

Revised March 23, 2017

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| RECEIVED: | REVIEWER: | TYPE: | APP NO: |
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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: Hilcorp Energy Company **OGRID Number:** 372171
Well Name: F J Titt 2A **API:** 30-045-22914
Pool: Basin Fruitland Coal / Aztec Pictured Cliffs / Blanco Mesaverde **Pool Code:** 71629, 71280, 72319

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

FOR OCD ONLY

- ☐ Notice Complete
- ☐ 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.

Cherylene Weston

Print or Type Name

Cherylene Weston

Signature

4/19/2024

Date

713-289-2614

Phone Number

cweston@hilcorp.com

e-mail Address

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

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

District III
1000 Rio Brazos Road, Aztec, NM 87410

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-107A
Revised August 1, 2011

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

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company

382 Road 3100, Aztec, NM 87410

Operator

Address

F J Titt

2A

O-35-T31N-R11W

San Juan County, NM

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 372171 Property Code 319359 API No. 30-045-22914 Lease Type: ☒ Federal ☐ State ☐ Fee

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|---|----------------------|--|---|
| Pool Name | Basin Fruitland Coal | Aztec Pictured Cliffs | Blanco Mesaverde |
| Pool Code | 71629 | 71280 | 72319 |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | 2004' - 2397' | 2400' - 2519' | 4501' - 4807' |
| Method of Production (Flowing or Artificial Lift) | Artificial Lift | Artificial Lift | 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) | 105 psi | 95 psi | 276 psi |
| Oil Gravity or Gas BTU (Degree API or Gas BTU) | 1068 BTU | 1143 BTU | 1228 BTU |
| Producing, Shut-In or New Zone | NEW ZONE | Producing | 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: | 2/1/2024 Date: Oil - 3 bbl Rates: Gas - 110 mcf Water - 3 bbl | Date: 12/1/2024 Rates: Oil - 0 bbl Gas - 991 mcf Water - 3 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 % % | Oil Gas % % | Oil Gas % % |

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 ☐

NMOCD 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

Cherylene Weston

TITLE

Operations/Regulatory Tech-Sr.

DATE

4/19/2024

TYPE OR PRINT NAME

Cherylene Weston

TELEPHONE NO. (713)

289-2615

E-MAIL ADDRESS

cweston@hilcorp.com

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 355335

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|-------------------------------|--|--|
| 1. API Number 30-045-22914 | 2. Pool Code 71629 | 3. Pool Name BASIN FRUITLAND COAL (GAS) |
| 4. Property Code 319359 | 5. Property Name F J TITT | 6. Well No. 002A |
| 7. OGRID No. 372171 | 8. Operator Name HILCORP ENERGY COMPANY | 9. Elevation 5806 |

10. Surface Location

| | | | | | | | | | |
|---------------|---------------|-----------------|--------------|---------|------------------|---------------|-------------------|---------------|--------------------|
| UL - Lot O | Section 35 | Township 31N | Range 11W | Lot Idn | Feet From 910 | N/S Line S | Feet From 1460 | E/W Line E | 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 <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: Cherylene Weston Title: Cherylene Weston Date: 12/7/2023 | |
| | 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: Fred B. Kerr, Jr. Date of Survey: 12/15/1977 Certificate Number: 3950 | |

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-69

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

| | | | | | |
|---|---|------------------------|----------------------------|---------------------------|--|
| Operator SOUTHLAND ROYALTY COMPANY | | | Lease F. J. TITT | | Well No. 2-A |
| Unit Letter 0 | Section 35 | Township 31N | Range 11W | County San Juan | |
| Actual Footage Location of Well: 910 feet from the South line and 1460 feet from the East line | | | | | |
| Ground Level Elev. 5806' | Producing Formation Pictured Cliffs | | Pool Blanco | | Dedicated Acreage: 160/320 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 _____

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.

CERTIFICATION

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

Name

C. C. Parsons

Position

District Production Manager

Company

Southland Royalty Company

Date

July 6, 1982

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

Registered Professional Engineer and/or Land Surveyor

Certificate No.

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

NMOCC

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.

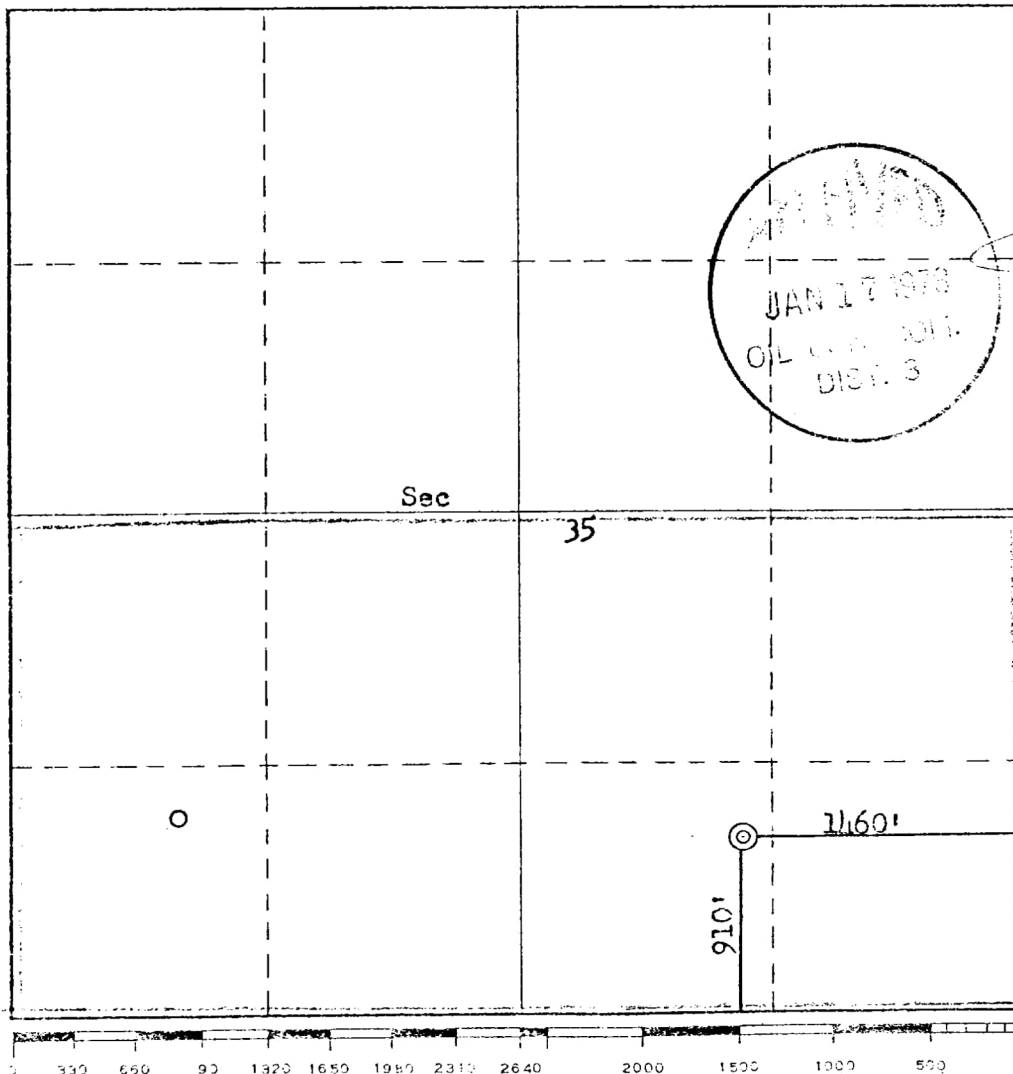
| | | | | | |
|---|--|------------------------|--|---------------------------|-----------------------|
| Operator SOUTHLAND ROYALTY COMPANY | | | Lease F. J. Titt | | Well No. 2A |
| Unit Letter 0 | Section 35 | Township 31N | Range 11W | County San Juan | |
| Acres of Postage Location of Well: 910 feet from the South line and 1460 feet from the East line | | | | | |
| Producing Well 5806 | Producing Formation Mesa Verde | Pool Blanco | Dedicated Acreage: 320 Acres | | |

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 _____

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.



