

30-045-06023

Huerfanito Unit 87  
API #3004506023



75 Suttle Street  
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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

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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

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

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**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
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**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
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Debbie Zufelt, Reports Manager

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Project Name / Number: Area #21  
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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

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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	



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

## CHAIN OF CUSTODY RECORD

GAL Work Order # 1505-149

PO#

Project Name: Arco #21

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	TPS 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 Valentine</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	Brader 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			