

# 001 WORK ORDER Summary Evergreen Analytical, Inc. 08-3946

Rpt To: Adell Heneghan

Email To: aheneghan@marathonoil.com

Marathon Oil

743 Horizon Court, Suite 220

Grand Junction, CO 81506

(970) 245-5233

6/10/2008 11:43:53 AM

Client Project ID:

QC Level: Level I+

## Comments:

| Sample ID   | Client Sample ID | Matrix         | Collection Date | Date Received | Test Code   | Test Name                         | Hold                     | MS                       | Date Due | Hold Time |
|-------------|------------------|----------------|-----------------|---------------|-------------|-----------------------------------|--------------------------|--------------------------|----------|-----------|
| 08-3946-01A | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 524 *       | 524.2: Standard List              | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/23/08   |
| 08-3946-01B | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 504 *       | 504: Standard List                | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/23/08   |
| 08-3946-01C | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 525 *       | 525.2: Standard List              | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/23/08   |
| 08-3946-01D | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 508 *       | 508: Standard List                | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/16/08   |
| 08-3946-01E | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 515.4       | 515.4: Standard List              | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/23/08   |
| 08-3946-01F | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 531_W *     | 531.1: Carbarnates                | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 7/07/08   |
| 08-3946-01G | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 547_W       | 547: Glyposate                    | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/23/08   |
| 08-3946-01H | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 548 *       | 548.1: Endothall                  | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/16/08   |
| 08-3946-01I | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 549_W *     | 549.2: Diquat                     | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/16/08   |
| 08-3946-01J | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | ANIONS_W *  | 300.0: DW Anions by IC            | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/11/08   |
| 08-3946-01K | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | 200.8_DHG * | 200.8 Drinking Water 11 Regulated | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 7/07/08   |
| 08-3946-01L | CABIN            | Drinking Water | 6/09/08 1300    | 6/10/08       | COLFPA      | Coliform P/A                      | <input type="checkbox"/> | <input type="checkbox"/> | 6/24/08  | 6/10/08   |

Definitions: \* - Test Code has a Select List



**Evergreen Analytical, Inc.**

**Date:** 23-Jun-08

**Lab Order:** 08-3946

**Client Project ID**

## **CASE NARRATIVE**

### **SAMPLE RECEIVING**

Sample(s) were hand delivered to the laboratory by the client.

Custody seals were present and intact.

The temperature of the sample(s) upon arrival was 5.7 °C.

Sample(s) were received in good condition, in the proper container, and within holding times.

525.2 sample(s) were preserved properly. VOC sample(s) were marked as preserved on the bottle labels.

VOC sample(s) were received with no headspace present. JD

### **QUALITY ASSURANCE (QA)**

Analyses performed on samples in this work order by EAL meet the requirements of the EAL Quality Assurance Program unless otherwise explained. Analyses of drinking water samples meet the requirements of the EPA Manual for the Certification of Laboratories Analyzing Drinking Water, unless otherwise explained. TP

### **CLIENT SERVICES**

The sample was logged in for the full 524 analysis list per the quotation.

In order to reduce paperwork and minimize mis-interpretation of results, the QA pages normally attached at the end of the report have been retained in the project file. They are available upon request. EKH

### **GENERAL CHEMISTRY**

ANIONS\_W: There are no anomalies to report. MM/TP

### **METALS ANALYSIS**

200.8\_DHG: Sample(s) were preserved by the metals group prior to analysis. There are no other anomalies to report. MB/TP

### **GAS CHROMATOGRAPHY**

Method 504.1: There are no anomalies to report. AE

Method 508: One of the two surrogate recoveries for a batch matrix spike (on another client's sample) is below QC limits. Only one of the surrogates is required to be within QC limits for this method.

There are no other anomalies to report. LC

**Evergreen Analytical, Inc.**

**Date:** 23-Jun-08

**Lab Order:** 08-3946

**Client Project ID**

## **CASE NARRATIVE**

Method 515.4: There are no anomalies to report. AE

### **GAS CHROMATOGRAPHY / MASS SPECTROMETRY**

Method 524.2: The benzene value exceeded the maximum contaminant level for drinking water. There are no other anomalies to report. DC/TP

Method 525.2: One of the three surrogate recoveries is above the QC limits for 08-3946-01C and the batch matrix spike (MS). Atrazine, Bis(2-ethylhexyl)phthalate, and Simazine recoveries are above QC limits on the batch matrix spike (MS). The sample is non-detect and the laboratory control spikes (LCS/LCSD) recoveries are within QC limits, proving the analysis is in control. There are no other anomalies to report. TMB/JM

