# Appendix I

## Tank Tightness Test Results

MAY 4 2001

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104141
Report Date: 04/16/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 04/06/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104141-01 | MW-39S/19' | L0104141-02 | MW-40S/18' |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

**Certified By**
**David L. Bumgarner**

KEMRON
ENVIRONMENTAL SERVICES

**KEMRON ENVIRONMENTAL SERVICES**
**REPORT NARRATIVE**

**L0104141**

**CHAIN OF CUSTODY:**

The chain of custody number was 04639.

**SHIPMENT CONDITIONS:**

The chain of custody was received sealed in a cooler. The cooler temperature was 0° C.

**SAMPLE MANAGEMENT:**

All samples were received intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Melissa Grimes DATE: 4-6-01

**REPORT NARRATIVE**
**GC/MS VOLATILE ORGANICS**

**KEMRON Login No: L0104141**

**METHOD**

**Preparation**: SW- 846 5030B
**Analysis:** SW-846 8260B

**HOLDING TIMES**

**Sample Preparation**: All holding times were met.
**Sample Analysis**: All holding times were met.

**PREPARATION**

Sample preparation proceeded normally.

**CALIBRATION**

**Initial calibrations**: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

**Alternate Source Standards:** All acceptance criteria were met.

**Continuing Calibration and Tune**: All acceptance criteria were met.

**BATCH QA/QC**

**Method Blank**: All acceptance criteria were met.

**Laboratory Control Samples**: All acceptance criteria were met.

**Matrix Spikes**: The MS/MSD results were not associated with this sample delivery group.

**SAMPLES**

**Internal Standards**: All acceptance criteria were met.

**Surrogates**: All acceptance criteria were met.

**Samples:** All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: CMS REVIEWED: Stephanie L. Tepe DATE: 4/16/01

Login #L0104141
April 16, 2001 08:47 am

**KEMRON ENVIRONMENTAL SERVICES**

Lab Sample ID: L0104141-01
Client Sample ID: MW-39S/19'
Site/Work ID: SC001/OFFSITE DRILLING

Matrix: Soil
Collected: 04/04/01 09:30

% Solid: 95
COC Info: 04639/

| Analyte | Units | Result | Qualifiers | RL | Dil | Type | Analyst | Analysis Date | Time | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| Percent Solids..... | weight % | 95 | | 1.0 | 1 | N/A | TMM | 04/12/01 | 11:45 | D2216-90 |

RL = Reporting Limit

Login #L0104141
April 16, 2001 08:47 am

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 826-VAP2 - Volatile Organics**

Lab Sample ID: L0104141-01
Client Sample ID: MW-39S/19'
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Soil

Dil. Type: N/A
COC Info: 04639/
Date Collected: 04/04/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 95

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 15:24

Instrument: HPMS6
Analyst: CMS
Lab File ID: 6M25161

Method: 8260B\5035
Run ID: R120090
Batch : WG95200

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/kg | | ND | 110 | 1 |
| 71-43-2 | Benzene | ug/kg | | ND | 5.3 | 1 |
| 108-86-1 | Bromobenzene | ug/kg | | ND | 5.3 | 1 |
| 74-97-5 | Bromochloromethane | ug/kg | | ND | 5.3 | 1 |
| 75-27-4 | Bromodichloromethane | ug/kg | | ND | 5.3 | 1 |
| 75-25-2 | Bromoform | ug/kg | | ND | 5.3 | 1 |
| 74-83-9 | Bromomethane | ug/kg | | ND | 11 | 1 |
| 78-93-3 | 2-Butanone | ug/kg | | ND | 110 | 1 |
| 104-51-8 | n-Butylbenzene | ug/kg | | ND | 5.3 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/kg | | ND | 5.3 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/kg | | ND | 5.3 | 1 |
| 75-15-0 | Carbon disulfide | ug/kg | | ND | 5.3 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/kg | | ND | 5.3 | 1 |
| 108-90-7 | Chlorobenzene | ug/kg | | ND | 5.3 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/kg | | ND | 5.3 | 1 |
| 75-00-3 | Chloroethane | ug/kg | | ND | 11 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/kg | | ND | 11 | 1 |
| 67-66-3 | Chloroform | ug/kg | | ND | 5.3 | 1 |
| 74-87-3 | Chloromethane | ug/kg | | ND | 11 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/kg | | ND | 5.3 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/kg | | ND | 5.3 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/kg | | ND | 5.3 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/kg | | ND | 5.3 | 1 |
| 74-95-3 | Dibromomethane | ug/kg | | ND | 5.3 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/kg | | ND | 5.3 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/kg | | ND | 5.3 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/kg | | ND | 5.3 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/kg | | ND | 11 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/kg | | ND | 5.3 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/kg | | ND | 5.3 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/kg | | ND | 5.3 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/kg | | ND | 5.3 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/kg | | ND | 5.3 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/kg | | ND | 5.3 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/kg | | ND | 5.3 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/kg | | ND | 5.3 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/kg | | ND | 5.3 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/kg | | ND | 5.3 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/kg | | ND | 5.3 | 1 |

RL = Reporting Limit

Login #L0104141
April 16, 2001 08:47 am

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 826-VAP2 - Volatile Organics**

Lab Sample ID: L0104141-01
Client Sample ID: MW-39S/19'
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Soil

Dil. Type: N/A
COC Info: 04639/
Date Collected: 04/04/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 95

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 15:24

Instrument: HPMS6
Analyst: CMS
Lab File ID: 6M25161

Method: 8260B\5035
Run ID: R120090
Batch : WG95200

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/kg | | ND | 5.3 | 1 |
| 110-54-3 | n-Hexane | ug/kg | | ND | 11 | 1 |
| 591-78-6 | 2-Hexanone | ug/kg | | ND | 11 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/kg | | ND | 5.3 | 1 |
| 98-82-8 | Isopropylbenzene | ug/kg | | ND | 5.3 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/kg | | ND | 5.3 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/kg | | ND | 11 | 1 |
| 75-09-2 | Methylene chloride | ug/kg | | ND | 5.3 | 1 |
| 91-20-3 | Naphthalene | ug/kg | | ND | 11 | 1 |
| 103-65-1 | n-Propylbenzene | ug/kg | | ND | 5.3 | 1 |
| 100-42-5 | Styrene | ug/kg | | ND | 5.3 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/kg | | ND | 5.3 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/kg | | ND | 5.3 | 1 |
| 127-18-4 | Tetrachloroethene | ug/kg | | ND | 5.3 | 1 |
| 108-88-3 | Toluene | ug/kg | | ND | 5.3 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/kg | | ND | 5.3 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/kg | | ND | 5.3 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/kg | | ND | 5.3 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/kg | | ND | 5.3 | 1 |
| 79-01-6 | Trichloroethene | ug/kg | | ND | 5.3 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/kg | | ND | 11 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/kg | | ND | 5.3 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/kg | | ND | 5.3 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/kg | | ND | 5.3 | 1 |
| 108-05-4 | Vinyl acetate | ug/kg | | ND | 11 | 1 |
| 75-01-4 | Vinyl chloride | ug/kg | | ND | 2.1 | 1 |
| 95-47-6 | o-Xylene | ug/kg | | ND | 5.3 | 1 |
| 108-38-3 | m-Xylene | ug/kg | | ND | 5.3 | 1 |
| 106-42-3 | p-Xylene | ug/kg | | ND | 5.3 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 98.2 | ( 80 - 120%) |
| 1,2-Dichloroethane-d4 | 111 | ( 80 - 120%) |
| Toluene-d8 | 95.9 | ( 81 - 117%) |
| 4-Bromofluorobenzene | 103 | ( 74 - 121%) |

RL = Reporting Limit

Login #L0104141
April 16, 2001 08:47 am

**KEMRON ENVIRONMENTAL SERVICES**

Lab Sample ID: L0104141-02
Client Sample ID: MW-40S/18'
Site/Work ID: SC001/OFFSITE DRILLING

Matrix: Soil
Collected: 04/05/01 08:30

% Solid: 97
COC Info: 04639/

| Analyte | Units | Result | Qualifiers | RL | Dil | Type | Analyst | Analysis Date | Time | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| Percent Solids..... | weight % | 97 | | 1.0 | 1 | N/A | TMM | 04/12/01 | 11:45 | D2216-90 |

RL = Reporting Limit

Login #L0104141
April 16, 2001 08:47 am

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 826-VAP2 - Volatile Organics**

Lab Sample ID: L0104141-02
Client Sample ID: MW-40S/18'
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Soil

Dil. Type: N/A
COC Info: 04639/
Date Collected: 04/05/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 97

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 15:57

Instrument: HPMS6
Analyst: CMS
Lab File ID: 6M25162

Method: 8260B\5035
Run ID: R120090
Batch : WG95200

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/kg | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/kg | | ND | 5.2 | 1 |
| 108-86-1 | Bromobenzene | ug/kg | | ND | 5.2 | 1 |
| 74-97-5 | Bromochloromethane | ug/kg | | ND | 5.2 | 1 |
| 75-27-4 | Bromodichloromethane | ug/kg | | ND | 5.2 | 1 |
| 75-25-2 | Bromoform | ug/kg | | ND | 5.2 | 1 |
| 74-83-9 | Bromomethane | ug/kg | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/kg | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/kg | | ND | 5.2 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/kg | | ND | 5.2 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/kg | | ND | 5.2 | 1 |
| 75-15-0 | Carbon disulfide | ug/kg | | ND | 5.2 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/kg | | ND | 5.2 | 1 |
| 108-90-7 | Chlorobenzene | ug/kg | | ND | 5.2 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/kg | | ND | 5.2 | 1 |
| 75-00-3 | Chloroethane | ug/kg | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/kg | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/kg | | ND | 5.2 | 1 |
| 74-87-3 | Chloromethane | ug/kg | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/kg | | ND | 5.2 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/kg | | ND | 5.2 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/kg | | ND | 5.2 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/kg | | ND | 5.2 | 1 |
| 74-95-3 | Dibromomethane | ug/kg | | ND | 5.2 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/kg | | ND | 5.2 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/kg | | ND | 5.2 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/kg | | ND | 5.2 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/kg | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/kg | | ND | 5.2 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/kg | | ND | 5.2 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/kg | | ND | 5.2 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/kg | | ND | 5.2 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/kg | | ND | 5.2 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/kg | | ND | 5.2 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/kg | | ND | 5.2 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/kg | | ND | 5.2 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/kg | | ND | 5.2 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/kg | | ND | 5.2 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/kg | | ND | 5.2 | 1 |

RL = Reporting Limit

Login #L0104141
April 16, 2001 08:47 am

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 826-VAP2 - Volatile Organics**

Lab Sample ID: L0104141-02
Client Sample ID: MW-40S/18'
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Soil

Dil. Type: N/A
COC Info: 04639/
Date Collected: 04/05/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 97

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 15:57

Instrument: HPMS6
Analyst: CMS
Lab File ID: 6M25162

Method: 8260B\5035
Run ID: R120090
Batch : WG95200

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/kg | | ND | 5.2 | 1 |
| 110-54-3 | n-Hexane | ug/kg | | ND | 10 | 1 |
| 591-78-6 | 2-Hexanone | ug/kg | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/kg | | ND | 5.2 | 1 |
| 98-82-8 | Isopropylbenzene | ug/kg | | ND | 5.2 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/kg | | ND | 5.2 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/kg | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/kg | | ND | 5.2 | 1 |
| 91-20-3 | Naphthalene | ug/kg | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/kg | | ND | 5.2 | 1 |
| 100-42-5 | Styrene | ug/kg | | ND | 5.2 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/kg | | ND | 5.2 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/kg | | ND | 5.2 | 1 |
| 127-18-4 | Tetrachloroethene | ug/kg | | ND | 5.2 | 1 |
| 108-88-3 | Toluene | ug/kg | 0.98 | J | 5.2 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/kg | | ND | 5.2 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/kg | | ND | 5.2 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/kg | | ND | 5.2 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/kg | | ND | 5.2 | 1 |
| 79-01-6 | Trichloroethene | ug/kg | | ND | 5.2 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/kg | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/kg | | ND | 5.2 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/kg | | ND | 5.2 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/kg | | ND | 5.2 | 1 |
| 108-05-4 | Vinyl acetate | ug/kg | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/kg | | ND | 2.1 | 1 |
| 95-47-6 | o-Xylene | ug/kg | | ND | 5.2 | 1 |
| 108-38-3 | m-Xylene | ug/kg | 0.73 | J,Z | 5.2 | 1 |
| 106-42-3 | p-Xylene | ug/kg | | Z | 5.2 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 99.4 | ( 80 - 120%) |
| 1,2-Dichloroethane-d4 | 110 | ( 80 - 120%) |
| Toluene-d8 | 97.8 | ( 81 - 117%) |
| 4-Bromofluorobenzene | 103 | ( 74 - 121%) |

RL = Reporting Limit

Order #: 01-04-141
April 16, 2001 08:47 am

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG95200 | R120090 | L0104141-01 | | Soil | Volatile Organics | 8260B\5035 | 04-APR-2001 | Volatile - GC/MS |
| WG95200 | R120090 | L0104141-02 | | Soil | Volatile Organics | 8260B\5035 | 05-APR-2001 | Volatile - GC/MS |
| WG95500 | R120531 | L0104141-01 | | Soil | Percent Solids | D2216-90 | 04-APR-2001 | Conventionals |
| WG95500 | R120531 | L0104141-02 | | Soil | Percent Solids | D2216-90 | 05-APR-2001 | Conventionals |

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

## 04/04/2001

---

ABW - ANGELA B. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
AMT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CBN - CHARLES B. NOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIE - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
HD - HEATH DENNIS
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITHERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JMW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LBM - LAWRENCE B. MCSWEGAN
LKN - LINDA K. NEDEFF
LRR - LUCYNDA R. ROBERTS
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRIMES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PML - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RLW - RON L. WATSON
RSH - RENEE S. HENNES
RSS - REGINA S. SIMMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
SAM - SAMUAL A. MILLS
SJK - SINDY J. KINNEY
SKH - SHARON K. HANDSCHUMACHER
SLC - SHAWN L. COLE
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HOEFLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
# List of Valid Qualifiers
# December 15, 2000

## *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| * | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

## *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| **J** | The analyte was positively identified, the quantitation is an estimation |
| **U** | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| **F** | The analyte was positively identified but the associated numerical value is below the RL |
| **R** | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| **B** | The analyte was found in an associated blank, as well as in the sample |
| **M** | The matrix effect was present |
| **S** | To be applied to all field screening data |
| **T** | Tentatively identified compound (using GC/MS) |

Kemron Environmental Services -OVL

*Volatile Quality Control Summary - 8260*

| | | | | | |
|---|---|---|---|---|---|
| Workgroup: | WG95200 | Run Date: | 4/9/2001 | Sample Number: 04-162-02 | LCS DF: 1 |
| Method: | 8260B | Instrument: | HPMS6 | Sample Filename: 6M25154.D | Sample DF: 1 |
| Matrix: | Soil | Blank Filename: | 6M25151.D | MS Filename: 6M25155.D | MS DF: 1 |
| Units: | ug/kg | LCS Filename: | 6M25152 D | MSD Filename: 6M25157.D | MSD DF: 1 |

| | | CONCENTRATION, ug/kg | | | | | | PERCENT RECOVERY | | | | | | | | | OUTLIERS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MDL | Blank | LCS | Sample | MS | MSD | Spike Level | Blank | LCS | Sample | MS | MSD | LCL | UCL | MS RPD | RPD UCL | Blank | LCS | MS | MSD | RPD |
| Target Analytes | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | ug/kg | % | % | % | % | % | % | % | % | % | | | | | |
| dichlorodifluoromethane | 1.00 | ND | 25.69 | ND | 34.68 | 31.62 | 20.0 | ND | 128.5 | ND | 173.4 | 158.1 | 70.0 | 130.0 | 9.2 | 28.0 | | | H | H | |
| chloromethane | 2.00 | ND | 20.81 | ND | 26.60 | 25.93 | 20.0 | ND | 104.1 | ND | 133.0 | 129.7 | 32.0 | 189.0 | 2.6 | 96.0 | | | | | |
| vinyl chloride | 1.00 | ND | 21.29 | ND | 28.71 | 27.29 | 20.0 | ND | 106.5 | ND | 143.6 | 136.5 | 59.0 | 172.0 | 5.1 | 69.0 | | | | | |
| bromomethane | 1.00 | ND | 24.64 | ND | 30.44 | 31.27 | 20.0 | ND | 123.2 | ND | 152.2 | 156.4 | 38.0 | 164.0 | 2.7 | 77.0 | | | | | |
| chloroethane | 1.00 | ND | 23.81 | ND | 30.14 | 29.95 | 20.0 | ND | 119.1 | ND | 150.7 | 149.8 | 46.0 | 175.0 | 0.6 | 80.0 | | | | | |
| trichlorofluoromethane | 1.00 | ND | 16.63 | ND | 21.80 | 18.56 | 20.0 | ND | 83.2 | ND | 109.0 | 92.8 | 37.0 | 168.0 | 16.1 | 22.0 | | | | | |
| acetone | 2.50 | ND | 14.19 | ND | 12.43 | 9.80 | 20.0 | ND | 71.0 | ND | 62.2 | 49.0 | 10.0 | 179.0 | 112.0 | 51.0 | | | | | H |
| 1,1-dichloroethene | 0.50 | ND | 16.39 | ND | 21.05 | 18.10 | 20.0 | ND | 82.0 | ND | 105.3 | 90.5 | 70.0 | 137.0 | 15.1 | 32.0 | | | | | |
| iodomethane | 1.00 | ND | 18.92 | ND | 20.10 | 20.96 | 20.0 | ND | 94.6 | ND | 100.5 | 104.8 | 10.0 | 247.0 | 4.2 | 164.0 | | | | | |
| methylene chloride | 1.00 | ND | 21.91 | ND | 27.01 | 24.82 | 20.0 | ND | 109.6 | ND | 135.1 | 124.1 | 70.0 | 131.0 | 8.5 | 36.0 | | | H | | |
| carbon disulfide | 0.50 | 1.22 | 19.02 | ND | 20.84 | 16.86 | 20.0 | 1.22 | 95.1 | ND | 104.2 | 84.3 | 49.0 | 154.0 | 21.1 | 64.0 | | | | | |
| methyl-tert-butyl ether | 0.50 | ND | 17.69 | ND | 14.46 | 13.42 | 20.0 | ND | 88.5 | ND | 72.3 | 67.1 | 62.1 | NA | 7.5 | 52.0 | | | | | |
| trans-1,2-dichloroethene | 0.50 | ND | 18.60 | ND | 23.42 | 20.90 | 20.0 | ND | 93.0 | ND | 117.1 | 104.5 | 70.0 | 130.0 | 11.4 | 26.0 | | | | | |
| n-hexane | 0.50 | ND | 23.42 | ND | 22.16 | 21.58 | 20.0 | ND | 117.1 | ND | 110.8 | 107.9 | 51.0 | 151.0 | 2.7 | 61.0 | | | | | |
| vinyl acetate | 1.00 | ND | 9.81 | ND | 9.05 | 8.08 | 20.0 | ND | 49.1 | ND | 45.3 | 40.4 | 10.0 | 179.0 | 11.3 | 105 | | | | | |
| 1,1-dichloroethane | 1.00 | ND | 17.40 | ND | 21.59 | 19.53 | 20.0 | ND | 87.0 | ND | 108.0 | 97.7 | 70.0 | 130.0 | 10.0 | 26.0 | | | | | |
| 2-butanone | 2.50 | ND | 17.66 | ND | 15.54 | 13.24 | 20.0 | ND | 88.3 | ND | 77.7 | 66.2 | 29.0 | 159.0 | 16.0 | 79.0 | | | | | |
| 2,2-dichloropropane | 0.50 | ND | 18.58 | ND | 23.70 | 21.33 | 20.0 | ND | 92.9 | ND | 118.5 | 106.7 | 70.0 | 136.0 | 10.5 | 35.0 | | | | | |
| cis-1,2-dichloroethene | 0.50 | ND | 17.14 | ND | 21.07 | 18.76 | 20.0 | ND | 85.7 | ND | 105.4 | 93.8 | 70.0 | 130.0 | 11.6 | 29.0 | | | | | |
| chloroform | 0.50 | ND | 18.88 | ND | 23.28 | 20.96 | 20.0 | ND | 94.4 | ND | 116.4 | 104.8 | 70.0 | 131.0 | 10.5 | 29.0 | | | | | |
| bromochloromethane | 0.50 | ND | 18.66 | ND | 21.68 | 17.76 | 20.0 | ND | 93.3 | ND | 108.4 | 88.8 | 65.0 | 140.0 | 19.9 | 56.0 | | | | | |
| 1,1,1-trichloroethane | 0.50 | ND | 18.50 | ND | 23.75 | 22.17 | 20.0 | ND | 92.5 | ND | 118.8 | 110.9 | 70.0 | 138.0 | 6.9 | 36.0 | | | | | |
| 1,1-dichloropropene | 0.50 | ND | 21.13 | ND | 27.75 | 26.25 | 20.0 | ND | 105.7 | ND | 138.8 | 131.3 | 70.0 | 159.0 | 5.6 | 43.0 | | | | | |
| carbon tetrachloride | 0.50 | ND | 18.55 | ND | 24.35 | 22.42 | 20.0 | ND | 92.8 | ND | 121.8 | 112.1 | 70.0 | 144.0 | 8.3 | 41.0 | | | | | |
| 1,2-dichloroethane | 0.50 | ND | 18.72 | ND | 22.47 | 19.53 | 20.0 | ND | 93.6 | ND | 112.4 | 97.7 | 70.0 | 130.0 | 14.0 | 51.0 | | | | | |
| benzene | 0.50 | ND | 19.28 | ND | 24.52 | 23.41 | 20.0 | ND | 96.4 | ND | 122.6 | 117.1 | 70.0 | 130.0 | 4.6 | 20.0 | | | | | |
| trichloroethene | 0.50 | ND | 18.17 | 96.48 | 72.56 | 46.69 | 20.0 | ND | 90.9 | 96.48 | NA | NA | 70.0 | 130.0 | NA | 22.0 | | | | | |
| 1,2-dichloropropane | 0.50 | ND | 18.41 | ND | 22.81 | 21.25 | 20.0 | ND | 92.1 | ND | 114.1 | 106.3 | 70.0 | 130.0 | 7.1 | 25.0 | | | | | |
| bromodichloromethane | 0.50 | ND | 20.27 | ND | 24.88 | 22.75 | 20.0 | ND | 101.4 | ND | 124.4 | 113.8 | 70.0 | 136.0 | 8.9 | 31.0 | | | | | |
| dibromomethane | 0.50 | ND | 19.00 | ND | 21.98 | 18.96 | 20.0 | ND | 95.0 | ND | 109.9 | 94.8 | 70.0 | 130.0 | 14.8 | 28.0 | | | | | |
| 2-chloroethylvinyl ether | 0.50 | ND | 19.52 | ND | 18.61 | 15.20 | 20.0 | ND | 97.6 | ND | 93.1 | 76.0 | 10.0 | 246.0 | 20.2 | 182.0 | | | | | |
| 4-methyl-2-pentanone | 2.50 | ND | 19.72 | ND | 18.73 | 15.36 | 20.0 | ND | 98.6 | ND | 93.7 | 76.8 | 45.0 | 153.0 | 19.8 | 67.0 | | | | | |
| cis-1,3-dichloropropene | 0.50 | ND | 22.26 | ND | 27.13 | 24.96 | 20.0 | ND | 111.3 | ND | 135.7 | 124.8 | 70.0 | 141.0 | 8.3 | 39.0 | | | | | |
| toluene | 0.50 | ND | 19.04 | ND | 23.41 | 23.45 | 20.0 | ND | 95.2 | ND | 117.1 | 117.3 | 70.0 | 130.0 | 0.2 | 26.0 | | | | | |
| trans-1,3-dichloropropene | 0.50 | ND | 16.94 | ND | 19.49 | 18.34 | 20.0 | ND | 84.7 | ND | 97.5 | 91.7 | 70.0 | 130.0 | 6.1 | 27.0 | | | | | |
| 1,1,2-trichloroethane | 0.50 | ND | 17.06 | ND | 19.10 | 17.89 | 20.0 | ND | 85.3 | ND | 95.5 | 89.5 | 70.0 | 130.0 | 6.5 | 22.0 | | | | | |
| 2-hexanone | 2.50 | ND | 16.36 | ND | 13.91 | 11.73 | 20.0 | ND | 81.8 | ND | 69.6 | 58.7 | 42.0 | 138.0 | 17.0 | 59.0 | | | | | |
| 1,3-dichloropropane | 0.50 | ND | 16.60 | ND | 18.60 | 17.43 | 20.0 | ND | 83.0 | ND | 93.0 | 87.2 | 70.0 | 130.0 | 6.5 | 24.0 | | | | | |
| tetrachloroethene | 0.50 | ND | 18.39 | ND | 23.04 | 22.71 | 20.0 | ND | 92.0 | ND | 115.2 | 113.6 | 70.0 | 130.0 | 1.4 | 24.0 | | | | | |
| dibromochloromethane | 0.50 | ND | 17.14 | ND | 19.77 | 18.36 | 20.0 | ND | 85.7 | ND | 98.9 | 91.8 | 70.0 | 130.0 | 7.4 | 29.0 | | | | | |
| 1,2-dibromoethane | 0.50 | ND | 17.25 | ND | 19.65 | 17.73 | 20.0 | ND | 86.3 | ND | 98.3 | 88.7 | 70.0 | 130.0 | 10.3 | 22.0 | | | | | |
| 1-chlorohexane | 0.50 | ND | 18.35 | ND | 17.07 | 17.32 | 20.0 | ND | 91.8 | ND | 85.4 | 86.6 | 70.0 | 139.0 | 1.5 | 40.0 | | | | | |
| chlorobenzene | 0.50 | ND | 18.57 | ND | 22.56 | 22.09 | 20.0 | ND | 92.9 | ND | 112.8 | 110.5 | 70.0 | 130.0 | 2.1 | 20.0 | | | | | |
| 1,1,1,2-tetrachloroethane | 0.50 | ND | 18.17 | ND | 21.60 | 20.30 | 20.0 | ND | 90.9 | ND | 108.0 | 101.5 | 70.0 | 131.0 | 6.2 | 29.0 | | | | | |
| ethylbenzene | 0.50 | ND | 19.17 | ND | 23.71 | 23.02 | 20.0 | ND | 95.9 | ND | 118.6 | 115.1 | 70.0 | 130.0 | 3.0 | 20.0 | | | | | |
| m+p-xylene | 0.50 | ND | 38.61 | ND | 48.33 | 46.67 | 40.0 | ND | 96.5 | ND | 120.8 | 116.7 | 70.0 | 130.0 | 3.5 | 33.0 | | | | | |
| o-xylene | 0.50 | ND | 20.07 | ND | 24.97 | 23.64 | 20.0 | ND | 100.4 | ND | 124.9 | 118.2 | 70.0 | 130.0 | 5.5 | 21.0 | | | | | |
| styrene | 0.50 | ND | 21.02 | ND | 25.66 | 24.62 | 20.0 | ND | 105.1 | ND | 128.3 | 123.1 | 70.0 | 130.0 | 4.1 | 26.0 | | | | | |
| bromoform | 0.50 | ND | 18.67 | ND | 22.00 | 19.01 | 20.0 | ND | 93.4 | ND | 110.0 | 95.1 | 70.0 | 130.0 | 14.6 | 33.0 | | | | | |
| isopropylbenzene | 0.30 | ND | 19.83 | ND | 25.51 | 24.34 | 20.0 | ND | 99.2 | ND | 127.6 | 121.7 | 85.0 | 124.0 | 4.7 | 15.0 | | | H | | |
| 1,1,2,2-tetrachloroethane | 0.50 | ND | 17.41 | ND | 18.31 | 17.08 | 20.0 | ND | 87.1 | ND | 91.6 | 85.4 | 70.0 | 130.0 | 7.0 | 28.0 | | | | | |
| 1,2,3-trichloropropane | 0.64 | ND | 18.36 | ND | 19.91 | 18.36 | 20.0 | ND | 91.8 | ND | 99.6 | 91.8 | 70.0 | 130.0 | 8.1 | 28.0 | | | | | |
| propyl-benzene | 0.50 | ND | 19.16 | ND | 22.86 | 22.68 | 20.0 | ND | 95.8 | ND | 114.3 | 113.4 | 70.0 | 130.0 | 0.8 | 26.0 | | | | | |
| bromobenzene | 0.50 | ND | 18.53 | ND | 20.93 | 21.03 | 20.0 | ND | 92.7 | ND | 104.7 | 105.2 | 70.0 | 130.0 | 0.5 | 22.0 | | | | | |
| 1,3,5-trimethylbenzene | 0.50 | ND | 19.11 | ND | 22.79 | 22.25 | 20.0 | ND | 95.6 | ND | 114.0 | 111.3 | 70.0 | 130.0 | 2.4 | 22.0 | | | | | |
| 2-chlorotoluene | 0.50 | ND | 18.75 | ND | 22.37 | 22.17 | 20.0 | ND | 93.8 | ND | 111.9 | 110.9 | 70.0 | 130.0 | 0.9 | 24.0 | | | | | |
| 4-chlorotoluene | 0.50 | ND | 19.07 | ND | 22.67 | 22.10 | 20.0 | ND | 95.4 | ND | 113.4 | 110.5 | 70.0 | 130.0 | 2.5 | 23.0 | | | | | |
| tert-butyl-benzene | 0.50 | ND | 18.35 | ND | 22.51 | 22.11 | 20.0 | ND | 91.8 | ND | 112.6 | 110.6 | 70.0 | 130.0 | 1.8 | 30.0 | | | | | |
| 1,2,4-trimethylbenzene | 0.50 | ND | 19.09 | ND | 22.74 | 22.02 | 20.0 | ND | 95.5 | ND | 113.7 | 110.1 | 70.0 | 130.0 | 3.2 | 22.0 | | | | | |
| sec-butyl-benzene | 0.50 | ND | 18.46 | ND | 23.02 | 22.59 | 20.0 | ND | 92.3 | ND | 115.1 | 113.0 | 70.0 | 130.0 | 1.9 | 26.0 | | | | | |
| p-isopropyl-toluene | 0.50 | ND | 18.16 | ND | 22.52 | 22.17 | 20.0 | ND | 90.8 | ND | 112.6 | 110.9 | 70.0 | 130.0 | 1.6 | 21.0 | | | | | |
| 1,3-dichlorobenzene | 0.50 | ND | 18.36 | ND | 22.07 | 22.02 | 20.0 | ND | 91.8 | ND | 110.4 | 110.1 | 70.0 | 130.0 | 0.2 | 20.0 | | | | | |
| 1,4-dichlorobenzene | 0.50 | ND | 18.22 | ND | 21.30 | 21.30 | 20.0 | ND | 91.1 | ND | 106.5 | 106.5 | 70.0 | 130.0 | 0.0 | 20.0 | | | | | |
| n-butyl-benzene | 0.50 | ND | 18.86 | ND | 23.44 | 22.99 | 20.0 | ND | 94.3 | ND | 117.2 | 115.0 | 70.0 | 130.0 | 1.9 | 29.0 | | | | | |
| 1,2-dichlorobenzene | 0.50 | ND | 18.35 | ND | 21.65 | 21.18 | 20.0 | ND | 91.8 | ND | 108.3 | 105.9 | 70.0 | 130.0 | 2.2 | 20.0 | | | | | |
| 1,2-dibromo-3-chloropropane | 0.50 | ND | 18.25 | ND | 20.27 | 17.54 | 20.0 | ND | 91.3 | ND | 101.4 | 87.7 | 63.0 | 131.0 | 14.4 | 20.0 | | | | | |
| 1,2,4-trichlorobenzene | 0.50 | ND | 18.23 | ND | 21.42 | 20.12 | 20.0 | ND | 91.2 | ND | 107.1 | 100.6 | 70.0 | 130.0 | 6.3 | 25.0 | | | | | |
| hexachlorobutadiene | 0.50 | ND | 17.45 | ND | 22.98 | 21.50 | 20.0 | ND | 87.3 | ND | 114.9 | 107.5 | 70.0 | 130.0 | 6.7 | 29.0 | | | | | |
| naphthalene | 0.50 | 0.87 | 18.49 | ND | 20.55 | 18.16 | 20.0 | 0.87 | 92.5 | ND | 102.8 | 90.8 | 59.0 | 130.0 | 12.3 | 43.0 | | | | | |
| 1,2,3-trichlorobenzene | 0.50 | ND | 18.14 | ND | 21.41 | 19.59 | 20.0 | ND | 90.7 | ND | 107.1 | 98.0 | 70.0 | 130.0 | 8.9 | 29.0 | | | | | |
| Surrogates | | | | | | | | | | | | | | | | | | | | | |
| dibromofluoromethane | | 50.74 | 46.34 | 49.00 | 45.58 | 42.32 | 50.0 | 101.5 | 92.7 | 98.0 | 91.2 | 84.6 | 80 | 120 | | | | | | | |
| 1,2-dichloroethane-d4 | | 55.90 | 49.84 | 54.67 | 50.72 | 44.98 | 50.0 | 111.8 | 99.7 | 109.3 | 101.4 | 90.0 | 80 | 120 | | | | | | | |
| toluene-d8 | | 48.53 | 47.73 | 47.16 | 47.64 | 49.33 | 50.0 | 97.1 | 95.5 | 94.3 | 95.3 | 98.7 | 81 | 117 | | | | | | | |
| p-bromofluorobenzene | | 49.26 | 51.56 | 50.03 | 48.68 | 49.48 | 50.0 | 98.5 | 103.1 | 100.1 | 97.4 | 99.0 | 74 | 121 | | | | | | | |

**Notes and Definitions:**

RDL= Reporting Detection Limit
LCS= Laboratory Control Sample
MS/MSD= Matrix Spike / Matrix Spike Duplicate
LCL= Lower Control Limit
UCL= Upper Control Limit
ND= Not Detected
NS=Not spiked
NA=Not applicable
RPD= Relative Percent Difference
H=Above control limit
L=Below control limit
DF=Dilution Factor

**CHRYSLER CORPORATION**

# Chain-of-Custody

04639 A

Offsite Drilling

~~CompuChem~~ Kemron
~~501 Madison Avenue~~ 109 Starlite Park
~~Cary, NC 27513~~ Marietta OH 45750
Phone Number: ~~1 800 833 5097~~ 743 375 4071
Fax Number: ~~(919) 379-4050~~

Project Name: Dayton Thermal Products
Site Location: 1600 Webster St Dayton OH
Site Code: SC001
RFA Number: YGQP2001207F SDG 207F
Chrysler PM: Gary Stanczuk

Consultant: LBG
Address: 1210 West County Road E
St. Paul MN 55112
Consultant PM: Kenneth Vogel
Phone: 651 490 1405 Fax: 1006

**Turn-around Time Request:**
24 calendar hrs.
48 calendar hrs.
10 days 14 day
28 days

**Data Package Deliverables: (circle)**
Chrysler Level 1
Chrysler Level 2
Other (specify):

**Compound List-Parameter/Method/Bottle Type/Preservative**

**Matrix Codes**
S - Soil
GW - Groundwater
Sed. - Sediment
O - Other (specify)
SW - Surface Water
A - Air

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 5030B/5035/8260B | | | | | | | | Volatiles pH <2 | Metals pH < 2 | Cyanide pH > 12 | Other | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-39S 19 feet | 4/4/01 | 930 | G | S | 1 | X | | | | | | | | | | | | 36 ppm |
| MW-40S 18 feet | 4/5/01 | 830 | G | S | 1 | X | | | | | | | | | | | | 15 ppm |
| ~~WS24117 VOID~~ | ~~4/5/01~~ | ~~1540~~ | ~~G~~ | ~~S~~ | ~~1~~ | ~~X~~ | Do not analyze. See RFA 2001-214 | | | | | | | | | | | ~~Waste soils generated from drilling contained in Rolloff 24117~~ |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | C/C sealed Sp intact |

Sampler(s) David Strand

Cooler ID # KL998

Is RFA sampling complete? Yes No

Bottles Reliquished under Airbill No. 457366349040

Samples Relinquished under Airbill No. 824189891712

Temperature (corrected) 0c

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| [signature] | 4/5/01 | FedEX | | | | Yes No |
| | | | | | | Yes No |
| | | | Received for Laboratory by: Brenda Gregory | 4/6/01 | 0953 | Yes No |

*Chrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

Distribution: White copy: Data package Yellow : Retained by laboratory Pink: Retained by sampler

SDG 207F

Revision No. 1
Created: September 23, 1997

KEMRON Environmental Services | **SAMPLES RECEIPT FORM #1** | Marietta Laboratory

| CLIENT: Compuchem | DATE: 4-6-01 | SHIPPED BY: (✓) FED-EX ( ) AIRBORNE ( ) UPS ( ) EMERY ( ) RPS ( ) US MAIL ( ) KEMRON ( ) CLIENT |
|---|---|---|
| BRG ARS Other _____ | | |

| | | |
|---|---|---|
| COOLER ID: KL998 | COOLER ID: | COOLER ID: |
| INDEX # : 824181891712 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY (✓) YES ( ) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) (D) °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) ( ) YES (✓) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL (✓) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|
| COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL | | |
| | | |
| | | |
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| | | |

Revised 02/21/01

EPA Region 5 Records Ctr.
350135

# KEMRON Internal Laboratory Chain of Custody

**Work Order:** L0104141 **Client:** Compuchem **# of Samples:** 2 **Due Date:** 4-13-01 **Page:** 1

| Sample # | Analysis | Reason | Removed By ADT | Removed From | Moved To | Reliq. by | Ret'd By ADT | Ret'd To | Rec'd By | Reason |
|---|---|---|---|---|---|---|---|---|---|---|
| 1-2 | 8260 SL | anal | CMS 4-6-01 @1600 | V-1 | VOA | Brg | MJ 4-12-01 1400 | Walkin | AJF | Storage |
| 1-2 | PCT-S | test | TMM 4/12/01 @1420 | walkin | wet | AJF | TMM 4/16/01 @850 | Archive | AJF | archive |
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App X

Fact #24

LBG / VOGEL

MAR 22 2001

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103299
Report Date: 03/15/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/14/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103299-01 | WL0013 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

**Certified By**
**David L. Bumgarner**

**KEMRON ENVIRONMENTAL SERVICES**
**REPORT NARRATIVE**

**L0103299**

**CHAIN OF CUSTODY:**

The chain of custody number was 04631.

**SHIPMENT CONDITIONS:**

The chain of custody was received sealed in a cooler. The cooler temperature was 10° C.

**SAMPLE MANAGEMENT:**

All samples were received intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Melissa Shimes DATE: 3/14/01

Login #L0103299
March 15, 2001 03:49 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/
Date Collected: 03/13/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 7.8 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0103299
March 15, 2001 03:49 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/
Date Collected: 03/13/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 18 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 100 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.0 | ( 80 - 120%) |
| Toluene-d8 | 107 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-03-299
March 15, 2001 03:49 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG93856 | R117495 | L0103299-01 | | Water | Volatile Organics | 8260B\5030 | 13-MAR-2001 | Volatile - GC/MS |

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

## 03/12/2001

---

ABW - ANGELA B. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
AMT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CBN - CHARLES B. NOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIE - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
HD - HEATH DENNIS
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITHERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JMW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LBM - LAWRENCE B. MCSWEGAN
LKN - LINDA K. NEDEFF
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRIMES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PML - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RLW - RON L. WATSON
RSH - RENEE S. HENNES
RSS - REGINA S. SIMMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
SAM - SAMUAL A. MILLS
SJK - SINDY J. KINNEY
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HOEFLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
# List of Valid Qualifiers
# December 15, 2000

## *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| * | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

## *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| **J** | The analyte was positively identified, the quantitation is an estimation |
| **U** | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| **F** | The analyte was positively identified but the associated numerical value is below the RL |
| **R** | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| **B** | The analyte was found in an associated blank, as well as in the sample |
| **M** | The matrix effect was present |
| **S** | To be applied to all field screening data |
| **T** | Tentatively identified compound (using GC/MS) |

