This representative produced water fluid sample report is for the nearby Lunt FC 1 and Lunt FC 2. Similar to the Lunt FC 11, both wells shown in the attached report produce fluids from the Fruitland Coal and are considered representative of the produced water fluids that were released from the failed check valve. Refer to PDF Pages 4 and 5 within this attachment for the dissolved chlorides concentration.

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970.247.4227 Fax
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21 March 2019

Kevin Fredrickson
Hilcorp
382 Road 3100
Aztec, NM 87410

RE: API - Oil Field "Complete Water"

Enclosed are the results of analyses for samples received by the laboratory on 03/12/19 13:25.
If you need any further assistance, please feel free to contact me.

Sincerely,

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	Project: API - Oil Field "Complete Water"	
382 Road 3100	Project Name / Number: Asset: North	**Reported:**
Aztec NM, 87410	Project Manager: Kevin Fredrickson	03/21/19 13:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
Lunt FC 1	1903139-01	Water	03/11/19 14:00	03/12/19 13:25	Q1
Lunt FC 2	1903139-02	Water	03/11/19 15:00	03/12/19 13:25	Q1

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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Hilcorp	Project: API - Oil Field "Complete Water"	
382 Road 3100	Project Name / Number: Asset: North	**Reported:**
Aztec NM, 87410	Project Manager: Kevin Fredrickson	03/21/19 13:08

Lunt FC 1
Area 2

1903139-01 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	**960**	10.0		mg/L	5	03/19/19	2320 B		JDA
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	03/19/19	2320 B		JDA
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	03/19/19	2320 B		JDA
Alkalinity, Total as CaCO3*	**960**	10.0	3.06	mg/L	5	03/19/19	2320 B		JDA
Chloride*	**8130**	250	25.6	mg/L	250	03/18/19	EPA300.0		AES
Conductivity*	**24200**	10.0		uS/cm	1	03/13/19	2510 B		JDA
pH*	**7.40**			pH Units	1	03/13/19	EPA150.1		JDA
Resistivity	**41.3**			ohm/cm	1	03/14/19	2510 B		JDA
Total Dissolved Solids*	**14100**	40.0		mg/L	4	03/18/19	EPA160.1		JDA
Specific Gravity	**1.011**	0.8000		No Unit	1	03/14/19	ASTM D1429-03		JDA
Sulfate*	<53.3	250	53.3	mg/L	250	03/18/19	EPA300.0		AES
Potentially Dissolved Metals by ICP									
Barium*	**17.2**	0.500	0.052	mg/L	25	03/14/19	EPA200.7		AES
Calcium*	**53.4**	2.50	0.321	mg/L	25	03/14/19	EPA200.7		AES
Hardness, as CaCO3	**216**	16.5	2.73	mg/L	25	03/14/19	2340 B		AES
Iron*	<1.25	1.25	0.691	mg/L	25	03/14/19	EPA200.7		AES
Lead*	<2.50	2.50	0.177	mg/L	25	03/14/19	EPA200.7		AES
Magnesium*	**20.1**	2.50	0.469	mg/L	25	03/14/19	EPA200.7		AES
Manganese*	**0.117**	0.500	0.067	mg/L	25	03/14/19	EPA200.7	J	AES
Potassium*	<25.0	25.0	2.39	mg/L	25	03/14/19	EPA200.7		AES
Silica (SIO2)	<26.7	26.7	1.43	mg/L	25	03/14/19	Calculation		AES
Silicon	<12.5	12.5	0.668	mg/L	25	03/14/19	EPA200.7		AES
Sodium*	**5510**	25.0	9.17	mg/L	25	03/14/19	EPA200.7		AES
Strontium*	**17.3**	2.50	0.072	mg/L	25	03/14/19	EPA200.7		AES
Zinc*	<2.50	2.50	0.054	mg/L	25	03/14/19	EPA200.7		AES
Cation/Anion Balance	**-.83**								

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

GREEN Analytical Laboratories

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Hilcorp	Project: API - Oil Field "Complete Water"	
382 Road 3100	Project Name / Number: Asset: North	**Reported:**
Aztec NM, 87410	Project Manager: Kevin Fredrickson	03/21/19 13:08