Method 548.1: There are no anomalies to report. TMB

### **HIGH PRESSURE LIQUID CHROMATOGRAPHY**

Method 531.1: There are no anomalies to report. HJ

Method 547: There are no anomalies to report. HJ

Method 549.2: One of the batch matrix spikes showed a recovery below the QC limit due to a matrix interference. All recoveries for the laboratory control spikes (LCS and LCSD) and the other batch matrix spike are within QC limits, proving the analysis is in control. There are no other anomalies to report. HJ

**Evergreen Analytical, Inc.**

4036 Youngfield Street  
Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

PO Number: 7807

**Outside Laboratory:**

Industrial Laboratories  
4046 Youngfield Street  
Wheat Ridge, CO 80033

TEL: (303) 287-9691  
FAX: (303) 287-0964

Accl #:

**CHAIN-OF-CUSTODY RECORD**

Page 1 of 1

WorkOrder: 08-3946

10-Jun-08

| Sample ID   | Matrix         | Collection Date     | Bottle Type | Requested Tests |  |  |  |  |  |  |  |  |  |  |  |
|-------------|----------------|---------------------|-------------|-----------------|--|--|--|--|--|--|--|--|--|--|--|
|             |                |                     |             | COL/P/A         |  |  |  |  |  |  |  |  |  |  |  |
| 08-3946-01L | Drinking Water | 6/9/2008 1:00:00 PM | COL         | 1               |  |  |  |  |  |  |  |  |  |  |  |

Comments:

|                  |                        |           |
|------------------|------------------------|-----------|
| Relinquished by: | <i>ntal 6/10/8 2pm</i> | Date/Time |
| Relinquished by: |                        |           |
| Received by:     | <i>[Signature]</i>     | Date/Time |
| Received by:     |                        |           |



# industrial LABORATORIES

Industrial Laboratories is your independent,  
third-party analytical testing laboratory

To: Evergreen Analytical  
4036 Youngfield

Wheat Ridge CO 80033-3862

Attn: Carl Smits

## TEST REPORT

EV1601

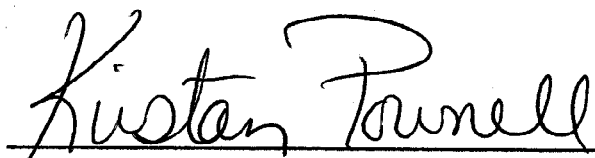
Date Received: 6/10/2008

Date Reported: 6/11/2008

PO Number: 7807

Note: Sample test procedures conform to EPA 40CFR141 requirements.

| Lab No.       | Sample Description    | Test Method                   | Result                                    | Units | MDL | Analysis Date/By |
|---------------|-----------------------|-------------------------------|---|-------|-----|------------------|
| 080610023-01A | 08-3946-01L<br>6/90/8 | Total Coliform<br><br>SM 9223 | Present for<br>total<br>coliforms<br>only |       |     | KP<br>6/10/2008  |

  
Department Manager

\* = Scope Analysis

# = Subcontracted Analysis

MDL = Method Detection Limit

ND = Not Detected at the Method Detection Limit

Page: 1 of 1

**Client Sample ID:** CABIN  
**Client Project ID:**  
**Date Collected:** 6/9/2008  
**Date Received:** 6/10/2008  
**Date Prepared:** 6/11/2008  
**Date Analyzed:** 6/11/2008  
**Percent Moisture:** NA

**Lab Work Order:** 08-3946  
**Lab Sample ID:** 08-3946-01A  
**Sample Matrix:** Drinking Water  
**Lab File ID:** 1301013.D  
**Method Blank:** MB6061108  
**Prep Factor:** 1.000  
**Dilution Factor:** 1.00

