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09 September 2020

David Bounds

Hilcorp

382 Road 3100

Aztec, NM 87410

RE: Braden Head Zachry 60 - API# 30-045-26761

Enclosed are the results of analyses for samples received by the laboratory on 08/28/20 14:12.  
If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Debbie Zufelt". The signature is written in a cursive, flowing style.

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.



Hilcorp  
382 Road 3100  
Aztec NM, 87410

Project: Braden Head  
Project Name / Number: [none]  
Project Manager: David Bounds

Reported:  
09/09/20 17:19

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
Zachry 60- Tubing	2009006-01	Water	08/28/20 00:00	08/28/20 14:12	H1
Zachry 60- Braden Head	2009006-02	Water	08/28/20 00:00	08/28/20 14:12	H1
Hubbell 3E- Tubing	2009006-03	Water	08/28/20 00:00	08/28/20 14:12	H1

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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Hilcorp 382 Road 3100 Aztec NM, 87410	Project: Braden Head Project Name / Number: [none] Project Manager: David Bounds	<b>Reported:</b> 09/09/20 17:19
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**Zachry 60- Tubing**

**2009006-01 (Produced Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Chloride*	15500	500	44.3	mg/L	500	09/08/20 21:48	EPA300.0		AES
pH*	6.40			pH Units	1	09/01/20 15:47	EPA150.1	H1	VJW
Total Dissolved Solids*	28000	40.0		mg/L	4	09/01/20 10:20	EPA160.1		VJW
Sulfate*	<76.2	500	76.2	mg/L	500	09/08/20 21:48	EPA300.0		AES

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**Zachry 60- Braden Head**

**2009006-02 (Produced Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Chloride*	122	200	17.7	mg/L	200	09/08/20 22:08	EPA300.0		AES
pH*	12.1			pH Units	1	09/03/20 09:25	EPA150.1	H3	VJW
Total Dissolved Solids*	13600	20.0		mg/L	2	09/01/20 10:20	EPA160.1		VJW
Sulfate*	9020	200	30.5	mg/L	200	09/08/20 22:08	EPA300.0		AES

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Client: **Hilcorp** Asset: **South** Phone# **505-419-3410** Contact **David Bounds**  
 Address: 9A CR# 5793, Farmington NM 87401 E-Mail Address [dbounds@hilcorp.com](mailto:dbounds@hilcorp.com)



75 Suttle Street  
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 Phone: 970-247-4220  
 FAX: 970-247-4227

**CHAIN OF CUSTODY RECORD**

GAL Work Order #  
 PO#  
 Project Name:

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

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 X01 a u

009  
 06-01  
 -02  
 -03

Well Name (Sample Name)	Area	Date	Time	Collection				Preservative				Analyses Required									
				Collected By: (init.)	Sample Location	Sample Type	No. of Containers	Filtered: Y / N	Unpreserved	H2SO4	Other:	Iron and Manganese	Phosphate	Full Water API							
1. Zachry 60 - tubing	7	8/28		RS	20	4	1	N	✓												
2. Zachry 60 - bradenhead	7	8/28		DB	20	4	1	N	✓												X
3.																					X
4. Hubbell 3E - tubing	7	8/28		DB	20	4	1	N	✓												X
5. Hubbell 3E - bradenhead	7	8/28		FW	20	4	1	N	✓												X
6.																					
7.																					
8.																					
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19.																					
20.																					

Relinquished by: Jap Harris Date: 8/29/2020 Time: 12:12  
Chris Clau 8/31/20 16:55  
Kangaroo Express 9/1/20 0815

Received By: Chris Clau Date: 8/28/20 Time: 1912  
Kangaroo Express 8/31/20 1655  
Clita Bil

5.4/5.5°C  
 on ice  
 laser #1

Q1