	245.1

Lab ID 9902775-02
mple ID: Equipment Blank

Matrix :AQUEOUS
Sample Date :02/25/99

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
cury Digestion Batch	V4-AQ-94				03/01/99	RM	245.1
cury	<0.0002	mg/L	0.0002	1706	03/01/99	RM	245.1

ABORATORY MANAGER

OHM Remediation Services Corp

Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

PROJECT FILE CARD
206973
FORM 0019 REV. 2-97

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770 734 8060	770 453 7716	ETC	Nathan Pera	OHM
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DMT	Memphis, TN	920022	901 327 2750	901 327 6834	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**	**ADDRESS**	
Steve Offner	901 775 0173	901 775 2517	2924 Walnut Creek Rd	5745 Triangle Pkwy	
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY, STATE AND ZIPCODE**	**CITY, STATE AND ZIPCODE**	
2163 Airways	Memphis, TN 38114	USACE	Memphis, TN 38111	Norcross, GA 30091	
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770 326 2571	770 453 7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: Mercury 245.1	Comments
1	SI-EFF-Hg-9C	H_2O	2/25/97	9:30	HNO_3	1	3	7 day	X	
2	Equipment Blank	H_2O	2/25/97	9:30	HNO_3	1	3	7 day	X	
3										Flow RATE = 104.2 GI
4										TOTAL FLOW = 0000467
5										
6										
7										
8										
9										
10										

SAMPLES COLLECTED BY	COURIER AND AIR BILL NUMBER			COOLER TEMPERATURE UPON RECEIPT
RELINQUISHED BY	**RECEIVED BY**	**DATE**	**TIME**	**SAMPLE'S CONDITION UPON RECEIPT**
Steve F. Kolb	R Bauge	2/25/97	10:00	

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

MAR 10 '99 09:29AM OHM NORCROSS P.8/8

February 1999 Monthly Discharge Report
Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Groundwater Recovery System Operation - February 1999		
Total Effluent Discharge through January 31, 1999	21,225,630 Gallons	
Duration of System Operation:	1-Feb-99 through 28-Feb-99	
System On-line:	28 Days	No full system shutdown in Feb-99
Recovery Wells Off-line:	1-Feb-99	Recovery wells RW-03, -04 & -05 were shutdown for sampling from 14 00 to 18 00.
	4-Feb-99	Recovery wells RW-06 & -07 were shutdown for sampling from 12:00 to 13 00
	4-Feb-99	Recovery wells RW-03, -06, -07, -08 & -09 were shutdown for sampling from 16 00 to 19 00
	23-Feb-99 to 25-Feb-99	Recovery well RW-08 was shutdown at 9 00 on 23-Feb-99 due to leak at a pressure guage coneection. Part replaced and well restarted at 11 00 on 25-Feb-99.
System Effluent Samples Collected	22-Feb-99	Week 17 of System Operation
**Grab samples collected & analyzed per the City of Memphis letter dated 28-Jan-99*	23-Feb-99	Day-2 Supplemental Mercury Analysis*
	24-Feb-99	Day-3 Supplemental Mercury Analysis*
	25-Feb-99	Day-4 Supplemental Mercury Analysis*
Total February 1999 Effluent Discharge Volume:	**4,280,248 Gallons**	31-Jan-99 through 28-Feb-99
February 1999 Average Discharge Flow Rate	102.3 GPM	
February 1999 Maximum Discharge Flow Rate	115.8 GPM	on 2-Feb-99
February 1999 Minimum Discharge Flow Rate	12 9 GPM	on 4-Feb-99
Total System Effluent through 28 February 1999	25,505,878 Gallons	

DEFENSE LOGISTICS AGENCY
DEFENSE DEPOT SUSQUEHANNA, PENNSYLVANIA
MEMPHIS DEPOT CARETAKER DIVISION
2163 AIRWAYS BOULEVARD, BLDG 144
MEMPHIS, TENNESSEE 38114-5210

479 502

REPLY REFER TO DDSP-F

January 9, 1999

Mr. Akil Al-Chokhachi
City of Memphis
Division of Public Works
2303 North Second Street
Memphis, TN 38127-7500

Dear Mr. Al-Chokhachi:

Please find enclosed the following documents for the sampling results from the groundwater we are extracting from Dunn Field for January 1999. We do not exceed any discharge agreement parameters.

1. Spreadsheet Summary of Analytical Results.
2. Analytical Data from sampling the groundwater.
3 Monthly Discharge Report total for January 1999.

Please contact me at 544-0611, if you have any questions.

Sincerely,

Harold Koval

for

SHAWN PHILLIPS
BRAC Environmental Coordinator

Enclosure

cc:
Rodney Thomas, City of Memphis
Jordan English, TDEC
Turpin Ballard, USEPA

Summary of Analytical Results for Total Effluent of the Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Sample Identification Number			ST-EFF-08	City of Memphis Industrial Wastewater Discharge Max. Levels
Laboratory ID No.			9901668-01	
Total System Effluent Sample Description			Week 13 of System Operation (O&M)	
Date Effluent Sample Collected			26-Jan-99	--
Instantaneous Flow Rate			116 7 GPM / 168,048 GPD	561,600 GPD
Totalized Flow			20,527,972 GAL	--
LABORATORY ANALYSES	**DL**	**Units**		*Monthly Ave / One Day Max.*
pH (Method 150 1)	--	SU	6 5	5 5 to 10 0
TAL Metals (EPA 200 Series)				*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 119	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	0 01 / 0.02
Calcium (Method 200 7)	0 015	mg/L	27 1	NS
Chromium (Method 200 7)	0 009	mg/L	ND	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 044	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	12 5	NS
Manganese (Method 200 7)	0 003	mg/L	0 175	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	0 1 / 0 3
Potassium (Method 200 7)	0 25	mg/L	0 927	NS
Sodium (Method 200 7)	0 05	mg/L	26 5	NS
Zinc (Method 200 7)	0 01	mg/L	0 048	0 3 / 1 0
TCL Volatile Organics (Method 8260B)				*ug/L*
Carbon Tetrachloride	1	ug/L	2 32	20 / 40
Chloroform	1	ug/L	9 95	20 / 40
1,1-Dichloroethene	1	ug/L	13 3	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	34	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	7 85	50 / 100
Methylene Chloride	5	ug/L	ND	10 / 20
1,1,2,2-Tetrachloroethane	1/10/50	ug/L	60 1	500 / 1000
Tetrachloroethene	1	ug/L	17 9	60 / 120
Toluene	1	ug/L	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	10 / 20
1,1,2-Trichloroethane	1	ug/L	ND	50 / 100
Trichloroethene	1/10/50	ug/L	116	400 / 800
TCL Semi-Volatile Organics (Method 8270C)				*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	30 / 60
Naphthalene	2	ug/L	ND	10 / 20
Phenol	5	ug/L	ND	10 / 20

NOTE: Compounds included in this table are those listed in Section D.3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement

All analyses performed by Environmental Testing & Consulting, Inc , Memphis, TN

* = Recovery well RW-09 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

ND = not detected — B = analyte detected in associated method blank

mg/L = milligrams per liter — ug/L = micrograms per liter

DL = detection limit — GPM = gallons per minute

GPD = gallons per day — **91.2** = bold number indicates that value exceeds Discharge Max. Levels

EXC / 1

479 503

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

February 2, 1999

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Ref: Analytical Testing
ETC Order # 9901688
Project Description DDMT

Project # 920022 Defense Depot - Memphis, TN

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

Encl 2

479 505

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY TABLE

lent Name OHM Remediation Services
:e ID DDMT

ple ID	Field ID	Matrix	Method	Method Description
168801	ST-EFF-08	AQUEOUS	200.7	Silver
168801	ST-EFF-08	AQUEOUS	200.7	Aluminum
168801	ST-EFF-08	AQUEOUS	206.2	Arsenic
168801	ST-EFF-08	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
168801	ST-EFF-08	AQUEOUS	200.7	Barium
168801	ST-EFF-08	AQUEOUS	200.7	Beryllium
168801	ST-EFF-08	AQUEOUS	200.7	Calcium
168801	ST-EFF-08	AQUEOUS	200.7	Cadmium
168801	ST-EFF-08	AQUEOUS	200.7	Cobalt
168801	ST-EFF-08	AQUEOUS	200.7	Chromium
168801	ST-EFF-08	AQUEOUS	200.7	Copper
168801	ST-EFF-08	AQUEOUS	200.7	Iron
168801	ST-EFF-08	AQUEOUS	245.1	Mercury
168801	ST-EFF-08	AQUEOUS	200.7	Potassium
168801	ST-EFF-08	AQUEOUS	200.7	Magnesium
168801	ST-EFF-08	AQUEOUS	200.7	Manganese
168801	ST-EFF-08	AQUEOUS	200.7	Sodium
168801	ST-EFF-08	AQUEOUS	200.7	Nickel
168801	ST-EFF-08	AQUEOUS	200.7	Lead
168801	ST-EFF-08	AQUEOUS	150.1	pH
168801	ST-EFF-08	AQUEOUS	200.7	Antimony
168801	ST-EFF-08	AQUEOUS	200.7	Selenium
168801	ST-EFF-08	AQUEOUS	200.7	Thallium
168801	ST-EFF-08	AQUEOUS	8260B	GC/MS Volatile Organics
168801	ST-EFF-08	AQUEOUS	200.7	Vanadium
168801	ST-EFF-08	AQUEOUS	200.7	Zinc
168802	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

479 507

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

OHM Remediation Services Corp

Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

218182

PROJECT# 9.20022 WBS# 89,000,000 PO#

FORM 0019 REV. 2-97

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ETC	Nathan Pera	OHM Remediation Services/IT Corp.
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDMT	Memphis, TN		901-327-2750	901-327-6334	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-775-0173	901-775-2517	2924 Walnut Grove Road		5445 Triangle Pkwy, Suite 400
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
1708 Dunn Ave.	Memphis, TN 38114	USACE	Memphis, TN 38111		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: TCL VOCs 8260 B; TCL SVOCs 8270 B; TAL Metals-200 Series; pH (420.1)	Comments
1	ST-EFF-08	H_2O	~~1/26/99~~ 1/28/99	1615	HCl, NaOH, None	21	Level 3	7 day	X X X X	Please fax results on DUE DATE to SITE and to Lab Coordinator.
2	Trip Blank	H_2O	—	—	HCl	2-3	Level 3	7 day	X =	Please run matrix spike and Matrix Spike Duplicate with our bottles of Water ~~for~~ from sample ST-EFF-08
3										
4										
5										
6										
7										
8										
9										
10										

SAMPLES COLLECTED BY: Tom Switzer

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
Tom Switzer				
	RBerger	1-27-99	0805	~4°C, RB

Distribution: White - Laboratory (To be returned with Analytical Report), Goldenrod - Project File; Yellow - Project Data Manager

0000004

FEB 08 '99 06:53PM OHM NORCROSS P.6/12

476 508

Environmental Testing & Consulting, Inc.

Sample Reports

ENVIRONMENTAL TESTING & CONSULTING, INC.

479 510

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

te ID DDMT

te Arrived 01/27/99
C Order Number 9901688

C Lab ID 9901688-01
mple ID: ST-EFF-08

Matrix :AQUEOUS
Sample Date :01/26/99

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	6.5	SU		0840	01/27/99	RB	150.1

BORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 511

INORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

Site ID DDMT

Date Arrived 01/27/99
STC Order Number 9901688

STC Lab ID 9901688-01
Sample ID: ST-EFF-08

Matrix :AQUEOUS
Sample Date :01/26/99

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
Mercury Digestion Batch	V4-AQ-78				01/28/99	RM	245.1
Metals Digestion Batch	V13-AQ-93				01/29/99	NR	3030K
Silver	<0.009	mg/L	0.009	1024	02/01/99	TD	200.7
Aluminum	<0.060	mg/L	0.060	1024	02/01/99	TD	200.7
Arsenic	<0.003	mg/L	0.003	1202	02/02/99	JF	206.2
Barium	0.119	mg/L	0.003	1024	02/01/99	TD	200.7
Beryllium	<0.002	mg/L	0.002	1024	02/01/99	TD	200.7
Calcium	27.1	mg/L	0.015	1024	02/01/99	TD	200.7
Cadmium	<0.005	mg/L	0.005	1024	02/01/99	TD	200.7
Cobalt	<0.009	mg/L	0.009	1024	02/01/99	TD	200.7
Chromium	<0.009	mg/L	0.009	1024	02/01/99	TD	200.7
Copper	<0.008	mg/L	0.008	1024	02/01/99	TD	200.7
Iron	0.044	mg/L	0.009	1024	02/01/99	TD	200.7
Mercury	<0.0002	mg/L	0.0002	1549	01/28/99	RM	245.1
Potassium	0.927	mg/L	0.250	1024	02/01/99	TD	200.7
Magnesium	12.5	mg/L	0.040	1024	02/01/99	TD	200.7
Manganese	0.175	mg/L	0.003	1024	02/01/99	TD	200.7
Sodium	26.5	mg/L	0.050	1024	02/01/99	TD	200.7
Nickel	<0.020	mg/L	0.020	1024	02/01/99	TD	200.7
Lead	<0.060	mg/L	0.060	1024	02/01/99	TD	200.7
Antimony	<0.040	mg/L	0.040	1024	02/01/99	TD	200.7
Selenium	<0.100	mg/L	0.100	1024	02/01/99	TD	200.7
Thallium	<0.065	mg/L	0.065	1024	02/01/99	TD	200.7
Vanadium	<0.010	mg/L	0.010	1024	02/01/99	TD	200.7
Zinc	0.048	mg/L	0.010	1024	02/01/99	TD	200.7

LABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 512

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT

te Arrived 01/27/99
C Order Number 9901688

C Lab ID **9901688-01**
mple ID: ST-EFF-08

Matrix :AQUEOUS
Sample Date :01/26/99

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Volatile Organics							8260B
					02/01/99	LS	
QC Batch	V2020101	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	2.32	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	9.95	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	13.3	ug/L	1.00				
trans-1,2-Dichloroethene	7.85	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	60.1	ug/L	1.00				
Tetrachloroethene	17.9	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	116	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	34.0	ug/L	1.00				

rrogate Standard	% Recovery	QC Limits	
1 - Dibromofluoromethane	104	74	123
2 - Toluene-d8	104	86	112
3 - 4-Bromofluorobenzene	110	81	115

BORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT

te Arrived 01/27/99
C Order Number 9901688

C Lab ID 9901688-01
mple ID: ST-EFF-08

Matrix :AQUEOUS
Sample Date :01/26/99

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
MS Base/Neutral & Acid							8270C
QC Batch	P05122	ug/L		01/27/99	01/27/99	CB	
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

ABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 514

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

:e ID DDMT

:e Arrived 01/27/99
: Order Number 9901688

: Lab ID 9901688-01
nple ID: ST-EFF-08

Matrix :AQUEOUS
Sample Date :01/26/99

r	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
4S Base/Neutral & Acid							8270C
:xachlorobutadiene	ND	ug/L	5.00	01/27/99	01/27/99	CB	
:xachlorocyclopentadiene	ND	ug/L	5.00				
:xachloroethane	ND	ug/L	5.00				
ıdeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
:ophorone	ND	ug/L	5.00				
Methylnaphthalene	ND	ug/L	2.00				
Methylphenol (o-cresol)	ND	ug/L	5.00				
Methylphenol (m-cresol)	ND	ug/L	5.00				
Methylphenol (p-cresol)	ND	ug/L	5.00				
phthalene	ND	ug/L	2.00				
trobenzene	ND	ug/L	5.00				
Nitroaniline	ND	ug/L	5.00				
Nitroaniline	ND	ug/L	10.0				
Nitroaniline	ND	ug/L	5.00				
Nitrophenol	ND	ug/L	5.00				
Nitrophenol	ND	ug/L	5.00				
Nitrosodiphenylamine	ND	ug/L	5.00				
Nitrosodipropylamine	ND	ug/L	5.00				
ntachlorophenol	ND	ug/L	10.0				
enanthrene	ND	ug/L	2.00				
enol	ND	ug/L	5.00				
rene	ND	ug/L	2.00				
2,4-Trichlorobenzene	ND	ug/L	5.00				
4,5-Trichlorphenol	ND	ug/L	5.00				
4,6-Trichlorophenol	ND	ug/L	5.00				

:ogate Standard	% Recovery	QC Limits	
- Nitrobenzene-d5	60	29	110
- 2-Fluorobiphenyl	61	38	107
- 4-Terphenyl-d14	44	33	122
- Phenol-d6	29	7	58
- 2,4,6-Tribromophenol	42	16	138
- 2-Fluorophenol	46	8	88

RATORY MANAGER

ND - Not Detected

January 1999 Monthly Discharge Report
Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Groundwater Recovery System Operation - January 1999		
Total Effluent Discharge through December 31, 1998	16,621,100 Gallons	
Duration of System Operation:	1-Jan-99 through 31-Jan-99	
System On-line:	31 Days	No full system shutdown in Jan-99
Recovery Wells Off-line:	4-Jan-99 to 7-Jan-99	Recovery well RW-05 shutdown automatically at 10:29 on 4-Jan-99 due to low water level in well Was restarted at 09 00 on 7-Jan-99.
	6-Jan-99 to 18-Jan-99	Recovery well RW-06 shutdown at 11:00 on 6-Jan-99 due to leak in the scaltrol unit. Part replaced at 12 30 on 18-Jan-99 and well restarted
	7-Jan-99 to 26-Jan-99	Recovery well RW-03 shutdown at 13 05 on 7-Jan-99 due to bad control valve actuator Actuator replaced and well was restarted at 11 30 on 26-Jan-99
	17-Jan-99 to 26-Jan-99	Effluent flow meter lost memory and calibration, likely due to poor power quality Was recalibrated and restarted on 26-Jan-99
	20-Jan-99 to 25-Jan-99	RW-05 pump was turned off at 13.20 on 20-Jan-99 due to low flow. Was restarted at 08 00 on 25-Jan-99.
System Effluent Samples Collected:	26-Jan-99	Week 13 of System Operation
Total January 1999 Effluent Discharge Volume:	**4,604,630 Gallons**	31-Dec-98 through 31-Jan-99
January 1999 Average Discharge Flow Rate	103 GPM	
January 1999 Maximum Discharge Flow Rate	121.2 GPM	on 26-Jan-99
January 1999 Minimum Discharge Flow Rate	12.9 GPM	on 1-Jan-99
Total System Effluent through January 1999	21,225,630 Gallons	

Encl 3

DEFENSE LOGISTICS AGENCY
MEMPHIS DEPOT CARETAKER
2163 AIRWAYS BOULEVARD
MEMPHIS, TENNESSEE 38114-5210

PLY ER TO DDSP-FE

January 8, 1999

Mr. Akil Al-Chokhachi
City of Memphis
Division of Public Works
2303 North Second Street
Memphis, TN 38127-7500

Dear Mr. Al-Chokhachi:

Please find enclosed the following documents for the sampling results from the groundwater we are extracting from Dunn Field for December 1998. We do not exceed any discharge agreement parameters

1. Spreadsheet Summary of Analytical Results.
2. Analytical Data from sampling the groundwater
3. Monthly Discharge Report Groundwater Flow for December 1998.