Kemron
ENVIRONMENTAL SERVICES

# ORGANIC QA/QC

Kemron Environmental Services -OVL
Volatile Quality Control Summary - 8260

| | | | | | |
|---|---|---|---|---|---|
| Workgroup: | WG93856 | Run Date: 3/14/2001 | Sample Number: 03-293-01 | LCS DF: | 1 |
| Method: | 8260B | Instrument: HPMS2 | Sample Filename: 2M42731.D | Sample DF: | 1 |
| Matrix: | WATER | Blank Filename: 2M42729.D | MS Filename: 2M42734 D | MS DF: | 1 |
| Units: | ug/L | LCS Filename: 2M42730.D | MSD Filename: 2M42735.D | MSD DF: | 1 |

| | | CONCENTRATION, ug/L | | | | | | PERCENT RECOVERY | | | | | | | | | OUTLIERS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MDL | Blank | LCS | Sample | MS | MSD | Spike Level | Blank | LCS | Sample | MS | MSD | LCL | UCL | MS RPD | RPD UCL | Blank | LCS | MS | MSD | RPD |
| Target Analytes | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | % | % | % | % | % | % | % | % | % | | | | | |
| dichlorodifluoromethane | 0.25 | ND | 21.44 | ND | 17.73 | 18.56 | 20.0 | ND | 107.2 | ND | 88.7 | 92.8 | 10.0 | 153.0 | 4.6 | 42.0 | | | | | |
| chloromethane | 0 56 | ND | 21.97 | ND | 18.79 | 20.78 | 20.0 | ND | 109.9 | ND | 94.0 | 103.9 | 49.0 | 129.0 | 10.1 | 30 0 | | | | | |
| vinyl chloride | 0.48 | ND | 22 27 | ND | 20.09 | 19.19 | 20.0 | ND | 111 4 | ND | 100.5 | 96.0 | 57.0 | 135.0 | 4.6 | 30.0 | | | | | |
| bromomethane | 0.25 | ND | 22.05 | ND | 18.88 | 20.29 | 20.0 | ND | 110.3 | ND | 94.4 | 101.5 | 58.0 | 140.0 | 7.2 | 39.0 | | | | | |
| chloroethane | 0.22 | ND | 20.66 | ND | 17.34 | 18.63 | 20.0 | ND | 103.3 | ND | 86.7 | 93.2 | 69 0 | 126 0 | 7.2 | 27.0 | | | | | |
| trichlorofluoromethane | 0.46 | ND | 20.09 | ND | 16.84 | 17.25 | 20.0 | ND | 100 5 | ND | 84.2 | 86.3 | 67.0 | 152.0 | 2.4 | 22.0 | | | | | |
| acetone | 1.84 | ND | 15.35 | 2.09 | 14.04 | 14.15 | 20.0 | ND | 76.8 | 2.09 | 59.8 | 60.3 | 40.0 | 142.0 | 0 8 | 40.0 | | | | | |
| 1,1-dichloroethene | 0.27 | ND | 22.71 | ND | 18.53 | 19.90 | 20.0 | ND | 113 6 | ND | 92.7 | 99.5 | 81.0 | 130.0 | 7.1 | 18.0 | | | | | |
| iodomethane | 0.14 | ND | 33.32 | ND | 29.70 | 32.13 | 20.0 | ND | 166.6 | ND | 148.5 | 160.7 | NA | NA | 7.9 | NA | | | | | |
| methylene chloride | 0.60 | ND | 20.39 | ND | 17.91 | 19.25 | 20.0 | ND | 102.0 | ND | 89.6 | 96.3 | 76 0 | 125.0 | 7.2 | 19.0 | | | | | |
| carbon disulfide | 0.15 | ND | 19.02 | ND | 15.22 | 16.29 | 20.0 | ND | 95.1 | ND | 76 1 | 81.5 | 70.0 | 138.0 | 6.8 | 20 0 | | | | | |
| methyl-tert-butyl ether | 0.46 | ND | 18.36 | ND | 15.47 | 15.82 | 20 0 | ND | 91.8 | ND | 77.4 | 79.1 | NA | NA | 2 2 | NA | | | | | |
| trans-1,2-dichloroethene | 0.21 | ND | 21.41 | ND | 17.85 | 19.23 | 20.0 | ND | 107.1 | ND | 89 3 | 96.2 | 86.0 | 135 0 | 7.4 | 16.0 | | | | | |
| n-hexane | 0.23 | ND | 31.19 | ND | 26.16 | 26.61 | 20.0 | ND | 156.0 | ND | 130.8 | 133.1 | 58.1 | 141.9 | 1.7 | 30.0 | | H | | | |
| vinyl acetate | 4.43 | ND | 14.97 | ND | 12.27 | 12.77 | 20.0 | ND | 74.9 | ND | 61 4 | 63.9 | 10.0 | 136.0 | 4.0 | 45.0 | | | | | |
| 1,1-dichloroethane | 0 18 | ND | 20.33 | ND | 17 38 | 18.96 | 20.0 | ND | 101.7 | ND | 86 9 | 94 8 | 84.0 | 127.0 | 8.7 | 15.0 | | | | | |
| 2-butanone | 1.17 | ND | 18.84 | ND | 14.60 | 15 36 | 20.0 | ND | 94.2 | ND | 73.0 | 76.8 | 61.0 | 137.0 | 5.1 | 30.0 | | | | | |
| 2,2-dichloropropane | 0.23 | ND | 21 13 | ND | 18.10 | 18.99 | 20 0 | ND | 105.7 | ND | 90 5 | 95.0 | 79.0 | 130.0 | 4.8 | 17 0 | | | | | |
| cis-1,2-dichloroethene | 0.14 | ND | 20.04 | ND | 17 48 | 19.26 | 20.0 | ND | 100.2 | ND | 87.4 | 96.3 | 82 0 | 121.0 | 9.7 | 15.0 | | | | | |
| chloroform | 0.19 | ND | 20.07 | 6.51 | 22.88 | 24.40 | 20.0 | ND | 100 4 | 6.51 | 81.9 | 89.5 | 85.0 | 121.0 | 6.4 | 15 0 | | | L | | |
| bromochloromethane | 0.19 | ND | 21.07 | 5.22 | 18.49 | 19.62 | 20.0 | ND | 105.4 | 5.22 | 66.4 | 72.0 | 85 0 | 121.0 | 5.9 | 15.0 | | | L | L | |
| 1,1,1-trichloroethane | 0 25 | ND | 21.32 | ND | 18.02 | 18.85 | 20.0 | ND | 106.6 | ND | 90.1 | 94.3 | 78.0 | 127.0 | 4.5 | 17.0 | | | | | |
| 1,1-dichloropropene | 0.21 | ND | 19.38 | ND | 16.08 | 17.60 | 20.0 | ND | 96.9 | ND | 80.4 | 88.0 | 91.0 | 133 0 | 9.0 | 15.0 | | | L | L | |
| carbon tetrachloride | 0.30 | ND | 21.46 | ND | 17.75 | 18.82 | 20 0 | ND | 107 3 | ND | 88.8 | 94.1 | 70 0 | 130.0 | 5.9 | 20 0 | | | | | |
| 1,2-dichloroethane | 0.33 | ND | 19.37 | ND | 17.69 | 18.13 | 20 0 | ND | 96.9 | ND | 88 5 | 90.7 | 78.0 | 128.0 | 2 5 | 17.0 | | | | | |
| benzene | 0.17 | ND | 19.36 | ND | 16.75 | 18.10 | 20.0 | ND | 96.8 | ND | 83.8 | 90.5 | 87.0 | 118.0 | 7.7 | 15.0 | | | L | | |
| trichloroethene | 0.17 | ND | 19.78 | ND | 16.76 | 18.22 | 20.0 | ND | 98.9 | ND | 83.8 | 91.1 | 83.0 | 123 0 | 8.3 | 15.0 | | | | | |
| 1,2-dichloropropane | 0.12 | ND | 19.27 | ND | 16.70 | 18 23 | 20.0 | ND | 96.4 | ND | 83 5 | 91.2 | 81.0 | 121.0 | 8.8 | 15.0 | | | | | |
| bromodichloromethane | 0.25 | ND | 20.47 | ND | 22 73 | 23.91 | 20.0 | ND | 102.4 | ND | 113.7 | 119.6 | 81.0 | 126.0 | 5.1 | 16.0 | | | | | |
| dibromomethane | 0 19 | ND | 19.72 | ND | 17.74 | 18.27 | 20 0 | ND | 98.6 | ND | 88.7 | 91.4 | 83.0 | 122 0 | 2.9 | 15.0 | | | | | |
| 2-chloroethylvinyl ether | 1.07 | ND | 14.69 | ND | 0.33 | 0.00 | 20.0 | ND | 73 5 | ND | 1.7 | 0.0 | 45.0 | 154.0 | 200.0 | 46.0 | | | L | L | H |
| 4-methyl-2-pentanone | 1 10 | ND | 18.98 | ND | 15.35 | 15.76 | 20.0 | ND | 94.9 | ND | 76.8 | 78.8 | 66.0 | 132 0 | 2.6 | 33.0 | | | | | |
| cis-1,3-dichloropropene | 0.14 | ND | 20 20 | ND | 17 48 | 18.89 | 20.0 | ND | 101.0 | ND | 87.4 | 94.5 | 82.0 | 124.0 | 7.8 | 15.0 | | | | | |
| toluene | 0.16 | ND | 20.24 | ND | 17.31 | 19.04 | 20.0 | ND | 101.2 | ND | 86.6 | 95.2 | 84 0 | 123.0 | 9.5 | 15.0 | | | | | |
| trans-1,3-dichloropropene | 0.16 | ND | 20 79 | ND | 17.60 | 18.81 | 20.0 | ND | 104.0 | ND | 88.0 | 94.1 | 80.0 | 124.0 | 6.6 | 15.0 | | | | | |
| 1,1,2-trichloroethane | 0.28 | ND | 20.35 | ND | 17.48 | 18.46 | 20 0 | ND | 101.8 | ND | 87.4 | 92.3 | 78.0 | 122.0 | 5 5 | 15.0 | | | | | |
| 2-hexanone | 1.19 | ND | 18.57 | ND | 14.23 | 14.75 | 20.0 | ND | 92.9 | ND | 71.2 | 73.8 | 57 0 | 130 0 | 3.6 | 31 0 | | | | | |
| 1,3-dichloropropane | 0.16 | ND | 19.53 | ND | 16.73 | 17 58 | 20.0 | ND | 97.7 | ND | 83.7 | 87.9 | 78.0 | 123.0 | 5.0 | 15.0 | | | | | |
| tetrachloroethene | 0.20 | ND | 20.98 | ND | 17.13 | 18.57 | 20.0 | ND | 104.9 | ND | 85.7 | 92.9 | 83.0 | 124.0 | 8 1 | 15.0 | | | | | |
| dibromochloromethane | 0 29 | ND | 20.13 | 2.29 | 19.22 | 20 49 | 20.0 | ND | 100.7 | 2.3 | 84 7 | 91.0 | 78.0 | 123.0 | 6 4 | 18.0 | | | | | |
| 1,2-dibromoethane | 0.15 | ND | 20.09 | ND | 17.19 | 18.02 | 20.0 | ND | 100.5 | ND | 86.0 | 90.1 | 79.0 | 123.0 | 4.7 | 15.0 | | | | | |
| 1-chlorohexane | 0 26 | ND | 20.06 | ND | 16.78 | 17.47 | 20.0 | ND | 100.3 | ND | 83.9 | 87.4 | 60.0 | 140.0 | 4.0 | NA | | | | | |
| chlorobenzene | 0.24 | ND | 19 97 | ND | 17.61 | 18.80 | 20.0 | ND | 99.9 | ND | 88.1 | 94.0 | 87.0 | 118.0 | 6.5 | 15.0 | | | | | |
| 1,1,1,2-tetrachloroethane | 0.25 | ND | 20 69 | ND | 18 28 | 19.42 | 20.0 | ND | 103.5 | ND | 91.4 | 97 1 | 82 0 | 123 0 | 6.0 | 15.0 | | | | | |
| ethylbenzene | 0.20 | ND | 20.24 | ND | 17.87 | 18.78 | 20.0 | ND | 101.2 | ND | 89.4 | 93.9 | 85.0 | 121.0 | 5.0 | 15.0 | | | | | |
| m+p-xylene | 0.33 | ND | 40.33 | ND | 35.44 | 38.00 | 40 0 | ND | 100.8 | ND | 88.6 | 95.0 | 86.0 | 121.0 | 7.0 | 15.0 | | | | | |
| o-xylene | 0.16 | ND | 20.65 | ND | 18.16 | 19 51 | 20.0 | ND | 103.3 | ND | 90.8 | 97.6 | 85.0 | 121.0 | 7.2 | 15.0 | | | | | |
| styrene | 0.20 | ND | 20.37 | ND | 17.25 | 18 08 | 20.0 | ND | 101.9 | ND | 86.3 | 90.4 | 84.0 | 120.0 | 4.7 | 15.0 | | | | | |
| bromoform | 0.45 | ND | 19.65 | ND | 17.75 | 18.28 | 20 0 | ND | 98.3 | ND | 88.8 | 91.4 | 73.0 | 124.0 | 2.9 | 22.0 | | | | | |
| isopropylbenzene | 0.20 | ND | 19.99 | ND | 17.72 | 18.52 | 20.0 | ND | 100.0 | ND | 88.6 | 92.6 | 81.0 | 124.0 | 4.4 | 15.0 | | | | | |
| 1,1,2,2-tetrachloroethane | 0.39 | ND | 19.55 | ND | 17.05 | 17.97 | 20.0 | ND | 97.8 | ND | 85.3 | 89.9 | 72.0 | 132.0 | 5.3 | 23.0 | | | | | |
| 1,2,3-trichloropropane | 0.41 | ND | 19.50 | ND | 17.41 | 18.10 | 20.0 | ND | 97.5 | ND | 87.1 | 90.5 | 72.0 | 132.0 | 3.9 | 21.0 | | | | | |
| propyl-benzene | 0.26 | ND | 20.41 | ND | 18.13 | 19.83 | 20.0 | ND | 102.1 | ND | 90.7 | 99.2 | 82.0 | 125.0 | 9 0 | 15.0 | | | | | |
| bromobenzene | 0.30 | ND | 19.25 | ND | 17.42 | 18.86 | 20 0 | ND | 96 3 | ND | 87.1 | 94.3 | 84 0 | 120.0 | 7.9 | 15.0 | | | | | |
| 1,3,5-trimethylbenzene | 0.22 | ND | 20.09 | ND | 18.53 | 20.05 | 20.0 | ND | 100.5 | ND | 92.7 | 100.3 | 82.0 | 125.0 | 7.9 | 15.0 | | | | | |
| 2-chlorotoluene | 0.30 | ND | 19.07 | ND | 18.66 | 19.42 | 20.0 | ND | 95 4 | ND | 93.3 | 97.1 | 80 0 | 128.0 | 4.0 | 15 0 | | | | | |
| 4-chlorotoluene | 0.26 | ND | 20.24 | ND | 17.10 | 19.45 | 20 0 | ND | 101.2 | ND | 85.5 | 97.3 | 80.0 | 127.0 | 12.9 | 15.0 | | | | | |
| tert-butyl-benzene | 0.36 | ND | 19.74 | ND | 17.64 | 19.20 | 20 0 | ND | 98.7 | ND | 88.2 | 96.0 | 80.0 | 121 0 | 8.5 | 15.0 | | | | | |
| 1,2,4-trimethylbenzene | 0.23 | ND | 19.36 | ND | 17.96 | 19 38 | 20.0 | ND | 96.8 | ND | 89.8 | 96.9 | 84.0 | 125.0 | 7.6 | 15.0 | | | | | |
| sec-butyl-benzene | 0.33 | ND | 19.73 | ND | 17.69 | 19.48 | 20.0 | ND | 98 7 | ND | 88.5 | 97 4 | 80 0 | 125.0 | 9.6 | 15.0 | | | | | |
| p-isopropyl-toluene | 0.33 | ND | 19.77 | ND | 17.57 | 18.97 | 20.0 | ND | 98.9 | ND | 87.9 | 94.9 | 79.0 | 133.0 | 7.7 | 15.0 | | | | | |
| 1,3-dichlorobenzene | 0 32 | ND | 19 77 | ND | 17.84 | 19.34 | 20.0 | ND | 98.9 | ND | 89 2 | 96.7 | 70.0 | 130.0 | 8.1 | 15.0 | | | | | |
| 1,4-dichlorobenzene | 0.38 | ND | 19.25 | ND | 17.40 | 18.57 | 20.0 | ND | 96.3 | ND | 87.0 | 92.9 | 70.0 | 130.0 | 6.5 | 15.0 | | | | | |
| n-butyl-benzene | 0.37 | ND | 21.38 | ND | 18.77 | 20.55 | 20.0 | ND | 106 9 | ND | 93 9 | 102.8 | 78.0 | 128.0 | 9.1 | 17.0 | | | | | |
| 1,2-dichlorobenzene | 0 37 | ND | 19.71 | ND | 17.53 | 18.93 | 20 0 | ND | 98.6 | ND | 87.7 | 94.7 | 70.0 | 130.0 | 7.7 | 15.0 | | | | | |
| 1,2-dibromo-3-chloropropane | 0.78 | ND | 17.42 | ND | 14.17 | 14.36 | 20.0 | ND | 87 1 | ND | 70.9 | 71.8 | 69.0 | 125.0 | 1.3 | 26.0 | | | | | |
| 1,2,4-trichlorobenzene | 0.25 | ND | 19.48 | ND | 15.81 | 16.70 | 20.0 | ND | 97.4 | ND | 79.1 | 83.5 | 74.0 | 124.0 | 5.5 | 20.0 | | | | | |
| hexachlorobutadiene | 0.46 | ND | 21.29 | ND | 18 33 | 20.34 | 20 0 | ND | 106.5 | ND | 91.7 | 101.7 | 67 0 | 131.0 | 10 4 | 26.0 | | | | | |
| naphthalene | 0.48 | ND | 18 25 | ND | 14.11 | 14.73 | 20.0 | ND | 91.3 | ND | 70.6 | 73.7 | 69.0 | 126 0 | 4.3 | 24.0 | | | | | |
| 1,2,3-trichlorobenzene | 0 33 | ND | 19.17 | 0 54 | 13 50 | 14.20 | 20 0 | ND | 95.9 | 0.5 | 64.8 | 68 3 | 60 0 | 137.0 | 5.1 | 33.0 | | | | | |
| Surrogates | | | | | | | | | | | | | | | | | | | | | |
| dibromofluoromethane | | 26.02 | 26.05 | 25.64 | 25.85 | 21.49 | 25 0 | 104.1 | 104.2 | 102.6 | 103.4 | 86.0 | 86 | 118 | | | | | | L | |
| 1,2-dichloroethane-d4 | | 25.04 | 24.47 | 23.42 | 23.78 | 19.50 | 25.0 | 100 2 | 97.9 | 93.7 | 95 1 | 78.0 | 80 | 120 | | | | | | L | |
| toluene-d8 | | 26.39 | 26.53 | 26.43 | 26.05 | 22.30 | 25.0 | 105.6 | 106.1 | 105.7 | 104.2 | 89.2 | 88 | 110 | | | | | | | |
| p-bromofluorobenzene | | 26.32 | 25.77 | 26.34 | 26.14 | 22.31 | 25.0 | 105.3 | 103.1 | 105.4 | 104.6 | 89.2 | 86 | 115 | | | | | | | |

**Notes and Definitions:**

RDL= Reporting Detection Limit
LCS= Laboratory Control Sample
MS/MSD= Matrix Spike / Matrix Spike Duplicate
LCL= Lower Control Limit
UCL= Upper Control Limit
ND= Not Detected
NS=Not spiked
NA=Not applicable
RPD= Relative Percent Difference
H=Above control limit
L=Below control limit
DF=Dilution Factor

**CHRYSLER CORPORATION**

# Chain-of-Custody

04631 . A

Offsite Drilling

~~CompuChem~~ Kenron
~~501 Madison Avenue~~ 109 Starlite Park
~~Cary, NC 27513~~ Marietta OH
Phone Number: ~~1-800-833-5097~~ ~~1704~~ 3734071
Fax Number: (919) 379-4050 740

Project Name: Dayton Thermal Products
Site Location: 1600 Webster St. Dayton, OH
Site Code: SC001
RFA Number: YGQP2001209 SDG 209A
Chrysler PM: Gary Stanczuk

Consultant: LBG
Address: 1210 West County Road E
St Paul MN
Consultant PM: Kenneth Vogel
Phone: 651 4901405 Fax: 1006

~~Turn-around~~ Time Request:
24 calendar hrs.
48 calendar hrs.
10 days
28 days

Data Package Deliverables: (circle)
Chrysler Level 1
Chrysler Level 2
Other (specify):

Compound List-Parameter/Method/Bottle Type/Preservative

Matrix Codes
S - Soil SW - Surface Water
GW - Groundwater A - Air
Sed. - Sediment
O - Other (specify) See Remarks

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC's 5030B/5035/8260B | | | | | | | | Lab Use Only: Volatiles pH <2 | Metals pH < 2 | Cyanide pH > 12 | Other | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0013 | 3/13/01 | 1545 | G | O | 2 | X | | | | | | | | | | | | 1000 gallons of waste water generated from drilling, well development and steam cleaning. (~250 gallons were in the tank already from the 4th qtr 2000 GW Sampling. (Blue Poly Tank) |

Sampler(s): David Strand

Cooler ID # LBG

Is RFA sampling complete? Yes No

Bottles Reliquished under Airbill No. NA

Samples Relinquished under Airbill No. 815313875312

Temperature (corrected) ___ C

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| David Strand | 3/13/01 | FedEx | | | | Yes No |
| | | | | | | Yes No |
| | | | Received for Laboratory by: Brenda Gregory | 3/14/01 | 1007 | Yes No |

*Chrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

SDG 209A

Distribution: White copy: Data package Yellow : Retained by laboratory Pink: Retained by sampler

C/C Sealed
Sb intact
Cooler Temp 10 deg

Revision No. 1
Created: September 23, 1997

KEMRON Environmental Services | **SAMPLES RECEIPT FORM #1** | Marietta Laboratory

| CLIENT: Compuchem | DATE: 3-14-01 | SHIPPED BY: (✓) FED-EX ( ) AIRBORNE ( ) UPS ( ) EMERY ( ) RPS ( ) US MAIL ( ) KEMRON ( ) CLIENT |
|---|---|---|
| BRG ARS Other _____ | | |

| | | |
|---|---|---|
| COOLER ID: Ogloo | COOLER ID: | COOLER ID: |
| INDEX # : 815313875312 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY ( ) YES (✓) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) (D) 0 °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) ( ) YES (✓) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| 1 Small bag WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL (✓) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

CRF#4

**Sample Receipt Form #2**

Client: Compuchem Project: _____
Date Received: 3/14/01

10 Cooler temperature > than 6 degrees Celcius
Reason 1 small bag wet ice

_____ Samples received not on chain of custody

_____ Samples on chain of custody not received

_____ Information on sample containers different from chain of custody

_____ Sample containers received broken, leaking or not sealed (List sample ID)

_____ pH out (List sample ID & which container)

_____ Insufficient sample volume

_____ Air bubbles present in Voa vials (List sample ID)

_____ Hold time expired (List sample ID)

**TSR:**
Was client notified regarding information: YES NO
Name of person contacted: _____ Company: _____
TSR: _____ Date: _____
Attach: Phone Logs, e-mails, faxes, etc.

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006


**DATE:** March 22, 2001

**PAGES:** 3
**(Includes cover page)**

**TO:** MIKE PLANTE, guest

**FAX #:** 937-278-0146

**COMPANY:** Holiday Inn

**PHONE #:** 937-278-4871

**TO:**

**FAX #:**

**COMPANY:**

**TO:**

**FAX #:**

**COMPANY:**

**FROM:** Dave Strand

RE: Final water quality for "BLUE 1000 gallon Poly Tank".

WL-0013

**Please contact Kathleen Weinrich (651) 490-1405 if transmission is incomplete.**

**fax** TRANSMITTAL

C:\WTDOCU—FAX.WPD

Login #L0103299
March 15, 2001 03:49 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/

Sample Weight: N/A
Extract Volume: N/A

Date Collected: 03/13/01

% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 18 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 100 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.0 | ( 80 - 120%) |
| Toluene-d8 | 107 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit

Login #L0103299
March 15, 2001 03:49 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 8260 - Volatile Organics

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/

Sample Weight: N/A
Extract Volume: N/A

Date Collected: 03/13/01

% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: RPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 7.8 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0103299
March 15, 2001 03:09 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/
Date Collected: 03/13/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M4273B

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 7.8 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit



PRELIMINARY

Login #L0103299
March 15, 2001 03:09 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/
Date Collected: 03/13/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 18 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 100 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.0 | ( 80 - 120%) |
| Toluene-d8 | 107 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit



PRELIMINARY

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
**Phone: (740) 373-4071**

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103299
Report Date: 03/15/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/14/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103299-01 | WL0013 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By:
David L. [illegible]

PRELIMINARY

KEMRON
ENVIRONMENTAL SERVICES

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: Ken Vogel

FAX: (651) 490-1006

DATE: 3/15/01

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 4

COMMENTS:

PRELIMINARY RESULTS FROM KEMRON ON 24 HR. VOC FROM RFA 209 (DAYTON THERMAL)

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE:** 3/15/01

**PAGES:** 5
**(Includes cover page)**

**TO:** Mike Webb **FAX #:** (937) 237-1850

**COMPANY:** Onyx

**TO:** Dave Strand Guest of Hotel **FAX #:** (937) 278-0146

**COMPANY:** LBG

**TO:** **FAX #:**

**COMPANY:**

**FROM:** Ken Vogel

**RE:** Well Development/Decon Water analytical results
DTP, Dayton, OH

**Please contact Kathleen Weinrich (651) 490-1405 if transmission is incomplete or can not be read.**

**fax** TRANSMITTAL

S:\LIBRARY\BLANK.FAX

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0776 |
| CONNECTION TEL | 19372780146 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 03/15 15:47 |
| USAGE T | 01'19 |
| PGS. SENT | 5 |
| RESULT | OK |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE:** 3/15/01 **PAGES:** 5
**(Includes cover page)**

**TO:** Mike Webb **FAX #:** (937) 237-1850
**COMPANY:** Onyx

**TO:** Dave Strand Guest of Hotel **FAX #:** (937) 278-0146
**COMPANY:** LBG

**TO:** **FAX #:**
**COMPANY:**

**FROM:** Ken Vogel

**RE:** Well Development/Decon Water analytical results
DTP, Dayton, OH

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0775 |
| CONNECTION TEL | 19372371850 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 03/15 15:44 |
| USAGE T | 02'43 |
| PGS. SENT | 5 |
| RESULT | OK |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE:** 3/15/01

**PAGES:** 5
**(Includes cover page)**

**TO:** Mike Webb **FAX #:** (937) 237-1850

**COMPANY:** Onyx

**TO:** Dave Strand Guest of Hotel **FAX #:** (937) 278-0146

**COMPANY:** LBG

**TO:** **FAX #:**

**COMPANY:**

**FROM:** Ken Vogel

**RE:** Well Development/Decon Water analytical results
DTP, Dayton, OH

ogin #L0103299
arch 15, 2001 03:49 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 8260 - Volatile Organics

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/
Date Collected: 03/13/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 7.8 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0103299
March 15, 2001 03:49 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 8260 - Volatile Organics

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/
Date Collected: 03/13/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 18 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

SURROGATES- In Percent Recovery:

| | | |
|---|---|---|
| Dibromofluoromethane | 100 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.0 | ( 80 - 120%) |
| Toluene-d8 | 107 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit



03/21/01 18:51 FAX 919 379 4070 COMPUCHEM 005

(Includes cover page)

| | |
|---|---|
| **TO:** MIKE PLANTE, guest | **FAX #:** 937-278-0146 |
| **COMPANY:** Holiday Inn | **PHONE #:** 937-278-4871 |
| **TO:** | **FAX #:** |
| **COMPANY:** | |
| **TO:** | **FAX #:** |
| **COMPANY:** | |

**FROM:** Dave Strand

RE: Final water quality for "BLUE 1000 gallon Poly Tank".

**Please contact Kathleen Weinrich (651) 490-1405 if transmission is incomplete.**

# fax TRANSMITTAL

C:\MYDOCU~1\FAX.WPD

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0818 |
| CONNECTION TEL | 19372780146 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 03/22 06:17 |
| USAGE T | 01'02 |
| PGS. SENT | 3 |
| RESULT | OK |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE**: March 22, 2001

**PAGES:** 3
**(Includes cover page)**

**TO:** MIKE PLANTE, guest

**FAX #:** 937-278-0146

**COMPANY:** Holiday Inn

**PHONE #:** 937-278-4871

**TO:** Mike Webb

**FAX #:** 937 237 3669

**COMPANY:** Onyx

**TO:**

**FAX #:**

**COMPANY:**

**FROM:** Dave Strand

RE: Final water quality for "BLUE 1000 gallon Poly Tank".

WL0013

**Please contact Kathleen Weinrich (651) 490-1405 if transmission is incomplete.**

**fax** TRANSMITTAL

C:\MYDOCU~1\FAX.WPD

(Includes cover page)

| | |
|---|---|
| **TO:** MIKE PLANTE, guest | **FAX #:** 937-278-0146 |
| **COMPANY:** Holiday Inn | **PHONE #:** 937-278-4871 |
| **TO:** Mike Webb | **FAX #:** 937 237 3669 |
| **COMPANY:** Onyx | |
| **TO:** | **FAX #:** |
| **COMPANY:** | |

**FROM:** Dave Strand

RE: Final water quality for "BLUE 1000 gallon Poly Tank".

WL0013

**Please contact Kathleen Weinrich (651) 490-1405 if transmission is incomplete.**

# fax TRANSMITTAL

E:\MYDOCS—FAX.WPD

**************************
*** TX REPORT ***
**************************

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0819 |
| CONNECTION TEL | 19372373669 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 03/22 06:19 |
| USAGE T | 01'21 |
| PGS. SENT | 3 |
| RESULT | OK |

03/22/2001 06:20 FAX 001

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006


**DATE**: March 22, 2001

**PAGES:** 19
**(Includes cover page)**

✓ **TO:** Mike Plante
**COMPANY:** LBG
**FAX #:** 937-278-0146
**PHONE #:** 937-278-4871

**TO:** Mike Webb
✓ **COMPANY:** ONYX
**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

**TO:** Gary Stanczuk
✓ **COMPANY:** DC Corporate
**FAX #:** 248-576-7369
**PHONE #:** 248-576-7365

**TO:** Britt Crider
✓ **COMPANY:** DC Dayton Thermal
**FAX #:** 937-224-2915
**PHONE #:** 937-224-2532

**FROM:** Dave Strand/Ken Vogel

RE: Offsite drilling water disposal analytical results.

Here are the analytical results for the 1,000 gallon BLUE poly tank (sample WL0013), and the 1,000 gallon white CENTER poly tank (sample WL0014). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0013 | 18 ug/L | 7.8 ug/L |
| WL0014 | 190 ug/L | 14 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.
There is no Ohio hazardous waste regulatory level for cis-1,2-dichloroethene.

We would like to get rid of this water Friday (tomorrow) if possible.

**fax** TRANSMITTAL S:\TECH\3CHRY\DAYTON\ANALYTIC\WATER\WASTEH2O.FAX

(Includes cover page)

| | |
|---|---|
| **TO:** Mike Plante<br>**COMPANY:** LBG | **FAX #:** 937-278-0146<br>**PHONE #:** 937-278-4871 |
| **TO:** Mike Webb<br>**COMPANY:** ONYX | **FAX #:** 937-237-3669<br>**PHONE #:** 937-603-2597 |
| **TO:** Gary Stanczuk<br>**COMPANY:** DC Corporate | **FAX #:** 248-576-7369<br>**PHONE #:** 248-576-7365 |
| **TO:** Britt Crider<br>✓ **COMPANY:** DC Dayton Thermal | **FAX #:** 937-224-2915<br>**PHONE #:** 937-224-2532 |

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# fax TRANSMITTAL

S:\TECH\3CHRT\DAYTON\ANALYTIC\WATER\WASTER30.FAX

```
**********************
***   TX REPORT   ***
**********************

TRANSMISSION OK

TX/RX NO                0823
CONNECTION TEL                  12485767369
SUBADDRESS
CONNECTION ID
ST. TIME                03/22 10:51
USAGE T                 06'05
PGS. SENT               19
RESULT                  OK
```

(Includes cover page)

| | |
|---|---|
| TO: Mike Plante<br>COMPANY: LBG | FAX #: 937-278-0146<br>PHONE #: 937-278-4871 |
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# fax TRANSMITTAL

S:\TECH\JCHRI\DAYTON\ANALYTIC\WATER\WASTEH2O.FAX

```
**********************
***   TX REPORT   ***
**********************

TRANSMISSION OK

TX/RX NO                0822
CONNECTION TEL                  19372242915
SUBADDRESS
CONNECTION ID
ST. TIME                03/22 10:45
USAGE T                 06'05
PGS. SENT               19
RESULT                  OK
```

03/22/2001 10:51 FAX 001

(Includes cover page)

| | |
|---|---|
| TO: Mike Plante<br>COMPANY: LBG | FAX #: 937-278-0146<br>PHONE #: 937-278-4871 |
| TO: Mike Webb<br>COMPANY: ONYX | FAX #: 937-237-3669<br>PHONE #: 937-603-2597 |
| TO: Gary Stanczuk<br>✓ COMPANY: DC Corporate | FAX #: 248-576-7369<br>PHONE #: 248-576-7365 |
| TO: Britt Crider<br>✓ COMPANY: DC Dayton Thermal | FAX #: 937-224-2915<br>PHONE #: 937-224-2532 |

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# fax TRANSMITTAL

E:\TECH\JCHRI\DAYTON\ANALYTIC\WATER\WASTEH2O.FAX


**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0824 |
| CONNECTION TEL | 19372373669 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 03/22 10:58 |
| USAGE T | 08'16 |
| PGS. SENT | 19 |
| RESULT | OK |

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0825 |
| CONNECTION TEL | 19372780146 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 03/22 11:18 |
| USAGE T | 05'55 |
| PGS. SENT | 19 |
| RESULT | OK |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

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**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: Ken Vogel

FAX: (651) 490-1006

DATE: 3/15/01

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 4

COMMENTS:

PRELIMINARY RESULTS FROM KEMRON ON
24 HR. VOC FROM RFA 209 (DAYTON THERMAL)

WL0013

Login #L0103299
March 15, 2001 03:09 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/
Date Collected: 03/13/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 7.8 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit



**PRELIMINARY**

Login #L0103299
March 15, 2001 03:09 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/

Sample Weight: N/A
Extract Volume: N/A

Date Collected: 03/13/01

% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPNS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 18 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 100 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.0 | ( 80 - 120%) |
| Toluene-d8 | 107 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit



PRELIMINARY

COMPUCHEM KEMRON TAF 03/17/01 13:18 8 0 4 0 7 0 004/004

# TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103299
Report Date: 03/15/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/14/01

## SAMPLE IDENTIFICATION

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103299-01 | WL0013 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified by:
David L. [illegible]

PRELIMINARY

KEMRON
ENVIRONMENTAL SERVICES

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(651) 490-1405 FAX (651) 490-1006

**DATE:** 3/15/01

**PAGES:** 5
**(Includes cover page)**

**TO:** Mike Webb
**FAX #:** (937) 237-1850
**COMPANY:** Onyx

**TO:** Dave Strand [Guest of Hotel]
**FAX #:** (937) 278-0146
**COMPANY:** LBG

**TO:**
**FAX #:**
**COMPANY:**

**FROM:** Ken Vogel

**RE:** Well Development/Decon Water analytical results
DTP, Dayton, OH

**Please contact Kathleen Weinrich (651) 490-1405 if transmission is incomplete or can not be read.**

**fax** TRANSMITTAL

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**fax** TRANSMITTAL

LBG / VOGEL

MAR 22 2001

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103299
Report Date: 03/15/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/14/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103299-01 | WL0013 | | |

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NYSDOH BLAP ID: 10861

David L. Bungarner

**Certified By**
**David L. Bungarner**

KEMRON
ENVIRONMENTAL SERVICES

03/22/2001 11:19 FAX

**KEMRON ENVIRONMENTAL SERVICES**
**REPORT NARRATIVE**

**L0103299**

**CHAIN OF CUSTODY:**

The chain of custody number was 04631.

**SHIPMENT CONDITIONS:**

The chain of custody was received sealed in a cooler. The cooler temperature was 10° C.

**SAMPLE MANAGEMENT:**

All samples were received intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Melissa Grimes DATE: 3/14/01

Login #L0103299
March 15, 2001 03:49 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/
Date Collected: 03/13/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 7.8 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit



03/22/2001 11:10 FAX

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103299-01
Client Sample ID: WL0013
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04631/
Date Collected: 03/13/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/15/01 Time: 01:39

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42738

Method: 8260B\5030
Run ID: R117495
Batch : WG93856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 18 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 100 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.0 | ( 80 - 120%) |
| Toluene-d8 | 107 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit



03/22/2001 11:19 FAX 005

Order #: 01-03-299
March 15, 2001 03:49 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG93856 | R217495 | L0103299-01 | | Water | Volatile Organics | 8260B\5030 | 13-MAR-2001 | Volatile - GC/MS |

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

*03/12/2001*

---

ABW - ANGELA B. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJP - AMANDA J. PICKIESEN
ALT - ANN L. THAYER
AMT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CBN - CHARLES B. NOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. MORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIE - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
HD - HEATH DENNIS
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITHERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JMW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LBM - LAWRENCE B. MCSWEGAN
LKW - LINDA K. WEDEFF
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRINES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BERRY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PML - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RLW - RON L. WATSON
RSH - RENEE S. HENNES
RSS - REGINA S. SIMMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
SAM - SAMUAL A. MILLS
SJK - SINDY J. KINNEY
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HOEFLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
# List of Valid Qualifiers
# December 15, 2000

## *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| * | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

## *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| J | The analyte was positively identified, the quantitation is an estimation |
| U | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| F | The analyte was positively identified but the associated numerical value is below the RL |
| R | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| B | The analyte was found in an associated blank, as well as in the sample |
| M | The matrix effect was present |
| S | To be applied to all field screening data |
| T | Tentatively identified compound (using GC/MS) |

Kemron
ENVIRONMENTAL SERVICES

# ORGANIC QA/QC

Kemron Environmental Services -OVL

Volatile Quality Control Summary - 8260

| | | | | | |
|---|---|---|---|---|---|
| Workgroup: | WG93856 | Run Date: | 3/14/2001 | Sample Number: | 03-293-01 |
| Method: | 8260B | Instrument: | HPMS9 | Sample Filename: | 2M42731.D |
| Matrix: | WATER | Blank Filename: | 2M42729.D | MS Filename: | 2M42734.D |
| Units: | ug/L | LCS Filename: | 2M42730.D | MSD Filename: | 2M42735.D |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CONCENTRATION, ug/L | | | | | | PERCENT RECOVERY | | | | | | | | | OUTLIERS | | | | | |
| | MDL | Blank | LCS | Sample | MS | MSD | Spike Level | Blank | LCS | Sample | MS | MSD | LCL | UCL | MS RPD | RPD UCL | Blank | LCS | MS | MSD | RPD |
| Target Analytes | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | % | % | % | % | % | % | % | % | % | | | | | |
| dichlorodifluoromethane | 0.25 | ND | 21.44 | ND | 17.75 | 18.56 | 20.0 | ND | 107.2 | ND | 88.7 | 92.8 | 10.0 | 153.0 | 4.6 | 42.0 | | | | | |
| chloromethane | 0.58 | ND | 21.97 | ND | 18.79 | 20.78 | 20.0 | ND | 109.9 | ND | 94.0 | 103.9 | 49.0 | 129.0 | 10.1 | 30.0 | | | | | |
| vinyl chloride | 0.48 | ND | 22.27 | ND | 20.09 | 19.19 | 20.0 | ND | 111.4 | ND | 100.5 | 96.0 | 57.0 | 135.0 | 4.6 | 30.0 | | | | | |
| bromomethane | 0.25 | ND | 22.05 | ND | 18.88 | 20.29 | 20.0 | ND | 110.3 | ND | 94.4 | 101.5 | 58.0 | 140.0 | 7.2 | 30.0 | | | | | |
| chloroethane | 0.22 | ND | 20.66 | ND | 17.34 | 18.63 | 20.0 | ND | 103.3 | ND | 86.7 | 93.2 | 69.0 | 126.0 | 7.2 | 27.0 | | | | | |
| trichlorofluoromethane | 0.46 | ND | 20.09 | ND | 16.84 | 17.25 | 20.0 | ND | 100.5 | ND | 84.2 | 86.3 | 67.0 | 152.0 | 2.4 | 22.0 | | | | | |
| acetone | 1.86 | ND | 15.35 | 2.09 | 14.04 | 14.15 | 20.0 | ND | 76.8 | 2.09 | 59.8 | 60.3 | 40.0 | 142.0 | 0.8 | 40.0 | | | | | |
| 1,1-dichloroethene | 0.27 | ND | 22.71 | ND | 18.53 | 19.99 | 20.0 | ND | 113.6 | ND | 92.7 | 99.5 | 81.0 | 130.0 | 7.1 | 18.0 | | | | | |
| iodomethane | 0.14 | ND | 33.32 | ND | 29.70 | 32.13 | 20.0 | ND | 166.6 | ND | 148.5 | 160.7 | NA | NA | 7.9 | NA | | | | | |
| methylene chloride | 0.60 | ND | 20.39 | ND | 17.91 | 17.25 | 20.0 | ND | 102.0 | ND | 89.6 | 96.3 | 76.0 | 125.0 | 7.2 | 19.0 | | | | | |
| carbon disulfide | 0.15 | ND | 19.03 | ND | 15.22 | 16.29 | 20.0 | ND | 95.1 | ND | 76.1 | 81.5 | 70.0 | 138.0 | 6.8 | 20.0 | | | | | |
| methyl-tert-butyl ether | 0.46 | ND | 18.36 | ND | 15.47 | 15.82 | 20.0 | ND | 91.8 | ND | 77.4 | 79.1 | NA | NA | 2.2 | NA | | | | | |
| trans-1,2-dichloroethene | 0.21 | ND | 21.41 | ND | 17.85 | 19.23 | 20.0 | ND | 107.1 | ND | 89.3 | 96.2 | 86.0 | 135.0 | 7.4 | 16.0 | | | | | |
| n-hexane | 0.23 | ND | 31.19 | ND | 26.16 | 26.01 | 20.0 | ND | 156.0 | ND | 130.8 | 133.1 | 58.1 | 141.9 | 1.7 | 30.0 | | H | | | |
| vinyl acetate | 4.43 | ND | 14.97 | ND | 12.27 | 12.77 | 20.0 | ND | 74.9 | ND | 61.4 | 63.9 | 10.0 | 136.0 | 4.0 | 45.0 | | | | | |
| 1,1-dichloroethane | 0.18 | ND | 20.33 | ND | 17.38 | 18.96 | 20.0 | ND | 101.7 | ND | 86.9 | 94.8 | 84.0 | 127.0 | 8.7 | 15.0 | | | | | |
| 2-butanone | 1.17 | ND | 18.84 | ND | 14.60 | 15.36 | 20.0 | ND | 94.2 | ND | 73.0 | 76.8 | 61.0 | 137.0 | 5.1 | 30.0 | | | | | |
| 2,2-dichloropropane | 0.23 | ND | 21.13 | ND | 18.10 | 18.99 | 20.0 | ND | 105.7 | ND | 90.5 | 95.0 | 79.0 | 130.0 | 4.8 | 17.0 | | | | | |
| cis-1,2-dichloroethene | 0.14 | ND | 20.04 | ND | 17.48 | 19.26 | 20.0 | ND | 100.2 | ND | 87.4 | 96.3 | 82.0 | 121.0 | 9.7 | 15.0 | | | | | |
| chloroform | 0.19 | ND | 20.07 | 6.51 | 22.88 | 24.40 | 20.0 | ND | 100.4 | 6.51 | 81.9 | 89.5 | 85.0 | 121.0 | 6.4 | 15.0 | | | L | | |
| bromochloromethane | 0.19 | ND | 21.07 | 5.27 | 18.49 | 19.62 | 20.0 | ND | 105.4 | 5.22 | 66.4 | 72.0 | 85.0 | 121.0 | 5.9 | 15.0 | | | L | L | |
| 1,1,1-trichloroethane | 0.25 | ND | 21.32 | ND | 18.02 | 18.85 | 20.0 | ND | 106.6 | ND | 90.1 | 94.3 | 78.0 | 127.0 | 4.5 | 17.0 | | | | | |
| 1,1-dichloropropene | 0.21 | ND | 19.38 | ND | 16.08 | 17.60 | 20.0 | ND | 96.9 | ND | 80.4 | 88.0 | 91.0 | 133.0 | 9.0 | 15.0 | | | L | L | |
| carbon tetrachloride | 0.30 | ND | 21.46 | ND | 17.75 | 18.82 | 20.0 | ND | 107.3 | ND | 88.8 | 94.1 | 70.0 | 130.0 | 5.9 | 20.0 | | | | | |
| 1,2-dichloroethane | 0.33 | ND | 19.37 | ND | 17.69 | 18.13 | 20.0 | ND | 96.9 | ND | 88.5 | 90.7 | 78.0 | 128.0 | 2.5 | 17.0 | | | | | |
| benzene | 0.17 | ND | 19.36 | ND | 16.75 | 18.10 | 20.0 | ND | 96.8 | ND | 83.8 | 90.5 | 87.0 | 118.0 | 7.7 | 15.0 | | | L | | |
| trichloroethene | 0.17 | ND | 19.78 | ND | 16.76 | 18.22 | 20.0 | ND | 98.9 | ND | 83.8 | 91.1 | 83.0 | 123.0 | 8.3 | 15.0 | | | | | |
| 1,2-dichloropropane | 0.12 | ND | 19.27 | ND | 16.70 | 18.23 | 20.0 | ND | 96.4 | ND | 83.5 | 91.2 | 81.0 | 121.0 | 8.8 | 15.0 | | | | | |
| bromodichloromethane | 0.25 | ND | 20.47 | ND | 22.75 | 23.91 | 20.0 | ND | 102.4 | ND | 113.7 | 119.6 | 81.0 | 126.0 | 5.1 | 16.0 | | | | | |
| dibromomethane | 0.19 | ND | 19.72 | ND | 17.74 | 18.27 | 20.0 | ND | 98.6 | ND | 88.7 | 91.4 | 83.0 | 122.0 | 2.9 | 15.0 | | | | | |
| 2-chloroethylvinyl ether | 1.07 | ND | 14.69 | ND | 0.33 | 0.00 | 20.0 | ND | 73.5 | ND | 1.7 | 0.0 | 45.0 | 154.0 | 200.0 | 46.0 | | | L | L | H |
| 4-methyl-2-pentanone | 1.10 | ND | 18.98 | ND | 15.35 | 15.74 | 20.0 | ND | 94.9 | ND | 76.8 | 78.8 | 66.0 | 132.0 | 2.6 | 33.0 | | | | | |
| cis-1,3-dichloropropene | 0.14 | ND | 20.20 | ND | 17.48 | 18.89 | 20.0 | ND | 101.0 | ND | 87.4 | 94.5 | 82.0 | 124.0 | 7.9 | 15.0 | | | | | |
| toluene | 0.16 | ND | 20.24 | ND | 17.31 | 19.04 | 20.0 | ND | 101.2 | ND | 86.6 | 95.2 | 84.0 | 123.0 | 9.5 | 15.0 | | | | | |
| trans-1,3-dichloropropene | 0.16 | ND | 20.79 | ND | 17.60 | 18.81 | 20.0 | ND | 104.0 | ND | 88.0 | 94.1 | 80.0 | 124.0 | 6.6 | 15.0 | | | | | |
| 1,1,2-trichloroethane | 0.28 | ND | 20.55 | ND | 17.48 | 18.46 | 20.0 | ND | 101.8 | ND | 87.4 | 92.3 | 78.0 | 122.0 | 5.5 | 15.0 | | | | | |
| 2-hexanone | 1.19 | ND | 18.57 | ND | 14.23 | 14.75 | 20.0 | ND | 92.9 | ND | 71.2 | 73.8 | 57.0 | 130.0 | 3.6 | 31.0 | | | | | |
| 1,3-dichloropropane | 0.16 | ND | 19.53 | ND | 16.73 | 17.58 | 20.0 | ND | 97.7 | ND | 83.7 | 87.9 | 78.0 | 125.0 | 5.0 | 15.0 | | | | | |
| tetrachloroethene | 0.20 | ND | 20.98 | ND | 17.13 | 18.57 | 20.0 | ND | 104.9 | ND | 85.7 | 92.9 | 83.0 | 124.0 | 8.1 | 15.0 | | | | | |
| dibromochloromethane | 0.29 | ND | 20.13 | 2.29 | 19.22 | 20.49 | 20.0 | ND | 100.7 | 2.3 | 84.7 | 91.0 | 78.0 | 123.0 | 6.4 | 18.0 | | | | | |
| 1,2-dibromoethane | 0.15 | ND | 20.09 | ND | 17.19 | 18.02 | 20.0 | ND | 100.5 | ND | 86.0 | 90.1 | 79.0 | 123.0 | 4.7 | 15.0 | | | | | |
| 1-chlorohexane | 0.24 | ND | 20.06 | ND | 16.78 | 17.47 | 20.0 | ND | 100.3 | ND | 83.9 | 87.4 | 60.0 | 140.0 | 4.0 | NA | | | | | |
| chlorobenzene | 0.24 | ND | 19.97 | ND | 17.61 | 18.80 | 20.0 | ND | 99.9 | ND | 88.1 | 94.0 | 87.0 | 118.0 | 6.5 | 15.0 | | | | | |
| 1,1,1,2-tetrachloroethane | 0.25 | ND | 20.69 | ND | 18.28 | 19.42 | 20.0 | ND | 103.5 | ND | 91.4 | 97.1 | 82.0 | 123.0 | 6.0 | 15.0 | | | | | |
| ethylbenzene | 0.20 | ND | 20.24 | ND | 17.67 | 18.78 | 20.0 | ND | 101.2 | ND | 88.4 | 93.9 | 85.0 | 121.0 | 5.0 | 15.0 | | | | | |
| m+p-xylene | 0.33 | ND | 40.33 | ND | 35.44 | 38.00 | 40.0 | ND | 100.8 | ND | 88.6 | 95.0 | 86.0 | 121.0 | 7.0 | 15.0 | | | | | |
| o-xylene | 0.16 | ND | 20.65 | ND | 18.16 | 19.51 | 20.0 | ND | 103.3 | ND | 90.8 | 97.6 | 85.0 | 121.0 | 7.2 | 15.0 | | | | | |
| styrene | 0.20 | ND | 20.37 | ND | 17.25 | 18.08 | 20.0 | ND | 101.9 | ND | 86.3 | 90.4 | 84.0 | 120.0 | 4.7 | 15.0 | | | | | |
| bromoform | 0.45 | ND | 19.65 | ND | 17.75 | 18.28 | 20.0 | ND | 98.3 | ND | 88.8 | 91.4 | 73.0 | 124.0 | 2.9 | 22.0 | | | | | |
| isopropylbenzene | 0.20 | ND | 19.99 | ND | 17.72 | 18.52 | 20.0 | ND | 100.0 | ND | 88.6 | 92.6 | 81.0 | 124.0 | 4.4 | 15.0 | | | | | |
| 1,1,2,2-tetrachloroethane | 0.39 | ND | 19.55 | ND | 17.05 | 17.97 | 20.0 | ND | 97.8 | ND | 85.3 | 89.9 | 72.0 | 132.0 | 5.3 | 23.0 | | | | | |
| 1,2,3-trichloropropane | 0.41 | ND | 19.50 | ND | 17.41 | 18.19 | 20.0 | ND | 97.5 | ND | 87.1 | 90.5 | 72.0 | 132.0 | 3.9 | 21.0 | | | | | |
| propyl-benzene | 0.26 | ND | 20.41 | ND | 18.13 | 19.83 | 20.0 | ND | 102.1 | ND | 90.7 | 99.2 | 82.0 | 123.0 | 9.0 | 15.0 | | | | | |
| bromobenzene | 0.30 | ND | 19.25 | ND | 17.42 | 18.86 | 20.0 | ND | 96.3 | ND | 87.1 | 94.3 | 84.0 | 120.0 | 7.9 | 15.0 | | | | | |
| 1,3,5-trimethylbenzene | 0.22 | ND | 20.09 | ND | 18.53 | 20.05 | 20.0 | ND | 100.3 | ND | 92.7 | 100.3 | 82.0 | 125.0 | 7.9 | 15.0 | | | | | |
| 2-chlorotoluene | 0.30 | ND | 19.07 | ND | 18.66 | 19.42 | 20.0 | ND | 95.4 | ND | 93.3 | 97.1 | 80.0 | 128.0 | 4.0 | 15.0 | | | | | |
| 4-chlorotoluene | 0.26 | ND | 20.24 | ND | 17.10 | 19.45 | 20.0 | ND | 101.2 | ND | 85.5 | 97.3 | 80.0 | 127.0 | 12.9 | 15.0 | | | | | |
| tert-butyl-benzene | 0.36 | ND | 19.74 | ND | 17.64 | 19.20 | 20.0 | ND | 98.7 | ND | 88.2 | 96.0 | 80.0 | 121.0 | 8.5 | 15.0 | | | | | |
| 1,2,4-trimethylbenzene | 0.23 | ND | 19.36 | ND | 17.96 | 19.38 | 20.0 | ND | 96.8 | ND | 89.8 | 96.9 | 84.0 | 125.0 | 7.6 | 15.0 | | | | | |
| sec-butyl-benzene | 0.33 | ND | 19.73 | ND | 17.69 | 19.48 | 20.0 | ND | 98.7 | ND | 88.5 | 97.4 | 80.0 | 125.0 | 9.6 | 15.0 | | | | | |
| p-isopropyl-toluene | 0.33 | ND | 19.77 | ND | 17.57 | 18.97 | 20.0 | ND | 98.9 | ND | 87.9 | 94.9 | 79.0 | 133.0 | 7.7 | 15.0 | | | | | |
| 1,3-dichlorobenzene | 0.32 | ND | 19.77 | ND | 17.84 | 19.34 | 20.0 | ND | 98.9 | ND | 89.2 | 96.7 | 70.0 | 130.0 | 8.1 | 15.0 | | | | | |
| 1,4-dichlorobenzene | 0.38 | ND | 19.25 | ND | 17.40 | 18.57 | 20.0 | ND | 96.3 | ND | 87.0 | 92.9 | 70.0 | 130.0 | 6.5 | 15.0 | | | | | |
| n-butyl-benzene | 0.37 | ND | 21.38 | ND | 18.77 | 20.55 | 20.0 | ND | 106.9 | ND | 93.9 | 102.8 | 78.0 | 128.0 | 9.1 | 17.0 | | | | | |
| 1,2-dichlorobenzene | 0.37 | ND | 19.71 | ND | 17.53 | 18.93 | 20.0 | ND | 98.6 | ND | 87.7 | 94.7 | 70.0 | 130.0 | 7.7 | 15.0 | | | | | |
| 1,2-dibromo-3-chloropropane | 0.78 | ND | 17.42 | ND | 14.17 | 14.36 | 20.0 | ND | 87.1 | ND | 70.9 | 71.8 | 69.0 | 125.0 | 1.3 | 26.0 | | | | | |
| 1,2,4-trichlorobenzene | 0.25 | ND | 19.48 | ND | 15.81 | 16.70 | 20.0 | ND | 97.4 | ND | 79.1 | 83.5 | 74.0 | 124.0 | 5.5 | 20.0 | | | | | |
| hexachlorobutadiene | 0.46 | ND | 21.29 | ND | 18.53 | 20.34 | 20.0 | ND | 106.5 | ND | 91.7 | 101.7 | 67.0 | 131.0 | 10.4 | 20.0 | | | | | |
| naphthalene | 0.48 | ND | 18.25 | ND | 14.11 | 14.73 | 20.0 | ND | 91.3 | ND | 70.6 | 73.7 | 69.0 | 126.0 | 4.3 | 24.0 | | | | | |
| 1,2,3-trichlorobenzene | 0.33 | ND | 19.17 | 0.54 | 13.50 | 14.20 | 20.0 | ND | 95.9 | 0.5 | 64.8 | 68.3 | 60.0 | 137.0 | 5.1 | 33.0 | | | | | |
| Surrogates | | | | | | | | | | | | | | | | | | | | | |
| dibromofluoromethane | | 20.02 | 26.03 | 25.64 | 23.83 | 21.49 | 25.0 | 104.1 | 104.2 | 102.6 | 103.4 | 86.0 | 86 | 118 | | | | | | L | |
| 1,2-dichloroethane-d4 | | 25.04 | 24.47 | 23.42 | 23.78 | 19.50 | 25.0 | 100.2 | 97.9 | 93.7 | 95.1 | 78.0 | 80 | 120 | | | | | | L | |
| toluene-d8 | | 26.32 | 26.53 | 26.43 | 26.05 | 22.30 | 25.0 | 105.6 | 106.1 | 105.7 | 104.2 | 89.2 | 88 | 110 | | | | | | | |
| p-bromofluorobenzene | | 26.32 | 25.77 | 26.34 | 26.14 | 22.31 | 25.0 | 105.3 | 103.1 | 105.4 | 104.6 | 89.2 | 86 | 113 | | | | | | | |

