



OIL CONS. DIV DIST. 3

MAY 03 2016

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

www.GreenAnalytical.com

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

Project: Formation Comparison
Project Name / Number: Area 9
Project Manager: Darrell Savage

Reported:
04/07/16 15:43

30-039-26086

Johnston A #13M**1604003-01 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate*	360	10.0		mg/L	10	04/07/16	2320 B		KDG
Alkalinity, Carbonate*	<10.0	10.0		mg/L	10	04/07/16	2320 B		KDG
Chloride	448	100	5.19	mg/L	100	04/05/16	EPA300.0		JDA
Phosphate (PO4)	33.3	0.768	0.276	mg/L	5	04/07/16	EPA365.3/Calc		LLG
Phosphorus, Total	10.9	0.250	0.0900	mg/L	5	04/07/16	EPA365.3	Q3	LLG
TDS*	1310	10.0		mg/L	1	04/06/16	EPA160.1		JDA
Sulfate	<6.15	100	6.15	mg/L	100	04/05/16	EPA300.0		JDA
Potentially Dissolved Metals by ICP									
Calcium*	4.33	0.400	0.055	mg/L	20	04/04/16	EPA200.7		JLM
Iron*	95.9	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*	419	20.0	6.11	mg/L	20	04/04/16	EPA200.7		JLM

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Debbie Zufelt, Reports Manager

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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

Q3 Sample received without chemical preservation but preserved by the laboratory.

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#	Contact:
Address:	E-Mail Address:	

GAL
Analytical
Laboratories

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

CHAIN OF CUSTODY RECORD

GAL Work Order # 1609-003
PO#
Project Name: Area 9

20.2°C
NO ice
2.5°C
on ice, Dgo

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

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	3/31/16	11:50	DS	20	4	1	N	Y				X		X
2.														
3.														
4. Please Expedite this sample														
5. Sample														
6. Copy Analyst Results														
7. To: Nathan Bloomfield P Caroco Phillips.com														
8.														
9.														
10.														
11.														
12.														
13.														
14.														
15.														
16.														
17.														
18.														
19.														
20.														

Relinquished by:	Date:	Time:	Received By:	Date:	Time:
<i>[Signature]</i>	3-31-16	12:44	<i>[Signature]</i>	3/31/16	1544
Chaim Chan	3/31/16	1655	Kangaroo Express	3/31/16	1655

Kangaroo 4-1-16 Michael Valenti
930



MAY 03 2016

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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Johnston A #13M	1604003-01	Water	03/31/16 11:50	03/31/16 15:44

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Debbie Zufelt, Reports Manager

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07 April 2016

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MAY 03 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 03/31/16 15:44.
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.