U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Sundry Print Report

05/24/2022

Well Name: RIDDLE 2

Well Location: T27N / R9W / SEC 9 / NWNE / 36.593826 / -107.789688

County or Parish/State: SAN JUAN / NM

Well Number: 1

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMSF078354A

Unit or CA Name:

Unit or CA Number: NMNM73372

US Well Number: 3004506713

Well Status: Producing Gas Well

Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2669548

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 05/02/2022

Time Sundry Submitted: 01:24

Date proposed operation will begin: 05/16/2022

Procedure Description: Hilcorp Energy Company requests permission to P&A the subject well per the attached procedures, current and proposed wellbore schematics. The Pre-Disturbance Site Visit was held on 4/7/22 with Roger Herrera/BLM. The Re-Vegetation Plan is attached. A closed loop system will be used.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Plug_and_Abandonment_Procedure___Riddle_2_1_20220502132409.pdf

Riddle_2_1_Reclamation_Plan_20220502132409.pdf

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Conditions of Approval

Additional

2669548_NOIA_2_1_3004506713_KR_05232022_20220523112403.pdf

General_Requirement_PxA_20220523112336.pdf

27N09W09BKpc_Riddle_2_1_20220519104857.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: KANDIS ROLAND

Signed on: MAY 02, 2022 01:24 PM

Name: HILCORP ENERGY COMPANY

Title: Operation Regulatory Tech

Street Address: 382 Road 3100

City: Farmington **State:** NM

Phone: (505) 599-3400

Email address: kroland@hilcorp.com

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742

BLM POC Email Address: krennick@blm.gov

Disposition: Approved

Disposition Date: 05/23/2022

Signature: Kenneth Rennick

Plug and Abandonment - NOI

Riddle 2 #1

API # - 3004506713

Procedure:

Hold PJSM prior to beginning any and all operations. Properly document all operations via the JSA process. Ensure that all personnel onsite abide by HEC safety protocol, including PPE, housekeeping, and standard guidelines.

Verify cathodic protection is off and wellhead instrumentation is properly disconnected from the wellhead. Comply with all NMOCD, BLM, and HEC safety and environmental regulations.

Verify there is no H2S present prior to beginning operations. If any H2S is present, take the necessary actions to ensure that the location is safe prior to beginning operations.

Observe and record pressures across all string daily, prior to beginning operations. **Remember to notify NMOCD 24 hours prior to starting operations on location.**

NOTE: **This procedure is contingent upon P&A sundry approval by NMOCD/BLM**. All cement volumes use 100% excess outside pipe and 50' excess inside (unless otherwise stated). All cement will be Class G, mixed at 15.8 ppg w/ a 1.15 cf/sx yield. The stabilizing wellbore fluid will be an 8.3 ppg fluid, sufficient to balance all exposed formation pressures.

1. This project will use a steel tank to handle waste fluids circulated from the well and cement wash up.
2. Test anchors if not using a base beam. Comply with all NMOCD, BLM, and HEC safety regulations. MIRU and conduct safety meeting for all personnel on location.
3. Record casing, tubing, and bradenhead pressures. Remove existing piping on casing valve. RU blow lines from casing valves and begin BD casing pressure. Kill well with water as necessary. Ensure well is dead or on a vacuum.
4. ND wellhead and POOH w/ pump and rods. NU BOP. Function test BOP. RU floor and 2 3/8" handling tools.
5. TOOH and tally 2-3/8" tubing inspecting each joint (2415').
6. TIH w/ CIBP and set at 2280'. Pump 6 sx of cement on top of plug to bring top to 2210' **(Pictured Cliffs Top: 2313' Perforations: 2330' – 2380').**
7. Load a roll the hole with fresh water and PT casing. TOOH and RU WL and run CBL from 2210' to surface. (Well was slimholed w/ 4.5" casing cemented inside 5.5" casing in 2005, and circulated to surface so assuming all inside plugs for procedure).
8. TIH open ended to 1959'.