**Method:** E524.2

### VOLATILE COMPOUNDS

**Prep Method:** E524.2

| Analytes                  | CAS Number | Result         | Units: µg/L |
|---------------------------|------------|----------------|-------------|
| Benzene                   | 71-43-2    | See Dilution * | 0.50        |
| Bromobenzene              | 108-86-1   | U              | 0.50        |
| Bromochloromethane        | 74-97-5    | U              | 0.50        |
| Bromodichloromethane      | 75-27-4    | U              | 0.50        |
| Bromoform                 | 75-25-2    | U              | 0.50        |
| Bromomethane              | 74-83-9    | U              | 0.50        |
| n-Butylbenzene            | 104-51-8   | U              | 0.50        |
| sec-Butylbenzene          | 135-98-8   | U              | 0.50        |
| t-Butylbenzene            | 98-06-6    | U              | 0.50        |
| Carbon tetrachloride      | 56-23-5    | U              | 0.50        |
| Chlorobenzene             | 108-90-7   | U              | 0.50        |
| Chloroethane              | 75-00-3    | U              | 0.50        |
| Chloroform                | 67-66-3    | U              | 0.50        |
| Chloromethane             | 74-87-3    | U              | 0.50        |
| 2-Chlorotoluene           | 95-49-8    | U              | 0.50        |
| 4-Chlorotoluene           | 106-43-4   | U              | 0.50        |
| Dibromochloromethane      | 124-48-1   | U              | 0.50        |
| Dibromomethane            | 74-95-3    | U              | 0.50        |
| 1,2-Dichlorobenzene       | 95-50-1    | U              | 0.50        |
| 1,3-Dichlorobenzene       | 541-73-1   | U              | 0.50        |
| 1,4-Dichlorobenzene       | 106-46-7   | U              | 0.50        |
| Dichlorodifluoromethane   | 75-71-8    | U              | 0.50        |
| 1,1-Dichloroethane        | 75-34-3    | U              | 0.50        |
| 1,2-Dichloroethane        | 107-06-2   | U              | 0.50        |
| 1,1-Dichloroethene        | 75-35-4    | U              | 0.50        |
| cis-1,2-Dichloroethene    | 156-59-2   | U              | 0.50        |
| trans-1,2-Dichloroethene  | 156-60-5   | U              | 0.50        |
| 1,2-Dichloropropane       | 78-87-5    | U              | 0.50        |
| 1,3-Dichloropropane       | 142-28-9   | U              | 0.50        |
| 2,2-Dichloropropane       | 590-20-7   | U              | 0.50        |
| 1,1-Dichloropropene       | 563-58-6   | U              | 0.50        |
| cis-1,3-Dichloropropene   | 10061-01-5 | U              | 0.50        |
| trans-1,3-Dichloropropene | 10061-02-6 | U              | 0.50        |
| 1,3-Dichloropropene       | 542-75-6   | U              | 0.50        |
| Ethylbenzene              | 100-41-4   | U              | 0.50        |
| Hexachlorobutadiene       | 87-68-3    | U              | 0.50        |
| Isopropylbenzene          | 98-82-8    | U              | 0.50        |
| p-Isopropyltoluene        | 99-87-6    | U              | 0.50        |
| Methylene chloride        | 75-09-2    | U              | 0.50        |
| Naphthalene               | 91-20-3    | 2.18           | 0.50        |

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved

**Qualifiers:** See case narrative for a discussion

B - Analyte detected in the Method Blank, value not subtracted from result  
E - Extrapolated value. Value exceeds calibration range  
H - Prep or Analytical holding time exceeded  
S - Spike Recovery outside acceptance limits  
X - See case narrative  
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Qualifiers:** U - Analyte not detected at or above the reporting limit

J - Estimated value below the LQL

**Definitions:** NA - Not Applicable  
LQL - Lower Quantitation Limit  
MDL - Method Detection Limit  
Surr - Surrogate Standard

Print Date: 6/18/2008

**Evergreen Analytical, Inc.**  
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

**Client Sample ID:** CABIN  
**Client Project ID:**  
**Date Collected:** 6/9/2008  
**Date Received:** 6/10/2008  
**Date Prepared:** 6/11/2008  
**Date Analyzed:** 6/11/2008  
**Percent Moisture:** NA

**Lab Work Order:** 08-3946  
**Lab Sample ID:** 08-3946-01A  
**Sample Matrix:** Drinking Water  
**Lab File ID:** 1301013.D  
**Method Blank:** MB6061108  
**Prep Factor:** 1.000  
**Dilution Factor:** 1.00

