

State of Colorado

Oil and Gas Conservation Commission

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



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 803b.)

RECEIVED
12/2/2011

1. OGCC Operator Number: 66571	4. Contact Name: Daniel I. Padilla	Complete the Attachment Checklist OP OGCC
2. Name of Operator: OXY USA WTP LP	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- 045-10687	OGCC Facility ID Number 291974	Survey Plat
6. Well/Facility Name: CC Pond 1 / 697-15-54	7. Well/Facility Number 697-15-54	Directional Survey
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): SWSE Sec 15, T6S, R97W 8th PM		Surface Eqpm Diagram
9. County: Garfield	10. Field Name: Grand Valley	Technical Info Page <input checked="" type="checkbox"/>
11. Federal, Indian or State Lease Number:		Other Lab data, Map <input checked="" type="checkbox"/>

General Notice

<input type="checkbox"/> 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"/> FNU/FSL <input type="checkbox"/> FEL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> attach directional survey
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer	
Latitude	Distance to nearest property line
Longitude	Distance to nearest lease line
Ground Elevation	Distance to nearest well same formation
	Is location in a High Density Area (rule 603b)? Yes/No <input type="checkbox"/>
	Surface owner consultation date: _____
GPS DATA: Date of Measurement _____ PDOP Reading _____ Instrument Operator's Name _____	
<input type="checkbox"/> CHANGE SPACING UNIT Formation _____ Formation Code _____ Spacing order number _____ Unit Acreage _____ Unit configuration _____	<input type="checkbox"/> Remove from surface bond Signed surface use agreement attached
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling): Effective Date: _____ Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	<input type="checkbox"/> CHANGE WELL NAME From: _____ NUMBER _____ To: _____ Effective Date: _____
<input type="checkbox"/> ABANDONED LOCATION: Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Ready for Inspection: _____	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS Date well shut in or temporarily abandoned: _____ Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No MIT required if shut in longer than two years. Date of last MIT _____
<input type="checkbox"/> SPUD DATE: _____	<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (5 mos from date casing set)
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK Method used _____ Cementing tool setting/perf depth _____ Cement volume _____ Cement top _____ Cement bottom _____ Date _____ *submit cbl and cement job summaries	
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004. Final reclamation will commence on approximately _____ <input type="checkbox"/> Final reclamation is completed and site is ready for inspection.	

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent Approximate Start Date: _____	<input type="checkbox"/> 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: Daniel I. Padilla Date: 12/2/11 Email: daniel_padilla@oxy.com
Print Name: Daniel I. Padilla Title: Regulatory Advisor

OGCC Approved: Chris Canfield

Title: FOR

Date: 06/19/2012

CONDITIONS OF APPROVAL, IF ANY:

Chris Canfield
EPS NW Region

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 66571 API Number: 05-045-10687
2. Name of Operator: OXY USA WTP LP OGCC Facility ID # 291974
3. Well/Facility Name: CC Pond 1 / 697-15-54 Well/Facility Number: 697-15-54
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SWSE Sec 15, T6S, R97W 6th PM

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 WTP LP (Oxy) has completed reclamation of the above-mentioned Storage Pond and requests to apply a different standard (see table on next page) to the COGCC Table 910-1 concentration levels for Arsenic (As). Based on post reclamation levels for As being below undisturbed background levels, Oxy's sundry requests to waive the COGCC Table 910-1 concentration for As. In this particular situation, the below the pit liner (Post Reclaim 10/28/2011) concentration for As is above COGCC Table 910-1 standards, but is below undisturbed background levels (see sampling locations on included location map).

The sampling method Oxy employed was to take a representative random grab sample for each background sample location. 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 10/28/2011).

The reclaimed pit was contoured to be level with the pad grade to minimize stormwater runoff, during the operational phase of the pad. Final pad reclamation will occur at the end of the life of the pad.



OXY USA WTP LP

760 Horizon Drive, Suite 101
Grand Junction, CO 81506

Pond 1 Closure Sampling

Updated: December 1, 2011

Garfield County, Colorado

0 0.005 0.01 0.02 0.03 0.04 0.05 Miles



Pond / Pit



Pit Samples



BG Samples



Cap Samples



Pond 1 BG Sampling

Updated: December 1, 2011 Garfield County, Colorado

0 0.05 0.1 0.2 0.3 0.4 0.5 Mile

Upper Loop Pipeline

Pond / Pit



Pit Samples



BG Samples



Cap Samples





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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Friday November 04, 2011

Report Number: L544028

Samples Received: 10/28/11

Client Project:

Description: Pond 1 Excavation

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

November 04, 2011

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : NORTH 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 09:54

ESC Sample # : L544028-01

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	11/04/11	1
Chromium, Trivalent	55.	0.17	2.0	mg/kg		Calc.	10/30/11	1
ORP	230			mV		2580	11/02/11	1
pH	8.2			su		9045D	10/29/11	1
Sodium Adsorption Ratio	2.8					Calc.	11/01/11	1
Specific Conductance	280			umhos/cm		9050AMo	10/30/11	1
Mercury	0.0098	0.0015	0.020	mg/kg	J	7471	11/02/11	1
Arsenic	9.5	0.32	1.0	mg/kg		6010B	10/30/11	1
Barium	250	0.050	0.25	mg/kg	V	6010B	10/30/11	1
Cadmium	0.82	0.040	0.25	mg/kg		6010B	10/30/11	1
Chromium	55.	0.085	0.50	mg/kg		6010B	10/30/11	1
Copper	6.5	0.21	1.0	mg/kg		6010B	10/30/11	1
Lead	20.	0.090	0.25	mg/kg		6010B	10/30/11	1
Nickel	22.	0.26	1.0	mg/kg		6010B	10/30/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	11/02/11	1
Silver	0.60	0.16	0.50	mg/kg	P1	6010B	10/30/11	1
Zinc	34.	0.34	1.5	mg/kg		6010B	10/30/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	10/30/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	97.1			% Rec.		602/801	10/30/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	10/29/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	10/29/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	10/29/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	10/29/11	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	10/29/11	5
Dibromofluoromethane	117.			% Rec.		8260B	10/29/11	5
a,a,a-Trifluorotoluene	96.5			% Rec.		8260B	10/29/11	5
4-Bromofluorobenzene	94.1			% Rec.		8260B	10/29/11	5
TPH (GC/FID) High Fraction	2.7	0.77	4.0	mg/kg	J	3546/DR	11/03/11	1
Surrogate recovery(%) o-Terphenyl	68.3			% Rec.		3546/DR	11/03/11	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: 11/04/11 14:51 Printed: 11/04/11 14:59
L544028-01 (PH) - 8.24@21.1c



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

Daniel Padilla
OKY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 04, 2011

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : NORTH 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 09:54

ESC Sample # : L544028-01

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/03/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/03/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/03/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Naphthalene	0.00077	0.00065	0.0060	mg/kg	J	8270C-S	11/03/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/03/11	1
Pyrene	0.0011	0.00059	0.0060	mg/kg	J	8270C-S	11/03/11	1
1-Methylnaphthalene	0.0014	0.00079	0.0060	mg/kg	J	8270C-S	11/03/11	1
2-Methylnaphthalene	0.0027	0.00059	0.0060	mg/kg	J	8270C-S	11/03/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/03/11	1
Surrogate Recovery								
Nitrobenzene-d5	87.9			% Rec.		8270C-S	11/03/11	1
2-Fluorobiphenyl	91.7			% Rec.		8270C-S	11/03/11	1
p-Terphenyl-d14	91.4			% Rec.		8270C-S	11/03/11	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: 11/04/11 14:51 Printed: 11/04/11 14:59
L544028-01 (PH) - 8.24@21.1c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 04, 2011

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : NORTH CENTER 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 10:05

