

State of New Mexico  
Energy, Minerals and Natural Resources Department

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Michelle Lujan Grisham  
Governor

Sarah Cottrell Propst  
Cabinet Secretary

Todd E. Leahy, JD, PhD  
Deputy Secretary

Adrienne Sandoval, Division Director  
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-4 or 3160-5 form.

Operator Signature Date: 2/14/2020

Well information:

**30-045-25574 CAIN #002**

**HILCORP ENERGY COMPANY**

Application Type:

☒ P&A   ☐ Drilling/Casing Change   ☐ Location Change

☐ Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84; Submit Gas Capture Plan form prior to spudding or initiating recompletion operations)

☐ Other:

Conditions of Approval:

- Notify NMOCD 24hrs prior to beginning operations.

In addition to the plugs approved by BLM:

- Add a Pictured Cliffs plug 2165'- 2065.' OCD P.C. top pick @ 2085.'
- Add a Kirtland plug 398'-0'. OCD Kirtland top pick @ 348'.

11/2/2020

NMOCD Approved by Signature

Date

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.**5. Lease Serial No.  
NMSF078464

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other8. Well Name and No.  
CAIN 22. Name of Operator  
HILCORP ENERGY COMPANYContact: PRISCILLA SHORTY  
E-Mail: pshorty@hilcorp.com9. API Well No.  
30-045-25574-00-D13a. Address  
1111 TRAVIS STREET  
HOUSTON, TX 770023b. Phone No. (include area code)  
Ph: 505-324-518810. Field and Pool or Exploratory Area  
UNDESIGNATED

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 25 T31N R13W SENE 1520FNL 0790FEL  
36.873688 N Lat, 108.148849 W Lon

11. County or Parish, State

SAN JUAN COUNTY, NM

## 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

During well review, it was found the CIBP, originally placed @ 2100, was removed on 2/29/2000 for the subject well. The wellbore was cleanout to plugback TD @ 2175'. See attached Greystone Energy's daily rig report.

Hilcorp Energy Company requests permission to P&A the subject well per the attached procedure, current and proposed wellbore schematics. A closed loop system will be used. The pre-disturbance site visit was held on 12/13/2019 with Randy McKee. The reclamation plan is attached.

NMOCD Rec'd  
11/2/20

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #503405 verified by the BLM Well Information System  
For HILCORP ENERGY COMPANY, sent to the Farmington  
Committed to AFMSS for processing by ALBERTA WETHINGTON on 02/18/2020 (20AMW0173SE)**

Name (Printed/Typed) PRISCILLA SHORTY

Title OPERATIONS REGULATORY TECH SR

Signature (Electronic Submission)

Date 02/14/2020

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**Approved By JOE KILLINSTitle ENGINEERDate 02/18/2020

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Farmington

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

AV



**Hilcorp Energy Company**  
**CAIN 2**  
**NOI - Plug and Abandon**  
**API #: 3004525574**

**PROCEDURE**

1. Hold a pre-job safety meeting prior to beginning all operations or during a change in operational scope or initiation of SIMOPs. Properly document all operations via the JSA process. Insure that all personnel onsite abide by HEC safety protocol, including PPE, housekeeping, and procedures. Verify cathodic protection is off and wellhead instrumentation is properly disconnected from wellhead. Comply with all NMOCD, BLM, and HEC safety and environmental regulations. Verify there is no H2S present prior to beginning operations. If H2S is present, take the necessary actions to insure that the operation is safe prior to beginning operations. Observe and record pressures across all strings daily, prior to beginning operations. **Notify NMOCD and BLM 24 hours in advance of beginning operations**

NOTE: **this procedure is contingent upon P&A sundry approval by both the BLM and the NMOCD.** All cement volumes use 100% excess outside pipe and 50' excess inside (unless stated otherwise). All cement will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield. 8.3 ppg fluid will be used to balance the well during this operation.

