

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

\_\_\_\_\_  
 Cherylene Weston

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  
\_\_X\_\_ Yes \_\_\_\_No

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company  
Operator

382 Road 3100, Aztec, NM 87410  
Address

San Juan 27-4 Unit  
Lease

51  
Well No.

H-29-T27N-R04W  
Unit Letter-Section-Township-Range

Rio Arriba  
County

OGRID No. 372171 Property Code 319210 API No. 30-039-20149 Lease Type: \_\_X\_\_ Federal \_\_\_\_State \_\_\_\_Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Blanco-Mesaverde (Prorated Gas)	Basin Mancos	Basin Dakota
Pool Code	72319	97232	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	5400' – 6350'	7473 - 7482'	7945' – 8167'
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)	1535 psi	2015 psi	1772 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1229 BTU	1327 BTU	1255 BTU
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:  Rates:	Date:  Rates:	Date: 6/1/2023  Rates: 1,492 Mcf-Gas 0 Bbl-Oil 14 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  Please see attachments	Oil Gas  Please see attachments	Oil Gas  Please see attachments

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes\_\_\_\_ No \_\_X\_\_  
Yes\_\_\_\_ No \_\_X\_\_

Are all produced fluids from all commingled zones compatible with each other?

Yes \_\_X\_\_ No\_\_\_\_

Will commingling decrease the value of production?

Yes\_\_\_\_ No \_\_X\_\_

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 \_\_X\_\_ No\_\_\_\_

NM OCD Reference Case No. applicable to this well: R-13681

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 Technician DATE 08/22/2023

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 341856

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-039-20149	2. Pool Code 97232	3. Pool Name BASIN MANCOS
4. Property Code 319210	5. Property Name SAN JUAN 27 4 UNIT	6. Well No. 051
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6884

**10. Surface Location**

UL - Lot H	Section 29	Township 27N	Range 04W	Lot Idn	Feet From 1450	N/S Line N	Feet From 800	E/W Line E	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 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**

	<b>OPERATOR CERTIFICATION</b> <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  E-Signed By: <i>Cherylene Weston</i> Title: Cherylene Weston Date: 06/23/2023
	<b>SURVEYOR CERTIFICATION</b> <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: Russell H McNease Date of Survey: 6/25/1968 Certificate Number: 1500

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

Form C-102  
August 1, 2011  
Permit 273913

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-039-20419	2. Pool Code 72319	3. Pool Name BLANCO-MESAVERDE (PRORATED GAS)
4. Property Code 319210	5. Property Name SAN JUAN 27 4 UNIT	6. Well No. 051
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6884

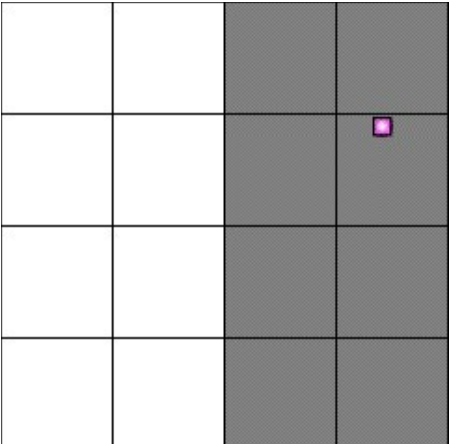
**10. Surface Location**

UL - Lot H	Section 29	Township 27N	Range 04W	Lot Idn	Feet From 1450	N/S Line N	Feet From 800	E/W Line E	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 320.00 E/2				13. Joint or Infill	14. Consolidation Code			15. Order No.	

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

	<p style="text-align: center;"><b>OPERATOR CERTIFICATION</b></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: Etta Trujillo Title: Operations/Regulatory Tech Sr Date: 11/08/2019</p> <hr/> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></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: Russell H McNeace Date of Survey: 6/25/1968 Certificate Number: 1500</p>
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Recorded by OGD: 8353033 13:54:40 BW

Page 4 of 4



NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

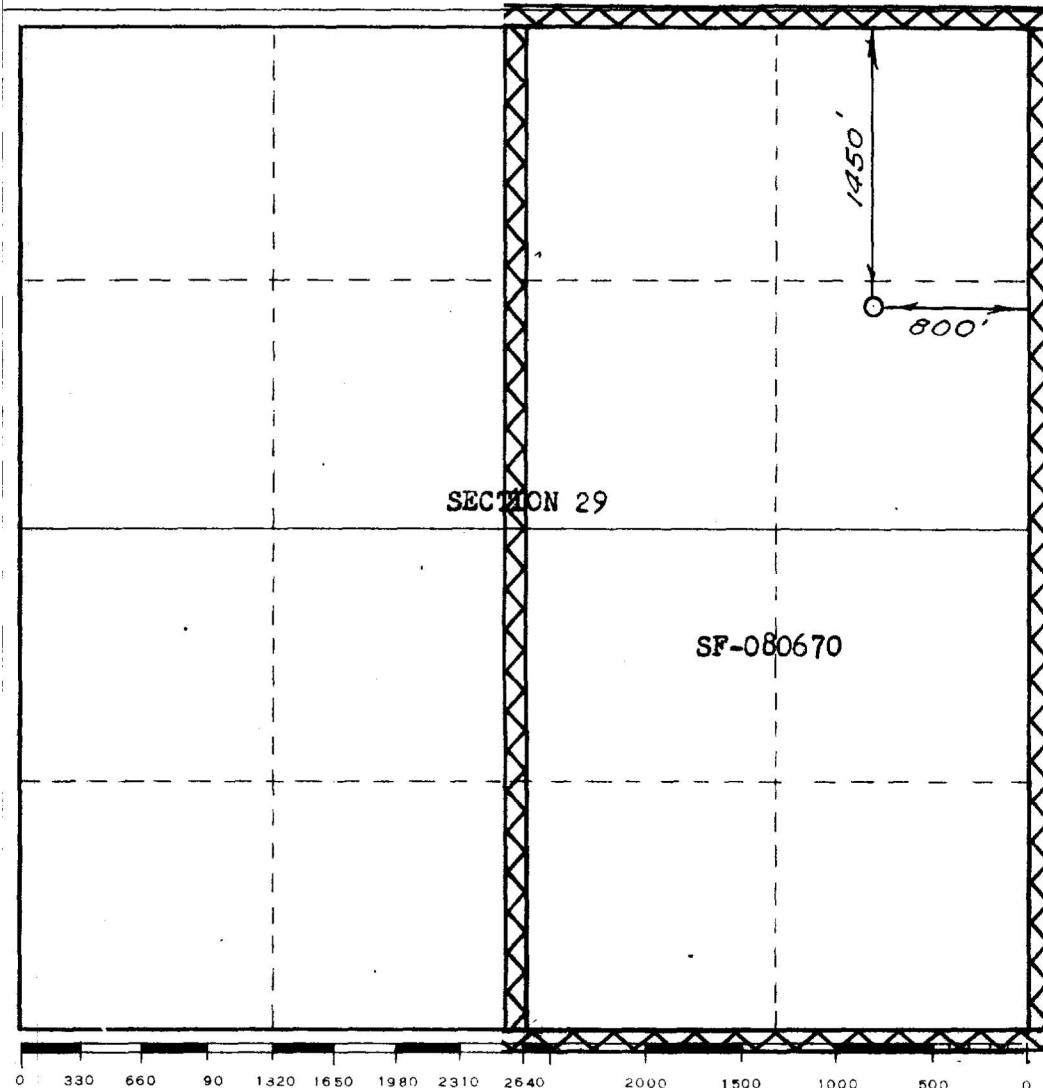
Operator <b>EL PASO NATURAL GAS COMPANY</b>		Lease <b>SAN JUAN 27-4 UNIT (SF-080670)</b>		Well No. <b>51</b>
Unit Letter <b>H</b>	Section <b>29</b>	Township <b>27-N</b>	Range <b>4-W</b>	County <b>RIO ARriba</b>
Actual Footage Location of Well: <b>1150</b> feet from the <b>NORTH</b> line and <b>800</b> feet from the <b>EAST</b> line				
Ground Level Elev. <b>6884</b>	Producing Formation <b>DAKOTA</b>	Pool <b>BASIN DAKOTA</b>	Dedicated Acreage: <b>320.00</b> 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.



## CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  
Original signed by  
**Carl E. Matthews**

Name  
**Petroleum Engineer**Residence  
**El Paso Natural Gas Co.**Completions  
**September 18, 1968**

Date

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

Date Surveyed  
**JUNE 25, 1968**Registered Professional Engineer  
and/or Land Surveyor