CERTIFICATION

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

Name: *Don Ryan*
Position: Dist. Production Mgr.
Company: Southland Royalty Company
Date: January 13, 1978

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: December 15, 1977
Registered Professional Engineer and/or Land Surveyor: *Fred B. Kerr Jr.*
Certificate No.: 3950

The near wellbore shut-in bottom hole pressures of the above reservoirs are much lower than the calculated far-field stabilized reservoir pressure 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 above reservoirs, 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 above reservoirs 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 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.

Note: BTU Data taken from standalone completions in the zone of interest within a 2 mile radius of the well.

A farther radius is used if there is not enough data for a proper statistical analysis.

F J Titt 2A Production Allocation

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 basin wide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin, in conjunction with shut-in pressure build-ups. These models were constructed incorporating reservoir dynamics and physics, historic production, and observed pressure data. Historic commingling operations have proven reservoir fluids are compatible.

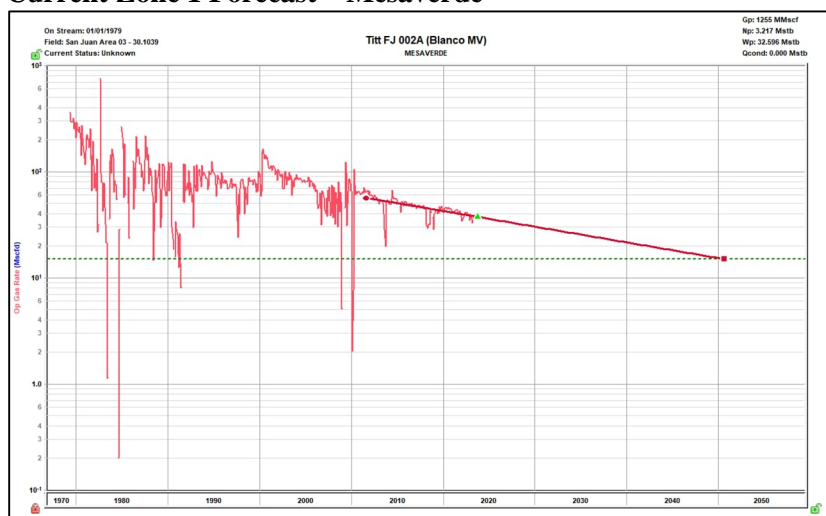
Production Allocation Method – Subtraction

Gas Allocation:

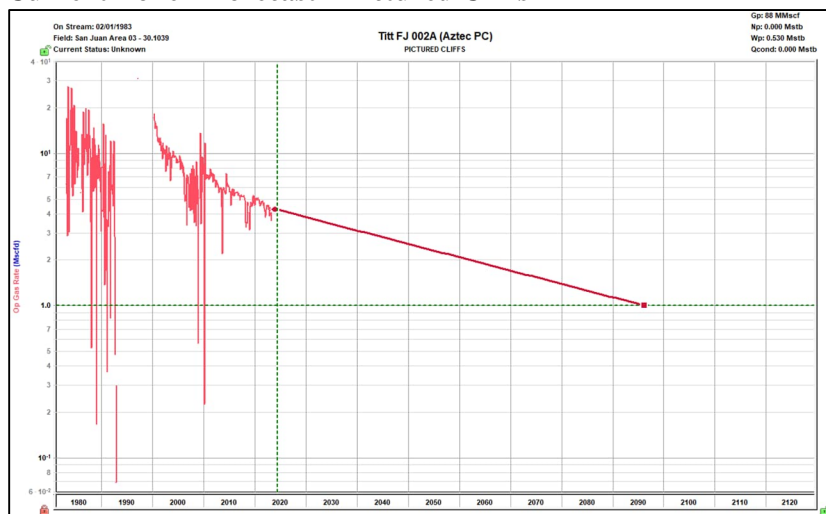
Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Mesaverde/Pictured Cliffs and the added formation to be commingled is the Fruitland Coal. The subtraction method applies an average monthly production forecast to the base formations using historic production. All production from this well exceeding the base formation forecasts 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.

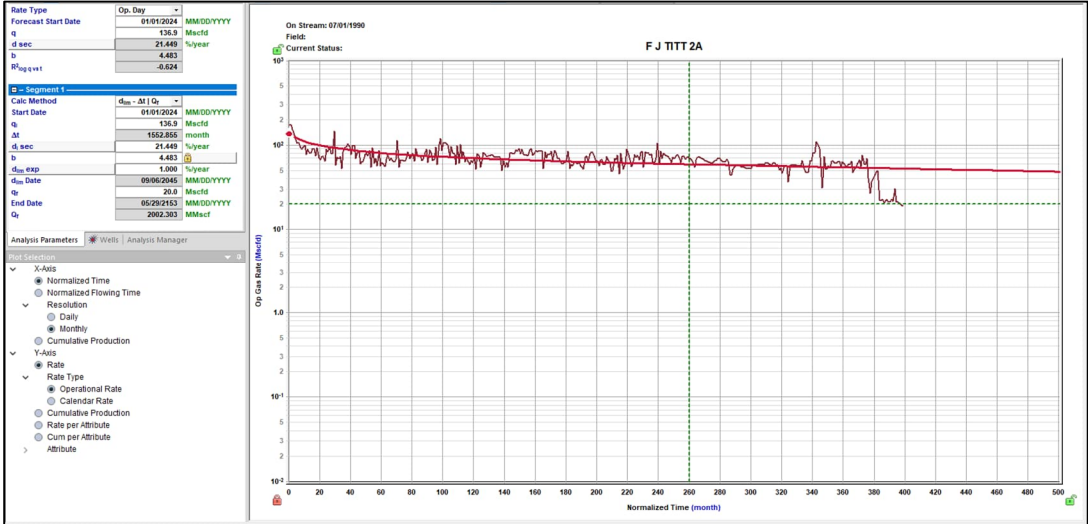
Current Zone 1 Forecast – Mesaverde



Current Zone 2 Forecast – Pictured Cliffs



Proposed Zone Forecast – Fruitland Coal



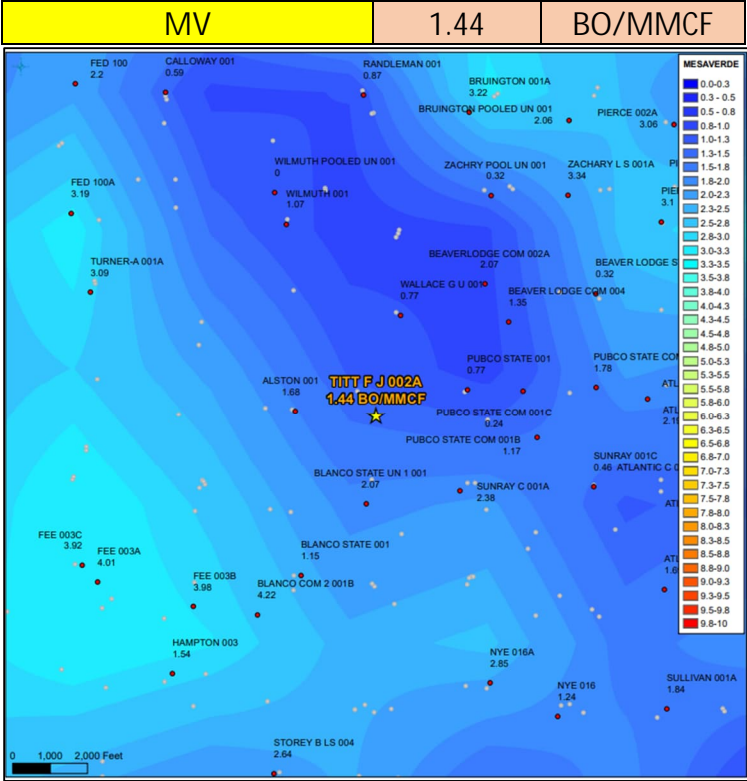
Average initial production curve in geologic region.

