

Page 1
FORM
4
Rev 12/05State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)424-2100 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.)

Rec
5/30/12
JHK

1. OGCC Operator Number: 10255	4. Contact Name: Todd Hutson - Environmental Manager	Complete the Attachment Checklist OP OGCC
2. Name of Operator: Quicksilver Resources Inc.	Phone: 817-422-2883	
3. Address: 801 Cherry Street, Suite 3700, Unit 19 City: Fort Worth State: TX Zip: 76102	Fax: 817-665-4191	
5. API Number 05-107-06248	OGCC Facility ID Number 427088	Survey Plat
6. Well/Facility Name: Pirtlaw Partners Ltd	7. Well/Facility Number 24-33	Directional Survey
8. Location (Qtr/Sec, Twp, Rng, Meridian): SE 5W, 33, 7N, 87W, 6		Surface Equipmt Diagram
9. County: Routt	10. Field Name: Wildcat	Technical Info Page
11. Federal, Indian or State Lease Number:		Other Lab Results

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> FNL/FSL <input type="checkbox"/> FE/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> attach directional survey
Bottomhole location Qtr/Sec, Twp, Rng, Mer	
Latitude	Distance to nearest property line
Longitude	Distance to nearest bldg, public rd, utility or RR
Ground Elevation	Distance to nearest lease line
	Is location in a High Density Area (rule 603b)? Yes/No
	Distance to nearest well same formation
	Surface owner consultation date:
GPS DATA: Date of Measurement PDOP Reading Instrument Operator's Name	
<input type="checkbox"/> CHANGE SPACING UNIT Formation Formation Code Spacing order number Unit Acreage Unit configuration	
<input type="checkbox"/> Remove from surface bond Signed surface use agreement attached	
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling): Effective Date: Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	
<input type="checkbox"/> CHANGE WELL NAME From: NUMBER To: Effective Date:	
<input type="checkbox"/> ABANDONED LOCATION: Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Ready for inspection:	
<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS Date well shut in or temporarily abandoned: Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No MIT required if shut in longer than two years. Date of last MIT	
<input type="checkbox"/> SPUD DATE:	
<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)	
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK Method used Cementing tool setting/perf depth Cement volume Cement top Cement bottom Date	
<input type="checkbox"/> 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

<input type="checkbox"/> Notice of Intent Approximate Start Date:		<input type="checkbox"/> Report of Work Done Date Work Completed:	
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)			
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input checked="" 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: Background	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: Todd Hutson Date: 5/30/12 Email: thutson@qvinc.com
Print Name: Todd Hutson Title: Environmental ManagerOGCC Approved: Ally Fin Title: Env-Sup. Date: 5/30/12
CONDITIONS OF APPROVAL, IF ANY:

w/A



TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

- | | |
|--|-----------------------------|
| 1. OGCC Operator Number: 10255 | API Number: 05-107-06248 |
| 2. Name of Operator: Quicksilver Resources Inc. | OGCC Facility ID # 427088 |
| 3. Well/Facility Name: Pirtlaw Partners Ltd | Well/Facility Number: 24-33 |
| 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SE SW, 33, 7N, 87W, 6 | |

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

This COGCC Form 4 is being submitted as a request to meet the background concentration levels for arsenic at the Pirtlaw Partners Ltd 24-33 pad in accordance with footnote 1 to the COGCC table 910-1.

The request is based on the analytical results presented below (see attached laboratory report).

The cuttings contained in the pit were generated from the surface hole drilling using a water-based drilling mud. One composite sample was collected from six separate locations within the pit to determine the arsenic concentration of the cuttings. The arsenic concentration was reported as 6.4 mg/kg. All other concentrations were reported to meet the COGCC table 910-1 criteria.

Three grab samples were collected from nearby non-impacted, native soil up gradient from the cuttings pit to establish background arsenic concentrations. The background concentrations were reported as 6.5 mg/kg, 5.4 mg/kg, and 6.1 mg/kg.

Quicksilver is requesting this approval in order to proceed with closure and reclamation of the cuttings pit located at the Pirtlaw Partners 24-33 pad.



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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mr Jared Black
Quicksilver Resources, Inc.
801 Cherry Street, Suite 3700
Fort Worth, TX 76102

Report Summary

Friday May 04, 2012

Report Number: L571649

Samples Received: 04/25/12

Client Project:

Description: Pirtlaw Partners 24-33

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:

Craig Cothron , 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.

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.

REPORT OF ANALYSIS

Mr Jared Black
Quicksilver Resources, Inc.
801 Cherry Street, Suite 3700
Fort Worth, TX 76102

May 04, 2012

Date Received : April 25, 2012
Description : Pirtlaw Partners 24-33

Sample ID : CUTTINGS PIT

Collected By : Jarred Black
Collection Date : 04/24/12 13:25

ESC Sample # : L571649-01

Site ID : CO

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	50.	mg/kg	3060A/7196A	04/27/12	25
Chromium, Trivalent	BDL	50.	mg/kg	Calc.	04/26/12	1
ORP	-16.		mV	2580	04/27/12	1
pH	11.		su	9045D	04/26/12	1
Sodium Adsorption Ratio	17.			Calc.	04/27/12	1
Specific Conductance	1700		umhos/cm	9050AMod	04/26/12	1
Total Solids	72.3	0.100	%	2540G	04/27/12	1
Arsenic	6.4	1.0	mg/kg	6010B	04/26/12	1
Barium	240	0.25	mg/kg	6010B	04/26/12	1
Boron	BDL	10.	mg/kg	6010B	04/26/12	1
Cadmium	BDL	0.25	mg/kg	6010B	04/26/12	1
Chromium	11.	0.50	mg/kg	6010B	04/26/12	1
Lead	12.	0.25	mg/kg	6010B	04/26/12	1
Nickel	10.	1.0	mg/kg	6010B	04/26/12	1
Selenium	BDL	1.0	mg/kg	6010B	04/26/12	1
Silver	BDL	0.50	mg/kg	6010B	04/26/12	1
Zinc	53.	1.5	mg/kg	6010B	04/26/12	1
Benzene	0.064	0.0025	mg/kg	8021/8015	04/25/12	5
Toluene	0.49	0.025	mg/kg	8021/8015	04/25/12	5
Ethylbenzene	0.23	0.0025	mg/kg	8021/8015	04/25/12	5
Total Xylene	1.4	0.0075	mg/kg	8021/8015	04/25/12	5
TPH (GC/FID) Low Fraction	26.	0.50	mg/kg	GRO	04/25/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	97.0		% Rec.	8021/8015	04/25/12	5
a,a,a-Trifluorotoluene(PID)	109.		% Rec.	8021/8015	04/25/12	5
TPH (GC/FID) High Fraction	160	4.0	mg/kg	3546/DRO	05/01/12	1
Surrogate recovery(%)						
o-Terphenyl	88.3		% Rec.	3546/DRO	05/01/12	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	0.035	0.0060	mg/kg	8270C-SIM	05/02/12	1
Acenaphthene	0.056	0.0060	mg/kg	8270C-SIM	05/02/12	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/02/12	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/02/12	1
Benzo(b)fluoranthene	0.0088	0.0060	mg/kg	8270C-SIM	05/02/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

L571649-01 (PH) - 11@21.4c

L571649-01 (CR6) - Diluted due to sample color interference.



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REPORT OF ANALYSIS

Mr Jared Black
Quicksilver Resources, Inc.
801 Cherry Street, Suite 3700
Fort Worth, TX 76102

May 04, 2012

Date Received : April 25, 2012
Description : Pirtlaw Partners 24-33

Sample ID : CUTTINGS PIT

Collected By : Jarred Black
Collection Date : 04/24/12 13:25

ESC Sample # : L571649-01

Site ID : CO

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/02/12	1
Chrysene	0.014	0.0060	mg/kg	8270C-SIM	05/02/12	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/02/12	1
Fluoranthene	0.011	0.0060	mg/kg	8270C-SIM	05/02/12	1
Fluorene	0.17	0.0060	mg/kg	8270C-SIM	05/02/12	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/02/12	1
Naphthalene	0.45	0.12	mg/kg	8270C-SIM	05/02/12	20
Pyrene	0.031	0.0060	mg/kg	8270C-SIM	05/02/12	1
Surrogate Recovery						
Nitrobenzene-d5	541.		% Rec.	8270C-SIM	05/02/12	20
2-Fluorobiphenyl	159.		% Rec.	8270C-SIM	05/02/12	1
p-Terphenyl-d14	62.7		% Rec.	8270C-SIM	05/02/12	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: 05/04/12 05:44 Printed: 05/04/12 08:44

L571649-01 (PH) - 11@21.4c

L571649-01 (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
L571649-01	WG589504	SAMP	Toluene	R2143513	J6
	WG589504	SAMP	Total Xylene	R2143513	J6
	WG589504	SAMP	TPH (GC/FID) Low Fraction	R2143513	J6
	WG589620	SAMP	pH	R2144794	T8
	WG589756	SAMP	ORP	R2146673	T8
	WG589646	SAMP	Nitrobenzene-d5	R2153073	J7
	WG589646	SAMP	2-Fluorobiphenyl	R2153073	J1
	WG589501	SAMP	Chromium, Trivalent	R2143894	O
	WG589119	SAMP	Chromium, Hexavalent	R2146795	O

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
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.



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Mr Jared Black
Quicksilver Resources, Inc.
801 Cherry Street, Suite 3700
Fort Worth, TX 76102

Report Summary

Thursday May 24, 2012

Report Number: L576361

Samples Received: 05/22/12

Client Project: 201205400

Description: Pirtlaw Partners 24-33

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:

Craig Cothron , 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

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REPORT OF ANALYSIS

Mr Jared Black
Quicksilver Resources, Inc.
801 Cherry Street, Suite 3700
Fort Worth, TX 76102

May 24, 2012

Date Received : May 22, 2012
Description : Pirtlaw Partners 24-33
Sample ID : BACKGROUND 1 1 IN
Collected By : David Chavira
Collection Date : 05/18/12 10:30

ESC Sample # : L576361-01

Site ID : PIRTLAW 24-33

Project # : 201205400

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	6.5	1.0	mg/kg	6010B	05/23/12	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: 05/24/12 09:48 Printed: 05/24/12 09:48



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REPORT OF ANALYSIS

Mr Jared Black
Quicksilver Resources, Inc.
801 Cherry Street, Suite 3700
Fort Worth, TX 76102

May 24, 2012

Date Received : May 22, 2012
Description : Pirtlaw Partners 24-33
Sample ID : BACKGROUND 2 1 IN
Collected By : David Chavira
Collection Date : 05/18/12 10:30

ESC Sample # : L576361-02

Site ID : PIRTLAW 24-33

Project # : 201205400

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	5.4	1.0	mg/kg	6010B	05/23/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Reported: 05/24/12 09:48 Printed: 05/24/12 09:48



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REPORT OF ANALYSIS

Mr Jared Black
Quicksilver Resources, Inc.
801 Cherry Street, Suite 3700
Fort Worth, TX 76102

May 24, 2012

Date Received : May 22, 2012
Description : Pirtlaw Partners 24-33
Sample ID : BACKGROUND 3 1 IN
Collected By : David Chavira
Collection Date : 05/18/12 10:30

ESC Sample # : L576361-03

Site ID : PIRTLAW 24-33

Project # : 201205400

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	6.1	1.0	mg/kg	6010B	05/23/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 05/24/12 09:48 Printed: 05/24/12 09:48

Summary of Remarks For Samples Printed
05/24/12 at 09:48:58

TSR Signing Reports: 034
R3 - Rush: Two Day

Sample: L576361-01 Account: QUIFWTX Received: 05/22/12 09:00 Due Date: 05/24/12 00:00 RPT Date: 05/24/12 09:48

Sample: L576361-02 Account: QUIFWTX Received: 05/22/12 09:00 Due Date: 05/24/12 00:00 RPT Date: 05/24/12 09:48

Sample: L576361-03 Account: QUIFWTX Received: 05/22/12 09:00 Due Date: 05/24/12 00:00 RPT Date: 05/24/12 09:48