Lunt FC 2
Area 2

1903139-02 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	**1020**	10.0		mg/L	5	03/19/19	2320 B		JDA
Alkalinity, Carbonate as CaCO3*	<10.0	10.0		mg/L	5	03/19/19	2320 B		JDA
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0		mg/L	5	03/19/19	2320 B		JDA
Alkalinity, Total as CaCO3*	**1020**	10.0	3.06	mg/L	5	03/19/19	2320 B		JDA
Chloride*	**9580**	250	25.6	mg/L	250	03/18/19	EPA300.0		AES
Conductivity*	**28300**	10.0		uS/cm	1	03/13/19	2510 B		JDA
pH*	**7.41**			pH Units	1	03/13/19	EPA150.1		JDA
Resistivity	**35.3**			ohm/cm	1	03/14/19	2510 B		JDA
Total Dissolved Solids*	**16600**	40.0		mg/L	4	03/18/19	EPA160.1		JDA
Specific Gravity	**1.012**	0.8000		No Unit	1	03/14/19	ASTM D1429-03		JDA
Sulfate*	<53.3	250	53.3	mg/L	250	03/18/19	EPA300.0		AES
Potentially Dissolved Metals by ICP									
Barium*	**19.4**	0.500	0.052	mg/L	25	03/14/19	EPA200.7		AES
Calcium*	**49.4**	2.50	0.321	mg/L	25	03/14/19	EPA200.7		AES
Hardness, as CaCO3	**219**	16.5	2.73	mg/L	25	03/14/19	2340 B		AES
Iron*	**1.91**	1.25	0.691	mg/L	25	03/14/19	EPA200.7		AES
Lead*	<2.50	2.50	0.177	mg/L	25	03/14/19	EPA200.7		AES
Magnesium*	**23.2**	2.50	0.469	mg/L	25	03/14/19	EPA200.7		AES
Manganese*	<0.067	0.500	0.067	mg/L	25	03/14/19	EPA200.7		AES
Potassium*	<25.0	25.0	2.39	mg/L	25	03/14/19	EPA200.7		AES
Silica (SIO2)	<26.7	26.7	1.43	mg/L	25	03/14/19	Calculation		AES
Silicon	<12.5	12.5	0.668	mg/L	25	03/14/19	EPA200.7		AES
Sodium*	**5900**	25.0	9.17	mg/L	25	03/14/19	EPA200.7		AES
Strontium*	**19.7**	2.50	0.072	mg/L	25	03/14/19	EPA200.7		AES
Zinc*	<2.50	2.50	0.054	mg/L	25	03/14/19	EPA200.7		AES
Cation/Anion Balance	**-5.25**								

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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Hilcorp	Project: API - Oil Field "Complete Water"	
382 Road 3100	Project Name / Number: Asset: North	**Reported:**
Aztec NM, 87410	Project Manager: Kevin Fredrickson	03/21/19 13:08

Notes and Definitions

Q1	Sample received outside of acceptable temperature range for analyses requiring cold storage.
M3	Matrix spike recovery did not meet acceptance criteria. Accuracy of the spike is reduced since the analyte concentration in the sample is more than four times the spike level.
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.
J	Estimated conentration. Analyte concentration between MDL and RL.
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

Debbie Zufelt, Reports Manager

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

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

CHAIN OF CUSTODY RECORD

GAL Work Order # 1903-139
PO#
Project Name:

20.5°C
No ice

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			
	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	oil & grease
01	Lunt FC 1	2	3/11/2019	2pm	TA	20	4	1	N	x					x	
02	Lunt FC 2	2	3/11/2019	3pm	TA	20	4	1	N	x					x	
4.																
5.																
6.																
7.																
8.																
9.																
10.																
11.																
12.																
13.																
14.																
15.																
16.																
17.																
18.																
19.																
20.																

Relinquished by:	Date:	Time:	Received By:	Date:	Time:
[signature]	3-12-19	1:25	[signature]	3/12/19	1322
[signature]	3/12/19	1655	Kangaroo Express	3/12/19	1655
Kangaroo Express	03/13/19	0900	Jenna Emeni	03/13/19	0900

1.9/1.9°C
#1 on ice in DGO

The total spill volume was based on data derived from SCADA, which allowed Hilcorp to 1) identify the approximate period of time when the check valve failed at the Lunt FC 11 and 2) the daily flow rate of produced water fluids that were being sent to the Salty Dog SWD 4 water injection system.

