



DOCUMENT #2224459

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 11/20/2012

Re submitted 11/20/2012

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 05-077-09681	OGCC Facility ID Number 334445(Facility ID)	Survey Plat
6. Well/Facility Name: Griffith 11-2 Reserve Pit	7. Well/Facility Number 11-2	Directional Survey
8. Location (Qtr/Clr, Sec, Twp, Rng, Meridian): NWNE, Sec 11, T9S, R94W, 6th PM		Surface Eqpm Diagram
9. County: Mesa	10. Field Name: Brush Creek	Technical Info Page
11. Federal, Indian or State Lease Number:		Other Lab data, Map

General Notice

CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/Clr is substantive and requires a new permit)

Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bottomhole location Qtr/Clr, 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 _____

CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

Remove from surface bond
Signed surface use agreement attached

CHANGE OF OPERATOR (prior to drilling):
 Effective Date: _____
 Plugging Bond: Blanket Individual

CHANGE WELL NAME NUMBER
 From: _____
 To: _____
 Effective Date: _____

ABANDONED LOCATION:
 Was location ever built? Yes No
 Is site ready for inspection? Yes No
 Date Ready for inspection: _____

NOTICE OF CONTINUED SHUT IN STATUS
 Date well shut in or temporarily abandoned: _____
 Has Production Equipment been removed from site? Yes No
 MIT required if shut in longer than two years. Date of last MIT _____

SPUD DATE: _____

REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries

Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date

RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.
 Final reclamation will commence on approximately _____ Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

Notice of Intent Approximate Start Date: _____

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: [Signature] Date: 5/9/12 Email: daniel_padilla@oxy.com
Print Name: Daniel I. Padilla Title: Regulatory Advisor

COGCC Approved: [Signature] Title: FOR Date: 02/12/2013
CONDITIONS OF APPROVAL, IF ANY:

Alex Fischer
Supervisor
Western Region

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 66561	API Number: 05-077-09681
2. Name of Operator: OXY USA Inc.	OGCC Facility ID # 334445
3. Well/Facility Name: Griffith 11-2 Reserve Pit	Well/Facility Number: 11-2
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWN, Sec 11, T9S, 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. Oxy identified post reclamation levels for Arsenic (As) to be above table 910-1, but below undisturbed background levels. Oxy requests consideration as an alternative to the default value for As in Table 910-1, based on our demonstration of naturally occurring concentrations of As in undisturbed samples taken from native material collected from nearby areas, as per foot note 1 of COGCC Table 910-1. Please refer to attached table, analytical data, and sample location map.

The sampling method Oxy employed was to take a representative random grab sample for each background sample location, and post reclaim sample. The analytical concentrations table identifies the COGCC Table 910-1 concentration levels, Oxy's undisturbed background concentrations (08/25/2010, 12/08/2011, 04/19/2012), and Oxy's post reclamation concentrations (post reclaim 08/25/2010). The post reclaim concentrations of As are below those found in background samples.

To address elevated concentrations of SAR, Oxy will cap the pit below at least three feet of native material to ensure a sufficient agronomic zone. Oxy backfilled and graded the pit to be level with the working surface of the pad. Therefore final pit capping and pad reclamation will occur at the end of the life of the pad.

Based on review of data presented, it appears that no further action is necessary at this time at this site. Reclamation has not been completed yet. Please ensure that reclamation is completed as indicated in this Form 27, and according to the 1000 Series of the COGCC Rules and Regulations. Reclamation activities should be completed preferably in spring and at the most by end of September 2011.

Griffith 11-2 Reserve Pit (Location ID: 334495) Reclamation and Closure Sampling Narrative

Outlined below is the Griffith 11-2 reserve pit sampling narrative. This is being provided in support of Oxy's Griffith 11-2 Sundry Notice reserve pit closure documentation. The narrative details what closure, and background samples were taken, where they were taken and for what purpose.

Post Reclaim Sample 8/25/2010 (L475917)

- Oxy removed the pit liner and mixed the pit bottom with a back hoe. Oxy then collected a five-point composite post reclaim sample of the pit bottom, which was consistent with practices conducted at time of closure (2010). The post reclaim samples were taken along the length of the pit between 6-8 inches at the pit bottom, which was approximately 10' feet below the pad surface. The post reclaim sample is represented in the post reclaim tabulated data spreadsheet, in the first column and labeled as "Post Reclaim" for Sample Type. The post reclaim sample date was 8/25/2010 and the Sample ID from the data tabulation is Griffith 11-2 Post Rec 6-8 IN. These samples are shown on the Griffith 11-2 Closure Sampling Map as a black dot and are referenced in the legend as Pit Sample. The sample values for this sample can be found within the attached lab report L475917 on pages 2 and 3 as sample ID Griffith 11-2 Post Rec 6-8 IN.
- Initial Post Reclaim values showed elevated concentrations for sodium adsorption ratio (SAR) and arsenic (As).

Cap and Soil Pile samples 9/8/2010 and 10/1/2010 (L478000 and L481950)

- Prior to backfilling the pit, Oxy collected soil samples from material on location to verify these soil piles would be adequate capping material. The cap and soil pile samples are represented in the post reclaim tabulated data spreadsheet in columns 14, 15, and 16 and labeled "Cap" or "Soil Pile" for Sample Type. These samples were collected on 9/8/2010 and 10/1/2010 and the Sample ID from the tabulated data is Cap and Soil Pile. The sample value for the 9/8/2010 sample can be found within the attached lab reports L478000 on page 2 as sample ID Griffith 11-2 Cap 0-6 IN. The sample values for the 10/1/2010 Cap and Soil pile samples can be found on the attached lab report L481950 on pages 2 and 3 as sample ID's Griffith 11-2 Cap 0-6IN and Soil Pile 11-2 0-6IN.
- Cap and Soil pile values showed elevated concentrations for SAR. Oxy will therefore cap the reserve pit with at least three feet of native material to ensure a sufficient agronomic zone is provided at the end of the life of the pad.

Fill Sample 11/1/2010 (L486809)

- Oxy backfilled the pit with stockpiled native clean material to pad grade (6-10 feet deep). Oxy collected five individual grab samples of the fill material and analyzed them only for the analyte exceedances found in the post reclaim samples, specifically SAR as outlined above, since the fill material will serve as a cap for the elevated value of SAR found in the reclaimed pit bottom. The fill samples are represented in the tabulated data spreadsheet in the 17th through the 21st columns and labeled as "Fill" for Sample Type on the attached pit reclaim table. The fill samples dates were November 2, 2012 and the Sample ID from the data tabulation is #1 Fill, #2 Fill, #3 Fill, #4 Fill, and #5 Fill. The samples are shown on the Griffith 11-2 Closure Sampling Map as black dots with blue labels and are referenced in the legend as Pit Samples. The lab data report for these samples is attached.

Sample values can be found on lab report L486809 on pages 2 through 6 as sample ID Griffith 11-2 #1 Fill, Griffith 11-2 #2 Fill, Griffith 11-2 #3 Fill, Griffith 11-2 #4 Fill, and Griffith 11-2 #5 Fill.

- The fill samples were tested for SAR since this was the only analyte exceedance found in the post reclaim sample. The SAR value for all fill samples was found to be below the COGCC's table 910-1 allowable concentrations.

