



1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109

RECEIVED
12/19/2011

SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: 66561	4. Contact Name: Daniel I. Padilla	Complete the Attachment Checklist OP OGCC
2. Name of Operator: OXY USA Inc.	Phone: 970.263.3637	
3. Address: 760 Horizon Drive, Suite 101 City: Grand Junction State: CO Zip: 81506	Fax: 970.263.3694	
5. API Number 05-077-09589	OGCC Facility ID Number 334501	Survey Plat
6. Well/Facility Name: Gipp 18-12 Reserve Pit	7. Well/Facility Number: Gipp 18-12	Directional Survey
8. Location (Qtr, Sec, Twp, Rng, Meridian): NWSW Sec. 18, T9S, R93W, 6th PM		Surface Eqprmt Diagram
9. County: Mesa	10. Field Name: Brush Creek	Technical Info Page
11. Federal, Indian or State Lease Number:		Other Lab data, Map

General Notice

CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bottomhole location Qtr/Sec, Twp, Rng, Mer: _____ attach directional survey

Latitude _____ Distance to nearest property line _____ Distance to nearest bldg, public rd, utility or RR _____

Longitude _____ Distance to nearest lease line _____ Is location in a High Density Area (rule 603b)? Yes/No

Ground Elevation _____ Distance to nearest well same formation _____ Surface owner consultation date: _____

GPS DATA:
Date of Measurement _____ PDOP Reading _____ Instrument Operator's Name _____

CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

Remove from surface bond
Signed surface use agreement attached

CHANGE OF OPERATOR (prior to drilling):
Effective Date: _____
Plugging Bond: Blanket Individual

CHANGE WELL NAME NUMBER
From: _____
To: _____
Effective Date: _____

ABANDONED LOCATION:
Was location ever built? Yes No
Is site ready for inspection? Yes No
Date Ready for Inspection: _____

NOTICE OF CONTINUED SHUT IN STATUS
Date well shut in or temporarily abandoned: _____
Has Production Equipment been removed from site? Yes No
MIT required if shut in longer than two years. Date of last MIT: _____

SPUD DATE: _____ REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbi and cement job summaries

Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date

RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.
Final reclamation will commence on approximately _____ Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

Notice of Intent Approximate Start Date: _____ Report of Work Done Date Work Completed: _____

Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)

<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input type="checkbox"/> Status Update/Change of Remediation Plans
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: Application of diff. standard for Spills and Releases	

I hereby certify that the statements made in this form are to the best of my knowledge, true, correct and complete.

Signed: [Signature] Date: 12/19/11 Email: daniel_padilla@oxy.com
Print Name: Daniel I. Padilla Title: Regulatory Advisor

COGCC Approved: [Signature] Title: FOR Chris Canfield Date: 12/21/2011
CONDITIONS OF APPROVAL, IF ANY: EPS NW Region

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

- | |
|--|
| 1. OGCC Operator Number: <u>66561</u> API Number: <u>05-077-09589</u> |
| 2. Name of Operator: <u>OXY USA Inc.</u> OGCC Facility ID # <u>334501</u> |
| 3. Well/Facility Name: <u>Gipp 18-12 Reserve Pit</u> Well/Facility Number: <u>Gipp 18-12</u> |
| 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): <u>NWSW Sec. 18, T9S, R93W, 6th PM</u> |


This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

OXY USA Inc. (Oxy) has completed reclamation of the above-mentioned reserve pit. Oxy identified post reclamation levels for Arsenic (As) to be equal with undisturbed background levels but above COGCC Table 910-1 concentration levels. Oxy requests consideration as an alternative to the default value for As in Table 910-1, based on our demonstration of naturally occurring concentrations of As in undisturbed samples taken from native material collected from nearby locations, as per foot note 1 of COGCC Table 910-1. Please refer to attached table, analytical data, and sample location map.

The sampling method Oxy employed was to take a representative random grab sample for each background sample location, post reclaim sample, and cap sample. The analytical concentrations table identifies the COGCC Table 910-1 concentration levels, Oxy's undisturbed background concentrations, and Oxy's post reclamation concentrations (Post Reclaim 09/08/2010), and cap sample (Cap 10/01/2010). The Post Reclaim concentrations of As are statistically equal to those found in Back Ground samples.


Oxy also identified elevated concentrations of pH in post reclamation pit samples. Oxy has buried and capped the pit bottom contents below at least three feet of native material. The reclaimed pit was contoured to be level with active production pad surface, which includes proper stormwater run-on and runoff controls during the operational phase of the production pad. Oxy requests to leave the pit at pad grade until final pad reclamation occurs. At that time, Oxy will ensure that allowable concentration levels are met so that a sufficient agronomic zone is available for reclamation efforts. Therefore final pit capping, sampling, and pad reclamation will occur at the end of the life of the pad.



OXY USA Inc.
 760 Horizon Drive, Suite 101
 Grand Junction, CO 81506

Gipp 18-12
Sampling Locations Map
 Updated: Nov. 14, 2011 Mesa County, Colorado
 0 0.0125 0.025 0.05 Miles





OXY USA Inc.
 760 Horizon Drive, Suite 101
 Grand Junction, CO 81506

Gipp 18-12
Sampling Locations Map
 Updated: Nov. 14, 2011 Mesa County, Colorado
 0 0.04 0.08 0.16 Miles



 Pit / Pond Location

 Post Reclamation Sample

 Composite Cap Sample

 Background Composite Sample



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Brett Kennedy
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Monday September 20, 2010

Report Number: L478059

Samples Received: 09/10/10

Client Project:

Description: Pit Reclaims - Collbran

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,
TX - T104704245, OK-9915

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.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

