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| RECEIVED: | REVIEWER: | TYPE: | APP NO: |
|-----------|-----------|-------|---------|

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: _____ **OGRID Number:** _____
Well Name: _____ **API:** _____
Pool: _____ **Pool Code:** _____

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
- A. Location – Spacing Unit – Simultaneous Dedication
 NSL NSP (PROJECT AREA) NSP (PRORATION UNIT) SD
- B. Check one only for [I] or [II]
- [I] Commingling – Storage – Measurement
 DHC CTB PLC PC OLS OLM
- [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR

- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.
- A. Offset operators or lease holders
 B. Royalty, overriding royalty owners, revenue owners
 C. Application requires published notice
 D. Notification and/or concurrent approval by SLO
 E. Notification and/or concurrent approval by BLM
 F. Surface owner
 G. For all of the above, proof of notification or publication is attached, and/or,
 H. No notice required

| <u>FOR OCD ONLY</u> | |
|--------------------------|------------------------------|
| <input type="checkbox"/> | Notice Complete |
| <input type="checkbox"/> | Application Content Complete |

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

 Print or Type Name

 Signature

Date

Phone Number

e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised August 1, 2011

District II
811 S. First St., Artesia, NM 88210

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION TYPE
 Single Well
 Establish Pre-Approved Pools
EXISTING WELLBORE
 Yes No

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company 382 Road 3100, Aztec, NM 87410
Operator Address

Atlantic D Com **1A** **F, 36, 31N, 10W** **San Juan**
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 372171 Property Code 318866 API No. 30-045-22978 Lease Type: Federal State Fee

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|---|----------------------------|-------------------|---|
| Pool Name | Basin Fruitland Coal | | Blanco Mesaverde |
| Pool Code | 71629 | | 72319 |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | 2800 – 3392 Estimated | | 4175 - 5971 |
| Method of Production (Flowing or Artificial Lift) | New Zone | | Artificial Lift |
| Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone) | 876 | | 568 |
| Oil Gravity or Gas BTU (Degree API or Gas BTU) | 1123 BTU | | 1210 BTU |
| Producing, Shut-In or New Zone | New Zone | | Producing |
| Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.) | Date: Rates: | Date: Rates: | Date: Rates: Gas: 1941 MCF Oil: 7 BBL Water: 14 BBL |
| Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.) | Oil Gas See Attachments | Oil Gas % % | Oil Gas See Attachments |

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes _____ No
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes No _____

Are all produced fluids from all commingled zones compatible with each other? Yes No _____

Will commingling decrease the value of production? Yes _____ No

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes No _____

NMOC Reference Case No. applicable to this well: _____

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE *A Walker* TITLE Operations/Regulatory Technician DATE 04/18/2022

TYPE OR PRINT NAME Amanda Walker TELEPHONE NO. (346) 237-2177

E-MAIL ADDRESS mwalker@hilcorp.com

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

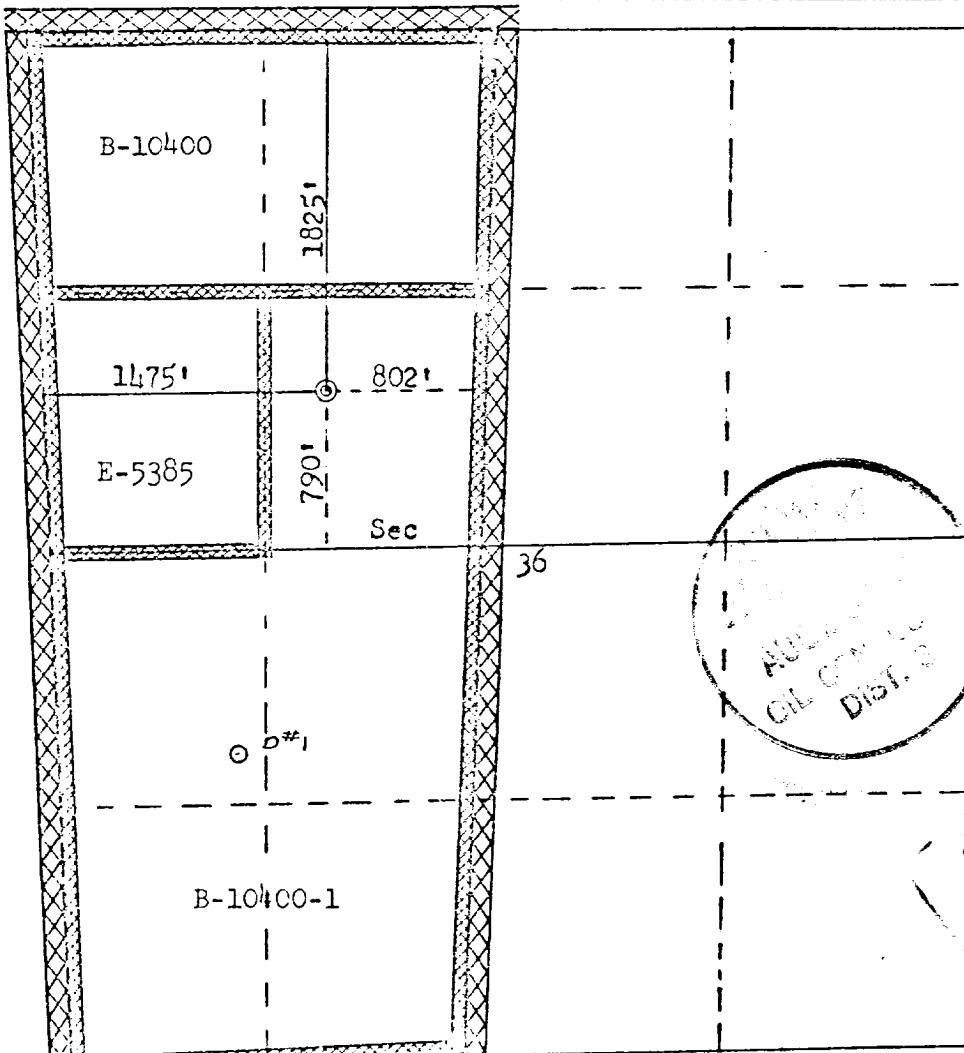
| | | | | | |
|--|--|------------------------|--|---|-----------------------|
| Operator EL PASO NATURAL GAS COMPANY | | | Lease ATLANTIC D COM (B-10400) | | Well No. 1A |
| Unit Letter F | Section 36 | Township 31N | Range 10W | County San Juan | |
| Actual Footage Location of Well: 1825 feet from the North line and 1475 feet from the West line | | | | | |
| Ground Level Elev: 6633 | Producing Formation Mesa Verde | | Pool Blanco Mesa Verde | Dedicated Acreage: 220.00 Acres | |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. Reissued 6/11/78 Well Moved To Get Further Away From A Ranchers Spring



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

A. J. Lisco

| | |
|----------|-------------------------|
| Name | Drilling Clerk |
| Position | El Paso Natural Gas Co. |
| Company | August 23, 1978 |
| Date | |

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 knowledge and belief.

| | |
|--|-------------------------|
| Date Surveyed | August 10, 1978 |
| Registered Professional Engineer and Land Surveyor | <i>Fred B. Kerr Jr.</i> |
| Certificate No. | 5120 |

State of New Mexico
Energy, Minerals and Natural
Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|-------------------------------|--|--|
| 1. API Number 30-045-22978 | 2. Pool Code 71629 | 3. Pool Name BASIN FRUITLAND COAL (GAS) |
| 4. Property Code 318866 | 5. Property Name ATLANTIC D COM | 6. Well No. 001A |
| 7. OGRID No. 372171 | 8. Operator Name HILCORP ENERGY COMPANY | 9. Elevation 6528 |