Background Samples 8/25/2010, 12/8/2011, and 4/16/2012 (L475917, L551143, and 571147)

- In an effort to identify elevated concentrations of naturally occurring As similar to that which was previously identified in the Post Reclaim and Fill samples, Oxy collected multiple grab samples from native undisturbed areas around the pad and area. The samples were collected at various depths ranging between 0 – 12 inches. Oxy collected four grab samples from native background soil on 8/25/2010 at depths of 0 – 12 inches. Oxy collected two additional grab samples from native undisturbed locations on 12/8/2011 at depths ranging from 0 – 12. Oxy also collected six grab samples from native background soil on 4/16/2012 at depths ranging from 0 – 12 inches. Based on the many sampling events, Oxy identified As concentrations ranging between 1.0 – 9.5 mg/kg in native background locations. Oxy believes these results prove the As values found in the post reclaim samples of the pit bottom are naturally occurring and demonstrate the highly variable As values in this region. Oxy assumes the soil in the area is such that, As precipitates down through the soil profile where it meets a soil inclusion (likely bedrock) that catches or holds the As. This would explain the higher As values found at pit bottom and at depths of 10-14 ft in background samples. Please reference the attached tabulated data spreadsheet.
- The first set of grab background samples were collected on 08/25/2010 and can be found in the 2nd – 5th columns of the tabulated data spreadsheet. The sample names from the data tabulation are Background – N, Background – E, Background – S, and Background – W. These samples are shown on the Griffith 11-2 Closure Sampling Map as green dots with labels and are referenced in the legend as Background Sample. The sample values can be found on lab report L475917 on pages 4-7 as sample ID's Griffith 11-2 BG-N 0-6IN, Griffith 11-2 BG-E 0-6IN, Griffith 11-2 BG-S 0-6IN, Griffith 11-2 BG-W 0-6IN.
- The second set of grab background samples were collected on 12/8/2011 and can be found in the 6th and 7th columns of the tabulated data spreadsheet. The sample names from the data tabulation are Griffith 11-2 BG-CS and Griffith 11-2 BG-SE. These samples are shown on the Griffith 11-2 Closure Sampling Map as green dots with labels and are referenced in the legend as Background Sample. The sample values can be found on lab report L551143 on pages 2-5 as sample ID's Griffith 1-2 BG-CS and Griffith 11-2 BG-SE.
- The final set of grab background samples were collected from an adjacent well pad on 04/19/2012 and can be found in the 8th – 13th columns of the tabulated data spreadsheet. Each sample was analyzed two separate times for As, as depicted by the two As values for each sample. The sample names from the data tabulation are McDaniel 11-11 Pt 138, McDaniel 11-11 Pt 139, McDaniel 11-11 Pt 140, McDaniel 11-11 Pt 142, McDaniel 11-11 Pt 143, and McDaniel 11-11 Pt 150. These samples are shown on the Griffith 11-2 Closure Sampling Map with McDaniel Close-Up map as green dots with labels and are referenced in the legend as Background Samples. The sample values can be found on lab report L571147 on pages 2-13 as sample ID's BG-N. Most-Pt 138, BG-NW-Pt 139, BG-NE-Pt 140, BG-SE-Pt 142, BG-S. Most-Pt 143, BG-S. Most-Pt 150.

- This sampling effort yielded background As concentrations above those found in Post Reclaim sample (8/25/2010).

In conclusion, this pit has been closed and meets both the COGCC 900 series and 1000 series rules for pit closure. All analyte concentrations were either found to be below COGCC table 910-1 allowable concentrations, were mitigated using a cap to ensure a sufficient agronomic zone, or were found to be below native background concentration levels (As). Oxy will continue to monitor this site for stormwater compliance until final pad reclamation has occurred.



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

Griffith 11-2 Closure Sampling Map

Mesa County, Colorado



	Pit Area
	Pit Sample
	Background Sample
BG-CS-N	Sample Identification



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

**Griffith 11- 2 Closure Sampling Map
With McDaniel Close-up**

Mesa County, Colorado



BG - PT 138 ●

● BG - PT 139

BG - PT 140 ●

● BG - PT 141

BG - PT 142 ●

● BG - PT 143



Pit Area



Pit Sample



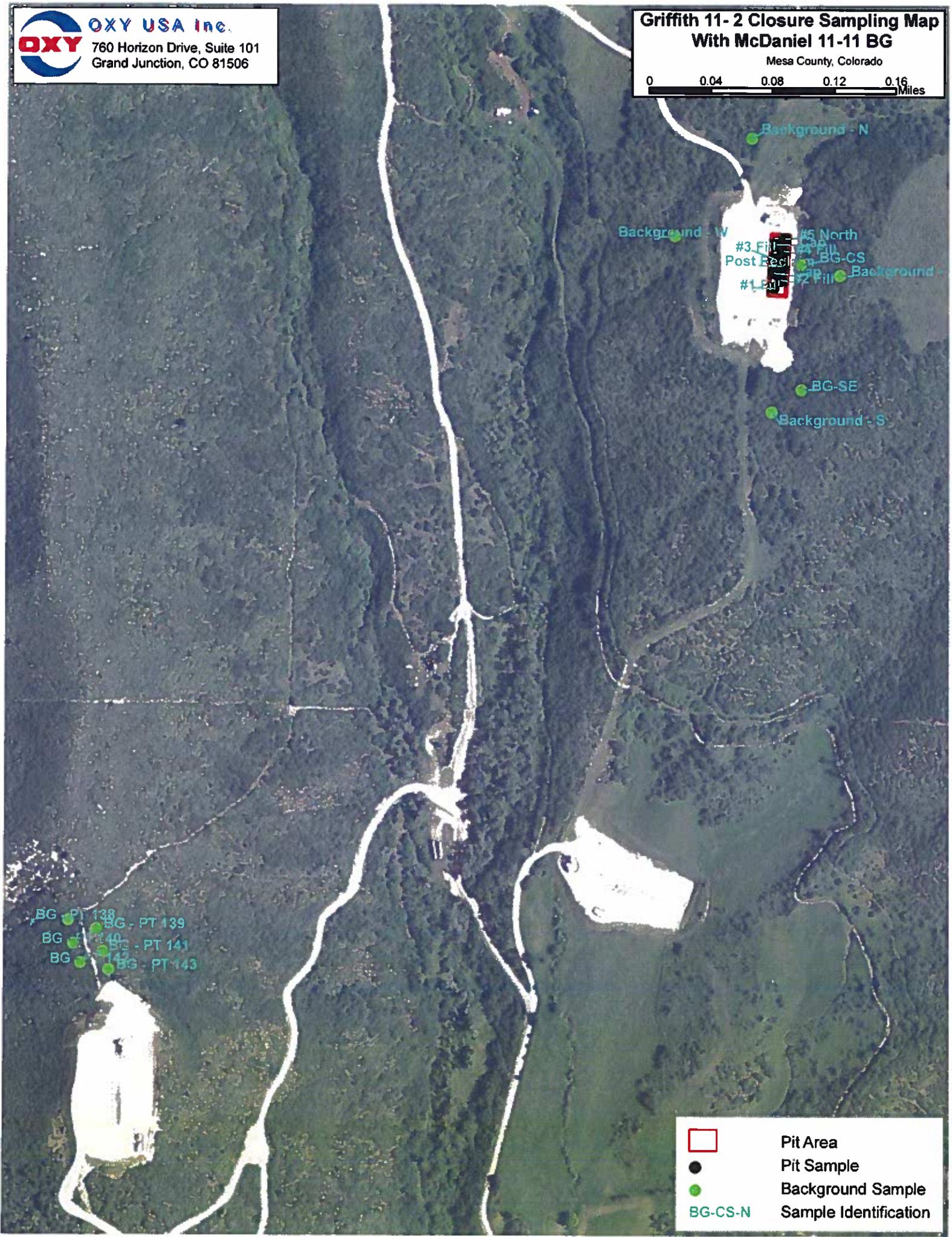
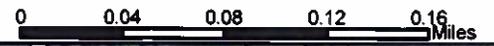
Background Sample

BG-CS-N

Sample Identification

**Griffith 11-2 Closure Sampling Map
With McDaniel 11-11 BG**

Mesa County, Colorado



	Pit Area
	Pit Sample
	Background Sample
	Sample Identification



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Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

Report Summary

Thursday September 02, 2010

Report Number: L475917

Samples Received: 08/27/10

Client Project:

Description: Pit Reclaims

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.



