



**605-01 (Rock Springs)
January - June 2010 Summary of Events**

July 15, 2010



Prepared by:

**Brett Kennedy
Sr. HES Specialist**

Reviewed by:

**Alonzo Hernandez
HES Lead Mid-Continent**



1.0 Location:

OXY USA WTP LP
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

605-01
T6S, R97W, S5, SWNW
Garfield County, Colorado

2.0 Executive Summary:

This initial 2010 quarterly status report was prepared document release monitoring and interim remedial actions at OXY USA WTP LP's ("OXY") Cascade Creek 605-1 well pad and adjacent springs (Rock Springs). The well pad is located in Section 5, Township 6 South, Range 97 West of the 6th Principal Meridian, Garfield County, Colorado (See Appendix A). The well pad is situated east of an unnamed tributary to Crystal Creek, and a release of produced water has extended from the production pit at the well pad to springs (locally known as Rock Springs) which feed the tributary. The well pad and the area upon which the release occurred and surfaced are located on property owned by OXY.

In the first half of 2010, OXY has completed interim remedial activities at the site, including:

- Surface water monitoring
- Monitoring of impoundment conditions
- Placement and injection oxidizing compounds to augment remediation

Some concentrations of hydrocarbons detected in the water samples increased during the heavy runoff season but generally declined. The results of the May and June 2010 sampling event indicated that the North Spring (Map ID 40) were below the Maximum Contaminant Level (MCL). Furthermore, the point of compliance (Downstream - Map ID 43) has never exceeded drinking water standards for hydrocarbons.

The overall reduction of hydrocarbons concentrations indicates the efficacy of OXY's interim remedial activities. On May 24 and June 23, 2010, OXY injected in-situ chemical oxidation compounds into the release point. In-situ chemical oxidation applications will resume monthly through August 2010. Based on the benzene concentrations in the South Spring (Map ID 42), Oxy will assess the need for additional in-situ chemical oxidation applications in October 2010.

Analytical results from total dissolved solids (TDS) samples collected at the site were generally below the secondary drinking water standard of 500 mg/L at sampling locations. Regional surface water naturally contains background concentrations of dissolved solids.

3.0 Interim Remedial and Monitoring Activities:

During October and November of 2009, OXY prepared the impoundments for winter by adding a mixture of ORC-Advance® (a proprietary oxygen releasing compound manufactured by Regenesis) and crusher fines (a washed gravel and sand mixture). This created an area for active bioremediation that water entering the impoundments filtered through.

During the winter months (December 2009 through April, 2010) monthly site visits were conducted (depending upon accessibility) by OXY personnel to collect water samples for laboratory analyses. The impoundments were observed to ensure they were capturing flow and preventing further releases to the environment. By April 2010, access to the sampling locations were improved and all locations were sampled. Impound bypass was observed at



the North Spring. Based on the analytical results being just above and currently below the MCL, bypassing of the North Spring (impoundment) was allowed to continue.

4.0 Water Monitoring – 2010:

A total of 5 sampling events were conducted from January to June of 2010. The site was not accessible in February due to heavy snow accumulation on the 605-01 access road. The sampling events were conducted on the following dates:

- o January 28, 2010
- o March 25, 2010
- o April 29, 2010
- o May 27, 2010
- o June 24, 2010

Sampling was limited during the January and March visits due to snow accumulation and ice. In January and March, only the South Spring (Map ID 42) and Downstream (Map ID 43) were accessible for sampling.

Samples were collected by OXY personnel on a regular basis from 2 to 5 locations. Locations sampled in 2010 are identified in the following table, along with their corresponding Map Identifiers (see Appendix A).

Map ID	Sample Location	Location Description
41	Upstream	Intermittent spring upstream of the North and South Springs
40	North Spring	Trench/dam intercepting northern spring area
42	South Spring	Trench/dam intercepting southern spring area
44	Downstream	Downgradient sample location (Compliance sample location)
44	Lower Pit	Dam constructed during remedial activities

5.0 Water Quality Results:

Monthly water quality sampling typically consists of sampling for BTEX/GRO. Furthermore, field parameters (TDS, EC, pH, and temperature) are collected utilizing a calibrated Hanna Instruments HI991300. A 'long list' sampling event was conducted on May 28, 2010. The long list analytes included: BTEX/GRO, nitrate, chlorides, sulfates, alkalinity, TDS, arsenic, barium, cadmium, chromium, cadmium, calcium, lead, magnesium, potassium, molybdenum, selenium, silver, sodium, BOD, COD, DO, ORP, o-phosphate, TOC, copper, iron, and zinc. The 'long list' results were submitted to Walsh Environmental for interpretation. Walsh Environmental determined that the remedial activities have not increased the mobility of potentially hazardous metals because geochemical parameters such as calcium and sulfate concentrations have remained consistent to initial concentrations before remedial activities were initiated. The reported concentrations of dissolved oxygen (DO) and oxygen reduction potential (ORP) are favorable for bioremediation to occur.

During the first half of 2010, Petroleum hydrocarbons were detected at concentrations greater than MCLs only at the impoundment locations including the North Spring (Map ID 40) and South Spring (Map ID 42). All other sample locations were below the MCL. A 2010 historical perspective is provided below of these exceedances.

North Spring (Map ID 40)						
Date	Benzene (MCL= 0.005 mg/L)	Toluene (MCL= 0.56 to 1 mg/L)	Ethylbenzene (MCL= 0.7 mg/L)	Xylenes (MCL= 1.4 to 10 mg/L)	GRO (No MCL)	TDS
04/29/2010	0.0091	0.00039	0.006	0.03	0.4	428
05/27/2010	<0.00013	<0.00021	<0.00021	0.0007	<0.040	391/500
06/24/2010	0.0035	<0.00021	0.0021	0.012	0.072	392



South Spring (Map ID 42)						
Date	Benzene (MCL= 0.005 mg/L)	Toluene (MCL= 0.56 to 1 mg/L)	Ethylbenzene (MCL= 0.7 mg/L)	Xylenes (MCL= 1.4 to 10 mg/L)	GRO (No MCL)	TDS
01/28/2010	0.077	0.0019	0.019	0.56	2.40	472
03/25/2010	0.180	0.0023	0.061	1.30	3.60	551
04/29/2010	0.039	0.0014	0.007	0.21	1.20	559
05/27/2010	0.051	0.00096	0.010	0.26	1.50	511/630
06/24/2010	0.073	0.00071	0.014	0.34	2.10	552

Additionally, minor hydrocarbon impacts detected below the MCLs were observed in additional locations including Lower Pit (Map ID 44) and Downstream (Map ID 43).