*Russell H. McNease*  
Certificate No. **1500**

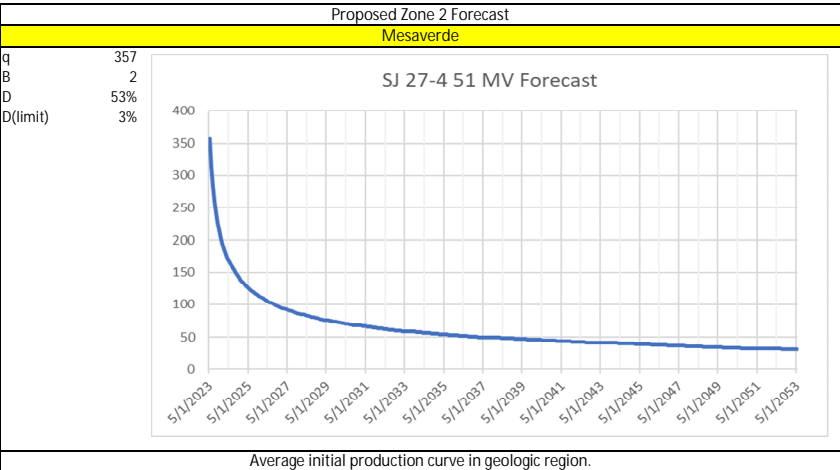
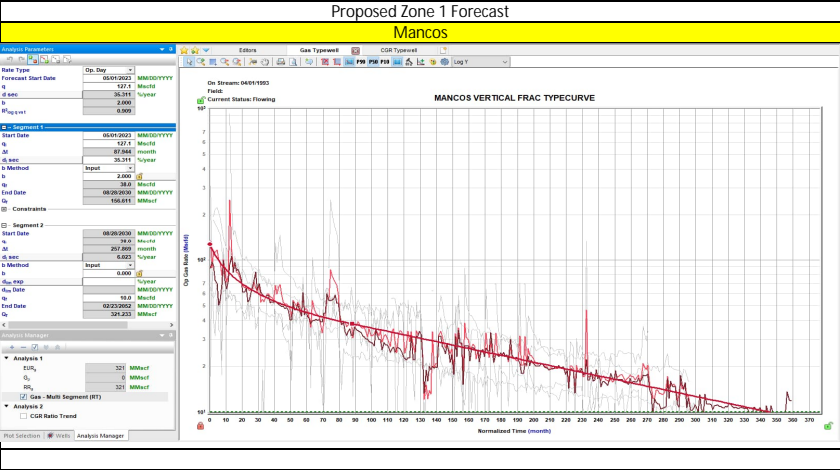
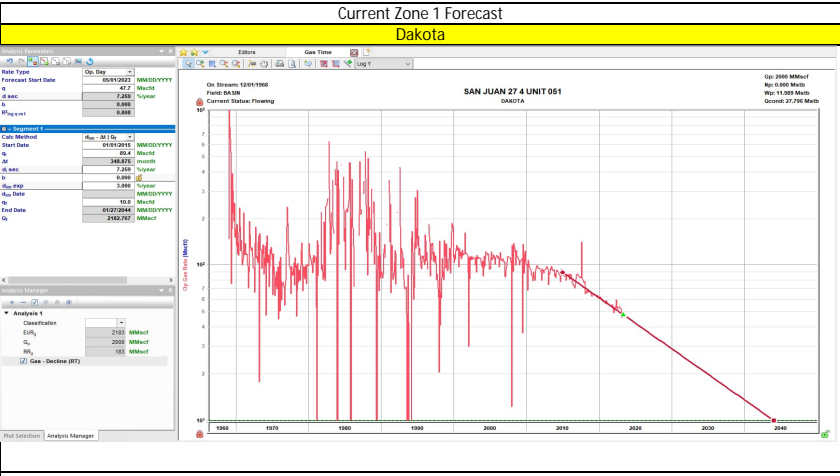
San Juan 27-4 Unit 51 Allocation

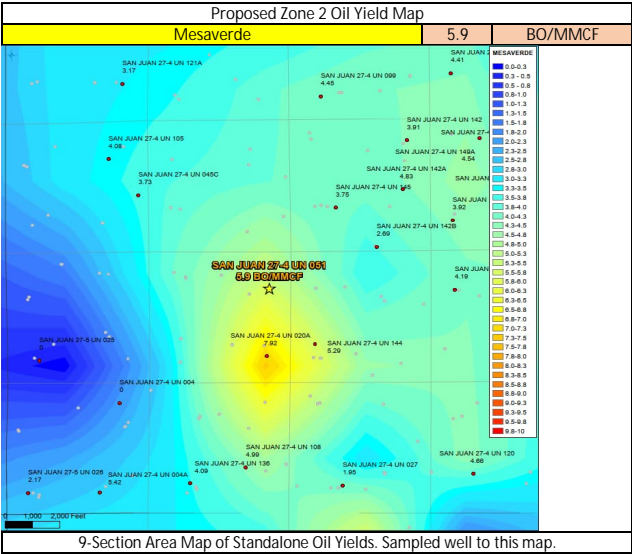
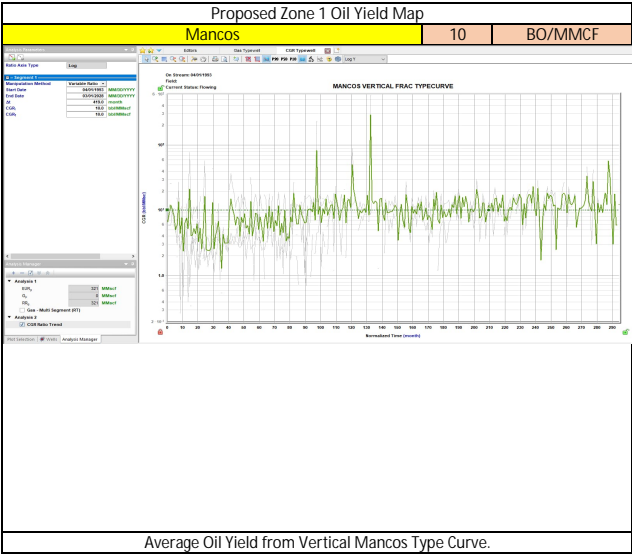
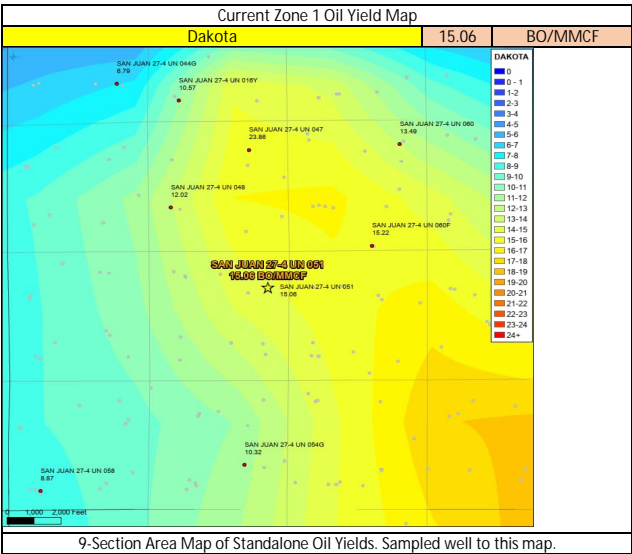
DK	
Date	Mcf/d
Jul-23	47
Aug-23	46.7
Sep-23	46.4
Oct-23	46.1
Nov-23	45.8
Dec-23	45.5
Jan-24	45.2
Feb-24	45
Mar-24	44.7
Apr-24	44.4
May-24	44.1
Jun-24	43.9
Jul-24	43.6
Aug-24	43.3
Sep-24	43
Oct-24	42.8
Nov-24	42.5
Dec-24	42.2
Jan-25	42
Feb-25	41.7
Mar-25	41.5
Apr-25	41.2
May-25	40.9
Jun-25	40.7
Jul-25	40.4
Aug-25	40.2
Sep-25	39.9
Oct-25	39.7
Nov-25	39.4
Dec-25	39.2
Jan-26	38.9
Feb-26	38.7
Mar-26	38.4
Apr-26	38.2
May-26	38
Jun-26	37.7
Jul-26	37.5
Aug-26	37.2
Sep-26	37
Oct-26	36.8
Nov-26	36.6
Dec-26	36.3
Jan-27	36.1
Feb-27	35.9
Mar-27	35.7
Apr-27	35.4
May-27	35.2
Jun-27	35
Jul-27	34.8
Aug-27	34.5
Sep-27	34.3
Oct-27	34.1
Nov-27	33.9
Dec-27	33.7
Jan-28	33.5
Feb-28	33.3
Mar-28	33.1
Apr-28	32.9
May-28	32.6
Jun-28	32.4
Jul-28	32.2
Aug-28	32
Sep-28	31.8
Oct-28	31.6
Nov-28	31.4
Dec-28	31.2
Jan-29	31
Feb-29	30.8
Mar-29	30.7
Apr-29	30.5
May-29	30.3
Jun-29	30.1
Jul-29	29.9
Aug-29	29.7
Sep-29	29.5
Oct-29	29.3
Nov-29	29.2
Dec-29	29
Jan-30	28.8
Feb-30	28.6
Mar-30	28.4
Apr-30	28.3
May-30	28.1
Jun-30	27.9
Jul-30	27.7

The forecasts for Gallup and Mesaverde production have been generated using type curves of production in the surrounding 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.





Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
DK	15.06	183	28%
MC	10	321	32%
MV	5.9	685	40%
			100%

<b>Well Name:</b> SAN JUAN 27-4 UNIT	<b>Well Location:</b> T27N / R4W / SEC 29 / SENE / 36.547363 / -107.266983	<b>County or Parish/State:</b> RIO ARRIBA / NM
<b>Well Number:</b> 51	<b>Type of Well:</b> CONVENTIONAL GAS WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMSF080670	<b>Unit or CA Name:</b> SAN JUAN 27-4 UNIT--DK	<b>Unit or CA Number:</b> NMNM78408B
<b>US Well Number:</b> 3003920149	<b>Well Status:</b> Producing Gas Well	<b>Operator:</b> HILCORP ENERGY COMPANY

### Notice of Intent

**Sundry ID:** 2738032

**Type of Submission:** Notice of Intent

**Type of Action:** Recompletion

**Date Sundry Submitted:** 06/26/2023

**Time Sundry Submitted:** 03:18

**Date proposed operation will begin:** 07/01/2023

**Procedure Description:** Hilcorp Energy would like to revise the recomplete NOI that was approved on 11/14/2019. Hilcorp Energy Company requests permission to recomplete the subject well in the Mesaverde and Mancos formations and downhole commingle with the existing Dakota. Please see the attached procedure, current and proposed wellbore diagram, plat and natural gas management plan.

### Surface Disturbance

**Is any additional surface disturbance proposed?:** No

### NOI Attachments

**Procedure Description**

SJ\_27\_4\_Unit\_51\_Amended\_NOI\_20230626151811.pdf

Notify NMOCD 24 Hours Prior to beginning operations

DHC required

The CBL proposed in the procedures shall be submitted to the Division. If the cement sheath around the casing is not adequate to protect the casing and isolate strata from the top Mesaverde perforation to at least 150 feet above the top Mesaverde perforation, then Hilcorp shall conduct operations to remediate it prior to completing or producing from the formation.

