

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

Heather Riley, 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: 5-7-18

Well information:

frmWellFilterSub													
API WELL #	Well Name	Well #	Operator Name	Type	Stat	County	Surf_Owner	UL	Sec	Twp	N/S	Rng	W/E
30-045-34450-00-00	SUNRAY F	001F	HILCORP ENERGY COMPANY	G	A	San Juan	F	I	26	30	N	10	W

Application Type:

- ☐ P&A ☐ Drilling/Casing Change ☐ Location Change
- o ☒ **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 OCD 24hrs prior to beginning operations.
- Density exception must be approved prior to producing from the Blanco Mesaverde.
- Provide the agencies the planned footage for the remediation footages prior to performing the remedial sqz.
- Provide the agencies a copy of the CBL for review/approval after the remedial squeeze prior to continuing the completion.

NMOCD Approved by Signature

5/29/18

Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM 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.

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMSF080750
2. Name of Operator HILCORP ENERGY COMPANY Contact: PRISCILLA SHORTY E-Mail: pshorty@hilcorp.com		6. If Indian, Allottee or Tribe Name
3a. Address 1111 TRAVIS STREET HOUSTON, TX 77002	3b. Phone No. (include area code) Ph: 505-324-5188	7. If Unit or CA/Agreement, Name and/or No. NMNM103103
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 26 T30N R10W NESE 2565FSL 885FEL 36.782884 N Lat, 107.847995 W Lon		8. Well Name and No. SUNRAY F 1F
		9. API Well No. 30-045-34450-00-S1
		10. Field and Pool or Exploratory Area BASIN DAKOTA
		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 checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input 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 recompleate 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 recompleation 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.

Hilcorp Energy Company plans to recompleate the subject well in the Mesaverde formation and downhole commingle the existing Dakota with the Mesaverde. Attached is the Mesaverde plat and recompleate procedure. A DHC application will be filed and approved prior to commingling. A Closed Loop system will be used.

Please note that this well is pending approval of well density exemption

NMOC

MAY 09 2018

DISTRICT III

14. I hereby certify that the foregoing is true and correct. Electronic Submission #419115 verified by the BLM Well Information System For HILCORP ENERGY COMPANY, sent to the Farmington Committed to AFMSS for processing by JACK SAVAGE on 05/09/2018 (18JWS0123SE)	
Name (Printed/Typed) PRISCILLA SHORTY	Title OPERATIONS REGULATORY TECH
Signature (Electronic Submission)	Date 05/07/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JACK SAVAGE	Title PETROLEUM ENGINEER	Date 05/09/2018
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 **

NMOC

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

Form C-102

August 1, 2011

Permit 250145

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-045-34450	2. Pool Code 72319	3. Pool Name BLANCO-MESAVERDE (PRORATED GAS)
4. Property Code 318747	5. Property Name SUNRAY F	6. Well No. 001F
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6252

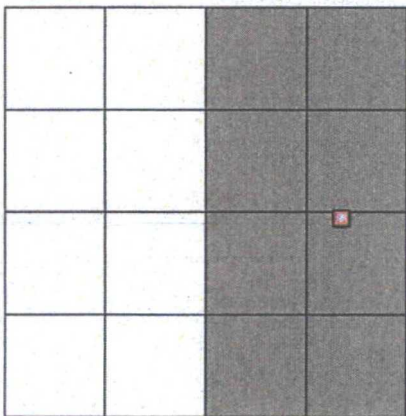
10. Surface Location

UL - Lot I	Section 26	Township 30N	Range 10W	Lot Idn	Feet From 2565	N/S Line S	Feet From 885	E/W Line E	County SAN JUAN
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 317.22 E/2			13. Joint or Infill		14. Consolidation Code			15. Order No.	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> E-Signed By: <i>Priscilla Shorty</i> Title: Operations Regulatory Technician Date: 3/20/2018
	SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> Surveyed By: David Russell Date of Survey: 6/1/2007 Certificate Number: 10201



HILCORP ENERGY COMPANY
SUNRAY F 1F
MESA VERDE RECOMPLETION SUNDRY

JOB PROCEDURES

1. MIRU service rig and associated equipment; NU and test BOP.
2. TOOH with 2 3/8" tubing set at 7,244'.
3. Set a 4-1/2" cast iron bridge plug at +/- 7,100' to isolate the Dakota. Note: TOC at 4,500' by CBL.
4. Perforate hole(s) in 4-1/2" casing, set a 4-1/2" cmt retainer below perforations, and squeeze 70 sxs (14.6 bbls) of cement inbetween 7" and 4-1/2" casings.
3. WOC, estimated new annulus TOC @ 3,800'. Drill out cement to CIBP.
4. Load hole with fluid and run CBL to determine new TOC.
4. Pressure test the casing to frac pressure.
5. N/D BOP, N/U frac stack and test frac stack to frac pressure.
6. Perforate and frac the Mesa Verde in two or three stages. (Top perforation @ 4,325', Bottom perforation @ 5,480')
7. Isolate frac stages with a composite bridge plug and set top isolation plug once frac is completed.
8. Nipple down frac stack, nipple up BOP and test.
9. TIH with a mill and drill out top isolation plug and Mesa Verde frac plugs.
10. Clean out to Dakota isolation plug and, when water and sand rates are acceptable, flow test the Mesa Verde.
11. Drill out Dakota isolation plug and cleanout to PBTD of 7,369'. TOOH.
12. TIH and land production tubing. Get a commingled Dakota/Mesa Verde flow rate.



HILCORP ENERGY COMPANY
SUNRAY F 1F
MESA VERDE RECOMPLETION SUNDRY

SUNRAY F 1F - CURRENT WELLBORE SCHEMATIC



Schematic - Current

Well Name: SUNRAY F #1F

API / UWI 3004534450	Surface Legal Location 026-030N-010W-1	Field Name BASIN DAKOTA	License No.	State Province NEW MEXICO	Well Configuration Type VERTICAL
Original XBRRT Elevation (ft) 6,268.00	XB-Tubing Hanger Distance (ft)	Original Spud Date 11/30/2007 00:00	Reg. Release Date	PSTO (API) (B/C)	Total Depth Air (T-D) (ft)

Most Recent Job

Job Category COMPLETIONS	Primary Job Type INITIAL COMPLETION	Secondary Job Type INITIAL COMPLETION	Actual Start Date 12/13/2007	End Date 2/6/2008
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ID: 7,394.0

VERTICAL, Original Hole, 5/2/2018 11:21:34 AM

