

Revised March 23, 2017

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: _____ 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

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.

 Print or Type Name

 Signature

 Date

 Phone Number

 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

San Juan 28-7 Unit

242

UL F – Sec. 18, T28N, R7W

Rio Arriba

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 372171 Property Code 318432 API No. 30-039-21093 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	OTERO CHACRA (GAS)	BLANCO MESAVERDE (PRORATED GAS)	BASIN DAKOTA (PRORATED GAS)
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	4400’ – 5100’ - Estimated	5100’- 6100’- Estimated	7755’- 7961’
Method of Production (Flowing or Artificial Lift)	NEW ZONE	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)	1270 psi	903 psi	1344 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1200	BTU 1250	BTU 1100
Producing, Shut-In or New Zone	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: N/A Rates:	Date: N/A Rates:	Date: 11/1/2021 Rates: 97 MCF – GAS 0 BBL – Oil 15 BBL - Water
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 attached	Oil Gas See attached	Oil Gas See attached

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: R-10476-B

- 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

Kandis Roland

TITLE

Operation/Regulatory Tech

DATE

2/10/2022

TYPE OR PRINT NAME

Kandis Roland

TELEPHONE NO. (713)

757-5246

E-MAIL ADDRESS

kroland@hilcorp.com

WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes C-128
Effective 1-1-65

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

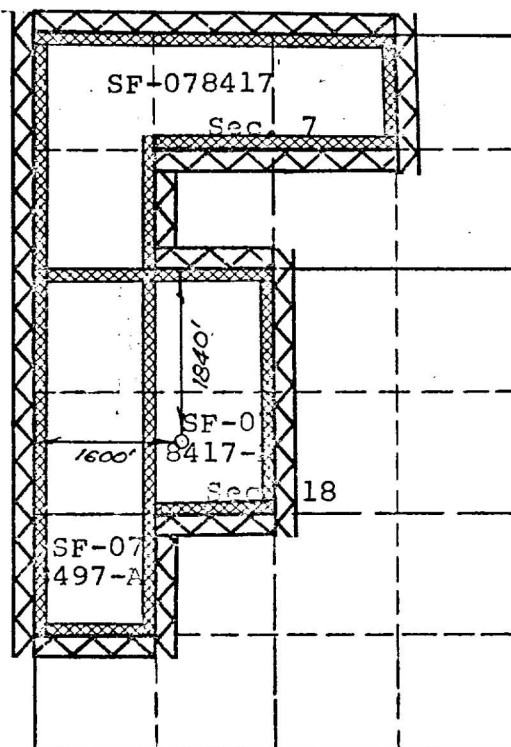
Operator EL PASO NATURAL GAS COMPANY		Lease SAN JUAN 28-7 UNIT (SF-078417-A)		Well No. 242
Unit Letter F	Section 18	Township 28-N	Range 7-W	County RIO ARriba
Actual Footage Location of Well: 1840 feet from the NORTH line and 1600 feet from the WEST line				
Ground Level Elev. 6862	Producing Formation DAKOTA	Pool BASIN DAKOTA	Dedicated Acreage: 331.11 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?

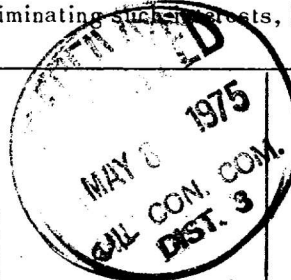
☒ Yes ☐ No If answer is "yes," type of consolidation Unitization

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.



Scale 2,000' = 1"



CERTIFICATION

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

Original Signed by

Name **D. G. Brisson**
 Position **Drilling Clerk**
 Company **El Paso Natural Gas Co.**
 Date **May 6, 1975**

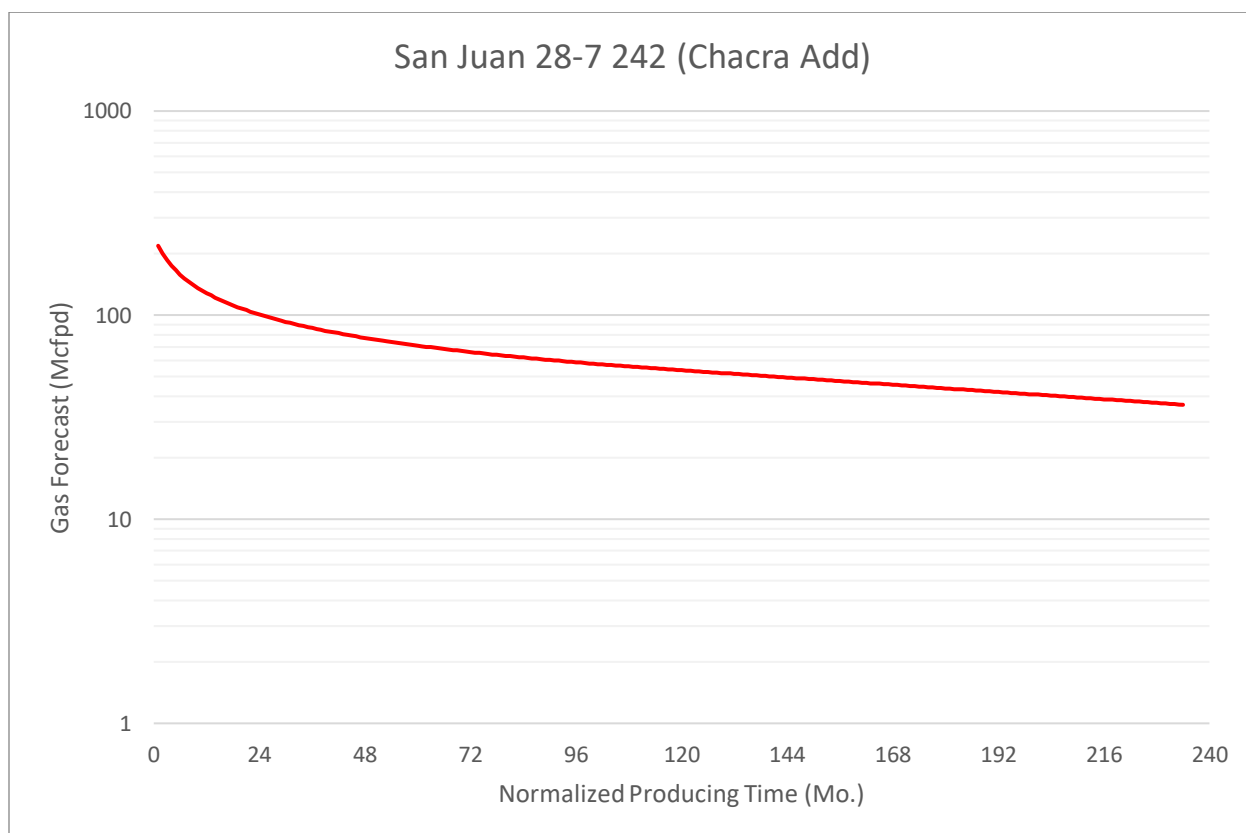
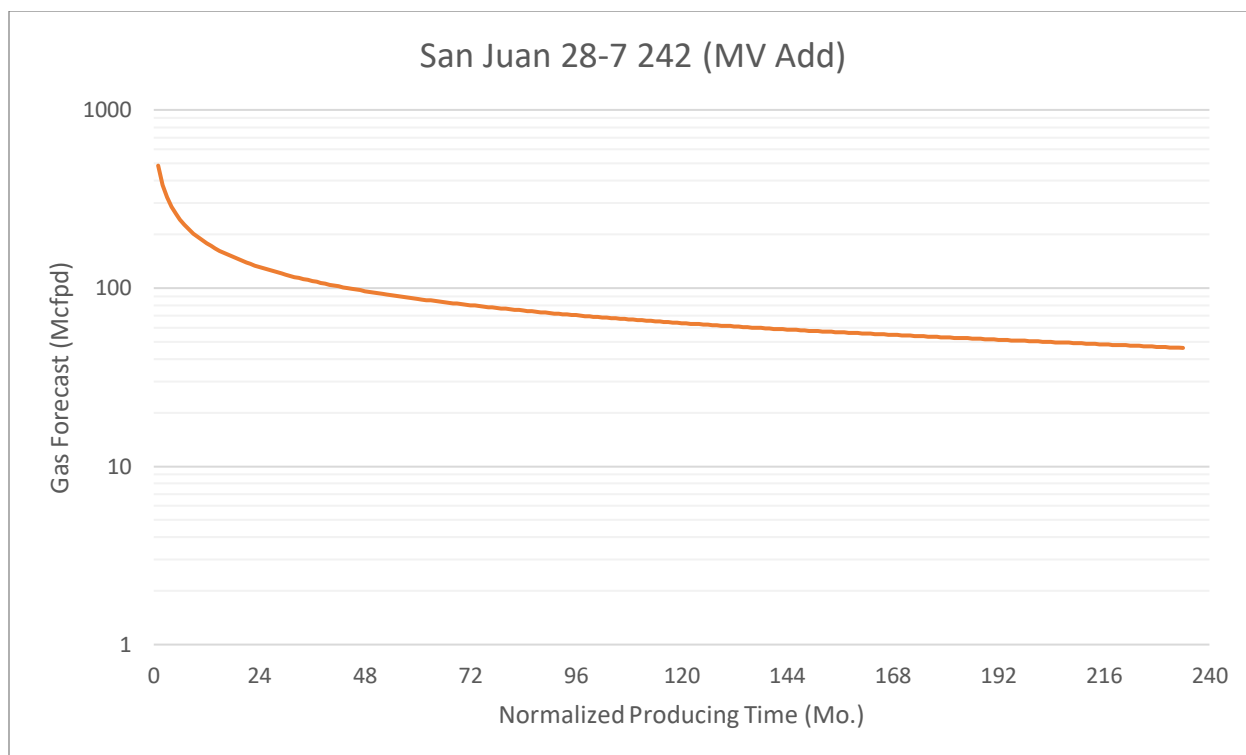
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
APRIL 17, 1975

Registered Professional Engineer
and/or Land Surveyor

[Signature]

Certificate No.
1760



The forecasts for Chacra and Mesaverde production have been generated using type curves of CH and MV gas production in the surrounding production trend.

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.