**Method:** E524.2

**VOLATILE COMPOUNDS**

**Prep Method:** E524.2

**Units:** µg/L

| Analytes                       | CAS Number | Result       | LQL                           |
|--------------------------------|------------|--------------|-------------------------------|
| n-Propylbenzene                | 103-65-1   | U            | 0.50                          |
| Styrene                        | 100-42-5   | U            | 0.50                          |
| 1,1,1,2-Tetrachloroethane      | 630-20-6   | U            | 0.50                          |
| 1,1,2,2-Tetrachloroethane      | 79-34-5    | U            | 0.50                          |
| Tetrachloroethene              | 127-18-4   | U            | 0.50                          |
| Toluene                        | 108-88-3   | See Dilution | 0.50                          |
| 1,2,3-Trichlorobenzene         | 87-61-6    | U            | 0.50                          |
| 1,2,4-Trichlorobenzene         | 120-82-1   | U            | 0.50                          |
| 1,1,1-Trichloroethane          | 71-55-6    | U            | 0.50                          |
| 1,1,2-Trichloroethane          | 79-00-5    | U            | 0.50                          |
| Trichloroethene                | 79-01-6    | U            | 0.50                          |
| Trichlorofluoromethane         | 75-69-4    | U            | 0.50                          |
| 1,2,3-Trichloropropane         | 96-18-4    | U            | 0.50                          |
| 1,2,4-Trimethylbenzene         | 95-63-6    | 3.34         | 0.50                          |
| 1,3,5-Trimethylbenzene         | 108-67-8   | See Dilution | 0.50                          |
| Vinyl chloride                 | 75-01-4    | U            | 0.50                          |
| m,p-Xylene                     | 1330-20-7  | See Dilution | 0.50                          |
| o-Xylene                       | 95-47-6    | See Dilution | 0.50                          |
| Xylenes, Total                 | 1330-20-7  | See Dilution | 0.50                          |
| Total THM (Summation of above) |            | U            | 0.50                          |
| Surr: 1,2-Dichlorobenzene-d4   | 2199-69-1  | 99           | <b>QC Limits:</b> 70-130 %REC |
| Surr: 4-Bromofluorobenzene     | 460-00-4   | 100          | <b>QC Limits:</b> 70-130 %REC |

\_\_\_\_\_  
Analyst

\_\_\_\_\_  
Approved

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**Definitions:** NA - Not Applicable  
LQL - Lower Quantitation Limit  
MDL - Method Detection Limit  
Surr - Surrogate Standard

Print Date: 6/18/2008



Client Sample ID: CABIN  
Client Project ID:  
Date Collected: 6/9/2008  
Date Received: 6/10/2008  
Date Prepared: 6/16/2008  
Date Analyzed: 6/16/2008  
Percent Moisture: NA

Lab Work Order: 08-3946  
Lab Sample ID: 08-3946-01A  
Sample Matrix: Drinking Water  
Lab File ID: 0801008.D  
Method Blank: MB6061608  
Prep Factor: 1.000  
Dilution Factor: 20.00

Method: E524.2

VOLATILE COMPOUNDS

Prep Method: E524.2

Units: µg/L

| Analytes                     | CAS Number | Result | LQL                    |
|------------------------------|------------|--------|------------------------|
| Benzene                      | 71-43-2    | 53.6 * | 10                     |
| Toluene                      | 108-88-3   | 128    | 10                     |
| 1,3,5-Trimethylbenzene       | 108-67-8   | 42.6   | 10                     |
| m,p-Xylene                   | 1330-20-7  | 80.6   | 10                     |
| o-Xylene                     | 95-47-6    | 109    | 10                     |
| Xylenes, Total               | 1330-20-7  | 190    | 10                     |
| Surr: 1,2-Dichlorobenzene-d4 | 2199-69-1  | 101    | QC Limits: 70-130 %REC |
| Surr: 4-Bromofluorobenzene   | 460-00-4   | 99     | QC Limits: 70-130 %REC |

  
Analyst

  
Approved

Qualifiers: See case narrative for a discussion

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Qualifiers: U - Analyte not detected at or above the reporting limit

J - Estimated value below the LQL

Definitions: NA - Not Applicable

LQL - Lower Quantitation Limit

MDL - Method Detection Limit

Surr - Surrogate Standard

Print Date: 6/19/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: CABIN

Client Project ID:

Date Collected: 6/9/2008

Date Received: 6/10/2008

Date Prepared: 6/11/2008

Date Analyzed: 6/11/2008

Percent Moisture: NA

Lab Work Order: 08-3946

Lab Sample ID: 08-3946-01B

Sample Matrix: Drinking Water

Lab File ID: 033.D

Method Blank: MB-15738

Prep Factor: 0.057

Dilution Factor: 1.00

Method: E504.1

EDB/DBCP

Prep Method: E504.1

| Analytes                    | CAS Number | Result | Units: µg/L<br>LQL |
|-----------------------------|------------|--------|--------------------|
| 1,2-Dibromo-3-chloropropane | 96-12-8    | U      | 0.02               |
| 1,2-Dibromoethane           | 106-93-4   | U      | 0.01               |