Dean R McClure

08/16/2023

Well Name: SAN JUAN 27-4 UNIT

Well Location: T27N / R4W / SEC 29 /  
SENE / 36.547363 / -107.266983County or Parish/State: RIO  
ARRIBA / NM

Well Number: 51

Type of Well: CONVENTIONAL GAS  
WELL

Allottee or Tribe Name:

Lease Number: NMSF080670

Unit or CA Name: SAN JUAN 27-4  
UNIT--DKUnit or CA Number:  
NMNM78408B

US Well Number: 3003920149

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: JUN 26, 2023 03:17 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: 06/27/2023

Signature: Matthew Kade



**HILCORP ENERGY COMPANY**  
**SAN JUAN 27-4 UNIT 51**  
**MESA VERDE RECOMPLETION SUNDRY**

**JOB PROCEDURES**

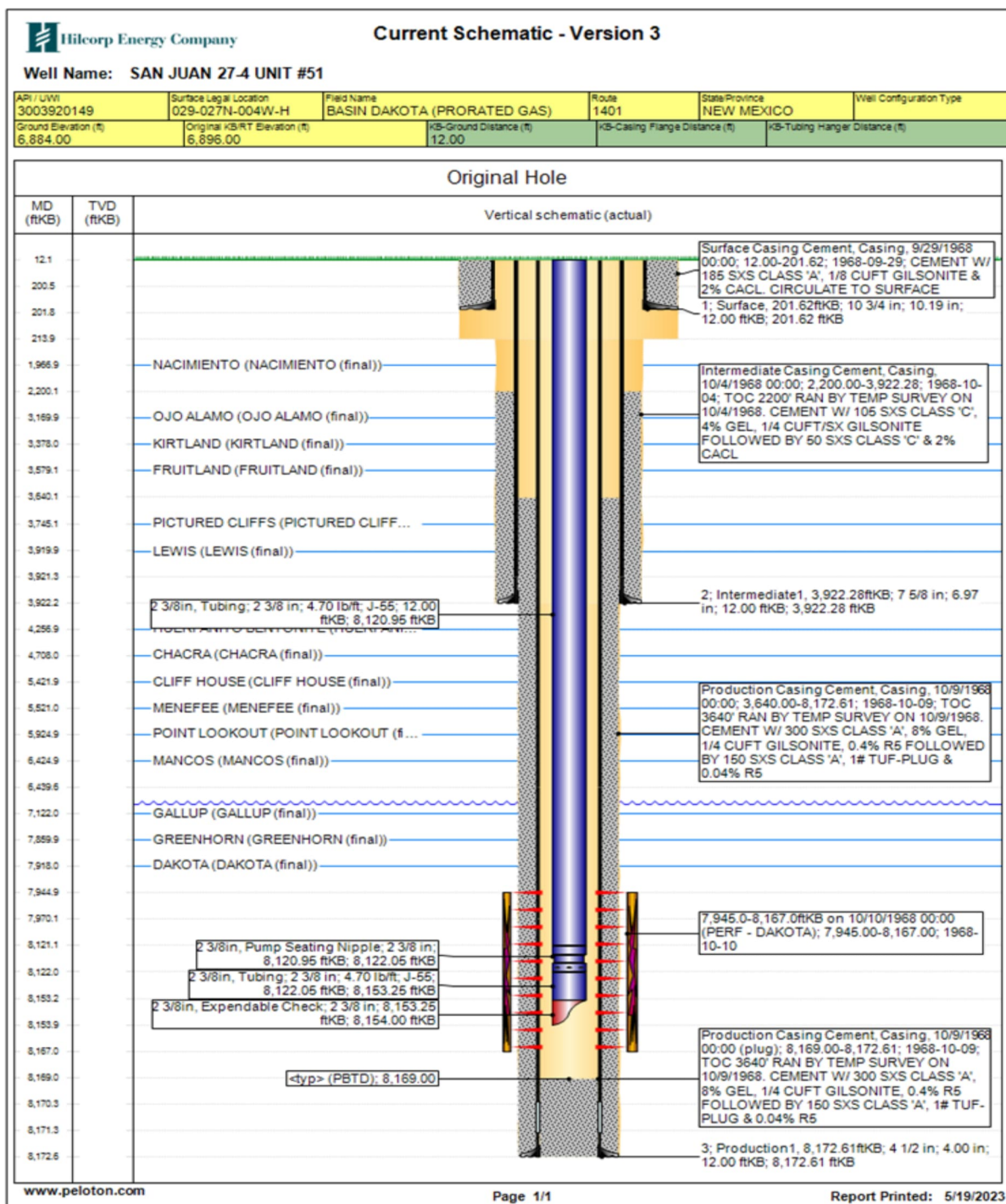
1. MIRU service rig and associated equipment; test BOP. Check bradenhead pressures daily and record throughout the recomplete project. Notify NMOCD and BLM of any anomalous pressure changes.
2. TOOH with **2-3/8"** tubing set at **8,154'**.
3. Set a **4-1/2"** plug at +/- **7,895'** to isolate the **Dakota**.
4. Load the hole and perform MIT (Pressure test to **560 psi**). Notifiy NMOCD and BLM +/-24hr prior to testing (and in the event of a failed test).
5. RU W/L. Run CBL, record TOC.
6. Perforate the **Mancos** formation (Top Perforation @ **7,473'**; Bottom perforation @ **7,482'** )
7. Flow test **Mancos**.
8. Based on the **Mancos** flow test and pressures, the decision will be made whether or not to frac the **Mancos**.
9. Set a **4-1/2"** plug at +/- **6,500'**.
10. Load the hole and pressure test casing.
11. N/D BOP, N/U frac stack and pressure test frac stack.
12. Perforate and frac the **Mesaverde** formation (Top Perforation @ **5,400'**; Bottom Perforation @ **6,350'**).
13. If needed, isolate frac stages with a plug.
14. Nipple down frac stack, nipple up BOP and test.
15. Flow Test **Mesa Verde**.
16. TIH with a mill and drill out any plugs above the **Dakota** isolation plug.
17. Clean out to **Dakota** isolation plug.
18. Drill out **Dakota** isolation plug and cleanout to PBTD of **8,169'**. TOOH.
19. TIH and land production tubing. Get a commingled **Dakota/Mancos/Mesaverde** flow rate.





**HILCORP ENERGY COMPANY**  
**SAN JUAN 27-4 UNIT 51**  
**MESA VERDE RECOMPLETION SUNDRY**

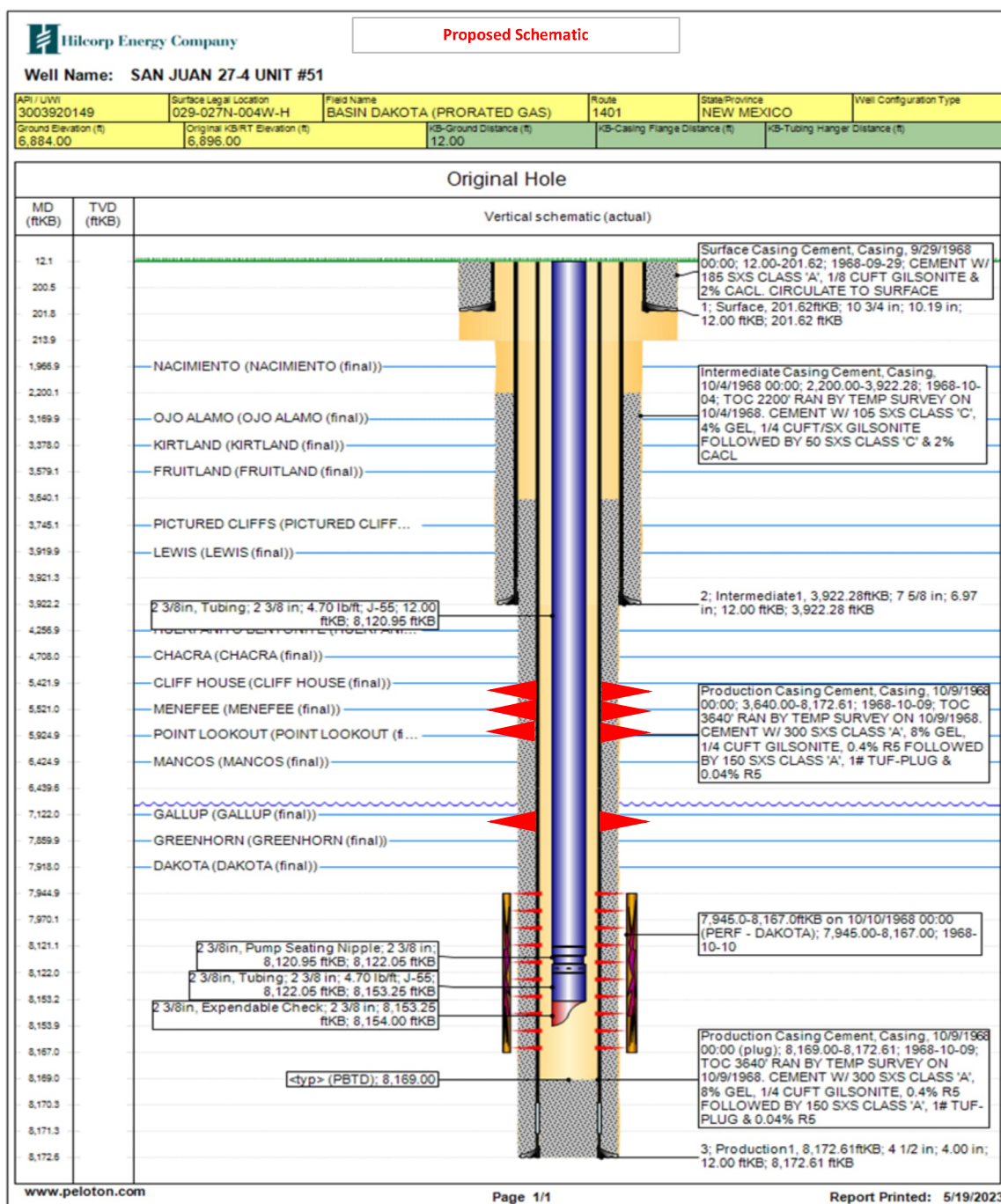
**SAN JUAN 27-4 UNIT 51 - CURRENT WELLBORE SCHEMATIC**





**HILCORP ENERGY COMPANY  
SAN JUAN 27-4 UNIT 51  
MESA VERDE RECOMPLETION SUNDRY**

**SAN JUAN 27-4 UNIT 51 - Proposed Schematic**



**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

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Form C-102  
August 1, 2011

Permit 341856

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-039-20149	2. Pool Code 97232	3. Pool Name BASIN MANCOS
4. Property Code 319210	5. Property Name SAN JUAN 27 4 UNIT	6. Well No. 051
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6884

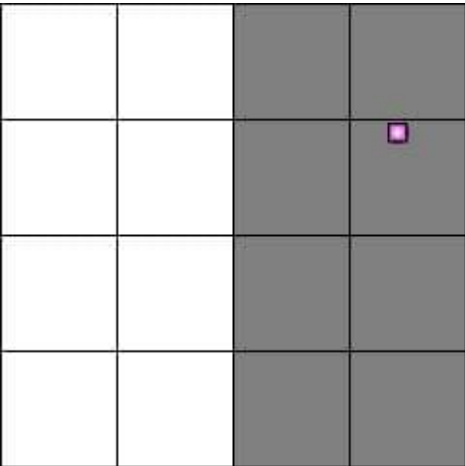
**10. Surface Location**

UL - Lot H	Section 29	Township 27N	Range 04W	Lot Idn	Feet From 1450	N/S Line N	Feet From 800	E/W Line E	County RIO ARRIBA
---------------	---------------	-----------------	--------------	---------	-------------------	---------------	------------------	---------------	-------------------------

**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**

	<p style="text-align: center;"><b>OPERATOR CERTIFICATION</b></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: 06/23/2023</p> <hr/> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></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: Russell H McNease  Date of Survey: 6/25/1968  Certificate Number: 1500</p>
--	--

**District I**

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 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

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**District III**

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**District IV**

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 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 273913

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-039-20419	2. Pool Code 72319	3. Pool Name BLANCO-MESAVERDE (PRORATED GAS)
4. Property Code 319210	5. Property Name SAN JUAN 27 4 UNIT	6. Well No. 051
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6884

**10. Surface Location**

UL - Lot H	Section 29	Township 27N	Range 04W	Lot Idn	Feet From 1450	N/S Line N	Feet From 800	E/W Line E	County RIO ARRIBA
---------------	---------------	-----------------	--------------	---------	-------------------	---------------	------------------	---------------	----------------------

**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 E/2				13. Joint or Infill	14. Consolidation Code			15. Order No.	