Agua Moss

Agua Moss LLC
345 CR 350
Farmington, NM 87401

No.
CM10432

Date:
06/17/2025

Company:
Hilcorp

Billing Location:
LUNT FC 2

Area
2

Run
202

Ordered By:
VAWNDA

Delivery Company:
Kelley OIlfield

Delivery Driver:
GILBERT

Delivery Driver Truck #:
01

Delivery Ticket #:
SC

Product:
4100 - Disposal / Produced Water

BBLS:
80

Time Stamp
04:47 PM

8ba76e0c-1b5e-4f0b-95ca-4fe93f8ea6a4

Agua Moss

Agua Moss LLC
3782 Provo Street
Bloomfield, NM 87413

No.
PL42937

Date:
06/17/2025

Company:
Hilcorp

Billing Location:
LUNT FC 2

Area
2

Run
202

Ordered By:
VAWNDA LUCERO

Delivery Company:
~~M&R~~ Kelley Oilfield

Delivery Driver:
GILBERT

Delivery Driver Truck #:
PT01

Delivery Ticket #:
PL

Product:	BBLS:	Time Stamp
4100 - Disposal / Produced Water	80	07:46 PM

Agua Moss

Agua Moss LLC
345 CR 350
Farmington, NM 87401

No.
CM10440

Date:
06/18/2025

Company:
Hilcorp

Billing Location:
LUNT F C 2

Area
2

Run
202

Ordered By:
VAWNDA

Delivery Company:
Kelley OIlfield

Delivery Driver:
GILBERT

Delivery Driver Truck #:
01

Delivery Ticket #:
SC

Product:
4100 - Disposal / Produced Water

BBLS:
15

Time Stamp
12:37 PM

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 545024

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 545024
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2602130568**
Incident Name	**NAPP2602130568 LUNT FC 11 @ 30-045-34030**
Incident Type	**Produced Water Release**
Incident Status	**Initial C-141 Received**
Incident Well	**[30-045-34030] LUNT FC #011**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Lunt FC 11
Date Release Discovered	01/20/2026
Surface Owner	Private

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Equipment Failure | Valve | Produced Water | Released: 2,000 BBL | Recovered: 20 BBL | Lost: 1,980 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	On 1/20/2026 at 1:22 pm (MT), a HEC operator discovered a 2,000-bbl produced water release at the Lunt FC 11. HEC noticed a reduced flow rate at the Salty Dog SWD 4 injection well on SCADA, which prompted an immediate site visit. It was discovered that a check valve going into the flowline at the Lunt FC 11 had froze and ruptured allowing for produced water to back flow from the main pipeline feeding the Salty Dog SWD 4 onto the Lunt FC 11 location. The produced water release occurred at the check valve (aboveground), which is located within secondary containment. Released fluids accumulated around the pit tank and separator. Operations stopped the leak and secured the source by shutting in the flowline before and after the failed check valve. Fluid Management was able to coordinate a vacuum truck on the same day and recovered approximately 20 bbls of fluid from within secondary containment. All remaining released fluids within secondary containment soaked into the underlying soils. Primary cause has been determined to be an equipment failure at a frozen

	check valve. Corrective actions for the frozen check valve will involve replacement and an additional alarm will be setup in SCADA to allow for earlier detection of flow rate anomalies.

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

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 545024
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Mitch Killough Title: Environmental Specialist Email: mkillough@hilcorp.com Date: 01/21/2026

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

QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 545024
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	*Not answered.*
What method was used to determine the depth to ground water	*Not answered.*
Did this release impact groundwater or surface water	*Not answered.*
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	*Not answered.*
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	*Not answered.*
An occupied permanent residence, school, hospital, institution, or church	*Not answered.*
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	*Not answered.*
Any other fresh water well or spring	*Not answered.*
Incorporated municipal boundaries or a defined municipal fresh water well field	*Not answered.*
A wetland	*Not answered.*
A subsurface mine	*Not answered.*
An (non-karst) unstable area	*Not answered.*
Categorize the risk of this well / site being in a karst geology	*Not answered.*
A 100-year floodplain	*Not answered.*
Did the release impact areas not on an exploration, development, production, or storage site	*Not answered.*

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	No
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 545024
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	None	1/21/2026