ESC Sample # : L544028-02

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	11/04/11	1
Chromium, Trivalent	61.	0.17	2.0	mg/kg		Calc.	10/30/11	1
ORP	200			mV		2580	11/02/11	1
pH	8.3			su		9045D	10/29/11	1
Sodium Adsorption Ratio	2.0					Calc.	11/01/11	1
Specific Conductance	200			umhos/cm		9050AMo	10/30/11	1
Mercury	0.010	0.0015	0.020	mg/kg	J	7471	11/02/11	1
Arsenic	9.6	0.32	1.0	mg/kg		6010B	10/30/11	1
Barium	190	0.050	0.25	mg/kg		6010B	10/30/11	1
Cadmium	0.74	0.040	0.25	mg/kg		6010B	10/30/11	1
Chromium	61.	0.085	0.50	mg/kg		6010B	10/30/11	1
Copper	7.5	0.21	1.0	mg/kg		6010B	10/30/11	1
Lead	20.	0.090	0.25	mg/kg		6010B	10/30/11	1
Nickel	24.	0.26	1.0	mg/kg		6010B	10/30/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	11/02/11	1
Silver	0.39	0.16	0.50	mg/kg	J	6010B	10/30/11	1
Zinc	37.	0.34	1.5	mg/kg		6010B	10/30/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	10/30/11	5
Surrogate Recovery (70-130) a, a, a-Trifluorotoluene (FID)	98.5			% Rec.		602/801	10/30/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	10/29/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	10/29/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	10/29/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	10/29/11	5
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	10/29/11	5
Dibromofluoromethane	116.			% Rec.		8260B	10/29/11	5
a, a, a-Trifluorotoluene	96.3			% Rec.		8260B	10/29/11	5
4-Bromofluorobenzene	90.7			% Rec.		8260B	10/29/11	5
TPH (GC/FID) High Fraction	1.3	0.77	4.0	mg/kg	J	3546/DR	11/03/11	1
Surrogate recovery(%) o-Terphenyl	76.5			% Rec.		3546/DR	11/03/11	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: 11/04/11 14:51 Printed: 11/04/11 14:59
L544028-02 (PH) - 8.28@20.9c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 04, 2011

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : NORTH CENTER 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 10:05

ESC Sample # : L544028-02

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/03/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/03/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/03/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/03/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/03/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/03/11	1
1-Methylnaphthalene	0.0010	0.00079	0.0060	mg/kg	J	8270C-S	11/03/11	1
2-Methylnaphthalene	0.0016	0.00059	0.0060	mg/kg	J	8270C-S	11/03/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/03/11	1
Surrogate Recovery								
Nitrobenzene-d5	81.2			% Rec.		8270C-S	11/03/11	1
2-Fluorobiphenyl	80.4			% Rec.		8270C-S	11/03/11	1
p-Terphenyl-d14	84.6			% Rec.		8270C-S	11/03/11	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: 11/04/11 14:51 Printed: 11/04/11 14:59

L544028-02 (PH) - 8.28@20.9c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 04, 2011

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : CENTER 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 10:16

ESC Sample # : L544028-03

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	11/04/11	1
Chromium, Trivalent	57.	0.17	2.0	mg/kg		Calc.	10/30/11	1
ORP	190			mV		2580	11/02/11	1
pH	8.4			su		9045D	10/29/11	1
Sodium Adsorption Ratio	2.3					Calc.	11/01/11	1
Specific Conductance	170			umhos/cm		9050AMo	10/30/11	1
Mercury	0.0093	0.0015	0.020	mg/kg	J	7471	11/02/11	1
Arsenic	10.	0.32	1.0	mg/kg		6010B	10/30/11	1
Barium	220	0.050	0.25	mg/kg		6010B	10/30/11	1
Cadmium	0.77	0.040	0.25	mg/kg		6010B	10/30/11	1
Chromium	57.	0.085	0.50	mg/kg		6010B	10/30/11	1
Copper	7.6	0.21	1.0	mg/kg		6010B	10/30/11	1
Lead	25.	0.090	0.25	mg/kg		6010B	10/30/11	1
Nickel	24.	0.26	1.0	mg/kg		6010B	10/30/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	11/02/11	1
Silver	0.42	0.16	0.50	mg/kg	J	6010B	10/30/11	1
Zinc	37.	0.34	1.5	mg/kg		6010B	10/30/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	10/31/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	96.5			% Rec.		602/801	10/31/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	10/29/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	10/29/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	10/29/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	10/29/11	5
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	10/29/11	5
Dibromofluoromethane	119.			% Rec.		8260B	10/29/11	5
a,a,a-Trifluorotoluene	97.7			% Rec.		8260B	10/29/11	5
4-Bromofluorobenzene	93.1			% Rec.		8260B	10/29/11	5
TPH (GC/FID) High Fraction	2.2	0.77	4.0	mg/kg	J	3546/DR	11/03/11	1
Surrogate recovery(%) o-Terphenyl	94.1			% Rec.		3546/DR	11/03/11	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: 11/04/11 14:51 Printed: 11/04/11 14:59
L544028-03 (PH) - 8.45@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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 04, 2011

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : CENTER 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 10:16

ESC Sample # : L544028-03

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/03/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/03/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/03/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/03/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/03/11	1
Pyrene	0.00082	0.00059	0.0060	mg/kg	J	8270C-S	11/03/11	1
1-Methylnaphthalene	0.0012	0.00079	0.0060	mg/kg	J	8270C-S	11/03/11	1
2-Methylnaphthalene	0.0022	0.00059	0.0060	mg/kg	J	8270C-S	11/03/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/03/11	1
Surrogate Recovery								
Nitrobenzene-d5	73.6			% Rec.		8270C-S	11/03/11	1
2-Fluorobiphenyl	77.2			% Rec.		8270C-S	11/03/11	1
p-Terphenyl-d14	64.2			% Rec.		8270C-S	11/03/11	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: 11/04/11 14:51 Printed: 11/04/11 14:59

L544028-03 (PH) - 8.45@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

November 04, 2011

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : SOUTH CENTER 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 10:32

ESC Sample # : L544028-04

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	11/04/11	1
Chromium, Trivalent	57.	0.17	2.0	mg/kg		Calc.	10/30/11	1
ORP	190			mV		2580	11/02/11	1
pH	8.6			su		9045D	10/29/11	1
Sodium Adsorption Ratio	2.2					Calc.	11/01/11	1
Specific Conductance	160			umhos/cm		9050AMo	10/30/11	1
Mercury	0.0076	0.0015	0.020	mg/kg	J	7471	11/02/11	1
Arsenic	9.1	0.32	1.0	mg/kg		6010B	10/30/11	1
Barium	240	0.050	0.25	mg/kg		6010B	10/30/11	1
Cadmium	0.68	0.040	0.25	mg/kg		6010B	10/30/11	1
Chromium	57.	0.085	0.50	mg/kg		6010B	10/30/11	1
Copper	6.8	0.21	1.0	mg/kg		6010B	10/30/11	1
Lead	20.	0.090	0.25	mg/kg		6010B	10/30/11	1
Nickel	22.	0.26	1.0	mg/kg		6010B	10/30/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	11/02/11	1
Silver	0.38	0.16	0.50	mg/kg	J	6010B	10/30/11	1
Zinc	35.	0.34	1.5	mg/kg		6010B	10/30/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	10/30/11	5
Surrogate Recovery (70-130)								
a,a,a-Trifluorotoluene (FID)	102.			% Rec.		602/801	10/30/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	10/29/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	10/29/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	10/29/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	10/29/11	5
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	10/29/11	5
Dibromofluoromethane	117.			% Rec.		8260B	10/29/11	5
a,a,a-Trifluorotoluene	96.0			% Rec.		8260B	10/29/11	5
4-Bromofluorobenzene	91.4			% Rec.		8260B	10/29/11	5
TPH (GC/FID) High Fraction	1.9	0.77	4.0	mg/kg	J	3546/DR	11/03/11	1
Surrogate recovery(%)								
o-Terphenyl	93.8			% Rec.		3546/DR	11/03/11	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: 11/04/11 14:51 Printed: 11/04/11 14:59
L544028-04 (PH) - 8.63@20.9c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 04, 2011

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : SOUTH CENTER 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 10:32

ESC Sample # : L544028-04

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/03/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/03/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/03/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/03/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/03/11	1
Pyrene	0.00087	0.00059	0.0060	mg/kg	J	8270C-S	11/03/11	1
1-Methylnaphthalene	0.0015	0.00079	0.0060	mg/kg	J	8270C-S	11/03/11	1
2-Methylnaphthalene	0.0027	0.00059	0.0060	mg/kg	J	8270C-S	11/03/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/03/11	1
Surrogate Recovery								
Nitrobenzene-d5	65.6			% Rec.		8270C-S	11/03/11	1
2-Fluorobiphenyl	67.5			% Rec.		8270C-S	11/03/11	1
p-Terphenyl-d14	75.9			% Rec.		8270C-S	11/03/11	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: 11/04/11 14:51 Printed: 11/04/11 14:59

L544028-04 (PH) - 8.63020.9c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 04, 2011

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : SOUTH 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 10:39