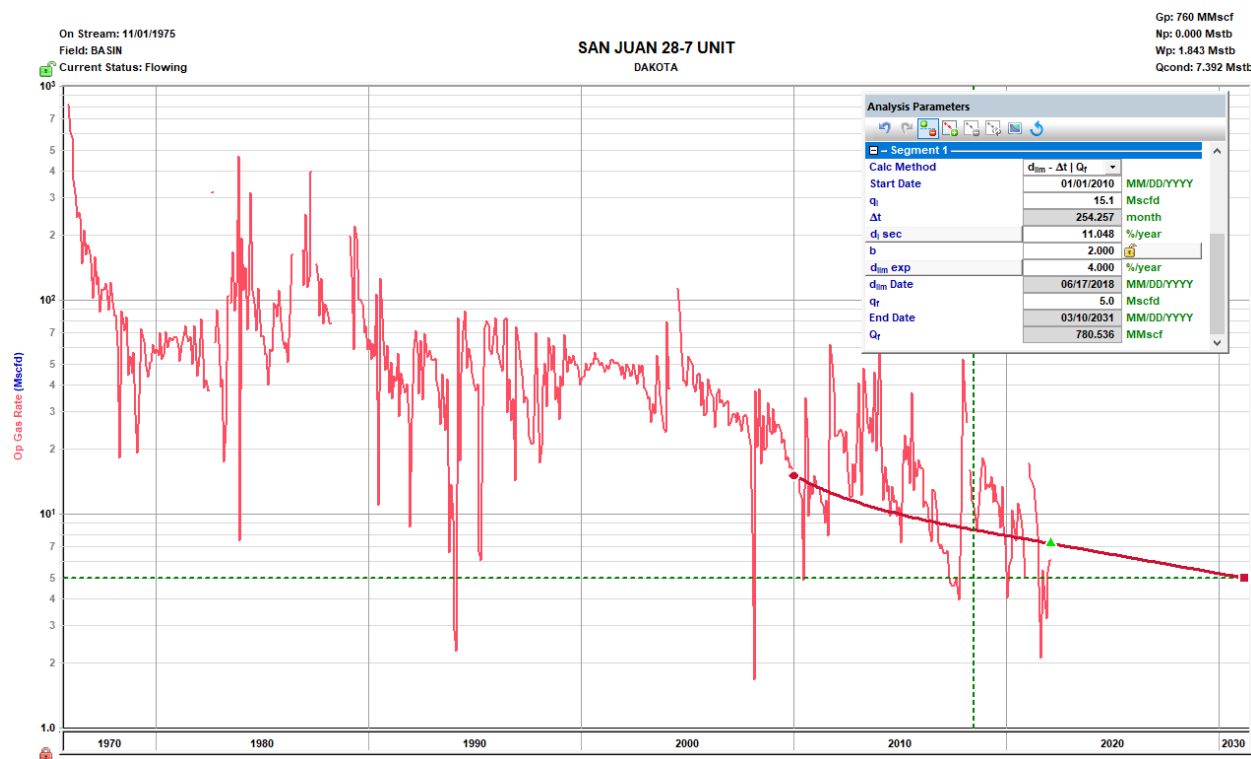
The BHPs of all zones, producing and non-producing, were estimated based upon basinwide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin. These models were constructed incorporating reservoir dynamics and physics,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

San Juan 28-7 Unit 242 – Production Allocation Method - Subtraction

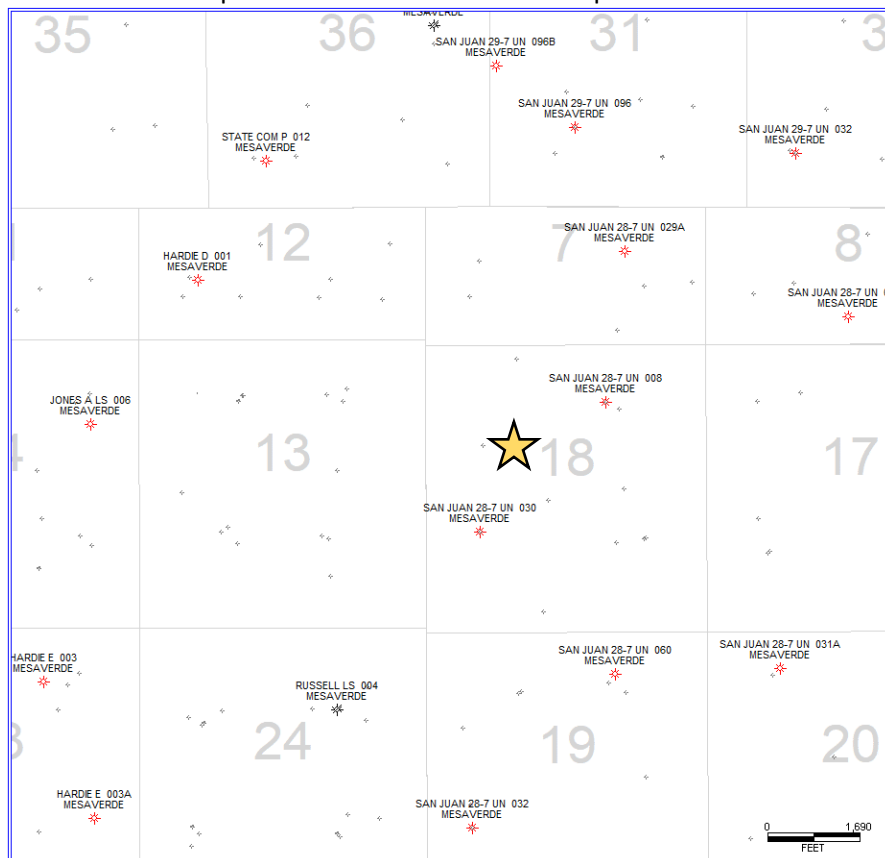
Gas Allocation:

Production for the downhole trimmingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Dakota and the added formations to be trimmingle is the Chacra and Mesaverde. 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 formations (MV/CH).

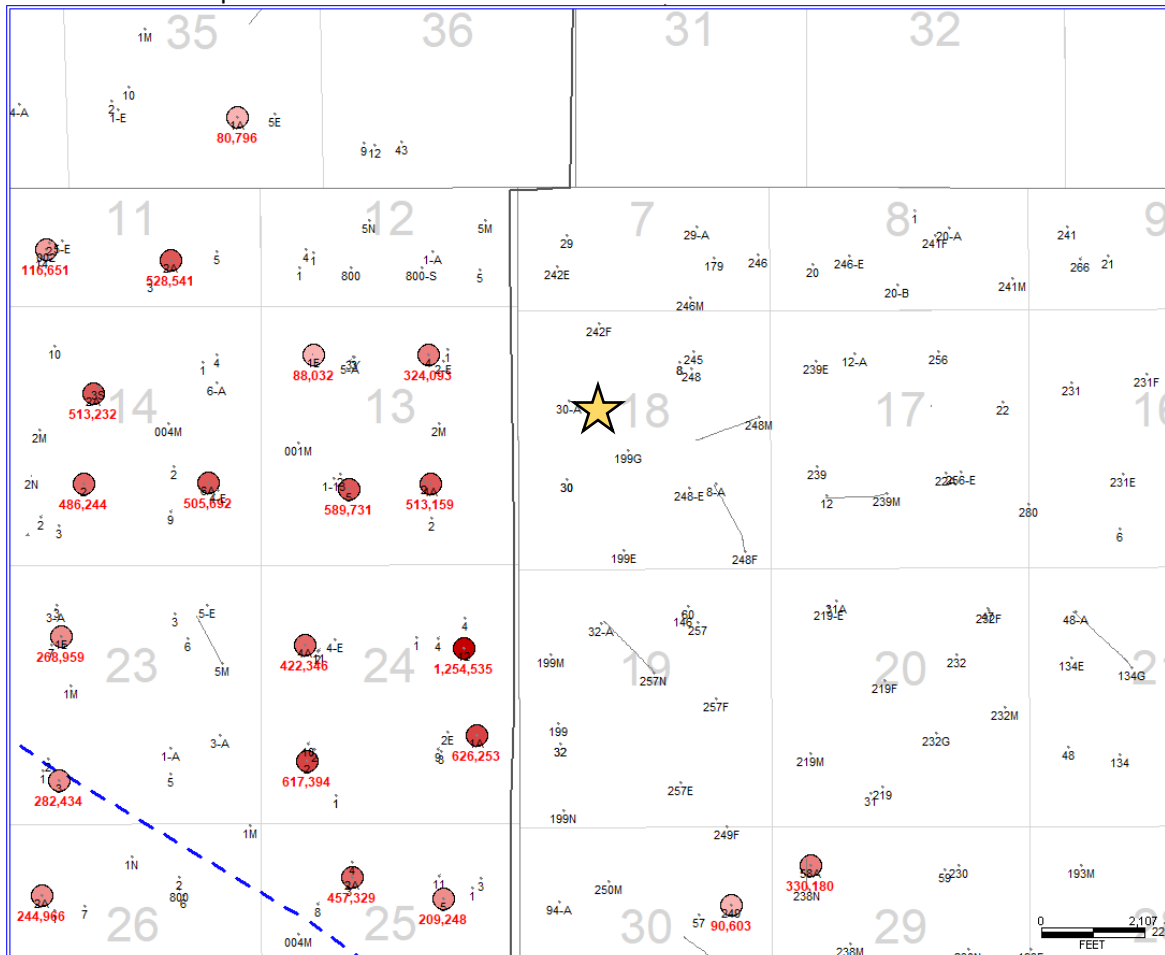
Historical offset wells will be used to create a fixed allocation split for the new formations (MV/CH). After 3 years production will stabilize. A production average will be gathered during the 4th year and will be utilized to create a fixed percentage based allocation.



Gas Allocation Map - Mesaverde Standalone Completions



Gas Allocation Map - Chacra Producers in SJ 28-7 242 Area

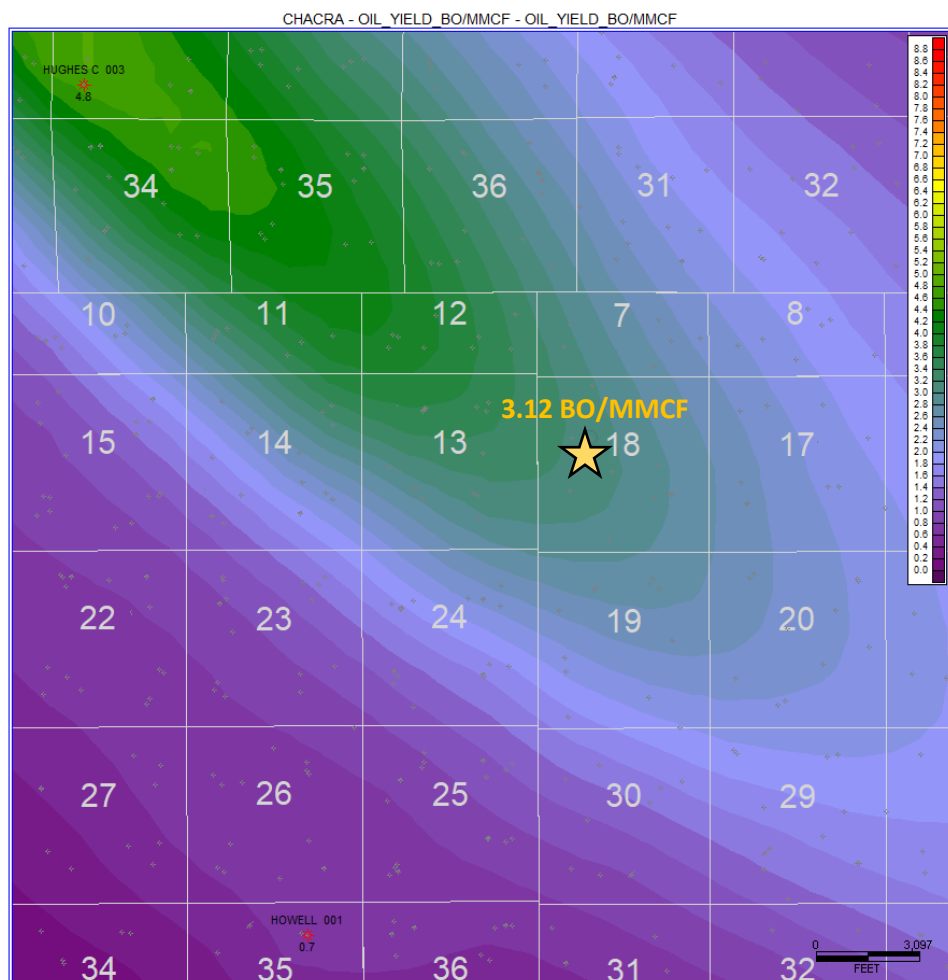


Oil Allocation:

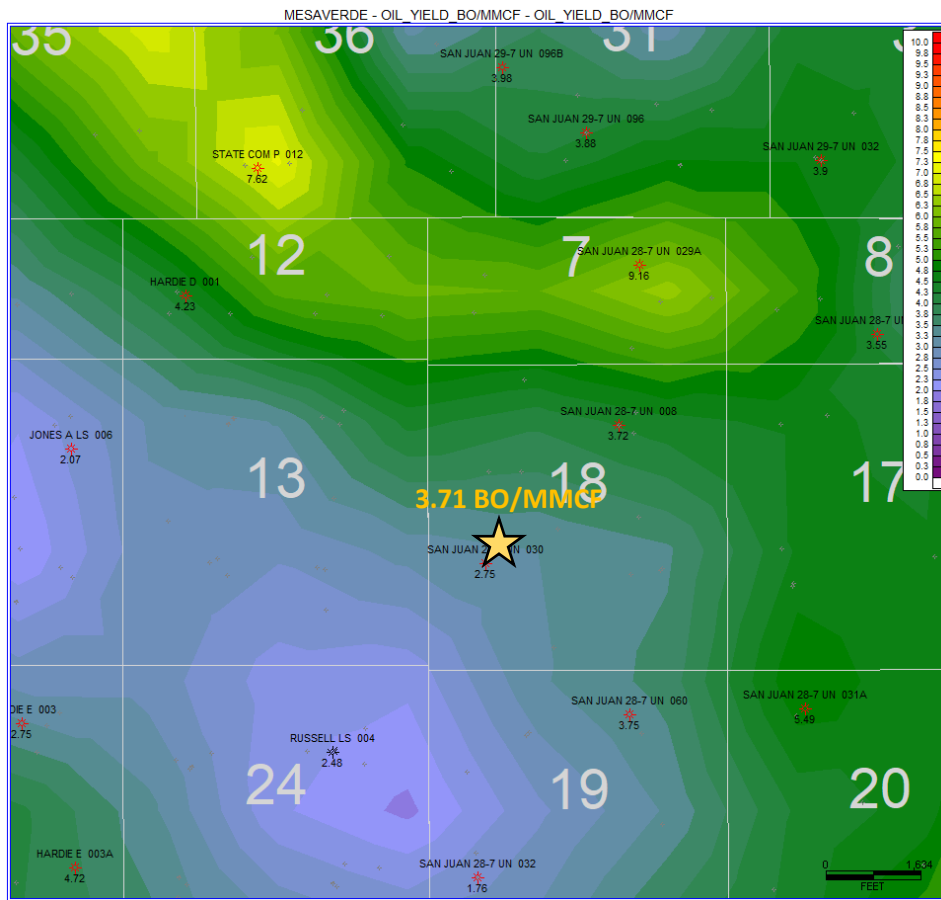
Oil production will be allocated based on average formation yields from offset wells and will be a fixed rate for 4 years.

After 4 years oil will be reevaluated and adjusted as needed based on average formation yields and new fixed gas allocations.

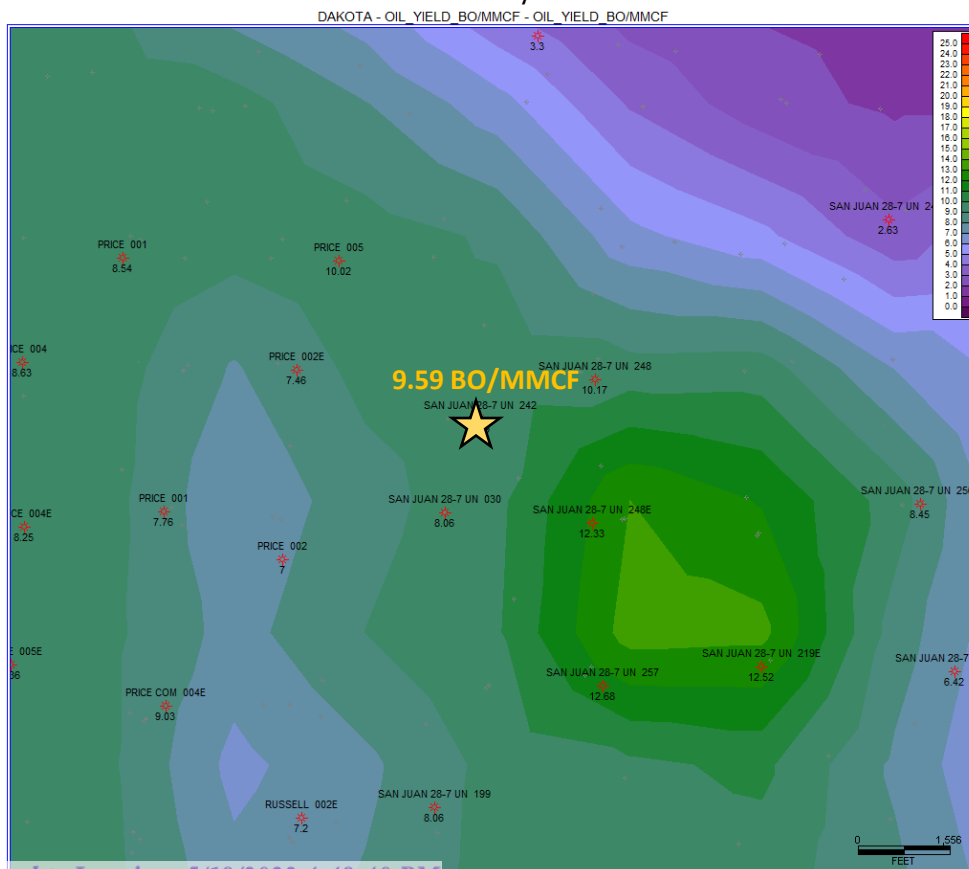
9- Section Area Map of Chacra Standalone Oil Yields
Sampled well to this map.



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



Well is a Dakota standalone - used actual oil yield





February 1, 2022

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

Re: C-107-A (Downhole Commingle)
San Juan 28-7 Unit 242
API No. 30-039-21093
F-18, T28N-R07W
Rio Arriba County, NM

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

Interest is not common between the formations listed below:

- Otero Chacra (Pool Code: 82329)
- Basin Dakota (Pool Code: 71599)
- Blanco Mesaverde (Pool Code: 72319)

Order No. R-10476-B waives the notice requirement and thus no notices will be sent.

The subject well is located within the bounds of a Federal Unit. Therefore, pursuant to Subsection C.(1) of 19.15.12.11 NMAC, a copy of the C-107-A has been sent to the Bureau of Land Management as of the date of this letter.

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

Well Name: SAN JUAN 28-7 UNIT	Well Location: T28N / R7W / SEC 18 / SENW / 36.663315 / -107.617432	County or Parish/State: RIO ARRIBA / NM
Well Number: 242	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078417A	Unit or CA Name: SAN JUAN 28-7 UNIT--DK	Unit or CA Number: NMNM78413C
US Well Number: 3003921093	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2652945

Type of Submission: Notice of Intent	Type of Action: Recompletion
Date Sundry Submitted: 01/18/2022	Time Sundry Submitted: 08:13
Date proposed operation will begin: 02/01/2022	

Procedure Description: Recomplete NOI was filed 6/6/2019 to recomplete in the Mesaverde and commingle with existing Dakota. Hilcorp Energy Company would like to revise the Recomplete NOI to include the Chacra. Hilcorp requests permission to recomplete the subject well in the Chacra/Mesaverde formations and downhole commingle with the existing Dakota. Please see the attached updated procedure, current and proposed wellbore diagram, plats and natural gas management plan. A closed loop system will be used. A pre-reclamation site visit was held on 1/14/2022 with Bob Switzer/BLM. The reclamation plan is attached.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- SJ_28_7_Unit_242_CH_C_102_20220118081029.pdf
- SJ_28_7_242_RC_NOI_20220118081029.pdf
- San_Juan_28_7_Unit_242_NGMP_20220118081030.pdf
- SJ_28_7_Unit_242_MV_C_102_20220118081029.pdf
- SAN_JUAN_28_7_242_Reclamation_Plan_20220118081029.pdf

Well Name: SAN JUAN 28-7 UNIT	Well Location: T28N / R7W / SEC 18 / SENW / 36.663315 / -107.617432	County or Parish/State: RIO ARriba / NM
Well Number: 242	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078417A	Unit or CA Name: SAN JUAN 28-7 UNIT--DK	Unit or CA Number: NMNM78413C
US Well Number: 3003921093	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Conditions of Approval

Specialist Review

2652945_RCMPLTN_SJ_28_7_UNIT_242_3003921093_KR_01272022_20220127155736.pdf

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: KANDIS ROLAND	Signed on: JAN 18, 2022 08:13 AM
Name: HILCORP ENERGY COMPANY	
Title: Operation Regulatory Tech	
Street Address: 382 Road 3100	
City: Farmington	State: NM
Phone: (505) 599-3400	
Email address: kroland@hilcorp.com	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5055647742	BLM POC Email Address: krennick@blm.gov
Disposition: Approved	Disposition Date: 01/27/2022
Signature: Kenneth Rennick	

