

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

Well Name: NASSAU	Well Location: T27N / R12W / SEC 36 / NENE / 36.536682 / -108.056473	County or Parish/State: SAN JUAN / NM
Well Number: 1	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM12030	Unit or CA Name:	Unit or CA Number:
US Well Number: 3004520683	Well Status: Gas Well Shut In	Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2685842

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 08/05/2022

Time Sundry Submitted: 06:01

Date proposed operation will begin: 09/01/2022

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 4/12/2022 with Bertha Spencer, Larson Nez/Navajo Nation and Emmanuel Adelote/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

Nassau_1_P_A_NOI_Packet_20220805060054.pdf

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Unit or CA Name:

Unit or CA Number:

US Well Number: 3004520683

Well Status: Gas Well Shut In

Operator: HILCORP ENERGY COMPANY

Conditions of Approval

Additional

Nassau_1_Geo_Rpt_20220809131709.pdf

Authorized

General_Requirement_PxA_20220809164219.pdf

2685842_NOIA_1_3004520683_KR_08082022_20220809164153.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: AMANDA WALKER

Signed on: AUG 05, 2022 06:01 AM

Name: HILCORP ENERGY COMPANY

Title: Operations/Regulatory Technician

Street Address: 1111 TRAVIS ST.

City: HOUSTON State: TX

Phone: (346) 237-2177

Email address: mwalker@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: 08/09/2022

Signature: Kenneth Rennick



P&A Procedure

General Information			
Well Name	Nassau #1	Date:	8/4/2022
API:	30-045-20683	AFE #	
Field:	San Juan South	County	San Juan
Status:	Well is ACOI		
Subject:	Permanently P&A wellbore		
By:	M. Wissing		

Well Data

SPUD: 8/13/1970

Surface Casing: 8-5/8" 24# J-55 at 227'

Production Casing: 4-1/2" J-55 10.5# 8rd at 6,227'

Production Tubing: 2-3/8" 4.7# J-55 8rd at 6,103' (9/1996)

Current Perforations: 6,084'-6,144'

Current PBTD: 6,195' (cmt plug)

SICP = 0 psig; SIBP: 0 psi (4/2022)

Notes: last wireline 3/2016: ran 1.5" IB and tagged through tbg to 6120' WLM.

Hold PJSM prior to begin 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 strings daily, prior to beginning operations. All cement volumes and depths include a 50' volume of excess of cement.

Remember to notify NMOCD & BLM 24 hours prior to starting operations on location. This procedure is contingent upon P&A sundry approval by the NMOCD & BLM.

P&A Rig Procedure: Nassau #1

1. RU Slickline and clear tbg to SN, pull any downhole plunger equipment if present.
2. MIRU P&A rig and equipment. Record pressures on all strings daily.
 - a. Monitor BH pressure during project.
3. Blow down well, kill well as needed with water. ND wellhead and NU 5k BOP. Pressure test BOP.
4. TOOH with 2-3/8" prod tbg at 6,103'.
 - a. If using work string, no tbg scan need.
5. MU 4-1/2" csg scraper and RIH, clear csg to 6,050'. POOH.
6. MU 4-1/2" CICR and RIH. Set CICR at 6,040'. Roll hole and circulate well clean. TOOH with tbg.
7. RU E-line and RIH with CBL tools. Log entire well and review results with BLM and NMOCD to plan all future cmt plugs.
8. RIH with 2-3/8" work string to 6,040'.
9. Pressure test casing to 500 psi to verify integrity.
10. **Plug #1 (Dakota top perf at 6,084')**: RU cementers and pump a 150' balanced cmt plug inside the 4-1/2" csg from 5,890'-6,040', using 2.5 bbls (12 sx) of 15.8+ ppg Class G cmt.
11. **Plug #2 (Gallup top at 5,176')**: RU cementers and pump a 150' balanced cmt plug inside the 4-1/2" csg from 5,076'-5,226', using 2.5 bbls (12 sx) of 15.8+ ppg Class G cmt.
12. **Plug #3 (Mancos Formation Top at 4,283')**: RU cementers and pump a 150' balanced cmt plug inside the 4-1/2" csg from 4,183'-4,333', using 2.5 bbls (12 sx) of 15.8+ ppg Class G cmt.
13. **Plug #4 (Mesa Verde formation top at 3,105')**: RU cementers and pump a 150' balanced cmt plug inside the 4-1/2" csg from 3,005' - 3,155' using 2.5 bbls (12 sx) of 15.8+ ppg Class G cmt.
14. **Plug #5 (PC top at 1,514')**: RU cementers and pump a 150' cement plug inside the 4-1/2" csg from 1,414'-1,564', using 2.5 bbls (12 sx) of 15.8+ ppg Class G cmt.
15. TOOH with tbg.
16. RU E-line and MU 4-1/2" perf charges. RIH and perf 4-1/2" csg at 1,330'.
17. MU 4-1/2' CICR and RIH. Set CICR at 1,280'.