Lower Pit (Map ID 44)						
Date	Benzene (MCL= 0.005 mg/L)	Toluene (MCL= 0.56 to 1 mg/L)	Ethylbenzene (MCL= 0.7 mg/L)	Xylenes (MCL= 1.4 to 10 mg/L)	GRO (No MCL)	TDS
04/29/2010	0.0003	<0.00021	<0.00021	0.001	<0.040	452
05/27/2010	0.0005	<0.00021	<0.00021	0.0011	<0.040	434/530
06/24/2010	0.0016	<0.00021	<0.00021	0.0024	<0.040	464

Downstream (Map ID 43)						
Date	Benzene (MCL= 0.005 mg/L)	Toluene (MCL= 0.56 to 1 mg/L)	Ethylbenzene (MCL= 0.7 mg/L)	Xylenes (MCL= 1.4 to 10 mg/L)	GRO (No MCL)	TDS
12/29/2010	0.00059	0.00054	0.0004	0.001	<0.040	436
01/28/2010	0.00041	<0.00021	<0.00021	0.00079	<0.040	536
03/25/2010	0.00099	<0.00021	0.00028	0.0028	<0.040	157
04/29/2010	0.00030	<0.00021	<0.00021	0.0017	<0.040	441
05/27/2010	<0.00013	<0.00021	<0.00021	<0.00043	<0.040	436/520
06/24/2010	0.00018	<0.00021	<0.00021	<0.00043	<0.040	463

Furthermore, hydrocarbons were not detected at the Upstream (Map ID 41) location.

Upstream (Map ID 41)						
Date	Benzene (MCL= 0.005 mg/L)	Toluene (MCL= 0.56 to 1 mg/L)	Ethylbenzene (MCL= 0.7 mg/L)	Xylenes (MCL= 1.4 to 10 mg/L)	GRO (No MCL)	TDS
04/29/2010	<0.00013	<0.00021	<0.00021	<0.00043	<0.040	420
05/27/2010	<0.00013	<0.00021	<0.00021	<0.00043	<0.040	403/520
06/24/2010	<0.00013	<0.00021	<0.00021	<0.00043	<0.040	422

TDS results for samples collected at the site generally were below the secondary drinking water standard of 500 mg/L. Minor TDS elevations were observed at all locations. The South Spring regularly exceeded the drinking water standard and ranged from 472 to 630 ppm. The complete laboratory analytical reports are provided in Appendix B.

**6.0 In-Situ Chemical Oxidation Applications:**

RegenOx®, a proprietary in-situ chemical oxidation (ISCO) compound manufactured by Regenesis, was applied in the vicinity of the former pit on the well pad. ISCO applications were completed according to the following schedule:

ISCO Application Schedule

Injection	Total lbs RegenOx	lbs Part A	lbs Part B	Water needed Part A	Water needed Part B	Status
1	900	900	0	2060	0	Completed 05/24/2010
2	900	900	0	2060	0	Completed 06/23/2010

OXY intends to inject Part A in July and August of 2010.

ISCO was injected into trench constructed on October 30, 2009.

Based on elevations observed in the South Spring (Map ID 42). Oxy intends to work with a third part consultant in October 2010 to assess the needs for additional ISCO treatment.

7.0 Conclusions:

The concentrations of hydrocarbons detected in the water samples collected from the 605-01 Pad vicinity initially exhibited an increase during the run-off season. Since the initial influx, all of the locations have declined to below the MCL with the exception of the South Spring (Map ID 42). Water samples from the point of compliance (Downstream, Map ID 43) have never exceeded drinking water standards for hydrocarbons. The reduction of hydrocarbons indicates the overall efficacy of OXY's interim remedial activities. On May 24, 2010 and June 23, 2010, OXY injected in-situ chemical oxidation compounds into the release point. ISCO applications will continue in July and August of 2010 and throughout 2010 and early 2011. OXY will continue to monitor the water levels and collect water samples on a monthly basis, as weather permits.

OXY plans to evaluate the condition of the impoundments in the Fall of 2010 and will repair or modify them as necessary. A progress report for the release will be prepared for the third quarter and a year end report will be prepared at the end of 2010 that will detail sampling, remediation efforts, and other information collected during 2010.



OXY USA WTP LP

760 Horizon Dr., Suite 101
Grand Junction, CO 81506
Phone 970.263.3600

Appendix A





OXY USA WTP LP

760 Horizon Dr., Suite 101
Grand Junction, CO 81506
Phone 970.263.3600

Appendix B

Company Name/Address: Oxy USA WTP LP - Grand Junction, CO 760 Horizon Dr., Ste. 101 Grand Junction, CO 81506				Alternate billing information:				Analysis/Container/Preservative <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p>Report to: <u>Brett Kennedy</u></p> <p>Project Description: <u>605-01</u></p> <p>Phone: (970) 263-3601</p> <p>FAX: (970) 201-2305</p> </div> <div style="width: 40%;"> <p>Email to: <u>brett.kennedy@oxy.com</u></p> <p>City/State Collected: <u>—</u></p> <p>Client Project #: <u>—</u></p> <p>ESC Key: <u>—</u></p> <p>Site/Facility ID#: <u>—</u></p> <p>P.O.#: <u>—</u></p> </div> </div>				Chain of Custody Page <u>1</u> of <u>1</u> A001 <div style="text-align: center;"> ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859 </div>							
Collected by: <u>Brett Kennedy</u> Collected by (signature): <u>Brett Kennedy</u> Immediately Packed on Ice N <u>—</u> Y <u>✓</u>				<div style="border: 1px solid black; padding: 2px;"> Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day.....200% <input type="checkbox"/> Next Day.....100% <input type="checkbox"/> Two Day.....50% <input type="checkbox"/> Three Day.....25% </div>				<div style="border: 1px solid black; padding: 2px;"> Date Results Needed: Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes </div>				No. of Cntrs <div style="border: 1px solid black; padding: 2px;"> CoCode: OXYWTPGJ (lab use only) Template/Prelogin Shipped Via: </div>							
Sample ID				Comp/Grab		Matrix*		Depth		Date		Time		No. of Cntrs		Remarks/Contaminant		Sample # (lab only)	
<u>#4d South Spring</u>				<u>Grab</u>		<u>SW</u>		<u>0-6"</u>		<u>01/29/10</u>		<u>1255</u>		<u>2</u>		<u>✓</u>		<u>L442749-01</u>	
<u>#43 Downstream</u>				<u>↓</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>		<u>1305</u>		<u>2</u>		<u>✓</u>		<u>02</u>	