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REPORT OF ANALYSIS

September 02, 2010

Brett Kennedy
 Oxy USA WTP LP - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Date Received : August 27, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GRIFFITH 11-2 POST REC 6-8 IN
 Collected By : Brett Kennedy
 Collection Date : 08/25/10 10:15

ESC Sample # : L475917-01
 Site ID :
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.31	2.0	mg/kg		3060A/7	08/28/10	1
ORP	42.			mV		2580	08/31/10	1
pH	8.8			su		9045D	09/01/10	1
Sodium Adsorption Ratio	25.					Calc.	08/29/10	1
Specific Conductance	1600			umhos/cm		9050AMo	08/28/10	1
Arsenic	8.6	1.6	5.0	mg/kg		6010B	08/31/10	5
Barium	5200	0.050	0.25	mg/kg		6010B	08/30/10	1
Cadmium	0.16	0.040	0.25	mg/kg	J	6010B	08/30/10	1
Calcium	U	5.4	25.	mg/kg		6010B	08/30/10	1
Chromium	18.	0.085	0.50	mg/kg		6010B	08/30/10	1
Copper	16.	0.21	1.0	mg/kg		6010B	08/30/10	1
Lead	14.	0.45	1.3	mg/kg		6010B	08/31/10	5
Nickel	12.	0.26	1.0	mg/kg		6010B	08/30/10	1
Selenium	U	1.6	5.0	mg/kg	O	6010B	08/31/10	5
Silver	U	0.16	0.50	mg/kg		6010B	08/30/10	1
Zinc	47.	1.7	7.5	mg/kg		6010B	08/31/10	5
Benzene	U	0.00090	0.0025	mg/kg		8021/80	08/29/10	5
Toluene	U	0.0015	0.025	mg/kg		8021/80	08/29/10	5
Ethylbenzene	0.0026	0.0013	0.0025	mg/kg		8021/80	08/29/10	5
Total Xylene	0.0034	0.0028	0.0075	mg/kg	J	8021/80	08/29/10	5
TPH (GC/FID) Low Fraction	U	0.14	0.50	mg/kg		GRO	08/29/10	5
Surrogate Recovery-%								
a, a, a-Trifluorotoluene (FID)	97.5			% Rec.		8021/80	08/29/10	5
a, a, a-Trifluorotoluene (PID)	103.			% Rec.		8021/80	08/29/10	5
TPH (GC/FID) High Fraction	50.	0.77	4.0	mg/kg		3546/DR	09/01/10	1
Surrogate recovery(%)								
o-Terphenyl	52.5			% Rec.		3546/DR	09/01/10	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.0093	0.033	mg/kg		8270C	08/29/10	1
Acenaphthene	U	0.011	0.033	mg/kg		8270C	08/29/10	1
Acenaphthylene	U	0.011	0.033	mg/kg		8270C	08/29/10	1
Benzo(a)anthracene	U	0.0077	0.033	mg/kg		8270C	08/29/10	1
Benzo(a)pyrene	U	0.0074	0.033	mg/kg		8270C	08/29/10	1
Benzo(b)fluoranthene	U	0.0078	0.033	mg/kg		8270C	08/29/10	1
Benzo(g,h,i)perylene	U	0.0095	0.033	mg/kg		8270C	08/29/10	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.
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Reported: 09/02/10 14:14 Printed: 09/02/10 14:14
 L475917-01 (PH) - 8.8@21.8c



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REPORT OF ANALYSIS

Brett Kennedy
 Oxy USA WTP LP - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

September 02, 2010

Date Received : August 27, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GRIFFITH 11-2 POST REC 6-8 IN
 Collected By : Brett Kennedy
 Collection Date : 08/25/10 10:15

ESC Sample # : L475917-01

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(k)fluoranthene	U	0.012	0.033	mg/kg		8270C	08/29/10	1
Chrysene	U	0.0091	0.033	mg/kg		8270C	08/29/10	1
Dibenz(a,h)anthracene	U	0.011	0.033	mg/kg		8270C	08/29/10	1
Fluoranthene	U	0.0079	0.033	mg/kg		8270C	08/29/10	1
Fluorene	0.013	0.0095	0.033	mg/kg	J	8270C	08/29/10	1
Indeno(1,2,3-cd)pyrene	U	0.011	0.033	mg/kg		8270C	08/29/10	1
Naphthalene	0.064	0.016	0.033	mg/kg		8270C	08/29/10	1
Phenanthrene	0.026	0.0073	0.033	mg/kg	J	8270C	08/29/10	1
Pyrene	U	0.0089	0.033	mg/kg		8270C	08/29/10	1
Surrogate Recovery								
Nitrobenzene-d5	87.2			% Rec.		8270C	08/29/10	1
2-Fluorobiphenyl	89.9			% Rec.		8270C	08/29/10	1
p-Terphenyl-d14	86.5			% Rec.		8270C	08/29/10	1

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REPORT OF ANALYSIS

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

September 02, 2010

Date Received : August 27, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GRIFFITH 11-2 BG-N 0-6 IN
 Collected By : Brett Kennedy
 Collection Date : 08/25/10 10:40

ESC Sample # : L475917-02

Site ID :

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.0			su		9045D	09/01/10	1
Sodium Adsorption Ratio	0.50					Calc.	08/29/10	1
Specific Conductance	290			umhos/cm		9050AMo	08/28/10	1
Arsenic	3.9	0.32	1.0	mg/kg		6010B	09/01/10	1

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 L475917-02 (PH) - 7.0@21.8c



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REPORT OF ANALYSIS

Brett Kennedy
 Oxy USA WTP LP - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

September 02, 2010

Date Received : August 27, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GRIFFITH 11-2 BG-E 0-6 IN
 Collected By : Brett Kennedy
 Collection Date : 08/25/10 10:45

ESC Sample # : L475917-03
 Site ID :
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.2			su		9045D	09/01/10	1
Sodium Adsorption Ratio	0.60					Calc.	08/29/10	1
Specific Conductance	280			umhos/cm		9050AMo	08/28/10	1
Arsenic	6.4	0.32	1.0	mg/kg		6010B	09/01/10	1

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 L475917-03 (PH) - 7.2@21.5c



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September 02, 2010

Date Received : August 27, 2010
 Description : Pit Reclaims - Collbran
 Sample ID : GRIFFITH 11-2 BG-S 0-6 IN
 Collected By : Brett Kennedy
 Collection Date : 08/25/10 10:54

ESC Sample # : L475917-04
 Site ID :
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	6.7			su		9045D	09/01/10	1
Sodium Adsorption Ratio	0.90					Calc.	08/29/10	1
Specific Conductance	240			umhos/cm		9050AMo	08/28/10	1
Arsenic	4.9	0.32	1.0	mg/kg		6010B	09/01/10	1

U = ND (Not Detected)
 MDL = Minimum Detection Limit = LOD
 RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:
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Reported: 09/02/10 14:14 Printed: 09/02/10 14:14
 L475917-04 (PH) - 6.7@21.6c



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REPORT OF ANALYSIS

Brett Kennedy
Oxy USA WTP LP - Grand Junction, CO
760 Horizon Dr., Ste. 101
Grand Junction, CO 81506

September 02, 2010

Date Received : August 27, 2010
Description : Pit Reclaims - Collbran
Sample ID : GRIFFITH 11-2 BG-W 0-6 IN
Collected By : Brett Kennedy
Collection Date : 08/25/10 11:02

ESC Sample # : L475917-05
Site ID :
Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	6.3			su		9045D	08/31/10	1
Sodium Adsorption Ratio	0.30					Calc.	08/29/10	1
Specific Conductance	230			umhos/cm		9050AMo	08/28/10	1
Arsenic	5.0	0.32	1.0	mg/kg		6010B	09/01/10	1

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L475917-05 (PH) - 6.3@22.7c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L475917-01	WG495797	SAMP	Total Xylene	R1352048	J
	WG495996	SAMP	Cadmium	R1355249	J
	WG495996	SAMP	Selenium	R1355249	O
	WG495714	SAMP	Fluorene	R1351228	J
	WG495714	SAMP	Phenanthrene	R1351228	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
O	(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.

Summary of Remarks For Samples Printed
09/02/10 at 14:14:56

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L475917-01 Account: OXYWTPGJCO Received: 08/27/10 09:00 Due Date: 09/02/10 00:00 RPT Date: 09/02/10 14:14
Sample: L475917-02 Account: OXYWTPGJCO Received: 08/27/10 09:00 Due Date: 09/01/10 00:00 RPT Date: 09/02/10 14:14
Sample: L475917-03 Account: OXYWTPGJCO Received: 08/27/10 09:00 Due Date: 09/01/10 00:00 RPT Date: 09/02/10 14:14
Sample: L475917-04 Account: OXYWTPGJCO Received: 08/27/10 09:00 Due Date: 09/01/10 00:00 RPT Date: 09/02/10 14:14
Sample: L475917-05 Account: OXYWTPGJCO Received: 08/27/10 09:00 Due Date: 09/01/10 00:00 RPT Date: 09/02/10 14:14

Company Name/Address:

Oxy USA WTP LP - Grand Junction, CO

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

Report to: *Brett Kennedy*
Email to: *brett.kennedy@oxy.com*

Project Description: *Pit Reclaims - Colbran*

Phone: (970) 263-3601
FAX: (970) 201-2305

Client Project #: *---*
ESC Key: *---*

Site/Facility ID#: *---*
P.O.#: *---*

Collected by: *Brett Kennedy*
Collected by (signature): *Brett Kennedy*
Immediately Packed on Ice N *Y*

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody Page *1* of *1*

C005

ENVIRONMENTAL SCIENCE CORP.

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-CoCode OXYWTPGJ (lab use only)
Template/Prelogin

Shipped Via:

Remarks/Contaminant

Sample # (lab only)

Sample ID	Comp/Grab	Matrix	Depth	Date	Time	Date Results Needed:		No. of Cntrs	Analysis/Container/Preservative	Remarks/Contaminant	Sample # (lab only)
						Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	FAX? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes				
<i>Griffith 11-d Post Rec Comp</i>	<i>SS</i>	<i>6"-8"</i>	<i>810510</i>	<i>1015</i>	<i>1015</i>	<i>1015</i>	<i>1015</i>	<i>2</i>	<i>PAH</i>	<i>AS</i>	<i>1475917-01</i>
<i>Griffith 11-d B6-N</i>	<i>6"ab</i>	<i>0-6"</i>		<i>1040</i>	<i>1040</i>	<i>1040</i>	<i>1040</i>	<i>1</i>	<i>ECIS/AR/PH</i>	<i>AS</i>	<i>1475917-02</i>
<i>Griffith 11-d B6-E</i>				<i>1045</i>	<i>1045</i>	<i>1045</i>	<i>1045</i>	<i>1</i>			<i>1475917-03</i>
<i>Griffith 11-d B6-S</i>				<i>1054</i>	<i>1054</i>	<i>1054</i>	<i>1054</i>	<i>1</i>			<i>1475917-04</i>
<i>Griffith 11-d B6-W</i>				<i>1102</i>	<i>1102</i>	<i>1102</i>	<i>1102</i>	<i>1</i>	<i>BTEX 16 ROIDRO</i>		<i>1475917-05</i>

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

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by (Signature): <i>Brett Kennedy</i>	Date: <i>8/26/10</i>	Time: <i>1710</i>	Received by (Signature): <i>[Signature]</i>	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> Courier	Condition: <i>OK</i>	CoC Seals Intact: <i>Y</i> <input type="checkbox"/> <i>N</i> <input checked="" type="checkbox"/> <i>NA</i>
Relinquished by (Signature): <i>[Signature]</i>	Date: _____	Time: _____	Received by (Signature): _____	Temp: <i>54</i>	Bottles Received: <i>6 (800)</i>	pH Checked: _____
Relinquished by (Signature): _____	Date: _____	Time: _____	Received for lab by (Signature): <i>Blair Hale</i>	Date: <i>8/27/10</i>	Time: <i>0900</i>	NCF: _____



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

Report Summary

Friday December 16, 2011

Report Number: L551143

Samples Received: 12/13/11

Client Project: 900546.0005.010

Description: Griffith 11-2 Background

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

Entire Report Reviewed By:

Mark W. Beasley, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
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AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
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REPORT OF ANALYSIS

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

December 16, 2011

Date Received : December 13, 2011
Description : Griffith 11-2 Background
Sample ID : GRIFFITH 11-2 B6-CS
Collected By :
Collection Date : 12/12/11 09:20

ESC Sample # : L551143-01
Site ID :
Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	0.71	2.0	mg/kg		3060A/7	12/16/11	1
Chromium, Trivalent	12.	0.17	2.0	mg/kg		Calc.	12/14/11	1
ORP	-29.			mV	T8	2580	12/14/11	1
pH	8.9			su	T8	9045D	12/16/11	1
Sodium Adsorption Ratio	1.5					Calc.	12/15/11	1
Specific Conductance	210			umhos/cm		9050AMo	12/14/11	1
Mercury	0.016	0.0015	0.020	mg/kg	J	7471	12/14/11	1
Arsenic	1.7	0.32	1.0	mg/kg		6010B	12/14/11	1
Barium	140	0.050	0.25	mg/kg		6010B	12/14/11	1
Cadmium	0.59	0.040	0.25	mg/kg		6010B	12/14/11	1
Chromium	12.	0.085	0.50	mg/kg		6010B	12/14/11	1
Copper	9.8	1.0	5.0	mg/kg		6010B	12/14/11	5
Lead	7.6	0.090	0.25	mg/kg		6010B	12/15/11	1
Nickel	9.7	0.26	1.0	mg/kg		6010B	12/14/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	12/14/11	1
Silver	U	0.82	2.5	mg/kg	O	6010B	12/14/11	5
Zinc	43.	0.34	1.5	mg/kg		6010B	12/14/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	12/14/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	92.6			% Rec.		602/801	12/14/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	12/14/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	12/14/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	12/14/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	12/14/11	5
Surrogate Recovery								
Toluene-d8	97.8			% Rec.		8260B	12/14/11	5
Dibromofluoromethane	95.3			% Rec.		8260B	12/14/11	5
a,a,a-Trifluorotoluene	101.			% Rec.		8260B	12/14/11	5
4-Bromofluorobenzene	105.			% Rec.		8260B	12/14/11	5
TPH (GC/FID) High Fraction	U	0.77	4.0	mg/kg		3546/DR	12/13/11	1
Surrogate recovery(%) o-Terphenyl	78.9			% Rec.		3546/DR	12/13/11	1

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L551143-01 (PH) - 8.90@17.7c



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REPORT OF ANALYSIS

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

December 16, 2011

Date Received : December 13, 2011
 Description : Griffith 11-2 Background
 Sample ID : GRIFFITH 11-2 B6-CS
 Collected By :
 Collection Date : 12/12/11 09:20

ESC Sample # : L551143-01

Site ID :

Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	12/14/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	12/14/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	12/14/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	12/14/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	12/14/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	12/14/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	12/14/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	12/14/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	12/14/11	1
Phenanthrene	0.00081	0.00074	0.0060	mg/kg	J	8270C-S	12/14/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	12/14/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	12/14/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	12/14/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	12/14/11	1
Surrogate Recovery								
Nitrobenzene-d5	54.8			% Rec.		8270C-S	12/14/11	1
2-Fluorobiphenyl	65.0			% Rec.		8270C-S	12/14/11	1
p-Terphenyl-d14	73.8			% Rec.		8270C-S	12/14/11	1

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REPORT OF ANALYSIS

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

December 16, 2011

Date Received : December 13, 2011
 Description : Griffith 11-2 Background
 Sample ID : GRIFFITH 11-2 BG-SE
 Collected By :
 Collection Date : 12/12/11 09:32

ESC Sample # : L551143-02
 Site ID :
 Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	U	7.1	20.	mg/kg	O	3060A/7	12/16/11	10
Chromium, Trivalent	13.	0.17	20.	mg/kg	J	Calc.	12/14/11	1
ORP	20.			mV	T8	2580	12/14/11	1
pH	6.5			su	T8	9045D	12/16/11	1
Sodium Adsorption Ratio	0.60					Calc.	12/15/11	1
Specific Conductance	51.			umhos/cm		9050AMo	12/14/11	1
Mercury	0.0091	0.0015	0.020	mg/kg	J	7471	12/14/11	1
Arsenic	4.2	0.32	1.0	mg/kg		6010B	12/14/11	1
Barium	150	0.050	0.25	mg/kg		6010B	12/14/11	1
Cadmium	0.28	0.040	0.25	mg/kg		6010B	12/14/11	1
Chromium	13.	0.085	0.50	mg/kg		6010B	12/14/11	1
Copper	12.	0.21	1.0	mg/kg		6010B	12/14/11	1
Lead	8.2	0.090	0.25	mg/kg		6010B	12/15/11	1
Nickel	9.4	0.26	1.0	mg/kg		6010B	12/14/11	1
Selenium	0.62	0.32	1.0	mg/kg	J	6010B	12/14/11	1
Silver	1.1	0.16	0.50	mg/kg		6010B	12/14/11	1
Zinc	40.	0.34	1.5	mg/kg		6010B	12/14/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	12/14/11	5
Surrogate Recovery (70-130) a, a, a-Trifluorotoluene (FID)	92.6			% Rec.		602/801	12/14/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	12/14/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	12/14/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	12/14/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	12/14/11	5
Surrogate Recovery								
Toluene-d8	97.5			% Rec.		8260B	12/14/11	5
Dibromofluoromethane	94.8			% Rec.		8260B	12/14/11	5
a, a, a-Trifluorotoluene	101.			% Rec.		8260B	12/14/11	5
4-Bromofluorobenzene	99.1			% Rec.		8260B	12/14/11	5
TPH (GC/FID) High Fraction	0.95	0.77	4.0	mg/kg	J	3546/DR	12/13/11	1
Surrogate recovery(%) o-Terphenyl	71.0			% Rec.		3546/DR	12/13/11	1

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Note:

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L551143-02 (PH) - 6.52@19.1c

L551143-02 (CR6) - Diluted due to sample color interference.



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REPORT OF ANALYSIS

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

December 16, 2011

Date Received : December 13, 2011
 Description : Griffith 11-2 Background
 Sample ID : GRIFFITH 11-2 BG-SE
 Collected By :
 Collection Date : 12/12/11 09:32

ESC Sample # : L551143-02

Site ID :

Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0060	mg/kg		8270C-S	12/14/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	12/14/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	12/14/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	12/14/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	12/14/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	12/14/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	12/14/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	12/14/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	12/14/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	12/14/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	12/14/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	12/14/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	12/14/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	12/14/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	12/14/11	1
Surrogate Recovery								
Nitrobenzene-d5	72.9			% Rec.		8270C-S	12/14/11	1
2-Fluorobiphenyl	66.1			% Rec.		8270C-S	12/14/11	1
p-Terphenyl-d14	146.			% Rec.	J1	8270C-S	12/14/11	1

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Reported: 12/16/11 16:24 Printed: 12/16/11 16:24

L551143-02 (PH) - 6.52@19.1c

L551143-02 (CR6) - Diluted due to sample color interference.

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L551143-01	WG569766	SAMP	Silver	R1967074	O
	WG569738	SAMP	Mercury	R1965915	J
	WG570065	SAMP	pH	R1969016	T8
	WG569801	SAMP	Phenanthrene	R1966173	J
	WG569795	SAMP	ORP	R1966193	T8
L551143-02	WG569766	SAMP	Selenium	R1967074	J
	WG569759	SAMP	TPH (GC/FID) High Fraction	R1965575	J
	WG569826	SAMP	Chromium, Hexavalent	R1969413	O
	WG569738	SAMP	Mercury	R1965915	J
	WG570065	SAMP	pH	R1969016	T8
	WG569801	SAMP	p-Terphenyl-d14	R1966173	J1
	WG569795	SAMP	ORP	R1966193	T8
	WG569766	SAMP	Chromium, Trivalent	R1967074	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
O	(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.
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
12/16/11 at 16:24:42

TSR Signing Reports: 134
R4 - Rush: Three Day

Sample: L551143-01 Account: OXYGJCO Received: 12/13/11 09:46 Due Date: 12/16/11 00:00 RPT Date: 12/16/11 16:24

Sample: L551143-02 Account: OXYGJCO Received: 12/13/11 09:46 Due Date: 12/16/11 00:00 RPT Date: 12/16/11 16:24

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

Project Description: **GRIFFITH 11-2 BACKGROUND**
 Phone: (970) 263-3601
 FAX: **970546.0005.010**

Collected by: *[Signature]*
 Collected by (signature): *[Signature]*
 Packed on Ice N *[Signature]*

Client Project #: **970546.0005.010**
 Site/Facility ID#: _____
 P.O.#: _____
 Date Results Needed:
 Email? Yes
 FAX? No Yes

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	Date Results Needed:		No. of Cntrs
						Email?	FAX?	
GRIFFITH 11-2 BG-CS	GRAB	SS	G-2"	10/08/11	9:20AM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3
GRIFFITH 11-2 BG-SE	GRAB	SS	G-2"	10/08/11	9:32AM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3

Alternate billing information:
 CO Table 910
 Report to: **BAIN-MOLLINS@OXY.COM**
 Email to: **DANIEL - PAPILLA@OXY.COM**
 Clay/Safe Collected: **COLLBRAN**
 ESC Key: _____
 Relinquished by: *[Signature]*
 Relinquished by: *[Signature]*
 Relinquished by: *[Signature]*

Prepared by: _____
ENVIRONMENTAL SCIENCE CORP.
 12065 Lebanon Road
 Mt Juliet, TN 37122
 Phone (615) 758-5858
 Phone (800) 767-5859
 FAX (615) 758-5859

CoCode: OXYGJCO (lab use only)	
Template/Prelogin	
Shipped Via:	
Remarks/Contaminant	5551143
Sample # (lab only)	-01
	-02

Analysis/Container/Preservative	DR0, SV8270PAHSIM	SAR, SPCON, PH	MRCRA8 + Cu, Ni, Zn	CR3, CR6SS
V8260BTEX, GRO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

pH _____ Temp _____
 Condition: (lab use only) **OK**
 pH Checked: _____ NCF: _____

Remarks: **THREE DAY**
 4963 452 4911 Flow
 Samples returned via: UPS
 FedEx Courier
 Temp: 3.4
 Bottles Received: 6
 Date: 11/11/11
 Time: 09:00

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other
 Received by: (Signature) *[Signature]*
 Received by: (Signature) *[Signature]*
 Received for lab by: (Signature) *[Signature]*
 Date: 11/12/11 Time: 5:00PM
 Date: _____ Time: _____
 Date: _____ Time: _____



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Est. 1970

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

Report Summary

Monday April 30, 2012

Report Number: L571147

Samples Received: 04/20/12

Client Project:

Description: McDaniel 11-11 BG Sampling

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

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

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

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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
 Description : McDaniel 11-11 BG Sampling
 Sample ID : BG-NE-PT 140 6 FT
 Collected By : Lilly Griffin
 Collection Date : 04/19/12 13:42

ESC Sample # : L571147-01
 Site ID : MCD 11-11
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.9			su	T8	9045D	04/24/12	1
Specific Conductance	130			umhos/cm		9050AMo	04/23/12	1
Arsenic	9.5	1.6	5.0	mg/kg		6010B	04/29/12	5

U = ND (Not Detected)
 MDL = Minimum Detection Limit = LOD
 RDL = Reported Detection Limit = LOQ = PQL = EQL
 Note:
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 L571147-01 (PH) - 7.9@21.1c



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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
Description : McDaniel 11-11 BG Sampling
Sample ID : BG-NE-PT 140 6 FT
Collected By : Lilly Griffin
Collection Date : 04/19/12 13:42

ESC Sample # : L571147-02
Site ID : MCD 11-11
Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	6.0	1.6	5.0	mg/kg		6010B	04/29/12	5

U = ND (Not Detected)
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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
 Description : McDaniel 11-11 BG Sampling
 Sample ID : BG-W.CENTRAL PT 150 8 FT
 Collected By : Lilly Griffin
 Collection Date : 04/19/12 13:50

ESC Sample # : L571147-03
 Site ID : MCD 11-11
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.8			su	T8	9045D	04/24/12	1
Specific Conductance	150			umhos/cm		9050AMo	04/23/12	1
Arsenic	8.6	1.6	5.0	mg/kg		6010B	04/29/12	5

U = ND (Not Detected)
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 L571147-03 (PH) - 7.8@21.1c



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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
 Description : McDaniel 11-11 BG Sampling
 Sample ID : BG-W.CENTRAL PT 150 8 FT
 Collected By : Lilly Griffin
 Collection Date : 04/19/12 13:50

ESC Sample # : L571147-04
 Site ID : MCD 11-11
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	8.7	1.6	5.0	mg/kg		6010B	04/29/12	5

U = ND (Not Detected)
 MDL = Minimum Detection Limit = LOD
 RDL = Reported Detection Limit = LOQ = PQL = EQL
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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
 Description : McDaniel 11-11 BG Sampling
 Sample ID : BG-NW-PT 139 6 FT
 Collected By : Lilly Griffin
 Collection Date : 04/19/12 13:36

ESC Sample # : L571147-05
 Site ID : MCD 11-11
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.8			su	T8	9045D	04/24/12	1
Specific Conductance	130			umhos/cm		9050AMo	04/23/12	1
Arsenic	U	0.32	1.0	mg/kg		6010B	04/29/12	1

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 L571147-05 (PH) - 7.8@20.9c



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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
Description : McDaniel 11-11 BG Sampling
Sample ID : BG-NW-PT 139 6 FT
Collected By : Lilly Griffin
Collection Date : 04/19/12 13:36

ESC Sample # : L571147-06

Site ID : MCD 11-11

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	2.0	0.32	1.0	mg/kg		6010B	04/28/12	1

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MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
 Description : McDaniel 11-11 BG Sampling
 Sample ID : BG-SE-PT 142 8 FT
 Collected By : Lilly Griffin
 Collection Date : 04/19/12 13:55

ESC Sample # : L571147-07
 Site ID : MCD 11-11
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.9			su	T8	9045D	04/24/12	1
Specific Conductance	110			umhos/cm		9050AMo	04/23/12	1
Arsenic	7.1	1.6	5.0	mg/kg		6010B	04/29/12	5

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 MDL = Minimum Detection Limit = LOD
 RDL = Reported Detection Limit = LOQ = PQL = EQL

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Reported: 04/30/12 08:18 Printed: 04/30/12 08:19
 L571147-07 (PH) - 7.9@20.6c



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 OXY USA Inc - Grand Junction, CO
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April 30, 2012

Date Received : April 20, 2012
 Description : McDaniel 11-11 BG Sampling
 Sample ID : BG-SE-PT 142 8 FT
 Collected By : Lilly Griffin
 Collection Date : 04/19/12 13:55

ESC Sample # : L571147-08
 Site ID : MCD 11-11
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	4.3	1.6	5.0	mg/kg	J	6010B	04/29/12	5

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 RDL = Reported Detection Limit = LOQ = PQL = EQL

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REPORT OF ANALYSIS

April 30, 2012

Daniel Padilla
 OXY USA Inc - Grand Junction, CO
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 Grand Junction, CO 81506

Date Received : April 20, 2012
 Description : McDaniel 11-11 BG Sampling
 Sample ID : BG-S.MOST-PT 143 6 FT
 Collected By : Lilly Griffin
 Collection Date : 04/19/12 14:02

ESC Sample # : L571147-09
 Site ID : MCD 11-11
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.9			su	T8	9045D	04/24/12	1
Specific Conductance	99.			umhos/cm		9050AMo	04/23/12	1
Arsenic	5.0	0.32	1.0	mg/kg		6010B	04/28/12	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

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 L571147-09 (PH) - 7.9@21.1c



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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
 Description : McDaniel 11-11 BG Sampling
 Sample ID : BG-S.MOST-PT 143 6 FT
 Collected By : Lilly Griffin
 Collection Date : 04/19/12 14:02

ESC Sample # : L571147-10
 Site ID : MCD 11-11
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	6.1	0.32	1.0	mg/kg		6010B	04/28/12	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
 Description : McDaniel 11-11 BG Sampling
 Sample ID : BG-N.MOST-PT 138 6 FT
 Collected By : Lilly Griffin
 Collection Date : 04/19/12 13:31

ESC Sample # : L571147-11
 Site ID : MCD 11-11
 Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
pH	7.8			su	T8	9045D	04/24/12	1
Specific Conductance	100			umhos/cm		9050AMo	04/23/12	1
Arsenic	1.4	0.32	1.0	mg/kg		6010B	04/28/12	1

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 L571147-11 (PH) - 7.8@21.1c



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REPORT OF ANALYSIS

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

April 30, 2012

Date Received : April 20, 2012
Description : McDaniel 11-11 BG Sampling
Sample ID : BG-N.MOST-PT 138 6 FT
Collected By : Lilly Griffin
Collection Date : 04/19/12 13:31

ESC Sample # : L571147-12

Site ID : MCD 11-11

Project # :

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic	1.7	0.32	1.0	mg/kg		6010B	04/28/12	1

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Reported: 04/30/12 08:18 Printed: 04/30/12 08:19

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L571147-01	WG589208	SAMP	pH	R2139213	T8
L571147-03	WG589208	SAMP	pH	R2139213	T8
L571147-05	WG589208	SAMP	pH	R2139213	T8
L571147-07	WG589208	SAMP	pH	R2139213	T8
L571147-08	WG589050	SAMP	Arsenic	R2147774	J
L571147-09	WG589208	SAMP	pH	R2139213	T8
L571147-11	WG589208	SAMP	pH	R2139213	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

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- 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
04/30/12 at 08:19:05

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L571147-01 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-02 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-03 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-04 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-05 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-06 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-07 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-08 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-09 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-10 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-11 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18
Sample: L571147-12 Account: OXYGJCO Received: 04/20/12 09:00 Due Date: 04/27/12 00:00 RPT Date: 04/30/12 08:18

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

Alternate billing information:

Report to: Daniel Padilla / Blair Rollins
 Email to: daniel_padilla@oxy.com, blai

Analysis/Container/Preservative

B118 Chain of Custody Page 2 of 2
 Prepared by:
ENVIRONMENTAL SCIENCE CORP.
 12065 Lebanon Road
 Mt. Juliet, TN 37122
 Phone (615) 758-5858
 Phone (800) 767-5859
 FAX (615) 758-5859

Project Description: *McDaniel 11-11 Bg Sampling*
 Phone: (970) 263-3637
 FAX:

Client Project #: ESC Key:

City/State Collected: P.O. #:

Collected by: *Chris Eak*

Site/Facility ID#: *11-11*

Collected by (Signature): *[Signature]*

Packed on Ice: *N*

Rush? (Lab MUST Be Notified)
 Same Day... 200%
 Next Day... 100%
 Two Day... .50%

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

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cnts	Arsenic	Arsenic	EC	pH	Remarks/Contaminant	Sample # (lab only)
BG-NE - Pt 140	Gt	SS	6	4/19/12	1342	1	X	X	X			LS7111201/162
BG-W. Central. Pt 150	Gt	SS	8	4/19/12	1350	1	X	X	X			0504
BG-Niv - Pt 139	Gt	SS	6	4/19/12	1336	1	X	X	X			0506
BG-SE - Pt 142	Gt	SS	8	4/19/12	1355	1	X	X	X			0718
BG-S. Most - Pt 143	Gt	SS	6	4/19/12	1402	1	X	X	X			0910
BG-N. Most. Pt 138	Gt	SS	6	4/19/12	1331	1	X	X	X			-1112

Matrix: SS - Soil/Solid GW - Groundwater WW - Wastewater DW - Drinking Water OT - Other

pH _____ Temp _____

Remarks: Please analyze arsenic twice per sample as noted by the two columns of arsenic

50410 OCG 28/177 Flow

Condition: *SE* (lab use only)

Relinquished by: (Signature) <i>[Signature]</i>	Date: <i>04/19/12</i>	Time: <i>6:00</i>	Received by: (Signature) <i>[Signature]</i>	Samples returned via: <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> UPS	Temp: <i>3.2</i>	Bottles Received: <i>6-8oz Jar</i>	Condition: <i>SE</i> (lab use only)
Relinquished by: (Signature) <i>[Signature]</i>	Date: _____	Time: _____	Received by: (Signature) _____	<input type="checkbox"/> UPS	Date: <i>4-20-12</i>	Time: <i>0400</i>	pH Checked: _____
Relinquished by: (Signature) _____	Date: _____	Time: _____	Received for lab by: (Signature) <i>[Signature]</i>	<input type="checkbox"/> Other	Date: _____	Time: _____	NCF: <i>[Signature]</i>



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Est. 1970

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

Report Summary

Wednesday September 15, 2010

Report Number: L478000

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

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REPORT OF ANALYSIS

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

September 15, 2010

Date Received : September 10, 2010
Description : Pit Reclaims - Collbran
Sample ID : GRIFFITH 11-2 CAP 0-6 IN
Collected By : Brett Kennedy
Collection Date : 09/08/10 16:15

ESC Sample # : L478000-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Sodium Adsorption Ratio	20.			Calc.	09/13/10	5

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: 09/15/10 17:15 Printed: 09/15/10 17:15

Summary of Remarks For Samples Printed
09/15/10 at 17:15:23

TSR Signing Reports: 134
R4 - Rush: Three Day

Sample: L478000-01 Account: OXYGJCO Received: 09/10/10 09:00 Due Date: 09/15/10 00:00 RPT Date: 09/15/10 17:15



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

Report Summary

Wednesday October 06, 2010

Report Number: L481950

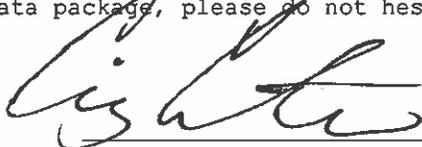
Samples Received: 10/02/10

Client Project:

Description: Pit Reclaims - Collbran

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Entire Report Reviewed By:


Craig Cothron, 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,
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REPORT OF ANALYSIS

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

October 06, 2010

Date Received : October 02, 2010
Description : Pit Reclaims - Collbran
Sample ID : GRIFFITH 11-2 CAP 0-6 IN
Collected By : Brett Kennedy
Collection Date : 10/01/10 12:00

ESC Sample # : L481950-01
Site ID :
Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Sodium Adsorption Ratio	20.			Calc.	10/05/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Reported: 10/06/10 16:48 Printed: 10/06/10 16:49



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REPORT OF ANALYSIS

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

October 06, 2010

Date Received : October 02, 2010
Description : Pit Reclaims - Collbran
Sample ID : SOIL PILE 11-2 0-6 IN
Collected By : Brett Kennedy
Collection Date : 10/01/10 12:12

ESC Sample # : L481950-02

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Sodium Adsorption Ratio	17.			Calc.	10/05/10	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: 10/06/10 16:48 Printed: 10/06/10 16:49

Summary of Remarks For Samples Printed
10/06/10 at 16:49:08

TSR Signing Reports: 134
R4 - Rush: Three Day

Sample: L481950-01 Account: OXYGJCO Received: 10/02/10 09:00 Due Date: 10/06/10 00:00 RPT Date: 10/06/10 16:48

Sample: L481950-02 Account: OXYGJCO Received: 10/02/10 09:00 Due Date: 10/06/10 00:00 RPT Date: 10/06/10 16:48

Company Name/Address: **OXY USA - Grand Junction, CO**
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Alternate billing information:

Report to: *Brett Kennedy* Email to: *brett.kennedy@oxy.com*

Project Description: *Pit Reclaims - 6611 Gran* City/Site Collected: *---*

Phone: (970) 263-3601 Client Project #: *---* ESC Key: *---*

FAX: *---* P.O.#: *---*

Collected by: *Brett Kennedy* Site/Facility ID#: *---*

Collected by (signature): *Brett Kennedy* Rush? (Lab MUST Be Notified) (Lab MUST Be Notified)

Immediately Packed on Ice N *Y* V *---*

Same Day 200%
 Next Day 100%
 Two Day 50%
 Three Day 25%

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	Date Results Needed:		No. of Cuts	Analysis/Container/Preservative	Remarks/Contaminant	Sample # (lab only)
						Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	FAX? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes				
<i>6611H11-a Cap</i>	<i>Comp</i>	<i>SS</i>	<i>0-6"</i>	<i>10/11/10</i>	<i>1:00</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>1</i>	<i>SAR</i>		<i>14219502</i>
<i>Soil Pile 11-a</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>12/2</i>	<i>1</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>1</i>			<i>02</i>

Received by (Signature): *[Signature]* Date: *10/10/10* Time: *1:55*

Received for lab by (Signature): *[Signature]* Date: *10/12/10* Time: *0900*

Temp: *3.9* Bottles Received: *3-802*

Condition: *(lab use only) OK*

COC Seals Intact: *Y* N NA

pH Checked: *---* NCF: *---*

Flow: *---* Other: *---*

PH: *---* Temp: *---*

Remarks: *Matrix: SS - Soil/Solid GW - Groundwater WW - Wastewater DW - Drinking Water OT - Other*

Prepared by: **ENVIRONMENTAL SCIENCE CORP.**
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 Phone (615) 758-5858
 Phone (800) 767-5859
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 A179

Chain of Custody Page *1* of *1*

Remarks: *Matrix: SS - Soil/Solid GW - Groundwater WW - Wastewater DW - Drinking Water OT - Other*

Relinquished by (Signature): *[Signature]* Date: *10/10/10* Time: *1:55*

Relinquished by (Signature): *[Signature]* Date: *10/12/10* Time: *0900*

Relinquished by (Signature): *[Signature]* Date: *10/12/10* Time: *0900*

Temp: *3.9* Bottles Received: *3-802*

Condition: *(lab use only) OK*

COC Seals Intact: *Y* N NA

pH Checked: *---* NCF: *---*

Flow: *---* Other: *---*

PH: *---* Temp: *---*

Remarks: *Matrix: SS - Soil/Solid GW - Groundwater WW - Wastewater DW - Drinking Water OT - Other*

Prepared by: **ENVIRONMENTAL SCIENCE CORP.**
 12065 Lebanon Road
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Chain of Custody Page *1* of *1*



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

Report Summary

Wednesday November 10, 2010

Report Number: L486809

Samples Received: 11/02/10

Client Project:

Description: Pit Reclaims - Collbran

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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,
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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 10, 2010

Date Received : November 02, 2010
Description : Pit Reclaims - Collbran
Sample ID : GRIFFITH 11-2 1 FILL 0-6 IN
Collected By : Brett Kennedy
Collection Date : 11/01/10 13:30

ESC Sample # : L486809-01
Site ID :
Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Sodium Adsorption Ratio	8.3			Calc.	11/07/10	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: 11/10/10 14:50 Printed: 11/10/10 14:50



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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 10, 2010

Date Received : November 02, 2010
Description : Pit Reclaims - Collbran
Sample ID : GRIFFITH 11-2 2 FILL 0-6 IN
Collected By : Brett Kennedy
Collection Date : 11/01/10 13:33

ESC Sample # : L486809-02

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Sodium Adsorption Ratio	9.7			Calc.	11/07/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/10/10 14:50 Printed: 11/10/10 14:50



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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 10, 2010

Date Received : November 02, 2010
Description : Pit Reclaims - Collbran
Sample ID : GRIFFITH 11-2 3 FILL 0-6 IN
Collected By : Brett Kennedy
Collection Date : 11/01/10 13:38

ESC Sample # : L486809-03
Site ID :
Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Sodium Adsorption Ratio	4.3			Calc.	11/07/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Reported: 11/10/10 14:50 Printed: 11/10/10 14:50



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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 10, 2010

Date Received : November 02, 2010
Description : Pit Reclaims - Collbran
Sample ID : GRIFFITH 11-2 4 FILL 0-6 IN
Collected By : Brett Kennedy
Collection Date : 11/01/10 13:42

ESC Sample # : L486809-04
Site ID :
Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Sodium Adsorption Ratio	5.0			Calc.	11/07/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Reported: 11/10/10 14:50 Printed: 11/10/10 14:50



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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 10, 2010

Date Received : November 02, 2010
Description : Pit Reclaims - Collbran
Sample ID : GRIFFITH 11-2 5N 0-6 IN
Collected By : Brett Kennedy
Collection Date : 11/01/10 13:46

ESC Sample # : L486809-05

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Sodium Adsorption Ratio	5.7			Calc.	11/07/10	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: 11/10/10 14:50 Printed: 11/10/10 14:50

Summary of Remarks For Samples Printed
11/10/10 at 14:50:59

TSR Signing Reports: 134
R5 - Desired TAT

Sample: L486809-01 Account: OXYGJCO Received: 11/02/10 09:30 Due Date: 11/09/10 00:00 RPT Date: 11/10/10 14:50
Sample: L486809-02 Account: OXYGJCO Received: 11/02/10 09:30 Due Date: 11/09/10 00:00 RPT Date: 11/10/10 14:50
Sample: L486809-03 Account: OXYGJCO Received: 11/02/10 09:30 Due Date: 11/09/10 00:00 RPT Date: 11/10/10 14:50
Sample: L486809-04 Account: OXYGJCO Received: 11/02/10 09:30 Due Date: 11/09/10 00:00 RPT Date: 11/10/10 14:50
Sample: L486809-05 Account: OXYGJCO Received: 11/02/10 09:30 Due Date: 11/09/10 00:00 RPT Date: 11/10/10 14:50

Company Name/Address:
OXY USA Inc - Grand Junction, CO
 760 Horizon Dr., Ste. 101
 Grand Junction, CO 81506

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody
 Page 1 of 1

Prepared by:
ENVIRONMENTAL SCIENCE CORP.
 12065 Lebanon Road
 Mt. Juliet, TN 37122
 Phone (615) 758-5858
 Phone (800) 767-5859
 FAX (615) 758-5859
A150

Report to: *Brett Kennedy*
 Email to: *brettkennedy@oxy.com*

Project Description: *Pit Reckins - Lebanon*
 City/State Collected: *-*
 Phone: (970) 263-3601
 Client Project #: *-*
 ESC Key: *-*
 FAX: *-*

Collected by: *Brett Kennedy*
 Site/Facility ID#: *-*
 P.O.#: *-*

Collected by (signature): *Brett Kennedy*
 Rush? (Lab MUST Be Notified)
 Same Day 200%
 Next Day 100%
 Two Day 50%
 Three Day 25%
 Date Results Needed:
 Email? No Yes
 FAX? No Yes

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cnts	Remarks/Contaminant	Sample # (lab only)
<i>6RIF11A 11-a - #1 Fill</i>	<i>6R1</i>	<i>SS</i>	<i>0-6"</i>	<i>11/01/10</i>	<i>1330</i>	<i>1</i>	<i>LY8680901</i>	
<i>6RIF11A 11-a - #2 Fill</i>					<i>1333</i>	<i>1</i>	<i>02</i>	
<i>6RIF11A 11-a - #3 Fill</i>					<i>1338</i>	<i>1</i>	<i>03</i>	
<i>6RIF11A 11-a - #4 Fill</i>					<i>1342</i>	<i>1</i>	<i>04</i>	
<i>6RIF11A 11-a - #5 Fill</i>					<i>1346</i>	<i>1</i>	<i>05</i>	

*Matrix: SS - Soil/Solid GW - Groundwater WW - Wastewater DW - Drinking Water OT - Other _____
 pH _____ Temp _____
 Flow _____ Other _____

Relinquished by: (Signature) *Brett Kennedy* Date: *11/01/10* Time: *1650*
 Received by: (Signature) _____
 Relinquished by: (Signature) _____ Date: _____ Time: _____
 Received by: (Signature) _____

Remarks: *4341 4812 7412*
 Samples returned via: UPS FedEx Courier
 Temp: *3.10* Bottles Received: *5 - 602*
 Date: *11-02-10* Time: *0930*
 Condition: (lab use only) _____
 CQC Seals Intact: *Y* pH Checked: _____ NCF: _____
PK



Re: Griffith 11-2 Reserve Pit Closure (Location ID: 334495) Sundry submitted via email to COGCC on May 9th, 2012, COGCC Document number not provided

1 message

Lujan - DNR, Carlos <carlos.lujan@state.co.us>

Tue, Feb 12, 2013 at 2:16 PM

To: "EnviroScan, OGCC" <OGCC.EnviroScan@state.co.us>

Cc: Alex Fischer <alex.fischer@state.co.us>, Blair Rollins <brollins@walshenv.com>, Daniel Padilla <Daniel_Padilla@oxy.com>, Chris Clark <Chris_Clark@oxy.com>

Amber,

Please enter/upload the attached Form 04 (Reserve pit closure), the attached document "Griffith 11-2 Supporting documentation 11.20.12" attached document and this email (all in one new document) and link to:

Location ID # 334445

API # 077 09681

Thanks,

Blair,

Thanks for sending the narrative that Linda requested. No Further Action is required at this time regarding the Griffith 11-2 reserve pit closure.

Based on review of data presented, it appears that no further action is necessary at this time at this site. However, should future conditions at the site be discovered of contaminant concentrations in soils exceeding COGCC standards or if groundwater is found to be significantly impacted, COGCC may require that further investigation and/or remediation be conducted.

Note:

Please moving forward, when you provide additional information or a report related to an ongoing Remediation Project, please include a Sundry Notice (Form 04) as cover page, so that it can be signed as a proof of approval and uploaded to the database. To expedite the closure of this project, I updated and used the old Form 04.

Thanks,
Carlos

On Tue, Nov 20, 2012 at 11:52 AM, Blair Rollins <brollins@walshenv.com> wrote:

Dear Mr. Fischer,

Oxy submitted a sundry notice documenting closure of the Griffith 11-2 reserve pit on May 9, 2012, no COGCC document number was provided but receipt was provided by you at 12:49PM on May 9, 2012. Following COGCC review completed by Linda Spry O'Rourke on October 17, 2012, and discussion during the Oxy and COGCC August 22, 2012 Legacy Pit Closure meeting, Oxy is providing you the following reserve pit closure documentation for the above referenced location.

Closure of the Griffith 11-2 reserve pit is in compliance with the COGCC 1000 Series Rules, specifically 1003.d (Drilling Pit Closure), which requires that COGCC Table 910-1 concentration levels are met.

No specific COGCC closure documentation guidance was provided to Oxy. Oxy is therefore following the closure procedures outlined in the August 22, 2012 meeting and providing you with this email to support the May 9, 2012 sundry notice (no COGCC document # provided). Included as part of the reserve pit closure documentation:

- Griffith 11-2 reserve pit sampling narrative
- Griffith 11-2 reserve pit tabulated data
- Supporting lab analytical data package reflecting the tabulated data
- Griffith 11-2 sampling locations map

Please let Daniel or me know if sufficient information has been provided to close the reserve pit or if you require additional information.

Thank you,

Blair Rollins

Environmental Scientist

Walsh Environmental Scientists and Engineers, LLC.

535 Grand Avenue

Grand Junction, CO 81501

Cell: (970) 261-1224

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Carlos A. Luján, Ph.D

Groundwater Hydrologist

Cell: (720) 272-2306

**Colorado Oil & Gas Conservation
Commission**

1120 Lincoln Street, Suite 801, Denver, CO
80203

(303) 894-2100 Ext. 5105

Carlos.lujan@state.co.us



Please consider the environment prior to printing this e-mail...

2 attachments

 **Griffith 11-2 Form 04 _ Signed CALS.pdf**
99K

 **Griffith 11-2 Supporting documentation 11.20.12.pdf**
1755K