10. Surface Location

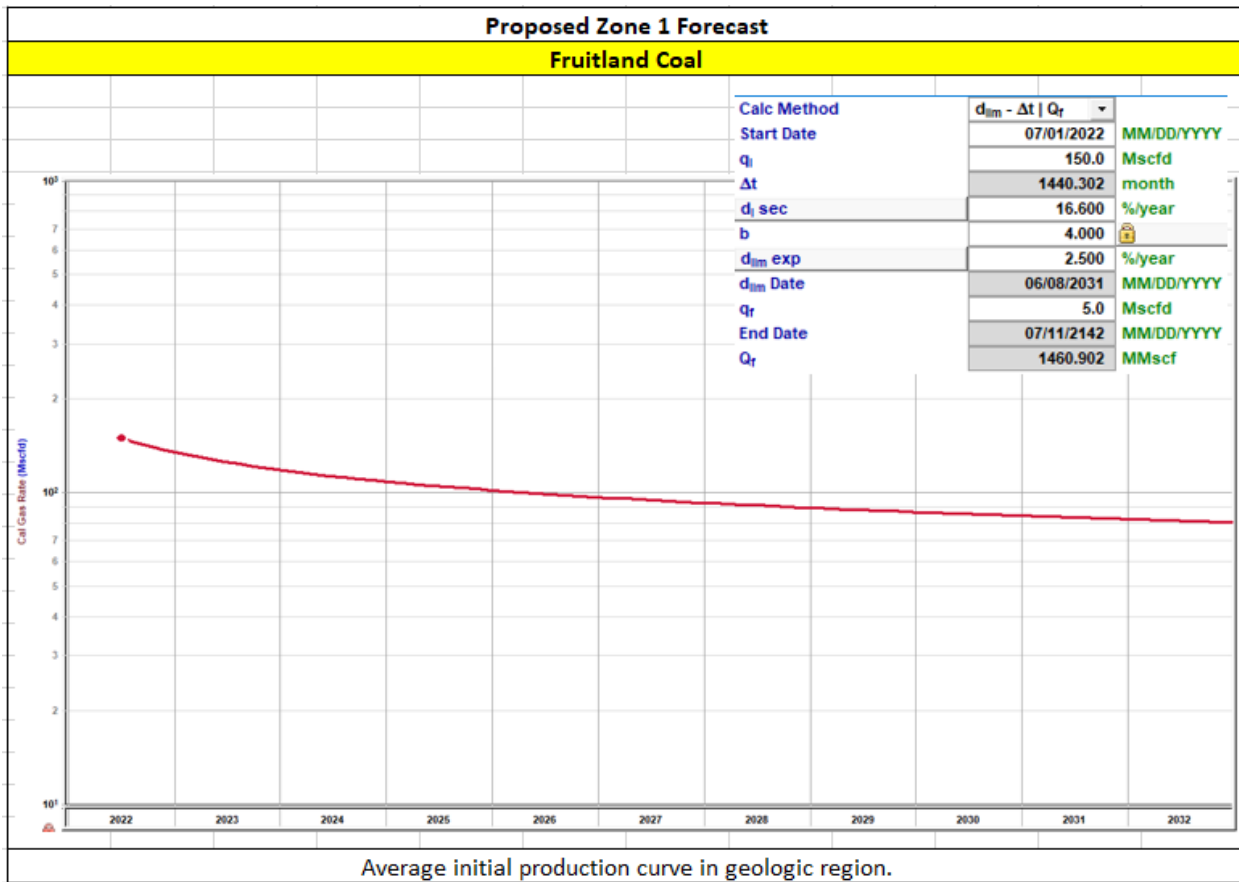
| | | | | | | | | | |
|---------------|---------------|-----------------|--------------|---------|-------------------|---------------|-------------------|---------------|-----------------------|
| UL - Lot F | Section 36 | Township 31N | Range 10W | Lot Idn | Feet From 1825 | N/S Line N | Feet From 1475 | E/W Line W | County SAN JUAN |
|---------------|---------------|-----------------|--------------|---------|-------------------|---------------|-------------------|---------------|-----------------------|

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 320.00 | 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 |
| | <p><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></p> <p>E-Signed By: <i>AW Walker</i> Title: Operations Regulatory Tech Sr. Date: 04/04/2022</p> |
| | SURVEYOR CERTIFICATION |
| | <p><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></p> <p>Surveyed By: Fred Kerr Date of Survey: 8/10/1978 Certificate Number: 3950</p> |



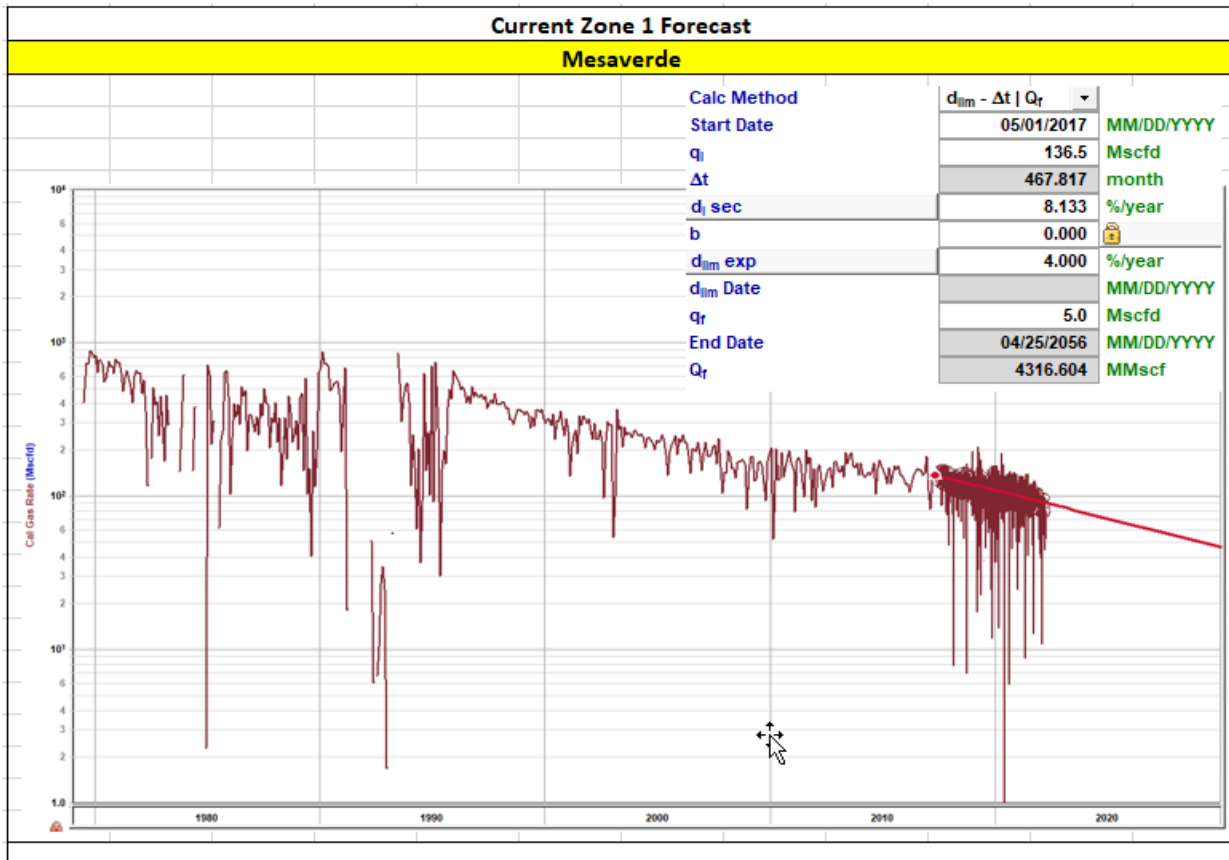
These zones are proposed to be commingled because the application of dual completions impedes the ability to produce the shallow zone without artificial lift and the deeper zones with reduced artificial lift efficiency. All horizons will require artificial lift due to low bottomhole pressure (BHP) and permeability.

The BHPs of all zones, producing and non-producing, were estimated based upon basinwide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin. These models were constructed incorporating reservoir dynamics and physics, historic production, and observed pressure data. Historic commingling operations have proven reservoir fluids are compatible.

