MARSHALL MILLER & ASSOCIATES

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Regional Office

July 6, 2001

Ms. Cindy Rintoul
*Regional Supervisor*
**North Carolina Department of Environment and Natural Resources**
**Winston-Salem Regional Office**
585 Waughtown Street
Winston-Salem, North Carolina 27107

Exxon - 43998-B
(2)

Re: UST Closure Report
Lee-Moore Oil Company
4701 West Market Street
Facility I.D. No. 0-017509
MM&A Project No. YZ131

Dear Ms. Rintoul:

Please find enclosed the closure report for the above referenced facility. Marshall Miller & Associates, Inc. (MM&A) is submitting the report on behalf of Lee-Moore Oil Company. If you have any questions or comments, please do not hesitate to call our office at 919-786-1414.

Sincerely,

**MARSHALL MILLER & ASSOCIATES, INC.**

Andrew Waggener
*Assistant Vice President*

Enclosure

cc: Bob Hood
W. Fred Mayes, Commonwealth Environmental
Frank Medlin, Exxon-Mobil

5900 Triangle Drive / Raleigh, NC 27617 / Tel 919.786.1414 / Fax 919.786.1418
**Web Site — http://www.mma1.com • E-mail — raleigh@mma1.com**
With Other Offices in Bluefield, VA / Richmond, VA / Bristol, VA / Charleston, WV / Lexington, KY / Camp Hill, PA

RECEIVED
N.C. Dept. of EHNR
JUL 10 2001
Winston-Salem
Regional Office

# UST CLOSURE REPORT
## West Market Street Exxon
**4701 W. Market Street**
**Greensboro, Guilford County, NC 27407**
**Facility ID# 0-017509**
**Groundwater Incident No. 10001**

*July 6, 2001*

*Prepared For:*

**Lee-Moore Oil Company**
**1807 Douglas Drive**
**Sanford, NC 27731**
**(919) 775-2301**

*Prepared By:*

**MARSHALL MILLER & ASSOCIATES, INC.**
**5900 Triangle Drive**
**Raleigh, North Carolina 27617**
**(919) 786-1414**
**MM&A Project No: YZ131**

**Prepared By:**

7/6/01

**Jessica Bellas, P.E.**
*Project Engineer*

**Reviewed By:**

**Andrew D. Waggener**
*Assistant Vice President/Branch Manager*

MARSHALL MILLER & ASSOCIATES

## TABLE OF CONTENTS

**Page**


I. GENERAL INFORMATION ..... 1
II. CLOSURE PROCEDURES ..... 3
III. SITE INVESTIGATION ..... 5
IV. CONCLUSIONS AND RECOMMENDATIONS ..... 6
V. SIGNATURE OF PROFESSIONAL ENGINEER OR LICENSED GEOLOGIST ..... 6
VI. ENCLOSURES ..... 7


## FIGURES


Figure 1: Vicinity Map
Figure 2: Site Map


## TABLES


Table 1: Soil Analytical Data


## APPENDICES


Appendix A: Notification of Intent to Close (GW/UST-3)
Appendix B: Certificate of Disposal
Appendix C: Copy of Laboratory Analytical Report

# UNDERGROUND STORAGE TANK CLOSURE REPORT

## I. GENERAL INFORMATION

### A. Ownership of UST(s)

1. Name of UST owner: Lee Moore Oil Company

2. Owner address and telephone number: 1807 Douglas Drive
Sanford, N.C. 27331
(919) 775-2301

### B. Facility Information

1. Facility name: West Market Street Exxon

2. Facility ID #: 0-017509

3. Facility address, telephone number and county: 4701 West Market Street
Greensboro, Guilford Co, NC

### C. Contacts

**1. Name, address, telephone number and job title of primary contact person:**

Mr. Bob Hood / Lee Moore Oil Company, 1807 Douglas Drive, Sanford, NC 27331 (919) 775-2301

**2. Name, address and telephone number of closure contractor:**

JD Contractors, 2179 Barren Tower Road, Asheboro, N.C. 27203,
(336)-241-2007

**3. Name, address and telephone number of primary consultant:**

Marshall Miller & Associates, Inc., 5900 Triangle Drive, Raleigh, NC 27617
(919) 786-1414.

**4. Name, address, telephone number, and State certification number of laboratory:**

Paradigm Analytical Laboratories, Inc.
2627 Northchase Parkway S.E.
Wilmington, North Carolina 28405
(910) 350-1903
NC Certification # 481

## D. UST Information

Three 12,000 gallon gasoline UST's and associated piping and dispensers were removed on June 13 and 14, 2001. (The 1,000 gallon heating oil tank, thought to be present and listed on the UST-3 form was not present and had previously been removed in September 1991.) The following table lists information about the UST's removal in June 2001.

| Tank No. | Installation Dates | Size (gallons) | Tank Dimensions | Last Contents |
|---|---|---|---|---|
| 1 | September 1991 | 12,000 | 8'x 32' | Gasoline |
| 2 | September 1991 | 12,000 | 8'x 32' | Gasoline |
| 3 | September 1991 | 12,000 | 8'x 32' | Gasoline |

## E. Site Characteristics

**1. Describe any past releases at this site:**

Groundwater incident #10001 was assigned the site upon discovery of a petroleum release from the former UST system that was removed in September 1991. That UST system was located along the southern edge of the site, downgraident from the recently removed system. Previous reporting activities associated with that release included a Tank Excavating Assessment Report, Comprehensive Site Assessment and Corrective Action Plan. A soil vapor extraction (SVE) system was installed and began operation in 1996 and is still active.

A 1,000-gallon used UST was removed in February 1998. After review of the UST Closure Report, NCDENR issued a Notice of No Further Action (NFA) on May 26, 1998 related to this tank.

2. **Is the facility active or inactive at this time? If the facility is inactive note the last time the USTs were in operation:**

The facility is inactive at this time. The UST system was reported to be operational prior to removal.

3. **Describe surrounding property use (for example, residential, commercial, farming, etc.)**

The site is located in a heavily commercialized area. Either streets or businesses surround the site. Another gas station is located to the north of the facility (hydrologically crossgradient) across West Market Street. The businesses located downgradient of the subject site include a McDonald's™ and the West Market Shopping Center.

4. **Describe site geology/hydrogeology**

The site is located in the Eastern Slate Belt Physiographic province of North Carolina. The site is underlain by the Metamorphosed Granitic Rock. The water table was not encountered during the excavation.

## II. CLOSURE PROCEDURES

A. **Describe preparations for closure including the steps taken to notify authorities, permits obtained and the steps taken to clean and purge the tanks.**

Notice of intent to permanently close the USTs was made to the North Carolina Department of Environment and Natural Resources (NCDENR) by Jacqueline Doub of JD Contractors via a GW/UST-3 form dated June 14, 2001 (**Appendix A**). Sharon Cihak, Guilford County Health Department, was present during the closure. Residual material was pumped from the tanks prior to removal. Carbon dioxide gas was used to inert the tanks to a Lower Explosive Limit (LEL) of less than 10% before removal.

B. **Note the amount of residual material pumped from the tank(s):**

A total of 193 gallons of residual material was purged before removal.

C. **Describe the storage, sampling and disposal of the residual material:**

A & D Environmental and Industrial Services, Inc. disposed of the residual material in accordance with applicable regulations. The disposal manifest is included as part of the certificate of tank disposal (**Appendix B**).

## D. Excavation

### 1. Describe excavation procedures noting the condition of the soils and the dimensions of the excavation in relation to the tanks, piping and/or pumps:

Tanks T1, T2, and T3 were located in the same pit basin and were surrounded by pea gravel. The tanks were excavated using both a trackhoe and backhoe. Petroleum odor and staining was not observed during excavation. The tanks were removed and placed on a flatbed trailer for transport. The associated piping was also excavated and transported off site. A copy of the tank disposal certificate is provided in (**Appendix B**). The soil samples were taken from the native clayey soil below the pea gravel from the trackhoe bucket.

### 2. Note the depth of tank burial(s) (from land surface to top of tank):

The tops of tanks T1, T2 and T3 were buried four feet below the ground surface (bgs).

### 3. Volume of soil excavated:

Only the volume of pea gravel necessary to remove the UST's was excavated and stockpiled beside the excavation. Since no petroleum odor was noted, the pea gravel was returned to the tank bed area, after removal of the UST's and the soil sampling was completed.

### 4. Describe soil type(s):

The native soils below the UST tank basin consisted of red, sandy clay.

### 5. Type and source of backfill used:

The excavation area was backfilled with the same pea gravel material that was originally excavated from the tank bed. Clean soil was brought from offsite to complete the back filling.

## E. Contaminated Soil

### 1. Describe how it was determined to what extent to excavate the soil:

Each UST basin was excavated along the outer sides lengthwise and on both ends. Only enough pea gravel/soil was excavated to safely remove the USTs.

2. **Describe method of temporary storage, sampling and treatment/disposal of soil:**

The excavated pea gravel was stored beside the excavation. The soil samples were taken from the native clayey soils using a track hoe bucket. The pea gravel was returned to the tank bed. **Figure 2** depicts the location of the tank bed. Sampling and analytical procedures for this material are discussed in the following section.

## III. SITE INVESTIGATION

A. **Provide information on field screening and observations, include methods used to calibrate field screen instrument(s):**

A portion of each sample (see following section) was placed in a sealable, plastic freezer bag and allowed to equilibrate for 5 minutes. The headspace in each bag was screened for petroleum vapors using a Photoionization Detector (PID), which was properly calibrated prior to use, using an isobutylene standard. PID readings between 0 parts per million (ppm) and 46.25 ppm were obtained for the samples taken from the bottom of the excavations. Samples from the dispenser islands yielded PID readings of 16.82 ppm to 25.82 ppm. Samples from the product line yielded PID readings of 16.82 ppm to 25.82 ppm.

B. **Describe soil sampling points and sampling procedures used.**

Twelve soil samples (T1A, T1B, T1C, T1D, T2A, T2B, T2C, T2D, T3A, T3B, T3C and T3D) were taken from directly underneath the USTs, five samples (L1 through L5) were taken directly from underneath the product line and four samples (D1 through D4) were taken from underneath the dispenser islands. Refer to **Figure 2** for the location of the soil samples. Soil samples procured from underneath the USTs ranged in depth from 12 feet bgs, depending on the tank burial depth and diameter of the UST. Soil samples were procured at a depth of 2 feet bgs from underneath the dispenser islands and product lines. All samples were collected using the trackhoe bucket.

All of the above listed soil samples were submitted for laboratory analysis. All submitted samples were for analysis by volatile organic compounds by EPA Method 8260B. The soil sample from each area (one from beneath each tank, one from beneath the product line, one from beneath the dispenser island) that yielded the highest PID reading was selected for analysis for volatile petroleum hydrocarbon by MADEP VPH.

**C. Describe ground water or surface water sampling procedures used.**

NA.

**D. Quality control measures**

The soil samples selected for analysis were properly labeled and immediately placed on ice in a cooler pending transport to Paradigm Analytical Laboratories. Strict chain-of-custody and sample preservation protocols were observed for shipping and delivering samples. No duplicate samples or sample blanks were collected.

**E. Investigation results**

The tanks were visually inspected for evidence of corrosion and staining after they were removed. The USTs were in good condition. Analytical results for soil samples collected are summarized in **Table 1**, and the complete laboratory report is included in **Appendix C**.

## IV. CONCLUSIONS AND RECOMMENDATIONS

Only soil sample T1-A contained petroleum compounds in excess of the Maximum Soil Contaminant Concentration (MSCC) Standards. The detected concentrations in this sample exceeded the soil to groundwater MSCC for ten compounds but only exceeded the residential MSCC for C9-C10 Aromatics. Trace concentrations of petroleum compounds were detected in a limited number of the remaining samples but none exceeded MSCC's.

## V. SIGNATURE OF PROFESSIONAL ENGINEER OR LICENSED GEOLOGIST

**Professional Engineer License #:** _____
*Jessica Bellas, P.E. NC License #24952*

# VI. ENCLOSURES

## A. Figures

1. Vicinity Map
2. Site Map

## B. Tables

1. Soil Analytical Data

## C. Appendices

Appendix A: Notification of Intent to Close (GW/UST-3)
Appendix B: Certificate of Disposal
Appendix C: Copy of laboratory Analytical Reports

TABLE 1 (Page 1 of 3)

## SOIL ANALYTICAL DATA
### W. MARKET STREET EXXON

| Constituent | T1-A | T1-B | T1-C | T1-D | T2-A | T2-B | T2-C | T2-D | Maximum Soil Contaminant Concentration | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 12' | 12' | 12' | 12' | 12' | 12' | 12' | 12' | Soil to Groundwater | Residential | Industrial |
| **VOCs by GCMS 8260B** | | | | | | | | | | | |
| Benzene | BQL(10000) | BQL(8) | BQL(6.5) | BQL(7.1) | BQL(7.6) | BQL(6.6) | BQL(6.6) | BQL(7.2) | 5.6 | 22,000 | 200,000 |
| n-Butylbenzene | **24,000** | BQL(8) | BQL(6.5) | BQL(7.1) | BQL(7.6) | BQL(6.6) | BQL(6.6) | BQL(7.2) | 4,000 | 156,000 | 4,088,000 |
| DIPE | BQL(10000) | BQL(8) | BQL(6.5) | BQL(7.1) | BQL(7.6) | BQL(6.6) | BQL(6.6) | BQL(7.2) | 370 | 156,000 | 4,088,000 |
| Ethylbenzene | **34,000** | BQL(8) | BQL(6.5) | BQL(7.1) | BQL(7.6) | BQL(6.6) | BQL(6.6) | BQL(7.2) | 240 | 1,560,000 | 40,000,000 |
| MTBE | BQL(10000) | BQL(8) | BQL(6.5) | BQL(7.1) | 12 | BQL(6.6) | BQL(6.6) | BQL(7.2) | 920 | 156,000 | 4,088,000 |
| Naphthalene | **52,000** | BQL(8) | BQL(6.5) | BQL(7.1) | 15 | BQL(6.6) | BQL(6.6) | BQL(7.2) | 580 | 63,000 | 1,635,000 |
| n-Propylbenzene | **22,000** | BQL(8) | BQL(6.5) | BQL(7.1) | BQL(7.6) | BQL(6.6) | BQL(6.6) | BQL(7.2) | 2,000 | 156,000 | 4,088,000 |
| 1,2,4-Trimethylbenzene | **220,000** | BQL(8) | BQL(6.5) | BQL(7.1) | 12 | BQL(6.6) | BQL(6.6) | BQL(7.2) | 8,000 | 782,000 | 20,440,000 |
| 1,3,5-Trimethylbenzene | **72,000** | BQL(8) | BQL(6.5) | BQL(7.1) | BQL(7.6) | BQL(6.6) | BQL(6.6) | BQL(7.2) | 7,000 | 782,000 | 20,440,000 |
| Toluene | **47,000** | BQL(8) | BQL(6.5) | BQL(7.1) | BQL(7.6) | BQL(6.6) | BQL(6.6) | BQL(7.2) | 7,000 | 3,200,000 | 82,000,000 |
| Xylenes (mixed) | **255,000** | BQL(24) | BQL(19.5) | BQL(21.1) | 7.7 | BQL(19.6) | BQL(19.6) | BQL(21.2) | 5,000 | 32,000,000 | 200,000,000 |
| **VPH by MADEP Method** | | | | | | | | | | | |
| C9-C10 Aromatics | **920,000** | NA | NA | NA | <10 | NA | NA | NA | 34,000 | 469,000 | 12,264,000 |
| C5-C8 Aliphatics | **760,000** | NA | NA | NA | <10 | NA | NA | NA | 72,000 | 939,000 | 24,528,000 |
| C9-C12 Aliphatics | **3,000,000** | NA | NA | NA | <10 | NA | NA | NA | 3,255,000 | 9,356,000 | 245,280,000 |

NA: Not Applicable

BQL(x): Below Quantitation Limit

Results reported in micrograms per kilogram (ug/kg)

**Bold**: Exceeds maximum soil contaminant concentrations

NS: No Standard Established



MARSHALL MILLER & ASSOCIATES

TABLE 1 (Page 2 of 3)

## SOIL ANALYTICAL DATA
### W. MARKET STREET EXXON

| Constituent | T3-A | T3-B | T3-C | T3-D | L1 | L2 | L3 | L4 | L5 | Maximum Soil Contaminant Concentration | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 12' | 12' | 12' | 12' | 2' | 2' | 2' | 2' | 2' | Soil to Groundwater | Residential | Industrial |
| **VOCs by GCMS 8260B** | | | | | | | | | | | | |
| Benzene | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | BQL(6.8) | BQL(6.5) | BQL(6.4) | BQL(6.6) | 10 | 5.6 | 22,000 | 200,000 |
| n-Butylbenzene | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | BQL(6.8) | BQL(6.5) | BQL(6.4) | BQL(6.6) | BQL(6.1) | 4,000 | 156,000 | 4,088,000 |
| DIPE | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | BQL(6.8) | BQL(6.5) | BQL(6.4) | BQL(6.6) | 13 | 370 | 156,000 | 4,088,000 |
| Ethylbenzene | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | BQL(6.8) | BQL(6.5) | BQL(6.4) | BQL(6.6) | 24 | 240 | 1,560,000 | 40,000,000 |
| MTBE | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | 15 | BQL(6.5) | BQL(6.4) | BQL(6.6) | BQL(6.1) | 920 | 156,000 | 4,088,000 |
| Naphthalene | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | BQL(6.8) | BQL(6.5) | BQL(6.4) | BQL(6.6) | 8.7 | 580 | 63,000 | 1,635,000 |
| n-Propylbenzene | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | BQL(6.8) | BQL(6.5) | BQL(6.4) | BQL(6.6) | BQL(6.1) | 2,000 | 156,000 | 4,088,000 |
| 1,2,4-Trimethylbenzene | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | BQL(6.8) | BQL(6.5) | BQL(6.4) | BQL(6.6) | 15 | 8,000 | 782,000 | 20,440,000 |
| 1,3,5-Trimethylbenzene | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | BQL(6.8) | BQL(6.5) | BQL(6.4) | BQL(6.6) | BQL(6.1) | 7,000 | 782,000 | 20,440,000 |
| Toluene | BQL(6.6) | BQL(7.7) | BQL(8.1) | BQL(6.8) | BQL(6.8) | BQL(6.5) | BQL(6.4) | BQL(6.6) | BQL(6.1) | 7,000 | 3,200,000 | 82,000,000 |
| Xylenes (mixed) | BQL(19.6) | BQL(22.7) | BQL(24.1) | BQL(20.8) | 14 | BQL(19.5) | BQL(19.4) | BQL(19.6) | 54 | 5,000 | 32,000,000 | 200,000,000 |
| **VPH by MADEP Method** | | | | | | | | | | | | |
| C9-C10 Aromatics | <10 | NA | NA | NA | NA | NA | NA | NA | <10 | 34,000 | 469,000 | 12,264,000 |
| C5-C8 Aliphatics | <10 | NA | NA | NA | NA | NA | NA | NA | <10 | 72,000 | 939,000 | 24,528,000 |
| C9-C12 Aliphatics | <10 | NA | NA | NA | NA | NA | NA | NA | <10 | 3,255,000 | 9,356,000 | 245,280,000 |