ESC Sample # : L544028-05

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	11/04/11	1
Chromium, Trivalent	53.	0.17	2.0	mg/kg		Calc.	10/30/11	1
ORP	180			mV		2580	11/02/11	1
pH	8.6			su		9045D	10/29/11	1
Sodium Adsorption Ratio	2.4					Calc.	11/01/11	1
Specific Conductance	160			umhos/cm		9050AMo	10/30/11	1
Mercury	0.0086	0.0015	0.020	mg/kg	J	7471	11/02/11	1
Arsenic	8.0	0.32	1.0	mg/kg		6010B	10/30/11	1
Barium	250	0.050	0.25	mg/kg		6010B	10/30/11	1
Cadmium	0.62	0.040	0.25	mg/kg		6010B	10/30/11	1
Chromium	53.	0.085	0.50	mg/kg		6010B	10/30/11	1
Copper	6.3	0.21	1.0	mg/kg		6010B	10/30/11	1
Lead	18.	0.090	0.25	mg/kg		6010B	10/30/11	1
Nickel	20.	0.26	1.0	mg/kg		6010B	10/30/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	11/02/11	1
Silver	0.30	0.16	0.50	mg/kg	J	6010B	10/30/11	1
Zinc	33.	0.34	1.5	mg/kg		6010B	10/30/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	10/30/11	5
Surrogate Recovery (70-130)								
a, a, a-Trifluorotoluene (FID)	101.			% Rec.		602/801	10/30/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	10/29/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	10/29/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	10/29/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	10/29/11	5
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	10/29/11	5
Dibromofluoromethane	119.			% Rec.		8260B	10/29/11	5
a, a, a-Trifluorotoluene	95.7			% Rec.		8260B	10/29/11	5
4-Bromofluorobenzene	92.7			% Rec.		8260B	10/29/11	5
TPH (GC/FID) High Fraction	240	0.77	4.0	mg/kg		3546/DR	11/02/11	1
Surrogate recovery(%)								
o-Terphenyl	51.9			% Rec.		3546/DR	11/02/11	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: 11/04/11 14:51 Printed: 11/04/11 14:59

L544028-05 (PH) - 8.61@20.9c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 04, 2011

Date Received : October 28, 2011
Description : Pond 1 Excavation
Sample ID : SOUTH 10-12FT
Collected By : Brennen Graff
Collection Date : 10/27/11 10:39

ESC Sample # : L544028-05

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/03/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/03/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/03/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/03/11	1
Fluorene	0.00090	0.00055	0.0060	mg/kg	J	8270C-S	11/03/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/03/11	1
Naphthalene	0.011	0.00065	0.0060	mg/kg		8270C-S	11/03/11	1
Phenanthrene	0.0036	0.00074	0.0060	mg/kg	J	8270C-S	11/03/11	1
Pyrene	0.0010	0.00059	0.0060	mg/kg	J	8270C-S	11/03/11	1
1-Methylnaphthalene	0.013	0.00079	0.0060	mg/kg		8270C-S	11/03/11	1
2-Methylnaphthalene	0.017	0.00059	0.0060	mg/kg		8270C-S	11/03/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/03/11	1
Surrogate Recovery								
Nitrobenzene-d5	59.6			% Rec.		8270C-S	11/03/11	1
2-Fluorobiphenyl	72.4			% Rec.		8270C-S	11/03/11	1
p-Terphenyl-d14	65.2			% Rec.		8270C-S	11/03/11	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EGL

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: 11/04/11 14:51 Printed: 11/04/11 14:59
L544028-05 (PH) - 8.61@20.9c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L544028-01	WG563049	SAMP	Barium	R1914594	V
	WG563049	SAMP	Silver	R1914594	P1
	WG563223	SAMP	TPH (GC/FID) High Fraction	R1919813	J
	WG563141	SAMP	Mercury	R1918672	J
	WG563652	SAMP	Naphthalene	R1920114	J
	WG563652	SAMP	Pyrene	R1920114	J
	WG563652	SAMP	1-Methylnaphthalene	R1920114	J
	WG563652	SAMP	2-Methylnaphthalene	R1920114	J
L544028-02	WG563049	SAMP	Silver	R1914594	J
	WG563223	SAMP	TPH (GC/FID) High Fraction	R1919813	J
	WG563141	SAMP	Mercury	R1918672	J
	WG563652	SAMP	1-Methylnaphthalene	R1920114	J
	WG563652	SAMP	2-Methylnaphthalene	R1920114	J
	WG563049	SAMP	Silver	R1914594	J
L544028-03	WG563223	SAMP	TPH (GC/FID) High Fraction	R1919813	J
	WG563141	SAMP	Mercury	R1918672	J
	WG563652	SAMP	Pyrene	R1920114	J
	WG563652	SAMP	1-Methylnaphthalene	R1920114	J
	WG563652	SAMP	2-Methylnaphthalene	R1920114	J
	WG563049	SAMP	Silver	R1914594	J
L544028-04	WG563223	SAMP	TPH (GC/FID) High Fraction	R1919813	J
	WG563141	SAMP	Mercury	R1918672	J
	WG563652	SAMP	Pyrene	R1920114	J
	WG563652	SAMP	1-Methylnaphthalene	R1920114	J
	WG563652	SAMP	2-Methylnaphthalene	R1920114	J
	WG563049	SAMP	Silver	R1914594	J
L544028-05	WG563223	SAMP	TPH (GC/FID) High Fraction	R1919813	J
	WG563141	SAMP	Mercury	R1918672	J
	WG563652	SAMP	Fluorene	R1920114	J
	WG563652	SAMP	Phenanthrene	R1920114	J
	WG563652	SAMP	Pyrene	R1920114	J
	WG563049	SAMP	Silver	R1914594	J

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.
V	(ESC) - Additional QC Info: The sample concentration is too high to evaluate accurate spike recoveries.

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.

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Monday November 14, 2011

Report Number: L545601

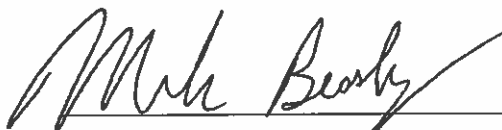
Samples Received: 11/08/11

Client Project: 900546.0005.010

Description: 697-15-54 Background

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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 14, 2011

Date Received : November 08, 2011
Description : 697-15-54 Background

Sample ID : 697-15-54-BG-S 18IN

Collected By : CJB/BG
Collection Date : 11/07/11 08:54

ESC Sample # : L545601-01

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	11/10/11	1
Chromium, Trivalent	61.	0.17	2.0	mg/kg		Calc.	11/11/11	1
ORP	170			mV	T8	2580	11/11/11	1
pH	7.4			su		9045D	11/10/11	1
Sodium Adsorption Ratio	0.49					Calc.	11/10/11	1
Specific Conductance	13.			umhos/cm		9050AMo	11/11/11	1
Mercury	0.0072	0.0015	0.020	mg/kg	J	7471	11/10/11	1
Arsenic	1.2	0.32	1.0	mg/kg		6010B	11/11/11	1
Barium	210	0.050	0.25	mg/kg		6010B	11/11/11	1
Cadmium	U	0.040	0.25	mg/kg		6010B	11/11/11	1
Chromium	61.	0.085	0.50	mg/kg		6010B	11/11/11	1
Copper	10.	0.21	1.0	mg/kg		6010B	11/11/11	1
Lead	11.	0.090	0.25	mg/kg		6010B	11/11/11	1
Nickel	22.	0.26	1.0	mg/kg		6010B	11/11/11	1
Selenium	1.9	0.32	1.0	mg/kg		6010B	11/11/11	1
Silver	0.48	0.16	0.50	mg/kg	J	6010B	11/11/11	1
Zinc	40.	0.34	1.5	mg/kg		6010B	11/11/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/09/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	108.			% Rec.		602/801	11/09/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/09/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/09/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/09/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/09/11	5
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	11/09/11	5
Dibromofluoromethane	116.			% Rec.		8260B	11/09/11	5
a,a,a-Trifluorotoluene	98.5			% Rec.		8260B	11/09/11	5
4-Bromofluorobenzene	90.8			% Rec.		8260B	11/09/11	5
TPH (GC/FID) High Fraction	1.6	0.77	4.0	mg/kg	J	3546/DR	11/12/11	1
Surrogate recovery(%) o-Terphenyl	55.5			% Rec.		3546/DR	11/12/11	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: 11/14/11 11:56 Printed: 11/14/11 11:57
L545601-01 (PH) - 7.37@19.5c