Please contact me at 544-0611, if you have any questions

Sincerely,

SHAWN PHILLIPS
BRAC Environmental Coordinator

Enclosure

cc:
Rodney Thomas, City of Memphis
Jordan English, TDEC
Turpin Ballard, USEPA

479 517

Summary of Analytical Results for Total Effluent of the Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Sample Identification Number			ST-EFF-01	ST-EFF-02*	ST-EFF-03	ST-EFF-04	ST-EFF-04A (Duplicate)	ST-EFF-05	ST-EFF-06
Laboratory ID No.			9810617-01	9810819-01	9811263-01	9811479-01	9811479-04	9811705-01	9812045-01
Total System Effluent Sample Description			Week 1 of System Startup Testing	Week 2 of System Startup Testing	Week 1 of System Operation (O&M)	Week 2 of System Operation (O&M)		Week 3 of System Operation (O&M)	Week 4 of System Operation (O&M)
Date Effluent Sample Collected			19-Oct-98	26-Oct-98	9-Nov-98	16-Nov-98		23-Nov-98	30-Nov-98
Instantaneous Flow Rate			230 GPM / 331,200 GPD	155 GPM / 223,200 GPD	199 GPM / 286,560 GPD	169 8 GPM / 244,512 GPD		158 8 GPM / 228,672 GPD	145 0 GPM / 208,800 GPD
Totalized Flow			1,382,400 GAL	3,408,480 GAL	5,976,549 GAL	7,748,690 GAL		9,343,370 GAL	10,969,840 GAL
LABORATORY ANALYSES	DL	Units							
pH (Method 150 1)	--	SU	5 6	5 9	5 8	5 6	5 9	5 6	5 8
TAL Metals (EPA 200 Series)									
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	ND	ND	ND	ND	ND
Barium (Method 200.7)	0 003	mg/L	0 104	0 107	0 109	0 118	0 117	0 112	0 124
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	ND	ND	ND	ND	ND
Calcium (Method 200 7)	0.015	mg/L	23	21 6	24 7	25 3	25	24 8	26 5
Chromium (Method 200 7)	0.009	mg/L	ND	ND	ND	ND	ND	ND	ND
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	ND	ND	ND	ND
Iron (Method 200 7)	0 009	mg/L	0 07	0 046	0 022	0 019	0 019	0 036	0 01
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND
Magnesium (Method 200.7)	0 04	mg/L	11 7	11 3	12 6	13	12 8	12 5	13
Manganese (Method 200 7)	0 003	mg/L	ND	ND	ND	0 015	0 015	0 014	0.048
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	ND	ND	ND	ND
Nickel (Method 200 7)	0 02	mg/L	ND	ND	ND	ND	ND	ND	ND
Potassium (Method 200 7)	0 25	mg/L	0 916	0 781	0 883	0 975	1 15	0 9	0.703
Sodium (Method 200 7)	0 05	mg/L	27.8	28 3	27 7	27 9	28 7	26 6	26 1
Zinc (Method 200 7)	0 01	mg/L	0 047	0 129	0 095	0 098	0 095	0 063	0 062
TCL Volatile Organics (Method 8260B)									
Carbon Tetrachlonde	1	ug/L	2 9	4 3	3 06	3 27	3 38	4 07	3 22
Chloroform	1	ug/L	13 6	12 9	14 9	18 1	20 9	20 6	16 4
1,1-Dichloroethene	1	ug/L	11 6	5 42	9 99	13 9	15.6	20 3	14 6
Cis 1,2-Dichlorothene	1	ug/L	29.2	43 8	30	33 3	36 8	37 3	32.8
Trans 1,2-Dichloroethene	1	ug/L	5.96	9 27	6 68	7 47	7 92	8 42	7.47
Methylene Chlonde	5	ug/L	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1/10/50	ug/L	87 1	159	234	234	257	272	176
Tetrachloroethene	1	ug/L	25.7	22 6	28 9	30	29 7	34 4	25 6
Toluene	1	ug/L	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	1	ND
1,1,2-Trichloroethane	1	ug/L	1.81	2 82	1 59	1 46	1.5	1 3	1 1
Trichloroethene	1/10/50	ug/L	108	226	195	225	220	217	160
TCL Semi-Volatile Organics (Method 8270C)									
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	**23.6B**	ND	ND	ND	**26B**	ND
Di-n-butyl Phthalate	5	ug/L	**91.2**	2 5J	ND	ND	ND	ND	ND
Naphthalene	2	ug/L	ND	ND	ND	ND	ND	ND	ND
Phenol	5	ug/L	ND	ND	ND	ND	ND	ND	ND

NOTE: Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement.

All analyses performed by Environmental Testing & Consulting, Inc , Memphis, TN

* = Recovery well RW-09 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

ND = not detected — B = analyte detected in associated method blank

mg/L = milligrams per liter — ug/L = micrograms per liter

DL = detection limit — GPM = gallons per minute

GPD = gallons per day — 91.2 = bold number indicates that value exceeds Discharge Max. Levels

479 518

Summary of Analytical Results for Total Effluent of the Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Sample Identification Number			ST-EFF-07*	ST-EFF-07A* (Duplicate)	City of Memphis Industrial Wastewater Discharge Max Levels
Laboratory ID No.			9812764-01	9812764-02	
Total System Effluent Sample Description			Week 7 of System Operation (O&M)		
Date Effluent Sample Collected			18-Dec-98		--
Instantaneous Flow Rate			98.4 GPM / 141,696 GPD		561,600 GPD
Totalized Flow			14,448,100		--
LABORATORY ANALYSES	**DL**	**Units**			*Monthly Ave / One Day Max.*
pH (Method 150 1)	--	SU	5 8	5 8	5 5 to 10 0
TAL Metals (EPA 200 Series)					*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	1 / 2
Arsenic (Method 206 2)	0.003	mg/L	ND	ND	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 114	0 118	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	25.2	26 3	NS
Chromium (Method 200.7)	0.009	mg/L	ND	ND	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 020	0 014	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	11 9	12 4	NS
Manganese (Method 200 7)	0 003	mg/L	0.097	0 101	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	0 1 / 0 3
Potassium (Method 200.7)	0 25	mg/L	0 808	0 818	NS
Sodium (Method 200 7)	0 05	mg/L	25 3	26 8	NS
Zinc (Method 200 7)	0 01	mg/L	0 115	0 081	0 3 / 1 0
TCL Volatile Organics (Method 8260B)					*ug/L*
Carbon Tetrachloride	1	ug/L	4 50	4 72	20 / 40
Chloroform	1	ug/L	10 1	10 3	20 / 40
1,1-Dichloroethene	1	ug/L	4 8	5 36	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	43 4	46 7	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	9 78	10 4	50 / 100
Methylene Chloride	5	ug/L	ND	ND	10 / 20
1,1,2,2-Tetrachloroethane	1/10/50	ug/L	175	189	500 / 1000
Tetrachloroethene	1	ug/L	11.8	13 4	60 / 120
Toluene	1	ug/L	ND	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	ND	10 / 20
1,1,2-Trichloroethane	1	ug/L	ND	1.06	50 / 100
Trichloroethene	1/10/50	ug/L	183	196	400 / 800
TCL Semi-Volatile Organics (Method 8270C)					*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	**11.9**	**11.6**	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	10 / 20

NOTE: Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement.
All analyses performed by Environmental Testing & Consulting, Inc , Memphis, TN
* = Recovery well RW-09 was not in operation at the time of sample collection
NS = no standard listed in the Industrial Wastewater Discharge Agreement
J = estimated value - presence of the compound was confirmed but less than the reported DL
ND = not detected B = analyte detected in associated method blank
mg/L = milligrams per lite ug/L = micrograms per liter
DL = detection limit GPM = gallons per minute
GPD = gallons per day **91 2** = bold number indicates that value exceeds Discharge Max. Levels

received
JAN 8 1999

OHM Remediation
Services Corp.
A Subsidiary of OHM Corporation

STEPHEN OFFNER, P.G.
Technical Manager

TECHNICAL DEPARTMENT

Southern Regional Office
Fax: (770)453-7716
Direct line: (770)326-2571
Main Line: (770)729-3900

5445 Triangle Parkway
Suite 400
Norcross, Georgia 30092

16 Number of Pages (including this cover)

To: Mike Lee

Company: 544-0639

Fax Number:

Date: Time:

Comments:

Please contact the above if there are any problems concerning this facsimile.

Enal 2

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

December 22, 1998

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Ref: Analytical Testing
ETC Order # 9812764
Project Description DDMT

Project # 20022 Defense Depot - Memphis, TN

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

479 521

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY TABLE

479 522

Client Name OHM Remediation Services
Site ID DDMT

TC Sample ID	Field ID	Matrix	Method	Method Description
81276401	ST-EFF-07	AQUEOUS	200.7	Silver
81276401	ST-EFF-07	AQUEOUS	200.7	Aluminum
81276401	ST-EFF-07	AQUEOUS	206.2	Arsenic
81276401	ST-EFF-07	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
81276401	ST-EFF-07	AQUEOUS	200.7	Barium
81276401	ST-EFF-07	AQUEOUS	200.7	Beryllium
81276401	ST-EFF-07	AQUEOUS	200.7	Calcium
81276401	ST-EFF-07	AQUEOUS	200.7	Cadmium
81276401	ST-EFF-07	AQUEOUS	200.7	Cobalt
81276401	ST-EFF-07	AQUEOUS	200.7	Chromium
81276401	ST-EFF-07	AQUEOUS	200.7	Copper
81276401	ST-EFF-07	AQUEOUS	200.7	Iron
81276401	ST-EFF-07	AQUEOUS	245.1	Mercury
81276401	ST-EFF-07	AQUEOUS	200.7	Potassium
81276401	ST-EFF-07	AQUEOUS	200.7	Magnesium
81276401	ST-EFF-07	AQUEOUS	200.7	Manganese
81276401	ST-EFF-07	AQUEOUS	200.7	Sodium
81276401	ST-EFF-07	AQUEOUS	200.7	Nickel
81276401	ST-EFF-07	AQUEOUS	200.7	Lead
81276401	ST-EFF-07	AQUEOUS	150.1	pH
81276401	ST-EFF-07	AQUEOUS	200.7	Antimony
81276401	ST-EFF-07	AQUEOUS	200.7	Selenium
81276401	ST-EFF-07	AQUEOUS	200.7	Thallium
81276401	ST-EFF-07	AQUEOUS	8260B	GC/MS Volatile Organics
81276401	ST-EFF-07	AQUEOUS	200.7	Vanadium
81276401	ST-EFF-07	AQUEOUS	200.7	Zinc
81276402	ST-EFF-07A	AQUEOUS	200.7	Silver
81276402	ST-EFF-07A	AQUEOUS	200.7	Aluminum
81276402	ST-EFF-07A	AQUEOUS	206.2	Arsenic
81276402	ST-EFF-07A	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
81276402	ST-EFF-07A	AQUEOUS	200.7	Barium
81276402	ST-EFF-07A	AQUEOUS	200.7	Beryllium
81276402	ST-EFF-07A	AQUEOUS	200.7	Calcium
81276402	ST-EFF-07A	AQUEOUS	200.7	Cadmium
81276402	ST-EFF-07A	AQUEOUS	200.7	Cobalt
81276402	ST-EFF-07A	AQUEOUS	200.7	Chromium
81276402	ST-EFF-07A	AQUEOUS	200.7	Copper
81276402	ST-EFF-07A	AQUEOUS	200.7	Iron
81276402	ST-EFF-07A	AQUEOUS	245.1	Mercury
81276402	ST-EFF-07A	AQUEOUS	200.7	Potassium
81276402	ST-EFF-07A	AQUEOUS	200.7	Magnesium
81276402	ST-EFF-07A	AQUEOUS	200.7	Manganese
81276402	ST-EFF-07A	AQUEOUS	200.7	Sodium
81276402	ST-EFF-07A	AQUEOUS	200.7	Nickel
81276402	ST-EFF-07A	AQUEOUS	200.7	Lead
81276402	ST-EFF-07A	AQUEOUS	150.1	pH
81276402	ST-EFF-07A	AQUEOUS	200.7	Antimony
81276402	ST-EFF-07A	AQUEOUS	200.7	Selenium
81276402	ST-EFF-07A	AQUEOUS	200.7	Thallium
81276402	ST-EFF-07A	AQUEOUS	8260B	GC/MS Volatile Organics
81276402	ST-EFF-07A	AQUEOUS	200.7	Vanadium
81276402	ST-EFF-07A	AQUEOUS	200.7	Zinc
81276403	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

000002

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 523

INORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 20022

Site ID DDMT

Date Arrived 12/19/98
ETC Order Number 9812764

ETC Lab ID 9812764-01
Sample ID: ST-EFF-07

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
pH	5.8	SU		0840	12/21/98	RB	150.1

LABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 524

INORGANIC ANALYSIS DATA SHEET

Client Name **OHM Remediation Services**
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 20022

Site ID DDMT

Date Arrived 12/19/98
ETC Order Number 9812764

ETC Lab ID **9812764-02**
Sample ID: ST-EFF-07A

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
pH	5.8	SU		0840	12/21/98	RB	150.1

LABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 525

INORGANIC ANALYSIS DATA SHEET

lient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 20022

ite ID DDMT

ate Arrived 12/19/98
TC Order Number 9812764

TC Lab ID **9812764-01**
ample ID: ST-EFF-07

Matrix :AQUEOUS
Sample Date :12/18/98

EST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
ercury Digestion Batch	V4-AQ-67				12/21/98	RM	245.1
etals Digestion Batch	V13-AQ-40				12/21/98	TD	3030K
ilver	ND	mg/L	0.009	1242	12/22/98	TD	200.7
luminum	ND	mg/L	0.060	1242	12/22/98	TD	200.7
rsenic	ND	mg/L	0.003	1814	12/21/98	JF	206.2
arium	0.114	mg/L	0.003	1242	12/22/98	TD	200.7
eryllium	ND	mg/L	0.002	1242	12/22/98	TD	200.7
alcium	25.2	mg/L	0.015	1242	12/22/98	TD	200.7
admium	ND	mg/L	0.005	1242	12/22/98	TD	200.7
obalt	ND	mg/L	0.009	1242	12/22/98	TD	200.7
hromium	ND	mg/L	0.009	1242	12/22/98	TD	200.7
opper	ND	mg/L	0.008	1242	12/22/98	TD	200.7
ron	0.020	mg/L	0.009	1242	12/22/98	TD	200.7
ercury	ND	mg/L	0.0002	1535	12/21/98	RM	245.1
otassium	0.808	mg/L	0.250	1242	12/22/98	TD	200.7
agnesium	11.9	mg/L	0.040	1242	12/22/98	TD	200.7
anganese	0.097	mg/L	0.003	1242	12/22/98	TD	200.7
odium	25.3	mg/L	0.050	1242	12/22/98	TD	200.7
ickel	ND	mg/L	0.020	1242	12/22/98	TD	200.7
ead	ND	mg/L	0.060	1242	12/22/98	TD	200.7
ntimony	ND	mg/L	0.040	1242	12/22/98	TD	200.7
elenium	ND	mg/L	0.100	1242	12/22/98	TD	200.7
hallium	ND	mg/L	0.065	1242	12/22/98	TD	200.7
anadium	ND	mg/L	0.010	1242	12/22/98	TD	200.7
inc	0.115	mg/L	0.010	1242	12/22/98	TD	200.7

LABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC. 479 526

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 20022

Site ID DDMT

Date Arrived 12/19/98
ETC Order Number 9812764

ETC Lab ID **9812764-02**
Sample ID: ST-EFF-07A

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
Mercury Digestion Batch	V4-AQ-67				12/21/98	RM	245.1
Metals Digestion Batch	V13-AQ-40				12/21/98	TD	3030K
Silver	ND	mg/L	0.009	1304	12/22/98	TD	200.7
Aluminum	ND	mg/L	0.060	1304	12/22/98	TD	200.7
Arsenic	ND	mg/L	0.003	1834	12/21/98	JF	206.2
Barium	0.118	mg/L	0.003	1304	12/22/98	TD	200.7
Beryllium	ND	mg/L	0.002	1304	12/22/98	TD	200.7
Calcium	26.3	mg/L	0.015	1304	12/22/98	TD	200.7
Cadmium	ND	mg/L	0.005	1304	12/22/98	TD	200.7
Cobalt	ND	mg/L	0.009	1304	12/22/98	TD	200.7
Chromium	ND	mg/L	0.009	1304	12/22/98	TD	200.7
Copper	ND	mg/L	0.008	1304	12/22/98	TD	200.7
Iron	0.014	mg/L	0.009	1304	12/22/98	TD	200.7
Mercury	ND	mg/L	0.0002	1539	12/21/98	RM	245.1
Potassium	0.818	mg/L	0.250	1304	12/22/98	TD	200.7
Magnesium	12.4	mg/L	0.040	1304	12/22/98	TD	200.7
Manganese	0.101	mg/L	0.003	1304	12/22/98	TD	200.7
Sodium	26.8	mg/L	0.050	1304	12/22/98	TD	200.7
Nickel	ND	mg/L	0.020	1304	12/22/98	TD	200.7
Lead	ND	mg/L	0.060	1304	12/22/98	TD	200.7
Antimony	ND	mg/L	0.040	1304	12/22/98	TD	200.7
Selenium	ND	mg/L	0.100	1304	12/22/98	TD	200.7
Thallium	ND	mg/L	0.065	1304	12/22/98	TD	200.7
Vanadium	ND	mg/L	0.010	1304	12/22/98	TD	200.7
Zinc	0.081	mg/L	0.010	1304	12/22/98	TD	200.7

LABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 527

Client Name **OHM Remediation Services**
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
Site ID DDMT