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

	<p align="center"><b>OPERATOR CERTIFICATION</b></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>Etta Trujillo</i>          Title: Operations/Regulatory Tech Sr          Date: 11/08/2019</p>
	<p align="center"><b>SURVEYOR CERTIFICATION</b></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: Russell H McNeace          Date of Survey: 6/25/1968          Certificate Number: 1500</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:** 6/26/2023

**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	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
San Juan 27-4 Unit 51	3003920149	H-29-27N-4W	1450' FNL & 800' FEL	2	357	.5

**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
<u>San Juan 27-4 Unit 51</u>	<u>3003920149</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 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: *Cherylene Weston*

Printed Name: Cheryl Weston

Title: Operations/Regulatory Tech Sr.

E-mail Address: cweston@hilcorp.com

Date: 6/26/2023

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 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.

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

CONDITIONS

Action 233166

**CONDITIONS**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 233166
	Action Type: [C-103] NOI Recompletion (C-103E)

**CONDITIONS**

Created By	Condition	Condition Date
dmcclure	Notify NMOCD 24 Hours Prior to beginning operations	8/16/2023
dmcclure	DHC required	8/16/2023
dmcclure	The CBL proposed in the procedures shall be submitted to the Division. If the cement sheath around the casing is not adequate to protect the casing and isolate strata from the top Mesaverde perforation to at least 150 feet above the top Mesaverde perforation, then Hilcorp shall conduct operations to remediate it prior to completing or producing from the formation.	8/16/2023



**July 31, 2023**

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

**Re: C-107A (Downhole Commingle)  
San Juan 27-4 Unit 51  
API No. 30-039-20149  
Section 29, T27N-R04W  
Rio Arriba County, NM**

Concerning Hilcorp Energy Company's C-107A 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:

- **Basin Mancos (Pool Code: (97232))**
- **Basin Dakota (Pool Code: (71599))**
- **Blanco Mesaverde (Pool Code: (72319))**

Order No. R-13681 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, written notice 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 that reads 'Chuck Creekmore'.

Charles E (Chuck) Creekmore  
Division Landman  
Hilcorp Energy Company  
1111 Travis Street, Houston TX 77002  
PO Box 61229, Houston TX 77208-  
1229 Main: 713/209-2400; Direct:  
832/839-4601 Cell: 505/320-9910; Fax:  
713/209-2420  
[ccreekmore@hilcorp.com](mailto:ccreekmore@hilcorp.com)



**From:** [McClure, Dean, EMNRD](#) on behalf of [Engineer, OCD, EMNRD](#)  
**To:** [Cheryl Weston](#); [Mandi Walker](#)  
**Cc:** [McClure, Dean, EMNRD](#); [Rikala, Ward, EMNRD](#); [Wrinkle, Justin, EMNRD](#); [Powell, Brandon, EMNRD](#); [Paradis, Kyle Q](#)  
**Subject:** Approved Administrative Order DHC-5324  
**Date:** Friday, September 22, 2023 9:47:48 AM  
**Attachments:** [DHC5324 Order.pdf](#)

---

NMOCD has issued Administrative Order DHC-5324 which authorizes Hilcorp Energy Company (372171) to downhole commingle production within the following well:

**Well Name:** [San Juan 27 4 Unit #51](#)

**Well API:** [30-039-20149](#)

---

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

## San Juan 27-4 Unit 51 Allocation

The forecasts for Mancos and Mesaverde production have been generated using type curves of production in the surrounding 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 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:

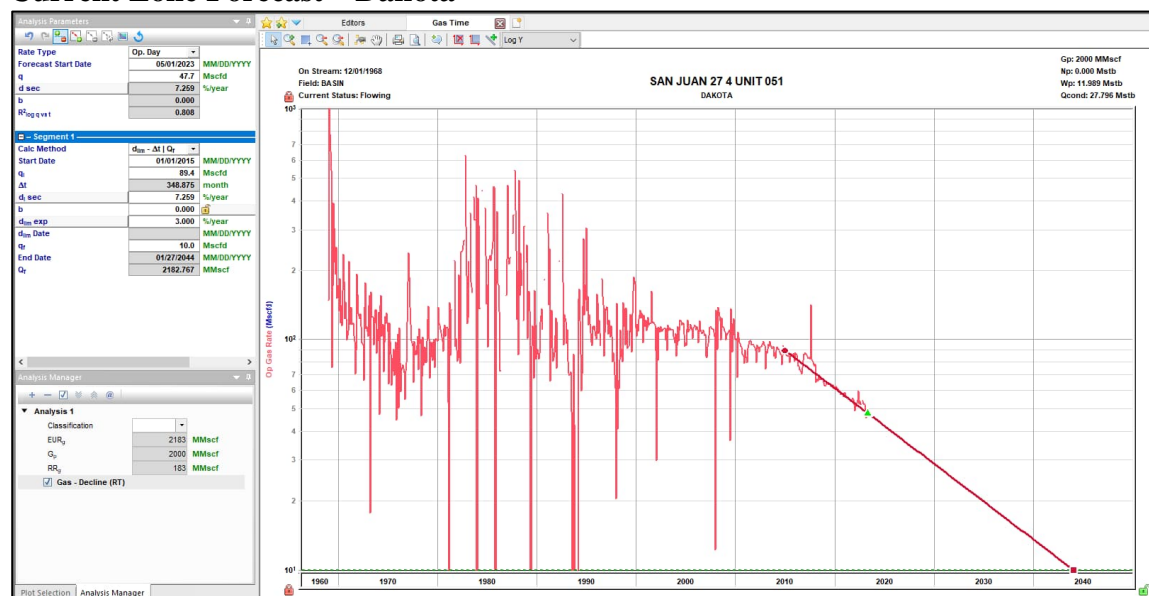
Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Dakota and the added formations to be trimmingle are the Mancos and Mesaverde. The subtraction method applies an average monthly production forecast to the base formation using historic production. All production from this well exceeding the base formation forecasts will be allocated to the new formations.

New zones will be allocated using a fixed allocation. Forecasted rates for MC and MV are based on offsets type curve. The maps show the standalone offsets that were used for type-curves. The split between MC and MV is bason the ratio of forecasted reserves as shown in the table below.

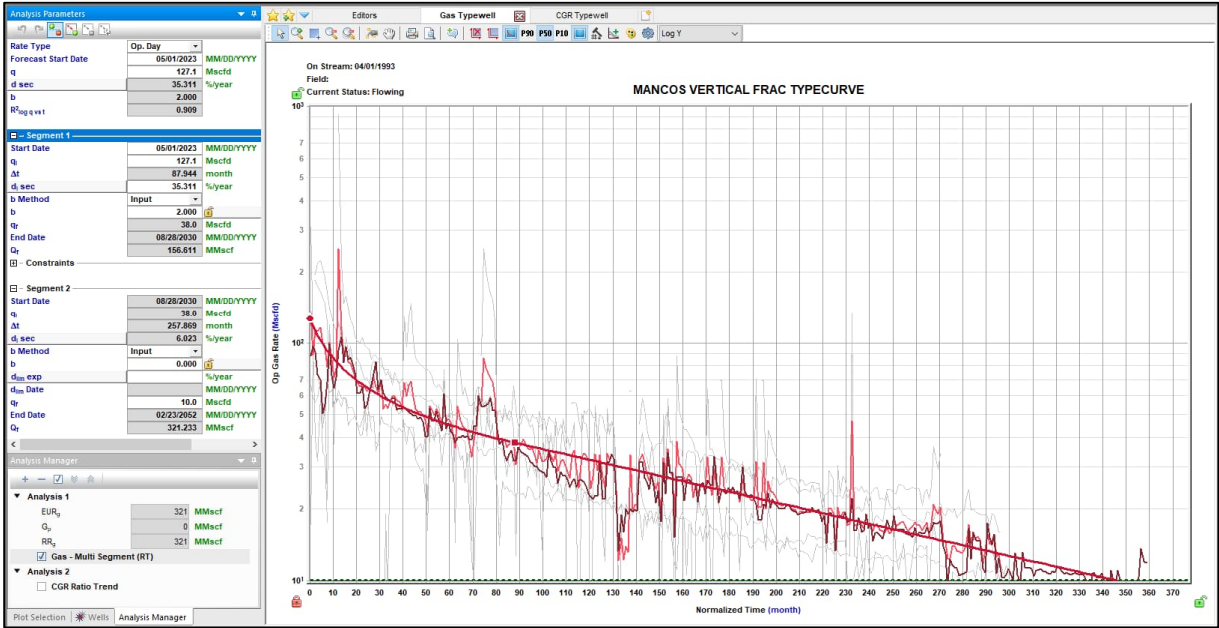
Formation	Remaining Reserves (MMcf)	% Gas Allocation
Mancos	321	32%
Mesaverde	685	68%

After 3 years production will stabilize. A production average will be gathered during the 4<sup>th</sup> year and will be utilized to create a fixed percentage-based allocation.