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

November 14, 2011

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Date Received : November 08, 2011
Description : 697-15-54 Background
Sample ID : 697-15-54-BG-S 18IN
Collected By : CJB/BG
Collection Date : 11/07/11 08:54

ESC Sample # : L545601-01

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	11/11/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/11/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(g,h,i)perylene	0.0012	0.0012	0.0060	mg/kg	J	8270C-S	11/11/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/11/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/11/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/11/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/11/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/11/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/11/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/11/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/11/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/11/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/11/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/11/11	1
2-Chloronaphthalene	0.0038	0.00060	0.0060	mg/kg	J	8270C-S	11/11/11	1
Surrogate Recovery								
Nitrobenzene-d5	76.7			% Rec.		8270C-S	11/11/11	1
2-Fluorobiphenyl	71.4			% Rec.		8270C-S	11/11/11	1
p-Terphenyl-d14	68.5			% Rec.		8270C-S	11/11/11	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: 11/14/11 11:56 Printed: 11/14/11 11:57

L545601-01 (PH) - 7.37@19.5c



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

November 14, 2011

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Date Received : November 08, 2011
Description : 697-15-54 Background
Sample ID : 697-15-54-BG-SE 14IN
Collected By : CJB/BG
Collection Date : 11/07/11 09:08

ESC Sample # : L545601-02

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	11/10/11	1
Chromium, Trivalent	49.	0.17	2.0	mg/kg		Calc.	11/11/11	1
ORP	180			mV	T8	2580	11/11/11	1
pH	6.7			su		9045D	11/10/11	1
Sodium Adsorption Ratio	1.2					Calc.	11/10/11	1
Specific Conductance	0.16			umhos/cm		9050AMo	11/11/11	1
Mercury	0.0085	0.0015	0.020	mg/kg	J	7471	11/10/11	1
Arsenic	0.62	0.32	1.0	mg/kg	J	6010B	11/11/11	1
Barium	350	0.050	0.25	mg/kg		6010B	11/11/11	1
Cadmium	U	0.040	0.25	mg/kg		6010B	11/11/11	1
Chromium	49.	0.085	0.50	mg/kg		6010B	11/11/11	1
Copper	12.	0.21	1.0	mg/kg		6010B	11/11/11	1
Lead	13.	0.090	0.25	mg/kg		6010B	11/11/11	1
Nickel	22.	0.26	1.0	mg/kg		6010B	11/11/11	1
Selenium	1.8	0.32	1.0	mg/kg		6010B	11/11/11	1
Silver	0.46	0.16	0.50	mg/kg	J	6010B	11/11/11	1
Zinc	45.	0.34	1.5	mg/kg		6010B	11/11/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/09/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	107.			% Rec.		602/801	11/09/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/09/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/09/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/09/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/09/11	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	11/09/11	5
Dibromofluoromethane	120.			% Rec.		8260B	11/09/11	5
a,a,a-Trifluorotoluene	100.			% Rec.		8260B	11/09/11	5
4-Bromofluorobenzene	89.4			% Rec.		8260B	11/09/11	5
TPH (GC/FID) High Fraction	2.0	0.77	4.0	mg/kg	J	3546/DR	11/12/11	1
Surrogate recovery(%) o-Terphenyl	64.0			% Rec.		3546/DR	11/12/11	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: 11/14/11 11:56 Printed: 11/14/11 11:57

L545601-02 (PH) - 6.68@19.7c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 14, 2011

Date Received : November 08, 2011
Description : 697-15-54 Background

Sample ID : 697-15-54-BG-SE 14IN

Collected By : CJB/BG
Collection Date : 11/07/11 09:08

ESC Sample # : L545601-02

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	11/11/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/11/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/11/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/11/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/11/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/11/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/11/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/11/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/11/11	1
Phenanthrene	0.00090	0.00074	0.0060	mg/kg	J	8270C-S	11/11/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/11/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/11/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/11/11	1
2-Chloronaphthalene	0.0030	0.00060	0.0060	mg/kg	J	8270C-S	11/11/11	1
Surrogate Recovery								
Nitrobenzene-d5	77.3			% Rec.		8270C-S	11/11/11	1
2-Fluorobiphenyl	75.6			% Rec.		8270C-S	11/11/11	1
p-Terphenyl-d14	71.1			% Rec.		8270C-S	11/11/11	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: 11/14/11 11:56 Printed: 11/14/11 11:57

L545601-02 (PH) - 6.68@19.7c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 14, 2011

Date Received : November 08, 2011
Description : 697-15-54 Background
Sample ID : 697-15-54-BG-E 9IN
Collected By : CJB/BG
Collection Date : 11/07/11 09:22

ESC Sample # : L545601-03

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	11/10/11	1
Chromium, Trivalent	41.	0.17	2.0	mg/kg		Calc.	11/11/11	1
ORP	170			mV	T8	2580	11/11/11	1
pH	6.7			su		9045D	11/10/11	1
Sodium Adsorption Ratio	0.79					Calc.	11/10/11	1
Specific Conductance	12.			umhos/cm		9050AMo	11/11/11	1
Mercury	0.014	0.0015	0.020	mg/kg	J	7471	11/10/11	1
Arsenic	0.73	0.32	1.0	mg/kg	J	6010B	11/11/11	1
Barium	370	0.050	0.25	mg/kg		6010B	11/11/11	1
Cadmium	U	0.040	0.25	mg/kg		6010B	11/11/11	1
Chromium	41.	0.085	0.50	mg/kg		6010B	11/11/11	1
Copper	8.8	0.21	1.0	mg/kg		6010B	11/11/11	1
Lead	15.	0.090	0.25	mg/kg		6010B	11/11/11	1
Nickel	18.	0.26	1.0	mg/kg		6010B	11/11/11	1
Selenium	2.2	0.32	1.0	mg/kg		6010B	11/11/11	1
Silver	0.50	0.16	0.50	mg/kg		6010B	11/11/11	1
Zinc	48.	0.34	1.5	mg/kg		6010B	11/11/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/08/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	109.			% Rec.		602/801	11/08/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/09/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/09/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/09/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/09/11	5
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	11/09/11	5
Dibromofluoromethane	117.			% Rec.		8260B	11/09/11	5
a,a,a-Trifluorotoluene	101.			% Rec.		8260B	11/09/11	5
4-Bromofluorobenzene	95.9			% Rec.		8260B	11/09/11	5
TPH (GC/FID) High Fraction	1.6	0.77	4.0	mg/kg	J	3546/DR	11/12/11	1
Surrogate recovery(%) o-Terphenyl	65.2			% Rec.		3546/DR	11/12/11	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: 11/14/11 11:56 Printed: 11/14/11 11:57

L545601-03 (PH) - 6.71@19.4c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 14, 2011

Date Received : November 08, 2011
Description : 697-15-54 Background
Sample ID : 697-15-54-BG-E 9IN
Collected By : CJB/BG
Collection Date : 11/07/11 09:22

ESC Sample # : L545601-03

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	11/11/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/11/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/11/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/11/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/11/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/11/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/11/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/11/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/11/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/11/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/11/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/11/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/11/11	1
2-Chloronaphthalene	0.00075	0.00060	0.0060	mg/kg	J	8270C-S	11/11/11	1
Surrogate Recovery								
Nitrobenzene-d5	82.0			% Rec.		8270C-S	11/11/11	1
2-Fluorobiphenyl	73.9			% Rec.		8270C-S	11/11/11	1
p-Terphenyl-d14	78.6			% Rec.		8270C-S	11/11/11	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: 11/14/11 11:56 Printed: 11/14/11 11:57

L545601-03 (PH) - 6.71@19.4c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 14, 2011

Date Received : November 08, 2011
Description : 697-15-54 Background

Sample ID : 697-15-54-BG-N 13IN

Collected By : CJB/BG
Collection Date : 11/07/11 09:36

ESC Sample # : L545601-04

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	11/10/11	1
Chromium, Trivalent	36.	0.17	2.0	mg/kg		Calc.	11/11/11	1
ORP	190			mV	T8	2580	11/11/11	1
pH	5.7			su		9045D	11/10/11	1
Sodium Adsorption Ratio	0.59					Calc.	11/12/11	1
Specific Conductance	26.			umhos/cm		9050AMo	11/11/11	1
Mercury	0.0060	0.0015	0.020	mg/kg	J	7471	11/10/11	1
Arsenic	1.4	0.32	1.0	mg/kg		6010B	11/11/11	1
Barium	190	0.050	0.25	mg/kg		6010B	11/11/11	1
Cadmium	U	0.040	0.25	mg/kg		6010B	11/11/11	1
Chromium	36.	0.085	0.50	mg/kg		6010B	11/11/11	1
Copper	9.4	0.21	1.0	mg/kg		6010B	11/11/11	1
Lead	13.	0.090	0.25	mg/kg		6010B	11/11/11	1
Nickel	18.	0.26	1.0	mg/kg		6010B	11/11/11	1
Selenium	2.3	0.32	1.0	mg/kg		6010B	11/11/11	1
Silver	0.45	0.16	0.50	mg/kg	J	6010B	11/11/11	1
Zinc	37.	0.34	1.5	mg/kg		6010B	11/11/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/08/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	93.2			% Rec.		602/801	11/08/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/09/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/09/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/09/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/09/11	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	11/09/11	5
Dibromofluoromethane	120.			% Rec.		8260B	11/09/11	5
a,a,a-Trifluorotoluene	102.			% Rec.		8260B	11/09/11	5
4-Bromofluorobenzene	87.9			% Rec.		8260B	11/09/11	5
TPH (GC/FID) High Fraction	4.2	0.77	4.0	mg/kg		3546/DR	11/12/11	1
Surrogate recovery (%) o-Terphenyl	61.5			% Rec.		3546/DR	11/12/11	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: 11/14/11 11:56 Printed: 11/14/11 11:57
L545601-04 (PH) - 5.73@19.6c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

November 14, 2011

Date Received : November 08, 2011
Description : 697-15-54 Background
Sample ID : 697-15-54-BG-N 13IN
Collected By : CJB/BG
Collection Date : 11/07/11 09:36

ESC Sample # : L545601-04

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	11/11/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/11/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(a)pyrene	0.00078	0.00062	0.0060	mg/kg	J	8270C-S	11/11/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/11/11	1
Benzo(g,h,i)perylene	0.0015	0.0012	0.0060	mg/kg	J	8270C-S	11/11/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/11/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/11/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/11/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/11/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/11/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/11/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/11/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/11/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/11/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/11/11	1
2-Methylnaphthalene	0.00065	0.00059	0.0060	mg/kg	J	8270C-S	11/11/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/11/11	1
Surrogate Recovery								
Nitrobenzene-d5	98.2			% Rec.		8270C-S	11/11/11	1
2-Fluorobiphenyl	85.4			% Rec.		8270C-S	11/11/11	1
p-Terphenyl-d14	60.1			% Rec.		8270C-S	11/11/11	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: 11/14/11 11:56 Printed: 11/14/11 11:57

L545601-04 (PH) - 5.73@19.6c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L545601-01	WG564727	SAMP	Silver	R1928674	J
	WG564554	SAMP	TPH (GC/FID) High Fraction	R1929832	J
	WG564626	SAMP	Mercury	R1927299	J
	WG564558	SAMP	Benzo(g,h,i)perylene	R1928792	J
	WG564558	SAMP	2-Chloronaphthalene	R1928792	J
	WG565090	SAMP	ORP	R1928893	T8
L545601-02	WG564727	SAMP	Arsenic	R1928674	J
	WG564727	SAMP	Silver	R1928674	J
	WG564554	SAMP	TPH (GC/FID) High Fraction	R1929832	J
	WG564626	SAMP	Mercury	R1927299	J
	WG564558	SAMP	Phenanthrene	R1928792	J
	WG564558	SAMP	2-Chloronaphthalene	R1928792	J
L545601-03	WG565090	SAMP	ORP	R1928893	T8
	WG564727	SAMP	Arsenic	R1928674	J
	WG564554	SAMP	TPH (GC/FID) High Fraction	R1929832	J
	WG564626	SAMP	Mercury	R1927299	J
	WG564558	SAMP	2-Chloronaphthalene	R1928792	J
	WG565090	SAMP	ORP	R1928893	T8
L545601-04	WG564727	SAMP	Silver	R1928674	J
	WG564626	SAMP	Mercury	R1927299	J
	WG564558	SAMP	Benzo(a)pyrene	R1928792	J
	WG564558	SAMP	Benzo(g,h,i)perylene	R1928792	J
	WG564558	SAMP	2-Methylnaphthalene	R1928792	J
	WG565090	SAMP	ORP	R1928893	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
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
11/14/11 at 11:57:25

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L545601-01 Account: OXYGJCO Received: 11/08/11 09:00 Due Date: 11/15/11 00:00 RPT Date: 11/14/11 11:56
Sample: L545601-02 Account: OXYGJCO Received: 11/08/11 09:00 Due Date: 11/15/11 00:00 RPT Date: 11/14/11 11:56
Sample: L545601-03 Account: OXYGJCO Received: 11/08/11 09:00 Due Date: 11/15/11 00:00 RPT Date: 11/14/11 11:56
Sample: L545601-04 Account: OXYGJCO Received: 11/08/11 09:00 Due Date: 11/15/11 00:00 RPT Date: 11/14/11 11:56

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

Project Description: 697-15-54 Background
 Phone: (970) 263-3601
 FAX:

Client Project #: 900546.0005.010

Site/Facility ID#:

Collected by: GSB & BC

Collected by (signature): [Signature]
 Packed on Ice N

Alternate billing information:
 CO Table 910

Report to:
 Email to: Blaire Robbins
Daniel Phillips @oxy.com

City/State Collected: Pa. Achute

ESC Key:

P.O.#:

Date Results Needed:
 Same Day.....200%
 Next Day.....100%
 Two Day.....50%

(Lab MUST Be Notified)
 Rush? []
 Email? No Yes
 FAX? No Yes

Analysis/Container/Preservative	No. of Cntrs	Date	Time	Depth	Matrix*	Comp/Grab	Sample ID
V8260BTEX, GRO	3	11/7/11	8:54	15"	SS	Grab	697-15-54-BG-S
DRO, SV8270PAHSIM	3	11/7/11	9:08	14"	SS	Grab	697-15-54-BG-SE
SAR, SPCON, PH	3	11/7/11	9:22	9"	SS	Grab	697-15-54-BG-E
MCR8A8 + Cu, Ni, Zn	3	11/7/11	9:36	13"	SS	Grab	697-15-54-BG-N
CR3, CR6SS	3						

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

Remarks/Contaminant	Sample # (lab only)
	1545601-01
	-02
	-03
	-04

pH _____ Temp _____
 Flow _____ Other _____

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

Remarks: 5040 0001 2912

Relinquished by: (Signature)	Date: 11/7/11	Time: 5:00	Received by: (Signature)	Date: 11/8/11	Time: 0900
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time:

Condition: OK
 Samples returned via: ☒ UPS ☐ Courier
 Temp: 3.4° Bottles Received: 12802
 Date: 11-8-11 Time: 0900
 pH Checked: NCF

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Thursday December 01, 2011

Report Number: L548307

Samples Received: 11/23/11

Client Project:

Description: Pond 1 Excavation

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 01, 2011

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

ESC Sample # : L548307-01

Date Received : November 23, 2011
Description : Pond 1

Site ID : 15-54

Sample ID : POND 1 RP CAP 4-6IN

Project # :

Collected By : Brennen Graff
Collection Date : 11/22/11 12:04

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	11/29/11	1
Chromium, Trivalent	50.	0.17	2.0	mg/kg		Calc.	11/27/11	1
ORP	100			mV	T8	2580	11/30/11	1
pH	8.3			su		9045D	11/29/11	1
Sodium Adsorption Ratio	2.0					Calc.	11/30/11	1
Specific Conductance	150			umhos/cm		9050AMo	11/28/11	1
Mercury	0.0079	0.0015	0.020	mg/kg	J	7471	11/23/11	1
Arsenic	9.2	0.32	1.0	mg/kg		6010B	11/27/11	1
Barium	230	0.050	0.25	mg/kg		6010B	11/27/11	1
Cadmium	0.14	0.040	0.25	mg/kg	J	6010B	11/27/11	1
Chromium	50.	0.085	0.50	mg/kg		6010B	11/27/11	1
Copper	10.	0.21	1.0	mg/kg		6010B	11/27/11	1
Lead	15.	0.090	0.25	mg/kg		6010B	11/27/11	1
Nickel	22.	0.26	1.0	mg/kg		6010B	11/27/11	1
Selenium	2.3	0.32	1.0	mg/kg		6010B	11/28/11	1
Silver	0.36	0.16	0.50	mg/kg	J	6010B	11/27/11	1
Zinc	34.	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	11/23/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	97.1			% Rec.		602/801	11/23/11	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				% Rec.				
Toluene-d8	106.			% Rec.		8260B	11/24/11	5
Dibromofluoromethane	100.			% Rec.		8260B	11/24/11	5
a,a,a-Trifluorotoluene	104.			% Rec.		8260B	11/24/11	5
4-Bromofluorobenzene	90.9			% Rec.		8260B	11/24/11	5
TPH (GC/FID) High Fraction	U	0.77	4.0	mg/kg		3546/DR	11/25/11	1
Surrogate recovery (%) o-Terphenyl	57.0			% Rec.		3546/DR	11/25/11	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 09:52 Printed: 12/01/11 09:58
L548307-01 (PH) - 8.26@19.3c



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

Daniel Padilla
OXY USA Inc - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

December 01, 2011

Date Received : November 23, 2011
Description : Pond 1
Sample ID : POND 1 RP CAP 4-6IN
Collected By : Brennen Graff
Collection Date : 11/22/11 12:04

ESC Sample # : L548307-01

Site ID : 15-54

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	11/24/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/24/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/24/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/24/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/24/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/24/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/24/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/24/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/24/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/24/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/24/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/24/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/24/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/24/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/24/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/24/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/24/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/24/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/24/11	1
Surrogate Recovery								
Nitrobenzene-d5	86.0			% Rec.		8270C-S	11/24/11	1
2-Fluorobiphenyl	87.9			% Rec.		8270C-S	11/24/11	1
p-Terphenyl-d14	80.6			% Rec.		8270C-S	11/24/11	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 09:52 Printed: 12/01/11 09:58
L548307-01 (PH) - 8.26@19.3c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L548307-01	WG567266	SAMP	Cadmium	R1947244	J
	WG567266	SAMP	Silver	R1947244	J
	WG567131	SAMP	Mercury	R1944313	J
	WG567573	SAMP	ORP	R1950672	T8

Attachment B
Explanation of QC Qualifier Codes



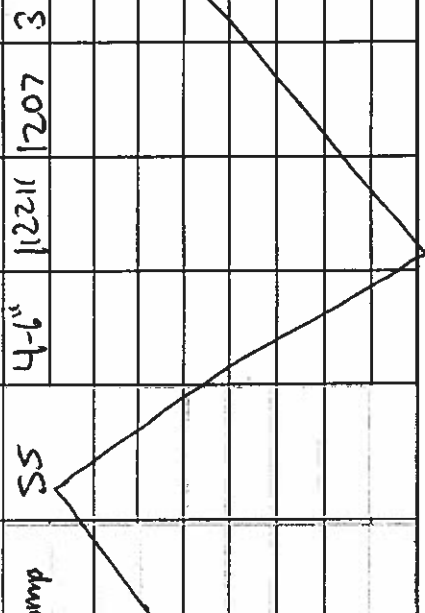






Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

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.

OXY USA WTP LP- Grand Junction, CO 760 Horizon Dr., Ste 101 Grand Junction, CO 81506				Alternate billing information: CO Table 910		Analysis/Container/Preservative		Chain of Custody Page <u> 1 </u> of <u> 1 </u>			
Project Description: Pond 1 Phone: (970) 263-3601 FAX:				Report to: Daniel Audilla Email to: daniel.audilla@oxy.com City/State Collected: Colorado		Prepared by: C190 ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859		CoCode OXYGJCO (lab use only) Template/Prelogin Shipped Via:			
Collected by: Brown Graft Collected by (signature):  Packed on Ice N 				Site/Facility ID#: 15-54 P.O.#:		Date Results Needed: Email? <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes		No. of Cntrs			
(Rush?) (Lab MUST Be Notified) Same Day.....200% Next Day.....100% Two Day.....50%				Date Date Date Date Date Date		Date Date Date Date Date Date		Date Date Date Date Date Date			
Sample ID Pond 1 RP Cap				Comp/Grab Comp		Depth 4-6"		Time 1207			
<div style="text-align: center;">  </div>				Matrix* SS		Date 11/22/11		Time 1207			
Remarks: 5040 0621 2820 *Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other				Samples returned via: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Condition:		(lab use only)			
Relinquished by: (Signature) 				Received by: (Signature) 		Bottles Received: 3 802		pH Checked:			
Relinquished by: (Signature) 				Received by: (Signature) 		Date: 11/23/11		NCF			
Relinquished by: (Signature) 				Received by: (Signature) 		Time: 0900					

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

Report Summary

Tuesday June 21, 2011

Report Number: L520529

Samples Received: 06/11/11

Client Project: 900546.0001.050

Description: 697-16-28-Pit Background

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

June 21, 2011

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

ESC Sample # : L520529-01

Date Received : June 11, 2011
Description : 697-16-28-Pit Background

Site ID :

Sample ID : SS-1

Project # : 900546.0001.050

Collected By : CJB
Collection Date : 06/10/11 09:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	06/17/11	1
Chromium, Trivalent	49.	0.17	2.0	mg/kg		Calc.	06/15/11	1
ORP	79.			mV		2580	06/17/11	1
pH	8.6			su		9045D	06/17/11	1
Sodium Adsorption Ratio	1.8					Calc.	06/15/11	1
Specific Conductance	100			umhos/cm		9050AMo	06/17/11	1
Mercury	0.031	0.0015	0.020	mg/kg		7471	06/16/11	1
Arsenic	12.	0.32	1.0	mg/kg		6010B	06/15/11	1
Barium	280	0.050	0.25	mg/kg		6010B	06/15/11	1
Cadmium	1.6	0.040	0.25	mg/kg		6010B	06/15/11	1
Chromium	49.	0.085	0.50	mg/kg		6010B	06/15/11	1
Copper	21.	0.21	1.0	mg/kg		6010B	06/15/11	1
Lead	14.	0.090	0.25	mg/kg	B	6010B	06/16/11	1
Nickel	29.	0.26	1.0	mg/kg		6010B	06/15/11	1
Selenium	0.59	0.32	1.0	mg/kg	J	6010B	06/15/11	1
Silver	U	0.16	0.50	mg/kg		6010B	06/15/11	1
Zinc	59.	0.34	1.5	mg/kg		6010B	06/15/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	06/13/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	94.4			% Rec.		602/801	06/13/11	5
Benzene	U	0.0021	0.0050	mg/kg		8260B	06/13/11	5
Toluene	U	0.0017	0.025	mg/kg		8260B	06/13/11	5
Ethylbenzene	U	0.0016	0.0050	mg/kg		8260B	06/13/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	06/13/11	5
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	06/13/11	5
Dibromofluoromethane	108.			% Rec.		8260B	06/13/11	5
a,a,a-Trifluorotoluene	105.			% Rec.		8260B	06/13/11	5
4-Bromofluorobenzene	96.6			% Rec.		8260B	06/13/11	5
TPH (GC/FID) High Fraction	1.4	0.77	4.0	mg/kg	J	3546/DR	06/21/11	1
Surrogate recovery(%) o-Terphenyl	71.5			% Rec.		3546/DR	06/21/11	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: 06/21/11 11:33 Printed: 06/21/11 11:33

L520529-01 (PH) - 8.6@20.5c



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

June 21, 2011

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

Date Received : June 11, 2011
Description : 697-16-28-Pit Background
Sample ID : SS-1
Collected By : CJB
Collection Date : 06/10/11 09:15

ESC Sample # : L520529-01

Site ID :

Project # : 900546.0001.050

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	06/17/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	06/17/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	06/17/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	06/17/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	06/17/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	06/17/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	06/17/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	06/17/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	06/17/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	06/17/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	06/17/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	06/17/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	06/17/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	06/17/11	1
Surrogate Recovery								
Nitrobenzene-d5	87.9			% Rec.		8270C-S	06/17/11	1
2-Fluorobiphenyl	96.0			% Rec.		8270C-S	06/17/11	1
p-Terphenyl-d14	97.5			% Rec.		8270C-S	06/17/11	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: 06/21/11 11:33 Printed: 06/21/11 11:33
L520529-01 (PH) - 8.6@20.5c



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

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

June 21, 2011

Date Received : June 11, 2011
Description : 697-16-28-Pit Background
Sample ID : SS-2
Collected By : CJB
Collection Date : 06/10/11 09:20

ESC Sample # : L520529-02
Site ID :
Project # : 900546.0001.050

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	06/17/11	1
Chromium, Trivalent	50.	0.17	2.0	mg/kg		Calc.	06/15/11	1
ORP	82.			mV		2580	06/17/11	1
pH	8.5			su		9045D	06/17/11	1
Sodium Adsorption Ratio	1.5					Calc.	06/15/11	1
Specific Conductance	75.			umhos/cm		9050AMo	06/17/11	1
Mercury	0.028	0.0015	0.020	mg/kg		7471	06/16/11	1
Arsenic	5.0	0.32	1.0	mg/kg		6010B	06/15/11	1
Barium	280	0.050	0.25	mg/kg		6010B	06/15/11	1
Cadmium	1.2	0.040	0.25	mg/kg		6010B	06/15/11	1
Chromium	50.	0.085	0.50	mg/kg		6010B	06/15/11	1
Copper	19.	0.21	1.0	mg/kg		6010B	06/15/11	1
Lead	15.	0.090	0.25	mg/kg	B	6010B	06/16/11	1
Nickel	26.	0.26	1.0	mg/kg		6010B	06/15/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	06/15/11	1
Silver	U	0.16	0.50	mg/kg		6010B	06/15/11	1
Zinc	59.	0.34	1.5	mg/kg		6010B	06/15/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	06/13/11	5
Surrogate Recovery (70-130)								
a,a,a-Trifluorotoluene (FID)	94.7			% Rec.		602/801	06/13/11	5
Benzene	U	0.0021	0.0050	mg/kg		8260B	06/15/11	5
Toluene	U	0.0017	0.025	mg/kg		8260B	06/15/11	5
Ethylbenzene	U	0.0016	0.0050	mg/kg		8260B	06/15/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	06/15/11	5
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	06/15/11	5
Dibromofluoromethane	104.			% Rec.		8260B	06/15/11	5
a,a,a-Trifluorotoluene	101.			% Rec.		8260B	06/15/11	5
4-Bromofluorobenzene	105.			% Rec.		8260B	06/15/11	5
TPH (GC/FID) High Fraction	0.95	0.77	4.0	mg/kg	J	3546/DR	06/18/11	1
Surrogate recovery(%)								
o-Terphenyl	55.4			% Rec.		3546/DR	06/18/11	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: 06/21/11 11:33 Printed: 06/21/11 11:34
L520529-02 (PH) - 8.5@20.5c



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

June 21, 2011

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

Date Received : June 11, 2011
Description : 697-16-28-Pit Background
Sample ID : SS-2
Collected By : CJB
Collection Date : 06/10/11 09:20

ESC Sample # : L520529-02

Site ID :

Project # : 900546.0001.050

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	06/19/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	06/19/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	06/19/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	06/19/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	06/19/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	06/19/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	06/19/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	06/19/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	06/19/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	06/19/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	06/19/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	06/19/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	06/19/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	06/19/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	06/19/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	06/19/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	06/19/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	06/19/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	06/19/11	1
Surrogate Recovery								
Nitrobenzene-d5	68.3			% Rec.		8270C-S	06/19/11	1
2-Fluorobiphenyl	79.5			% Rec.		8270C-S	06/19/11	1
p-Terphenyl-d14	69.6			% Rec.		8270C-S	06/19/11	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: 06/21/11 11:33 Printed: 06/21/11 11:34
L520529-02 (PH) - 8.5@20.5c



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

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

June 21, 2011

Date Received : June 11, 2011
Description : 697-16-28-Pit Background

Sample ID : SS-3

Collected By : CJB
Collection Date : 06/10/11 09:24

ESC Sample # : L520529-03

Site ID :

Project # : 900546.0001.050

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	06/17/11	1
Chromium, Trivalent	48.	0.17	2.0	mg/kg		Calc.	06/15/11	1
ORP	84.			mV		2580	06/17/11	1
pH	8.6			su		9045D	06/17/11	1
Sodium Adsorption Ratio	1.5					Calc.	06/15/11	1
Specific Conductance	83.			umhos/cm		9050AMo	06/17/11	1
Mercury	0.048	0.0015	0.020	mg/kg		7471	06/16/11	1
Arsenic	13.	0.32	1.0	mg/kg		6010B	06/15/11	1
Barium	300	0.050	0.25	mg/kg		6010B	06/15/11	1
Cadmium	2.2	0.040	0.25	mg/kg		6010B	06/15/11	1
Chromium	48.	0.085	0.50	mg/kg		6010B	06/15/11	1
Copper	25.	0.21	1.0	mg/kg		6010B	06/15/11	1
Lead	14.	0.090	0.25	mg/kg	B	6010B	06/16/11	1
Nickel	28.	0.26	1.0	mg/kg		6010B	06/15/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	06/15/11	1
Silver	U	0.16	0.50	mg/kg		6010B	06/15/11	1
Zinc	71.	0.34	1.5	mg/kg		6010B	06/15/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	06/13/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	95.8			% Rec.		602/801	06/13/11	5
Benzene	U	0.0021	0.0050	mg/kg		8260B	06/13/11	5
Toluene	U	0.0017	0.025	mg/kg		8260B	06/13/11	5
Ethylbenzene	U	0.0016	0.0050	mg/kg		8260B	06/13/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	06/13/11	5
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260B	06/13/11	5
Dibromofluoromethane	110.			% Rec.		8260B	06/13/11	5
a,a,a-Trifluorotoluene	103.			% Rec.		8260B	06/13/11	5
4-Bromofluorobenzene	97.5			% Rec.		8260B	06/13/11	5
TPH (GC/FID) High Fraction	1.5	0.77	4.0	mg/kg	J	3546/DR	06/18/11	1
Surrogate recovery(%) o-Terphenyl	54.1			% Rec.		3546/DR	06/18/11	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: 06/21/11 11:33 Printed: 06/21/11 11:34
L520529-03 (PH) - 8.6@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

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

June 21, 2011

Date Received : June 11, 2011
Description : 697-16-28-Pit Background
Sample ID : SS-3
Collected By : CJB
Collection Date : 06/10/11 09:24

ESC Sample # : L520529-03

Site ID :

Project # : 900546.0001.050

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	06/17/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	06/17/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	06/17/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	06/17/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	06/17/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	06/17/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	06/17/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	06/17/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	06/17/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	06/17/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	06/17/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	06/17/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	06/17/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	06/17/11	1
Surrogate Recovery								
Nitrobenzene-d5	82.7			% Rec.		8270C-S	06/17/11	1
2-Fluorobiphenyl	80.7			% Rec.		8270C-S	06/17/11	1
p-Terphenyl-d14	82.0			% Rec.		8270C-S	06/17/11	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: 06/21/11 11:33 Printed: 06/21/11 11:34
L520529-03 (PH) - 8.6@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

June 21, 2011

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

ESC Sample # : L520529-04

Date Received : June 11, 2011
Description : 697-16-28-Pit Background
Sample ID : SS-4
Collected By : CJB
Collection Date : 06/10/11 09:38

Site ID :
Project # : 900546.0001.050

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	06/17/11	1
Chromium, Trivalent	48.	0.17	2.0	mg/kg		Calc.	06/15/11	1
ORP	88.			mV		2580	06/17/11	1
pH	8.6			su		9045D	06/17/11	1
Sodium Adsorption Ratio	1.5					Calc.	06/15/11	1
Specific Conductance	68.			umhos/cm		9050AMo	06/17/11	1
Mercury	0.045	0.0015	0.020	mg/kg		7471	06/16/11	1
Arsenic	16.	0.32	1.0	mg/kg		6010B	06/15/11	1
Barium	290	0.050	0.25	mg/kg		6010B	06/15/11	1
Cadmium	1.7	0.040	0.25	mg/kg		6010B	06/15/11	1
Chromium	48.	0.085	0.50	mg/kg		6010B	06/15/11	1
Copper	21.	0.21	1.0	mg/kg		6010B	06/15/11	1
Lead	17.	0.090	0.25	mg/kg	B	6010B	06/16/11	1
Nickel	27.	0.26	1.0	mg/kg		6010B	06/15/11	1
Selenium	0.90	0.32	1.0	mg/kg	J	6010B	06/15/11	1
Silver	U	0.16	0.50	mg/kg		6010B	06/15/11	1
Zinc	62.	0.34	1.5	mg/kg		6010B	06/15/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	06/13/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	96.0			% Rec.		602/801	06/13/11	5
Benzene	U	0.0021	0.0050	mg/kg		8260B	06/13/11	5
Toluene	U	0.0017	0.025	mg/kg		8260B	06/13/11	5
Ethylbenzene	U	0.0016	0.0050	mg/kg		8260B	06/13/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	06/13/11	5
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	06/13/11	5
Dibromofluoromethane	110.			% Rec.		8260B	06/13/11	5
a,a,a-Trifluorotoluene	101.			% Rec.		8260B	06/13/11	5
4-Bromofluorobenzene	93.7			% Rec.		8260B	06/13/11	5
TPH (GC/FID) High Fraction	1.1	0.77	4.0	mg/kg	J	3546/DR	06/18/11	1
Surrogate recovery (%) o-Terphenyl	57.6			% Rec.		3546/DR	06/18/11	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: 06/21/11 11:33 Printed: 06/21/11 11:34
L520529-04 (PH) - 8.6@20.7c