Analyst



Approved

**Qualifiers: See the case narrative for a discussion**

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X - See case narrative  
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Qualifiers:** U - Analyte not detected at or above the reporting limit

J - Estimated value below the LQL

**Definitions:** NA - Not Applicable  
LQL - Lower Quantitation Limit  
MDL - Method Detection Limit  
Surr - Surrogate Standard

Print Date: 6/12/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862

(303) 425-6021

Client Sample ID: CABIN  
 Client Project ID:  
 Date Collected: 6/9/08  
 Date Received: 6/10/08  
 Date Prepared: 6/11/08  
 Date Analyzed: 6/12/08  
 Percent Moisture NA

Lab Work Order 08-3946  
 Lab Sample ID: 08-3946-01C  
 Sample Matrix: Drinking Water  
 Lab File ID: \GCMS20611\3301033.D  
 Method Blank: MB-15742  
 Prep Factor: 0.001  
 Dilution Factor: 1.00

## Method: E525.2

## ORGANIC COMPOUNDS

### Prep Method: E525.2

| Analytes                   | CAS Number | Result | MDL                    | Units: µg/L<br>LQL |
|----------------------------|------------|--------|------------------------|--------------------|
| Alachlor                   | 15972-60-8 | U      | 0.20                   | 0.25               |
| Atrazine                   | 1912-24-9  | U      | 0.10                   | 0.25               |
| Benzo(a)pyrene             | 50-32-8    | U      | 0.020                  | 0.020              |
| Butachlor                  | 23184-66-9 | U      | 0.10                   | 0.25               |
| Bis(2-ethylhexyl)adipate   | 103-23-1   | U      | 0.60                   | 0.60               |
| Bis(2-ethylhexyl)phthalate | 117-81-7   | U      | 0.60                   | 0.60               |
| Metolachlor                | 51218-45-2 | U      | 0.10                   | 0.25               |
| Metribuzin                 | 21087-64-9 | U      | 0.10                   | 0.25               |
| Propachlor                 | 1918-16-7  | U      | 0.10                   | 0.25               |
| Simazine                   | 122-34-9   | U      | 0.070                  | 0.25               |
| Surr: 1,3-DM-2-Nbenzene    | 81-20-9    | 119    | QC Limits: 70-130 %REC |                    |
| Surr: Perylene-d12         | 1520-96-3  | 103    | QC Limits: 70-130 %REC |                    |
| Surr: Triphenyl phosphate  | 115-86-6   | 150 S  | QC Limits: 70-130 %REC |                    |

  
 Analyst

  
 Approved

#### Qualifiers: See the case narrative for a discussion

B - Analyte detected in the Method Blank, value not subtracted from result  
 E - Extrapolated value. Value exceeds calibration range  
 H - Prep or Analytical holding time exceeded  
 S - Spike Recovery outside acceptance limits  
 X - See case narrative  
 \* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Qualifiers: U - Analyte not detected at or above the reporting limit

J - Estimated value below the LQL

Definitions: NA - Not Applicable  
 LQL - Lower Quantitation Limit  
 MDL - Method Detection Limit  
 Surr - Surrogate Standard

Print Date: 6/12/08

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: CABIN  
Client Project ID:  
Date Collected: 6/9/2008  
Date Received: 6/10/2008  
Date Prepared: 6/12/2008  
Date Analyzed: 6/13/2008  
Percent Moisture: NA

Lab Work Order: 08-3946  
Lab Sample ID: 08-3946-01D  
Sample Matrix: Drinking Water  
Lab File ID: ECD10612\024F  
Method Blank: MB-15759  
Prep Factor: 0.005  
Dilution Factor: 1.00