Notes and Definitions:

RDL= Reporting Detection Limit
LCS= Laboratory Control Sample
MS/MSD= Matrix Spike / Matrix Spike Duplicate
LCL= Lower Control Limit
UCL= Upper Control Limit
ND= Not Detected
NS=Not spiked
NA=Not Applicable
RPD= Relative Percent Difference
H=Above control limit
L=Below control limit
DF=Dilution Factor



010

# CHRYSLER CORPORATION

## Chain-of-Custody

04631 A

Offsite Drilling

CompuChem Kelmon
~~501 Madison Avenue~~ 109 Starlite Park
~~Cary, NC 27513~~ Marietta OH
Phone Number: ~~1-800-833-5097~~ 1 740 373 4071
Fax Number: (919) 379-4050 740

Project Name: Dayton Thermal Products
Site Location: 1600 Webster St. Dayton, OH
Site Code: SC001
RFA Number: YGQA2001209 SDG 209A
Chrysler PM: Gary Stanczuk

Consultant: LBG
Address: 1210 West County Road E
St Paul MN
Consultant PM: Kenneth Vogel
Phone: 651 4901408 Fax: 1006

**Turn around Time Request:**
24 calendar hrs.
48 calendar hrs.
10 days
28 days

**Data Package Deliverables: (circle)**
Chrysler Level 1
Chrysler Level 2
Other (specify):

Matrix Codes: S: Soil; SW: Surface Water; GW: Groundwater; A: Air; Sed: Sediment; O: Other (specify) Soil Remnants

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOCs SO30B/5035/8260B | | | | | | | | Validation Level | Matrix pH | Quantity pH | Other | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0013 | 3/13/01 | 1545 | G | O | 2 | X | | | | | | | | | | | | 1000 gallons of waste water generated from drilling, well development and steam cleaning. (~250 gallons were in the tank already from the 4th qtr 2000 GW sampling (Blue Poly Tank) |

Sampler(s): David Strand

Cooler ID #: LBG

Is RFA sampling complete? Yes No

Bottles Relinquished under Airbill No. NA

Samples Relinquished under Airbill No. 815313875312

Temperature (corrected) ___ C

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| David Strand | 3/13/01 | Fed Ex | | | | Yes No |
| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? Yes No |
| Relinquished by: | Date: | Time: | Received for Laboratory by: Rhonda Gregory | Date: 3/14/01 | Time: 1007 | Custody Seal Intact? Yes No |

*Chrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

Distribution: White copy: Data package Yellow: Retained by laboratory Pink: Retained by sampler

SDG 209A

CIC Dated
Abundant
Cooler Temp 10 deg

Page 1 of 1

Revision No. 1
Created: September 23, 1997

03/22/2001 11:21 FAX 011

KEMRON Environmental Services | **SAMPLES RECEIPT FORM #1** | Marietta Laboratory

| | | |
|---|---|---|
| CLIENT: Compuchem<br>BRG ARS Other _____ | DATE: 3-14-01 | SHIPPED BY:<br>(✓) FED-EX ( ) AIRBORNE<br>( ) UPS ( ) EMERY<br>( ) RPS ( ) US MAIL<br>( ) KEMRON ( ) CLIENT |

| | | |
|---|---|---|
| COOLER ID: Ogloo | COOLER ID: | COOLER ID: |
| INDEX # : 815313875312 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY ( ) YES (✓) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) (D) 10 °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) ( ) YES (✓) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL (✓) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

1 Sealed bag

TSR COMMENTS

| | | |
|---|---|---|
| CONTACT: | DATE: | TIME: |

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

03/22/2001 11:22 FAX 012

CRF#4

**Sample Receipt Form #2**

Client: Compichem Project: _____
Date Received: 3/14/01

10 Cooler temperature > than 6 degrees Celcius
Reason 1 small bag wet ice

_____ Samples received not on chain of custody

_____ Samples on chain of custody not received

_____ Information on sample containers different from chain of custody

_____ Sample containers received broken, leaking or not sealed (List sample ID)

_____ pH out (List sample ID & which container)

_____ Insufficient sample volume

_____ Air bubbles present in Voa vials (List sample ID)

_____ Hold time expired (List sample ID)

TSR:
Was client notified regarding information: YES NO
Name of person contacted: _____ Company: _____
TSR: _____ Date: _____
Attach: Phone Logs, e-mails, faxes, etc.

# TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103388
Report Date: 03/20/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/17/01

## SAMPLE IDENTIFICATION

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103388-01 | WL0014 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By
David L. Bumgarner

Login #L0103388
March 20, 2001 04:49 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 8260 - Volatile Organics

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 14 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0103388
March 20, 2001 04:49 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 190 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 101 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.6 | ( 80 - 120%) |
| Toluene-d8 | 104 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 103 | ( 86 - 115%) |

RL - Reporting Limit



03/22/2001 11:23 FAX 016

**CHRYSLER CORPORATION**

# Chain-of-Custody

04634 A

| | | |
|---|---|---|
| ~~CompuChem~~ Kamron<br>~~501 Madison Avenue~~ 109 Starlite Park<br>~~Cary, NC 27513~~ Marietta OH 45750<br>Phone Number: ~~1-800-833-5097~~ 7403734071<br>Fax Number: ~~(919) 379-4050~~ | Project Name: Dayton Thermal Products Offsite Drilling<br>Site Location: 1600 Webster St. Dayton OH<br>Site Code: SC001<br>RFA Number: YGQP2001209 SDG 209B<br>Chrysler PM: Gary Stagczuk | Consultant: LBG<br>Address: 1210 West County Road E<br>St. Paul MN 55112<br>Consultant PM: Kenneth Vogel<br>Phone: 651 490 1405 Fax: 1006 |

**Turn-around Time Request:**
24 calendar hrs.
48 calendar hrs.
10 days
28 days

**Data Package Deliverables: (circle)**
Chrysler Level 1
Chrysler Level 2
Other (specify):

**Compound List Parameter/Method/Bottle Type/Preservative**

**Matrix Codes**
S - Soil; SW - Surface Water; GW - Groundwater; A - Air; Sed - Sediment; O - Other (specify)

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 5030B/5035/8260B | Lab Use Only: Volatiles pH<2 | Metals pH<2 | Cyanide pH>12 | Other | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0014 | 3/16/01 | 1130 | G | 0 | 2 | X | | | | | 900 gallons wastewater contained in "Center Poly Tank". Water generated from well development, well drilling and steam cleaning |
| | | | | | | | | | | | Sb recd 3/17/01 |
| | | | | | | | | | | | Stored in locked Cooler over weekend |

**Sampler(s)**: David Strand

Cooler ID #: KL 194

Is RFA sampling complete? Yes No

Bottles Relinquished under Airbill No. NA

Samples Relinquished under Airbill No. 815313875301

Temperature (corrected) C

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| [signature] | | | | | | Yes No |
| | | | | | | Yes No |
| | | | Received for Laboratory by: Brenda Gregory | 3/19/01 | 0800 | Yes No |

Chrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757

Distribution: White copy: Data package Yellow: Retained by laboratory Pink: Retained by sampler

SDG 209B

C/C Dated
Sb intact
Cooler Temp 2 [initials]

Revision No. 1
Created September 23, 1991

Page ___ of ___

03/22/2001 11:23 FAX

KEMRON Environmental Services | SAMPLES RECEIPT FORM #1 | Marietta Laboratory

| CLIENT: | DATE: | SHIPPED BY: |
|---|---|---|
| CampuChem<br>BRG ARS Other _____ | 3-19-01 | (✓) FED-EX ( ) AIRBORNE<br>( ) UPS ( ) EMERY<br>( ) RPS ( ) US MAIL<br>( ) KEMRON ( ) CLIENT |

| | | |
|---|---|---|
| COOLER ID: KL194 | COOLER ID: | COOLER ID: |
| INDEX #: 8153 13875301 | INDEX #: | INDEX #: |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY (✓) YES ( ) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP: (C) 2 (D) 2 °C | TEMP: (C) (D) °C | TEMP: (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL (✓) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|
| | | |

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

03/22/2001 11:23 FAX 018

KEMRON Environmental Services, Inc.
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Mar 19 2001, 08:21 am

Login Number: L0103388
Account: COMPUCHEM-529 CompuChem
Project: 529-DAYTON SOIL Ohio VAP Soils

| Laboratory Sample Number | Client Sample Number | Collect Date | Receive Date | Due PR Date |
|---|---|---|---|---|
| L0103388-01 | WL0014 | 16-MAR-01 | 17-MAR-01 | PFF 20-MAR-01 |

level 2 & 4; int c/c; Send level 2 pkg

| | | | | | |
|---|---|---|---|---|---|
| Water | S | 8260 | Hold:30-MAR-01 | 1/v1 40g hcl | 2 Bottles |
| Services | S | EDD | | 2/ | |
| Services | S | ICOC | | 2/ | |
| Services | P | L4 | | 2/ | |
| Services | C | L4-6010 | | 2/ | |
| Services | C | L4-6020 | | 2/ | |
| Services | C | L4-7000 | | 2/ | |
| Services | C | L4-8021 | | 2/ | |
| Services | C | L4-8081 | | 2/ | |
| Services | C | L4-8082 | | 2/ | |
| Services | C | L4-8151 | | 2/ | |
| Services | C | L4-8260 | | 2/ | |
| Services | C | L4-8270 | | 2/ | |
| Services | C | L4-8310 | | 2/ | |
| Services | C | L4-8330 | | 2/ | |
| Services | C | L4-9056 | | 2/ | |
| Services | C | L4-DRO | | 2/ | |
| Services | C | L4-GRO | | 2/ | |
| Services | C | L4-RSK175 | | 2/ | |
| Services | C | L4CV | | 2/ | |
| Services | C | LEVEL-4 | | 2/ | |
| Services | S | LEVEL-2 | | 2/ | |



Signature: Bcg MG

Date: 3/19 3/19

03/22/2001 11:24 FAX
010

MAY -4 2001

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103388
Report Date: 03/20/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/17/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103388-01 | WL0014 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

David L. Bumgarner

Certified By
**David L. Bumgarner**

KEMRON ENVIRONMENTAL SERVICES

**KEMRON ENVIRONMENTAL SERVICES**
**REPORT NARRATIVE**

**L0103388**

**CHAIN OF CUSTODY:**

The chain of custody number was 04634.

**SHIPMENT CONDITIONS:**

The chain of custody was received sealed in a cooler. The cooler temperature was 2 ° C.

**SAMPLE MANAGEMENT:**

All samples were received intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Melissa Simms DATE: 3-19-01

# REPORT NARRATIVE
# GC/MS VOLATILE ORGANICS

**KEMRON Login No: L0103388**

## METHOD

**Preparation**: SW- 846 5030B
**Analysis:** SW-846 8260B

## HOLDING TIMES

**Sample Preparation**: All holding times were met.
**Sample Analysis**: All holding times were met.

## PREPARATION

Sample preparation proceeded normally.

## CALIBRATION

**Initial calibrations**: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

**Alternate Source Standards:** All acceptance criteria were met.

**Continuing Calibration and Tune**: All acceptance criteria were met.

## BATCH QA/QC

**Method Blank**: All acceptance criteria were met.

**Laboratory Control Samples**: All acceptance criteria were met.

**Matrix Spikes**: The MS/MSD results were not associated with this sample delivery group.

## SAMPLES

**Internal Standards**: All acceptance criteria were met.

**Surrogates**: All acceptance criteria were met.

**Samples:** All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: CMS REVIEWED Stephanie L Lope DATE: 3/28/01

Login #L0103388
March 20, 2001 04:48 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 14 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0103388
March 20, 2001 04:48 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 190 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 101 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.6 | ( 80 - 120%) |
| Toluene-d8 | 104 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 103 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-03-388
March 20, 2001 04:48 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94164 | R118050 | L0103388-01 | | Water | Volatile Organics | 8260B\5030 | 16-MAR-2001 | Volatile - GC/MS |

Kemron Environmental Services -OVL

Volatile Quality Control Summary - 8260

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Workgroup: | WG94164 | Run Date: | 3/20/2001 | Sample Number: | 03-302-21 | LCS DF: | 1 |
| Method: | 8260B | Instrument: | HPMS2 | Sample Filename: | 2M42836.D | Sample DF: | 1 |
| Matrix: | WATER | Blank Filename: | 2M42829.D | MS Filename: | 2M42837.D | MS DF: | 1 |
| Units: | ug/L | LCS Filename: | 2M42830.D | MSD Filename: | 2M42838.D | MSD DF: | 1 |

| | | CONCENTRATION, ug/L | | | | | | PERCENT RECOVERY | | | | | | | | | OUTLIERS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MDL | Blank | LCS | Sample | MS | MSD | Spike Level | Blank | LCS | Sample | MS | MSD | LCL | UCL | MS RPD | RPD UCL | Blank | LCS | MS | MSD | RPD |
| Target Analytes | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | % | % | % | % | % | % | % | % | % | | | | | |
| dichlorodifluoromethane | 0.25 | ND | 18.98 | ND | 18.65 | 19.36 | 20.0 | ND | 94.9 | ND | 93.3 | 96.8 | 10.0 | 153.0 | 3.7 | 42.0 | | | | | |
| chloromethane | 0.56 | ND | 19.88 | ND | 20.58 | 21.61 | 20.0 | ND | 99.4 | ND | 102.9 | 108.1 | 49.0 | 129.0 | 4.9 | 30.0 | | | | | |
| vinyl chloride | 0.48 | ND | 18.30 | ND | 20.80 | 19.82 | 20.0 | ND | 91.5 | ND | 104.0 | 99.1 | 57.0 | 135.0 | 4.8 | 30.0 | | | | | |
| bromomethane | 0.25 | ND | 20.80 | ND | 20.36 | 21.61 | 20.0 | ND | 104.0 | ND | 101.8 | 108.1 | 58.0 | 140.0 | 6.0 | 39.0 | | | | | |
| chloroethane | 0.22 | ND | 18.70 | ND | 19.59 | 20.43 | 20.0 | ND | 93.5 | ND | 98.0 | 102.2 | 69.0 | 126.0 | 4.2 | 27.0 | | | | | |
| trichlorofluoromethane | 0.46 | ND | 18.56 | ND | 18.68 | 19.33 | 20.0 | ND | 92.8 | ND | 93.4 | 96.7 | 67.0 | 152.0 | 3.4 | 22.0 | | | | | |
| acetone | 1.84 | ND | 17.49 | ND | 17.06 | 17.64 | 20.0 | ND | 87.5 | ND | 85.3 | 88.2 | 40.0 | 142.0 | 3.3 | 40.0 | | | | | |
| 1,1-dichloroethene | 0.27 | ND | 22.82 | ND | 21.54 | 22.73 | 20.0 | ND | 114.1 | ND | 107.7 | 113.7 | 81.0 | 130.0 | 5.4 | 18.0 | | | | | |
| iodomethane | 0.14 | ND | 33.40 | ND | 31.92 | 33.78 | 20.0 | ND | 167.0 | ND | 159.6 | 168.9 | NA | NA | 5.7 | NA | | | | | |
| methylene chloride | 0.60 | ND | 21.06 | ND | 20.65 | 21.41 | 20.0 | ND | 105.3 | ND | 103.3 | 107.1 | 76.0 | 125.0 | 3.6 | 19.0 | | | | | |
| carbon disulfide | 0.15 | ND | 18.89 | ND | 17.86 | 18.23 | 20.0 | ND | 94.5 | ND | 89.3 | 91.2 | 70.0 | 138.0 | 2.1 | 20.0 | | | | | |
| methyl-tert-butyl ether | 0.46 | ND | 20.79 | ND | 19.53 | 20.67 | 20.0 | ND | 104.0 | ND | 97.7 | 103.4 | NA | NA | 5.7 | NA | | | | | |
| trans-1,2-dichloroethene | 0.21 | ND | 21.29 | ND | 20.70 | 21.39 | 20.0 | ND | 106.5 | ND | 103.5 | 107.0 | 86.0 | 135.0 | 3.3 | 16.0 | | | | | |
| n-hexane | 0.23 | ND | 21.44 | ND | 18.19 | 19.69 | 20.0 | ND | 107.2 | ND | 91.0 | 98.5 | 58.1 | 141.9 | 7.9 | 30.0 | | | | | |
| vinyl acetate | 4.43 | ND | 11.70 | ND | 12.17 | 11.85 | 20.0 | ND | 58.5 | ND | 60.9 | 59.3 | 10.0 | 136.0 | 2.7 | 45.0 | | | | | |
| 1,1-dichloroethane | 0.18 | ND | 20.18 | ND | 20.25 | 20.49 | 20.0 | ND | 100.9 | ND | 101.3 | 102.5 | 84.0 | 127.0 | 1.2 | 15.0 | | | | | |
| 2-butanone | 1.17 | ND | 20.92 | ND | 19.59 | 20.46 | 20.0 | ND | 104.6 | ND | 98.0 | 102.3 | 61.0 | 137.0 | 4.3 | 30.0 | | | | | |
| 2,2-dichloropropane | 0.23 | ND | 20.58 | ND | 20.44 | 20.44 | 20.0 | ND | 102.9 | ND | 102.2 | 102.2 | 79.0 | 130.0 | 0.0 | 17.0 | | | | | |
| cis-1,2-dichloroethene | 0.14 | ND | 20.44 | ND | 20.53 | 20.84 | 20.0 | ND | 102.2 | ND | 102.7 | 104.2 | 82.0 | 121.0 | 1.5 | 15.0 | | | | | |
| chloroform | 0.19 | ND | 20.17 | 0.64 | 21.06 | 21.36 | 20.0 | ND | 100.9 | 0.64 | 102.1 | 103.6 | 85.0 | 121.0 | 1.4 | 15.0 | | | | | |
| bromochloromethane | 0.19 | ND | 21.49 | ND | 21.96 | 22.20 | 20.0 | ND | 107.5 | ND | 109.8 | 111.0 | 85.0 | 121.0 | 1.1 | 15.0 | | | | | |
| 1,1,1-trichloroethane | 0.25 | ND | 19.99 | ND | 21.01 | 20.86 | 20.0 | ND | 100.0 | ND | 105.1 | 104.3 | 78.0 | 127.0 | 0.7 | 17.0 | | | | | |
| 1,1-dichloropropene | 0.21 | ND | 19.25 | ND | 18.80 | 19.53 | 20.0 | ND | 96.3 | ND | 94.0 | 97.7 | 91.0 | 133.0 | 3.8 | 15.0 | | | | | |
| carbon tetrachloride | 0.30 | ND | 20.16 | ND | 20.82 | 21.24 | 20.0 | ND | 100.8 | ND | 104.1 | 106.2 | 70.0 | 130.0 | 2.0 | 20.0 | | | | | |
| 1,2-dichloroethane | 0.33 | ND | 19.42 | ND | 20.32 | 20.07 | 20.0 | ND | 97.1 | ND | 101.6 | 100.4 | 78.0 | 128.0 | 1.2 | 17.0 | | | | | |
| benzene | 0.17 | ND | 20.25 | ND | 19.33 | 20.04 | 20.0 | ND | 101.3 | ND | 96.7 | 100.2 | 87.0 | 118.0 | 3.6 | 15.0 | | | | | |
| trichloroethene | 0.17 | ND | 19.72 | ND | 19.96 | 19.71 | 20.0 | ND | 98.6 | ND | 99.8 | 98.6 | 83.0 | 123.0 | 1.3 | 15.0 | | | | | |
| 1,2-dichloropropane | 0.12 | ND | 19.56 | ND | 19.51 | 19.89 | 20.0 | ND | 97.8 | ND | 97.6 | 99.5 | 81.0 | 121.0 | 1.9 | 15.0 | | | | | |
| bromodichloromethane | 0.25 | ND | 20.91 | ND | 21.12 | 21.28 | 20.0 | ND | 104.6 | ND | 105.6 | 106.4 | 81.0 | 126.0 | 0.8 | 16.0 | | | | | |
| dibromomethane | 0.19 | ND | 21.03 | ND | 20.95 | 21.35 | 20.0 | ND | 105.2 | ND | 104.8 | 106.8 | 83.0 | 122.0 | 1.9 | 15.0 | | | | | |
| 2-chloroethylvinyl ether | 1.07 | ND | 20.63 | ND | ND | ND | 20.0 | ND | 103.2 | ND | NA | NA | 45.0 | 154.0 | NA | 46.0 | | | | | |
| 4-methyl-2-pentanone | 1.10 | ND | 20.28 | ND | 20.54 | 20.40 | 20.0 | ND | 101.4 | ND | 102.7 | 102.0 | 66.0 | 132.0 | 0.7 | 33.0 | | | | | |
| cis-1,3-dichloropropene | 0.14 | ND | 21.03 | ND | 21.11 | 21.21 | 20.0 | ND | 105.2 | ND | 105.6 | 106.1 | 82.0 | 124.0 | 0.5 | 15.0 | | | | | |
| toluene | 0.16 | ND | 19.73 | ND | 19.19 | 19.99 | 20.0 | ND | 98.7 | ND | 96.0 | 100.0 | 84.0 | 123.0 | 4.1 | 15.0 | | | | | |
| trans-1,3-dichloropropene | 0.16 | ND | 21.04 | ND | 20.52 | 21.07 | 20.0 | ND | 105.2 | ND | 102.6 | 105.4 | 80.0 | 124.0 | 2.6 | 15.0 | | | | | |
| 1,1,2-trichloroethane | 0.28 | ND | 20.49 | ND | 19.72 | 20.61 | 20.0 | ND | 102.5 | ND | 98.6 | 103.1 | 78.0 | 122.0 | 4.4 | 15.0 | | | | | |
| 2-hexanone | 1.19 | ND | 18.90 | ND | 19.23 | 19.27 | 20.0 | ND | 94.5 | ND | 96.2 | 96.4 | 57.0 | 130.0 | 0.2 | 31.0 | | | | | |
| 1,3-dichloropropane | 0.16 | ND | 19.97 | ND | 19.30 | 20.16 | 20.0 | ND | 99.9 | ND | 96.5 | 100.8 | 78.0 | 123.0 | 4.4 | 15.0 | | | | | |
| tetrachloroethene | 0.20 | ND | 19.48 | ND | 18.93 | 19.22 | 20.0 | ND | 97.4 | ND | 94.7 | 96.1 | 83.0 | 124.0 | 1.5 | 15.0 | | | | | |
| dibromochloromethane | 0.29 | ND | 19.51 | ND | 19.93 | 20.35 | 20.0 | ND | 97.6 | ND | 99.7 | 101.8 | 78.0 | 123.0 | 2.1 | 18.0 | | | | | |
| 1,2-dibromoethane | 0.15 | ND | 20.32 | ND | 20.27 | 20.69 | 20.0 | ND | 101.6 | ND | 101.4 | 103.5 | 79.0 | 123.0 | 2.1 | 15.0 | | | | | |
| 1-chlorohexane | 0.26 | ND | 19.85 | ND | 17.82 | 19.01 | 20.0 | ND | 99.3 | ND | 89.1 | 95.1 | 60.0 | 140.0 | 6.5 | NA | | | | | |
| chlorobenzene | 0.24 | ND | 19.26 | ND | 19.40 | 19.86 | 20.0 | ND | 96.3 | ND | 97.0 | 99.3 | 87.0 | 118.0 | 2.3 | 15.0 | | | | | |
| 1,1,1,2-tetrachloroethane | 0.25 | ND | 20.01 | ND | 20.33 | 20.75 | 20.0 | ND | 100.1 | ND | 101.7 | 103.8 | 82.0 | 123.0 | 2.0 | 15.0 | | | | | |
| ethylbenzene | 0.20 | ND | 19.06 | ND | 19.31 | 19.49 | 20.0 | ND | 95.3 | ND | 96.6 | 97.5 | 85.0 | 121.0 | 0.9 | 15.0 | | | | | |
| m+p-xylene | 0.33 | ND | 37.64 | ND | 37.97 | 38.85 | 40.0 | ND | 94.1 | ND | 94.9 | 97.1 | 86.0 | 121.0 | 2.3 | 15.0 | | | | | |
| o-xylene | 0.16 | ND | 19.39 | ND | 19.55 | 19.86 | 20.0 | ND | 97.0 | ND | 97.8 | 99.3 | 85.0 | 121.0 | 1.6 | 15.0 | | | | | |
| styrene | 0.20 | ND | 19.75 | ND | 19.84 | 20.12 | 20.0 | ND | 98.8 | ND | 99.2 | 100.6 | 84.0 | 120.0 | 1.4 | 15.0 | | | | | |
| bromoform | 0.45 | ND | 20.05 | ND | 20.19 | 20.82 | 20.0 | ND | 100.3 | ND | 101.0 | 104.1 | 73.0 | 124.0 | 3.1 | 22.0 | | | | | |
| isopropylbenzene | 0.20 | ND | 17.95 | ND | 18.13 | 18.68 | 20.0 | ND | 89.8 | ND | 90.7 | 93.4 | 81.0 | 124.0 | 3.0 | 15.0 | | | | | |
| 1,1,2,2-tetrachloroethane | 0.39 | ND | 20.68 | ND | 20.16 | 21.02 | 20.0 | ND | 103.4 | ND | 100.8 | 105.1 | 72.0 | 132.0 | 4.2 | 23.0 | | | | | |
| 1,2,3-trichloropropane | 0.41 | ND | 20.12 | ND | 19.69 | 19.83 | 20.0 | ND | 100.6 | ND | 98.5 | 99.2 | 72.0 | 132.0 | 0.7 | 21.0 | | | | | |
| propyl-benzene | 0.26 | ND | 18.19 | ND | 18.04 | 18.47 | 20.0 | ND | 91.0 | ND | 90.2 | 92.4 | 82.0 | 125.0 | 2.4 | 15.0 | | | | | |
| bromobenzene | 0.30 | ND | 18.77 | ND | 18.84 | 18.92 | 20.0 | ND | 93.9 | ND | 94.2 | 94.6 | 84.0 | 120.0 | 0.4 | 15.0 | | | | | |
| 1,3,5-trimethylbenzene | 0.22 | ND | 18.28 | ND | 18.06 | 18.44 | 20.0 | ND | 91.4 | ND | 90.3 | 92.2 | 82.0 | 125.0 | 2.1 | 15.0 | | | | | |
| 2-chlorotoluene | 0.30 | ND | 20.06 | ND | 17.78 | 20.26 | 20.0 | ND | 100.3 | ND | 88.9 | 101.3 | 80.0 | 128.0 | 13.0 | 15.0 | | | | | |
| 4-chlorotoluene | 0.26 | ND | 17.90 | ND | 18.48 | 17.55 | 20.0 | ND | 89.5 | ND | 92.4 | 87.8 | 80.0 | 127.0 | 5.2 | 15.0 | | | | | |
| tert-butyl-benzene | 0.36 | ND | 17.20 | ND | 17.43 | 17.72 | 20.0 | ND | 86.0 | ND | 87.2 | 88.6 | 80.0 | 121.0 | 1.7 | 15.0 | | | | | |
| 1,2,4-trimethylbenzene | 0.23 | ND | 17.86 | ND | 17.79 | 17.89 | 20.0 | ND | 89.3 | ND | 89.0 | 89.5 | 84.0 | 125.0 | 0.6 | 15.0 | | | | | |
| sec-butyl-benzene | 0.33 | ND | 16.72 | ND | 16.72 | 16.92 | 20.0 | ND | 83.6 | ND | 83.6 | 84.6 | 80.0 | 125.0 | 1.2 | 15.0 | | | | | |
| p-isopropyl-toluene | 0.33 | ND | 16.55 | ND | 16.65 | 16.81 | 20.0 | ND | 82.8 | ND | 83.3 | 84.1 | 79.0 | 133.0 | 1.0 | 15.0 | | | | | |
| 1,3-dichlorobenzene | 0.32 | ND | 18.47 | ND | 18.54 | 18.62 | 20.0 | ND | 92.4 | ND | 92.7 | 93.1 | 70.0 | 130.0 | 0.4 | 15.0 | | | | | |
| 1,4-dichlorobenzene | 0.38 | ND | 18.43 | ND | 18.30 | 18.44 | 20.0 | ND | 92.2 | ND | 91.5 | 92.2 | 70.0 | 130.0 | 0.8 | 15.0 | | | | | |
| n-butyl-benzene | 0.37 | ND | 17.03 | ND | 16.64 | 16.81 | 20.0 | ND | 85.2 | ND | 83.2 | 84.1 | 78.0 | 128.0 | 1.0 | 17.0 | | | | | |
| 1,2-dichlorobenzene | 0.37 | ND | 19.32 | ND | 19.40 | 19.43 | 20.0 | ND | 96.6 | ND | 97.0 | 97.2 | 70.0 | 130.0 | 0.2 | 15.0 | | | | | |
| 1,2-dibromo-3-chloropropane | 0.78 | ND | 21.31 | ND | 20.82 | 22.04 | 20.0 | ND | 106.6 | ND | 104.1 | 110.2 | 69.0 | 125.0 | 5.7 | 26.0 | | | | | |
| 1,2,4-trichlorobenzene | 0.25 | ND | 19.48 | ND | 19.29 | 19.40 | 20.0 | ND | 97.4 | ND | 96.5 | 97.0 | 74.0 | 124.0 | 0.6 | 20.0 | | | | | |
| hexachlorobutadiene | 0.46 | ND | 15.98 | ND | 15.52 | 16.06 | 20.0 | ND | 79.9 | ND | 77.6 | 80.3 | 67.0 | 131.0 | 3.4 | 26.0 | | | | | |
| naphthalene | 0.48 | ND | 22.35 | ND | 22.37 | 23.17 | 20.0 | ND | 111.8 | ND | 111.9 | 115.9 | 69.0 | 126.0 | 3.5 | 24.0 | | | | | |
| 1,2,3-trichlorobenzene | 0.33 | ND | 22.40 | ND | 22.73 | 23.58 | 20.0 | ND | 112.0 | ND | 113.7 | 117.9 | 60.0 | 137.0 | 3.7 | 33.0 | | | | | |
| Surrogates | | | | | | | | | | | | | | | | | | | | | |
| dibromofluoromethane | | 25.12 | 25.58 | 26.83 | 26.53 | 26.39 | 25.0 | 100.5 | 102.3 | 107.3 | 106.1 | 105.6 | 86 | 118 | | | | | | | |
| 1,2-dichloroethane-d4 | | 22.46 | 24.03 | 25.69 | 25.26 | 25.02 | 25.0 | 89.8 | 96.1 | 102.8 | 101.0 | 100.1 | 80 | 120 | | | | | | | |
| toluene-d8 | | 26.62 | 26.37 | 26.00 | 25.62 | 26.33 | 25.0 | 106.5 | 105.5 | 104.0 | 102.5 | 105.3 | 88 | 110 | | | | | | | |
| p-bromofluorobenzene | | 25.66 | 25.79 | 25.91 | 25.91 | 26.01 | 25.0 | 102.6 | 103.2 | 103.6 | 103.6 | 104.0 | 86 | 115 | | | | | | | |

**Notes and Definitions:**

RDL= Reporting Detection Limit
LCS= Laboratory Control Sample
MS/MSD= Matrix Spike / Matrix Spike Duplicate
LCL= Lower Control Limit
UCL= Upper Control Limit
ND= Not Detected
NS=Not spiked
NA=Not applicable
RPD= Relative Percent Difference
H=Above control limit
L=Below control limit
DF=Dilution Factor

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

## 03/12/2001

---

ABW - ANGELA B. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
AMT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CBN - CHARLES B. NOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIE - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
HD - HEATH DENNIS
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITHERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JMW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LBM - LAWRENCE B. MCSWEGAN
LKN - LINDA K. NEDEFF
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRIMES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PML - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RLW - RON L. WATSON
RSH - RENEE S. HENNES
RSS - REGINA S. SIMMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
SAM - SAMUAL A. MILLS
SJK - SINDY J. KINNEY
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HOEFLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
# List of Valid Qualifiers
# December 15, 2000

## *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| * | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

## *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| **J** | The analyte was positively identified, the quantitation is an estimation |
| **U** | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| **F** | The analyte was positively identified but the associated numerical value is below the RL |
| **R** | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| **B** | The analyte was found in an associated blank, as well as in the sample |
| **M** | The matrix effect was present |
| **S** | To be applied to all field screening data |
| **T** | Tentatively identified compound (using GC/MS) |

**CHRYSLER CORPORATION**

# Chain-of-Custody

04634 A

Offsite Drilling

~~CompuChem~~ Kamron
~~501 Madison Avenue~~ 109 Starlite Park
~~Cary, NC 27513~~ Marietta OH 45750
Phone Number: ~~1-800-833-5097~~ 7403734071
Fax Number: ~~(919) 379-4050~~

Project Name: Dayton Thermal Products
Site Location: 1600 Webster St. Dayton OH
Site Code: SC001
RFA Number: YGQC2001209 SDG 209B
Chrysler PM: Gary Stanczuk

Consultant: LBG
Address: 1210 West County Road E
St. Paul MN 55112
Consultant PM: Kenneth Vogel
Phone: 651 490 1405 Fax: 1006

**Turn-around Time Request:**
- (24 calendar hrs.)
- 48 calendar hrs.
- 10 days
- 28 days

**Data Package Deliverables: (circle)**
- (Chrysler Level 1)
- Chrysler Level 2
- Other (specify):

**Matrix Codes**
S - Soil; SW - Surface Water; GW - Groundwater; A - Air; Sed. - Sediment; O - Other (specify)

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 5030B/5035/8260B | | | | | | | | Volatiles pH <2 | Metals pH < 2 | Cyanide pH > 12 | Other | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0014 | 3/16/01 | 1130 | G | O | 2 | X | | | | | | | | | | | | 900 gallons wastewater contained in "Center Poly Tank", water generated from well development, well drilling and steam cleaning |
| | | | | | | | | | | | | | | | | | | Sto recd 3/17/01 |
| | | | | | | | | | | | | | | | | | | Stored in locked Cooler over weekend |

Sampler(s): David Strand

Cooler ID # KL 194

Is RFA sampling complete? Yes (No)

Bottles Reliquished under Airbill No. NA

Samples Relinquished under Airbill No. 815313875301

Temperature (corrected) ___ C

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| [signature] | | | | | | Yes No |
| | | | | | | Yes No |
| | | | Received for Laboratory by: Bunda Gregory | 3/19/01 | 0800 | (Yes) No |

*Chrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

SDG 209B

Distribution: White copy: Data package Yellow : Retained by laboratory Pink: Retained by sampler

C/C dated
Sto intact
cooler temp 2

Revision No. 1
Created: September 23, 1997

Page ____ of ____

# KEMRON Internal Laboratory Chain of Custody

**Work Order:** 20103388 **Client:** Cushpuchem **# of Samples:** 01 **Due Date:** 3/20 **Page:** ____

| Sample # | Analysis | Reason | Removed By ADT | Removed From | Moved To | Reliq. by | Ret'd By ADT | Ret'd To | Rec'd By | Reason |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 8260 | AN | Clus 3-19-01 @0825 | login | VOA | Brg | ars 3-30-01 15:15 | Archive | Brg | Archive |
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KEMRON Environmental Services | **SAMPLES RECEIPT FORM #1** | Marietta Laboratory

| CLIENT: Compuchem<br>BRG ARS Other _____ | DATE: 3-19-01 | SHIPPED BY:<br>(✓) FED-EX ( ) AIRBORNE<br>( ) UPS ( ) EMERY<br>( ) RPS ( ) US MAIL<br>( ) KEMRON ( ) CLIENT |
|---|---|---|

| COOLER ID: KL194 | COOLER ID: | COOLER ID: |
|---|---|---|
| INDEX # : 8153 13875301 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY (✓) YES ( ) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) 2 (D) °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL (✓) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

MAR 22 2001

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103388
Report Date: 03/20/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/17/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103388-01 | WL0014 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By
David L. Bumgarner

Login #L0103388
March 20, 2001 04:49 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 14 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0103388
March 20, 2001 04:49 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 190 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 101 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.6 | ( 80 - 120%) |
| Toluene-d8 | 104 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 103 | ( 86 - 115%) |

RL = Reporting Limit

**CHRYSLER CORPORATION**

# Chain-of-Custody

04634 A

| | | |
|---|---|---|
| ~~CompuChem~~ Kemron<br>~~501 Madison Avenue~~ 109 Starlite Park<br>~~Gary, NC 27513~~ Marietta OH 45750<br>Phone Number: ~~1-800-833-5097~~ 740 373 4071<br>Fax Number: ~~(919) 379-4050~~ | Project Name: Dayton Thermal Products Offsite Drilling<br>Site Location: 1600 Webster St. Dayton OH<br>Site Code: SC001<br>RFA Number: YGQP2001209 SDG 209B<br>Chrysler PM: Gary Stanczuk | Consultant: LBG<br>Address: 1210 West County Road E<br>St. Paul MN 55112<br>Consultant PM: Kenneth Vogel<br>Phone: 651 490 1405 Fax: 1006 |

**Turn-around Time Request:**
24 calendar hrs.
48 calendar hrs.
10 days
28 days

**Data Package Deliverables: (circle)**
Chrysler Level 1
Chrysler Level 2
Other (specify):

**Compound List-Parameter/Method/Bottle Type/Preservative**

**Matrix Codes**
S - Soil
SW - Surface Water
GW - Groundwater
A - Air
Sed. - Sediment
O - Other (specify)

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 5030B/5035/8260B | | | | | | | | Lab Use Only: Volatiles pH <2 | Metals pH <2 | Cyanide pH >12 | Other | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0014 | 3/16/01 | 1130 | G | O | 2 | X | | | | | | | | | | | | 900 gallons wastewater contained in "Center Poly Tank". Water generated from well development, well drilling and steam cleaning |
| | | | | | | | | | | | | | | | | | | (*) Sb recd 3/17/01 |
| | | | | | | | | | | | | | | | | | | Stored in locked Cooler over weekend |

**Sampler(s)**
David Strand

Cooler ID # KL 194

Is RFA sampling complete? Yes No

Bottles Reliquished under Airbill No. NA

Samples Relinquished under Airbill No. 815313875301

Temperature (corrected) ___ C

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| [signature] | | | | | | Yes No |
| | | | | | | Yes No |
| | | | Received for Laboratory by: Brenda Gregory | (*) 3/19/01 | 0800 | Yes No |

*Chrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

SDG 209B

Distribution: White copy: Data package Yellow : Retained by laboratory Pink: Retained by sampler

C/C Dated
Sb intact
Cooler Temp 2 [initials]

Revision No. 1
Created September 23, 1997

Page ____ of ____

KEMRON Environmental Services | SAMPLES RECEIPT FORM #1 | Marietta Laboratory

| CLIENT: | DATE: | SHIPPED BY: |
|---|---|---|
| CampuChem<br>BRG ARS Other _____ | 3-19-01 | (✓) FED-EX ( ) AIRBORNE<br>( ) UPS ( ) EMERY<br>( ) RPS ( ) US MAIL<br>( ) KEMRON ( ) CLIENT |

| COOLER ID: KL194 | COOLER ID: | COOLER ID: |
|---|---|---|
| INDEX # : 8153 13875301 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY (✓) YES ( ) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) 2 (D) 2 °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL (✓) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|
| | | |

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

KEMRON Environmental Services, Inc.
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Mar 19 2001, 08:21 am

Login Number: L0103388
Account: COMPUCHEM-529 CompuChem
Project: 529-DAYTON SOIL Ohio VAP Soils

| Laboratory Sample Number | Client Sample Number | Collect Date | Receive Date | Due PR Date |
|---|---|---|---|---|
| L0103388-01 | WL0014 | 16-MAR-01 | 17-MAR-01 | PFF 20-MAR-01 |

level 2 & 4; int c/c; Send level 2 pkg

| | | | | | |
|---|---|---|---|---|---|
| Water | S | 8260 | Hold:30-MAR-01 | 1/v1 40g hcl | 2 Bottles |
| Services | S | EDD | | 2/ | |
| Services | S | ICOC | | 2/ | |
| Services | P | L4 | | 2/ | |
| Services | C | L4-6010 | | 2/ | |
| Services | C | L4-6020 | | 2/ | |
| Services | C | L4-7000 | | 2/ | |
| Services | C | L4-8021 | | 2/ | |
| Services | C | L4-8081 | | 2/ | |
| Services | C | L4-8082 | | 2/ | |
| Services | C | L4-8151 | | 2/ | |
| Services | C | L4-8260 | | 2/ | |
| Services | C | L4-8270 | | 2/ | |
| Services | C | L4-8310 | | 2/ | |
| Services | C | L4-8330 | | 2/ | |
| Services | C | L4-9056 | | 2/ | |
| Services | C | L4-DRO | | 2/ | |
| Services | C | L4-GRO | | 2/ | |
| Services | C | L4-RSK175 | | 2/ | |
| Services | C | L4CV | | 2/ | |
| Services | C | LEVEL-4 | | 2/ | |
| Services | S | LEVEL-2 | | 2/ | |



Signature: BCG MG

Date: 3/19 3/19

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103388
Report Date: 03/21/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/17/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103388-01 | WL0014 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

**Certified By**
**David L. Bumgarner**

Login #L0103388
March 21, 2001 05:03 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 14 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0103388
March 21, 2001 05:03 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 190 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 101 | ( 75 - 125%) |
| 1,2-Dichloroethane-d4 | 92.6 | ( 62 - 139%) |
| Toluene-d8 | 104 | ( 75 - 125%) |
| 4-Bromofluorobenzene | 103 | ( 75 - 125%) |

RL = Reporting Limit

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0817 |
| CONNECTION TEL | 19372373669 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 03/22 06:09 |
| USAGE T | 01'34 |
| PGS. SENT | 4 |
| RESULT | OK |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE:** March 22, 2001

**PAGES:** 4
**(Includes cover page)**

**TO:** MIKE PLANTE, guest

**FAX #:** 937-278-0146

**COMPANY:** Holiday Inn

**PHONE #:** 937-278-4871

**TO:** Mike Webb

**FAX #:** 937 237 3669

**COMPANY:** Onyx

**TO:**

**FAX #:**

**COMPANY:**

**FROM:** Dave Strand

RE: Water quality for "Center 1000 gallon Poly Tank".
WL0014

(Includes cover page)

| | |
|---|---|
| **TO:** MIKE PLANTE, guest | **FAX #:** 937-278-0146 |
| **COMPANY:** Holiday Inn | **PHONE #:** 937-278-4871 |
| **TO:** Mike Webb | **FAX #:** 937 237 3669 |
| **COMPANY:** Onyx | |
| **TO:** | **FAX #:** |
| **COMPANY:** | |

**FROM:** Dave Strand

RE: Water quality for "Center 1000 gallon Poly Tank".
WL0014

**Please contact Kathleen Weinrich (651) 490-1405 if transmission is incomplete.**

# fax TRANSMITTAL

C:\MYDOCU~1\FAX.WPD

```
**********************
***   TX REPORT    ***
**********************

TRANSMISSION OK

TX/RX NO                    0816
CONNECTION TEL              19372780146
SUBADDRESS
CONNECTION ID
ST. TIME                    03/22 06:06
USAGE T                     01'11
PGS. SENT                   4
RESULT                      OK
```

# LEGGETTE, BRASHEARS & GRAHAM, INC.

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**TO:** MIKE PLANTE, guest

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**TO:** Mike Webb

**FAX #:** 937 237 3669

**COMPANY:** Onyx

**TO:**

**FAX #:**

**COMPANY:**

**FROM:** Dave Strand

RE: Water quality for "Center 1000 gallon Poly Tank".
WL0014

**Please contact Kathleen Weinrich (651) 490-1405 if transmission is incomplete.**

**fax** TRANSMITTAL

C:\MYDOCU~1\FAX.WPD

Login #L0103388
March 20, 2001 04:49 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 8260 - Volatile Organics

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 14 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

XEMRON ENVIRONMENTAL SERVICES

003

Product: 8260 - Volatile Organics

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 190 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

SURROGATES- In Percent Recovery:

| | | |
|---|---|---|
| Dibromofluoromethane | 101 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 92.6 | ( 80 - 120%) |
| Toluene-d8 | 104 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 103 | ( 86 - 115%) |

RL = Reporting Limit



03/21/01 18:51 FAX 919 379 4070 COMPUCHEM

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: KEN VOGEL

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

FAX: (651) 490-1006

DATE: 3/21/01

PAGES WITH COVER: _____

COMMENTS:

KEN,

HERE'S THE FINAL "FORM I" RESULTS FOR THE 2-24 hr. WL0013 WL0014
TAT ASSOC. W/ RFA 209 (DAYTON THERMAL)

Cathy

FAX

CASTELLE

To: DAVE STRAND

Company :

Fax Number : 9,1-651-490-1006

Phone Number :

From :

Fax Number : 373-4835

Phone Number

Time Sent : Wednesday, Mar 21, 2001 05:06PM

Pages : 4

Description :

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE:** March 22, 2001

**PAGES:** 4
**(Includes cover page)**

**TO:** MIKE PLANTE, guest

**FAX #:** 937-278-0146

**COMPANY:** Holiday Inn

**PHONE #:** 937-278-4871

**TO:** Mike Webb

**FAX #:** 937 237 3669

**COMPANY:** Onyx

**TO:**

**FAX #:**

**COMPANY:**

**FROM:** Dave Strand

RE: Water quality for "Center 1000 gallon Poly Tank".
WL0014

**Please contact Kathleen Weinrich (651) 490-1405 if transmission is incomplete.**

fax TRANSMITTAL

C:\MYDOCU~1\FAX.WPD

03/22/2001 06:06 FAX 001

Login #L0103388
March 21, 2001 05:03 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 190 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 101 | ( 75 - 125%) |
| 1,2-Dichloroethane-d4 | 92.6 | ( 62 - 139%) |
| Toluene-d8 | 104 | ( 75 - 125%) |
| 4-Bromofluorobenzene | 103 | ( 75 - 125%) |

RL = Reporting Limit

Login #L0103388
March 21, 2001 05:03 pm

KENRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103388-01
Client Sample ID: WL0014
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04634/
Date Collected: 03/16/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/20/01 Time: 10:51

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42831.D

Method: 8260B\5030
Run ID: R118050
Batch : WG94164

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 14 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103388
Report Date: 03/21/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/17/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103388-01 | WL0014 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

**Certified By**
**David L. Bumgarner**

MAY -4 2001

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103525
Report Date: 03/27/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/24/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103525-01 | WL0015 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

David L. Bumgarner

**Certified By**
**David L. Bumgarner**

KEMRON
ENVIRONMENTAL SERVICES

**KEMRON ENVIRONMENTAL SERVICES**
**REPORT NARRATIVE**

**L0103525**

**CHAIN OF CUSTODY:**

The chain of custody number was 0081.