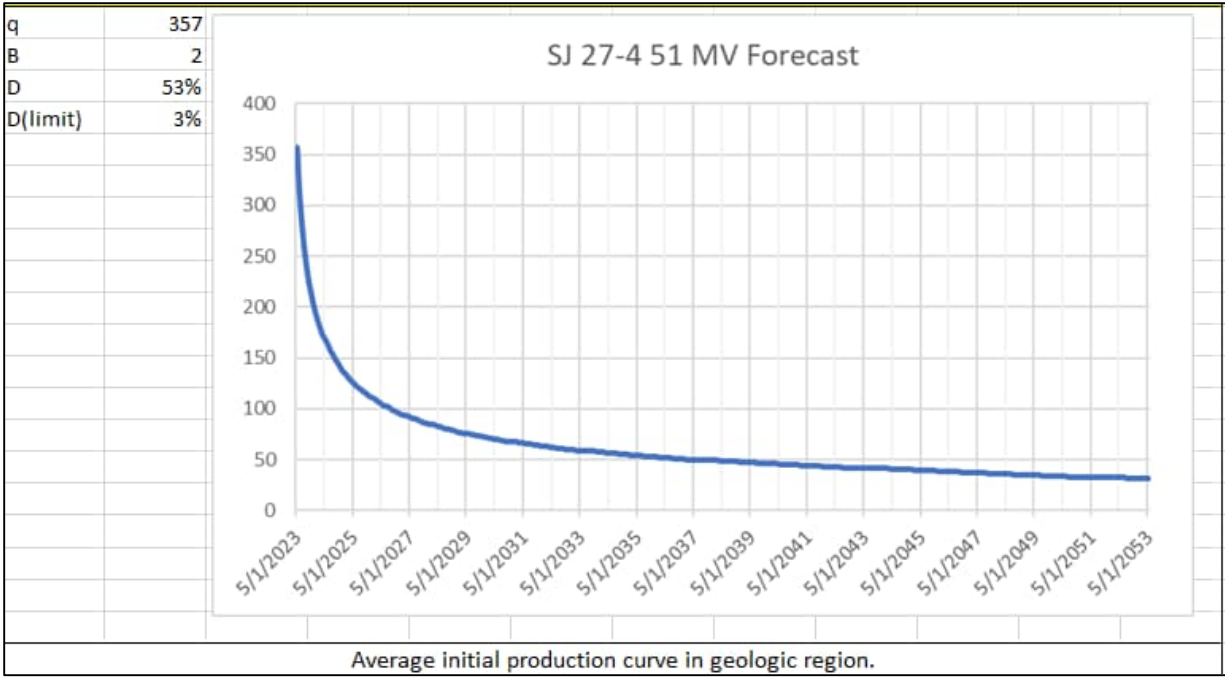
## Current Zone Forecast – Dakota



Proposed Zone 1 Forecast - Mancos



Proposed Zone 2 Forecast - Mesaverde

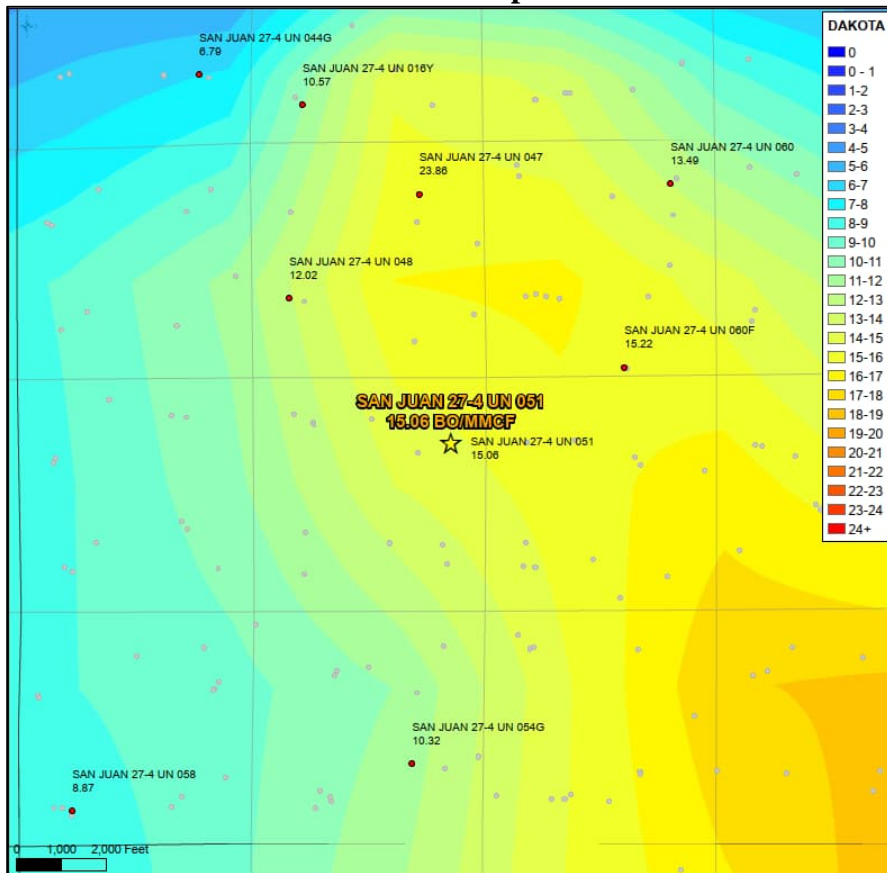


### Oil Allocation:

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.

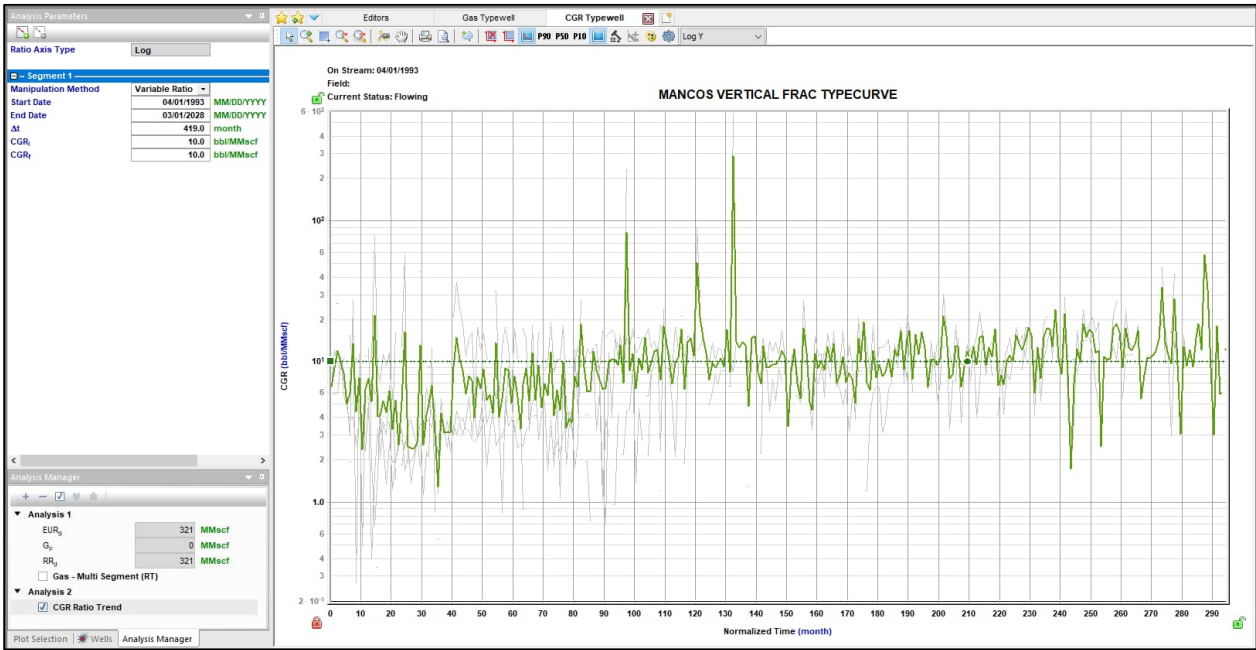
Formation	Yield (bbl/MM)	% Oil Allocation
Dakota	15.06	28%
Mancos	10	32%
Mesaverde	5.9	40%

### Current Zone – Dakota Oil Yield Map



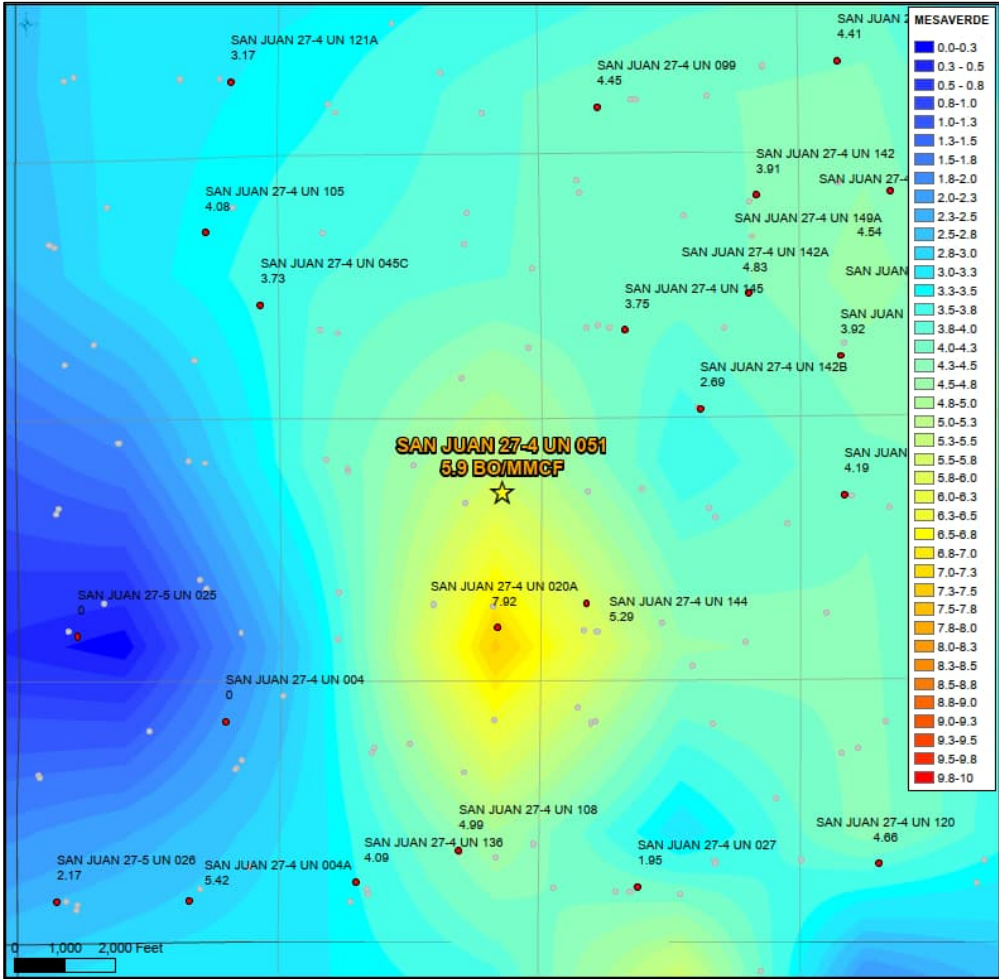
9-Section Area of Standalone Oil Yields. Sampled well to this map.