Project # 20022
FID # DACA45-96-D-0014

Date Arrived 12/19/98
ETC Order Number 9812764

ETC Lab ID **9812764-01**
Sampl ID: ST-EFF-07

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
				12/21/98	12/21/98	LS	
QC Batch	V3122101	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	4.50	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	10.1	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	4.80	ug/L	1.00				
trans-1,2-Dichloroethene	9.78	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	175	ug/L	1.00				
Tetrachloroethene	11.8	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	183	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	43.4	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	99	74	123
S2 - Toluene-d8	101	86	112
S3 - 4-Bromofluorobenzene	89	81	115

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 528

Client Name **OHM Remediation Services**
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
Site ID DDMT

Project # 20022
FID # DACA45-96-D-0014

Date Arrived 12/19/98
ETC Order Number 9812764

ETC Lab ID **9812764-02**
Sample ID: ST-EFF-07A

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics				12/21/98	12/21/98	LS	8260B
QC Batch	V3122101	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	4.72	ug/L	1 00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	10.3	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	5.36	ug/L	1.00				
trans-1,2-Dichloroethene	10.4	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	189	ug/L	1.00				
Tetrachloroethene	13.4	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	1.06	ug/L	1.00				
Trichloroethene	196	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	46.7	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	96	74	123
S2 - Toluene-d8	99	86	112
S3 - 4-Bromofluorobenzene	89	81	115

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 529

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 20022
FID # DACA45-96-D-0014

Site ID DDMT

Date Arrived 12/19/98
ETC Order Number 9812764

ETC Lab ID **9812764-03**
Sample ID: Trip Blank

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
				12/21/98	12/21/98	LS	
QC Batch	V3122101	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	99	74	123
S2 - Toluene-d8	99	86	112
S3 - 4-Bromofluorobenzene	86	81	115

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 530

Client Name **OHM Remediation Services**
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 20022
FID # DACA45-96-D-0014

Site ID DDMT

Date Arrived 12/19/98
ETC Order Number 9812764

ETC Lab ID **9812764-01**
Sample ID: ST-EFF-07

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				12/22/98	12/22/98	CB	8270C
QC Batch	P05102	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	11.9	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 53i

ORGANIC ANALYSIS DATA SHEET

Client Name **OHM Remediation Services**
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
Site ID DDMT

Project # 20022
FID # DACA45-96-D-0014

Date Arrived 12/19/98
ETC Order Number 9812764

ETC Lab ID **9812764-01**
Sample ID: ST-EFF-07

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				12/22/98	12/22/98	CB	8270C
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5 00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	62	29	110
S2 - 2-Fluorobiphenyl	59	38	107
S3 - 4-Terphenyl-d14	71	33	122
S4 - Phenol-d6	24	7	58
S5 - 2,4,6-Tribromophenol	78	16	138
S6 - 2-Fluorophenol	42	8	88

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 20022
FID # DACA45-96-D-0014

Site ID DDMT

Date Arrived 12/19/98
STC Order Number 9812764

STC Lab ID **9812764-02**
Sample ID: ST-EFF-07A

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				12/22/98	12/22/98	CB	8270C
QC Batch	P05102	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	11.6	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 533

Client Name **OHM Remediation Services**
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092
Site ID DDMT

Project # 20022
FID # DACA45-96-D-0014

Date Arrived 12/19/98
ETC Order Number 9812764

ETC Lab ID **9812764-02**
Sample ID: ST-EFF-07A

Matrix :AQUEOUS
Sample Date :12/18/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				12/22/98	12/22/98	CB	8270C
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5 00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	65	29	110
S2 - 2-Fluorobiphenyl	60	38	107
S3 - 4-Terphenyl-d14	55	33	122
S4 - Phenol-d6	28	7	58
S5 - 2,4,6-Tribromophenol	72	16	138
S6 - 2-Fluorophenol	51	8	88

LABORATORY MANAGER

ND - Not Detected

9807764

479 534

OHM Remediation Services Corp

Subsidiary of OHM Corporation
U.S Route 224 East • Findlay, Ohio 45840 • (419) 423-3526 PROJECT# 30022 WBS# 89,000,000 PO#

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY
207468
FORM 0019 REV 2.97

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	CTC	Nathan Pera	OHM Remediation Services/IT Corp.
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDMT	Memphis, TN		901-327-2750	901-327-6334	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-775-0173	901-775-2517	2924 Walnut Grove Road		5445 Triangle Pkwy, Suite 400
PROJECT ADDRESS	**CITY STATE AND ZIPCODE**	**CLIENT**	**CITY, STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
1708 Dunn Ave.	Memphis, TN 38114	USACE	Memphis, TN 38111		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: TCL VOCs 8240B	TCL SVOCs 8270B	TAL Metals (-200 series)	pH (160.1)	Comments
1	ST-EFF-07	H_2O	12/14/94	12:45 p.m.	HCl HNO_3 none	7	Level 3	7 day	X	X	X	X	Please fax results on DUE DATE to SITE and to Lab Coordinator.
2	ST-EFF-07A	H_2O	12/14/94	12:55 p.m	HCl HNO_3 none	7	Level 3	7 day	X	X	X	X	
3	ST-EFF-07-MS	H_2O	12/14/94	1:05 p.m	HCl HNO_3 none	7	Level 3	7 day	X	X	X	X	Matrix Spike
4	ST-EFF-07-MSD	H_2O	12/14/94	1:15 p.m	HCl HNO_3 none	7	Level 3	7 day	X	X	X	X	Matrix Spike Duplicate
5	Trip Blank	H_2O	12/14/94	—	HCl	3	Level 3	7 day	X				
6													
7													Flow Rate: 98.4 gal/min
8													Total Flow: 9,980,060 gal
9													
10													

SAMPLES COLLECTED BY Steven P Kmiec
COURIER AND AIR BILL NUMBER —
COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
Steven P Kmiec	[illegible]	12/14/94	1:30	ICED
[illegible]	[illegible]	12/14/94	3:00 pm	

Distribution: White - Laboratory (To be returned with Analytical Report), Goldenrod - Project File; Yellow - Project Data Manager

P.16/16
JAN 08 '99 10:42AM OHM NORCROSS

December 1998 Monthly Discharge Report
Groundwater Recovery System
Dunn Field, Memphis Depot, Tennessee

Groundwater Recovery System Operation - December 1998		
Total Effluent Discharge through November 1998:	10,969,800 Gallons	
Duration of System Operation:	1-Dec-98 through 31-Dec-98	
System On-line:	31 Days	No full system shutdown in Dec-98
Recovery Wells Off-line:	3-Dec-98	Recovery well RW-04 shutdown for 1 hour to repair leak in the recirculation line.
	11-Dec-98	Recovery well RW-05 shutdown for 4 hours to install 3/4" ball valve in the recirculation line
	16-Dec-98 through 22-Dec-98	Recovery well RW-09 shutdown at 1600 due to pump malfunction RW-09 restarted at 1700 after pump removal and reinstallation
System Effluent Samples Collected:	18-Dec-98	Week 7 of System Operation
Total December 1998 Effluent Discharge Volume:	**5,651,260 Gallons**	1-Dec-98 through 31-Dec-98
December 1998 Average Discharge Flow Rate	127 GPM	
December 1998 Maximum Discharge Flow Rate	144 GPM	on 1-Dec-98
December 1998 Minimum Discharge Flow Rate	98 GPM	on 18-Dec-98
Total System Effluent through December 1998	16,621,100 Gallons	

DEFENSE LOGISTICS AGENCY
MEMPHIS DEPOT CARETAKER
2163 AIRWAYS BOULEVARD
MEMPHIS, TENNESSEE 38114-5210

REPLY REFER TO DDSP-FE

December 9, 1998

Mr. Akil Al-Chokhachi
City of Memphis
Division of Public Works
2303 North Second Street
Memphis, TN 38127-7500

Dear Mr. Al-Chokhachi:

Please find enclosed the following documents for the sampling results from the groundwater we are extracting from Dunn Field. We do not exceed any discharge agreement parameters.

1. Spreadsheet Summary of Analytical Results.
2. Analytical Data from sampling the groundwater for Sample Numbers ST-EFF-004, ST-EFF-004A, ST-EFF-005 and ST-EFF-006.

This report will include the volume of all the water cumulatively discharged to the public sewer from the system through the end of November 1998, including any startup or testing volumes discharged.

Please contact me at 544-0611 if you have any other questions.

Sincerely,

SHAWN PHILLIPS
BRAC Environmental Coordinator

Enclosure

cc:
Rodney Thomas, City of Memphis
Mike Dobbs, DDC
Jordan English, TDEC
Turpin Ballard, USEPA
John Rollyson, USACE-TAO

Summary of Analytical Results for Total Ef[illegible]t of the Groundwater Recovery System
Dunn Field, Memph.[illegible]epot, Tennessee

Sample Identification Number			ST-EFF-01	ST-EFF-02*	ST-EFF-03	ST-EFF-04	ST-EFF-04A (Duplicate)	ST-EFF-05	ST-EFF-06	City of Memphis Industrial Wastewater Discharge Max. Levels
Laboratory ID No.			9810617-01	9810819-01	9811263-01	9811479-01	9811479-04	9811705-01	9812045-01	
Total System Effluent Sample Description			Week 1 of System Startup Testing	Week 2 of System Startup Testing	Week 1 of System Operation (O&M)	Week 2 of System Operation (O&M)		Week 3 of System Operation (O&M)	Week 4 of System Operation (O&M)	
Date Effluent Sample Collected			19-Oct-98	26-Oct-98	9-Nov-98	16-Nov-98		23-Nov-98	30-Nov-98	–
Instantaneous Flow Rate			230 GPM / 331,200 GPD	155 GPM / 223,200 GPD	199 GPM / 286,560 GPD	169 8 GPM / 244,512 GPD		158 8 GPM / 228,672 GPD	145.0 GPM / 208,800 GPD	561,600 GPD
Totalized Flow			1,382,400 GAL	3,408,480 GAL	5,976,549 GAL	7,748,690 GAL		9,343,370 GAL	10,969,840 GAL	–
LABORATORY ANALYSES	**DL**	**Units**								*Monthly Ave / One Day Max.*
pH (Method 150 1)	–	SU	5 6	5 9	5 8	5 6	5 9	5 6	5 8	5 5 to 10 0
TAL Metals (EPA 200 Series)										*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	1 / 2
Arsenic (Method 206.2)	0 003	mg/L	ND	ND	ND	ND	ND	ND	ND	0 04 / 0 1
Barium (Method 200.7)	0 003	mg/L	0.104	0 107	0 109	0 118	0 117	0 112	0 124	NS
Cadmium (Method 200.7)	0 005	mg/L	ND	ND	ND	ND	ND	ND	ND	0 01 / 0 02
Calcium (Method 200.7)	0 015	mg/L	23	21 6	24 7	25 3	25	24.8	26 5	NS
Chromium (Method 200.7)	0 009	mg/L	ND	ND	ND	ND	ND	ND	ND	0 2 / 0.4
Copper (Method 200.7)	0 008	mg/L	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 07	0 046	0 022	0 019	0 019	0 036	0 01	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	0 15 / 0.3
Magnesium (Method 200 7)	0 04	mg/L	11.7	11 3	12 6	13	12.8	12.5	13	NS
Mercury (Method 245.1)	0 0002	mg/L	ND	ND	ND	ND	ND	ND	ND	0 001 / 0 002
Nickel (Method 200.7)	0 02	mg/L	ND	ND	ND	ND	ND	ND	ND	0 1 / 0 3
Potassium (Method 200 7)	0.25	mg/L	0 918	0 781	0 883	0 975	1 15	0 9	0 703	NS
Sodium (Method 200.7)	0.05	mg/L	27 8	28 3	27 7	27 9	28 7	28 6	26 1	NS
Zinc (Method 200.7)	0 01	mg/L	0 047	0 129	0 095	0 098	0 095	0 063	0 062	0 3 / 1 0
TCL Volatile Organics (Method 8260B)										*ug/L*
Carbon Tetrachloride	1	ug/L	2.9	4 3	3 06	3 27	3 38	4 07	3 22	20 / 40
Chloroform	1	ug/L	13.6	12 9	14 9	18 1	20 9	20 6	18 4	20 / 40
1,1-Dichloroethene	1	ug/L	11 6	5 42	9 99	13 9	15 6	20 3	14 6	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	29 2	43 8	30	33 3	36 8	37 3	32 8	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	5 96	9 27	6 68	7 47	7 92	8 42	7 47	50 / 100
Methylene Chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20
1,1,2,2-Tetrachloroethane	1/10/50	ug/L	87 1	159	234	234	257	272	176	500 / 1000
Tetrachloroethene	1	ug/L	25 7	22 6	28 9	30	29 7	34 4	25 6	60 / 120
Toluene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	1	ND	10 / 20
1,1,2-Trichloroethane	1	ug/L	1 81	2 82	1 59	1 46	1 5	1 3	1 1	50 / 100
Trichloroethene	1/10/50	ug/L	108	226	195	225	220	217	160	400 / 800
TCL Semi-Volatile Organics (Method 8270C)										*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	**23.6B**	ND	ND	ND	**26B**	ND	10 / 20
Di-n-butyl Phthalate	5	ug/L	**91.2**	2 5J	ND	ND	ND	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20

NOTE. Compounds included in this table are those listed in Section D.3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement

All analyses performed by Environmental Testing & Consulting, Inc., Memphis, TN

* = Recovery well RW-08 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

ND = not detected

B = analyte detected in associated method blank

mg/L = milligrams per liter

ug/L = micrograms per liter

DL = detection limit

GPM = gallons per minute

GPD = gallons per day

91 2 = bold number indicates that value exceeds Discharge Max. Levels

479 537

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6834
Founded 1972

November 20, 1998

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Sample 004
004A

Ref: Analytical Testing

ETC Order #	9811479
Project Description	DDMT Memphis, TN
Project #	920022
FID #	DACA45-96-D-0014

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas		*Oklahoma*	*#9311*
Alabama	*#40730*	*Virginia*	*#00106*
Kentucky	*#90047*	*Washington*	*#C248*
North Carolina	*#415*	*US Army Corps of Engineers*	
South Carolina	*#84002002*		

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY TABLE

t Name OHM Remediation Services
te ID DDMT
Memphis, TN

C Sample ID	Field ID	Matrix	Method	Method Description
1147901	ST-EFF-04	AQUEOUS	200.7	Silver
1147901	ST-EFF-04	AQUEOUS	200.7	Aluminum
1147901	ST-EFF-04	AQUEOUS	206.2	Arsenic
1147901	ST-EFF-04	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
1147901	ST-EFF-04	AQUEOUS	200.7	Barium
1147901	ST-EFF-04	AQUEOUS	200.7	Beryllium
1147901	ST-EFF-04	AQUEOUS	200.7	Calcium
1147901	ST-EFF-04	AQUEOUS	200.7	Cadmium
1147901	ST-EFF-04	AQUEOUS	200.7	Cobalt
1147901	ST-EFF-04	AQUEOUS	200.7	Chromium
1147901	ST-EFF-04	AQUEOUS	200.7	Copper
1147901	ST-EFF-04	AQUEOUS	200.7	Iron
1147901	ST-EFF-04	AQUEOUS	245.1	Mercury
1147901	ST-EFF-04	AQUEOUS	200.7	Potassium
1147901	ST-EFF-04	AQUEOUS	200.7	Magnesium
1147901	ST-EFF-04	AQUEOUS	200.7	Manganese
1147901	ST-EFF-04	AQUEOUS	200.7	Sodium
1147901	ST-EFF-04	AQUEOUS	200.7	Nickel
1147901	ST-EFF-04	AQUEOUS	200.7	Lead
1147901	ST-EFF-04	AQUEOUS	150.1	pH
1147901	ST-EFF-04	AQUEOUS	200.7	Antimony
1147901	ST-EFF-04	AQUEOUS	200.7	Selenium
1147901	ST-EFF-04	AQUEOUS	200.7	Thallium
1 901	ST-EFF-04	AQUEOUS	8260B	GC/MS Volatile Organics
1147901	ST-EFF-04	AQUEOUS	200.7	Vanadium
1147901	ST-EFF-04	AQUEOUS	200.7	Zinc
1147904	ST-EFF-04A	AQUEOUS	200.7	Silver
1147904	ST-EFF-04A	AQUEOUS	200.7	Aluminum
1147904	ST-EFF-04A	AQUEOUS	206.2	Arsenic
1147904	ST-EFF-04A	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
1147904	ST-EFF-04A	AQUEOUS	200.7	Barium
1147904	ST-EFF-04A	AQUEOUS	200.7	Beryllium
1147904	ST-EFF-04A	AQUEOUS	200.7	Calcium
1147904	ST-EFF-04A	AQUEOUS	200.7	Cadmium
1147904	ST-EFF-04A	AQUEOUS	200.7	Cobalt
1147904	ST-EFF-04A	AQUEOUS	200.7	Chromium
1147904	ST-EFF-04A	AQUEOUS	200.7	Copper
1147904	ST-EFF-04A	AQUEOUS	200.7	Iron
1147904	ST-EFF-04A	AQUEOUS	245.1	Mercury
1147904	ST-EFF-04A	AQUEOUS	200.7	Potassium
1147904	ST-EFF-04A	AQUEOUS	200.7	Magnesium
1147904	ST-EFF-04A	AQUEOUS	200.7	Manganese
1147904	ST-EFF-04A	AQUEOUS	200.7	Sodium
1147904	ST-EFF-04A	AQUEOUS	200.7	Nickel
1147904	ST-EFF-04A	AQUEOUS	200.7	Lead
1147904	ST-EFF-04A	AQUEOUS	150.1	pH
1147904	ST-EFF-04A	AQUEOUS	200.7	Antimony
1147904	ST-EFF-04A	AQUEOUS	200.7	Selenium
1147904	ST-EFF-04A	AQUEOUS	200.7	Thallium
1147904	ST-EFF-04A	AQUEOUS	8260B	GC/MS Volatile Organics
1147904	ST-EFF-04A	AQUEOUS	200.7	Vanadium
1147904	ST-EFF-04A	AQUEOUS	200.7	Zinc
905	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

479 541

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

Site ID DDMT
Memphis, TN

Date Arrived 11/16/98
TC Order Number 9811479

TC Lab ID 9811479-04
ample ID: ST-EFF-04A

Matrix :AQUEOUS
Sample Date :11/16/98

EST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
[	5.9	SU		1240	11/16/98	LB	150.1

ABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC. 479.542

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

te ID DDMT
Memphis, TN

.te Arrived 11/16/98
'C Order Number 9811479

'C Lab ID 9811479-01
mple ID: ST-EFF-04

Matrix :AQUEOUS
Sample Date :11/16/98

:ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
rcury Digestion Batch	V4-AQ-59				11/20/98	RM	245.1
tals Digestion Batch	V12-AQ-86				11/18/98	NR	3030K
lver	ND	mg/L	0.009	2:42	11/19/98	TD	200.7
uminum	ND	mg/L	0.060	2:42	11/19/98	TD	200.7
senic	ND	mg/L	0.003	3:13	11/18/98	JF	206.2
rium	0.118	mg/L	0.003	2:42	11/19/98	TD	200.7
r ium	ND	mg/L	0.002	2:42	11/19/98	TD	200.7
l m	25.3	mg/L	0.015	2:42	11/19/98	TD	200.7
dmium	ND	mg/L	0.005	2:42	11/19/98	TD	200.7
balt	ND	mg/L	0.009	2:42	11/19/98	TD	200.7
romium	ND	mg/L	0.009	2:42	11/19/98	TD	200.7
pper	ND	mg/L	0.008	2:42	11/19/98	TD	200.7
on	0.019	mg/L	0.009	2:42	11/19/98	TD	200.7
rcury	ND	mg/L	0.0002	5:40	11/20/98	RM	245.1
tassium	0.975	mg/L	0.250	2:42	11/19/98	TD	200.7
gnesium	13.0	mg/L	0.040	2:42	11/19/98	TD	200.7
nganese	0.015	mg/L	0.003	2:42	11/19/98	TD	200.7
dium	27.9	mg/L	0.050	2:42	11/19/98	TD	200.7
ckel	ND	mg/L	0.020	2:42	11/19/98	TD	200.7
ad	ND	mg/L	0.060	2:42	11/19/98	TD	200.7
timony	ND	mg/L	0.040	2:42	11/19/98	TD	200.7
lenium	ND	mg/L	0.100	2:42	11/19/98	TD	200.7
allium	ND	mg/L	0.065	2:42	11/19/98	TD	200.7
nadium	ND	mg/L	0.010	2:42	11/19/98	TD	200.7
nc	0.098	mg/L	0.010	2:42	11/19/98	TD	200.7

ABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 543

INORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

te ID DDMT
Memphis, TN

te Arrived 11/16/98
C Order Number 9811479

C Lab ID 9811479-04
mple ID: ST-EFF-04A

Matrix :AQUEOUS
Sample Date :11/16/98

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
cury Digestion Batch	V4-AQ-59				11/20/98	RM	245.1
als Digestion Batch	V12-AQ-86				11/18/98	NR	3030K
ver	ND	mg/L	0.009	3:07	11/19/98	TD	200.7
minum	ND	mg/L	0.060	3:07	11/19/98	TD	200.7
enic	ND	mg/L	0.003	3:22	11/18/98	JF	206.2
ium	0.117	mg/L	0.003	3:07	11/19/98	TD	200.7
lium	ND	mg/L	0.002	3:07	11/19/98	TD	200.7
n	25.0	mg/L	0.015	3:07	11/19/98	TD	200.7
mium	ND	mg/L	0.005	3:07	11/19/98	TD	200.7
alt	ND	mg/L	0.009	3:07	11/19/98	TD	200.7
omium	ND	mg/L	0.009	3:07	11/19/98	TD	200.7
per	ND	mg/L	0.008	3:07	11/19/98	TD	200.7
n	0.019	mg/L	0.009	3:07	11/19/98	TD	200.7
cury	ND	mg/L	0.0002	5:45	11/20/98	RM	245.1
assium	1.15	mg/L	0.250	3:07	11/19/98	TD	200.7
nesium	12.8	mg/L	0.040	3:07	11/19/98	TD	200.7
ganese	0.015	mg/L	0.003	3:07	11/19/98	TD	200.7
ium	28.7	mg/L	0.050	3:07	11/19/98	TD	200.7
kel	ND	mg/L	0.020	3:07	11/19/98	TD	200.7
d	ND	mg/L	0.060	3:07	11/19/98	TD	200.7
imony	ND	mg/L	0.040	3:07	11/19/98	TD	200.7
enium	ND	mg/L	0.100	3:07	11/19/98	TD	200.7
llium	ND	mg/L	0.065	3:07	11/19/98	TD	200.7
adium	ND	mg/L	0.010	3:07	11/19/98	TD	200.7
c	0.095	mg/L	0.010	3:07	11/19/98	TD	200.7

ORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 544

t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 11/16/98
C Order Number 9811479

C Lab ID 9811479-01
mple ID: ST-EFF-04

Matrix :AQUEOUS
Sample Date :11/16/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Volatile Organics							8260B
					11/20/98	LS	
QC Batch	V1112001	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	3.27	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	18.1	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	13.9	ug/L	1.00				
trans-1,2-Dichloroethene	7.47	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	228E	ug/L	1.00				
Tetrachloroethene	30.0	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	1.46	ug/L	1.00				
Trichloroethene	198	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	33.3	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
1 - Dibromofluoromethane	99	74	123
2 - Toluene-d8	102	86	112
3 - 4-Bromofluorobenzene	99	81	115

LABORATORY MANAGER

ND - Not Detected

000011

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 545

.. .it Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

.te Arrived 11/16/98
'C Order Number 9811479

'C Lab ID 9811479-01
mple ID: ST-EFF-04-DIL

Matrix :AQUEOUS
Sample Date :11/16/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Volatile Organics							8260B
					11/20/98	LS	
QC Batch	V1112001	ug/L					
Acetone	ND	ug/L	2500				
Benzene	ND	ug/L	50.0				
Bromodichloromethane	ND	ug/L	50.0				
Bromoform	ND	ug/L	50.0				
Bromomethane	ND	ug/L	50.0				
Carbon Disulfide	ND	ug/L	50.0				
Carbon Tetrachloride	ND	ug/L	50.0				
[illegible]robenzene	ND	ug/L	50.0				
[illegible]orodibromomethane	ND	ug/L	50.0				
Chloroethane	ND	ug/L	50.0				
Chloroform	ND	ug/L	50.0				
Chloromethane	ND	ug/L	50.0				
1,1-Dichloroethane	ND	ug/L	50.0				
1,2-Dichloroethane	ND	ug/L	50.0				
1,1-Dichloroethene	ND	ug/L	50.0				
trans-1,2-Dichloroethene	ND	ug/L	50.0				
1,2-Dichloropropane	ND	ug/L	50.0				
cis-1,3-Dichloropropene	ND	ug/L	50.0				
trans-1,3-Dichloropropene	ND	ug/L	50.0				
Ethylbenzene	ND	ug/L	50.0				
2-Hexanone (MBK)	ND	ug/L	250				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	250				
2-Butanone (MEK)	ND	ug/L	1000				
Methylene Chloride	ND	ug/L	250				
Styrene	ND	ug/L	50.0				
1,1,2,2-Tetrachloroethane	234	ug/L	50.0				
Tetrachloroethene	ND	ug/L	50.0				
Toluene	ND	ug/L	50.0				
1,1,1-Trichloroethane	ND	ug/L	50.0				
1,1,2-Trichloroethane	ND	ug/L	50.0				
Trichloroethene	225	ug/L	50.0				
Vinyl Acetate	ND	ug/L	1000				
Vinyl Chloride	ND	ug/L	50.0				
o-Xylenes	ND	ug/L	50.0				
m-Xylenes	ND	ug/L	50.0				
p-Xylenes	ND	ug/L	50.0				
cis-1,2-Dichloroethene	ND	ug/L	50.0				

[illegible]ogate Standard	% Recovery	QC Limits	
[illegible] Dibromofluoromethane	101	74	123
2 - Toluene-d8	100	86	112
3 - 4-Bromofluorobenzene	103	81	115

ABORATORY MANAGER

ND - Not Detected

000012

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 546

lient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ite ID DDMT
Memphis, TN

ate Arrived 11/16/98
TC Order Number 9811479

TC Lab ID 9811479-04
mple ID: ST-EFF-04A

Matrix :AQUEOUS
Sample Date :11/16/98

EST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Volatile Organics							8260B
QC Batch	V1112001	ug/L			11/20/98	LS	
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	3.38	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	19.2	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	15.6	ug/L	1.00				
trans-1,2-Dichloroethene	7.92	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	208E	ug/L	1.00				
Tetrachloroethene	29.4	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	1.50	ug/L	1.00				
Trichloroethene	200E	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	33.5	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
1 - Dibromofluoromethane	103	74	123
2 - Toluene-d8	98	86	112
3 - 4-Bromofluorobenzene	101	81	115

000013

BORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 547

t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT
Memphis, TN

e Arrived 11/16/98
Order Number 9811479

Lab ID 9811479-04
mple ID: ST-EFF-04A-DIL

Matrix :AQUEOUS
Sample Date :11/16/98

T	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
MS Volatile Organics							8260B
					11/21/98	LS	
C Batch	V1112101	ug/L					
cetone	ND	ug/L	500				
enzene	ND	ug/L	10.0				
romodichloromethane	ND	ug/L	10.0				
romoform	ND	ug/L	10.0				
romomethane	ND	ug/L	10.0				
arbon Disulfide	ND	ug/L	10.0				
arbon Tetrachloride	ND	ug/L	10.0				
robenzene	ND	ug/L	10.0				
rodibromomethane	ND	ug/L	10.0				
hloroethane	ND	ug/L	10.0				
hloroform	20.9	ug/L	10.0				
hloromethane	ND	ug/L	10.0				
,1-Dichloroethane	ND	ug/L	10.0				
,2-Dichloroethane	ND	ug/L	10.0				
,1-Dichloroethene	14.5	ug/L	10.0				
rans-1,2-Dichloroethene	ND	ug/L	10.0				
,2-Dichloropropane	ND	ug/L	10.0				
is-1,3-Dichloropropene	ND	ug/L	10.0				
rans-1,3-Dichloropropene	ND	ug/L	10.0				
thylbenzene	ND	ug/L	10.0				
-Hexanone (MBK)	ND	ug/L	50.0				
-Methyl-2-pentanone (MIBK)	ND	ug/L	50.0				
-Butanone (MEK)	ND	ug/L	200				
ethylene Chloride	ND	ug/L	50.0				
tyrene	ND	ug/L	10.0				
,1,2,2-Tetrachloroethane	257	ug/L	10.0				
etrachloroethene	29.7	ug/L	10.0				
oluene	ND	ug/L	10.0				
,1,1-Trichloroethane	ND	ug/L	10.0				
,1,2-Trichloroethane	ND	ug/L	10.0				
richloroethene	220	ug/L	10.0				
inyl Acetate	ND	ug/L	200				
inyl Chloride	ND	ug/L	10.0				
o-Xylenes	ND	ug/L	10.0				
m-Xylenes	ND	ug/L	10.0				
p-Xylenes	ND	ug/L	10.0				
cis-1,2-Dichloroethene	36.8	ug/L	10.0				

U	gate Standard	% Recovery	QC Limits	
1	Dibromofluoromethane	104	74	123
2	- Toluene-d8	98	86	112
3	- 4-Bromofluorobenzene	97	81	115

000014

ABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road • Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479-548

.t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

.te ID DDMT
Memphis, TN

ıte Arrived 11/16/98
'C Order Number 9811479

'C Lab ID 9811479-05
ımple ID: Trip Blank

Matrix :AQUEOUS
Sample Date :11/16/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Volatile Organics							8260B
					11/20/98	LS	
QC Batch	V1112001	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
C robenzene	ND	ug/L	1.00				
C rodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

g	gate Standard	% Recovery	QC Limits	
1	Dibromofluoromethane	100	74	123
2	- Toluene-d8	100	86	112
3	- 4-Bromofluorobenzene	102	81	115

ABORATORY MANAGER

ND - Not Detected

000015

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 549

t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 11/16/98
C Order Number 9811479

C Lab ID 9811479-01
mple ID: ST-EFF-04

Matrix :AQUEOUS
Sample Date :11/16/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Base/Neutral & Acid							8270C
				11/18/98	11/19/98	CB	
QC Batch	P05075	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	5.00				
? o(a)pyrene	ND	ug/L	2.00				
B oic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	2.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	5.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
D -octyl phthalate	ND	ug/L	5.00				
F ranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

000016

BORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 550

i. .t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 11/16/98
C Order Number 9811479

C Lab ID 9811479-01
mple ID: ST-EFF-04

Matrix :AQUEOUS
Sample Date :11/16/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Base/Neutral & Acid				11/18/98	11/19/98	CB	8270C
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4 thylphenol (p-cresol)	ND	ug/L	5.00				
N_ .chalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

urrogate Standard	% Recovery	QC Limits	
31 - Nitrobenzene-d5	81	29	110
32 - 2-Fluorobiphenyl	85	38	107
33 - 4-Terphenyl-d14	101	33	122
34 - Phenol-d6	28	7	58
35 - 2,4,6-Tribromophenol	76	16	138
36 - 2-Fluorophenol	47	8	88

ABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 551

t. it Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ite ID DDMT
Memphis, TN

ite Arrived 11/16/98
C Order Number 9811479

C Lab ID 9811479-04
mple ID: ST-EFF-04A

Matrix :AQUEOUS
Sample Date :11/16/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Base/Neutral & Acid							8270C
				11/18/98	11/19/98	CB	
QC Batch	P05075	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	5.00				
E o(a)pyrene	ND	ug/L	2.00				
E oic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	2.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	5.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
D -n-octyl phthalate	ND	ug/L	5.00				
I ranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

ABORATORY MANAGER

ND - Not Detected

000019

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479-552

t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 11/16/98
C Order Number 9811479

C Lab ID 9811479-04
mple ID: ST-EFF-04A

Matrix :AQUEOUS
Sample Date :11/16/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Base/Neutral & Acid				11/18/98	11/19/98	CB	8270C
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4 thylphenol (p-cresol)	ND	ug/L	5.00				
N. chalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

rrogate Standard	% Recovery	QC Limits	
1 - Nitrobenzene-d5	76	29	110
2 - 2-Fluorobiphenyl	80	38	107
3 - 4-Terphenyl-d14	109	33	122
4 - Phenol-d6	28	7	58
5 - 2,4,6-Tribromophenol	82	16	138
6 - 2-Fluorophenol	46	8	88

BORATORY MANAGER

ND - Not Detected

000020

9811-765

OHM Remediation Services Corp

Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

218184

PROJECT# _____ WBS# _____ PO# _____

FORM 0019 REV. 2

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ETC	Nathan Pera	OHM Remediation Services/IT Corp.
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDMT	Memphis, TN	920022	901-327-2750	901-327-6334	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-775-0173	901-775-2517	2924 Walnut Grove Road		5445 Triangle Pkwy, Suite 400
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY, STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
1708 Dunn Ave.	Memphis, TN 38114	USACE	Memphis, TN 38111		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	Analyses: TCL VOC 8260B	TCL SVOC 8270C	TAL metals 200 series	pH	Comments
1	ST-EFF-05	H_2O	11/11/98	8:15 AM	3 HCl 1 HNO_3 3 none	7	Level 3	7 day	X	X	X	X	Please fax results on DUE DATE to SITE and to Lab Coordinator.
2													Flow Rate 158.8 gpm
3													Totaled Flow 4875330
4													
5													
6													
7													
8													
9													
10													

SAMPLES COLLECTED BY: John McCarthy

COURIER AND AIR BILL NUMBER

COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
John McCarthy	[signature]	11/23/98	0905	14°C

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

P.11/11

DEC 09 98 02:02PM OHM NORCROSS

479 553

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

November 30, 1998

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Sample 005

Ref: Analytical Testing

ETC Order #	9811705
Project Description	DDMT
	Memphis, TN
Project #	920022
FID #	DACA45-96-D-0014

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas		*Oklahoma*	*#9311*
Alabama	*#40730*	*Virginia*	*#00106*
Kentucky	*#90047*	*Washington*	*#C248*
North Carolina	*#415*	*US Army Corps of Engineers*	
South Carolina	*#84002002*		

479 555

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

479 556

Environmental Testing and Consulting, Inc.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Cross Reference Table

Project : DDMT

Sample ID	Laboratory ID
ST-EFF-05	9811-705-01

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479-557

INORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

te ID DDMT
Memphis, TN

te Arrived 11/23/98
C Order Number 9811705

C Lab ID 9811705-01
mple ID: ST-EFF-05

Matrix :AQUEOUS
Sample Date :11/23/98

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	5.6	SU		0930	11/23/98	LB	150.1

BORATORY MANAGER

479 558

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

te ID DDMT
Memphis, TN

te Arrived 11/23/98
C Order Number 9811705

C Lab ID 9811705-01
mple ID: ST-EFF-05

Matrix :AQUEOUS
Sample Date :11/23/98

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
rcury Digestion Batch	V4-AQ-61				11/25/98	RM	245.1
:als Digestion Batch	V12-AQ-97				11/24/98	TD	3030K
lver	ND	mg/L	0.009	1315	11/25/98	TD	200.7
uminum	ND	mg/L	0.060	1315	11/25/98	TD	200.7
senic	ND	mg/L	0.003	1019	11/25/98	JF	206.2
:ium	0.112	mg/L	0.003	1315	11/25/98	TD	200.7
[illegible]ium	ND	mg/L	0.002	1315	11/25/98	TD	200.7
l n	24.8	mg/L	0.015	1315	11/25/98	TD	200.7
imium	ND	mg/L	0.005	1315	11/25/98	TD	200.7
balt	ND	mg/L	0.009	1315	11/25/98	TD	200.7
romium	ND	mg/L	0.009	1315	11/25/98	TD	200.7
pper	ND	mg/L	0.008	1315	11/25/98	TD	200.7
on	0.036	mg/L	0.009	1315	11/25/98	TD	200.7
rcury	ND	mg/L	0.0002	1415	11/25/98	RM	245.1
:assium	0.900	mg/L	0.250	1315	11/25/98	TD	200.7
gnesium	12.5	mg/L	0.040	1315	11/25/98	TD	200.7
nganese	0.014	mg/L	0.003	1315	11/25/98	TD	200.7
dium	26.6	mg/L	0.050	1315	11/25/98	TD	200.7
ckel	ND	mg/L	0.020	1315	11/25/98	TD	200.7
ad	ND	mg/L	0.060	1315	11/25/98	TD	200.7
timony	ND	mg/L	0.040	1315	11/25/98	TD	200.7
lenium	ND	mg/L	0.100	1315	11/25/98	TD	200.7
allium	ND	mg/L	0.065	1315	11/25/98	TD	200.7
nadium	ND	mg/L	0.010	1315	11/25/98	TD	200.7
nc	0.063	mg/L	0.010	1315	11/25/98	TD	200.7

BORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479-559

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

Site ID DDMT
Memphis, TN

Date Arrived 11/23/98
TC Order Number 9811705

TC Lab ID 9811705-01
Sample ID: ST-EFF-05

Matrix :AQUEOUS
Sample Date :11/23/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
QC Batch	V3112901	ug/L		11/29/98	11/29/98	LS	
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	4.07	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	20.6	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	20.3	ug/L	1.00				
trans-1,2-Dichlordethene	8.42	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	226E	ug/L	1.00				
Tetrachloroethene	34.4	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	1.00	ug/L	1.00				
1,1,2-Trichloroethane	1.30	ug/L	1.00				
Trichloroethene	207E	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	37.3	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
1 Dibromofluoromethane	95	74	123
2 - Toluene-d8	97	86	112
3 - 4-Bromofluorobenzene	89	81	115

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 560

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

Site ID DDMT
Memphis, TN

Date Arrived 11/23/98
TC Order Number 9811705

TC Lab ID 9811705-01
Sample ID: ST-EFF-05-DL

Matrix :AQUEOUS
Sample Date :11/23/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
V/MS Volatile Organics							8260B
				11/29/98	11/29/98	LS	
QC Batch	V3112901	ug/L					
Acetone	ND	ug/L	2500				
Benzene	ND	ug/L	50.0				
Bromodichloromethane	ND	ug/L	50.0				
Bromoform	ND	ug/L	50.0				
Bromomethane	ND	ug/L	50.0				
Carbon Disulfide	ND	ug/L	50.0				
Carbon Tetrachloride	ND	ug/L	50.0				
Chlorobenzene	ND	ug/L	50.0				
Dibromochloromethane	ND	ug/L	50.0				
Chloroethane	ND	ug/L	50.0				
Chloroform	ND	ug/L	50.0				
Chloromethane	ND	ug/L	50.0				
1,1-Dichloroethane	ND	ug/L	50.0				
1,2-Dichloroethane	ND	ug/L	50.0				
1,1-Dichloroethene	ND	ug/L	50.0				
trans-1,2-Dichloroethene	ND	ug/L	50.0				
1,2-Dichloropropane	ND	ug/L	50.0				
cis-1,3-Dichloropropene	ND	ug/L	50.0				
trans-1,3-Dichloropropene	ND	ug/L	50.0				
Ethylbenzene	ND	ug/L	50.0				
2-Hexanone (MBK)	ND	ug/L	250				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	250				
2-Butanone (MEK)	ND	ug/L	1000				
Methylene Chloride	ND	ug/L	250				
Styrene	ND	ug/L	50.0				
1,1,2,2-Tetrachloroethane	272	ug/L	50.0				
Tetrachloroethene	ND	ug/L	50.0				
Toluene	ND	ug/L	50.0				
1,1,1-Trichloroethane	ND	ug/L	50.0				
1,1,2-Trichloroethane	ND	ug/L	50.0				
Trichloroethene	217	ug/L	50.0				
Vinyl Acetate	ND	ug/L	1000				
Vinyl Chloride	ND	ug/L	50.0				
o-Xylenes	ND	ug/L	50.0				
m-Xylenes	ND	ug/L	50.0				
p-Xylenes	ND	ug/L	50.0				
cis-1,2-Dichloroethene	ND	ug/L	50.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	99	74	123
S2 - Toluene-d8	98	86	112
S3 - 4-Bromofluorobenzene	88	81	115

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 561

t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 11/23/98
C Order Number 9811705

C Lab ID 9811705-01
mple ID: ST-EFF-05

Matrix :AQUEOUS
Sample Date :11/23/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Base/Neutral & Acid							8270C
				11/24/98	11/27/98	CB	
QC Batch	P05081	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
B[illegible]o(a)pyrene	ND	ug/L	2.00				
B[illegible]bic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	26.0B	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	2.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
F[illegible]oranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

ABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 562

ORGANIC ANALYSIS DATA SHEET

t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 11/23/98
C Order Number 9811705

C Lab ID 9811705-01
mple ID: ST-EFF-05

Matrix :AQUEOUS
Sample Date :11/23/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Base/Neutral & Acid				11/24/98	11/27/98	CB	8270C
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

urrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	80	29	110
S2 - 2-Fluorobiphenyl	85	38	107
S3 - 4-Terphenyl-d14	85	33	122
S4 - Phenol-d6	33	7	58
S5 - 2,4,6-Tribromophenol	88	16	138
S6 - 2-Fluorophenol	54	8	88

ABORATORY MANAGER

ND - Not Detected

9811-479

OHM Remediation Servic s Corp

Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-1526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

21818

FORM 0019 REV. 2-97

PROJECT# 92002.22 WBS# 80000.000 PO#

LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ETC	Nathan Pera	OHM Remediation Services/IT Corp.
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDMT	Memphis, TN	92002.22	901-327-2750	901-327-6334	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-775-0173	901-775-2517	2924 Walnut Grove Road		5445 Triangle Pkwy, Suite 400
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY, STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
1708 Dunn Ave.	Memphis, TN 38114	USACE	Memphis, TN 38111		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T.	Analyses: TCL VOCs 8260B	TCL SVOCs 8270C	TAL Metals-200 Series	pH	Comments
1	ST-EFF-04	H_2O	11/10/98	1020	HCl HNO_3 None	7	Level 3	7 day	X	X	X	X	Please fax results on DUE DATE to SITE and to Lab Coordinator.
2	ST-EFF-04-MS	H_2O	11/10/98	1021	"	7	"	"	X	X	X	X	Effluent Flow Rate 169.8 gpm
3	ST-EFF-04-MSD	H_2O	11/10/98	1022	"	7	"	"	X	X	X	X	Totaled Flow: 328650 gal
4	ST-EFF-04A	H_2O	11/10/98	~~1023~~ 1123	"	7	"	"	X	X	X	X	
5	Trip Blank	H_2O	—		HCl	3	"	"	X				
6													
7													
8													
9													
10													

SAMPLES COLLECTED BY

RELINQUISHED BY

COURIER AND AIR BILL NUMBER

RECEIVED BY

DATE 11/11/98 TIME 1225

COOLER TEMPERATURE UPON RECEIPT

SAMPLE'S CONDITION UPON RECEIPT

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

DEC 09 '98 01:58PM OHM NORCROSS

479 563

ENVIRONMENTAL TESTING & CONSULTING, INC.
2024 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6384
Founded 1972

479 564

December 7, 1998

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Sample 006

Ref: Analytical Testing
ETC Order # 9812045
Project Description DDMT

Project # 920022 Defense Depot - Memphis, TN

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

479 565

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY TABLE

479 566

t Name OHM Remediation Services
te ID DDMT
Memphis, TN

mple ID	Field ID	Matrix	Method	Method Description
1204501	ST-EFF-06	AQUEOUS	200.7	Silver
1204501	ST-EFF-06	AQUEOUS	200.7	Aluminum
1204501	ST-EFF-06	AQUEOUS	206.2	Arsenic
1204501	ST-EFF-06	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
1204501	ST-EFF-06	AQUEOUS	200.7	Barium
1204501	ST-EFF-06	AQUEOUS	200.7	Beryllium
1204501	ST-EFF-06	AQUEOUS	200.7	Calcium
1204501	ST-EFF-06	AQUEOUS	200.7	Cadmium
1204501	ST-EFF-06	AQUEOUS	200.7	Cobalt
1204501	ST-EFF-06	AQUEOUS	200.7	Chromium
1204501	ST-EFF-06	AQUEOUS	200.7	Copper
1204501	ST-EFF-06	AQUEOUS	200.7	Iron
1204501	ST-EFF-06	AQUEOUS	245.1	Mercury
1204501	ST-EFF-06	AQUEOUS	200.7	Potassium
1204501	ST-EFF-06	AQUEOUS	200.7	Magnesium
1204501	ST-EFF-06	AQUEOUS	200.7	Manganese
1204501	ST-EFF-06	AQUEOUS	200.7	Sodium
1204501	ST-EFF-06	AQUEOUS	200.7	Nickel
1204501	ST-EFF-06	AQUEOUS	200.7	Lead
1204501	ST-EFF-06	AQUEOUS	150.1	pH
1204501	ST-EFF-06	AQUEOUS	200.7	Antimony
1204501	ST-EFF-06	AQUEOUS	200.7	Selenium
1204501	ST-EFF-06	AQUEOUS	200.7	Thallium
1[illegible]501	ST-EFF-06	AQUEOUS	8260B	GC/MS Volatile Organics
1[illegible]501	ST-EFF-06	AQUEOUS	200.7	Vanadium
1204501	ST-EFF-06	AQUEOUS	200.7	Zinc
1204502	EQB-06	AQUEOUS	200.7	Silver
1204502	EQB-06	AQUEOUS	200.7	Aluminum
1204502	EQB-06	AQUEOUS	206.2	Arsenic
1204502	EQB-06	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
1204502	EQB-06	AQUEOUS	200.7	Barium
1204502	EQB-06	AQUEOUS	200.7	Beryllium
1204502	EQB-06	AQUEOUS	200.7	Calcium
1204502	EQB-06	AQUEOUS	200.7	Cadmium
1204502	EQB-06	AQUEOUS	200.7	Cobalt
1204502	EQB-06	AQUEOUS	200.7	Chromium
1204502	EQB-06	AQUEOUS	200.7	Copper
1204502	EQB-06	AQUEOUS	200.7	Iron
1204502	EQB-06	AQUEOUS	245.1	Mercury
1204502	EQB-06	AQUEOUS	200.7	Potassium
1204502	EQB-06	AQUEOUS	200.7	Magnesium
1204502	EQB-06	AQUEOUS	200.7	Manganese
1204502	EQB-06	AQUEOUS	200.7	Sodium
1204502	EQB-06	AQUEOUS	200.7	Nickel
1204502	EQB-06	AQUEOUS	200.7	Lead
1204502	EQB-06	AQUEOUS	150.1	pH
1204502	EQB-06	AQUEOUS	200.7	Antimony
1204502	EQB-06	AQUEOUS	200.7	Selenium
1204502	EQB-06	AQUEOUS	200.7	Thallium
1204502	EQB-06	AQUEOUS	8260B	GC/MS Volatile Organics
1204502	EQB-06	AQUEOUS	200.7	Vanadium
1204502	EQB-06	AQUEOUS	200.7	Zinc
1[illegible]503	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 567

INORGANIC ANALYSIS DATA SHEET

lient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

ite ID DDMT
Memphis, TN

ate Arrived 12/01/98
TC Order Number 9812045

TC Lab ID **9812045-01**
ample ID: ST-EFF-06

Matrix :AQUEOUS
Sample Date :11/30/98

EST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
H	5.8	SU		1220	12/01/98	LB	150.1

ABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 568

INORGANIC ANALYSIS DATA SHEET

Client Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

Site ID DDMT
Memphis, TN

Date Arrived 12/01/98
TC Order Number 9812045

TC Lab ID 9812045-01
Sample ID: ST-EFF-06

Matrix :AQUEOUS
Sample Date :11/30/98

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
Mercury Digestion Batch	V4-AQ-62				12/03/98	RM	245.1
Metals Digestion Batch	V13-AQ-04				12/02/98	NR	3030K
Silver	ND	mg/L	0.009	1253	12/03/98	TD	200.7
Aluminum	ND	mg/L	0.060	1253	12/03/98	TD	200.7
Arsenic	ND	mg/L	0.003	1416	12/02/98	JF	206.2
Barium	0.124	mg/L	0.003	1253	12/03/98	TD	200.7
Beryllium	ND	mg/L	0.002	1253	12/03/98	TD	200.7
Calcium	26.5	mg/L	0.015	1253	12/03/98	TD	200.7
Cadmium	ND	mg/L	0.005	1253	12/03/98	TD	200.7
Cobalt	ND	mg/L	0.009	1253	12/03/98	TD	200.7
Chromium	ND	mg/L	0.009	1253	12/03/98	TD	200.7
Copper	ND	mg/L	0.008	1253	12/03/98	TD	200.7
Iron	0.010	mg/L	0.009	1253	12/03/98	TD	200.7
Mercury	ND	mg/L	0.0002	1539	12/03/98	RM	245.1
Potassium	0.703	mg/L	0.250	1253	12/03/98	TD	200.7
Magnesium	13.0	mg/L	0.040	1253	12/03/98	TD	200.7
Manganese	0.048	mg/L	0.003	1253	12/03/98	TD	200.7
Sodium	26.1	mg/L	0.050	1253	12/03/98	TD	200.7
Nickel	ND	mg/L	0.020	1253	12/03/98	TD	200.7
Lead	ND	mg/L	0.060	1253	12/03/98	TD	200.7
Antimony	ND	mg/L	0.040	1253	12/03/98	TD	200.7
Selenium	ND	mg/L	0.100	1253	12/03/98	TD	200.7
Thallium	ND	mg/L	0.065	1253	12/03/98	TD	200.7
Vanadium	ND	mg/L	0.010	1253	12/03/98	TD	200.7
Zinc	0.062	mg/L	0.010	1253	12/03/98	TD	200.7

LABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 569

l nt Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ite ID DDMT
Memphis, TN

ate Arrived 12/01/98
IC Order Number 9812045

IC Lab ID 9812045-01
ample ID: ST-EFF-06

Matrix :AQUEOUS
Sample Date :11/30/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Volatile Organics							8260B
				12/05/98	12/05/98	LS	
QC Batch	V2120501	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	3.22	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
C rodibromomethane	ND	ug/L	1.00				
C roethane	ND	ug/L	1.00				
Chloroform	16.4	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	14.6	ug/L	1.00				
trans-1,2-Dichloroethene	7.47	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	176	ug/L	1.00				
Tetrachloroethene	25.6	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	1.10	ug/L	1.00				
Trichloroethene	160	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	32.8	ug/L	1.00				

rrogate Standard	% Recovery	QC Limits	
) Dibromofluoromethane	109	74	123
Toluene-d8	100	86	112
- 4-Bromofluorobenzene	102	81	115

ABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

Client Name	OHM Remediation Services Defense Depot - Memphis, TN 5445 Triangle Parkway Suite 400 Norcross, GA 30092
Site ID	DDMT Memphis, TN

Project # 920022
FID # DACA45-96-D-0014

Date Arrived 12/01/98
TC Order Number 9812045

TC Lab ID 9812045-03
Sample ID: Trip Blank

Matrix :AQUEOUS
Sample Date :

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
				12/05/98	12/05/98	LS	
QC Batch	V2120501	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	109	74	123
S2 - Toluene-d8	102	86	112
S3 - 4-Bromofluorobenzene	104	81	115

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 571

l ıt Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ıte ID DDMT
Memphis, TN

ıte Arrived 12/01/98
ſC Order Number 9812045

ſC Lab ID 9812045-01
ımple ID: ST-EFF-06

Matrix :AQUEOUS
Sample Date :11/30/98

:ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
:/MS Base/Neutral & Acid				12/03/98	12/04/98	CB	8270C
QC Batch	P05085	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
I :oic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	2.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
F :oranthene	ND	ug/L	2.00				
. :orene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

ABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 572

J nt Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ite ID DDMT
Memphis, TN

ate Arrived 12/01/98
TC Order Number 9812045

TC Lab ID 9812045-01
ample ID: ST-EFF-06

Matrix :AQUEOUS
Sample Date :11/30/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
:/MS Base/Neutral & Acid							8270C
				12/03/98	12/04/98	CB	
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
hthalene	ND	ug/L	2.00				
robenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

urrogate Standard	% Recovery	QC Limits	
31 - Nitrobenzene-d5	61	29	110
32 - 2-Fluorobiphenyl	63	38	107
33 - 4-Terphenyl-d14	88	33	122
34 - Phenol-d6	22	7	58
35 - 2,4,6-Tribromophenol	71	16	138
36 - 2-Fluorophenol	39	8	88

ABORATORY MANAGER

ND - Not Detected

4812-045

OHM Remediation Services Corp
Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY 218183

PROJECT# 920022 WBS# 89000000 PO#

FORM 0019 REV. 11/11

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ETC	Nathan Pera	OHM Remediation Services/IT Corp.
PROJECT NAME DDMT	**PROJECT LOCATION** Memphis, TN	**PROJECT NUMBER** 920022	**LABORATORY PHONE** 901-327-2750	**LABORATORY FAX** 901-327-6334	**RECIPIENT NAME** Elena Rodriguez
PROJECT CONTACT Steve Offner	**PROJECT PHONE NUMBER** 901-775-0173	**PROJECT FAX** 901-775-2517	**LABORATORY ADDRESS** 2924 Walnut Grove Road		**ADDRESS** 5445 Triangle Pkwy, Suite 400
PROJECT ADDRESS 1708 Dunn Ave.	**CITY, STATE AND ZIPCODE** Memphis, TN 38114	**CLIENT** USACE	**CITY, STATE AND ZIPCODE** Memphis, TN 38111		**CITY, STATE AND ZIPCODE** Norcross, GA 30092
PROJECT MANAGER Steve Offner	**PROJECT MANAGER'S PHONE** 770-326-2571	**PROJECT MANAGER'S FAX** 770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: TCL VOCs 8260B	TCL SVOC 8270	TAL Metals - 200 series	pH	Comments
1	ST-EFF-06	H_2O	11/30/98 JB	1800	HCl MeOH None	7	Level 3	7 day	X	X	X	X	Please fax results on DUE DATE to SITE and to Lab Coordinator.
2	ST-EFF-06-MS	H_2O	11/30/98	1801	"	7	"	"	X	X	X	X	Matrix Spike.
3	ST-EFF-06-MSD	H_2O	11/30/98	1802	"	7	"	"	X	X	X	X	Matrix Spike Duplicate
4	EQB-06	H_2O	11/30/98 ~~1803~~ 1803		"	7	"	"	X	X	X	X	Equipment Blank
5	Trip Blank	H_2O	~	—	HCl	3	"	"	X				
6													Flow Rate is 145 gpm
7													totaled Flow 6,501,800 gal
8													
9													
10													

SAMPLES COLLECTED BY John McCarthy

COURIER AND AIR BILL NUMBER

COOLER TEMPERATURE UPON RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
John O'M° Carthy	Angela Jones	12/01/98	1200 pm	

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

DEC 09 '98 03:42PM OHM NORCROSS

479 573

November 1998 Monthly Discharge Report
Groundwater Recovery System, Dunn Field, Memphis Depot, Tennessee

479 574

Groundwater Recovery System Startup Testing - October 1998

Duration	05-Oct-98	Began
	30-Oct-98	Ended
Full System On-line	15-Oct-98	
Effluent Samples Collected	19-Oct-98	Week 1 of Startup testing
	26-Oct-98	Week 2 of Startup testing
Total October Effluent Discharge Volume:	**4,468,040 Gallons**	through 30-Oct-98

Groundwater Recovery System Operation - November 1998

Duration:	04-Nov-98 through 30-Nov-98	
System On-line	27 Days	
System Off-line:	19-Nov-98	All recovery wells were off-line from 1000 to 1600 during installation of secondary in-line check valves
	22-Nov-98	Recovery well RW-05 was off-line from 1100 to 1400 to repair flow meter.
Effluent Samples Collected:	09-Nov-98	Week 1 of System Operation
	16-Nov-98	Week 2 of System Operation
	23-Nov-98	Week 3 of System Operation
	30-Nov-98	Week 4 of System Operation
Total November Effluent Discharge Volume.	**6,501,800 Gallons**	04-Nov-98 through 30-Nov-98
November Average Discharge Flow Rate	181.4 GPM	
November Maximum Discharge Flow Rate	248 GPM	on 05-Nov-98
November Minimum Discharge Flow Rate	145 GPM	on 30-Nov-98

TOTAL SYSTEM EFFLUENT THROUGH NOVEMBER **10,969,840 Gallons**

DEFENSE LOGISTICS AGENCY
MEMPHIS DEPOT CARETAKER
2163 AIRWAYS BOULEVARD
MEMPHIS, TENNESSEE 38114-5210

479 575

REPLY REFER TO DDSP-F

November 23, 1998

Mr. Akil Al-Chokhachi
City of Memphis
Division of Public Works
2303 North Second Street
Memphis, TN 38127-7500

Dear Mr. Al-Chokhachi:

Please find enclosed the sampling results from the groundwater we are extracting from Dunn Field. We do not exceed any discharge agreement parameters. Also included is a spreadsheet summary of the three sampling events to date.