NA: Not Applicable

BQL(x): Below Quantitation Limit

Results reported in micrograms per kilogram (ug/kg)

**Bold**: Exceeds maximum soil contaminant concentrations

NS: No Standard Established



MARSHALL MILLER & ASSOCIATES

TABLE 1 (Page 3 of 3)

# SOIL ANALYTICAL DATA
## W. MARKET STREET EXXON

| Constituent | D1 | D2 | D3 | D4 | Maximum Soil Contaminant Concentration | | |
|---|---|---|---|---|---|---|---|
| | 2' | 2' | 2' | 2' | Soil to Groundwater | Residential | Industrial |
| **VOCs by GCMS 8260B** | | | | | | | |
| Benzene | BQL(7) | BQL(6.3) | BQL(6.7) | BQL(6.4) | 5.6 | 22,000 | 200,000 |
| n-Butylbenzene | BQL(7) | BQL(6.3) | BQL(6.7) | BQL(6.4) | 4,000 | 156,000 | 4,088,000 |
| DIPE | BQL(7) | BQL(6.3) | BQL(6.7) | BQL(6.4) | 370 | 156,000 | 4,088,000 |
| Ethylbenzene | 45 | BQL(6.3) | BQL(6.7) | BQL(6.4) | 240 | 1,560,000 | 40,000,000 |
| MTBE | 81 | BQL(6.3) | BQL(6.7) | 12 | 920 | 156,000 | 4,088,000 |
| Naphthalene | 17 | BQL(6.3) | BQL(6.7) | BQL(6.4) | 580 | 63,000 | 1,635,000 |
| n-Propylbenzene | 12 | BQL(6.3) | BQL(6.7) | BQL(6.4) | 2,000 | 156,000 | 4,088,000 |
| 1,2,4-Trimethylbenzene | 95 | BQL(6.3) | BQL(6.7) | BQL(6.4) | 8,000 | 782,000 | 20,440,000 |
| 1,3,5-Trimethylbenzene | 25 | BQL(6.3) | BQL(6.7) | BQL(6.4) | 7,000 | 782,000 | 20,440,000 |
| Toluene | 120 | BQL(6.3) | BQL(6.7) | BQL(6.4) | 7,000 | 3,200,000 | 82,000,000 |
| Xylenes (mixed) | 246 | BQL(19.3) | BQL(19.7) | BQL(19.4) | 5,000 | 32,000,000 | 200,000,000 |
| **VPH by MADEP Method** | | | | | | | |
| C9-C10 Aromatics | NA | NA | <10 | NA | 34,000 | 469,000 | 12,264,000 |
| C5-C8 Aliphatics | NA | NA | <10 | NA | 72,000 | 939,000 | 24,528,000 |
| C9-C12 Aliphatics | NA | NA | <10 | NA | 3,255,000 | 9,356,000 | 245,280,000 |

NA: Not Applicable

BQL(x): Below Quantitation Limit

Results reported in micrograms per kilogram (ug/kg)

**Bold**: Exceeds maximum soil contaminant concentrations

NS: No Standard Established

# WEST MARKET STREET EXXON
# 4701 W. MARKET STREET
# GREENSBORO, NORTH CAROLINA

2,000' 0 2,000'

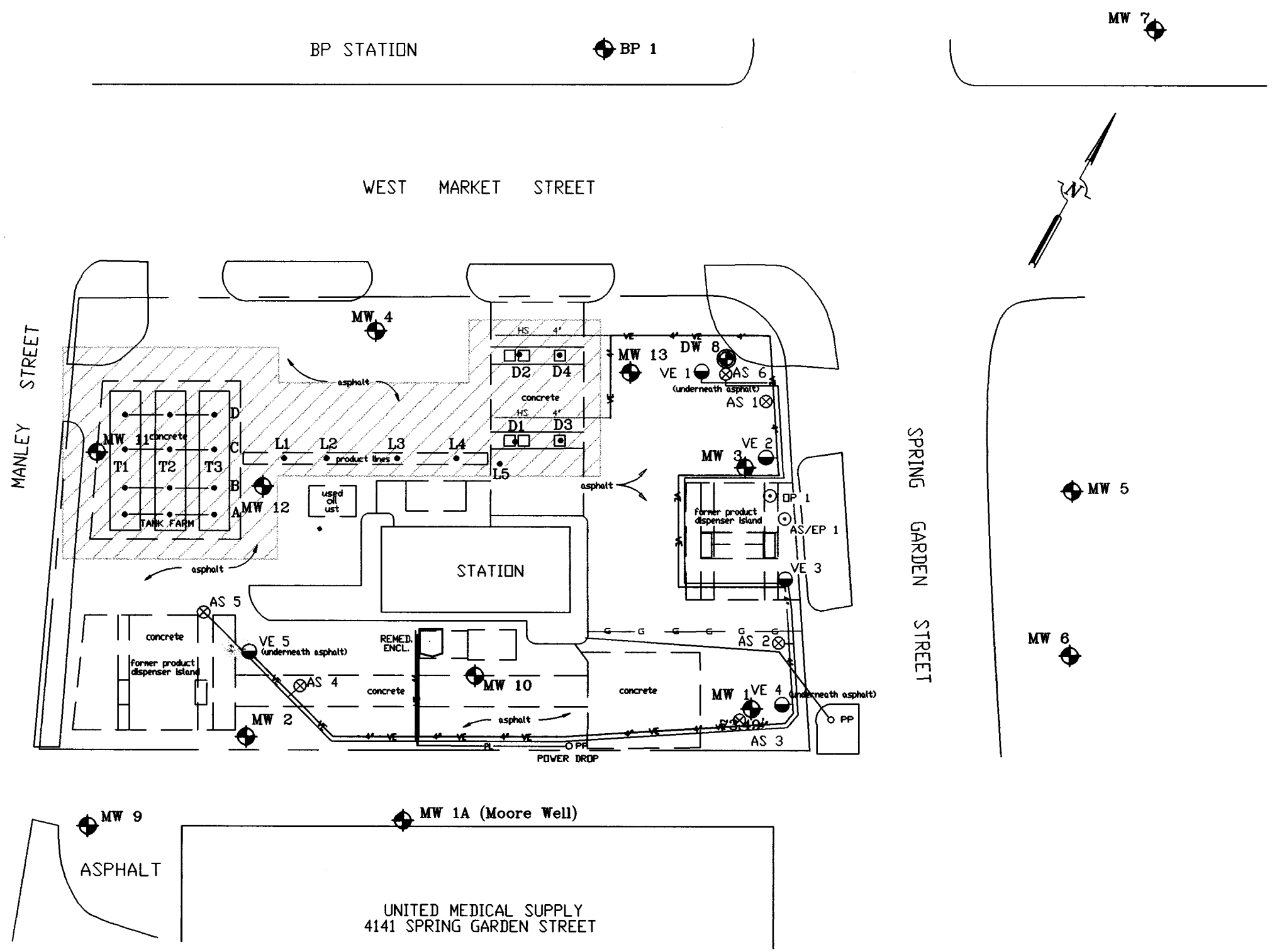
SCALE 1:24,000

Prepared by:

MARSHALL MILLER & ASSOCIATES

YZ131VIC.dwg 06/28/01
USGS 7.5' GREENSBORO, NC - 1994

# VICINITY MAP




NOTE: AIR SPARGE WELL AS/EP 1 WAS INSTALLED FOR THE PILOT TEST AND WAS CONNECTED TO THE SYSTEM.

# LEGEND

- TYPE II MONITORING WELL
- TYPE III MONITORING WELL
- PP — POWER POLE
- G — UNDERGROUND GAS LINE
- PROPERTY LINE
- VE — SVE WELL
- AS — AIR SPARGE WELL
- SPARGE PIPING
- VE — SVE PIPING
- HS — HORIZONTAL SCREEN
- PL — POWER LINE
- UST CLOSURE SAMPLE LOCATIONS
- SUBJECT UST SYSTEM AREA

40 0 20 40

1"=40'

BASE MAP PROVIDED BY NIGHTINGALE GEOLOGIC CONSULTANTS, P.C.

MARSHALL MILLER & ASSOCIATES

# SITE MAP

WEST MARKET STREET EXXON
4701 WEST MARKET STREET
GREENSBORO, NORTH CAROLINA

| | |
|---|---|
| FIGURE: 2 | PROJECT: YZ131 |
| SCALE: 1" = 40' | FILE: 4701WMARKET |
| DATE: 07-06-01 | DRAWN BY: JMCH |

# APPENDIX A

# NOTIFICATION OF INTENT TO CLOSE (GW/UST-3)

# UST-3 Notice of Intent: UST Permanent Closure of Change-in-Service

**FOR TANKS IN NC**

**Return completed form to:**
The DWM Regional Office located in the area where the facility is located. SEE MAP ON THE BACK OF THIS FORM FOR REGIONAL OFFICE ADDRESSES.

STATE USE ONLY
I.D. #_____
Date Received_____

## INSTRUCTIONS

Complete and return at least five (5) working days prior to closure or change-in-service if a Professional Engineer (P.E.) or a Licensed Geologist (L.G.) provides supervision for closure or change-in-service site assessment activities and signs and seals all closure reports. Otherwise, a thirty (30) day notice is required.

## I. OWNERSHIP OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity): Lee Moore Oil Company
Street Address: 1807 Douglas Drive
City: Sanford
County: Lee
State: NC
Zip Code: 27331
Area Code: (919)
Phone Number: 775-2301

## II. LOCATION

Facility Name or Company: West Market Street Exxon
Facility ID # (If known): 0-017509
Street Address: 4701 W. Market Street
City: Greensboro
County: Guilford
Zip Code: 27407
Area Code: unknown
Phone Number:

## III. CONTACT PERSONNEL

Name: Mr. Bob Hood
Job Title: Project Engineer
Phone Number: (919) 775-2301

## IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE-IN SERVICE

1. Contact local fire marshal.
2. Plan entire closure event.
3. Conduct Site Soil Assessment.
4. If removing tanks or closing in place, refer to API Publication 2015 *Cleaning Petroleum Storage Tanks* and 1604 *Removal and Disposal of Used Underground Pétroleum Storage Tanks.*
5. Provide a sketch locating piping, tanks and soil sampling locations.
6. Submit a closure report in the format of UST-12 (including the form UST-2) within thirty (30) days following the site investigation.
7. If a release from the tanks has occurred, the site assessment portion of the tank closure must be conducted under the supervision of a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G. If a release has not occurred, the supervision, signature or seal of a P.E. or L.G. is not required.
8. Keep closure records for three (3) years.

## V. WORK TO BE PERFORMED BY

Contractor Name: JD Contractors, LLC
Address: 2179 Barrier Town Rd Asheboro
State: NC
Zip Code: 27205
Contact Person: Joe Doub
Phone No.: 336-241-2007
Primary Consultant: Piedmont Industrial SVC
Phone No.: 336-767-7522

## VI. TANKS SCHEDULED FOR CLOSURE OR CHANGE-IN-SERVICE

| Tank ID # | Tank Capacity | Last Contents | Proposed Activity: Closure – Removal | Closure – Abandonment in Place | Change-In-Service – New Contents Stored |
|---|---|---|---|---|---|
| 1 | 12,000 | Super Unl. Gas | ☑ 10/14 | ☐ | |
| 2 | 12,000 | Prem Unl. Gas | ☑ 10/14 | ☐ | |
| 3 | 12,000 | Reg. Unl. Gas | ☐ 10/14 | ☐ | |
| 4 | 1,000 | Heating Oil | ☑ 10/14 | ☐ | |
| | | | ☐ | ☐ | |
| | | | ☐ | ☐ | |

## VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

I understand that I can be held responsible for environmental damage resulting from the improper disposal of my USTs. Read note on the back of this form before signing.
Print name and official title: [illegible] JD Contractors LLC on behalf of Lee Moore Oil

| Signature | Date Signed | SCHEDULED REMOVAL DATE | Notify your DWM Regional Office 48 hours before this date if scheduled removal date changes |
|---|---|---|---|
| [illegible] | 8/28/01 | 10/14/01 | |

# APPENDIX B

# WASTE DISPOSAL MANIFESTS

MARSHALL MILLER & ASSOCIATES

**01** FILE NUMBER

# GREENSBORO FIRE DEPARTMENT
## FIRE INSPECTION REPORT

| STREET NUMBER | DIR | STREET NAME | TYPE | BUILDING UNIT | GENERAL INSP. DATE |
|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | | |

| LAST INSP. DATE | BC OCCUPANCY | NFPA OCCUPANCY | COMPLEX | CONST | SPRINKLERS | STAND PIPES | DETECTORS | ALARM SYS | SPEC SYS | YR. CONST. | STORIES | FIRE EXT. | L-LINE P-PREV. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |

| LAST INSP. BY | SQ. FT. GROUND FLOOR | MAX. OCCUPANT LOAD | REQ EXITS | SPEC INSTR | DUE DATE | INSPECTION PERIOD | DISTRICT | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**02**

| DATE | TIME | ACT'Y | DISTRICT | SHFT | INSPECTING OFFICER | |
|---|---|---|---|---|---|---|
| 06/13/01 | | 1A | 01 | P | C3C | |

**03** **NOTICE OF FIRE & SAFETY HAZARDS**: You are hereby notified that an inspection of your premises has disclosed the following fire safety hazards and/or violations of the provisions of appropriate local or state codes.

| | CODE | TYPE | COUNT | DESCRIPTION | APPR. |
|---|---|---|---|---|---|
| | | | | TANK Pull Inspection; Contractor: JD Contractors | |
| | | | | JOE Doob | |
| | | | | Hauled away by A & D | |
| | | | | 3 - 12,000 Gal Tanks | |
| | | | | TANK 1 - 4.4% Oxy Labeled/Secured | |
| | | | | Tank 2 - 7.0% Oxy Labeled/Secured | |
| | | | | Tank 3 - 8.4% Oxy Labeled/Secured | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

ORDER TO COMPLY: As such conditions are contrary to law, you are hereby required to correct said conditions immediately upon receipt of this notice. An inspection to determine whether you have complied will be conducted on or before Failure to comply with the foregoing order before the date of such reinspection may render you liable to the penalties provided by law for such violation. FIRE PREVENTION BUREAU - PHONE 373-2177

FEES AND PENALTIES INCLUDE REINSPECTION FEES, AND/OR CITATIONS, OR CRIMINAL SUMMONS.

REINSPECTION DATE

X OCCUPANT

X INSPECTING OFFICER

**04**

| BUSINESS NAME | BUSINESS PHONE |
|---|---|
| [illegible] | |

| OWNER/OCCUPANT | EMERGENCY PHONE |
|---|---|
| | |

PS - FIRE
91-2356A

**05** BUILDING UNIT IDENTIFICATION

REV 11-90

INSPECTOR'S COPY

A&D 10/95

# MATERIAL MANIFEST

EMERGENCY PHONE NO.
( 800 ) 434 - 7750

A & D *Environmental and Industrial Services, Inc.*

POST OFFICE BOX 484
HIGH POINT, NC 27262

TEL (336) 434-7750
FAX (336) 434-7752

Manifest Document No.

Page 1 of 1

A & D Job No. 4D01892

## GENERATOR INFORMATION

Name: JD Construction

US EPA ID No.:

Street Address: Exxon Station 1201 Dominoist Greensboro N.C.

Mailing Address: JD Construction

Phone No.: 993-[illegible]

Contact: Joe

## DESCRIPTION OF MATERIALS

| | HM | USDOT Proper Shipping Name (Complete All Items for Hazardous Materials) | Hazard Class or Div. | UN / NA ID No. | Packing Group | Containers Qty. | Containers Type | Total Quantity | Unit Wt./ Vol. |
|---|---|---|---|---|---|---|---|---|---|
| a. | | Non Regulated Liquids n.o.s | N/A | N/A | N/A | 1 | TT | 193 | G |
| b. | | | | | | | | | |
| c. | | | | | | | | | |

| ADDITIONAL INFORMATION | ERG No. | A & D Profile Code | Facility Use |
|---|---|---|---|
| a. Petroleum Waste | | | |
| b. | | | |
| c. | | | |

## GENERATOR'S CERTIFICATION

*This is to certify that the above-described materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are a hazardous waste as defined by EPA 40 CFR Part 261 or any applicable state law, and unless specifically identified above, the materials contain less than 1,000 ppm total halogens and do not contain quantifiable levels (2 ppm) of PCBs as defined by EPA 40 CFR Parts 279 and 761.*

Printed / Typed Name | Signature | Mo. / Day / Yr.

## TRANSPORTER INFORMATION

Transporter: A & D ENVIRONMENTAL AND INDUSTRIAL SERVICES

Address: 2718 UWHARRIE ROAD
ARCHDALE, NC 27263

Transporter or EPA ID No.: NCD986232221

Unit No.:

Phone: (336) 434-7750

*I hereby acknowledge receipt of the above-described materials for transport from the generator site listed above.*

Signature: [illegible] Shipment Date: 6-12-01

*I hereby acknowledge that the above-described materials were received from the generator site and were transported to the facility listed below.*

Signature | Delivery Date

## FACILITY INFORMATION

Facility: A & D ENVIRONMENTAL AND INDUSTRIAL SERVICES

Address: 2718 UWHARRIE ROAD
ARCHDALE, NC 27263

Facility or EPA ID No.: NCD986232221

Phone: (336) 434-7750

Contact: ERIC McMANUSS

*I hereby acknowledge receipt of the materials covered by this manifest except for any discrepancy noted below.*

Signature: E. D. McManuss Receipt Date: 6-12-01

Discrepancies / Routing Codes / Handling Methods

a.

b.

c.

