

# WORK ORDER Summary

08-3951

Rpt To: Adell Heneghan

Marathon Oil

743 Horizon Court, Suite 220

Grand Junction, CO 81506

(970) 245-5233

Email To: aheneghan@marathonoil.com

6/10/2008 12:07:04 PM

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
08-3951-01A	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	524 *	524.2: Standard List	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	6/23/08
08-3951-01B	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	504 *	504: Standard List	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	6/23/08
08-3951-01C	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	525 *	525.2: Standard List	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	6/23/08
08-3951-01D	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	508 *	508: Standard List	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	6/16/08
08-3951-01E	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	515.4	515.4: Standard List	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	6/23/08
08-3951-01F	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	531_W *	531.1: Carbamates	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	7/07/08
08-3951-01G	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	547_W	547: Glyphosate	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	6/23/08
08-3951-01H	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	548 *	548.1: Endothall	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	6/16/08
08-3951-01I	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	549_W *	549.2: Diquat	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	6/16/08
08-3951-01J	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	ANIONS_W *	300.0: DW Anions by IC	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	6/11/08
08-3951-01K	STOCK TANK	Drinking Water	6/09/08 1530	6/10/08	200.8_DHG *	200.8 Drinking Water 11 Regulated	<input type="checkbox"/>	<input type="checkbox"/>	6/24/08	7/07/08
08-3951-01L	STOCK TANK	Drinking Water	6/09/08 1530	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

**Client Project ID:**

**Lab Order:** 08-3951

## **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: Due to high Chloride levels requiring dilutions to separate the Nitrite peak, the detection limit for Nitrite has been raised for this sample. There are no other anomalies to report. JML/ MM

### **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

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Client Project ID:

Lab Order: 08-3951

## CASE NARRATIVE

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Method 515.4: There are no anomalies to report. AE

### GAS CHROMATOGRAPHY / MASS SPECTROMETRY

Method 524.2: There are no anomalies to report. DC

Method 525.2: One of the three surrogate recoveries is above the QC limits for 08-3951-01C 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: 7809

**Outside Laboratory:**

Industrial Laboratories  
4046 Youngfield Street  
Wheat Ridge, CO 80033

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

Acct #:

WorkOrder: 08-3951

**CHAIN-OF-CUSTODY RECORD**

Page 1 of 1

10-Jun-08

Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests													
08-3951-01L	Drinking Water	6/9/2008 3:30:00 PM	COL	COLP/A													

Comments:

Date/Time

Relinquished by:

*ntal 6/10/08 2pm*

Relinquished by:

Date/Time

Received by:

*[Signature]*

Received by:

06/10/08  
1400



**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

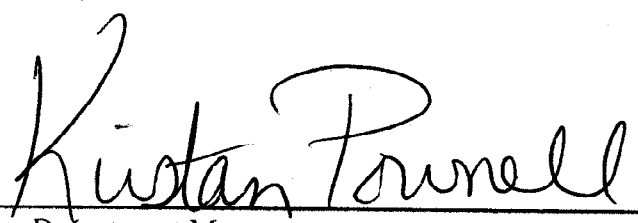
Date Received: 6/10/2008

Date Reported: 6/11/2008

PO Number: 7809

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

Lab No.	Sample Description	Test Method	Result	Units	MDL	Analysis Date/By
080610025-01A	08-3951-01L 6/9/08	Total Coliform  SM 9223	Absent			KP 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:** STOCK TANK  
**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:** 08-3951  
**Lab Sample ID:** 08-3951-01A  
**Sample Matrix:** Drinking Water  
**Lab File ID:** 1601016.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 LQL
Benzene	71-43-2	U	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	U	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: STOCK TANK  
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: 08-3951  
Lab Sample ID: 08-3951-01A  
Sample Matrix: Drinking Water  
Lab File ID: 1601016.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	U	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	U	0.50
1,3,5-Trimethylbenzene	108-67-8	U	0.50
Vinyl chloride	75-01-4	U	0.50
m,p-Xylene	1330-20-7	U	0.50
o-Xylene	95-47-6	U	0.50
Xylenes, Total	1330-20-7	U	0.50
Total THM (Summation of above)		U	0.50
Surr: 1,2-Dichlorobenzene-d4	2199-69-1	102	QC Limits: 70-130 %REC
Surr: 4-Bromofluorobenzene	460-00-4	103	QC Limits: 70-130 %REC

Analyst

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Print Date: 6/18/2008



# Evergreen Analytical, Inc.

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

Client Sample ID: STOCK TANK

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: 08-3951

Lab Sample ID: 08-3951-01B

Sample Matrix: Drinking Water

Lab File ID: 036.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 LQL
1,2-Dibromo-3-chloropropane	96-12-8	U	0.02
1,2-Dibromoethane	106-93-4	U	0.01



Analyst



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**Definitions:** NA - Not Applicable  
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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: STOCK TANK

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 08-3951

Lab Sample ID: 08-3951-01C

Sample Matrix: Drinking Water

Lab File ID: \GCMS20611\3601036.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 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	106	QC Limits: 70-130 %REC	
Surr: Perylene-d12	1520-96-3	101	QC Limits: 70-130 %REC	
Surr: Triphenyl phosphate	115-86-6	149 S	QC Limits: 70-130 %REC	

  
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.