Production Allocation Method - Subtraction

Gas Allocation:

Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Mesaverde and the added formation to be commingled is the Fruitland Coal. The subtraction method applies an average monthly production forecast to the base formation using historic production. All production from this well exceeding the forecast will be allocated to the new formation. After 3 years production will stabilize. A production average will be gathered during the 4th year and will be utilized to create a fixed percentage based allocation.

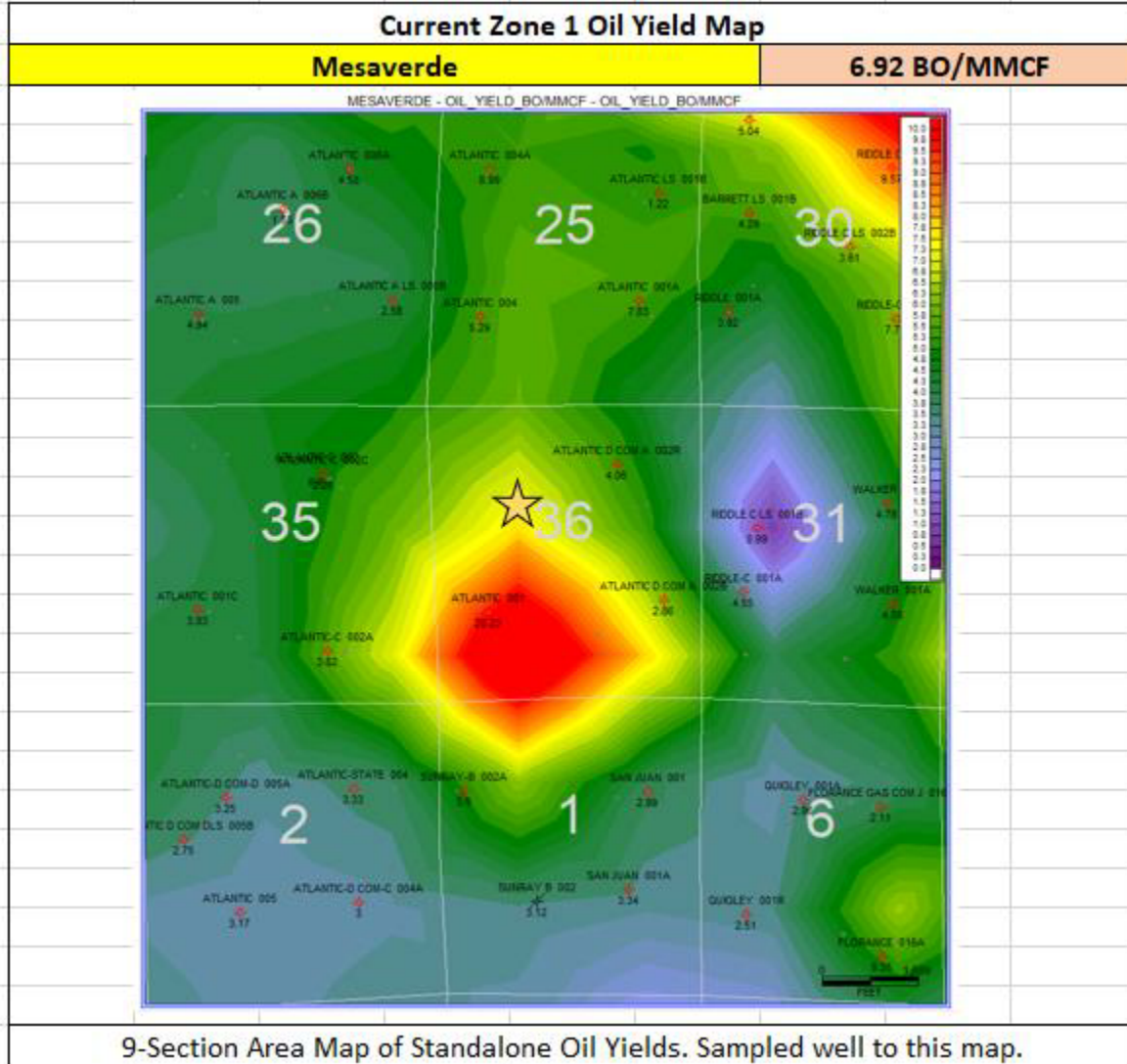


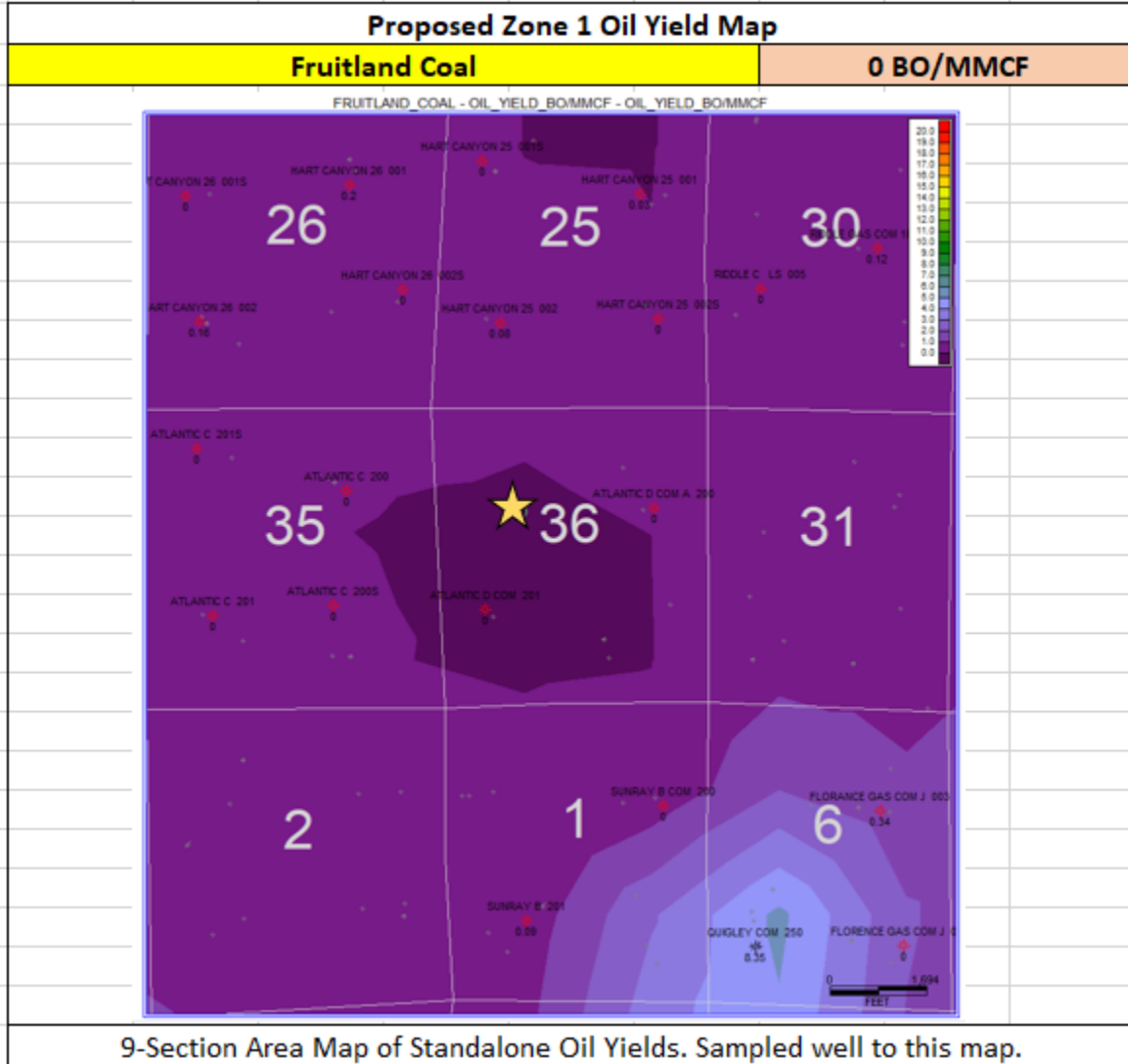
Oil Allocation:

Oil production will be allocated based on average formation yields from offset wells and will be a fixed rate for 4 years. After 4 years oil will be reevaluated and adjust as needed based on average formation yields and new fixed gas allocation.

| Formation | Yield (bb/MM) | Remaining Reserves (MMcf) | % Oil Allocation |
|-----------|---------------|---------------------------|------------------|
| MV | 6.92 | 566 | 100% |
| FRC | 0 | 917 | 0% |
| | | | 100% |

All documentation will be submitted to NMOCD.