Proposed Zone 1 – Mancos Oil Yield



Average Oil Yield from Vertical Mancos Type Curve.

Proposed Zone 2 - Mesaverde Oil Yield Map



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

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 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

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

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-039-20149
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Hilcorp Energy Company		6. State Oil & Gas Lease No. Federal NMSF080670
3. Address of Operator 382 Road 3100, Aztec NM 87410		7. Lease Name or Unit Agreement Name San Juan 27-4 Unit
4. Well Location Unit Letter_H_: 1450 feet from the North line and 800 feet from the East line Section 29 Township 27N Range 04W NMPM Rio Arriba County		8. Well Number 51
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6884' GL		9. OGRID Number 372171
		10. Pool name or Wildcat Blanco MV/Basin MC/Basin DK

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input checked="" type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

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

It is intended to recomplete the subject well in the Basin Mancos (pool 97232) / Blanco Mesaverde (pool 72319) and downhole commingle the existing Basin Dakota (pool 71599) with the Mesaverde and Mancos. The production will be commingled per Oil Conservation Division Order Number 11363. Allocation and methodology will be provided after the well is completed. Commingling will not reduce the value of the production. The Bureau of Land Management has been notified in writing of this application.

Proposed perforations are: MV - 5400' – 6350'; MC – 7473' – 7482'; DK - 7945' - 8167' **These perforations are in TVD.**

As referenced in Order # **R-13681** interest owners were not re-notified.

Spud Date:  Rig Release Date:

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

SIGNATURE Cherylene Weston TITLE Operations/Regulatory Technician Sr. DATE 08/22/2023

Type or print name Cherylene Weston E-mail address: cweston@hilcorp.com PHONE: 713-289-2615

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):



**District I**

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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**

Form C-102  
August 1, 2011

Permit 341856

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-039-20149	2. Pool Code 97232	3. Pool Name BASIN MANCOS
4. Property Code 319210	5. Property Name SAN JUAN 27 4 UNIT	6. Well No. 051
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6884

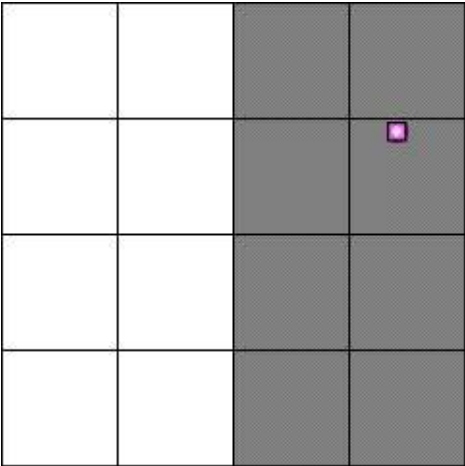
**10. Surface Location**

UL - Lot H	Section 29	Township 27N	Range 04W	Lot Idn	Feet From 1450	N/S Line N	Feet From 800	E/W Line E	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 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**

	<p style="text-align: center;"><b>OPERATOR CERTIFICATION</b></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: 06/23/2023</p> <hr/> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></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: <i>Russell H McNease</i> Date of Survey: 6/25/1968 Certificate Number: 1500</p>
--	---

**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 273913

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-039-20419	2. Pool Code 72319	3. Pool Name BLANCO-MESAVERDE (PRORATED GAS)
4. Property Code 319210	5. Property Name SAN JUAN 27 4 UNIT	6. Well No. 051
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6884

**10. Surface Location**

UL - Lot H	Section 29	Township 27N	Range 04W	Lot Idn	Feet From 1450	N/S Line N	Feet From 800	E/W Line E	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 320.00 E/2	13. Joint or Infill			14. Consolidation Code			15. Order No.		

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

	<b>OPERATOR CERTIFICATION</b> <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: Etta Trujillo Title: Operations/Regulatory Tech Sr Date: 11/08/2019	
	<b>SURVEYOR CERTIFICATION</b> <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: Russell H McNeace Date of Survey: 6/25/1968 Certificate Number: 1500	

Revised by OGD: 8/31/2013 13:54:40 BW

Page 30 of 41

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

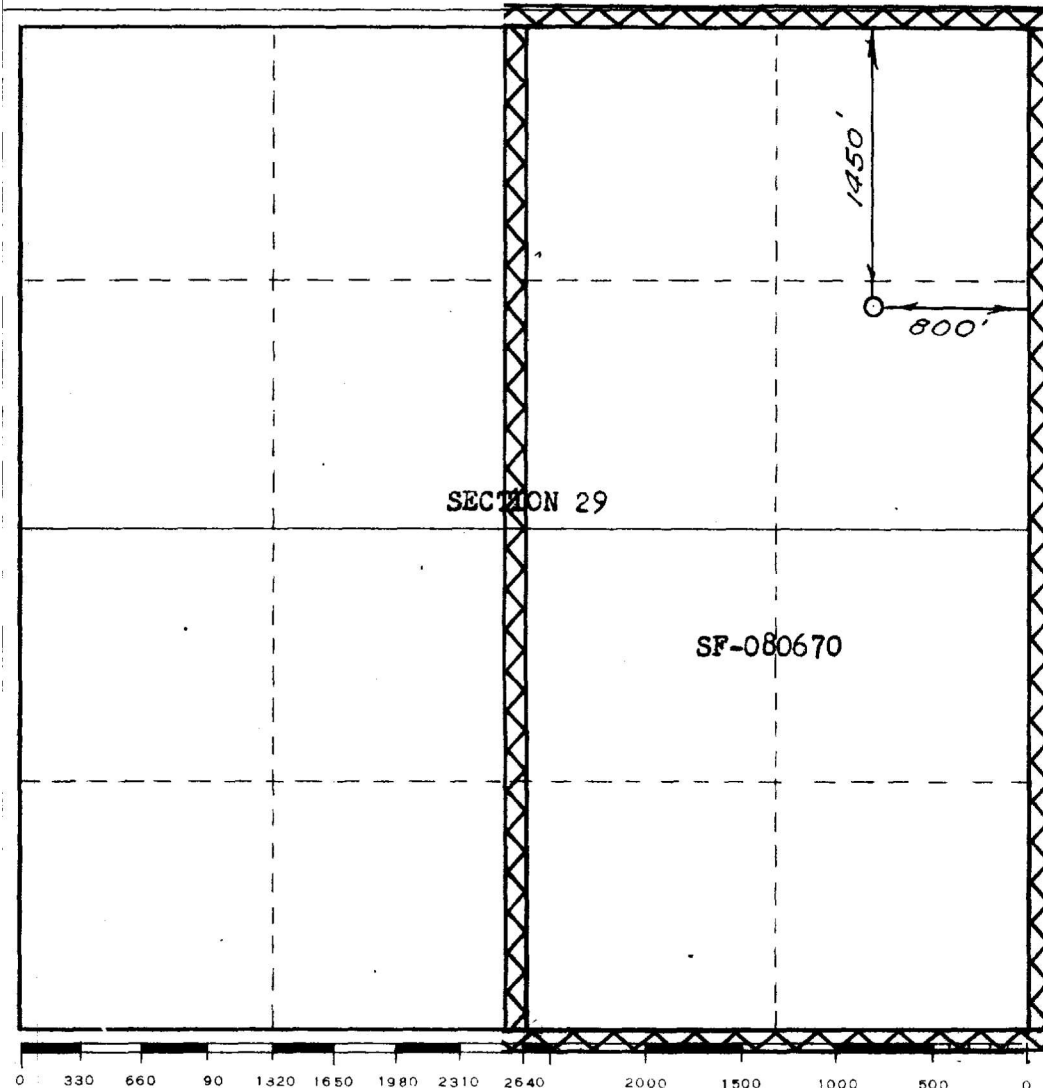
Operator <b>EL PASO NATURAL GAS COMPANY</b>		Lease <b>SAN JUAN 27-4 UNIT (SF-080670)</b>		Well No. <b>51</b>
Unit Letter <b>H</b>	Section <b>29</b>	Township <b>27-N</b>	Range <b>4-W</b>	County <b>RIO ARriba</b>
Actual Footage Location of Well: <b>1150</b> feet from the <b>NORTH</b> line and <b>800</b> feet from the <b>EAST</b> line				
Ground Level Elev. <b>6884</b>	Producing Formation <b>DAKOTA</b>	Pool <b>BASIN DAKOTA</b>	Dedicated Acreage: <b>320.00</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.



## CERTIFICATION

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

Original signed by  
**Carl E. Matthews**

Name  
**Petroleum Engineer**

Residence  
**El Paso Natural Gas Co.**

Comptroller  
**September 18, 1968**

Date

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

Date Surveyed  
**JUNE 25, 1968**

Registered Professional Engineer  
and/or Land Surveyor

*Russell H. McNease*  
Certificate No.

