# State of New Mexico Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham Governor

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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 <u>3160-4 or 3160-5</u> form.

Operator Signature Date: 7/26/2019

Well information:

# 30-045-20170 C M MORRIS COM A #001

# HILCORP ENERGY COMPANY

Application Type:

🖂 P&A	Drilling/Casing Change	Location Change
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**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)



Conditions of Approval:

- Notify NMOCD 24hrs prior to beginning operations.
- Extend Gallup plug: 5,665'-5,454'. OCD Gallup pick @ 5,504'.
- Extend Mancos plug: 4.730'-4.560'. OCD Mancos pick @ 4,680'.
- Extend the Mesaverde plug: 3,593'-3,414'. OCD Mesaverde pick @ 3,543'.
- Extend Chacra plug: 2,982'-2,784'. OCD Chacra pick @ 2,834'.
- In addition to the BLM P.C/Fruitland plug, add a plug: 1,718'-1,678'. OCD Fruitland pick @ 1,668'.

NMOCD Approved by Signature

11/25/19

Date

		UNITED STATES EPARTMENT OF THE INTERIOR UREAU OF LAND MANAGEMENT		OMB Expires:	FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018	
		NOTICES AND REPO		5. Lease Serial No. NMSF077329	5. Lease Serial No. NMSF077329	
	Do not use thi abandoned we	is form for proposals to II. Use form 3160-3 (AF	6. If Indian, Allottee	<ul> <li>6. If Indian, Allottee or Tribe Name</li> <li>7. If Unit or CA/Agreement, Name and/or No. SW445</li> <li>8. Well Name and No. CM MORRIS COM A 1</li> </ul>		
	SUBMIT IN	RIPLICATE - Other instructions on page 2				
<ol> <li>Type of Well</li> <li>Oil Well</li> </ol>	🛛 Gas Well 🔲 Oth	ner				
2. Name of Opera HILCORP E	2. Name of Operator Contact: CHRISTINE L BROCK HILCORP ENERGY COMPANY E-Mail: cbrock@hilcorp.com			9. API Well No. 30-045-20170-	00-S1	
3a. Address 1111 TRAVI HOUSTON,		3b. Phone No. (include area code) Ph: 505-324-5155			10. Field and Pool or Exploratory Area BASIN DAKOTA	
		, R., M., or Survey Description	n)	11. County or Parish	, State	
	Sec 13 T27N R10W NWSW 1450FSL 0790FWL 36.571747 N Lat, 107.852722 W Lon			SAN JUAN CC	SAN JUAN COUNTY, NM	
12.	CHECK THE AF	PROPRIATE BOX(ES)	) TO INDICATE NATURE O	F NOTICE, REPORT, OR OT	HER DATA	
TYPE OF S	UBMISSION		TYPE OF	ACTION		
Notice of I	ntent	□ Acidize	Deepen	□ Production (Start/Resume)	U Water Shut-Of	
□ Subsequen	t Report	□ Alter Casing	Hydraulic Fracturing		Well Integrity	
	ndonment Notice	Casing Repair Change Plans	<ul> <li>New Construction</li> <li>Plug and Abandon</li> </ul>	<ul> <li>Recomplete</li> <li>Temporarily Abandon</li> </ul>	□ Other	
	dominent Notice	Convert to Injection	_ 0	□ Water Disposal		
following com	d under which the wor	rk will be performed or provid	e the Bond No. on file with BLM/BIA	. Required subsequent reports must b	e filed within 30 days	
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# PLUG AND ABANDONMENT PROCEDURE C.M. Morris Com. "A" #1

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# Basin Dakota 1450' FSL & 790' FWL, Section 13, T27N, R10W, San Juan County, NM API 30-045-20170

- Note: This procedure is revised based on the approved P&A sundry. All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield.
  - 1. This project will use a steel tank to handle waste fluids circulated from the well and cement wash up.
  - Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.
  - Rods: Yes\_\_\_\_, No\_X\_\_\_, Unknown\_\_\_\_\_. Tubing: Yes \_\_\_\_, No\_X\_\_, Unknown\_\_\_\_\_, Size \_\_\_\_, Length \_\_\_\_\_. Packer: Yes\_\_\_\_, No\_X\_, Unknown\_\_\_\_, Type \_\_\_\_\_. If this well has rods or a packer, then modify the work sequence in step #2 as appropriate. Due to a recent Bradenhead attempt, the tubing has already been pulled from this well.
  - 4. Plug #1 (Dakota perforations and top, 6360' 6260'): TIH with gauge ring and RIH to 6360'. RIH w/ 4.5" CR and set at 6360'. Load casing with water and circulate well clean. Mix 12 sxs Class G cement. PUH.
  - 5. Plug #2 (Gallup top, 5665' 5565'): Mix and pump 12 sxs Class G cement and spot a balanced plug inside casing to cover the Gallup top. PUH.
  - 6. Plug #3 (Mancos top, 4660' 4560'): Mix and pump 12 sxs Class G cement and spot a balanced plug inside casing to cover the Gallup top. PUH.
  - Plug #4 (Mesaverde top, 3514' 3414'): Mix and pump 12 sxs Class G cement and spot a balanced plug inside casing to cover the Mesaverde top. TOH.
  - Plug #5 (Chacra top, 2982' 2882'): Perforate squeeze holes at 2982'. Establish injection rate. RIH and set 4.5" CR at 2932'. Sting into CR and establish injection rate. Mix and pump 37 sxs Class G cement; squeeze 25 sxs outside 4.5" casing and leave 12 sxs inside casing to isolate Chacra interval. TOH.

Plug #6 (Pictured Cliffs top, 2078' – 1978'): Perforate squeeze holes at 2078'. Establish
injection rate. RIH and set 4.5" CR at 2028'. Sting into CR and establish injection rate. Mix and
pump 37 sxs Class G cement; squeeze 25 sxs outside 4.5" casing and leave 12 sxs inside
casing to isolate Pictured Cliffs interval. TOH.

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- Plug #7 (Fruitiand top, 1920' 1820'): Perforate squeeze holes at 1920'. Establish injection rate. RIH and set 4.5" CR at 1870'. Sting into CR and establish injection rate. Mix and pump 37 sxs Class G cement; squeeze 25 sxs outside 4.5" casing and leave 12 sxs inside casing to isolate Fruitland interval. TOH.
- 11. Plug #8 (Kirtland and Ojo Alamo top, 1300' 947'): Mix and pump 32 sxs Class G cement and spot a balanced plug inside casing to cover the Kirtland/Ojo Alamo tops. TOH.
- Plug #9 (8-5/8" casing shoe, 519' 0'): Perforate squeeze holes at 519'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 153 sxs Class G cement and pump down the 4.5" casing to circulate good cement out bradenhead. Shut in well and WOC.
- ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. Cut off anchors and clean up location. Restore location per BLM stipulations.

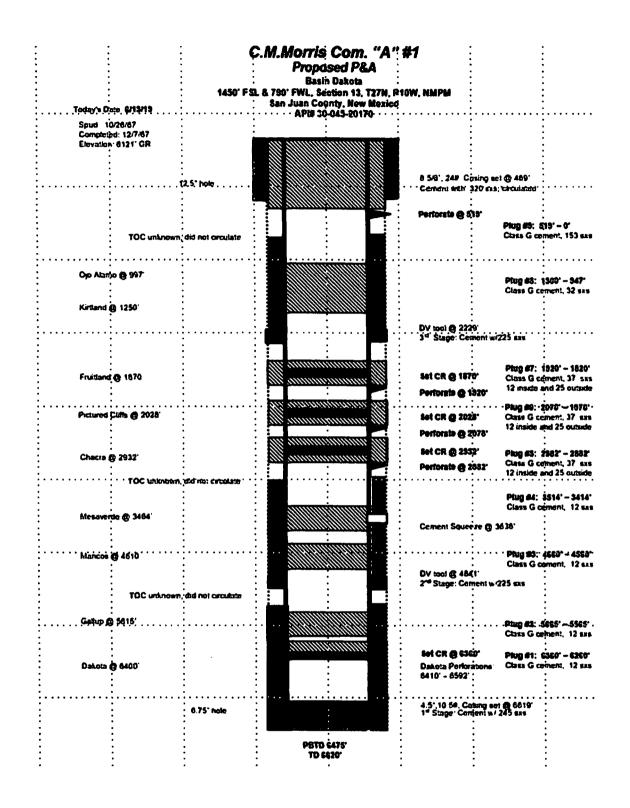


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Schematic - Current

Well Name:	CM MORRIS COM A #1	

004520170	T27N-R10W-S13 Basin Dakota	License No 10/9/1957	State Pischoe New Mexico	Weil Configuration Type Vertical
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2,231.0				
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2,457 0				
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6,452.1		19999	Perforated: 6.4	152 00-6,456 00: 11/22/1967
6.496.0		1990A	Market D	
6.502.0			Perforated: 6.4	198.00-5,502.00; 11/22/1957
6.514.1		20000		514 00-5,520 00 11/22/1967
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Hilcorp Energy P&A final Reclamation Plan CM Morris Com A 1 API: 30-045-20170 T27N-R10W-Sec. 13-Unit L LAT: 36.57194 LONG: -107.85332 Footage: 1450' FSL & 790' FWL San Juan County, NM

### 1. PRE- RECLAMATION SITE INSPECTION

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A pre-reclamation site inspection was completed with Bob Switzer from the BLM and Eufracio Trujillo Hilcorp Energy SJ South Construction Foreman on July 18, 2019.

# 2. LOCATION RECLAMATION PROCEDURE

- 1. Reclamation work will begin in summer/ fall time period.
- 2. Removal of all equipment and flowlines.
- 3. Below Grade Tank will be sampled and tested. It will be closed after approval has been given.
- 4. All trash and debris will be removed within a 50' buffer outside of the location disturbance during reclamation.
- 5. Rip compacted soil and walk down entire well pad.
- 6. Remove gravel from berms and where equipment was installed.
- 7. Pull soil from fill slope and push to cut slope. Recontour in shallow swales or slit traps to create rolling terrain that matches natural drainage features to limit erosion.

# 3. ACCESS ROAD RECLAMATION PROCEDURE

- 1. The main lease access is about 15' in length and has no culverts that need to be removed.
- 2. All trash and debris will be removed within a 50' buffer outside of the road disturbance during reclamation.
- 3. Rip and contour drainage at entrance.

# 4. SEEDING PROCEDURE

- 1. A Pinion/Juniper 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 action is required at this time for weed management, no noxious weeds were identified during this onsite.

Hilcorp Energy P&A final Reclamation Plan **CM Morris Com A 1** API: 30-045-20170 T27N-R10W-Sec. 13-Unit L LAT: 36.57194 LONG: -107.85332 Footage: 1450' FSL & 790' FWL San Juan County, NM

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# 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 <u>minimum general</u> 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)

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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.

Page 1

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.

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- 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 <u>date</u> 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

Attachment to Notice of Intention to Abandon:

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Re: Permanent Abandonment Well: CM Morris Com A1

### 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.

3. Run a CBL from approximately 6360 to surface. Submit electronic copy of the CBL for verification to the following addresses: <u>jkillins@blm.gov</u>, <u>jhoffman@blm.gov</u> and <u>Brandon.Powell@state.nm.us</u>. Based on CBL results inside/outside plugs and volumes will be adjusted accordingly. Please review the General Requirements document to ensure volumes meet required excess inside and outside casing.

4. BLM pick top of the Cliffhouse at 3464 ft. Modify Plug #4 to include coverage 3414 - 3514.

5. Combine plugs #6 and #7 1820 – 2078. (PC and Fruitland)