San Juan 28-7 Unit #242

018-028N-007W-F

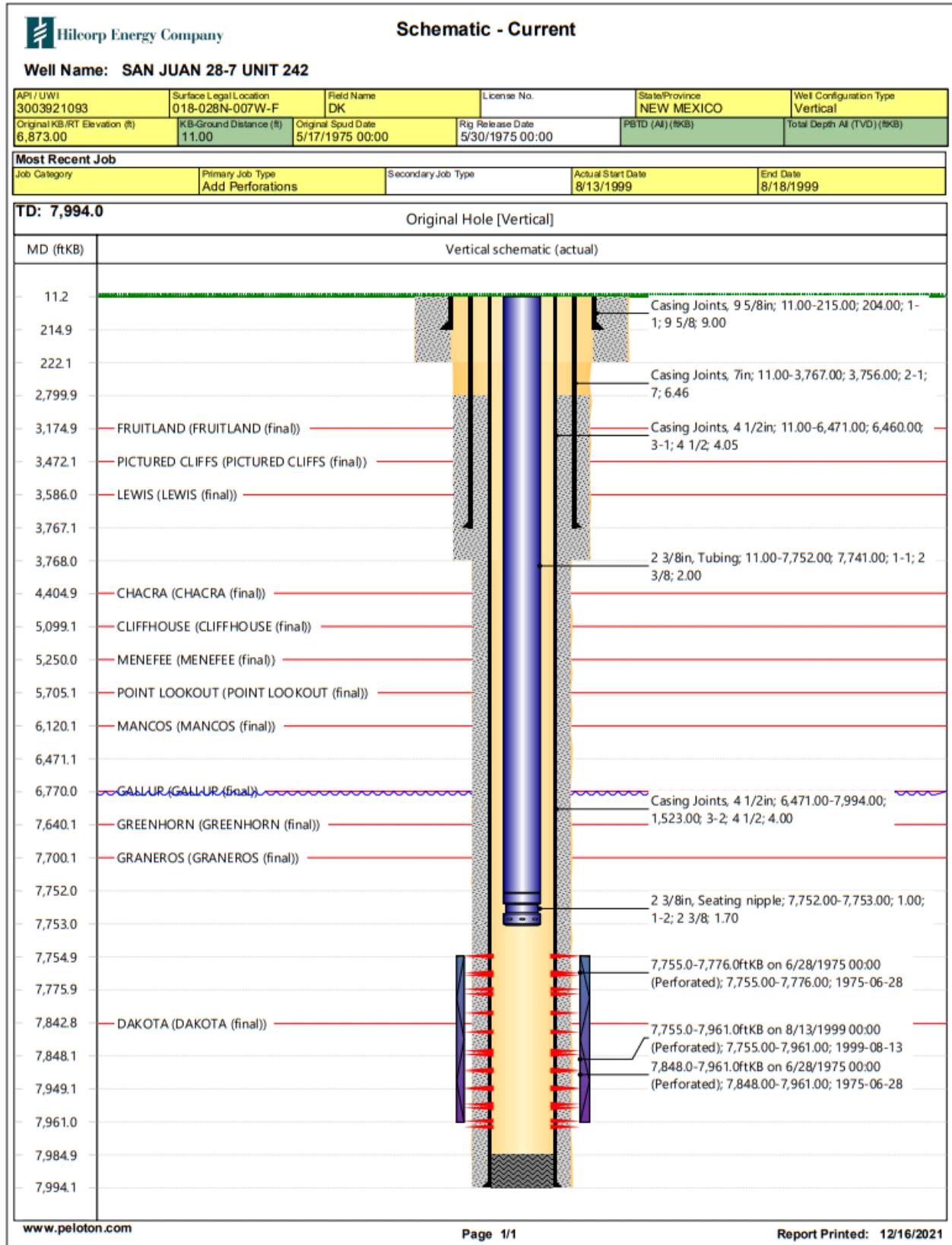
API#: 3003921093

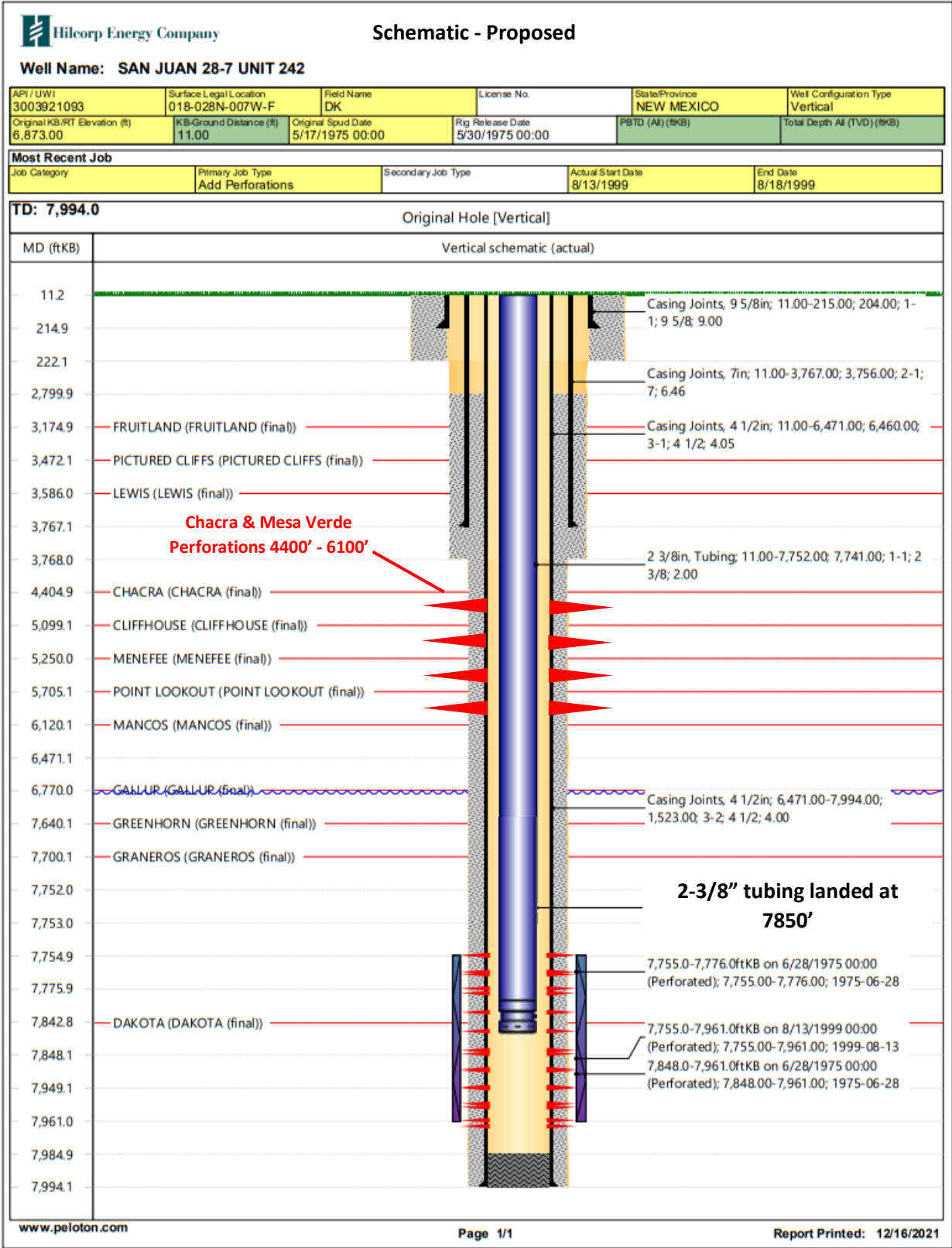
Mesaverde/Chacra Recompletion Procedure

12/16/2021

Procedure:

1. MIRU service rig and associated equipment.
2. Test BOP's
3. TOOH w/ 2-3/8" tubing currently set with EOT at 7,753'.
4. Set a CIBP to isolate the Dakota perforations @ +/- 7,705'.
5. Load the hole.
6. Temperature survey shows TOC at 2,800'.
7. Pressure test casing to maximum fracture pressure.
8. ND BOP's. NU frac stack and test same to maximum fracture pressure.
9. RDMO service rig.
10. MIRU frac spread.
11. Perforate and frac the Chacra and Mesa Verde from 4,400 to 6,100'. RDMO frac spread.
12. MIRU service rig.
13. Test BOP's.
14. PU mill and RIH to clean out to Mesa Verde isolation plug.
15. When water and sand rates are acceptable, flow test the Chacra.
16. Clean out to Dakota isolation plug.
17. When water and sand rates are acceptable, flow test the Mesa Verde to obtain a commingled rate.
18. Drill out Dakota isolation plug and TOOH.
19. TIH and land production tubing. Obtain a trimingled flow rate.
20. ND BOP's, NU production tree.
21. RDMO service rig & turn well over to production.





District I1625 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 268350

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21093	2. Pool Code 72319	3. Pool Name BLANCO-MESAVERDE (PRORATED GAS)
4. Property Code 318432	5. Property Name SAN JUAN 28 7 UNIT	6. Well No. 242
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6862

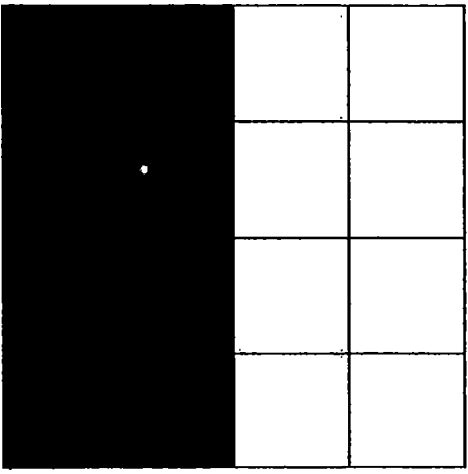
10. Surface Location

UL - Lot F	Section 18	Township 28N	Range 07W	Lot Idn	Feet From 1840	N/S Line N	Feet From 1600	E/W Line W	County RIO ARriba
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 304.76 - W/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, Operations/Regulatory Tech-Sr. Date: 06/06/2019</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: DAVID KILVEN Date of Survey: 4/17/1975 Certificate Number: 1760</p>
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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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1000 Rio Brazos Rd., Aztec, NM 87410
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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 306822

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21093	2. Pool Code 82329	3. Pool Name OTERO CHACRA (GAS)
4. Property Code 318432	5. Property Name SAN JUAN 28 7 UNIT	6. Well No. 242
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6862

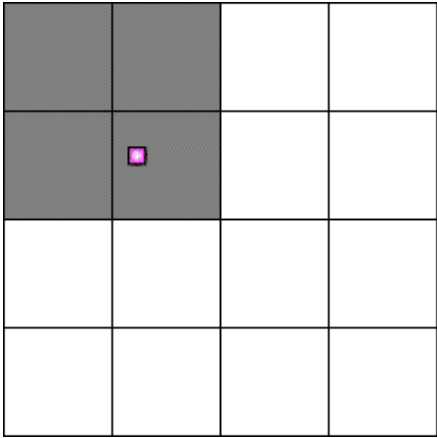
10. Surface Location

UL - Lot F	Section 18	Township 28N	Range 07W	Lot Idn	Feet From 1840	N/S Line N	Feet From 1600	E/W Line W	County RIO ARRIBA
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 152.27 NW/4			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: Kandis Roland Title: Regulatory Tech Date: 1/17/2022</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: David Kilven Date of Survey: 4/17/1975 Certificate Number: 1760</p>
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State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

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:** 1/17/2022

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	Anticipat ed Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
San Juan 28-7 Unit 242	3003921093	F-18-28N-7W	1840' FNL & 1600' FWL	2	680	7

IV. Central Delivery Point Name: Chaco 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
<u>San Juan 28-7 Unit 242</u>	<u>3003921093</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>Not Yet Scheduled</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 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>Kandis Roland</i>
Printed Name: Kandis Roland
Title: Operations/Regulatory Tech Sr.
E-mail Address: kroland@hilcorp.com
Date: 1/17/2022
Phone: 713-757-5246
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 recompleting project. HEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the recompleting 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 recompleting 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 recompleting
 - 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.