9. **Plug #2, 1959' – 1859' (Fruitland Coal Top: 5432')** Mix & pump 8 sx of Class G cement and spot a balanced plug to cover the Fruitland Coal top.
10. LD tubing to 1553'.
11. **Plug #3, 1553' – 1327' (Kirtland Top: 1503' Ojo Alamo: 1377')** Mix & pump 18 sx of Class G cement and spot a balanced plug to cover the Kirtland and Ojo Alamo tops.
12. LD tubing to 144'.
13. **Plug #4, 144' – Surface (Surface Shoe: 94')** Mix & pump 12 sxs of Class G cement and spot a balanced plug to cover the surface casing shoe.
14. LD the rest of tubing.
15. Ensure we have a good Bradenhead test where no communication is seen before cutting off the wellhead.
16. ND BOP and cut off wellhead below surface casing flange per regulation. Top off w/ cement if needed. Install PxA marker w/ cement to comply w/ regulations.
17. RD, MOL and cut off anchors. Restore location per BLM stipulations.

Hilcorp Energy Company

Schematic - Current

Well Name: RIDDLE 2 #1

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3004506713	T27N-R09W-S09	Blanco S Pictured Cliffs		New Mexico	Vertical

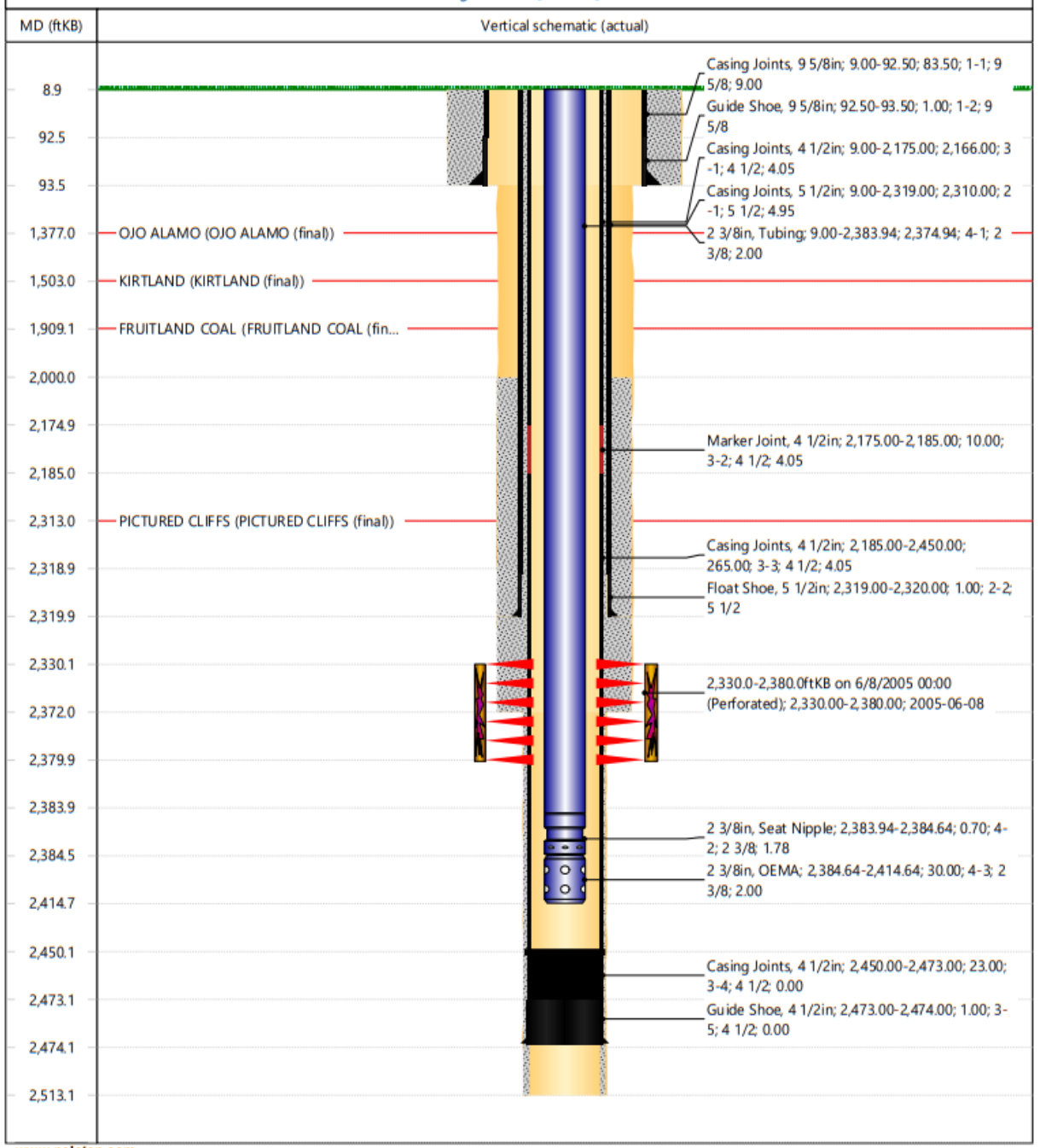
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
6,301.00	9.00	12/19/1955 00:00	1/2/1956 00:00	Original Hole - 2,450.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
Well Maintenance	Repair	Pump	8/17/2015	8/18/2015

TD: 2,513.0

Original Hole [Vertical]



Hilcorp Energy Company

Schematic - Proposed

Well Name: RIDDLE 2 #1

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3004506713	T27N-R09W-S09	Blanco S Pictured Cliffs		New Mexico	Vertical

Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
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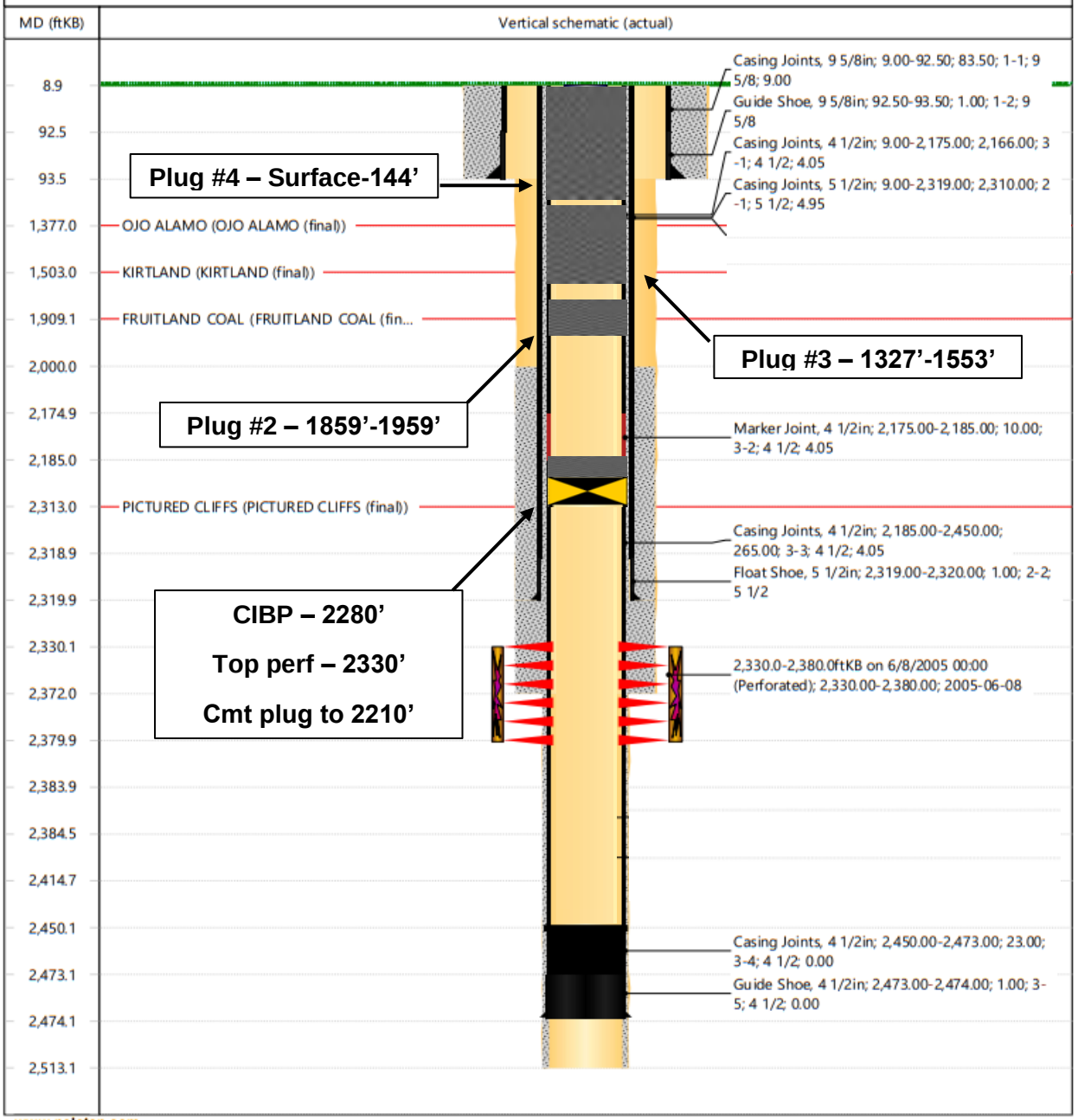
Original Hole [Vertical]



Hilcorp Energy
P&A Final Reclamation Plan
Riddle 2 1
API: 30-045-06713
T27N-R9W-Sec. 9-Unit B
LAT: 36.593811 LONG: -107.789718 NAD 27
Footage: 990' FNL & 1560' FEL
San Juan County, NM

1. **PRE- RECLAMATION SITE INSPECTION**

A pre-reclamation site inspection was completed with Roger Herrera from the BLM and Eufracio Trujillo, Hilcorp Energy SJ South Construction Foreman on April 7, 2022.

2. **LOCATION RECLAMATION PROCEDURE**

1. Reclamation work will begin in summer.
2. Removal of all equipment, anchors, flowlines, cathodic, and pipelines.
3. All trash and debris will be removed within a 50' buffer outside of the location disturbance during reclamation.
4. Close out BGT on location when results permit.
5. Rip compacted soil and walk down disturbed portion of well pad.
6. Location will be reclaimed by rolling in edge and blending fill in where meter run is located.
7. Feather out edges.
8. Remove all gravel from berms, pads, and meter run and use on lease road where needed.
9. Enterprise meter run will be removed out of their ROW. Barricade riser and blind if needed.
10. Enterprise to cut and cap pipeline.

3. **ACCESS ROAD RECLAMATION PROCEDURE**

1. The well access road will be blocked at the entrance with a berm and ditch.
2. Reclaim road by ripping, recontouring road out of location to main lease road.
3. Seed road after ripping.

4. **SEEDING PROCEDURE**

1. A Pinon/ Juniper mix with sagebrush added to seed mix will be used for all reclaimed and disturbed areas of the well pad and lease road.
2. Drill seed 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.
3. Timing of the seeding will be when the ground is not frozen or saturated.

5. **WEED MANAGEMENT**

1. No noxious weeds were identified during this onsite.

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

AFMSS 2 Sundry ID 2669548

Attachment to notice of Intention to Abandon

Well: Riddle 2 1

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. The following modifications to your plugging program are to be made:

   a) Adjust Plug #2 (Fruitland) to cover BLM formation top pick at 2010'.

3. Farmington Office is to be notified at least 24 hours before the plugging operations commence at (505) 564-7750.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

K. Rennick 5/23/2022

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_2S.

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.

BLM FLUID MINERALS
P&A Geologic Report

Date Completed: 05/19/2022

Well No. Riddle 2 #1 (API# 30-045-06713)		Location	990 FNL	&	1650 FEL	
Lease No. NMSF078354A		Sec. 09	T27N		R09W	
Operator Hilcorp Energy Company		County	San Juan	State	New Mexico	
Total Depth 2513’	PBTD 2450’	Formation	Pictured Cliffs			
Elevation (GL) 6292’		Elevation (KB)	6301’			

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					
Nacimiento Fm			Surface	1377	Surface/possible freshwater sands
Ojo Alamo Ss			1377	1503	Aquifer (possible freshwater)
Kirtland Shale			1503	2010	Possible gas
Fruitland Fm			2010	2313	Coal/Gas/Water
Pictured Cliffs Ss			2313	PBTD	Gas
Lewis Shale					
Chacra					
Cliff House Ss					
Menefee Fm					
Point Lookout Ss					
Mancos Shale					
Gallup					
Greenhorn					
Graneros Shale					
Dakota Ss					
Morrison Formation					

Remarks:
P & A

- BLM pick for the Fruitland formation top varies from Operator.
- Adjust Plug #2 (Fruitland) to cover BLM formation top pick at 2010’.
- The plugs proposed in the P&A procedure, with recommended changes, will adequately protect any freshwater sands in this well bore.
- Pictured Cliffs perfs 2330’ – 2380’.

Reference Well:
1) **Formation Tops**
Same

Prepared by: *Chris Wenman*

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 109663

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 109663
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	CBL required	5/31/2022
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	5/31/2022
kpickford	Adhere to BLM approved COAs and plugs. See GEO report.	5/31/2022