**SHIPMENT CONDITIONS:**

The chain of custody was received sealed in a cooler. The cooler temperature was 4° C.

**SAMPLE MANAGEMENT:**

All samples were received intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Melissa Humes DATE: 3-26-01

**REPORT NARRATIVE**
**GC/MS VOLATILE ORGANICS**

**KEMRON Login No: L0103525**

**METHOD**

**Preparation**: SW- 846 5030B
**Analysis:** SW-846 8260B

**HOLDING TIMES**

**Sample Preparation**: All holding times were met.
**Sample Analysis**: All holding times were met.

**PREPARATION**

Sample preparation proceeded normally.

**CALIBRATION**

**Initial calibrations**: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

**Alternate Source Standards:** All acceptance criteria were met.

**Continuing Calibration and Tune**: All acceptance criteria were met.

**BATCH QA/QC**

**Method Blank**: All acceptance criteria were met.

**Laboratory Control Samples**: All acceptance criteria were met.

**Matrix Spikes**: The MS/MSD results were not associated with this sample delivery group.

**SAMPLES**

**Internal Standards**: All acceptance criteria were met.

**Surrogates**: All acceptance criteria were met.

**Samples:** All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: CMS REVIEWED: Stephanie L Lepe DATE: 3/30/01

Login #L0103525
March 27, 2001 12:39 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103525-01
Client Sample ID: WL0015
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0081/

Sample Weight: N/A
Extract Volume: N/A

Date Collected: 03/23/01

% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/26/01 Time: 16:13

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42967

Method: 8260B\5030
Run ID: R118988
Batch : WG94489

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0103525
March 27, 2001 12:39 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103525-01
Client Sample ID: WL0015
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0081/
Date Collected: 03/23/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/26/01 Time: 16:13

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42967

Method: 8260B\5030
Run ID: R118988
Batch : WG94489

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 120 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 103 | ( 75 - 125%) |
| 1,2-Dichloroethane-d4 | 99.8 | ( 62 - 139%) |
| Toluene-d8 | 104 | ( 75 - 125%) |
| 4-Bromofluorobenzene | 104 | ( 75 - 125%) |

RL = Reporting Limit

Order #: 01-03-525
March 27, 2001 12:39 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94489 | R118988 | L0103525-01 | | Water | Volatile Organics | 8260B\5030 | 23-MAR-2001 | Volatile - GC/MS |

Kemron Environmental Services -OVL

Volatile Quality Control Summary - 8260

| | | | | | |
|---|---|---|---|---|---|
| **Workgroup:** WG94489 | **Run Date:** 3/26/2001 | **Sample Number:** 03-460-02 | **LCS DF:** 1 |
| **Method:** 8260B | **Instrument:** HPMS2 | **Sample Filename:** 2M42959.D | **Sample DF:** 1000 |
| **Matrix:** WATER | **Blank Filename:** 2M42957.D | **MS Filename:** 2M42960.D | **MS DF:** 1000 |
| **Units:** ug/L | **LCS Filename:** 2M42958.D | **MSD Filename:** 2M42961.D | **MSD DF:** 1000 |

| | | CONCENTRATION, ug/L | | | | | | PERCENT RECOVERY | | | | | | | | | OUTLIERS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MDL | Blank | LCS | Sample | MS | MSD | Spike Level | Blank | LCS | Sample | MS | MSD | LCL | UCL | MS RPD | RPD UCL | Blank | LCS | MS | MSD | RPD |
| Target Analytes | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | % | % | % | % | % | % | % | % | % | | | | | |
| dichlorodifluoromethane | 0.25 | ND | 22.88 | ND | 21346.73 | 22422.75 | 20000.0 | ND | 114.4 | ND | 106.7 | 112.1 | 34.0 | 202.0 | 4.9 | 30.0 | | | | | |
| chloromethane | 0.25 | ND | 22.03 | ND | 21473.23 | 23288.04 | 20000.0 | ND | 110.2 | ND | 107.4 | 116.4 | 44.0 | 182.0 | 8.1 | 85.0 | | | | | |
| vinyl chloride | 0.25 | ND | 22.07 | ND | 21638.24 | 21471.90 | 20000.0 | ND | 110.4 | ND | 108.2 | 107.4 | 61.0 | 164.0 | 0.8 | 63.0 | | | | | |
| bromomethane | 0.50 | ND | 22.21 | ND | 21126.32 | 22183.25 | 20000.0 | ND | 111.1 | ND | 105.6 | 110.9 | 64.2 | 140.0 | 4.9 | 58.0 | | | | | |
| chloroethane | 0.50 | ND | 20.62 | ND | 19615.70 | 20884.32 | 20000.0 | ND | 103.1 | ND | 98.1 | 104.4 | 74.0 | 148.0 | 6.3 | 47.0 | | | | | |
| trichlorofluoromethane | 0.25 | ND | 20.04 | ND | 19187.43 | 19937.55 | 20000.0 | ND | 100.2 | ND | 95.9 | 99.7 | 50.0 | 157.0 | 3.8 | 65.0 | | | | | |
| acetone | 2.50 | ND | 15.54 | ND | 14998.49 | 15302.71 | 20000.0 | ND | 77.7 | ND | 75.0 | 76.5 | 39.0 | 149.0 | 2.0 | 67.0 | | | | | |
| 1,1-dichloroethene | 0.50 | ND | 22.88 | ND | 22359.19 | 23701.52 | 20000.0 | ND | 114.4 | ND | 111.8 | 118.5 | 80.0 | 138.0 | 5.8 | 34.0 | | | | | |
| iodomethane | 0.50 | ND | 35.02 | ND | 34030.69 | 36298.95 | 20000.0 | ND | 175.1 | ND | 170.2 | 181.5 | 10.0 | 274.0 | 6.5 | 171.0 | | | | | |
| methylene chloride | 0.25 | ND | 21.10 | ND | 20307.40 | 21517.95 | 20000.0 | ND | 105.5 | ND | 101.5 | 107.6 | 80.0 | 123.0 | 5.8 | 24.0 | | | | | |
| carbon disulfide | 0.50 | ND | 19.09 | ND | 18255.49 | 19740.75 | 20000.0 | ND | 95.5 | ND | 91.3 | 98.7 | 71.0 | 143.0 | 7.8 | 44.0 | | | | | |
| methyl-tert-butyl ether | 0.50 | ND | 19.93 | ND | 19431.89 | 20107.63 | 20000.0 | ND | 99.7 | ND | 97.2 | 100.5 | 78.0 | 140.0 | 3.4 | 38.0 | | | | | |
| trans-1,2-dichloroethene | 0.25 | ND | 22.27 | ND | 20781.67 | 22059.88 | 20000.0 | ND | 111.4 | ND | 103.9 | 110.3 | 80.0 | 128.0 | 6.0 | 25.0 | | | | | |
| n-hexane | 0.56 | ND | 23.22 | ND | 22256.37 | 24208.00 | 20000.0 | ND | 116.1 | ND | 111.3 | 121.0 | 68.0 | 137.0 | 8.4 | 42.0 | | | | | |
| vinyl acetate | 2.50 | ND | 15.30 | ND | 15295.09 | 15986.59 | 20000.0 | ND | 76.5 | ND | 76.5 | 79.9 | 20.0 | 196.0 | 4.4 | 108.0 | | | | | |
| 1,1-dichloroethane | 0.13 | ND | 20.78 | ND | 19990.18 | 20562.26 | 20000.0 | ND | 103.9 | ND | 100.0 | 102.8 | 80.0 | 124.0 | 2.8 | 25.0 | | | | | |
| 2-butanone | 2.50 | ND | 19.28 | 158503.52 | 171036.85 | 177439.32 | 20000.0 | ND | 96.4 | 158503.52 | 62.7 | 94.7 | 53.0 | 146.0 | 3.7 | 57.0 | | | | | |
| 2,2-dichloropropane | 0.25 | ND | 21.78 | ND | 20597.41 | 21269.58 | 20000.0 | ND | 108.9 | ND | 103.0 | 106.3 | 78.0 | 137.0 | 3.2 | 36.0 | | | | | |
| cis-1,2-dichloroethene | 0.25 | ND | 20.99 | ND | 19927.18 | 20795.29 | 20000.0 | ND | 105.0 | ND | 99.6 | 104.0 | 80.0 | 122.0 | 4.3 | 22.0 | | | | | |
| chloroform | 0.13 | ND | 20.54 | ND | 19919.40 | 20696.15 | 20000.0 | ND | 102.7 | ND | 99.6 | 103.5 | 80.0 | 125.0 | 3.8 | 22.0 | | | | | |
| bromochloromethane | 0.20 | ND | 21.89 | ND | 21404.85 | 21858.09 | 20000.0 | ND | 109.5 | ND | 107.0 | 109.3 | 80.0 | 130.0 | 2.1 | 29.0 | | | | | |
| 1,1,1-trichloroethane | 0.25 | ND | 21.28 | ND | 20192.52 | 20770.46 | 20000.0 | ND | 106.4 | ND | 101.0 | 103.9 | 80.0 | 135.0 | 2.8 | 29.0 | | | | | |
| 1,1-dichloropropene | 0.25 | ND | 19.93 | ND | 18952.88 | 19791.72 | 20000.0 | ND | 99.7 | ND | 94.8 | 99.0 | 80.0 | 154.0 | 4.3 | 33.0 | | | | | |
| carbon tetrachloride | 0.25 | ND | 21.48 | ND | 20576.22 | 21276.40 | 20000.0 | ND | 107.4 | ND | 102.9 | 106.4 | 80.0 | 140.0 | 3.3 | 34.0 | | | | | |
| 1,2-dichloroethane | 0.25 | ND | 20.19 | ND | 19488.51 | 19355.81 | 20000.0 | ND | 101.0 | ND | 97.4 | 96.8 | 81.0 | 136.0 | 0.7 | 34.0 | | | | | |
| benzene | 0.13 | ND | 20.22 | ND | 19741.41 | 20192.08 | 20000.0 | ND | 101.1 | ND | 98.7 | 101.0 | 80.0 | 123.0 | 2.3 | 24.0 | | | | | |
| trichloroethene | 0.25 | ND | 20.65 | ND | 19543.01 | 20065.98 | 20000.0 | ND | 103.3 | ND | 97.7 | 100.3 | 80.0 | 125.0 | 2.6 | 22.0 | | | | | |
| 1,2-dichloropropane | 0.25 | ND | 19.94 | ND | 19319.39 | 20002.12 | 20000.0 | ND | 99.7 | ND | 96.6 | 100.0 | 80.0 | 128.0 | 3.5 | 28.0 | | | | | |
| bromodichloromethane | 0.25 | ND | 21.59 | ND | 20824.24 | 21098.52 | 20000.0 | ND | 108.0 | ND | 104.1 | 105.5 | 80.0 | 132.0 | 1.3 | 25.0 | | | | | |
| dibromomethane | 0.25 | ND | 21.30 | ND | 20539.23 | 20946.50 | 20000.0 | ND | 106.5 | ND | 102.7 | 104.7 | 80.0 | 127.0 | 2.0 | 27.0 | | | | | |
| 2-chloroethylvinyl ether | 10.00 | ND | 20.21 | ND | 19348.73 | 20102.78 | 20000.0 | ND | 101.1 | ND | 96.7 | 100.5 | 10.0 | 294.0 | 3.8 | 246.0 | | | | | |
| 4-methyl-2-pentanone | 2.50 | ND | 19.83 | ND | 19386.36 | 19676.48 | 20000.0 | ND | 99.2 | ND | 96.9 | 98.4 | 63.1 | 132.0 | 1.5 | 52.0 | | | | | |
| cis-1,3-dichloropropene | 0.25 | ND | 21.42 | ND | 20548.95 | 21338.96 | 20000.0 | ND | 107.1 | ND | 102.7 | 106.7 | 80.0 | 139.0 | 3.8 | 26.0 | | | | | |
| toluene | 0.25 | ND | 20.38 | 169.07 | 19368.09 | 20681.18 | 20000.0 | ND | 101.9 | 169.07 | 96.0 | 102.6 | 80.0 | 128.0 | 6.6 | 29.0 | | | | | |
| trans-1,3-dichloropropene | 0.50 | ND | 21.54 | ND | 20566.51 | 21329.34 | 20000.0 | ND | 107.7 | ND | 102.8 | 106.6 | 80.0 | 126.0 | 3.6 | 26.0 | | | | | |
| 1,1,2-trichloroethane | 0.13 | ND | 20.68 | ND | 19593.20 | 20707.35 | 20000.0 | ND | 103.4 | ND | 98.0 | 103.5 | 73.0 | 128.0 | 5.5 | 34.0 | | | | | |
| 2-hexanone | 2.50 | ND | 18.34 | ND | 17376.26 | 19015.69 | 20000.0 | ND | 91.7 | ND | 86.9 | 95.1 | 56.0 | 135.0 | 9.0 | 48.0 | | | | | |
| 1,3-dichloropropane | 0.20 | ND | 20.37 | ND | 18933.13 | 19976.65 | 20000.0 | ND | 101.9 | ND | 94.7 | 99.9 | 80.0 | 126.0 | 5.4 | 27.0 | | | | | |
| tetrachloroethene | 0.25 | ND | 20.62 | ND | 19190.07 | 20566.44 | 20000.0 | ND | 103.1 | ND | 96.0 | 102.8 | 80.0 | 126.0 | 6.9 | 27.0 | | | | | |
| dibromochloromethane | 0.25 | ND | 20.65 | ND | 19780.64 | 20263.63 | 20000.0 | ND | 103.3 | ND | 98.9 | 101.3 | 80.0 | 133.0 | 2.4 | 29.0 | | | | | |
| 1,2-dibromoethane | 0.25 | ND | 20.53 | ND | 19912.02 | 20293.03 | 20000.0 | ND | 102.7 | ND | 99.6 | 101.5 | 26.0 | 187.0 | 1.9 | 99.0 | | | | | |
| 1-chlorohexane | 0.13 | ND | 20.11 | ND | 19746.21 | 20946.71 | 20000.0 | ND | 100.6 | ND | 98.7 | 104.7 | 80.0 | 133.0 | 5.9 | 31.0 | | | | | |
| chlorobenzene | 0.13 | ND | 20.36 | ND | 19402.83 | 20213.08 | 20000.0 | ND | 101.8 | ND | 97.0 | 101.1 | 80.0 | 120.0 | 4.1 | 21.0 | | | | | |
| 1,1,1,2-tetrachloroethane | 0.25 | ND | 21.29 | ND | 20138.38 | 20876.28 | 20000.0 | ND | 106.5 | ND | 100.7 | 104.4 | 80.0 | 130.0 | 3.6 | 27.0 | | | | | |
| ethylbenzene | 0.25 | ND | 20.38 | ND | 19247.96 | 20468.49 | 20000.0 | ND | 101.9 | ND | 96.2 | 102.3 | 80.0 | 121.0 | 6.1 | 22.0 | | | | | |
| m+p-xylene | 0.50 | ND | 40.12 | ND | 37692.77 | 39522.60 | 40000.0 | ND | 100.3 | ND | 94.2 | 98.8 | 80.0 | 124.0 | 4.7 | 52.0 | | | | | |
| o-xylene | 0.25 | ND | 20.38 | ND | 19668.40 | 20575.00 | 20000.0 | ND | 101.9 | ND | 98.3 | 102.9 | 80.0 | 120.0 | 4.5 | 18.0 | | | | | |
| styrene | 0.13 | ND | 20.43 | ND | 19511.32 | 20424.16 | 20000.0 | ND | 102.2 | ND | 97.6 | 102.1 | 80.0 | 121.0 | 4.6 | 20.0 | | | | | |
| bromoform | 0.54 | ND | 21.17 | ND | 19978.28 | 20580.88 | 20000.0 | ND | 105.9 | ND | 99.9 | 102.9 | 75.0 | 132.0 | 3.0 | 34.0 | | | | | |
| isopropylbenzene | 0.25 | ND | 19.65 | ND | 18621.73 | 19666.39 | 20000.0 | ND | 98.3 | ND | 93.1 | 98.3 | 80.0 | 121.0 | 5.5 | 24.0 | | | | | |
| 1,1,2,2-tetrachloroethane | 0.13 | ND | 20.81 | ND | 20111.45 | 20924.43 | 20000.0 | ND | 104.1 | ND | 100.6 | 104.6 | 73.0 | 128.0 | 4.0 | 34.0 | | | | | |
| 1,2,3-trichloropropane | 0.75 | ND | 20.44 | ND | 19252.52 | 20221.88 | 20000.0 | ND | 102.2 | ND | 96.3 | 101.1 | 78.0 | 130.0 | 4.9 | 32.0 | | | | | |
| propyl-benzene | 0.13 | ND | 20.16 | ND | 19350.41 | 19804.21 | 20000.0 | ND | 100.8 | ND | 96.8 | 99.0 | 79.0 | 127.0 | 2.3 | 29.0 | | | | | |
| bromobenzene | 0.13 | ND | 19.98 | ND | 18938.42 | 19436.17 | 20000.0 | ND | 99.9 | ND | 94.7 | 97.2 | 80.0 | 120.0 | 2.6 | 22.0 | | | | | |
| 1,3,5-trimethylbenzene | 0.25 | ND | 20.00 | ND | 19237.60 | 19483.21 | 20000.0 | ND | 100.0 | ND | 96.2 | 97.4 | 80.0 | 122.0 | 1.3 | 25.0 | | | | | |
| 2-chlorotoluene | 0.13 | ND | 19.43 | ND | 20828.43 | 19058.59 | 20000.0 | ND | 97.2 | ND | 104.1 | 95.3 | 53.0 | 164.0 | 8.9 | 62.0 | | | | | |
| 4-chlorotoluene | 0.25 | ND | 19.81 | ND | 18494.75 | 19945.92 | 20000.0 | ND | 99.1 | ND | 92.5 | 99.7 | 42.0 | 163.0 | 7.6 | 74.0 | | | | | |
| tert-butyl-benzene | 0.25 | ND | 19.23 | ND | 18476.53 | 19239.57 | 20000.0 | ND | 96.2 | ND | 92.4 | 96.2 | 76.0 | 132.0 | 4.0 | 34.0 | | | | | |
| 1,2,4-trimethylbenzene | 0.25 | ND | 19.18 | ND | 18652.79 | 19035.25 | 20000.0 | ND | 95.9 | ND | 93.3 | 95.2 | 80.0 | 128.0 | 2.0 | 27.0 | | | | | |
| sec-butyl-benzene | 0.25 | ND | 18.92 | ND | 18351.12 | 18824.02 | 20000.0 | ND | 94.6 | ND | 91.8 | 94.1 | 73.0 | 126.0 | 2.5 | 33.0 | | | | | |
| p-isopropyl-toluene | 0.25 | ND | 18.72 | ND | 18169.76 | 18536.77 | 20000.0 | ND | 93.6 | ND | 90.8 | 92.7 | 77.0 | 124.0 | 2.0 | 29.0 | | | | | |
| 1,3-dichlorobenzene | 0.25 | ND | 19.70 | ND | 18962.91 | 19560.30 | 20000.0 | ND | 98.5 | ND | 94.8 | 97.8 | 80.0 | 120.0 | 3.1 | 22.0 | | | | | |
| 1,4-dichlorobenzene | 0.13 | ND | 19.41 | ND | 18700.70 | 19283.26 | 20000.0 | ND | 97.1 | ND | 93.5 | 96.4 | 80.0 | 120.0 | 3.1 | 18.0 | | | | | |
| n-butyl-benzene | 0.25 | ND | 19.63 | ND | 18760.47 | 19604.87 | 20000.0 | ND | 98.2 | ND | 93.8 | 98.0 | 73.0 | 136.0 | 4.4 | 39.0 | | | | | |
| 1,2-dichlorobenzene | 0.13 | ND | 20.12 | ND | 19435.44 | 19762.88 | 20000.0 | ND | 100.6 | ND | 97.2 | 98.8 | 80.0 | 120.0 | 1.7 | 20.0 | | | | | |
| 1,2-dibromo-3-chloropropane | 1.00 | ND | 20.90 | ND | 19874.33 | 19983.80 | 20000.0 | ND | 104.5 | ND | 99.4 | 99.9 | 22.0 | 178.0 | 0.5 | 96.0 | | | | | |
| 1,2,4-trichlorobenzene | 0.20 | ND | 20.42 | ND | 19651.38 | 20161.36 | 20000.0 | ND | 102.1 | ND | 98.3 | 100.8 | 75.0 | 126.0 | 2.6 | 31.0 | | | | | |
| hexachlorobutadiene | 0.25 | ND | 18.29 | ND | 17403.60 | 18106.80 | 20000.0 | ND | 91.5 | ND | 87.0 | 90.5 | 68.0 | 126.0 | 4.0 | 36.0 | | | | | |
| naphthalene | 0.20 | ND | 21.55 | ND | 20477.14 | 21036.79 | 20000.0 | ND | 107.8 | ND | 102.4 | 105.2 | 57.0 | 138.0 | 2.7 | 50.0 | | | | | |
| 1,2,3-trichlorobenzene | 0.13 | ND | 21.95 | ND | 21092.24 | 21508.03 | 20000.0 | ND | 109.8 | ND | 105.5 | 107.5 | 66.0 | 130.0 | 2.0 | 39.0 | | | | | |
| Surrogates | | | | | | | | | | | | | | | | | | | | | |
| dibromofluoromethane | | 26.07 | 26.21 | 25.97 | 26.07 | 25.96 | 25.0 | 104.3 | 104.8 | 103.9 | 104.3 | 103.8 | 86 | 118 | | | | | | | |
| 1,2-dichloroethane-d4 | | 24.37 | 24.42 | 24.31 | 24.21 | 24.32 | 25.0 | 97.5 | 97.7 | 97.2 | 96.8 | 97.3 | 80 | 120 | | | | | | | |
| toluene-d8 | | 26.34 | 26.41 | 26.33 | 26.29 | 26.68 | 25.0 | 105.4 | 105.6 | 105.3 | 105.2 | 106.7 | 88 | 110 | | | | | | | |
| p-bromofluorobenzene | | 25.90 | 26.16 | 26.29 | 26.22 | 26.40 | 25.0 | 103.6 | 104.6 | 105.2 | 104.9 | 105.6 | 86 | 115 | | | | | | | |

**Notes and Definitions:**

RDL= Reporting Detection Limit
LCS= Laboratory Control Sample
MS/MSD= Matrix Spike / Matrix Spike Duplicate
LCL= Lower Control Limit
UCL= Upper Control Limit
ND= Not Detected
NS=Not spiked
NA=Not applicable
RPD= Relative Percent Difference
H=Above control limit
L=Below control limit
DF=Dilution Factor

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

## 03/12/2001

---

ABW - ANGELA B. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
AMT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CBN - CHARLES B. NOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIE - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
*HD - HEATH DENNIS*
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITHERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JMW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LBM - LAWRENCE B. MCSWEGAN
LKN - LINDA K. NEDEFF
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRIMES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PML - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RLW - RON L. WATSON
RSH - RENEE S. HENNES
RSS - REGINA S. SIMMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
*SAM - SAMUAL A. MILLS*
SJK - SINDY J. KINNEY
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HOEFLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
# List of Valid Qualifiers
# December 15, 2000

## *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| * | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

## *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| **J** | The analyte was positively identified, the quantitation is an estimation |
| **U** | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| **F** | The analyte was positively identified but the associated numerical value is below the RL |
| **R** | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| **B** | The analyte was found in an associated blank, as well as in the sample |
| **M** | The matrix effect was present |
| **S** | To be applied to all field screening data |
| **T** | Tentatively identified compound (using GC/MS) |

# DAIMLERCHRYSLER — Chain-of-Custody

0081 B

Offsite drilling

| | | |
|---|---|---|
| ~~Lancaster Laboratories~~ Kemron | Project Name: Dayton Thermal Products | Consultant: Leggette Brashears + Graham, Inc. |
| ~~2425 New Holland Pike~~ 109 Starlite Park | Site Location: 1600 Webster St. Dayton OH 45414 | Address: 1210 W. Cnty Rd E Suite 700 |
| ~~Lancaster, PA 17601~~ Marietta OH 45750 | Site Code: SC001 | St. Paul MN 55112 |
| Phone Number: ~~(717) 656-2300~~ 740 373 4071 | RFA Number: YGQP2001209 (209C) | Consultant PM Ken Vogel |
| Fax Number: ~~(717) 656-2681~~ | DaimlerChrysler PM: Gary Stanczuk | Phone: 651-490-1405 Fax: 651-490-1006 |

**Turn-around Time Request: (circle)**
- 24 calendar hrs.
- 48 calendar hrs.
- 7 calendar days
- 14 calendar days

**Data Package Deliverables: (circle)**
- DaimlerChrysler Level 1
- DaimlerChrysler Level 2
- CLP

**Matrix Codes**
S - Soil; SW - Surface Water; GW - Groundwater; A - Air; Sed. - Sediment; O - Other (specify)

*Are aqueous samples field filtered for metals? Yes No*

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 5030B/5035/8260B | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0015 | 3/23/01 | 1410 | G | O | 2 | X | | | | | | | | 1000 gallons water from south white poly tank. Drilling + well development water from offsite wells. |

Clr Sealed Siphontact

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sampler(s): Mike Plant | Cooler ID # — | | | Samples Relinquished under Airbill No. 824181891804 | | | Temperature (corrected) 4 °C |
| | Relinquished by: [signature] | Date: 3/23/01 | Time: 1710 | Received by: | Date: | Time: | Custody Seal Intact? Yes No (Yes) |
| Is RFA sampling complete? Yes No (No) | Relinquished by: | Date: | Time: | Received for Laboratory by: Wanda Gregory | Date: 3/24/01 | Time: 1140 | Custody Seal Intact? Yes (Yes) No |

SDG 209 C

*DaimlerChrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

Distribution: White copy: Data package Yellow: Retained by laboratory Pink: Retained by sampler

Revision No. 3
Created: July 9, 1999

# KEMRON Internal Laboratory Chain of Custody

**Work Order:** L0103525 **Client:** Compuchem **# of Samples:** 01 **Due Date:** 3/27 **Page:** ____

| Sample # | Analysis | Reason | Removed By ADT | Removed From | Moved To | Reliq. by | Ret'd By ADT | Ret'd To | Rec'd By | Reason |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 8260WT | anal | CWS 3-26-01 @ 1115 | V-1 | VOA | JKW | aus 3-30-01 1510 | Archive | Big | Archive |
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CRF #3

| KEMRON Environmental Services | SAMPLES RECEIPT FORM #1 | Marietta Laboratory |
|---|---|---|

| CLIENT: | DATE: | SHIPPED BY: |
|---|---|---|
| Compuchem<br>(BRG) ARS Other _____ | 3-24-01 | (✓) FED-EX ( ) AIRBORNE<br>( ) UPS ( ) EMERY<br>( ) RPS ( ) US MAIL<br>( ) KEMRON ( ) CLIENT |

| COOLER ID: Med. Igloo | COOLER ID: | COOLER ID: |
|---|---|---|
| INDEX # : 8241 8189 1804 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY (✓) YES ( ) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) (D) 4 °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL (✓) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) (✓) YES ( ) NO<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|
| | | |

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: Dave Strand
Ken Vogel
FAX: (651) 490-1806
DATE: 3/29/01

FROM: CATHY DOVER X4089
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 4

COMMENTS:

Results for "WL0015" from Kemron

South Poly Tank 1st sample

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
**Phone: (740) 373-4071**

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103525
Report Date: 03/27/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/24/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103525-01 | WL0015 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

**Certified By**
**David L. Bumgarner**

03/29/01 16:09 FAX 919 379 4070 COMPUCHEM

003

ogin #L0103525
arch 27, 2001 01:30 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103525-01
Client Sample ID: WL0015
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0081/

Sample Weight: N/A
Extract Volume: N/A

Date Collected: 03/23/01

% Solid: N/A

CLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/26/01 Time: 16:13

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42967

Method: 8260B\5030
Run ID: R118988
Batch : WG94489

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

. = Reporting Limit

KEMRON ENVIRONMENTAL SERVICES



**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103525-01
Client Sample ID: WL0015
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0081/
Date Collected: 03/23/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/26/01 Time: 16:13

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42967

Method: 8260B\5030
Run ID: R118988
Batch : WG94489

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 120 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 103 | ( 75 - 125%) |
| 1,2-Dichloroethane-d4 | 99.8 | ( 62 - 139%) |
| Toluene-d8 | 104 | ( 75 - 125%) |
| 4-Bromofluorobenzene | 104 | ( 75 - 125%) |

= Reporting Limit



03/29/01 16:09 FAX 919 379 4070 COMPUCHEM

# DAIMLERCHRYSLER — Chain-of-Custody

0081 B

Offsite drilling

| | | |
|---|---|---|
| ~~Lancaster Laboratories~~ Kemron<br>~~2425 New Holland Pike~~ 109 Starlite Park<br>~~Lancaster, PA 17601~~ Marietta OH 45750<br>Phone Number: ~~(717) 656-2300~~ 740 373 4071<br>Fax Number: ~~(717) 656-2681~~ | Project Name: Dayton Thermal Products<br>Site Location: 1608 Webster St. Dayton OH 45414<br>Site Code: SC001<br>RFA Number: YGQP2001209 (209C)<br>DaimlerChrysler PM: Gary Stancenk | Consultant: Leggette Brashears + Graham, Inc.<br>Address: 1210 W. County Rd E Suite 700<br>St. Paul MN 55112<br>Consultant PM Ken Vogel<br>Phone: 651-490-1405 Fax: 651-490-1006 |

**Turn-around Time Request: (circle)**
- 24 calendar hrs.
- 48 calendar hrs.
- 7 calendar days
- 14 calendar days

**Data Package Deliverables: (circle)**
- DaimlerChrysler Level 1
- DaimlerChrysler Level 2
- CLP

**Matrix Codes**
S - Soil; SW - Surface Water; GW - Groundwater; A - Air; Sed. - Sediment; O - Other (specify) ____

*Are aqueous samples field filtered for metals? Yes (No)*

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 8260B/5035 | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0015 | 3/23/01 | 1410 | G | O | 2 | X | | | | | | | | 1000 gallons water from south white poly tank. Drilling + well development water from offsite wells. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sampler(s): Mike Plant | Cooler ID # ____ | | | Samples Relinquished under Airbill No. 824181891804 | | | Temperature (corrected) ___ C |
| | Relinquished by: [signature] | Date: 3/23/01 | Time: 1710 | Received by: | Date: | Time: | Custody Seal Intact? Yes No |
| Is RFA sampling complete? Yes (No) | Relinquished by: | Date: | Time: | Received for Laboratory by: | Date: | Time: | Custody Seal Intact? Yes No |

SDG 209 C

*DaimlerChrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

Distribution: White copy: Data package Yellow: Retained by laboratory Pink: Retained by sampler

Revision No. 1

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006


**DATE**: March 30, 2001

**PAGES:** 6
**(Includes cover page)**

✓ **TO:** Mike Plante
**COMPANY:** LBG
**FAX #:** 937-278-0146
**PHONE #:** 937-278-4871

✓ **TO:** Mike Webb
**COMPANY:** ONYX
**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

✓ **TO:** Gary Stanczuk
**COMPANY:** DC Corporate
**FAX #:** 248-576-7369
**PHONE #:** 248-576-7365

✓ **TO:** Britt Crider
**COMPANY:** DC Dayton Thermal
**FAX #:** 937-224-2915
**PHONE #:** 937-224-2532

**FROM:** Dave Strand/Ken Vogel

RE: Offsite drilling water disposal analytical results.

Here are the analytical results for the 1,000 gallon SOUTH poly tank (sample WL0015). There was only one positive detection:

| Sample # | Trichloroethene |
|---|---|
| WL0015 | 120 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.

We would like to get rid of this water possibly today or Monday (April 2) if possible.

**fax** TRANSMITTAL S:\TECH\3CHAY\DAYTON\ANALYTIC\WATER\WASTE#2.FAX

**DATE:** March 30, 2001

**PAGES:** 6
**(Includes cover page)**

**TO:** Mike Plante
**COMPANY:** LBG
**FAX #:** 937-278-0146
**PHONE #:** 937-278-4871

---

**TO:** Mike Webb
**COMPANY:** ONYX
**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

---

**TO:** Gary Stanczuk
**COMPANY:** DC Corporate
**FAX #:** 248-576-7369
**PHONE #:** 248-576-7365

---

**TO:** Britt Crider
**COMPANY:** DC Dayton Thermal
**FAX #:** 937-224-2915
**PHONE #:** 937-224-2532

---

**FROM:** Dave Strand/Ken Vogel

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Refaxed

**fax** TRANSMITTAL S:\TECH\ECHAY\DAYTON\ANALYTIC\WATER\WASTE#2.FAX

03/30/2001 07:32 FAX

```
TX FUNCTION WAS NOT COMPLETED

TX/RX NO                0857
CONNECTION TEL                  19372373669
SUBADDRESS
CONNECTION ID
ST. TIME                03/30 07:31
USAGE T                 00'00
PGS. SENT                  0
RESULT                  NG        #018  BUSY/NO SIGNAL

*************************
***   ERROR TX REPORT   ***
*************************
```

001

(Includes cover page)

| | |
|---|---|
| ✓ **TO:** Mike Plante<br>**COMPANY:** LBG | **FAX #:** 937-278-0146<br>**PHONE #:** 937-278-4871 |
| ✓ **TO:** Mike Webb<br>**COMPANY:** ONYX | **FAX #:** 937-237-3669<br>**PHONE #:** 937-603-2597 |
| ✓ **TO:** Gary Stanczuk<br>**COMPANY:** DC Corporate | **FAX #:** 248-576-7369<br>**PHONE #:** 248-576-7365 |
| ✓ **TO:** Britt Crider<br>**COMPANY:** DC Dayton Thermal | **FAX #:** 937-224-2915<br>**PHONE #:** 937-224-2532 |

**FROM:** Dave Strand/Ken Vogel

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**fax** TRANSMITTAL S:\TECH\3CHAT\DAYTON\ANALYTIC\WATER\WASTE#2.FAX

TRANSMISSION OK

| | | |
|---|---|---|
| TX/RX NO | 0862 | |
| CONNECTION TEL | | 19372373669 |
| SUBADDRESS | | |
| CONNECTION ID | | |
| ST. TIME | 03/30 08:14 | |
| USAGE T | 02'20 | |
| PGS. SENT | 6 | |
| RESULT | OK | |

**********
*** TX REPORT ***
**********

(Includes cover page)

| | |
|---|---|
| **TO:** Mike Plante<br>**COMPANY:** LBG | **FAX #:** 937-278-0146<br>**PHONE #:** 937-278-4871 |
| ✓ **TO:** Mike Webb<br>**COMPANY:** ONYX | **FAX #:** 937-237-3669<br>**PHONE #:** 937-603-2597 |
| **TO:** Gary Stanczuk<br>**COMPANY:** DC Corporate | **FAX #:** 248-576-7369<br>**PHONE #:** 248-576-7365 |
| **TO:** Britt Crider<br>**COMPANY:** DC Dayton Thermal | **FAX #:** 937-224-2915<br>**PHONE #:** 937-224-2532 |

**FROM:** Dave Strand/Ken Vogel

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|---|---|
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We would like to get rid of this water possibly today or Monday (April 2) if possible.

**fax** TRANSMITTAL S:\TECH\JCHRT\DATTON\ANALYTIC\WATER\WASTE#2.FAX

TRANSMISSION OK

| | | |
|---|---|---|
| TX/RX NO | 0858 | |
| CONNECTION TEL | | 19372242915 |
| SUBADDRESS | | |
| CONNECTION ID | | |
| ST. TIME | 03/30 07:27 | |
| USAGE T | 01'47 | |
| PGS. SENT | 6 | |
| RESULT | OK | |

**********
*** TX REPORT ***
**********

03/30/2001 07:29 FAX 001

(Includes cover page)

| | |
|---|---|
| **TO:** Mike Plante<br>**COMPANY:** LBG | **FAX #:** 937-278-0146<br>**PHONE #:** 937-278-4871 |
| ✓ **TO:** Mike Webb<br>**COMPANY:** ONYX | **FAX #:** 937-237-3669<br>**PHONE #:** 937-603-2597 |
| **TO:** Gary Stanczuk<br>**COMPANY:** DC Corporate | **FAX #:** 248-576-7369<br>**PHONE #:** 248-576-7365 |
| ✓ **TO:** Britt Crider<br>**COMPANY:** DC Dayton Thermal | **FAX #:** 937-224-2915<br>**PHONE #:** 937-224-2532 |

**FROM:** Dave Strand/Ken Vogel

RE: Offsite drilling water disposal analytical results.

Here are the analytical results for the 1,000 gallon SOUTH poly tank (sample WL0015). There was only one positive detection:

| Sample # | Trichloroethene |
|---|---|
| WL0015 | 120 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.

We would like to get rid of this water possibly today or Monday (April 2) if possible.

# fax TRANSMITTAL

E:\TECH3CHRT\DAYTON\ANALYTIC\WATER\WASTE#1.FAX

```
**********************
***   TX REPORT   ***
**********************

TRANSMISSION OK

TX/RX NO              0859
CONNECTION TEL                12485767369
SUBADDRESS
CONNECTION ID
ST. TIME              03/30 07:29
USAGE T               01'49
PGS. SENT                   6
RESULT                     OK
```

(Includes cover page)

| | |
|---|---|
| **TO:** Mike Plante<br>**COMPANY:** LBG | **FAX #:** 937-278-0146<br>**PHONE #:** 937-278-4871 |
| ✓ **TO:** Mike Webb<br>**COMPANY:** ONYX | **FAX #:** 937-237-3669<br>**PHONE #:** 937-603-2597 |
| ✓ **TO:** Gary Stanczuk<br>**COMPANY:** DC Corporate | **FAX #:** 248-576-7369<br>**PHONE #:** 248-576-7365 |
| ✓ **TO:** Britt Crider<br>**COMPANY:** DC Dayton Thermal | **FAX #:** 937-224-2915<br>**PHONE #:** 937-224-2532 |

**FROM:** Dave Strand/Ken Vogel

RE: Offsite drilling water disposal analytical results.

Here are the analytical results for the 1,000 gallon SOUTH poly tank (sample WL0015). There was only one positive detection:

| Sample # | Trichloroethene |
|---|---|
| WL0015 | 120 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.

We would like to get rid of this water possibly today or Monday (April 2) if possible.

# fax TRANSMITTAL

S:\TECH\JCHRT\DAYTON\ANALYTIC\WATER\WASTE#2.FAX

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0860 |
| CONNECTION TEL | 19372780146 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 03/30 07:33 |
| USAGE T | 01'46 |
| PGS. SENT | 6 |
| RESULT | OK |

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: Dave Strand
Ken Vogel
FAX: (651) 490-1806
DATE: 3/29/01

FROM: CATHY DOVER X4089
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 4

COMMENTS:

Results for "WL0015" from Kemron

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006


**DATE:** March 30, 2001

**PAGES:** 6
**(Includes cover page)**

**TO:** Mike Plante
**COMPANY:** LBG
**FAX #:** 937-278-0146
**PHONE #:** 937-278-4871

✓ **TO:** Mike Webb
**COMPANY:** ONYX
**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

✓ **TO:** Gary Stanczuk
**COMPANY:** DC Corporate
**FAX #:** 248-576-7369
**PHONE #:** 248-576-7365

✓ **TO:** Britt Crider
**COMPANY:** DC Dayton Thermal
**FAX #:** 937-224-2915
**PHONE #:** 937-224-2532

**FROM:** Dave Strand/Ken Vogel

RE: Offsite drilling water disposal analytical results.

Here are the analytical results for the 1,000 gallon SOUTH poly tank (sample WL0015). There was only one positive detection:

| Sample # | Trichloroethene |
|---|---|
| WL0015 | 120 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.

We would like to get rid of this water possibly today or Monday (April 2) if possible.