**1500**

## San Juan 27-4 Unit 51 Allocation

The forecasts for Mancos and Mesaverde production have been generated using type curves of production in the surrounding 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 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

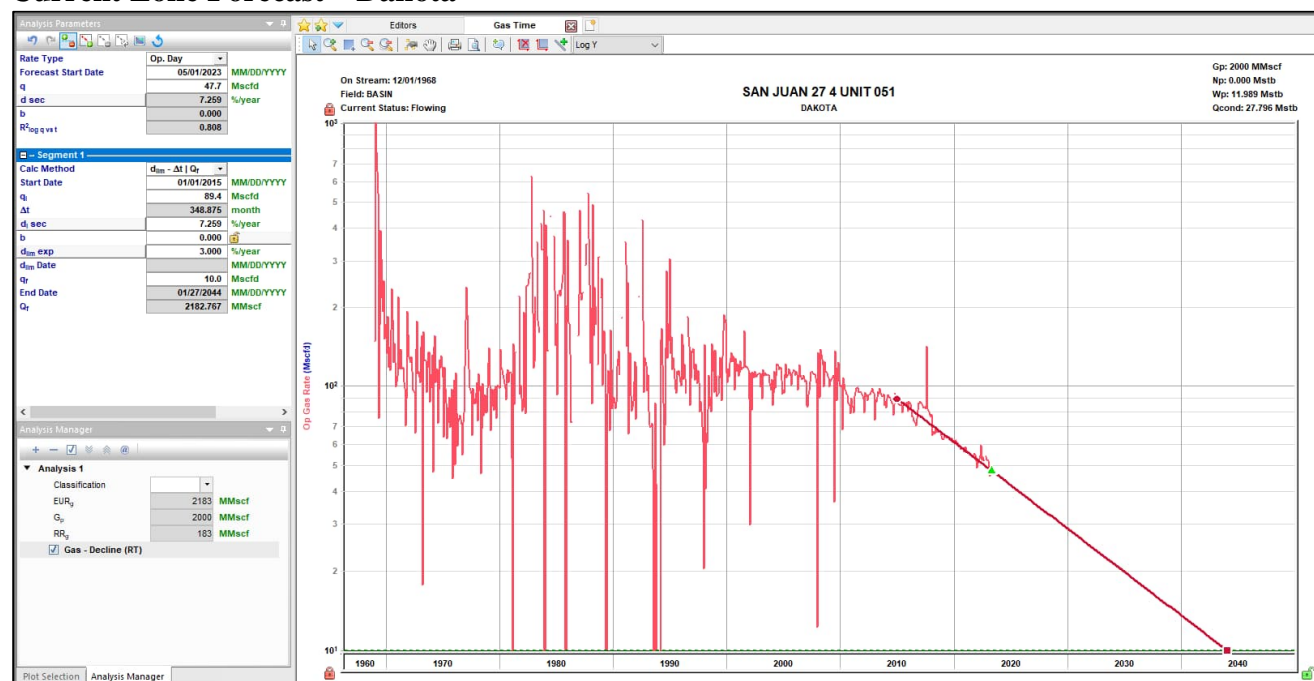
### Gas Allocation:

Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Dakota and the added formations to be trimmingle are the Mancos 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 base formation forecasts will be allocated to the new formations.

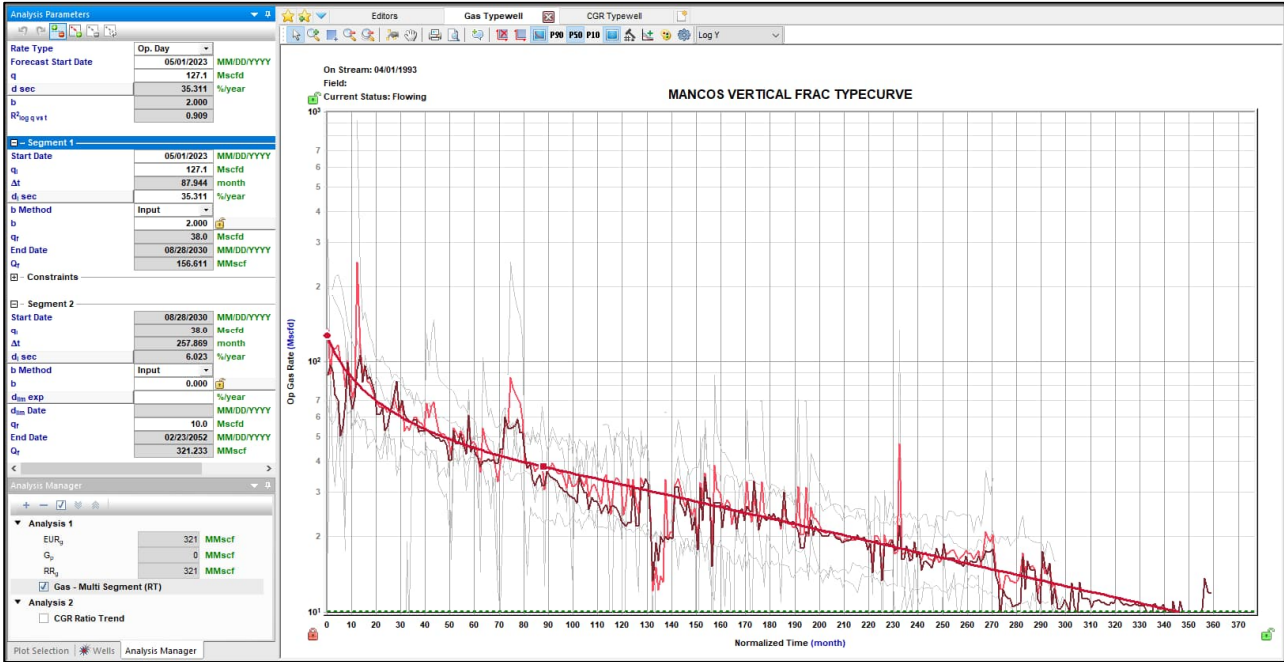
After 3 years production will stabilize. A production average will be gathered during the 4<sup>th</sup> year and will be utilized to create a fixed percentage-based allocation.

Formation	Remaining Reserves (MMcf)	% Gas Allocation
Mancos	321	32%
Mesaverde	685	68%

