



OCD Received
5/28/2020

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Durango, CO 81303
970.247.4220 Phone
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www.greenanalytical.com

04 May 2020

Kevin Fredrickson
Hilcorp
382 Road 3100
Aztec, NM 87410
RE: Braden Head

Enclosed are the results of analyses for samples received by the laboratory on 04/27/20 10:10.
If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in black ink 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 through the Colorado Department of Public Health and Environment and EPA region 8.



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Hilcorp
382 Road 3100
Aztec NM, 87410

Project: Braden Head
Project Name / Number: North
Project Manager: Kevin Fredrickson

Reported:
05/04/20 15:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
Fee 3B	2004170-01	Water	04/26/20 13:00	04/27/20 10:10	

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
Project Name / Number: North
Project Manager: Kevin Fredrickson

Reported:
05/04/20 15:57

Fee 3B

2004170-01 (Produced Water)

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

Chloride*	486	50.0	4.43	mg/L	50	04/29/20 22:00	EPA300.0		AES
pH*	10.6			pH Units	1	04/28/20 11:50	EPA150.1		FGH
Total Dissolved Solids*	3930	20.0		mg/L	2	04/30/20 14:30	EPA160.1		VJW
Sulfate*	390	50.0	7.62	mg/L	50	04/29/20 22:00	EPA300.0		AES

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Debbie Zufelt, Reports Manager

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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

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Client: **Hilcorp** Asset: **North** Phone# **505-634-6059** Contact **Kevin Fredrickson**
 Address: 382 Road 3100, Aztec, NM. 87410 E-Mail Address **kfredrickson@hilcorp.com**



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 Durango, CO 81303
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 FAX: 970-247-4227

CHAIN OF CUSTODY RECORD

GAL Work Order # **2004-170-01**
 PO#
 Project Name:

Sample Location:

(1) Bumper Spring, (2) Compressor Discharge, (3) Flowline, (4) Meter, (5) Oil Tank
 (6) Pig Launcher, (7) Pig Receiver, (8) Pipeline, (9) Pit Tank, (10) Post Filter, (11) Pre Filter
 (12) Separator Inlet, (13) Separator Outlet, (14) Separator Dump, (15) SWD Inlet
 (16) SWD Outlet, (17) Transfer Pump, (18) Valve Can, (19) Water Tank, (20) Wellhead
 (21) Other

Sample Type:

(1) Casing, (2) CO2 Gas Tube, (3) Coupon, (4) Water, (5) H2S Gas Tube, (6) Metals
 (7) O2 Gas Tube, (8) Pipe Section, (9) Residual, (10) Sludge, (11) Solid, (12) Tubing, (13) Other

Collection								Preservative				Analyses Required			
Post Rig water	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
Fee 3B	3	4/27/2020	1pm	RH	20	4	1	N	X						X
5.															
6.															
7.															
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20.															

Relinquished by:	Date: 4-27-20	Time:	Received By:	Date: 04/27/20	Time: 1610
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16.0/16.1°C no ice
 laser #01 FH