**fax** TRANSMITTAL

# DAIMLERCHRYSLER — Chain-of-Custody

0081 B

Offsite drilling

| | | |
|---|---|---|
| ~~Lancaster Laboratories~~ Kemron<br>~~2425 New Holland Pike~~ 109 Starlite Park<br>~~Lancaster PA 17601~~ Marietta OH 45750<br>Phone Number: ~~(717) 656-2300~~ 740 373 4071<br>Fax Number: ~~(717) 656-2681~~ | Project Name: Dayton Thermal Products<br>Site Location: 1608 Webster St. Dayton OH 45414<br>Site Code: 5C001<br>RFA Number: PGQP2001209 (209C)<br>DaimlerChrysler PM: Gary Stancuk | Consultant: Leggette Brashears + Graham, Inc.<br>Address: 1210 W. County Rd E Suite 100<br>St. Paul MN 55112<br>Consultant PM: Ken Vogel<br>Phone: 651-490-1405 Fax: 651-490-1006 |

| Turn-around Time Request: (circle) | Data Package Deliverables: (circle) | Compound List-Parameter/Method/Bottle Type/Preservative | Matrix Codes |
|---|---|---|---|
| 24 calendar hrs.<br>48 calendar hrs.<br>7 calendar days<br>14 calendar days | DaimlerChrysler Level 1<br>DaimlerChrysler Level 2<br>CLP | | S - Soil; SW - Surface Water<br>GW - Groundwater; A - Air<br>Sed. - Sediment<br>O - Other (specify)<br>Are aqueous samples field filtered for metals? Yes No |

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 8260B/5035/8260B | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0015 | 3/23/01 | 1410 | G | O | 2 | X | | | | | | | | 1000 gallons water from south white poly tank. Drilling + well development water from offsite wells. |

| Sampler(s) | Cooler ID # | Samples Relinquished under Airbill No. | Temperature (corrected) ___ C |
|---|---|---|---|
| Mike Plant | — | 824181891804 | |

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| [signature] | 3/23/01 | 1710 | | | | Yes No |

| Is RFA sampling complete? | Relinquished by: | Date: | Time: | Received for Laboratory by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|---|
| Yes No | | | | | | | Yes No |

SDG 209 C

*DaimlerChrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

Distribution: White copy: Data package Yellow: Retained by laboratory Pink: Retained by sampler

Revision No. 1

15:27 MAR 28. 2001 ID: KEMRON TEL NO: 3/9-4835

gin #L0103525
rch 27, 2001 01:30 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103525-01
Client Sample ID: WL0015
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0081/
Date Collected: 03/23/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

CLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/26/01 Time: 16:13

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42967

Method: 82608\5030
Run ID: R118988
Batch : WG94489

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 120 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 103 | ( 75 - 125%) |
| 1,2-Dichloroethane-d4 | 99.8 | ( 62 - 139%) |
| Toluene-d8 | 104 | ( 75 - 125%) |
| 4-Bromofluorobenzene | 104 | ( 75 - 125%) |

= Reporting Limit

gin #L0103525
rch 27, 2001 01:30 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0103525-01
Client Sample ID: WL0015
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0081/

Date Collected: 03/23/01

Sample Weight: N/A
Extract Volume: N/A

% Solid: N/A

CLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 03/26/01 Time: 16:13

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M42967

Method: 8260B\5030
Run ID: R118988
Batch : WG94489

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

= Reporting Limit

# TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0103525
Report Date: 03/27/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/24/01

## SAMPLE IDENTIFICATION

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0103525-01 | WL0015 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By
David L. Bungarner

## Dave Strand

**From:** Cathy Dover [cdover@compuchemlabs.com]
**Sent:** Thursday, March 29, 2001 2:17 PM
**To:** Dave Strand
**Subject:** Re: SDG 209C

THANKS DAVE!!

Cathy
----- Original Message -----
From: Dave Strand <dstran@lbgmn.com>
To: 'Cathy Dover' <cdover@compuchemlabs.com>; Dave Strand
<dstran@lbgmn.com>
Cc: Ken Vogel <KVogel@lbgmn.com>
Sent: Thursday, March 29, 2001 3:15 PM
Subject: RE: SDG 209C

> We will be sending in samples to Kemron tomorrow for Saturday
delivery.
> This should entail 3 soils (14-day) and one water (24-hour). Our
field
> people are now aware to fax you chain of custodies when samples are
sent.
> Thanks for the info.
>
> David V. Strand, PG
> Senior Hydrogeologist
> Leggette, Brashears & Graham, Inc.
> 1210 West County Road E, Suite 700
> St. Paul, MN 55112
> (651) 490-1405 ext. 223
> (651) 490-1006 fax
> email: dstran@lbgmn.com
> www.lbgweb.com
>
>
> -----Original Message-----
> From: Cathy Dover [mailto:cdover@compuchemlabs.com]
> Sent: Thursday, March 29, 2001 2:05 PM
> To: Dave Strand
> Cc: Ken Vogel
> Subject: Fw: SDG 209C
>
>
> Dave/Ken,
>
> Kenny forwarded your e-mail to me. He is now out of the loop for
"Chrysler"
> related projects. If you have to get in touch with anyone here at
> CompuChem---I am the one. Oh! The results for "WL0015" are being
faxed
now.
> I did not know this sample was at Kemron until last night when they
faxed
me
> a receipt verification form. Could someone in the field fax me a COC
when
> samples are shipped to Kemron? Then I could keep tabs on the TAT of

the
> samples.
>
> Thanks,
>
> Cathy
> ----- Original Message -----
> From: Kenny McDaniel <kmcdaniel@compuchemlabs.com>
> To: Cathy Dover <cdover@compuchemlabs.com>
> Sent: Thursday, March 29, 2001 2:47 PM
> Subject: Fw: SDG 209C
>
>
> >
> > ----- Original Message -----
> > From: Dave Strand <dstran@lbgmn.com>
> > To: Kenny McDaniel (E-mail) <kmcdaniel@compuchemlabs.com>
> > Cc: Ken Vogel <KVogel@lbgmn.com>
> > Sent: Thursday, March 29, 2001 2:03 PM
> > Subject: SDG 209C
> >
> >
> > > Need 24-hour TAT results for WL0015 collected at the
DaimlerChrysler
> > Dayton
> > > Thermal plant and analyzed by KEMRON.
> > >
> > > David V. Strand, PG
> > > Senior Hydrogeologist
> > > Leggette, Brashears & Graham, Inc.
> > > 1210 West County Road E, Suite 700
> > > St. Paul, MN 55112
> > > (651) 490-1405 ext. 223
> > > (651) 490-1006 fax
> > > email: dstran@lbgmn.com
> > > www.lbgweb.com
> > >
> > >
> >
> >
>

MAY -4 2001

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104001
Report Date: 04/06/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/31/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104001-01 | WL0016 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By
**David L. Bumgarner**

KEMRON
ENVIRONMENTAL SERVICES

**KEMRON ENVIRONMENTAL SERVICES**
**REPORT NARRATIVE**

**L0104001**

**CHAIN OF CUSTODY:**

The chain of custody number was 0266.

**SHIPMENT CONDITIONS:**

The chain of custody was received sealed in the cooler. The cooler temperature was 4° C.

**SAMPLE MANAGEMENT:**

All samples were received intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Melissa Grimes DATE: 4-2-01

# REPORT NARRATIVE
# GC/MS VOLATILE ORGANICS

**KEMRON Login No: L0104001**

**METHOD**

**Preparation**: SW- 846 5030B
**Analysis:** SW-846 8260B

**HOLDING TIMES**

**Sample Preparation**: All holding times were met.
**Sample Analysis**: All holding times were met.

**PREPARATION**

Sample preparation proceeded normally.

**CALIBRATION**

**Initial calibrations**: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

**Alternate Source Standards:** All acceptance criteria were met.

**Continuing Calibration and Tune**: All acceptance criteria were met.

**BATCH QA/QC**

**Method Blank**: All acceptance criteria were met.

**Laboratory Control Samples**: All acceptance criteria were met.

**Matrix Spikes**: The MS/MSD results were not associated with this sample delivery group.

**SAMPLES**

**Internal Standards**: All acceptance criteria were met.

**Surrogates**: All acceptance criteria were met.

**Samples:** All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: CMS REVIEWED: Stephanie L Lyle DATE: 4/13/01

Login #L0104001
April 6, 2001 09:55 am

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43082.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 6.4 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104001
April 6, 2001 09:55 am

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43082.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 13 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 110 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 108 | ( 80 - 120%) |
| Toluene-d8 | 103 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 102 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-04-001
April 6, 2001 09:55 am

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94856 | R119645 | L0104001-01 | | Water | Volatile Organics | 8260B\5030 | 29-MAR-2001 | Volatile - GC/MS |

Kemron Environmental Services -OVL

Volatile Quality Control Summary - 8260

| | | | | | |
|---|---|---|---|---|---|
| Workgroup: | WG94856 | Run Date: | 4/2/2001 | Sample Number: 03-598-02 | LCS DF: 1 |
| Method: | 8260B | Instrument: | HPMS2 | Sample Filename: 2M43088.D | Sample DF: 100 |
| Matrix: | WATER | Blank Filename: | 2M43081.D | MS Filename: 2M43089.D | MS DF: 100 |
| Units: | ug/L | LCS Filename: | 2M43080.D | MSD Filename: 2M43090.D | MSD DF: 100 |

| | | CONCENTRATION, ug/L | | | | | | PERCENT RECOVERY | | | | | | | | | OUTLIERS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MDL | Blank | LCS | Sample | MS | MSD | Spike Level | Blank | LCS | Sample | MS | MSD | LCL | UCL | MS RPD | RPD UCL | Blank | LCS | MS | MSD | RPD |
| Target Analytes | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | % | % | % | % | % | % | % | % | % | | | | | |
| dichlorodifluoromethane | 0.25 | ND | 21.78 | ND | 2178.39 | 1943.30 | 2000.0 | ND | 108.9 | ND | 108.9 | 97.2 | 34.0 | 202.0 | 11.4 | 30.0 | | | | | |
| chloromethane | 0.25 | ND | 22.90 | ND | 2259.93 | 2161.12 | 2000.0 | ND | 114.5 | ND | 113.0 | 108.1 | 44.0 | 182.0 | 4.5 | 85.0 | | | | | |
| vinyl chloride | 0.25 | ND | 21.44 | ND | 2494.24 | 2151.86 | 2000.0 | ND | 107.2 | ND | 124.7 | 107.6 | 61.0 | 164.0 | 14.7 | 63.0 | | | | | |
| bromomethane | 0.50 | ND | 23.62 | ND | 1969.72 | 2064.29 | 2000.0 | ND | 118.1 | ND | 98.5 | 103.2 | 64.2 | 140.0 | 4.7 | 58.0 | | | | | |
| chloroethane | 0.50 | ND | 20.69 | ND | 2136.85 | 2000.64 | 2000.0 | ND | 103.5 | ND | 106.8 | 100.0 | 74.0 | 148.0 | 6.6 | 47.0 | | | | | |
| trichlorofluoromethane | 0.25 | ND | 19.52 | ND | 2052.33 | 1896.40 | 2000.0 | ND | 97.6 | ND | 102.6 | 94.8 | 50.0 | 157.0 | 7.9 | 65.0 | | | | | |
| acetone | 2.50 | ND | 18.12 | ND | 1673.39 | 1286.14 | 2000.0 | ND | 90.6 | ND | 83.7 | 64.3 | 39.0 | 149.0 | 26.2 | 67.0 | | | | | |
| 1,1-dichloroethene | 0.50 | ND | 23.52 | ND | 2247.61 | 2263.82 | 2000.0 | ND | 117.6 | ND | 112.4 | 113.2 | 80.0 | 138.0 | 0.7 | 34.0 | | | | | |
| iodomethane | 0.50 | ND | 26.79 | ND | 2579.83 | 3204.01 | 20.0 | ND | 134.0 | ND | 12899.2 | 16020.1 | 10.0 | 274.0 | 21.6 | 171.0 | | | | | |
| methylene chloride | 0.25 | ND | 22.07 | ND | 2129.50 | 2086.64 | 2000.0 | ND | 110.4 | ND | 106.5 | 104.3 | 80.0 | 123.0 | 2.0 | 24.0 | | | | | |
| carbon disulfide | 0.50 | ND | 19.27 | ND | 1786.41 | 1765.00 | 2000.0 | ND | 96.4 | ND | 89.3 | 88.3 | 71.0 | 143.0 | 1.2 | 44.0 | | | | | |
| methyl-tert-butyl ether | 0.50 | ND | 21.92 | ND | 2178.81 | 1900.30 | 2000.0 | ND | 109.6 | ND | 108.9 | 95.0 | 78.0 | 140.0 | 13.7 | 38.0 | | | | | |
| trans-1,2-dichloroethene | 0.25 | ND | 22.19 | 129.57 | 2289.53 | 2225.34 | 2000.0 | ND | 111.0 | 129.57 | 108.0 | 104.8 | 80.0 | 128.0 | 2.8 | 25.0 | | | | | |
| n-hexane | 0.56 | ND | 23.21 | ND | 2178.44 | 2085.51 | 2000.0 | ND | 116.1 | ND | 108.9 | 104.3 | 68.0 | 137.0 | 4.4 | 42.0 | | | | | |
| vinyl acetate | 2.50 | ND | 11.77 | ND | 1223.44 | 1024.59 | 2000.0 | ND | 58.9 | ND | 61.2 | 51.2 | 20.0 | 196.0 | 17.7 | 108.0 | | | | | |
| 1,1-dichloroethane | 0.13 | ND | 21.34 | ND | 2153.47 | 2088.51 | 2000.0 | ND | 106.7 | ND | 107.7 | 104.4 | 80.0 | 124.0 | 3.1 | 25.0 | | | | | |
| 2-butanone | 2.50 | ND | 23.46 | ND | 2306.28 | 1751.77 | 2000.0 | ND | 117.3 | ND | 115.3 | 87.6 | 53.0 | 146.0 | 27.3 | 57.0 | | | | | |
| 2,2-dichloropropane | 0.25 | ND | 21.99 | ND | 2142.20 | 1914.94 | 2000.0 | ND | 110.0 | ND | 107.1 | 95.7 | 78.0 | 137.0 | 11.2 | 36.0 | | | | | |
| cis-1,2-dichloroethene | 0.25 | ND | 21.46 | 22117.96 | 23965.34 | 22754.12 | 2000.0 | ND | 107.3 | 22117.96 | 92.4 | 31.8 | 80.0 | 122.0 | 5.2 | 22.0 | | | | L | |
| chloroform | 0.13 | ND | 21.46 | ND | 2086.92 | 1982.72 | 2000.0 | ND | 107.3 | ND | 104.3 | 99.1 | 80.0 | 125.0 | 5.1 | 22.0 | | | | | |
| bromochloromethane | 0.20 | ND | 23.47 | ND | 2353.81 | 2155.89 | 2000.0 | ND | 117.4 | ND | 117.7 | 107.8 | 80.0 | 130.0 | 8.8 | 29.0 | | | | | |
| 1,1,1-trichloroethane | 0.25 | ND | 21.60 | ND | 2160.58 | 2039.51 | 2000.0 | ND | 108.0 | ND | 108.0 | 102.0 | 80.0 | 135.0 | 5.8 | 29.0 | | | | | |
| 1,1-dichloropropene | 0.25 | ND | 20.59 | ND | 1987.52 | 1877.79 | 2000.0 | ND | 103.0 | ND | 99.4 | 93.9 | 80.0 | 154.0 | 5.7 | 33.0 | | | | | |
| carbon tetrachloride | 0.25 | ND | 21.65 | ND | 2227.08 | 2027.35 | 2000.0 | ND | 108.3 | ND | 111.4 | 101.4 | 80.0 | 140.0 | 9.4 | 34.0 | | | | | |
| 1,2-dichloroethane | 0.25 | ND | 21.42 | ND | 2274.06 | 1959.97 | 2000.0 | ND | 107.1 | ND | 113.7 | 98.0 | 81.0 | 136.0 | 14.8 | 34.0 | | | | | |
| benzene | 0.13 | ND | 20.93 | ND | 2031.10 | 1937.72 | 2000.0 | ND | 104.7 | ND | 101.6 | 96.9 | 80.0 | 123.0 | 4.7 | 24.0 | | | | | |
| trichloroethene | 0.25 | 0.78 | 21.62 | 30289.58 | 32088.71 | 29899.77 | 2000.0 | 0.78 | 108.1 | 30289.58 | 90.0 | NA | 80.0 | 125.0 | NA | 22.0 | | | | | |
| 1,2-dichloropropane | 0.25 | ND | 21.49 | ND | 2104.85 | 1988.98 | 2000.0 | ND | 107.5 | ND | 105.2 | 99.4 | 80.0 | 128.0 | 5.7 | 28.0 | | | | | |
| bromodichloromethane | 0.25 | ND | 22.82 | ND | 2278.80 | 2057.66 | 2000.0 | ND | 114.1 | ND | 113.9 | 102.9 | 80.0 | 132.0 | 10.2 | 25.0 | | | | | |
| dibromomethane | 0.25 | ND | 23.02 | ND | 2359.90 | 2083.65 | 2000.0 | ND | 115.1 | ND | 118.0 | 104.2 | 80.0 | 127.0 | 12.4 | 27.0 | | | | | |
| 2-chloroethylvinyl ether | 10.00 | ND | 24.77 | ND | 2314.90 | 1878.08 | 2000.0 | ND | 123.9 | ND | 115.7 | 93.9 | 10.0 | 294.0 | 20.8 | 246.0 | | | | | |
| 4-methyl-2-pentanone | 2.50 | ND | 23.29 | ND | 2531.93 | 1869.79 | 2000.0 | ND | 116.5 | ND | 126.6 | 93.5 | 63.1 | 132.0 | 30.1 | 52.0 | | | | | |
| cis-1,3-dichloropropene | 0.25 | ND | 22.68 | ND | 2257.29 | 2043.37 | 2000.0 | ND | 113.4 | ND | 112.9 | 102.2 | 80.0 | 139.0 | 9.9 | 26.0 | | | | | |
| toluene | 0.25 | ND | 20.32 | ND | 1929.29 | 1931.06 | 2000.0 | ND | 101.6 | ND | 96.5 | 96.6 | 80.0 | 128.0 | 0.1 | 29.0 | | | | | |
| trans-1,3-dichloropropene | 0.50 | ND | 22.63 | ND | 2232.36 | 2029.94 | 2000.0 | ND | 113.2 | ND | 111.6 | 101.5 | 80.0 | 126.0 | 9.5 | 26.0 | | | | | |
| 1,1,2-trichloroethane | 0.13 | ND | 22.37 | ND | 2229.42 | 1997.19 | 2000.0 | ND | 111.9 | ND | 111.5 | 99.9 | 73.0 | 128.0 | 11.0 | 34.0 | | | | | |
| 2-hexanone | 2.50 | ND | 21.83 | ND | 2242.32 | 1716.69 | 2000.0 | ND | 109.2 | ND | 112.1 | 85.8 | 56.0 | 135.0 | 26.6 | 48.0 | | | | | |
| 1,3-dichloropropane | 0.20 | ND | 21.61 | ND | 2165.34 | 1929.19 | 2000.0 | ND | 108.1 | ND | 108.3 | 96.5 | 80.0 | 126.0 | 11.5 | 27.0 | | | | | |
| tetrachloroethene | 0.25 | ND | 20.12 | ND | 1953.42 | 1884.22 | 2000.0 | ND | 100.6 | ND | 97.7 | 94.2 | 80.0 | 126.0 | 3.6 | 27.0 | | | | | |
| dibromochloromethane | 0.25 | ND | 21.58 | ND | 2194.47 | 1959.44 | 2000.0 | ND | 107.9 | ND | 109.7 | 98.0 | 80.0 | 133.0 | 11.3 | 29.0 | | | | | |
| 1,2-dibromoethane | 0.25 | ND | 21.84 | ND | 2210.07 | 1997.56 | 2000.0 | ND | 109.2 | ND | 110.5 | 99.9 | 26.0 | 187.0 | 10.1 | 99.0 | | | | | |
| 1-chlorohexane | 0.13 | ND | 19.81 | ND | 1932.03 | 1871.93 | 2000.0 | ND | 99.1 | ND | 96.6 | 93.6 | 80.0 | 133.0 | 3.2 | 31.0 | | | | | |
| chlorobenzene | 0.13 | ND | 20.19 | ND | 2019.37 | 1955.25 | 2000.0 | ND | 101.0 | ND | 101.0 | 97.8 | 80.0 | 120.0 | 3.2 | 21.0 | | | | | |
| 1,1,1,2-tetrachloroethane | 0.25 | ND | 21.53 | ND | 2107.13 | 1977.72 | 2000.0 | ND | 107.7 | ND | 105.4 | 98.9 | 80.0 | 130.0 | 6.3 | 27.0 | | | | | |
| ethylbenzene | 0.25 | ND | 20.56 | ND | 1982.90 | 1926.94 | 2000.0 | ND | 102.8 | ND | 99.1 | 96.3 | 80.0 | 121.0 | 2.9 | 22.0 | | | | | |
| m+p-xylene | 0.50 | ND | 39.77 | ND | 3960.76 | 3908.01 | 4000.0 | ND | 99.4 | ND | 99.0 | 97.7 | 80.0 | 124.0 | 1.3 | 52.0 | | | | | |
| o-xylene | 0.25 | ND | 20.64 | ND | 2029.16 | 1979.20 | 2000.0 | ND | 103.2 | ND | 101.5 | 99.0 | 80.0 | 120.0 | 2.5 | 18.0 | | | | | |
| styrene | 0.13 | ND | 20.80 | ND | 2033.67 | 1952.82 | 2000.0 | ND | 104.0 | ND | 101.7 | 97.6 | 80.0 | 121.0 | 4.1 | 20.0 | | | | | |
| bromoform | 0.54 | ND | 22.66 | ND | 2378.78 | 1960.72 | 2000.0 | ND | 113.3 | ND | 118.9 | 98.0 | 75.0 | 132.0 | 19.3 | 34.0 | | | | | |
| isopropylbenzene | 0.25 | ND | 19.67 | ND | 1955.10 | 1867.98 | 2000.0 | ND | 98.4 | ND | 97.8 | 93.4 | 80.0 | 121.0 | 4.6 | 24.0 | | | | | |
| 1,1,2,2-tetrachloroethane | 0.13 | ND | 23.06 | ND | 2345.85 | 2006.38 | 2000.0 | ND | 115.3 | ND | 117.3 | 100.3 | 73.0 | 128.0 | 15.6 | 34.0 | | | | | |
| 1,2,3-trichloropropane | 0.75 | ND | 21.90 | ND | 2216.54 | 1922.09 | 2000.0 | ND | 109.5 | ND | 110.8 | 96.1 | 78.0 | 130.0 | 14.2 | 32.0 | | | | | |
| propyl-benzene | 0.13 | ND | 19.82 | ND | 1889.95 | 1908.51 | 2000.0 | ND | 99.1 | ND | 94.5 | 95.4 | 79.0 | 127.0 | 1.0 | 29.0 | | | | | |
| bromobenzene | 0.13 | ND | 20.10 | ND | 1939.15 | 1852.91 | 2000.0 | ND | 100.5 | ND | 97.0 | 92.6 | 80.0 | 120.0 | 4.5 | 22.0 | | | | | |
| 1,3,5-trimethylbenzene | 0.25 | ND | 19.63 | ND | 1886.04 | 1915.63 | 2000.0 | ND | 98.2 | ND | 94.3 | 95.8 | 80.0 | 122.0 | 1.6 | 25.0 | | | | | |
| 2-chlorotoluene | 0.13 | ND | 20.31 | ND | 2070.15 | 1836.52 | 2000.0 | ND | 101.6 | ND | 103.5 | 91.8 | 53.0 | 164.0 | 12.0 | 62.0 | | | | | |
| 4-chlorotoluene | 0.25 | ND | 18.85 | ND | 1799.42 | 1884.77 | 2000.0 | ND | 94.3 | ND | 90.0 | 94.2 | 42.0 | 163.0 | 4.6 | 74.0 | | | | | |
| tert-butyl-benzene | 0.25 | ND | 19.17 | ND | 1852.47 | 1866.72 | 2000.0 | ND | 95.9 | ND | 92.6 | 93.3 | 76.0 | 132.0 | 0.8 | 34.0 | | | | | |
| 1,2,4-trimethylbenzene | 0.25 | ND | 18.95 | ND | 1863.08 | 1850.34 | 2000.0 | ND | 94.8 | ND | 93.2 | 92.5 | 80.0 | 128.0 | 0.7 | 27.0 | | | | | |
| sec-butyl-benzene | 0.25 | ND | 18.98 | ND | 1830.09 | 1819.02 | 2000.0 | ND | 94.9 | ND | 91.5 | 91.0 | 73.0 | 126.0 | 0.6 | 33.0 | | | | | |
| p-isopropyl-toluene | 0.25 | ND | 18.96 | ND | 1838.94 | 1818.47 | 2000.0 | ND | 94.8 | ND | 91.9 | 90.9 | 77.0 | 124.0 | 1.1 | 29.0 | | | | | |
| 1,3-dichlorobenzene | 0.25 | ND | 20.02 | ND | 1941.52 | 1905.47 | 2000.0 | ND | 100.1 | ND | 97.1 | 95.3 | 80.0 | 120.0 | 1.9 | 22.0 | | | | | |
| 1,4-dichlorobenzene | 0.13 | ND | 19.81 | ND | 1920.02 | 1853.35 | 2000.0 | ND | 99.1 | ND | 96.0 | 92.7 | 80.0 | 120.0 | 3.5 | 18.0 | | | | | |
| n-butyl-benzene | 0.25 | ND | 20.14 | ND | 1932.67 | 1939.13 | 2000.0 | ND | 100.7 | ND | 96.6 | 97.0 | 73.0 | 136.0 | 0.3 | 39.0 | | | | | |
| 1,2-dichlorobenzene | 0.13 | ND | 20.77 | ND | 2060.35 | 1960.60 | 2000.0 | ND | 103.9 | ND | 103.0 | 98.0 | 80.0 | 120.0 | 5.0 | 20.0 | | | | | |
| 1,2-dibromo-3-chloropropane | 1.00 | ND | 22.71 | ND | 2430.01 | 1842.64 | 2000.0 | ND | 113.6 | ND | 121.5 | 92.1 | 22.0 | 178.0 | 27.5 | 96.0 | | | | | |
| 1,2,4-trichlorobenzene | 0.20 | ND | 21.51 | ND | 2261.52 | 1842.31 | 2000.0 | ND | 107.6 | ND | 113.1 | 92.1 | 75.0 | 126.0 | 20.4 | 31.0 | | | | | |
| hexachlorobutadiene | 0.25 | ND | 18.78 | ND | 1873.83 | 1817.39 | 2000.0 | ND | 93.9 | ND | 93.7 | 90.9 | 68.0 | 126.0 | 3.1 | 36.0 | | | | | |
| naphthalene | 0.20 | ND | 23.29 | ND | 2630.02 | 1813.84 | 2000.0 | ND | 116.5 | ND | 131.5 | 90.7 | 57.0 | 138.0 | 36.7 | 50.0 | | | | | |
| 1,2,3-trichlorobenzene | 0.13 | 0.20 | 24.12 | ND | 2807.01 | 1793.43 | 2000.0 | 0.20 | 120.6 | ND | 140.4 | 89.7 | 66.0 | 130.0 | 44.1 | 39.0 | | | H | | H |
| Surrogates | | | | | | | | | | | | | | | | | | | | | |
| dibromofluoromethane | | 26.80 | 27.18 | 27.67 | 27.80 | 26.63 | 25.0 | 107.2 | 108.7 | 110.7 | 111.2 | 106.5 | 86 | 118 | | | | | | | |
| 1,2-dichloroethane-d4 | | 25.87 | 26.36 | 28.76 | 28.60 | 25.40 | 25.0 | 103.5 | 105.4 | 115.0 | 114.4 | 101.6 | 80 | 120 | | | | | | | |
| toluene-d8 | | 26.33 | 26.45 | 25.72 | 25.66 | 26.89 | 25.0 | 105.3 | 105.8 | 102.9 | 102.6 | 107.6 | 88 | 110 | | | | | | | |
| p-bromofluorobenzene | | 25.71 | 25.93 | 25.54 | 25.69 | 26.37 | 25.0 | 102.8 | 103.7 | 102.2 | 102.8 | 105.5 | 86 | 115 | | | | | | | |

**Notes and Definitions:**

RDL= Reporting Detection Limit
LCS= Laboratory Control Sample
MS/MSD= Matrix Spike / Matrix Spike Duplicate
LCL= Lower Control Limit
UCL= Upper Control Limit
ND= Not Detected
NS=Not spiked
NA=Not applicable
RPD= Relative Percent Difference
H=Above control limit
L=Below control limit
DF=Dilution Factor

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

## 03/28/2001

---

ABW - ANGELA B. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
AMT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CBN - CHARLES B. NOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIE - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
HD - HEATH DENNIS
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITHERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JMW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LBM - LAWRENCE B. MCSWEGAN
LKN - LINDA K. NEDEFF
LRR - LUCYNDA R. ROBERTS
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRIMES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PML - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RLW - RON L. WATSON
RSH - RENEE S. HENNES
RSS - REGINA S. SIMMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
SAM - SAMUAL A. MILLS
SJK - SINDY J. KINNEY
SLC - SHAWN L. COLE
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HOEFLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
# List of Valid Qualifiers
# December 15, 2000

## *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| * | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

## *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| **J** | The analyte was positively identified, the quantitation is an estimation |
| **U** | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| **F** | The analyte was positively identified but the associated numerical value is below the RL |
| **R** | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| **B** | The analyte was found in an associated blank, as well as in the sample |
| **M** | The matrix effect was present |
| **S** | To be applied to all field screening data |
| **T** | Tentatively identified compound (using GC/MS) |

# DAIMLERCHRYSLER

## Chain-of-Custody

0266 B

Offsite Drilling

~~Lancaster Laboratories~~ Kemron
~~2425 New Holland Pike~~ 109 Starlite Park
~~Lancaster, PA 17601~~ Marietta OH 45750
Phone Number: ~~(717) 656-2300~~ 7403734071
~~Fax Number: (717) 656-2681~~

Project Name: Dayton Thermal Products
Site Location: Dayton OH
Site Code: SC001
RFA Number: YGQPZ001209 (209D)
DaimlerChrysler PM: Gary Stanczuk

Consultant: Leggette, Brashears + Graham, Inc.
Address: 1210 W. Cnty Rd. E Suite 700
St. Paul MN 55112
Consultant PM Ken Vogel
Phone: 651-490-1405 Fax: 651-490-1006

**Turn-around Time Request: (circle)**
24 calendar hrs.
48 calendar hrs.
7 calendar days
14 calendar days

**Data Package Deliverables: (circle)**
DaimlerChrysler Level 1
DaimlerChrysler Level 2
CLP

**Compound List-Parameter/Method/Bottle Type/Preservative**

**Matrix Codes**
S - Soil SW - Surface Water
GW - Groundwater A - Air
Sed. - Sediment
O - Other (specify)

*Are aqueous samples field filtered for metals? Yes No*

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 5030B/5035/8260B | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0016 | 3/29/01 | 1505 | G | O | 2 | X | | | | | | | | 1000 gallon blue poly tank |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | Drilling and well development |
| | | | | | | | | | | | | | | water from offsite wells. |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | (*) Sp rec'd 3/31/01 |
| | | | | | | | | | | | | | | Stored in locked |
| | | | | | | | | | | | | | | cooler over weekend |

**Sampler(s)** Mike Plante

Cooler ID # ——

Samples Relinquished under Airbill No. 824181891815

Temperature (corrected) 4 C (bg)

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| [signature] | 3/30/01 | 18:30 | | | | Yes No |

C/C Dealer Sp intact (bg)

Is RFA sampling complete? Yes No

| Relinquished by: | Date: | Time: | Received for Laboratory by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| | | | Brenda Gregory | (*) 4/2/01 | 0830 | Yes No |

209 D

*DaimlerChrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

Distribution: White copy: Data package Yellow : Retained by laboratory Pink: Retained by sampler

Revision No. 3
Created: July 9, 1999

# KEMRON Internal Laboratory Chain of Custody

**Work Order:** L0104001 **Client:** Complexhem **# of Samples:** 01 **Due Date:** 4/4 **Page:** _____

| Sample # | Analysis | Reason | Removed By ADT | Removed From | Moved To | Reliq. by | Ret'd By ADT | Ret'd To | Rec'd By | Reason |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 8260WT | anal | CMS 4-2-01 @0915 | login | VOA | BLG | CMS 4-16-01 @1425 | archive | ARS | archive |
| | | | | | | | | | | |
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CRF #3

KEMRON Environmental Services | **SAMPLES RECEIPT FORM #1** | Marietta Laboratory

| CLIENT: | DATE: | SHIPPED BY: |
|---|---|---|
| Compuchem<br>BRG ARS Other _____ | 4-2-01 | (✓) FED-EX ( ) AIRBORNE<br>( ) UPS ( ) EMERY<br>( ) RPS ( ) US MAIL<br>( ) KEMRON ( ) CLIENT |

| | | |
|---|---|---|
| COOLER ID: Lt. Blue Igloo | COOLER ID: | COOLER ID: |
| INDEX # : 82418189 1815 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY (✓) YES ( ) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) (D) 4 °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL (✓) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) AS APPROPRIATE (✓) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|
| | | |

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

COMPUCHEM
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: MIKE PLANT
NICOLE MAR
FAX: (651) 490-1006
DATE: 4/6/01

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 5

COMMENTS:

FINAL RESULTS FOR WL0016

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
**Phone: (740) 373-4071**

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104001
Report Date: 04/06/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/31/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104001-01 | WL0016 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By
David L. Bungarner

KEMRON
ENVIRONMENTAL SERVICES

Login #L0104001
April 6, 2001 09:55 am

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43082.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 6.4 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104001
April 6, 2001 09:55 am

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43082.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 13 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 110 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 108 | ( 80 - 120%) |
| Toluene-d8 | 103 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 102 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-04-001
April 6, 2001 09:55 am

**KEMRON ENVIRONMENTAL SERVICES**
**WORK GROUPS**

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG98856 | R119645 | L0104001-01 | | Water | Volatile Organics | 8260B\5030 | 29-MAR-2001 | Volatile - GC/MS |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

FAXED
APR - 6 2001

**DATE**: April 6, 2001

**PAGES:** 6
**(Includes cover page)**

**TO:**
**COMPANY:**

**FAX #:**
**PHONE #:**

**TO:** Mike Webb
**COMPANY:** ONYX

**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

**TO:** Gary Stanczuk
**COMPANY:** DC Corporate

**FAX #:** 248-576-7369
**PHONE #:** 248-576-7365

**TO:** Britt Crider
**COMPANY:** DC Dayton Thermal

**FAX #:** 937-224-2915
**PHONE #:** 937-224-2532

**FROM:** Ken Vogel/Mike Plante

RE: Offsite drilling water disposal analytical results.

Here are the analytical results for the 1,000 gallon BLUE poly tank (sample WL0016). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0016 | 13 ug/L | 6.4 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.
There is no Ohio hazardous waste regulatory level for cis-1,2-dichloroethene.

**fax** TRANSMITTAL S:\TECH\3CHRY\DAYTON\ANALYTIC\WATER\WASTE#3.FAX

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0920 |
| CONNECTION TEL | 19372242915 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 04/06 11:59 |
| USAGE T | 01'31 |
| PGS. SENT | 6 |
| RESULT | OK |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE:** April 6, 2001

**PAGES:** 6
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|---|---|---|
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**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0919 |
| CONNECTION TEL | 12485767369 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 04/06 11:57 |
| USAGE T | 01'31 |
| PGS. SENT | 6 |
| RESULT | OK |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE:** April 6, 2001

**PAGES:** 6
**(Includes cover page)**

**TO:**
**COMPANY:**

**FAX #:**
**PHONE #:**

**TO:** Mike Webb
**COMPANY:** ONYX

**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

**TO:** Gary Stanczuk
**COMPANY:** DC Corporate

**FAX #:** 248-576-7369
**PHONE #:** 248-576-7365

**TO:** Britt Crider
**COMPANY:** DC Dayton Thermal

**FAX #:** 937-224-2915
**PHONE #:** 937-224-2532

**FROM:** Ken Vogel/Mike Plante

RE: Offsite drilling water disposal analytical results.

Here are the analytical results for the 1,000 gallon BLUE poly tank (sample WL0016). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0016 | 13 ug/L | 6.4 ug/L |

```
**********************
***   TX REPORT   ***
**********************

TRANSMISSION OK

TX/RX NO                0918
CONNECTION TEL                  19372373669
SUBADDRESS
CONNECTION ID
ST. TIME                04/06 11:54
USAGE T                 01'56
PGS. SENT                 6
RESULT                  OK
```

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE**: April 6, 2001

**PAGES:** 6
**(Includes cover page)**

**TO:**
**COMPANY:**

**FAX #:**
**PHONE #:**

**TO:** Mike Webb
**COMPANY:** ONYX

**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

**TO:** Gary Stanczuk
**COMPANY:** DC Corporate

**FAX #:** 248-576-7369
**PHONE #:** 248-576-7365

**TO:** Britt Crider
**COMPANY:** DC Dayton Thermal

**FAX #:** 937-224-2915
**PHONE #:** 937-224-2532

**FROM:** Ken Vogel/Mike Plante

RE: Offsite drilling water disposal analytical results.

Here are the analytical results for the 1,000 gallon BLUE poly tank (sample WL0016). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0016 | 13 ug/L | 6.4 ug/L |

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: KEN VOGEL

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

FAX: (651) 490-1006

DATE: 4/3/01

PAGES WITH COVER: 5

COMMENTS:

24 HR RESULTS FROM KEMRON

WL0016 Preliminary RFA 2001-209

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

*Login #:* *L0104001*
Report Date: 04/03/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/31/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| *L0104001-01* | *WL0016* | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

**Certified By**
**David L. Bumgarner**

KEMRON ENVIRONMENTAL SERVICES

Login #L0104001
April 3, 2001 04:00 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43082.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 6.4 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL - Reporting Limit

Login #L0104001
April 3, 2001 04:00 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43062.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 13 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 110 | ( 75 - 125%) |
| 1,2-Dichloroethane-d4 | 108 | ( 62 - 139%) |
| Toluene-d8 | 103 | ( 75 - 125%) |
| 4-Bromofluorobenzene | 102 | ( 75 - 125%) |

RL = Reporting Limit

Order #: 01-04-001
April 3, 2001 04:00 pm

## KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94856 | 2119645 | L0104001-01 | | Water | Volatile Organics | 8260B\5030 | 29-MAR-2001 | Volatile - GC/MS |

# KEMRON
ENVIRONMENTAL SERVICES

109 Starlite Park, Marietta, Ohio 45750
Phone: (740) 373-4071 Fax: (740) 373-4835
We are on the Web check us out at www.kemron.com

*PROTECTING OUR ENVIRONMENTAL FUTURE*

| | |
|---|---|
| Company Name: | Compuchem |
| Telecopied To: | Diane Byrd / Mike Hart |
| Receiver's Fax: | 919-379-4050 / 651-490-1006 |

| | |
|---|---|
| Sender: | J. Wagner |
| Description: | prelim - L0104001 |
| | |
| | WL0016 |
| | |
| | |

| | |
|---|---|
| Number of Pages: (Including Transmittal Sheet) | |
| Date Sent: | |

If there are any problems with this transmission,
please contact sender at the above number.

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104001
Report Date: 04/03/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/31/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104001-01 | WL0016 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

**Certified By**
**David L. Bumgarner**

KEMRON
ENVIRONMENTAL SERVICES

Login #L0104001
April 3, 2001 04:00 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43082.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 6.4 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104001
April 3, 2001 04:00 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43082.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 13 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 110 | ( 75 - 125%) |
| 1,2-Dichloroethane-d4 | 108 | ( 62 - 139%) |
| Toluene-d8 | 103 | ( 75 - 125%) |
| 4-Bromofluorobenzene | 102 | ( 75 - 125%) |

RL = Reporting Limit

Order #: 01-04-001
April 3, 2001 04:00 pm

## *KEMRON ENVIRONMENTAL SERVICES*
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94856 | R119645 | L0104001-01 | | Water | Volatile Organics | 8260B\5030 | 29-MAR-2001 | Volatile - GC/MS |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006


**DATE:** April 5, 2001

**PAGES:** 9
**(Includes cover page)**

**TO:** Mike Webb
**COMPANY:** ONYX
**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

**TO:**
**COMPANY:**
**FAX #:**
**PHONE #:**

**TO:**
**COMPANY:**
**FAX #:**
**PHONE #:**

**TO:**
**COMPANY:**
**FAX #:**
**PHONE #:**

**FROM:** Ken Vogel

RE: Offsite drilling water disposal preliminary analytical results.

Here are the analytical results for the 1,000 gallon BLUE poly tank (sample WL0016), and the 1,000 gallon white CENTER poly tank (sample WL0017). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0016 | 13 ug/L | 6.4 ug/L |
| WL0017 | 33 ug/L | 5.2 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.
There is no Ohio hazardous waste regulatory level for cis-1,2-dichloroethene.

We would like to get rid of this water as soon as possible.

**fax** TRANSMITTAL S:\TECH\3CHRY\DAYTON\ANALYTIC\WATER\WASTE#3P.FAX

# TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104001
Report Date: 04/03/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 03/31/01

## SAMPLE IDENTIFICATION

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104001-01 | WL0016 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By
David L. Bumgarner

KEMRON
ENVIRONMENTAL SERVICES

Order #: 01-04-001
April 3, 2001 04:00 pm

## KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94856 | 2119645 | L0104001-01 | | Water | Volatile Organics | 8260B\5030 | 29-MAR-2001 | Volatile - GC/MS |

Login #L0104001
April 3, 2001 04:00 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Oil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43082.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 6.4 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL - Reporting Limit

Login #L0104001
April 3, 2001 04:00 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104001-01
Client Sample ID: WL0016[redacted]
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 0266/
Date Collected: 03/29/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/02/01 Time: 10:27

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43082.D

Method: 8260B\5030
Run ID: R119645
Batch : WG94856

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 13 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 110 | ( 75 - 125%) |
| 1,2-Dichloroethane-d4 | 108 | ( 62 - 139%) |
| Toluene-d8 | 103 | ( 75 - 125%) |
| 4-Bromofluorobenzene | 102 | ( 75 - 125%) |

*RL = Reporting Limit*

# TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104027
Report Date: 04/04/01
Work ID: OFFSITE DRILLING
Date Received: 04/03/01

## SAMPLE IDENTIFICATION

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104027-01 | WL0017 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Preliminary

Certified By
David L. Bumgarner

Order #: 01-04-027
April 4, 2001 03:46 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94938 | R119674 | L0104027-01 | | Water | Volatile Organics | 8260B\5030 | 02-APR-2001 | Volatile - GC/MS |

Login #L0104027
April 4, 2001 03:46 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 5.2 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104027
April 4, 2001 03:46 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 33 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 103 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 98.8 | ( 80 - 120%) |
| Toluene-d8 | 106 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0908 |
| CONNECTION TEL | 19372373669 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 04/05 10:18 |
| USAGE T | 02'57 |
| PGS. SENT | 9 |
| RESULT | OK |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112

(651) 490-1405 FAX (651) 490-1006

**DATE:** April 5, 2001

**PAGES:** 9
**(Includes cover page)**

**TO:** Mike Webb
**COMPANY:** ONYX
**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

**TO:**
**COMPANY:**
**FAX #:**
**PHONE #:**

**TO:**
**COMPANY:**
**FAX #:**
**PHONE #:**

**TO:**
**COMPANY:**
**FAX #:**
**PHONE #:**

**FROM:** Ken Vogel

RE: Offsite drilling water disposal preliminary analytical results.

Here are the analytical results for the 1,000 gallon BLUE poly tank (sample WL0016), and the 1,000 gallon white CENTER poly tank (sample WL0017). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0016 | 13 ug/L | 6.4 ug/L |
| WL0017 | 33 ug/L | 5.2 ug/L |

MAY -4 2001

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104027
Report Date: 04/09/01
Work ID: OFFSITE DRILLING
Date Received: 04/03/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104027-01 | WL0017 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

David L. Bumgarner

**Certified By**
**David L. Bumgarner**

KEMRON
ENVIRONMENTAL SERVICES

**KEMRON ENVIRONMENTAL SERVICES**
**REPORT NARRATIVE**

**L0104027**

**CHAIN OF CUSTODY:**

The chain of custody number was 04637.

**SHIPMENT CONDITIONS:**

The chain of custody was received sealed in the cooler. The cooler temperature was 3° C.

**SAMPLE MANAGEMENT:**

All samples were received intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Melissa Hume DATE: 4/3/01

# REPORT NARRATIVE
# GC/MS VOLATILE ORGANICS

**KEMRON Login No: L0104027**

**METHOD**

**Preparation**: SW- 846 5030B
**Analysis:** SW-846 8260B

**HOLDING TIMES**

**Sample Preparation**: All holding times were met.
**Sample Analysis**: All holding times were met.

**PREPARATION**

Sample preparation proceeded normally.