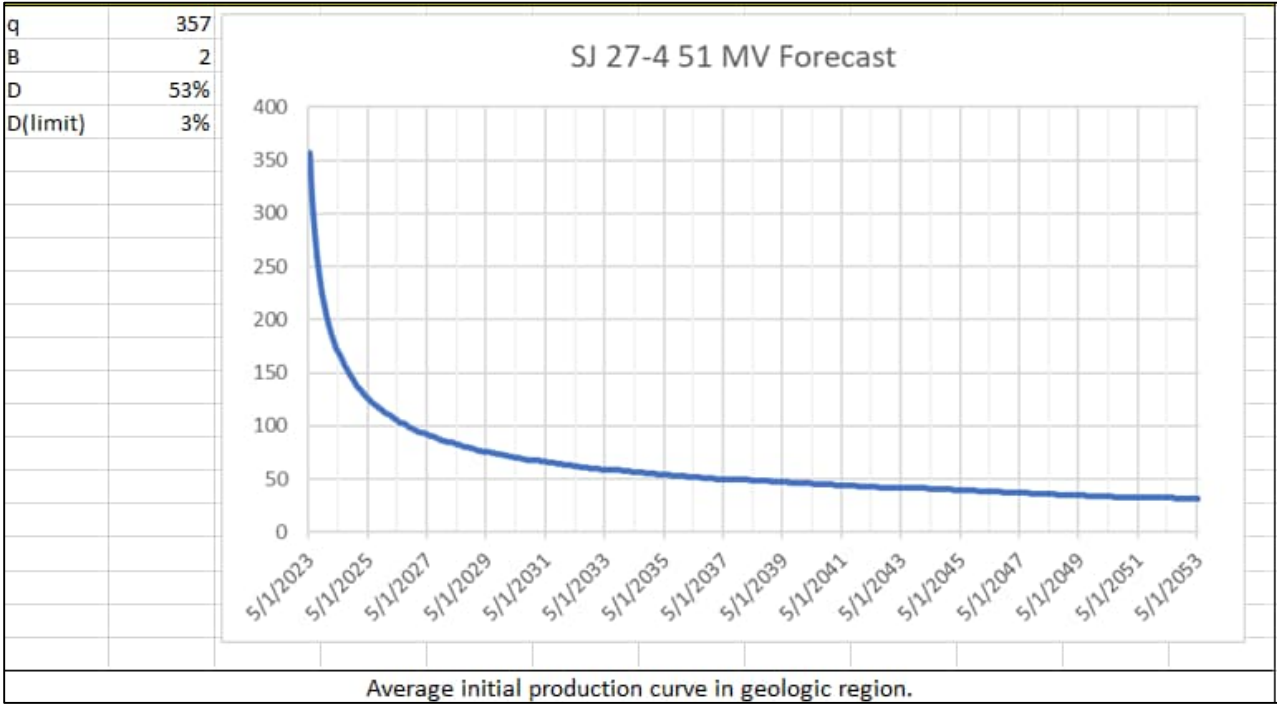
## Current Zone Forecast – Dakota



Proposed Zone 1 Forecast - Mancos



Proposed Zone 2 Forecast - Mesaverde

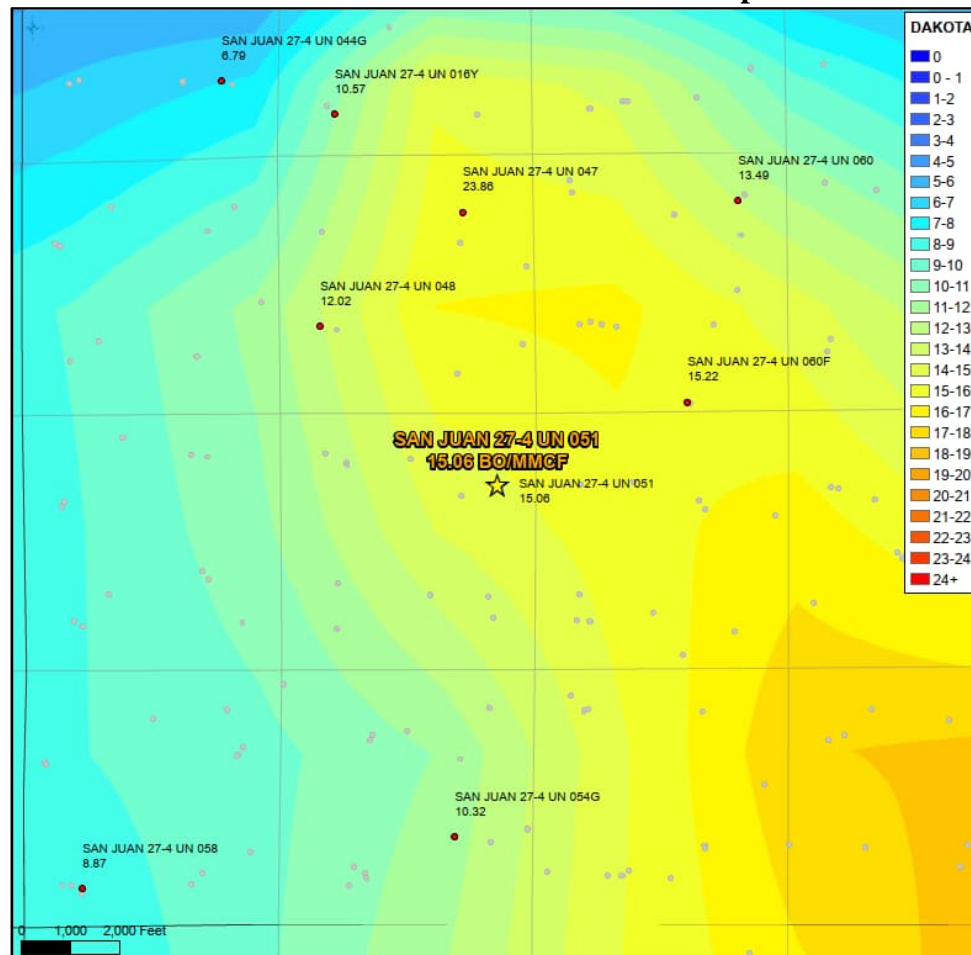




**Oil Allocation:**

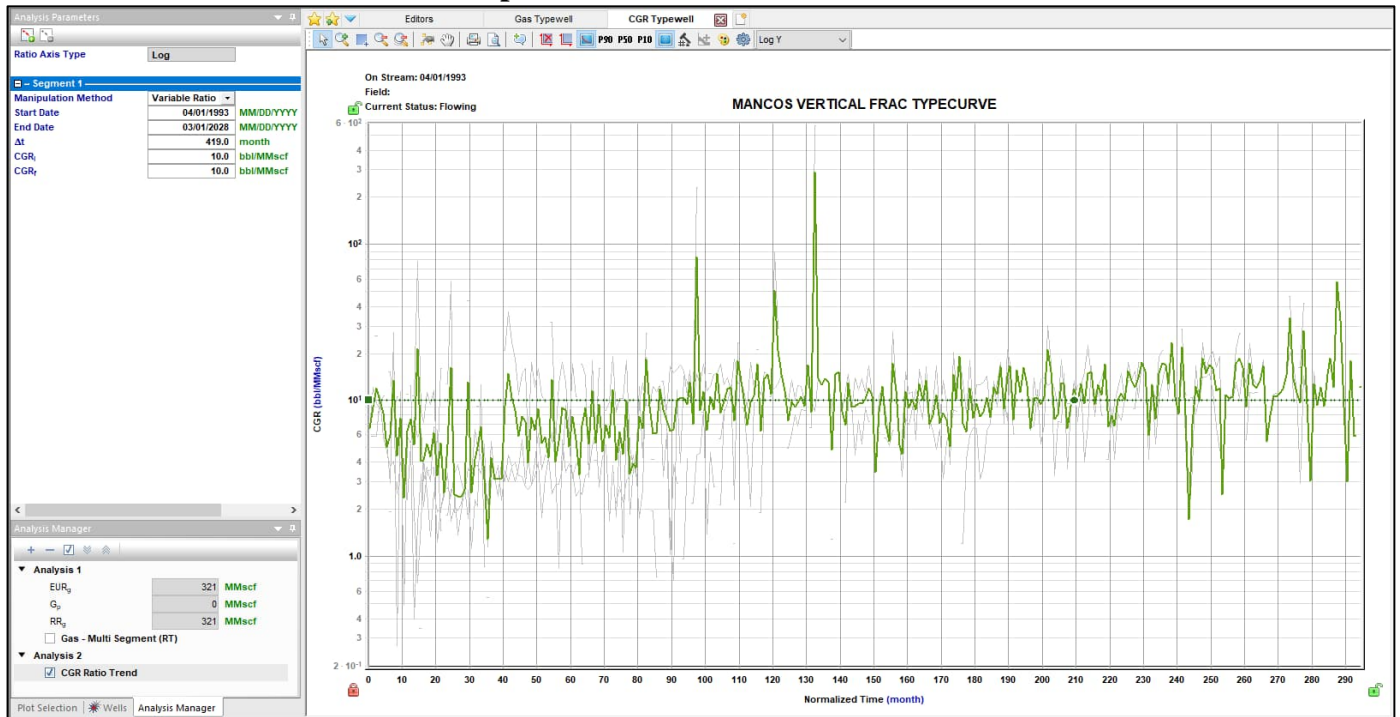
Oil production will be allocated based on average formation yields from offset wells and will be a fixed rate for 4 years. After 4 years oil will be reevaluated and adjusted as needed based on average formation yields and new fixed gas allocation.

Formation	Yield (bbl/MM)	% Oil Allocation
Dakota	15.06	28%
Mancos	10	32%
Mesaverde	5.9	40%

**Current Zone – Dakota Oil Yield Map**

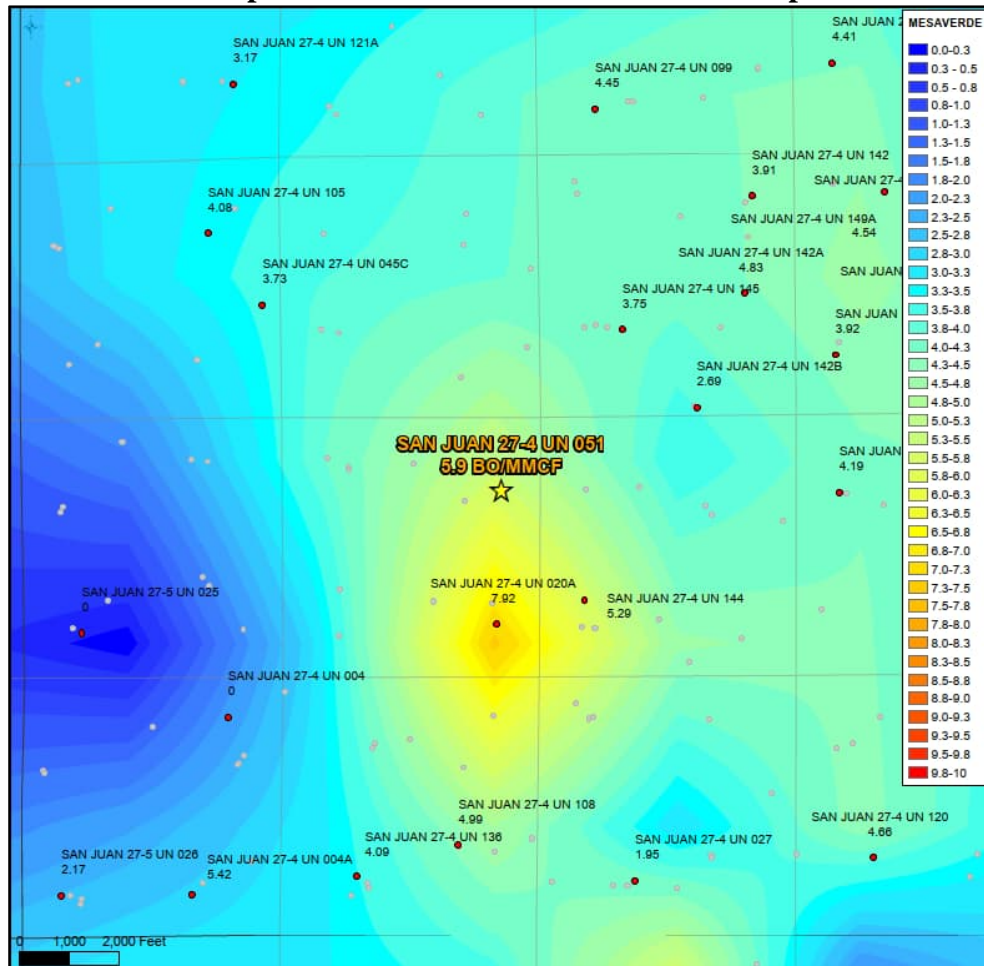
9-Section Area of Standalone Oil Yields. Sampled well to this map.

## Proposed Zone 1 – Mancos Oil Yield



Average Oil Yield from Vertical Mancos Type Curve.

## Proposed Zone 2 - Mesaverde Oil Yield Map



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

**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-5324**

**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-13681.
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-5073.
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. forty percent (40%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319);
  - b. thirty-two percent (32%) shall be allocated to the BASIN MANCOS pool (pool ID: 97232); and
  - c. twenty-eight percent (28%) shall be allocated to the BASIN DAKOTA (PRORATED GAS) pool (pool ID: 71599).

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 BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319); and
- b. the BASIN MANCOS pool (pool ID: 97232).

The current pool(s) are:

- a. the BASIN DAKOTA (PRORATED GAS) pool (pool ID: 71599).

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

- a. sixty-eight percent (68%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319); and
- b. thirty-two percent (32%) shall be allocated to the BASIN MANCOS pool (pool ID: 97232).

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**

**DATE:** 9/21/2023

State of New Mexico  
Energy, Minerals and Natural Resources Department

## Exhibit A

Order: **DHC-5324**

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

Well Name: **San Juan 27 4 Unit #51**

Well API: **30-039-20149**

Pool Name: **BLANCO-MESAVERDE (PRORATED GAS)**

Upper Zone

Pool ID: **72319**

Current:

New: **X**

Allocation:

Oil: **40%**

Gas: **68%**

Interval: **Perforations**

Top: **5,400**

Bottom: **6,350**

Pool Name: **BASIN MANCOS**

Intermediate Zone

Pool ID: **97232**

Current:

New: **X**

Allocation:

Oil: **32%**

Gas: **32%**

Interval: **Perforations**

Top: **7,473**

Bottom: **7,482**

Bottom of Interval within 150% of Upper Zone's Top of Interval: **YES**

Pool Name: **BASIN DAKOTA (PRORATED GAS)**

Lower Zone

Pool ID: **71599**

Current: **X**

New:

Allocation:

Oil: **28%**

Gas:

Interval: **Perforations**

Top: **7,945**

Bottom: **8,167**

Bottom of Interval within 150% of Upper Zone's Top of Interval: **NO**

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 255522

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 255522
	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.	9/22/2023