ORIGINAL - Facility Retain COPY 2 - Transporter Retain COPY 3 - Transporter Retain COPY 4 - Generator Retain

# A&D Environmental and Industrial Services

P.O. Box • High Point, NC 27261 • Phone (910) 434-7750 • FAX (910) 434-7752

## TANK DISPOSAL MANIFEST

1) **Tank Owner/Authorized Representative:** Name and Mailing Address
Exxon Station
4701 W Market st
Greensboro, N.C.
J.D Construction

2) **Tank Owner/Authorized Representative:** Contact
Phone#:

3) **Description Of Tanks:**

| Tank No. | Capacity | Previous Contents | Comments |
|---|---|---|---|
| 2 | 12000 | Gas | Not Vapor Free clean + mark |

4) **Tank Owner/Authorized Representative Certification:** The undersigned certifies that the above listed storage tanks have been removed from the premises of the tank owner.

Joe Dorb — *Printed/Typed Name* — *Signature* — 6-13-01 *Month/Day/Year*

5) **Transporter:** The undersigned certifies that the above listed storage tanks have been transported to A&D Environmental and Industrial Services, 2718 Uwharrie Road, Archdale, N.C. 27263.

Gary Standley — *Printed/Typed Name* — *Signature* — 06-13-01 *Month/Day/Year*

6) **Disposal Certification:** The undersigned certifies that the above-named storage tank(s) have been cut into scrap pieces and accepted by the metal recycling facility.

**Recycling Facility:** City of Greensboro Landfill

Eric D. McManus — *Printed/Typed Name* — *Signature* — 6-14-01 *Month/Day/Year*

A&D Environmental and Industrial Services
P.O. Box 484 • High Point, NC • Phone (336) 434-7750 • FAX (336) 434-7752

# TANK DISPOSAL MANIFEST

1) **Tank Owner/Authorized Representative:** Name and Mailing Address
Exxon Station
4701 W. Market St.
Greensboro NC
J.D. Construction

2) **Tank Owner/Authorized Representative:** Contact
Phone#:

3) **Description Of Tanks:**

| Tank No. | Capacity | Previous Contents | Comments |
|---|---|---|---|
| 3 | 12,000 | Gasoline | NOT VAPOR FREE |
| | | | Clean + crush |

4) **Tank Owner/Authorized Representative Certification:** The undersigned certifies that the above listed storage tanks have been removed from the premises of the tank owner.

Joe Daub — Printed/Typed Name
Signature
6-13-01 — Month/Day/Year

5) **Transporter:** The undersigned certifies that the above listed storage tanks have been transported to A&D Environmental and Industrial Services, 2718 Uwharrie Road, Archdale, N.C. 27263.

Wesley C Agner — Printed/Typed Name
Signature
6/13/01 — Month/Day/Year

6) **Disposal Certification:** The undersigned certifies that the above-named storage tank(s) have been cut into scrap pieces and accepted by the metal recycling facility.

Recycling Facility: City of Greensboro Landfill

Ed. D. McManus — Printed/Typed Name
Signature
6-14-01 — Month/Day/Year

# APPENDIX C

# LABORATORY ANALYTICAL REPORT

**PARADIGM ANALYTICAL LABORATORIES, INC.**
2627 Northchase Parkway S.E.
Wilmington, North Carolina 28405
(910) 350-1903
Fax (910) 350-1557

Mr. Drew Waggener
Marshall Miller & Assoc.
5900 Triangle Drive
Raleigh,NC 27613

June 29, 2001

Report Number: G145-741

Client Project ID: W. Market Street Exxon

Dear Mr. Waggener,

Enclosed are the results of the analytical services performed under the referenced project. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call for assistance. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,

Paradigm Analytical Laboratories, Inc.

Laboratory Director
Mark Randall

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T1-A
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21769
Lab Project ID: G145-741
Matrix: Soil %Solids: 61.0

Date Analyzed: 6/21/01
Analyzed By: EKR
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 6250

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 260000 | BQL |
| Acrolein | 1000000 | BQL |
| Acrylonitrile | 1000000 | BQL |
| Benzene | 10000 | BQL |
| Bromobenzene | 10000 | BQL |
| Bromochloromethane | 10000 | BQL |
| Bromodichloromethane | 10000 | BQL |
| Bromoform | 10000 | BQL |
| Bromomethane | 10000 | BQL |
| 2-Butanone | 260000 | BQL |
| n-Butylbenzene | 10000 | **24000** |
| sec-Butylbenzene | 10000 | BQL |
| tert-Butylbenzene | 10000 | BQL |
| Carbon disulfide | 10000 | BQL |
| Carbon tetrachloride | 10000 | BQL |
| Chlorobenzene | 10000 | BQL |
| Chloroethane | 10000 | BQL |
| 2-Chloroethyl vinyl ether | 51000 | BQL |
| Chloroform | 10000 | BQL |
| Chloromethane | 10000 | BQL |
| 2-Chlorotoluene | 10000 | BQL |
| 4-Chlorotoluene | 10000 | BQL |
| Dibromochloromethane | 10000 | BQL |
| 1,2-Dibromo-3-chloropropane | 51000 | BQL |
| Dibromomethane | 10000 | BQL |
| 1,2-Dibromoethane (EDB) | 10000 | BQL |
| 1,2-Dichlorobenzene | 10000 | BQL |
| 1,3-Dichlorobenzene | 10000 | BQL |
| 1,4-Dichlorobenzene | 10000 | BQL |
| trans-1,4-Dichloro-2-butene | 51000 | BQL |
| 1,1-Dichloroethane | 10000 | BQL |
| 1,1-Dichloroethene | 10000 | BQL |
| 1,2-Dichloroethane | 10000 | BQL |
| cis-1,2-Dichloroethene | 10000 | BQL |
| trans-1,2-dichloroethene | 10000 | BQL |
| 1,2-Dichloropropane | 10000 | BQL |
| 1,3-Dichloropropane | 10000 | BQL |
| 2,2-Dichloropropane | 10000 | BQL |
| 1,1-Dichloropropene | 10000 | BQL |
| cis-1,3-Dichloropropene | 10000 | BQL |
| trans-1,3-Dichloropropene | 10000 | BQL |
| Dichlorodifluoromethane | 51000 | BQL |
| Diisopropyl ether (DIPE) | 10000 | BQL |
| Ethylbenzene | 10000 | **34000** |
| Hexachlorobutadiene | 10000 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T1-A
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21769
Lab Project ID: G145-741
Matrix: Soil %Solids: 61.0

Date Analyzed: 6/21/01
Analyzed By: EKR
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 6250

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 51000 | BQL |
| Iodomethane | 10000 | BQL |
| Isopropylbenzene | 10000 | BQL |
| 4-Isopropyltoluene | 10000 | BQL |
| Methylene chloride | 51000 | BQL |
| 4-Methyl-2-pentanone | 51000 | BQL |
| Methyl-tert-butyl ether (MTBE) | 10000 | BQL |
| Naphthalene | 10000 | **52000** |
| n-Propyl benzene | 10000 | **22000** |
| Styrene | 10000 | BQL |
| 1,1,1,2-Tetrachloroethane | 10000 | BQL |
| 1,1,2,2-Tetrachloroethane | 10000 | BQL |
| Tetrachloroethene | 10000 | BQL |
| Toluene | 10000 | **47000** |
| 1,2,3-Trichlorobenzene | 10000 | BQL |
| 1,2,4-Trichlorobenzene | 10000 | BQL |
| Trichloroethene | 10000 | BQL |
| 1,1,1-Trichloroethane | 10000 | BQL |
| 1,1,2-Trichloroethane | 10000 | BQL |
| Trichlorofluoromethane | 10000 | BQL |
| 1,2,3-Trichloropropane | 10000 | BQL |
| 1,2,4-Trimethylbenzene | 10000 | **220000** |
| 1,3,5-Trimethylbenzene | 10000 | **72000** |
| Vinyl chloride | 10000 | BQL |
| m-,p-Xylene | 21000 | **170000** |
| o-Xylene | 10000 | **85000** |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 10 | 10.4 | 104 |
| 1,2-Dichloroethane-d4 | 10 | 9.8 | 98 |
| Toluene-d8 | 10 | 10.1 | 101 |

**Comments:**

All results are corrected for dilution.

Reviewed by:

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T1-B
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21770
Lab Project ID: G145-741
Matrix: Soil %Solids: 62.6

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 80 | BQL |
| Acrolein | 160 | BQL |
| Acrylonitrile | 160 | BQL |
| Benzene | 8 | BQL |
| Bromobenzene | 8 | BQL |
| Bromochloromethane | 8 | BQL |
| Bromodichloromethane | 8 | BQL |
| Bromoform | 8 | BQL |
| Bromomethane | 8 | BQL |
| 2-Butanone | 40 | BQL |
| n-Butylbenzene | 8 | BQL |
| sec-Butylbenzene | 8 | BQL |
| tert-Butylbenzene | 8 | BQL |
| Carbon disulfide | 8 | BQL |
| Carbon tetrachloride | 8 | BQL |
| Chlorobenzene | 8 | BQL |
| Chloroethane | 8 | BQL |
| 2-Chloroethyl vinyl ether | 8 | BQL |
| Chloroform | 8 | BQL |
| Chloromethane | 8 | BQL |
| 2-Chlorotoluene | 8 | BQL |
| 4-Chlorotoluene | 8 | BQL |
| Dibromochloromethane | 8 | BQL |
| 1,2-Dibromo-3-chloropropane | 8 | BQL |
| Dibromomethane | 8 | BQL |
| 1,2-Dibromoethane (EDB) | 8 | BQL |
| 1,2-Dichlorobenzene | 8 | BQL |
| 1,3-Dichlorobenzene | 8 | BQL |
| 1,4-Dichlorobenzene | 8 | BQL |
| trans-1,4-Dichloro-2-butene | 8 | BQL |
| 1,1-Dichloroethane | 8 | BQL |
| 1,1-Dichloroethene | 8 | BQL |
| 1,2-Dichloroethane | 8 | BQL |
| cis-1,2-Dichloroethene | 8 | BQL |
| trans-1,2-dichloroethene | 8 | BQL |
| 1,2-Dichloropropane | 8 | BQL |
| 1,3-Dichloropropane | 8 | BQL |
| 2,2-Dichloropropane | 8 | BQL |
| 1,1-Dichloropropene | 8 | BQL |
| cis-1,3-Dichloropropene | 8 | BQL |
| trans-1,3-Dichloropropene | 8 | BQL |
| Dichlorodifluoromethane | 8 | BQL |
| Diisopropyl ether (DIPE) | 8 | BQL |
| Ethylbenzene | 8 | BQL |
| Hexachlorobutadiene | 8 | BQL |

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**
*by GCMS 8260B*

Client Sample ID: T1-B
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21770
Lab Project ID: G145-741
Matrix: Soil %Solids: 62.6

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 8 | BQL |
| Iodomethane | 8 | BQL |
| Isopropylbenzene | 8 | BQL |
| 4-Isopropyltoluene | 8 | BQL |
| Methylene chloride | 32 | BQL |
| 4-Methyl-2-pentanone | 8 | BQL |
| Methyl-tert-butyl ether (MTBE) | 8 | BQL |
| Naphthalene | 8 | BQL |
| n-Propyl benzene | 8 | BQL |
| Styrene | 8 | BQL |
| 1,1,1,2-Tetrachloroethane | 8 | BQL |
| 1,1,2,2-Tetrachloroethane | 8 | BQL |
| Tetrachloroethene | 8 | BQL |
| Toluene | 8 | BQL |
| 1,2,3-Trichlorobenzene | 8 | BQL |
| 1,2,4-Trichlorobenzene | 8 | BQL |
| Trichloroethene | 8 | BQL |
| 1,1,1-Trichloroethane | 8 | BQL |
| 1,1,2-Trichloroethane | 8 | BQL |
| Trichlorofluoromethane | 8 | BQL |
| 1,2,3-Trichloropropane | 8 | BQL |
| 1,2,4-Trimethylbenzene | 8 | BQL |
| 1,3,5-Trimethylbenzene | 8 | BQL |
| Vinyl chloride | 8 | BQL |
| m-,p-Xylene | 16 | BQL |
| o-Xylene | 8 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 50.3 | 101 |
| 1,2-Dichloroethane-d4 | 50 | 53.0 | 106 |
| Toluene-d8 | 50 | 51.0 | 102 |

**Comments:**

All results are corrected for dilution.

Reviewed by: [signature]

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T1-C
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21771
Lab Project ID: G145-741
Matrix: Soil %Solids: 76.5

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 65 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.5 | BQL |
| Bromobenzene | 6.5 | BQL |
| Bromochloromethane | 6.5 | BQL |
| Bromodichloromethane | 6.5 | BQL |
| Bromoform | 6.5 | BQL |
| Bromomethane | 6.5 | BQL |
| 2-Butanone | 33 | BQL |
| n-Butylbenzene | 6.5 | BQL |
| sec-Butylbenzene | 6.5 | BQL |
| tert-Butylbenzene | 6.5 | BQL |
| Carbon disulfide | 6.5 | BQL |
| Carbon tetrachloride | 6.5 | BQL |
| Chlorobenzene | 6.5 | BQL |
| Chloroethane | 6.5 | BQL |
| 2-Chloroethyl vinyl ether | 6.5 | BQL |
| Chloroform | 6.5 | BQL |
| Chloromethane | 6.5 | BQL |
| 2-Chlorotoluene | 6.5 | BQL |
| 4-Chlorotoluene | 6.5 | BQL |
| Dibromochloromethane | 6.5 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.5 | BQL |
| Dibromomethane | 6.5 | BQL |
| 1,2-Dibromoethane (EDB) | 6.5 | BQL |
| 1,2-Dichlorobenzene | 6.5 | BQL |
| 1,3-Dichlorobenzene | 6.5 | BQL |
| 1,4-Dichlorobenzene | 6.5 | BQL |
| trans-1,4-Dichloro-2-butene | 6.5 | BQL |
| 1,1-Dichloroethane | 6.5 | BQL |
| 1,1-Dichloroethene | 6.5 | BQL |
| 1,2-Dichloroethane | 6.5 | BQL |
| cis-1,2-Dichloroethene | 6.5 | BQL |
| trans-1,2-dichloroethene | 6.5 | BQL |
| 1,2-Dichloropropane | 6.5 | BQL |
| 1,3-Dichloropropane | 6.5 | BQL |
| 2,2-Dichloropropane | 6.5 | BQL |
| 1,1-Dichloropropene | 6.5 | BQL |
| cis-1,3-Dichloropropene | 6.5 | BQL |
| trans-1,3-Dichloropropene | 6.5 | BQL |
| Dichlorodifluoromethane | 6.5 | BQL |
| Diisopropyl ether (DIPE) | 6.5 | BQL |
| Ethylbenzene | 6.5 | BQL |
| Hexachlorobutadiene | 6.5 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T1-C
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21771
Lab Project ID: G145-741
Matrix: Soil %Solids: 76.5

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.5 | BQL |
| Iodomethane | 6.5 | BQL |
| Isopropylbenzene | 6.5 | BQL |
| 4-Isopropyltoluene | 6.5 | BQL |
| Methylene chloride | 26 | BQL |
| 4-Methyl-2-pentanone | 6.5 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.5 | BQL |
| Naphthalene | 6.5 | BQL |
| n-Propyl benzene | 6.5 | BQL |
| Styrene | 6.5 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.5 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.5 | BQL |
| Tetrachloroethene | 6.5 | BQL |
| Toluene | 6.5 | BQL |
| 1,2,3-Trichlorobenzene | 6.5 | BQL |
| 1,2,4-Trichlorobenzene | 6.5 | BQL |
| Trichloroethene | 6.5 | BQL |
| 1,1,1-Trichloroethane | 6.5 | BQL |
| 1,1,2-Trichloroethane | 6.5 | BQL |
| Trichlorofluoromethane | 6.5 | BQL |
| 1,2,3-Trichloropropane | 6.5 | BQL |
| 1,2,4-Trimethylbenzene | 6.5 | BQL |
| 1,3,5-Trimethylbenzene | 6.5 | BQL |
| Vinyl chloride | 6.5 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.5 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 48.9 | 98 |
| 1,2-Dichloroethane-d4 | 50 | 53.7 | 107 |
| Toluene-d8 | 50 | 50.9 | 102 |

**Comments:**

All results are corrected for dilution.