*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other SW

Remarks:

Surface Water

pH _____ Temp _____

Flow _____ Other _____

Relinquished by: (Signature) <u>Brett Kennedy</u>		Date: <u>01/29/10</u>		Time: <u>1702</u>		Received by: (Signature) <u>Nathan Jay</u>		Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		Condition: (lab use only) <u>OK</u>					
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp: <u>3.1°C</u>		Bottles Received: <u>4</u>		CoC Seals Intact <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA			
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature)		Date: <u>1-30-10</u>		Time: <u>17:15</u>		pH Checked: <u>—</u>		NCF:	

8688-6671-1084



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Tax I.D. 62-0814289

Est. 1970

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101

Grand Junction, CO 81506

Report Summary

Friday February 05, 2010

Report Number: L442749

Samples Received: 01/30/10

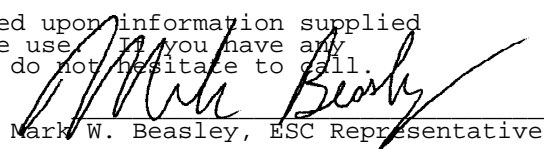
Client Project:

Description: 605-01

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Laboratory Certification Numbers


Mark W. Beasley, ESC Representative

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

February 05, 2010

Date Received : January 30, 2010
Description : 605-01

Sample ID : 42 SOUTH SPRING

Collected By : Brett Kennedy
Collection Date : 01/28/10 12:55

ESC Sample # : L442749-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.077	0.00013	0.00050	mg/l		8021/80	02/02/10	1
Toluene	0.0019	0.00021	0.0050	mg/l	J	8021/80	02/02/10	1
Ethylbenzene	0.019	0.00021	0.00050	mg/l		8021/80	02/02/10	1
Total Xylene	0.56	0.0043	0.015	mg/l		8021/80	02/04/10	10
TPH (GC/FID) Low Fraction	2.4	0.040	0.10	mg/l		GRO	02/02/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	96.6			% Rec.		8021/80	02/02/10	1
a,a,a-Trifluorotoluene(PID)	102.			% Rec.		8021/80	02/02/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 02/05/10 10:46 Printed: 02/05/10 10:46



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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

February 05, 2010

Date Received : January 30, 2010
Description : 605-01

Sample ID : 43 DOWNSTREAM

Collected By : Brett Kennedy
Collection Date : 01/28/10 13:05

ESC Sample # : L442749-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.00041	0.00013	0.00050	mg/l	J	8021/80	02/04/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	02/04/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	02/04/10	1
Total Xylene	0.00079	0.00043	0.0015	mg/l	J	8021/80	02/04/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	02/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.4			% Rec.		8021/80	02/04/10	1
a,a,a-Trifluorotoluene(PID)	101.			% Rec.		8021/80	02/04/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 02/05/10 10:46 Printed: 02/05/10 10:46

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L442749-01	WG461373	SAMP	Toluene	R1100008	J
L442749-02	WG461815	SAMP	Benzene	R1100890	J
	WG461815	SAMP	Total Xylene	R1100890	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/05/10 at 10:46:57

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L442749-01 Account: OXYWTPGJCO Received: 01/30/10 17:15 Due Date: 02/05/10 00:00 RPT Date: 02/05/10 10:46

Sample: L442749-02 Account: OXYWTPGJCO Received: 01/30/10 17:15 Due Date: 02/05/10 00:00 RPT Date: 02/05/10 10:46

Company Name/Address: Oxy USA WTP LP - Grand Junction, CO 760 Horizon Dr., Ste. 101 Grand Junction, CO 81506			Alternate billing information:			Analysis/Container/Preservative			Chain of Custody Page <u>1</u> of <u>1</u> A237 ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859		
Report to: <u>Brett Kennedy</u>			Email to: <u>brett.kennedy@oxy.com</u>			BTEx16RO					
Project Description: <u>605-01</u>			City/State Collected: <u> </u>								
Phone: (970) 263-3601		Client Project #:	ESC Key:								
FAX: (970) 201-2305											
Collected by: <u>Brett Kennedy</u>		Site/Facility ID#: <u> </u>		P.O.#: <u> </u>							
Collected by (signature): <u>Brett Kennedy</u> Immediately Packed on Ice N <u> </u> Y <u> </u>		<input checked="" type="checkbox"/> Rush? (Lab MUST Be Notified) <u> </u> Same Day. 200% <u> </u> Next Day. 100% <u> </u> Two Day. 50% <u> </u> Three Day. 25%		Date Results Needed: Email? <u> </u> No <input checked="" type="checkbox"/> Yes FAX? <input checked="" type="checkbox"/> No <u> </u> Yes		No. of Cntrs		CoCode OXYWTPGJ (lab use only) Template/Prelogin Shipped Via:			
Sample ID		Comp/Grab	Matrix*	Depth	Date	Time					
<u>#42 South Spring</u>		<u>Grab</u>	<u>SW</u>	<u>0-6"</u>	<u>3/25/10</u>	<u>1023</u>	<u>2</u>	Remarks/Contaminant		Sample # (lab only)	
<u>#43 Downstream</u>		<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>1033</u>	<u>2</u>				

*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other SW pH Temp

Remarks: Surface Water Flow 8688 6671 1099 Other

Relinquished by: (Signature) <u>Brett Kennedy</u>	Date: <u>3/26/10</u>	Time: <u>1035</u>	Received by: (Signature) 	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		Condition: (lab use only) <u>OK</u>	
	Date:	Time:		Date:	Time:	Temp: <u>2.5</u>	Bottles Received: <u>4/1</u>
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	pH Checked:	NCF:
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <u>Kenn Wren</u>	Date: <u>3/27/10</u>	Time: <u>6500</u>		



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Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Monday April 05, 2010

Report Number: L451420

Samples Received: 03/27/10

Client Project:

Description: 605-01

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

April 05, 2010

Date Received : March 27, 2010
Description : 605-01

Sample ID : 42 SOUTH SPRING

Collected By : Brett Kennedy
Collection Date : 03/26/10 10:23

ESC Sample # : L451420-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.18	0.00013	0.00050	mg/l		8021/80	03/31/10	1
Toluene	0.0023	0.00021	0.0050	mg/l	J	8021/80	03/31/10	1
Ethylbenzene	0.061	0.00021	0.00050	mg/l		8021/80	03/31/10	1
Total Xylene	1.3	0.0043	0.015	mg/l		8021/80	04/02/10	10
TPH (GC/FID) Low Fraction	3.6	0.040	0.10	mg/l		GRO	03/31/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	94.7			% Rec.		8021/80	03/31/10	1
a,a,a-Trifluorotoluene(PID)	100.			% Rec.		8021/80	03/31/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 04/05/10 18:07 Printed: 04/05/10 18:08



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

April 05, 2010

Date Received : March 27, 2010
Description : 605-01

Sample ID : 43 DOWNSTREAM

Collected By : Brett Kennedy
Collection Date : 03/26/10 10:33

ESC Sample # : L451420-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.00099	0.00013	0.00050	mg/l		8021/80	03/31/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	03/31/10	1
Ethylbenzene	0.00028	0.00021	0.00050	mg/l	J	8021/80	03/31/10	1
Total Xylene	0.0028	0.00043	0.0015	mg/l		8021/80	04/03/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	03/31/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.1			% Rec.		8021/80	03/31/10	1
a,a,a-Trifluorotoluene(PID)	99.9			% Rec.		8021/80	03/31/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

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Reported: 04/05/10 18:07 Printed: 04/05/10 18:08

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L451420-01	WG470485	SAMP	Toluene	R1164349	J
L451420-02	WG470485	SAMP	Ethylbenzene	R1164349	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions


- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
04/05/10 at 18:08:20

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L451420-01 Account: OXYWTPGJCO Received: 03/27/10 09:00 Due Date: 04/02/10 00:00 RPT Date: 04/05/10 18:07

Sample: L451420-02 Account: OXYWTPGJCO Received: 03/27/10 09:00 Due Date: 04/02/10 00:00 RPT Date: 04/05/10 18:07

Company Name/Address: Oxy USA WTP LP - Grand Junction, CO 760 Horizon Dr.. Ste. 101 Grand Junction.CO 81506				Alternate billing information:				Analysis/Container/Preservative				Chain of Custody Page <u>1</u> of <u>1</u> Prepared by: F096  ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859	
Report to: <i>Brett Kennedy</i>				Email to: <i>brett.kennedy@oxy.com</i>									
Project Description: <i>605-01</i>				City/State Collected: <i>-</i>									
Phone: (970) 263-3601		Client Project #:		ESC Key:									
FAX: (970) 201-2305		<i>-</i>		<i>-</i>									
Collected by: <i>Brett Kennedy</i>		Site/Facility ID#:		P.O.#:									
Collected by (signature): <i>Brett Kennedy</i>		<input checked="" type="checkbox"/> Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day.....200% <input type="checkbox"/> Next Day.....100% <input type="checkbox"/> Two Day.....50% <input checked="" type="checkbox"/> Three Day.....25%		Date Results Needed: Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		No. of Cntrs							
Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>													

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Remarks/Contaminant	Sample # (lab only)
#41 605-01 Upstream	Grab	SW	06"	4/29/10	1340	2		L456646-01
#42 South Spring	↓	↓	↓	↓	1348	2		02
#43 Downstream	↓	↓	↓	↓	1403	2		03
#44 Lower Pit	↓	↓	↓	↓	1358	2		04
#40 North Spring	↓	↓	↓	↓	1354	2		05

*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other SW pH _____ Temp _____

Remarks:

Surface Water 9632 6268 3/31 Flow _____ Other _____

Relinquished by: (Signature) <i>Brett Kennedy</i>	Date: <i>4/29/10</i>	Time: <i>1435</i>	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier	Condition: <i>OK</i> (lab use only)
	Date:	Time:	Received by: (Signature)	Temp: <i>3.6°C</i>	Bottles Received: <i>10V</i>
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>Jonal</i>	Date: <i>4/30/10</i>	Time: <i>0900</i>
Relinquished by: (Signature)	Date:	Time:		pH Checked:	NCF:



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Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Wednesday May 05, 2010

Report Number: L456646

Samples Received: 04/30/10

Client Project:

Description: 605-01

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

May 05, 2010

Date Received : April 30, 2010
Description : 605-01

Sample ID : 41 605-01 UPSTREAM

Collected By : Brett Kennedy
Collection Date : 04/29/10 13:40

ESC Sample # : L456646-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	U	0.00013	0.00050	mg/l		8021/80	05/04/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	05/04/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	05/04/10	1
Total Xylene	U	0.00043	0.0015	mg/l		8021/80	05/04/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	05/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	102.			% Rec.		8021/80	05/04/10	1
a,a,a-Trifluorotoluene(PID)	103.			% Rec.		8021/80	05/04/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

May 05, 2010

Date Received : April 30, 2010
Description : 605-01

Sample ID : 42 SOUTH SPRING

Collected By : Brett Kennedy
Collection Date : 04/29/10 13:48

ESC Sample # : L456646-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.039	0.00013	0.00050	mg/l		8021/80	05/04/10	1
Toluene	0.0014	0.00021	0.0050	mg/l	J	8021/80	05/04/10	1
Ethylbenzene	0.0072	0.00021	0.00050	mg/l		8021/80	05/04/10	1
Total Xylene	0.21	0.00043	0.0015	mg/l		8021/80	05/04/10	1
TPH (GC/FID) Low Fraction	1.2	0.040	0.10	mg/l		GRO	05/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	93.1			% Rec.		8021/80	05/04/10	1
a,a,a-Trifluorotoluene(PID)	100.			% Rec.		8021/80	05/04/10	1

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MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

May 05, 2010

Date Received : April 30, 2010
Description : 605-01

Sample ID : 43 DOWNSTREAM

Collected By : Brett Kennedy
Collection Date : 04/29/10 14:03

ESC Sample # : L456646-03

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.00030	0.00013	0.00050	mg/l	J	8021/80	05/04/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	05/04/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	05/04/10	1
Total Xylene	0.0017	0.00043	0.0015	mg/l		8021/80	05/04/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	05/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	102.			% Rec.		8021/80	05/04/10	1
a,a,a-Trifluorotoluene(PID)	103.			% Rec.		8021/80	05/04/10	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