**CALIBRATION**

**Initial calibrations**: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

**Alternate Source Standards:** All acceptance criteria were met.

**Continuing Calibration and Tune**: All acceptance criteria were met.

**BATCH QA/QC**

**Method Blank**: All acceptance criteria were met.

**Laboratory Control Samples**: All acceptance criteria were met.

**Matrix Spikes**: The MS/MSD results were not associated with this sample delivery group.
**SAMPLES**

**Internal Standards**: All acceptance criteria were met.

**Surrogates**: All acceptance criteria were met.

**Samples:** All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: RSS REVIEWED: Stephanie L Lepe DATE: 4/13/01

Rev. 7/14/00

Login #L0104027
April 9, 2001 01:35 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 5.2 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

*RL = Reporting Limit*

Login #L0104027
April 9, 2001 01:35 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 33 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 103 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 98.8 | ( 80 - 120%) |
| Toluene-d8 | 106 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-04-027
April 9, 2001 01:35 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94938 | R119674 | L0104027-01 | | Water | Volatile Organics | 8260B\5030 | 02-APR-2001 | Volatile - GC/MS |

*Kemron Environmental Services -OVL*

**Volatile Quality Control Summary - 8260**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Workgroup:** | WG94938 | **Run Date:** | 4/3/2001 | **Sample Number:** | 03598-16 | **LCS DF:** | 1 |
| **Method:** | 8260B | **Instrument:** | HPMS2 | **Sample Filename:** | 2M43125.D | **Sample DF:** | 1 |
| **Matrix:** | WATER | **Blank Filename:** | 2M43121.D | **MS Filename:** | 2M43126.D | **MS DF:** | 1 |
| **Units:** | ug/L | **LCS Filename:** | 2M43122.D | **MSD Filename:** | 2M43127.D | **MSD DF:** | 1 |

| | | CONCENTRATION, ug/L | | | | | | PERCENT RECOVERY | | | | | | | | | OUTLIERS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MDL | Blank | LCS | Sample | MS | MSD | Spike Level | Blank | LCS | Sample | MS | MSD | LCL | UCL | MS RPD | RPD UCL | Blank | LCS | MS | MSD | RPD |
| Target Analytes | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | % | % | % | % | % | % | % | % | % | | | | | |
| dichlorodifluoromethane | 0.25 | ND | 20.80 | ND | 19.13 | 18.23 | 20.0 | ND | 104.0 | ND | 95.7 | 91.2 | 34.0 | 202.0 | 4.8 | 30.0 | | | | | |
| chloromethane | 0.25 | ND | 22.03 | ND | 20.96 | 21.23 | 20.0 | ND | 110.2 | ND | 104.8 | 106.2 | 44.0 | 182.0 | 1.3 | 85.0 | | | | | |
| vinyl chloride | 0.25 | ND | 22.86 | ND | 22.60 | 19.71 | 20.0 | ND | 114.3 | ND | 113.0 | 98.6 | 61.0 | 164.0 | 13.7 | 63.0 | | | | | |
| bromomethane | 0.50 | ND | 23.99 | ND | 21.98 | 21.03 | 20.0 | ND | 120.0 | ND | 109.9 | 105.2 | 64.2 | 140.0 | 4.4 | 58.0 | | | | | |
| chloroethane | 0.50 | ND | 21.05 | ND | 20.65 | 20.39 | 20.0 | ND | 105.3 | ND | 103.3 | 102.0 | 74.0 | 148.0 | 1.3 | 47.0 | | | | | |
| trichlorofluoromethane | 0.25 | ND | 19.89 | ND | 19.61 | 18.19 | 20.0 | ND | 99.5 | ND | 98.1 | 91.0 | 50.0 | 157.0 | 7.5 | 65.0 | | | | | |
| acetone | 2.50 | ND | 14.75 | ND | 17.87 | 16.94 | 20.0 | ND | 73.8 | ND | 89.4 | 84.7 | 39.0 | 149.0 | 5.3 | 67.0 | | | | | |
| 1,1-dichloroethene | 0.50 | ND | 23.26 | ND | 22.50 | 21.57 | 20.0 | ND | 116.3 | ND | 112.5 | 107.9 | 80.0 | 138.0 | 4.2 | 34.0 | | | | | |
| iodomethane | 0.50 | ND | 25.72 | ND | 24.97 | 28.83 | 20.0 | ND | 128.6 | ND | 124.9 | 144.2 | 10.0 | 274.0 | 14.3 | 171.0 | | | | | |
| methylene chloride | 0.25 | ND | 21.20 | ND | 20.95 | 20.55 | 20.0 | ND | 106.0 | ND | 104.8 | 102.8 | 80.0 | 123.0 | 1.9 | 24.0 | | | | | |
| carbon disulfide | 0.50 | ND | 18.60 | ND | 18.14 | 17.62 | 20.0 | ND | 93.0 | ND | 90.7 | 88.1 | 71.0 | 143.0 | 2.9 | 44.0 | | | | | |
| methyl-tert-butyl ether | 0.50 | ND | 19.84 | ND | 21.15 | 19.40 | 20.0 | ND | 99.2 | ND | 105.8 | 97.0 | 78.0 | 140.0 | 8.6 | 38.0 | | | | | |
| trans-1,2-dichloroethene | 0.25 | ND | 21.30 | ND | 21.07 | 20.15 | 20.0 | ND | 106.5 | ND | 105.4 | 100.8 | 80.0 | 128.0 | 4.5 | 25.0 | | | | | |
| n-hexane | 0.56 | ND | 22.60 | ND | 20.96 | 19.86 | 20.0 | ND | 113.0 | ND | 104.8 | 99.3 | 68.0 | 137.0 | 5.4 | 42.0 | | | | | |
| vinyl acetate | 2.50 | ND | 9.67 | ND | 10.25 | 9.83 | 20.0 | ND | 48.4 | ND | 51.3 | 49.2 | 20.0 | 196.0 | 4.2 | 108.0 | | | | | |
| 1,1-dichloroethane | 0.13 | ND | 20.98 | ND | 20.81 | 19.93 | 20.0 | ND | 104.9 | ND | 104.1 | 99.7 | 80.0 | 124.0 | 4.3 | 25.0 | | | | | |
| 2-butanone | 2.50 | ND | 20.13 | ND | 21.30 | 20.46 | 20.0 | ND | 100.7 | ND | 106.5 | 102.3 | 53.0 | 146.0 | 4.0 | 57.0 | | | | | |
| 2,2-dichloropropane | 0.25 | ND | 21.12 | ND | 20.86 | 19.48 | 20.0 | ND | 105.6 | ND | 104.3 | 97.4 | 78.0 | 137.0 | 6.8 | 36.0 | | | | | |
| cis-1,2-dichloroethene | 0.25 | ND | 20.44 | 2.04 | 22.44 | 21.29 | 20.0 | ND | 102.2 | 2.04 | 102.0 | 96.3 | 80.0 | 122.0 | 5.3 | 22.0 | | | | | |
| chloroform | 0.13 | ND | 20.66 | ND | 20.55 | 19.63 | 20.0 | ND | 103.3 | ND | 102.8 | 98.2 | 80.0 | 125.0 | 4.6 | 22.0 | | | | | |
| bromochloromethane | 0.20 | ND | 21.97 | ND | 21.81 | 21.46 | 20.0 | ND | 109.9 | ND | 109.1 | 107.3 | 80.0 | 130.0 | 1.6 | 29.0 | | | | | |
| 1,1,1-trichloroethane | 0.25 | ND | 21.00 | ND | 21.32 | 19.72 | 20.0 | ND | 105.0 | ND | 106.6 | 98.6 | 80.0 | 135.0 | 7.8 | 29.0 | | | | | |
| 1,1-dichloropropene | 0.25 | ND | 19.95 | ND | 19.35 | 18.55 | 20.0 | ND | 99.8 | ND | 96.8 | 92.8 | 80.0 | 154.0 | 4.2 | 33.0 | | | | | |
| carbon tetrachloride | 0.25 | ND | 21.68 | ND | 21.54 | 20.03 | 20.0 | ND | 108.4 | ND | 107.7 | 100.2 | 80.0 | 140.0 | 7.3 | 34.0 | | | | | |
| 1,2-dichloroethane | 0.25 | ND | 20.56 | 5.46 | 26.66 | 24.46 | 20.0 | ND | 102.8 | 5.46 | 106.0 | 95.0 | 81.0 | 136.0 | 8.6 | 34.0 | | | | | |
| benzene | 0.13 | ND | 20.06 | ND | 19.87 | 19.37 | 20.0 | ND | 100.3 | ND | 99.4 | 96.9 | 80.0 | 123.0 | 2.5 | 24.0 | | | | | |
| trichloroethene | 0.25 | ND | 20.24 | 14.32 | 33.18 | 31.70 | 20.0 | ND | 101.2 | 14.32 | 94.3 | 86.9 | 80.0 | 125.0 | 4.6 | 22.0 | | | | | |
| 1,2-dichloropropane | 0.25 | ND | 20.35 | ND | 20.44 | 19.87 | 20.0 | ND | 101.8 | ND | 102.2 | 99.4 | 80.0 | 128.0 | 2.8 | 28.0 | | | | | |
| bromodichloromethane | 0.25 | ND | 21.52 | ND | 21.49 | 20.60 | 20.0 | ND | 107.6 | ND | 107.5 | 103.0 | 80.0 | 132.0 | 4.2 | 25.0 | | | | | |
| dibromomethane | 0.25 | ND | 21.21 | ND | 21.73 | 20.91 | 20.0 | ND | 106.1 | ND | 108.7 | 104.6 | 80.0 | 127.0 | 3.8 | 27.0 | | | | | |
| 2-chloroethylvinyl ether | 10.00 | ND | 22.93 | ND | ND | ND | 20.0 | ND | 114.7 | ND | NA | NA | 10.0 | 294.0 | NA | 246.0 | | | | | |
| 4-methyl-2-pentanone | 2.50 | ND | 22.04 | ND | 22.90 | 20.81 | 20.0 | ND | 110.2 | ND | 114.5 | 104.1 | 63.1 | 132.0 | 9.6 | 52.0 | | | | | |
| cis-1,3-dichloropropene | 0.25 | ND | 21.33 | ND | 21.48 | 20.54 | 20.0 | ND | 106.7 | ND | 107.4 | 102.7 | 80.0 | 139.0 | 4.5 | 26.0 | | | | | |
| toluene | 0.25 | ND | 19.73 | ND | 19.58 | 19.22 | 20.0 | ND | 98.7 | ND | 97.9 | 96.1 | 80.0 | 128.0 | 1.9 | 29.0 | | | | | |
| trans-1,3-dichloropropene | 0.50 | ND | 21.31 | ND | 21.90 | 20.83 | 20.0 | ND | 106.6 | ND | 109.5 | 104.2 | 80.0 | 126.0 | 5.0 | 26.0 | | | | | |
| 1,1,2-trichloroethane | 0.13 | ND | 20.44 | ND | 21.66 | 20.55 | 20.0 | ND | 102.2 | ND | 108.3 | 102.8 | 73.0 | 128.0 | 5.3 | 34.0 | | | | | |
| 2-hexanone | 2.50 | ND | 19.63 | ND | 22.18 | 20.35 | 20.0 | ND | 98.2 | ND | 110.9 | 101.8 | 56.0 | 135.0 | 8.6 | 48.0 | | | | | |
| 1,3-dichloropropane | 0.20 | ND | 20.25 | ND | 20.97 | 20.24 | 20.0 | ND | 101.3 | ND | 104.9 | 101.2 | 80.0 | 126.0 | 3.5 | 27.0 | | | | | |
| tetrachloroethene | 0.25 | ND | 19.98 | ND | 19.69 | 18.48 | 20.0 | ND | 99.9 | ND | 98.5 | 92.4 | 80.0 | 126.0 | 6.3 | 27.0 | | | | | |
| dibromochloromethane | 0.25 | ND | 20.28 | ND | 21.10 | 19.88 | 20.0 | ND | 101.4 | ND | 105.5 | 99.4 | 80.0 | 133.0 | 6.0 | 29.0 | | | | | |
| 1,2-dibromoethane | 0.25 | ND | 20.40 | ND | 21.26 | 20.32 | 20.0 | ND | 102.0 | ND | 106.3 | 101.6 | 26.0 | 187.0 | 4.5 | 99.0 | | | | | |
| 1-chlorohexane | 0.13 | ND | 20.07 | ND | 19.35 | 18.37 | 20.0 | ND | 100.4 | ND | 96.8 | 91.9 | 80.0 | 133.0 | 5.2 | 31.0 | | | | | |
| chlorobenzene | 0.13 | ND | 19.99 | ND | 19.88 | 19.24 | 20.0 | ND | 100.0 | ND | 99.4 | 96.2 | 80.0 | 120.0 | 3.3 | 21.0 | | | | | |
| 1,1,1,2-tetrachloroethane | 0.25 | ND | 20.55 | ND | 20.89 | 20.15 | 20.0 | ND | 102.8 | ND | 104.5 | 100.8 | 80.0 | 130.0 | 3.6 | 27.0 | | | | | |
| ethylbenzene | 0.25 | ND | 20.18 | ND | 19.75 | 19.04 | 20.0 | ND | 100.9 | ND | 98.8 | 95.2 | 80.0 | 121.0 | 3.7 | 22.0 | | | | | |
| m+p-xylene | 0.50 | ND | 39.26 | ND | 39.19 | 37.32 | 40.0 | ND | 98.2 | ND | 98.0 | 93.3 | 80.0 | 124.0 | 4.9 | 52.0 | | | | | |
| o-xylene | 0.25 | ND | 20.01 | ND | 20.16 | 19.51 | 20.0 | ND | 100.1 | ND | 100.8 | 97.6 | 80.0 | 120.0 | 3.3 | 18.0 | | | | | |
| styrene | 0.13 | ND | 20.17 | ND | 20.19 | 19.46 | 20.0 | ND | 100.9 | ND | 101.0 | 97.3 | 80.0 | 121.0 | 3.7 | 20.0 | | | | | |
| bromoform | 0.54 | ND | 21.12 | ND | 21.40 | 20.40 | 20.0 | ND | 105.6 | ND | 107.0 | 102.0 | 75.0 | 132.0 | 4.8 | 34.0 | | | | | |
| isopropylbenzene | 0.25 | ND | 19.29 | ND | 19.24 | 18.55 | 20.0 | ND | 96.5 | ND | 96.2 | 92.8 | 80.0 | 121.0 | 3.7 | 24.0 | | | | | |
| 1,1,2,2-tetrachloroethane | 0.13 | ND | 21.64 | ND | 21.98 | 21.39 | 20.0 | ND | 108.2 | ND | 109.9 | 107.0 | 73.0 | 128.0 | 2.7 | 34.0 | | | | | |
| 1,2,3-trichloropropane | 0.75 | ND | 20.48 | ND | 21.06 | 20.41 | 20.0 | ND | 102.4 | ND | 105.3 | 102.1 | 78.0 | 130.0 | 3.1 | 32.0 | | | | | |
| propyl-benzene | 0.13 | ND | 19.98 | ND | 19.26 | 19.01 | 20.0 | ND | 99.9 | ND | 96.3 | 95.1 | 79.0 | 127.0 | 1.3 | 29.0 | | | | | |
| bromobenzene | 0.13 | ND | 19.56 | ND | 19.24 | 18.77 | 20.0 | ND | 97.8 | ND | 96.2 | 93.9 | 80.0 | 120.0 | 2.5 | 22.0 | | | | | |
| 1,3,5-trimethylbenzene | 0.25 | ND | 19.82 | ND | 19.20 | 19.06 | 20.0 | ND | 99.1 | ND | 96.0 | 95.3 | 80.0 | 122.0 | 0.7 | 25.0 | | | | | |
| 2-chlorotoluene | 0.13 | ND | 18.94 | ND | 19.42 | 19.27 | 20.0 | ND | 94.7 | ND | 97.1 | 96.4 | 53.0 | 164.0 | 0.8 | 62.0 | | | | | |
| 4-chlorotoluene | 0.25 | ND | 20.31 | ND | 18.37 | 17.76 | 20.0 | ND | 101.6 | ND | 91.9 | 88.8 | 42.0 | 163.0 | 3.4 | 74.0 | | | | | |
| tert-butyl-benzene | 0.25 | ND | 19.49 | ND | 18.81 | 18.48 | 20.0 | ND | 97.5 | ND | 94.1 | 92.4 | 76.0 | 132.0 | 1.8 | 34.0 | | | | | |
| 1,2,4-trimethylbenzene | 0.25 | ND | 19.10 | ND | 18.67 | 18.11 | 20.0 | ND | 95.5 | ND | 93.4 | 90.6 | 80.0 | 128.0 | 3.0 | 27.0 | | | | | |
| sec-butyl-benzene | 0.25 | ND | 19.36 | ND | 18.73 | 18.00 | 20.0 | ND | 96.8 | ND | 93.7 | 90.0 | 73.0 | 126.0 | 4.0 | 33.0 | | | | | |
| p-isopropyl-toluene | 0.25 | ND | 19.20 | ND | 18.46 | 17.75 | 20.0 | ND | 96.0 | ND | 92.3 | 88.8 | 77.0 | 124.0 | 3.9 | 29.0 | | | | | |
| 1,3-dichlorobenzene | 0.25 | ND | 19.79 | ND | 19.39 | 18.68 | 20.0 | ND | 99.0 | ND | 97.0 | 93.4 | 80.0 | 120.0 | 3.7 | 22.0 | | | | | |
| 1,4-dichlorobenzene | 0.13 | ND | 19.32 | ND | 19.23 | 18.73 | 20.0 | ND | 96.6 | ND | 96.2 | 93.7 | 80.0 | 120.0 | 2.6 | 18.0 | | | | | |
| n-butyl-benzene | 0.25 | ND | 20.37 | ND | 19.21 | 18.55 | 20.0 | ND | 101.9 | ND | 96.1 | 92.8 | 73.0 | 136.0 | 3.5 | 39.0 | | | | | |
| 1,2-dichlorobenzene | 0.13 | ND | 20.04 | ND | 19.99 | 19.42 | 20.0 | ND | 100.2 | ND | 100.0 | 97.1 | 80.0 | 120.0 | 2.9 | 20.0 | | | | | |
| 1,2-dibromo-3-chloropropane | 1.00 | ND | 19.93 | ND | 22.05 | 20.12 | 20.0 | ND | 99.7 | ND | 110.3 | 100.6 | 22.0 | 178.0 | 9.2 | 96.0 | | | | | |
| 1,2,4-trichlorobenzene | 0.20 | 0.27 | 20.56 | ND | 20.77 | 19.52 | 20.0 | 0.27 | 102.8 | ND | 103.9 | 97.6 | 75.0 | 126.0 | 6.2 | 31.0 | | | | | |
| hexachlorobutadiene | 0.25 | 0.66 | 19.14 | ND | 18.76 | 18.36 | 20.0 | 0.66 | 95.7 | ND | 93.8 | 91.8 | 68.0 | 126.0 | 2.2 | 36.0 | | | | | |
| naphthalene | 0.20 | 0.58 | 20.90 | ND | 21.97 | 20.53 | 20.0 | 0.58 | 104.5 | ND | 109.9 | 102.7 | 57.0 | 138.0 | 6.8 | 50.0 | | | | | |
| 1,2,3-trichlorobenzene | 0.13 | 0.56 | 22.21 | ND | 22.87 | 21.53 | 20.0 | 0.56 | 111.1 | ND | 114.4 | 107.7 | 66.0 | 130.0 | 6.0 | 39.0 | | | | | |
| Surrogates | | | | | | | | | | | | | | | | | | | | | |
| dibromofluoromethane | | 26.40 | 26.12 | 26.25 | 26.70 | 26.41 | 25.0 | 105.6 | 104.5 | 105.0 | 106.8 | 105.6 | 86 | 118 | | | | | | | |
| 1,2-dichloroethane-d4 | | 25.66 | 25.50 | 26.02 | 26.77 | 25.41 | 25.0 | 102.6 | 102.0 | 104.1 | 107.1 | 101.6 | 80 | 120 | | | | | | | |
| toluene-d8 | | 26.94 | 25.87 | 26.12 | 26.16 | 26.29 | 25.0 | 107.8 | 103.5 | 104.5 | 104.6 | 105.2 | 88 | 110 | | | | | | | |
| p-bromofluorobenzene | | 26.60 | 26.20 | 26.53 | 26.02 | 26.53 | 25.0 | 106.4 | 104.8 | 106.1 | 104.1 | 106.1 | 86 | 115 | | | | | | | |

**Notes and Definitions:**

RDL= Reporting Detection Limit
LCS= Laboratory Control Sample
MS/MSD= Matrix Spike / Matrix Spike Duplicate
LCL= Lower Control Limit
UCL= Upper Control Limit
ND= Not Detected
NS=Not spiked
NA=Not applicable
RPD= Relative Percent Difference
H=Above control limit
L=Below control limit
DF=Dilution Factor

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

## 04/04/2001

---

ABW - ANGELA B. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
AMT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CBN - CHARLES B. NOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIE - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
HD - HEATH DENNIS
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITHERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JMW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LBM - LAWRENCE B. MCSWEGAN
LKN - LINDA K. NEDEFF
LRR - LUCYNDA R. ROBERTS
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRIMES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PML - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RLW - RON L. WATSON
RSH - RENEE S. HENNES
RSS - REGINA S. SIMMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
SAM - SAMUAL A. MILLS
SJK - SINDY J. KINNEY
SKH - SHARON K. HANDSCHUMACHER
SLC - SHAWN L. COLE
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HOEFLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
# List of Valid Qualifiers
# December 15, 2000

## *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| * | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

## *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| **J** | The analyte was positively identified, the quantitation is an estimation |
| **U** | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| **F** | The analyte was positively identified but the associated numerical value is below the RL |
| **R** | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| **B** | The analyte was found in an associated blank, as well as in the sample |
| **M** | The matrix effect was present |
| **S** | To be applied to all field screening data |
| **T** | Tentatively identified compound (using GC/MS) |

**CHRYSLER CORPORATION**

# Chain-of-Custody

04631 A

Offsite Drilling

~~CompuChem~~ Kemron
~~501 Madison Avenue~~ 109 Starlite Park
~~Cary, NC 27513~~ Marietta OH 45750
Phone Number: ~~1-800-833-5097~~ 7403734071
Fax Number: ~~(919) 379-4050~~

Project Name: Dayton Thermal Products
Site Location: 1600 Webster St. Dayton OH
Site Code: SC001
RFA Number: YGQA2001209 SDG 209E
Chrysler PM: Gary Stanczuk

Consultant: LBG
Address: 1210 West County Road E
St. Paul MN
Consultant PM: Kenneth Vogel
Phone: 651 490 1405 Fax: 1006

**~~Turn-around~~ Time Request:**
24 calendar hrs.
48 calendar hrs.
10 days
28 days

**Data Package Deliverables: (circle)**
Chrysler Level 1
Chrysler Level 2
Other (specify):

**Compound List-Parameter/Method/Bottle Type/Preservative**

**Matrix Codes**
S - Soil
SW - Surface Water
GW - Groundwater
A - Air
Sed. - Sediment
O - Other (specify) See remarks

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 5030B/5035/8260B 40 ml VOAs, HCl | | | | | | | | Lab Use Only: Volatiles pH <2 | Metals pH < 2 | Cyanide pH > 12 | Other ____ | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0017 | 4/2/01 | 1715 | G | O | 2 | X | | | | | | | | | | | | 900 gallons waste water contained in "Center 1000 gallon Poly Tank". Water was generated from well drilling, development and steam cleaning. |

Sampler(s): David Strand

Cooler ID # LBG01-01

Is RFA sampling complete? Yes (No)

SDG-209E

Bottles Reliquished under Airbill No. 457366355901 FedX

Samples Relinquished under Airbill No. 815313875297 FedX

Temperature (corrected) 3 C

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| [signature] | 4/2/01 | FedEx | | | | Yes No |
| | | | | | | Yes No |
| | | | Received for Laboratory by: Angelia R Scott | 4-3-01 | 1027 | (Yes) No |

*Chrysler Corporation 800 Chrysler Drive, CIMS 482-08-51, Auburn Hills, Michigan 48326-2757*

Distribution: White copy: Data package Yellow : Retained by laboratory Pink: Retained by sampler

Sxscuta f

Revision No. 1
Created: September 23, 1997

# KEMRON Internal Laboratory Chain of Custody

**Work Order:** L0104027 **Client:** Compuchem **# of Samples:** 1 **Due Date:** 4-4-01 **Page:** 1

| Sample # | Analysis | Reason | Removed By ADT | Removed From | Moved To | Reliq. by | Ret'd By ADT | Ret'd To | Rec'd By | Reason |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 | ~~AN~~ ars 4/3/01 8260 | Analyse | mej 4-3-01 1110 | Login | VOA | ars | ars 4/6-01 @1425 | archive | ars | archive |
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CRF #3

| KEMRON Environmental Services | SAMPLES RECEIPT FORM #1 | Marietta Laboratory |
|---|---|---|

| CLIENT: | DATE: | SHIPPED BY: |
|---|---|---|
| Compuchem<br>BRG (ARS) Other _____ | 4-3-01 | (✓) FED-EX ( ) AIRBORNE<br>( ) UPS ( ) EMERY<br>( ) RPS ( ) US MAIL<br>( ) KEMRON ( ) CLIENT |

| | | |
|---|---|---|
| COOLER ID: LBG 01-01 | COOLER ID: | COOLER ID: |
| INDEX # : 81531387 5297 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY (✓) YES ( ) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) (D) 3 °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT ars 4/3/01 ~~(✓) YES~~ ~~( ) NO~~ ars 4/3/01<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) ~~( ) YES ( ) NO~~<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE | pH IN RANGE (2 - >9 - >12) ( ) YES ( ) NO<br>AS APPROPRIATE |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| Sx sentrao 1 | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|
| | | |

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: MIKE PLANT
NICOLE MARCELL
FAX: (651) 490-4006
DATE: 4/9/01

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 4

COMMENTS:

FINAL RESULTS FROM KEMRON FOR
WL0017

Login #L0104027
April 9, 2001 08:12 am

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 5.2 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104027
April 9, 2001 08:12 am

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 33 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 103 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 98.8 | ( 80 - 120%) |
| Toluene-d8 | 106 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit

# TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104027
Report Date: 04/09/01
Work ID: OFFSITE DRILLING
Date Received: 04/03/01

## SAMPLE IDENTIFICATION

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104027-01 | WL0017 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By
David L. Bumgarner

KEMRON
ENVIRONMENTAL SERVICES

**CHRYSLER CORPORATION**

# Chain-of-Custody

04637 A

Offsite Drilling

CompuChem ~~Kemron~~
501 Madison ~~Avenue~~ 109 Starlite Park
Cary, ~~NC 27513~~ Marietta OH 45750
Phone Number: ~~1-800-833-5097~~ 740 373 4071
Fax Number: ~~(919) 379-4050~~

Project Name: Dayton Thermal Products
Site Location: 1600 Webster St. Dayton OH
Site Code: SC001
RFA Number: YGQP200/209 SDG 209E
Chrysler PM: Gary Stanczuk

Consultant: LBG
Address: 1210 West County Road E St. Paul MN
Consultant PM: Kenneth Vogel
Phone: 651 490 1405 Fax: 1006

**Turn-around Time Request:**
- 24 calendar hrs.
- 48 calendar hrs.
- 10 days
- 28 days

**Data Package Deliverables: (circle)**
- Chrysler Level 1
- Chrysler Level 2
- Other (specify):

**Matrix Codes**
S - Soil; SW - Surface Water; GW - Groundwater; A - Air; Sed. - Sediment; O - Other (specify) See remarks

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 5030B/5035/8260B 40 ml VOA's, HCl | | | | | | | | Lab Use Only: Volatiles pH < 2 | Metals pH < 2 | Cyanide pH > 12 | Other ____ | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0017 | 4/2/01 | 1715 | G | O | 2 | X | | | | | | | | | | | | 900 gallons waste water contained in "Center 1000 gallon Poly Tank". Water was generated from well drilling, development and steam cleaning. |

**Sampler(s)** David Strand

Cooler ID # LBG01-01

Is RFA sampling complete? Yes (No)

Bottles Relinquished under Airbill No. 457366355901 FedX

Samples Relinquished under Airbill No. 815313875297 FedX

Temperature (corrected) ___ C

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| [signature] | 4/2/01 | FedEx | | | | Yes No |
| | | | | | | Yes No |
| | | | Received for Laboratory by: | | | Yes No |

SDG-209E

*Chrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

Distribution: White copy: Data package Yellow : Retained by laboratory Pink: Retained by sampler

Revision No. 1
Created: September 23, 1997

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

*1210 WEST COUNTY ROAD E, Suite 700*
SAINT PAUL, MN 55112
(651) 490-1405 FAX (651) 490-1006

| | |
|---|---|
| **DATE**: April 9, 2001 | **PAGES:** 6<br>**(Includes cover page)** |
| **TO:**<br>**COMPANY:** | **FAX #:**<br>**PHONE #:** |
| ✓ **TO:** Mike Webb<br>**COMPANY:** ONYX | **FAX #:** 937-237-3669<br>**PHONE #:** 937-603-2597 |
| ✓ **TO:** Gary Stanczuk<br>**COMPANY:** DC Corporate | **FAX #:** 248-576-7369<br>**PHONE #:** 248-576-7365 |
| ✓ **TO:** Britt Crider<br>**COMPANY:** DC Dayton Thermal | **FAX #:** 937-224-2915<br>**PHONE #:** 937-224-2532 |

**FROM:** Ken Vogel/Dave Strand DVS

RE: Offsite drilling water disposal analytical results.

Here are the Final analytical results for the 1,000 gallon CENTER poly tank (sample WL0017). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0017 | 33 ug/L | 5.2 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.
There is no Ohio hazardous waste regulatory level for cis-1,2-dichloroethene.

**fax** TRANSMITTAL S:\TECH\3CHRY\DAYTON\ANALYTIC\WATER\WASTE#3.FAX

| | |
|---|---|
| **TO:** | **FAX #:** |
| **COMPANY:** | **PHONE #:** |
| ✓ **TO:** Mike Webb | **FAX #:** 937-237-3669 |
| **COMPANY:** ONYX | **PHONE #:** 937-603-2597 |
| **TO:** Gary Stanczuk | **FAX #:** 248-576-7369 |
| **COMPANY:** DC Corporate | **PHONE #:** 248-576-7365 |
| **TO:** Britt Crider | **FAX #:** 937-224-2915 |
| **COMPANY:** DC Dayton Thermal | **PHONE #:** 937-224-2532 |

**FROM:** Ken Vogel/Dave Strand DVS

RE: Offsite drilling water disposal analytical results.

Here are the Final analytical results for the 1,000 gallon CENTER poly tank (sample WL0017). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0017 | 33 ug/L | 5.2 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.
There is no Ohio hazardous waste regulatory level for cis-1,2-dichloroethene.

# fax TRANSMITTAL

S:\TECH\3CHRY\DAYTON\ANALYTIC\WATER\WASTE#3.FAX

```
*********************
***   TX REPORT   ***
*********************

TRANSMISSION OK

TX/RX NO                0929
CONNECTION TEL                  12485767369
SUBADDRESS
CONNECTION ID
ST. TIME                04/09 08:53
USAGE T                 02'21
PGS. SENT                  6
RESULT                  OK
```

04/09/2001 08:55 FAX 001

| | |
|---|---|
| **TO:** | **FAX #:** |
| **COMPANY:** | **PHONE #:** |
| **TO:** Mike Webb | **FAX #:** 937-237-3669 |
| **COMPANY:** ONYX | **PHONE #:** 937-603-2597 |
| **TO:** Gary Stanczuk | **FAX #:** 248-576-7369 |
| **COMPANY:** DC Corporate | **PHONE #:** 248-576-7365 |
| **TO:** Britt Crider | **FAX #:** 937-224-2915 |
| **COMPANY:** DC Dayton Thermal | **PHONE #:** 937-224-2532 |

**FROM:** Ken Vogel/Dave Strand DVS

RE: Offsite drilling water disposal analytical results.

Here are the Final analytical results for the 1,000 gallon CENTER poly tank (sample WL0017). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0017 | 33 ug/L | 5.2 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.
There is no Ohio hazardous waste regulatory level for cis-1,2-dichloroethene.

# fax TRANSMITTAL

S:\TECH\JCHRT\DAYTON\ANALYTIC\WATER\WASTE#3.FAX

TRANSMISSION OK

| | | |
|---|---|---|
| TX/RX NO | 0930 | |
| CONNECTION TEL | | 19372242915 |
| SUBADDRESS | | |
| CONNECTION ID | | |
| ST. TIME | 04/09 08:50 | |
| USAGE T | 02'20 | |
| PGS. SENT | 6 | |
| RESULT | OK | |

**********
*** TX REPORT ***
**********

| | |
|---|---|
| TO: | FAX #: |
| COMPANY: | PHONE #: |
| TO: Mike Webb | FAX #: 937-237-3669 |
| COMPANY: ONYX | PHONE #: 937-603-2597 |
| TO: Gary Stanczuk | FAX #: 248-576-7369 |
| COMPANY: DC Corporate | PHONE #: 248-576-7365 |
| TO: Britt Crider | FAX #: 937-224-2915 |
| COMPANY: DC Dayton Thermal | PHONE #: 937-224-2532 |

**FROM:** Ken Vogel/Dave Strand DVS

RE: Offsite drilling water disposal analytical results.

Here are the Final analytical results for the 1,000 gallon CENTER poly tank (sample WL0017). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0017 | 33 ug/L | 5.2 ug/L |

The Ohio EPA hazardous waste regulatory level for trichloroethene is 500 ug/L.
There is no Ohio hazardous waste regulatory level for cis-1,2-dichloroethene.

# fax TRANSMITTAL

S:\TECH\3CHRY\DAYTON\ANALYTIC\WATER\WASTE#3.FAX

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0928 |
| CONNECTION TEL | 19372373669 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 04/09 08:45 |
| USAGE T | 03'07 |
| PGS. SENT | 6 |
| RESULT | OK |

04/09/2001 08:48 FAX 001

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: KEN VOGEL

FAX: (651) 490-1006

DATE: 4/4/01

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 5

COMMENTS:

PRELIMINARY RESULTS FOR WL0017 FROM KEMRON
RFA2001209

Cathy

# TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104027
Report Date: 04/04/01
Work ID: OFFSITE DRILLING
Date Received: 04/03/01

## SAMPLE IDENTIFICATION

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104027-01 | WL0017 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Preliminary

Certified By
David L. Bumgarner

Login #L0104027
April 4, 2001 03:46 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 5.2 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104027
April 4, 2001 03:46 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 33 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 103 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 98.8 | ( 80 - 120%) |
| Toluene-d8 | 106 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-04-027
April 4, 2001 03:46 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94938 | B119674 | L0104027-01 | | Water | Volatile Organics | 8260B\5030 | 02-APR-2001 | Volatile - GC/MS |

# KEMRON
ENVIRONMENTAL SERVICES

109 Starlite Park, Marietta, Ohio 45750
Phone: (740) 373-4071 Fax: (740) 373-4835
We are on the Web check us out at www.kemron.com

*PROTECTING OUR ENVIRONMENTAL FUTURE*

| | |
|---|---|
| Company Name: | |
| Telecopied To: | Mike Plant |
| Receiver's Fax: | 651-490-1006 |

| | |
|---|---|
| Sender: | G. Wagner |
| Description: | Prelim - |
| | |
| | WL0017 |
| | Preliminary RFA2001-209 |
| | |

| | |
|---|---|
| Number of Pages: (Including Transmittal Sheet) | 4 |
| Date Sent: | 4-4-01 |

If there are any problems with this transmission,
please contact sender at the above number.

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104027
Report Date: 04/04/01
Work ID: OFFSITE DRILLING
Date Received: 04/03/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104027-01 | WL0017 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Preliminary

**Certified By**
**David L. Bumgarner**

Login #L0104027
April 4, 2001 03:46 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 5.2 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104027
April 4, 2001 03:46 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104027-01
Client Sample ID: WL0017
Site/Work ID: OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04637/
Date Collected: 04/02/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/03/01 Time: 11:58

Instrument: HPMS2
Analyst: RSS
Lab File ID: 2M43123.D

Method: 8260B\5030
Run ID: R119674
Batch : WG94938

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 33 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 103 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 98.8 | ( 80 - 120%) |
| Toluene-d8 | 106 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 106 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-04-027
April 4, 2001 03:46 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG94938 | R119674 | L0104027-01 | | Water | Volatile Organics | 8260B\5030 | 02-APR-2001 | Volatile - GC/MS |



ent By: KEMRON OH VALLEY LAB;

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

MAY -4 2001

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104139
Report Date: 04/09/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 04/06/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104139-01 | WL0018 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

David L. Bumgarner

**Certified By**
**David L. Bumgarner**

KEMRON
ENVIRONMENTAL SERVICES

**KEMRON ENVIRONMENTAL SERVICES**
**REPORT NARRATIVE**

**L0104139**

**CHAIN OF CUSTODY:**

The chain of custody number was 04638.

**SHIPMENT CONDITIONS:**

The chain of custody was received sealed in a cooler. The cooler temperature was 0° C.

**SAMPLE MANAGEMENT:**

All samples were received intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Melissa Grimes DATE: 4/9/01

# REPORT NARRATIVE
# GC/MS VOLATILE ORGANICS

**KEMRON Login No: L0104139**

**METHOD**

**Preparation**: SW- 846 5030B
**Analysis:** SW-846 8260B

**HOLDING TIMES**

**Sample Preparation**: All holding times were met.
**Sample Analysis**: All holding times were met.

**PREPARATION**

Sample preparation proceeded normally.

**CALIBRATION**

**Initial calibrations**: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

**Alternate Source Standards:** All acceptance criteria were met.

**Continuing Calibration and Tune**: All acceptance criteria were met.

**BATCH QA/QC**

**Method Blank**: All acceptance criteria were met.

**Laboratory Control Samples**: All acceptance criteria were met.

**Matrix Spikes**: The MS/MSD results were not associated with this sample delivery group.
**SAMPLES**

**Internal Standards**: All acceptance criteria were met.

**Surrogates**: All acceptance criteria were met.

**Samples:** All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: CMS REVIEWED: Stephanie L Sepe DATE: 4/13/01

Rev. 7/14/00

Login #L0104139
April 9, 2001 03:59 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104139-01
Client Sample ID: WL0018
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04638/
Date Collected: 04/05/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 11:25

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43260

Method: 8260B\5030
Run ID: R120036
Batch : WG95199

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104139
April 9, 2001 03:59 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104139-01
Client Sample ID: WL0018
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04638/
Date Collected: 04/05/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 11:25

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43260

Method: 8260B\5030
Run ID: R120036
Batch : WG95199

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 9.8 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 106 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 102 | ( 80 - 120%) |
| Toluene-d8 | 110 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 107 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-04-139
April 9, 2001 03:59 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG95199 | R120036 | L0104139-01 | | Water | Volatile Organics | 8260B\5030 | 05-APR-2001 | Volatile - GC/MS |

Kemron Environmental Services -OVL

Volatile Quality Control Summary - 8260

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Workgroup: | WG95199 | Run Date: | 4/9/2001 | Sample Number: | 04-162-04 | LCS DF: | 1 |
| Method: | 8260B | Instrument: | HPMS2 | Sample Filename: | 2M43268.D | Sample DF: | 10 |
| Matrix: | WATER | Blank Filename: | 2M43258.D | MS Filename: | 2M43269.D | MS DF: | 10 |
| Units: | ug/L | LCS Filename: | 2M43259.D | MSD Filename: | 2M43270.D | MSD DF: | 10 |

