



75 Suttle Street
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www.greenanalytical.com

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 script is cursive and fluid, with the first name 'Debbie' and last name 'Zufelt' clearly legible.

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.



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382 Road 3100
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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

A handwritten signature in black ink 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.



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Project: Braden Head
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Project Manager: David Bounds

Reported:
09/09/20 17:19

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

Reported:
09/09/20 17:19

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	



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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

Collection								Preservative				Analyses Required			
Well Name (Sample Name)	Area	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
1. Zachry 60 - tubing	7	8/28		RS	20	4	1	N	✓						X
2. Zachry 60 - bradenhead	7	8/28		DB	20	4	1	N	✓						X
3.															
4. Hubbell 3E - tubing	7	8/28		DB	20	4	1	N	✓						X
5. Hubbell 3E - bradenhead	7	8/28		TH	20	4	1	N	✓						X
6.															
7.															
8.															
9.															
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17.															
18.															
19.															
20.															

Relinquished by:	Date:	Time:	Received By:	Date:	Time:
Jap Harris	8/29/2020	12:12	Chris Chan	8/28/20	14:12
Chris Chan	8/31/20	16:55	Kangaroo Express	8/31/20	16:55
Kangaroo Express	9/1/20	0815	Chita Bil		

5.4/5.5°C
on ice
laser #1

Q1