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 adjusted as needed based on average formation yields and new fixed gas allocation.

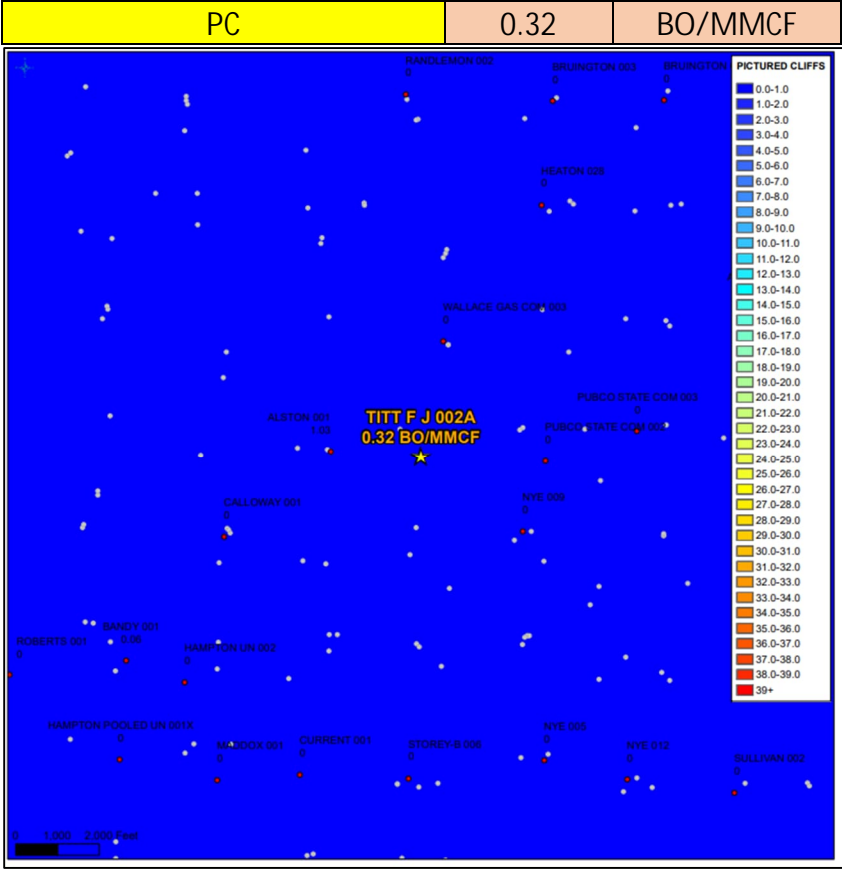
| Formation | Yield (bbl/MM) | Remaining Reserves (MMcf) | % Oil Allocation |
|-----------|----------------|---------------------------|------------------|
| MV | 1.44 | 241 | 100% |
| FRC | 0 | 2002 | 0% |
| PC | 0.32 | 0 | 0% |

Current Zone 1 – Mesaverde Oil Yield Map

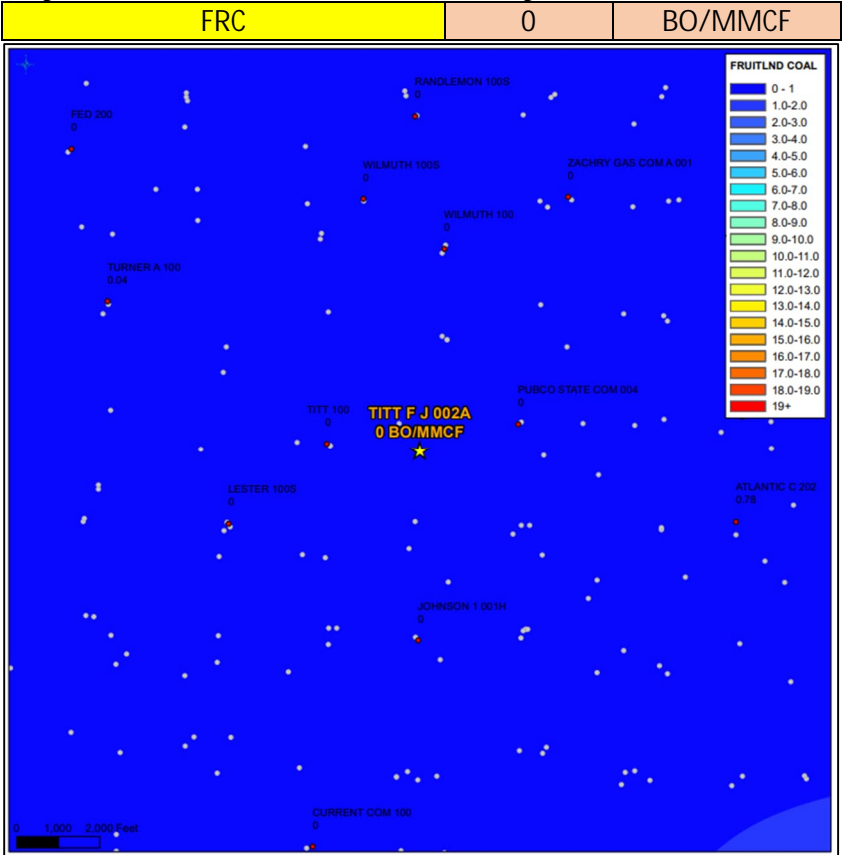


9-Section Area Map of Standalone Oil Yields. Sampled well to this map.

Current Zone 2 – Pictured Cliffs Oil Yield Map



Proposed Zone – Fruitland Coal Oil Yield Map



9-Section Area Map of Standalone Oil Yields. Sampled well to this map.

Supplemental Information:

Shut in pressures were calculated for operated offset standalone wells in each of the zones being commingled in the well in question via the following process:

- 1) Wells were shut in for 24 hours
- 2) Echometer was used to obtain a fluid level
- 3) Shut in BHP was calculated for the proposed commingled completion

List of wells used to calculate BHPs for the Project:

| | | |
|------------|---------------|-----|
| 3004534893 | LESTER 100S | FRC |
| 3004534918 | WILMUTH 100 | PC |
| 300453005 | PIERCE SRC 2C | MV |

I believe each of the reservoirs to be continuous and in a similar state of depletion at this well and at each of the wells from which the pressures are being derived.