| | | CONCENTRATION, ug/L | | | | | | PERCENT RECOVERY | | | | | | | | | OUTLIERS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MDL | Blank | LCS | Sample | MS | MSD | Spike Level | Blank | LCS | Sample | MS | MSD | LCL | UCL | MS RPD | RPD UCL | Blank | LCS | MS | MSD | RPD |
| Target Analytes | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | % | % | % | % | % | % | % | % | % | | | | | |
| dichlorodifluoromethane | 0.25 | ND | 19.69 | ND | 198.30 | 191.73 | 200.0 | ND | 98.5 | ND | 99.2 | 95.9 | 34.0 | 202.0 | 3.4 | 30.0 | | | | | |
| chloromethane | 0.25 | ND | 22.34 | ND | 227.52 | 222.47 | 200.0 | ND | 111.7 | ND | 113.8 | 111.2 | 44.0 | 182.0 | 2.2 | 85.0 | | | | | |
| vinyl chloride | 0.25 | ND | 18.64 | ND | 201.01 | 184.18 | 200.0 | ND | 93.2 | ND | 100.5 | 92.1 | 61.0 | 164.0 | 8.7 | 63.0 | | | | | |
| bromomethane | 0.50 | ND | 20.40 | ND | 212.17 | 207.59 | 200.0 | ND | 102.0 | ND | 106.1 | 103.8 | 64.2 | 140.0 | 2.2 | 58.0 | | | | | |
| chloroethane | 0.50 | ND | 20.48 | ND | 210.27 | 202.94 | 200.0 | ND | 102.4 | ND | 105.1 | 101.5 | 74.0 | 148.0 | 3.5 | 47.0 | | | | | |
| trichlorofluoromethane | 0.25 | ND | 20.06 | ND | 206.30 | 193.53 | 200.0 | ND | 100.3 | ND | 103.2 | 96.8 | 50.0 | 157.0 | 6.4 | 65.0 | | | | | |
| acetone | 2.50 | ND | 18.53 | ND | 184.46 | 185.82 | 200.0 | ND | 92.7 | ND | 92.2 | 92.9 | 39.0 | 149.0 | 0.7 | 67.0 | | | | | |
| 1,1-dichloroethene | 0.50 | ND | 22.86 | ND | 223.61 | 216.18 | 200.0 | ND | 114.3 | ND | 111.8 | 108.1 | 80.0 | 138.0 | 3.4 | 34.0 | | | | | |
| iodomethane | 0.50 | ND | 26.76 | ND | 264.84 | 278.98 | 20.0 | ND | 133.8 | ND | 1324.2 | 1394.9 | 10.0 | 274.0 | 5.2 | 171.0 | | | | | |
| methylene chloride | 0.25 | ND | 21.85 | ND | 209.73 | 207.76 | 200.0 | ND | 109.3 | ND | 104.9 | 103.9 | 80.0 | 123.0 | 0.9 | 24.0 | | | | | |
| carbon disulfide | 0.50 | ND | 18.84 | ND | 183.42 | 176.61 | 200.0 | ND | 94.2 | ND | 91.7 | 88.3 | 71.0 | 143.0 | 3.8 | 44.0 | | | | | |
| methyl-tert-butyl ether | 0.50 | ND | 20.64 | ND | 200.77 | 198.13 | 200.0 | ND | 103.2 | ND | 100.4 | 99.1 | 78.0 | 140.0 | 1.3 | 38.0 | | | | | |
| trans-1,2-dichloroethene | 0.25 | ND | 21.63 | ND | 212.43 | 204.48 | 200.0 | ND | 108.2 | ND | 106.2 | 102.2 | 80.0 | 128.0 | 3.8 | 25.0 | | | | | |
| n-hexane | 0.56 | ND | 25.30 | ND | 245.61 | 238.65 | 200.0 | ND | 126.5 | ND | 122.8 | 119.3 | 68.0 | 137.0 | 2.9 | 42.0 | | | | | |
| vinyl acetate | 2.50 | ND | 20.63 | ND | 206.50 | 204.21 | 200.0 | ND | 103.2 | ND | 103.3 | 102.1 | 20.0 | 196.0 | 1.1 | 108.0 | | | | | |
| 1,1-dichloroethane | 0.13 | ND | 20.90 | ND | 208.81 | 202.97 | 200.0 | ND | 104.5 | ND | 104.4 | 101.5 | 80.0 | 124.0 | 2.8 | 25.0 | | | | | |
| 2-butanone | 2.50 | ND | 23.76 | ND | 223.86 | 220.92 | 200.0 | ND | 118.8 | ND | 111.9 | 110.5 | 53.0 | 146.0 | 1.3 | 57.0 | | | | | |
| 2,2-dichloropropane | 0.25 | ND | 20.96 | ND | 207.48 | 193.15 | 200.0 | ND | 104.8 | ND | 103.7 | 96.6 | 78.0 | 137.0 | 7.2 | 36.0 | | | | | |
| cis-1,2-dichloroethene | 0.25 | ND | 20.55 | 60.18 | 264.48 | 258.09 | 200.0 | ND | 102.8 | 60.18 | 102.2 | 99.0 | 80.0 | 122.0 | 2.4 | 22.0 | | | | | |
| chloroform | 0.13 | ND | 20.66 | 2.64 | 212.01 | 204.35 | 200.0 | ND | 103.3 | 2.64 | 104.7 | 100.9 | 80.0 | 125.0 | 3.7 | 22.0 | | | | | |
| bromochloromethane | 0.20 | ND | 22.29 | ND | 220.68 | 218.53 | 200.0 | ND | 111.5 | ND | 110.3 | 109.3 | 80.0 | 130.0 | 1.0 | 29.0 | | | | | |
| 1,1,1-trichloroethane | 0.25 | ND | 20.66 | ND | 210.26 | 195.75 | 200.0 | ND | 103.3 | ND | 105.1 | 97.9 | 80.0 | 135.0 | 7.1 | 29.0 | | | | | |
| 1,1-dichloropropene | 0.25 | ND | 19.67 | ND | 194.95 | 182.19 | 200.0 | ND | 98.4 | ND | 97.5 | 91.1 | 80.0 | 154.0 | 6.8 | 33.0 | | | | | |
| carbon tetrachloride | 0.25 | ND | 21.28 | ND | 216.32 | 201.19 | 200.0 | ND | 106.4 | ND | 108.2 | 100.6 | 80.0 | 140.0 | 7.2 | 34.0 | | | | | |
| 1,2-dichloroethane | 0.25 | ND | 20.45 | ND | 211.87 | 202.36 | 200.0 | ND | 102.3 | ND | 105.9 | 101.2 | 81.0 | 136.0 | 4.6 | 34.0 | | | | | |
| benzene | 0.13 | ND | 20.22 | ND | 196.41 | 192.83 | 200.0 | ND | 101.1 | ND | 98.2 | 96.4 | 80.0 | 123.0 | 1.8 | 24.0 | | | | | |
| trichloroethene | 0.25 | ND | 20.07 | 892.08 | 1104.45 | 1034.91 | 200.0 | ND | 100.4 | 892.08 | 106.2 | 71.4 | 80.0 | 125.0 | 6.5 | 22.0 | | | | L | |
| 1,2-dichloropropane | 0.25 | ND | 20.65 | ND | 204.41 | 200.30 | 200.0 | ND | 103.3 | ND | 102.2 | 100.2 | 80.0 | 128.0 | 2.0 | 28.0 | | | | | |
| bromodichloromethane | 0.25 | ND | 21.57 | ND | 216.72 | 207.55 | 200.0 | ND | 107.9 | ND | 108.4 | 103.8 | 80.0 | 132.0 | 4.3 | 25.0 | | | | | |
| dibromomethane | 0.25 | ND | 21.82 | ND | 219.96 | 212.74 | 200.0 | ND | 109.1 | ND | 110.0 | 106.4 | 80.0 | 127.0 | 3.3 | 27.0 | | | | | |
| 2-chloroethylvinyl ether | 10.00 | ND | 14.76 | ND | 67.13 | 56.75 | 200.0 | ND | 73.8 | ND | 33.6 | 28.4 | 10.0 | 294.0 | 16.8 | 246.0 | | | | | |
| 4-methyl-2-pentanone | 2.50 | ND | 22.93 | ND | 225.87 | 216.46 | 200.0 | ND | 114.7 | ND | 112.9 | 108.2 | 63.1 | 132.0 | 4.3 | 52.0 | | | | | |
| cis-1,3-dichloropropene | 0.25 | ND | 21.60 | ND | 212.78 | 210.05 | 200.0 | ND | 108.0 | ND | 106.4 | 105.0 | 80.0 | 139.0 | 1.3 | 26.0 | | | | | |
| toluene | 0.25 | ND | 20.26 | ND | 197.79 | 192.80 | 200.0 | ND | 101.3 | ND | 98.9 | 96.4 | 80.0 | 128.0 | 2.6 | 29.0 | | | | | |
| trans-1,3-dichloropropene | 0.50 | ND | 22.49 | ND | 221.35 | 210.31 | 200.0 | ND | 112.5 | ND | 110.7 | 105.2 | 80.0 | 126.0 | 5.1 | 26.0 | | | | | |
| 1,1,2-trichloroethane | 0.13 | ND | 21.93 | ND | 213.35 | 210.69 | 200.0 | ND | 109.7 | ND | 106.7 | 105.3 | 73.0 | 128.0 | 1.3 | 34.0 | | | | | |
| 2-hexanone | 2.50 | ND | 22.52 | ND | 216.30 | 215.54 | 200.0 | ND | 112.6 | ND | 108.2 | 107.8 | 56.0 | 135.0 | 0.4 | 48.0 | | | | | |
| 1,3-dichloropropane | 0.20 | ND | 21.01 | ND | 208.28 | 201.24 | 200.0 | ND | 105.1 | ND | 104.1 | 100.6 | 80.0 | 126.0 | 3.4 | 27.0 | | | | | |
| tetrachloroethene | 0.25 | ND | 20.57 | ND | 196.30 | 189.43 | 200.0 | ND | 102.9 | ND | 98.2 | 94.7 | 80.0 | 126.0 | 3.6 | 27.0 | | | | | |
| dibromochloromethane | 0.25 | ND | 21.07 | ND | 208.71 | 204.00 | 200.0 | ND | 105.4 | ND | 104.4 | 102.0 | 80.0 | 133.0 | 2.3 | 29.0 | | | | | |
| 1,2-dibromoethane | 0.25 | ND | 21.47 | ND | 210.69 | 207.87 | 200.0 | ND | 107.4 | ND | 105.3 | 103.9 | 26.0 | 187.0 | 1.3 | 99.0 | | | | | |
| 1-chlorohexane | 0.13 | ND | 20.77 | ND | 200.73 | 194.78 | 200.0 | ND | 103.9 | ND | 100.4 | 97.4 | 80.0 | 133.0 | 3.0 | 31.0 | | | | | |
| chlorobenzene | 0.13 | ND | 20.39 | ND | 201.05 | 196.96 | 200.0 | ND | 102.0 | ND | 100.5 | 98.5 | 80.0 | 120.0 | 2.1 | 21.0 | | | | | |
| 1,1,1,2-tetrachloroethane | 0.25 | ND | 20.99 | ND | 211.33 | 203.13 | 200.0 | ND | 105.0 | ND | 105.7 | 101.6 | 80.0 | 130.0 | 4.0 | 27.0 | | | | | |
| ethylbenzene | 0.25 | ND | 20.27 | ND | 197.17 | 194.45 | 200.0 | ND | 101.4 | ND | 98.6 | 97.2 | 80.0 | 121.0 | 1.4 | 22.0 | | | | | |
| m+p-xylene | 0.50 | ND | 40.02 | ND | 399.43 | 381.85 | 400.0 | ND | 100.1 | ND | 99.9 | 95.5 | 80.0 | 124.0 | 4.5 | 52.0 | | | | | |
| o-xylene | 0.25 | ND | 20.66 | ND | 205.54 | 199.18 | 200.0 | ND | 103.3 | ND | 102.8 | 99.6 | 80.0 | 120.0 | 3.1 | 18.0 | | | | | |
| styrene | 0.13 | ND | 21.06 | ND | 207.32 | 200.55 | 200.0 | ND | 105.3 | ND | 103.7 | 100.3 | 80.0 | 121.0 | 3.3 | 20.0 | | | | | |
| bromoform | 0.54 | ND | 21.70 | ND | 213.97 | 208.07 | 200.0 | ND | 108.5 | ND | 107.0 | 104.0 | 75.0 | 132.0 | 2.8 | 34.0 | | | | | |
| isopropylbenzene | 0.25 | ND | 19.46 | ND | 192.14 | 183.68 | 200.0 | ND | 97.3 | ND | 96.1 | 91.8 | 80.0 | 121.0 | 4.5 | 24.0 | | | | | |
| 1,1,2,2-tetrachloroethane | 0.13 | ND | 21.40 | ND | 209.73 | 211.55 | 200.0 | ND | 107.0 | ND | 104.9 | 105.8 | 73.0 | 128.0 | 0.9 | 34.0 | | | | | |
| 1,2,3-trichloropropane | 0.75 | ND | 21.07 | ND | 205.62 | 211.05 | 200.0 | ND | 105.4 | ND | 102.8 | 105.5 | 78.0 | 130.0 | 2.6 | 32.0 | | | | | |
| propyl-benzene | 0.13 | ND | 20.33 | ND | 198.48 | 195.27 | 200.0 | ND | 101.7 | ND | 99.2 | 97.6 | 79.0 | 127.0 | 1.6 | 29.0 | | | | | |
| bromobenzene | 0.13 | ND | 20.12 | ND | 195.06 | 191.99 | 200.0 | ND | 100.6 | ND | 97.5 | 96.0 | 80.0 | 120.0 | 1.6 | 22.0 | | | | | |
| 1,3,5-trimethylbenzene | 0.25 | ND | 20.28 | ND | 195.70 | 189.96 | 200.0 | ND | 101.4 | ND | 97.9 | 95.0 | 80.0 | 122.0 | 3.0 | 25.0 | | | | | |
| 2-chlorotoluene | 0.13 | ND | 19.93 | ND | 190.71 | 190.28 | 200.0 | ND | 99.7 | ND | 95.4 | 95.1 | 53.0 | 164.0 | 0.2 | 62.0 | | | | | |
| 4-chlorotoluene | 0.25 | ND | 19.68 | ND | 200.08 | 189.48 | 200.0 | ND | 98.4 | ND | 100.0 | 94.7 | 42.0 | 163.0 | 5.4 | 74.0 | | | | | |
| tert-butyl-benzene | 0.25 | ND | 19.43 | ND | 190.40 | 183.98 | 200.0 | ND | 97.2 | ND | 95.2 | 92.0 | 76.0 | 132.0 | 3.4 | 34.0 | | | | | |
| 1,2,4-trimethylbenzene | 0.25 | ND | 19.49 | ND | 190.88 | 186.46 | 200.0 | ND | 97.5 | ND | 95.4 | 93.2 | 80.0 | 128.0 | 2.3 | 27.0 | | | | | |
| sec-butyl-benzene | 0.25 | ND | 19.86 | ND | 193.08 | 186.52 | 200.0 | ND | 99.3 | ND | 96.5 | 93.3 | 73.0 | 126.0 | 3.5 | 33.0 | | | | | |
| p-isopropyl-toluene | 0.25 | ND | 19.02 | ND | 187.08 | 181.70 | 200.0 | ND | 95.1 | ND | 93.5 | 90.9 | 77.0 | 124.0 | 2.9 | 29.0 | | | | | |
| 1,3-dichlorobenzene | 0.25 | ND | 19.77 | ND | 193.90 | 191.49 | 200.0 | ND | 98.9 | ND | 97.0 | 95.7 | 80.0 | 120.0 | 1.3 | 22.0 | | | | | |
| 1,4-dichlorobenzene | 0.13 | ND | 19.42 | ND | 191.12 | 188.56 | 200.0 | ND | 97.1 | ND | 95.6 | 94.3 | 80.0 | 120.0 | 1.3 | 18.0 | | | | | |
| n-butyl-benzene | 0.25 | ND | 20.19 | ND | 195.58 | 187.70 | 200.0 | ND | 101.0 | ND | 97.8 | 93.9 | 73.0 | 136.0 | 4.1 | 39.0 | | | | | |
| 1,2-dichlorobenzene | 0.13 | ND | 20.06 | ND | 199.10 | 192.70 | 200.0 | ND | 100.3 | ND | 99.6 | 96.4 | 80.0 | 120.0 | 3.3 | 20.0 | | | | | |
| 1,2-dibromo-3-chloropropane | 1.00 | ND | 19.14 | ND | 176.31 | 180.91 | 200.0 | ND | 95.7 | ND | 88.2 | 90.5 | 22.0 | 178.0 | 2.6 | 96.0 | | | | | |
| 1,2,4-trichlorobenzene | 0.20 | ND | 16.66 | ND | 164.19 | 163.09 | 200.0 | ND | 83.3 | ND | 82.1 | 81.5 | 75.0 | 126.0 | 0.7 | 31.0 | | | | | |
| hexachlorobutadiene | 0.25 | ND | 17.60 | ND | 173.66 | 169.96 | 200.0 | ND | 88.0 | ND | 86.8 | 85.0 | 68.0 | 126.0 | 2.2 | 36.0 | | | | | |
| naphthalene | 0.20 | ND | 15.57 | ND | 154.36 | 155.16 | 200.0 | ND | 77.9 | ND | 77.2 | 77.6 | 57.0 | 138.0 | 0.5 | 50.0 | | | | | |
| 1,2,3-trichlorobenzene | 0.13 | ND | 14.62 | ND | 146.33 | 149.89 | 200.0 | ND | 73.1 | ND | 73.2 | 74.9 | 66.0 | 130.0 | 2.4 | 39.0 | | | | | |
| Surrogates | | | | | | | | | | | | | | | | | | | | | |
| dibromofluoromethane | | 26.76 | 26.47 | 27.67 | 27.28 | 26.35 | 25.0 | 107.0 | 105.9 | 110.7 | 109.1 | 105.4 | 86 | 118 | | | | | | | |
| 1,2-dichloroethane-d4 | | 25.79 | 25.37 | 27.33 | 26.75 | 25.86 | 25.0 | 103.2 | 101.5 | 109.3 | 107.0 | 103.4 | 80 | 120 | | | | | | | |
| toluene-d8 | | 26.49 | 26.78 | 26.86 | 26.43 | 26.82 | 25.0 | 106.0 | 107.1 | 107.4 | 105.7 | 107.3 | 88 | 110 | | | | | | | |
| p-bromofluorobenzene | | 26.57 | 26.91 | 26.72 | 26.49 | 26.89 | 25.0 | 106.3 | 107.6 | 106.9 | 106.0 | 107.6 | 86 | 115 | | | | | | | |

**Notes and Definitions:**

RDL= Reporting Detection Limit
LCS= Laboratory Control Sample
MS/MSD= Matrix Spike / Matrix Spike Duplicate
LCL= Lower Control Limit
UCL= Upper Control Limit
ND= Not Detected
NS=Not spiked
NA=Not applicable
RPD= Relative Percent Difference
H=Above control limit
L=Below control limit
DF=Dilution Factor

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

## 04/04/2001

---

ABW - ANGELA B. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
AMT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CBN - CHARLES B. NOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIE - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
HD - HEATH DENNIS
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITHERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JMW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LBM - LAWRENCE B. MCSWEGAN
LKN - LINDA K. NEDEFF
LRR - LUCYNDA R. ROBERTS
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRIMES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PML - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RLW - RON L. WATSON
RSH - RENEE S. HENNES
RSS - REGINA S. SIMMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
SAM - SAMUAL A. MILLS
SJK - SINDY J. KINNEY
SKH - SHARON K. HANDSCHUMACHER
SLC - SHAWN L. COLE
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HOEFLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
# List of Valid Qualifiers
# December 15, 2000

## *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| * | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

## *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| **J** | The analyte was positively identified, the quantitation is an estimation |
| **U** | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| **F** | The analyte was positively identified but the associated numerical value is below the RL |
| **R** | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| **B** | The analyte was found in an associated blank, as well as in the sample |
| **M** | The matrix effect was present |
| **S** | To be applied to all field screening data |
| **T** | Tentatively identified compound (using GC/MS) |

**CHRYSLER CORPORATION**

# Chain-of-Custody

04638 A

~~CompuChem~~ Remron
~~501 Madison Avenue~~ 109 Starlite Park
~~Cary, NC 27513~~ Marietta OH 45750
Phone Number: ~~1-800-833-5097~~ 740 373 4071
Fax Number: ~~(919) 379-4050~~

Project Name: Offsite Drilling Dayton Thermal Products
Site Location: ~~SCO~~ 1600 Webster St. Dayton OH
Site Code: SC001
RFA Number: YGQP2001209 SDG 209F
Chrysler PM: Gary Stanczuk

Consultant: LBG
Address: 1210 West County Road E Suite 700
St Paul MN 55112
Consultant PM: Kenneth Vogel
Phone: 651 490 1405 Fax: 1006

**Turn-around Time Request:**
24 calendar hrs.
48 calendar hrs.
10 days
28 days

**Data Package Deliverables: (circle)**
Chrysler Level 1
Chrysler Level 2
Other (specify):

**Compound List-Parameter/Method/Bottle Type/Preservative**

**Matrix Codes**
S - Soil SW - Surface Water
GW - Groundwater A - Air
Sed. - Sediment
O - Other (specify) See remarks

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 5030B/5035/8260B | | | | | | | | Lab Use Only: Volatiles pH <2 | Metals pH < 2 | Cyanide pH > 12 | Other | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0018 | 4/5/01 | 14:15 | G | O | 3 | X | | | | | | | | | | | | 1000 gallons waste water contained in "South 1000 gallon Poly Tank". Water was generated from well drilling, well development and steam cleaning. |
| | | | | | | | | | | | | | | | | | | C/C sealed sep intact |

**Sampler(s)** David Strand

Cooler ID # KL998

Is RFA sampling complete? Yes No

Bottles Reliquished under Airbill No. 457366355901

Samples Relinquished under Airbill No. 824181891712

Temperature (corrected) 0 C

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| [signature] | 4/5/01 | Fed Ex | | | | Yes No |
| | | | | | | Yes No |
| | | | Received for Laboratory by: Brenda Gregory | 4/6/01 | 09:53 | Yes No |

*Chrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

SDG 209F

Distribution: White copy: Data package Yellow : Retained by laboratory Pink: Retained by sampler

Revision No. 1
Created: September 23, 1997

# KEMRON Internal Laboratory Chain of Custody

**Work Order:** L0104139 **Client:** Compuchem **# of Samples:** 01 **Due Date:** 4/9 **Page:** ____

| Sample # | Analysis | Reason | Removed By ADT | Removed From | Moved To | Reliq. by | Ret'd By ADT | Ret'd To | Rec'd By | Reason |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 8260WT | anal | CMS 4-6-01 @1155 | V-1 | V2A | BLG | CMS 4-16-01 @1425 | archive | GS | archive |
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CRF #3

**KEMRON Environmental Services** | **SAMPLES RECEIPT FORM #1** | **Marietta Laboratory**

| CLIENT: Compuchem | DATE: 4-6-01 | SHIPPED BY: (✓) FED-EX ( ) AIRBORNE ( ) UPS ( ) EMERY ( ) RPS ( ) US MAIL ( ) KEMRON ( ) CLIENT |
|---|---|---|
| BRG ARS Other _____ | | |

| | | |
|---|---|---|
| COOLER ID: KL998 | COOLER ID: | COOLER ID: |
| INDEX # : 824181891712 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY (✓) YES ( ) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) (D) °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) ( ) YES (✓) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL (✓) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|
| | | |

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: DAVE STRAND
KEN VOGEL
FAX: (651) 490-1006
DATE: 4/12/01

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 4

COMMENTS:

Final WL0018

# TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104139
Report Date: 04/09/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 04/06/01

## SAMPLE IDENTIFICATION

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104139-01 | WL0018 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

David L. Bumgarner

Certified By
David L. Bumgarner

KEMRON
ENVIRONMENTAL SERVICES

Login #L0104139
April 9, 2001 03:59 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104139-01
Client Sample ID: WL0018
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04638/
Date Collected: 04/05/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 11:25

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43260

Method: 8260B\5030
Run ID: R120036
Batch : WG95199

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104139
April 9, 2001 03:59 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104139-01
Client Sample ID: WL0018
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04638/
Date Collected: 04/05/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 11:25

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43260

Method: 8260B\5030
Run ID: R120036
Batch : WG95199

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 9.8 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 106 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 102 | ( 80 - 120%) |
| Toluene-d8 | 110 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 107 | ( 86 - 115%) |

RL = Reporting Limit

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112
(651) 490-1405 FAX (651) 490-1006

**DATE:** April 13, 2001 **PAGES:** 7
**(Includes cover page)**

**TO:**
**COMPANY:**
**FAX #:**
**PHONE #:**

✓ **TO:** Mike Webb
**COMPANY:** ONYX
**FAX #:** 937-237-3669
**PHONE #:** 937-603-2597

✓ **TO:** Gary Stanczuk
**COMPANY:** DC Corporate
**FAX #:** 248-576-7369
**PHONE #:** 248-576-7365

✓ **TO:** Britt Crider
**COMPANY:** DC Dayton Thermal
**FAX #:** 937-224-2915
**PHONE #:** 937-224-2532

**FROM:** Ken Vogel/Dave Strand DVS

RE: Offsite drilling water disposal analytical results.

Here are the Final analytical results for the 1,000 gallon SOUTH poly tank (sample WL0018) and preliminary results for the BLUE poly tank (sample WL0019). Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0018 | 9.8 ug/L | ND |
| WL0019 | 41 ug/L | 8.3 ug/L |

The Ohio EPA hazardous waste regulatory level for Trichloroethene is 500 ug/L.
There is no Ohio hazardous waste regulatory level for cis-1,2-Dichloroethene.

**fax** TRANSMITTAL S:\TECH\3CHRY\DAYTON\ANALYTIC\WATER\WASTE#5.FAX

**********
*** TX REPORT ***
**********

TRANSMISSION OK

| | |
|---|---|
| TX/RX NO | 0996 |
| CONNECTION TEL | 19372373669 |
| SUBADDRESS | |
| CONNECTION ID | |
| ST. TIME | 04/13 06:37 |
| USAGE T | 02'43 |
| PGS. SENT | 7 |
| RESULT | OK |

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112
(651) 490-1405 FAX (651) 490-1006

**DATE:** April 13, 2001 **PAGES:** 7 **(Includes cover page)**

| | |
|---|---|
| **TO:** | **FAX #:** |
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**fax** TRANSMITTAL S:\TECH\3CHRY\DAYTON\ANALYTIC\WATER\WASTE#5.FAX

TRANSMISSION OK

| | | |
|---|---|---|
| TX/RX NO | 0997 | |
| CONNECTION TEL | | 12485767369 |
| SUBADDRESS | | |
| CONNECTION ID | | |
| ST. TIME | 04/13 06:40 | |
| USAGE T | 02'04 | |
| PGS. SENT | 7 | |
| RESULT | OK | |

**********
*** TX REPORT ***
**********

04/13/2001 06:42 FAX 001

| | |
|---|---|
| **TO:** | **FAX #:** |
| **COMPANY:** | **PHONE #:** |
| ✓ **TO:** Mike Webb | **FAX #:** 937-237-3669 |
| **COMPANY:** ONYX | **PHONE #:** 937-603-2597 |
| **TO:** Gary Stanczuk | **FAX #:** 248-576-7369 |
| **COMPANY:** DC Corporate | **PHONE #:** 248-576-7365 |
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There is no Ohio hazardous waste regulatory level for cis-1,2-Dichloroethene.

# fax TRANSMITTAL

S:\TECH\3CHRT\DATTOM\ANALTIC\WATER\WASTE#5.FAX

```
**********************
***   TX REPORT   ***
**********************

TRANSMISSION OK

TX/RX NO                    0998
CONNECTION TEL                      19372242915
SUBADDRESS
CONNECTION ID
ST. TIME                    04/13 06:43
USAGE T                     02'04
PGS. SENT                   7
RESULT                      OK
```

04/13/2001 06:45 FAX 001

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

937

# FAX

TO: MIKE PLANT
NICOLE MARCELL

FAX: (651) 490-1006

DATE: 4/9/01

FROM: CATHY DOVER
PHONE: (919) 379-4100.
FAX: (919) 379-4050

PAGES WITH COVER: 7

COMMENTS:

PRELIMINARY RESULTS FOR WL0018

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104139
Report Date: 04/09/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 04/06/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104139-01 | WL0018 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By
David L. Bumgarner

KEMRON
ENVIRONMENTAL SERVICES

Login #L0104139
April 9, 2001 03:59 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104139-01
Client Sample ID: WL0018
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04638/
Date Collected: 04/05/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 11:25

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43260

Method: 8260B\5030
Run ID: R120036
Batch : WG95199

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104139
April 9, 2001 03:59 pm

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104139-01
Client Sample ID: WL0018
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04638/
Date Collected: 04/05/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/09/01 Time: 11:25

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43260

Method: 8260B\5030
Run ID: R120036
Batch : WG95199

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 9.8 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

***SURROGATES- In Percent Recovery:***

| | | |
|---|---|---|
| Dibromofluoromethane | 106 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 102 | ( 80 - 120%) |
| Toluene-d8 | 110 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 107 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-04-139
April 9, 2001 03:59 pm

**KEMRON ENVIRONMENTAL SERVICES**
**WORK GROUPS**

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG95199 | R120036 | L0104139-01 | | Water | Volatile Organics | 8260B\5030 | 05-APR-2001 | Volatile - GC/MS |

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

## 04/04/2001

---

AEW - ANGELA E. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJF - AMANDA J. FICKISSEN
ALT - ANN L. THAYER
ANT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KORLACH
CBH - CHARLES B. HOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORRES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUNGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIB - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
HD - HEATH DENNIS
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITMERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JNW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHRAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHH - KIM H. HUDDES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LMM - LAWRENCE B. MCSWEGAN
LMN - LINDA K. NEDEFF
LRR - LUCYNDA R. ROBERTS
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRIMES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIDGEL
MMB - MAREN M. BERRY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PHL - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
RSK - ROBERT M. KYER
RJW - RHONDA J. WITTEKIND
RLM - RON L. MATSON
RSR - RENEE S. HEDGES
RSS - REGINA S. SIMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
SAM - SAMUAL A. MILLS
SJK - SINDY J. KINNEY
SKM - SHARON K. MANDSCHUMACHER
SLC - SHAWN L. COLE
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HORWLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
## List of Valid Qualifiers
## December 15, 2000

### *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| • | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

### *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| J | The analyte was positively identified, the quantitation is an estimation |
| U | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| F | The analyte was positively identified but the associated numerical value is below the RL |
| R | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| B | The analyte was found in an associated blank, as well as in the sample |
| M | The matrix effect was present |
| S | To be applied to all field screening data |
| T | Tentatively identified compound (using GC/MS) |

H:\DATA\COMMON\Qualifier List 12-15-00.doc

MAY -4 2001

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104198
Report Date: 04/13/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 04/11/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104198-01 | WL0019 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

David L. Bumgarner

**Certified By**
**David L. Bumgarner**

KEMRON
ENVIRONMENTAL SERVICES

# REPORT NARRATIVE
# GC/MS VOLATILE ORGANICS

**KEMRON Login No: L0104198**

## METHOD

**Preparation**: SW- 846 5030B
**Analysis:** SW-846 8260B

## HOLDING TIMES

**Sample Preparation**: All holding times were met.
**Sample Analysis**: All holding times were met.

## PREPARATION

Sample preparation proceeded normally.

## CALIBRATION

**Initial calibrations**: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

**Alternate Source Standards:** All acceptance criteria were met.

**Continuing Calibration and Tune**: All acceptance criteria were met.

## BATCH QA/QC

**Method Blank**: All acceptance criteria were met.

**Laboratory Control Samples**: All acceptance criteria were met.

**Matrix Spikes**: The MS/MSD results were not associated with this sample delivery group.

## SAMPLES

**Internal Standards**: All acceptance criteria were met.

**Surrogates**: All acceptance criteria were met.

**Samples:** All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: CMS REVIEWED: Stephanie C Lepe DATE: 4/13/01

Login #L0104198
April 13, 2001 01:16 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104198-01
Client Sample ID: WL0019
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04641/
Date Collected: 04/10/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/11/01 Time: 17:33

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43335

Method: 8260B\5030
Run ID: R120359
Batch : WG95396

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 8.3 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104198
April 13, 2001 01:16 pm

**KEMRON ENVIRONMENTAL SERVICES**

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104198-01
Client Sample ID: WL0019
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04641/
Date Collected: 04/10/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/11/01 Time: 17:33

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43335

Method: 8260B\5030
Run ID: R120359
Batch : WG95396

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 41 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 107 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 106 | ( 80 - 120%) |
| Toluene-d8 | 102 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 101 | ( 86 - 115%) |

RL = Reporting Limit

Order #: 01-04-198
April 13, 2001 01:16 pm

# KEMRON ENVIRONMENTAL SERVICES
## WORK GROUPS

| Work Group | Run ID | Sample | Dil Type | Matrix | Product | Method | Date Collected | Department |
|---|---|---|---|---|---|---|---|---|
| WG95396 | R120359 | L0104198-01 | | Water | Volatile Organics | 8260B\5030 | 10-APR-2001 | Volatile - GC/MS |

Kemron Environmental Services -OVL

Volatile Quality Control Summary - 8260

| | | | | | |
|---|---|---|---|---|---|
| Workgroup: | WG95396 | Run Date: | 4/11/01 | Sample Number: | 04-122-01 | LCS DF: | 1 |
| Method: | 8260B | Instrument: | HPMS2 | Sample Filename: | 2M43330.D | Sample DF: | 1 |
| Matrix: | WATER | Blank Filename: | 2M43325.D | MS Filename: | 2M43331.D | MS DF: | 1 |
| Units: | ug/L | LCS Filename: | 2M43326.D | MSD Filename: | 2M43332.D | MSD DF: | 1 |

| | | CONCENTRATION, ug/L | | | | | | PERCENT RECOVERY | | | | | | | | | OUTLIERS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MDL | Blank | LCS | Sample | MS | MSD | Spike Level | Blank | LCS | Sample | MS | MSD | LCL | UCL | MS RPD | RPD UCL | Blank | LCS | MS | MSD | RPD |
| Target Analytes | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | % | % | % | % | % | % | % | % | % | | | | | |
| dichlorodifluoromethane | 0.25 | ND | 18.52 | ND | 17.09 | 16.47 | 20.0 | ND | 92.6 | ND | 85.5 | 82.4 | 34.0 | 202.0 | 3.7 | 30.0 | | | | | |
| chloromethane | 0.25 | ND | 18.09 | ND | 18.66 | 19.45 | 20.0 | ND | 90.5 | ND | 93.3 | 97.3 | 44.0 | 182.0 | 4.1 | 85.0 | | | | | |
| vinyl chloride | 0.25 | ND | 20.58 | ND | 19.21 | 18.40 | 20.0 | ND | 102.9 | ND | 96.1 | 92.0 | 61.0 | 164.0 | 4.3 | 63.0 | | | | | |
| bromomethane | 0.50 | ND | 21.36 | ND | 17.98 | 17.97 | 20.0 | ND | 106.8 | ND | 89.9 | 89.9 | 64.2 | 140.0 | 0.1 | 58.0 | | | | | |
| chloroethane | 0.50 | ND | 21.54 | ND | 20.13 | 20.65 | 20.0 | ND | 107.7 | ND | 100.7 | 103.3 | 74.0 | 148.0 | 2.6 | 47.0 | | | | | |
| trichlorofluoromethane | 0.25 | ND | 21.83 | ND | 20.75 | 19.84 | 20.0 | ND | 109.2 | ND | 103.8 | 99.2 | 50.0 | 157.0 | 4.5 | 65.0 | | | | | |
| acetone | 2.50 | ND | 18.80 | ND | 18.90 | 20.56 | 20.0 | ND | 94.0 | ND | 94.5 | 102.8 | 39.0 | 149.0 | 8.4 | 67.0 | | | | | |
| 1,1-dichloroethene | 0.50 | ND | 23.83 | ND | 21.61 | 21.66 | 20.0 | ND | 119.2 | ND | 108.1 | 108.3 | 80.0 | 138.0 | 0.2 | 34.0 | | | | | |
| iodomethane | 0.50 | ND | 41.34 | ND | 9.83 | 4.84 | 20.0 | ND | 206.7 | ND | 49.2 | 24.2 | 10.0 | 274.0 | 68.0 | 171.0 | | | | | |
| methylene chloride | 0.25 | ND | 21.15 | ND | 19.83 | 20.67 | 20.0 | ND | 105.8 | ND | 99.2 | 103.4 | 80.0 | 123.0 | 4.1 | 24.0 | | | | | |
| carbon disulfide | 0.50 | ND | 23.23 | ND | 21.36 | 21.48 | 20.0 | ND | 116.2 | ND | 106.8 | 107.4 | 71.0 | 143.0 | 0.6 | 44.0 | | | | | |
| methyl-tert-butyl ether | 0.50 | ND | 22.93 | ND | 21.83 | 22.18 | 20.0 | ND | 114.7 | ND | 109.2 | 110.9 | 78.0 | 140.0 | 1.6 | 38.0 | | | | | |
| trans-1,2-dichloroethene | 0.25 | ND | 23.12 | ND | 21.42 | 21.57 | 20.0 | ND | 115.6 | ND | 107.1 | 107.9 | 80.0 | 128.0 | 0.7 | 25.0 | | | | | |
| n-hexane | 0.56 | ND | 26.88 | ND | 24.27 | 22.01 | 20.0 | ND | 134.4 | ND | 121.4 | 110.1 | 68.0 | 137.0 | 9.8 | 42.0 | | | | | |
| vinyl acetate | 2.50 | ND | 10.82 | ND | 0.21 | 0.00 | 20.0 | ND | 54.1 | ND | 1.1 | 0.0 | 20.0 | 196.0 | 200.0 | 108.0 | | | L | L | H |
| 1,1-dichloroethane | 0.13 | ND | 21.60 | ND | 20.20 | 20.34 | 20.0 | ND | 108.0 | ND | 101.0 | 101.7 | 80.0 | 124.0 | 0.7 | 25.0 | | | | | |
| 2-butanone | 2.50 | ND | 21.97 | ND | 20.97 | 21.67 | 20.0 | ND | 109.9 | ND | 104.9 | 108.4 | 53.0 | 146.0 | 3.3 | 57.0 | | | | | |
| 2,2-dichloropropane | 0.25 | ND | 22.70 | ND | 20.98 | 20.35 | 20.0 | ND | 113.5 | ND | 104.9 | 101.8 | 78.0 | 137.0 | 3.0 | 36.0 | | | | | |
| cis-1,2-dichloroethene | 0.25 | ND | 21.81 | ND | 19.85 | 20.33 | 20.0 | ND | 109.1 | ND | 99.3 | 101.7 | 80.0 | 122.0 | 2.4 | 22.0 | | | | | |
| chloroform | 0.13 | ND | 22.46 | 0.24 | 21.71 | 21.58 | 20.0 | ND | 112.3 | 0.24 | 107.4 | 106.7 | 80.0 | 125.0 | 0.6 | 22.0 | | | | | |
| bromochloromethane | 0.20 | ND | 23.25 | ND | 22.14 | 22.22 | 20.0 | ND | 116.3 | ND | 110.7 | 111.1 | 80.0 | 130.0 | 0.4 | 29.0 | | | | | |
| 1,1,1-trichloroethane | 0.25 | ND | 23.70 | ND | 22.57 | 21.82 | 20.0 | ND | 118.5 | ND | 112.9 | 109.1 | 80.0 | 135.0 | 3.4 | 29.0 | | | | | |
| 1,1-dichloropropene | 0.25 | ND | 26.65 | ND | 24.84 | 24.34 | 20.0 | ND | 133.3 | ND | 124.2 | 121.7 | 80.0 | 154.0 | 2.0 | 33.0 | | | | | |
| carbon tetrachloride | 0.25 | ND | 24.30 | ND | 23.06 | 22.29 | 20.0 | ND | 121.5 | ND | 115.3 | 111.5 | 80.0 | 140.0 | 3.4 | 34.0 | | | | | |
| 1,2-dichloroethane | 0.25 | ND | 21.89 | ND | 21.68 | 21.42 | 20.0 | ND | 109.5 | ND | 108.4 | 107.1 | 81.0 | 136.0 | 1.2 | 34.0 | | | | | |
| benzene | 0.13 | ND | 20.60 | ND | 19.58 | 19.77 | 20.0 | ND | 103.0 | ND | 97.9 | 98.9 | 80.0 | 123.0 | 1.0 | 24.0 | | | | | |
| trichloroethene | 0.25 | ND | 22.57 | ND | 20.79 | 20.67 | 20.0 | ND | 112.9 | ND | 104.0 | 103.4 | 80.0 | 125.0 | 0.6 | 22.0 | | | | | |
| 1,2-dichloropropane | 0.25 | ND | 20.91 | ND | 19.34 | 20.04 | 20.0 | ND | 104.6 | ND | 96.7 | 100.2 | 80.0 | 128.0 | 3.6 | 28.0 | | | | | |
| bromodichloromethane | 0.25 | ND | 23.90 | ND | 22.54 | 22.54 | 20.0 | ND | 119.5 | ND | 112.7 | 112.7 | 80.0 | 132.0 | 0.0 | 25.0 | | | | | |
| dibromomethane | 0.25 | ND | 23.00 | ND | 21.90 | 21.79 | 20.0 | ND | 115.0 | ND | 109.5 | 109.0 | 80.0 | 127.0 | 0.5 | 27.0 | | | | | |
| 2-chloroethylvinyl ether | 10.00 | ND | 22.28 | ND | ND | ND | 20.0 | ND | 111.4 | ND | NA | NA | 10.0 | 294.0 | NA | 246.0 | | | | | |
| 4-methyl-2-pentanone | 2.50 | ND | 21.72 | ND | 21.03 | 21.28 | 20.0 | ND | 108.6 | ND | 105.2 | 106.4 | 63.1 | 132.0 | 1.2 | 52.0 | | | | | |
| cis-1,3-dichloropropene | 0.25 | ND | 24.48 | ND | 23.20 | 23.36 | 20.0 | ND | 122.4 | ND | 116.0 | 116.8 | 80.0 | 139.0 | 0.7 | 26.0 | | | | | |
| toluene | 0.25 | ND | 21.07 | ND | 19.61 | 19.64 | 20.0 | ND | 105.4 | ND | 98.1 | 98.2 | 80.0 | 128.0 | 0.2 | 29.0 | | | | | |
| trans-1,3-dichloropropene | 0.50 | ND | 21.48 | ND | 20.53 | 20.45 | 20.0 | ND | 107.4 | ND | 102.7 | 102.3 | 80.0 | 126.0 | 0.4 | 26.0 | | | | | |
| 1,1,2-trichloroethane | 0.13 | ND | 21.12 | ND | 20.47 | 20.52 | 20.0 | ND | 105.6 | ND | 102.4 | 102.6 | 73.0 | 128.0 | 0.2 | 34.0 | | | | | |
| 2-hexanone | 2.50 | ND | 20.91 | ND | 20.37 | 20.10 | 20.0 | ND | 104.6 | ND | 101.9 | 100.5 | 56.0 | 135.0 | 1.3 | 48.0 | | | | | |
| 1,3-dichloropropane | 0.20 | ND | 20.71 | ND | 19.52 | 19.90 | 20.0 | ND | 103.6 | ND | 97.6 | 99.5 | 80.0 | 126.0 | 1.9 | 27.0 | | | | | |
| tetrachloroethene | 0.25 | ND | 22.55 | ND | 20.84 | 20.33 | 20.0 | ND | 112.8 | ND | 104.2 | 101.7 | 80.0 | 126.0 | 2.5 | 27.0 | | | | | |
| dibromochloromethane | 0.25 | ND | 21.87 | ND | 20.80 | 21.01 | 20.0 | ND | 109.4 | ND | 104.0 | 105.1 | 80.0 | 133.0 | 1.0 | 29.0 | | | | | |
| 1,2-dibromoethane | 0.25 | ND | 21.76 | ND | 20.73 | 21.10 | 20.0 | ND | 108.8 | ND | 103.7 | 105.5 | 26.0 | 187.0 | 1.8 | 99.0 | | | | | |
| 1-chlorohexane | 0.13 | ND | 22.48 | ND | 20.66 | 20.05 | 20.0 | ND | 112.4 | ND | 103.3 | 100.3 | 80.0 | 133.0 | 3.0 | 31.0 | | | | | |
| chlorobenzene | 0.13 | ND | 20.74 | ND | 19.57 | 19.47 | 20.0 | ND | 103.7 | ND | 97.9 | 97.4 | 80.0 | 120.0 | 0.5 | 21.0 | | | | | |
| 1,1,1,2-tetrachloroethane | 0.25 | ND | 21.91 | ND | 20.71 | 20.92 | 20.0 | ND | 109.6 | ND | 103.6 | 104.6 | 80.0 | 130.0 | 1.0 | 27.0 | | | | | |
| ethylbenzene | 0.25 | ND | 21.76 | ND | 20.28 | 20.19 | 20.0 | ND | 108.8 | ND | 101.4 | 101.0 | 80.0 | 121.0 | 0.4 | 22.0 | | | | | |
| m+p-xylene | 0.50 | ND | 42.48 | ND | 39.80 | 39.19 | 40.0 | ND | 106.2 | ND | 99.5 | 98.0 | 80.0 | 124.0 | 1.5 | 52.0 | | | | | |
| o-xylene | 0.25 | ND | 21.31 | ND | 20.05 | 19.92 | 20.0 | ND | 106.6 | ND | 100.3 | 99.6 | 80.0 | 120.0 | 0.7 | 18.0 | | | | | |
| styrene | 0.13 | ND | 21.25 | ND | 0.52 | 0.50 | 20.0 | ND | 106.3 | ND | 2.6 | 2.5 | 80.0 | 121.0 | 3.9 | 20.0 | | | L | L | |
| bromoform | 0.54 | ND | 22.06 | ND | 21.17 | 20.97 | 20.0 | ND | 110.3 | ND | 105.9 | 104.9 | 75.0 | 132.0 | 0.9 | 34.0 | | | | | |
| isopropylbenzene | 0.25 | ND | 20.56 | ND | 19.36 | 19.15 | 20.0 | ND | 102.8 | ND | 96.8 | 95.8 | 80.0 | 121.0 | 1.1 | 24.0 | | | | | |
| 1,1,2,2-tetrachloroethane | 0.13 | ND | 19.71 | ND | 18.45 | 19.06 | 20.0 | ND | 98.6 | ND | 92.3 | 95.3 | 73.0 | 128.0 | 3.3 | 34.0 | | | | | |
| 1,2,3-trichloropropane | 0.75 | ND | 20.77 | ND | 19.73 | 20.04 | 20.0 | ND | 103.9 | ND | 98.7 | 100.2 | 78.0 | 130.0 | 1.6 | 32.0 | | | | | |
| propyl-benzene | 0.13 | ND | 20.45 | ND | 19.02 | 18.95 | 20.0 | ND | 102.3 | ND | 95.1 | 94.8 | 79.0 | 127.0 | 0.4 | 29.0 | | | | | |
| bromobenzene | 0.13 | ND | 20.72 | ND | 19.50 | 19.56 | 20.0 | ND | 103.6 | ND | 97.5 | 97.8 | 80.0 | 120.0 | 0.3 | 22.0 | | | | | |
| 1,3,5-trimethylbenzene | 0.25 | ND | 20.32 | ND | 10.85 | 7.51 | 20.0 | ND | 101.6 | ND | 54.3 | 37.6 | 80.0 | 122.0 | 36.4 | 25.0 | | | L | L | H |
| 2-chlorotoluene | 0.13 | ND | 18.91 | ND | 18.69 | 18.56 | 20.0 | ND | 94.6 | ND | 93.5 | 92.8 | 53.0 | 164.0 | 0.7 | 62.0 | | | | | |
| 4-chlorotoluene | 0.25 | ND | 20.14 | ND | 18.37 | 18.49 | 20.0 | ND | 100.7 | ND | 91.9 | 92.5 | 42.0 | 163.0 | 0.7 | 74.0 | | | | | |
| tert-butyl-benzene | 0.25 | ND | 20.17 | ND | 18.74 | 18.69 | 20.0 | ND | 100.9 | ND | 93.7 | 93.5 | 76.0 | 132.0 | 0.3 | 34.0 | | | | | |
| 1,2,4-trimethylbenzene | 0.25 | ND | 20.29 | ND | 18.21 | 18.21 | 20.0 | ND | 101.5 | ND | 91.1 | 91.1 | 80.0 | 128.0 | 0.0 | 27.0 | | | | | |
| sec-butyl-benzene | 0.25 | ND | 20.09 | ND | 18.53 | 18.44 | 20.0 | ND | 100.5 | ND | 92.7 | 92.2 | 73.0 | 126.0 | 0.5 | 33.0 | | | | | |
| p-isopropyl-toluene | 0.25 | ND | 19.93 | ND | 18.49 | 18.33 | 20.0 | ND | 99.7 | ND | 92.5 | 91.7 | 77.0 | 124.0 | 0.9 | 29.0 | | | | | |
| 1,3-dichlorobenzene | 0.25 | ND | 20.23 | ND | 18.73 | 18.66 | 20.0 | ND | 101.2 | ND | 93.7 | 93.3 | 80.0 | 120.0 | 0.4 | 22.0 | | | | | |
| 1,4-dichlorobenzene | 0.13 | ND | 19.71 | ND | 18.28 | 18.65 | 20.0 | ND | 98.6 | ND | 91.4 | 93.3 | 80.0 | 120.0 | 2.0 | 18.0 | | | | | |
| n-butyl-benzene | 0.25 | ND | 20.64 | ND | 18.34 | 18.43 | 20.0 | ND | 103.2 | ND | 91.7 | 92.2 | 73.0 | 136.0 | 0.5 | 39.0 | | | | | |
| 1,2-dichlorobenzene | 0.13 | ND | 20.14 | ND | 18.92 | 19.27 | 20.0 | ND | 100.7 | ND | 94.6 | 96.4 | 80.0 | 120.0 | 1.8 | 20.0 | | | | | |
| 1,2-dibromo-3-chloropropane | 1.00 | ND | 20.84 | ND | 19.33 | 19.89 | 20.0 | ND | 104.2 | ND | 96.7 | 99.5 | 22.0 | 178.0 | 2.9 | 96.0 | | | | | |
| 1,2,4-trichlorobenzene | 0.20 | ND | 19.06 | ND | 17.80 | 18.02 | 20.0 | ND | 95.3 | ND | 89.0 | 90.1 | 75.0 | 126.0 | 1.2 | 31.0 | | | | | |
| hexachlorobutadiene | 0.25 | ND | 18.69 | ND | 17.22 | 17.17 | 20.0 | ND | 93.5 | ND | 86.1 | 85.9 | 68.0 | 126.0 | 0.3 | 36.0 | | | | | |
| naphthalene | 0.20 | ND | 19.08 | ND | 18.13 | 18.47 | 20.0 | ND | 95.4 | ND | 90.7 | 92.4 | 57.0 | 138.0 | 1.9 | 50.0 | | | | | |
| 1,2,3-trichlorobenzene | 0.13 | ND | 18.94 | ND | 17.46 | 18.56 | 20.0 | ND | 94.7 | ND | 87.3 | 92.8 | 66.0 | 130.0 | 6.1 | 39.0 | | | | | |
| Surrogates | | | | | | | | | | | | | | | | | | | | | |
| dibromofluoromethane | | 26.29 | 26.51 | 26.60 | 26.19 | 26.12 | 25.0 | 105.2 | 106.0 | 106.4 | 104.8 | 104.5 | 86 | 118 | | | | | | | |
| 1,2-dichloroethane-d4 | | 25.89 | 25.70 | 26.82 | 25.96 | 25.72 | 25.0 | 103.6 | 102.8 | 107.3 | 103.8 | 102.9 | 80 | 120 | | | | | | | |
| toluene-d8 | | 25.96 | 25.30 | 25.55 | 25.66 | 26.00 | 25.0 | 103.8 | 101.2 | 102.2 | 102.6 | 104.0 | 88 | 110 | | | | | | | |
| p-bromofluorobenzene | | 25.36 | 25.20 | 24.84 | 24.54 | 25.17 | 25.0 | 101.4 | 100.8 | 99.4 | 98.2 | 100.7 | 86 | 115 | | | | | | | |

Notes and Definitions:

RDL= Reporting Detection Limit
LCS= Laboratory Control Sample
MS/MSD= Matrix Spike / Matrix Spike Duplicate
LCL= Lower Control Limit
UCL= Upper Control Limit
ND= Not Detected
NS=Not spiked
NA=Not applicable
RPD= Relative Percent Difference
H=Above control limit
L=Below control limit
DF=Dilution Factor

# KEMRON ANALYST LIST

## Ohio Valley Laboratory

## 04/04/2001

---

ABW - ANGELA B. WIGAL
ADB - AMANDA D. BREEDLOVE
ADH - ANGELA D. HURST
AJF - AMANDA J. FICKIESEN
ALT - ANN L. THAYER
AMT - ANDREA M. TUCKER
ARS - ANGELINA R. SCOTT
BJM - BARRY J. MYERS
BRG - BRENDA R. GREGORY
CAF - CHERYL A. FLOWERS
CAK - CHERYL A. KOELSCH
CBN - CHARLES B. NOLL
CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD
CLK - CARL L. KING
CLW - CHARISSA L. WINTERS
CMS - CRYSTAL M. STEVENS
CRC - CARLA R. COCHRAN
CSH - CHRIS S. HILL
DAM - DAN A. MUSGRAVE
DAS - DALLAS A. SULLIVAN
DAT - DEBBIE A. TORNES
DCU - DAVID C. UNDERWOOD
DEL - DON E. LIGHTFRITZ
DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON
DLA - DENISE L. ADAMS
DLB - DAVID L. BUMGARNER
DLN - DEANNA L. NORTON
DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH
DP - DEANNA L. PIERSON
DST - DENNIS S. TEPE
DTK - DEENA T. KELLEY
EAN - ELIZABETH A. NICHOLSON
EAW - ELIZABETH A. WEBER
ECL - ERIC C. LAWSON
EIE - ELIZABETH I. EAGLE
GSG - GALEN S. GEORGE
GWH - GEORGE W. HUTCHISON
HD - HEATH DENNIS
HV - HEMA VILASAGAR
JAQ - JEROMY A. QUESENBERRY
JAW - JOYCE A. WITHERS
JKM - JUNE K. MORRIS
JKW - JANE K. WARDEN
JLH - JANICE L. HOLLAND
JMM - JARROD M. MARTIN
JMT - JOY M. THOMAS
JMW - JOHN M. WASS
JRM - JAY R. MCDOUGAL
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KDS - KRISTI D. STONE
KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON
KSL - KELLY S. LAUER
LBM - LAWRENCE B. MCSWEGAN
LKN - LINDA K. NEDEFF
LRR - LUCYNDA R. ROBERTS
LSA - LUCINDA S. ARNOLD
LSB - LESLIE S. BUCINA
MDA - MICHAEL D. ALBERTSON
MDC - MICHAEL D. COCHRAN
MDG - MELISSA D. GRIMES
MEF - MIKE E. FLANAGAN
MES - MARY E. SCHILLING
MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY
MRR - MICHELLE R. RAUCH
MSW - MATT S. WILSON
NJB - NATALIE J. BOOTH
PML - PAULA M. LEIDY
RDC - REBECCA D. CUTLIP
REF - RON E. FERTILE
REK - ROBERT E. KYER
RJW - RHONDA J. WITTEKIND
RLW - RON L. WATSON
RSH - RENEE S. HENNES
RSS - REGINA S. SIMMONS
RVC - RUTH V. CALLIHAN
RWC - ROD W. CAMPBELL
SAM - SAMUAL A. MILLS
SJK - SINDY J. KINNEY
SKH - SHARON K. HANDSCHUMACHER
SLC - SHAWN L. COLE
SLP - SHERI L. PFALZGRAF
SLT - STEPHANIE L. TEPE
SMW - SHAUNA M. WELCH
SPL - STEVE P. LEARN
SPS - STEVE P. SWATZEL
TJH - TIM J. HOEFLICH
TLD - TERESA L. DAVIS
TM - TODD MCGINNIS
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER

# KEMRON Environmental Services, Inc
# List of Valid Qualifiers
# December 15, 2000

## *Standard Qualifiers*

These are KEMRON's Standard Report Qualifiers

| | |
|---|---|
| A | See the report narrative |
| B | Present in the method blank |
| C | Confirmed by GC/MS |
| CG | Confluent growth |
| D | The analyte was quantified at a secondary dilution factor |
| DL | Surrogate or spike was diluted out |
| E | Estimated concentration due to sample matrix interference |
| FL | Free liquid |
| I | Semiquantitative result, out of instrument calibration range |
| J | Present below nominal reporting limit |
| L | Sample reporting limits elevated due to matrix interference |
| M | Duplicate injection precision not met |
| N | Tentatively Identified Compound (TIC) |
| NA | Not applicable |
| ND | Not detected at or above the reporting limit (RL) |
| NF | Not found |
| NFL | No free liquid |
| NI | Non-ignitable |
| NR | Analyte is not required to be analyzed |
| NS | Not spiked |
| P | Concentration >40% difference between The two GC columns |
| QNS | Quantity not sufficient to perform analysis |
| R | Analyte exceeds regulatory limit |
| RA | Re analysis confirms reported results |
| RE | Re analysis confirms sample matrix Interference |
| S | Analyzed by method of standard addition |
| SMI | Sample matrix interference on surrogate |
| SP | Reported results are for spike compounds only |
| TNTC | Too numerous to count |
| U | Analyzed for but not detected |
| W | Post-digestion spike for furnace AA out Of control limits |
| Z | Can not be resolved from isomer.*** |
| + | Correlation coefficient for the MSA is less Than 0.995 |
| < | Less than |
| > | Greater than |
| * | Surrogate or spike compound out of range |

***** Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantative screens only
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene
3. N-nitrosodiphenylamine cannot be separated from diphenylamine
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds
5. m-Xylene and p-Xylene are unresolvable compounds
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent

## *AFCEE Qualifiers*

These are KEMRON's AFCEE Report Qualifiers

| | |
|---|---|
| **J** | The analyte was positively identified, the quantitation is an estimation |
| **U** | The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL |
| **F** | The analyte was positively identified but the associated numerical value is below the RL |
| **R** | The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria |
| **B** | The analyte was found in an associated blank, as well as in the sample |
| **M** | The matrix effect was present |
| **S** | To be applied to all field screening data |
| **T** | Tentatively identified compound (using GC/MS) |

**CHRYSLER CORPORATION**

# Chain-of-Custody

04641 A

OFFSITE DRILLING

~~CompuChem~~ KEMRON
~~501 Madison Avenue~~ 109 STARLITE PARK
~~Gary, NC 27513~~ MARIETTA, OH 45750
Phone Number: ~~1-800-833-5097~~ (740) 373 4071
Fax Number: ~~(919) 379-4050~~

Project Name: DAYTON THERMAL PRODUCTS
Site Location: 1600 WEBSTER ST. DAYTON, OH
Site Code: SC 001
RFA Number: YGQP2001209 SOG 209G
Chrysler PM: GARY STANZUK

Consultant: LBG
Address: 1210 WEST COUNTY RD E SUITE 700 ST PAUL, MN 55112
Consultant PM: KENNETH VOGEL
Phone: 651 490 1405 Fax: 651 490 1006

**Turn-around Time Request:**
- (24 calendar hrs.)
- 48 calendar hrs.
- 10 days
- 28 days

**Data Package Deliverables: (circle)**
- (Chrysler Level 1)
- Chrysler Level 2
- Other (specify):

**Matrix Codes**
S - Soil; SW - Surface Water; GW - Groundwater; A - Air; Sed. - Sediment; O - Other (specify) SEE REMARKS

| Field Sample Identification | Date Collected | Time Collected | Grab (G) or Composite (C) | Matrix Code | Total # of Containers | TCL VOC 8260B/5035 | | | | | | | | | Volatiles pH <2 | Metals pH <2 | Cyanide pH > 12 | Other | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WL0019 | 4/10/01 | 1250 | G | O | 3 | X | | | | | | | | | | | | | 1,000 GALLONS OF WASTEWATER CONTAINED IN THE "BLUE 1,000 GALLON POLY TANK" WATER WAS GENERATED FROM WELL DRILLING, DEVELOPMENT, AND STEAM CLEANING C/C sealed S/C intact |

Sampler(s): KRISTIN YAHNKE, LYNDSEY ALM

Cooler ID # LBG01-02

Is RFA sampling complete? Yes (No)

Bottles Relinquished under Airbill No. 457366355901

Samples Relinquished under Airbill No. 816239989050

Temperature (corrected) 5 C

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: | Custody Seal Intact? |
|---|---|---|---|---|---|---|
| Kristin Yahnke | 4/10/01 | FEDEX | | | | Yes No |
| | | | | | | Yes No |
| | | | Received for Laboratory by: Linda Gregory | 4/11/01 | 0953 | Yes (No) |

*Chrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757*

SOG 209G

Distribution: White copy: Data package Yellow : Retained by laboratory Pink: Retained by sampler

Revision No. 1
Created: September 23, 1997

# KEMRON Internal Laboratory Chain of Custody

**Work Order:** L0104198 **Client:** Compuchem **# of Samples:** 01 **Due Date:** 4/12 **Page:** 1

| Sample # | Analysis | Reason | Removed By ADT | Removed From | Moved To | Reliq. by | Ret'd By ADT | Ret'd To | Rec'd By | Reason |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 8260 Wt | Anal | CMS 4-11-01 @ 1120 | V-1 | VOA | Brg | RSS 05/02/01 @1645 | Archive | CrS | Archive |
| | | | | | | | | | | |
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CRF #3

KEMRON Environmental Services | **SAMPLES RECEIPT FORM #1** | Marietta Laboratory

| CLIENT: Compuchem | DATE: 4-11-01 | SHIPPED BY: (✓) FED-EX ( ) AIRBORNE ( ) UPS ( ) EMERY ( ) RPS ( ) US MAIL ( ) KEMRON ( ) CLIENT |
|---|---|---|
| BRC ARS Other _____ | | |

| | | |
|---|---|---|
| COOLER ID: 2g100 | COOLER ID: | COOLER ID: |
| INDEX # 8162 3998 9050 | INDEX # : | INDEX # : |
| SEALED (✓) YES ( ) NO | SEALED ( ) YES ( ) NO | SEALED ( ) YES ( ) NO |
| CUSTODY (✓) YES ( ) NO | CUSTODY ( ) YES ( ) NO | CUSTODY ( ) YES ( ) NO |
| TEMP : (C) (D) 5 °C | TEMP : (C) (D) °C | TEMP : (C) (D) °C |
| TEMP IN RANGE (4°C ± 2°) (✓) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO | TEMP IN RANGE (4°C ± 2°) ( ) YES ( ) NO |
| WET ICE (✓) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) | WET ICE ( ) BLUE ICE ( ) |
| ICE FROZEN (✓) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) | ICE FROZEN ( ) MELTED ( ) |
| RADIATION CHECKED (✓) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO | RADIATION CHECKED ( ) YES ( ) NO |
| SAMPLE INTACT (✓) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO | SAMPLE INTACT ( ) YES ( ) NO<br>SALVAGEBLE ( ) YES ( ) NO |
| SAMPLE TYPE:<br>WATER (✓) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) | SAMPLE TYPE:<br>WATER ( ) SOIL ( ) OTHER ( ) |
| LABELS: INTACT (✓) YES ( ) NO<br>LEGIBLE (✓) YES ( ) NO<br>MATCH COC (✓) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO | LABELS: INTACT ( ) YES ( ) NO<br>LEGIBLE ( ) YES ( ) NO<br>MATCH COC ( ) YES ( ) NO |
| pH IN RANGE (2 - >9 - >12) AS APPROPRIATE (✓) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO | pH IN RANGE (2 - >9 - >12) AS APPROPRIATE ( ) YES ( ) NO |
| LOG-IN COMMENTS | LOG-IN COMMENTS | LOG-IN COMMENTS |
| | | |
| | | |
| | | |

TSR COMMENTS

| CONTACT: | DATE: | TIME: |
|---|---|---|
| | | |

COMMENTS: ( ) VOICE ( ) FAX ( ) E-MAIL

Revised 02/21/01

Loose

Loose

# LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER
AND ENVIRONMENTAL ENGINEERING SERVICES

1210 WEST COUNTY ROAD E, Suite 700
SAINT PAUL, MN 55112
(651) 490-1405 FAX (651) 490-1006


| | |
|---|---|
| **DATE**: April 13, 2001 | **PAGES:** 7 5<br>**(Includes cover page)** |
| **TO:**<br>**COMPANY:** | **FAX #:**<br>**PHONE #:** |
| **TO:** Mike Webb<br>**COMPANY:** ONYX | **FAX #:** 937-237-3669<br>**PHONE #:** 937-603-2597 |
| **TO:** Gary Stanczuk<br>**COMPANY:** DC Corporate | **FAX #:** 248-576-7369<br>**PHONE #:** 248-576-7365 |
| **TO:** Britt Crider<br>**COMPANY:** DC Dayton Thermal | **FAX #:** 937-224-2915<br>**PHONE #:** 937-224-2532 |

**FROM:** Ken Vogel/Dave Strand

RE: Offsite drilling water disposal analytical results.

Here are the Final analytical results for the 1,000 gallon BLUE poly tank (sample WL0019). Nothing changed from the preliminary data faxed earlier. Positive detections were:

| | Trichloroethene | cis-1,2-Dichloroethene |
|---|---|---|
| WL0019 | 41 ug/L | 8.3 ug/L |

The Ohio EPA hazardous waste regulatory level for Trichloroethene is 500 ug/L.
There is no Ohio hazardous waste regulatory level for cis-1,2-Dichloroethene.

**fax** TRANSMITTAL S:\TECH\3CHRY\DAYTON\ANALYTIC\WATER\WASTE#6.FAX

**COMPUCHEM**
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

Visit our web site –
www.compuchemlabs.com

# FAX

TO: KEN VOGEL
DAVE STRAND
FAX: (651) 490-1006
DATE: 4/13/01

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 4

COMMENTS:

FINAL RESULTS FOR WL0019

# TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104198
Report Date: 04/13/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 04/11/01

## SAMPLE IDENTIFICATION

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104198-01 | WL0019 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

Certified By
David L. Bumgarner

Login #L0104198
April 13, 2001 08:36 am

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104198-01
Client Sample ID: WL0019
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04641/
Date Collected: 04/10/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/11/01 Time: 17:33

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43335.D

Method: 8260B\5030
Run ID: R120359
Batch : WG95396

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ug/L | | ND | 100 | 1 |
| 71-43-2 | Benzene | ug/L | | ND | 5.0 | 1 |
| 108-86-1 | Bromobenzene | ug/L | | ND | 5.0 | 1 |
| 74-97-5 | Bromochloromethane | ug/L | | ND | 5.0 | 1 |
| 75-27-4 | Bromodichloromethane | ug/L | | ND | 5.0 | 1 |
| 75-25-2 | Bromoform | ug/L | | ND | 5.0 | 1 |
| 74-83-9 | Bromomethane | ug/L | | ND | 10 | 1 |
| 78-93-3 | 2-Butanone | ug/L | | ND | 100 | 1 |
| 104-51-8 | n-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 135-98-8 | sec-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 98-06-6 | tert-Butylbenzene | ug/L | | ND | 5.0 | 1 |
| 75-15-0 | Carbon disulfide | ug/L | | ND | 5.0 | 1 |
| 56-23-5 | Carbon tetrachloride | ug/L | | ND | 5.0 | 1 |
| 108-90-7 | Chlorobenzene | ug/L | | ND | 5.0 | 1 |
| 124-48-1 | Chlorodibromomethane | ug/L | | ND | 5.0 | 1 |
| 75-00-3 | Chloroethane | ug/L | | ND | 10 | 1 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ug/L | | ND | 10 | 1 |
| 67-66-3 | Chloroform | ug/L | | ND | 5.0 | 1 |
| 74-87-3 | Chloromethane | ug/L | | ND | 10 | 1 |
| 95-49-8 | 2-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 106-43-4 | 4-Chlorotoluene | ug/L | | ND | 5.0 | 1 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ug/L | | ND | 5.0 | 1 |
| 106-93-4 | 1,2-Dibromoethane | ug/L | | ND | 5.0 | 1 |
| 74-95-3 | Dibromomethane | ug/L | | ND | 5.0 | 1 |
| 95-50-1 | 1,2-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 541-73-1 | 1,3-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 106-46-7 | 1,4-Dichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 75-71-8 | Dichlorodifluoromethane | ug/L | | ND | 10 | 1 |
| 75-34-3 | 1,1-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 107-06-2 | 1,2-Dichloroethane | ug/L | | ND | 5.0 | 1 |
| 75-35-4 | 1,1-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 156-59-2 | cis-1,2-Dichloroethene | ug/L | 8.3 | | 5.0 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | ug/L | | ND | 5.0 | 1 |
| 78-87-5 | 1,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 142-28-9 | 1,3-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 594-20-7 | 2,2-Dichloropropane | ug/L | | ND | 5.0 | 1 |
| 10061-01-5 | cis-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 10061-02-6 | trans-1,3-Dichloropropene | ug/L | | ND | 5.0 | 1 |
| 563-58-6 | 1,1-Dichloropropene | ug/L | | ND | 5.0 | 1 |

RL = Reporting Limit

Login #L0104198
April 13, 2001 08:36 am

KEMRON ENVIRONMENTAL SERVICES

**Product: 8260 - Volatile Organics**

Lab Sample ID: L0104198-01
Client Sample ID: WL0019
Site/Work ID: SC001/OFFSITE DRILLING
Matrix: Water

Dil. Type: N/A
COC Info: 04641/
Date Collected: 04/10/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: N/A

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 04/11/01 Time: 17:33

Instrument: HPMS2
Analyst: CMS
Lab File ID: 2M43335.D

Method: 8260B\5030
Run ID: R120359
Batch : WG95396

| CAS # | Compound | Units | Result | Qualifiers | RL | Dilution |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethylbenzene | ug/L | | ND | 5.0 | 1 |
| 591-78-6 | 2-Hexanone | ug/L | | ND | 10 | 1 |
| 87-68-3 | Hexachlorobutadiene | ug/L | | ND | 5.0 | 1 |
| 98-82-8 | Isopropylbenzene | ug/L | | ND | 5.0 | 1 |
| 99-87-6 | p-Isopropyltoluene | ug/L | | ND | 5.0 | 1 |
| 108-10-1 | 4-Methyl-2-pentanone | ug/L | | ND | 10 | 1 |
| 75-09-2 | Methylene chloride | ug/L | | ND | 5.0 | 1 |
| 91-20-3 | Naphthalene | ug/L | | ND | 10 | 1 |
| 103-65-1 | n-Propylbenzene | ug/L | | ND | 5.0 | 1 |
| 100-42-5 | Styrene | ug/L | | ND | 5.0 | 1 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ug/L | | ND | 5.0 | 1 |
| 127-18-4 | Tetrachloroethene | ug/L | | ND | 5.0 | 1 |
| 108-88-3 | Toluene | ug/L | | ND | 5.0 | 1 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ug/L | | ND | 5.0 | 1 |
| 71-55-6 | 1,1,1-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-00-5 | 1,1,2-Trichloroethane | ug/L | | ND | 5.0 | 1 |
| 79-01-6 | Trichloroethene | ug/L | 41 | | 5.0 | 1 |
| 75-69-4 | Trichlorofluoromethane | ug/L | | ND | 10 | 1 |
| 96-18-4 | 1,2,3-Trichloropropane | ug/L | | ND | 5.0 | 1 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ug/L | | ND | 5.0 | 1 |
| 108-05-4 | Vinyl acetate | ug/L | | ND | 10 | 1 |
| 75-01-4 | Vinyl chloride | ug/L | | ND | 10 | 1 |
| 95-47-6 | o-Xylene | ug/L | | ND | 5.0 | 1 |
| 108-38-3 | m-Xylene | ug/L | | ND | 5.0 | 1 |
| 106-42-3 | p-Xylene | ug/L | | ND | 5.0 | 1 |

**SURROGATES- In Percent Recovery:**

| | | |
|---|---|---|
| Dibromofluoromethane | 107 | ( 86 - 118%) |
| 1,2-Dichloroethane-d4 | 106 | ( 80 - 120%) |
| Toluene-d8 | 102 | ( 88 - 110%) |
| 4-Bromofluorobenzene | 101 | ( 86 - 115%) |

RL = Reporting Limit

COMPUCHEM
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

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www.compuchemlabs.com

# FAX

TO: KEN VOGEL
DAVE STRAND
FAX: (651) 490-1006
DATE: 4/12/01

FROM: CATHY DOVER
PHONE: (919) 379-4100
FAX: (919) 379-4050

PAGES WITH COVER: 5

COMMENTS:

PRELIMINARY RESULTS FOR WL0019

**TEST CERTIFICATE**
**KEMRON Environmental Services**
**109 Starlite Park**
**Marietta, Ohio 45750**
Phone: (740) 373-4071

CompuChem
501 Madison Ave.
Cary, NC 27513

Attention: Diane Byrd

PO Number:
Account Number: COMPUCHEM-529

Login #: L0104198
Report Date: 04/12/01
Work ID: SC001/OFFSITE DRILLING
Date Received: 04/11/01

**SAMPLE IDENTIFICATION**

| Sample Number | Sample Description | Sample Number | Sample Description |
|---|---|---|---|
| L0104198-01 | WL0019 | | |

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

**PRELIMINARY**

Certified By
David L. Bumgarner

EPA Region 5 Records Ctr.
350136

# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** | mw-A1 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL ~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1355 | 80° | Sunny | 75% | 0-5 | West | Stubble/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| ~~hNu/OVM~~ TBMP | ~~"na"~~ |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.0 | NA | 29.05 | NA | 37.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 39.05 | 22.0 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 19.36 | 1,350 | 6.74 | 0.51 | N/A | N/A |
| 2 | ↓ | ↓ | 19.39 | 1,352 | 6.70 | 0.44 | N/A | N/A |
| 3 | ↓ | ↓ | 19.28 | 1,347 | 6.72 | 0.37 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| mw-A1 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1355 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-A2 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL ~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1300 | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 19.92 | NA | 29.35 | NA | 38.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 39.35 | 19.92 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 18.72 | 1,610 | 6.90 | 1.51 | N/A | N/A |
| 2 | ↓ | ↓ | 18.67 | 1,620 | 6.91 | 1.41 | N/A | N/A |
| 3 | ↓ | ↓ | 18.77 | 1,620 | 6.93 | 1.33 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-A2 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1300 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-A 3 | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1040 | 80 | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.70 | NA | 29.3 | NA | 37.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 39.30 | 22.70 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| ~~1~~ 2 | Low Flow | Low Flow | 20.08 | 1,247 | 6.91 | 0.30 | N/A | N/A |
| 3 | ↓ | ↓ | 20.13 | 1,247 | 6.89 | 0.28 | N/A | N/A |
| 4 | ↓ | ↓ | 20.11 | 1,249 | 6.87 | 0.23 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-A3 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1040 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-A 4 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL-~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1400 | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.91 | — | 35.0 | — | 43.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 45.00 | 21.91 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 18.34 | 1,052 | 6.84 | 0.54 | N/A | N/A |
| 2 | ↓ | ↓ | 18.23 | 1,048 | 6.85 | 0.41 | N/A | N/A |
| 3 | | | 18.19 | 1,044 | 6.86 | 0.35 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Turbid

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-A 4 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1400 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** mw-A 5 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL-~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1235 | 80 | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.85 | — | 29.35 | — | 38.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 39.35 | 21.85 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 18.03 | 1,650 | 7.04 | 0.70 | N/A | N/A |
| 3 | ↓ | ↓ | 18.01 | 1,640 | 7.04 | 0.61 | N/A | N/A |
| ~~4~~ | | | 18.01 | 1,650 | 7.04 | 0.54 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| mw A5 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1235 |
| | | | | | | | |
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Rev. 1 by LBG, Jan 2001



S:\TECH\3CHRY
GW_sampling_record.xls, Sheet1

# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** | MW-A6 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 0745 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.32 | — | 29.80 | — | 38.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 39.80 | 22.32 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 20.22 | 1,570 | 6.78 | 0.67 | N/A | N/A |
| 2 | ↓ | ↓ | 20.21 | 1,570 | 6.78 | 0.73 | N/A | N/A |
| 3 | ↓ | ↓ | 20.24 | 1,570 | 6.80 | 0.65 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Duplicate Performed, clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-A6 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 0745 |
| MW-A6 Duplicate | 2 | 40 ml | VOA | VOC, 8260 | HCL | 8/2/01 | 0745 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-B1 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL-~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1550 | 80° | Sunny | 75% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 15.24 | — | 64.15 | — | 72.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 74.15 | 15.24 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 16.70 | 979 | 6.97 | 0.54 | N/A | N/A |
| 3 | ↓ | ↓ | 16.69 | 976 | 6.96 | 0.39 | N/A | N/A |
| 4 | ↓ | ↓ | 16.77 | 981 | 6.91 | 0.35 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW B-1 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1550 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** mw-B2 |

| | |
|---|---|
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | Inspectors: MCP, DVS |
| | Pump #: low-flow |
| | Laboratory: STL-~~Chicago~~ Ohio |
| | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1155 | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.30 | — | 76.85 | — | 83.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 76.85 | 22.30 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | low Flow | low Flow | 17.83 | 1,590 | 7.22 | 0.51 | N/A | N/A |
| 3 | ↓ | ↓ | 17.80 | 1,580 | 7.22 | 0.63 | N/A | N/A |
| 4 | ↓ | ↓ | 17.77 | 1,586 | 7.17 | 0.52 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| mw-B2 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1155 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-B 3 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL ~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.74 | — | 45.75 | — | 53.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 55.75 | 22.74 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| | Low Flow | Low Flow | 17.01 | 1540 | 6.79 | 0.50 | N/A | N/A |
| | ↓ | ↓ | 17.05 | 1530 | 6.79 | 0.42 | N/A | N/A |
| | ↓ | ↓ | 16.99 | 1530 | 6.79 | 0.36 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-B 3 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1730 |
| | | | | | | | |
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Rev. 1 by LBG, Jan 2001



S:\TECH\3CHRY
GW_sampling_record.xls, Sheet1

# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-B 4 | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1450 | 80° | Sunny | 75% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.78 | — | 25.35 | — | 34.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 35.35 | 22.78 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 14.84 | 858 | 7.03 | 0.83 | N/A | N/A |
| 2 | ↓ | ↓ | 14.74 | 830 | 7.04 | 0.66 | N/A | N/A |
| 3 | ↓ | ↓ | 15.03 | 830 | 7.05 | 0.70 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Turbid

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-B 4 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1450 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-B 5 | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Chad |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 0925 | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.29 | — | 79.90 | — | 88.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 89.90 | 21.29 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 17.15 | 1,730 | 6.82 | 0.80 | N/A | N/A |
| 3 | ↓ | ↓ | 17.13 | 1,750 | 6.83 | 0.68 | N/A | N/A |
| 4 | ↓ | ↓ | 17.09 | 1,740 | 6.83 | 0.64 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-B5 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 0925 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | | **Well #:** MW-B6 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | | Inspectors: MCP, DVS |
| | | | Pump #: low-flow |
| | | | Laboratory: STL-~~Chicago~~ Ohio |
| | | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1300 | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.94 | — | 35.80 | — | 43.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 45.80 | 21.94 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 19.44 | 1,238 | 6.90 | 0.49 | N/A | N/A |
| 3 | ↓ | ↓ | 19.40 | 1,239 | 6.89 | 0.42 | N/A | N/A |
| 4 | ↓ | ↓ | 19.39 | 1,239 | 6.87 | 0.36 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-B6 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1300 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-C 1 | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-Chicago |
| | | Bailer Type: | na Ohio |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1550 | 80° | Sunny | 75% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 18.88 | — | 102 | — | 109.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 112.00 | 18.88 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 16.85 | 913 | 7.25 | 0.65 | N/A | N/A |
| 2 | ↓ | ↓ | 16.77 | 915 | 7.25 | 0.57 | N/A | N/A |
| 3 | ↓ | ↓ | 16.83 | 915 | 7.25 | 0.49 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Turbid

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-C1 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1550 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-C 2 |

| | |
|---|---|
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | Inspectors: MCP, DVS |
| | Pump #: low-flow |
| | Laboratory: STL ~~Chicago~~ Ohio |
| | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 12:00 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 24.61 | — | 112 | — | 117.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 122.00 | 24.61 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| Time (~~24 hour~~ Cycle) | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 16.95 | 974 | 7.21 | 0.71 | N/A | N/A |
| 3 | ↓ | ↓ | 16.92 | 975 | 7.21 | 0.59 | N/A | N/A |
| 4 | ↓ | ↓ | 16.96 | 978 | 7.19 | 0.53 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** Turbid

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-C2 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 12:00 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-C3 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL ~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.79 | — | 74.0 | — | 81.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 84.00 | ~~51.53~~ 22.79 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| | Low Flow | Low Flow | 16.58 | 1197 | 6.87 | .37 | N/A | N/A |
| | ↓ | ↓ | 16.42 | 1201 | 6.88 | .30 | N/A | N/A |
| | | | ~~17.44~~ | ~~1204~~ | ~~6.89~~ | ~~0.25~~ | N/A | N/A |
| | | | 16.40 | 1202 | 6.88 | 0.27 | | |
| | | | | | | | | |

**REMARKS:**

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-C3 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1705 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-75 | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 ~~MW 75~~ | |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 0920 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.45 | — | 20.25 | — | 29.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 30.25 | 21.45 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 16.74 | 1,414 | 6.98 | 0.60 | N/A | N/A |
| 3 | ↓ | ↓ | 16.80 | 1,420 | 6.97 | 0.50 | N/A | N/A |
| 4 | ↓ | ↓ | 16.78 | 1,420 | 6.97 | 0.45 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-75 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 0920 |
| | | | | | | | |
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GW_sampling_record.xls, Sheet1

# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** P2 - 7I | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 0930 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.09 | — | 53.35 | — | 53.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 55.35 | 21.09 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 17.01 | 1,331 | 7.03 | 0.47 | N/A | N/A |
| 3 | ↓ | ↓ | 16.98 | 1,333 | 7.02 | 0.38 | N/A | N/A |
| 4 | ↓ | ↓ | 17.05 | 1,332 | 7.01 | 0.38 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| P2-7I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 0930 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** mw-8 S |

| | |
|---|---|
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | Inspectors: MCP, DVS |
| | Pump #: low-flow |
| | Laboratory: STL-~~Chicago~~ Ohio |
| | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1330 | 80' | Sunny | 50% | 0-5 | West | Stubble/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.48 | — | 19.0 | — | 28.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 29.00 | 21.48 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| Time ~~(24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 18.41 | 1,560 | 6.77 | 5.30 | N/A | N/A |
| 2 | ↓ | ↓ | 18.35 | 1,570 | 6.77 | 5.25 | N/A | N/A |
| 3 | ↓ | ↓ | 18.31 | 1,560 | 6.78 | 5.12 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** DUPLICATE PERFORMED, Turbid

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| mw-8S | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1330 |
| mw-8S Duplicate | 2 | 40 ml | VOA, glass | VOC, 8260 | HCL | 8/2/01 | 1330 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** mw - 8I |

| | |
|---|---|
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | Inspectors: MCP, DVS |
| | Pump #: low-flow |
| | Laboratory: STL ~~Chicago~~ Ohio |
| | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1335 | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.19 | — | 36.4 | — | 37.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 38.40 | 21.19 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle * | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 18.39 | 1,288 | 7.10 | 0.60 | N/A | N/A |
| 3 | ↓ | ↓ | 18.40 | 1,285 | 7.09 | 0.50 | N/A | N/A |
| 4 | ↓ | ↓ | 18.56 | 1,288 | 7.08 | 0.42 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| mw-8 1 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1335 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** P2-8D | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 0850 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.05 | — | 76.65 | — | 77.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 78.65 | 21.05 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 3 | Low Flow | Low Flow | 18.42 | 1,520 | 6.94 | 0.69 | N/A | N/A |
| 4 | ↓ | ↓ | 18.46 | 1,576 | 6.95 | 0.61 | N/A | N/A |
| 5 | ↓ | ↓ | 18.74 | 1,530 | 6.93 | 0.53 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** cloudy brown

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| P2-8D | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 0850 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ-9D |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL ~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1405 | 80°F | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.08 | — | 65.60 | — | 66.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 67.60 | 22.08 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 18.26 | 1,283 | 6.96 | 0.63 | N/A | N/A |
| 3 | ↓ | ↓ | 18.33 | 1,284 | 6.96 | 0.57 | N/A | N/A |
| 4 | ↓ | ↓ | 18.21 | 1,289 | 6.96 | 0.49 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-9D | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1405 |
| | | | | | | | |
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GW_sampling_record.xls, Sheet1

# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-105 | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1425 | 80 | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.63 | — | 19.4 | — | 28.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 29.40 | 22.63 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Sample | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 12.49 | 1,560 | 6.88 | 1.59 | N/A | N/A |
| 3 | ↓ | ↓ | 12.51 | 1,560 | 6.88 | 1.52 | N/A | N/A |
| 4 | ↓ | ↓ | 12.50 | 1,560 | 6.87 | 1.48 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-105 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1425 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** P2-10F | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ OHIO |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1420 | 80 | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.58 | — | 47.90 | — | 48.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 49.90 | 22.58 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 12.53 | 1,364 | 6.85 | 0.55 | N/A | N/A |
| 2 | ↓ | ↓ | 12.32 | 1,359 | 6.86 | 0.69 | N/A | N/A |
| 3 | ↓ | ↓ | 12.35 | 1,359 | 6.85 | 0.53 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| P2-101 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1420 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-115 |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 ~~MW-115~~ |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL-~~Chicago~~ OH |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1450 | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.74 | — | 19.05 | — | 28.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 29.05 | 22.74 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 18.05 | 1,272 | 6.97 | 0.80 | N/A | N/A |
| 3 | ↓ | ↓ | 18.04 | 1,269 | 6.95 | 0.69 | N/A | N/A |
| 4 | ↓ | ↓ | 18.00 | 1,265 | 6.93 | 0.61 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-115 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1450 |
| | | | | | | | |
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Rev. 1 by LBG, Jan 2001



S:\TECH\3CHRY
GW_sampling_record.xls, Sheet1

# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ-~~12~~ I | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-Chicago |
| | | Bailer Type: | na Ohio |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 0750 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.36 | — | 55.85 | — | 56.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 57.85 | 22.36 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 19.34 | 1,353 | 7.05 | 0.58 | N/A | N/A |
| 2 | ↓ | ↓ | 19.33 | 1,359 | 7.04 | 0.48 | N/A | N/A |
| 3 | ↓ | ↓ | 19.31 | 1,354 | 7.04 | 0.43 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-~~12~~ I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 0750 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** P2-~~12~~ D | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL ~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 0810 | 80' | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.35 | — | 82.45 | — | 83.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 84.45 | 22.35 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 14.15 | 1,468 | 6.94 | 0.69 | N/A | N/A |
| 3 | ↓ | ↓ | 14.13 | 1,467 | 6.95 | 0.59 | N/A | N/A |
| 4 | ↓ | ↓ | 14.11 | 1,472 | 6.94 | 0.53 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| P2-~~12~~ D | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 0810 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ - 13 I | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1235 | 80° | Sunny | 50% | 0-5 | West | Stalds/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.69 | — | 45.80 | — | 46.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 47.80 | 21.69 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 17.46 | 1,264 | 6.91 | 0.70 | N/A | N/A |
| 2 | ↓ | ↓ | 17.84 | 1,265 | 6.91 | 0.71 | N/A | N/A |
| 3 | ↓ | ↓ | 17.85 | 1,264 | 6.91 | 0.67 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-13 I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1235 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** P2-14 I |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL ~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1040 | 80° | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.41 | — | 57.90 | — | 58.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 59.90 | 22.41 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 19.55 | 1,448 | 6.82 | 0.59 | N/A | N/A |
| 2 | ↓ | ↓ | 19.51 | 1,445 | 6.82 | 0.48 | N/A | N/A |
| 3 | ↓ | ↓ | 19.50 | 1,448 | 6.82 | 0.39 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| P2-14 I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1040 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-15 S | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1005 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 17.39 | — | 19.45 | — | 28.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 29.45 | 17.39 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| ~~10~~ 1 | low Flow | Low Flow | 17.28 | 1,980 | 7.35 | 8.86 | N/A | N/A |
| 2 | ↓ | ↓ | 17.29 | 1,970 | 7.35 | 8.95 | N/A | N/A |
| 3 | ↓ | ↓ | 17.32 | 1,970 | 7.35 | 8.81 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-15S | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1005 |
| | | | | | | | |
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Rev. 1 by LBG, Jan 2001



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GW_sampling_record.xls, Sheet1

# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ- 15I |

| | |
|---|---|
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | Inspectors: MCP, DVS |
| | Pump #: low-flow |
| | Laboratory: STL ~~Chicago~~ Ohio |
| | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1005 | 86° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 17.81 | — | 48.05 | — | 48.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 50.05 | 17.81 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 17.13 | 1,430 | 6.82 | 0.63 | N/A | N/A |
| 2 | ↓ | ↓ | 17.13 | 1,426 | 6.82 | 0.53 | N/A | N/A |
| 3 | ↓ | ↓ | 17.09 | 1,427 | 6.82 | 0.45 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-15 I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1005 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

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|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ-16D |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL-~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1105 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

**MONITORING**

| Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 19.82 | — | 76.90 | — | 79.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 80.90 | 19.82 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 18.36 | 1,610 | 6.83 | 0.63 | N/A | N/A |
| 3 | ↓ | ↓ | 18.40 | 1,620 | 6.81 | 0.73 | N/A | N/A |
| 4 | ↓ | ↓ | 18.35 | 1,610 | 6.85 | 0.56 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-16D | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1105 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** P2-17 I |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL ~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1125 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.74 | — | 55.65 | — | 56.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 57.65 | 21.74 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Sample # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 18.77 | 1,446 | 6.85 | 0.86 | N/A | N/A |
| 2 | ↓ | ↓ | 18.69 | 1,442 | 6.85 | 0.71 | N/A | N/A |
| 3 | ↓ | ↓ | 18.63 | 1,440 | 6.85 | 0.68 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| P2-17 I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1125 |
| | | | | | | | |
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Rev. 1 by LBG, Jan 2001



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GW_sampling_record.xls, Sheet1

# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** P2 - 17 D | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1130 | 80° | Sunny | 50% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 21.86 | — | 82.25 | — | 83.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 84.25 | 21.86 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 18.80 | 1,620 | 6.99 | 0.52 | N/A | N/A |
| 3 | ↓ | ↓ | 18.77 | 1,630 | 6.98 | 0.47 | N/A | N/A |
| 4 | ↓ | ↓ | 18.70 | 1,630 | 6.98 | 0.39 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** cloudy brown

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| P2-17D | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1130 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-18S | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/2/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1215 | 80 | Sunny | 50% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.69 | — | 19.60 | — | 28.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 29.60 | 22.69 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 17.40 | 1,021 | 6.93 | 6.91 | N/A | N/A |
| 2 | ↓ | ↓ | 17.30 | 1,019 | 6.92 | 6.87 | N/A | N/A |
| 3 | ↓ | ↓ | 17.21 | 1,017 | 6.93 | 6.98 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-18S | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/2/01 | 1215 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-195 |

| | |
|---|---|
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | Date: 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | Inspectors: MCP, DVS |
| | Pump #: low-flow |
| | Laboratory: STL ~~Chicago~~ |
| | Bailer Type: na Ohio |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1430 | 80° | Sunny | 75% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

**MONITORING**

| Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 19.02 | — | 13.70 | — | 23.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 23.70 | 19.02 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 3 | Low Flow | Low Flow | 17.06 | 1,368 | 6.93 | 3.71 | N/A | N/A |
| 4 | ↓ | ↓ | 17.10 | 1,381 | 6.91 | 3.58 | N/A | N/A |
| 5 | ↓ | ↓ | 17.10 | 1,394 | 6.91 | 3.50 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** turbid

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| mw-195 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1430 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ - 19I |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL-~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1425 | 80° | Sunny | 75% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 18.91 | — | 60.45 | — | 61.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 62.45 | 18.91 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 15.14 | 809 | 7.15 | 0.77 | N/A | N/A |
| 3 | ↓ | ↓ | 15.18 | 813 | 7.14 | 0.62 | N/A | N/A |
| 4 | ↓ | ↓ | 15.08 | 810 | 7.14 | 0.63 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** turbid

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-19I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1425 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-205 | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL ~~Chicago~~ Cincy |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1330 | 80° | Sunny | 75% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 19.13 | — | 17.80 | — | 27.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 27.80 | 19.13 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 15.39 | 1,435 | 6.96 | 7.01 | N/A | N/A |
| 2 | ↓ | ↓ | 15.27 | 1,435 | 6.93 | 6.84 | N/A | N/A |
| 3 | ↓ | ↓ | 15.22 | 1,445 | 6.95 | 6.90 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-205 | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1330 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ - 20 D |

| | |
|---|---|
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | Date: 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | Inspectors: MCP, DVS |
| | Pump #: low-flow |
| | Laboratory: STL ~~Chicago~~ |
| | Bailer Type: na Ohio |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1330 | 80' | Sunny | 75% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 19.14 ~~22.55~~ | — | 82.90 | — | 83.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 84.90 | 19.14 ~~22.55~~ | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 15.51 | 919 | 6.96 | 0.70 | N/A | N/A |
| 3 | ↓ | ↓ | 15.49 | 919 | 6.96 | 0.61 | N/A | N/A |
| 4 | ↓ | ↓ | 15.46 | 921 | 6.97 | 0.53 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-20D | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1330 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ-21I |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL ~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1450 | 80° | Sunny | 25% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.20 | — | 52.85 | — | 53.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 54.85 | 22.20 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| | Low Flow | Low Flow | 15.29 | 1,011 | 7.53 | 4.65 | N/A | N/A |
| | ↓ | ↓ | 15.27 ~~1,011~~ | 1,017 | 7.51 | 4.50 | N/A | N/A |
| | | | 15.25 | 1,019 | 7.47 | 4.66 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-21I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1450 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ-22I | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1525 | 80' | Sunny | 75% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 17.78 | — | 42.50 | — | 43.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 44.50 | 17.78 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 6 | Low Flow | Low Flow | 15.80 | 907 | 7.11 | 0.73 | N/A | N/A |
| 7 | ↓ | ↓ | 15.64 | 913 | 7.11 | 0.62 | N/A | N/A |
| 8 | ↓ | ↓ | 15.69 | 906 | 7.10 | 0.54 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-22I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1525 |
| | | | | | | | |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW 24S | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ Ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1245 | 80° | Sunny | 75% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.47 | | 17.87 | | 31.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 32.87 | 22.47 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 3 | Low Flow | Low Flow | 15.07 | 1,317 | 7.30 | 0.22 | N/A | N/A |
| 4 | ↓ | ↓ | 15.14 | 1,306 | 7.29 | 0.23 | N/A | N/A |
| 5 | ↓ | ↓ | 15.09 | 1,303 | 7.28 | 0.23 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW 24S | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1245 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** P2 - 24I |

| | |
|---|---|
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | Date: 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | Inspectors: MCP, DVS |
| | Pump #: low-flow |
| | Laboratory: STL-~~Chicago~~ Ohio |
| | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1225 | 80° | Sunny | 75% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.63 | | 54.39 | | 55.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 56.39 | 22.63 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 15.30 | 1,130 | 7.00 | 0.38 | N/A | N/A |
| 3 | ↓ | ↓ | 15.21 | 1,134 | 7.00 | 0.32 | N/A | N/A |
| 4 | ↓ | ↓ | 15.15 | 1,136 | 7.01 | 0.28 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| P2-24 I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1225 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ - 24 D |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: MCP, DVS |
| | | Pump #: low-flow |
| | | Laboratory: STL-~~Chicago~~ Ohio |
| | | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1230 | 80 | Sunny | 25% | 0-5 | West | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.55 | | 87.99 | | 89.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 89.99 | 22.55 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 2 | Low Flow | Low Flow | 15.66 | 1,126 | 7.03 | 0.82 | N/A | N/A |
| 3 | ↓ | ↓ | 15.76 | 1,227 | 7.03 | 0.71 | N/A | N/A |
| 4 | ↓ | ↓ | 15.71 | 1,227 | 7.02 | 0.79 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-24D | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1230 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | | |
|---|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** MW-25 S | |
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | | Date: | 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | | Inspectors: | MCP, DVS |
| | | Pump #: | low-flow |
| | | Laboratory: | STL-~~Chicago~~ ohio |
| | | Bailer Type: | na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1205 | 80° | Sunny | 75% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING | |
|---|---|
| Instrument | Model No. |
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.31 | | 18.07 | | 31.5 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 33.07 | 22.31 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 16.68 | 1,124 | 7.15 | 1.08 | N/A | N/A |
| 2 | ↓ | ↓ | 16.65 | 1,124 | 7.16 | 1.00 | N/A | N/A |
| 3 | ↓ | ↓ | 16.59 | 1,121 | 7.17 | 0.93 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| MW-25S | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1205 |
| | | | | | | | |
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# DAIMLERCHRYSLER CORPORATION

## SAMPLING RECORD - GROUNDWATER

| | | |
|---|---|---|
| **Consultant:** Leggette, Brashears & Graham, Inc. | **RFA Number:** YGQP2001231 | **Well #:** PZ-25I |

| | |
|---|---|
| **PROJECT:** Dayton Thermal Products, 3rd Quarter GW Sampling | Date: 8/1/01 |
| **LOCATION:** 1600 Webster St., Dayton, Ohio | Inspectors: MCP, DVS |
| | Pump #: low-flow |
| | Laboratory: STL-~~Chicago~~ Ohio |
| | Bailer Type: na |

**Weather/Field Conditions Checklist (Record Major Changes)**

| Time (24 hour) | Temp. (Approx) | Weather (General) | Relative Humidity (Approx) | Wind (From) Velocity (Approx) | Wind (From) Direction (0-360) | Ground/Site Surface Conditions |
|---|---|---|---|---|---|---|
| 1145 | 80° | Sunny | 75% | 0-5 | west | Stable/Dry |
| | | | | | | |
| | | | | | | |

| MONITORING Instrument | Model No. |
|---|---|
| Solinst | St. Paul - 100' |
| D.O. Meter | flow cell |
| pH/Cond Meter | flow cell |
| hNu/OVM | na |

**WELL DIAMETER FACTORS**

| Diameter (in) | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|
| Gallons/Foot | 0.041 | 0.092 | 0.163 | 0.367 | 0.654 | 1.47 | 2.61 | 5.87 |

| DATA COLLECTED AT WELL SITE | Initial Depth to Water (ft) | Final Depth to Water (ft) | Depth to Top of Screen (ft) | PID Reading (Opening Well) | Depth to Pump Intake (ft) | Pumping Start Time (24 hour) |
|---|---|---|---|---|---|---|
| | 22.30 | | 49.92 | | 50.0 | |

| 1 Total Depth (feet) | 2 Depth to Water (feet) | 3 Column of Standing Water in Well (feet) (1-2) | 4 Well Diameter Factor | 5 Volume in Gallons (3x4) | 6 Number of Well Volumes to be Evacuated | 7 Total Volume to be Evacuated (gallons) (5x6) |
|---|---|---|---|---|---|---|
| 51.92 | 22.30 | | 0.163 | | | |

**MONITORING DATA COLLECTED DURING PURGING OPERATIONS**

| ~~Time (24 hour)~~ Cycle # | Pumping Rate (gal/min) | Cumulative Volume (gal) | Temperature (Celsius) | Spec. Cond. (umhos) | pH | Dissolved O2 (mg/L) | Turbidity (NTU) | Depth to Water (feet) |
|---|---|---|---|---|---|---|---|---|
| 1 | Low Flow | Low Flow | 16.54 | 1,336 | 7.03 | 0.51 | N/A | N/A |
| 2 | ↓ | ↓ | 16.56 | 1,348 | 7.01 | 0.40 | N/A | N/A |
| 3 | ↓ | ↓ | 16.58 | 1,355 | 6.91 | 0.32 | N/A | N/A |
| | | | | | | | | |
| | | | | | | | | |

**REMARKS:** clear

| BOTTLES: | Count | Volume | Type: VOA, glass, amber, plastic | Analytes: VOC, SVOC, PAH, TPH, PCB, Metals, Pest, Herb, BTEX, dissolved... | Preservative: HCl, Na2SO4, NO3... | Date | Time |
|---|---|---|---|---|---|---|---|
| PZ-25I | 2 | 40 ml | VOA, glass | VOC, 8260 | HCl | 8/1/01 | 1145 |
| | | | | | | | |
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