## Method: E508

## CHLORINATED PESTICIDES AND PCBS

### Prep Method: E508

| Analytes           | CAS Number | Result | Units: µg/L<br>LQL     |
|--------------------|------------|--------|------------------------|
| Aldrin             | 309-00-2   | U      | 0.010                  |
| g-BHC              | 58-89-9    | U      | 0.010                  |
| a-Chlordane        | 5103-71-9  | U      | 0.010                  |
| g-Chlordane        | 5103-74-2  | U      | 0.010                  |
| Dieldrin           | 60-57-1    | U      | 0.010                  |
| Endrin             | 72-20-8    | U      | 0.010                  |
| HCCPD              | 77-47-4    | U      | 0.050                  |
| Heptachlor         | 76-44-8    | U      | 0.010                  |
| Heptachlor epoxide | 1024-57-3  | U      | 0.010                  |
| Hexachlorobenzene  | 118-74-1   | U      | 0.020                  |
| Methoxychlor       | 72-43-5    | U      | 0.050                  |
| Toxaphene          | 8001-35-2  | U      | 0.50                   |
| Chlordane          | 57-74-9    | U      | 0.20                   |
| Aroclor 1016       | 12674-11-2 | U      | 0.080                  |
| Aroclor 1221       | 11104-28-2 | U      | 0.10                   |
| Aroclor 1232       | 11141-16-5 | U      | 0.10                   |
| Aroclor 1242       | 53469-21-9 | U      | 0.10                   |
| Aroclor 1248       | 12672-29-6 | U      | 0.10                   |
| Aroclor 1254       | 11097-69-1 | U      | 0.10                   |
| Aroclor 1260       | 11096-82-5 | U      | 0.10                   |
| PCBs, Total        | 1336-36-3  | U      | 0.10                   |
| Surr: TCMX         | 877-09-8   | 77     | QC Limits: 70-130 %REC |
| Surr: DCB          | 2051-24-3  | 76     | QC Limits: 70-130 %REC |



Analyst



Approved

#### Qualifiers: See the case narrative for a discussion

B - Analyte detected in the Method Blank, value not subtracted from result  
E - Extrapolated value. Value exceeds calibration range  
H - Prep or Analytical holding time exceeded  
S - Spike Recovery outside acceptance limits  
X - See case narrative  
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Qualifiers: U - Analyte not detected at or above the reporting limit

J - Estimated value below the LQL

Definitions: NA - Not Applicable  
LQL - Lower Quantitation Limit  
MDL - Method Detection Limit  
Surr - Surrogate Standard

Print Date: 6/16/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: CABIN  
Client Project ID:  
Date Collected: 6/9/2008  
Date Received: 6/10/2008  
Date Prepared: 6/12/2008  
Date Analyzed: 6/12/2008  
Percent Moisture: NA

Lab Work Order: 08-3946  
Lab Sample ID: 08-3946-01E  
Sample Matrix: Drinking Water  
Lab File ID: 025.D  
Method Blank: MB-15760  
Prep Factor: 0.100  
Dilution Factor: 1.00

Method: E515.4  
Prep Method: E515.4

## CHLORINATED HERBICIDES

| Analytes          | CAS Number | Result | Units: µg/L<br>LQL     |
|-------------------|------------|--------|------------------------|
| 2,4-D             | 94-75-7    | U      | 0.10                   |
| Dalapon           | 75-99-0    | U      | 1.0                    |
| Dicamba           | 1918-00-9  | U      | 0.30                   |
| Dinoseb           | 88-85-7    | U      | 0.20                   |
| Pentachlorophenol | 87-86-5    | U      | 0.040                  |
| Picloram          | 1918-02-1  | U      | 0.10                   |
| 2,4,5-TP (Silvex) | 93-72-1    | U      | 0.20                   |
| Surr: DCAA        | 19719-28-9 | 104    | QC Limits: 70-130 %REC |



Analyst



Approved

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MDL - Method Detection Limit  
Surr - Surrogate Standard

Print Date: 6/13/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: CABIN  
Client Project ID:  
Date Collected: 6/9/2008  
Date Received: 6/10/2008  
Date Prepared: 6/18/2008  
Date Analyzed: 6/19/2008  
Percent Moisture NA

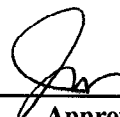
Lab Work Order 08-3946  
Lab Sample ID: 08-3946-01F  
Sample Matrix: Drinking Water  
Lab File ID: 5310618\53100020.  
Method Blank: MB-15807  
Prep Factor: 1.000  
Dilution Factor: 1.00

## Method: E531.1 CARBAMATES Prep Method: E531.1

| Analytes            | CAS Number | Result | Units: µg/L<br>LQL |
|---------------------|------------|--------|--------------------|
| Aldicarb sulfoxide  | 1646-87-3  | U      | 0.50               |
| Aldicarb sulfone    | 1646-88-4  | U      | 0.50               |
| Oxamyl              | 23135-22-0 | U      | 0.50               |
| Methomyl            | 16752-77-5 | U      | 0.50               |
| 3-Hydroxycarbofuran | 16655-82-6 | U      | 0.50               |
| Aldicarb            | 116-06-3   | U      | 0.50               |
| Propoxur            | 114-26-1   | U      | 0.50               |
| Carbofuran          | 1563-66-2  | U      | 0.50               |
| Carbaryl            | 63-25-2    | U      | 0.50               |
| Methiocarb          | 2032-65-7  | U      | 0.50               |



Analyst



Approved

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S - Spike Recovery outside acceptance limits  
X - See case narrative  
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Qualifiers: U - Analyte not detected at or above the reporting limit

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LQL - Lower Quantitation Limit  
MDL - Method Detection Limit  
Surr - Surrogate Standard

Print Date: 6/20/2008

**Evergreen Analytical, Inc.**

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

**Client Sample ID:** CABIN**Lab Work Order** 08-3946**Client Project ID:****Lab Sample ID:** 08-3946-01G**Date Collected:** 6/9/2008**Sample Matrix:** Drinking Water**Date Received:** 6/10/2008**Lab File ID:** 5470616\54700015.**Date Prepared:** 6/16/2008**Method Blank:** MB-15761**Date Analyzed:** 6/16/2008**Prep Factor:** 1.000**Percent Moisture** NA**Dilution Factor:** 1.00**Method:** E547**GLYPHOSATE****Prep Method:** E547

| Analytes   | CAS Number | Result | Units: µg/L<br>LQL |
|------------|------------|--------|--------------------|
| Glyphosate | 1071-83-6  | U      | 5.0                |

**Analyst****Approved****Qualifiers:** See the case narrative for a discussion

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S - Spike Recovery outside acceptance limits

X - See case narrative

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**Definitions:** NA - Not Applicable

LQL - Lower Quantitation Limit

MDL - Method Detection Limit

Surr - Surrogate Standard

Print Date: 6/17/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862

(303) 425-6021

Client Sample ID: CABIN

Client Project ID:

Date Collected: 6/9/08

Date Received: 6/10/08

Date Prepared: 6/13/08

Date Analyzed: 6/13/08

Percent Moisture NA

Lab Work Order 08-3946

Lab Sample ID: 08-3946-01H

Sample Matrix: Drinking Water

Lab File ID: \GCMS20613\2001020.D

Method Blank: MB-15772

Prep Factor: 0.010


Dilution Factor: 1.00

Method: E548.1

ENDOTHALL

Prep Method: E548.1

| Analytes  | CAS Number | Result | Units: µg/L<br>LQL |
|-----------|------------|--------|--------------------|
| Endothall | 145-73-3   | U      | 9.0                |

  
Analyst

  
Approved

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S - Spike Recovery outside acceptance limits

X - See case narrative

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Definitions: NA - Not Applicable

LQL - Lower Quantitation Limit

MDL - Method Detection Limit

Surr - Surrogate Standard

Print Date: 6/16/08



# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: CABIN

Client Project ID:

Date Collected: 6/9/2008

Date Received: 6/10/2008

Date Prepared: 6/13/2008

Date Analyzed: 6/19/2008

Percent Moisture NA

Lab Work Order 08-3946

Lab Sample ID: 08-3946-011

Sample Matrix: Drinking Water

Lab File ID: 5490619\54900015.

Method Blank: MB-15770

Prep Factor: 0.020

Dilution Factor: 1.00

Method: E549.2

DIQUAT

Prep Method: E549.2

| Analytes | CAS Number | Result | Units: µg/L<br>LQL |
|----------|------------|--------|--------------------|
| Diquat   | 85-00-7    | U      | 0.40               |



Analyst



Approved

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H - Prep or Analytical holding time exceeded

S - Spike Recovery outside acceptance limits

X - See case narrative

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**Definitions:** NA - Not Applicable

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MDL - Method Detection Limit

Surr - Surrogate Standard

Print Date: 6/20/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: CABIN  
Client Project ID:  
Date Collected: 6/9/08 1300  
Date Received: 6/10/08

Lab Work Order 08-3946  
Lab Sample ID: 08-3946-01  
Sample Matrix: Drinking Water

## ANIONS BY IC

Method: E300.0

Prep Method:

Date Prepared: 6/10/08

Date Analyzed: 6/10/08 1430

Method Blank: MB 6/10/08

Dilution Factor: 1

Lab Fraction ID: 08-3946-01J

| Analytes  | CAS Number | Result | LQL    | Units |
|-----------|------------|--------|--------|-------|
| Chloride  | 7647-14-5  | 38.7   | 0.50   | mg/L  |
| Nitrite-N |            | 0.0210 | 0.0040 | mg/L  |

Date Prepared: 6/10/08

Date Analyzed: 6/10/08 1728

Method Blank: MB 6/10/08

Dilution Factor: 5

Lab Fraction ID: 08-3946-01J

| Analytes  | CAS Number | Result | LQL   | Units |
|-----------|------------|--------|-------|-------|
| Nitrate-N |            | 0.526  | 0.050 | mg/L  |
| Sulfate   | 7778-80-2  | 48.6   | 2.5   | mg/L  |

  
Analyst

  
Approved

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Print Date: 6/11/08

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: CABIN  
Client Project ID:  
Date Collected: 6/9/08  
Date Received: 6/10/08

Lab Work Order 08-3946  
Lab Sample ID: 08-3946-01  
Sample Matrix: Drinking Water

## METALS, 200.8 DRINKING WATER

Method: E200.8


Prep Method: E200.8

Date Prepared: 6/11/08  
Date Analyzed: 6/12/08

Lab File ID: 080612A.B\044SMPL.D  
Method Blank: MB-15744

Dilution Factor: 1  
Lab Fraction ID: 08-3946-01K

| Analytes  | CAS Number | Result | LQL     | Units |
|-----------|------------|--------|---------|-------|
| Aluminum  | 7429-90-5  | U      | 0.025   | mg/L  |
| Antimony  | 7440-36-0  | U      | 0.0020  | mg/L  |
| Arsenic   | 7440-38-2  | 0.0042 | 0.0020  | mg/L  |
| Barium    | 7440-39-3  | 0.056  | 0.010   | mg/L  |
| Beryllium | 7440-41-7  | U      | 0.0010  | mg/L  |
| Cadmium   | 7440-43-9  | U      | 0.00050 | mg/L  |
| Chromium  | 7440-47-3  | U      | 0.0022  | mg/L  |
| Iron      | 7439-89-6  | 0.37   | 0.20    | mg/L  |
| Manganese | 7439-96-5  | 0.034  | 0.0050  | mg/L  |
| Mercury   | 7439-97-6  | U      | 0.00015 | mg/L  |
| Nickel    | 7440-02-0  | U      | 0.010   | mg/L  |
| Selenium  | 7782-49-2  | U      | 0.0020  | mg/L  |
| Silver    | 7440-22-4  | U      | 0.00020 | mg/L  |
| Sodium    | 7440-23-5  | 43     | 0.50    | mg/L  |
| Thallium  | 7440-28-0  | U      | 0.0010  | mg/L  |
| Zinc      | 7440-66-6  | U      | 0.0050  | mg/L  |



Analyst

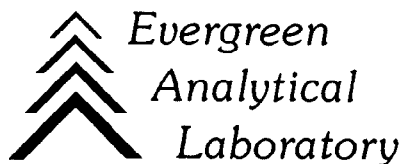


Approved

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**Definitions:** NA - Not Applicable  
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Surr - Surrogate

Print Date: 6/20/08



June 23, 2008

Adell Heneghan  
Marathon Oil  
743 Horizon Court, Suite 220  
Grand Junction, CO 81506

Lab Work Order: 08-3946  
Client Project ID:

Dear Adell Heneghan:

Enclosed are the analytical results for the samples shown in the Laboratory Work Order Summary. The invoice is included with this report or has been mailed to another party as indicated on the chain of custody.

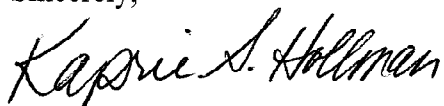
The enclosed data for testing performed at Evergreen Analytical Laboratory (EAL) have been reviewed for quality assurance. A case narrative is included to describe any anomalies associated with the samples or data.

EAL will dispose of all samples one month from the date of this letter. If you want samples returned, please advise us by mail or fax as soon as possible.

A copy of this project report and supporting data will be retained for a period of five years unless we are otherwise advised by you. A document retrieval charge will apply.

Thank you for using the services of Evergreen Analytical. If you have any questions concerning the analytical data, please contact me. Please direct other questions to Client Services.

Sincerely,



Carl Smits / Kaprie Hollman  
Quality Assurance

Results were NOT sent to  
CDPHE (not requested).