



12065 Lebanon Rd.
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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

Monday November 18, 2013

Report Number: L668251

Samples Received: 11/13/13

Client Project: 013-0624

Description: Hawkins 10-9 08 spill confirmation

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 - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

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

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REPORT OF ANALYSIS

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

November 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation
Sample ID : NORTH HALF 1 0-6 IN
Collected By : Lilly Griffin
Collection Date : 11/12/13 12:05

ESC Sample # : L668251-01
Site ID : HAWKINS 10-9
Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	50.	mg/kg	3060A/7196A	11/16/13	25
Chromium, Trivalent	18.	0.50	mg/kg	Calc.	11/17/13	1
ORP	130		mV	2580 B-2011	11/16/13	1
pH	8.1		su	9045D	11/15/13	1
Sodium Adsorption Ratio	0.88			Calc.	11/15/13	1
Specific Conductance	260		umhos/cm	9050AMod	11/16/13	1
Mercury	BDL	0.020	mg/kg	7471	11/14/13	1
Arsenic	5.3	0.38	mg/kg	6010B	11/16/13	1
Barium	220	0.25	mg/kg	6010B	11/16/13	1
Cadmium	BDL	0.25	mg/kg	6010B	11/16/13	1
Chromium	18.	0.50	mg/kg	6010B	11/16/13	1
Copper	14.	1.0	mg/kg	6010B	11/16/13	1
Lead	9.8	0.25	mg/kg	6010B	11/16/13	1
Nickel	14.	1.0	mg/kg	6010B	11/16/13	1
Selenium	1.8	1.0	mg/kg	6010B	11/16/13	1
Silver	BDL	0.50	mg/kg	6010B	11/16/13	1
Zinc	44.	1.5	mg/kg	6010B	11/16/13	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	11/13/13	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	101.		% Rec.	602/8015	11/13/13	5
Benzene	BDL	0.0050	mg/kg	8260B	11/14/13	5
Toluene	BDL	0.025	mg/kg	8260B	11/14/13	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	11/14/13	5
Total Xylenes	BDL	0.015	mg/kg	8260B	11/14/13	5
Surrogate Recovery						
Toluene-d8	101.		% Rec.	8260B	11/14/13	5
Dibromofluoromethane	103.		% Rec.	8260B	11/14/13	5
a,a,a-Trifluorotoluene	97.4		% Rec.	8260B	11/14/13	5
4-Bromofluorobenzene	95.4		% Rec.	8260B	11/14/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	11/17/13	1
Surrogate recovery(%) o-Terphenyl	89.1		% Rec.	3546/DRO	11/17/13	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L668251-01 (CR6) - diluted due to sample color
L668251-01 (PH) - 8.1@20.4c



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Grand Junction, CO 81506

November 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation

ESC Sample # : L668251-01

Sample ID : NORTH HALF 1 0-6 IN

Site ID : HAWKINS 10-9

Collected By : Lilly Griffin
Collection Date : 11/12/13 12:05

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Surrogate Recovery						
Nitrobenzene-d5	92.7		% Rec.	8270C-SIM	11/18/13	1
2-Fluorobiphenyl	82.7		% Rec.	8270C-SIM	11/18/13	1
p-Terphenyl-d14	82.4		% Rec.	8270C-SIM	11/18/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/18/13 15:59 Printed: 11/18/13 17:22
L668251-01 (CR6) - diluted due to sample color
L668251-01 (PH) - 8.1@20.4c



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REPORT OF ANALYSIS

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

November 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation
Sample ID : NORTH HALF 2 0-6 IN
Collected By : Lilly Griffin
Collection Date : 11/12/13 12:15

ESC Sample # : L668251-02
Site ID : HAWKINS 10-9
Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	50.	mg/kg	3060A/7196A	11/16/13	25
Chromium, Trivalent	20.	0.50	mg/kg	Calc.	11/17/13	1
ORP	140		mV	2580 B-2011	11/16/13	1
pH	8.2		su	9045D	11/15/13	1
Sodium Adsorption Ratio	0.53			Calc.	11/15/13	1
Specific Conductance	340		umhos/cm	9050AMod	11/16/13	1
Mercury	BDL	0.020	mg/kg	7471	11/14/13	1
Arsenic	6.0	0.38	mg/kg	6010B	11/16/13	1
Barium	170	0.25	mg/kg	6010B	11/16/13	1
Cadmium	BDL	0.25	mg/kg	6010B	11/16/13	1
Chromium	20.	0.50	mg/kg	6010B	11/16/13	1
Copper	13.	1.0	mg/kg	6010B	11/16/13	1
Lead	7.9	0.25	mg/kg	6010B	11/16/13	1
Nickel	15.	1.0	mg/kg	6010B	11/16/13	1
Selenium	1.6	1.0	mg/kg	6010B	11/16/13	1
Silver	BDL	0.50	mg/kg	6010B	11/16/13	1
Zinc	44.	1.5	mg/kg	6010B	11/16/13	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	11/14/13	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	100.		% Rec.	602/8015	11/14/13	5
Benzene	BDL	0.0050	mg/kg	8260B	11/14/13	5
Toluene	BDL	0.025	mg/kg	8260B	11/14/13	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	11/14/13	5
Total Xylenes	BDL	0.015	mg/kg	8260B	11/14/13	5
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	11/14/13	5
Dibromofluoromethane	110.		% Rec.	8260B	11/14/13	5
a,a,a-Trifluorotoluene	99.0		% Rec.	8260B	11/14/13	5
4-Bromofluorobenzene	104.		% Rec.	8260B	11/14/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	11/17/13	1
Surrogate recovery(%) o-Terphenyl	83.8		% Rec.	3546/DRO	11/17/13	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L668251-02 (CR6) - diluted due to sample color
L668251-02 (PH) - 8.2@20.3c



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

November 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation

ESC Sample # : L668251-02

Sample ID : NORTH HALF 2 0-6 IN

Site ID : HAWKINS 10-9

Collected By : Lilly Griffin
Collection Date : 11/12/13 12:15

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Surrogate Recovery						
Nitrobenzene-d5	83.4		% Rec.	8270C-SIM	11/18/13	1
2-Fluorobiphenyl	81.8		% Rec.	8270C-SIM	11/18/13	1
p-Terphenyl-d14	83.1		% Rec.	8270C-SIM	11/18/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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L668251-02 (CR6) - diluted due to sample color

L668251-02 (PH) - 8.2@20.3c



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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 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation
Sample ID : NORTH HALF 3 0-6 IN
Collected By : Lilly Griffin
Collection Date : 11/12/13 12:30

ESC Sample # : L668251-03

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	50.	mg/kg	3060A/7196A	11/16/13	25
Chromium, Trivalent	23.	0.50	mg/kg	Calc.	11/17/13	1
ORP	140		mV	2580 B-2011	11/16/13	1
pH	8.2		su	9045D	11/15/13	1
Sodium Adsorption Ratio	0.40			Calc.	11/15/13	1
Specific Conductance	370		umhos/cm	9050AMod	11/16/13	1
Mercury	BDL	0.020	mg/kg	7471	11/14/13	1
Arsenic	6.8	0.38	mg/kg	6010B	11/16/13	1
Barium	150	0.25	mg/kg	6010B	11/16/13	1
Cadmium	BDL	0.25	mg/kg	6010B	11/16/13	1
Chromium	23.	0.50	mg/kg	6010B	11/16/13	1
Copper	14.	1.0	mg/kg	6010B	11/16/13	1
Lead	9.0	0.25	mg/kg	6010B	11/16/13	1
Nickel	15.	1.0	mg/kg	6010B	11/16/13	1
Selenium	1.5	1.0	mg/kg	6010B	11/16/13	1
Silver	BDL	0.50	mg/kg	6010B	11/16/13	1
Zinc	45.	1.5	mg/kg	6010B	11/16/13	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	11/14/13	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	102.		% Rec.	602/8015	11/14/13	5
Benzene	BDL	0.0050	mg/kg	8260B	11/14/13	5
Toluene	BDL	0.025	mg/kg	8260B	11/14/13	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	11/14/13	5
Total Xylenes	BDL	0.015	mg/kg	8260B	11/14/13	5
Surrogate Recovery						
Toluene-d8	104.		% Rec.	8260B	11/14/13	5
Dibromofluoromethane	107.		% Rec.	8260B	11/14/13	5
a,a,a-Trifluorotoluene	98.1		% Rec.	8260B	11/14/13	5
4-Bromofluorobenzene	91.5		% Rec.	8260B	11/14/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	11/17/13	1
Surrogate recovery(%) o-Terphenyl	89.4		% Rec.	3546/DRO	11/17/13	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L668251-03 (PH) - 8.2@20.4c
L668251-03 (CR6) - diluted due to sample color



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November 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation

Sample ID : NORTH HALF 3 0-6 IN

Collected By : Lilly Griffin
Collection Date : 11/12/13 12:30

ESC Sample # : L668251-03

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Surrogate Recovery						
Nitrobenzene-d5	83.2		% Rec.	8270C-SIM	11/18/13	1
2-Fluorobiphenyl	80.4		% Rec.	8270C-SIM	11/18/13	1
p-Terphenyl-d14	79.1		% Rec.	8270C-SIM	11/18/13	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Reported: 11/18/13 15:59 Printed: 11/18/13 17:22
L668251-03 (PH) - 8.2@20.4c
L668251-03 (CR6) - diluted due to sample color



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REPORT OF ANALYSIS

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

November 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation
Sample ID : NORTH HALF 4 0-6 IN
Collected By : Lilly Griffin
Collection Date : 11/12/13 12:40

ESC Sample # : L668251-04

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	11/16/13	1
Chromium, Trivalent	16.	2.0	mg/kg	Calc.	11/17/13	1
ORP	140		mV	2580 B-2011	11/16/13	1
pH	8.3		su	9045D	11/15/13	1
Sodium Adsorption Ratio	0.30			Calc.	11/15/13	1
Specific Conductance	370		umhos/cm	9050AMod	11/16/13	1
Mercury	BDL	0.020	mg/kg	7471	11/14/13	1
Arsenic	6.3	0.38	mg/kg	6010B	11/16/13	1
Barium	230	0.25	mg/kg	6010B	11/16/13	1
Cadmium	BDL	0.25	mg/kg	6010B	11/16/13	1
Chromium	16.	0.50	mg/kg	6010B	11/16/13	1
Copper	13.	1.0	mg/kg	6010B	11/16/13	1
Lead	8.4	0.25	mg/kg	6010B	11/16/13	1
Nickel	20.	1.0	mg/kg	6010B	11/16/13	1
Selenium	1.8	1.0	mg/kg	6010B	11/16/13	1
Silver	BDL	0.50	mg/kg	6010B	11/16/13	1
Zinc	39.	1.5	mg/kg	6010B	11/16/13	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	11/14/13	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	102.		% Rec.	602/8015	11/14/13	5
Benzene	BDL	0.0050	mg/kg	8260B	11/14/13	5
Toluene	BDL	0.025	mg/kg	8260B	11/14/13	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	11/14/13	5
Total Xylenes	BDL	0.015	mg/kg	8260B	11/14/13	5
Surrogate Recovery						
Toluene-d8	104.		% Rec.	8260B	11/14/13	5
Dibromofluoromethane	107.		% Rec.	8260B	11/14/13	5
a,a,a-Trifluorotoluene	102.		% Rec.	8260B	11/14/13	5
4-Bromofluorobenzene	101.		% Rec.	8260B	11/14/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	11/17/13	1
Surrogate recovery(%) o-Terphenyl	89.7		% Rec.	3546/DRO	11/17/13	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L668251-04 (PH) - 8.3@20.1c



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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 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation

ESC Sample # : L668251-04

Sample ID : NORTH HALF 4 0-6 IN

Site ID : HAWKINS 10-9

Collected By : Lilly Griffin
Collection Date : 11/12/13 12:40

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Surrogate Recovery						
Nitrobenzene-d5	93.5		% Rec.	8270C-SIM	11/18/13	1
2-Fluorobiphenyl	84.5		% Rec.	8270C-SIM	11/18/13	1
p-Terphenyl-d14	84.8		% Rec.	8270C-SIM	11/18/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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L668251-04 (PH) - 8.3@20.1c



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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 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation
Sample ID : SOUTH HALF 8 0-6 IN
Collected By : Lilly Griffin
Collection Date : 11/12/13 12:55

ESC Sample # : L668251-05

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	10.	mg/kg	3060A/7196A	11/16/13	5
Chromium, Trivalent	14.	10.	mg/kg	Calc.	11/17/13	1
ORP	140		mV	2580 B-2011	11/16/13	1
pH	8.4		su	9045D	11/15/13	1
Sodium Adsorption Ratio	0.59			Calc.	11/15/13	1
Specific Conductance	500		umhos/cm	9050AMod	11/16/13	1
Mercury	BDL	0.020	mg/kg	7471	11/15/13	1
Arsenic	4.6	0.38	mg/kg	6010B	11/16/13	1
Barium	230	0.25	mg/kg	6010B	11/16/13	1
Cadmium	BDL	0.25	mg/kg	6010B	11/16/13	1
Chromium	14.	0.50	mg/kg	6010B	11/16/13	1
Copper	16.	1.0	mg/kg	6010B	11/16/13	1
Lead	12.	0.25	mg/kg	6010B	11/16/13	1
Nickel	22.	1.0	mg/kg	6010B	11/16/13	1
Selenium	1.7	1.0	mg/kg	6010B	11/16/13	1
Silver	BDL	0.50	mg/kg	6010B	11/16/13	1
Zinc	42.	1.5	mg/kg	6010B	11/16/13	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	11/14/13	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	102.		% Rec.	602/8015	11/14/13	5
Benzene	BDL	0.0050	mg/kg	8260B	11/16/13	5
Toluene	BDL	0.025	mg/kg	8260B	11/16/13	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	11/16/13	5
Total Xylenes	BDL	0.015	mg/kg	8260B	11/16/13	5
Surrogate Recovery						
Toluene-d8	103.		% Rec.	8260B	11/16/13	5
Dibromofluoromethane	107.		% Rec.	8260B	11/16/13	5
a,a,a-Trifluorotoluene	103.		% Rec.	8260B	11/16/13	5
4-Bromofluorobenzene	101.		% Rec.	8260B	11/16/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	11/17/13	1
Surrogate recovery(%) o-Terphenyl	73.5		% Rec.	3546/DRO	11/17/13	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L668251-05 (PH) - 8.4@20.9c
L668251-05 (CR6) - diluted due to sample color



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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 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation

Sample ID : SOUTH HALF 8 0-6 IN

Collected By : Lilly Griffin
Collection Date : 11/12/13 12:55

ESC Sample # : L668251-05

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Surrogate Recovery						
Nitrobenzene-d5	81.5		% Rec.	8270C-SIM	11/18/13	1
2-Fluorobiphenyl	77.5		% Rec.	8270C-SIM	11/18/13	1
p-Terphenyl-d14	65.4		% Rec.	8270C-SIM	11/18/13	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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L668251-05 (PH) - 8.4@20.9c
L668251-05 (CR6) - diluted due to sample color



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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 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation
Sample ID : SOUTH HALF 7 0-6 IN
Collected By : Lilly Griffin
Collection Date : 11/12/13 13:20

ESC Sample # : L668251-06

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	11/16/13	1
Chromium,Trivalent	18.	2.0	mg/kg	Calc.	11/17/13	1
ORP	130		mV	2580 B-2011	11/16/13	1
pH	8.3		su	9045D	11/15/13	1
Sodium Adsorption Ratio	0.71			Calc.	11/15/13	1
Specific Conductance	350		umhos/cm	9050AMod	11/16/13	1
Mercury	BDL	0.020	mg/kg	7471	11/15/13	1
Arsenic	5.5	0.38	mg/kg	6010B	11/16/13	1
Barium	150	0.25	mg/kg	6010B	11/16/13	1
Cadmium	BDL	0.25	mg/kg	6010B	11/16/13	1
Chromium	18.	0.50	mg/kg	6010B	11/16/13	1
Copper	15.	1.0	mg/kg	6010B	11/16/13	1
Lead	11.	0.25	mg/kg	6010B	11/16/13	1
Nickel	15.	1.0	mg/kg	6010B	11/16/13	1
Selenium	1.8	1.0	mg/kg	6010B	11/16/13	1
Silver	BDL	0.50	mg/kg	6010B	11/16/13	1
Zinc	44.	1.5	mg/kg	6010B	11/16/13	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	11/14/13	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	101.		% Rec.	602/8015	11/14/13	5
Benzene	BDL	0.0050	mg/kg	8260B	11/16/13	5
Toluene	BDL	0.025	mg/kg	8260B	11/16/13	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	11/16/13	5
Total Xylenes	BDL	0.015	mg/kg	8260B	11/16/13	5
Surrogate Recovery						
Toluene-d8	103.		% Rec.	8260B	11/16/13	5
Dibromofluoromethane	107.		% Rec.	8260B	11/16/13	5
a,a,a-Trifluorotoluene	103.		% Rec.	8260B	11/16/13	5
4-Bromofluorobenzene	101.		% Rec.	8260B	11/16/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	11/17/13	1
Surrogate recovery(%) o-Terphenyl	96.3		% Rec.	3546/DRO	11/17/13	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L668251-06 (PH) - 8.3@21.0c



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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 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation

Sample ID : SOUTH HALF 7 0-6 IN

Collected By : Lilly Griffin
Collection Date : 11/12/13 13:20

ESC Sample # : L668251-06

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Surrogate Recovery						
Nitrobenzene-d5	91.1		% Rec.	8270C-SIM	11/18/13	1
2-Fluorobiphenyl	81.1		% Rec.	8270C-SIM	11/18/13	1
p-Terphenyl-d14	81.8		% Rec.	8270C-SIM	11/18/13	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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L668251-06 (PH) - 8.3@21.0c



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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 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation
Sample ID : SOUTH HALF 6 0-6 IN
Collected By : Lilly Griffin
Collection Date : 11/12/13 13:30

ESC Sample # : L668251-07

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	10.	mg/kg	3060A/7196A	11/16/13	5
Chromium, Trivalent	18.	10.	mg/kg	Calc.	11/17/13	1
ORP	130		mV	2580 B-2011	11/16/13	1
pH	8.3		su	9045D	11/15/13	1
Sodium Adsorption Ratio	0.65			Calc.	11/15/13	1
Specific Conductance	160		umhos/cm	9050AMod	11/16/13	1
Mercury	BDL	0.020	mg/kg	7471	11/15/13	1
Arsenic	5.5	0.38	mg/kg	6010B	11/16/13	1
Barium	130	0.25	mg/kg	6010B	11/16/13	1
Cadmium	BDL	0.25	mg/kg	6010B	11/16/13	1
Chromium	18.	0.50	mg/kg	6010B	11/16/13	1
Copper	14.	1.0	mg/kg	6010B	11/16/13	1
Lead	11.	0.25	mg/kg	6010B	11/16/13	1
Nickel	15.	1.0	mg/kg	6010B	11/16/13	1
Selenium	1.9	1.0	mg/kg	6010B	11/16/13	1
Silver	BDL	0.50	mg/kg	6010B	11/16/13	1
Zinc	43.	1.5	mg/kg	6010B	11/16/13	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	11/14/13	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	103.		% Rec.	602/8015	11/14/13	5
Benzene	BDL	0.0050	mg/kg	8260B	11/16/13	5
Toluene	BDL	0.025	mg/kg	8260B	11/16/13	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	11/16/13	5
Total Xylenes	BDL	0.015	mg/kg	8260B	11/16/13	5
Surrogate Recovery						
Toluene-d8	103.		% Rec.	8260B	11/16/13	5
Dibromofluoromethane	105.		% Rec.	8260B	11/16/13	5
a,a,a-Trifluorotoluene	104.		% Rec.	8260B	11/16/13	5
4-Bromofluorobenzene	101.		% Rec.	8260B	11/16/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	11/17/13	1
Surrogate recovery(%) o-Terphenyl	91.8		% Rec.	3546/DRO	11/17/13	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L668251-07 (PH) - 8.3@20.6c
L668251-07 (CR6) - diluted due to sample color



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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 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation
Sample ID : SOUTH HALF 6 0-6 IN
Collected By : Lilly Griffin
Collection Date : 11/12/13 13:30

ESC Sample # : L668251-07

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Surrogate Recovery						
Nitrobenzene-d5	84.3		% Rec.	8270C-SIM	11/18/13	1
2-Fluorobiphenyl	83.9		% Rec.	8270C-SIM	11/18/13	1
p-Terphenyl-d14	83.6		% Rec.	8270C-SIM	11/18/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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L668251-07 (PH) - 8.3@20.6c

L668251-07 (CR6) - diluted due to sample color



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Est. 1970

REPORT OF ANALYSIS

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

November 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation
Sample ID : SOUTH HALF 5 0-6 IN
Collected By : Lilly Griffin
Collection Date : 11/12/13 13:40

ESC Sample # : L668251-08

Site ID : HAWKINS 10-9

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	11/16/13	1
Chromium, Trivalent	18.	2.0	mg/kg	Calc.	11/17/13	1
ORP	130		mV	2580 B-2011	11/16/13	1
pH	8.2		su	9045D	11/15/13	1
Sodium Adsorption Ratio	0.73			Calc.	11/15/13	1
Specific Conductance	310		umhos/cm	9050AMod	11/16/13	1
Mercury	BDL	0.020	mg/kg	7471	11/15/13	1
Arsenic	5.0	0.38	mg/kg	6010B	11/16/13	1
Barium	180	0.25	mg/kg	6010B	11/16/13	1
Cadmium	BDL	0.25	mg/kg	6010B	11/16/13	1
Chromium	18.	0.50	mg/kg	6010B	11/16/13	1
Copper	18.	1.0	mg/kg	6010B	11/16/13	1
Lead	10.	0.25	mg/kg	6010B	11/16/13	1
Nickel	20.	1.0	mg/kg	6010B	11/16/13	1
Selenium	1.8	1.0	mg/kg	6010B	11/16/13	1
Silver	BDL	0.50	mg/kg	6010B	11/16/13	1
Zinc	43.	1.5	mg/kg	6010B	11/16/13	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	11/14/13	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	102.		% Rec.	602/8015	11/14/13	5
Benzene	BDL	0.0050	mg/kg	8260B	11/15/13	5
Toluene	BDL	0.025	mg/kg	8260B	11/15/13	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	11/15/13	5
Total Xylenes	BDL	0.015	mg/kg	8260B	11/15/13	5
Surrogate Recovery						
Toluene-d8	104.		% Rec.	8260B	11/15/13	5
Dibromofluoromethane	111.		% Rec.	8260B	11/15/13	5
a,a,a-Trifluorotoluene	101.		% Rec.	8260B	11/15/13	5
4-Bromofluorobenzene	99.7		% Rec.	8260B	11/15/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	11/17/13	1
Surrogate recovery(%) o-Terphenyl	90.4		% Rec.	3546/DRO	11/17/13	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L668251-08 (PH) - 8.2@20.3c



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Est. 1970

REPORT OF ANALYSIS

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

November 18, 2013

Date Received : November 13, 2013
Description : Hawkins 10-9 08 spill confirmation

ESC Sample # : L668251-08

Sample ID : SOUTH HALF 5 0-6 IN

Site ID : HAWKINS 10-9

Collected By : Lilly Griffin
Collection Date : 11/12/13 13:40

Project # : 013-0624

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	11/18/13	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	11/18/13	1
Surrogate Recovery						
Nitrobenzene-d5	82.2		% Rec.	8270C-SIM	11/18/13	1
2-Fluorobiphenyl	80.4		% Rec.	8270C-SIM	11/18/13	1
p-Terphenyl-d14	78.8		% Rec.	8270C-SIM	11/18/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/18/13 15:59 Printed: 11/18/13 17:22
L668251-08 (PH) - 8.2@20.3c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L668251-01	WG692433	SAMP	Chromium,Hexavalent	R2855940	O
L668251-02	WG692433	SAMP	Chromium,Hexavalent	R2855940	O
L668251-03	WG692433	SAMP	Chromium,Hexavalent	R2855940	O
L668251-05	WG692433	SAMP	Chromium,Hexavalent	R2855940	O
L668251-07	WG692433	SAMP	Chromium,Hexavalent	R2855940	O

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
0	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

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

Definitions

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