We plan on reporting the volumes discharged in the upcoming December 10 Self-Monitoring Monthly Report. This report will include the volume of all the water cumulatively discharged to the public sewer from the system through the end of November, including any startup or testing volumes discharged. Each subsequent report that follows will provide the analytical and volumetric data gathered during the preceding month, per the discharge agreement.

Please contact me at 544-0611 if you have any other questions.

Sincerely,

SHAWN PHILLIPS
BRAC Environmental Coordinator

cc:
Rodney Thomas, City of Memphis
Mike Dobbs, DDC
Jordan English, TDEC
Turpin Ballard, USEPA
John Rollyson, USACE-TAO

479 576

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-5334
Founded 1972

October 22, 1998

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

SAMPLE 001

Ref: Analytical Testing
ETC Order # 9810617
Project Description DDMT
Memphis, TN
Project # 920022

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas		*Oklahoma*	*#9311*
Alabama	*#40730*	*Virginia*	*#00106*
Kentucky	*#90047*	*Washington*	*#C248*
North Carolina	*#415*	*US Army Corps of Engineers*	
South Carolina	*#84002002*		

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 577

ANALYTICAL SUMMARY TABLE

ent Name OHM Remediation Services
Site ID DDMT
Memphis, TN

STC Sample ID	Field ID	Matrix	Method	Method Description
981061701	ST-EFF-001	AQUEOUS	200.7	Silver
981061701	ST-EFF-001	AQUEOUS	200.7	Aluminum
981061701	ST-EFF-001	AQUEOUS	206.2	Arsenic
981061701	ST-EFF-001	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
981061701	ST-EFF-001	AQUEOUS	200.7	Barium
981061701	ST-EFF-001	AQUEOUS	200.7	Beryllium
981061701	ST-EFF-001	AQUEOUS	200.7	Calcium
981061701	ST-EFF-001	AQUEOUS	200.7	Cadmium
981061701	ST-EFF-001	AQUEOUS	200.7	Cobalt
981061701	ST-EFF-001	AQUEOUS	200.7	Chromium
981061701	ST-EFF-001	AQUEOUS	200.7	Copper
981061701	ST-EFF-001	AQUEOUS	200.7	Iron
981061701	ST-EFF-001	AQUEOUS	245.1	Mercury
981061701	ST-EFF-001	AQUEOUS	200.7	Potassium
981061701	ST-EFF-001	AQUEOUS	200.7	Magnesium
981061701	ST-EFF-001	AQUEOUS	200.7	Manganese
981061701	ST-EFF-001	AQUEOUS	200.7	Sodium
981061701	ST-EFF-001	AQUEOUS	200.7	Nickel
981061701	ST-EFF-001	AQUEOUS	200.7	Lead
981061701	ST-EFF-001	AQUEOUS	150.1	pH
981061701	ST-EFF-001	AQUEOUS	200.7	Antimony
981061701	ST-EFF-001	AQUEOUS	200.7	Selenium
981061701	ST-EFF-001	AQUEOUS	200.7	Thallium
981061701	ST-EFF-001	AQUEOUS	8260B	GC/MS Volatile Organics
981061701	ST-EFF-001	AQUEOUS	200.7	Vanadium
981061701	ST-EFF-001	AQUEOUS	200.7	Zinc

000002

479 578

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

Client Name: OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

Site ID: DDMT
Memphis, TN

Date Arrived: 10/19/98
STC Order Number: 9810617

STC Lab ID: 9810617-01
Sample ID: ST-EFF-001

Matrix: AQUEOUS
Sample Date: 10/19/98

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
H	5.6	SU		16:20	10/19/98	LB	150.1

LABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 579

INORGANIC ANALYSIS DATA SHEET

Client Name: OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

Site ID: DDMT
Memphis, TN

Date Arrived: 10/19/98
ETC Order Number: 9810617

ETC Lab ID: 9810617-01
Sample ID: ST-EFF-001

Matrix: AQUEOUS
Sample Date: 10/19/98

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
ercury Digestion Batch	V4-AQ-51					RM	245.1
etals Digestion Batch	V12-AQ-29					NR	3030K
ilver	ND	mg/L	0.009	13:05	10/21/98	TD	200.7
luminum	ND	mg/L	0.060	13:05	10/21/98	TD	200.7
rsenic	ND	mg/L	0.003	11:27	10/21/98	JF	206.2
arium	0.104	mg/L	0.003	13:05	10/21/98	TD	200.7
eryllium	ND	mg/L	0.002	13:05	10/21/98	TD	200.7
a[illegible]ium	23.0	mg/L	0.015	13:05	10/21/98	TD	200.7
[illegible]um	ND	mg/L	0.005	13:05	10/21/98	TD	200.7
obalt	ND	mg/L	0.009	13:05	10/21/98	TD	200.7
hromium	ND	mg/L	0.009	13:05	10/21/98	TD	200.7
opper	ND	mg/L	0.008	13:05	10/21/98	TD	200.7
ron	0.070	mg/L	0.009	13:05	10/21/98	TD	200.7
ercury	ND	mg/L	0.0002	14:33	10/21/98	RM	245.1
otassium	0.916	mg/L	0.250	13:05	10/21/98	TD	200.7
agnesium	11.7	mg/L	0.040	13:05	10/21/98	TD	200.7
anganese	ND	mg/L	0.003	13:05	10/21/98	TD	200.7
odium	27.8	mg/L	0.050	13:05	10/21/98	TD	200.7
ickel	ND	mg/L	0.020	13:05	10/21/98	TD	200.7
ead	ND	mg/L	0.060	13:05	10/21/98	TD	200.7
ntimony	ND	mg/L	0.040	13:05	10/21/98	TD	200.7
elenium	ND	mg/L	0.100	13:05	10/21/98	TD	200.7
hallium	ND	mg/L	0.065	13:05	10/21/98	TD	200.7
anadium	ND	mg/L	0.010	13:05	10/21/98	TD	200.7
inc	0.047	mg/L	0.010	13:05	10/21/98	TD	200.7

ABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 580

Client Name: OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID #

Site ID: DDMT
Memphis, TN

Date Arrived 10/19/98
STC Order Number 9810617

STC Lab ID 9810617-01
Sample ID: ST-EFF-001

Matrix :AQUEOUS
Sample Date :10/19/98

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
				10/20/98	10/21/98	LS	
QC Batch	V2102002	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	2.90	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	13.6	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	11.6	ug/L	1.00				
trans-1,2-Dichloroethene	5.96	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	20.0				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	87.1	ug/L	1.00				
Tetrachloroethene	25.7	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	1.81	ug/L	1.00				
Trichloroethene	108	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	29.2	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	104	74	123
S2 - Toluene-d8	100	86	112
S3 - 4-Bromofluorobenzene	102	81	115

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 581

nt Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID #

ite ID DDMT
Memphis, TN

ate Arrived 10/19/98
TC Order Number 9810617

TC Lab ID 9810617-01
ample ID: ST-EFF-001

Matrix :AQUEOUS
Sample Date :10/19/98

EST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
C/MS Base/Neutral & Acid				10/21/98	10/22/98	RR	8270C
QC Batch	P04045	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
zoic Acid	ND	ug/L	50.0				
enzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	2.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	91.2	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
oranthene	ND	ug/L	2.00				
uorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 582

nt Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID #

ite ID DDMT
Memphis, TN

ate Arrived 10/19/98
TC Order Number 9810617

TC Lab ID 9810617-01
ample ID: ST-EFF-001

Matrix :AQUEOUS
Sample Date :10/19/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
C/MS Base/Neutral & Acid				10/21/98	10/22/98	RR	8270C
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
hthalene	ND	ug/L	2.00				
crobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

urrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	65	29	110
S2 - 2-Fluorobiphenyl	61	38	107
S3 - 4-Terphenyl-d14	48	33	122
S4 - Phenol-d6	31	7	58
S5 - 2,4,6-Tribromophenol	81	16	138
S6 - 2-Fluorophenol	43	8	88

ABORATORY MANAGER

ND - Not Detected

000012

7810-L61

OHM Remediation Services Corp
Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

2178964

FORM 0019 REV. 3-93

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ETC	Nathan Pera	OHM Remediation Services Corp
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDMT	Memphis TN	~~20560~~ 920022	901-327-2750	901-327-6334	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-743-1117	901-743-1048	2924 Walnut Grove Road		5445 Triangle Pkwy, #400
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
1708 Dunn Ave.	Memphis, TN 38114	USACE	Memphis TN 38111		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: FH	VOCs SW846-8260	SVOCs SW846-8270	TAL Metals EPA 200	Comments
1	ST-EFF-001	water	10/19/98	1510	HCl none HNO_3	3 40ml 2 1L 2 500ml	OHM STD III	3 day	X	X	X	X	Please fax results on DUE DATE to SITE and to Lab Coordinator
2													
3													
4													
5													
6													
7													
8													
9													
10													

SAMPLES COLLECTED BY: Grant / McCall

COURIER AND AIR BILL NUMBER

COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
[signature]	[signature]	10/19/98	1615	

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

NOV 23 '98 01:32PM OHM NORCROSS 404 729 5883 P.9/9

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

October 28, 1998

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

SAMPLE 002

Ref: Analytical Testing
ETC Order # 9810819
Project Description DDMT
Memphis, TN
Project # 920022
FID # DACA45-96-D-0014

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas		*Oklahoma*	*#9311*
Alabama	*#40730*	*Virginia*	*#00106*
Kentucky	*#90047*	*Washington*	*#C248*
North Carolina	*#415*	*US Army Corps of Engineers*	
South Carolina	*#84002002*		

479 585

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 586

INORGANIC ANALYSIS DATA SHEET

ient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

te ID DDMT
Memphis, TN

te Arrived 10/26/98
C Order Number 9810819

C Lab ID 9810819-01
mple ID: ST-EFF-002

Matrix :AQUEOUS
Sample Date :10/26/98

ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	5.9	SU		1600	10/26/98	LB	150.1

BORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road • Memphis, TN 38111 • (901)327-2750

479 587

INORGANIC ANALYSIS DATA SHEET

lient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

.te ID DDMT
Memphis, TN

ıte Arrived 10/26/98
:C Order Number 9810819

:C Lab ID 9810819-01
ımple ID: ST-EFF-002

Matrix :AQUEOUS
Sample Date :10/26/98

!ST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
rcury Digestion Batch	V4-AQ-54				10/28/98	RM	245.1
tals Digestion Batch	V12-AQ-46				10/27/98	NR	3030K
lver	ND	mg/L	0.009	12:45	10/27/98	TD	200.7
ùminum	ND	mg/L	0.060	12:45	10/27/98	TD	200.7
senic	ND	mg/L	0.003	16:32	10/28/98	JF	206.2
rium	0.107	mg/L	0.003	12:45	10/27/98	TD	200.7
ryllium	ND	mg/L	0.002	12:45	10/27/98	TD	200.7
] ım	21.6	mg/L	0.015	12:45	10/27/98	TD	200.7
c ım	ND	mg/L	0.005	12:45	10/27/98	TD	200.7
balt	ND	mg/L	0.009	12:45	10/27/98	TD	200.7
romium	ND	mg/L	0.009	12:45	10/27/98	TD	200.7
pper	ND	mg/L	0.008	12:45	10/27/98	TD	200.7
on	0.046	mg/L	0.009	12:45	10/27/98	TD	200.7
rcury	ND	mg/L	0.0002	13:57	10/28/98	RM	245.1
tassium	0.781	mg/L	0.250	12:45	10/27/98	TD	200.7
gnesium	11.3	mg/L	0.040	12:45	10/27/98	TD	200.7
nganese	ND	mg/L	0.003	12:45	10/27/98	TD	200.7
dium	28.3	mg/L	0.050	12:45	10/27/98	TD	200.7
ckel	ND	mg/L	0.020	12:45	10/27/98	TD	200.7
ad	ND	mg/L	0.060	12:45	10/27/98	TD	200.7
timony	ND	mg/L	0.040	12:45	10/27/98	TD	200.7
lenium	ND	mg/L	0.100	12:45	10/27/98	TD	200.7
allium	ND	mg/L	0.065	12:45	10/27/98	TD	200.7
nadium	ND	mg/L	0.010	12:45	10/27/98	TD	200.7
nc	0.129	mg/L	0.010	12:45	10/27/98	TD	200.7

ıBORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 588

1. it Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ite ID DDMT
Memphis, TN

ate Arrived 10/26/98
TC Order Number 9810819

TC Lab ID 9810819-01
ample ID: ST-EFF-002

Matrix :AQUEOUS
Sample Date :10/26/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
C/MS Volatile Organics							8260B
					10/27/98	LS	
QC Batch	V2102701	ug/L					
Acetone	ND	ug/L	50.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	4.30	ug/L	1.00				
[illegible]probenzene	ND	ug/L	1.00				
[illegible]rodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	12.9	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	5.42	ug/L	1.00				
trans-1,2-Dichloroethene	9.27	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	20.0				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	155	ug/L	1.00				
Tetrachloroethene	22.6	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	2.82	ug/L	1.00				
Trichloroethene	218E	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	43.8	ug/L	1.00				

[illegible]ogate Standard	% Recovery	QC Limits	
S[illegible] - Dibromofluoromethane	102	74	123
S2 - Toluene-d8	96	86	112
S3 - 4-Bromofluorobenzene	101	81	115

ABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 589

lient Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ite ID DDMT
Memphis, TN

ate Arrived 10/26/98
TC Order Number 9810819

TC Lab ID **9810819-01**
ample ID: ST-EFF-002-DL

Matrix :AQUEOUS
Sample Date :10/26/98

EST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
C/MS Volatile Organics							8260B
					10/27/98	LS	
QC Batch	V2102701	ug/L					
Acetone	ND	ug/L	2500				
Benzene	ND	ug/L	50.0				
Bromodichloromethane	ND	ug/L	50.0				
Bromoform	ND	ug/L	50.0				
Bromomethane	ND	ug/L	50.0				
Carbon Disulfide	ND	ug/L	50.0				
Carbon Tetrachloride	ND	ug/L	50.0				
Chlorobenzene	ND	ug/L	50.0				
Dibromochloromethane	ND	ug/L	50.0				
Chloroethane	ND	ug/L	50.0				
Chloroform	ND	ug/L	50.0				
Chloromethane	ND	ug/L	50.0				
1,1-Dichloroethane	ND	ug/L	50.0				
1,2-Dichloroethane	ND	ug/L	50.0				
1,1-Dichloroethene	ND	ug/L	50.0				
trans-1,2-Dichloroethene	ND	ug/L	50.0				
1,2-Dichloropropane	ND	ug/L	50.0				
cis-1,3-Dichloropropene	ND	ug/L	50.0				
trans-1,3-Dichloropropene	ND	ug/L	50.0				
Ethylbenzene	ND	ug/L	50.0				
2-Hexanone (MBK)	ND	ug/L	250				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	250				
2-Butanone (MEK)	ND	ug/L	1000				
Methylene Chloride	ND	ug/L	1000				
Styrene	ND	ug/L	50.0				
1,1,2,2-Tetrachloroethane	159	ug/L	50.0				
Tetrachloroethene	ND	ug/L	50.0				
Toluene	ND	ug/L	50.0				
1,1,1-Trichloroethane	ND	ug/L	50.0				
1,1,2-Trichloroethane	ND	ug/L	50.0				
Trichloroethene	226	ug/L	50.0				
Vinyl Acetate	ND	ug/L	1000				
Vinyl Chloride	ND	ug/L	50.0				
o-Xylenes	ND	ug/L	50.0				
m-Xylenes	ND	ug/L	50.0				
p-Xylenes	ND	ug/L	50.0				
cis-1,2-Dichloroethene	ND	ug/L	50.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	101	74	123
S2 - Toluene-d8	97	86	112
S3 - 4-Bromofluorobenzene	103	81	115

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 590

l it Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ite ID DDMT
Memphis, TN

ate Arrived 10/26/98
TC Order Number 9810819

TC Lab ID 9810819-01
ample ID: ST-EFF-002

Matrix :AQUEOUS
Sample Date :10/26/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
:/MS Base/Neutral & Acid				10/27/98	10/29/98	RM	8270C
QC Batch	P05063	ug/L					
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
zoic Acid	ND	ug/L	50.0				
benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	23.6B	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	2.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	2.5J	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
ioranthene	ND	ug/L	2.00				
uorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				

ABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road • Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 591

t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ite ID DDMT
Memphis, TN

ite Arrived 10/26/98
C Order Number 9810819

C Lab ID **9810819-01**
mple ID: ST-EFF-002

Matrix :AQUEOUS
Sample Date :10/26/98

ST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
/MS Base/Neutral & Acid							8270C
				10/27/98	10/29/98	RM	
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

rrogate Standard	% Recovery	QC Limits	
1 - Nitrobenzene-d5	82	29	110
2 - 2-Fluorobiphenyl	88	38	107
3 - 4-Terphenyl-d14	91	33	122
4 - Phenol-d6	32	7	58
5 - 2,4,6-Tribromophenol	90	16	138
6 - 2-Fluorophenol	44	8	88

ABORATORY MANAGER

ND - Not Detected

9810-819

OHM Remediation Services Corp

Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

217900

FORM 0019 REV 2-97

OHM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ETC	Nathan Pera	OHM Remediation Services Corp
PROJECT NAME:	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
DDNT	Memphis TN	20560 920032	901-327-2750	901-327-6334	Elena Rodriguez
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Steve Offner	901-743-1117	901-743-1048	2924 Walnut Grove Road		5445 Triangle Pkwy, #400
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY, STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
1708 Dunn Ave.	Memphis, TN 38114	USACE	Memphis TN 38111		Norcross, GA 30092
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Steve Offner	770-326-2571	770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: PH	VOC's	SVOC's	TAL Metals				Comments
1	ST-EFF-002	water	10/26/98	1500	HCl none HNO3	3 0-40ml R-1 2 1L-500ml	OHM STD TIE	3day	+	+	X	X				Please fax results on DUE DATE to SITE and to Lab Coordinator
2																RW-9 Was not running Sampling RW 3,4,5,6,7,8
3																
4																
5																
6																
7																
8																
9																
10																

SAMPLES COLLECTED BY: [illegible] COURIER AND AIR BILL NUMBER: COOLER TEMPERATURE UPON RECEIPT: 2.9°C (3)

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
[signature]	[signature]	10/28/98	1540	

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

NOV 23 '98 12:59PM OHM NORCROSS 479 592 0 10/10

000003

479 593

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

November 17, 1998

Ms. Elena Rodriguez
OHM Remediation Services
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

SAMPLE 003

Ref: Analytical Testing
ETC Order # 9811263
Project Description DDMT
Memphis, TN
Project # 920022

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

OHM_DDMT22

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas		*Oklahoma*	*#9311*
Alabama	*#40730*	*Virginia*	*#00106*
Kentucky	*#90047*	*Washington*	*#C248*
North Carolina	*#415*	*US Army Corps of Engineers*	
South Carolina	*#84002002*		

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY TABLE

ent Name OHM Remediation Services
e ID DDMT
Memphis, TN

ple ID	Field ID	Matrix	Method	Method Description
26301	ST-EFF-03	AQUEOUS	200.7	Silver
26301	ST-EFF-03	AQUEOUS	200.7	Aluminum
26301	ST-EFF-03	AQUEOUS	206.2	Arsenic
26301	ST-EFF-03	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
26301	ST-EFF-03	AQUEOUS	200.7	Barium
26301	ST-EFF-03	AQUEOUS	200.7	Beryllium
26301	ST-EFF-03	AQUEOUS	200.7	Calcium
26301	ST-EFF-03	AQUEOUS	200.7	Cadmium
26301	ST-EFF-03	AQUEOUS	200.7	Cobalt
26301	ST-EFF-03	AQUEOUS	200.7	Chromium
26301	ST-EFF-03	AQUEOUS	200.7	Copper
26301	ST-EFF-03	AQUEOUS	200.7	Iron
26301	ST-EFF-03	AQUEOUS	245.1	Mercury
26301	ST-EFF-03	AQUEOUS	200.7	Potassium
26301	ST-EFF-03	AQUEOUS	200.7	Magnesium
26301	ST-EFF-03	AQUEOUS	200.7	Manganese
26301	ST-EFF-03	AQUEOUS	200.7	Sodium
26301	ST-EFF-03	AQUEOUS	200.7	Nickel
26301	ST-EFF-03	AQUEOUS	200.7	Lead
26301	ST-EFF-03	AQUEOUS	150.1	pH
26301	ST-EFF-03	AQUEOUS	200.7	Antimony
26301	ST-EFF-03	AQUEOUS	200.7	Selenium
26301	ST-EFF-03	AQUEOUS	200.7	Thallium
26301	ST-EFF-03	AQUEOUS	8260B	GC/MS Volatile Organics
26301	ST-EFF-03	AQUEOUS	200.7	Vanadium
26301	ST-EFF-03	AQUEOUS	200.7	Zinc
26302	ST-EFF-03MS	AQUEOUS	200.7	Silver
26302	ST-EFF-03MS	AQUEOUS	200.7	Aluminum
26302	ST-EFF-03MS	AQUEOUS	206.2	Arsenic
26302	ST-EFF-03MS	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
26302	ST-EFF-03MS	AQUEOUS	200.7	Barium
26302	ST-EFF-03MS	AQUEOUS	200.7	Beryllium
26302	ST-EFF-03MS	AQUEOUS	200.7	Calcium
26302	ST-EFF-03MS	AQUEOUS	200.7	Cadmium
26302	ST-EFF-03MS	AQUEOUS	200.7	Cobalt
26302	ST-EFF-03MS	AQUEOUS	200.7	Chromium
26302	ST-EFF-03MS	AQUEOUS	200.7	Copper
26302	ST-EFF-03MS	AQUEOUS	200.7	Iron
26302	ST-EFF-03MS	AQUEOUS	245.1	Mercury
26302	ST-EFF-03MS	AQUEOUS	200.7	Potassium
26302	ST-EFF-03MS	AQUEOUS	200.7	Magnesium
26302	ST-EFF-03MS	AQUEOUS	200.7	Manganese
26302	ST-EFF-03MS	AQUEOUS	200.7	Sodium
26302	ST-EFF-03MS	AQUEOUS	200.7	Nickel
26302	ST-EFF-03MS	AQUEOUS	200.7	Lead
26302	ST-EFF-03MS	AQUEOUS	150.1	pH
26302	ST-EFF-03MS	AQUEOUS	200.7	Antimony
26302	ST-EFF-03MS	AQUEOUS	200.7	Selenium
26302	ST-EFF-03MS	AQUEOUS	200.7	Thallium
26302	ST-EFF-03MS	AQUEOUS	8260B	GC/MS Volatile Organics
26302	ST-EFF-03MS	AQUEOUS	200.7	Vanadium
26302	ST-EFF-03MS	AQUEOUS	200.7	Zinc
26303	ST-EFF-03MSD	AQUEOUS	200.7	Silver
26303	ST-EFF-03MSD	AQUEOUS	200.7	Aluminum
26303	ST-EFF-03MSD	AQUEOUS	206.2	Arsenic

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY TABLE

479-596

enc Name OHM Remediation Services
e ID DDMT
Memphis, TN

ple ID	Field ID	Matrix	Method	Method Description
26303	ST-EFF-03MSD	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
26303	ST-EFF-03MSD	AQUEOUS	200.7	Barium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Beryllium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Calcium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Cadmium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Cobalt
26303	ST-EFF-03MSD	AQUEOUS	200.7	Chromium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Copper
26303	ST-EFF-03MSD	AQUEOUS	200.7	Iron
26303	ST-EFF-03MSD	AQUEOUS	245.1	Mercury
26303	ST-EFF-03MSD	AQUEOUS	200.7	Potassium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Magnesium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Manganese
26303	ST-EFF-03MSD	AQUEOUS	200.7	Sodium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Nickel
26303	ST-EFF-03MSD	AQUEOUS	200.7	Lead
26303	ST-EFF-03MSD	AQUEOUS	150.1	pH
26303	ST-EFF-03MSD	AQUEOUS	200.7	Antimony
26303	ST-EFF-03MSD	AQUEOUS	200.7	Selenium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Thallium
26303	ST-EFF-03MSD	AQUEOUS	8260B	GC/MS Volatile Organics
26303	ST-EFF-03MSD	AQUEOUS	200.7	Vanadium
26303	ST-EFF-03MSD	AQUEOUS	200.7	Zinc
4	EQB-03	AQUEOUS	200.7	Silver
26304	EQB-03	AQUEOUS	200.7	Aluminum
26304	EQB-03	AQUEOUS	206.2	Arsenic
26304	EQB-03	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
26304	EQB-03	AQUEOUS	200.7	Barium
26304	EQB-03	AQUEOUS	200.7	Beryllium
26304	EQB-03	AQUEOUS	200.7	Calcium
26304	EQB-03	AQUEOUS	200.7	Cadmium
26304	EQB-03	AQUEOUS	200.7	Cobalt
26304	EQB-03	AQUEOUS	200.7	Chromium
26304	EQB-03	AQUEOUS	200.7	Copper
26304	EQB-03	AQUEOUS	200.7	Iron
26304	EQB-03	AQUEOUS	245.1	Mercury
26304	EQB-03	AQUEOUS	200.7	Potassium
26304	EQB-03	AQUEOUS	200.7	Magnesium
26304	EQB-03	AQUEOUS	200.7	Manganese
26304	EQB-03	AQUEOUS	200.7	Sodium
26304	EQB-03	AQUEOUS	200.7	Nickel
26304	EQB-03	AQUEOUS	200.7	Lead
26304	EQB-03	AQUEOUS	150.1	pH
26304	EQB-03	AQUEOUS	200.7	Antimony
26304	EQB-03	AQUEOUS	200.7	Selenium
26304	EQB-03	AQUEOUS	200.7	Thallium
26304	EQB-03	AQUEOUS	8260B	GC/MS Volatile Organics
26304	EQB-03	AQUEOUS	200.7	Vanadium
26304	EQB-03	AQUEOUS	200.7	Zinc
26305	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

479 597

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

.e ID DDMT
Memphis, TN

:e Arrived 11/10/98
: Order Number 9811263

: Lab ID 9811263-01
nple ID: ST-EFF-03

Matrix :AQUEOUS
Sample Date :11/09/98

;T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	5.8	SU			11/10/98	LB	150.1

BORATORY MANAGER

479 598

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT
Memphis, TN

e Arrived 11/10/98
Order Number 9811263

. Lab ID 9811263-04
ple ID: EQB-03 ← EQUIPMENT BLANK

Matrix :AQUEOUS
Sample Date :11/09/98

T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
	6.8	SU			11/10/98	LB	150.1

ABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

479 599

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

e ID DDMT
Memphis, TN

e Arrived 11/10/98
Order Number 9811263

Lab ID 9811263-01
ple ID: ST-EFF-03

Matrix :AQUEOUS
Sample Date :11/09/98

T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
:ury Digestion Batch	V4-AQ-57					RM	245.1
ıls Digestion Batch	V12-AQ-69					NR	3030K
ver	ND	mg/L	0.009	13:03	11/13/98	TD	200.7
ıinum	ND	mg/L	0.060	13:03	11/13/98	TD	200.7
:nic	ND	mg/L	0.003	16:53	11/11/98	JF	206.2
.um	0.109	mg/L	0.003	13:03	11/13/98	TD	200.7
' ım	ND	mg/L	0.002	13:03	11/13/98	TD	200.7
:	24.7	mg/L	0.015	13:03	11/13/98	TD	200.7
ıium	ND	mg/L	0.005	13:03	11/13/98	TD	200.7
ılt	ND	mg/L	0.009	13:03	11/13/98	TD	200.7
omium	ND	mg/L	0.009	13:03	11/13/98	TD	200.7
per	ND	mg/L	0.008	13:03	11/13/98	TD	200.7
ı	0.022	mg/L	0.009	13:03	11/13/98	TD	200.7
cury	ND	mg/L	0.0002	16:03	11/10/98	RM	245.1
ıssium	0.883	mg/L	0.250	13:03	11/13/98	TD	200.7
ıesium	12.6	mg/L	0.040	13:03	11/13/98	TD	200.7
ganese	ND	mg/L	0.003	13:03	11/13/98	TD	200.7
ium	27.7	mg/L	0.050	13:03	11/13/98	TD	200.7
cel	ND	mg/L	0.020	13:03	11/13/98	TD	200.7
ı	ND	mg/L	0.060	13:03	11/13/98	TD	200.7
imony	ND	mg/L	0.040	13:03	11/13/98	TD	200.7
enium	ND	mg/L	0.100	13:03	11/13/98	TD	200.7
ılium	ND	mg/L	0.065	13:03	11/13/98	TD	200.7
ıdium	ND	mg/L	0.010	13:03	11/13/98	TD	200.7
:	0.095	mg/L	0.010	13:03	11/13/98	TD	200.7

ORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 600

INORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022

.e ID DDMT
Memphis, TN

.e Arrived 11/10/98
: Order Number 9811263

: Lab ID 9811263-04
nple ID: EQB-03

Matrix :AQUEOUS
Sample Date :11/09/98

:T	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED	BY	METHOD
:ury Digestion Batch	V4-AQ-57					RM	245.1
als Digestion Batch	V12-AQ-69					NR	3030K
ver	ND	mg/L	0.009	13:32	11/13/98	TD	200.7
inum	ND	mg/L	0.060	13:32	11/13/98	TD	200.7
enic	ND	mg/L	0.003	10:20	11/12/98	JF	206.2
ium	ND	mg/L	0.003	13:32	11/13/98	TD	200.7
' um	ND	mg/L	0.002	13:32	11/13/98	TD	200.7
:	0.022	mg/L	0.015	13:32	11/13/98	TD	200.7
nium	ND	mg/L	0.005	13:32	11/13/98	TD	200.7
alt	ND	mg/L	0.009	13:32	11/13/98	TD	200.7
omium	ND	mg/L	0.009	13:32	11/13/98	TD	200.7
per	ND	mg/L	0.008	13:32	11/13/98	TD	200.7
n	ND	mg/L	0.009	13:32	11/13/98	TD	200.7
:ury	ND	mg/L	0.0002	16:08	11/10/98	RM	245.1
assium	ND	mg/L	0.250	13:32	11/13/98	TD	200.7
nesium	ND	mg/L	0.040	13:32	11/13/98	TD	200.7
ganese	ND	mg/L	0.003	13:32	11/13/98	TD	200.7
ium	0.083	mg/L	0.050	13:32	11/13/98	TD	200.7
kel	ND	mg/L	0.020	13:32	11/13/98	TD	200.7
d	ND	mg/L	0.060	13:32	11/13/98	TD	200.7
imony	ND	mg/L	0.040	13:32	11/13/98	TD	200.7
enium	ND	mg/L	0.100	13:32	11/13/98	TD	200.7
llium	ND	mg/L	0.065	13:32	11/13/98	TD	200.7
adium	ND	mg/L	0.010	13:32	11/13/98	TD	200.7
c	ND	mg/L	0.010	13:32	11/13/98	TD	200.7

BORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 601

ORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT
Memphis, TN

e Arrived 11/10/98
: Order Number 9811263

: Lab ID 9811263-01
nple ID: ST-EFF-03

Matrix :AQUEOUS
Sample Date :11/09/98

r	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
MS Volatile Organics				11/13/98	11/13/98	LS	8260B
C Batch	V2111301	ug/L					
cetone	ND	ug/L	50.0				
enzene	ND	ug/L	1.00				
romodichloromethane	ND	ug/L	1.00				
romoform	ND	ug/L	1.00				
romomethane	ND	ug/L	1.00				
arbon Disulfide	ND	ug/L	1.00				
n Tetrachloride	3.06	ug/L	1.00				
h. robenzene	ND	ug/L	1.00				
hlorodibromomethane	ND	ug/L	1.00				
hloroethane	ND	ug/L	1.00				
hloroform	14.9	ug/L	1.00				
hloromethane	ND	ug/L	1.00				
,1-Dichloroethane	ND	ug/L	1.00				
,2-Dichloroethane	ND	ug/L	1.00				
,1-Dichloroethene	9.99	ug/L	1.00				
rans-1,2-Dichloroethene	6.68	ug/L	1.00				
,2-Dichloropropane	ND	ug/L	1.00				
is-1,3-Dichloropropene	ND	ug/L	1.00				
rans-1,3-Dichloropropene	ND	ug/L	1.00				
thylbenzene	ND	ug/L	1.00				
-Hexanone (MBK)	ND	ug/L	5.00				
-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
-Butanone (MEK)	ND	ug/L	20.0				
ethylene Chloride	ND	ug/L	20.0				
tyrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	243E	ug/L	1.00				
etrachloroethene	28.9	ug/L	1.00				
oluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	1.59	ug/L	1.00				
richloroethene	203E	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1.00				
m-Xylenes	ND	ug/L	1.00				
p-Xylenes	ND	ug/L	1.00				
cis-1,2-Dichloroethene	30.0	ug/L	1.00				

gate Standard	% Recovery	QC Limits	
1 - Dibromofluoromethane	99	74	123
2 - Toluene-d8	96	86	112
3 - 4-Bromofluorobenzene	100	81	115

ABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 602

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT
Memphis, TN

e Arrived 11/10/98
Order Number 9811263

Lab ID 9811263-01
ple ID: ST-EFF-03-DIL

Matrix :AQUEOUS
Sample Date :11/09/98

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
S Volatile Organics				11/13/98	11/13/98	LS	8260B
Batch	V2111301	ug/L					
etone	ND	ug/L	2500				
nzene	ND	ug/L	50.0				
omodichloromethane	ND	ug/L	50.0				
omoform	ND	ug/L	50.0				
omomethane	ND	ug/L	50.0				
rbon Disulfide	ND	ug/L	50.0				
rbon Tetrachloride	ND	ug/L	50.0				
J obenzene	ND	ug/L	50.0				
l dibromomethane	ND	ug/L	50.0				
loroethane	ND	ug/L	50.0				
loroform	ND	ug/L	50.0				
loromethane	ND	ug/L	50.0				
1-Dichloroethane	ND	ug/L	50.0				
2-Dichloroethane	ND	ug/L	50.0				
1-Dichloroethene	ND	ug/L	50.0				
ans-1,2-Dichloroethene	ND	ug/L	50.0				
2-Dichloropropane	ND	ug/L	50.0				
is-1,3-Dichloropropene	ND	ug/L	50.0				
ans-1,3-Dichloropropene	ND	ug/L	50.0				
hylbenzene	ND	ug/L	50.0				
-Hexanone (MBK)	ND	ug/L	250				
-Methyl-2-pentanone (MIBK)	ND	ug/L	250				
-Butanone (MEK)	ND	ug/L	1000				
thylene Chloride	ND	ug/L	1000				
yrene	ND	ug/L	50.0				
1,2,2-Tetrachlorpethane	234	ug/L	50.0				
trachloroethene	ND	ug/L	50.0				
luene	ND	ug/L	50.0				
1,1-Trichloroethane	ND	ug/L	50.0				
1,2-Trichloroethane	ND	ug/L	50.0				
richloroethene	195	ug/L	50.0				
inyl Acetate	ND	ug/L	1000				
inyl Chloride	ND	ug/L	50.0				
-Xylenes	ND	ug/L	50.0				
-Xylenes	ND	ug/L	50.0				
-Xylenes	ND	ug/L	50.0				
is-1,2-Dichloroethene	ND	ug/L	50.0				

rogate Standard	% Recovery	QC Limits	
ibromofluoromethane	95	74	123
oluene-d8	99	86	112
4-Bromofluorobenzene	102	81	115

