API #3004560308 Zachry 5 API #3004507298 McClanahan 16

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

GREEN Analytical Laboratories

05 August 2015

Darrell Savage Conoco Phillips-Farmington 3401 30th Street Farmington, NM 87401 RE: Braden Head

OIL CONS. DIV DIST. 3 AUG 1 9 2015

Delline Zufett

Debbie Zufelt Reports Manager

Sincerely,

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/

Enclosed are the results of analyses for samples received by the laboratory on 07/14/15 15:11.

If you need any further assistance, please feel free to contact me.

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

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Laboratories		www.GreenAnalytical.com
Conoco Phillips-Farmington	Project: Braden Head	
3401 30th Street	Project Name / Number: Area 22	Reported:
Farmington NM, 87401	Project Manager: Darrell Savage	08/05/15 09:34

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received		
Zachry #5	1507145-01	Water	07/14/15 08:30	07/14/15 15:11		
McClanahan #16	1507145-02	Water	07/14/15 09:57	07/14/15 15:11		

OIL CONS. DIV DIST. 3

AUG 1 9 2015

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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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Laboratories		www.Gi											
Conoco Phillips-Farmington		P	roject: Brad	len Head									
3401 30th Street     Project Name / Number: Area 22       Farmington NM, 87401     Project Manager: Darrell Savage													
Farmington NM, 87401			08/05/15	09:34									
			Zachry #	5									
		1507	7145-01 (W	ater)									
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analys				
General Chemistry													
'hloride*	2400	200	100	mg/L	20	07/30/15	4500-Cl- C		ABP				
ulfate	3630	500	84.0	mg/L	50	07/20/15	4500-SO42- E		ABP				
DS*	5630	10.0		mg/L	1	07/20/15	EPA160.1		ABP				
		Mc	Clanahan	#16									
		1507	/145-02 (W	ater)									
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analys				
General Chemistry													
hloride*	540	100	50.0	mg/L	10	07/30/15	4500-Cl- C		ABP				
ulfate	5480	1000	168	mg/L	100	07/20/15	4500-SO42- E		ABP				
DS*	8300	10.0		mg/L	1	07/20/15	EPA160.1		ABP				

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Laboratories		www.GreenAnalytical.co				
Conoco Phillips-Farmington	Project: Braden Head					
3401 30th Street	Project Name / Number: Area 22	Reported:				
Farmington NM, 87401	Project Manager: Darrell Savage	08/05/15 09:34				

## 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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Debbie Zufelt, Reports Manager

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

Л	75 Suttle Street	CHAIN OF CUSTODY RECORD								
CREEK.	Durango, CO 81303	GAL Work Order # 507-145								
Analytical	Phone:970-247-4220	PO#								
Laborátories	FAX: 970-247-4227	Project Name: Area 22								
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

Coll		Pres	serva	ative		Ana	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	Braden Head TDS, chartler Sciftorres
1. ZACHRY # 5 2. McChaNahar # 16	7-1415	8130	25	20	4	1	N	4						X
2. Mc Chanahan # 16	7-14-15	9157	P5	20	4	1	N	1×						X
3.								£						
4.														
5.														
6.					v.									
7.														
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13.														
14.														
15.														
16.														
17.														
18.														
19.					_									
20.														

Relinquished by:	Date:	Time:	Received By:		Date: Time:
1 Danalla	2-14-15	15:11	Muin	llan	7/14/15 15/1
Chritin Clau	7/14/15	1655	Kangarod	Expless	7/14/15 1650
	Kongar	00 <u>7-15</u> 92	-15 Mich	al Valu	time Page 5 of 5

SAMPLE IDENTIFICATION			ANIONS pH Q				OTHER PROPERTIES					TEST METHODS			
Legal Well Name	Vendor	Sample ID	Sample Date	Sample Location	Sample Type	Chloride (mg/L)	Sulfate (mg/L)	Field pH	Calculated pH					Conductivity (µΩ/cm)	Analytical Test Methods_List all used
ZACHRY 5 MCCLANAHAN 16	GREEN LAB	3004560308-GL_1507_145_01 3004507298-GL-1507_145_02	07/14/15	Bradenhead Bradenhead	Water Water	2400 540	3630 5480	9.15 10.54				5630 8300			SM4500-CI-C, EPA160.1, SM4500-SO4-E SM4500-CI-C, EPA160.1, SM4500-SO4-E
	ACHRY 5	egal Well Name Vendor ACHRY 5 GREEN LAB	egal Well Name Vendor Sample ID ACHRY 5 GREEN LAB 3004560308-GL_1507_145_01	egal Well Name Vendor Sample ID Sample Date ACHRY 5 GREEN LAB 3004560308-GL_1507_145_01 07/14/15	egal Well Name Vendor Sample ID Sample Date Sample Location ACHRY 5 GREEN LAB 3004560308-GL_1507_145_01 07/14/15 Bradenhead	egal Well Name Vendor Sample ID Sample Date Sample Location Sample Type ACHRY 5 GREEN LAB 3004560308-GL_1507_145_01_07/14/15 Bradenhead Water	Begal Well Name         Vendor         Sample ID         Sample Date         Sample Location         Sample Type         Chloride (mg/L)           ACHRY 5         GREEN LAB         3004560308-GL_1507_145_01         07/L4/15         Bradenhead         Water         2400	Vendor         Sample ID         Sample Date         Sample Location         Sample Type         Chloride         Sulfate           ACHRY 5         GREEN LAB         3004560108-GL_1507_145_01         07/14/15         Bradenhead         Water         2400         3630	Regal Well Name         Vendor         Sample ID         Sample Date         Sample Location         Sample Type         Chloride (mg/L)         Suffact (mg/L)         Fried pH           ACHRY 5         GREEN LAB         3004560308-GL_1507_145_01         07/14/15         Bradenhead         Water         2400         3630         9.15	Begal Well Name         Vendor         Sample ID         Sample Date         Sample Location         Sample Type         Chloride         Sufface         Field pH         Calculated pH           ACHRY 5         GREEN LAB         3004550308-66_1507_145_01         07/14/15         Bradenhead         Water         2400         3630         9.15	Regal Well Name         Vendor         Sample ID         Sample Date         Sample Location         Sample Type         Chloride         Sulfa         Field Alkalnity (mg/L)         Field Alkalnity           ACHRY 5         GREEN LAB         3004560308-GL_1507_145_01         07/L4/L5         Bradenhead         Water         2400         3630         9.15	Regal Well Name         Vendor         Sample ID         Sample Date         Sample Location         Sample Type         Chloride         Sulfate         Field pH         Calculated pH         Field Alkalinity         Specific (mg/L)           ACHRY 5         GREEN LAB         3004560308-GL_1507_145_01         07/14/15         Bradenhead         Water         2400         3630         9.15	Regal Well Name         Vendor         Sample ID         Sample Date         Sample Location         Sample Type         Chloride         Suffa         Field Alkalinity         Specific         Top           ACHRY 5         GREEN LAB         3004560308-GL_1507_145_01         07/L4/15         Bradenhead         Water         2400         3630         9.15           5630	Regal Well Name         Vendor         Sample ID         Sample Date         Sample Location         Sample Type         Chloride         Life         Field All         Field All         Specific         TD         Total Hardness as CaCo <sub>3</sub> ACHRY 5         GREEN LAB         3004560308-GL_1507_145_01         07/14/15         Bradenhead         Water         2400         3630         9.15         E         5630	gal Well Name         Vendor         Sample ID         Sample Date         Sample Location         <