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

June 21, 2011

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

ESC Sample # : L520529-04

Date Received : June 11, 2011
Description : 697-16-28-Pit Background

Site ID :

Sample ID : SS-4

Project # : 900546.0001.050

Collected By : CJB
Collection Date : 06/10/11 09:38

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	06/17/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	06/17/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	06/17/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	06/17/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	06/17/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	06/17/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	06/17/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	06/17/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	06/17/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	06/17/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	06/17/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	06/17/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	06/17/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	06/17/11	1
Surrogate Recovery								
Nitrobenzene-d5	82.9			% Rec.		8270C-S	06/17/11	1
2-Fluorobiphenyl	86.7			% Rec.		8270C-S	06/17/11	1
p-Terphenyl-d14	91.6			% Rec.		8270C-S	06/17/11	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: 06/21/11 11:33 Printed: 06/21/11 11:34

L520529-04 (PH) - 8.6@20.7c



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

June 21, 2011

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

ESC Sample # : L520529-05

Date Received : June 11, 2011
Description : 697-16-28-Pit Background

Site ID :

Sample ID : SS-5

Project # : 900546.0001.050

Collected By : CJB
Collection Date : 06/10/11 09:48

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	06/17/11	1
Chromium, Trivalent	44.	0.17	2.0	mg/kg		Calc.	06/15/11	1
ORP	91.			mV		2580	06/17/11	1
pH	8.8			su		9045D	06/17/11	1
Sodium Adsorption Ratio	4.0					Calc.	06/15/11	1
Specific Conductance	110			umhos/cm		9050AMo	06/17/11	1
Mercury	0.054	0.0015	0.020	mg/kg		7471	06/16/11	1
Arsenic	17.	0.32	1.0	mg/kg		6010B	06/15/11	1
Barium	260	0.050	0.25	mg/kg		6010B	06/15/11	1
Cadmium	2.7	0.040	0.25	mg/kg		6010B	06/15/11	1
Chromium	44.	0.085	0.50	mg/kg		6010B	06/15/11	1
Copper	41.	0.21	1.0	mg/kg		6010B	06/15/11	1
Lead	20.	0.090	0.25	mg/kg	B	6010B	06/16/11	1
Nickel	36.	0.26	1.0	mg/kg		6010B	06/15/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	06/15/11	1
Silver	U	0.16	0.50	mg/kg		6010B	06/15/11	1
Zinc	84.	0.34	1.5	mg/kg		6010B	06/15/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	06/13/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	95.9			% Rec.		602/801	06/13/11	5
Benzene	U	0.0021	0.0050	mg/kg		8260B	06/13/11	5
Toluene	U	0.0017	0.025	mg/kg		8260B	06/13/11	5
Ethylbenzene	U	0.0016	0.0050	mg/kg		8260B	06/13/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	06/13/11	5
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	06/13/11	5
Dibromofluoromethane	109.			% Rec.		8260B	06/13/11	5
a,a,a-Trifluorotoluene	102.			% Rec.		8260B	06/13/11	5
4-Bromofluorobenzene	99.7			% Rec.		8260B	06/13/11	5
TPH (GC/FID) High Fraction	1.9	0.77	4.0	mg/kg	J	3546/DR	06/18/11	1
Surrogate recovery(%) o-Terphenyl	55.6			% Rec.		3546/DR	06/18/11	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: 06/21/11 11:33 Printed: 06/21/11 11:34

L520529-05 (PH) - 8.8@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

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

June 21, 2011

Date Received : June 11, 2011
Description : 697-16-28-Pit Background
Sample ID : SS-5
Collected By : CJB
Collection Date : 06/10/11 09:48

ESC Sample # : L520529-05
Site ID :
Project # : 900546.0001.050

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	06/17/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	06/17/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	06/17/11	1
Benzo(g,h,i)perylene	0.0022	0.0012	0.0060	mg/kg	J	8270C-S	06/17/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	06/17/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	06/17/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	06/17/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	06/17/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	06/17/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	06/17/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	06/17/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	06/17/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	06/17/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	06/17/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	06/17/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	06/17/11	1
Surrogate Recovery								
Nitrobenzene-d5	84.5			% Rec.		8270C-S	06/17/11	1
2-Fluorobiphenyl	94.0			% Rec.		8270C-S	06/17/11	1
p-Terphenyl-d14	90.2			% Rec.		8270C-S	06/17/11	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: 06/21/11 11:33 Printed: 06/21/11 11:34
L520529-05 (PH) - 8.8@20.6c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L520529-01	WG540600	SAMP	Lead	R1727230	B
	WG540130	SAMP	Selenium	R1724389	J
	WG541424	SAMP	TPH (GC/FID) High Fraction	R1731493	J
L520529-02	WG540600	SAMP	Lead	R1727230	B
	WG540786	SAMP	TPH (GC/FID) High Fraction	R1728510	J
L520529-03	WG540600	SAMP	Lead	R1727230	B
	WG540786	SAMP	TPH (GC/FID) High Fraction	R1728510	J
L520529-04	WG540600	SAMP	Lead	R1727230	B
	WG540130	SAMP	Selenium	R1724389	J
L520529-05	WG540786	SAMP	TPH (GC/FID) High Fraction	R1728510	J
	WG540600	SAMP	Lead	R1727230	B
	WG540786	SAMP	TPH (GC/FID) High Fraction	R1728510	J
	WG540652	SAMP	Benzo(g,h,i)perylene	R1727749	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
B	(EPA) - The indicated compound was found in the associated method blank as well as the laboratory sample.
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
06/21/11 at 11:34:08

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L520529-01 Account: OXYGJCO Received: 06/11/11 09:00 Due Date: 06/17/11 00:00 RPT Date: 06/21/11 11:33
Sample: L520529-02 Account: OXYGJCO Received: 06/11/11 09:00 Due Date: 06/17/11 00:00 RPT Date: 06/21/11 11:33
Sample: L520529-03 Account: OXYGJCO Received: 06/11/11 09:00 Due Date: 06/17/11 00:00 RPT Date: 06/21/11 11:33
Sample: L520529-04 Account: OXYGJCO Received: 06/11/11 09:00 Due Date: 06/17/11 00:00 RPT Date: 06/21/11 11:33
Sample: L520529-05 Account: OXYGJCO Received: 06/11/11 09:00 Due Date: 06/17/11 00:00 RPT Date: 06/21/11 11:33

OXY USA Inc. - Grand Junction, CO

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

Alternate billing information:
CO Table 910

Report to:

Email to: *blatti@oxy.com*
Daniel Padilla

Project Description: *697-16-28-Pit Backflow*

City/State Collected: *Parachute*

Phone: (970) 263-3601
FAX:

Client Project #: *700546.0001.050*

Site/Facility ID#: *700546.0001.050*

Collected by: *CPS*

Collected by (signature): *[Signature]*

Packed on Ice: *N*

ESC Key:

P.O.#:

Rush? (Lab MUST Be Notified)

Same Day.....200%
Next Day.....100%
Two Day.....50%

Date Results Needed:

Email? ☒ No ☐ Yes
FAX? ☐ No ☐ Yes

Date

Time

Depth

Matrix*

Comp/Grab

Sample ID

SS-1

SS-2

SS-3

SS-4

SS-5

Analysis/Container/Preservative

V8260BTEX, GRO

DRO, SV8270PAHSIM

SAR, SPCON, PH

MRCRA8 + Cu, Ni, Zn

CR3, CR6SS

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

F154

CoCode OXYGJCO (lab use only)

Template/Prelogin

Shipped Via:

Remarks/Contaminant

Sample # (lab use only)

152052901

-02

03

-04

-05

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

Remarks:

pH Temp

Flow Other

Relinquished by: (Signature)	Date: 6/10/11	Time: 4:39 PM	Received by: (Signature)	Date: 6/10/11	Time: 4:39 PM	Samples returned via: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier	Condition: OK	(lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	Bottles Received: 15-802		
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/10/11	Time: 2:30 PM		pH Checked:	NCF: