

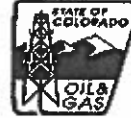
FORM

27

Rev 6/99

State of Colorado
Oil and Gas Conservation Commission

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



#6057

FOR OGCC USE ONLY

RECEIVED
8/18/2011

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No:

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☒ Site/Facility Closure ☐ Other (describe):

OGCC Operator Number: 66571

Name of Operator: OXY USA WTP LP

Address: 760 Horizon Drive, Suite 101

City: Grand Junction

State: CO Zip: 81506

Contact Name and Telephone:

Daniel I. Padilla

No: 970.263.3637

Fax: 970.263.3694

API Number: 05-045-10185

County: Garfield

Facility Name: MCM 83-92 (Pit)

Facility Number: 273647

Well Name: Cascade Creek

Well Number: 604-44

Location: (QtrQtr, Sec, Twp, Rng, Meridian): NESE, 4, 6S, 97W, 6th P.M.

Latitude: 39.551877

Longitude: -108.21784

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Not Applicable

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☐ Y ☒ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Non-crop Rangeland

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Parachute-Rhone Loams 5-30% slopes.

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Nearest surface water is an unnamed intermittent drainage ~ 999' away.

Nearest natural drainage is ~ 600' away.

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):

☐ Soils
☐ Vegetation
☐ Groundwater
☐ Surface Water

Extent of Impact:

N/A

N/A

N/A

N/A

How Determined:

Laboratory analytical results

Visual

Visual inspection below pit liner

Visual

REMEDIALTION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Oxy permitted the pit as a blowdown pit in September of 2004. Oxy closed this pit in 2008 and is providing this pit closure form/plan for COGCC review/approval.

Describe how source is to be removed:

Oxy removed liquids from inside the pit; no solids were encountered. Liquids removed from the pit were disposed of at the Black Mountain Disposal Facility located near DeBeque, Colorado. Oxy disposed of the pit liner at Garfield County Landfill. Based on the sampling results of the pit bottom, all analytes are found to be below allowable concentration levels except for (As). Although the As concentrations are above the COGCC regulated concentration, Oxy collected background samples in undisturbed locations which identified elevated concentrations of arsenic to be above concentrations found in the pit bottom.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

Liquids were removed from the pit and no solids were encountered. Liquids present in the pit and the 30-mil high-density polyethylene liner were disposed of at commercial disposal facilities. Analytical concentrations found in the pit bottom are below the COGCC's table 910-1 concentrations. The elevated concentrations of As have been found to be below As concentrations found in background samples. Oxy has submitted a Form 4 Sundry to account for this allowance. Oxy backfilled the pit with cuttings generated on-site. Oxy capped the pit with at least 6 inches topsoil to ensure a proper seed bed for revegetation. The backfilled pit was contoured to be level with the existing pad grade to minimize stormwater erosion.

Submit Page 2 with Page 1

FORM
27
Rev 6/99

State of Colorado
Oil and Gas Conservation Commission
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Page 2
REMEDIAL WORKPLAN (Cont.)

Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: MCH 83-92
Facility Name & No: Pit # 273647

OGCC Employee: _____

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

No groundwater was impacted by the pit. The pit was lined with a 30-mil HDPE liner. This pit was used as a blowdown pit and no solids were encountered in the pit during closure activities. During excavation of the pit liner, an Oxy contractor was present to observe the soil below the liner. The Oxy contractor collected soil samples from below the pit liner to ensure environmental impacts were not present. Laboratory analytical results are included which identify the approximate sampling location within the pit at depth and compliance with the OGCC Table 910-1 allowable concentrations, except for Arsenic (As). Oxy collected background samples in undisturbed locations which identified elevated concentrations of As to be above concentrations found in the pit bottom. Oxy has submitted a Form 4 to apply a different standard for As based on background concentrations of As.

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

The blowdown pit was constructed at grade with Oxy's Cascade Creek 604-44 well pad, and was approximately 15 feet deep. The pit liner was sent to the Garfield County Landfill for disposal. The reclaimed pit was contoured to be level with the pad grade to minimize stormwater runoff. Final pad reclamation will occur at the end of the life of the pad.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☒ N If yes, describe:

Oxy found that all analytes were below the table 910-1 criteria and therefore no further reclamation is required. Final pad reclamation will occur at the end of the life of the pad.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

Oxy removed all liquids within the pit and disposed of them at the Black Mountain Disposal Facility located near DeBeque, Colorado. No solids were encountered during removal of the liquids from the blowdown pit. Note that the blowdown pit liner was disposed of at the Garfield County Landfill.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: <u>07/16/2008</u>	Date Site Investigation Completed: <u>09/02/2008</u>	Date Remediation Plan Submitted: _____
Remediation Start Date: <u>08/30/2008</u>	Anticipated Completion Date: _____	Actual Completion Date: _____

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

Print Name: Daniel I. Padilla

Signed: [Signature]

Title: Regulatory Advisor

Date: 8/26/11

OGCC Approved: [Signature]

Title: For

Chris Camfield
EPS NW Region

Date: 08/26/2011

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 601, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



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.)

1. OGCC Operator Number: <u>66571</u>	4. Contact Name: <u>Daniel I. Padilla</u>	Complete the Attachment Checklist OP OGCC
2. Name of Operator: <u>OXY USA WTP LP</u>	Phone: <u>970.263.3628</u>	
3. Address: <u>760 Horizon Drive, Suite 101</u>	Fax: <u>970.263.3694</u>	
City: <u>Grand Junction</u> State: <u>CO</u> Zip: <u>81506</u>		
5. API Number: <u>05-045-10185</u>	OGCC Facility ID Number: <u>273647</u>	Survey Plat
6. Well/Facility Name: <u>MCM 83-92 (Pit)</u>	7. Well/Facility Number: <u>604-44</u>	Directional Survey
8. Location (Otr/Otr, Sec, Twp, Rng, Meridian): <u>NESE, Sec 4, 6S, 97W, 6th P.M.</u>		Surface Exptl Diagram
9. County: <u>Garfield</u>	10. Field Name: <u>Grand Valley</u>	Technical Info Page <input checked="" type="checkbox"/>
11. Federal, Indian or State Lease Number: _____		Other Lab data, map <input checked="" type="checkbox"/>

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface of/for is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> FHU/FSL <input type="checkbox"/> FEL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> attach directional survey
Bottomhole location Otr/Otr, 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 <input type="checkbox"/>
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	<input type="checkbox"/> Remove from surface bond
Formation _____ Formation Code _____ Spacing order number _____ Unit Acreage _____ Unit configuration _____	Signed surface use agreement attached
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):	<input type="checkbox"/> CHANGE WELL NAME
Effective Date: _____	From: _____
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	To: _____
	Effective Date: _____
<input type="checkbox"/> ABANDONED LOCATION:	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS
Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No	Date well shut in or temporarily abandoned: _____
Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date Ready for inspection: _____	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 (5 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	<input type="checkbox"/> Report of Work Done
Approximate Start Date: _____	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 Recombine (submit form 2)	<input type="checkbox"/> Request to Vent or Flare
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: Apply different standards
	<input type="checkbox"/> E&P Waste Disposal
	<input type="checkbox"/> Beneficial Reuse of E&P Waste
	<input type="checkbox"/> Status Update/Change of Remediation Plans 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: 8/18/11 Email: daniel_padilla@oxy.com
Print Name: Daniel I. Padilla Title: Regulatory Advisor

COGCC Approved:

CONDITIONS OF APPROVAL, IF ANY:

Title: For

Date: 08/26/2011

Chris Camfield

EPS NW Region

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number:	66571	API Number:	05-045-10185
2. Name of Operator:	OXY USA WTP LP	OGCC Facility ID #	273647
3. Well/Facility Name:	MCM 83-92 (Pit)	Well/Facility Number:	604-44
4. Location (QtrQtr, Sec, Twp, Rng, Meridian):	NESE 4 6S 97W		

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 WTP LP (Oxy) has completed reclamation of the above-mentioned blowdown pit and will 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 will waive the COGCC Table 910-1 concentration for As. In this particular situation, the below the pit liner (Post Reclaim 9/02/2008) 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 9/02/2008). Based on the background sample concentrations, Oxy's sundry notice request to apply different standards to the COGCC Table 910-1 concentration levels due to elevated background concentrations for As.



OXY USA WTP LP

760 Horizon Drive, Suite 101
Grand Junction, CO 81506

604-44 Blowdown Pit Sampling Figure

Revised: July 14, 2011

Garfield County, Colorado

0 0.01 0.02 0.03 0.04 0.05 Miles



Approximate Location of Blowdown Pit



Post Reclaim sample location (11/26/2008)



Background sample location another project

Pit Reclaims - Cascade Creek

Pad #:	604-44
Sample Date:	9/2/2008
Clearance Achieved Date:	

	MCL (mg/kg)	Sample Identifications (mg/kg)				
		Post Reclaim	Background - N	Background-NW	Background-SW	Background-S
Organics in Soil		9/2/2008	6/22/2011	6/22/2011	6/22/2011	6/22/2011
TPH (GRO and DRO) - Sen Area	500	14.0	4.00	3.80	6.80	3.90
Benzene	0.17	<0.0025	U	U	U	U
Toluene	85	<0.025	U	U	U	U
Ethylbenzene	100	<0.0025	U	U	U	U
Xylenes	175	<0.0075	U	U	U	U
Organics in Soil (PAH's)						
Acenaphthene	1000	N/A	U	U	U	U
Anthracene	1000	N/A	U	U	U	U
Benzo(A)anthracene	0.22	N/A	0.00097	0.001	U	0.00093
Benzo(B)fluoranthene	0.22	N/A	U	U	U	U
Benzo(K)fluoranthene	2.2	N/A	U	U	U	U
Benzo(A)pyrene	0.022	N/A	U	U	U	U
Chrysene	22	N/A	U	U	U	U
Dibenzo(A,H)anthracene	0.022	N/A	U	U	U	U
Fluoranthene	1000	N/A	U	U	U	U
Flourene	1000	N/A	0.003	U	U	U
Indeno(1,2,3,C,D)pyrene	0.22	N/A	U	U	U	U
Napthalene	23	N/A	U	U	U	U
Pyrene	1000	N/A	U	U	U	U
Inorganics in Soil						
EC	<4 mmhos/cm or 2X background	2.70	0.036	0.081	0.042	0.028
SAR	<12	2.3	0.2	0.3	0.3	0.2
pH	6-9	7.4	6.1	6.5	6.4	6.4
Metals in Soils						
Arsenic	0.39	3.7	5.1	3.1	3.4	2.8
Barium (LDNR True Total)	15000	210	270	240	290	240
Boron (Hot Water Soluble)	2 (mg/L)	<10 (total)/0.20 (SPLP)	-	-	-	-
Cadmium	70	0.49	0.0	0.2	0.1	0.1
Chromium	12000	43.0	65.0	46.0	44.0	50.0
Chromium VI	23	U	0.96	U	U	0.84
Copper	3100	11.0	7.8	11.0	12.0	11.0
Lead	400	10.0	13.0	12.0	13.0	12.0
Mercury	23	<0.020	0.022	0.009	0.013	0.011
Molybdenum	(3) - See Below	<0.25				
Nickel	1600	24.0	25.0	19.0	18.0	22.0
Selenium	(3)/390	<10.0	2.00	1.20	2.60	1.30
Silver	390	<0.50	U	U	U	0.17
Zinc	23000	43.0	40.0	43.0	45.0	45.0

(3) - Per the Old COGCC Rules, "Considerations are dependent on site specific conditions"

U - Undetected



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

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

Report Summary

Wednesday July 06, 2011

Report Number: L522831

Samples Received: 06/24/11

Client Project: 900546.0005.010

Description: 604-44 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
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.



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REPORT OF ANALYSIS

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

July 06, 2011

Date Received : June 24, 2011
Description : 604-44 Background
Sample ID : 604-44 BACKGROUND-NORTH 13IN
Collected By : CJB
Collection Date : 06/22/11 13:25

ESC Sample # : L522831-01

Site ID :

Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	0.96	0.71	2.0	mg/kg	J	3060A/7	06/30/11	1
Chromium, Trivalent	64.	0.17	0.50	mg/kg		Calc.	06/29/11	1
ORP	170			mV		2580	06/28/11	1
pH	6.1			su		9045D	06/30/11	1
Sodium Adsorption Ratio	0.24					Calc.	06/27/11	1
Specific Conductance	36.			umhos/cm		9050AMo	06/30/11	1
Mercury	0.022	0.0015	0.020	mg/kg		7471	06/27/11	1
Arsenic	5.1	0.32	1.0	mg/kg		6010B	06/29/11	1
Barium	270	0.050	0.25	mg/kg		6010B	06/29/11	1
Cadmium	0.048	0.040	0.25	mg/kg	J	6010B	06/29/11	1
Chromium	65.	0.085	0.50	mg/kg		6010B	06/29/11	1
Copper	7.8	0.21	1.0	mg/kg		6010B	06/29/11	1
Lead	13.	0.090	0.25	mg/kg		6010B	06/29/11	1
Nickel	25.	0.26	1.0	mg/kg		6010B	06/29/11	1
Selenium	2.0	0.32	1.0	mg/kg		6010B	06/29/11	1
Silver	U	0.16	0.50	mg/kg		6010B	06/29/11	1
Zinc	40.	0.34	1.5	mg/kg		6010B	06/29/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	06/27/11	5
Surrogate Recovery (70-130)								
a,a,a-Trifluorotoluene (FID)	96.7			% Rec.		602/801	06/27/11	5
Benzene	U	0.0021	0.0050	mg/kg		8260B	06/26/11	5
Toluene	U	0.0017	0.025	mg/kg		8260B	06/26/11	5
Ethylbenzene	U	0.0016	0.0050	mg/kg		8260B	06/26/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	06/26/11	5
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	06/26/11	5
Dibromofluoromethane	105.			% Rec.		8260B	06/26/11	5
a,a,a-Trifluorotoluene	108.			% Rec.		8260B	06/26/11	5
4-Bromofluorobenzene	93.2			% Rec.		8260B	06/26/11	5
TPH (GC/FID) High Fraction	4.0	0.77	4.0	mg/kg	J	3546/DR	07/02/11	1
Surrogate recovery(%)								
o-Terphenyl	70.2			% Rec.		3546/DR	07/02/11	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: 07/06/11 14:10 Printed: 07/06/11 14:28
L522831-01 (PH) - 6.1@20.0c



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REPORT OF ANALYSIS

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

July 06, 2011

Date Received : June 24, 2011
Description : 604-44 Background
Sample ID : 604-44 BACKGROUND-NORTH 13IN
Collected By : CJB
Collection Date : 06/22/11 13:25

ESC Sample # : L522831-01

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	07/04/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	07/04/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	07/04/11	1
Benzo(a)anthracene	0.00097	0.00092	0.0060	mg/kg	J	8270C-S	07/04/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	07/04/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	07/04/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	07/04/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	07/04/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	07/04/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	07/04/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	07/04/11	1
Fluorene	0.0029	0.00055	0.0060	mg/kg	J	8270C-S	07/04/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	07/04/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	07/04/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	07/04/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	07/04/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	07/04/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	07/04/11	1
2-Chloronaphthalene	0.0083	0.00060	0.0060	mg/kg		8270C-S	07/04/11	1
Surrogate Recovery								
Nitrobenzene-d5	102.			% Rec.		8270C-S	07/04/11	1
2-Fluorobiphenyl	99.2			% Rec.		8270C-S	07/04/11	1
p-Terphenyl-d14	98.3			% Rec.		8270C-S	07/04/11	1

U = ND (Not Detected)

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L522831-01 (PH) - 6.1@20.0c



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REPORT OF ANALYSIS

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

July 06, 2011

Date Received : June 24, 2011
Description : 604-44 Background
Sample ID : 604-44 BACKGROUND-NW 16IN
Collected By : CJB
Collection Date : 06/22/11 13:50

ESC Sample # : L522831-02
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	06/30/11	1
Chromium, Trivalent	46.	0.17	0.50	mg/kg		Calc.	06/29/11	1
ORP	180			mV		2580	06/28/11	1
pH	6.5			su		9045D	06/30/11	1
Sodium Adsorption Ratio	0.27					Calc.	06/27/11	1
Specific Conductance	81.			umhos/cm		9050AMo	06/30/11	1
Mercury	0.0086	0.0015	0.020	mg/kg	J	7471	06/27/11	1
Arsenic	3.1	0.32	1.0	mg/kg		6010B	06/29/11	1
Barium	240	0.050	0.25	mg/kg		6010B	06/29/11	1
Cadmium	0.16	0.040	0.25	mg/kg	JP1	6010B	06/29/11	1
Chromium	46.	0.085	0.50	mg/kg		6010B	06/29/11	1
Copper	11.	0.21	1.0	mg/kg		6010B	06/29/11	1
Lead	12.	0.090	0.25	mg/kg		6010B	06/29/11	1
Nickel	19.	0.26	1.0	mg/kg		6010B	06/29/11	1
Selenium	1.2	0.32	1.0	mg/kg	P1	6010B	06/29/11	1
Silver	U	0.16	0.50	mg/kg		6010B	06/29/11	1
Zinc	43.	0.34	1.5	mg/kg		6010B	06/29/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	06/27/11	5
Surrogate Recovery (70-130)								
a,a,a-Trifluorotoluene (FID)	97.6			% Rec.		602/801	06/27/11	5
Benzene	U	0.0021	0.0050	mg/kg		8260B	06/26/11	5
Toluene	U	0.0017	0.025	mg/kg		8260B	06/26/11	5
Ethylbenzene	U	0.0016	0.0050	mg/kg		8260B	06/26/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	06/26/11	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	06/26/11	5
Dibromofluoromethane	101.			% Rec.		8260B	06/26/11	5
a,a,a-Trifluorotoluene	106.			% Rec.		8260B	06/26/11	5
4-Bromofluorobenzene	92.5			% Rec.		8260B	06/26/11	5
TPH (GC/FID) High Fraction	3.8	0.77	4.0	mg/kg	J	3546/DR	07/02/11	1
Surrogate recovery(%)								
o-Terphenyl	68.2			% Rec.		3546/DR	07/02/11	1

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L522831-02 (PH) - 6.5@20.0c



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REPORT OF ANALYSIS

July 06, 2011

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

Date Received : June 24, 2011
Description : 604-44 Background
Sample ID : 604-44 BACKGROUND-NW 16IN
Collected By : CJB
Collection Date : 06/22/11 13:50

ESC Sample # : L522831-02

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	07/04/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	07/04/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	07/04/11	1
Benzo(a)anthracene	0.0010	0.00092	0.0060	mg/kg	J	8270C-S	07/04/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	07/04/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	07/04/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	07/04/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	07/04/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	07/04/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	07/04/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	07/04/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	07/04/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	07/04/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	07/04/11	1
Phenanthrene	0.0011	0.00074	0.0060	mg/kg	J	8270C-S	07/04/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	07/04/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	07/04/11	1
2-Methylnaphthalene	0.00082	0.00059	0.0060	mg/kg	J	8270C-S	07/04/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	07/04/11	1
Surrogate Recovery								
Nitrobenzene-d5	105.			% Rec.		8270C-S	07/04/11	1
2-Fluorobiphenyl	101.			% Rec.		8270C-S	07/04/11	1
p-Terphenyl-d14	96.5			% Rec.		8270C-S	07/04/11	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

July 06, 2011

Date Received : June 24, 2011
Description : 604-44 Background
Sample ID : 604-44 BACKGROUND-SW 10IN
Collected By : CJB
Collection Date : 06/22/11 13:15

ESC Sample # : L522831-03
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	06/30/11	1
Chromium, Trivalent	44.	0.17	0.50	mg/kg		Calc.	06/29/11	1
ORP	220			mV		2580	06/28/11	1
pH	6.4			su		9045D	06/30/11	1
Sodium Adsorption Ratio	0.28					Calc.	06/27/11	1
Specific Conductance	42.			umhos/cm		9050AMo	06/30/11	1
Mercury	0.013	0.0015	0.020	mg/kg	J	7471	06/27/11	1
Arsenic	3.4	0.32	1.0	mg/kg		6010B	06/29/11	1
Barium	290	0.050	0.25	mg/kg		6010B	06/29/11	1
Cadmium	0.12	0.040	0.25	mg/kg	J	6010B	06/29/11	1
Chromium	44.	0.085	0.50	mg/kg		6010B	06/29/11	1
Copper	12.	0.21	1.0	mg/kg		6010B	06/29/11	1
Lead	13.	0.090	0.25	mg/kg		6010B	06/29/11	1
Nickel	18.	0.26	1.0	mg/kg		6010B	06/29/11	1
Selenium	2.6	0.32	1.0	mg/kg		6010B	06/29/11	1
Silver	U	0.16	0.50	mg/kg		6010B	06/29/11	1
Zinc	45.	0.34	1.5	mg/kg		6010B	06/29/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	06/27/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	95.9			% Rec.		602/801	06/27/11	5
Benzene	U	0.0021	0.0050	mg/kg		8260B	06/26/11	5
Toluene	U	0.0017	0.025	mg/kg		8260B	06/26/11	5
Ethylbenzene	U	0.0016	0.0050	mg/kg		8260B	06/26/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	06/26/11	5
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	06/26/11	5
Dibromofluoromethane	102.			% Rec.		8260B	06/26/11	5
a,a,a-Trifluorotoluene	105.			% Rec.		8260B	06/26/11	5
4-Bromofluorobenzene	92.8			% Rec.		8260B	06/26/11	5
TPH (GC/FID) High Fraction	6.8	0.77	4.0	mg/kg		3546/DR	07/02/11	1
Surrogate recovery(%) o-Terphenyl	69.4			% Rec.		3546/DR	07/02/11	1

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REPORT OF ANALYSIS

July 06, 2011

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

Date Received : June 24, 2011
Description : 604-44 Background
Sample ID : 604-44 BACKGROUND-SW 10IN
Collected By : CJB
Collection Date : 06/22/11 13:15

ESC Sample # : L522831-03

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	07/03/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	07/03/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	07/03/11	1
Benzo(a)anthracene	U	0.00092	0.0060	mg/kg		8270C-S	07/03/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	07/03/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	07/03/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	07/03/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	07/03/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	07/03/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	07/03/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	07/03/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	07/03/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	07/03/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	07/03/11	1
Phenanthrene	U	0.00074	0.0060	mg/kg		8270C-S	07/03/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	07/03/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	07/03/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	07/03/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	07/03/11	1
Surrogate Recovery								
Nitrobenzene-d5	87.5			% Rec.		8270C-S	07/03/11	1
2-Fluorobiphenyl	87.8			% Rec.		8270C-S	07/03/11	1
p-Terphenyl-d14	92.4			% Rec.		8270C-S	07/03/11	1

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REPORT OF ANALYSIS

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

July 06, 2011

Date Received : June 24, 2011
Description : 604-44 Background
Sample ID : 604-44 BACKGROUND-SOUTH 12IN
Collected By : CJB
Collection Date : 06/22/11 13:00

ESC Sample # : L522831-04
Site ID :
Project # : 900546.0005.010

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Chromium, Hexavalent	0.84	0.71	2.0	mg/kg	J	3060A/7	06/30/11	1
Chromium, Trivalent	50.	0.17	0.50	mg/kg		Calc.	06/29/11	1
ORP	190			mV		2580	06/28/11	1
pH	6.4			su		9045D	06/30/11	1
Sodium Adsorption Ratio	0.21					Calc.	06/27/11	1
Specific Conductance	28.			umhos/cm		9050AMo	06/30/11	1
Mercury	0.011	0.0015	0.020	mg/kg	J	7471	06/27/11	1
Arsenic	2.8	0.32	1.0	mg/kg		6010B	06/29/11	1
Barium	240	0.050	0.25	mg/kg		6010B	06/29/11	1
Cadmium	0.10	0.040	0.25	mg/kg	J	6010B	06/29/11	1
Chromium	50.	0.085	0.50	mg/kg		6010B	06/29/11	1
Copper	11.	0.21	1.0	mg/kg		6010B	06/29/11	1
Lead	12.	0.090	0.25	mg/kg		6010B	06/29/11	1
Nickel	22.	0.26	1.0	mg/kg		6010B	06/29/11	1
Selenium	1.3	0.32	1.0	mg/kg		6010B	06/29/11	1
Silver	0.17	0.16	0.50	mg/kg	J	6010B	06/29/11	1
Zinc	45.	0.34	1.5	mg/kg		6010B	06/29/11	1
TPH (GC/FID) Low Fraction	U	0.25	0.50	mg/kg		8015D/G	06/27/11	5
Surrogate Recovery (70-130)								
a,a,a-Trifluorotoluene(FID)	96.5			% Rec.		602/801	06/27/11	5
Benzene	U	0.0021	0.0050	mg/kg		8260B	06/26/11	5
Toluene	U	0.0017	0.025	mg/kg		8260B	06/26/11	5
Ethylbenzene	U	0.0016	0.0050	mg/kg		8260B	06/26/11	5
Total Xylenes	U	0.0023	0.015	mg/kg		8260B	06/26/11	5
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	06/26/11	5
Dibromofluoromethane	102.			% Rec.		8260B	06/26/11	5
a,a,a-Trifluorotoluene	106.			% Rec.		8260B	06/26/11	5
4-Bromofluorobenzene	92.3			% Rec.		8260B	06/26/11	5
TPH (GC/FID) High Fraction	3.9	0.77	4.0	mg/kg	J	3546/DR	07/02/11	1
Surrogate recovery(%)								
o-Terphenyl	70.7			% Rec.		3546/DR	07/02/11	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

July 06, 2011

Date Received : June 24, 2011
Description : 604-44 Background
Sample ID : 604-44 BACKGROUND-SOUTH 12IN
Collected By : CJB
Collection Date : 06/22/11 13:00

ESC Sample # : L522831-04
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	07/03/11	1
Acenaphthene	U	0.00071	0.0060	mg/kg		8270C-S	07/03/11	1
Acenaphthylene	U	0.00057	0.0060	mg/kg		8270C-S	07/03/11	1
Benzo(a)anthracene	0.00093	0.00092	0.0060	mg/kg	J	8270C-S	07/03/11	1
Benzo(a)pyrene	U	0.00062	0.0060	mg/kg		8270C-S	07/03/11	1
Benzo(b)fluoranthene	U	0.00082	0.0060	mg/kg		8270C-S	07/03/11	1
Benzo(g,h,i)perylene	U	0.0012	0.0060	mg/kg		8270C-S	07/03/11	1
Benzo(k)fluoranthene	U	0.0013	0.0060	mg/kg		8270C-S	07/03/11	1
Chrysene	U	0.0011	0.0060	mg/kg		8270C-S	07/03/11	1
Dibenz(a,h)anthracene	U	0.0011	0.0060	mg/kg		8270C-S	07/03/11	1
Fluoranthene	U	0.0010	0.0060	mg/kg		8270C-S	07/03/11	1
Fluorene	U	0.00055	0.0060	mg/kg		8270C-S	07/03/11	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0060	mg/kg		8270C-S	07/03/11	1
Naphthalene	U	0.00065	0.0060	mg/kg		8270C-S	07/03/11	1
Phenanthrene	0.00085	0.00074	0.0060	mg/kg	J	8270C-S	07/03/11	1
Pyrene	U	0.00059	0.0060	mg/kg		8270C-S	07/03/11	1
1-Methylnaphthalene	U	0.00079	0.0060	mg/kg		8270C-S	07/03/11	1
2-Methylnaphthalene	U	0.00059	0.0060	mg/kg		8270C-S	07/03/11	1
2-Chloronaphthalene	U	0.00060	0.0060	mg/kg		8270C-S	07/03/11	1
Surrogate Recovery								
Nitrobenzene-d5	102.			% Rec.		8270C-S	07/03/11	1
2-Fluorobiphenyl	99.0			% Rec.		8270C-S	07/03/11	1
p-Terphenyl-d14	96.9			% Rec.		8270C-S	07/03/11	1

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L522831-04 (PH) - 6.4@19.9c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L522831-01	WG542912	SAMP	Cadmium	R1745450	J
	WG543473	SAMP	TPH (GC/FID) High Fraction	R1747955	J
	WG543166	SAMP	Chromium, Hexavalent	R1747009	J
	WG543949	SAMP	Benzo(a)anthracene	R1749049	J
	WG543949	SAMP	Fluorene	R1749049	J
L522831-02	WG542912	SAMP	Cadmium	R1745449	JP1
	WG542912	SAMP	Selenium	R1745449	P1
	WG543473	SAMP	TPH (GC/FID) High Fraction	R1747955	J
	WG542593	SAMP	Mercury	R1741269	J
	WG543949	SAMP	Benzo(a)anthracene	R1749049	J
	WG543949	SAMP	Phenanthrene	R1749049	J
	WG543949	SAMP	2-Methylnaphthalene	R1749049	J
	WG542912	SAMP	Cadmium	R1745449	J
L522831-03	WG542593	SAMP	Mercury	R1741269	J
	WG542912	SAMP	Cadmium	R1745449	J
L522831-04	WG542912	SAMP	Cadmium	R1745449	J
	WG542912	SAMP	Silver	R1745449	J
	WG543473	SAMP	TPH (GC/FID) High Fraction	R1747955	J
	WG543166	SAMP	Chromium, Hexavalent	R1747009	J
	WG542593	SAMP	Mercury	R1741269	J
	WG543949	SAMP	Benzo(a)anthracene	R1749049	J
	WG543949	SAMP	Phenanthrene	R1749049	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	{EPA} - Estimated value below the lowest calibration point. Confidence correlates with concentration.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

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

Definitions

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

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

Alternate billing information:

CO Table 910

Report to:

Email to: Blair-Rollins
Daniel Padilla @oxy.com

Project
Description: 604-44 Background

City/State
Collected Parachute

Phone: (970) 263-3601
FAX:

Client Project #:

900546.0005.010

ESC Key:

Collected by: CSB

Site/Facility ID#:

P.O.#:

Collected by (signature):

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

Date Results Needed:

Email? No X Yes

FAX? No Yes

Packed on Ice N

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	V8260BTEX, GRO	DRO, SV8270PAHSIM	SAR, SPCON, pH	MRCRA8 + Cu, Ni, Zn	CR3, CR6SS	Remarks/Contaminant	Sample # (lab only)
604-44 Background-North	Grab	SS	13"	6/22/11	1325	3	X	X	X	X	X		LS22831-01
604-44 Background-NW	Grab	SS	16"	6/22/11	1350	3	X	X	X	X	X		-02
604-44 Background-SW	Grab	SS	10"	6/22/11	1315	3	X	X	X	X	X		-03
604-44 Background-South	Grab	SS	12"	6/22/11	1300	3	X	X	X	X	X		-04

G172

n of Custody
e 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

CoCode OXYGJCO (lab use only)

Template/Prelogin

Shipped Via:

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

pH _____ Temp _____

Remarks:

434 989 4805

Flow _____ Other _____

Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>6/23/11</u>	Time: <u>5:00</u>	Received by: (Signature) <u>[Signature]</u>	Samples returned via: <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> UPS <input type="checkbox"/> Courier	Condition: <u>OK</u> (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: <u>3.4°C</u>	Bottles Received: <u>12 Bar</u>
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <u>Shrey Pearson</u>	Date: <u>6-24-11</u>	Time: <u>900</u>
				pH Checked:	NCF:



ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
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Tax I.D. 62-0814289

Est. 1970

Blair Rollins
Walsh Env.- Grand Junction
535 Grand Avenue

Grand Junction, CO 81501

Report Summary

Friday September 12, 2008

Report Number: L363199

Samples Received: 09/04/08

Client Project: 7830-060

Description: Pit Bottom 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 - 09227, 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, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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8 Samples Reported: 09/12/08 10:34 Printed: 09/12/08 13:12

Page 1 of 11



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Est. 1970

REPORT OF ANALYSIS

Blair Rollins
Walsh Env.- Grand Junction
535 Grand Avenue
Grand Junction, CO 81501

September 12, 2008

Date Received : September 04, 2008
Description : Pit Bottom Sampling

Sample ID : 604-44

Collected By : Blair K. Rollins
Collection Date : 09/02/08 12:20

ESC Sample # : L363199-03

Site ID :

Project # : 7830-060

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
pH	7.4		su	9045D	09/06/08	1
Sodium Adsorption Ratio	2.3			Calc.	09/10/08	1
Specific Conductance	2700		umhos/cm	9050AMod	09/08/08	1
Mercury	BDL	0.020	mg/kg	7471	09/10/08	1
Arsenic	3.7	1.0	mg/kg	6010B	09/06/08	1
Beryllium	BDL	0.10	mg/kg	6010B	09/06/08	1
Boron	BDL	10.	mg/kg	6010B	09/06/08	1
Cadmium	0.49	0.25	mg/kg	6010B	09/06/08	1
Chromium	43.	0.50	mg/kg	6010B	09/06/08	1
Copper	11.	1.0	mg/kg	6010B	09/08/08	1
Lead	10.	0.25	mg/kg	6010B	09/06/08	1
Molybdenum	BDL	0.25	mg/kg	6010B	09/06/08	1
Nickel	24.	1.0	mg/kg	6010B	09/06/08	1
Selenium	BDL	10.	mg/kg	6010B	09/06/08	10
Silver	BDL	0.50	mg/kg	6010B	09/09/08	1
Zinc	43.	1.5	mg/kg	6010B	09/06/08	1
Benzene	BDL	0.0025	mg/kg	8021/8015	09/06/08	5
Toluene	BDL	0.025	mg/kg	8021/8015	09/06/08	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	09/06/08	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	09/06/08	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	09/06/08	5
Surrogate Recovery (70-130)						
a,a,a-Trifluorotoluene(FID)	93.3		% Rec.	8021/8015	09/06/08	5
a,a,a-Trifluorotoluene(PID)	99.4		% Rec.	8021/8015	09/06/08	5
TPH (GC/FID) High Fraction	14.	4.0	mg/kg	3546/DRO	09/05/08	1
Surrogate Recovery (50-150)						
o-Terphenyl	88.4		% Rec.	3546/DRO	09/05/08	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 09/12/08 10:34 Printed: 09/12/08 13:13
L363199-03 (PH) - 7.4@21.0c

Company Name/Address: Walsh Env.- Grand Junction 535 Grand Avenue Grand Junction, CO 81501				Alternate billing information:				Analysis/Container/Preservative						Chain of Custody Page ____ of ____ Prepared by: ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859	
Report to: <u>Blair Rollins</u>				Email to: <u>broollins@walshenv.com</u>				Analysis/Container/Preservative TPH - Diesel - Grease BTEX EC SAR PH As, Be, Boron, Cd, Cr, Cu Pb, Hg, Mo, Ni, Se, Ag, Zn							
Project Description: <u>Pit bottom sampling</u>				City/State Collected:											
Phone: (970) 241-4636				Client Project #: <u>7830-060</u>											
FAX:				ESC Key:											
Collected by: <u>Blair K Rollins</u>				Site/Facility ID#:											
Collected by (signature): <u>Blair K Rollins</u>				<input checked="" type="checkbox"/> Rush? (Lab MUST Be Notified) Same Day.....200% Next Day.....100% Two Day.....50% Three Day.....25%				Date Results Needed: Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes				No. of Cntrs		Code: WALSHGJC (lab use only) Template/Prelogin Shipped Via:	
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>															
Sample ID		Comp/Grab	Matrix*	Depth	Date	Time							Remarks/Contaminant		Sample # (lab only)
629-2		Comp	SS	NA	9/2/08	0841	2	X	X	X	X	X	X		2363149-01
629-31-11		Comp	SS	NA	9/2/08	0905	2	X	X	X	X	X	X		-02
604-44		Comp	SS	NA	9/2/08	1220	2	X	X	X	X	X	X		-03
697-15-23		Comp	SS	NA	9/2/08	1020	2	X	X	X	X	X	X		-04
604-12-13		Comp	SS	NA	9/2/08	1325	2	X	X	X	X	X	X		-05
620-01		Comp	SS	NA	9/2/08	0930	2	X	X	X	X	X	X		-06
603-23-32		Comp	SS	NA	9/2/08	1200	2	X	X	X	X	X	X		-07
632-21-41		Comp	SS	NA	9/2/08	0811	2	X	X	X	X	X	X		-08

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

pH _____ Temp _____

Remarks:

9669 74375744 Flow _____ Other _____

Relinquished by: (Signature) <u>Blair K Rollins</u>		Date: <u>9/3/08</u>	Time: <u>1700</u>	Received by: (Signature) <u>FED EX</u>		Samples returned via: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____		Condition: (lab use only)	
Relinquished by: (Signature) _____		Date: _____	Time: _____	Received by: (Signature) _____		Temp: <u>4.6</u>		Bottles Received: <u>16</u>	
Relinquished by: (Signature) _____		Date: _____	Time: _____	Received for lab by: (Signature) <u>[Signature]</u>		Date: <u>9-4-08</u>		Time: <u>0900</u>	
						CoC Seals Intact <u>Y</u> <u>N</u> <u>NA</u>		pH Checked: <u>NCP</u>	