



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
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Tax I.D. 62-0814289

Est. 1970

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

Grand Junction, CO 81506

Report Summary

Friday November 13, 2009

Report Number: L430984

Samples Received: 11/06/09

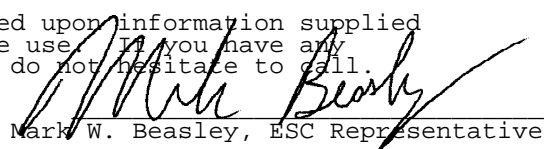
Client Project:

Description: Pit Reclaims - Collbran

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Laboratory Certification Numbers


Mark W. Beasley, ESC Representative

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

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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

2 Samples Reported: 11/13/09 17:17 Printed: 11/13/09 17:17

Page 1 of 6



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REPORT OF ANALYSIS

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

November 13, 2009

Date Received : November 06, 2009
Description : Pit Reclaims - Collbran
Sample ID : HIDDEN CREEK 1414 BG 0-6IN
Collected By : Brett Kennedy
Collection Date : 11/05/09 12:34

ESC Sample # : L430984-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
pH	7.7			su		9045D	11/11/09	1
Sodium Adsorption Ratio	0.66					Calc.	11/10/09	1
Specific Conductance	240			umhos/cm		9050AMo	11/11/09	1
Arsenic	5.0	0.32	1.0	mg/kg		6010B	11/11/09	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

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Reported: 11/13/09 17:17 Printed: 11/13/09 17:17
L430984-01 (PH) - 7.7@18.4c

REPORT OF ANALYSIS

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

November 13, 2009

Date Received : November 06, 2009
Description : Pit Reclaims - Collbran
Sample ID : HIDDEN CREEK 1414 POST REC 0-6IN
Collected By : Brett Kennedy
Collection Date : 11/05/09 12:45

ESC Sample # : L430984-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chromium, Hexavalent	U	0.10	2.0	mg/kg	J6	3060A/7	11/07/09	1
ORP	120			mV		2580	11/10/09	1
pH	7.8			su		9045D	11/11/09	1
Sodium Adsorption Ratio	1.4					Calc.	11/10/09	1
Specific Conductance	190			umhos/cm		9050AMo	11/11/09	1
Mercury	0.023	0.0025	0.020	mg/kg		7471	11/12/09	1
Arsenic	2.2	0.32	1.0	mg/kg		6010B	11/11/09	1
Cadmium	0.38	0.040	0.25	mg/kg		6010B	11/11/09	1
Chromium	18.	0.085	0.50	mg/kg		6010B	11/11/09	1
Copper	12.	0.21	1.0	mg/kg		6010B	11/11/09	1
Lead	10.	0.090	0.25	mg/kg		6010B	11/11/09	1
Nickel	14.	0.26	1.0	mg/kg		6010B	11/11/09	1
Selenium	6.3	0.32	1.0	mg/kg		6010B	11/11/09	1
Silver	0.28	0.16	0.50	mg/kg	J	6010B	11/11/09	1
Zinc	50.	0.34	1.5	mg/kg		6010B	11/11/09	1
Benzene	U	0.00090	0.0025	mg/kg		8021/80	11/11/09	5
Toluene	U	0.0015	0.025	mg/kg		8021/80	11/11/09	5
Ethylbenzene	U	0.0013	0.0025	mg/kg		8021/80	11/11/09	5
Total Xylene	U	0.0028	0.0075	mg/kg		8021/80	11/11/09	5
TPH (GC/FID) Low Fraction	U	0.14	0.50	mg/kg		GRO	11/11/09	5
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	98.8			% Rec.		8021/80	11/11/09	5
a,a,a-Trifluorotoluene(PID)	102.			% Rec.		8021/80	11/11/09	5
TPH (GC/FID) High Fraction	3.6	1.3	4.0	mg/kg	J	3546/DR	11/10/09	1
Surrogate recovery(%)								
o-Terphenyl	54.9			% Rec.		3546/DR	11/10/09	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.0093	0.033	mg/kg		8270C	11/11/09	1
Acenaphthene	U	0.011	0.033	mg/kg		8270C	11/11/09	1
Acenaphthylene	U	0.011	0.033	mg/kg		8270C	11/11/09	1
Benzo(a)anthracene	U	0.0077	0.033	mg/kg		8270C	11/11/09	1
Benzo(a)pyrene	U	0.0074	0.033	mg/kg		8270C	11/11/09	1
Benzo(b)fluoranthene	U	0.0078	0.033	mg/kg		8270C	11/11/09	1
Benzo(g,h,i)perylene	U	0.0095	0.033	mg/kg		8270C	11/11/09	1

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Reported: 11/13/09 17:17 Printed: 11/13/09 17:17
L430984-02 (PH) - 7.8@17.9c



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REPORT OF ANALYSIS

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November 13, 2009

Date Received : November 06, 2009
Description : Pit Reclaims - Collbran
Sample ID : HIDDEN CREEK 1414 POST REC 0-6IN
Collected By : Brett Kennedy
Collection Date : 11/05/09 12:45

ESC Sample # : L430984-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Benzo(k)fluoranthene	U	0.012	0.033	mg/kg		8270C	11/11/09	1
Chrysene	U	0.0091	0.033	mg/kg		8270C	11/11/09	1
Dibenz(a,h)anthracene	U	0.011	0.033	mg/kg		8270C	11/11/09	1
Fluoranthene	U	0.0079	0.033	mg/kg		8270C	11/11/09	1
Fluorene	U	0.0095	0.033	mg/kg		8270C	11/11/09	1
Indeno(1,2,3-cd)pyrene	U	0.011	0.033	mg/kg		8270C	11/11/09	1
Naphthalene	U	0.016	0.033	mg/kg	J3J4	8270C	11/11/09	1
Phenanthrene	U	0.0073	0.033	mg/kg		8270C	11/11/09	1
Pyrene	U	0.0089	0.033	mg/kg		8270C	11/11/09	1
Surrogate Recovery								
Nitrobenzene-d5	51.9			% Rec.		8270C	11/11/09	1
2-Fluorobiphenyl	89.4			% Rec.		8270C	11/11/09	1
p-Terphenyl-d14	96.0			% Rec.		8270C	11/11/09	1

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L430984-02 (PH) - 7.8@17.9c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L430984-02	WG449670	SAMP	Silver	R991548	J
	WG449626	SAMP	TPH (GC/FID) High Fraction	R988952	J
	WG449557	SAMP	Chromium, Hexavalent	R986828	J6
	WG449624	SAMP	Naphthalene	R991651	J3J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J4	The associated batch QC was outside the established quality control range for accuracy.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low

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
11/13/09 at 17:17:36

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L430984-01 Account: OXYGJCO Received: 11/06/09 09:00 Due Date: 11/13/09 00:00 RPT Date: 11/13/09 17:17

Sample: L430984-02 Account: OXYGJCO Received: 11/06/09 09:00 Due Date: 11/13/09 00:00 RPT Date: 11/13/09 17:17