September 20, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Date Received : September 10, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GIPP 18-12 POST REC 4-10 FT
 Collected By : Brett Kennedy
 Collection Date : 09/08/10 14:00

ESC Sample # : L478059-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.31	2.0	mg/kg		3060A/7	09/17/10	1
ORP	120			mV		2580	09/16/10	1
pH	9.7			su		9045D	09/16/10	1
Sodium Adsorption Ratio	11.					Calc.	09/13/10	1
Specific Conductance	890			umhos/cm		9050AMo	09/17/10	1
Mercury	0.016	0.0053	0.020	mg/kg	J	7471	09/11/10	1
Arsenic	4.6	0.32	1.0	mg/kg		6010B	09/16/10	1
Barium	4200	0.050	0.25	mg/kg		6010B	09/16/10	1
Cadmium	U	0.040	0.25	mg/kg		6010B	09/16/10	1
Chromium	15.	0.085	0.50	mg/kg		6010B	09/16/10	1
Copper	21.	1.0	5.0	mg/kg		6010B	09/16/10	5
Lead	13.	0.45	1.3	mg/kg		6010B	09/16/10	5
Nickel	10.	0.26	1.0	mg/kg		6010B	09/16/10	1
Selenium	U	1.6	5.0	mg/kg	O	6010B	09/16/10	5
Silver	0.21	0.16	0.50	mg/kg	J	6010B	09/16/10	1
Zinc	46.	0.34	1.5	mg/kg		6010B	09/16/10	1
Benzene	0.00095	0.00090	0.0025	mg/kg	J	8021/80	09/11/10	5
Toluene	0.0016	0.0015	0.025	mg/kg	J	8021/80	09/11/10	5
Ethylbenzene	U	0.0013	0.0025	mg/kg		8021/80	09/11/10	5
Total Xylene	U	0.0028	0.0075	mg/kg		8021/80	09/13/10	5
TPH (GC/FID) Low Fraction	U	0.14	0.50	mg/kg		GRO	09/11/10	5
Surrogate Recovery-%								
a, a, a-Trifluorotoluene (FID)	99.2			% Rec.		8021/80	09/11/10	5
a, a, a-Trifluorotoluene (PID)	102.			% Rec.		8021/80	09/11/10	5
TPH (GC/FID) High Fraction	28.	0.77	4.0	mg/kg		3546/DR	09/12/10	1
Surrogate recovery(%)								
o-Terphenyl	55.7			% Rec.		3546/DR	09/12/10	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.0093	0.033	mg/kg	J3	8270C	09/16/10	1
Acenaphthene	U	0.011	0.033	mg/kg	J3	8270C	09/16/10	1
Acenaphthylene	U	0.011	0.033	mg/kg	J3	8270C	09/16/10	1
Benzo(a)anthracene	U	0.0077	0.033	mg/kg	J3	8270C	09/16/10	1
Benzo(a)pyrene	U	0.0074	0.033	mg/kg	J3	8270C	09/16/10	1
Benzo(b)fluoranthene	U	0.0078	0.033	mg/kg	J3	8270C	09/16/10	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/20/10 10:44 Printed: 09/20/10 10:44
 L478059-01 (PH) - 9.7@20.6c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

September 20, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L478059-01

Date Received : September 10, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GIPP 18-12 POST REC 4-10 FT
 Collected By : Brett Kennedy
 Collection Date : 09/08/10 14:00

Site ID :
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.0095	0.033	mg/kg	J3	8270C	09/16/10	1
Benzo(k)fluoranthene	U	0.012	0.033	mg/kg		8270C	09/16/10	1
Chrysene	U	0.0091	0.033	mg/kg	J3	8270C	09/16/10	1
Dibenz(a,h)anthracene	U	0.011	0.033	mg/kg	J4J3	8270C	09/16/10	1
Fluoranthene	U	0.0079	0.033	mg/kg	J3	8270C	09/16/10	1
Fluorene	U	0.0095	0.033	mg/kg	J3	8270C	09/16/10	1
Indeno(1,2,3-cd)pyrene	U	0.011	0.033	mg/kg	J3	8270C	09/16/10	1
Naphthalene	U	0.016	0.033	mg/kg	J3	8270C	09/16/10	1
Phenanthrene	0.0077	0.0073	0.033	mg/kg	JJ3	8270C	09/16/10	1
Pyrene	U	0.0089	0.033	mg/kg	J3	8270C	09/16/10	1
Surrogate Recovery								
Nitrobenzene-d5	55.7			% Rec.		8270C	09/16/10	1
2-Fluorobiphenyl	63.9			% Rec.		8270C	09/16/10	1
p-Terphenyl-d14	66.2			% Rec.		8270C	09/16/10	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/20/10 10:44 Printed: 09/20/10 10:44
 L478059-01 (PH) - 9.7@20.6c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859
 Tax I.D. 62-0814289
 Est. 1970

REPORT OF ANALYSIS

September 20, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L478059-02

Date Received : September 10, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GIPP 18-12 BG-N 4-10 FT
 Collected By : Brett Kennedy
 Collection Date : 09/08/10 14:25

Site ID :
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	8.4			su		9045D	09/16/10	1
Sodium Adsorption Ratio	0.38					Calc.	09/13/10	1
Specific Conductance	240			umhos/cm		9050AMo	09/17/10	1
Arsenic	0.84	0.32	1.0	mg/kg	J	6010B	09/14/10	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.
 This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/20/10 10:44 Printed: 09/20/10 10:44
 L478059-02 (PH) - 8.4@20.6c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

September 20, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L478059-03

Date Received : September 10, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GIPP 18-12 BG-E 4-10 FT
 Collected By : Brett Kennedy
 Collection Date : 09/08/10 14:35