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 603

ORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

e ID DDMT
Memphis, TN

Project # 920022
FID # DACA45-96-D-0014

e Arrived 11/10/98
Order Number 9811263

Lab ID 9811263-04
ple ID: EQB-03

Matrix :AQUEOUS
Sample Date :11/09/98

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
S Volatile Organics				11/13/98	11/13/98	LS	8260B
Batch	V2111301	ug/L					
etone	ND	ug/L	50.0				
nzene	ND	ug/L	1.00				
omodichloromethane	ND	ug/L	1.00				
omoform	ND	ug/L	1.00				
omomethane	ND	ug/L	1.00				
rbon Disulfide	ND	ug/L	1.00				
n Tetrachloride	ND	ug/L	1.00				
obenzene	ND	ug/L	1.00				
lorodibromomethane	ND	ug/L	1.00				
loroethane	ND	ug/L	1.00				
loroform	ND	ug/L	1.00				
loromethane	ND	ug/L	1.00				
1-Dichloroethane	ND	ug/L	1.00				
2-Dichloroethane	ND	ug/L	1.00				
1-Dichloroethene	ND	ug/L	1.00				
ans-1,2-Dichloroethene	ND	ug/L	1.00				
2-Dichloropropane	ND	ug/L	1.00				
is-1,3-Dichloropropene	ND	ug/L	1.00				
ans-1,3-Dichloropropene	ND	ug/L	1.00				
thylbenzene	ND	ug/L	1.00				
-Hexanone (MBK)	ND	ug/L	5.00				
-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
-Butanone (MEK)	ND	ug/L	20.0				
ethylene Chloride	ND	ug/L	20.0				
tyrene	ND	ug/L	1.00				
1,2,2-Tetrachloroethane	ND	ug/L	1.00				
etrachloroethene	ND	ug/L	1.00				
oluene	ND	ug/L	1.00				
1,1-Trichloroethane	ND	ug/L	1.00				
1,2-Trichloroethane	ND	ug/L	1.00				
richloroethene	ND	ug/L	1.00				
inyl Acetate	ND	ug/L	20.0				
inyl Chloride	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
-Xylenes	ND	ug/L	1.00				
is-1,2-Dichloroethene	ND	ug/L	1.00				

gate Standard	% Recovery	QC Limits	
Dibromofluoromethane	97	74	123
- Toluene-d8	97	86	112
- 4-Bromofluorobenzene	99	81	115

BORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 604

ORGANIC ANALYSIS DATA SHEET

nt Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

ID DDMT
Memphis, TN

Arrived 11/10/98
Order Number 9811263

Lab ID 9811263-05
ple ID: Trip Blank

Matrix :AQUEOUS
Sample Date :11/09/98

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
s Volatile Organics				11/13/98	11/13/98	LS	8260B
Batch	V2111301	ug/L					
etone	ND	ug/L	50.0				
nzene	ND	ug/L	1.00				
omodichloromethane	ND	ug/L	1.00				
omoform	ND	ug/L	1.00				
omomethane	ND	ug/L	1.00				
rbon Disulfide	ND	ug/L	1.00				
r Tetrachloride	ND	ug/L	1.00				
l benzene	ND	ug/L	1.00				
lorodibromomethane	ND	ug/L	1.00				
loroethane	ND	ug/L	1.00				
loroform	ND	ug/L	1.00				
loromethane	ND	ug/L	1.00				
1-Dichloroethane	ND	ug/L	1.00				
2-Dichloroethane	ND	ug/L	1.00				
1-Dichloroethene	ND	ug/L	1.00				
ans-1,2-Dichloroethene	ND	ug/L	1.00				
2-Dichloropropane	ND	ug/L	1.00				
s-1,3-Dichloropropene	ND	ug/L	1.00				
ans-1,3-Dichloropropene	ND	ug/L	1.00				
hylbenzene	ND	ug/L	1.00				
Hexanone (MBK)	ND	ug/L	5.00				
Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Butanone (MEK)	ND	ug/L	20.0				
thylene Chloride	ND	ug/L	20.0				
yrene	ND	ug/L	1.00				
1,2,2-Tetrachloroethane	ND	ug/L	1.00				
trachloroethene	ND	ug/L	1.00				
luene	ND	ug/L	1.00				
1,1-Trichloroethane	ND	ug/L	1.00				
1,2-Trichloroethane	ND	ug/L	1.00				
ichloroethene	ND	ug/L	1.00				
nyl Acetate	ND	ug/L	20.0				
nyl Chloride	ND	ug/L	1.00				
Xylenes	ND	ug/L	1.00				
Xylenes	ND	ug/L	1.00				
Xylenes	ND	ug/L	1.00				
s-1,2-Dichloroethene	ND	ug/L	1.00				

ate Standard	% Recovery	QC Limits	
ibromofluoromethane	95	74	123
- Toluene-d8	97	86	112
- 4-Bromofluorobenzene	99	81	115

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 605

ORGANIC ANALYSIS DATA SHEET

i : Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 11/10/98
C Order Number 9811263

C Lab ID 9811263-01
mple ID: ST-EFF-03

Matrix :AQUEOUS
Sample Date :11/09/98

T	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
MS Base/Neutral & Acid							8270C
				11/10/98	11/15/98	CB	
C Batch	P05071	ug/L					
cenaphthene	ND	ug/L	2.00				
cenaphthylene	ND	ug/L	2.00				
nthracene	ND	ug/L	2.00				
enzo(a)anthracene	ND	ug/L	2.00				
enzo(b)fluoranthene	ND	ug/L	2.00				
enzo(k)fluoranthene	ND	ug/L	2.00				
enzo(g,h,i)perylene	ND	ug/L	2.00				
enzo(a)pyrene	ND	ug/L	2.00				
er ic Acid	ND	ug/L	50.0				
e l Alcohol	ND	ug/L	10.0				
is(2-chloroethoxy)methane	ND	ug/L	5.00				
is(2-chloroethyl)ether	ND	ug/L	5.00				
is(2-chloroisopropyl)ether	ND	ug/L	5.00				
is(2-ethylhexyl)phthalate	ND	ug/L	10.0				
-Bromophenyl phenyl ether	ND	ug/L	5.00				
utyl benzyl phthalate	ND	ug/L	5.00				
-Chloroaniline	ND	ug/L	5.00				
-Chloronaphthalene	ND	ug/L	2.00				
-Chloro-3-methylphenol	ND	ug/L	5.00				
-Chlorophenol	ND	ug/L	5.00				
-Chlorophenyl phenyl ether	ND	ug/L	5.00				
hrysene	ND	ug/L	2.00				
ibenzo(a,h)anthracene	ND	ug/L	2.00				
ibenzofuran	ND	ug/L	5.00				
i-n-butyl phthalate	ND	ug/L	5.00				
,2-Dichlorobenzene	ND	ug/L	5.00				
,3-Dichlorobenzene	ND	ug/L	5.00				
,4-Dichlorobenzene	ND	ug/L	5.00				
,3'-Dichlorobenzidine	ND	ug/L	10.0				
,4-Dichlorophenol	ND	ug/L	5.00				
,6-Dichlorophenol	ND	ug/L	5.00				
iethyl phthalate	ND	ug/L	5.00				
,4-Dimethylphenol	ND	ug/L	5.00				
imethyl phthalate	ND	ug/L	5.00				
,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
,4-Dinitrophenol	ND	ug/L	50.0				
,4-Dinitrotoluene	ND	ug/L	5.00				
,6-Dinitrotoluene	ND	ug/L	5.00				
i-n-octyl phthalate	ND	ug/L	5.00				
luoranthene	ND	ug/L	2.00				
lu ne	ND	ug/L	2.00				
ex lorobenzene	ND	ug/L	5.00				

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 606

ORGANIC ANALYSIS DATA SHEET

ent Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

e ID DDMT
Memphis, TN

e Arrived 11/10/98
Order Number 9811263

Lab ID 9811263-04
ple ID: EQB-03

Matrix :AQUEOUS
Sample Date :11/09/98

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
s Base/Neutral & Acid							8270C
				11/10/98	11/05/98	CB	
Batch	P05071	ug/L					
enaphthene	ND	ug/L	2.00				
enaphthylene	ND	ug/L	2.00				
thracene	ND	ug/L	2.00				
nzo(a)anthracene	ND	ug/L	2.00				
nzo(b)fluoranthene	ND	ug/L	2.00				
nzo(k)fluoranthene	ND	ug/L	2.00				
nzo(g,h,i)perylene	ND	ug/L	2.00				
a)pyrene	ND	ug/L	2.00				
c Acid	ND	ug/L	50.0				
nzyl Alcohol	ND	ug/L	10.0				
s(2-chloroethoxy)methane	ND	ug/L	5.00				
s(2-chloroethyl)ether	ND	ug/L	5.00				
s(2-chloroisopropyl)ether	ND	ug/L	5.00				
s(2-ethylhexyl)phthalate	10.7B	ug/L	10.0				
promophenyl phenyl ether	ND	ug/L	5.00				
yl benzyl phthalate	ND	ug/L	5.00				
hloroaniline	ND	ug/L	5.00				
hloronaphthalene	ND	ug/L	2.00				
hloro-3-methylphenol	ND	ug/L	5.00				
hlorophenol	ND	ug/L	5.00				
hlorophenyl phenyl ether	ND	ug/L	5.00				
ysene	ND	ug/L	2.00				
enzo(a,h)anthracene	ND	ug/L	2.00				
enzofuran	ND	ug/L	5.00				
n-butyl phthalate	ND	ug/L	5.00				
-Dichlorobenzene	ND	ug/L	5.00				
-Dichlorobenzene	ND	ug/L	5.00				
-Dichlorobenzene	ND	ug/L	5.00				
'-Dichlorobenzidine	ND	ug/L	10.0				
-Dichlorophenol	ND	ug/L	5.00				
-Dichlorophenol	ND	ug/L	5.00				
thyl phthalate	ND	ug/L	5.00				
-Dimethylphenol	ND	ug/L	5.00				
ethyl phthalate	ND	ug/L	5.00				
-Dinitro-2-methylphenol	ND	ug/L	10.0				
-Dinitrophenol	ND	ug/L	50.0				
-Dinitrotoluene	ND	ug/L	5.00				
-Dinitrotoluene	ND	ug/L	5.00				
n-octyl phthalate	ND	ug/L	5.00				
pthene	ND	ug/L	2.00				
ne	ND	ug/L	2.00				
achlorobenzene	ND	ug/L	5.00				

RATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

479 607

ORGANIC ANALYSIS DATA SHEET

.i .t Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

te Arrived 11/10/98
C Order Number 9811263

C Lab ID 9811263-01
mple ID: ST-EFF-03

Matrix :AQUEOUS
Sample Date :11/09/98

T	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
MS Base/Neutral & Acid							8270C
exachlorobutadiene	ND	ug/L	5.00	11/10/98	11/15/98	CB	
exachlorocyclopentadiene	ND	ug/L	5.00				
exachloroethane	ND	ug/L	5.00				
ndeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
sophorone	ND	ug/L	5.00				
-Methylnaphthalene	ND	ug/L	2.00				
-Methylphenol (o-cresol)	ND	ug/L	5.00				
-Methylphenol (m-cresol)	ND	ug/L	20.0				
-Methylphenol (p-cresol)	ND	ug/L	20.0				
a halene	ND	ug/L	2.00				
i benzene	ND	ug/L	5.00				
-Nitroaniline	ND	ug/L	5.00				
-Nitroaniline	ND	ug/L	10.0				
-Nitroaniline	ND	ug/L	5.00				
-Nitrophenol	ND	ug/L	5.00				
-Nitrophenol	ND	ug/L	5.00				
-Nitrosodiphenylamine	ND	ug/L	5.00				
-Nitrosodipropylamine	ND	ug/L	5.00				
entachlorophenol	ND	ug/L	10.0				
henanthrene	ND	ug/L	2.00				
henol	ND	ug/L	5.00				
yrene	ND	ug/L	2.00				
,2,4-Trichlorobenzene	ND	ug/L	5.00				
,4,5-Trichlorphenol	ND	ug/L	5.00				
,4,6-Trichlorophenol	ND	ug/L	5.00				

rogate Standard	% Recovery	QC Limits	
- Nitrobenzene-d5	78	29	110
- 2-Fluorobiphenyl	76	38	107
- 4-Terphenyl-d14	98	33	122
- Phenol-d6	34	7	58
- 2,4,6-Tribromophenol	91	16	138
- 2-Fluorophenol	49	8	88

ORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ORGANIC ANALYSIS DATA SHEET

479 608

i : Name OHM Remediation Services
Defense Depot - Memphis, TN
5445 Triangle Parkway
Suite 400
Norcross, GA 30092

Project # 920022
FID # DACA45-96-D-0014

te ID DDMT
Memphis, TN

:e Arrived 11/10/98
: Order Number 9811263

: Lab ID 9811263-04
nple ID: EQB-03

Matrix :AQUEOUS
Sample Date :11/09/98

	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
MS Base/Neutral & Acid							8270C
				11/10/98	11/05/98	CB	
exachlorobutadiene	ND	ug/L	5.00				
exachlorocyclopentadiene	ND	ug/L	5.00				
exachloroethane	ND	ug/L	5.00				
ideno(1,2,3-cd)pyrene	ND	ug/L	2.00				
ophorone	ND	ug/L	5.00				
-Methylnaphthalene	ND	ug/L	2.00				
Methylphenol (o-cresol)	ND	ug/L	5.00				
Methylphenol (m-cresol)	ND	ug/L	20.0				
Methylphenol (p-cresol)	ND	ug/L	20.0				
p alene	ND	ug/L	2.00				
t enzene	ND	ug/L	5.00				
Nitroaniline	ND	ug/L	5.00				
Nitroaniline	ND	ug/L	10.0				
Nitroaniline	ND	ug/L	5.00				
Nitrophenol	ND	ug/L	5.00				
Nitrophenol	ND	ug/L	5.00				
Nitrosodiphenylamine	ND	ug/L	5.00				
Nitrosodipropylamine	ND	ug/L	5.00				
ntachlorophenol	ND	ug/L	10.0				
enanthrene	ND	ug/L	2.00				
enol	ND	ug/L	5.00				
rene	ND	ug/L	2.00				
2,4-Trichlorobenzene	ND	ug/L	5.00				
4,5-Trichlorphenol	ND	ug/L	5.00				
4,6-Trichlorophenol	ND	ug/L	5.00				

:ogate Standard	% Recovery	QC Limits	
- Nitrobenzene-d5	86	29	110
- 2-Fluorobiphenyl	84	38	107
- 4-Terphenyl-d14	108	33	122
- Phenol-d6	38	7	58
- 2,4,6-Tribromophenol	98	16	138
- 2-Fluorophenol	54	8	88

RATORY MANAGER

ND - Not Detected

ORM Remediation Services Corp
Subsidiary of ORM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

218186

PROJECT# 920022 WBS# 82,000,000 PO#

FORM 0019 REV. 2-97

ORM's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Elena Rodriguez	770-734-8060	770-453-7716	ETC	Nathan Pera	ORM Remediation Services/IT Corp.
PROJECT NAME: DDMT	**PROJECT LOCATION** Memphis, TN	**PROJECT NUMBER** 920022	**LABORATORY PHONE** 901-327-2750	**LABORATORY FAX** 901-327-6334	**RECIPIENT NAME** Elena Rodriguez
PROJECT CONTACT Steve Offner	**PROJECT PHONE NUMBER** 901-775-0173	**PROJECT FAX** 901-775-2517	**LABORATORY ADDRESS** 2924 Walnut Grove Road		**ADDRESS** 5445 Triangle Pkwy, Suite 400
PROJECT ADDRESS 1708 Dunn Ave.	**CITY, STATE AND ZIPCODE** Memphis, TN 38114	**CLIENT** USACE	**CITY, STATE AND ZIPCODE** Memphis, TN 38111		**CITY, STATE AND ZIPCODE** Norcross, GA 30092
PROJECT MANAGER Steve Offner	**PROJECT MANAGER'S PHONE** 770-326-2571	**PROJECT MANAGER'S FAX** 770-453-7716			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	Analyses: TCL VOCs 8260B	TCL SVOCs 8270C	TAL Metals - 200 Series	pH	Comments
1	ST-EFF-03	H_2O	11/9/98	1630	HCl, Hg2Cl2, Meoh	7 ~~6~~	Level 3	7 day	X	X	X	X	Please fax results on DUE DATE to SITE and to Lab Coordinator.
2	ST-EFF-03-MS	H_2O	11/9/98	1631	"	7 ~~6~~	Level 3	7 day	X	X	X	X	Matrix Spike
3	ST-EFF-03-MSD	H_2O	11/9/98	1632	"	7 ~~6~~	Level 3	7 day	X	X	X	X	Matrix Spike Duplicate
4	EQB-03	H_2O	11/9/98	1633	"	7 ~~6~~	Level 3	7 day	X	X	X	X	Equipment Blank
5	Trip Blank	H_2O	—	—	HCl	3	Level 3	7 day	X				
6													
7													
8													
9													
10													

SAMPLES COLLECTED BY: John McCarthy

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
John D McCarthy	[illegible]	11/10/98	0810	Good (4°C)

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

NOV 23 '98 12:54PM ORM NORCROSS P.18/18 ETC 4191809

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE