

From: [Spry ORourke, Linda](#)
To: Daniel_Padilla@oxy.com
Cc: [Scan, OGCC](#)
Subject: Sundry 2216379
Date: Monday, July 09, 2012 1:29:03 PM
Attachments: [Hawkins 10-9 Res pit -2216379-annotated.pdf](#)

Daniel,

Please see notes attached to this sundry. Additional clarification is required.

Amber, please associate this email and attached sundry with Sundry 2216379 in laserfiche.

Thanks.

Linda Spry O'Rourke
Environmental Protection Specialist, Northwest Region
Colorado Oil & Gas Conservation Commission
707 Wapiti Court
Suite 204
Rifle, CO 81650

(970) 625-2497 Office
(970) 625-5682 Fax
(970) 309-3356 Cellular
linda.spryorourke@state.co.us

FORM
4
Rev 12/05State of Colorado
Oil and Gas Conservation Commission

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

DOCUMENT
#2216379

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.)

RECEIVED
10/4/2011

1. OGCC Operator Number: 66561	4. Contact Name Daniel I. Padilla	Complete the Attachment Checklist OP OGCC
2. Name of Operator: OXY USA Inc.	Phone: 970.263.3637	
3. Address: 760 Horizon Drive, Suite 101 City: Grand Junction State: CO Zip: 81506	Fax: 970.263.3694	
5. API Number 05-077-09483	OGCC Facility ID Number 334543	Survey Plat
6. Well/Facility Name: Hawkins (Reserve Pit)	7. Well/Facility Number 10-9	Directional Survey
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): NESE, Sec 10, T10S, R94W, 6th PM		Surface Eqpmt Diagram
9. County: Mesa	10. Field Name: Plateau	Technical Info Page
11. Federal, Indian or State Lease Number:		Other Lab data, map

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:	FNL/FSL	FEL/FWL	
Change of Surface Footage to Exterior Section Lines:			
Change of Bottomhole Footage from Exterior Section Lines:			
Change of Bottomhole Footage to Exterior Section Lines:			attach directional survey
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer			
Latitude	Distance to nearest property line	Distance to nearest bldg, public rd, utility or RR	
Longitude	Distance to nearest lease line	Is location in a High Density Area (rule 603b)?	Yes/No
Ground Elevation	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 Method used Cementing tool setting/perf depth Cement volume Cement top Cement bottom Date *submit cbl and cement job summaries			
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004. Final reclamation will commence on approximately <input type="checkbox"/> Final reclamation is completed and site is ready for inspection.			

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent Approximate Start Date:	<input type="checkbox"/> Report of Work Done Date Work Completed:	
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)		
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input type="checkbox"/> Status Update/Change of Remediation Plans
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: Application of diff. standard for Spills and Releases	

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

Signed: Daniel I. Padilla
Print Name: Daniel I. PadillaDate: 9/20/11 Email: daniel_padilla@oxy.com
Title: Regulatory Advisor

COGCC Approved: _____ Title: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number:	66561	API Number:	05-077-09483
2. Name of Operator:	OXY USA Inc.	OGCC Facility ID #	334543
3. Well/Facility Name:	Hawkins (Reserve Pit)	Well/Facility Number:	10-9
4. Location (QtrQtr, Sec, Twp, Rng, Meridian):	NESE, Sec 10, T10S, R94W, 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 Inc. (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 (Post Reclaim 10/25/2009) concentration for As is above COGCC Table 910-1 standards, but is below undisturbed background levels (see sampling locations on included location map).

The sampling method Oxy employed was to take a representative random grab sample for each background sample location. The analytical concentrations table identifies the COGCC Table 910-1 concentration levels, Oxy's undisturbed background concentrations, and Oxy's post reclamation concentrations (Post Reclaim 10/25/2009). Based on the background sample concentrations, Oxy's sundry notice requests to apply different standards to the COGCC Table 910-1 concentration levels.

To address elevated concentrations of pH, Oxy will bury and cap the pit bottom below at least two feet of native material to ensure a sufficient agronomic zone. The reclaimed pit was contoured to be level with the pad grade to minimize stormwater runoff, during the operational phase of the pad. Final pad reclamation will occur at the end of the life of the pad.

7-9-2012 Notes: 1. Eight background locations indicated in data table; only 5 background locations depicted on site diagram. Please clarify location of all background sampling.
2. Five pit sample locations indicated in diagram; one post-reclaim sample included in table with full Table 910-1 analytical. Please clarify compositing conducted.
3. Please include locations of the three 'post-reclaim' arsenic-only samples on site diagram, with sample names associated.
4. Arsenic levels in background samples range from 1.9 to 3.6 mg/kg. Arsenic levels in post-reclaim samples range from 7.8 to 8.6 mg/kg. The analytical data are in conflict with the statements above: "Based on post reclamation levels for As being below undisturbed background levels..." and "...the below the pit liner (Post Reclaim 10/25/2009) concentration for As is above COGCC Table 910-1 standards, but is below undisturbed background levels...".
5. Include sample collection depth below ground level for all samples.
6. Additional clarification is required before this sundry can be approved.
Resubmit referencing sundry #2216379.

Pit Reclaims - Collbran

Pad #:	Hawkins 10-9
Sample Date:	10/25/2009
Clearance Achieved Date:	

[illegible]






OXY USA Inc.
760 Horizon Drive, Suite 101
Grand Junction, CO 81506

Hawkins 10-9 Reserve Pit Sampling Map

Mesa County, Colorado
0 0.004 0.008 0.012 0.016 Miles



Pit Sample Locations 
Background sample locations 
Approximate Location of Pit 



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

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

Report Summary

Monday September 13, 2010

Report Number: L477998

Samples Received: 09/10/10

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:

Mark W. Beasley, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

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

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

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
Tax I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

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

September 13, 2010

Date Received : September 10, 2010
Description : Pit Reclaims - Collbran
Sample ID : HAWKINS 10-9-PR-E
Collected By : Brett Kennedy
Collection Date : 09/08/10 12:40

ESC Sample # : L477998-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	6.4	0.32	1.0	mg/kg		6010B	09/12/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/13/10 11:23 Printed: 09/13/10 11:23



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

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

September 13, 2010

Date Received : September 10, 2010
Description : Pit Reclaims-Collbran
Sample ID : HAWKINS 10-9-PR-CENT
Collected By : Brett Kennedy
Collection Date : 09/08/10 12:50

ESC Sample # : L477998-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	8.6	0.32	1.0	mg/kg		6010B	09/12/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/13/10 11:23 Printed: 09/13/10 11:23



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

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

September 13, 2010

Date Received : September 10, 2010
Description : Pit Reclaims-Collbran
Sample ID : HAWKINS 10-9-PR-W
Collected By : Brett Kennedy
Collection Date : 09/08/10 13:05

ESC Sample # : L477998-03

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	6.1	0.32	1.0	mg/kg		6010B	09/12/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/13/10 11:23 Printed: 09/13/10 11:23



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

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

Grand Junction, CO 81506

Report Summary

Thursday December 03, 2009

Report Number: L434451

Samples Received: 12/02/09

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:


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

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

This report may not be reproduced, except in full, without written approval from Environmental Science Corp.
Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304.

1 Samples Reported: 12/03/09 12:22 Printed: 12/03/09 13:46

Page 1 of 2



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

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

December 03, 2009

Date Received : December 02, 2009
Description : Pit Reclaims - Collbran
Sample ID : HAWKINS 10-9 FILL
Collected By : Brett Kennedy
Collection Date : 11/30/09 11:20

ESC Sample # : L434451-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
pH	8.4		su	9045D	12/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 12/03/09 12:22 Printed: 12/03/09 13:46

L434451-01 (PH) - 8.4@17.0c



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

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

Report Summary

Tuesday May 11, 2010

Report Number: L458022

Samples Received: 05/08/10

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:

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

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

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

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
Tax I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

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

May 11, 2010

Date Received : May 08, 2010
Description : Pit Reclaims - Collbran
Sample ID : HAWKINS 10-9 BG-W 0-6 IN
Collected By : Brett Kennedy
Collection Date : 05/06/10 14:21

ESC Sample # : L458022-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	2.9	0.32	1.0	mg/kg		6010B	05/10/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 05/11/10 09:16 Printed: 05/11/10 09:16



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

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

May 11, 2010

Date Received : May 08, 2010
Description : Pit Reclaims - Collbran
Sample ID : HAWKINS 10-9 BG-N 0-6 IN
Collected By : Brett Kennedy
Collection Date : 05/06/10 14:26

ESC Sample # : L458022-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	3.6	0.32	1.0	mg/kg		6010B	05/10/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 05/11/10 09:16 Printed: 05/11/10 09:16



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

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

May 11, 2010

Date Received : May 08, 2010
Description : Pit Reclaims - Collbran
Sample ID : HAWKINS 10-9 BG-E 0-6 IN
Collected By : Brett Kennedy
Collection Date : 05/06/10 14:30

ESC Sample # : L458022-03

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	1.9	0.32	1.0	mg/kg		6010B	05/10/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 05/11/10 09:16 Printed: 05/11/10 09:16



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

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

May 11, 2010

Date Received : May 08, 2010
Description : Pit Reclaims - Collbran
Sample ID : HAWKINS 10-9 BG-S 0-6 IN
Collected By : Brett Kennedy
Collection Date : 05/06/10 14:35

ESC Sample # : L458022-04

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	3.0	0.32	1.0	mg/kg		6010B	05/10/10	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 05/11/10 09:16 Printed: 05/11/10 09:16



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

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

Grand Junction, CO 81506

Report Summary

Tuesday November 03, 2009

Report Number: L429066

Samples Received: 10/27/09

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:

Mark W. Beasley
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

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

This report may not be reproduced, except in full, without written approval from Environmental Science Corp.
Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
Tax I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

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

November 03, 2009

Date Received : October 27, 2009
Description : Pit Reclaims - Collbran
Sample ID : HAWKINS 10-9 BG 0-6IN
Collected By : Brett Kennedy
Collection Date : 10/25/09 14:15

ESC Sample # : L429066-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
pH	7.8			su		9045D	10/27/09	1
Sodium Adsorption Ratio	0.39					Calc.	11/01/09	1
Specific Conductance	53.			umhos/cm		9050AMo	10/29/09	1
Arsenic	2.4	0.32	1.0	mg/kg		6010B	11/02/09	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/03/09 13:08 Printed: 11/03/09 13:09
L429066-01 (PH) - 7.8@19.7c



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

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

November 03, 2009

Date Received : October 27, 2009
Description : Pit Reclaims - Collbran
Sample ID : HAWKINS 10-9 POST REC 0-6IN
Collected By : Brett Kennedy
Collection Date : 10/25/09 14:25

ESC Sample # : L429066-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chromium, Hexavalent	U	0.10	2.0	mg/kg	J6	3060A/7	10/29/09	1
ORP	110			mV		2580	10/29/09	1
pH	9.3			su	J3	9045D	10/27/09	1
Sodium Adsorption Ratio	10.					Calc.	11/01/09	1
Specific Conductance	950			umhos/cm		9050AMo	10/29/09	1
Mercury	0.023	0.0025	0.020	mg/kg		7471	10/29/09	1
Arsenic	7.8	0.32	1.0	mg/kg		6010B	11/02/09	1
Cadmium	1.6	0.040	0.25	mg/kg		6010B	11/02/09	1
Chromium	20.	0.085	0.50	mg/kg		6010B	11/02/09	1
Copper	24.	0.21	1.0	mg/kg		6010B	11/02/09	1
Lead	26.	0.090	0.25	mg/kg		6010B	11/02/09	1
Nickel	16.	0.26	1.0	mg/kg		6010B	11/02/09	1
Selenium	1.1	0.32	1.0	mg/kg		6010B	11/02/09	1
Silver	1.4	0.16	0.50	mg/kg		6010B	11/02/09	1
Zinc	40.	0.34	1.5	mg/kg		6010B	11/02/09	1
Benzene	U	0.00090	0.0025	mg/kg		8021/80	10/31/09	5
Toluene	U	0.0015	0.025	mg/kg		8021/80	10/31/09	5
Ethylbenzene	U	0.0013	0.0025	mg/kg		8021/80	10/31/09	5
Total Xylene	U	0.0028	0.0075	mg/kg		8021/80	10/31/09	5
TPH (GC/FID) Low Fraction	0.15	0.14	0.50	mg/kg	J	GRO	10/31/09	5
Surrogate Recovery-%								
a,a,a-Trifluorotoluene (FID)	98.9			% Rec.		8021/80	10/31/09	5
a,a,a-Trifluorotoluene (PID)	103.			% Rec.		8021/80	10/31/09	5
TPH (GC/FID) High Fraction	69.	1.3	4.0	mg/kg		3546/DR	10/30/09	1
Surrogate recovery(%)								
o-Terphenyl	84.9			% Rec.		3546/DR	10/30/09	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.0093	0.033	mg/kg		8270C	10/30/09	1
Acenaphthene	U	0.011	0.033	mg/kg		8270C	10/30/09	1
Acenaphthylene	U	0.011	0.033	mg/kg	J3	8270C	10/30/09	1
Benzo(a)anthracene	U	0.0077	0.033	mg/kg		8270C	10/30/09	1
Benzo(a)pyrene	U	0.0074	0.033	mg/kg	J3	8270C	10/30/09	1
Benzo(b)fluoranthene	U	0.0078	0.033	mg/kg		8270C	10/30/09	1
Benzo(g,h,i)perylene	U	0.0095	0.033	mg/kg	J3	8270C	10/30/09	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/03/09 13:08 Printed: 11/03/09 13:09

L429066-02 (PH) - 9.3@19.3c



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

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

November 03, 2009

Date Received : October 27, 2009
Description : Pit Reclaims - Collbran
Sample ID : HAWKINS 10-9 POST REC 0-6IN
Collected By : Brett Kennedy
Collection Date : 10/25/09 14:25

ESC Sample # : L429066-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Benzo(k) fluoranthene	U	0.012	0.033	mg/kg		8270C	10/30/09	1
Chrysene	U	0.0091	0.033	mg/kg		8270C	10/30/09	1
Dibenz(a,h)anthracene	U	0.011	0.033	mg/kg	J3	8270C	10/30/09	1
Fluoranthene	U	0.0079	0.033	mg/kg		8270C	10/30/09	1
Fluorene	0.011	0.0095	0.033	mg/kg	J	8270C	10/30/09	1
Indeno(1,2,3-cd)pyrene	U	0.011	0.033	mg/kg		8270C	10/30/09	1
Naphthalene	0.050	0.016	0.033	mg/kg		8270C	10/30/09	1
Phenanthrene	0.020	0.0073	0.033	mg/kg	J	8270C	10/30/09	1
Pyrene	U	0.0089	0.033	mg/kg		8270C	10/30/09	1
Surrogate Recovery								
Nitrobenzene-d5	47.7			% Rec.		8270C	10/30/09	1
2-Fluorobiphenyl	61.6			% Rec.		8270C	10/30/09	1
p-Terphenyl-d14	64.5			% Rec.		8270C	10/30/09	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/03/09 13:08 Printed: 11/03/09 13:09

L429066-02 (PH) - 9.3019.3c