



12065 Lebanon Rd.
Mt. Juliet, TN 37122
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Tax I.D. 62-0814289

Est. 1970

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

Report Summary

Monday September 29, 2014

Report Number: L723450

Samples Received: 09/24/14

Client Project: 605-2

Description: CWHF

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

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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, EPA - TN002

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REPORT OF ANALYSIS

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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF
Sample ID : W POT 6FT
Collected By : Robert Stockton
Collection Date : 09/23/14 13:15

ESC Sample # : L723450-01

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	09/26/14	1
Chromium,Trivalent	41.	2.0	mg/kg	Calc.	09/26/14	1
ORP	90.		mV	2580 B-2011	09/27/14	1
pH	6.0		su	9045D	09/25/14	1
Sodium Adsorption Ratio	1.5			Calc.	09/28/14	1
Specific Conductance	53.		umhos/cm	9050AMod	09/25/14	1
Mercury	0.035	0.020	mg/kg	7471	09/25/14	1
Arsenic	15.	2.0	mg/kg	6010B	09/25/14	1
Barium	490	0.50	mg/kg	6010B	09/25/14	1
Cadmium	BDL	0.50	mg/kg	6010B	09/25/14	1
Chromium	41.	1.0	mg/kg	6010B	09/25/14	1
Copper	30.	2.0	mg/kg	6010B	09/25/14	1
Lead	20.	0.50	mg/kg	6010B	09/25/14	1
Nickel	50.	2.0	mg/kg	6010B	09/25/14	1
Selenium	BDL	2.0	mg/kg	6010B	09/25/14	1
Silver	BDL	5.0	mg/kg	6010B	09/25/14	5
Zinc	75.	5.0	mg/kg	6010B	09/25/14	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	09/26/14	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	94.8		% Rec.	8015D/GRO	09/26/14	5
Benzene	BDL	0.0050	mg/kg	8260B	09/26/14	5
Toluene	BDL	0.025	mg/kg	8260B	09/26/14	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	09/26/14	5
Total Xylenes	BDL	0.015	mg/kg	8260B	09/26/14	5
Surrogate Recovery						
Toluene-d8	98.3		% Rec.	8260B	09/26/14	5
Dibromofluoromethane	93.8		% Rec.	8260B	09/26/14	5
a,a,a-Trifluorotoluene	106.		% Rec.	8260B	09/26/14	5
4-Bromofluorobenzene	102.		% Rec.	8260B	09/26/14	5
TPH (GC/FID) High Fraction	17.	4.0	mg/kg	3546/DRO	09/29/14	1
Surrogate recovery(%) o-Terphenyl	82.8		% Rec.	3546/DRO	09/29/14	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L723450-01 (PH) - 6.0@19.8c
L723450-01 (SV8270PAHSIM) - Dilution due to matrix



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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF

Sample ID : W POT 6FT

Collected By : Robert Stockton
Collection Date : 09/23/14 13:15

ESC Sample # : L723450-01

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Acenaphthene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Acenaphthylene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Benzo(a)anthracene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Benzo(a)pyrene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Benzo(b)fluoranthene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Benzo(g,h,i)perylene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Benzo(k)fluoranthene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Chrysene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Dibenz(a,h)anthracene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Fluoranthene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Fluorene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Indeno(1,2,3-cd)pyrene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Naphthalene	BDL	0.20	mg/kg	8270C-SIM	09/29/14	10
Phenanthrene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
Pyrene	BDL	0.060	mg/kg	8270C-SIM	09/29/14	10
1-Methylnaphthalene	BDL	0.20	mg/kg	8270C-SIM	09/29/14	10
2-Methylnaphthalene	BDL	0.20	mg/kg	8270C-SIM	09/29/14	10
2-Chloronaphthalene	BDL	0.20	mg/kg	8270C-SIM	09/29/14	10
Surrogate Recovery						
p-Terphenyl-d14	76.1		% Rec.	8270C-SIM	09/29/14	10
Nitrobenzene-d5	56.7		% Rec.	8270C-SIM	09/29/14	10
2-Fluorobiphenyl	69.9		% Rec.	8270C-SIM	09/29/14	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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L723450-01 (PH) - 6.0@19.8c

L723450-01 (SV8270PAHSIM) - Dilution due to matrix



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REPORT OF ANALYSIS

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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF
Sample ID : S WALL 9FT
Collected By : Robert Stockton
Collection Date : 09/23/14 15:28

ESC Sample # : L723450-02

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	09/26/14	1
Chromium,Trivalent	49.	2.0	mg/kg	Calc.	09/26/14	1
ORP	90.		mV	2580 B-2011	09/27/14	1
pH	6.0		su	9045D	09/25/14	1
Sodium Adsorption Ratio	1.9			Calc.	09/28/14	1
Specific Conductance	48.		umhos/cm	9050AMod	09/25/14	1
Mercury	0.029	0.020	mg/kg	7471	09/25/14	1
Arsenic	71.	2.0	mg/kg	6010B	09/25/14	1
Barium	530	0.50	mg/kg	6010B	09/25/14	1
Cadmium	BDL	0.50	mg/kg	6010B	09/25/14	1
Chromium	49.	1.0	mg/kg	6010B	09/25/14	1
Copper	40.	2.0	mg/kg	6010B	09/25/14	1
Lead	30.	0.50	mg/kg	6010B	09/25/14	1
Nickel	39.	2.0	mg/kg	6010B	09/25/14	1
Selenium	BDL	10.	mg/kg	6010B	09/25/14	5
Silver	BDL	5.0	mg/kg	6010B	09/25/14	5
Zinc	70.	5.0	mg/kg	6010B	09/25/14	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	09/26/14	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	93.4		% Rec.	8015D/GRO	09/26/14	5
Benzene	BDL	0.0050	mg/kg	8260B	09/26/14	5
Toluene	BDL	0.025	mg/kg	8260B	09/26/14	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	09/26/14	5
Total Xylenes	BDL	0.015	mg/kg	8260B	09/26/14	5
Surrogate Recovery						
Toluene-d8	99.2		% Rec.	8260B	09/26/14	5
Dibromofluoromethane	95.2		% Rec.	8260B	09/26/14	5
a,a,a-Trifluorotoluene	104.		% Rec.	8260B	09/26/14	5
4-Bromofluorobenzene	101.		% Rec.	8260B	09/26/14	5
TPH (GC/FID) High Fraction	BDL	40.	mg/kg	3546/DRO	09/28/14	10
Surrogate recovery(%) o-Terphenyl	104.		% Rec.	3546/DRO	09/28/14	10

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L723450-02 (DRO) - Cannot run at a lower dilution, dilution due to extractions process
L723450-02 (SV8270PAHSIM) - Dilution due to matrix
L723450-02 (PH) - 6.0@19.9c



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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF

Sample ID : S WALL 9FT

Collected By : Robert Stockton
Collection Date : 09/23/14 15:28

ESC Sample # : L723450-02

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Acenaphthene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Acenaphthylene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Benzo(a)anthracene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Benzo(a)pyrene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Benzo(b)fluoranthene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Benzo(g,h,i)perylene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Benzo(k)fluoranthene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Chrysene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Dibenz(a,h)anthracene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Fluoranthene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Fluorene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Indeno(1,2,3-cd)pyrene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Naphthalene	BDL	0.040	mg/kg	8270C-SIM	09/29/14	2
Phenanthrene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
Pyrene	BDL	0.012	mg/kg	8270C-SIM	09/29/14	2
1-Methylnaphthalene	BDL	0.040	mg/kg	8270C-SIM	09/29/14	2
2-Methylnaphthalene	BDL	0.040	mg/kg	8270C-SIM	09/29/14	2
2-Chloronaphthalene	BDL	0.040	mg/kg	8270C-SIM	09/29/14	2
Surrogate Recovery						
p-Terphenyl-d14	74.0		% Rec.	8270C-SIM	09/29/14	2
Nitrobenzene-d5	78.9		% Rec.	8270C-SIM	09/29/14	2
2-Fluorobiphenyl	68.6		% Rec.	8270C-SIM	09/29/14	2

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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L723450-02 (DRO) - Cannot run at a lower dilution, dilution due to extractions process

L723450-02 (SV8270PAHSIM) - Dilution due to matrix

L723450-02 (PH) - 6.0@19.9c



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REPORT OF ANALYSIS

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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF
Sample ID : E WALL 10FT
Collected By : Robert Stockton
Collection Date : 09/23/14 15:14

ESC Sample # : L723450-03

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	09/26/14	1
Chromium, Trivalent	46.	2.0	mg/kg	Calc.	09/26/14	1
ORP	90.		mV	2580 B-2011	09/27/14	1
pH	6.0		su	9045D	09/25/14	1
Sodium Adsorption Ratio	2.0			Calc.	09/28/14	1
Specific Conductance	72.		umhos/cm	9050AMod	09/25/14	1
Mercury	0.027	0.020	mg/kg	7471	09/25/14	1
Arsenic	54.	2.0	mg/kg	6010B	09/25/14	1
Barium	510	0.50	mg/kg	6010B	09/25/14	1
Cadmium	BDL	0.50	mg/kg	6010B	09/25/14	1
Chromium	46.	1.0	mg/kg	6010B	09/25/14	1
Copper	34.	2.0	mg/kg	6010B	09/25/14	1
Lead	19.	0.50	mg/kg	6010B	09/25/14	1
Nickel	42.	2.0	mg/kg	6010B	09/25/14	1
Selenium	BDL	10.	mg/kg	6010B	09/25/14	5
Silver	BDL	5.0	mg/kg	6010B	09/25/14	5
Zinc	69.	5.0	mg/kg	6010B	09/25/14	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	09/26/14	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	94.3		% Rec.	8015D/GRO	09/26/14	5
Benzene	BDL	0.0050	mg/kg	8260B	09/26/14	5
Toluene	BDL	0.025	mg/kg	8260B	09/26/14	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	09/26/14	5
Total Xylenes	BDL	0.015	mg/kg	8260B	09/26/14	5
Surrogate Recovery						
Toluene-d8	101.		% Rec.	8260B	09/26/14	5
Dibromofluoromethane	96.3		% Rec.	8260B	09/26/14	5
a,a,a-Trifluorotoluene	104.		% Rec.	8260B	09/26/14	5
4-Bromofluorobenzene	94.5		% Rec.	8260B	09/26/14	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	09/28/14	1
Surrogate recovery(%) o-Terphenyl	75.0		% Rec.	3546/DRO	09/28/14	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L723450-03 (PH) - 6.0@20.1c



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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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF
Sample ID : E WALL 10FT
Collected By : Robert Stockton
Collection Date : 09/23/14 15:14

ESC Sample # : L723450-03

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	09/29/14	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	09/29/14	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	09/29/14	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	09/29/14	1
Surrogate Recovery						
p-Terphenyl-d14	76.6		% Rec.	8270C-SIM	09/29/14	1
Nitrobenzene-d5	77.0		% Rec.	8270C-SIM	09/29/14	1
2-Fluorobiphenyl	73.8		% Rec.	8270C-SIM	09/29/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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L723450-03 (PH) - 6.0@20.1c



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REPORT OF ANALYSIS

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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF
Sample ID : N WALL 8
Collected By : Robert Stockton
Collection Date : 09/23/14 14:36

ESC Sample # : L723450-04

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	09/26/14	1
Chromium,Trivalent	32.	2.0	mg/kg	Calc.	09/26/14	1
ORP	90.		mV	2580 B-2011	09/27/14	1
pH	6.1		su	9045D	09/25/14	1
Sodium Adsorption Ratio	1.8			Calc.	09/28/14	1
Specific Conductance	46.		umhos/cm	9050AMod	09/25/14	1
Mercury	0.032	0.020	mg/kg	7471	09/25/14	1
Arsenic	28.	2.0	mg/kg	6010B	09/25/14	1
Barium	590	0.50	mg/kg	6010B	09/25/14	1
Cadmium	BDL	0.50	mg/kg	6010B	09/25/14	1
Chromium	32.	1.0	mg/kg	6010B	09/25/14	1
Copper	23.	2.0	mg/kg	6010B	09/25/14	1
Lead	16.	0.50	mg/kg	6010B	09/25/14	1
Nickel	39.	2.0	mg/kg	6010B	09/25/14	1
Selenium	BDL	2.0	mg/kg	6010B	09/25/14	1
Silver	BDL	1.0	mg/kg	6010B	09/25/14	1
Zinc	59.	5.0	mg/kg	6010B	09/25/14	1
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	09/26/14	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	95.6		% Rec.	8015D/GRO	09/26/14	5
Benzene	BDL	0.0050	mg/kg	8260B	09/26/14	5
Toluene	BDL	0.025	mg/kg	8260B	09/26/14	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	09/26/14	5
Total Xylenes	BDL	0.015	mg/kg	8260B	09/26/14	5
Surrogate Recovery						
Toluene-d8	101.		% Rec.	8260B	09/26/14	5
Dibromofluoromethane	96.6		% Rec.	8260B	09/26/14	5
a,a,a-Trifluorotoluene	104.		% Rec.	8260B	09/26/14	5
4-Bromofluorobenzene	101.		% Rec.	8260B	09/26/14	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	09/28/14	1
Surrogate recovery(%) o-Terphenyl	59.2		% Rec.	3546/DRO	09/28/14	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L723450-04 (PH) - 6.1@20.2c



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REPORT OF ANALYSIS

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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF
Sample ID : N WALL 8
Collected By : Robert Stockton
Collection Date : 09/23/14 14:36

ESC Sample # : L723450-04

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	09/29/14	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	09/29/14	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	09/29/14	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	09/29/14	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	09/29/14	1
Surrogate Recovery						
p-Terphenyl-d14	78.5		% Rec.	8270C-SIM	09/29/14	1
Nitrobenzene-d5	69.5		% Rec.	8270C-SIM	09/29/14	1
2-Fluorobiphenyl	65.7		% Rec.	8270C-SIM	09/29/14	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: 09/29/14 15:57 Printed: 09/29/14 15:57
L723450-04 (PH) - 6.1@20.2c



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REPORT OF ANALYSIS

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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF
Sample ID : W WALL 8
Collected By : Robert Stockton
Collection Date : 09/23/14 14:47

ESC Sample # : L723450-05

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	3900	100	mg/kg	8015D/GRO	09/26/14	1000
Surrogate Recovery (70-130)						
a,a,a-Trifluorotoluene(FID)	95.4		% Rec.	8015D/GRO	09/26/14	1000
Benzene	3.2	1.0	mg/kg	8260B	09/26/14	1000
Toluene	110	5.0	mg/kg	8260B	09/26/14	1000
Ethylbenzene	20.	1.0	mg/kg	8260B	09/26/14	1000
Total Xylenes	290	3.0	mg/kg	8260B	09/26/14	1000
Surrogate Recovery						
Toluene-d8	96.9		% Rec.	8260B	09/26/14	1000
Dibromofluoromethane	96.2		% Rec.	8260B	09/26/14	1000
a,a,a-Trifluorotoluene	102.		% Rec.	8260B	09/26/14	1000
4-Bromofluorobenzene	117.		% Rec.	8260B	09/26/14	1000
TPH (GC/FID) High Fraction	1800	80.	mg/kg	3546/DRO	09/29/14	20
Surrogate recovery(%)						
o-Terphenyl	97.8		% Rec.	3546/DRO	09/29/14	20

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: 09/29/14 15:57 Printed: 09/29/14 15:57
L723450-05 (DRO) - Dilution due to matrix



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REPORT OF ANALYSIS

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

September 29, 2014

Date Received : September 24, 2014
Description : CWHF
Sample ID : BOTTOM (W)
Collected By : Robert Stockton
Collection Date : 09/23/14 15:51

ESC Sample # : L723450-06

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	2300	100	mg/kg	8015D/GRO	09/26/14	1000
Surrogate Recovery (70-130)						
a,a,a-Trifluorotoluene(FID)	95.8		% Rec.	8015D/GRO	09/26/14	1000
Benzene	1.6	1.0	mg/kg	8260B	09/26/14	1000
Toluene	39.	5.0	mg/kg	8260B	09/26/14	1000
Ethylbenzene	7.2	1.0	mg/kg	8260B	09/26/14	1000
Total Xylenes	120	3.0	mg/kg	8260B	09/26/14	1000
Surrogate Recovery						
Toluene-d8	101.		% Rec.	8260B	09/26/14	1000
Dibromofluoromethane	95.8		% Rec.	8260B	09/26/14	1000
a,a,a-Trifluorotoluene	103.		% Rec.	8260B	09/26/14	1000
4-Bromofluorobenzene	116.		% Rec.	8260B	09/26/14	1000
TPH (GC/FID) High Fraction	1200	80.	mg/kg	3546/DRO	09/29/14	20
Surrogate recovery(%)						
o-Terphenyl	83.0		% Rec.	3546/DRO	09/29/14	20

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: 09/29/14 15:57 Printed: 09/29/14 15:57
L723450-06 (DRO) - Dilution due to matrix

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L723450-01	WG744886	SAMP	Mercury	R2992946	P1
L723450-05	WG745128	SAMP	o-Terphenyl	R2993510	J7
L723450-06	WG745128	SAMP	o-Terphenyl	R2993510	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

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

Definitions

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

Summary of Remarks For Samples Printed
09/29/14 at 15:57:53

TSR Signing Reports: 134
R4 - Rush: Three Day

Add EDD Log BTEX by 8260 unless otherwise noted

Sample: L723450-01 Account: OXYGJCO Received: 09/24/14 09:00 Due Date: 09/29/14 00:00 RPT Date: 09/29/14 15:57

Sample: L723450-02 Account: OXYGJCO Received: 09/24/14 09:00 Due Date: 09/29/14 00:00 RPT Date: 09/29/14 15:57

Sample: L723450-03 Account: OXYGJCO Received: 09/24/14 09:00 Due Date: 09/29/14 00:00 RPT Date: 09/29/14 15:57

Sample: L723450-04 Account: OXYGJCO Received: 09/24/14 09:00 Due Date: 09/29/14 00:00 RPT Date: 09/29/14 15:57

Sample: L723450-05 Account: OXYGJCO Received: 09/24/14 09:00 Due Date: 09/29/14 00:00 RPT Date: 09/29/14 15:57

Sample: L723450-06 Account: OXYGJCO Received: 09/24/14 09:00 Due Date: 09/29/14 00:00 RPT Date: 09/29/14 15:57



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

Report Summary

Monday September 29, 2014

Report Number: L723453

Samples Received: 09/24/14

Client Project: 605-2

Description: CWHF

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, EPA - TN002

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REPORT OF ANALYSIS

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

September 29, 2014

Date Received : September 24, 2014
Description : 605-2
Sample ID : POND
Collected By : Robert Stockton
Collection Date : 09/23/14 14:00

ESC Sample # : L723453-01

Site ID : CWHF

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Bromide	BDL	1.0	mg/l	9056MOD	09/24/14	1
Chloride	3.3	1.0	mg/l	9056MOD	09/24/14	1
Fluoride	BDL	0.10	mg/l	9056MOD	09/24/14	1
Nitrate	BDL	0.10	mg/l	9056MOD	09/24/14	1
Nitrite	BDL	0.10	mg/l	9056MOD	09/24/14	1
Sulfate	10.	5.0	mg/l	9056MOD	09/24/14	1
Alkalinity	140	20.	mg/l	2320 B-2011	09/25/14	1
pH	9.0		su	9040C	09/26/14	1
Specific Conductance	280		umhos/cm	9050A	09/27/14	1
Dissolved Solids	280	10.	mg/l	2540 C-2011	09/29/14	1
Selenium,Dissolved	BDL	0.0010	mg/l	6020	09/29/14	1
Calcium,Dissolved	24.	1.0	mg/l	6010B	09/25/14	1
Iron,Dissolved	BDL	0.10	mg/l	6010B	09/25/14	1
Magnesium,Dissolved	14.	1.0	mg/l	6010B	09/25/14	1
Manganese,Dissolved	0.022	0.010	mg/l	6010B	09/25/14	1
Potassium,Dissolved	5.1	1.0	mg/l	6010B	09/25/14	1
Sodium,Dissolved	19.	1.0	mg/l	6010B	09/25/14	1
TPH (GC/FID) Low Fraction	BDL	0.10	mg/l	8015D/GRO	09/27/14	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	97.6		% Rec.	8015D/GRO	09/27/14	1
Benzene	BDL	0.0010	mg/l	8260B	09/27/14	1
Toluene	BDL	0.0050	mg/l	8260B	09/27/14	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	09/27/14	1
Total Xylenes	BDL	0.0030	mg/l	8260B	09/27/14	1
Surrogate Recovery						
Toluene-d8	99.4		% Rec.	8260B	09/27/14	1
Dibromofluoromethane	94.5		% Rec.	8260B	09/27/14	1
a,a,a-Trifluorotoluene	110.		% Rec.	8260B	09/27/14	1
4-Bromofluorobenzene	103.		% Rec.	8260B	09/27/14	1
TPH (GC/FID) High Fraction	0.10	0.10	mg/l	3511/8015	09/29/14	1
Surrogate recovery(%) o-Terphenyl	77.3		% Rec.	3511/8015	09/29/14	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: 09/29/14 22:33 Printed: 09/29/14 22:34
L723453-01 (PH) - 9.0@18.3c



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REPORT OF ANALYSIS

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

September 29, 2014

Date Received : September 24, 2014
Description : 605-2
Sample ID : DOWNSTREAM
Collected By : Robert Stockton
Collection Date : 09/23/14 15:05

ESC Sample # : L723453-02

Site ID : CWHF

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Bromide	BDL	1.0	mg/l	9056MOD	09/24/14	1
Chloride	11.	1.0	mg/l	9056MOD	09/24/14	1
Fluoride	BDL	0.10	mg/l	9056MOD	09/24/14	1
Nitrate	BDL	0.10	mg/l	9056MOD	09/24/14	1
Nitrite	BDL	0.10	mg/l	9056MOD	09/24/14	1
Sulfate	53.	5.0	mg/l	9056MOD	09/24/14	1
Alkalinity	280	20.	mg/l	2320 B-2011	09/25/14	1
pH	8.2		su	9040C	09/26/14	1
Specific Conductance	660		umhos/cm	9050A	09/27/14	1
Dissolved Solids	380	10.	mg/l	2540 C-2011	09/29/14	1
Selenium,Dissolved	0.0010	0.0010	mg/l	6020	09/29/14	1
Calcium,Dissolved	69.	1.0	mg/l	6010B	09/25/14	1
Iron,Dissolved	BDL	0.10	mg/l	6010B	09/25/14	1
Magnesium,Dissolved	28.	1.0	mg/l	6010B	09/25/14	1
Manganese,Dissolved	BDL	0.010	mg/l	6010B	09/25/14	1
Potassium,Dissolved	2.1	1.0	mg/l	6010B	09/25/14	1
Sodium,Dissolved	40.	1.0	mg/l	6010B	09/25/14	1
TPH (GC/FID) Low Fraction	BDL	0.10	mg/l	8015D/GRO	09/25/14	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	97.9		% Rec.	8015D/GRO	09/25/14	1
Benzene	BDL	0.0010	mg/l	8260B	09/27/14	1
Toluene	BDL	0.0050	mg/l	8260B	09/27/14	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	09/27/14	1
Total Xylenes	BDL	0.0030	mg/l	8260B	09/27/14	1
Surrogate Recovery						
Toluene-d8	98.1		% Rec.	8260B	09/27/14	1
Dibromofluoromethane	97.3		% Rec.	8260B	09/27/14	1
a,a,a-Trifluorotoluene	108.		% Rec.	8260B	09/27/14	1
4-Bromofluorobenzene	103.		% Rec.	8260B	09/27/14	1
TPH (GC/FID) High Fraction	BDL	0.10	mg/l	3511/8015	09/29/14	1
Surrogate recovery(%) o-Terphenyl	112.		% Rec.	3511/8015	09/29/14	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: 09/29/14 22:33 Printed: 09/29/14 22:34
L723453-02 (PH) - 8.2@16.4c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L723453-01	WG745100	SAMP	pH	R2993093	T8
L723453-02	WG745100	SAMP	pH	R2993093	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
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
09/29/14 at 22:34:18

TSR Signing Reports: 134
R4 - Rush: Three Day

Add EDD Log BTEX by 8260 unless otherwise noted

Sample: L723453-01 Account: OXYGJCO Received: 09/24/14 09:00 Due Date: 09/29/14 00:00 RPT Date: 09/29/14 22:33

Sample: L723453-02 Account: OXYGJCO Received: 09/24/14 09:00 Due Date: 09/29/14 00:00 RPT Date: 09/29/14 22:33



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Est. 1970

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

Report Summary

Friday October 17, 2014

Report Number: L727234

Samples Received: 10/07/14

Client Project: 013-0623

Description: 605-2

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, EPA - TN002

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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

October 17, 2014

Date Received : October 07, 2014
Description : 605-2

Sample ID : SPOILS

Collected By : Robert Stockton
Collection Date : 10/06/14 13:27

ESC Sample # : L727234-01

Site ID : 605-2

Project # : 013-0623

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	10/15/14	1
Chromium, Trivalent	29.	2.0	mg/kg	Calc.	10/15/14	1
ORP	66.		mV	2580 B-2011	10/16/14	1
pH	8.4		su	9045D	10/14/14	1
Sodium Adsorption Ratio	2.1			Calc.	10/16/14	1
Specific Conductance	430		umhos/cm	9050AMod	10/16/14	1
Mercury	0.024	0.020	mg/kg	7471	10/15/14	1
Arsenic	10.	2.0	mg/kg	6010B	10/15/14	1
Barium	290	0.50	mg/kg	6010B	10/15/14	1
Cadmium	BDL	0.50	mg/kg	6010B	10/15/14	1
Chromium	29.	1.0	mg/kg	6010B	10/15/14	1
Copper	18.	2.0	mg/kg	6010B	10/15/14	1
Lead	12.	0.50	mg/kg	6010B	10/15/14	1
Nickel	23.	2.0	mg/kg	6010B	10/15/14	1
Selenium	BDL	2.0	mg/kg	6010B	10/15/14	1
Silver	BDL	1.0	mg/kg	6010B	10/15/14	1
Zinc	60.	5.0	mg/kg	6010B	10/15/14	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Fluorene	0.0068	0.0060	mg/kg	8270C-SIM	10/17/14	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	10/17/14	1
Phenanthrene	0.011	0.0060	mg/kg	8270C-SIM	10/17/14	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	10/17/14	1
1-Methylnaphthalene	0.029	0.020	mg/kg	8270C-SIM	10/17/14	1
2-Methylnaphthalene	0.024	0.020	mg/kg	8270C-SIM	10/17/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L727234-01 (PH) - 8.4 @ 22.0c



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

October 17, 2014

Date Received : October 07, 2014
Description : 605-2
Sample ID : SPOILS
Collected By : Robert Stockton
Collection Date : 10/06/14 13:27

ESC Sample # : L727234-01

Site ID : 605-2

Project # : 013-0623

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	10/17/14	1
Surrogate Recovery						
p-Terphenyl-d14	71.7		% Rec.	8270C-SIM	10/17/14	1
Nitrobenzene-d5	86.7		% Rec.	8270C-SIM	10/17/14	1
2-Fluorobiphenyl	79.7		% Rec.	8270C-SIM	10/17/14	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: 10/17/14 11:53 Printed: 10/17/14 11:54
L727234-01 (PH) - 8.4 @ 22.0c

Summary of Remarks For Samples Printed
10/17/14 at 11:54:06

TSR Signing Reports: 134
R5 - Desired TAT

Add EDD Log BTEX by 8260 unless otherwise noted

Sample: L727234-01 Account: OXYGJCO Received: 10/07/14 09:00 Due Date: 10/20/14 00:00 RPT Date: 10/17/14 11:53
Relogged from L725852-02. AV 10/13



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Tax I.D. 62-0814289

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

Report Summary

Wednesday November 12, 2014

Report Number: L732111

Samples Received: 11/07/14

Client Project: 605-2

Description: CWHF

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, EPA - TN002

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Est. 1970

REPORT OF ANALYSIS

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

November 12, 2014

Date Received : November 07, 2014
Description : CWHF
Sample ID : BOTTOM 6 FT
Collected By : Blair Rollins
Collection Date : 10/31/14 13:00

ESC Sample # : L7321111-01

Site ID : 605-2

Project # : 605-2

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	11/09/14	5
Surrogate Recovery (70-130)						
a,a,a-Trifluorotoluene(FID)	99.9		% Rec.	8015D/GRO	11/09/14	5
Benzene	BDL	0.0050	mg/kg	8260B	11/12/14	5
Toluene	BDL	0.025	mg/kg	8260B	11/12/14	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	11/12/14	5
Total Xylenes	BDL	0.015	mg/kg	8260B	11/12/14	5
Surrogate Recovery						
Toluene-d8	75.0		% Rec.	8260B	11/12/14	5
Dibromofluoromethane	107.		% Rec.	8260B	11/12/14	5
a,a,a-Trifluorotoluene	87.5		% Rec.	8260B	11/12/14	5
4-Bromofluorobenzene	82.4		% Rec.	8260B	11/12/14	5
TPH (GC/FID) High Fraction	100	4.0	mg/kg	3546/DRO	11/10/14	1
Surrogate recovery(%)						
o-Terphenyl	75.8		% Rec.	3546/DRO	11/10/14	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: 11/12/14 11:39 Printed: 11/12/14 11:39

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L732111-01	WG754065	SAMP	Toluene-d8	R3003929	J2

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits

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
11/12/14 at 11:39:37

TSR Signing Reports: 134
R4 - Rush: Three Day

Add EDD Log BTEX by 8260 unless otherwise noted

Sample: L732111-01 Account: OXYGJCO Received: 11/07/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 11:39