Site ID :
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.0			su		9045D	09/16/10	1
Sodium Adsorption Ratio	0.36					Calc.	09/15/10	1
Specific Conductance	80.			umhos/cm	J3	9050AMo	09/17/10	1
Arsenic	2.1	0.32	1.0	mg/kg		6010B	09/14/10	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.
 This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/20/10 10:44 Printed: 09/20/10 10:44
 L478059-03 (PH) - 7.0@20.6c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

September 20, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L478059-04

Site ID :

Project # :

Date Received : September 10, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GIPP 18-12 BG-S 4-10 FT
 Collected By : Brett Kennedy
 Collection Date : 09/08/10 14:42

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.7			su		9045D	09/16/10	1
Sodium Adsorption Ratio	0.30					Calc.	09/15/10	1
Specific Conductance	130			umhos/cm		9050AMo	09/17/10	1
Arsenic	3.2	0.32	1.0	mg/kg		6010B	09/14/10	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/20/10 10:44 Printed: 09/20/10 10:44
 L478059-04 (PH) - 7.7@20.4c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859
 Tax I.D. 62-0814289
 Est. 1970

REPORT OF ANALYSIS

September 20, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Date Received : September 10, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GIPP 18-12 BG-W 4-10 FT
 Collected By : Brett Kennedy
 Collection Date : 09/08/10 14:50

ESC Sample # : L478059-05
 Site ID :
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.3			su		9045D	09/16/10	1
Sodium Adsorption Ratio	0.33					Calc.	09/13/10	1
Arsenic	1.8	0.32	1.0	mg/kg		6010B	09/14/10	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.
 This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/20/10 10:44 Printed: 09/20/10 10:44
 L478059-05 (PH) - 7.3@20.4c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L478059-01	WG497867	SAMP	Benzene	R1372550	J
	WG497867	SAMP	Toluene	R1372550	J
	WG497984	SAMP	Selenium	R1379870	O
	WG497984	SAMP	Silver	R1379870	J
	WG497833	SAMP	Mercury	R1371568	J
	WG498090	SAMP	Anthracene	R1377949	J3
	WG498090	SAMP	Acenaphthene	R1377949	J3
	WG498090	SAMP	Acenaphthylene	R1377949	J3
	WG498090	SAMP	Benzo(a)anthracene	R1377949	J3
	WG498090	SAMP	Benzo(a)pyrene	R1377949	J3
	WG498090	SAMP	Benzo(b)fluoranthene	R1377949	J3
	WG498090	SAMP	Benzo(g,h,i)perylene	R1377949	J3
	WG498090	SAMP	Chrysene	R1377949	J3
	WG498090	SAMP	Dibenz(a,h)anthracene	R1377949	J4J3
	WG498090	SAMP	Fluoranthene	R1377949	J3
	WG498090	SAMP	Fluorene	R1377949	J3
	WG498090	SAMP	Indeno(1,2,3-cd)pyrene	R1377949	J3
	WG498090	SAMP	Naphthalene	R1377949	J3
	WG498090	SAMP	Phenanthrene	R1377949	JJ3
	WG498090	SAMP	Pyrene	R1377949	J3
L478059-02	WG498137	SAMP	Arsenic	R1376450	J
L478059-03	WG498721	SAMP	Specific Conductance	R1382270	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

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
09/20/10 at 10:44:48

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L478059-01 Account: OXYGJCO Received: 09/10/10 09:00 Due Date: 09/17/10 00:00 RPT Date: 09/20/10 10:44
Sample: L478059-02 Account: OXYGJCO Received: 09/10/10 09:00 Due Date: 09/17/10 00:00 RPT Date: 09/20/10 10:44
Sample: L478059-03 Account: OXYGJCO Received: 09/10/10 09:00 Due Date: 09/17/10 00:00 RPT Date: 09/20/10 10:44
Sample: L478059-04 Account: OXYGJCO Received: 09/10/10 09:00 Due Date: 09/17/10 00:00 RPT Date: 09/20/10 10:44
Sample: L478059-05 Account: OXYGJCO Received: 09/10/10 09:00 Due Date: 09/17/10 00:00 RPT Date: 09/20/10 10:44
Removed SPCON due to insufficient sample -JCH 9/17



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Brett Kennedy
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Monday October 04, 2010

Report Number: L481946

Samples Received: 10/02/10

Client Project:

Description: Pit Reclaims - Collbran

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:


Craig Cothron , 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,
TX - T104704245, OK-9915

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.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



L·A·B S·C·I·E·N·C·E·S

YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brett Kennedy
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

October 04, 2010

Date Received : October 02, 2010
Description : Pit Reclaims - Collbran
Sample ID : GIPP 18-12 CAP 0-6 IN
Collected By : Brett Kennedy
Collection Date : 10/01/10 10:45

ESC Sample # : L481946-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
pH	8.3		su	9045D	10/03/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/04/10 10:52 Printed: 10/04/10 13:30

L481946-01 (PH) - 8.3@17.9c

Company Name/Address:

OXY USA - Grand Junction, CO

760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Alternate billing information:

Report to: *Brett Kennedy* Email to: *brett.kennedy@oxy.com*

Project Description: *Pit Reclaims - Colbran* City/State Collected: *CO*

Phone: (970) 263-3601 Client Project #: *---* ESC Key: *---*

FAX: *---* Site/Facility ID#: *---* P.O.#: *---*

Collected by: *Brett Kennedy*

Collected by (signature): *Brett Kennedy*
Brett Kennedy
Immediately Packed on Ice N ___ Y *✓*

Rush? (Lab MUST Be Notified)
Same Day..... 200%
Next Day..... 100%
Two Day..... 50%
Three Day..... 25%