Reviewed by:

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T1-D
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21772
Lab Project ID: G145-741
Matrix: Soil %Solids: 70.8

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 71 | BQL |
| Acrolein | 140 | BQL |
| Acrylonitrile | 140 | BQL |
| Benzene | 7.1 | BQL |
| Bromobenzene | 7.1 | BQL |
| Bromochloromethane | 7.1 | BQL |
| Bromodichloromethane | 7.1 | BQL |
| Bromoform | 7.1 | BQL |
| Bromomethane | 7.1 | BQL |
| 2-Butanone | 35 | BQL |
| n-Butylbenzene | 7.1 | BQL |
| sec-Butylbenzene | 7.1 | BQL |
| tert-Butylbenzene | 7.1 | BQL |
| Carbon disulfide | 7.1 | BQL |
| Carbon tetrachloride | 7.1 | BQL |
| Chlorobenzene | 7.1 | BQL |
| Chloroethane | 7.1 | BQL |
| 2-Chloroethyl vinyl ether | 7.1 | BQL |
| Chloroform | 7.1 | BQL |
| Chloromethane | 7.1 | BQL |
| 2-Chlorotoluene | 7.1 | BQL |
| 4-Chlorotoluene | 7.1 | BQL |
| Dibromochloromethane | 7.1 | BQL |
| 1,2-Dibromo-3-chloropropane | 7.1 | BQL |
| Dibromomethane | 7.1 | BQL |
| 1,2-Dibromoethane (EDB) | 7.1 | BQL |
| 1,2-Dichlorobenzene | 7.1 | BQL |
| 1,3-Dichlorobenzene | 7.1 | BQL |
| 1,4-Dichlorobenzene | 7.1 | BQL |
| trans-1,4-Dichloro-2-butene | 7.1 | BQL |
| 1,1-Dichloroethane | 7.1 | BQL |
| 1,1-Dichloroethene | 7.1 | BQL |
| 1,2-Dichloroethane | 7.1 | BQL |
| cis-1,2-Dichloroethene | 7.1 | BQL |
| trans-1,2-dichloroethene | 7.1 | BQL |
| 1,2-Dichloropropane | 7.1 | BQL |
| 1,3-Dichloropropane | 7.1 | BQL |
| 2,2-Dichloropropane | 7.1 | BQL |
| 1,1-Dichloropropene | 7.1 | BQL |
| cis-1,3-Dichloropropene | 7.1 | BQL |
| trans-1,3-Dichloropropene | 7.1 | BQL |
| Dichlorodifluoromethane | 7.1 | BQL |
| Diisopropyl ether (DIPE) | 7.1 | BQL |
| Ethylbenzene | 7.1 | BQL |
| Hexachlorobutadiene | 7.1 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T1-D
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21772
Lab Project ID: G145-741
Matrix: Soil %Solids: 70.8

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 7.1 | BQL |
| Iodomethane | 7.1 | BQL |
| Isopropylbenzene | 7.1 | BQL |
| 4-Isopropyltoluene | 7.1 | BQL |
| Methylene chloride | 28 | BQL |
| 4-Methyl-2-pentanone | 7.1 | BQL |
| Methyl-tert-butyl ether (MTBE) | 7.1 | BQL |
| Naphthalene | 7.1 | BQL |
| n-Propyl benzene | 7.1 | BQL |
| Styrene | 7.1 | BQL |
| 1,1,1,2-Tetrachloroethane | 7.1 | BQL |
| 1,1,2,2-Tetrachloroethane | 7.1 | BQL |
| Tetrachloroethene | 7.1 | BQL |
| Toluene | 7.1 | BQL |
| 1,2,3-Trichlorobenzene | 7.1 | BQL |
| 1,2,4-Trichlorobenzene | 7.1 | BQL |
| Trichloroethene | 7.1 | BQL |
| 1,1,1-Trichloroethane | 7.1 | BQL |
| 1,1,2-Trichloroethane | 7.1 | BQL |
| Trichlorofluoromethane | 7.1 | BQL |
| 1,2,3-Trichloropropane | 7.1 | BQL |
| 1,2,4-Trimethylbenzene | 7.1 | BQL |
| 1,3,5-Trimethylbenzene | 7.1 | BQL |
| Vinyl chloride | 7.1 | BQL |
| m-,p-Xylene | 14 | BQL |
| o-Xylene | 7.1 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 48.0 | 96 |
| 1,2-Dichloroethane-d4 | 50 | 55.4 | 111 |
| Toluene-d8 | 50 | 50.0 | 100 |

**Comments:**

All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T2-A
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21773
Lab Project ID: G145-741
Matrix: Soil %Solids: 66.0

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 76 | BQL |
| Acrolein | 150 | BQL |
| Acrylonitrile | 150 | BQL |
| Benzene | 7.6 | BQL |
| Bromobenzene | 7.6 | BQL |
| Bromochloromethane | 7.6 | BQL |
| Bromodichloromethane | 7.6 | BQL |
| Bromoform | 7.6 | BQL |
| Bromomethane | 7.6 | BQL |
| 2-Butanone | 38 | BQL |
| n-Butylbenzene | 7.6 | BQL |
| sec-Butylbenzene | 7.6 | BQL |
| tert-Butylbenzene | 7.6 | BQL |
| Carbon disulfide | 7.6 | BQL |
| Carbon tetrachloride | 7.6 | BQL |
| Chlorobenzene | 7.6 | BQL |
| Chloroethane | 7.6 | BQL |
| 2-Chloroethyl vinyl ether | 7.6 | BQL |
| Chloroform | 7.6 | BQL |
| Chloromethane | 7.6 | BQL |
| 2-Chlorotoluene | 7.6 | BQL |
| 4-Chlorotoluene | 7.6 | BQL |
| Dibromochloromethane | 7.6 | BQL |
| 1,2-Dibromo-3-chloropropane | 7.6 | BQL |
| Dibromomethane | 7.6 | BQL |
| 1,2-Dibromoethane (EDB) | 7.6 | BQL |
| 1,2-Dichlorobenzene | 7.6 | BQL |
| 1,3-Dichlorobenzene | 7.6 | BQL |
| 1,4-Dichlorobenzene | 7.6 | BQL |
| trans-1,4-Dichloro-2-butene | 7.6 | BQL |
| 1,1-Dichloroethane | 7.6 | BQL |
| 1,1-Dichloroethene | 7.6 | BQL |
| 1,2-Dichloroethane | 7.6 | BQL |
| cis-1,2-Dichloroethene | 7.6 | BQL |
| trans-1,2-dichloroethene | 7.6 | BQL |
| 1,2-Dichloropropane | 7.6 | BQL |
| 1,3-Dichloropropane | 7.6 | BQL |
| 2,2-Dichloropropane | 7.6 | BQL |
| 1,1-Dichloropropene | 7.6 | BQL |
| cis-1,3-Dichloropropene | 7.6 | BQL |
| trans-1,3-Dichloropropene | 7.6 | BQL |
| Dichlorodifluoromethane | 7.6 | BQL |
| Diisopropyl ether (DIPE) | 7.6 | BQL |
| Ethylbenzene | 7.6 | BQL |
| Hexachlorobutadiene | 7.6 | BQL |

Reviewed by: [signature]

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T2-A
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21773
Lab Project ID: G145-741
Matrix: Soil %Solids: 66.0

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 7.6 | BQL |
| Iodomethane | 7.6 | BQL |
| Isopropylbenzene | 7.6 | BQL |
| 4-Isopropyltoluene | 7.6 | BQL |
| Methylene chloride | 30 | BQL |
| 4-Methyl-2-pentanone | 7.6 | BQL |
| Methyl-tert-butyl ether (MTBE) | 7.6 | **12** |
| Naphthalene | 7.6 | **15** |
| n-Propyl benzene | 7.6 | BQL |
| Styrene | 7.6 | BQL |
| 1,1,1,2-Tetrachloroethane | 7.6 | BQL |
| 1,1,2,2-Tetrachloroethane | 7.6 | BQL |
| Tetrachloroethene | 7.6 | BQL |
| Toluene | 7.6 | BQL |
| 1,2,3-Trichlorobenzene | 7.6 | BQL |
| 1,2,4-Trichlorobenzene | 7.6 | BQL |
| Trichloroethene | 7.6 | BQL |
| 1,1,1-Trichloroethane | 7.6 | BQL |
| 1,1,2-Trichloroethane | 7.6 | BQL |
| Trichlorofluoromethane | 7.6 | BQL |
| 1,2,3-Trichloropropane | 7.6 | BQL |
| 1,2,4-Trimethylbenzene | 7.6 | **12** |
| 1,3,5-Trimethylbenzene | 7.6 | BQL |
| Vinyl chloride | 7.6 | BQL |
| m-,p-Xylene | 15 | BQL |
| o-Xylene | 7.6 | **7.7** |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 48.5 | 97 |
| 1,2-Dichloroethane-d4 | 50 | 54.7 | 109 |
| Toluene-d8 | 50 | 50.9 | 102 |

**Comments:**

All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T2-B
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21774
Lab Project ID: G145-741
Matrix: Soil %Solids: 75.6

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 66 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.6 | BQL |
| Bromobenzene | 6.6 | BQL |
| Bromochloromethane | 6.6 | BQL |
| Bromodichloromethane | 6.6 | BQL |
| Bromoform | 6.6 | BQL |
| Bromomethane | 6.6 | BQL |
| 2-Butanone | 33 | BQL |
| n-Butylbenzene | 6.6 | BQL |
| sec-Butylbenzene | 6.6 | BQL |
| tert-Butylbenzene | 6.6 | BQL |
| Carbon disulfide | 6.6 | BQL |
| Carbon tetrachloride | 6.6 | BQL |
| Chlorobenzene | 6.6 | BQL |
| Chloroethane | 6.6 | BQL |
| 2-Chloroethyl vinyl ether | 6.6 | BQL |
| Chloroform | 6.6 | BQL |
| Chloromethane | 6.6 | BQL |
| 2-Chlorotoluene | 6.6 | BQL |
| 4-Chlorotoluene | 6.6 | BQL |
| Dibromochloromethane | 6.6 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.6 | BQL |
| Dibromomethane | 6.6 | BQL |
| 1,2-Dibromoethane (EDB) | 6.6 | BQL |
| 1,2-Dichlorobenzene | 6.6 | BQL |
| 1,3-Dichlorobenzene | 6.6 | BQL |
| 1,4-Dichlorobenzene | 6.6 | BQL |
| trans-1,4-Dichloro-2-butene | 6.6 | BQL |
| 1,1-Dichloroethane | 6.6 | BQL |
| 1,1-Dichloroethene | 6.6 | BQL |
| 1,2-Dichloroethane | 6.6 | BQL |
| cis-1,2-Dichloroethene | 6.6 | BQL |
| trans-1,2-dichloroethene | 6.6 | BQL |
| 1,2-Dichloropropane | 6.6 | BQL |
| 1,3-Dichloropropane | 6.6 | BQL |
| 2,2-Dichloropropane | 6.6 | BQL |
| 1,1-Dichloropropene | 6.6 | BQL |
| cis-1,3-Dichloropropene | 6.6 | BQL |
| trans-1,3-Dichloropropene | 6.6 | BQL |
| Dichlorodifluoromethane | 6.6 | BQL |
| Diisopropyl ether (DIPE) | 6.6 | BQL |
| Ethylbenzene | 6.6 | BQL |
| Hexachlorobutadiene | 6.6 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

| | | | |
|---|---|---|---|
| Client Sample ID: | T2-B | Date Analyzed: | 6/15/01 |
| Client Project ID: | W. Market Street Exxon | Analyzed By: | RNP |
| Lab Sample ID: | 21774 | Date Collected: | 6/13/01 |
| Lab Project ID: | G145-741 | Date Received: | 6/14/01 |
| Matrix: | Soil %Solids: 75.6 | Dilution: | 1 |

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.6 | BQL |
| Iodomethane | 6.6 | BQL |
| Isopropylbenzene | 6.6 | BQL |
| 4-Isopropyltoluene | 6.6 | BQL |
| Methylene chloride | 26 | BQL |
| 4-Methyl-2-pentanone | 6.6 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.6 | BQL |
| Naphthalene | 6.6 | BQL |
| n-Propyl benzene | 6.6 | BQL |
| Styrene | 6.6 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.6 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.6 | BQL |
| Tetrachloroethene | 6.6 | BQL |
| Toluene | 6.6 | BQL |
| 1,2,3-Trichlorobenzene | 6.6 | BQL |
| 1,2,4-Trichlorobenzene | 6.6 | BQL |
| Trichloroethene | 6.6 | BQL |
| 1,1,1-Trichloroethane | 6.6 | BQL |
| 1,1,2-Trichloroethane | 6.6 | BQL |
| Trichlorofluoromethane | 6.6 | BQL |
| 1,2,3-Trichloropropane | 6.6 | BQL |
| 1,2,4-Trimethylbenzene | 6.6 | BQL |
| 1,3,5-Trimethylbenzene | 6.6 | BQL |
| Vinyl chloride | 6.6 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.6 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 45.1 | 90 |
| 1,2-Dichloroethane-d4 | 50 | 58.2 | 116 |
| Toluene-d8 | 50 | 48.4 | 97 |

**Comments:**

All results are corrected for dilution.

Reviewed by:

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T2-C
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21775
Lab Project ID: G145-741
Matrix: Soil %Solids: 75.4

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 66 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.6 | BQL |
| Bromobenzene | 6.6 | BQL |
| Bromochloromethane | 6.6 | BQL |
| Bromodichloromethane | 6.6 | BQL |
| Bromoform | 6.6 | BQL |
| Bromomethane | 6.6 | BQL |
| 2-Butanone | 33 | BQL |
| n-Butylbenzene | 6.6 | BQL |
| sec-Butylbenzene | 6.6 | BQL |
| tert-Butylbenzene | 6.6 | BQL |
| Carbon disulfide | 6.6 | BQL |
| Carbon tetrachloride | 6.6 | BQL |
| Chlorobenzene | 6.6 | BQL |
| Chloroethane | 6.6 | BQL |
| 2-Chloroethyl vinyl ether | 6.6 | BQL |
| Chloroform | 6.6 | BQL |
| Chloromethane | 6.6 | BQL |
| 2-Chlorotoluene | 6.6 | BQL |
| 4-Chlorotoluene | 6.6 | BQL |
| Dibromochloromethane | 6.6 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.6 | BQL |
| Dibromomethane | 6.6 | BQL |
| 1,2-Dibromoethane (EDB) | 6.6 | BQL |
| 1,2-Dichlorobenzene | 6.6 | BQL |
| 1,3-Dichlorobenzene | 6.6 | BQL |
| 1,4-Dichlorobenzene | 6.6 | BQL |
| trans-1,4-Dichloro-2-butene | 6.6 | BQL |
| 1,1-Dichloroethane | 6.6 | BQL |
| 1,1-Dichloroethene | 6.6 | BQL |
| 1,2-Dichloroethane | 6.6 | BQL |
| cis-1,2-Dichloroethene | 6.6 | BQL |
| trans-1,2-dichloroethene | 6.6 | BQL |
| 1,2-Dichloropropane | 6.6 | BQL |
| 1,3-Dichloropropane | 6.6 | BQL |
| 2,2-Dichloropropane | 6.6 | BQL |
| 1,1-Dichloropropene | 6.6 | BQL |
| cis-1,3-Dichloropropene | 6.6 | BQL |
| trans-1,3-Dichloropropene | 6.6 | BQL |
| Dichlorodifluoromethane | 6.6 | BQL |
| Diisopropyl ether (DIPE) | 6.6 | BQL |
| Ethylbenzene | 6.6 | BQL |
| Hexachlorobutadiene | 6.6 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T2-C
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21775
Lab Project ID: G145-741
Matrix: Soil %Solids: 75.4

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.6 | BQL |
| Iodomethane | 6.6 | BQL |
| Isopropylbenzene | 6.6 | BQL |
| 4-Isopropyltoluene | 6.6 | BQL |
| Methylene chloride | 27 | BQL |
| 4-Methyl-2-pentanone | 6.6 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.6 | BQL |
| Naphthalene | 6.6 | BQL |
| n-Propyl benzene | 6.6 | BQL |
| Styrene | 6.6 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.6 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.6 | BQL |
| Tetrachloroethene | 6.6 | BQL |
| Toluene | 6.6 | BQL |
| 1,2,3-Trichlorobenzene | 6.6 | BQL |
| 1,2,4-Trichlorobenzene | 6.6 | BQL |
| Trichloroethene | 6.6 | BQL |
| 1,1,1-Trichloroethane | 6.6 | BQL |
| 1,1,2-Trichloroethane | 6.6 | BQL |
| Trichlorofluoromethane | 6.6 | BQL |
| 1,2,3-Trichloropropane | 6.6 | BQL |
| 1,2,4-Trimethylbenzene | 6.6 | BQL |
| 1,3,5-Trimethylbenzene | 6.6 | BQL |
| Vinyl chloride | 6.6 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.6 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 45.6 | 91 |
| 1,2-Dichloroethane-d4 | 50 | 57.3 | 115 |
| Toluene-d8 | 50 | 48.7 | 97 |

**Comments:**

All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T2-D
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21776
Lab Project ID: G145-741
Matrix: Soil %Solids: 69.0

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 72 | BQL |
| Acrolein | 140 | BQL |
| Acrylonitrile | 140 | BQL |
| Benzene | 7.2 | BQL |
| Bromobenzene | 7.2 | BQL |
| Bromochloromethane | 7.2 | BQL |
| Bromodichloromethane | 7.2 | BQL |
| Bromoform | 7.2 | BQL |
| Bromomethane | 7.2 | BQL |
| 2-Butanone | 36 | BQL |
| n-Butylbenzene | 7.2 | BQL |
| sec-Butylbenzene | 7.2 | BQL |
| tert-Butylbenzene | 7.2 | BQL |
| Carbon disulfide | 7.2 | BQL |
| Carbon tetrachloride | 7.2 | BQL |
| Chlorobenzene | 7.2 | BQL |
| Chloroethane | 7.2 | BQL |
| 2-Chloroethyl vinyl ether | 7.2 | BQL |
| Chloroform | 7.2 | BQL |
| Chloromethane | 7.2 | BQL |
| 2-Chlorotoluene | 7.2 | BQL |
| 4-Chlorotoluene | 7.2 | BQL |
| Dibromochloromethane | 7.2 | BQL |
| 1,2-Dibromo-3-chloropropane | 7.2 | BQL |
| Dibromomethane | 7.2 | BQL |
| 1,2-Dibromoethane (EDB) | 7.2 | BQL |
| 1,2-Dichlorobenzene | 7.2 | BQL |
| 1,3-Dichlorobenzene | 7.2 | BQL |
| 1,4-Dichlorobenzene | 7.2 | BQL |
| trans-1,4-Dichloro-2-butene | 7.2 | BQL |
| 1,1-Dichloroethane | 7.2 | BQL |
| 1,1-Dichloroethene | 7.2 | BQL |
| 1,2-Dichloroethane | 7.2 | BQL |
| cis-1,2-Dichloroethene | 7.2 | BQL |
| trans-1,2-dichloroethene | 7.2 | BQL |
| 1,2-Dichloropropane | 7.2 | BQL |
| 1,3-Dichloropropane | 7.2 | BQL |
| 2,2-Dichloropropane | 7.2 | BQL |
| 1,1-Dichloropropene | 7.2 | BQL |
| cis-1,3-Dichloropropene | 7.2 | BQL |
| trans-1,3-Dichloropropene | 7.2 | BQL |
| Dichlorodifluoromethane | 7.2 | BQL |
| Diisopropyl ether (DIPE) | 7.2 | BQL |
| Ethylbenzene | 7.2 | BQL |
| Hexachlorobutadiene | 7.2 | BQL |

Reviewed by: [signature]

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T2-D
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21776
Lab Project ID: G145-741
Matrix: Soil %Solids: 69.0

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 7.2 | BQL |
| Iodomethane | 7.2 | BQL |
| Isopropylbenzene | 7.2 | BQL |
| 4-Isopropyltoluene | 7.2 | BQL |
| Methylene chloride | 29 | BQL |
| 4-Methyl-2-pentanone | 7.2 | BQL |
| Methyl-tert-butyl ether (MTBE) | 7.2 | BQL |
| Naphthalene | 7.2 | BQL |
| n-Propyl benzene | 7.2 | BQL |
| Styrene | 7.2 | BQL |
| 1,1,1,2-Tetrachloroethane | 7.2 | BQL |
| 1,1,2,2-Tetrachloroethane | 7.2 | BQL |
| Tetrachloroethene | 7.2 | BQL |
| Toluene | 7.2 | BQL |
| 1,2,3-Trichlorobenzene | 7.2 | BQL |
| 1,2,4-Trichlorobenzene | 7.2 | BQL |
| Trichloroethene | 7.2 | BQL |
| 1,1,1-Trichloroethane | 7.2 | BQL |
| 1,1,2-Trichloroethane | 7.2 | BQL |
| Trichlorofluoromethane | 7.2 | BQL |
| 1,2,3-Trichloropropane | 7.2 | BQL |
| 1,2,4-Trimethylbenzene | 7.2 | BQL |
| 1,3,5-Trimethylbenzene | 7.2 | BQL |
| Vinyl chloride | 7.2 | BQL |
| m-,p-Xylene | 14 | BQL |
| o-Xylene | 7.2 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 47.0 | 94 |
| 1,2-Dichloroethane-d4 | 50 | 53.7 | 107 |
| Toluene-d8 | 50 | 48.4 | 97 |

