

Rock Island #1

30-045-11876

OIL CONS. DIV DIST. 3

JUL 26 2016



75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
970.247.4227 Fax
www.greenanalytical.com

22 July 2016

Darrell Savage
Conoco Phillips-Farmington
3401 30th Street
Farmington, NM 87401
RE: Formation Comparison

Enclosed are the results of analyses for samples received by the laboratory on 07/12/16 13:05.
If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Debbie Zufelt'.

Debbie Zufelt
Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <http://greenanalytical.com/certifications/>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water.

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8.



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Conoco Phillips-Farmington
3401 30th Street
Farmington NM, 87401

Project: Formation Comparison
Project Name / Number: Area 6
Project Manager: Darrell Savage

Reported:
07/22/16 15:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Rock Island #1 (produced water sample)	1607111-01	Water	07/11/16 12:21	07/12/16 13:05

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



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Rock Island #1 (produced water sample)

1607111-01 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate*	62.0	10.0		mg/L	1	07/21/16	2320 B		JDA
Alkalinity, Carbonate*	<10.0	10.0		mg/L	1	07/21/16	2320 B		JDA
Chloride	326	50.0	2.60	mg/L	50	07/19/16	EPA300.0		JDA
Total Dissolved Solids	665	10.0		mg/L	1	07/13/16	EPA160.1		KDG
Sulfate	30.2	50.0	3.07	mg/L	50	07/19/16	EPA300.0		JDA
Potentially Dissolved Metals by ICP									
Calcium*	16.6	1.00	0.055	mg/L	20	07/20/16	EPA200.7		LLG
Iron*	59.4	1.00	0.070	mg/L	20	07/20/16	EPA200.7		LLG
Magnesium*	<2.00	2.00	0.648	mg/L	20	07/20/16	EPA200.7		LLG
Sodium*	244	20.0	6.11	mg/L	20	07/20/16	EPA200.7		LLG

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

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Client: COP	Phone# (505) 320-2634	Contact: Darrell Savage
Address: 3401 E. 30th St. Farmington, NM 87402	E-Mail Address: darrell.q.savage@conocophillips.com	



75 Suttle Street
Durango, CO 81303
Phone: 970-247-4220
FAX: 970-247-4227

CHAIN OF CUSTODY RECORD
GAL Work Order # <u>1602-111</u>
PO#
Project Name: Area 6

<p>Sample Location:</p> <p>(1)BumperSpring, (2)CompressorDischarge, (3)Flowline, (4)Meter, (5)Oil Tank (6)PigLauncher, (7)PigReceiver, (8)Pipeline, (9)Pit Tank, (10)PostFilter, (11)PreFilter (12)SeparatorInlet, (13)SeparatorOutlet, (14)SeparatorDump, (15)SWDInlet (16)SWDOutlet, (17)TransferPump, (18)ValveCan, (19)WaterTank, (20)Wellhead (21)Other</p>	<p>Sample Type:</p> <p>(1)Casing, (2)CO2GasTube, (3)Coupon, (4)Water, (5)H2SGasTube, (6)Metals (7)O2GasTube, (8)PipeSection, (9)Residual, (10)Sludge, (11)Solid, (12)Tubing, (13)Other</p>
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Collection							Preservative				Analyses Required			
Well Name (Sample Name)	Date	Time	Collected By: (Init.)	Sample Location	Sample Type	No. of Containers	Filtered: Y / N	Unpreserved	H2SO4	Other:	Iron and Manganese	Phosphate	Full Water API	Formational Carbon, Sulfur
Rock Island #1 (produced water sample)	7/11/2016	12:21	DS	20	4	1	n	y						X
2.														
3. Send analysis results to: Kaylie.B.Branstetter@conocophillips.com														
4.														
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20.														

Relinquished by:	Date:	Time:	Received By:	Date:	Time:
<i>[Signature]</i>	7-12-16	7:20 am	<i>[Signature]</i>	7-12-16	7:20 am

Christina Clark 7-12-16 1:05 pm *Christina Clark* 7/12/16 13:05
Christina Clark 7/12/16 1655 Kansas Express 7/12/16 1055

[illegible]