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07 April 2016

Darrell Savage Conoco Phillips-Farmington 3401 30th Street Farmington, NM 87401 OIL CONS. DIV DIST. 3 APR 1 2 2016

RE: Formation Comparison

Dellie Zufett

Enclosed are the results of analyses for samples received by the laboratory on 03/23/16 12:04. 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.



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Conoco Phillips-Farmington

Project: Formation Comparison

3401 30th Street

Project Name / Number: Area 3

Reported:

Farmington NM, 87401

Project Manager: Darrell Savage

04/07/16 13:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received		
Pierce SRC #2 Braden Head	1603229-01	Water	03/23/16 10:00	03/23/16 12:04		
Pierce SRC #2 Tubing	1603229-02	Water	03/23/16 11:00	03/23/16 12:04		

Green Analytical Laboratories

Deldie Zufett

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Project: Formation Comparison

3401 30th Street

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Pierce SRC #2 Braden Head

1603229-01 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate*	100	10.0		mg/L	10	04/06/16	2320 B		KDG
Alkalinity, Carbonate*	20.0	10.0		mg/L	10	04/06/16	2320 B		KDG
Chloride	437	100	5.19	mg/L	100	04/05/16	EPA300.0		JDA
TDS*	15900	10.0		mg/L	1	03/30/16	EPA160.1		JDA
Sulfate	9610	500	30.7	mg/L	500	04/06/16	EPA300.0		JDA
Potentially Dissolved Metals by ICP									
Calcium*	277	0.400	0.055	mg/L	20	04/04/16	EPA200.7		JLM
Iron*	27.5	1.00	0.070	mg/L	20	04/04/16	EPA200.7		JLM
Magnesium*	6.18	2.00	0.648	mg/L	20	04/04/16	EPA200.7		JLM
Sodium*	4770	20.0	6.11	mg/L	20	04/04/16	EPA200.7		JLM

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Project: Formation Comparison

3401 30th Street

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Pierce SRC #2 Tubing

1603229-02 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate*	100	10.0		mg/L	10	04/06/16	2320 B		KDG
Alkalinity, Carbonate*	<10.0	10.0		mg/L	10	04/06/16	2320 B		KDG
Chloride	105	50.0	2.60	mg/L	50	04/05/16	EPA300.0		JDA
TDS*	290	10.0		mg/L	1	03/30/16	EPA160.1		JDA
Sulfate	< 3.07	50.0	3.07	mg/L	50	04/05/16	EPA300.0		JDA
Potentially Dissolved Metals by ICP									
Calcium*	6.78	0.400	0.055	mg/L	20	04/04/16	EPA200.7		JLM
Iron*	56.8	1.00	0.070	mg/L	20	04/04/16	EPA200.7		JLM
Magnesium*	< 2.00	2.00	0.648	mg/L	20	04/04/16	EPA200.7		JLM
Sodium*	69.7	20.0	6.11	mg/L	20	04/04/16	EPA200.7		JLM

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Notes and Definitions

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

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 # 11003 - 229

PO#

Project Name: Akea 3

20.200

Sample Location: (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

Sample Type: (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

	Co	llection						Pres	serva	ative		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 Confact 500	
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Daraffa	3-23-16	12:04	Dellie Zufalt	3-23-14	1204	
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