May 4, 2022

Mailed Certified / Electronic Return Receipt Requested

To: ALL INTEREST OWNERS

RE: Application to Downhole Commingle Production
Well: ATLANTIC D COM #001A
API: 30-045-22978
Township 31 North, Range 10 West, Section 36
San Juan County, New Mexico

Ladies and Gentlemen:

Hilcorp Energy Company (“Hilcorp”), as Operator of the subject well, has filed application with the New Mexico Oil Conservation Division for approval to downhole commingle production from the **Fruitland Coal**, Hilcorp soon intends to perforate, with existing production from the **Mesaverde** formation. This letter and the application copy enclosed serve to provide you, an owner in one or more of the aforementioned formations, with written notice as prescribed by Subsection C of 19.15.12.11 New Mexico Administrative Code.

No action is required by you unless you wish to pursue a formal protest (see details italicized below).

If you no longer own an interest in this well or need to make changes to your address, etc., please email ownerrelations@hilcorp.com. For those without email access, please call (713) 209-2457.

Hilcorp is eager to explore this potential opportunity to enhance production. Thank you for your support.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Carlson'.

Robert Carlson
Sr. Landman
(832) 839-4596
rcarlson@hilcorp.com

RTC:dkp
Enclosures

Protesting:

Protests must be in writing and received within twenty (20) days from the date of this letter. In your response, please include your contact information, details referenced herein and the specific concerns and/or reasoning behind your decision. You are encouraged to email me an electronic copy and, subsequently, mailing (overnight) a hard copy to my attention at the address in the footer below. Upon receipt, I will follow up by phone to discuss your concerns. Should we be unable to resolve them, a formal protest will be set for hearing with the New Mexico Oil & Conservation Division in Santa Fe, NM, wherein your attendance and testimony will be required.

1111 Travis Street Houston, Texas 77002
Phone: 713/209-2400

| Certified Number | Sender | Recipient | Date Mailed | Delivery Status |
|--|------------|--|-------------|--|
| 92148969009997901811527691 Request Signature via Email | Dani Kuzma | , SILVERADO OIL and GAS LLP, , TULSA, OK, 74152-0308 Code: ATLANTIC D COM 1A DHC | 5/4/2022 | Delivered May 9, 2022 Signature Pending |
| 92148969009997901811527707 Request Signature via Email | Dani Kuzma | , PIONEER NATURAL RES USA INC, KATHY NAVARRETE, MIDLAND, TX, 79702 Code: ATLANTIC D COM 1A DHC | 5/4/2022 | Delivered, Individual Picked Up at Postal Facility May 9, 2022 Signature Pending |
| 92148969009997901811527714 Request Signature via Email | Dani Kuzma | , STATE OF NEW MEXICO, BATAAN MEMORIAL BUILDING, SANTA FE, NM, 87501 Code: ATLANTIC D COM 1A DHC | 5/4/2022 | Delivered, Front Desk/Reception/Mail Room May 9, 2022 Signature Pending |
| 92148969009997901811527721 Request Signature via Email | Dani Kuzma | , MESA ROYALTY TRUST, ATTN NEW MEXICO PROPERTIES, BARTLESVILLE, OK, 74004 Code: ATLANTIC D COM 1A DHC | 5/4/2022 | Delivered, Individual Picked Up at Postal Facility May 16, 2022 Signature Pending |
| 92148969009997901811527738 Request Signature via Email | Dani Kuzma | , SIMCOE LLC, , HOUSTON, TX, 77002- 5632 Code: ATLANTIC D COM 1A DHC | 5/4/2022 | Delivered, Left with Individual May 7, 2022 Signature Pending |

NEW MEXICO STATE LAND OFFICE
Guidelines for Requesting Commingling Approval

1. A commingling agreement from the New Mexico State Land Office is not required if the commingling operation does not contain New Mexico State Trust acreage.
2. If State Trust acreage will be part of a proposed commingling operation:
 - a. Commingling of production of all wells from the same pool within a single lease, communitized area, or unit area is permitted without additional Land Commissioner approval.
 - b. Surface commingling (including off-lease storage) from more than one pool, and/or from more than one lease, communitized area, unit area, or a combination of leases/communitized areas/unit areas, requires additional Land Commissioner approval.
 - c. Downhole commingling of multiple producing pools in a single well bore requires Land Commissioner approval unless the pools or the area in which the well is located are listed as pre-approved in NMAC 19.15.12.11(E).

The attached application form describes the process for submitting a commingling application to the New Mexico State Land Office.



APPLICATION FOR
COMMINGLING AND OFF-LEASE STORAGE
ON STATE TRUST LANDS



This application form is required for all commingling applications requiring approval by the Commissioner of Public Lands.

Applicant: Hilcorp Energy Company OGRID #: 372171
Well Name: Atlantic D Com 1A API #: 30-045-22978
Pool: Basin Fruitland Coal

OPERATOR NAME: Hilcorp Energy Company
OPERATOR ADDRESS: 1111 Travis St. Houston TX 77002

APPLICATION REQUIREMENTS - SUBMIT:

- 1. New Mexico Oil Conservation Division (NMOCD) application packet (or equivalent information if no application is required by NMOCD),
2. Commingling application fee of \$150.

CERTIFICATION: To the best of my knowledge,

- All business leases and rights-of-way necessary for conducting the proposed operation on State Trust lands have been applied for or obtained,
The information submitted with this application is accurate and complete, and
No loss will accrue to the state of New Mexico as a result of the proposed operation.

I also understand that no action will be taken on this application until the required information and fee are submitted to the State Land Office.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Amanda Walker

Print or Type Name

Signature

346-237-2177

Phone Number

05/04/2022

Date

mwalker@hilcorp.com

e-mail Address

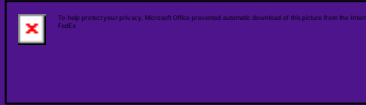
Submit application to:
Commissioner of Public Lands
Attn: Commingling Manager
PO Box 1148
Santa Fe, NM 87504-1148

Questions?
Contact the Commingling Manager:
505.827.5791

Upon approval, the requesting organization will receive an acknowledgment letter from the Commissioner of Public Lands.

Mandi Walker

From: TrackingUpdates@fedex.com
Sent: Thursday, May 12, 2022 10:14 AM
To: Mandi Walker
Subject: [EXTERNAL] FedEx Shipment 776821048763: Your package has been delivered



Hi. Your package was delivered Thu, 05/12/2022 at 9:09am.