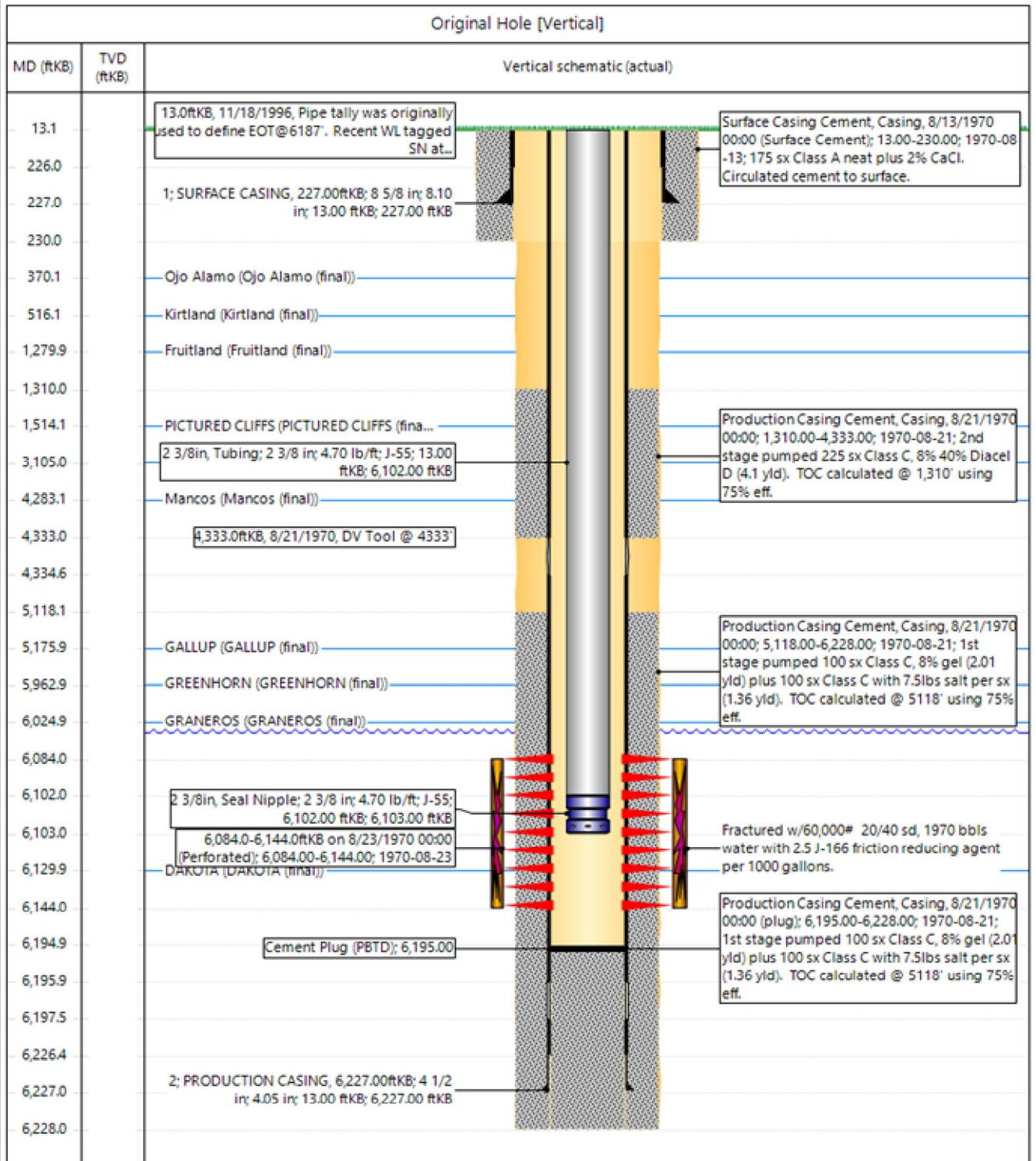
18. **Plug #6 (FRC top at 1,280')**: RU cementers and pump a 150' cement plug inside/outside of the 4-1/2" csg from 1,180-1,330', using 10.7 bbls (52 sx) of 15.8+ ppg Class G cmt.
19. TOOH with tbg.
20. RU E-line and MU 4-1/2" perf charges. RIH and perf 4-1/2" csg at 566'.
21. MU 4-1/2' CICR and RIH. Set CICR at 516'.
22. **Plug #7 (Kirtland top at 516')**: RU cementers and pump a 140' cement plug inside/outside of the 4-1/2" csg from 416'-566', using 10.7 bbls (52 sx) of 15.8+ ppg Class G cmt.
 - a. *Based on CBL results, adjust plug as needed.*
23. RU E-line and MU 4-1/2" perf charges. RIH and perf 4-1/2" csg at 400'.
24. MU 4-1/2' CICR and RIH. Set CICR at 370'.
25. **Plug #7 (Ojo top at 370')**: RU cementers and pump a 120' cement plug inside/outside of the 4-1/2" csg from 280'-400', using 10.2 bbls (50 sx) of 15.8+ ppg Class G cmt.
 - a. *Based on CBL results, adjust plug as needed.*
26. TOOH with tbg.
27. RU E-line and MU 4-1/2" perf charges. RIH and perf 4-1/2" csg at 270'.
28. **Plug #9 (Surface casing shoe at 266')**: RU cementers and circulate a 270' cmt plug inside 4-1/2" csg and 8-5/8" x 4-1/2" csg annulus from 0' – 270', using 16.6 bbls (81 sx) of 15.8+ ppg Class G cmt. Bring cmt to surface.
29. Verify all pressures on all strings are at 0 psi.
30. ND BOP. Tag cmt and top off wellbore as needed. Cutoff wellhead at surface and weld on P&A marker.
31. RDMO P&A rig.

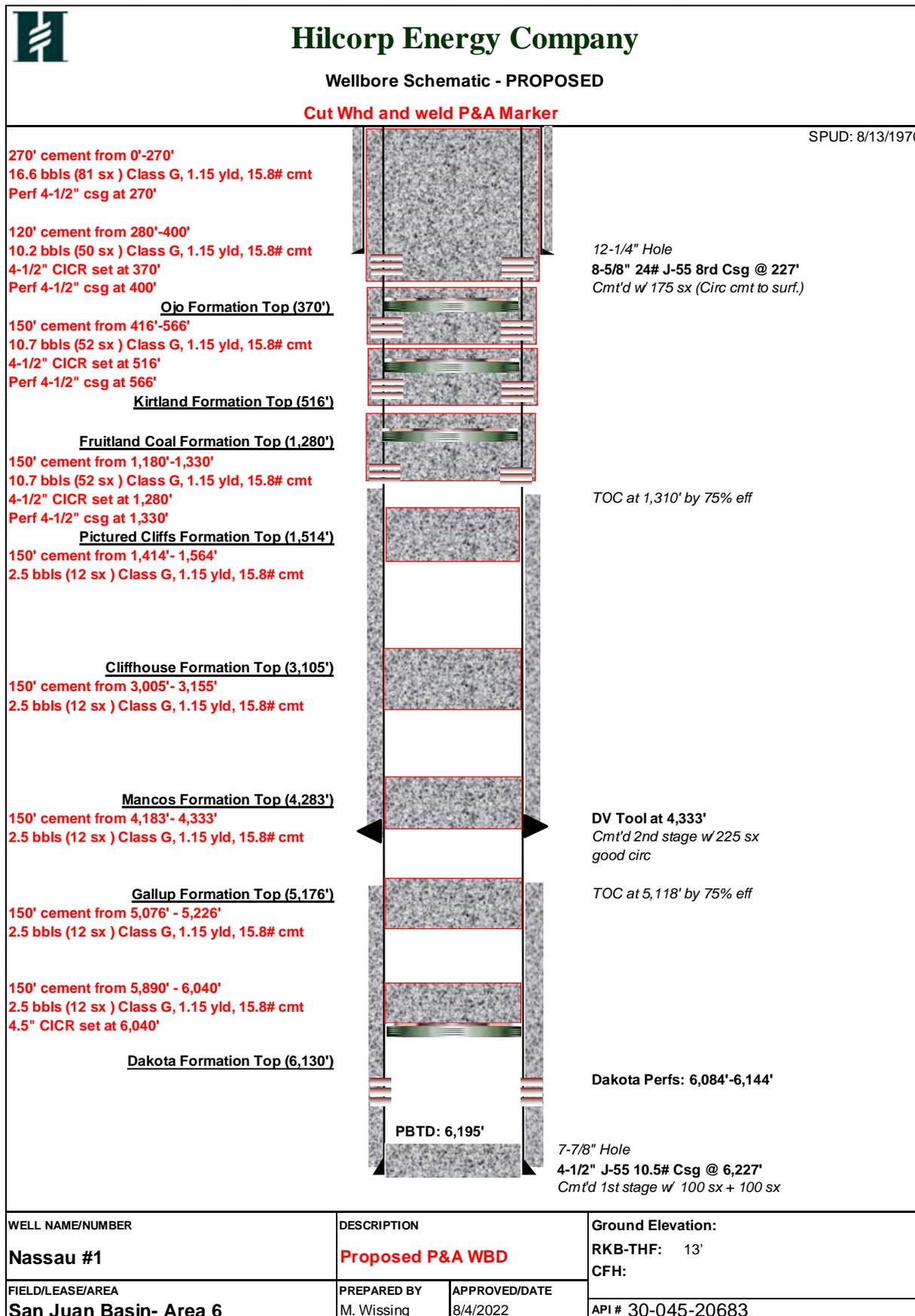


Current Schematic - Completion Comments

Well Name: **NASSAU 1**

API / UWI 3004520683	Surface Legal Location 036-027N-012W-A	Field Name DK	Route 0600	State/Province NEW MEXICO	Well Configuration Type Vertical
Ground Elevation (ft) 6,029.00	Original KB/RT Elevation (ft) 6,042.00	KB-Ground Distance (ft) 13.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)	





Hilcorp Energy
P&A Final Reclamation Plan
Nassau 1
API: 30-045-20683
T27N-R12W-Sec. 36-Unit A
LAT: 36.536678 LONG: -108.05647 NAD 27
Footage: 790' FNL & 910' FEL
San Juan County, NM

1. PRE- RECLAMATION SITE INSPECTION

A pre-reclamation site inspection was completed with Bertha Spencer and Larsen Nez of the Navajo Nation, Emmanuel Adeloeye from the BLM and Eufrazio Trujillo, Hilcorp Energy SJ South Construction Foreman on April 12, 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. Rip compacted soil and walk down disturbed portion of well pad.
5. Contour pad by pushing western edge to the eastern cut.
6. Sample and close BGT when test results permit closure.
7. Sample and remove line drip.
8. Remove all stained gravel and test if needed. Haul impacted soils to land farm.
9. Remove all gravel from berms, pads, and meter run.
10. Enterprise meter run will be removed out of their ROW.
11. Enterprise will cut and cap pipeline to off location and blind riser on opposite end.

3. ACCESS ROAD RECLAMATION PROCEDURE

1. The well access road will be ripped and seeded.
2. Feather in sides of lease road into middle of roadway.
3. The access road will be bermed and fenced to keep public from using access road.

4. SEEDING PROCEDURE

1. A NAPI 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.

**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 H₂S.

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.

(October 2012 Revision)

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

AFMSS 2 Sundry ID 2685842

Attachment to notice of Intention to Abandon

Well: Nassau 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) Place the Plug 4 (Mesa Verde) CR at 3045' to account for the BLM top.
 - b) Modify the top of the Kirtland plug to completely cover the Ojo Alamo plus 100' of required excess cement making the TOC 270'.
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 8/8/2022

BLM - FFO - Geologic Report

Date Completed 8/9/2022

Well No. Nassau # 1 Surf. Loc. 790 FNL 910 FEL
 Sec. 36 T27N R12W

Lease No. NMNM12030
 Operator Hilcorp Energy Co. County San Juan State New Mexico
 TVD 6228 PBTD 6195 Formations Dakota, Gallup, Chacra
 Elevation GL 6029 Elevation Est. KB 6042

Geologic Formations	Est. tops	Subsea Elev.	Remarks
Nacimiento Fm.	Surface	6042	Fresh water sands
Ojo Alamo Ss	370	5672	Aquifer (fresh water)
Kirtland Fm.	516	5526	
Fruitland Fm.	1280	4762	Coal/gas/possible water
Pictured Cliffs Ss	1514	4528	Probable water
Lewis Shale	1800	4242	
Huerfanito Bentonite	1922	4120	Reference bed
Chacra (Upper)	2020	4022	Probable water or dry
Lewis Shale Stringer	2070	3972	
Chacra (Lower)	2400	3642	Probable water or dry
La Ventana Tongue	2530	3512	Probable water or dry
Cliff House	3045	2997	Probable water or gas
Menefee	3120	2922	Coal/ss/water/possible gas
Point Lookout Fm.	4030	2012	Water
Mancos Shale	4283	1759	Source Rock
Gallup	5176	866	O&G
Mancos Stringer	5560	482	
Juana Lopez	5720	322	
Mancos Stringer	5840	202	
Greenhorn	5963	79	
Graneros	6025	17	
Dakota Ss	6130	-88	O&G

Remarks:

Reference Wells:

-Place the Plug 4 (Mesa Verde) CR at 3045' to account for the BLM top.
 -Modify the top of the Kirtland plug to completely cover the Ojo Alamo plus 100' of required excess cement making the TOC 270'.

Same

Prepared by: Walter Gage

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 132631

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 132631
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	CBL required	8/12/2022
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	8/12/2022
kpickford	Adhere to BLM approved COAs and plugs. See GEO report.	8/12/2022