May 05, 2010

Date Received : April 30, 2010
Description : 605-01

Sample ID : 44 LOWER PIT

Collected By : Brett Kennedy
Collection Date : 04/29/10 13:58

ESC Sample # : L456646-04

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.00033	0.00013	0.00050	mg/l	J	8021/80	05/04/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	05/04/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	05/04/10	1
Total Xylene	0.0010	0.00043	0.0015	mg/l	J	8021/80	05/04/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	05/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	102.			% Rec.		8021/80	05/04/10	1
a,a,a-Trifluorotoluene(PID)	103.			% Rec.		8021/80	05/04/10	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL

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Reported: 05/05/10 16:51 Printed: 05/05/10 16:51



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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

May 05, 2010

Date Received : April 30, 2010
Description : 605-01

Sample ID : 40 NORTH SPRING

Collected By : Brett Kennedy
Collection Date : 04/29/10 13:54

ESC Sample # : L456646-05

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.0091	0.00013	0.00050	mg/l		8021/80	05/04/10	1
Toluene	0.00039	0.00021	0.0050	mg/l	J	8021/80	05/04/10	1
Ethylbenzene	0.0060	0.00021	0.00050	mg/l		8021/80	05/04/10	1
Total Xylene	0.030	0.00043	0.0015	mg/l		8021/80	05/04/10	1
TPH (GC/FID) Low Fraction	0.40	0.040	0.10	mg/l		GRO	05/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	93.3			% Rec.		8021/80	05/04/10	1
a,a,a-Trifluorotoluene(PID)	101.			% Rec.		8021/80	05/04/10	1

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MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

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Reported: 05/05/10 16:51 Printed: 05/05/10 16:51

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L456646-02	WG476343	SAMP	Toluene	R1205828	J
L456646-03	WG476343	SAMP	Benzene	R1205828	J
L456646-04	WG476343	SAMP	Benzene	R1205828	J
	WG476343	SAMP	Total Xylene	R1205828	J
L456646-05	WG476343	SAMP	Toluene	R1205828	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

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- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
05/05/10 at 16:51:49

TSR Signing Reports: 134
R4 - Rush: Three Day

Sample: L456646-01 Account: OXYWTPGJCO Received: 04/30/10 09:00 Due Date: 05/05/10 00:00 RPT Date: 05/05/10 16:51
Sample: L456646-02 Account: OXYWTPGJCO Received: 04/30/10 09:00 Due Date: 05/05/10 00:00 RPT Date: 05/05/10 16:51
Sample: L456646-03 Account: OXYWTPGJCO Received: 04/30/10 09:00 Due Date: 05/05/10 00:00 RPT Date: 05/05/10 16:51
Sample: L456646-04 Account: OXYWTPGJCO Received: 04/30/10 09:00 Due Date: 05/05/10 00:00 RPT Date: 05/05/10 16:51
Sample: L456646-05 Account: OXYWTPGJCO Received: 04/30/10 09:00 Due Date: 05/05/10 00:00 RPT Date: 05/05/10 16:51



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Est. 1970

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Thursday June 10, 2010

Report Number: L461778

Samples Received: 05/29/10

Client Project:

Description: 605-01

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

June 10, 2010

Date Received : May 29, 2010
Description : 605-01
Sample ID : 41 605-01 UPSTREAM 0-6IN
Collected By : Brett Kennedy
Collection Date : 05/27/10 14:10

ESC Sample # : L461778-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	0.17	0.041	0.10	mg/l		9056	05/29/10	1
Sulfate	44.	0.46	5.0	mg/l		9056	05/29/10	1
BOD	U	1.6	5.0	mg/l	B1J4	SM5210B	06/03/10	1
COD	9.8	1.7	10.	mg/l	J	410.4	06/02/10	1
Dissolved Oxygen	8.03@21.4c	0.99	3.0	mg/l	TT8	4500-O	05/29/10	1
ORP	180			mV	T8	2580	06/01/10	1
Phosphate,Ortho	0.12	0.0036	0.025	mg/l		4500P-E	05/29/10	1
TOC (Total Organic Carbon)	2.4	0.20	1.0	mg/l		9060A	06/08/10	1
Dissolved Solids	520	2.5	10.	mg/l		2540C	06/04/10	1
Arsenic	0.0065	0.0065	0.020	mg/l	J	6010B	06/09/10	1
Barium	0.20	0.0010	0.0050	mg/l		6010B	06/09/10	1
Cadmium	U	0.00080	0.0050	mg/l		6010B	06/09/10	1
Calcium	81.	0.11	0.50	mg/l		6010B	06/09/10	1
Chromium	0.0028	0.0017	0.010	mg/l	J	6010B	06/09/10	1
Copper	U	0.0042	0.020	mg/l		6010B	06/09/10	1
Iron	1.2	0.019	0.10	mg/l		6010B	06/09/10	1
Lead	U	0.0018	0.0050	mg/l		6010B	06/09/10	1
Magnesium	35.	0.018	0.10	mg/l		6010B	06/09/10	1
Molybdenum	0.0047	0.0017	0.0050	mg/l	J	6010B	06/09/10	1
Nickel	U	0.0053	0.020	mg/l		6010B	06/09/10	1
Zinc	0.0070	0.0068	0.030	mg/l	J	6010B	06/09/10	1
Benzene	U	0.00013	0.00050	mg/l		8021/80	06/06/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	06/06/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	06/06/10	1
Total Xylene	U	0.00043	0.0015	mg/l		8021/80	06/06/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	06/06/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	108.			% Rec.		8021/80	06/06/10	1
a,a,a-Trifluorotoluene(PID)	102.			% Rec.		8021/80	06/06/10	1

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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

June 10, 2010

Date Received : May 29, 2010
Description : 605-01
Sample ID : 42 SOUTH SPRING 0-6IN

ESC Sample # : L461778-02

Site ID :

