



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

07 October 2021

David Bounds  
Hilcorp  
382 Road 3100  
Aztec, NM 87410  
RE: Braden Head

Enclosed are the results of analyses for samples received by the laboratory on 09/23/21 15:22.  
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.  
TNI Certificate Number: T104704514-21-12.

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. TNI Certificate Number: T104704398-21-14



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Hilcorp  
382 Road 3100  
Aztec NM, 87410

Project: Braden Head  
Project Name / Number: South  
Project Manager: David Bounds

**Reported:**  
10/07/21 11:09

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
Florance 1 (Bradenhead)	2109266-01	Water	09/22/21 00:00	09/23/21 15:22	Q1, Q3

Green Analytical Laboratories

A handwritten signature in black ink that reads 'Debbie Zufelt'.

Debbie Zufelt, Reports Manager

Released to Imaging: 12/21/2021 8:14:10 AM

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10/07/21 11:09

**Florance 1 (Bradenhead)  
Area 9**

**2109266-01 (Ground Water)**

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

Chloride*	59.8	100	4.22	mg/L	100	10/04/21 19:59	EPA300.0		AES
pH*	8.36			pH Units	1	09/24/21 14:00	EPA150.1	H1	VJW
pH Temperature, degrees C	23.8			pH Units	1	09/24/21 14:00	EPA150.1	H1	VJW
Total Dissolved Solids*	5540	10.0		mg/L	1	09/29/21 10:55	EPA160.1		VJW
Sulfate*	4050	100	15.2	mg/L	100	10/04/21 19:59	EPA300.0		AES

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Page 3 of 5 2109266 GAL\_no QC FINAL 10 07 21 1109 10/07/21 11:09:56



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### Notes and Definitions

Q3	Sample received without proper chemical preservation as requested by the method of analysis.
Q1	Sample received outside of acceptable temperature range for analyses requiring cold storage.
M2	Matrix spike recovery was below laboratory acceptance criteria. Recovery possibly affected by a matrix interference in the sample. The method blank spike recovery was acceptable.
H1	Sample was received several days after collected and subsequently analyzed past hold time.
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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Client: <b>Hilcorp</b>	Asset: <b>South</b>	Phone# <b>505-419-3410</b>	Contact <b>David Bounds</b>
Address: 9A CR# 5793, Farmington NM 87401		E-Mail Address <a href="mailto:dbounds@hilcorp.com">dbounds@hilcorp.com</a>	



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Phone: 970-247-4220  
FAX: 970-247-4227

### CHAIN OF CUSTODY RECORD

GAL Work Order # 2109266

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	Bradenhead
1. <u>Florance 1 (Bradenhead)</u>	<u>9</u>	<u>9/22</u>		<u>CR</u>	<u>20</u>	<u>4</u>	<u>1</u>	<u>Y</u>	<u>Y</u>	<u>N</u>	<u>N</u>				<u>+</u>
2.															
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20.															

Relinquished by:	Date:	Time:	Received By:	Date:	Time:
<u>Ryan Pritchard</u>	<u>9/23/21</u>	<u>3:22</u>	<u>Matthew Clark</u>	<u>9/23/21</u>	<u>1522</u>
<u>Matthew Clark</u>	<u>9/23/21</u>	<u>1655</u>	<u>Kangaroo Express</u>	<u>9/23/21</u>	<u>1655</u>
<u>Kangaroo Express</u>	<u>9/24/21</u>	<u>0830</u>	<u>Quinta Dumper</u>	<u>9/24/21</u>	<u>0830</u>

Test 3 on Ice  
4.4/4.3°C

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 56312

## CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 56312
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

## CONDITIONS

Created By	Condition	Condition Date
mkuehling	tds 5540	12/21/2021