Delivered to 310 OLD SANTA FE TRL, SANTA FE, NM 87501
Received by S.ARMijo

OBTAIN PROOF OF DELIVERY

TRACKING NUMBER [776821048763](#)

FROM Hilcorp Energy Company
1111 TRAVIS ST.
12th Floor
HOUSTON, TX, US, 77002

TO Commissioner of Public Lands
 Attn: Commingling Manager
 310 Old Santa Fe Trail
 SANTA FE, NM, US, 87501

SHIP DATE Tue 5/10/2022 03:00 PM

DELIVERED TO Receptionist/Front Desk

PACKAGING TYPE FedEx Envelope

ORIGIN HOUSTON, TX, US, 77002

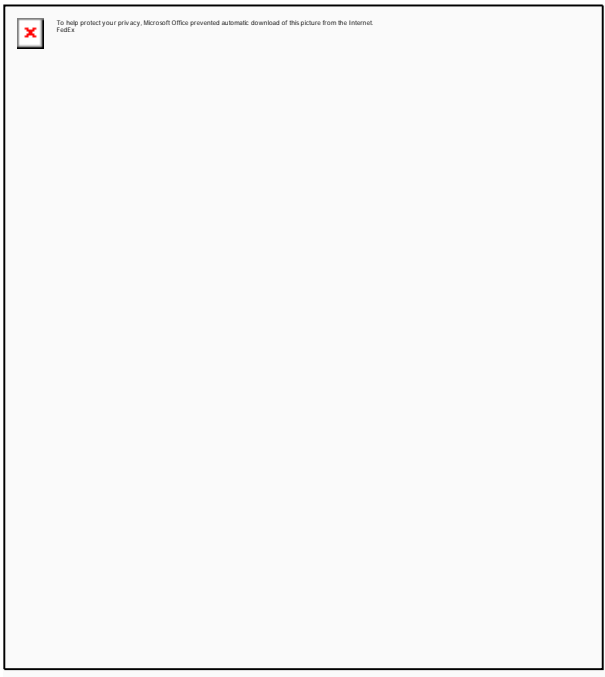
DESTINATION SANTA FE, NM, US, 87501

SPECIAL HANDLING Deliver Weekday

NUMBER OF PIECES 1

TOTAL SHIPMENT WEIGHT 1.00 LB

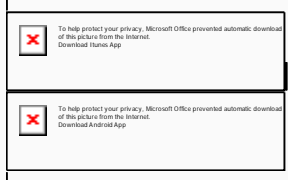
SERVICE TYPE FedEx Express Saver



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Thank you for your business.

Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-105
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.
30-045-22978
5. Indicate Type of Lease
STATE [X] FEE []
6. State Oil & Gas Lease No.
E-5385-NM

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)
1. Type of Well: Oil Well [] Gas Well [X] Other []
2. Name of Operator
HILCORP ENERGY COMPANY
3. Address of Operator
382 Road 3100, Aztec, NM 87410
4. Well Location
Unit Letter F : 1825 feet from the North line and 1475 feet from the West line
Section 36 Township 31N Range 10W NMPM San Juan County
11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6528 GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:
PERFORM REMEDIAL WORK [] PLUG AND ABANDON []
TEMPORARILY ABANDON [] CHANGE PLANS []
PULL OR ALTER CASING [] MULTIPLE COMPL []
DOWNHOLE COMMINGLE []
CLOSED-LOOP SYSTEM []
OTHER: [X] Recomplete

SUBSEQUENT REPORT OF:
REMEDIAL WORK [] ALTERING CASING []
COMMENCE DRILLING OPNS. [] P AND A []
CASING/CEMENT JOB []
OTHER: []

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Hilcorp Energy Company requests to REVISE the pervious NOI to approved on 4/8/2022 to only recomplete into the Basin Fruitland Coal and downhole commingle with the existing Mesaverde. Please see the attached procedure, current and proposed wellbore diagram. A closed loop system will be used.

Spud Date: []

Rig Release Date: []

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE Operations/Regulatory Technician - Sr. DATE 4/12/2022

Type or print name Amanda Walker E-mail address: mwalker@hilcorp.com PHONE: 346-237-2177

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Specialist DATE 04/13/2022

Conditions of Approval (if any):



HILCORP ENERGY COMPANY
ATLANTIC D COM 1A
FRUITLAND COAL RECOMPLETE SUNDRY
API 3004522978

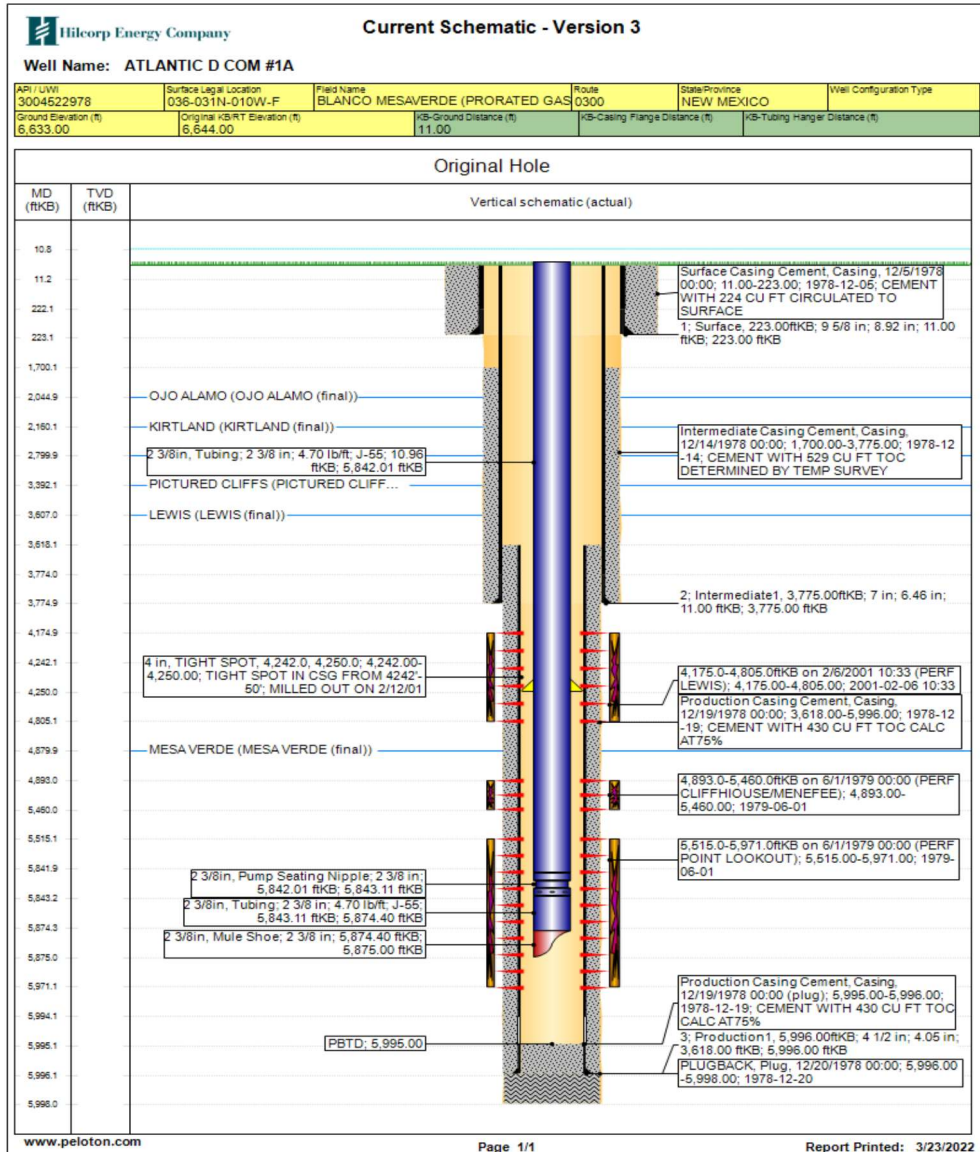
JOB PROCEDURES

1. MIRU workover rig and associated equipment; NU and test BOP.
2. TOOH with 2 3/8" tubing set at 5,875'.
3. Set a 4-1/2" bridge plug at +/- 4,135' to isolate the Lewis and Mesaverde (top perf: 4,175').
4. Run a CBL from liner top (3,618') to surface. Verify cement bond across the Fruitland Coal formation; confirm cement top and bottom behind the 7" production casing. Review CBL results with engineering/NMOCD and perform cement remediation, if required. IF TOC IS > PROPOSED PERF INTERVAL, CEMENT REMEDIATION IS NOT NECESSARY.
5. If necessary, pressure test any remedial cement squeeze work to 560 psi for 30 minutes as official MIT on bridge plug isolating Lewis/MV. Notify NMOCD 24 hours prior to any MIT work.
6. Set a bridge plug at base of frac, directly below perf interval at +/- 3,400'. Pressure test.
7. RU WL and perforate the Fruitland Coal (Perf interval: 2,800'-3,392').
8. RIH w/ packer and acidize Fruitland Coal perms.
9. RIH w/ frac string & packer. Set packer at +/- 2,700'.
10. ND BOPs, NU frac stack.
11. Frac the Fruitland Coal down the frac string.
12. Flowback the Fruitland Coal until pressures diminish. Get a Fruitland Coal only flow rate.
13. MIRU workover rig, ND frac stack, NU BOP, and test.
14. Release packer and POOH w/ frac string.
15. TIH w/ mill and cleanout to first plug at base of frac.
16. Drillout frac plug and cleanout to isolation plug at 4,135' and circulate wellbore clean. TOOH w/ cleanout assembly. TIH with 2-3/8" production tubing (if C107A to commingle is not approved yet).
17. When C107A is approved, drillout isolation plug and cleanout to PBTD of 5,995'. TOOH w/ cleanout assembly.
18. TIH and land 2-3/8" production tubing. ND BOPs and NU tree.
19. RDMO. Get an FRC/Lewis/MV flow rate.