Collected By : Brett Kennedy
Collection Date : 05/27/10 14:25

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	0.041	0.10	mg/l		9056	05/29/10	1
Sulfate	26.	0.46	5.0	mg/l		9056	05/29/10	1
BOD	U	1.6	5.0	mg/l	B1J4	SM5210B	06/03/10	1
COD	30.	1.7	10.	mg/l		410.4	06/02/10	1
Dissolved Oxygen	3.74@21.1c	0.99	3.0	mg/l	TT8	4500-O	05/29/10	1
ORP	180			mV	T8	2580	06/01/10	1
Phosphate,Ortho	0.0066	0.0036	0.025	mg/l	J	4500P-E	05/29/10	1
TOC (Total Organic Carbon)	4.6	0.20	1.0	mg/l		9060A	06/08/10	1
Dissolved Solids	630	2.5	10.	mg/l		2540C	06/04/10	1
Arsenic	0.014	0.0065	0.020	mg/l	J	6010B	06/09/10	1
Barium	0.21	0.0010	0.0050	mg/l		6010B	06/09/10	1
Cadmium	U	0.00080	0.0050	mg/l		6010B	06/09/10	1
Calcium	89.	0.11	0.50	mg/l		6010B	06/09/10	1
Chromium	U	0.0017	0.010	mg/l		6010B	06/09/10	1
Copper	U	0.0042	0.020	mg/l		6010B	06/09/10	1
Iron	0.93	0.019	0.10	mg/l		6010B	06/09/10	1
Lead	U	0.0018	0.0050	mg/l		6010B	06/09/10	1
Magnesium	36.	0.018	0.10	mg/l		6010B	06/09/10	1
Molybdenum	0.0024	0.0017	0.0050	mg/l	J	6010B	06/09/10	1
Nickel	U	0.0053	0.020	mg/l		6010B	06/09/10	1
Zinc	0.011	0.0068	0.030	mg/l	J	6010B	06/09/10	1
Benzene	0.051	0.00013	0.00050	mg/l		8021/80	06/06/10	1
Toluene	0.00096	0.00021	0.0050	mg/l	J	8021/80	06/06/10	1
Ethylbenzene	0.010	0.00021	0.00050	mg/l		8021/80	06/06/10	1
Total Xylene	0.26	0.00043	0.0015	mg/l		8021/80	06/06/10	1
TPH (GC/FID) Low Fraction	1.5	0.040	0.10	mg/l		GRO	06/06/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	106.			% Rec.		8021/80	06/06/10	1
a,a,a-Trifluorotoluene(PID)	100.			% Rec.		8021/80	06/06/10	1

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

June 10, 2010

Date Received : May 29, 2010
Description : 605-01
Sample ID : 40 NORTH SPRING 0-6IN
Collected By : Brett Kennedy
Collection Date : 05/27/10 14:35

ESC Sample # : L461778-03

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	0.14	0.041	0.10	mg/l		9056	05/29/10	1
Sulfate	44.	0.46	5.0	mg/l		9056	05/29/10	1
BOD	U	1.6	5.0	mg/l	B1J4	SM5210B	06/03/10	1
COD	21.	1.7	10.	mg/l		410.4	06/02/10	1
Dissolved Oxygen	7.17@21.0c	0.99	3.0	mg/l	TT8	4500-O	05/29/10	1
ORP	180			mV	T8	2580	06/01/10	1
Phosphate,Ortho	0.087	0.0036	0.025	mg/l		4500P-E	05/29/10	1
TOC (Total Organic Carbon)	2.7	0.20	1.0	mg/l		9060A	06/08/10	1
Dissolved Solids	500	2.5	10.	mg/l		2540C	06/04/10	1
Arsenic	U	0.0065	0.020	mg/l		6010B	06/09/10	1
Barium	0.19	0.0010	0.0050	mg/l		6010B	06/09/10	1
Cadmium	U	0.00080	0.0050	mg/l		6010B	06/09/10	1
Calcium	77.	0.11	0.50	mg/l		6010B	06/09/10	1
Chromium	U	0.0017	0.010	mg/l		6010B	06/09/10	1
Copper	U	0.0042	0.020	mg/l		6010B	06/09/10	1
Iron	0.62	0.019	0.10	mg/l		6010B	06/09/10	1
Lead	U	0.0018	0.0050	mg/l		6010B	06/09/10	1
Magnesium	33.	0.018	0.10	mg/l		6010B	06/09/10	1
Molybdenum	0.0058	0.0017	0.0050	mg/l		6010B	06/09/10	1
Nickel	U	0.0053	0.020	mg/l		6010B	06/09/10	1
Zinc	U	0.0068	0.030	mg/l		6010B	06/09/10	1
Benzene	U	0.00013	0.00050	mg/l		8021/80	06/06/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	06/06/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	06/06/10	1
Total Xylene	0.00070	0.00043	0.0015	mg/l	J	8021/80	06/06/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	06/06/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	107.			% Rec.		8021/80	06/06/10	1
a,a,a-Trifluorotoluene(PID)	101.			% Rec.		8021/80	06/06/10	1

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

June 10, 2010

Date Received : May 29, 2010
Description : 605-01
Sample ID : 44 LOWER PIT 0-6IN
Collected By : Brett Kennedy
Collection Date : 05/27/10 14:43

ESC Sample # : L461778-04

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	0.041	0.10	mg/l		9056	05/29/10	1
Sulfate	42.	0.46	5.0	mg/l		9056	05/29/10	1
BOD	U	1.6	5.0	mg/l	B1J4	SM5210B	06/03/10	1
COD	9.7	1.7	10.	mg/l	J	410.4	06/02/10	1
Dissolved Oxygen	7.46@21.0c	0.99	3.0	mg/l	TT8	4500-O	05/29/10	1
ORP	180			mV	T8	2580	06/01/10	1
Phosphate,Ortho	0.13	0.0036	0.025	mg/l		4500P-E	05/29/10	1
TOC (Total Organic Carbon)	3.1	0.20	1.0	mg/l		9060A	06/08/10	1
Dissolved Solids	530	2.5	10.	mg/l		2540C	06/04/10	1
Arsenic	0.0080	0.0065	0.020	mg/l	J	6010B	06/09/10	1
Barium	0.23	0.0010	0.0050	mg/l		6010B	06/09/10	1
Cadmium	U	0.00080	0.0050	mg/l		6010B	06/09/10	1
Calcium	86.	0.11	0.50	mg/l		6010B	06/09/10	1
Chromium	U	0.0017	0.010	mg/l		6010B	06/09/10	1
Copper	U	0.0042	0.020	mg/l		6010B	06/09/10	1
Iron	1.4	0.019	0.10	mg/l		6010B	06/09/10	1
Lead	U	0.0018	0.0050	mg/l		6010B	06/09/10	1
Magnesium	34.	0.018	0.10	mg/l		6010B	06/09/10	1
Molybdenum	0.0036	0.0017	0.0050	mg/l	J	6010B	06/09/10	1
Nickel	U	0.0053	0.020	mg/l		6010B	06/09/10	1
Zinc	0.017	0.0068	0.030	mg/l	J	6010B	06/09/10	1
Benzene	0.00053	0.00013	0.00050	mg/l		8021/80	06/06/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	06/06/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	06/06/10	1
Total Xylene	0.0011	0.00043	0.0015	mg/l	J	8021/80	06/06/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	06/06/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	107.			% Rec.		8021/80	06/06/10	1
a,a,a-Trifluorotoluene(PID)	101.			% Rec.		8021/80	06/06/10	1