Date Results Needed:
Email? ___ No ___ Yes
FAX? ___ No ___ Yes

No. of Cntus

Sample ID

Comp/Grab

Matrix*

Depth

Date

Time

6119-1a Cap

SS

0-6"

10/10/10

1045

1

Analysis/Container/Preservative

Chain of Custody Page 1 of 1

Prepared by:

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Road
Mt Juliet, TN 37122

Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859
A181

CoCode: **OXYGJCO** (lab use only)
Template/Prelogin
Shipped Via:

Remarks/Contaminant

Sample # (lab only)

4481946-1

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

pH _____ Temp _____

Relinquished by (Signature) <i>Brett Kennedy</i> Relinquished by (Signature)	Date: <i>10/10/10</i>	Time: <i>1540</i>	Received by: (Signature) 	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier	Condition: (lab use only) <i>OK</i>
	Date: _____	Time: _____	Received by: (Signature)	Temp: <i>3.9c</i>	C&C Seals Intact ___ Y ___ N ___ NA
	Date: _____	Time: _____	Received for lab by: (Signature) <i>Fluor</i>	Bottles Received: <i>1-8oz</i>	pH Checked: _____

3695 17895782

Flow

Date: *10/10/10* Time: *0900*



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Brett Kennedy
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Friday September 24, 2010

Report Number: L479303

Samples Received: 09/17/10

Client Project:

Description: Pit Reclaims - Collbran

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,
TX - T104704245, OK-9915

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.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

September 24, 2010

Brett Kennedy
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Date Received : September 17, 2010
Description : Pit Reclaims - Collbran
Sample ID : GUNDERSON 18-5 DR
Collected By : Brett Kennedy
Collection Date : 09/16/10 12:55

ESC Sample # : L479303-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.31	2.0	mg/kg		3060A/7	09/21/10	1
ORP	140			mV		2580	09/21/10	1
pH	9.4			su		9045D	09/23/10	1
Sodium Adsorption Ratio	18.					Calc.	09/21/10	1
Specific Conductance	970			umhos/cm		9050AMo	09/21/10	1
Mercury	0.025	0.0053	0.020	mg/kg		7471	09/18/10	1
Arsenic	4.4	0.32	1.0	mg/kg		6010B	09/19/10	1
Barium	5600	0.25	1.3	mg/kg		6010B	09/20/10	5
Cadmium	U	0.040	0.25	mg/kg		6010B	09/19/10	1
Chromium	22.	0.085	0.50	mg/kg		6010B	09/19/10	1
Copper	39.	0.21	1.0	mg/kg		6010B	09/19/10	1
Lead	17.	0.090	0.25	mg/kg		6010B	09/19/10	1
Nickel	16.	0.26	1.0	mg/kg		6010B	09/19/10	1
Selenium	U	1.6	5.0	mg/kg	O	6010B	09/20/10	5
Silver	U	0.16	0.50	mg/kg		6010B	09/20/10	1
Zinc	65.	0.34	1.5	mg/kg		6010B	09/19/10	1
Benzene	0.0021	0.00090	0.0025	mg/kg	J	8021/80	09/18/10	5
Toluene	0.0036	0.0015	0.025	mg/kg	J	8021/80	09/18/10	5
Ethylbenzene	0.0036	0.0013	0.0025	mg/kg		8021/80	09/18/10	5
Total Xylene	0.027	0.0028	0.0075	mg/kg		8021/80	09/18/10	5
TPH (GC/FID) Low Fraction	0.63	0.14	0.50	mg/kg		GRO	09/18/10	5
Surrogate Recovery-%								
a, a, a-Trifluorotoluene (FID)	98.1			% Rec.		8021/80	09/18/10	5
a, a, a-Trifluorotoluene (PID)	103.			% Rec.		8021/80	09/18/10	5
TPH (GC/FID) High Fraction	50.	0.77	4.0	mg/kg		3546/DR	09/20/10	1
Surrogate recovery(%)								
o-Terphenyl	51.3			% Rec.		3546/DR	09/20/10	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.0093	0.033	mg/kg		8270C	09/19/10	1
Acenaphthene	U	0.011	0.033	mg/kg		8270C	09/19/10	1
Acenaphthylene	U	0.011	0.033	mg/kg		8270C	09/19/10	1
Benzo(a)anthracene	U	0.0077	0.033	mg/kg		8270C	09/19/10	1
Benzo(a)pyrene	U	0.0074	0.033	mg/kg		8270C	09/19/10	1
Benzo(b)fluoranthene	U	0.0078	0.033	mg/kg		8270C	09/19/10	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/24/10 14:42 Printed: 09/24/10 15:09

L479303-01 (PH) - 9.4@22.2c

L479303-01 (PH) - 12@20.3c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

September 24, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L479303-01

Date Received : September 17, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GUNDERSON 18-5 DR
 Collected By : Brett Kennedy
 Collection Date : 09/16/10 12:55

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.0095	0.033	mg/kg		8270C	09/19/10	1
Benzo(k)fluoranthene	U	0.012	0.033	mg/kg		8270C	09/19/10	1
Chrysene	U	0.0091	0.033	mg/kg		8270C	09/19/10	1
Dibenz(a,h)anthracene	U	0.011	0.033	mg/kg		8270C	09/19/10	1
Fluoranthene	0.0081	0.0079	0.033	mg/kg	J	8270C	09/19/10	1
Fluorene	U	0.0095	0.033	mg/kg		8270C	09/19/10	1
Indeno(1,2,3-cd)pyrene	U	0.011	0.033	mg/kg		8270C	09/19/10	1
Naphthalene	0.22	0.016	0.033	mg/kg		8270C	09/19/10	1
Phenanthrene	0.10	0.0073	0.033	mg/kg		8270C	09/19/10	1
Pyrene	0.013	0.0089	0.033	mg/kg	J	8270C	09/19/10	1
Surrogate Recovery								
Nitrobenzene-d5	107.			% Rec.		8270C	09/19/10	1
2-Fluorobiphenyl	83.2			% Rec.		8270C	09/19/10	1
p-Terphenyl-d14	69.3			% Rec.		8270C	09/19/10	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/24/10 14:42 Printed: 09/24/10 15:09

L479303-01 (PH) - 9.4@22.2c

L479303-01 (PH) - 12@20.3c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

September 24, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L479303-02

Site ID :

Project # :

Date Received : September 17, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GUNDERSON 18-5 BG-N
 Collected By : Brett Kennedy
 Collection Date : 09/16/10 13:43

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.5			su		9045D	09/23/10	1
Sodium Adsorption Ratio	0.60					Calc.	09/21/10	1
Specific Conductance	100			umhos/cm		9050AMo	09/21/10	1
Arsenic	3.5	0.32	1.0	mg/kg		6010B	09/19/10	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/24/10 14:42 Printed: 09/24/10 15:09

L479303-02 (PH) - 7.5@21.6c

L479303-02 (PH) - 13@20.1c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859
 Tax I.D. 62-0814289
 Est. 1970

REPORT OF ANALYSIS

September 24, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Date Received : September 17, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GUNDERSON 18-5 BG-E
 Collected By : Brett Kennedy
 Collection Date : 09/16/10 13:52

ESC Sample # : L479303-03
 Site ID :
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	6.4			su		9045D	09/23/10	1
Sodium Adsorption Ratio	0.73					Calc.	09/21/10	1
Specific Conductance	7.8			umhos/cm		9050AMo	09/21/10	1
Arsenic	4.4	0.32	1.0	mg/kg		6010B	09/19/10	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.
 This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/24/10 14:42 Printed: 09/24/10 15:09
 L479303-03 (PH) - 13@19.9c
 L479303-03 (PH) - 6.4@21.8c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859
 Tax I.D. 62-0814289
 Est. 1970

REPORT OF ANALYSIS

September 24, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Date Received : September 17, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GUNDERSON 18-5 BG-S
 Collected By : Brett Kennedy
 Collection Date : 09/16/10 13:59

ESC Sample # : L479303-04
 Site ID :
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	6.8			su		9045D	09/23/10	1
Sodium Adsorption Ratio	0.53					Calc.	09/21/10	1
Specific Conductance	27.			umhos/cm		9050AMo	09/21/10	1
Arsenic	2.0	0.32	1.0	mg/kg		6010B	09/18/10	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.
 This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/24/10 14:42 Printed: 09/24/10 15:09
 L479303-04 (PH) - 12@20.3c
 L479303-04 (PH) - 6.8@21.3c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

September 24, 2010

Brett Kennedy
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L479303-05

Site ID :

Project # :

Date Received : September 17, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GUNDERSON 18-5 BG-W
 Collected By : Brett Kennedy
 Collection Date : 09/16/10 14:04

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	6.5			su		9045D	09/23/10	1
Sodium Adsorption Ratio	0.55					Calc.	09/21/10	1
Specific Conductance	56.			umhos/cm		9050AMo	09/21/10	1
Arsenic	2.1	0.32	1.0	mg/kg		6010B	09/18/10	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/24/10 14:42 Printed: 09/24/10 15:09

L479303-05 (PH) - 6.5@21.3c

L479303-05 (PH) - 12@20.3c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L479303-01	WG498940	SAMP	Benzene	R1381949	J
	WG498940	SAMP	Toluene	R1381949	J
	WG498841	SAMP	Selenium	R1382530	O
	WG498885	SAMP	Fluoranthene	R1382629	J
	WG498885	SAMP	Pyrene	R1382629	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

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
09/24/10 at 15:09:09

TSR Signing Reports: 134
R4 - Rush: Three Day

Sample: L479303-01 Account: OXYGJCO Received: 09/17/10 09:00 Due Date: 09/23/10 00:00 RPT Date: 09/24/10 14:42
UNV 551321 - MB 9/23/10
Sample: L479303-02 Account: OXYGJCO Received: 09/17/10 09:00 Due Date: 09/23/10 00:00 RPT Date: 09/24/10 14:42
Sample: L479303-03 Account: OXYGJCO Received: 09/17/10 09:00 Due Date: 09/23/10 00:00 RPT Date: 09/24/10 14:42
Sample: L479303-04 Account: OXYGJCO Received: 09/17/10 09:00 Due Date: 09/23/10 00:00 RPT Date: 09/24/10 14:42
Sample: L479303-05 Account: OXYGJCO Received: 09/17/10 09:00 Due Date: 09/23/10 00:00 RPT Date: 09/24/10 14:42

Company Name/Address:

OXY USA - Grand Junction, CO
Inc.

760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report to: *Brett Kennedy*
Email to: *brett.kennedy@oxy.com*

Project Description: *Pit Reclaims - Callbran*
City/State Collected: *Callbran*

Phone: (970) 263-3601
Client Project #: *---*
ESC Key: *---*

Collected by: *Brett Kennedy*
Site/Facility ID#: *---*
P.O.#: *---*

Collected by (signature): *Brett Kennedy*
Brett Kennedy
Immediately Packed on Ice N ___ Y ___
Date Results Needed:
Email? ___ No ___ Yes
FAX? ___ No ___ Yes

Sample ID
Comp/Grab Matrix* Depth Date Time

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs
Gunderson 18-5 DR	Comp	SS	4-N'	9/16/10	1255	2
Gunderson 18-5 B6-N	Grab		0-6"		1343	1
Gunderson 18-5 B6-E					1352	1
Gunderson 18-5 B6-S					1359	1
Gunderson 18-5 B6-W					1404	1

Analysis/Container/Preservative

Analysis/Container/Preservative	Remarks/Contaminant	Sample # (lab only)
BTEX / GRO / PRO	PAH	1479363-2
EC / IS / A / R / PH	AS	102
Ba, Ca, Cr, Cu, Pb, Hg, Ni, Se, Mn, Zn		103
		104
		105

Prepared by:

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt Juliet, TN 37122

Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859
B013

CoCode: OXYGJCO (lab use only)
Template/Prelogin
Shipped Via:

Remarks/Contaminant

Remarks/Contaminant	Sample # (lab only)
	1479363-2
	102
	103
	104
	105

Alternate billing information:

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

Remarks:

4341 9807 1655

Relinquished by (Signature): *Brett Kennedy*
Relinquished by (Signature): *Brett Kennedy*
Relinquished by (Signature): *Brett Kennedy*

Date: 9/16/10 1630
Date:
Date:
Received by (Signature):
Received by (Signature):
Received for lab by (Signature): *Brett Kennedy*

Samples returned via: UPS FedEx Courier
Bottles Received: 6
Temp: 3.10C
Date: 9-17-10
Time: 9:00

Condition: (lab use only) *OK*
CoC Seals Intact: Y ___ N ___ NA
pH Checked:
NCF:

pH _____ Temp _____

Flow _____ Other _____

Blair Rollins
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Friday December 02, 2011

Report Number: L548472

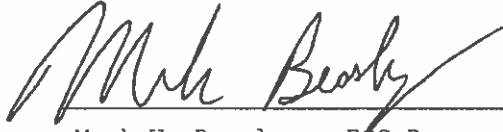
Samples Received: 11/23/11

Client Project: 900546.0005.010

Description: Gipp 18-12

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,
TX - T104704245, OK-9915, PA - 68-02979

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.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

December 02, 2011

Blair Rollins
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Date Received : November 23, 2011
 Description : Gipp 18-12
 Sample ID : GIPP 18-12 BG-CS-NE 12-18 IN
 Collected By : LG
 Collection Date : 11/22/11 12:30

ESC Sample # : L548472-01
 Site ID :
 Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	12/01/11	1
Chromium, Trivalent	15.	0.17	2.0	mg/kg		Calc.	11/27/11	1
ORP	100			mV	T8	2580	12/01/11	1
pH	8.1			su		9045D	11/28/11	1
Sodium Adsorption Ratio	0.57					Calc.	11/30/11	1
Specific Conductance	210			umhos/cm		9050AMo	11/30/11	1
Mercury	0.0039	0.0015	0.020	mg/kg	J	7471	11/28/11	1
Arsenic	U	0.32	1.0	mg/kg		6010B	11/27/11	1
Barium	110	0.050	0.25	mg/kg		6010B	11/27/11	1
Cadmium	U	0.040	0.25	mg/kg		6010B	11/27/11	1
Chromium	15.	0.085	0.50	mg/kg		6010B	11/27/11	1
Copper	17.	0.21	1.0	mg/kg		6010B	11/27/11	1
Lead	8.4	0.090	0.25	mg/kg		6010B	11/27/11	1
Nickel	13.	0.26	1.0	mg/kg		6010B	11/27/11	1
Selenium	2.5	0.32	1.0	mg/kg		6010B	11/27/11	1
Silver	0.17	0.16	0.50	mg/kg	J	6010B	11/27/11	1
Zinc	51.	0.34	1.5	mg/kg		6010B	11/27/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/25/11	5
Surrogate Recovery (70-130) a, a, a-Trifluorotoluene (FID)	95.3			% Rec.		602/801	11/25/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/24/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/24/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/24/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/24/11	5
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	11/24/11	5
Dibromofluoromethane	99.5			% Rec.		8260B	11/24/11	5
a, a, a-Trifluorotoluene	109.			% Rec.		8260B	11/24/11	5
4-Bromofluorobenzene	93.0			% Rec.		8260B	11/24/11	5
TPH (GC/FID) High Fraction	U	0.77	4.0	mg/kg		3546/DR	11/29/11	1
Surrogate recovery (%) o-Terphenyl	77.7			% Rec.		3546/DR	11/29/11	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 12/01/11 16:41 Revised: 12/02/11 08:42
 L548472-01 (PH) - 8.07@18.4c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

December 02, 2011

Blair Rollins
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Date Received : November 23, 2011
 Description : Gipp 18-12
 Sample ID : GIPP 18-12 BG-CS-NE 12-18 IN
 Collected By : LG
 Collection Date : 11/22/11 12:30

ESC Sample # : L548472-01
 Site ID :
 Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	11/28/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/28/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/28/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/28/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/28/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/28/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/28/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/28/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/28/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/28/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/28/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/28/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/28/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/28/11	1
Surrogate Recovery								
Nitrobenzene-d5	67.8			% Rec.		8270C-S	11/28/11	1
2-Fluorobiphenyl	61.6			% Rec.		8270C-S	11/28/11	1
p-Terphenyl-d14	80.1			% Rec.		8270C-S	11/28/11	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.
 This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 12/01/11 16:41 Revised: 12/02/11 08:42
 L548472-01 (PH) - 8.07@18.4c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

December 02, 2011

Blair Rollins
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L548472-02

Date Received : November 23, 2011
 Description : Gipp 18-12

Site ID :