Gas 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 or gas composition.
- The samples below all show offset gas analysis variability by formation is low.

| | |
|-------------|------------|
| Well Name | API |
| F J TITT 2A | 3004522914 |

| FRC Offset | | PC Offset | | MV Offset | |
|-------------|-------------|-------------|---------------|-------------|--------------------|
| AssetCode | 3004534893 | AssetCode | LACKEY B LS 1 | AssetCode | BEAVER LODGE COM 4 |
| AssetName | LESTER 100S | AssetName | 3004507367 | AssetName | 3004532064 |
| N2 | | N2 | 0.141 | N2 | 0.0877 |
| CO2 | 0 | CO2 | 0.8534 | CO2 | 0.7361 |
| C1 | 0.93 | C1 | 88.7876 | C1 | 82.522 |
| C2 | 0.03 | C2 | 7.0323 | C2 | 9.3464 |
| C3 | 0.02 | C3 | 2.0997 | C3 | 4.0265 |
| IC4 | 0 | IC4 | 0.4066 | IC4 | 0.8283 |
| NC4 | 0 | NC4 | 0.3153 | NC4 | 1.0959 |
| IC5 | 0 | IC5 | 0.1198 | IC5 | 0.3832 |
| NC5 | 0 | NC5 | 0.0733 | NC5 | 0.3065 |
| C6+ | | C6+ | 0.171 | C6+ | 0.6674 |
| C7 | | C7 | | C7 | |
| C8 | | C8 | | C8 | |
| C9 | | C9 | | C9 | |
| C10 | | C10 | | C10 | |
| AR | | AR | | AR | |
| CO | | CO | | CO | |
| H2 | | H2 | | H2 | |
| O2 | | O2 | | O2 | |
| H2O | | H2O | | H2O | |
| H2S | | H2S | | H2S | 0 |
| HE | | HE | | HE | |
| C_O_S | | C_O_S | | C_O_S | |
| CH3SH | | CH3SH | | CH3SH | |
| C2H5SH | | C2H5SH | | C2H5SH | |
| CH2S3_2CH3S | | CH2S3_2CH3S | | CH2S3_2CH3S | |
| CH2S | | CH2S | | CH2S | |
| C6HV | | C6HV | | C6HV | |
| CO2GPM | | CO2GPM | | CO2GPM | |
| N2GPM | | N2GPM | | N2GPM | |
| C1GPM | | C1GPM | | C1GPM | |
| C2GPM | | C2GPM | | C2GPM | |
| C3GPM | | C3GPM | | C3GPM | |
| ISOC4GPM | | ISOC4GPM | | ISOC4GPM | |
| NC4GPM | | NC4GPM | | NC4GPM | |
| ISOC5GPM | | ISOC5GPM | | ISOC5GPM | |
| NC5GPM | | NC5GPM | | NC5GPM | |
| C6_PLUSGPM | | C6_PLUSGPM | | C6_PLUSGPM | |

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 samples below all show water with low TDS.

| Well Name | API |
|-------------|------------|
| F J TITT 2A | 3004522914 |

| FRC Offset | | PC Offset | | MV Offset | |
|----------------------|-------------|----------------------|-----------------|----------------------|--------------|
| API | 3004534893 | API | 3004520704 | API | 3004524073 |
| Property | LESTER 100S | Property | BRUINGTON SRC 3 | Property | HEATON LS 6A |
| CationBarium | 24.7 | CationBarium | 0 | CationBarium | 0.2 |
| CationBoron | | CationBoron | | CationBoron | |
| CationCalcium | 24.04 | CationCalcium | 562.8 | CationCalcium | 2.46 |
| CationIron | 191.93 | CationIron | 0.29 | CationIron | 20.3 |
| CationMagnesium | 14.64 | CationMagnesium | 234.24 | CationMagnesium | 0.65 |
| CationManganese | 4.74 | CationManganese | 2.18 | CationManganese | 0.16 |
| CationPhosphorus | | CationPhosphorus | | CationPhosphorus | 0.56 |
| CationPotassium | | CationPotassium | | CationPotassium | 20 |
| CationStrontium | 10.08 | CationStrontium | 12.92 | CationStrontium | 2 |
| CationSodium | 3810.42 | CationSodium | 10010.68 | CationSodium | 20 |
| CationSilica | | CationSilica | | CationSilica | 10.7 |
| CationZinc | | CationZinc | | CationZinc | 1.42 |
| CationAluminum | | CationAluminum | | CationAluminum | |
| CationCopper | | CationCopper | | CationCopper | |
| CationLead | | CationLead | | CationLead | 2 |
| CationLithium | | CationLithium | | CationLithium | |
| CationNickel | | CationNickel | | CationNickel | |
| CationCobalt | | CationCobalt | | CationCobalt | |
| CationChromium | | CationChromium | | CationChromium | |
| CationSilicon | | CationSilicon | | CationSilicon | 10 |
| CationMolybdenum | | CationMolybdenum | | CationMolybdenum | |
| AnionChloride | 4870.35 | AnionChloride | 15316.83 | AnionChloride | 20.6 |
| AnionCarbonate | 0 | AnionCarbonate | 0 | AnionCarbonate | 10 |
| AnionBicarbonate | | AnionBicarbonate | 366.6 | AnionBicarbonate | 45 |
| AnionBromide | | AnionBromide | | AnionBromide | |
| AnionFluoride | | AnionFluoride | | AnionFluoride | |
| AnionHydroxyl | 0 | AnionHydroxyl | | AnionHydroxyl | 10 |
| AnionNitrate | | AnionNitrate | | AnionNitrate | |
| AnionPhosphate | | AnionPhosphate | | AnionPhosphate | 1.7 |
| AnionSulfate | 345 | AnionSulfate | 2200 | AnionSulfate | 24.9 |
| phField | 8.75 | phField | | phField | 6.96 |
| phCalculated | | phCalculated | 6.8 | phCalculated | 8.06 |
| TempField | 77 | TempField | | TempField | 52.1 |
| TempLab | | TempLab | | TempLab | |
| OtherFieldAlkalinity | | OtherFieldAlkalinity | | OtherFieldAlkalinity | 15 |
| OtherSpecificGravity | 1.01 | OtherSpecificGravity | 1.02 | OtherSpecificGravity | 1 |
| OtherTDS | 10409.48 | OtherTDS | 28693.62 | OtherTDS | 65 |
| OtherCaCO3 | | OtherCaCO3 | 2367.38 | OtherCaCO3 | 6.14 |
| OtherConductivity | 16264.81 | OtherConductivity | | OtherConductivity | |
| DissolvedCO2 | 24.65 | DissolvedCO2 | | DissolvedCO2 | 0 |
| DissolvedO2 | | DissolvedO2 | | DissolvedO2 | |
| DissolvedH2S | 24.65 | DissolvedH2S | 0 | DissolvedH2S | |
| GasPressure | 75 | GasPressure | | GasPressure | |
| GasCO2 | 0 | GasCO2 | | GasCO2 | |
| GasCO2PP | 0 | GasCO2PP | | GasCO2PP | |
| GasH2S | | GasH2S | | GasH2S | |
| GasH2SPP | 0 | GasH2SPP | | GasH2SPP | |
| PitzerCaCO3_70 | 0.84 | PitzerCaCO3_70 | | PitzerCaCO3_70 | |
| PitzerBaSO4_70 | 2.63 | PitzerBaSO4_70 | | PitzerBaSO4_70 | |
| PitzerCaSO4_70 | -2.25 | PitzerCaSO4_70 | | PitzerCaSO4_70 | |
| PitzerSrSO4_70 | -0.92 | PitzerSrSO4_70 | | PitzerSrSO4_70 | |
| PitzerFeCO3_70 | | PitzerFeCO3_70 | | PitzerFeCO3_70 | |
| PitzerCaCO3_220 | 1.74 | PitzerCaCO3_220 | | PitzerCaCO3_220 | |
| PitzerBaSO4_220 | 2.02 | PitzerBaSO4_220 | | PitzerBaSO4_220 | |
| PitzerCaSO4_220 | -2.2 | PitzerCaSO4_220 | | PitzerCaSO4_220 | |
| PitzerSrSO4_220 | -0.8 | PitzerSrSO4_220 | | PitzerSrSO4_220 | |
| PitzerFeCO3_220 | | PitzerFeCO3_220 | | PitzerFeCO3_220 | |

| | | |
|-----------------------------------|---|--|
| Well Name: F J TITT | Well Location: T31N / R11W / SEC 35 / SWSE / 36.85049 / -107.95601 | County or Parish/State: SAN JUAN / NM |
| Well Number: 2A | Type of Well: CONVENTIONAL GAS WELL | Allottee or Tribe Name: |
| Lease Number: NMSF078115 | Unit or CA Name: ALSTON | Unit or CA Number: NMNM73125 |
| US Well Number: 3004522914 | Well Status: Producing Gas Well | Operator: HILCORP ENERGY COMPANY |

