



Johnston A 13M  
API #3003926086

75 Suttle Street  
Durango, CO 81303  
970.247.4220 Phone  
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[www.greenanalytical.com](http://www.greenanalytical.com)

12 February 2016

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

OIL CONS. DIV DIST. 3  
FEB 16 2016

Enclosed are the results of analyses for samples received by the laboratory on 02/04/16 16:20.  
If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script 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 9  
Project Manager: Darrell Savage

Reported:  
02/12/16 11:58

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Johnston A #13M	1602035-01	Water	02/04/16 10:00	02/04/16 16:20
Johnston A #13M	1602035-02	Water	02/04/16 10:00	02/04/16 16:20

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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**Johnston A #13M**

**1602035-01 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
<b>General Chemistry</b>									
Alkalinity, Bicarbonate*	8800	10.0		mg/L	100	02/10/16	2320 B		KDG
Alkalinity, Carbonate*	<10.0	10.0		mg/L	100	02/10/16	2320 B		KDG
Chloride	4540	500	26.0	mg/L	500	02/08/16	EPA300.0		JDA
TDS*	51700	10.0		mg/L	1	02/10/16	EPA160.1		JDA
Sulfate	470	500	30.7	mg/L	500	02/08/16	EPA300.0		JDA
<b>Potentially Dissolved Metals by ICP</b>									
Calcium*	207	1.00	0.138	mg/L	50	02/10/16	EPA200.7		JGS
Iron*	1750	2.50	0.175	mg/L	50	02/10/16	EPA200.7		JGS
Magnesium*	35.9	5.00	1.62	mg/L	50	02/10/16	EPA200.7		JGS
Sodium*	3130	50.0	15.3	mg/L	50	02/10/16	EPA200.7		JGS

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*Debbie Zufelt*

Debbie Zufelt, Reports Manager

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**Johnston A #13M**

**1602035-02 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
<b>General Chemistry</b>									
Chloride	4700	500	26.0	mg/L	500	02/08/16	EPA300.0		JDA
pH*	7.14			pH Units	1	02/05/16	EPA150.1		KDG
TDS*	46700	10.0		mg/L	1	02/10/16	EPA160.1		JDA
Sulfate	505	500	30.7	mg/L	500	02/08/16	EPA300.0		JDA

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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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Please put these samples at the top of the list for analysis - call Darrell for questions **RUSH**

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

**GAL**  
GREEN  
Analytical  
Laboratories

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Phone: 970-247-4220  
FAX: 970-247-4227

**CHAIN OF CUSTODY RECORD**

GAL Work Order # 1602-035

PO#

Project Name: Area 9

16.5°C  
NO: 0.0

30°C  
on ice, Dgo

Sample Location: (1) Bumper Spring, (2) Compressor Discharge, (3) Flowline, (4) Meter, (5) Oil Tank, (6) Pig Launcher, (7) Pig Receiver, (8) Pipeline, (9) Pit Tank, (10) Post Filter, (11) Pre Filter, (12) Separator Inlet, (13) Separator Outlet, (14) Separator Dump, (15) SWD Inlet, (16) SWD Outlet, (17) Transfer Pump, (18) Valve Can, (19) Water Tank, (20) Wellhead, (21) Other

Sample Type: (1) Casing, (2) CO2 Gas Tube, (3) Coupon, (4) Water, (5) H2S Gas Tube, (6) Metals, (7) O2 Gas Tube, (8) Pipe Section, (9) Residual, (10) Sludge, (11) Solid, (12) Tubing, (13) Other

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	Formation Completion
1. JOHNSTON A # 13m	2-4-16	10:00	DS	20	4	1	N	Y						X
2. " " "	"	"	DS	20	4	1	N	Y						
3.														
4.														
5.														
6.														
7.														
8.														
9.														
10.														
11.														
12.														
13.														
14.														
15.														
16.														
17.														
18.														
19.														
20.														

Relinquished by:	Date:	Time:	Received By:	Date:	Time:
<i>[Signature]</i>	2-4-16	16:20	<i>[Signature]</i>	2/4/16	16:20
<i>[Signature]</i>	2/4/16	16:55	Kangaroo Express	2/4/16	16:58

Kangaroo 2-5-16 → Michael Valentin  
930



[illegible]