2. MIRU service rig and associated equipment, ND casing risers
3. LOTO pumping unit. Remove horse's head and bridle. Unseat pump and POOH with pump, LD rods.
4. ND tree and NU BOPs. Pressure and function test BOPs to 150/1500 psi.
5. PU on tbg, remove hanger, POOH LD tbg.
6. PU workstring. RIH w/ bit and scraper to 1780', POOH. RIH w/ CIBP and set at 2103'.
7. **PLUG #1:** Mix and pump a 99 sx, Class G cement balanced plug on top of the CIBP from 2103' to 1470' to isolate the Pictured Cliff perms and sand top and cover the Fruitland Coal perms and top. PUH and RO excess cement. WOC
8. **PLUG #2:** LIH and tag TOC on Plug #1. Mix and pump a 26 sx, Class G cement balanced plug from 700' to 450' to cover the Kirtland and Ojo Alamo tops. PUH and RO excess cement. WOC
9. **PLUG #3:** Mix and pump a 20 sx, Class G cement balanced plug from 175-0' to cover the surface casing shoe. PUH and RO excess cement. LD tbg, WOC
9. ND BOPs, cementing valves. Cut csg and remove wellhead. Fill annulus with cement, as needed. Install P&A marker to comply with regulations, record GPS coordinate for P&A marker, and photograph P&A marker in place. RDMO.

# Schematic - Current

Well Name: CAIN #2

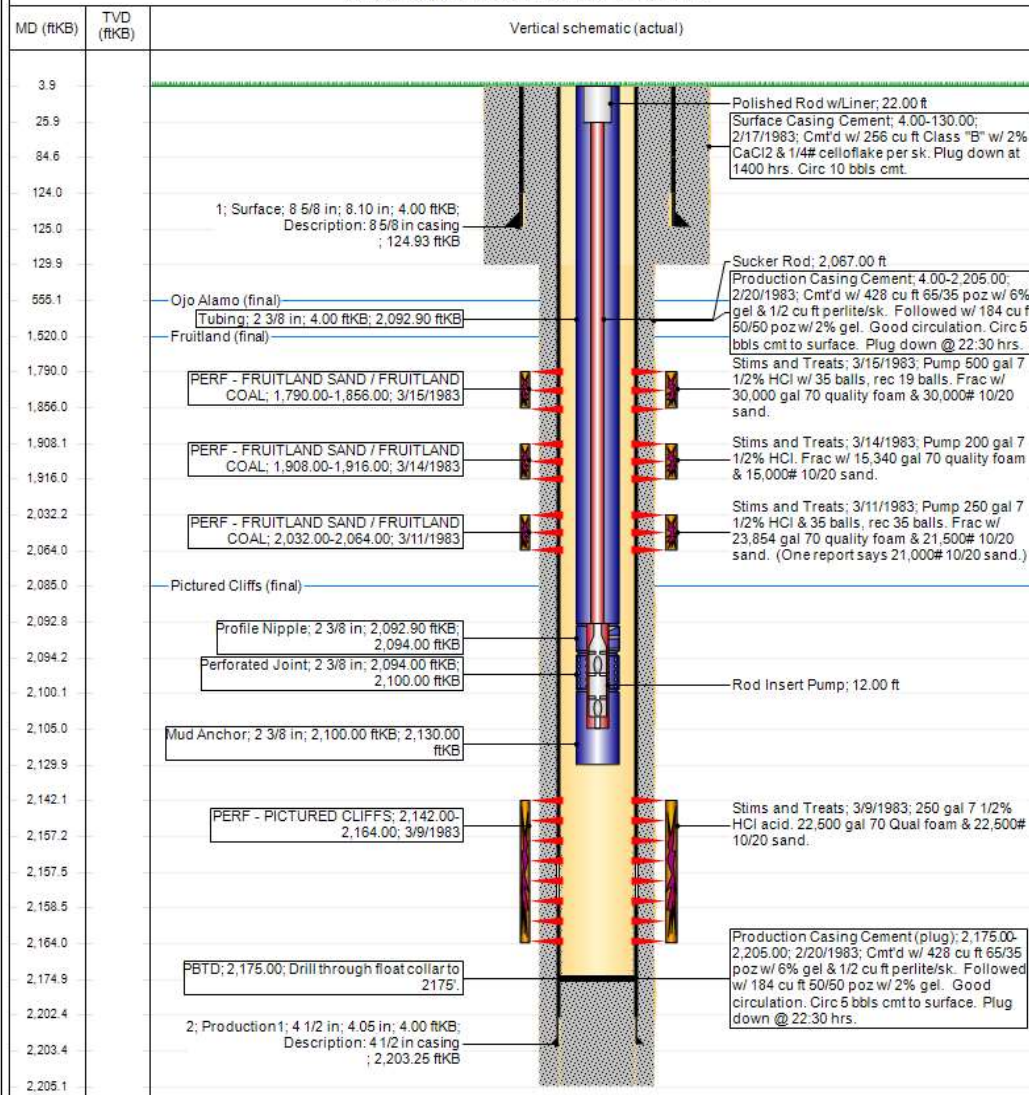
API UWI 3004525574	Surface Legal Location H-25-31N-13W	Field Name BLANCO	License No. 30020800	State/Province NEW MEXICO	Well Configuration Type Vertical
Original KBRT Elevation (ft) 5,824.00	KB-Ground Distance (ft) 4.00	Original Spud Date 2/16/1983 09:45	Rig Release Date	BSTD (Alt) (ftKB) Original Hole - 2,175.0	Total Depth Alt (TVD) (ftKB)

