

30-045-06023

Huerfanito Unit 87
API #3004506023



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

28 May 2015

OIL CONS. DIV DIST. 3

JUN 11 2015

Darrell Savage
Conoco Phillips-Farmington
3401 30th Street
Farmington, NM 87401
RE: TDS & Chloride

Enclosed are the results of analyses for samples received by the laboratory on 05/13/15 16:31.
If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script 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

JUN 11 2015



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: TDS & Chloride
Project Name / Number: Area #21
Project Manager: Darrell Savage

Reported:
05/28/15 16:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Huerfanito Unit #87 Braden Head Sample	1505149-01	Water	05/13/15 14:30	05/13/15 16:31
Huerfanito Unit #87 Well Head Sample	1505149-02	Water	05/13/15 14:50	05/13/15 16:31

Green Analytical Laboratories

A handwritten signature in cursive script that reads 'Debbie Zufelt'.

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.

JUN 11 2015



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: TDS & Chloride Project Name / Number: Area #21 Project Manager: Darrell Savage	Reported: 05/28/15 16:56
--	---	-----------------------------

Huerfanito Unit #87 Braden Head Sample
1505149-01 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Chloride*	30.0	10.0	5.00	mg/L	1	05/18/15	4500-Cl- C		ACH
TDS*	605	10.0		mg/L	1	05/20/15	EPA160.1		ABP

Huerfanito Unit #87 Well Head Sample
1505149-02 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Chloride*	132	10.0	5.00	mg/L	1	05/18/15	4500-Cl- C		ACH
TDS*	2590	10.0		mg/L	1	05/20/15	EPA160.1		ABP

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

Green Analytical Laboratories

Debbie Zufelt

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.

JUN 11 2015



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: TDS & Chloride Project Name / Number: Area #21 Project Manager: Darrell Savage	Reported: 05/28/15 16:56
--	---	-----------------------------

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

Green Analytical Laboratories

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.

JUN 11 2015

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



CHAIN OF CUSTODY RECORD	
GAL Work Order #	1505-149
PO#	
Project Name	Arco # 21

24.1c
NOICE

3.50c #9
arice

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

Well Name (Sample Name)	Collection		Collected By: (Init.)	Sample Location	Sample Type	No. of Containers	Preservative				Analyses Required				
	Date	Time					Filtered: Y/N	Unpreserved	H2SO4	Other:	Iron and Manganese	Phosphate	Full Water API	TDS	chlorides
1. Huerfano unit # 87	5-13-15	14:30	DS	21	4	1	N	X						X	
2. Brader Head Sample														X	
3.															
4. Huerfano unit # 87	5-13-15	14:50	DS	20	4	1	N	X						X	
5. well Head Sample															
6.															
7.															
8.															
9.															
10.															
11.															
12.															
13.															
14.															
15.															
16.															
17.															
18.															
19.															
20.															

Relinquished by:	Date:	Time:	Received By:	Date:	Time:
<i>Darrell Savage</i>	5-13-15	16:31	<i>Michael Delventive</i>	5/13/15	16:31
		C.C.		5-14-15	1500

JUN 11 2015

CIC water sampling form "Full sample" (requires 120 ML water for lab) (100 ML water needed for titrations)										
Well Name	Sampler Initials	Collection date & time	Temp. (F)	Sample PSI	Water color / clarity	PH	Dissolved CO2 (Titration) turns X 4 = PPM	Total Alkalinity (Titration) turns X 10 = PPM	CO2 Partial pressure	Comments
Huerfano unit #87	BSader Head DS	5/13/15 14:30	60.4	2	CLR	9.51	0	104		
Huerfano unit #87	well Head DS	5/13/15 14:50	67.2	74	CLR	6.88	340	170		
"Residual" water sample only (requires 60 ML water)										
Well Name	Sampler Initials	Collection date & time	Temp. (F)	PH	Water color	CO2 Partial pressure if requested	Comments			
"Solid" sample collected for (solveny testing)										
Well Name	Sampler Initials	Collection date & time	Type Paraffin/Scale/Other	Norm test Y/N	Acid Soluble Y/N	Other tests conducted	Comments			