HILCORP ENERGY COMPANY
ATLANTIC D COM 1A
FRUITLAND COAL RECOMPLETE SUNDRY

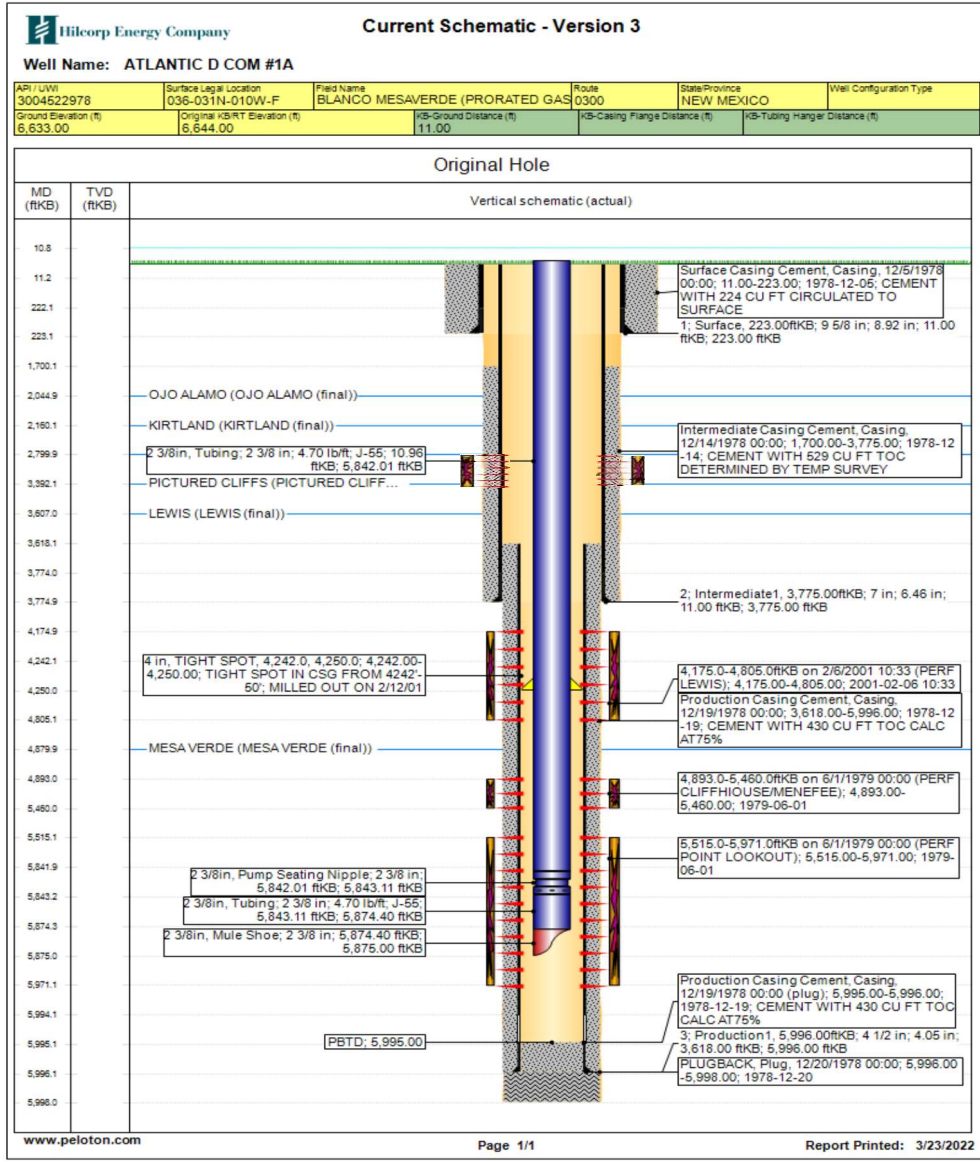
ATLANTIC D COM 1A - CURRENT WELLBORE SCHEMATIC





HILCORP ENERGY COMPANY
ATLANTIC D COM 1A
FRUITLAND COAL RECOMPLETE SUNDRY

ATLANTIC D COM 1A - PROPOSED WELLBORE SCHEMATIC



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
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS
 Action 97726

CONDITIONS

| | |
|--|---|
| Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002 | OGRID: 372171 |
| | Action Number: 97726 |
| | Action Type: [C-103] NOI Recompletion (C-103E) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|---|----------------|
| kpickford | Adhere to previous NMOCD Conditions of Approval | 4/13/2022 |

C-107A Pressure Revision: ATLANTIC D COM #001A (3004522978)

| Reservoir | Originally Submitted Pressure | Revised Bottom Hole Pressure |
|----------------|-------------------------------|------------------------------|
| Fruitland Coal | 876 | 104 |
| Mesaverde | 568 | 194 |

The pressures originally provided were calculated far-field stabilized reservoir pressures based on a moving domain material balance simulation. The near wellbore shut-in bottom hole pressures of the Fruitland Coal and Mesaverde are much lower than the calculated far-field stabilized reservoir pressured due to the low permeability of the reservoirs. Based on pressure transient analysis performed in the San Juan Basin, it would take 7-25 years for shut-in bottom hole pressures to build up to the calculated far-field reservoir pressure. Our observation is that even for areas of high static reservoir pressures, the low permeability of the reservoir rock results in rapid depletion of the near-fracture region, quickly enough that the wells are unable to produce without the aid of a plunger. Given low permeabilities and low wellbore flowing pressures in the Fruitland Coal and Mesaverde loss of reserves due to cross-flow is not an issue during producing or shut-in periods. Given low shut-in bottom hole pressures, commingling the Fruitland Coal and Mesaverde in this well will not result in shut-in or flowing wellbore pressures in excess of any commingled pool's fracture parting pressure. The pressures provided in the revised C-107A are based on shut-in bottom hole pressures of offset standalone wells which match expected near-wellbore shut-in bottom hole pressures of this proposed commingled completion.

The **State Com H 4A** and **Atlantic D Com 1A** are within the same geologic region, so the gas and water samples seen below will be used for both DHCs.