Sample ID : GIPP 18-12 BG-E 12-18 IN

Project # : 900546.0005.010

Collected By : LG
 Collection Date : 11/22/11 12:47

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	12/01/11	1
Chromium, Trivalent	14.	0.17	2.0	mg/kg		Calc.	11/27/11	1
ORP	110			mV	T8	2580	12/01/11	1
pH	7.2			su		9045D	11/28/11	1
Sodium Adsorption Ratio	0.90					Calc.	11/30/11	1
Specific Conductance	34.			umhos/cm		9050AMo	11/30/11	1
Mercury	0.0074	0.0015	0.020	mg/kg	J	7471	11/28/11	1
Arsenic	U	0.32	1.0	mg/kg		6010B	11/27/11	1
Barium	100	0.050	0.25	mg/kg		6010B	11/27/11	1
Cadmium	U	0.040	0.25	mg/kg		6010B	11/27/11	1
Chromium	14.	0.085	0.50	mg/kg		6010B	11/27/11	1
Copper	19.	0.21	1.0	mg/kg		6010B	11/27/11	1
Lead	9.1	0.090	0.25	mg/kg		6010B	11/27/11	1
Nickel	13.	0.26	1.0	mg/kg		6010B	11/27/11	1
Selenium	1.9	0.32	1.0	mg/kg		6010B	11/27/11	1
Silver	0.26	0.16	0.50	mg/kg	J	6010B	11/27/11	1
Zinc	56.	0.34	1.5	mg/kg		6010B	11/27/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/25/11	5
Surrogate Recovery (70-130) a, a, a-Trifluorotoluene (FID)	96.2			% Rec.		602/801	11/25/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/24/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/24/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/24/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/24/11	5
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	11/24/11	5
Dibromofluoromethane	101.			% Rec.		8260B	11/24/11	5
a, a, a-Trifluorotoluene	110.			% Rec.		8260B	11/24/11	5
4-Bromofluorobenzene	89.9			% Rec.		8260B	11/24/11	5
TPH (GC/FID) High Fraction	U	0.77	4.0	mg/kg		3546/DR	11/29/11	1
Surrogate recovery(%) o-Terphenyl	68.4			% Rec.		3546/DR	11/29/11	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 12/01/11 16:41 Revised: 12/02/11 08:42
 L548472-02 (PH) - 7.18@18.6c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

December 02, 2011

Blair Rollins
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Date Received : November 23, 2011
 Description : Gipp 18-12
 Sample ID : GIPP 18-12 BG-E 12-18 IN
 Collected By : LG
 Collection Date : 11/22/11 12:47

ESC Sample # : L548472-02
 Site ID :
 Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	11/28/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/28/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/28/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/28/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/28/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/28/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/28/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/28/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/28/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/28/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/28/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/28/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/28/11	1
2-Chloronaphthalene	0.0036	0.00060	0.0060	mg/kg	J	8270C-S	11/28/11	1
Surrogate Recovery								
Nitrobenzene-d5	62.4			% Rec.		8270C-S	11/28/11	1
2-Fluorobiphenyl	62.8			% Rec.		8270C-S	11/28/11	1
p-Terphenyl-d14	80.4			% Rec.		8270C-S	11/28/11	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.
 This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 12/01/11 16:41 Revised: 12/02/11 08:42
 L548472-02 (PH) - 7.18@18.6c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859
 Tax I.D. 62-0814289
 Est. 1970

REPORT OF ANALYSIS

December 02, 2011

Blair Rollins
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L548472-03

Date Received : November 23, 2011
 Description : Gipp 18-12
 Sample ID : GIPP 18-12 BG-W 12-18 IN
 Collected By : LG
 Collection Date : 11/22/11 13:14

Site ID :
 Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	6.9			su		9045D	11/28/11	1
Sodium Adsorption Ratio	0.65					Calc.	11/30/11	1
Specific Conductance	32.			umhos/cm		9050AMo	11/30/11	1
Mercury	0.0060	0.0015	0.020	mg/kg	J	7471	11/28/11	1
Arsenic	U	0.32	1.0	mg/kg		6010B	11/27/11	1
Barium	120	0.050	0.25	mg/kg		6010B	11/27/11	1
Cadmium	U	0.040	0.25	mg/kg		6010B	11/27/11	1
Chromium	17.	0.085	0.50	mg/kg		6010B	11/27/11	1
Copper	17.	0.21	1.0	mg/kg		6010B	11/27/11	1
Lead	9.2	0.090	0.25	mg/kg		6010B	11/27/11	1
Nickel	13.	0.26	1.0	mg/kg		6010B	11/27/11	1
Selenium	2.9	0.32	1.0	mg/kg		6010B	11/27/11	1
Silver	0.41	0.16	0.50	mg/kg	J	6010B	11/27/11	1
Zinc	53.	0.34	1.5	mg/kg		6010B	11/27/11	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.
 This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 12/01/11 16:41 Revised: 12/02/11 08:42
 L548472-03 (PH) - 6.86@18.4c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

December 02, 2011

Blair Rollins
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L548472-04

Date Received : November 23, 2011
 Description : Gipp 18-12
 Sample ID : GIPP 18-12 BG-S 12-18 IN
 Collected By : LG
 Collection Date : 11/22/11 13:26

Site ID :
 Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	1.3	0.71	2.0	mg/kg	J	3060A/7	12/01/11	1
Chromium, Trivalent	13.	0.17	2.0	mg/kg		Calc.	11/27/11	1
ORP	120			mV	T8	2580	12/01/11	1
pH	7.1			su		9045D	11/28/11	1
Sodium Adsorption Ratio	0.33					Calc.	11/30/11	1
Specific Conductance	33.			umhos/cm		9050AMo	11/30/11	1
Mercury	0.024	0.0015	0.020	mg/kg		7471	11/28/11	1
Arsenic	U	0.32	1.0	mg/kg		6010B	11/27/11	1
Barium	130	0.050	0.25	mg/kg		6010B	11/27/11	1
Cadmium	U	0.040	0.25	mg/kg		6010B	11/27/11	1
Chromium	14.	0.085	0.50	mg/kg		6010B	11/27/11	1
Copper	17.	0.21	1.0	mg/kg		6010B	11/27/11	1
Lead	9.4	0.090	0.25	mg/kg		6010B	11/27/11	1
Nickel	13.	0.26	1.0	mg/kg		6010B	11/27/11	1
Selenium	2.4	0.32	1.0	mg/kg	P1	6010B	11/27/11	1
Silver	0.22	0.16	0.50	mg/kg	P1	6010B	11/27/11	1
Zinc	43.	0.34	1.5	mg/kg		6010B	11/27/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/25/11	5
Surrogate Recovery (70-130) a, a, a-Trifluorotoluene (FID)	95.9			% Rec.		602/801	11/25/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/24/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/24/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/24/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/24/11	5
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	11/24/11	5
Dibromofluoromethane	101.			% Rec.		8260B	11/24/11	5
a, a, a-Trifluorotoluene	106.			% Rec.		8260B	11/24/11	5
4-Bromofluorobenzene	99.1			% Rec.		8260B	11/24/11	5
TPH (GC/FID) High Fraction	U	0.77	4.0	mg/kg		3546/DR	11/29/11	1
Surrogate recovery(%) o-Terphenyl	63.4			% Rec.		3546/DR	11/29/11	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 12/01/11 16:41 Revised: 12/02/11 08:42
 L548472-04 (PH) - 7.10@18.5c



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

December 02, 2011

Blair Rollins
 OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

ESC Sample # : L548472-04

Site ID :

Project # : 900546.0005.010

Date Received : November 23, 2011
 Description : Gipp 18-12
 Sample ID : GIPP 18-12 BG-S 12-18 IN
 Collected By : LG
 Collection Date : 11/22/11 13:26

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	11/28/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/28/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/28/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/28/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/28/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/28/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/28/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/28/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/28/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/28/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/28/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/28/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/28/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/28/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/28/11	1
Surrogate Recovery								
Nitrobenzene-d5	74.2			% Rec.		8270C-S	11/28/11	1
2-Fluorobiphenyl	65.9			% Rec.		8270C-S	11/28/11	1
p-Terphenyl-d14	104.			% Rec.		8270C-S	11/28/11	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 12/01/11 16:41 Revised: 12/02/11 08:42
 L548472-04 (PH) - 7.10@18.5c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L548472-01	WG567265	SAMP	Silver	R1946576	J
	WG567326	SAMP	Mercury	R1948072	J
	WG567942	SAMP	ORP	R1951496	T8
L548472-02	WG567265	SAMP	Silver	R1946576	J
	WG567326	SAMP	Mercury	R1948072	J
	WG567421	SAMP	2-Chloronaphthalene	R1948173	J
	WG567942	SAMP	ORP	R1951496	T8
L548472-03	WG567265	SAMP	Silver	R1946576	J
	WG567326	SAMP	Mercury	R1948072	J
L548472-04	WG567265	SAMP	Selenium	R1946576	P1
	WG567265	SAMP	Silver	R1946576	P1
	WG567578	SAMP	Chromium, Hexavalent	R1951012	J
	WG567942	SAMP	ORP	R1951496	T8

Attachment B
Explanation of QC Qualifier Codes

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

Alternate billing information:

CO Table 910

Report to:

City/State Collected
Email to: Stavis@oxy.com
Daniel - Facility @oxy.com

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

Project Description: 18-12 Gipp
Phone: (970) 263-3601
FAX: 905516.010

Client Project #: 0005
Site/Facility ID#: 18-12

Collected by: LC
Collected by (signature): 
Packed on: Nov 18, 2005

Sample ID	Comp/Grab	Matrix*	Depth	Date Results Needed:		No. of Cntrs
				Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	FAX? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Gipp 18-12 BG-CS-NE	Grab	SS	12"-18"	11/22/11	12:30	3
Gipp 18-12 BG-E	Grab	SS	12"-18"	11/22/11	12:47	3
Gipp 18-12 BG-W	Grab	SS	12"-18"	11/22/11	1:14	3
Gipp 18-12 BG-S	Grab	SS	12"-18"	11/22/11	1:26	3

Analysis/Container/Preservative

Analysis/Container/Preservative	SAR, SPCON, pH	MRCRA8 + Cu, Ni, Zn	CR3, CR6S
V8260BTEX, GRO	X	X	X
DRO, SV8270PAHSIM	X	X	X
DR3, CR6S	X	X	X




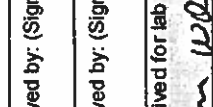
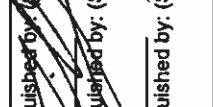
CoCode OXYGJCO (lab use only)	Sample # (lab only)
Template/Prelogin	654847201
Shipped Via:	OC
Remarks/Contaminant	OC
	OC
	OC

Prepared by:

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859

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

Remarks: 50400621277BW

Relinquished by (Signature): 	Date: 11/22/11	Time: 5:00	Received by (Signature): 	Date: 11/23/11	Time: 9:00
Relinquished by (Signature): 	Date:	Time:	Received by (Signature): 	Date:	Time:
Relinquished by (Signature): 	Date:	Time:	Received for lab by (Signature): <u>Yum W. Lee</u>	Date:	Time:

Condition: (lab use only)	Other: O/C
pH Checked:	NCF:

Samples returned via: UPS Courier

Bottles Received: 354
Time: 11:30Z

Date: 11/23/11

Time: 9:00