## Most Recent Job

Job Category Expense Workover	Primary Job Type INSTALL PUMP	Secondary Job Type	Actual Start Date 9/6/2001	End Date
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TD: 2,205.0

Vertical, Original Hole, 11/19/2019 10:38:53 AM



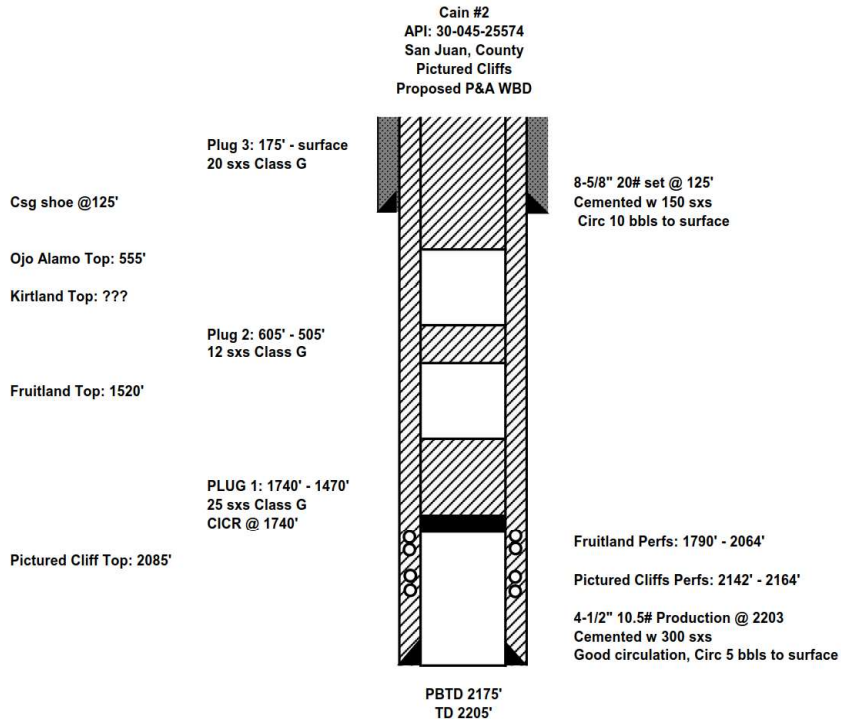


Family-owned, founded in 1963 with Aztec Well Servicing Co.



