

San Juan 27-4 Unit 14X
API #3003907056

75 Suttle Street
Durango, CO 81303
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25 May 2016

OIL CONS. DIV DIST. 3

JUN 22 2016

Kevin Fredrickson
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 05/17/16 16:20.
If you need any further assistance, please feel free to contact me.

Sincerely,

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.

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

Project: Formation Comparison
Project Name / Number: Area 9
Project Manager: Kevin Fredrickson

Reported:
05/25/16 12:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
San Juan 27-4 Unit #14X Tubing Sample	1605192-01	Water	05/16/16 13:04	05/17/16 16:20
San Juan 27-4 Unit #14X Braden Head Sample	1605192-02	Water	05/16/16 13:04	05/17/16 16:20



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

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Farmington NM, 87401

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05/25/16 12:25

San Juan 27-4 Unit #14X Tubing Sample

1605192-01 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate*	700	10.0		mg/L	10	05/24/16	2320 B		KDG
Alkalinity, Carbonate*	<10.0	10.0		mg/L	10	05/24/16	2320 B		KDG
Chloride	890	500	26.0	mg/L	500	05/19/16	EPA300.0		JDA
Total Dissolved Solids	2190	10.0		mg/L	1	05/25/16	EPA160.1		KDG
Sulfate	307	500	30.7	mg/L	500	05/19/16	EPA300.0	J	JDA
Potentially Dissolved Metals by ICP									
Calcium*	14.4	0.400	0.055	mg/L	20	05/24/16	EPA200.7		LLG
Iron*	53.0	1.00	0.070	mg/L	20	05/24/16	EPA200.7		LLG
Magnesium*	<2.00	2.00	0.648	mg/L	20	05/24/16	EPA200.7		LLG
Sodium*	377	20.0	6.11	mg/L	20	05/24/16	EPA200.7		LLG

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Debbie Zufelt, Reports Manager

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Conoco Phillips-Farmington 3401 30th Street Farmington NM, 87401	Project: Formation Comparison Project Name / Number: Area 9 Project Manager: Kevin Fredrickson	Reported: 05/25/16 12:25
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San Juan 27-4 Unit #14X Braden Head Sample

1605192-02 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate*	200	10.0		mg/L	10	05/24/16	2320 B		KDG
Alkalinity, Carbonate*	300	10.0		mg/L	10	05/24/16	2320 B		KDG
Chloride	24.6	50.0	2.60	mg/L	50	05/19/16	EPA300.0	J	JDA
Total Dissolved Solids	550	10.0		mg/L	1	05/25/16	EPA160.1		KDG
Sulfate	85.1	50.0	3.07	mg/L	50	05/19/16	EPA300.0		JDA
Potentially Dissolved Metals by ICP									
Calcium*	1.50	0.400	0.055	mg/L	20	05/24/16	EPA200.7		LLG
Iron*	4.77	1.00	0.070	mg/L	20	05/24/16	EPA200.7		LLG
Magnesium*	<2.00	2.00	0.648	mg/L	20	05/24/16	EPA200.7		LLG
Sodium*	206	20.0	6.11	mg/L	20	05/24/16	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

- J Estimated concentration. Analyte concentration between MDL and RL.
- 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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RUSH!

Client: COP	Phone#	Contact:
Address:	E-Mail/Address:	



755 Suttle Street
 Durango, CO 81302
 Phone: 970-247-4220
 FAX: 970-247-4227

CHAIN OF CUSTODY RECORD	
GAL Work Order#	1605-192
PO#	
Project Name:	Area 9

28.2 °C
 NO₃⁻ ✓
 300
 orice, Dyo

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) CO ₂ Gas Tube, (3) Coupon, (4) Water, (5) H ₂ S Gas Tube, (6) Metals, (7) O ₂ Gas Tube, (8) Pipe Section, (9) Residual, (10) Sludge, (11) Solid, (12) Tubing, (13) Other

Well Name (Sample Name)	Collection				Preservative				Analyses Required					
	Date	Time	Collected By: (Init.)	Sample Location	Sample Type	No. of Containers	Filtered: Y/N	Unpreserved	H ₂ SO ₄	Other:	Iron and Manganese	Phosphate	Full Water API	Formate (S&W)
1. Saw Jan 27-4 unit # 14X	5/16/16	13:04	DS	20	4	1	N							X
2. Tubing Sample														
3.														
4. Saw Jan 27-4 unit # 14X	5/16/16	13:04	DS	13	4	1	N							X
5. Braden Head sample														
6.														
7.														
8. Send Results to:														
9. Nathan.Bloomfield@conocoPhillips.com														
10.														
11.														
12.														
13.														
14.														
15.														
16.														
17.														
18.														
19.														
20.														

Relinquished by:	Date:	Time:	Received By:	Date:	Time:
Or Donald	5-17-16	16:20	Christy Clark	5/17/16	16:20
Christy Clark	5/17/16	16:55	Kangaroo Express	5/17/16	16:55

Kangaroo 5-18-16 10:30 → Michael Valencia

CIC water sampling form "Full sample" (requires 120 ML water for lab) (100 ML water needed for titrations)										
Well Name	Sample initials	Collection date & time	Temp. (F)	Sample PS	Water color / clarity	PH	Dissolved CO2 (Titration) turns x 4 = PPM	Total Alkalinity (Titration) turns x 10 = PPM	CO2 Partial pressure	Comments
Tubing Sample San Juan 27-5 unit #107M	DS	5-16-16 14:08	54.2	116	CLR	6.70				
Brack-Head San Juan 27-5 unit #107M	DS	" 11	64.2	2	CLR	11.04				
Residual water sample only (requires 60 ML water)										
Well Name	Sample initials	Collection date & time	Temp. (F)	Sample PS	TDS color / clarity	PH	Free Chlorine concentration ppm/L	Comments		
Tubing Sample San Juan 27-4 unit #14X	DS	5-16-16 13:04	52	147	WHT	6.78	NA			
Brack-Head Sample San Juan 27-4 unit #14X	DS	" 11	64	2	CLR	9.54	NA			
Solid sample collected for (toxicity testing)										
Well Name	Sample initials	Collection date & time	Type Paraffin/ Scale/CF her.	Non- test Y/N	Acid Soluble Y/N	Other tests conducted		Comments		

Busse, Dollie L

30-039-07056

From: Bloomfield, Nathan
Sent: Saturday, June 18, 2016 8:01 PM
To: Busse, Dollie L
Subject: SJ 27-4 Unit 14X water sample
Attachments: Production and BH Water Results 052516.pdf

OIL CONS. DIV DIST. 3

JUN 22 2016

Dollie,

The SJ 27-4 Unit 14X made water during the bradenhead test. Please see the attached water analysis for submittal to NMOCD.

Thanks,

Nathan Bloomfield

The logo for ConocoPhillips, featuring the word "ConocoPhillips" in a bold, sans-serif font with a red checkmark above the "o" in "Phillips".

Area 9 Production Engineer
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