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

June 10, 2010

Date Received : May 29, 2010
Description : 605-01
Sample ID : 43 DOWNSTREAM 0-6IN
Collected By : Brett Kennedy
Collection Date : 05/27/10 15:00

ESC Sample # : L461778-05

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	0.086	0.041	0.10	mg/l	J	9056	05/29/10	1
Sulfate	34.	0.46	5.0	mg/l		9056	05/29/10	1
BOD	U	1.6	5.0	mg/l	B1J4	SM5210B	06/03/10	1
COD	35.	1.7	10.	mg/l		410.4	06/02/10	1
Dissolved Oxygen	8.31@21.0c	0.99	3.0	mg/l	TT8	4500-O	05/29/10	1
ORP	180			mV	T8	2580	06/01/10	1
Phosphate,Ortho	0.13	0.0036	0.025	mg/l		4500P-E	05/29/10	1
TOC (Total Organic Carbon)	2.9	0.20	1.0	mg/l		9060A	06/08/10	1
Dissolved Solids	520	2.5	10.	mg/l		2540C	06/04/10	1
Arsenic	0.011	0.0065	0.020	mg/l	JP1	6010B	06/09/10	1
Barium	0.20	0.0010	0.0050	mg/l		6010B	06/09/10	1
Cadmium	U	0.00080	0.0050	mg/l		6010B	06/09/10	1
Calcium	86.	0.11	0.50	mg/l		6010B	06/09/10	1
Chromium	U	0.0017	0.010	mg/l		6010B	06/09/10	1
Copper	U	0.0042	0.020	mg/l		6010B	06/09/10	1
Iron	0.84	0.019	0.10	mg/l		6010B	06/09/10	1
Lead	U	0.0018	0.0050	mg/l		6010B	06/09/10	1
Magnesium	35.	0.018	0.10	mg/l		6010B	06/09/10	1
Molybdenum	0.0048	0.0017	0.0050	mg/l	J	6010B	06/09/10	1
Nickel	U	0.0053	0.020	mg/l		6010B	06/09/10	1
Zinc	0.012	0.0068	0.030	mg/l	JP1	6010B	06/09/10	1
Benzene	U	0.00013	0.00050	mg/l		8021/80	06/09/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	06/09/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	06/09/10	1
Total Xylene	U	0.00043	0.0015	mg/l		8021/80	06/09/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	06/09/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	103.			% Rec.		8021/80	06/09/10	1
a,a,a-Trifluorotoluene(PID)	97.8			% Rec.		8021/80	06/09/10	1

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L461778-01	WG481313	SAMP	Dissolved Oxygen	R1239652	TT8
	WG481557	SAMP	Arsenic	R1248899	J
	WG481557	SAMP	Chromium	R1248899	J
	WG481557	SAMP	Molybdenum	R1248899	J
	WG481557	SAMP	Zinc	R1248899	J
	WG481064	SAMP	BOD	R1246128	B1J4
	WG481201	SAMP	COD	R1240689	J
	WG481216	SAMP	ORP	R1239892	T8
L461778-02	WG481313	SAMP	Dissolved Oxygen	R1239652	TT8
	WG481876	SAMP	Toluene	R1247470	J
	WG481557	SAMP	Arsenic	R1248899	J
	WG481557	SAMP	Molybdenum	R1248899	J
	WG481557	SAMP	Zinc	R1248899	J
	WG481035	SAMP	Phosphate,Ortho	R1237611	J
	WG481064	SAMP	BOD	R1246128	B1J4
	WG481216	SAMP	ORP	R1239892	T8
L461778-03	WG481313	SAMP	Dissolved Oxygen	R1239652	TT8
	WG481876	SAMP	Total Xylene	R1247470	J
	WG481064	SAMP	BOD	R1246128	B1J4
	WG481216	SAMP	ORP	R1239892	T8
L461778-04	WG481313	SAMP	Dissolved Oxygen	R1239652	TT8
	WG481876	SAMP	Total Xylene	R1247470	J
	WG481557	SAMP	Arsenic	R1248899	J
	WG481557	SAMP	Molybdenum	R1248899	J
	WG481557	SAMP	Zinc	R1248899	J
	WG481064	SAMP	BOD	R1246128	B1J4
	WG481201	SAMP	COD	R1240689	J
	WG481216	SAMP	ORP	R1239892	T8
L461778-05	WG481313	SAMP	Dissolved Oxygen	R1239652	TT8
	WG481557	SAMP	Arsenic	R1248899	JP1
	WG481557	SAMP	Molybdenum	R1248899	J
	WG481557	SAMP	Zinc	R1248899	JP1
	WG481025	SAMP	Nitrate	R1238890	J
	WG481064	SAMP	BOD	R1246128	B1J4
	WG481216	SAMP	ORP	R1239892	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J4	The associated batch QC was outside the established quality control range for accuracy.
B1	(ESC) - The blank depletion was greater than the recommended maximum depletion of 0.2mg/L.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
06/10/10 at 16:32:57

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L461778-01 Account: OXYWTPGJCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/10/10 16:32
Sample: L461778-02 Account: OXYWTPGJCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/10/10 16:32
Sample: L461778-03 Account: OXYWTPGJCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/10/10 16:32
Sample: L461778-04 Account: OXYWTPGJCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/10/10 16:32
Sample: L461778-05 Account: OXYWTPGJCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/10/10 16:32

Company Name/Address: Oxy USA WTP LP - Grand Junction, CO 760 Horizon Dr.. Ste. 101 Grand Junction.CO 81506			Alternate billing information:			Analysis/Container/Preservative			Chain of Custody Page <u>1</u> of <u>1</u>	
Report to: <u>Brett Kennedy</u>			Email to: <u>brett-kennedy@oxy.com</u>			<div style="font-size: 2em; transform: rotate(-90deg);">BTEX/600</div>			E068	
Project Description: <u>605-01</u>			City/State Collected:						ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859	
Phone: (970) 263-3601 FAX: (970) 201-2305		Client Project #:		ESC Key:						
Collected by: <u>Brett Kennedy</u>		Site/Facility ID#:		P.O.#:						
Collected by (signature): <u>Brett Kennedy</u> Immediately Packed on Ice N <u>Y</u>		Rush? (Lab MUST Be Notified) Same Day.....200% Next Day.....100% Two Day.....50% Three Day.....25%		Date Results Needed: Email? <u>No</u> <u>Yes</u> FAX? <u>Yes</u> <u>No</u>						
Sample ID		Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	CoCode: OXYWTPGJ (lab use only) Template/Prelogin Shipped Via:		
#41 605-01 Upstream		grab	SW	0-6"	6/24/10	0820	2	Remarks/Contaminant		
#40 North Spring		↓	↓	↓	↓	0835	2	Sample # (lab only)		
#42 South Spring		↓	↓	↓	↓	0840	2	466385-01		
#44 Lower Pit		↓	↓	↓	↓	0847	2	02		
#43 Downstream		↓	↓	↓	↓	0852	0	03		
#45		↓	↓	↓	↓	0852	0	04		
#46		↓	↓	↓	↓	0852	0	05		

