

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



DOCUMENT
#2221493

SUNDRY NOTICE

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

1. OGCC Operator Number: 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	Fax: 970.263.3694	
City: Grand Junction State: CO Zip: 81506		
5. API Number 05-045-13794	OGCC Facility ID Number 335018	Survey Plat
6. Well/Facility Name: Shell Reserve Pit	7. Well/Facility Number 797-09A	Directional Survey
8. Location (Qtr/Sec, Twp, Rng, Meridian): NENW Sec 9, T7S, R97W 6th PM		Surface Egmpt 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"/> FNL/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/Sec, Twp, Rng, Mer	
Latitude	Distance to nearest property line
Longitude	Distance to nearest bldg, public rd, utility or RR
Ground Elevation	Distance to nearest lease line
	Is location in a High Density Area (rule 603b)? Yes/No
	Distance to nearest well same formation
	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 (6 mos from date casing set)	
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK	
*submit cbl and cement job summaries	
Method used	Cementing tool setting/perf depth
Cement volume	Cement top
Cement bottom	Date
<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		<input type="checkbox"/> Report of Work Done	
Approximate Start Date:		Date Work Completed:	
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)			
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal	
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste	
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input type="checkbox"/> Status Update/Change of Remediation Plans	
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: Application of diff. standard for Spills and Releases		

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

Signed: [Signature] Date: 12/7/11 Email: daniel_padilla@oxy.com
Print Name: Daniel I. Padilla Title: Regulatory Advisor

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

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

- | | |
|---|-------------------------------|
| 1. OGCC Operator Number: 66571 | API Number: 05-045-13794 |
| 2. Name of Operator: OXY USA WTP LP | OGCC Facility ID # 335018 |
| 3. Well/Facility Name: Shell Reserve Pit | Well/Facility Number: 797-09A |
| 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENW Sec 9, T7S, 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 USA WTP LP (Oxy) has completed reclamation of the above-mentioned reserve pit 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 and cap sample show (Post Reclaim 11/07/2008, Cap 11/28/2011) 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, for the post reclamation sample, and a composite sample for the cap. The analytical concentrations table identifies the COGCC Table 910-1 concentration levels, Oxy's undisturbed background concentrations, Oxy's post reclamation concentrations, and cap sample (Post Reclaim 11/07/2008, Cap 11/28/2011).

The original post reclamation samples were not tested for PAH's, this was due to the rules that were in effect prior to the 2008 amended rules that went into effect on April 1, 2009. However, Oxy believes that due to the low levels of total TPH, exceedances in PAH would be unlikely. The pit was in 2008 and PAHs were recently sampled in the cap, concentrations were found to be well below allowable levels per the COGCC's table 910-1.

To address elevated concentrations of EC and SAR, Oxy buried and capped the pit bottom below at least three feet of native material to ensure a sufficient agronomic zone. The reclaimed pit was contoured to be level with the active pad surface to minimize stormwater runoff, during the operational phase of the pad. Oxy sampled the cap and found a slightly elevated level of SAR (14). Oxy believes this elevated level of SAR is a result of de minimis amounts of the reclaimed pit becoming part of the working surface of the pad. Therefore final pit capping and pad reclamation will occur at the end of the life of the pad.

Shell 797-09A Pit Closure Data	
Location:	Shell 797-09A
Date:	11/28/2011

Sample Identifications

Lab Report #	L373867	L547375	L546596	L546596	L546596	L546596
Date Sampled	11/7/2008	11/28/2011	11/12/2011	11/12/2011	11/12/2011	11/12/2011
Sample Name	797-09A Pit BTM - 0-6"	797-09A Pit Cap	797-09A BG-SE	797-09A BG-S	797-09A BG-E	797-09A BG-NE

Organics in Soil	MCL (mg/kg)					
TPH (GRO and DRO)	500	82	70	27.00	14.00	7.20
Benzene	0.17	BDL	U	U	U	U
Toluene	85	BDL	0.0022	U	U	U
Ethylbenzene	100	BDL	U	U	U	U
Xylenes	175	0.0075	U	U	U	U

Organics in Soil (PAH's)						
Acenaphthene	1000	NA	0.0022	U	U	U
Anthracene	1000	NA	0.0054	U	U	U
Benzo(A)anthracene	0.22	NA	U	U	U	U
Benzo(B)fluoranthene	0.22	NA	0.0016	U	U	U
Benzo(K)fluoranthene	2.2	NA	U	U	U	U
Benzo(A)pyrene	0.022	NA	0.00092	U	U	U
Chrysene	22	NA	0.0025	U	U	U
Dibenz(A,H)anthracene	0.022	NA	U	U	U	U
Fluoranthene	1000	NA	0.0029	U	U	U
Flourene	1000	NA	0.0099	U	U	U
Indeno(1,2,3,C,D)pyrene	0.22	NA	U	U	U	U
Naphthalene	23	NA	0.054	U	U	U
Pyrene	1000	NA	0.0076	0.00073	0.0016	0.00071

Inorganics in Soil						
EC	<4 mmhos/cm or 2X background	4.8	2.1	0.2400	0.2	1.400
SAR	<12	16	14	1.70	1.1	0.3
pH	6-9	8.4	8.2	8.4	8.0	7.6

Metals in Soils						
Arsenic	0.39	7.8	5.3	9	10	2.9
Barium	15,000	NA	1,300	160	110	58
Cadmium	70	0.55	U	0.54	0.49	0.6
Chromium III	120,000	9	14	14.0	16.0	23.0
Chromium VI	23	NA	U	1.8	U	U
Copper	3100	19	22	23.0	18.0	26.0
Lead	400	10	9.2	12.0	11.0	15.0
Mercury	23	BDL	0.02	0.015	0.017	0.013
Nickel	1600	14	13	16.0	14.0	18.0
Selenium	390	BDL	2.9	2.00	1.70	0.80
Silver	390	BDL	0.24	0.26	0.3	0.44
Zinc	23,000	52	67	64.0	58.0	70.0



OXY USA WTP LP

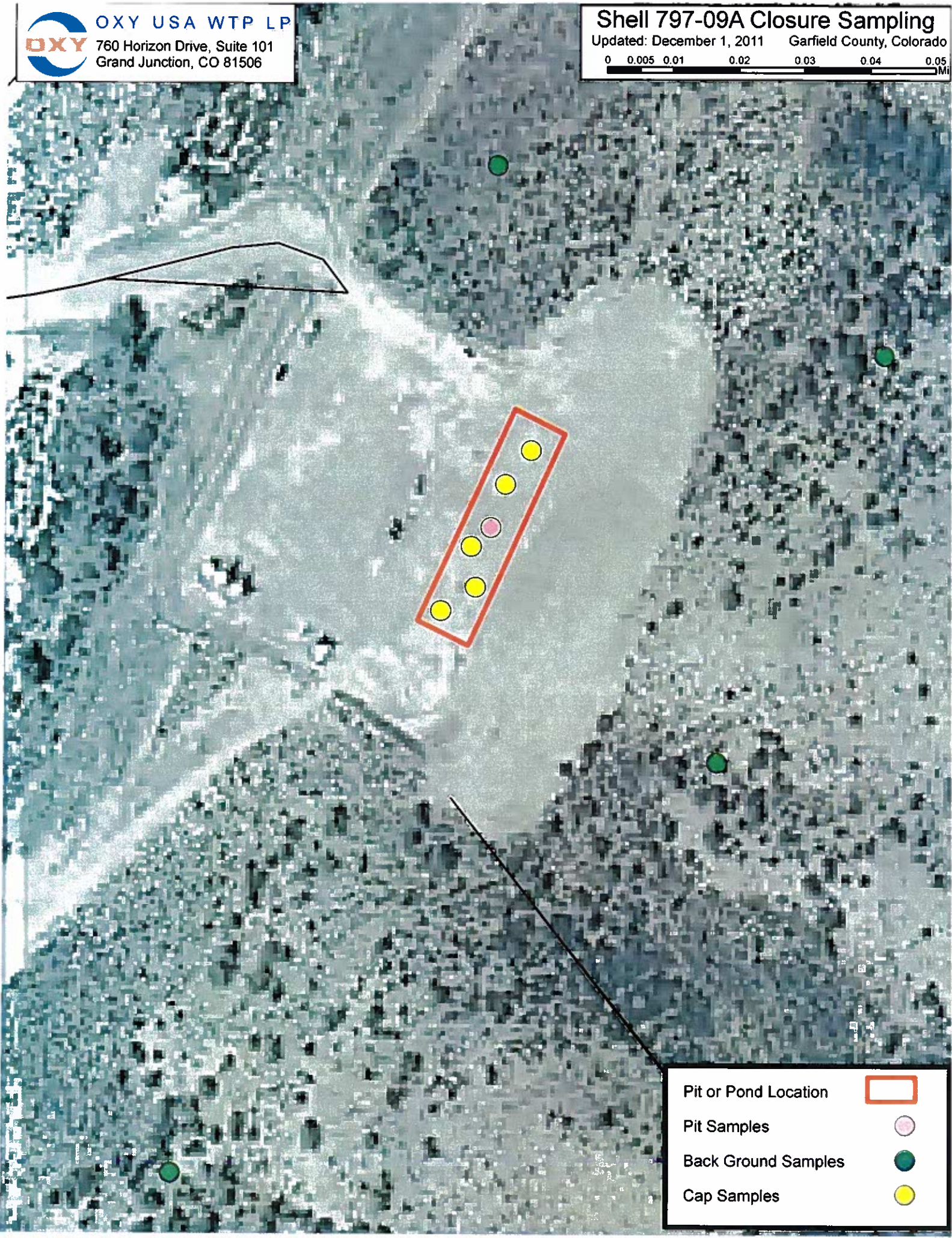
760 Horizon Drive, Suite 101
Grand Junction, CO 81506

Shell 797-09A Closure Sampling

Updated: December 1, 2011

Garfield County, Colorado

0 0.005 0.01 0.02 0.03 0.04 0.05
Mi



Pit or Pond Location



Pit Samples



Back Ground Samples



Cap Samples



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

Report Summary

Sunday November 20, 2011

Report Number: L546596

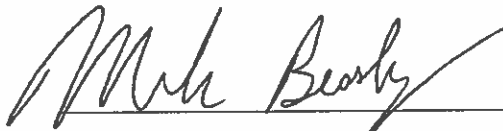
Samples Received: 11/12/11

Client Project: 900546.0005.010

Description: 797-09A 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
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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.

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



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YOUR LAB OF CHOICE

REPORT OF ANALYSIS

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

November 20, 2011

Date Received : November 12, 2011
Description : 797-09A Background
Sample ID : 797-09A BG-SE 6 IN
Collected By : CB
Collection Date : 11/11/11 10:06

ESC Sample # : L546596-01
Site ID :
Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	1.8	0.71	2.0	mg/kg	J	3060A/7	11/17/11	1
Chromium, Trivalent	14.	0.17	2.0	mg/kg		Calc.	11/17/11	1
ORP	62.			mV	T8	2580	11/16/11	1
pH	8.4			su		9045D	11/18/11	1
Sodium Adsorption Ratio	1.7					Calc.	11/16/11	1
Specific Conductance	240			umhos/cm		9050AMo	11/16/11	1
Mercury	0.015	0.0015	0.020	mg/kg	J	7471	11/15/11	1
Arsenic	9.0	0.32	1.0	mg/kg		6010B	11/17/11	1
Barium	160	0.050	0.25	mg/kg		6010B	11/17/11	1
Cadmium	0.54	0.040	0.25	mg/kg		6010B	11/17/11	1
Chromium	16.	0.085	0.50	mg/kg		6010B	11/17/11	1
Copper	23.	0.21	1.0	mg/kg		6010B	11/17/11	1
Lead	12.	0.090	0.25	mg/kg		6010B	11/17/11	1
Nickel	16.	0.26	1.0	mg/kg		6010B	11/17/11	1
Selenium	2.0	0.32	1.0	mg/kg		6010B	11/17/11	1
Silver	0.26	0.16	0.50	mg/kg	J	6010B	11/17/11	1
Zinc	64.	0.34	1.5	mg/kg		6010B	11/17/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/14/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	97.6			% Rec.		602/801	11/14/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/15/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/15/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/15/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/15/11	5
Surrogate Recovery								
Toluene-d8	99.9			% Rec.		8260B	11/15/11	5
Dibromofluoromethane	96.5			% Rec.		8260B	11/15/11	5
a,a,a-Trifluorotoluene	107.			% Rec.		8260B	11/15/11	5
4-Bromofluorobenzene	109.			% Rec.		8260B	11/15/11	5
TPH (GC/FID) High Fraction	27.	0.77	4.0	mg/kg		3546/DR	11/16/11	1
Surrogate recovery(%) o-Terphenyl	54.1			% Rec.		3546/DR	11/16/11	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

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L546596-01 (PH) - 8.37@18.8c



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REPORT OF ANALYSIS

November 20, 2011

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

Date Received : November 12, 2011
Description : 797-09A Background
Sample ID : 797-09A BG-SE 6 IN
Collected By : CB
Collection Date : 11/11/11 10:06

ESC Sample # : L546596-01

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	11/17/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/17/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/17/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/17/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/17/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/17/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/17/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/17/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/17/11	1
Phenanthrene	0.0016	0.00074	0.0060	mg/kg	J	8270C-S	11/17/11	1
Pyrene	0.00073	0.00059	0.0060	mg/kg	J	8270C-S	11/17/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/17/11	1
2-Methylnaphthalene	0.00065	0.00059	0.0060	mg/kg	J	8270C-S	11/17/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/17/11	1
Surrogate Recovery								
Nitrobenzene-d5	83.6			% Rec.		8270C-S	11/17/11	1
2-Fluorobiphenyl	84.4			% Rec.		8270C-S	11/17/11	1
p-Terphenyl-d14	102.			% Rec.		8270C-S	11/17/11	1

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REPORT OF ANALYSIS

November 20, 2011

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

ESC Sample # : L546596-02

Date Received : November 12, 2011
Description : 797-09A Background
Sample ID : 797-09A BG-S 12 IN

Site ID :

Project # : 900546.0005.010

Collected By : CB
Collection Date : 11/11/11 09:49

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	11/17/11	1
Chromium, Trivalent	16.	0.17	2.0	mg/kg		Calc.	11/17/11	1
ORP	70.			mV	T8	2580	11/16/11	1
pH	8.0			su		9045D	11/18/11	1
Sodium Adsorption Ratio	1.1					Calc.	11/16/11	1
Specific Conductance	160			umhos/cm		9050AMo	11/16/11	1
Mercury	0.017	0.0015	0.020	mg/kg	J	7471	11/16/11	1
Arsenic	10.	0.32	1.0	mg/kg		6010B	11/17/11	1
Barium	110	0.050	0.25	mg/kg		6010B	11/17/11	1
Cadmium	0.49	0.040	0.25	mg/kg		6010B	11/17/11	1
Chromium	16.	0.085	0.50	mg/kg		6010B	11/17/11	1
Copper	18.	0.21	1.0	mg/kg		6010B	11/17/11	1
Lead	11.	0.090	0.25	mg/kg		6010B	11/17/11	1
Nickel	14.	0.26	1.0	mg/kg		6010B	11/17/11	1
Selenium	1.7	0.32	1.0	mg/kg		6010B	11/17/11	1
Silver	0.30	0.16	0.50	mg/kg	J	6010B	11/17/11	1
Zinc	58.	0.34	1.5	mg/kg		6010B	11/17/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/14/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	93.7			% Rec.		602/801	11/14/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/15/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/15/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/15/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/15/11	5
Surrogate Recovery				% Rec.		8260B	11/15/11	5
Toluene-d8	101.			% Rec.		8260B	11/15/11	5
Dibromofluoromethane	94.8			% Rec.		8260B	11/15/11	5
a,a,a-Trifluorotoluene	107.			% Rec.		8260B	11/15/11	5
4-Bromofluorobenzene	110.			% Rec.		8260B	11/15/11	5
TPH (GC/FID) High Fraction	14.	0.77	4.0	mg/kg		3546/DR	11/16/11	1
Surrogate recovery(%) o-Terphenyl	72.9			% Rec.		3546/DR	11/16/11	1

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L546596-02 (PH) - 7.97@18.0c



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REPORT OF ANALYSIS

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

November 20, 2011

Date Received : November 12, 2011
Description : 797-09A Background
Sample ID : 797-09A BG-S 12 IN
Collected By : CB
Collection Date : 11/11/11 09:49

ESC Sample # : L546596-02

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	11/17/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/17/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(g,h,i)perylene	0.0014	0.0012	0.0060	mg/kg	J	8270C-S	11/17/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/17/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/17/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/17/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/17/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/17/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/17/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/17/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/17/11	1
Pyrene	0.0016	0.00059	0.0060	mg/kg	J	8270C-S	11/17/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/17/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/17/11	1
2-Chloronaphthalene	0.0012	0.00060	0.0060	mg/kg	J	8270C-S	11/17/11	1
Surrogate Recovery								
Nitrobenzene-d5	86.5			% Rec.		8270C-S	11/17/11	1
2-Fluorobiphenyl	80.8			% Rec.		8270C-S	11/17/11	1
p-Terphenyl-d14	80.4			% Rec.		8270C-S	11/17/11	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

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Reported: 11/20/11 08:04 Printed: 11/20/11 08:04

L546596-02 (PH) - 7.97@18.0c



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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 20, 2011

Date Received : November 12, 2011
Description : 797-09A Background
Sample ID : 797-09A BG-E 16 IN
Collected By : CB
Collection Date : 11/11/11 10:16

ESC Sample # : L546596-03

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	11/17/11	1
Chromium, Trivalent	23.	0.17	2.0	mg/kg		Calc.	11/17/11	1
ORP	120			mV	T8	2580	11/16/11	1
pH	7.6			su		9045D	11/18/11	1
Sodium Adsorption Ratio	0.27					Calc.	11/16/11	1
Specific Conductance	1400			umhos/cm		9050AMo	11/16/11	1
Mercury	0.013	0.0015	0.020	mg/kg	J	7471	11/16/11	1
Arsenic	2.9	0.32	1.0	mg/kg		6010B	11/17/11	1
Barium	58.	0.050	0.25	mg/kg		6010B	11/17/11	1
Cadmium	0.60	0.040	0.25	mg/kg		6010B	11/17/11	1
Chromium	23.	0.085	0.50	mg/kg		6010B	11/17/11	1
Copper	26.	0.21	1.0	mg/kg		6010B	11/17/11	1
Lead	15.	0.090	0.25	mg/kg		6010B	11/17/11	1
Nickel	18.	0.26	1.0	mg/kg		6010B	11/17/11	1
Selenium	0.80	0.32	1.0	mg/kg	J	6010B	11/17/11	1
Silver	0.44	0.16	0.50	mg/kg	J	6010B	11/17/11	1
Zinc	70.	0.34	1.5	mg/kg		6010B	11/17/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/14/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	93.4			% Rec.		602/801	11/14/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/15/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/15/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/15/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/15/11	5
Surrogate Recovery								
Toluene-d8	99.4			% Rec.		8260B	11/15/11	5
Dibromofluoromethane	96.8			% Rec.		8260B	11/15/11	5
a,a,a-Trifluorotoluene	106.			% Rec.		8260B	11/15/11	5
4-Bromofluorobenzene	106.			% Rec.		8260B	11/15/11	5
TPH (GC/FID) High Fraction	7.2	0.77	4.0	mg/kg		3546/DR	11/16/11	1
Surrogate recovery(%) o-Terphenyl	79.2			% Rec.		3546/DR	11/16/11	1

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L546596-03 (PH) - 7.56@18.4c



L.A.B S.C.I.E.N.C.E.S

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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 20, 2011

Date Received : November 12, 2011
Description : 797-09A Background
Sample ID : 797-09A BG-E 16 IN
Collected By : CB
Collection Date : 11/11/11 10:16

ESC Sample # : L546596-03

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	11/17/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/17/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/17/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/17/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/17/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/17/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/17/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/17/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/17/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/17/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	11/17/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/17/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/17/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/17/11	1
Surrogate Recovery								
Nitrobenzene-d5	89.5			% Rec.		8270C-S	11/17/11	1
2-Fluorobiphenyl	82.5			% Rec.		8270C-S	11/17/11	1
p-Terphenyl-d14	84.4			% Rec.		8270C-S	11/17/11	1

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L546596-03 (PH) - 7.56@18.4c



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REPORT OF ANALYSIS

November 20, 2011

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

Date Received : November 12, 2011
Description : 797-09A Background
Sample ID : 797-09A BG-NE 13 IN
Collected By : CB
Collection Date : 11/11/11 10:27

ESC Sample # : L546596-04

Site ID :

Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	1.2	0.71	2.0	mg/kg	JP1	3060A/7	11/17/11	1
Chromium, Trivalent	19.	0.17	2.0	mg/kg		Calc.	11/17/11	1
ORP	81.			mV	T8	2580	11/16/11	1
pH	8.4			su		9045D	11/18/11	1
Sodium Adsorption Ratio	2.2					Calc.	11/16/11	1
Specific Conductance	140			umhos/cm		9050AMo	11/16/11	1
Mercury	0.014	0.0015	0.020	mg/kg	J	7471	11/16/11	1
Arsenic	22.	1.6	5.0	mg/kg		6010B	11/17/11	5
Barium	270	0.050	0.25	mg/kg		6010B	11/17/11	1
Cadmium	0.48	0.040	0.25	mg/kg		6010B	11/17/11	1
Chromium	20.	0.085	0.50	mg/kg		6010B	11/17/11	1
Copper	17.	0.21	1.0	mg/kg		6010B	11/17/11	1
Lead	15.	0.45	1.3	mg/kg		6010B	11/17/11	5
Nickel	20.	1.3	5.0	mg/kg		6010B	11/17/11	5
Selenium	5.2	1.6	5.0	mg/kg		6010B	11/17/11	5
Silver	U	0.16	0.50	mg/kg		6010B	11/17/11	1
Zinc	60.	0.34	1.5	mg/kg		6010B	11/17/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/14/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	93.2			% Rec.		602/801	11/14/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/13/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	11/13/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/13/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/13/11	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	11/13/11	5
Dibromofluoromethane	118.			% Rec.		8260B	11/13/11	5
a,a,a-Trifluorotoluene	105.			% Rec.		8260B	11/13/11	5
4-Bromofluorobenzene	101.			% Rec.		8260B	11/13/11	5
TPH (GC/FID) High Fraction	29.	0.77	4.0	mg/kg		3546/DR	11/16/11	1
Surrogate recovery (%) o-Terphenyl	55.2			% Rec.		3546/DR	11/16/11	1

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L546596-04 (PH) - 8.37@18.0c

REPORT OF ANALYSIS

November 20, 2011

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

Date Received : November 12, 2011
Description : 797-09A Background
Sample ID : 797-09A BG-NE 13 IN
Collected By : CB
Collection Date : 11/11/11 10:27

ESC Sample # : L546596-04

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	11/17/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	11/17/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/17/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/17/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	11/17/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/17/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	11/17/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	11/17/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/17/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	11/17/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	11/17/11	1
Pyrene	0.00071	0.00059	0.0060	mg/kg	J	8270C-S	11/17/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	11/17/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	11/17/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/17/11	1
Surrogate Recovery								
Nitrobenzene-d5	83.7			% Rec.		8270C-S	11/17/11	1
2-Fluorobiphenyl	80.0			% Rec.		8270C-S	11/17/11	1
p-Terphenyl-d14	102.			% Rec.		8270C-S	11/17/11	1

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Note:

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L546596-04 (PH) - 8.37@18.0c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L546596-01	WG565434	SAMP	Silver	R1936495	J
	WG565775	SAMP	Chromium, Hexavalent	R1935553	J
	WG565541	SAMP	Mercury	R1932473	J
	WG565735	SAMP	Phenanthrene	R1936792	J
	WG565735	SAMP	Pyrene	R1936792	J
	WG565735	SAMP	2-Methylnaphthalene	R1936792	J
	WG565578	SAMP	ORP	R1933894	T8
	WG565434	SAMP	Silver	R1936495	J
L546596-02	WG565630	SAMP	Mercury	R1933772	J
	WG565735	SAMP	Benzo(g,h,i)perylene	R1936792	J
	WG565735	SAMP	Pyrene	R1936792	J
	WG565735	SAMP	2-Chloronaphthalene	R1936792	J
	WG565578	SAMP	ORP	R1933894	T8
	WG565434	SAMP	Selenium	R1936495	J
	WG565434	SAMP	Silver	R1936495	J
	WG565630	SAMP	Mercury	R1933772	J
L546596-03	WG565578	SAMP	ORP	R1933894	T8
	WG565775	SAMP	Chromium, Hexavalent	R1935553	JP1
	WG565630	SAMP	Mercury	R1933772	J
	WG565735	SAMP	Pyrene	R1936792	J
L546596-04	WG565578	SAMP	ORP	R1933894	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

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

Definitions

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

Summary of Remarks For Samples Printed
11/20/11 at 08:04:47

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L546596-01 Account: OXYGJCO Received: 11/12/11 09:00 Due Date: 11/18/11 00:00 RPT Date: 11/20/11 08:04
Sample: L546596-02 Account: OXYGJCO Received: 11/12/11 09:00 Due Date: 11/18/11 00:00 RPT Date: 11/20/11 08:04
Sample: L546596-03 Account: OXYGJCO Received: 11/12/11 09:00 Due Date: 11/18/11 00:00 RPT Date: 11/20/11 08:04
Sample: L546596-04 Account: OXYGJCO Received: 11/12/11 09:00 Due Date: 11/18/11 00:00 RPT Date: 11/20/11 08:04

OXY USA WTP LP. -

Grand Junction, CO

760 Horizon Dr., Ste 101

Grand Junction, CO 81506

Alternate billing information:

CO Table 910

Report to:

BEAR - NOLLUS@OXY.COM

Email to:

DANIEL_PAPILLA@oxy.com

Project

Description: 797-09A Background

Phone: (970) 263-3601

FAX:

Client Project #:

900546.0005.010

ESC Key:

P.O.#:

Site/Facility ID#:

Collected by:

Collected by (signature):

(Lab MUST Be Notified)

Same Day.....200%

Next Day.....100%

Two Day.....50%

Standard

Packed on Ice N

Sample ID

797-09A BG-SE

797-09A BG-S

797-09A BG-E

797-09A BG-NE

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

Remarks:

STANDARD

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Date: 11/11/11

Time: 4:21

Date:

Time:

Date:

Time:

Received by: (Signature)

Received by: (Signature)

Received by: (Signature)

Received by: (Signature)

Received by: (Signature)

Received by: (Signature)

Samples returned via: ☒ UPS ☐ FedEx ☐ Courier

Temp: 3.4

Date: 11-12-11

Time: 0:00

Condition:

pH Checked:

NCF:

Other

Flow

4371 9823223Flow

Analysis/Container/Preservative

Chain of Custody

Page 1 of 1

D073

ENVIRONMENTAL

SCIENCE CORP.

12065 Lebanon Road

Mt Juliet, TN 37122

Phone (615) 758-5858

Phone (800) 767-3859

FAX (615) 758-5859

CoCode OXYGJCO (lab use only)

Template/Prelogin

Shipped Via:

Remarks/Contaminant

Sample # (lab only)

LS465962

pH

Temp

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

Report Summary

Monday November 28, 2011

Report Number: L547375

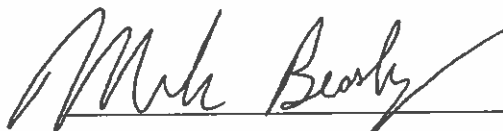
Samples Received: 11/17/11

Client Project: 900546.0005.010

Description: Shell 797-09A Cap

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.

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REPORT OF ANALYSIS

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

November 28, 2011

Date Received : November 17, 2011
Description : Shell 797-09A Cap
Sample ID : SHELL-09ACC
Collected By : CJB
Collection Date : 11/16/11 11:35

ESC Sample # : L547375-01
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	11/23/11	1
Chromium, Trivalent	14.	0.17	2.0	mg/kg		Calc.	11/22/11	1
ORP	-15.			mV	T8	2580	11/21/11	1
pH	8.2			su		9045D	11/22/11	1
Sodium Adsorption Ratio	14.					Calc.	11/22/11	1
Specific Conductance	2100			umhos/cm		9050AMo	11/20/11	1
Mercury	0.020	0.0015	0.020	mg/kg	J	7471	11/18/11	1
Arsenic	5.3	0.32	1.0	mg/kg		6010B	11/22/11	1
Barium	1300	0.050	0.25	mg/kg		6010B	11/22/11	1
Cadmium	U	0.040	0.25	mg/kg		6010B	11/22/11	1
Chromium	14.	0.085	0.50	mg/kg		6010B	11/22/11	1
Copper	22.	0.21	1.0	mg/kg		6010B	11/22/11	1
Lead	9.2	0.090	0.25	mg/kg		6010B	11/22/11	1
Nickel	13.	0.26	1.0	mg/kg		6010B	11/22/11	1
Selenium	2.9	0.32	1.0	mg/kg		6010B	11/22/11	1
Silver	0.24	0.16	0.50	mg/kg	J	6010B	11/22/11	1
Zinc	67.	0.34	1.5	mg/kg		6010B	11/22/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	11/19/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	95.0			% Rec.		602/801	11/19/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	11/17/11	5
Toluene	0.0022	0.0016	0.025	mg/kg	J	8260B	11/17/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	11/17/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	11/17/11	5
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	11/17/11	5
Dibromofluoromethane	100.			% Rec.		8260B	11/17/11	5
a,a,a-Trifluorotoluene	112.			% Rec.		8260B	11/17/11	5
4-Bromofluorobenzene	93.1			% Rec.		8260B	11/17/11	5
TPH (GC/FID) High Fraction	70.	0.77	4.0	mg/kg		3546/DR	11/19/11	1
Surrogate recovery(%) o-Terphenyl	89.4			% Rec.		3546/DR	11/19/11	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.

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Reported: 11/28/11 14:40 Printed: 11/28/11 14:40
L547375-01 (PH) - 8.24@21.0c

REPORT OF ANALYSIS

November 28, 2011

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

ESC Sample # : L547375-01

Date Received : November 17, 2011
Description : Shell 797-09A Cap

Site ID :

Sample ID : SHELL-09ACC

Project # : 900546.0005.010

Collected By : CJB
Collection Date : 11/16/11 11:35

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.0054	0.00076	0.0060	mg/kg	JJ3	8270C-S	11/25/11	1
Acenaphthene	0.0022	0.00071	0.0060	mg/kg	J	8270C-S	11/25/11	1
Acenaphthylene	0.0015	0.00057	0.0060	mg/kg	J	8270C-S	11/25/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	11/25/11	1
Benzo(a)pyrene	0.00092	0.00062	0.0060	mg/kg	J	8270C-S	11/25/11	1
Benzo(b)fluoranthene	0.0016	0.00082	0.0060	mg/kg	J	8270C-S	11/25/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	11/25/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	11/25/11	1
Chrysene	0.0025	0.0011	0.0060	mg/kg	J	8270C-S	11/25/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	11/25/11	1
Fluoranthene	0.0029	0.0010	0.0060	mg/kg	J	8270C-S	11/25/11	1
Fluorene	0.0099	0.00055	0.0060	mg/kg		8270C-S	11/25/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	11/25/11	1
Naphthalene	0.054	0.00065	0.0060	mg/kg		8270C-S	11/25/11	1
Phenanthrene	0.027	0.00074	0.0060	mg/kg		8270C-S	11/25/11	1
Pyrene	0.0076	0.00059	0.0060	mg/kg		8270C-S	11/25/11	1
1-Methylnaphthalene	0.044	0.00079	0.0060	mg/kg		8270C-S	11/25/11	1
2-Methylnaphthalene	0.085	0.00059	0.0060	mg/kg		8270C-S	11/25/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	11/25/11	1
Surrogate Recovery								
Nitrobenzene-d5	90.2			% Rec.		8270C-S	11/25/11	1
2-Fluorobiphenyl	52.8			% Rec.		8270C-S	11/25/11	1
p-Terphenyl-d14	55.8			% Rec.		8270C-S	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.

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Reported: 11/28/11 14:40 Printed: 11/28/11 14:40

L547375-01 (PH) - 8.24@21.0c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L547375-01	WG566623	SAMP	Silver	R1942454	J
	WG566254	SAMP	Mercury	R1938952	J
	WG566250	SAMP	Toluene	R1936113	J
	WG566430	SAMP	Anthracene	R1939636	JJ3
	WG566430	SAMP	Acenaphthene	R1939636	J
	WG566430	SAMP	Acenaphthylene	R1939636	J
	WG566430	SAMP	Benzo(a)pyrene	R1939636	J
	WG566430	SAMP	Benzo(b)fluoranthene	R1939636	J
	WG566430	SAMP	Chrysene	R1939636	J
	WG566430	SAMP	Fluoranthene	R1939636	J
	WG566386	SAMP	ORP	R1939702	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
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
11/28/11 at 14:40:51

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L547375-01 Account: OXYGJCO Received: 11/17/11 09:00 Due Date: 11/29/11 00:00 RPT Date: 11/28/11 14:40

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

Project Description: Shell 797-09A Cap
Phone: (970) 263-3601
FAX:

Client Project #: 90546.005.010

Site/Facility ID#:

Collected by: CJB

Collected by (signature):

Packed on Ice N

Rush? (Lab MUST Be Notified)
Same Day.....200%
Next Day.....100%
Two Day50%

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

No
of
Cntrs

Sample ID

Shell-09ACC

Comp/Grab
Comp

Matrix*
SS

Depth
6"-12"

Date
11/16/11

Time
11:35

Alternate billing information:

CO Table 910

Report to:

Blaise Collins
Email to: Daniel_Falilla @oxy.com

City/State
Collected Parachute

ESC Key:

P.O.#:

Chain of Custody
Page 1 of 1

Preparer

E142



ENVIRONMINTAL

SCIENCE CORP.

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Mt Juliet, TN 37122

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Phone (800) 767-5859

FAX (615) 758-5859

CoCode OXYGJCO (lab use only)

Template/Prelogin

Shipped Via:

Remarks/Contaminant

Sample # (lab use only)

1547375

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

pH Temp

Remarks:

5040 0621 3853 Flow

Samples returned via: ☒ UPS ☐ FedEx ☐ Courier

Condition:

(lab use only)

Relinquished by: (Signature)

Date: 11/16/11

Received by: (Signature)

Temp: 31.0

Bottles Received: 3

Condition:

(lab use only)

Relinquished by: (Signature)

Date:

Received by: (Signature)

Date: 11-17-11

Time: 0900

pH Checked:

NCF:

Relinquished by: (Signature)

Date:

Received for lab by: (Signature)