Hilcorp Energy
Recomplete Reclamation Plan
San Juan 28-7 Unit 242
API: 30-039-21093
T28N-R7W-Sec.18-F
LAT: 36.663388 LONG: -107.61733
Footage: 1840' FNL & 1600' FWL
Rio Arriba County, NM

1. PRE- RECLAMATION SITE INSPECTION

A pre-reclamation site inspection was completed with Bob Switzer from the BLM and Eufracio Trujillo, Hilcorp Energy SJ South Construction Foreman, on January 14, 2022.

2. LOCATION RECLAMATION PROCEDURE

1. Reclamation work will begin in spring period.
2. All trash and debris will be removed within a 25' buffer outside of the location disturbance during reclamation.
3. Brush hog location and fence off area for disturbance.
4. Reclaim all disturbed area being used for recompletion activities.
5. Reestablish teardrop on location.
6. Reclaim areas used to the locations to the West of pad as TUA's

3. SEEDING PROCEDURE

1. A Pinion/Juniper seed mix with some Sage will be used for all reclaimed and disturbed areas of the well pad(s) and lease road.
2. Drill seed will be done where applicable and all other disturbed areas will be broadcast seeded and harrowed. Broadcast seeding will be applied at a double the rate of seed.
3. Timing of the seeding will be when the ground is not frozen or saturated.

4. WEED MANAGEMENT

1. No action is required at this time for weed management, no noxious weeds were identified during this onsite.

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

AFMSS 2 Sundry ID 2652945

Attachment to notice of Intent for Recompletion Operations:

Well: San Juan 28-7 Unit 242

CONDITIONS OF APPROVAL

1. File a subsequent report detailing work completed with exact dates (month, day, year) within 30 days of completing operations.
2. File an updated completion report within AFMSS 2 with the location of the new perforations. For each new producing zone, update where the production will be reported. For example, if lease basis only input the lease for the production zone. If the production will be part of an agreement, input the agreement along with the lease.

K. Rennick 01/27/2022

Revised March 23, 2017

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: _____ **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

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.

 Print or Type Name

 Signature

 Signature

 Date

 Phone Number

 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

San Juan 28-7 Unit

242

UL F – Sec. 18, T28N, R7W

Rio Arriba

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 372171 Property Code 318432 API No. 30-039-21093 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	OTERO CHACRA (GAS)	BLANCO MESAVERDE (PRORATED GAS)	BASIN DAKOTA (PRORATED GAS)
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	4400’ – 5100’ - Estimated	5100’- 6100’- Estimated	7755’- 7961’
Method of Production (Flowing or Artificial Lift)	NEW ZONE	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)	1270 psi	903 psi	1344 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1200	BTU 1250	BTU 1100
Producing, Shut-In or New Zone	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: N/A Rates:	Date: N/A Rates:	Date: 11/1/2021 Rates: 97 MCF – GAS 0 BBL – Oil 15 BBL - Water
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 Will be supplied upon completion	Oil Gas Will be supplied upon completion	Oil Gas Will be supplied upon completion

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: R-10476-B

- 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

Kandis Roland

TITLE

Operation/Regulatory Tech

DATE

2/10/2022

TYPE OR PRINT NAME

Kandis Roland

TELEPHONE NO. (713)

757-5246

E-MAIL ADDRESS

kroland@hilcorp.com

WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes C-128
Effective 1-1-65

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

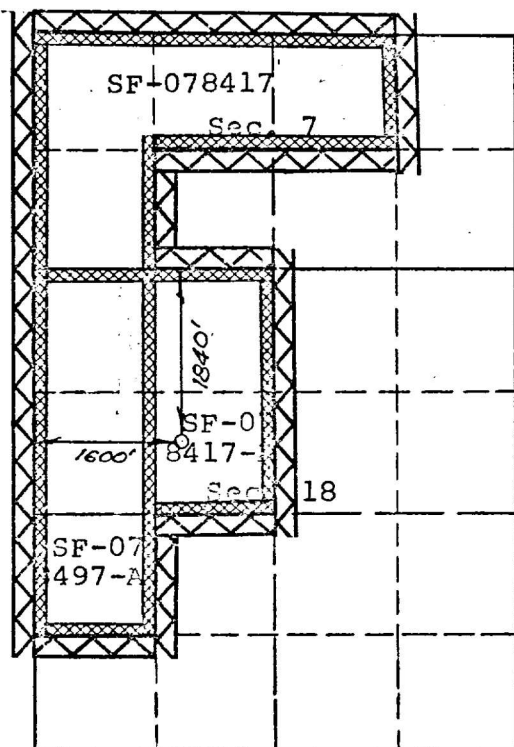
Operator EL PASO NATURAL GAS COMPANY		Lease SAN JUAN 28-7 UNIT (SF-078417-A)		Well No. 242
Unit Letter F	Section 18	Township 28-N	Range 7-W	County RIO ARriba
Actual Footage Location of Well: 1840 feet from the NORTH line and 1600 feet from the WEST line				
Ground Level Elev. 6862	Producing Formation DAKOTA	Pool BASIN DAKOTA	Dedicated Acreage: 331.11 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?

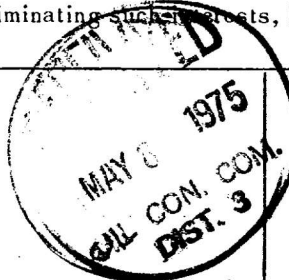
☒ Yes ☐ No If answer is "yes," type of consolidation Unitization

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.



Scale 2,000' = 1"



CERTIFICATION

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

Original Signed by

Name **D. G. Brisson**
 Position **Drilling Clerk**
 Company **El Paso Natural Gas Co.**
 Date **May 6, 1975**

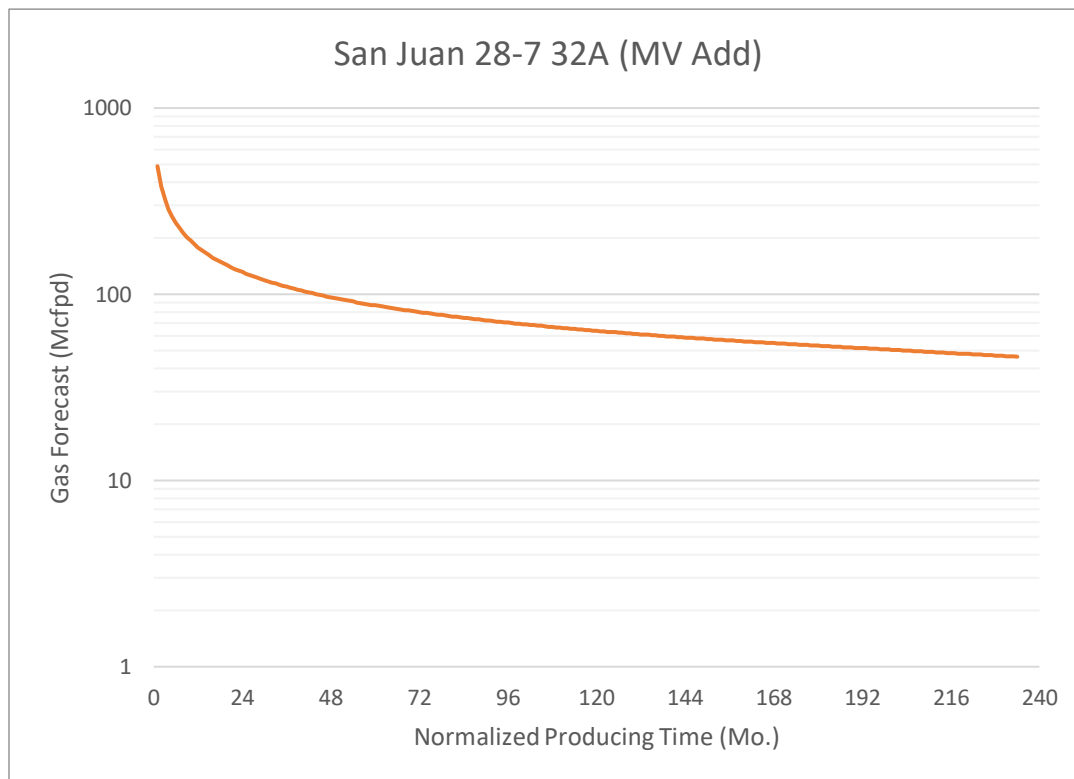
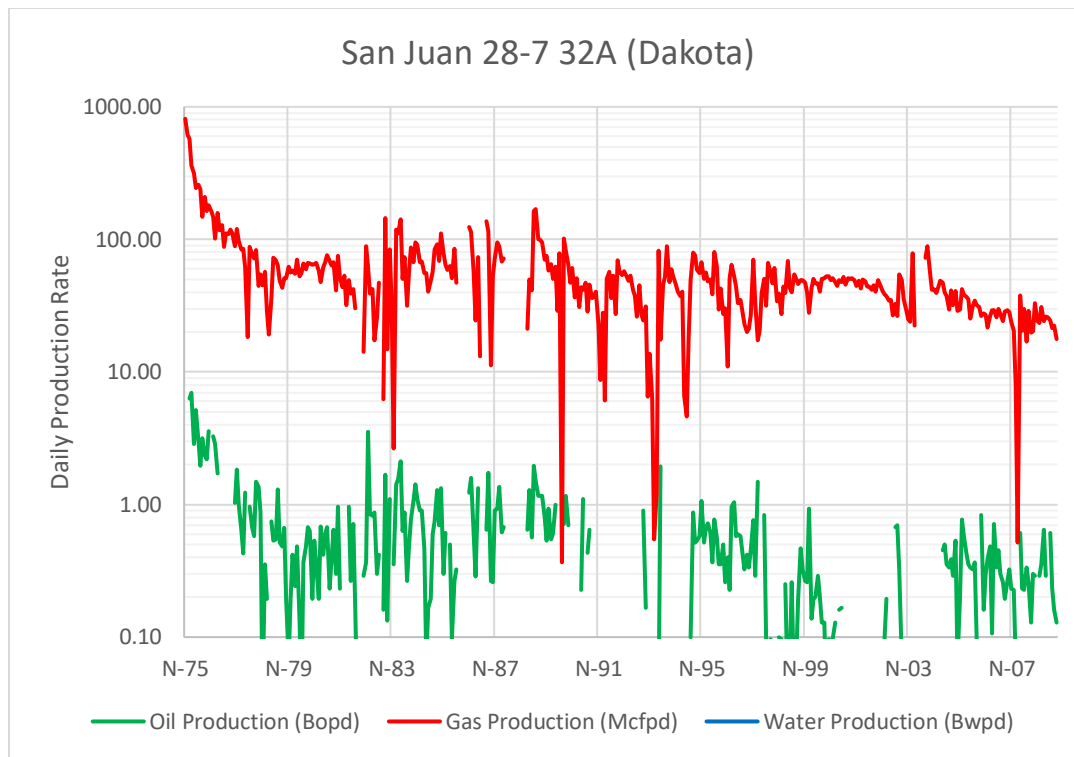
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