**Comments:**

All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T3-A
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21777
Lab Project ID: G145-741
Matrix: Soil %Solids: 75.2

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 66 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.6 | BQL |
| Bromobenzene | 6.6 | BQL |
| Bromochloromethane | 6.6 | BQL |
| Bromodichloromethane | 6.6 | BQL |
| Bromoform | 6.6 | BQL |
| Bromomethane | 6.6 | BQL |
| 2-Butanone | 33 | BQL |
| n-Butylbenzene | 6.6 | BQL |
| sec-Butylbenzene | 6.6 | BQL |
| tert-Butylbenzene | 6.6 | BQL |
| Carbon disulfide | 6.6 | BQL |
| Carbon tetrachloride | 6.6 | BQL |
| Chlorobenzene | 6.6 | BQL |
| Chloroethane | 6.6 | BQL |
| 2-Chloroethyl vinyl ether | 6.6 | BQL |
| Chloroform | 6.6 | BQL |
| Chloromethane | 6.6 | BQL |
| 2-Chlorotoluene | 6.6 | BQL |
| 4-Chlorotoluene | 6.6 | BQL |
| Dibromochloromethane | 6.6 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.6 | BQL |
| Dibromomethane | 6.6 | BQL |
| 1,2-Dibromoethane (EDB) | 6.6 | BQL |
| 1,2-Dichlorobenzene | 6.6 | BQL |
| 1,3-Dichlorobenzene | 6.6 | BQL |
| 1,4-Dichlorobenzene | 6.6 | BQL |
| trans-1,4-Dichloro-2-butene | 6.6 | BQL |
| 1,1-Dichloroethane | 6.6 | BQL |
| 1,1-Dichloroethene | 6.6 | BQL |
| 1,2-Dichloroethane | 6.6 | BQL |
| cis-1,2-Dichloroethene | 6.6 | BQL |
| trans-1,2-dichloroethene | 6.6 | BQL |
| 1,2-Dichloropropane | 6.6 | BQL |
| 1,3-Dichloropropane | 6.6 | BQL |
| 2,2-Dichloropropane | 6.6 | BQL |
| 1,1-Dichloropropene | 6.6 | BQL |
| cis-1,3-Dichloropropene | 6.6 | BQL |
| trans-1,3-Dichloropropene | 6.6 | BQL |
| Dichlorodifluoromethane | 6.6 | BQL |
| Diisopropyl ether (DIPE) | 6.6 | BQL |
| Ethylbenzene | 6.6 | BQL |
| Hexachlorobutadiene | 6.6 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

| | | | |
|---|---|---|---|
| Client Sample ID: | T3-A | Date Analyzed: | 6/15/01 |
| Client Project ID: | W. Market Street Exxon | Analyzed By: | RNP |
| Lab Sample ID: | 21777 | Date Collected: | 6/13/01 |
| Lab Project ID: | G145-741 | Date Received: | 6/14/01 |
| Matrix: | Soil %Solids: 75.2 | Dilution: | 1 |

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.6 | BQL |
| Iodomethane | 6.6 | BQL |
| Isopropylbenzene | 6.6 | BQL |
| 4-Isopropyltoluene | 6.6 | BQL |
| Methylene chloride | 27 | BQL |
| 4-Methyl-2-pentanone | 6.6 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.6 | BQL |
| Naphthalene | 6.6 | BQL |
| n-Propyl benzene | 6.6 | BQL |
| Styrene | 6.6 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.6 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.6 | BQL |
| Tetrachloroethene | 6.6 | BQL |
| Toluene | 6.6 | BQL |
| 1,2,3-Trichlorobenzene | 6.6 | BQL |
| 1,2,4-Trichlorobenzene | 6.6 | BQL |
| Trichloroethene | 6.6 | BQL |
| 1,1,1-Trichloroethane | 6.6 | BQL |
| 1,1,2-Trichloroethane | 6.6 | BQL |
| Trichlorofluoromethane | 6.6 | BQL |
| 1,2,3-Trichloropropane | 6.6 | BQL |
| 1,2,4-Trimethylbenzene | 6.6 | BQL |
| 1,3,5-Trimethylbenzene | 6.6 | BQL |
| Vinyl chloride | 6.6 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.6 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 46.1 | 92 |
| 1,2-Dichloroethane-d4 | 50 | 57.3 | 115 |
| Toluene-d8 | 50 | 48.9 | 98 |

**Comments:**

All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T3-B
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21778
Lab Project ID: G145-741
Matrix: Soil %Solids: 65.1

Date Analyzed: 6/15/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 77 | BQL |
| Acrolein | 150 | BQL |
| Acrylonitrile | 150 | BQL |
| Benzene | 7.7 | BQL |
| Bromobenzene | 7.7 | BQL |
| Bromochloromethane | 7.7 | BQL |
| Bromodichloromethane | 7.7 | BQL |
| Bromoform | 7.7 | BQL |
| Bromomethane | 7.7 | BQL |
| 2-Butanone | 38 | BQL |
| n-Butylbenzene | 7.7 | BQL |
| sec-Butylbenzene | 7.7 | BQL |
| tert-Butylbenzene | 7.7 | BQL |
| Carbon disulfide | 7.7 | BQL |
| Carbon tetrachloride | 7.7 | BQL |
| Chlorobenzene | 7.7 | BQL |
| Chloroethane | 7.7 | BQL |
| 2-Chloroethyl vinyl ether | 7.7 | BQL |
| Chloroform | 7.7 | BQL |
| Chloromethane | 7.7 | BQL |
| 2-Chlorotoluene | 7.7 | BQL |
| 4-Chlorotoluene | 7.7 | BQL |
| Dibromochloromethane | 7.7 | BQL |
| 1,2-Dibromo-3-chloropropane | 7.7 | BQL |
| Dibromomethane | 7.7 | BQL |
| 1,2-Dibromoethane (EDB) | 7.7 | BQL |
| 1,2-Dichlorobenzene | 7.7 | BQL |
| 1,3-Dichlorobenzene | 7.7 | BQL |
| 1,4-Dichlorobenzene | 7.7 | BQL |
| trans-1,4-Dichloro-2-butene | 7.7 | BQL |
| 1,1-Dichloroethane | 7.7 | BQL |
| 1,1-Dichloroethene | 7.7 | BQL |
| 1,2-Dichloroethane | 7.7 | BQL |
| cis-1,2-Dichloroethene | 7.7 | BQL |
| trans-1,2-dichloroethene | 7.7 | BQL |
| 1,2-Dichloropropane | 7.7 | BQL |
| 1,3-Dichloropropane | 7.7 | BQL |
| 2,2-Dichloropropane | 7.7 | BQL |
| 1,1-Dichloropropene | 7.7 | BQL |
| cis-1,3-Dichloropropene | 7.7 | BQL |
| trans-1,3-Dichloropropene | 7.7 | BQL |
| Dichlorodifluoromethane | 7.7 | BQL |
| Diisopropyl ether (DIPE) | 7.7 | BQL |
| Ethylbenzene | 7.7 | BQL |
| Hexachlorobutadiene | 7.7 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

| | | | |
|---|---|---|---|
| Client Sample ID: | T3-B | Date Analyzed: | 6/15/01 |
| Client Project ID: | W. Market Street Exxon | Analyzed By: | RNP |
| Lab Sample ID: | 21778 | Date Collected: | 6/13/01 |
| Lab Project ID: | G145-741 | Date Received: | 6/14/01 |
| Matrix: | Soil %Solids: 65.1 | Dilution: | 1 |

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 7.7 | BQL |
| Iodomethane | 7.7 | BQL |
| Isopropylbenzene | 7.7 | BQL |
| 4-Isopropyltoluene | 7.7 | BQL |
| Methylene chloride | 31 | BQL |
| 4-Methyl-2-pentanone | 7.7 | BQL |
| Methyl-tert-butyl ether (MTBE) | 7.7 | BQL |
| Naphthalene | 7.7 | BQL |
| n-Propyl benzene | 7.7 | BQL |
| Styrene | 7.7 | BQL |
| 1,1,1,2-Tetrachloroethane | 7.7 | BQL |
| 1,1,2,2-Tetrachloroethane | 7.7 | BQL |
| Tetrachloroethene | 7.7 | BQL |
| Toluene | 7.7 | BQL |
| 1,2,3-Trichlorobenzene | 7.7 | BQL |
| 1,2,4-Trichlorobenzene | 7.7 | BQL |
| Trichloroethene | 7.7 | BQL |
| 1,1,1-Trichloroethane | 7.7 | BQL |
| 1,1,2-Trichloroethane | 7.7 | BQL |
| Trichlorofluoromethane | 7.7 | BQL |
| 1,2,3-Trichloropropane | 7.7 | BQL |
| 1,2,4-Trimethylbenzene | 7.7 | BQL |
| 1,3,5-Trimethylbenzene | 7.7 | BQL |
| Vinyl chloride | 7.7 | BQL |
| m-,p-Xylene | 15 | BQL |
| o-Xylene | 7.7 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 45.7 | 91 |
| 1,2-Dichloroethane-d4 | 50 | 59.8 | 120 |
| Toluene-d8 | 50 | 48.8 | 98 |

**Comments:**

All results are corrected for dilution.

Reviewed by: [illegible]

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T3-C
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21779
Lab Project ID: G145-741
Matrix: Soil %Solids: 61.6

Date Analyzed: 6/16/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 81 | BQL |
| Acrolein | 160 | BQL |
| Acrylonitrile | 160 | BQL |
| Benzene | 8.1 | BQL |
| Bromobenzene | 8.1 | BQL |
| Bromochloromethane | 8.1 | BQL |
| Bromodichloromethane | 8.1 | BQL |
| Bromoform | 8.1 | BQL |
| Bromomethane | 8.1 | BQL |
| 2-Butanone | 41 | BQL |
| n-Butylbenzene | 8.1 | BQL |
| sec-Butylbenzene | 8.1 | BQL |
| tert-Butylbenzene | 8.1 | BQL |
| Carbon disulfide | 8.1 | BQL |
| Carbon tetrachloride | 8.1 | BQL |
| Chlorobenzene | 8.1 | BQL |
| Chloroethane | 8.1 | BQL |
| 2-Chloroethyl vinyl ether | 8.1 | BQL |
| Chloroform | 8.1 | BQL |
| Chloromethane | 8.1 | BQL |
| 2-Chlorotoluene | 8.1 | BQL |
| 4-Chlorotoluene | 8.1 | BQL |
| Dibromochloromethane | 8.1 | BQL |
| 1,2-Dibromo-3-chloropropane | 8.1 | BQL |
| Dibromomethane | 8.1 | BQL |
| 1,2-Dibromoethane (EDB) | 8.1 | BQL |
| 1,2-Dichlorobenzene | 8.1 | BQL |
| 1,3-Dichlorobenzene | 8.1 | BQL |
| 1,4-Dichlorobenzene | 8.1 | BQL |
| trans-1,4-Dichloro-2-butene | 8.1 | BQL |
| 1,1-Dichloroethane | 8.1 | BQL |
| 1,1-Dichloroethene | 8.1 | BQL |
| 1,2-Dichloroethane | 8.1 | BQL |
| cis-1,2-Dichloroethene | 8.1 | BQL |
| trans-1,2-dichloroethene | 8.1 | BQL |
| 1,2-Dichloropropane | 8.1 | BQL |
| 1,3-Dichloropropane | 8.1 | BQL |
| 2,2-Dichloropropane | 8.1 | BQL |
| 1,1-Dichloropropene | 8.1 | BQL |
| cis-1,3-Dichloropropene | 8.1 | BQL |
| trans-1,3-Dichloropropene | 8.1 | BQL |
| Dichlorodifluoromethane | 8.1 | BQL |
| Diisopropyl ether (DIPE) | 8.1 | BQL |
| Ethylbenzene | 8.1 | BQL |
| Hexachlorobutadiene | 8.1 | BQL |

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

| | | | |
|---|---|---|---|
| Client Sample ID: | T3-C | Date Analyzed: | 6/16/01 |
| Client Project ID: | W. Market Street Exxon | Analyzed By: | RNP |
| Lab Sample ID: | 21779 | Date Collected: | 6/13/01 |
| Lab Project ID: | G145-741 | Date Received: | 6/14/01 |
| Matrix: | Soil %Solids: 61.6 | Dilution: | 1 |

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 8.1 | BQL |
| Iodomethane | 8.1 | BQL |
| Isopropylbenzene | 8.1 | BQL |
| 4-Isopropyltoluene | 8.1 | BQL |
| Methylene chloride | 32 | BQL |
| 4-Methyl-2-pentanone | 8.1 | BQL |
| Methyl-tert-butyl ether (MTBE) | 8.1 | BQL |
| Naphthalene | 8.1 | BQL |
| n-Propyl benzene | 8.1 | BQL |
| Styrene | 8.1 | BQL |
| 1,1,1,2-Tetrachloroethane | 8.1 | BQL |
| 1,1,2,2-Tetrachloroethane | 8.1 | BQL |
| Tetrachloroethene | 8.1 | BQL |
| Toluene | 8.1 | BQL |
| 1,2,3-Trichlorobenzene | 8.1 | BQL |
| 1,2,4-Trichlorobenzene | 8.1 | BQL |
| Trichloroethene | 8.1 | BQL |
| 1,1,1-Trichloroethane | 8.1 | BQL |
| 1,1,2-Trichloroethane | 8.1 | BQL |
| Trichlorofluoromethane | 8.1 | BQL |
| 1,2,3-Trichloropropane | 8.1 | BQL |
| 1,2,4-Trimethylbenzene | 8.1 | BQL |
| 1,3,5-Trimethylbenzene | 8.1 | BQL |
| Vinyl chloride | 8.1 | BQL |
| m-,p-Xylene | 16 | BQL |
| o-Xylene | 8.1 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 46.0 | 92 |
| 1,2-Dichloroethane-d4 | 50 | 56.1 | 112 |
| Toluene-d8 | 50 | 48.2 | 96 |

**Comments:**

All results are corrected for dilution.

Reviewed by:

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T3-D
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21780
Lab Project ID: G145-741
Matrix: Soil %Solids: 73.9

Date Analyzed: 6/20/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 68 | BQL |
| Acrolein | 140 | BQL |
| Acrylonitrile | 140 | BQL |
| Benzene | 6.8 | BQL |
| Bromobenzene | 6.8 | BQL |
| Bromochloromethane | 6.8 | BQL |
| Bromodichloromethane | 6.8 | BQL |
| Bromoform | 6.8 | BQL |
| Bromomethane | 6.8 | BQL |
| 2-Butanone | 34 | BQL |
| n-Butylbenzene | 6.8 | BQL |
| sec-Butylbenzene | 6.8 | BQL |
| tert-Butylbenzene | 6.8 | BQL |
| Carbon disulfide | 6.8 | BQL |
| Carbon tetrachloride | 6.8 | BQL |
| Chlorobenzene | 6.8 | BQL |
| Chloroethane | 6.8 | BQL |
| 2-Chloroethyl vinyl ether | 6.8 | BQL |
| Chloroform | 6.8 | BQL |
| Chloromethane | 6.8 | BQL |
| 2-Chlorotoluene | 6.8 | BQL |
| 4-Chlorotoluene | 6.8 | BQL |
| Dibromochloromethane | 6.8 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.8 | BQL |
| Dibromomethane | 6.8 | BQL |
| 1,2-Dibromoethane (EDB) | 6.8 | BQL |
| 1,2-Dichlorobenzene | 6.8 | BQL |
| 1,3-Dichlorobenzene | 6.8 | BQL |
| 1,4-Dichlorobenzene | 6.8 | BQL |
| trans-1,4-Dichloro-2-butene | 6.8 | BQL |
| 1,1-Dichloroethane | 6.8 | BQL |
| 1,1-Dichloroethene | 6.8 | BQL |
| 1,2-Dichloroethane | 6.8 | BQL |
| cis-1,2-Dichloroethene | 6.8 | BQL |
| trans-1,2-dichloroethene | 6.8 | BQL |
| 1,2-Dichloropropane | 6.8 | BQL |
| 1,3-Dichloropropane | 6.8 | BQL |
| 2,2-Dichloropropane | 6.8 | BQL |
| 1,1-Dichloropropene | 6.8 | BQL |
| cis-1,3-Dichloropropene | 6.8 | BQL |
| trans-1,3-Dichloropropene | 6.8 | BQL |
| Dichlorodifluoromethane | 6.8 | BQL |
| Diisopropyl ether (DIPE) | 6.8 | BQL |
| Ethylbenzene | 6.8 | BQL |
| Hexachlorobutadiene | 6.8 | BQL |

Reviewed by: [illegible]

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: T3-D
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21780
Lab Project ID: G145-741
Matrix: Soil %Solids: 73.9

Date Analyzed: 6/20/01
Analyzed By: RNP
Date Collected: 6/13/01
Date Received: 6/14/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.8 | BQL |
| Iodomethane | 6.8 | BQL |
| Isopropylbenzene | 6.8 | BQL |
| 4-Isopropyltoluene | 6.8 | BQL |
| Methylene chloride | 27 | BQL |
| 4-Methyl-2-pentanone | 6.8 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.8 | BQL |
| Naphthalene | 6.8 | BQL |
| n-Propyl benzene | 6.8 | BQL |
| Styrene | 6.8 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.8 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.8 | BQL |
| Tetrachloroethene | 6.8 | BQL |
| Toluene | 6.8 | BQL |
| 1,2,3-Trichlorobenzene | 6.8 | BQL |
| 1,2,4-Trichlorobenzene | 6.8 | BQL |
| Trichloroethene | 6.8 | BQL |
| 1,1,1-Trichloroethane | 6.8 | BQL |
| 1,1,2-Trichloroethane | 6.8 | BQL |
| Trichlorofluoromethane | 6.8 | BQL |
| 1,2,3-Trichloropropane | 6.8 | BQL |
| 1,2,4-Trimethylbenzene | 6.8 | BQL |
| 1,3,5-Trimethylbenzene | 6.8 | BQL |
| Vinyl chloride | 6.8 | BQL |
| m-,p-Xylene | 14 | BQL |
| o-Xylene | 6.8 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 48.6 | 97 |
| 1,2-Dichloroethane-d4 | 50 | 57.4 | 115 |
| Toluene-d8 | 50 | 49.6 | 99 |

**Comments:**

All results are corrected for dilution.