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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: STOCK TANK

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: 08-3951

Lab Sample ID: 08-3951-01D

Sample Matrix: Drinking Water

Lab File ID: ECD10612\038F

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 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	83	QC Limits: 70-130 %REC
Surr: DCB	2051-24-3	81	QC Limits: 70-130 %REC

Analyst

Approved

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E - Extrapolated value. Value exceeds calibration range  
H - Prep or Analytical holding time exceeded  
S - Spike Recovery outside acceptance limits  
X - See case narrative  
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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: 6/16/2008

# Evergreen Analytical, Inc.

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

Client Sample ID: STOCK TANK  
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: 08-3951  
Lab Sample ID: 08-3951-01E  
Sample Matrix: Drinking Water  
Lab File ID: 030.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 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	113	QC Limits: 70-130 %REC



Analyst



Approved

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X - See case narrative  
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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: 6/13/2008

# Evergreen Analytical, Inc.

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

Client Sample ID: STOCK TANK

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 08-3951

Lab Sample ID: 08-3951-01F

Sample Matrix: Drinking Water

Lab File ID: 5310618\53100023.

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 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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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: 6/20/2008

# Evergreen Analytical, Inc.

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

Client Sample ID: STOCK TANK

Lab Work Order 08-3951

Client Project ID:

Lab Sample ID: 08-3951-01G

Date Collected: 6/9/2008

Sample Matrix: Drinking Water

Date Received: 6/10/2008

Lab File ID: 5470616\54700019.

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
			LQL
Glyphosate	1071-83-6	U	5.0



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

J - Estimated value below the LQL

**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: STOCK TANK

Lab Work Order 08-3951

Client Project ID:

Lab Sample ID: 08-3951-01H

Date Collected: 6/9/08

Sample Matrix: Drinking Water

Date Received: 6/10/08

Lab File ID: \GCMS20613\2701027.D

Date Prepared: 6/13/08

Method Blank: MB-15772

Date Analyzed: 6/14/08

Prep Factor: 0.010

Percent Moisture NA


Dilution Factor: 1.00

Method: E548.1

ENDOTHALL

Prep Method: E548.1

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

  
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: 6/16/08

# Evergreen Analytical, Inc.

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

Client Sample ID: STOCK TANK

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 08-3951

Lab Sample ID: 08-3951-011

Sample Matrix: Drinking Water

Lab File ID: 5490619\54900019.

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 LQL
Diquat	85-00-7	U	0.40



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: 6/20/2008



# Evergreen Analytical, Inc.

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

Client Sample ID: STOCK TANK

Lab Work Order 08-3951

Client Project ID:

Lab Sample ID: 08-3951-01

Date Collected: 6/9/08 1530

Sample Matrix: Drinking Water

Date Received: 6/10/08

## ANIONS BY IC

Method: E300.0

Prep Method:

Date Prepared: 6/10/08

Dilution Factor: 5


Date Analyzed: 6/10/08 1809

Method Blank: MB 6/10/08

Lab Fraction ID: 08-3951-01J

Analytes	CAS Number	Result	LQL	Units
Chloride	7647-14-5	120	2.5	mg/L
Nitrite-N		U	0.020	mg/L
Nitrate-N		1.42	0.050	mg/L
Sulfate	7778-80-2	50.5	2.5	mg/L

  
Analyst

  
Approved

**Qualifiers:** B - Analyte detected in the associated Method Blank, value not subtracted from result  
E - Extrapolated value. Value exceeds calibration range  
H - Sample analysis exceeded analytical holding time  
J - Indicates an estimated value when the compound is detected, but is below the LQL  
S - Spike Recovery outside accepted limits  
U - Compound analyzed for but not detected  
X - See case narrative  
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Definitions:** NA - Not Applicable  
LQL - Lower Quantitation Limit  
Surr - Surrogate

Print Date: 6/11/08

# Evergreen Analytical, Inc.

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

Client Sample ID: STOCK TANK

Client Project ID:

Date Collected: 6/9/08

Date Received: 6/10/08

Lab Work Order 08-3951

Lab Sample ID: 08-3951-01

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\047SMPL.D

Method Blank: MB-15744

Dilution Factor: 1

Lab Fraction ID: 08-3951-01K

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	0.0037	0.0020	mg/L
Barium	7440-39-3	0.095	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	0.45	0.20	mg/L
Manganese	7439-96-5	U	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	0.0023	0.0020	mg/L
Silver	7440-22-4	U	0.00020	mg/L
Sodium	7440-23-5	79	0.50	mg/L
Thallium	7440-28-0	U	0.0010	mg/L
Zinc	7440-66-6	U	0.0050	mg/L



Analyst

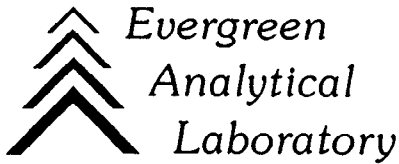


Approved

**Qualifiers:** B - Analyte detected in the associated Method Blank, value not subtracted from result  
E - Extrapolated value. Value exceeds calibration range  
H - Sample analysis exceeded analytical holding time  
J - Indicates an estimated value when the compound is detected, but is below the LQL  
S - Spike Recovery outside accepted limits  
U - Compound analyzed for but not detected  
X - See case narrative  
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Definitions:** NA - Not Applicable  
LQL - Lower Quantitation Limit  
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: 08-3951  
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,

A handwritten signature in cursive script that reads "Kaprie S. Hollman".

Carl Smits / Kaprie Hollman  
Quality Assurance

Results were NOT sent to  
CDPHE (not requested).