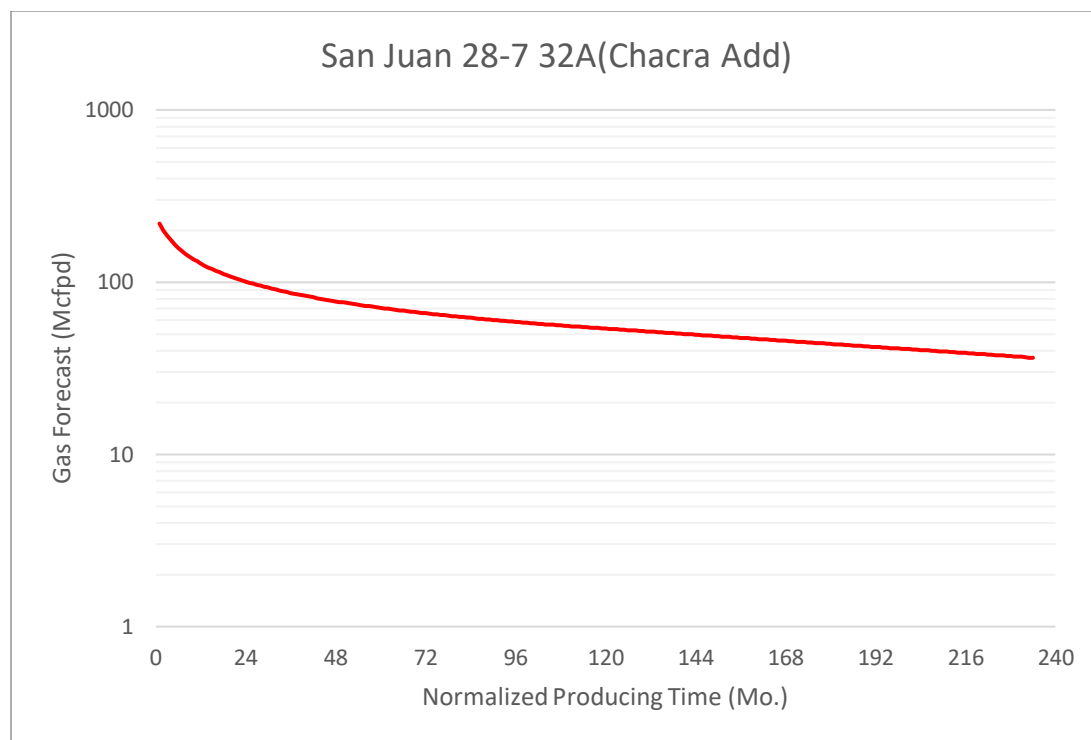
Date Surveyed
APRIL 17, 1975

Registered Professional Engineer
and/or Land Surveyor

[Signature]

Certificate No.
1760





The forecasts for Chacra and Mesaverde production have been generated using type curves of CH and MV gas production in the surrounding production trend.

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.

San Juan 28-7 Unit 242 – Production Allocation Method

Production for the downhole trimmingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Dakota and the added formations to be trimmingle is the Chacra and Mesaverde. 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 formations (MV/CH). Historical offset wells will be used to create an allocation split for the new formations (MV/CH). 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 production will be allocated based on average formation yields from offset wells. All documentation will be submitted to the Aztec NMOCD office.



February 1, 2022

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

Re: C-107-A (Downhole Commingle)
San Juan 28-7 Unit 242
API No. 30-039-21093
F-18, T28N-R07W
Rio Arriba County, NM

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

Interest is not common between the formations listed below:

- Otero Chacra (Pool Code: 82329)
- Basin Dakota (Pool Code: 71599)
- Blanco Mesaverde (Pool Code: 72319)

Order No. R-10476-B waives the notice requirement and thus no notices will be sent.

The subject well is located within the bounds of a Federal Unit. Therefore, pursuant to Subsection C.(1) of 19.15.12.11 NMAC, a copy of the C-107-A has been sent to the Bureau of Land Management as of the date of this letter.

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

Well Name: SAN JUAN 28-7 UNIT	Well Location: T28N / R7W / SEC 18 / SENW / 36.663315 / -107.617432	County or Parish/State: RIO ARRIBA / NM
Well Number: 242	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078417A	Unit or CA Name: SAN JUAN 28-7 UNIT--DK	Unit or CA Number: NMNM78413C
US Well Number: 3003921093	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2652945

Type of Submission: Notice of Intent

Date Sundry Submitted: 01/18/2022

Date proposed operation will begin: 02/01/2022

Type of Action: Recompletion

Time Sundry Submitted: 08:13

Procedure Description: Recomplete NOI was filed 6/6/2019 to recomplete in the Mesaverde and commingle with existing Dakota. Hilcorp Energy Company would like to revise the Recomplete NOI to include the Chacra. Hilcorp requests permission to recomplete the subject well in the Chacra/Mesaverde formations and downhole commingle with the existing Dakota. Please see the attached updated procedure, current and proposed wellbore diagram, plats and natural gas management plan. A closed loop system will be used. A pre-reclamation site visit was held on 1/14/2022 with Bob Switzer/BLM. The reclamation plan is attached.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- SJ_28_7_Unit_242_CH_C_102_20220118081029.pdf
- SJ_28_7_242_RC_NOI_20220118081029.pdf
- San_Juan_28_7_Unit_242_NGMP_20220118081030.pdf
- SJ_28_7_Unit_242_MV_C_102_20220118081029.pdf
- SAN_JUAN_28_7_242_Reclamation_Plan_20220118081029.pdf

Well Name: SAN JUAN 28-7 UNIT	Well Location: T28N / R7W / SEC 18 / SENW / 36.663315 / -107.617432	County or Parish/State: RIO ARriba / NM
Well Number: 242	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078417A	Unit or CA Name: SAN JUAN 28-7 UNIT--DK	Unit or CA Number: NMNM78413C
US Well Number: 3003921093	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Conditions of Approval

Specialist Review

2652945_RCMPLTN_SJ_28_7_UNIT_242_3003921093_KR_01272022_20220127155736.pdf

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: KANDIS ROLAND	Signed on: JAN 18, 2022 08:13 AM
Name: HILCORP ENERGY COMPANY	
Title: Operation Regulatory Tech	
Street Address: 382 Road 3100	
City: Farmington	State: NM
Phone: (505) 599-3400	
Email address: kroland@hilcorp.com	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5055647742	BLM POC Email Address: krennick@blm.gov
Disposition: Approved	Disposition Date: 01/27/2022
Signature: Kenneth Rennick	