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature) <u>Brett Kennedy</u>		Date: <u>6/25/10</u>		Time: <u>1230</u>		Received by: (Signature) 		Samples returned via: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Condition: <u>OK</u> (lab use only)	
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp: <u>3.4</u>		Bottles Received: <u>10</u>	
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) <u>C. Pineda</u>		Date: <u>6.26.10</u>		Time: <u>0900</u>	
								CoC Seals Intact <u>Y</u> <u>N</u> <u>NA</u>		pH Checked:	
								NCF:			



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Est. 1970

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Friday July 09, 2010

Report Number: L466385

Samples Received: 06/26/10

Client Project:

Description: 605-01

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

July 09, 2010

Date Received : June 26, 2010
Description : 605-01

Sample ID : 41 605-01 UPSTREAM

Collected By : Brett Kennedy
Collection Date : 06/24/10 08:20

ESC Sample # : L466385-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	U	0.00013	0.00050	mg/l		8021/80	07/04/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	07/04/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	07/04/10	1
Total Xylene	U	0.00043	0.0015	mg/l		8021/80	07/04/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	07/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	109.			% Rec.		8021/80	07/04/10	1
a,a,a-Trifluorotoluene(PID)	103.			% Rec.		8021/80	07/04/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

July 09, 2010

Date Received : June 26, 2010
Description : 605-01

Sample ID : 40 NORTH SPRING

Collected By : Brett Kennedy
Collection Date : 06/24/10 08:35

ESC Sample # : L466385-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.0035	0.00013	0.00050	mg/l		8021/80	07/04/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	07/04/10	1
Ethylbenzene	0.0021	0.00021	0.00050	mg/l		8021/80	07/04/10	1
Total Xylene	0.012	0.00043	0.0015	mg/l		8021/80	07/04/10	1
TPH (GC/FID) Low Fraction	0.072	0.040	0.10	mg/l	J	GRO	07/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	112.			% Rec.		8021/80	07/04/10	1
a,a,a-Trifluorotoluene(PID)	101.			% Rec.		8021/80	07/04/10	1

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

July 09, 2010

Date Received : June 26, 2010
Description : 605-01

Sample ID : 42 SOUTH SPRING

Collected By : Brett Kennedy
Collection Date : 06/24/10 08:40

ESC Sample # : L466385-03

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.073	0.00013	0.00050	mg/l		8021/80	07/04/10	1
Toluene	0.00071	0.00021	0.0050	mg/l	J	8021/80	07/04/10	1
Ethylbenzene	0.014	0.00021	0.00050	mg/l		8021/80	07/04/10	1
Total Xylene	0.34	0.00043	0.0015	mg/l		8021/80	07/04/10	1
TPH (GC/FID) Low Fraction	2.1	0.040	0.10	mg/l		GRO	07/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	102.			% Rec.		8021/80	07/04/10	1
a,a,a-Trifluorotoluene(PID)	100.			% Rec.		8021/80	07/04/10	1

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

July 09, 2010

Date Received : June 26, 2010
Description : 605-01

Sample ID : 44 LOWER PIT

Collected By : Brett Kennedy
Collection Date : 06/24/10 08:47

ESC Sample # : L466385-04

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.0016	0.00013	0.00050	mg/l		8021/80	07/04/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	07/04/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	07/04/10	1
Total Xylene	0.0024	0.00043	0.0015	mg/l		8021/80	07/04/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l		GRO	07/04/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	110.			% Rec.		8021/80	07/04/10	1
a,a,a-Trifluorotoluene(PID)	102.			% Rec.		8021/80	07/04/10	1

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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

July 09, 2010

Date Received : June 26, 2010
Description : 605-01

Sample ID : 43 DOWNSTREAM

Collected By : Brett Kennedy
Collection Date : 06/24/10 08:52

ESC Sample # : L466385-05

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzene	0.00018	0.00013	0.00050	mg/l	J	8021/80	07/06/10	1
Toluene	U	0.00021	0.0050	mg/l		8021/80	07/06/10	1
Ethylbenzene	U	0.00021	0.00050	mg/l		8021/80	07/06/10	1
Total Xylene	U	0.00043	0.0015	mg/l		8021/80	07/06/10	1
TPH (GC/FID) Low Fraction	U	0.040	0.10	mg/l	J5	GRO	07/06/10	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.3			% Rec.		8021/80	07/06/10	1
a,a,a-Trifluorotoluene(PID)	104.			% Rec.		8021/80	07/06/10	1

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L466385-02	WG486880	SAMP	TPH (GC/FID) Low Fraction	R1275430	J
L466385-03	WG486880	SAMP	Toluene	R1275430	J
L466385-05	WG486894	SAMP	Benzene	R1279814	J
	WG486894	SAMP	TPH (GC/FID) Low Fraction	R1279814	J5

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
07/09/10 at 10:07:57

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L466385-01 Account: OXYWTPGJCO Received: 06/26/10 09:00 Due Date: 07/02/10 00:00 RPT Date: 07/09/10 10:07
Sample: L466385-02 Account: OXYWTPGJCO Received: 06/26/10 09:00 Due Date: 07/02/10 00:00 RPT Date: 07/09/10 10:07
Sample: L466385-03 Account: OXYWTPGJCO Received: 06/26/10 09:00 Due Date: 07/02/10 00:00 RPT Date: 07/09/10 10:07
Sample: L466385-04 Account: OXYWTPGJCO Received: 06/26/10 09:00 Due Date: 07/02/10 00:00 RPT Date: 07/09/10 10:07
Sample: L466385-05 Account: OXYWTPGJCO Received: 06/26/10 09:00 Due Date: 07/02/10 00:00 RPT Date: 07/09/10 10:07