**Hilcorp Energy Company**  
**Plug & Abandon Procedure**  
 November 23, 2019

<b>Well:</b>	Cain #2	<b>API:</b>	30-045-25574
<b>Location:</b>	1520' FNL & 790' FEL	<b>Field:</b>	Fruitland Coal/Pictured Cliffs
<b>Sec, T, R:</b>	Sec 25, 31N, 13W	<b>Elevation:</b>	GL: 5820'
<b>Cnty/State:</b>	San Juan, New Mexico		
<b>Lat/Long:</b>	36.8737411, -108.1494522	<b>By:</b>	Aztec Well Servicing



Hilcorp Energy  
P&A Final Reclamation Plan  
Cain # 2  
API: 30-045-25574  
K – Sec. 11-T032N-R008W  
Lat: 36.873684, Long: -108.148897  
Footage: 1520' FNL & 790' FEL  
San Juan County, NM

1. PRE-RECLAMATION SITE INSPECTION

- 1.1) A pre-reclamation site inspection was completed by Randy McKee with the BLM and Chad Perkins construction Foreman for Hilcorp Energy on December 13, 2019.

2. LOCATION RECLAMATION PROCEDURE

- 2.1) Reclamation work will begin in the spring/summer of 2020.  
2.2) Remove all equipment and strip all piping including water line drip.  
2.3) All trash and debris will be removed within 50' buffer outside of the location disturbance during reclamation.  
2.4) No re-contour will be required because the location matches the natural topography.  
2.5) Rip compacted soil and walk down entire well pad.

3. ACCESS ROAD RECLAMATION PROCEDURE:

- 3.1) There is no lease road to reclaim, access onto location is off the main lease road.  
3.2) The location has two access entrances off of the main lease road that will be fenced off to barricade and inhibit travel onto location once the reclamation is complete.

4. SEEDING PROCEDURE

- 4.1) The following seeding yield will be applied at a rate of:
- Fourwing saltbush 4 LBS/PLS per acre
  - Winterfat 2 LBS/PLS per acre
  - Indian ricegrass 3.5 LBS/PLS per acre
  - Sand dropseed .5 LBS/PLS per acre
  - Blue grama 2 LBS/PLS per acre
  - James galleta 4 LBS/PLS per acre
  - Sand sage 2 LBS/PLS per acre
  - Sage brush 2 LBS/PLS per acre
  - Rocky mountain BEE plant .25 LBS per acre
- 4.2) Drill seeding will be done where applicable and all other disturbed areas will be broadcast seeded and harrowed, broadcast seeding will be applied at a double the rate of seed.  
4.3) Timing of the seeding will take place when the ground is not frozen or saturated.

5. WEED MANAGEMENT

- 5.1) No action is required at this time for weed management, no noxious weeds were identified during the onsite.





**GREYSTONE ENERGY, INC.**  
**DAILY RIG REPORT**

HUB: Farmington  
DATE: 02/28/2000

OPERATING DAYS: 1

RIG: AWS 473

WELLNAME CAIN #2

TD: 2100

PBTD: 2100

PKR: PLUG@ 2100'

FORMATION FRUITLAND/PC

TUBING 2-3/8 EUE 8 RD

PERFS: 1790 TO 2164'

### OPERATIONS PAST 24 HOURS

START TIME:

**STOP:** \_\_\_\_\_

[illegible]

ACCOUNT NUMBER	INTANGIBLE COST	DAILY
	Wireline	\$0
	FRAC	\$0
	ACID	\$0
	Rental Tools	\$0
	COMP, UNIT	\$2,000
	Trucking	\$750
	Tank Rental	\$0
	H2O & TRK	\$250
	Total Intangible	\$3,000

CUM
\$0
\$0
\$0
\$0
\$2,000
\$750
\$0
\$250
\$3,000

ACCOUNT NUMBER	TANGIBLE COST	DAILY	CUM
	Tubing	\$0	\$0
	PRO TEC	\$0	\$0
	WRK STR.	\$0	\$0
	ROUSTA.	\$0	\$0
	PUMP	\$0	\$0
	RODS	\$0	\$0
	CSI	\$0	\$0
	WELL.HD	\$0	\$0
	Total Tangib	\$0	\$0

**GREYSTONE ENERGY, INC.  
DAILY RIG REPORT**

HUB: Farmington  
DATE: 03/01/2000

OPERATING DAYS: 2

RIG: AWS 473

WELLNAME CAIN #2

TD: 2100

PBTD: 2100

PKR: PLUG@ 2100'

FORMATION FRUITLAND/PC

TUBING 2-3/8 EUE 8 RD

PERFS: 1790 TO 2164'

**OPERATIONS PAST 24 HOURS**

START TIME: \_\_\_\_\_

STOP: \_\_\_\_\_

02/29/2000	BLOW WELL DOWN TO RIG PIT.
	PICKUP RBP RETRIEVING HEAD AND SAND BAILER, TRIP IN HOLE TO TOP OF PLUG.
	BAIL VERY LITTLE FILL OFF TOP OF PLUG, WORK DOWN ON TOP OF PLUG, RETRIEVING HEAD WOULD NOT LA
	WORKED ON IT FOR 1 HOUR THEN PULLED OUT OF HOLE.
	FOUND VERY LITTLE FILL IN PIPE. REDRESSED TOOLS AND TRIPPED BACK IN HOLE TO PLUG.
	LATCHED ONTO PLUG AND PULLED TO 25,000# BEFORE TOOLS JUMPED OFF.
	LATCHED ONTO PLUG SEVERAL TIMES BUT COULD NOT GET A GOOD ENOUGH BITE. PULL OUT OF HOLE.
	SENT TO TOWN FOR A SHORT CATCH OVERSHOT.
	DRESSED TOOLS AND TRIP IN HOLE TO TOP OF PLUG.
	LATCHED ONTO PLUG AND STARTED WORKING UP FROM 25,000#.
	RELEASED PLUG AT 42,000# PULL OVER STRING WAIT.
	TRIP OUT OF HOLE WITH PLUG.
	SHUT DOWN FOR NIGHT.
NOTE	WILL CLEAN OUT AND RUN PRODUCTION STRING AND PUMP IN THE MORNING.

ACCOUNT NUMBER	INTANGIBLE COST	DAILY
	Wireline	\$0
	FRAC	\$0
	ACID	\$0
	Rental Tools	\$2,500
	COMP. UNIT	\$2,500
	Trucking	\$0
	Tank Rental	\$0
	H2O & TRK	\$0
	Total Intangible	\$5,000

CUM
\$0
\$0
\$0
\$2,500
\$4,500
\$750
\$0
\$250
\$8,000

ACCOUNT NUMBER	TANGIBLE COST	DAILY	CUM
	Tubing	\$0	\$0
	PRO TEC	\$0	\$0
	WRK STR.	\$0	\$0
	ROUSTA.	\$0	\$0
	PUMP	\$1,500	\$1,500
	RODS	\$0	\$0
	CSI	\$0	\$0
	WELL.HD	\$0	\$0
	Total Tangible	\$1,500	\$1,500

**GREYSTONE ENERGY, INC.  
DAILY RIG REPORT**

HUB: Farmington  
 DATE: 03/01/2000  
 OPERATING DAYS: 3 RIG: AWS 473  
 WELLNAME CAIN #2  
 TD: 2203 PBDT: 2175 PKR: NONE  
 FORMATION FRUITLAND/PC TUBING 2-3/8 EUE 8 RD  
 PERFS: 1790/2064 & 2142/2164

**OPERATIONS PAST 24 HOURS**

START TIME: \_\_\_\_\_ STOP: \_\_\_\_\_

03/01/2000	WELL HAD 410# ON CASING AT 8:00 AM.
	BLOW WELL DOWN TO RIG PIT.
	PICKUP BAILER AND TRIP IN HOLE.
	TAGGED UP ON FILL AT 2145', SHOWING MOST OF PC PERFS WERE COVERED.
	CLEAN OUT TO PLUGBACK TD AT 2175'.
	PULL OUT OF HOLE.
	FOUND 1-1/2 " PLUNGER STUCK IN FLAPPER VALVE.
	LAYED DOWN BAILER AND FLAPPER VALVE.
	PICKUP 2" X 14' TUBING PUMP AND TRIP BACK IN HOLE TO 2157.05.
	RAN TUBING AS FOLLOWS.
	1 EACH 2" TUBING PUMP.
	1 EACH 3' X 2-3/8 TUBING SUB.
	69 JOINTS USED 2-3/8 8RD TUBING.
	LANDED TUBING, NIPPLE DOWN BOPS AND NIPPLE UP WELLHEAD.
	RUN IN HOLE WITH RODS AND ON/OFF TOOL FOR TUBING PUMP.
	SPACE OUT RODS AND HANG ON.
	LOAD TUBING AND CHECK FOR PUMP ACTION.
	PLACE WELL ON PRODUCTION.
	RIG DOWN AND MOVE TO THE MCLINTOCK #1.

ACCOUNT NUMBER	INTANGIBLE COST	DAILY
	Wireline	\$0
	FRAC	\$0
	ACID	\$0
	Rental Tools	\$900
	COMP. UNIT	\$2,000
	Trucking	\$0
	Tank Rental	\$0
	H2O & TRK	\$0
	Total Intangible	\$2,900

CUM
\$0
\$0
\$0
\$3,400
\$6,500
\$750
\$0
\$250
\$10,900

ACCOUNT NUMBER	TANGIBLE COST	DAILY	CUM
	Tubing	\$0	\$0
	PRO TEC	\$0	\$0
	WRK STR.	\$0	\$0
	ROUSTA.	\$0	\$0
	PUMP	\$2,742	\$2,742
	RODS	\$0	\$0
	CSI	\$0	\$0
	WELL.HD	\$0	\$0
	Total Tangible	\$2,742	\$2,742

# BLM FLUID MINERALS Geologic Report

Date Completed: 2/13/20

Well No.	Cain #2	Location	1520'	FNL &	790	FEL
Lease No.	NMSF078464	Sec. 25	T31N			R13W
Operator	Hilcorp	County	San Juan	State		New Mexico
Total Depth	2205'	PBTD 2175'	Formation	Commingled Fruitland Coal/Pictured Cliffs		
Elevation (GL)	5820'		Elevation (KB)	5832' (est.)		

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/Fresh water sands
Nacimiento Fm			Surface	555'	Fresh water sands
Ojo Alamo Ss			555'	650'	Aquifer (fresh water)
Kirtland Shale			650'	1520'	
Fruitland Fm			1520'	2085'	Coal/Gas/Possible water
Pictured Cliffs Ss			2085'	PBTD	Gas
Lewis Shale					
Chacra					Probable water or dry
La Ventana Tongue					Probable water or dry
Cliff House Ss					Water/Possible gas
Menefee Fm					Coal/Ss/Water/Possible O&G
Point Lookout Ss					Probable water/Possible O&G
Mancos Shale					Source rock
Gallup					O&G/Water
Dakota					O&G/Water

**Remarks:**

P & A

- Log analysis of reference well #2 (attached worksheet) indicates the Nacimiento formation contain fresh water ( $\leq 5,000$  ppm TDS).

- Please ensure that the tops of the Pictured Cliffs, Fruitland, and Nacimiento formations as well as the entire Ojo Alamo aquifer, identified in this report, are isolated by proper placement of cement plugs. This will protect the freshwater sands in this well bore.

**Reference Well:**

1) Hilcorp  
Same

Fm. Tops

2) Snyder Oil Co  
Williams # 1A  
11190' FNL, 1850' FWL  
Sec 25, T31N, R13W  
GL 5853', KB 5865'