San Juan 28-7 Unit #242

018-028N-007W-F

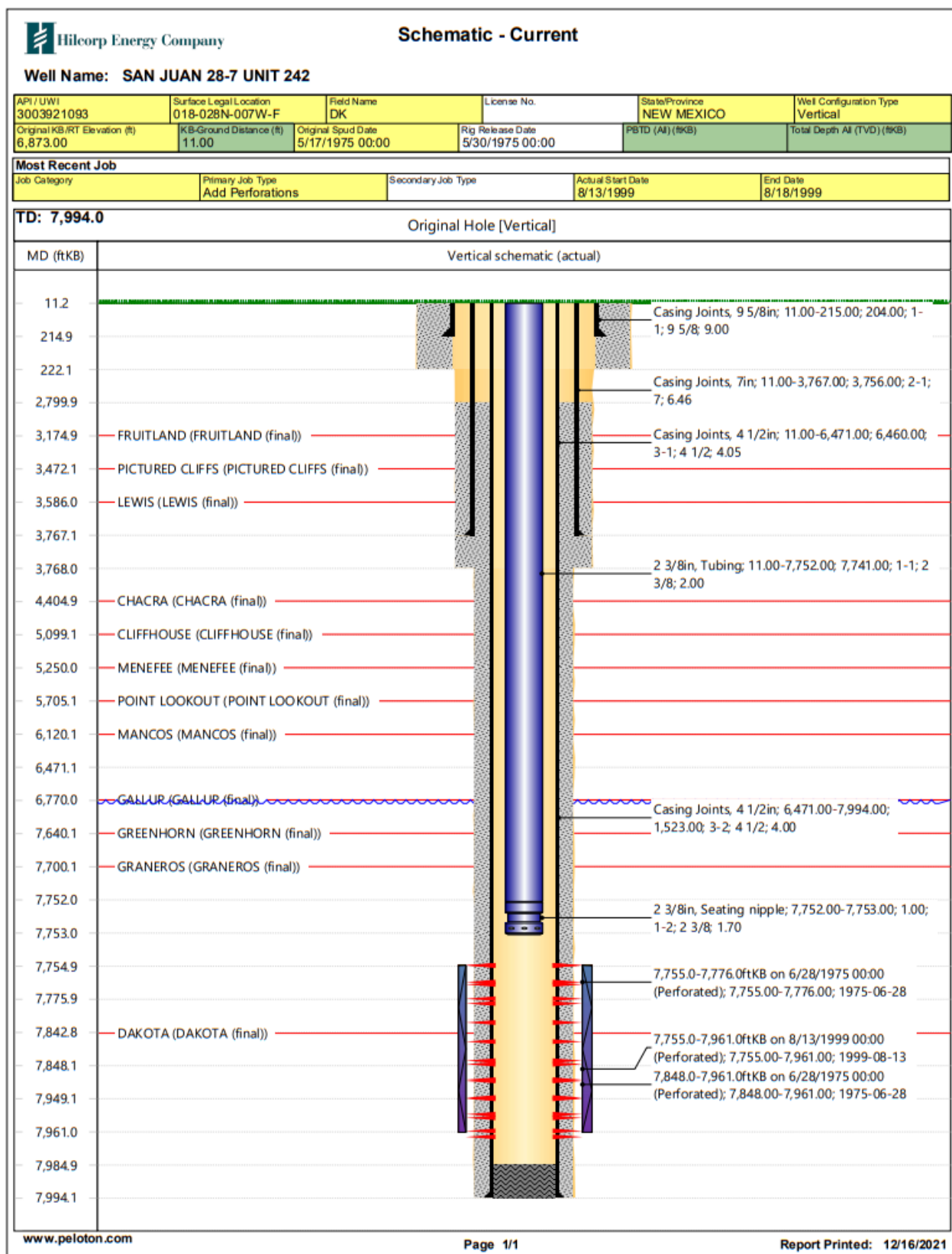
API#: 3003921093

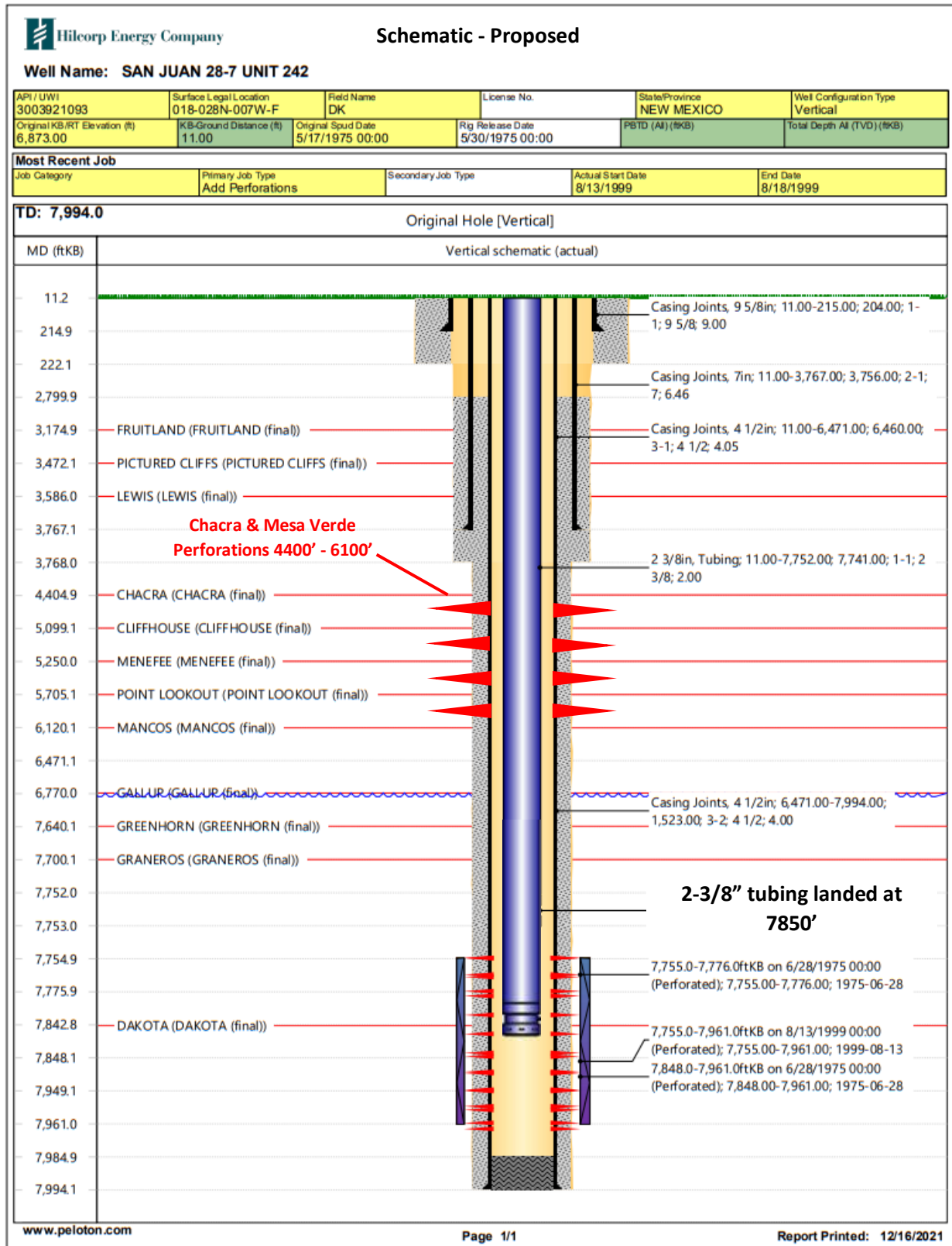
Mesaverde/Chacra Recompletion Procedure

12/16/2021

Procedure:

1. MIRU service rig and associated equipment.
2. Test BOP's
3. TOOH w/ 2-3/8" tubing currently set with EOT at 7,753'.
4. Set a CIBP to isolate the Dakota perforations @ +/- 7,705'.
5. Load the hole.
6. Temperature survey shows TOC at 2,800'.
7. Pressure test casing to maximum fracture pressure.
8. ND BOP's. NU frac stack and test same to maximum fracture pressure.
9. RDMO service rig.
10. MIRU frac spread.
11. Perforate and frac the Chacra and Mesa Verde from 4,400 to 6,100'. RDMO frac spread.
12. MIRU service rig.
13. Test BOP's.
14. PU mill and RIH to clean out to Mesa Verde isolation plug.
15. When water and sand rates are acceptable, flow test the Chacra.
16. Clean out to Dakota isolation plug.
17. When water and sand rates are acceptable, flow test the Mesa Verde to obtain a commingled rate.
18. Drill out Dakota isolation plug and TOOH.
19. TIH and land production tubing. Obtain a trimingled flow rate.
20. ND BOP's, NU production tree.
21. RDMO service rig & turn well over to production.





District I1625 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 268350

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21093	2. Pool Code 72319	3. Pool Name BLANCO-MESAVERDE (PRORATED GAS)
4. Property Code 318432	5. Property Name SAN JUAN 28 7 UNIT	6. Well No. 242
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6862

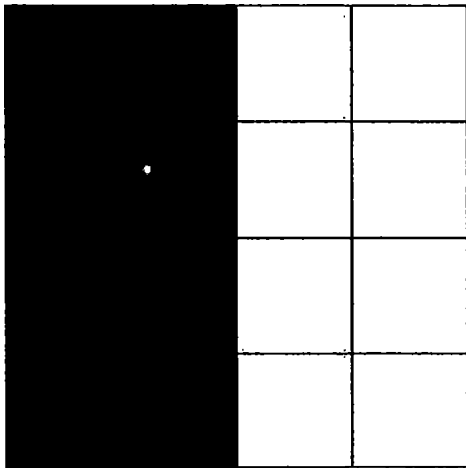
10. Surface Location

UL - Lot F	Section 18	Township 28N	Range 07W	Lot Idn	Feet From 1840	N/S Line N	Feet From 1600	E/W Line W	County RIO ARRIBA
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 304.76 - W/2	13. Joint or Infill	14. Consolidation Code	15. Order No.						

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

	OPERATOR CERTIFICATION	
	I 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.	
	E-Signed By: <i>Cherylene Weston</i>	
	Title: Cherylene Weston, Operations/Regulatory Tech-Sr. Date: 06/06/2019	
	SURVEYOR CERTIFICATION	
	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.	
	Surveyed By: DAVID KILVEN	
	Date of Survey: 4/17/1975	
	Certificate Number: 1760	

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 306822

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21093	2. Pool Code 82329	3. Pool Name OTERO CHACRA (GAS)
4. Property Code 318432	5. Property Name SAN JUAN 28 7 UNIT	6. Well No. 242
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6862

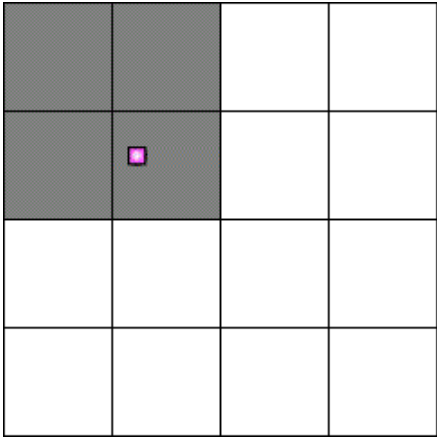
10. Surface Location

UL - Lot F	Section 18	Township 28N	Range 07W	Lot Idn	Feet From 1840	N/S Line N	Feet From 1600	E/W Line W	County RIO ARRIBA
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 152.27 NW/4			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: Kandis Roland Title: Regulatory Tech Date: 1/17/2022</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: David Kilven Date of Survey: 4/17/1975 Certificate Number: 1760</p>
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State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

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:** 1/17/2022

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	Anticipat ed Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
San Juan 28-7 Unit 242	3003921093	F-18-28N-7W	1840' FNL & 1600' FWL	2	680	7

IV. Central Delivery Point Name: Chaco 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
<u>San Juan 28-7 Unit 242</u>	<u>3003921093</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>Not Yet Scheduled</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 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>Kandis Roland</i>
Printed Name: Kandis Roland
Title: Operations/Regulatory Tech Sr.
E-mail Address: kroland@hilcorp.com
Date: 1/17/2022
Phone: 713-757-5246
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 recompleting project. HEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the recompleting 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 recompleting 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 recompleting
 - 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.

Hilcorp Energy
Recomplete Reclamation Plan
San Juan 28-7 Unit 242
API: 30-039-21093
T28N-R7W-Sec.18-F
LAT: 36.663388 LONG: -107.61733
Footage: 1840' FNL & 1600' FWL
Rio Arriba County, NM

1. PRE- RECLAMATION SITE INSPECTION

A pre-reclamation site inspection was completed with Bob Switzer from the BLM and Eufracio Trujillo, Hilcorp Energy SJ South Construction Foreman, on January 14, 2022.

2. LOCATION RECLAMATION PROCEDURE

1. Reclamation work will begin in spring period.
2. All trash and debris will be removed within a 25' buffer outside of the location disturbance during reclamation.
3. Brush hog location and fence off area for disturbance.
4. Reclaim all disturbed area being used for recompletion activities.
5. Reestablish teardrop on location.
6. Reclaim areas used to the locations to the West of pad as TUA's

3. SEEDING PROCEDURE

1. A Pinion/Juniper seed mix with some Sage will be used for all reclaimed and disturbed areas of the well pad(s) and lease road.
2. Drill seed will be done where applicable and all other disturbed areas will be broadcast seeded and harrowed. Broadcast seeding will be applied at a double the rate of seed.
3. Timing of the seeding will be when the ground is not frozen or saturated.

4. WEED MANAGEMENT

1. No action is required at this time for weed management, no noxious weeds were identified during this onsite.

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

AFMSS 2 Sundry ID 2652945

Attachment to notice of Intent for Recompletion Operations:

Well: San Juan 28-7 Unit 242

CONDITIONS OF APPROVAL

1. File a subsequent report detailing work completed with exact dates (month, day, year) within 30 days of completing operations.
2. File an updated completion report within AFMSS 2 with the location of the new perforations. For each new producing zone, update where the production will be reported. For example, if lease basis only input the lease for the production zone. If the production will be part of an agreement, input the agreement along with the lease.

K. Rennick 01/27/2022

From: [Engineer, OCD, EMNRD](#)
To: [Kandis Roland](#)
Cc: [McClure, Dean, EMNRD](#); [Wrinkle, Justin, EMNRD](#); [Powell, Brandon, EMNRD](#); lisa@rwbyram.com; [Glover, James; Paradis, Kyle O](#)
Subject: Approved Administrative Order DHC-5189
Date: Thursday, May 19, 2022 4:44:27 PM
Attachments: [DHC5189 Order.pdf](#)

NMOCD has issued Administrative Order DHC-5189 which authorizes Hilcorp Energy Company (372171) to downhole commingle production within the following well:

Well Name: **San Juan 28 7 Unit #242**

Well API: **30-039-21093**

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: [Justin Nall](#)
To: [McClure, Dean, EMNRD](#); [Kandis Roland](#)
Cc: [Mandi Walker](#)
Subject: RE: [EXTERNAL] downhole commingling application DHC-5189
Date: Monday, May 16, 2022 10:41:50 AM

Dean,

As we discussed on the phone, I have re-calculated the oil percentage split based on the relative oil yields and a 4-year average gas allocation. The gas allocation will stay the same as we had originally submitted.

Formation	Forecasted 4 -	Oil Yield (BO/MMCF)	Forecasted	Percent of Oil
	Year Avg Gas Rate (MCFD)		4-Year Oil Rate (BOPD)	
Dakota	6.5	9.59	0.062335	6.30%
Mesaverde	158	3.71	0.58618	58.70%
Chacra	112	3.12	0.34944	35.00%

Please feel free to call or email me with any questions you may have.

Thanks,

Justin Nall

Sr. Reservoir Engineer – San Juan South
O: 346-237-2231

From: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>
Sent: Monday, May 16, 2022 9:22 AM
To: Kandis Roland <kroland@hilcorp.com>; Justin Nall <jnall@hilcorp.com>
Cc: Mandi Walker <mwalker@hilcorp.com>
Subject: RE: [EXTERNAL] downhole commingling application DHC-5189

Kandis,

Initially I had not seen the intent to have fixed percent for all of the oil production although thinking of it now, I should have as I know this is the method used in many of Hilcorp's downhole commingles.

Having said that, the values proposed within this email chain seem to be incorrect as they seem to be computed based solely off of the gas oil ratios from each pool without consideration for the quantity of gas being produced from each pool. For an example please see my calculations below. Please re-compute your values and provide the calculations used to derive them. Diversely, perhaps I am misunderstanding the data included in the application; if so, we may need to touch base to discuss it.

Presuming each pool produces equal amounts of gas:

Pool	Produced Gas (MMCF)	GOR (STB/MMCF)	Oil (STB)	Percent of Oil
Chacra	1	3.12	3.12	19.00%
Mesaverde	1	3.71	3.71	22.59%
Dakota	1	9.59	9.59	58.40%
Total	3	5.473333333	16.42	

Presuming each pool produces different quantities of gas:

Pool	Produced Gas (MMCF)	GOR (STB/MMCF)	Oil (STB)	Percent of Oil
Chacra	0.43	3.12	1.3416	10.28%
Mesaverde	0.57	3.71	2.1147	16.21%
Dakota	1	9.59	9.59	73.51%
Total	2	6.52315	13.0463	

Dean McClure

Petroleum Engineer, Oil Conservation Division

New Mexico Energy, Minerals and Natural Resources Department

(505) 469-8211

From: Kandis Roland <kroland@hilcorp.com>

Sent: Thursday, May 12, 2022 8:49 AM

To: Justin Nall <jnall@hilcorp.com>; McClure, Dean, EMNRD <Dean.McClure@state.nm.us>

Cc: Mandi Walker <mwalker@hilcorp.com>; Kandis Roland <kroland@hilcorp.com>

Subject: RE: [EXTERNAL] downhole commingling application DHC-5189

Dean,

I just want to make sure the oil allocation is clear. The oil allocation will be a fixed rate for all three zone (58% DK, 23% MV, 19% CH) during the four year duration of the subtraction method.

Thanks,

Kandis Roland

HILCORP ENERGY

San Juan East/South Regulatory

713.757.5246

kroland@hilcorp.com

From: Justin Nall <jnall@hilcorp.com>

Sent: Thursday, May 12, 2022 8:34 AM

To: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>; Kandis Roland <kroland@hilcorp.com>
Cc: Mandi Walker <mwalker@hilcorp.com>
Subject: RE: [EXTERNAL] downhole commingling application DHC-5189

Dean,

You are correct, the fixed allocation percentages will be different for oil and gas. The 57% Mesaverde, 43% Chacra allocation is for gas only. The oil allocation will be based on the yields that were sampled from the maps provided in the application. In this case, it will be a 54% Mesaverde, 46% Chacra split based on the yields of 3.71 BO/MMCF and 3.12 BO/MMCF respectively.

Please let me know if you have any questions or need further information.

Thanks,

Justin Nall

Sr. Reservoir Engineer – San Juan South

O: 346-237-2231

From: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>
Sent: Wednesday, May 11, 2022 4:32 PM
To: Kandis Roland <kroland@hilcorp.com>
Cc: Mandi Walker <mwalker@hilcorp.com>; Justin Nall <jnall@hilcorp.com>
Subject: RE: [EXTERNAL] downhole commingling application DHC-5189

Kandis,

I apologize, I do have an additional question. A fixed percentage was proposed below; presumably this was a fixed percent for gas and the fixed percent for oil will be slightly different. Perhaps something like 39% and 61% based off the documentation included in the application.

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

From: McClure, Dean, EMNRD
Sent: Wednesday, May 11, 2022 9:28 AM
To: Kandis Roland <kroland@hilcorp.com>
Cc: Mandi Walker <mwalker@hilcorp.com>; Justin Nall <jnall@hilcorp.com>
Subject: RE: [EXTERNAL] downhole commingling application DHC-5189

Kandis,

Thank you; this will be sufficient.

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

From: Kandis Roland <kroland@hilcorp.com>
Sent: Tuesday, May 10, 2022 5:41 AM
To: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>
Cc: Mandi Walker <mwalker@hilcorp.com>; Kandis Roland <kroland@hilcorp.com>; Justin Nall <jnall@hilcorp.com>
Subject: FW: [EXTERNAL] downhole commingling application DHC-5189

Dean,

Please see below for response from Justin Nall our Reservoir Engineer. Please let us know if you need anything else.

Thanks,

Kandis Roland
HILCORP ENERGY
San Juan East/South Regulatory
713.757.5246
kroland@hilcorp.com

From: Justin Nall
Sent: Monday, May 9, 2022 10:54 AM
To: Mandi Walker <mwalker@hilcorp.com>; Kandis Roland <kroland@hilcorp.com>
Subject: RE: [EXTERNAL] downhole commingling application DHC-5189

The proposed fixed allocation would be 57% Mesaverde, 43% Chacra. This is based on type curves of each formation that were created using production data in the surrounding area.

API Gravities from nearby standalone completions:
Dakota – 58.55 Degree API (taken from 3003921093)
Mesaverde – 57.03 Degree API (taken from 3003907411)
Chacra – 50.45 Degree API (taken from 3004507038)

Thanks,

Justin Nall
Sr. Reservoir Engineer – San Juan South

O: 346-237-2231

From: Mandi Walker <mwalker@hilcorp.com>
Sent: Tuesday, May 3, 2022 1:18 PM
To: Justin Nall <jnall@hilcorp.com>; Kandis Roland <kroland@hilcorp.com>
Subject: FW: [EXTERNAL] downhole commingling application DHC-5189

Justin, can you assist with the requests below from Dean? I attached what was filed already.

From: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>
Sent: Tuesday, May 3, 2022 1:02 PM
To: Mandi Walker <mwalker@hilcorp.com>
Subject: [EXTERNAL] downhole commingling application DHC-5189

Ms. Walker,

I am reviewing downhole commingling application DHC-5189 which involves a downhole commingling project within the San Juan 28 7 Unit #242 (30-039-21093) and is operated by Hilcorp Energy Company (372171).

It appears that Hilcorp is proposing to use historic production to allocate production to the Dakota formation and then the subtraction method to determine production to the Chacra and Mesaverde formations. Presumably the Chacra and Mesaverde would be on a fixed percent of the remainder of the production after allocation to the Dakota. However, I am not seeing that proposed fixed percent within the application. Presuming that my above assumptions are correct, please submit a proposed fixed percent for the Chacra and Mesaverde formations for both oil and gas production.

Additionally, please submit known or estimated oil gravity values for all applicable formations.

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

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While all reasonable care has been taken to avoid the transmission of viruses, it is the responsibility of the recipient to ensure that the onward transmission, opening, or use of this message and any attachments will not adversely affect its systems or data. No responsibility is accepted by the company in this regard and the recipient should carry out such virus and other checks as it considers appropriate.

**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-5189

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. An exception to the notification requirements within 19.15.12.11(C)(1)(b) NMAC was granted by the Division within Order R-10476-B.
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-5034.
3. Applicant shall allocate thirty-five percent (35%) of the oil production from the Well to the Otero Chacra (Gas) pool (Pool ID 82329), fifty-eight and seven tenths percent (58.7%) of the oil production from the Well to the Blanco-Mesaverde (Prorated Gas) pool (Pool ID 72319), and six and three tenths percent (6.3%) of the oil production from the Well to the Basin Dakota (Prorated Gas) pool (Pool ID 71599) until a different plan to allocate oil and gas production is approved by OCD.

Applicant shall allocate gas production to the Otero Chacra (Gas) pool (Pool ID 82329) and Blanco-Mesaverde (Prorated Gas) pool (Pool ID 72319) equal to the total gas production from the Well minus the projected gas production from the Basin Dakota (Prorated Gas) pool (Pool ID 71599) until a different plan to allocate oil and gas production is approved by OCD. Of the gas production allocated to the Otero Chacra (Gas) pool (Pool ID 82329) and Blanco-Mesaverde (Prorated Gas) pool (Pool ID 72319), forty-three percent (43%) shall be allocated to the Otero Chacra (Gas) pool (Pool ID 82329) and fifty-seven percent (57%) 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**



**ADRIENNE E. SANDOVAL
DIRECTOR**

DATE: 5/19/2022

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit A

Order: **DHC-5189**

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

Well Name: **San Juan 28 7 Unit #242**

Well API: **30-039-21093**

Upper Zone	Pool Name: OTERO CHACRA (GAS)		
	Pool ID: 82329	Current:	New: X
	Allocation:	Oil: 35%	Gas: 43%
	Interval: Perforations	Top: 4,400	Bottom: 5,100
Intermediate Zone	Pool Name: BLANCO-MESAVERDE (PRORATED GAS)		
	Pool ID: 72319	Current:	New: X
	Allocation:	Oil: 58.7%	Gas: 57%
	Interval: Perforations	Top: 5,100	Bottom: 6,100
Bottom of Interval within 150% of Upper Zone's Top of Interval: YES			
Lower Zone	Pool Name: BASIN DAKOTA (PRORATED GAS)		
	Pool ID: 71599	Current: X	New:
	Allocation:	Oil: 6.3%	Gas:
	Interval: Perforations	Top: 7,755	Bottom: 7,961
Bottom of Interval within 150% of Upper Zone's Top of Interval: NO			

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 80731

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 80731
	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.	5/19/2022