Water Compatibility in the San Juan Basin

- The San Juan basin has productive siliciclastic reservoirs (Pictured Cliffs, Blanco Mesaverde, Basin Dakota, etc.) and a productive coalbed methane reservoir (Basin Fruitland Coal).
- These siliciclastic and coalbed methane reservoirs are commingled extensively throughout the basin in many different combinations with no observed damage from clay swelling due to differing formation waters.
- The Basin Fruitland Coal, Blanco Mesaverde, and Blanco Pictured Cliffs a samples below all show fresh water with low TDS.

| PC Gas Analysis | | BTUWet | BTUDry | SpecificHeatRatio | Viscosity | SpecificGravity | CO2 |
|-----------------|---------------------|--------|--------|-------------------|-----------|-----------------|------|
| AssetCode | AssetName | | | | | | |
| 3004521333 | ATLANTIC D COM O 16 | 1118 | 1137 | | | 0.65 | 0.01 |

| PC Water Analysis | | CationBarium | CationBoron | CationCalcium | CationIron | CationMagnesiun | CationManganese |
|-------------------|---------------------|--------------|-------------|---------------|------------|-----------------|-----------------|
| API | Property | | | | | | |
| 3004521333 | ATLANTIC D COM O 16 | 0 | | 8.04 | 93 | 4.88 | 1.38 |

| MV Gas Analysis | | BTUWet | BTUDry | SpecificHeatRatio | Viscosity | SpecificGravity | CO2 |
|-----------------|-------------|--------|--------|-------------------|-----------|-----------------|------|
| AssetCode | AssetName | | | | | | |
| 3004528933 | ATLANTIC 5R | 1198 | 1219 | | | 0.72 | 0.02 |

| MV Water Analysis | | CationBarium | CationBoron | CationCalcium | CationIron | CationMagnesiun | CationManganese |
|-------------------|-------------|--------------|-------------|---------------|------------|-----------------|-----------------|
| API | Property | | | | | | |
| 3004528933 | ATLANTIC 5R | 0.16 | | 3.15 | 82.33 | 0.35 | 0.68 |

| FRC Gas Analysis | | BTUWet | BTUDry | SpecificHeatRatio | Viscosity | SpecificGravity | CO2 |
|------------------|---------------|--------|--------|-------------------|-----------|-----------------|------|
| AssetCode | AssetName | | | | | | |
| 3004527307 | LAMBE COM 200 | 1104 | 1124 | | | 0.64 | 0.01 |

| FRC Water Analysis | | CationBarium | CationBoron | CationCalcium | CationIron | CationMagnesiun | CationManganese |
|--------------------|---------------|--------------|-------------|---------------|------------|-----------------|-----------------|
| API | Property | | | | | | |
| 3004527307 | LAMBE COM 200 | 0.53 | | 14.7 | 181 | 2 | 2.25 |

| N2 | C1 | C2 | C3 | ISOC4 | NC4 | ISOC5 | NC5 | NEOC5 |
|----|----|------|------|-------|-----|-------|-----|-------|
| 0 | | 0.88 | 0.06 | 0.03 | 0 | 0.01 | 0 | 0 |

| CationPhosphorus | CationPotassium | CationStrontium | CationSodium | CationSilica | CationZinc | CationAlumi | CationCopper | CationLead |
|------------------|-----------------|-----------------|--------------|--------------|------------|-------------|--------------|------------|
| | | 0.11 | 143.54 | | | | | |

| N2 | C1 | C2 | C3 | ISOC4 | NC4 | ISOC5 | NC5 | NEOC5 |
|----|----|------|------|-------|------|-------|-----|-------|
| 0 | | 0.82 | 0.09 | 0.04 | 0.01 | 0.01 | 0 | 0 |

| CationPhosphorus | CationPotassium | CationStrontium | CationSodium | CationSilica | CationZinc | CationAlumi | CationCopper | CationLead |
|------------------|-----------------|-----------------|--------------|--------------|------------|-------------|--------------|------------|
| | | 0.63 | 152.46 | | | | | |

| N2 | C1 | C2 | C3 | ISOC4 | NC4 | ISOC5 | NC5 | NEOC5 |
|----|----|-----|------|-------|-----|-------|-----|-------|
| 0 | | 0.9 | 0.06 | 0.03 | 0 | 0 | 0 | 0 |

| CationPhosphorus | CationPotassium | CationStrontium | CationSodium | CationSilica | CationZinc | CationAlumi | CationCopper | CationLead |
|------------------|-----------------|-----------------|--------------|--------------|------------|-------------|--------------|------------|
| | 20 | 2 | 20 | 21.4 | 2.48 | | | 2 |

| | | | | | | | | |
|----|---------|----|----|----|-----|----|----|----|
| C6 | C6_PLUS | C7 | C8 | C9 | C10 | AR | CO | H2 |
| | | 0 | | | | | | |

| | | | | | | | | | |
|---------------|--------------|--------------|----------------|---------------|------------------|---------------|----------------|------------------|-------|
| CationLithium | CationNickel | CationCobalt | CationChromium | CationSilicon | CationMolybdenum | AnionChloride | AnionCarbonate | AnionBicarbonate | |
| | | | | | | | 0 | 0 | 183.3 |

| | | | | | | | | |
|----|---------|----|----|----|-----|----|----|----|
| C6 | C6_PLUS | C7 | C8 | C9 | C10 | AR | CO | H2 |
|----|---------|----|----|----|-----|----|----|----|

| | | | | | | | | | |
|---------------|--------------|--------------|----------------|---------------|------------------|---------------|----------------|------------------|------|
| CationLithium | CationNickel | CationCobalt | CationChromium | CationSilicon | CationMolybdenum | AnionChloride | AnionCarbonate | AnionBicarbonate | |
| | | | | | | | 199 | 0 | 73.2 |

| | | | | | | | | |
|----|---------|----|----|----|-----|----|----|----|
| C6 | C6_PLUS | C7 | C8 | C9 | C10 | AR | CO | H2 |
| | | 0 | | | | | | |

| | | | | | | | | | |
|---------------|--------------|--------------|----------------|---------------|------------------|---------------|----------------|------------------|-----|
| CationLithium | CationNickel | CationCobalt | CationChromium | CationSilicon | CationMolybdenum | AnionChloride | AnionCarbonate | AnionBicarbonate | |
| | | | | 10 | | | 22.8 | 10 | 150 |

| | | |
|----|-----|-----|
| O2 | H2O | H2S |
| | | 0 |

| AnionBromide | AnionFluoride | AnionHydroxyl | AnionNitrate | AnionPhosphat | AnionSulfate | phField | phCalculated | TempField |
|--------------|---------------|---------------|--------------|---------------|--------------|---------|--------------|-----------|
| | | | | | | 0 | 5.23 | |

| | | |
|----|-----|-----|
| O2 | H2O | H2S |
| | | 0 |

| AnionBromide | AnionFluoride | AnionHydroxyl | AnionNitrate | AnionPhosphat | AnionSulfate | phField | phCalculated | TempField |
|--------------|---------------|---------------|--------------|---------------|--------------|---------|--------------|-----------|
| | | 0 | | | | 1 | 7 | 53 |

| | | |
|----|-----|-----|
| O2 | H2O | H2S |
| | | 0 |

| AnionBromide | AnionFluoride | AnionHydroxyl | AnionNitrate | AnionPhosphat | AnionSulfate | phField | phCalculated | TempField |
|--------------|---------------|---------------|--------------|---------------|--------------|---------|--------------|-----------|
| | | 10 | | | | 7.38 | 7.04 | |

| TempLab | OtherField.OtherSpecificGravity | OtherTDS | OtherCaCO3 | OtherConduct | DissolvedCO2 | DissolvedO2 | DissolvedH2S |
|---------|---------------------------------|----------|------------|--------------|--------------|-------------|--------------|
| | 1 | 634.14 | 40.11 | | | 200 | 0 |

| TempLab | OtherField.OtherSpecificGravity | OtherTDS | OtherCaCO3 | OtherConduct | DissolvedCO2 | DissolvedO2 | DissolvedH2S |
|---------|---------------------------------|----------|------------|--------------|--------------|-------------|--------------|
| | 1 | 512.97 | | 801.51 | | 40 | 0 |

| TempLab | OtherField.OtherSpecificGravity | OtherTDS | OtherCaCO3 | OtherConduct | DissolvedCO2 | DissolvedO2 | DissolvedH2S |
|---------|---------------------------------|----------|------------|--------------|--------------|-------------|--------------|
| | 1 | 700 | 36.7 | 272 | | | |

From: [McClure, Dean, EMNRD](#) on behalf of [Engineer, OCD, EMNRD](#)
To: [Mandi Walker](#); [Kandis Roland](#)
Cc: [McClure, Dean, EMNRD](#); [Wrinkle, Justin, EMNRD](#); [Powell, Brandon, EMNRD](#); lisa@rwbyram.com; [Dawson, Scott](#)
Subject: Approved Administrative Order DHC-5204
Date: Friday, October 14, 2022 1:06:52 PM
Attachments: [DHC5204 Order.pdf](#)

NMOCD has issued Administrative Order DHC-5204 which authorizes Hilcorp Energy Company (372171) to downhole commingle production within the following well:

Well Name: **Atlantic D Com #1A**

Well API: **30-045-22978**

The administrative order is attached to this email and can also be found online at OCD Imaging.

Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.

Dean McClure
Petroleum Engineer, Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
(505) 469-8211

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION FOR DOWNHOLE COMMINGLING
SUBMITTED BY HILCORP ENERGY COMPANY**

ORDER NO. DHC-5204

ORDER

The Director of the New Mexico Oil Conservation Division (“OCD”), having considered the application and the recommendation of the Engineering Bureau, issues the following Order.

FINDINGS OF FACT

1. Hilcorp Energy Company (“Applicant”) submitted a complete application (“Application”) to downhole commingle the pools described in Exhibit A (“the Pools”) within the well bore of the well identified in Exhibit A (“the Well”).
2. Applicant proposed a method to allocate the oil and gas production from the Well to each of the Pools that is satisfactory to the OCD and protective of correlative rights.
3. Applicant has certified that the proposed commingling of the Pools shall not result in shut-in or flowing well bore pressure in excess of the commingled pool’s fracture parting pressure.
4. Applicant has certified that all produced fluids from all the Pools are compatible with each other.
5. Applicant has certified that downhole commingling the Pools will not decrease the value of the oil and gas production.
6. To the extent that ownership is identical, Applicant submitted a certification by a licensed attorney or qualified petroleum landman that ownership in the Pools is identical as defined by 19.15.12.7(B) NMAC.
7. To the extent that ownership is diverse, Applicant identified all owners of interest in the Pools, provided evidence a copy of the Application was given to each person, and those persons either submitted a written waiver or did not file an objection to the Application.
8. Applicant provided notice of the Application to the Bureau of Land Management (“BLM”) or New Mexico State Land Office (“NMSLO”), as applicable.

CONCLUSIONS OF LAW

9. OCD has jurisdiction to issue this Order pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-6, 70-2-11, 70-2-12, 70-2-16, 70-2-17, and 19.15.12 NMAC.
10. The downhole commingling of the Pools is common, or Applicant has provided evidence that the fluids are compatible and will not damage the Pools in accordance with 19.15.12.11(A)(1) NMAC.

11. The bottom perforation of the lower zone is within one hundred fifty percent (150%) of the depth of the top perforation in the upper zone or Applicant has provided evidence that the proposed commingling of the Pools shall not result in shut-in or flowing well bore pressure in excess of the commingled pool's fracture parting pressure in accordance with 19.15.12.11(A)(3) NMAC.
12. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.11(A)(8) NMAC.
13. To the extent that ownership is diverse, Applicant identified all owners of interest in the Pools and provided evidence the application was given to those persons in accordance with 19.15.12.11(C)(1)(b) NMAC.
14. By granting the Application with the conditions specified below, this Order prevents waste and protects correlative rights, public health, and the environment.

ORDER

1. Applicant is authorized to downhole commingle the Pools described in Exhibit A within the well bore of the well identified in Exhibit A.
2. Applicant shall allocate a fixed percentage of the oil production from the Well to each of the Pools until a different plan to allocate oil production is approved by OCD. Of the oil production from the Well:
 - a. zero percent (0%) shall be allocated to the BASIN FRUITLAND COAL (GAS) pool (pool ID: 71629); and
 - b. one hundred percent (100%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

Applicant shall allocate gas production to the new pool(s) equal to the total gas production from the Well minus the projected gas production from the current pool(s) until a different plan to allocate gas production is approved by OCD. The new pool(s) are:

- a. the BASIN FRUITLAND COAL (GAS) pool (pool ID: 71629).

The current pool(s) are:

- a. the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

Applicant shall calculate the oil and gas production average during the fourth year after the commencement of commingling, which shall be used to establish a fixed percentage of the total oil and gas production that shall be allocated to each of the Pools ("fixed percentage allocation plan"). No later than ninety (90) days after the fourth year, Applicant shall submit a Form C-103 to the OCD Engineering Bureau that includes the fixed percentage allocation plan and all data used to determine it. If Applicant fails to do so, this Order shall terminate on the following day. If OCD denies the fixed percentage allocation plan, this Order shall terminate on the date of such action. If OCD approves the percentage allocation plan with or without modifications, then the approved percentage allocation plan shall be used to

determine oil and gas allocation starting on the date of such action until the Well is plugged and abandoned.

3. If an alteration is made to the Well or a condition within the Well changes which may cause the allocation of production to the Pools as approved within this Order to become inaccurate, then no later than sixty (60) days after that event, Applicant shall submit Form C-103 to the OCD Engineering Bureau describing the event and include a revised allocation plan. If OCD denies the revised allocation plan, this Order shall terminate on the date of such action.
4. If any of the pools being commingled is prorated, or the Well's production has been restricted by an OCD order in any manner, the allocated production from each producing pool in the commingled well bore shall not exceed the top oil or gas allowable rate for a well in that pool or rate restriction applicable to the well.
5. If the Well is deepened, then no later than forty-five (45) days after the Well is deepened, Applicant shall conduct and provide logs to OCD that are sufficient for OCD to determine which pool(s) each new completed interval of the Well will produce from.
6. If the downhole commingling of the Pools reduces the value of the oil and gas production to less than if it had remained segregated, no later than sixty (60) days after the decrease in value has occurred Applicant shall submit a new downhole commingling application to OCD to amend this Order to remove the pool that caused the decrease in value. If Applicant fails to submit a new application, this Order shall terminate on the following day, and if OCD denies the application, this Order shall terminate on the date of such action.
7. If a completed interval of the Well is altered from what is submitted within the Application as identified in Exhibit A, then no later than sixty (60) days after the alteration, Applicant shall submit Form C-103 to the OCD Engineering Bureau detailing the alteration and completed interval.
8. If OCD determines that Applicant has failed to comply with any provision of this Order, OCD may take any action authorized by the Oil and Gas Act or the New Mexico Administrative Code (NMAC).
9. OCD retains jurisdiction of this matter and reserves the right to modify or revoke this Order as it deems necessary.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**



**ADRIENNE E. SANDOVAL
DIRECTOR**

DATE: 10/13/2022

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit A

Order: **DHC-5204**

Operator: **Hilcorp Energy Company (372171)**

Well Name: **Atlantic D Com #1A**

Well API: **30-045-22978**

| | | | |
|-------------------|--|-------------------|----------------------|
| | Pool Name: BASIN FRUITLAND COAL (GAS) | | |
| Upper Zone | Pool ID: 71629 | Current: | New: X |
| | Allocation: | Oil: 0% | Gas: |
| | Interval: Perforations | Top: 2,800 | Bottom: 3,392 |

| | | | |
|---|-------------|----------|---------|
| | Pool Name: | | |
| Intermediate Zone | Pool ID: | Current: | New: |
| | Allocation: | Oil: | Gas: |
| | Interval: | Top: | Bottom: |
| Bottom of Interval within 150% of Upper Zone's Top of Interval: | | | |

| | | | |
|---|---|-------------------|----------------------|
| | Pool Name: BLANCO-MESAVERDE (PRORATED GAS) | | |
| Lower Zone | Pool ID: 72319 | Current: X | New: |
| | Allocation: | Oil: 100% | Gas: |
| | Interval: Perforations | Top: 4,175 | Bottom: 5,971 |
| Bottom of Interval within 150% of Upper Zone's Top of Interval: NO | | | |

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS
 Action 111647

CONDITIONS

| | |
|--|--|
| Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002 | OGRID: 372171 |
| | Action Number: 111647 |
| | Action Type: [C-107] Down Hole Commingle (C-107A) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|--|----------------|
| dmcclure | Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me. | 10/14/2022 |