Reviewed by: [signature]

**Flags:** BQL = Below Quantitation Limit

PARADIGM ANALYTICAL LABORATORIES, INC.

# VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Marshall Miller & Assoc.

Project Name: W. Market Street Exxon

| Sample Information and Analytical Results | |
|---|---|
| Sample Identification | T1-A |
| Sample Matrix | Soil |
| Collection Option (for Soil)* | 2 |
| Date Collected | 06/13/01 |
| Date Received | 06/14/01 |
| Date Extracted | 06/14/01 |
| Date Analyzed | 06/19/01 |
| Dry Weight | 61 |
| Dilution Factor | 10 |
| $C_5$-$C_8$ Aliphatics** | 760 (mg/Kg) |
| $C_9$-$C_{12}$ Aliphatics** | 3000 (mg/Kg) |
| $C_9$-$C_{10}$ Aromatics** | 920 (mg/Kg) |
| Surrogate % Recovery - PID | 89 |
| Surrogate % Recovery - FID | 95 |

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: G145-741-21769

Reviewed By: _____

PARADIGM ANALYTICAL LABORATORIES, INC.

# VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Marshall Miller & Assoc.

Project Name: W. Market Street Exxon

| Sample Information and Analytical Results | |
|---|---|
| Sample Identification | T2-A |
| Sample Matrix | Soil |
| Collection Option (for Soil)* | 2 |
| Date Collected | 06/13/01 |
| Date Received | 06/14/01 |
| Date Extracted | 06/14/01 |
| Date Analyzed | 06/14/01 |
| Dry Weight | 66 |
| Dilution Factor | 1 |
| $C_5$-$C_8$ Aliphatics** | < 10 (mg/Kg) |
| $C_9$-$C_{12}$ Aliphatics** | < 10 (mg/Kg) |
| $C_9$-$C_{10}$ Aromatics** | < 10 (mg/Kg) |
| Surrogate % Recovery - PID | 77 |
| Surrogate % Recovery - FID | 120 |

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: G145-741-21773

Reviewed By: [signature]

PARADIGM ANALYTICAL LABORATORIES, INC.

# VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Marshall Miller & Assoc.

Project Name: W. Market Street Exxon

| Sample Information and Analytical Results | |
|---|---|
| Sample Identification | T3-A |
| Sample Matrix | Soil |
| Collection Option (for Soil)* | 2 |
| Date Collected | 06/13/01 |
| Date Received | 06/14/01 |
| Date Extracted | 06/14/01 |
| Date Analyzed | 06/14/01 |
| Dry Weight | 75 |
| Dilution Factor | 1 |
| $C_5$-$C_8$ Aliphatics** | < 10 (mg/Kg) |
| $C_9$-$C_{12}$ Aliphatics** | < 10 (mg/Kg) |
| $C_9$-$C_{10}$ Aromatics** | < 10 (mg/Kg) |
| Surrogate % Recovery - PID | 77 |
| Surrogate % Recovery - FID | 130 |

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: G145-741-21777

Reviewed By:

PARADIGM ANALYTICAL LABORATORIES, INC.

Attachment 2

# VPH Laboratory Reporting Form

## Calibration and QA/QC Information

FID Initial Calibration Date: 12/02/00 PID Initial Calibration Date: 12/02/00

### Calibration Ranges and Limits

| Range | MDL (µg/L) | MDL (mg/Kg) | ML (µg/L) | ML (mg/Kg) | RL (µg/L) | RL (mg/Kg) |
|---|---|---|---|---|---|---|
| $C_5$-$C_8$ Aliphatics | 2.4 | 0.12 | 7.5 | 0.38 | 100 | 10 |
| $C_9$-$C_{12}$ Aliphatics | 1.3 | 0.065 | 4.0 | 0.21 | 100 | 10 |
| $C_9$-$C_{10}$ Aromatics | 0.5 | 0.025 | 1.6 | 0.08 | 100 | 10 |

### Calibration Concentration Levels

| Range | Levels (µg/L) | Levels (mg/Kg) | %RSD or CCC | Method of Quantitation |
|---|---|---|---|---|
| $C_5$-$C_8$ Aliphatics | 40 | 2 | 15.5 | Calibration Factor |
| | 160 | 8 | | |
| | 400 | 20 | | |
| | 1600 | 80 | | |
| | 4000 | 200 | | |
| $C_9$-$C_{12}$ Aliphatics | 30 | 1.5 | 18.8 | Calibration Factor |
| | 120 | 6 | | |
| | 300 | 15 | | |
| | 1200 | 60 | | |
| | 3000 | 150 | | |
| $C_9$-$C_{10}$ Aromatics | 65 | 3.25 | 21.4 | Calibration Factor |
| | 260 | 13 | | |
| | 650 | 32.5 | | |
| | 2600 | 130 | | |
| | 6500 | 325 | | |

Calibration Check Date: 06/14/01

### Calibration Check

| Range | Levels (µg/L) | Levels (mg/Kg) | RPD |
|---|---|---|---|
| $C_5$-$C_8$ Aliphatics | 400 | 20 | -15.5 |
| $C_9$-$C_{12}$ Aliphatics | 300 | 15 | -15.6 |
| $C_9$-$C_{10}$ Aromatics | 650 | 32.5 | 0.1 |

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Reviewed By:

PARADIGM ANALYTICAL LABORATORIES, INC.

Attachment 2

# VPH Laboratory Reporting Form

## Calibration and QA/QC Information

FID Initial Calibration Date: 06/19/01 PID Initial Calibration Date: 06/19/01

### Calibration Ranges and Limits

| Range | MDL (µg/L) | MDL (mg/Kg) | ML (µg/L) | ML (mg/Kg) | RL (µg/L) | RL (mg/Kg) |
|---|---|---|---|---|---|---|
| $C_5$-$C_8$ Aliphatics | 2.4 | 0.12 | 7.5 | 0.38 | 100 | 10 |
| $C_9$-$C_{12}$ Aliphatics | 1.3 | 0.065 | 4.0 | 0.21 | 100 | 10 |
| $C_9$-$C_{10}$ Aromatics | 0.5 | 0.025 | 1.6 | 0.08 | 100 | 10 |

### Calibration Concentration Levels

| Range | Levels (µg/L) | Levels (mg/Kg) | %RSD or CCC | Method of Quantitation |
|---|---|---|---|---|
| $C_5$-$C_8$ Aliphatics | 40 | 2 | 3.2 | Calibration Factor |
| | 160 | 8 | | |
| | 400 | 20 | | |
| | 1600 | 80 | | |
| | 4000 | 200 | | |
| $C_9$-$C_{12}$ Aliphatics | 30 | 1.5 | 9.3 | Calibration Factor |
| | 120 | 6 | | |
| | 300 | 15 | | |
| | 1200 | 60 | | |
| | 3000 | 150 | | |
| $C_9$-$C_{10}$ Aromatics | 65 | 3.25 | 20.5 | Calibration Factor |
| | 260 | 13 | | |
| | 650 | 32.5 | | |
| | 2600 | 130 | | |
| | 6500 | 325 | | |

Calibration Check Date: 06/19/01

### Calibration Check

| Range | Levels (µg/L) | Levels (mg/Kg) | RPD |
|---|---|---|---|
| $C_5$-$C_8$ Aliphatics | 400 | 20 | 3.7 |
| $C_9$-$C_{12}$ Aliphatics | 300 | 15 | 11.0 |
| $C_9$-$C_{10}$ Aromatics | 650 | 32.5 | -9.2 |

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Reviewed By:

**PARADIGM ANALYTICAL LABORATORIES, INC.**
627 Northchase Parkway SE, Wilmington, NC 28405
Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 22048

Page 1 of 2

Client: Marshall Miller & Assoc
Address: 5900 Triangle Drive
Address: Raleigh, NC 27617
Quote #:

Project ID: W. Market Street Exxon
Contact: Drew Wiggener
Phone: (919) 786-1414
Fax: (919) 786-1418

Date: 6/13/01
Turnaround: Normal
Job Number: YZ131
P.O. Number: 1920

Report To: MM&A
5900 Triangle Drive
Raleigh, NC 27607
Invoice To:

| Sample ID | Date | Time | Matrix | Preservatives: 4°C | | | | Analyses: 8260 | MADEP VPH | | | | | | | | | Comments: Please specify any special reporting requirements |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | Encores used for VPH |
| T1-A | 6/13/01 | 1420 | Soil | X | | | | X | X | | | | | | | | | G145-741 |
| T1-B | | 1435 | | X | | | | X | | | | | | | | | | |
| T1-C | | 1447 | | X | | | | X | | | | | | | | | | |
| T1-D | | 1455 | | X | | | | X | | | | | | | | | | |
| T2-A | | 1615 | | X | | | | X | X | | | | | | | | | |
| T2-B | | 1682 | | X | | | | X | | | | | | | | | | |
| T2-C | | 1506 | | X | | | | X | | | | | | | | | | |
| T2-D | | 1513 | | X | | | | X | | | | | | | | | | |

| Relinquished By | Date | Time | Received By | Date | Time | Temperature |
|---|---|---|---|---|---|---|
| David Miller | 6/13/01 | 1900 | Julie Johnson | 6/14/01 | 1015 | 0.1°C |

State Certification Requested
NC ____ SC ____ Other ____

SEE REVERSE FOR TERMS AND CONDITIONS

**PARADIGM ANALYTICAL LABORATORIES, INC.**
627 Northchase Parkway SE, Wilmington, NC 28405
Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 22047

Page 2 of 2

Client: Marshall Miller & Assoc.
Address: 5900 Triangle Drive
Address: Raleigh, NC 27617
Quote #:

Project ID: W. Market Street Exxon
Contact: Drew Waggener
Phone: (919)786-1414
Fax: (919)786-1418

Date: 6/13/01
Turnaround: Normal
Job Number: Y2131
P.O. Number: 1920

Report To: MM+A
5900 Triangle Drive
Raleigh, NC 27617
Invoice To: Same As Above

| Sample ID | Date | Time | Matrix | Preservatives: 4°C | | | | Analyses: 8260 | MADEP VPH | | | | | | | | | Comments: Please specify any special reporting requirements |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | Encores used for VPH |
| T3-A | 6/13/01 | 1554 | Soil | X | | | | X | X | | | | | | | | | G145-741 |
| T3-B | | 1542 | | X | | | | X | | | | | | | | | | |
| T3-C | | 1530 | | X | | | | X | | | | | | | | | | |
| T3-D | | 1523 | | X | | | | X | | | | | | | | | | |

| Relinquished By | Date | Time | Received By | Date | Time | Temperature |
|---|---|---|---|---|---|---|
| [signature] | 6/13/01 | 1900 | [signature] | 6/14/01 | 1015 | 0.1°C |

State Certification Requested
NC ____ SC ____ Other ____

SEE REVERSE FOR TERMS AND CONDITIONS

**PARADIGM ANALYTICAL LABORATORIES, INC.**
2627 Northchase Parkway S.E.
Wilmington, North Carolina 28405
(910) 350-1903
Fax (910) 350-1557

Mr. Drew Waggener
Marshall Miller & Assoc.
5900 Triangle Drive
Raleigh,NC 27613

July 2, 2001

Report Number: G145-742

Client Project ID: W. Market Street Exxon

Dear Mr. Waggener,

Enclosed are the results of the analytical services performed under the referenced project. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call for assistance. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,

Paradigm Analytical Laboratories, Inc.

Laboratory Director
Mark Randall

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: L1
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21838
Lab Project ID: G145-742
Matrix: Soil %Solids: 73.8

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 68 | BQL |
| Acrolein | 140 | BQL |
| Acrylonitrile | 140 | BQL |
| Benzene | 6.8 | BQL |
| Bromobenzene | 6.8 | BQL |
| Bromochloromethane | 6.8 | BQL |
| Bromodichloromethane | 6.8 | BQL |
| Bromoform | 6.8 | BQL |
| Bromomethane | 6.8 | BQL |
| 2-Butanone | 34 | BQL |
| n-Butylbenzene | 6.8 | BQL |
| sec-Butylbenzene | 6.8 | BQL |
| tert-Butylbenzene | 6.8 | BQL |
| Carbon disulfide | 6.8 | BQL |
| Carbon tetrachloride | 6.8 | BQL |
| Chlorobenzene | 6.8 | BQL |
| Chloroethane | 6.8 | BQL |
| 2-Chloroethyl vinyl ether | 6.8 | BQL |
| Chloroform | 6.8 | BQL |
| Chloromethane | 6.8 | BQL |
| 2-Chlorotoluene | 6.8 | BQL |
| 4-Chlorotoluene | 6.8 | BQL |
| Dibromochloromethane | 6.8 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.8 | BQL |
| Dibromomethane | 6.8 | BQL |
| 1,2-Dibromoethane (EDB) | 6.8 | BQL |
| 1,2-Dichlorobenzene | 6.8 | BQL |
| 1,3-Dichlorobenzene | 6.8 | BQL |
| 1,4-Dichlorobenzene | 6.8 | BQL |
| trans-1,4-Dichloro-2-butene | 6.8 | BQL |
| 1,1-Dichloroethane | 6.8 | BQL |
| 1,1-Dichloroethene | 6.8 | BQL |
| 1,2-Dichloroethane | 6.8 | BQL |
| cis-1,2-Dichloroethene | 6.8 | BQL |
| trans-1,2-dichloroethene | 6.8 | BQL |
| 1,2-Dichloropropane | 6.8 | BQL |
| 1,3-Dichloropropane | 6.8 | BQL |
| 2,2-Dichloropropane | 6.8 | BQL |
| 1,1-Dichloropropene | 6.8 | BQL |
| cis-1,3-Dichloropropene | 6.8 | BQL |
| trans-1,3-Dichloropropene | 6.8 | BQL |
| Dichlorodifluoromethane | 6.8 | BQL |
| Diisopropyl ether (DIPE) | 6.8 | BQL |
| Ethylbenzene | 6.8 | BQL |
| Hexachlorobutadiene | 6.8 | BQL |

Reviewed by: [signature]

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

| | | | |
|---|---|---|---|
| Client Sample ID: | L1 | Date Analyzed: | 6/19/01 |
| Client Project ID: | W. Market Street Exxon | Analyzed By: | RNP |
| Lab Sample ID: | 21838 | Date Collected: | 6/14/01 |
| Lab Project ID: | G145-742 | Date Received: | 6/15/01 |
| Matrix: | Soil %Solids: 73.8 | Dilution: | 1 |

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.8 | BQL |
| Iodomethane | 6.8 | BQL |
| Isopropylbenzene | 6.8 | BQL |
| 4-Isopropyltoluene | 6.8 | BQL |
| Methylene chloride | 27 | BQL |
| 4-Methyl-2-pentanone | 6.8 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.8 | **15** |
| Naphthalene | 6.8 | BQL |
| n-Propyl benzene | 6.8 | BQL |
| Styrene | 6.8 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.8 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.8 | BQL |
| Tetrachloroethene | 6.8 | BQL |
| Toluene | 6.8 | BQL |
| 1,2,3-Trichlorobenzene | 6.8 | BQL |
| 1,2,4-Trichlorobenzene | 6.8 | BQL |
| Trichloroethene | 6.8 | BQL |
| 1,1,1-Trichloroethane | 6.8 | BQL |
| 1,1,2-Trichloroethane | 6.8 | BQL |
| Trichlorofluoromethane | 6.8 | BQL |
| 1,2,3-Trichloropropane | 6.8 | BQL |
| 1,2,4-Trimethylbenzene | 6.8 | BQL |
| 1,3,5-Trimethylbenzene | 6.8 | BQL |
| Vinyl chloride | 6.8 | BQL |
| m-,p-Xylene | 14 | BQL |
| o-Xylene | 6.8 | **14** |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 48.4 | 97 |
| 1,2-Dichloroethane-d4 | 50 | 51.9 | 104 |
| Toluene-d8 | 50 | 48.6 | 97 |

**Comments:**

All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: L2
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21839
Lab Project ID: G145-742
Matrix: Soil %Solids: 76.5

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 65 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.5 | BQL |
| Bromobenzene | 6.5 | BQL |
| Bromochloromethane | 6.5 | BQL |
| Bromodichloromethane | 6.5 | BQL |
| Bromoform | 6.5 | BQL |
| Bromomethane | 6.5 | BQL |
| 2-Butanone | 33 | BQL |
| n-Butylbenzene | 6.5 | BQL |
| sec-Butylbenzene | 6.5 | BQL |
| tert-Butylbenzene | 6.5 | BQL |
| Carbon disulfide | 6.5 | BQL |
| Carbon tetrachloride | 6.5 | BQL |
| Chlorobenzene | 6.5 | BQL |
| Chloroethane | 6.5 | BQL |
| 2-Chloroethyl vinyl ether | 6.5 | BQL |
| Chloroform | 6.5 | BQL |
| Chloromethane | 6.5 | BQL |
| 2-Chlorotoluene | 6.5 | BQL |
| 4-Chlorotoluene | 6.5 | BQL |
| Dibromochloromethane | 6.5 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.5 | BQL |
| Dibromomethane | 6.5 | BQL |
| 1,2-Dibromoethane (EDB) | 6.5 | BQL |
| 1,2-Dichlorobenzene | 6.5 | BQL |
| 1,3-Dichlorobenzene | 6.5 | BQL |
| 1,4-Dichlorobenzene | 6.5 | BQL |
| trans-1,4-Dichloro-2-butene | 6.5 | BQL |
| 1,1-Dichloroethane | 6.5 | BQL |
| 1,1-Dichloroethene | 6.5 | BQL |
| 1,2-Dichloroethane | 6.5 | BQL |
| cis-1,2-Dichloroethene | 6.5 | BQL |
| trans-1,2-dichloroethene | 6.5 | BQL |
| 1,2-Dichloropropane | 6.5 | BQL |
| 1,3-Dichloropropane | 6.5 | BQL |
| 2,2-Dichloropropane | 6.5 | BQL |
| 1,1-Dichloropropene | 6.5 | BQL |
| cis-1,3-Dichloropropene | 6.5 | BQL |
| trans-1,3-Dichloropropene | 6.5 | BQL |
| Dichlorodifluoromethane | 6.5 | BQL |
| Diisopropyl ether (DIPE) | 6.5 | BQL |
| Ethylbenzene | 6.5 | BQL |
| Hexachlorobutadiene | 6.5 | BQL |

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: L2
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21839
Lab Project ID: G145-742
Matrix: Soil %Solids: 76.5

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.5 | BQL |
| Iodomethane | 6.5 | BQL |
| Isopropylbenzene | 6.5 | BQL |
| 4-Isopropyltoluene | 6.5 | BQL |
| Methylene chloride | 26 | BQL |
| 4-Methyl-2-pentanone | 6.5 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.5 | BQL |
| Naphthalene | 6.5 | BQL |
| n-Propyl benzene | 6.5 | BQL |
| Styrene | 6.5 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.5 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.5 | BQL |
| Tetrachloroethene | 6.5 | BQL |
| Toluene | 6.5 | BQL |
| 1,2,3-Trichlorobenzene | 6.5 | BQL |
| 1,2,4-Trichlorobenzene | 6.5 | BQL |
| Trichloroethene | 6.5 | BQL |
| 1,1,1-Trichloroethane | 6.5 | BQL |
| 1,1,2-Trichloroethane | 6.5 | BQL |
| Trichlorofluoromethane | 6.5 | BQL |
| 1,2,3-Trichloropropane | 6.5 | BQL |
| 1,2,4-Trimethylbenzene | 6.5 | BQL |
| 1,3,5-Trimethylbenzene | 6.5 | BQL |
| Vinyl chloride | 6.5 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.5 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 48.1 | 96 |
| 1,2-Dichloroethane-d4 | 50 | 53.8 | 108 |
| Toluene-d8 | 50 | 49.6 | 99 |

**Comments:**

All results are corrected for dilution.