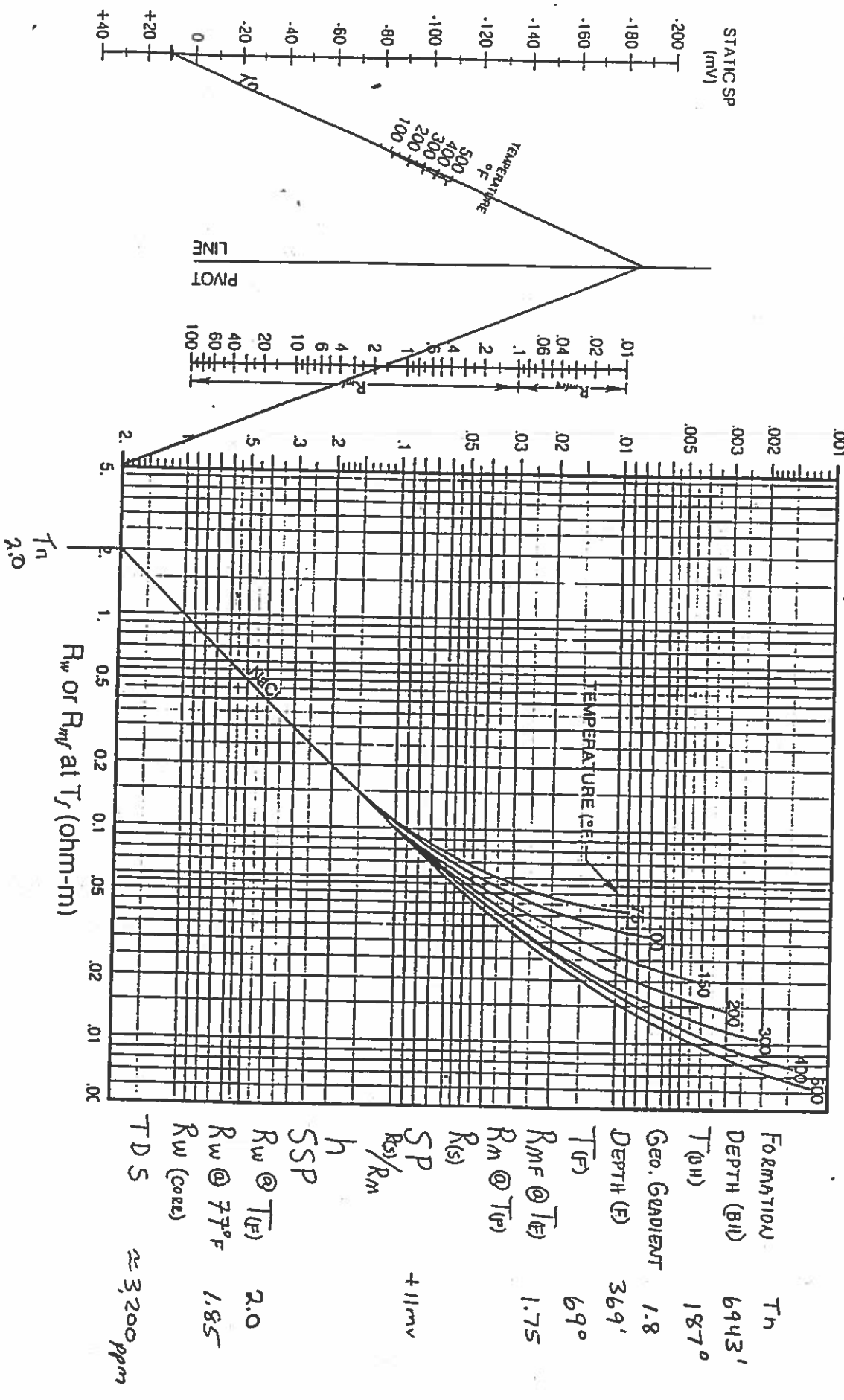
Water  
Analysis

**Prepared by:** Walter Gage

$R_{weq}$  or  $R_{mf}$  at  $T_f$  (ohm-m)

$$R_{mf} = 1.71 @ 71^\circ$$

Snyder Oil Corp.  
Williams #1A  
1190' FNL, 1850' FUL  
Sec. 24, 31N-13W  
GL 5853' KB 5865'



**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
FARMINGTON DISTRICT OFFICE  
6251 COLLEGE BLVD.  
FARMINGTON, NEW MEXICO 87402**

Attachment to notice of  
Intention to Abandon:

Re: Permanent Abandonment  
Well: Cain 2

**CONDITIONS OF APPROVAL**

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.

**GENERAL REQUIREMENTS FOR  
PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES  
FARMINGTON FIELD OFFICE**

1.0 The approved plugging plans may contain variances from the following minimum general requirements.

1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.

1.2 Requirements may be added to address specific well conditions.

2.0 Materials used must be accurately measured. (densometer/scales)

3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.

3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.

4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.

4.1 The cement shall be as specified in the approved plugging plan.

4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.3 Surface plugs may be no less than 50' in length.

4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.

**4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.**

5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.

- 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
- 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
- 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
- 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. **If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.**

6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.

- 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
- 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.

7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H<sub>2</sub>S.

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.

9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.

10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.