Notice of Intent

Sundry ID: 2769047

Type of Submission: Notice of Intent

Type of Action: Recompletion

Date Sundry Submitted: 01/10/2024

Time Sundry Submitted: 01:50

Date proposed operation will begin: 04/01/2024

Procedure Description: Hilcorp Energy Company requests permission to recomplete the subject well in the Fruitland Coal formation and downhole commingle with the existing Mesaverde/Pictured Cliffs formations. Please see the attached procedure, current and proposed wellbore diagram, plat and natural gas management plan. A closed loop system will be used. Hilcorp will contact the FFO Surface group within 90 days after the well has been recompleted, before any interim reclamation work to conduct the onsite. A reclamation plan will be submitted after the onsite. **The FRC production will be reported under existing CA NMNM-073125 covering S/2 Sec. 35, T31N, R11W.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

F_J_Titt_2A_UPE_Coal_RC_NOI_20240110134932.pdf

Well Name: F J TITT

Well Location: T31N / R11W / SEC 35 /
SWSE / 36.85049 / -107.95601

County or Parish/State: SAN
JUAN / NM

Well Number: 2A

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMSF078115

Unit or CA Name: ALSTON

Unit or CA Number:
NMNM73125

US Well Number: 3004522914

Well Status: Producing Gas Well

Operator: HILCORP ENERGY
COMPANY

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: CHERYLENE WESTON

Signed on: JAN 11, 2024 03:25 PM

Name: HILCORP ENERGY COMPANY

Title: Operations/Regulatory Tech - Sr

Street Address: 1111 TRAVIS STREET

City: HOUSTON

State: TX

Phone: (713) 289-2615

Email address: CWESTON@HILCORP.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: MATTHEW H KADE

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647736

BLM POC Email Address: MKADE@BLM.GOV

Disposition: Approved

Disposition Date: 01/12/2024

Signature: Matthew Kade

F J Titt #2A

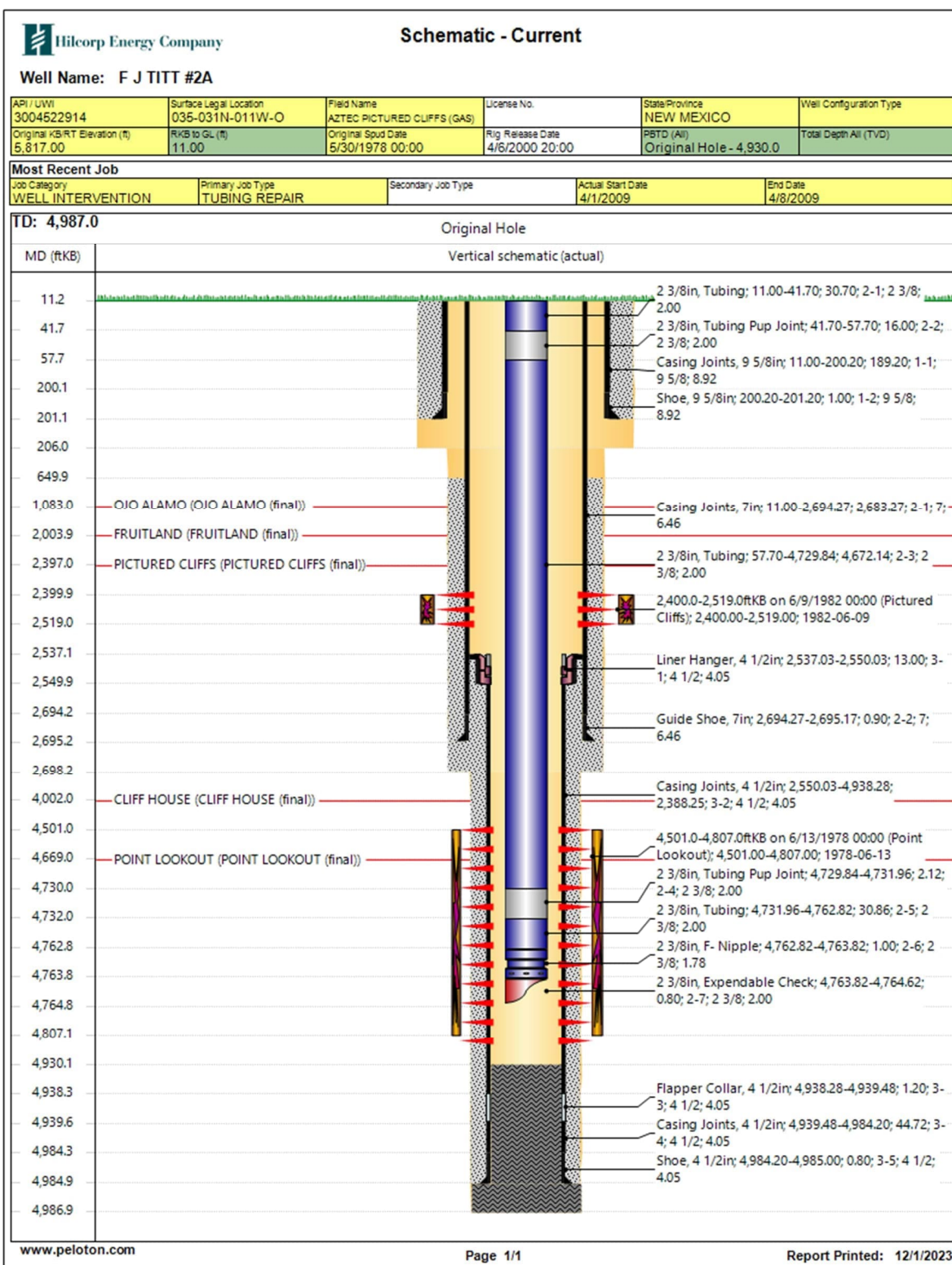
API#: 3004522914

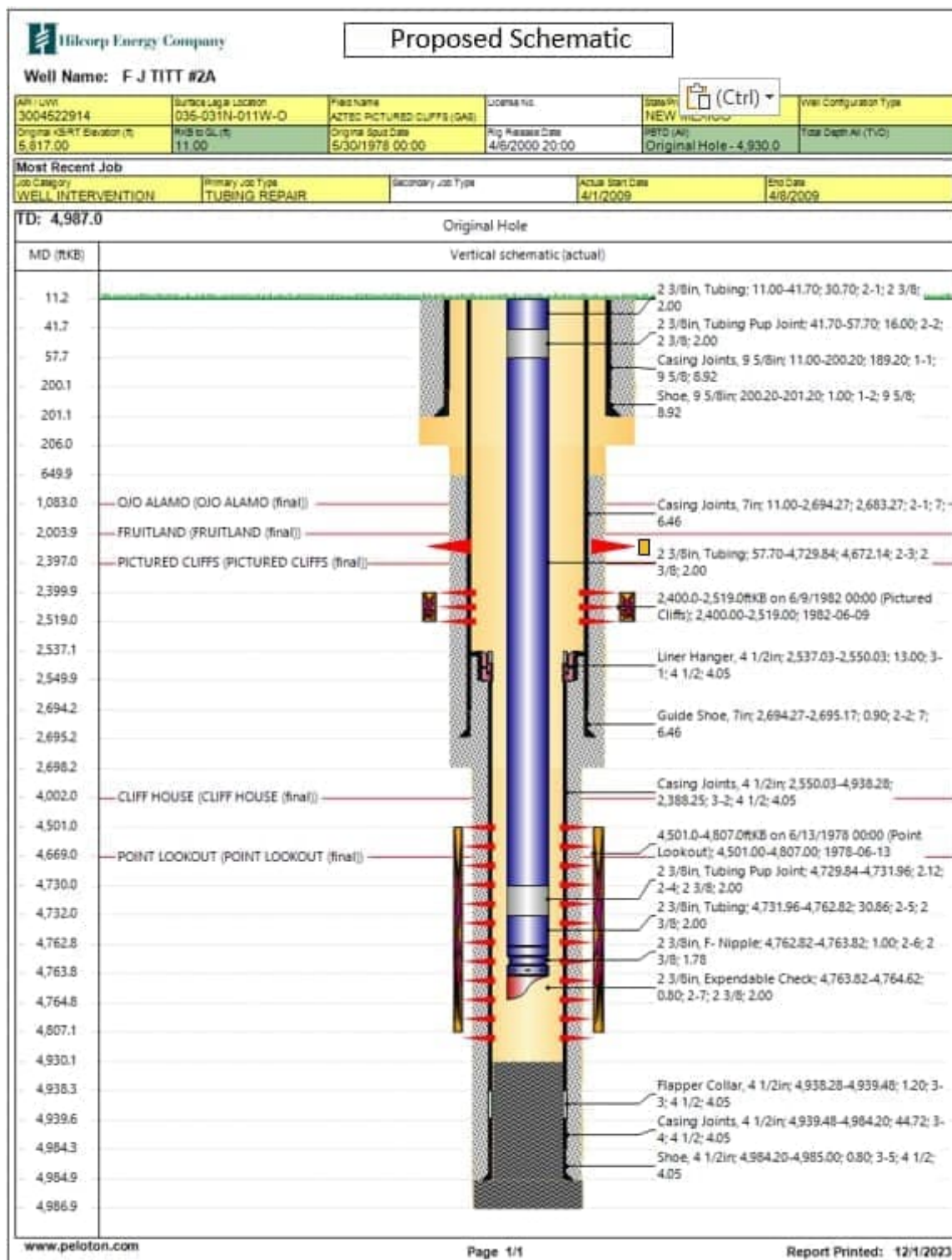
Fruitland Coal Recompletion Procedure

12/1/2023

Procedure:

1. MIRU PU and associated equipment. Kill well and NDWH.
2. NUBOP and unseat tubing, tag for fill and lay down 2 3/8" string
3. Set 7" CIBP at +/-2397' to isolate existing PC and MV completion
4. RU wellcheck and MIT wellbore to 500 PSI
5. Run CBL from CIBP to surface.
6. PU 7" frac packer and frac string, RIH and set packer at +/-1990'
7. Pressure test frac string to 5000 PSI
8. MIRU frac spread.
9. Perforate and frac the Fruitland Coal from 2004' to 2397'.
10. MI flow back and flow well to relieve pressure if needed.
11. MIRU service rig.
12. Test BOP's.
13. POOH with frac string and packer.
14. When water and sand rates are acceptable, flow test the intervals.
15. Make up 7" mill and clean out.
16. TIH and land 2-3/8" production tubing.
17. ND BOP's, NU production tree.
18. RDMO service rig & turn well over to production.





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 355335

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|-------------------------------|--|--|
| 1. API Number 30-045-22914 | 2. Pool Code 71629 | 3. Pool Name BASIN FRUITLAND COAL (GAS) |
| 4. Property Code 319359 | 5. Property Name F J TITT | 6. Well No. 002A |
| 7. OGRID No. 372171 | 8. Operator Name HILCORP ENERGY COMPANY | 9. Elevation 5806 |

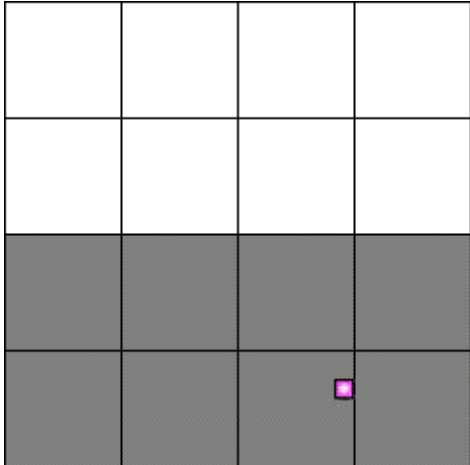
10. Surface Location

| | | | | | | | | | |
|---------------|---------------|-----------------|--------------|---------|------------------|---------------|-------------------|---------------|--------------------|
| UL - Lot O | Section 35 | Township 31N | Range 11W | Lot Idn | Feet From 910 | N/S Line S | Feet From 1460 | E/W Line E | 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 - S/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

| | |
|---|--|
|  | <p style="text-align: center;">OPERATOR CERTIFICATION</p> <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>Cherylene Weston</i> Title: Cherylene Weston Date: 12/7/2023</p> <hr/> <p style="text-align: center;">SURVEYOR CERTIFICATION</p> <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 B. Kerr, Jr. Date of Survey: 12/15/1977 Certificate Number: 3950</p> |
|---|--|

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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Hilcorp Energy Company **OGRID:** 372171 **Date:** 01 / 09 / 2024

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name | API | ULSTR | Footages | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|-------------|------------|--------------|-------------------|-----------------------|-----------------------|----------------------------------|
| F J Titt 2A | 3004522914 | O-35-31N-11W | 910 FSL, 1460 FEL | 0 bbl/d | 136 mcf/d | 3 bbl/d |
| | | | | | | |

IV. Central Delivery Point Name: Ignacio Processing Plant [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name | API | Spud Date | TD Reached Date | Completion Commencement Date | Initial Flow Back Date | First Production Date |
|-------------|------------|-----------|-----------------|------------------------------|------------------------|-----------------------|
| F J Titt 2A | 3004522914 | | | | | <u>2024</u> |
| | | | | | | |

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

| Well | API | Anticipated Average Natural Gas Rate MCF/D | Anticipated Volume of Natural Gas for the First Year MCF |
|------|-----|--|--|
| | | | |
| | | | |

X. Natural Gas Gathering System (NGGS):

| Operator | System | ULSTR of Tie-in | Anticipated Gathering Start Date | Available Maximum Daily Capacity of System Segment Tie-in |
|----------|--------|-----------------|----------------------------------|---|
| | | | | |
| | | | | |

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

| | |
|--|--------------------------------|
| Signature: | <i>Cherylene Weston</i> |
| Printed Name: | Cherylene Weston |
| Title: | Operations/Regulatory Tech-Sr. |
| E-mail Address: | cweston@hilcorp.com |
| Date: | 01/09/2024 |
| Phone: | 713-289-2615 |
| OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form) | |
| Approved By: | |
| Title: | |
| Approval Date: | |
| Conditions of Approval: | |

VI. Separation Equipment:

Hilcorp Energy Company (HEC or Operator) production facilities include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the targeted pool of our recomple project. HEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the recomple to optimize gas capture and send gas to sales or flare based on analytical composition. HEC operates facilities that are typically one-well facilities. Production separation equipment is upgraded prior to well being completed, if determined to be undersized or inadequate. This equipment is already on-site and tied into our sales gas lines prior to the recomple operations.

VII. Operational Practices:

1. Subsection (A) Venting and Flaring of Natural Gas
 - HEC understands the requirements of NMAC 19.15.27.8 which outlines that the venting and flaring of natural gas during drilling, completion or production operations that constitutes waste as defined in 19.15.2 are prohibited.
2. Subsection (B) Venting and Flaring during drilling operations
 - This gas capture plan isn't for a well being drilled.
3. Subsection (C) Venting and flaring during completion or recompletion
 - Flowlines will be routed for flowback fluids into a completion or storage tank and if feasible under well conditions, flare rather than vent and commence operation of a separator as soon as it is technically feasible for a separator to function.
 - At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.
4. Subsection (D) Venting and flaring during production operations
 - At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.
 - Monitor manual liquid unloading for wells on-site or in close proximity (<30 minutes' drive time), take reasonable actions to achieve a stabilized rate and pressure at the earliest practical time, and take reasonable actions to minimize venting to the maximum extent practicable.
 - HEC will not vent or flare except during the approved activities listed in NMAC 19.15.27.8 (D) 1-4.
5. Subsection (E) Performance standards
 - All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste.
 - If a flare is utilized during production operations it will have a continuous pilot and is located more than 100 feet from any known well or storage tanks.
 - At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.

6. Subsection (F) Measurement or estimation of vented and flared natural gas
 - Measurement equipment is installed to measure the volume of natural gas flared from process piping.
 - When measurement isn't practicable, estimation of vented and flared natural gas will be completed as noted in 19.15.27.8 (F) 5-6.

VIII. Best Management Practices:

1. Operator has adequate storage and takeaway capacity for wells it chooses to recomplete as the flowlines at the sites are already in place and tied into a gathering system.
2. Operator will flare rather than vent vessel blowdown gas when technically feasible during active and/or planned maintenance to equipment on-site.
3. Operator combusts natural gas that would otherwise be vented or flared, when technically feasible.
4. Operator will shut in wells in the event of a takeaway disruption, emergency situation, or other operations where venting or flaring may occur due to equipment failures.

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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District III
1000 Rio Brazos Rd., Aztec, NM 87410
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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 303090

CONDITIONS

| | |
|--|---|
| Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002 | OGRID: 372171 |
| | Action Number: 303090 |
| | Action Type: [C-103] NOI Recompletion (C-103E) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|--|----------------|
| dmcclure | Notify NMOCD 24 Hours Prior to beginning operations. | 4/15/2024 |
| dmcclure | DHC required | 4/15/2024 |
| dmcclure | All conducted logs shall be submitted to the Division as a [UF-WL] EP Well Log Submission (WellLog). | 4/15/2024 |
| dmcclure | The appropriate compliance officer supervisor shall be consulted and remedial action conducted as directed if the cement sheath around the casing is not adequate to protect the casing and isolate strata from: (a) the uppermost perforation in each added pool to at least 150 feet above that perforation; and (b) the lowermost perforation in each added pool to at least 100 feet below that perforation. | 4/15/2024 |



April 15, 2024

**New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505**

**Re: C-107A (Downhole Commingle)
FJ Titt 2A
API No. 30-045-22914
O-35, T31N-R11W
San Juan County, NM**

Gentlemen:

Concerning Hilcorp Energy Company's C-107A application to downhole commingle production in the subject well, this letter serves to confirm the following:

All working, royalty and overriding royalty interests are identical between the Blanco Mesaverde (Pool Code: 72319), Aztec Pictured Cliffs (Pool Code: 71280) and Basin Fruitland Coal (Pool Code: 71629) in the spacing units dedicated to these formations. Therefore, no notice to interest owners is required.

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

A handwritten signature in blue ink, appearing to read 'Carson Parker Rice', is written over a horizontal line.

Carson Parker Rice
Landman – San Juan Basin
Hilcorp Energy Company
1111 Travis Street
Houston, Texas 77002
713-757-7108 Direct
Email: carice@hilcorp.com

From: [McClure, Dean, EMNRD](#) on behalf of [Engineer, OCD, EMNRD](#)
To: [Cheryl Weston](#); [Mandi Walker](#)
Cc: [McClure, Dean, EMNRD](#); [Lowe, Leonard, EMNRD](#); [Rikala, Ward, EMNRD](#); [Wrinkle, Justin, EMNRD](#); [Powell, Brandon, EMNRD](#); [Paradis, Kyle O](#); dmankiew@blm.gov
Subject: Approved Administrative Order DHC-5382
Date: Thursday, May 23, 2024 1:07:04 PM
Attachments: [DHC5382 Order.pdf](#)

NMOCD has issued Administrative Order DHC-5382 which authorizes Hilcorp Energy Company (372171) to downhole commingle production within the following well:

Well Name: **F J Titt #2A**
Well API: **30-045-22914**

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.

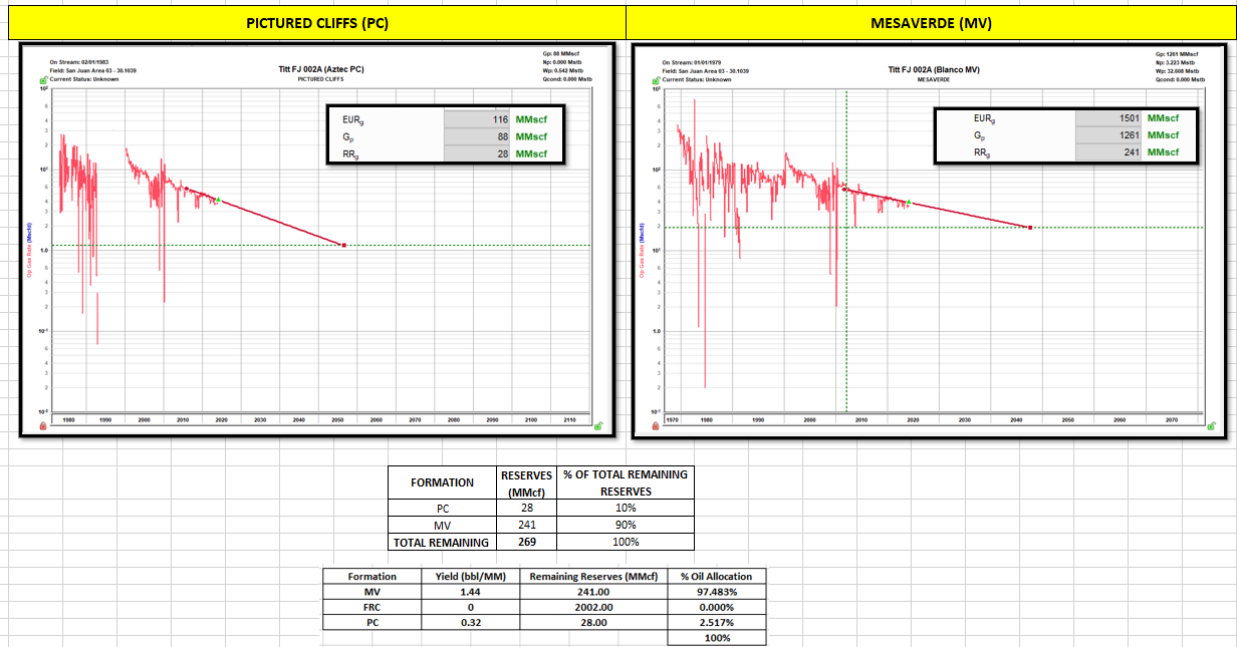
Dean McClure
Petroleum Engineer, Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
(505) 469-8211

From: Griffin Selby
To: McClure, Dean, EMNRD; Mandi Walker; Lowe, Leonard, EMNRD
Cc: Cheryl Weston
Subject: RE: [EXTERNAL] Action ID: 335315; DHC-5382
Date: Tuesday, May 21, 2024 6:47:02 AM
Attachments: image001.png
image002.png
image003.png

Dean,

Sorry for all the back and forth and confusion, this was all driven by two compounding errors in the units being used on reserves (BCF being used for the PC reserves vs MMcf in the MV). You are correct on the split, and I added a simplified look with an updated allocation table to help clarify this.

Thanks for the patience and helping us work through/catching those mistakes. Please reach out with any more questions.



Office: 346.237.2177
mwalker@hilcorp.com

From: Griffin Selby <Griffin.Selby@hilcorp.com>
Sent: Monday, May 20, 2024 10:44 AM
To: Cheryl Weston <cweston@hilcorp.com>; Jackson Lancaster <jackson.lancaster@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>
Subject: RE: [EXTERNAL] Action ID: 335315; DHC-5382

Cheryl,

Please see my responses to Dean's questions below in **red**. Thanks and let me know if there is anything else I need to provide.

Please provide additional information regarding the following:

- From the fixed oil percentage table, it appears that Hilcorp is stating that there is no remaining gas within the PC. However, the PC decline curve shows otherwise. Please provide either an amended decline curve and statement regarding PC having no remaining gas and the reason that Hilcorp wishes to leave the perforations open, or else provide an amended allocation table for oil and provide a gas allocation table which depicts Hilcorp's proposed allocation between the PC and MC.

This appears to be a rounding error – the PC has reserves remaining, and the value seemed to be cut off as all the values show no decimal places. The table is reshown below with decimal places and a value shown for the PC that matches the typecurve shown. Also, can we please clarify what is being referred to by the proposed allocation the PC & MC? The only formations existing in this wellbore are the PC and MV, with the added zone being the FC. If MC refers to the MV then no issues, just want to make sure we are submitting all the requested information correctly.

| Formation | Yield (bbl/MM) | Remaining Reserves (MMcf) | % Oil Allocation |
|-----------|----------------|---------------------------|------------------|
| MV | 1.44 | 241.00 | 99.974% |
| FRC | 0 | 2002.00 | 0.000% |
| PC | 0.32 | 0.28 | 0.026% |
| | | | 100% |

- Please provide an amended table that depicts the wells used to determine the BHP of the pools that includes the correct API numbers for the used wells.

This appears to be a typo. A "6" was missing from the end of the API number of the Pierce SRC 2C. I verified that that all API numbers are correct. Table with the "6" added to the API number for the Pierce SRC 2C below:

| List of wells used to calculate BHPs for the | | |
|--|---------------|-----|
| 3004534893 | LESTER 100S | FRC |
| 3004534918 | WILMUTH 100 | PC |
| 3004530056 | PIERCE SRC 2C | MV |

- Please provide the quantity of H2S for each of the pools.

H2S quantity for all pools (FC, MV, PC) is zero.

From: Cheryl Weston <cweston@hilcorp.com>
Sent: Wednesday, May 15, 2024 7:57 PM
To: Griffin Selby <Griffin.Selby@hilcorp.com>; Jackson Lancaster <jackson.lancaster@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>
Subject: FW: [EXTERNAL] Action ID: 335315; DHC-5382

Griffin,

Please provide additional information requested below.

Thanks,
Cheryl

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Wednesday, May 15, 2024 5:56 PM
To: Cheryl Weston <cweston@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>
Cc: Lowe, Leonard, EMNRD <Leonard.Lowe@emnrd.nm.gov>
Subject: [EXTERNAL] Action ID: 335315; DHC-5382

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

To whom it may concern (c/o Cheryl Weston for Hilcorp Energy Company),

The Division is reviewing the following application:

| | |
|-----------|---------------------------------|
| Action ID | 335315 |
| Admin No. | DHC-5382 |
| Applicant | Hilcorp Energy Company (372171) |
| Title | F J Tiit #2A |
| Sub. Date | 4/19/2024 |

Please provide the following additional supplemental documents:

-

Please provide additional information regarding the following:

- From the fixed oil percentage table, it appears that Hilcorp is stating that there is no remaining gas within the PC. However, the PC decline curve shows otherwise. Please provide either an amended decline curve and statement regarding PC having no remaining gas and the reason that Hilcorp wishes to leave the perforations open, or else provide an amended allocation table for oil and provide a gas allocation table which depicts Hilcorp's proposed allocation between the PC and MC.
- Please provide an amended table that depicts the wells used to determine the BHP of the pools that includes the correct API numbers for the used wells.
- Please provide the quantity of H2S for each of the pools.

Additional notes:

-

All additional supplemental documents and information may be provided via email and should be done by replying to this email. The produced email chain will be uploaded to the file for this application.

Please note that failure to take steps to address each of the requests made in this email within 10 business days of receipt of this email may result in the Division rejecting the application requiring the submittal of a new application by the applicant once it is prepared to address each of the topics raised.

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

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**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-5382

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. 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

8. 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.
9. 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.
10. 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.

11. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.11(A)(8) NMAC.
12. 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. This Order supersedes Order DHC-2603.
3. 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);
 - b. two and five tenths percent (2.5%) shall be allocated to the AZTEC PICTURED CLIFFS (GAS) pool (pool ID: 71280); and
 - c. ninety-seven and five tenths percent (97.5%) 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 AZTEC PICTURED CLIFFS (GAS) pool (pool ID: 71280); and
- b. the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

Until a different plan to allocate gas production is approved by OCD, of the projected gas production allocated to the current pools:

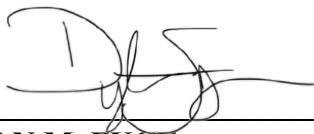
- a. ten percent (10%) shall be allocated to the AZTEC PICTURED CLIFFS (GAS) pool (pool ID: 71280); and
- b. ninety percent (90%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

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.

4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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).
10. 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**

A handwritten signature in black ink, appearing to read 'D. Fuge', is written over a horizontal line.

**DYLAN M. FUGE
DIRECTOR (ACTING)**

DATE: 5/23/24

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit A

| | | | |
|---|--|------------|---------------|
| Order: DHC-5382 | | | |
| Operator: Hilcorp Energy Company (372171) | | | |
| Well Name: F J Titt #2A | | | |
| Well API: 30-045-22914 | | | |
| Upper Zone | Pool Name: BASIN FRUITLAND COAL (GAS) | | |
| | Pool ID: 71629 | Current: | New: X |
| | Allocation: | Oil: 0.0% | Gas: subt |
| | | Top: 2,004 | Bottom: 2,397 |
| Intermediate Zone | Pool Name: AZTEC PICTURED CLIFFS (GAS) | | |
| | Pool ID: 71280 | Current: X | New: |
| | Allocation: | Oil: 2.5% | Gas: 10.0% |
| | | Top: 2,400 | Bottom: 2,519 |
| Bottom of Interval within 150% of Upper Zone's Top of Interval: YES | | | |
| Lower Zone | Pool Name: BLANCO-MESAVERDE (PRORATED GAS) | | |
| | Pool ID: 72319 | Current: X | New: |
| | Allocation: | Oil: 97.5% | Gas: 90.0% |
| | | Top: 4,501 | Bottom: 4,807 |
| Bottom of Interval within 150% of Upper Zone's Top of Interval: NO | | | |

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1625 N. French Dr., Hobbs, NM 88240
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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 335315

CONDITIONS

| | |
|--|--|
| Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002 | OGRID: 372171 |
| | Action Number: 335315 |
| | 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. | 5/23/2024 |