Reviewed by: [illegible]

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**
*by GCMS 8260B*

Client Sample ID: L3
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21840
Lab Project ID: G145-742
Matrix: Soil %Solids: 78.7

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 64 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.4 | BQL |
| Bromobenzene | 6.4 | BQL |
| Bromochloromethane | 6.4 | BQL |
| Bromodichloromethane | 6.4 | BQL |
| Bromoform | 6.4 | BQL |
| Bromomethane | 6.4 | BQL |
| 2-Butanone | 32 | BQL |
| n-Butylbenzene | 6.4 | BQL |
| sec-Butylbenzene | 6.4 | BQL |
| tert-Butylbenzene | 6.4 | BQL |
| Carbon disulfide | 6.4 | BQL |
| Carbon tetrachloride | 6.4 | BQL |
| Chlorobenzene | 6.4 | BQL |
| Chloroethane | 6.4 | BQL |
| 2-Chloroethyl vinyl ether | 6.4 | BQL |
| Chloroform | 6.4 | BQL |
| Chloromethane | 6.4 | BQL |
| 2-Chlorotoluene | 6.4 | BQL |
| 4-Chlorotoluene | 6.4 | BQL |
| Dibromochloromethane | 6.4 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.4 | BQL |
| Dibromomethane | 6.4 | BQL |
| 1,2-Dibromoethane (EDB) | 6.4 | BQL |
| 1,2-Dichlorobenzene | 6.4 | BQL |
| 1,3-Dichlorobenzene | 6.4 | BQL |
| 1,4-Dichlorobenzene | 6.4 | BQL |
| trans-1,4-Dichloro-2-butene | 6.4 | BQL |
| 1,1-Dichloroethane | 6.4 | BQL |
| 1,1-Dichloroethene | 6.4 | BQL |
| 1,2-Dichloroethane | 6.4 | BQL |
| cis-1,2-Dichloroethene | 6.4 | BQL |
| trans-1,2-dichloroethene | 6.4 | BQL |
| 1,2-Dichloropropane | 6.4 | BQL |
| 1,3-Dichloropropane | 6.4 | BQL |
| 2,2-Dichloropropane | 6.4 | BQL |
| 1,1-Dichloropropene | 6.4 | BQL |
| cis-1,3-Dichloropropene | 6.4 | BQL |
| trans-1,3-Dichloropropene | 6.4 | BQL |
| Dichlorodifluoromethane | 6.4 | BQL |
| Diisopropyl ether (DIPE) | 6.4 | BQL |
| Ethylbenzene | 6.4 | BQL |
| Hexachlorobutadiene | 6.4 | BQL |

Reviewed by: [illegible]

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**
*by GCMS 8260B*

Client Sample ID: L3
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21840
Lab Project ID: G145-742
Matrix: Soil %Solids: 78.7

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.4 | BQL |
| Iodomethane | 6.4 | BQL |
| Isopropylbenzene | 6.4 | BQL |
| 4-Isopropyltoluene | 6.4 | BQL |
| Methylene chloride | 25 | BQL |
| 4-Methyl-2-pentanone | 6.4 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.4 | BQL |
| Naphthalene | 6.4 | BQL |
| n-Propyl benzene | 6.4 | BQL |
| Styrene | 6.4 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.4 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.4 | BQL |
| Tetrachloroethene | 6.4 | BQL |
| Toluene | 6.4 | BQL |
| 1,2,3-Trichlorobenzene | 6.4 | BQL |
| 1,2,4-Trichlorobenzene | 6.4 | BQL |
| Trichloroethene | 6.4 | BQL |
| 1,1,1-Trichloroethane | 6.4 | BQL |
| 1,1,2-Trichloroethane | 6.4 | BQL |
| Trichlorofluoromethane | 6.4 | BQL |
| 1,2,3-Trichloropropane | 6.4 | BQL |
| 1,2,4-Trimethylbenzene | 6.4 | BQL |
| 1,3,5-Trimethylbenzene | 6.4 | BQL |
| Vinyl chloride | 6.4 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.4 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 48.0 | 96 |
| 1,2-Dichloroethane-d4 | 50 | 53.6 | 107 |
| Toluene-d8 | 50 | 49.0 | 98 |

**Comments:**
All results are corrected for dilution.

Reviewed by: [signature]

**Flags:** BQL = Below Quantitation Limit

N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: L4
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21841
Lab Project ID: G145-742
Matrix: Soil %Solids: 76.0

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 66 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.6 | BQL |
| Bromobenzene | 6.6 | BQL |
| Bromochloromethane | 6.6 | BQL |
| Bromodichloromethane | 6.6 | BQL |
| Bromoform | 6.6 | BQL |
| Bromomethane | 6.6 | BQL |
| 2-Butanone | 33 | BQL |
| n-Butylbenzene | 6.6 | BQL |
| sec-Butylbenzene | 6.6 | BQL |
| tert-Butylbenzene | 6.6 | BQL |
| Carbon disulfide | 6.6 | BQL |
| Carbon tetrachloride | 6.6 | BQL |
| Chlorobenzene | 6.6 | BQL |
| Chloroethane | 6.6 | BQL |
| 2-Chloroethyl vinyl ether | 6.6 | BQL |
| Chloroform | 6.6 | BQL |
| Chloromethane | 6.6 | BQL |
| 2-Chlorotoluene | 6.6 | BQL |
| 4-Chlorotoluene | 6.6 | BQL |
| Dibromochloromethane | 6.6 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.6 | BQL |
| Dibromomethane | 6.6 | BQL |
| 1,2-Dibromoethane (EDB) | 6.6 | BQL |
| 1,2-Dichlorobenzene | 6.6 | BQL |
| 1,3-Dichlorobenzene | 6.6 | BQL |
| 1,4-Dichlorobenzene | 6.6 | BQL |
| trans-1,4-Dichloro-2-butene | 6.6 | BQL |
| 1,1-Dichloroethane | 6.6 | BQL |
| 1,1-Dichloroethene | 6.6 | BQL |
| 1,2-Dichloroethane | 6.6 | BQL |
| cis-1,2-Dichloroethene | 6.6 | BQL |
| trans-1,2-dichloroethene | 6.6 | BQL |
| 1,2-Dichloropropane | 6.6 | BQL |
| 1,3-Dichloropropane | 6.6 | BQL |
| 2,2-Dichloropropane | 6.6 | BQL |
| 1,1-Dichloropropene | 6.6 | BQL |
| cis-1,3-Dichloropropene | 6.6 | BQL |
| trans-1,3-Dichloropropene | 6.6 | BQL |
| Dichlorodifluoromethane | 6.6 | BQL |
| Diisopropyl ether (DIPE) | 6.6 | BQL |
| Ethylbenzene | 6.6 | BQL |
| Hexachlorobutadiene | 6.6 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**
*by GCMS 8260B*

Client Sample ID: L4
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21841
Lab Project ID: G145-742
Matrix: Soil %Solids: 76.0

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.6 | BQL |
| Iodomethane | 6.6 | BQL |
| Isopropylbenzene | 6.6 | BQL |
| 4-Isopropyltoluene | 6.6 | BQL |
| Methylene chloride | 26 | BQL |
| 4-Methyl-2-pentanone | 6.6 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.6 | BQL |
| Naphthalene | 6.6 | BQL |
| n-Propyl benzene | 6.6 | BQL |
| Styrene | 6.6 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.6 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.6 | BQL |
| Tetrachloroethene | 6.6 | BQL |
| Toluene | 6.6 | BQL |
| 1,2,3-Trichlorobenzene | 6.6 | BQL |
| 1,2,4-Trichlorobenzene | 6.6 | BQL |
| Trichloroethene | 6.6 | BQL |
| 1,1,1-Trichloroethane | 6.6 | BQL |
| 1,1,2-Trichloroethane | 6.6 | BQL |
| Trichlorofluoromethane | 6.6 | BQL |
| 1,2,3-Trichloropropane | 6.6 | BQL |
| 1,2,4-Trimethylbenzene | 6.6 | BQL |
| 1,3,5-Trimethylbenzene | 6.6 | BQL |
| Vinyl chloride | 6.6 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.6 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 46.8 | 94 |
| 1,2-Dichloroethane-d4 | 50 | 51.1 | 102 |
| Toluene-d8 | 50 | 48.6 | 97 |

**Comments:**
All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: L5
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21842
Lab Project ID: G145-742
Matrix: Soil %Solids: 81.8

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 61 | BQL |
| Acrolein | 120 | BQL |
| Acrylonitrile | 120 | BQL |
| Benzene | 6.1 | **10** |
| Bromobenzene | 6.1 | BQL |
| Bromochloromethane | 6.1 | BQL |
| Bromodichloromethane | 6.1 | BQL |
| Bromoform | 6.1 | BQL |
| Bromomethane | 6.1 | BQL |
| 2-Butanone | 31 | BQL |
| n-Butylbenzene | 6.1 | BQL |
| sec-Butylbenzene | 6.1 | BQL |
| tert-Butylbenzene | 6.1 | BQL |
| Carbon disulfide | 6.1 | BQL |
| Carbon tetrachloride | 6.1 | BQL |
| Chlorobenzene | 6.1 | BQL |
| Chloroethane | 6.1 | BQL |
| 2-Chloroethyl vinyl ether | 6.1 | BQL |
| Chloroform | 6.1 | BQL |
| Chloromethane | 6.1 | BQL |
| 2-Chlorotoluene | 6.1 | BQL |
| 4-Chlorotoluene | 6.1 | BQL |
| Dibromochloromethane | 6.1 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.1 | BQL |
| Dibromomethane | 6.1 | BQL |
| 1,2-Dibromoethane (EDB) | 6.1 | BQL |
| 1,2-Dichlorobenzene | 6.1 | BQL |
| 1,3-Dichlorobenzene | 6.1 | BQL |
| 1,4-Dichlorobenzene | 6.1 | BQL |
| trans-1,4-Dichloro-2-butene | 6.1 | BQL |
| 1,1-Dichloroethane | 6.1 | BQL |
| 1,1-Dichloroethene | 6.1 | BQL |
| 1,2-Dichloroethane | 6.1 | BQL |
| cis-1,2-Dichloroethene | 6.1 | BQL |
| trans-1,2-dichloroethene | 6.1 | BQL |
| 1,2-Dichloropropane | 6.1 | BQL |
| 1,3-Dichloropropane | 6.1 | BQL |
| 2,2-Dichloropropane | 6.1 | BQL |
| 1,1-Dichloropropene | 6.1 | BQL |
| cis-1,3-Dichloropropene | 6.1 | BQL |
| trans-1,3-Dichloropropene | 6.1 | BQL |
| Dichlorodifluoromethane | 6.1 | BQL |
| Diisopropyl ether (DIPE) | 6.1 | **13** |
| Ethylbenzene | 6.1 | **24** |
| Hexachlorobutadiene | 6.1 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit

N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**
*by GCMS 8260B*

Client Sample ID: L5
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21842
Lab Project ID: G145-742
Matrix: Soil %Solids: 81.8

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.1 | BQL |
| Iodomethane | 6.1 | BQL |
| Isopropylbenzene | 6.1 | BQL |
| 4-Isopropyltoluene | 6.1 | BQL |
| Methylene chloride | 24 | BQL |
| 4-Methyl-2-pentanone | 6.1 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.1 | BQL |
| Naphthalene | 6.1 | **8.7** |
| n-Propyl benzene | 6.1 | BQL |
| Styrene | 6.1 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.1 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.1 | BQL |
| Tetrachloroethene | 6.1 | BQL |
| Toluene | 6.1 | BQL |
| 1,2,3-Trichlorobenzene | 6.1 | BQL |
| 1,2,4-Trichlorobenzene | 6.1 | BQL |
| Trichloroethene | 6.1 | BQL |
| 1,1,1-Trichloroethane | 6.1 | BQL |
| 1,1,2-Trichloroethane | 6.1 | BQL |
| Trichlorofluoromethane | 6.1 | BQL |
| 1,2,3-Trichloropropane | 6.1 | BQL |
| 1,2,4-Trimethylbenzene | 6.1 | **15** |
| 1,3,5-Trimethylbenzene | 6.1 | BQL |
| Vinyl chloride | 6.1 | BQL |
| m-,p-Xylene | 12 | **40** |
| o-Xylene | 6.1 | **14** |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 46.8 | 94 |
| 1,2-Dichloroethane-d4 | 50 | 51.4 | 103 |
| Toluene-d8 | 50 | 48.6 | 97 |

**Comments:**
All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: D1
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21843
Lab Project ID: G145-742
Matrix: Soil %Solids: 71.9

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 70 | BQL |
| Acrolein | 140 | BQL |
| Acrylonitrile | 140 | BQL |
| Benzene | 7 | BQL |
| Bromobenzene | 7 | BQL |
| Bromochloromethane | 7 | BQL |
| Bromodichloromethane | 7 | BQL |
| Bromoform | 7 | BQL |
| Bromomethane | 7 | BQL |
| 2-Butanone | 35 | BQL |
| n-Butylbenzene | 7 | BQL |
| sec-Butylbenzene | 7 | BQL |
| tert-Butylbenzene | 7 | BQL |
| Carbon disulfide | 7 | BQL |
| Carbon tetrachloride | 7 | BQL |
| Chlorobenzene | 7 | BQL |
| Chloroethane | 7 | BQL |
| 2-Chloroethyl vinyl ether | 7 | BQL |
| Chloroform | 7 | BQL |
| Chloromethane | 7 | BQL |
| 2-Chlorotoluene | 7 | BQL |
| 4-Chlorotoluene | 7 | BQL |
| Dibromochloromethane | 7 | BQL |
| 1,2-Dibromo-3-chloropropane | 7 | BQL |
| Dibromomethane | 7 | BQL |
| 1,2-Dibromoethane (EDB) | 7 | BQL |
| 1,2-Dichlorobenzene | 7 | BQL |
| 1,3-Dichlorobenzene | 7 | BQL |
| 1,4-Dichlorobenzene | 7 | BQL |
| trans-1,4-Dichloro-2-butene | 7 | BQL |
| 1,1-Dichloroethane | 7 | BQL |
| 1,1-Dichloroethene | 7 | BQL |
| 1,2-Dichloroethane | 7 | BQL |
| cis-1,2-Dichloroethene | 7 | BQL |
| trans-1,2-dichloroethene | 7 | BQL |
| 1,2-Dichloropropane | 7 | BQL |
| 1,3-Dichloropropane | 7 | BQL |
| 2,2-Dichloropropane | 7 | BQL |
| 1,1-Dichloropropene | 7 | BQL |
| cis-1,3-Dichloropropene | 7 | BQL |
| trans-1,3-Dichloropropene | 7 | BQL |
| Dichlorodifluoromethane | 7 | BQL |
| Diisopropyl ether (DIPE) | 7 | BQL |
| Ethylbenzene | 7 | **45** |
| Hexachlorobutadiene | 7 | BQL |

Reviewed by: [illegible]

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: D1
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21843
Lab Project ID: G145-742
Matrix: Soil %Solids: 71.9

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 7 | BQL |
| Iodomethane | 7 | BQL |
| Isopropylbenzene | 7 | BQL |
| 4-Isopropyltoluene | 7 | BQL |
| Methylene chloride | 28 | BQL |
| 4-Methyl-2-pentanone | 7 | BQL |
| Methyl-tert-butyl ether (MTBE) | 7 | **81** |
| Naphthalene | 7 | **17** |
| n-Propyl benzene | 7 | **12** |
| Styrene | 7 | BQL |
| 1,1,1,2-Tetrachloroethane | 7 | BQL |
| 1,1,2,2-Tetrachloroethane | 7 | BQL |
| Tetrachloroethene | 7 | BQL |
| Toluene | 7 | **120** |
| 1,2,3-Trichlorobenzene | 7 | BQL |
| 1,2,4-Trichlorobenzene | 7 | BQL |
| Trichloroethene | 7 | BQL |
| 1,1,1-Trichloroethane | 7 | BQL |
| 1,1,2-Trichloroethane | 7 | BQL |
| Trichlorofluoromethane | 7 | BQL |
| 1,2,3-Trichloropropane | 7 | BQL |
| 1,2,4-Trimethylbenzene | 7 | **95** |
| 1,3,5-Trimethylbenzene | 7 | **25** |
| Vinyl chloride | 7 | BQL |
| m-,p-Xylene | 14 | **170** |
| o-Xylene | 7 | **76** |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 49.2 | 98 |
| 1,2-Dichloroethane-d4 | 50 | 50.6 | 101 |
| Toluene-d8 | 50 | 49.1 | 98 |

**Comments:**

All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: D2
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21844
Lab Project ID: G145-742
Matrix: Soil %Solids: 79.9

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 63 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.3 | BQL |
| Bromobenzene | 6.3 | BQL |
| Bromochloromethane | 6.3 | BQL |
| Bromodichloromethane | 6.3 | BQL |
| Bromoform | 6.3 | BQL |
| Bromomethane | 6.3 | BQL |
| 2-Butanone | 31 | BQL |
| n-Butylbenzene | 6.3 | BQL |
| sec-Butylbenzene | 6.3 | BQL |
| tert-Butylbenzene | 6.3 | BQL |
| Carbon disulfide | 6.3 | BQL |
| Carbon tetrachloride | 6.3 | BQL |
| Chlorobenzene | 6.3 | BQL |
| Chloroethane | 6.3 | BQL |
| 2-Chloroethyl vinyl ether | 6.3 | BQL |
| Chloroform | 6.3 | BQL |
| Chloromethane | 6.3 | BQL |
| 2-Chlorotoluene | 6.3 | BQL |
| 4-Chlorotoluene | 6.3 | BQL |
| Dibromochloromethane | 6.3 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.3 | BQL |
| Dibromomethane | 6.3 | BQL |
| 1,2-Dibromoethane (EDB) | 6.3 | BQL |
| 1,2-Dichlorobenzene | 6.3 | BQL |
| 1,3-Dichlorobenzene | 6.3 | BQL |
| 1,4-Dichlorobenzene | 6.3 | BQL |
| trans-1,4-Dichloro-2-butene | 6.3 | BQL |
| 1,1-Dichloroethane | 6.3 | BQL |
| 1,1-Dichloroethene | 6.3 | BQL |
| 1,2-Dichloroethane | 6.3 | BQL |
| cis-1,2-Dichloroethene | 6.3 | BQL |
| trans-1,2-dichloroethene | 6.3 | BQL |
| 1,2-Dichloropropane | 6.3 | BQL |
| 1,3-Dichloropropane | 6.3 | BQL |
| 2,2-Dichloropropane | 6.3 | BQL |
| 1,1-Dichloropropene | 6.3 | BQL |
| cis-1,3-Dichloropropene | 6.3 | BQL |
| trans-1,3-Dichloropropene | 6.3 | BQL |
| Dichlorodifluoromethane | 6.3 | BQL |
| Diisopropyl ether (DIPE) | 6.3 | BQL |
| Ethylbenzene | 6.3 | BQL |
| Hexachlorobutadiene | 6.3 | BQL |

Reviewed by: [signature]

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: D2
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21844
Lab Project ID: G145-742
Matrix: Soil %Solids: 79.9

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.3 | BQL |
| Iodomethane | 6.3 | BQL |
| Isopropylbenzene | 6.3 | BQL |
| 4-Isopropyltoluene | 6.3 | BQL |
| Methylene chloride | 25 | BQL |
| 4-Methyl-2-pentanone | 6.3 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.3 | BQL |
| Naphthalene | 6.3 | BQL |
| n-Propyl benzene | 6.3 | BQL |
| Styrene | 6.3 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.3 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.3 | BQL |
| Tetrachloroethene | 6.3 | BQL |
| Toluene | 6.3 | BQL |
| 1,2,3-Trichlorobenzene | 6.3 | BQL |
| 1,2,4-Trichlorobenzene | 6.3 | BQL |
| Trichloroethene | 6.3 | BQL |
| 1,1,1-Trichloroethane | 6.3 | BQL |
| 1,1,2-Trichloroethane | 6.3 | BQL |
| Trichlorofluoromethane | 6.3 | BQL |
| 1,2,3-Trichloropropane | 6.3 | BQL |
| 1,2,4-Trimethylbenzene | 6.3 | BQL |
| 1,3,5-Trimethylbenzene | 6.3 | BQL |
| Vinyl chloride | 6.3 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.3 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 46.5 | 93 |
| 1,2-Dichloroethane-d4 | 50 | 51.8 | 104 |
| Toluene-d8 | 50 | 48.5 | 97 |

**Comments:**

All results are corrected for dilution.

Reviewed by: _____

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: D3
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21845
Lab Project ID: G145-742
Matrix: Soil %Solids: 74.5

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 67 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.7 | BQL |
| Bromobenzene | 6.7 | BQL |
| Bromochloromethane | 6.7 | BQL |
| Bromodichloromethane | 6.7 | BQL |
| Bromoform | 6.7 | BQL |
| Bromomethane | 6.7 | BQL |
| 2-Butanone | 34 | BQL |
| n-Butylbenzene | 6.7 | BQL |
| sec-Butylbenzene | 6.7 | BQL |
| tert-Butylbenzene | 6.7 | BQL |
| Carbon disulfide | 6.7 | BQL |
| Carbon tetrachloride | 6.7 | BQL |
| Chlorobenzene | 6.7 | BQL |
| Chloroethane | 6.7 | BQL |
| 2-Chloroethyl vinyl ether | 6.7 | BQL |
| Chloroform | 6.7 | BQL |
| Chloromethane | 6.7 | BQL |
| 2-Chlorotoluene | 6.7 | BQL |
| 4-Chlorotoluene | 6.7 | BQL |
| Dibromochloromethane | 6.7 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.7 | BQL |
| Dibromomethane | 6.7 | BQL |
| 1,2-Dibromoethane (EDB) | 6.7 | BQL |
| 1,2-Dichlorobenzene | 6.7 | BQL |
| 1,3-Dichlorobenzene | 6.7 | BQL |
| 1,4-Dichlorobenzene | 6.7 | BQL |
| trans-1,4-Dichloro-2-butene | 6.7 | BQL |
| 1,1-Dichloroethane | 6.7 | BQL |
| 1,1-Dichloroethene | 6.7 | BQL |
| 1,2-Dichloroethane | 6.7 | BQL |
| cis-1,2-Dichloroethene | 6.7 | BQL |
| trans-1,2-dichloroethene | 6.7 | BQL |
| 1,2-Dichloropropane | 6.7 | BQL |
| 1,3-Dichloropropane | 6.7 | BQL |
| 2,2-Dichloropropane | 6.7 | BQL |
| 1,1-Dichloropropene | 6.7 | BQL |
| cis-1,3-Dichloropropene | 6.7 | BQL |
| trans-1,3-Dichloropropene | 6.7 | BQL |
| Dichlorodifluoromethane | 6.7 | BQL |
| Diisopropyl ether (DIPE) | 6.7 | BQL |
| Ethylbenzene | 6.7 | BQL |
| Hexachlorobutadiene | 6.7 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**

*by GCMS 8260B*

Client Sample ID: D3
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21845
Lab Project ID: G145-742
Matrix: Soil %Solids: 74.5

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.7 | BQL |
| Iodomethane | 6.7 | BQL |
| Isopropylbenzene | 6.7 | BQL |
| 4-Isopropyltoluene | 6.7 | BQL |
| Methylene chloride | 27 | BQL |
| 4-Methyl-2-pentanone | 6.7 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.7 | BQL |
| Naphthalene | 6.7 | BQL |
| n-Propyl benzene | 6.7 | BQL |
| Styrene | 6.7 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.7 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.7 | BQL |
| Tetrachloroethene | 6.7 | BQL |
| Toluene | 6.7 | BQL |
| 1,2,3-Trichlorobenzene | 6.7 | BQL |
| 1,2,4-Trichlorobenzene | 6.7 | BQL |
| Trichloroethene | 6.7 | BQL |
| 1,1,1-Trichloroethane | 6.7 | BQL |
| 1,1,2-Trichloroethane | 6.7 | BQL |
| Trichlorofluoromethane | 6.7 | BQL |
| 1,2,3-Trichloropropane | 6.7 | BQL |
| 1,2,4-Trimethylbenzene | 6.7 | BQL |
| 1,3,5-Trimethylbenzene | 6.7 | BQL |
| Vinyl chloride | 6.7 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.7 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 46.8 | 94 |
| 1,2-Dichloroethane-d4 | 50 | 56.9 | 114 |
| Toluene-d8 | 50 | 48.7 | 97 |

**Comments:**

All results are corrected for dilution.

Reviewed by: JN

**Flags:** BQL = Below Quantitation Limit

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**
*by GCMS 8260B*

Client Sample ID: D4
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21846
Lab Project ID: G145-742
Matrix: Soil %Solids: 77.9

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| Acetone | 64 | BQL |
| Acrolein | 130 | BQL |
| Acrylonitrile | 130 | BQL |
| Benzene | 6.4 | BQL |
| Bromobenzene | 6.4 | BQL |
| Bromochloromethane | 6.4 | BQL |
| Bromodichloromethane | 6.4 | BQL |
| Bromoform | 6.4 | BQL |
| Bromomethane | 6.4 | BQL |
| 2-Butanone | 32 | BQL |
| n-Butylbenzene | 6.4 | BQL |
| sec-Butylbenzene | 6.4 | BQL |
| tert-Butylbenzene | 6.4 | BQL |
| Carbon disulfide | 6.4 | BQL |
| Carbon tetrachloride | 6.4 | BQL |
| Chlorobenzene | 6.4 | BQL |
| Chloroethane | 6.4 | BQL |
| 2-Chloroethyl vinyl ether | 6.4 | BQL |
| Chloroform | 6.4 | BQL |
| Chloromethane | 6.4 | BQL |
| 2-Chlorotoluene | 6.4 | BQL |
| 4-Chlorotoluene | 6.4 | BQL |
| Dibromochloromethane | 6.4 | BQL |
| 1,2-Dibromo-3-chloropropane | 6.4 | BQL |
| Dibromomethane | 6.4 | BQL |
| 1,2-Dibromoethane (EDB) | 6.4 | BQL |
| 1,2-Dichlorobenzene | 6.4 | BQL |
| 1,3-Dichlorobenzene | 6.4 | BQL |
| 1,4-Dichlorobenzene | 6.4 | BQL |
| trans-1,4-Dichloro-2-butene | 6.4 | BQL |
| 1,1-Dichloroethane | 6.4 | BQL |
| 1,1-Dichloroethene | 6.4 | BQL |
| 1,2-Dichloroethane | 6.4 | BQL |
| cis-1,2-Dichloroethene | 6.4 | BQL |
| trans-1,2-dichloroethene | 6.4 | BQL |
| 1,2-Dichloropropane | 6.4 | BQL |
| 1,3-Dichloropropane | 6.4 | BQL |
| 2,2-Dichloropropane | 6.4 | BQL |
| 1,1-Dichloropropene | 6.4 | BQL |
| cis-1,3-Dichloropropene | 6.4 | BQL |
| trans-1,3-Dichloropropene | 6.4 | BQL |
| Dichlorodifluoromethane | 6.4 | BQL |
| Diisopropyl ether (DIPE) | 6.4 | BQL |
| Ethylbenzene | 6.4 | BQL |
| Hexachlorobutadiene | 6.4 | BQL |

Reviewed by:

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles**
*by GCMS 8260B*

Client Sample ID: D4
Client Project ID: W. Market Street Exxon
Lab Sample ID: 21846
Lab Project ID: G145-742
Matrix: Soil %Solids: 77.9

Date Analyzed: 6/19/01
Analyzed By: RNP
Date Collected: 6/14/01
Date Received: 6/15/01
Dilution: 1

| Compound | Quantitation Limit (ug/KG) | Result (ug/KG) |
|---|---|---|
| 2-Hexanone | 6.4 | BQL |
| Iodomethane | 6.4 | BQL |
| Isopropylbenzene | 6.4 | BQL |
| 4-Isopropyltoluene | 6.4 | BQL |
| Methylene chloride | 26 | BQL |
| 4-Methyl-2-pentanone | 6.4 | BQL |
| Methyl-tert-butyl ether (MTBE) | 6.4 | 12 |
| Naphthalene | 6.4 | BQL |
| n-Propyl benzene | 6.4 | BQL |
| Styrene | 6.4 | BQL |
| 1,1,1,2-Tetrachloroethane | 6.4 | BQL |
| 1,1,2,2-Tetrachloroethane | 6.4 | BQL |
| Tetrachloroethene | 6.4 | BQL |
| Toluene | 6.4 | BQL |
| 1,2,3-Trichlorobenzene | 6.4 | BQL |
| 1,2,4-Trichlorobenzene | 6.4 | BQL |
| Trichloroethene | 6.4 | BQL |
| 1,1,1-Trichloroethane | 6.4 | BQL |
| 1,1,2-Trichloroethane | 6.4 | BQL |
| Trichlorofluoromethane | 6.4 | BQL |
| 1,2,3-Trichloropropane | 6.4 | BQL |
| 1,2,4-Trimethylbenzene | 6.4 | BQL |
| 1,3,5-Trimethylbenzene | 6.4 | BQL |
| Vinyl chloride | 6.4 | BQL |
| m-,p-Xylene | 13 | BQL |
| o-Xylene | 6.4 | BQL |

| Surrogate Spike Recoveries<br>Compound | Spike Added (ug/KG) | Surrogate Result (ug/KG) | %Rec |
|---|---|---|---|
| Bromofluorobenzene | 50 | 45.9 | 92 |
| 1,2-Dichloroethane-d4 | 50 | 52.1 | 104 |
| Toluene-d8 | 50 | 48.5 | 97 |

**Comments:**
All results are corrected for dilution.

Reviewed by: [signature]

**Flags:** BQL = Below Quantitation Limit



N.C. Certification #481 S.C. Certification #99029

# VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Marshall Miller & Assoc.

Project Name: W. Market Street Exxon

| Sample Information and Analytical Results | |
|---|---|
| Sample Identification | L5 |
| Sample Matrix | Soil |
| Collection Option (for Soil)* | 2 |
| Date Collected | 06/14/01 |
| Date Received | 06/15/01 |
| Date Extracted | 06/15/01 |
| Date Analyzed | 06/19/01 |
| Dry Weight | 82 |
| Dilution Factor | 1 |
| $C_5$-$C_8$ Aliphatics** | < 10 (mg/Kg) |
| $C_9$-$C_{12}$ Aliphatics** | < 10 (mg/Kg) |
| $C_9$-$C_{10}$ Aromatics** | < 10 (mg/Kg) |
| Surrogate % Recovery - PID | 89 |
| Surrogate % Recovery - FID | 100 |

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: G145-742-21842

Reviewed By: JN

PARADIGM ANALYTICAL LABORATORIES, INC.

# VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Marshall Miller & Assoc.

Project Name: W. Market Street Exxon

| Sample Information and Analytical Results | |
|---|---|
| Sample Identification | D3 |
| Sample Matrix | Soil |
| Collection Option (for Soil)* | 2 |
| Date Collected | 06/14/01 |
| Date Received | 06/15/01 |
| Date Extracted | 06/15/01 |
| Date Analyzed | 06/19/01 |
| Dry Weight | 75 |
| Dilution Factor | 1 |
| $C_5$-$C_8$ Aliphatics** | < 10 (mg/Kg) |
| $C_9$-$C_{12}$ Aliphatics** | < 10 (mg/Kg) |
| $C_9$-$C_{10}$ Aromatics** | < 10 (mg/Kg) |
| Surrogate % Recovery - PID | 99 |
| Surrogate % Recovery - FID | 99 |

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: G145-742-21845

Reviewed By:

Attachment 2

# VPH Laboratory Reporting Form

## Calibration and QA/QC Information

FID Initial Calibration Date: 06/19/01 PID Initial Calibration Date: 06/19/01

### Calibration Ranges and Limits

| Range | MDL (µg/L) | MDL (mg/Kg) | ML (µg/L) | ML (mg/Kg) | RL (µg/L) | RL (mg/Kg) |
|---|---|---|---|---|---|---|
| $C_5$-$C_8$ Aliphatics | 2.4 | 0.12 | 7.5 | 0.38 | 100 | 10 |
| $C_9$-$C_{12}$ Aliphatics | 1.3 | 0.065 | 4.0 | 0.21 | 100 | 10 |
| $C_9$-$C_{10}$ Aromatics | 0.5 | 0.025 | 1.6 | 0.08 | 100 | 10 |

### Calibration Concentration Levels

| Range | Levels (µg/L) | Levels (mg/Kg) | %RSD or CCC | Method of Quantitation |
|---|---|---|---|---|
| $C_5$-$C_8$ Aliphatics | 40 | 2 | 3.2 | Calibration Factor |
| | 160 | 8 | | |
| | 400 | 20 | | |
| | 1600 | 80 | | |
| | 4000 | 200 | | |
| $C_9$-$C_{12}$ Aliphatics | 30 | 1.5 | 9.3 | Calibration Factor |
| | 120 | 6 | | |
| | 300 | 15 | | |
| | 1200 | 60 | | |
| | 3000 | 150 | | |
| $C_9$-$C_{10}$ Aromatics | 65 | 3.25 | 20.5 | Calibration Factor |
| | 260 | 13 | | |
| | 650 | 32.5 | | |
| | 2600 | 130 | | |
| | 6500 | 325 | | |

Calibration Check Date: 06/19/01

### Calibration Check

| Range | Levels (µg/L) | Levels (mg/Kg) | RPD |
|---|---|---|---|
| $C_5$-$C_8$ Aliphatics | 40 | 2 | 1.8 |
| $C_9$-$C_{12}$ Aliphatics | 30 | 1.5 | -1.8 |
| $C_9$-$C_{10}$ Aromatics | 65 | 3.25 | -5.6 |

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Reviewed By: JW

RADIGM ANALYTICAL LABORATORIES, INC.
27 Northchase Parkway SE, Wilmington, NC 28405
one: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 21361

Page 1 of 1

ent: Marshall Miller + Assoc.
dress: 5900 Triangle Drive
dress: Raleigh, NC 27607
ote #:

Project ID: W. Market Street Exxon
Contact: Drew Waggenner
Phone: (919) 786-1414
Fax: (919) 786-1418

Date: 6/14/01
Turnaround: Normal
Job Number: YZ131
P.O. Number: 1921

Report To: MM+A
5900 Triangle Drive
Raleigh, NC 27617
Invoice To: Same As Above

| Sample ID | Date | Time | Matrix | Preservatives: 4°C | | | | Analyses: 8260 | MADEP VPH | | | | | | | | Comments: Please specify any special reporting requirements |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | Encores used for MADEP |
| 1 | 6/14/01 | 820 | Soil | X | | | | X | | | | | | | | | G145-742 |
| 2 | | 826 | | X | | | | X | | | | | | | | | |
| 3 | | 835 | | X | | | | X | | | | | | | | | |
| 4 | | 845 | | X | | | | X | | | | | | | | | |
| 5 | | 900 | | X | | | | X | X | | | | | | | | |
| D1 | | 935 | | X | | | | X | | | | | | | | | |
| D2 | | 944 | | X | | | | X | | | | | | | | | |
| D3 | | 1000 | | X | | | | X | X | | | | | | | | |
| D4 | | 1015 | | X | | | | X | | | | | | | | | |

| Relinquished By | Date | Time | Received By | Date | Time | Temperature |
|---|---|---|---|---|---|---|
| Emil D. Molloy | 6/14/01 | 1700 | Julie Johnson | 6/15/01 | 1005 | 1.1°C |

State Certification Requested

NC ____ SC ____ Other ____

SEE REVERSE FOR TERMS AND CONDITIONS