#### **Current Schematic** ConocoPhillips Well Name: WILLIAMS #1 Surface Legal Location 007-026N-008W-F Well Configuration Type VERTICAL API/UWI ield Name License No. State/Province NEW MEXICO 3004505941 BALLARD PICTURED CLIFFS (GAS) KB-Tubing Hanger Distance (ft) Ground Elevation (ft) Original KB/RT Elevation (ft) KB-Ground Distance (ft) KB-Casing Flange Distance (ft) 10.00 6.167.00 6,167.00 6,157.00 6,167.00 VERTICAL - Original Hole, 9/14/2015 9:02:40 AM MD (ftKB) Vertical schematic (actual) Formation Tops 9.8 1; Surface; 8 5/8 in; 8.097 in; 10.0 125.0 ftKB; 126.0 ftKB Surface Casing Cement; 10.0-126.0; 8/8/1957; CEMENT W/ 100 SXS 126.0 REGULAR CMT. CIRCULATE TO SURFACE OIL CONS. DIV DIST. 3 145.0 SEP 1 4 2015 810.0 Tubing; 2 3/8 in; 4.70 lb/ft; J-55; 10.0 ftKB; 1,877.0 ftKB Seating Nipple; 2 3/8 in; 1,877.0 ftKB; OJO ALAMO 993.1 1,877.7 ftKB Tubing; 2 3/8 in; 4.70 lb/ft; J-55; 1,877.7 ftKB; 1,908.7 ftKB 1,230.0 KIRTLAND Hyd Frac-Foam N2; 12/17/2002; RE-FRAC W/ 20# LINEAR 70% N2 FOAM, 85,000# 20/40 BRADY SAND & 1,684.1 FRUITLAND 15,000# 12/20 BRADY SAND Net penetration: INCREASE; Net stim: 100; Pumped down: CASING; 1,877.0 Remarks: FRACED WELL AS PER DESIGN. CHEMICALS: 2% KCL 1,877.6 9# BIOCIDE. 50 GAL SLURRIED POLYMER. 31 GAL FOAMER. 1,884.8 11 GAL SURFACTANT. PICTURED CLIFFS 11 GAL BREAKER ACTIVATOR. 27# ENCAPSOLATED BREAKER. 1,886.2 22# OXIDIZER BREAKER. Hyd Frac-Other; 8/18/1957; FRAC W/ 31,000 GALS WATER & 40,000# PERF - PICTURED CLIFFS; 1,886.0-1,908.8 1,926.0; 8/18/1957 Sawtooth Collar; 2 3/8 in; 1,908.7 ftKB; 1,909.2 ftKB 1,909.1 1.925.9 Auto cement plug; 1,974.0-2,020.0; 8/11/1957; Automatically created PBTD; 1,974.0 1,974.1 cement plug from the casing cement because it had a tagged depth. Production Casing Cement; 810.0-2,020.0; 8/11/1957; TOC 810' RAN BY TEMP SURVEY ON 8/11/1957. **LEWIS** 1,999.0 CEMENT W/ 50 SXS REGULAR CMT, 50 SXS POZMIX, 4% GEL 2.019.0 FOLLOWED BY 50 SXS REGULAR 2; Production1; 5 1/2 in; 4.950 in; 10.0 2.020.0 ftKB; 2,020.0 ftKB Page 1/1 Report Printed: 9/14/2015



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OIL CONS. DIV DIST. 3

SEP 1 4 2015

11 September 2015

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

RE: Braden Head

API - 30-045-05941

Enclosed are the results of analyses for samples received by the laboratory on 08/21/15 14:20. If you need any further assistance, please feel free to contact me.

Sincerely,

Debbie Zufelt

Reports Manager

Deldie Zufett

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 <a href="http://greenanalytical.com/certifications/">http://greenanalytical.com/certifications/</a>

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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Conoco Phillips-Farmington

Project: Braden Head

3401 30th Street

Project Name / Number: [none]

Reported:

Farmington NM, 87401

Project Manager: Kevin Fredrickson

09/11/15 16:10

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Williams 1 (Bradenhead) Area 21	1508313-01	Water	08/20/15 13:30	08/21/15 14:20
Bud-Dos-Pah 1 (Bradenhead) Area 21	1508313-02	Water	08/20/15 15:00	08/21/15 14:20

OIL CONS. DIV DIST. 3 SEP 1 4 2015

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Deldie Zufett

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Conoco Phillips-Farmington

3401 30th Street

Farmington NM, 87401

Project: Braden Head

Project Manager: Kevin Fredrickson

Project Name / Number: [none]

Reported:

09/11/15 16:10

## Williams 1 (Bradenhead) Area 21 1508313-01 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Chloride*	<10.0	10.0	5.00	mg/L	1	09/11/15	4500-CI- C		LLG
pH*	9.61			pH Units	1	08/25/15	EPA150.1	H4	MAJ
Sulfate	124	20.0	3.36	mg/L	2	09/05/15	4500-SO42- E		ABP
TDS*	560	10.0		mg/L	1	08/27/15	EPA160.1		ABP

### Bud-Dos-Pah 1 (Bradenhead) Area 21 1508313-02 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry		U.,							
Chloride*	<10.0	10.0	5.00	mg/L	1	09/11/15	4500-CI- C		LLG
pH*	10.1			pH Units	1	08/25/15	EPA150.1	H4	MAJ
Sulfate	114	20.0	3.36	mg/L	2	09/05/15	4500-SO42- E		ABP
TDS*	540	10.0		mg/L	1	08/27/15	EPA160.1		ABP

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

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Conoco Phillips-Farmington Project: Braden Head
3401 30th Street Project Name / Number: [none]

Farmington NM, 87401 Project Manager: Kevin Fredrickson

Reported: 09/11/15 16:10

#### **Notes and Definitions**

Q1 Sample received outside of acceptable temperature range for analyses requiring cold storage.

H4 pH analysis perfomed more than 48 hours after sampling.

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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eldie Zufett

Client: COP	Phone#	505-320-4738	Contact:	Kevin Fredrickson
Address:	E-Mail Add	dress: Kevin.G.Free	drickson@co	nocophillips.com



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

# CHAIN OF CUSTODY RECORD

GAL Work Order # 1508-313

PO#

Project Name:

18.90 PMa

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

Colle	ection		NA PL	0.4	W.		Pres	serva	ative		An	alyse	s Re	quired
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	_	Brodhen head Tests
1. Williams 1 (Brokenhead) a	8-20	13:30	MB	20	10	r	N	V						V
1. (williams 1 (Brothenbead) at 2. Bud - Dos Pah 1 (brothenbed) & 3.	8-20	15:00	øß.	20	4	1	N	~	VI, II					1
3.			F						m. i					
4.		E II	10											
5.														
6.								1124						
7.		WE LE									Land.		7735	
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14.												3,5		
15.										0.5		LEGI		
16.											THE		West	1500
17.														Mul
18.														
19.												W.		
20.														

Relinquished by:	Date:	Time:	Received By:	01	Date:	Time:
David Byens	8-21-0	14:20	Murin	(lan	8/21115	1420
Theston Class	8/24/15	1655	Kamani	9xpuss	8/21/15	
0,000			100	10 20 0	. 1	

Kangaroo 8-25-15 930 Michael Valen Page 5 of 6

Ci	water	sempling form "Full samp	ole" (requ	ires 120 N	1L water f	for lab)	(100 ML wate	r needed for t	itrations)			
Well Name	Sampler Initials	Collection date & time	Temp. (F)	Sample PSI	Water color / clarity	PH	Dissolved CO2 (Titration) turns X 4 = PPM	Total Alkilinity (Titration) turns X 10 = PPM	CO2 Partial pressure	Comments		
		"Residue	al" water	sample or	nly (regul	res 60 N	//Lwater)					
Well Name	Sampler	Collection date & time	Temp.	Sample PSI	Water color / clarity	РН	CO2 Partial pressure if requested	Comments				
Williams 1 (Brother)	<b>P</b>	8/20/15	929	8	clear	a.a	-	Bradhermeed somple				
Bud-Dos-Pah 1 (Brother)	00	8/25/25 15:00	17.4	10	Jan	36	-	Br	alhe	in head Samph		
									Market States			
Well Name	Sampler	Collection date & time	Type Paraffin/ Scale/Ot her	Norm test Y/N	Acid Soluble Y/N		ests conducted	Comments				
										<b>建设建设建设</b>		
							Y.					