

**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-5506**

**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 all produced fluids from all the Pools are compatible with each other.
4. Applicant has certified that downhole commingling the Pools will not decrease the value of the oil and gas production.
5. 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.
6. 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**

7. 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.
8. 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.
9. 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.

10. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.11(A)(8) NMAC.
11. 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-363.
3. Applicant shall allocate a fixed percentage of the oil production from the Well to each of the Pools until a different plan to allocate oil production is approved by OCD. Of the oil production from the Well:
  - a. zero percent (0%) shall be allocated to the Basin Fruitland Coal pool (pool ID: 71629);
  - b. forty-four percent (44%) shall be allocated to the Otero Chacra pool (pool ID: 82329); and
  - c. forty-seven (47%) shall be allocated to the Blanco Mesaverde pool (pool ID: 72319);
  - d. nine percent (9%) shall be allocated to the Basin Dakota 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 Basin Fruitland Coal pool (pool ID: 71629); and
- b. the Otero Chacra pool (pool ID: 82329).

The current pool(s) are:

- a. the Blanco Mesaverde pool (pool ID: 72319); and
- b. the Basin Dakota pool (pool ID: 71599).

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**



---

**ALBERT CHANG  
DIRECTOR**

**DATE:** 7/18/2025

Order No. DHC-5506

State of New Mexico  
Energy, Minerals and Natural Resources Department

## Exhibit A

Order: **DHC-5506**

Operator: **Hilcorp Energy Company**

Well Name: **San Juan 28 7 Unit Well No. 199M**

Well API: **30-039-26718**

Upper Zone	Pool Name: <b>Basin Fruitland Coal</b>		
	Pool ID: <b>71629</b>	Current:	New: <b>X</b>
	Allocation:	Oil: <b>0.0%</b>	Gas: <b>60.0%</b>
		Top: <b>2,999</b>	Bottom: <b>3,313</b>
Intermediate Zone	Pool Name: <b>Otero Chacra</b>		
	Pool ID: <b>82329</b>	Current:	New: <b>X</b>
	Allocation:	Oil: <b>44.0%</b>	Gas: <b>40.0%</b>
		Top: <b>4,251</b>	Bottom: <b>4,959</b>
	Bottom of Interval within 150% of Upper Zone's Top of Interval: <b>NO</b>		
Intermediate Zone 2	Pool Name: <b>Blanco Mesaverde</b>		
	Pool ID: <b>72319</b>	Current: <b>X</b>	New:
	Allocation:	Oil: <b>47.0%</b>	Gas: <b>Subt</b>
		Top: <b>5,012</b>	Bottom: <b>5,606</b>
	Bottom of Interval within 150% of Upper Zone's Top of Interval: <b>NO</b>		
Lower Zone	Pool Name: <b>Basin Dakota</b>		
	Pool ID: <b>71599</b>	Current: <b>X</b>	New:
	Allocation:	Oil: <b>9.0%</b>	Gas: <b>Subt</b>
		Top: <b>7,590</b>	Bottom: <b>7,778</b>
	Bottom of Interval within 150% of Upper Zone's Top of Interval: <b>NO</b>		
	Top of Queen Formation:		

ID NO. 456598

DHC - 5506

Revised March 23, 2017

RECEIVED: <b>04/29/25</b>	REVIEWER:	TYPE:	APP NO:
---------------------------	-----------	-------	---------

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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

**ADMINISTRATIVE APPLICATION CHECKLIST**

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

**Applicant:** \_\_\_\_\_ **OGRID Number:** \_\_\_\_\_  
**Well Name:** \_\_\_\_\_ **API:** \_\_\_\_\_  
**Pool:** \_\_\_\_\_ **Pool Code:** \_\_\_\_\_

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

**1) TYPE OF APPLICATION:** Check those which apply for [A]

A. Location – Spacing Unit – Simultaneous Dedication

☐ NSL      ☐ NSP (PROJECT AREA)      ☐ NSP (PRORATION UNIT)      ☐ SD

B. Check one only for [ I ] or [ II ]

[ I ] Commingling – Storage – Measurement

☐ DHC    ☐ CTB    ☐ PLC    ☐ PC    ☐ OLS    ☐ OLM

[ II ] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery

☐ WFX    ☐ PMX    ☐ SWD    ☐ IPI    ☐ EOR    ☐ PPR
**2) NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☐ Offset operators or lease holders  
 B. ☐ Royalty, overriding royalty owners, revenue owners  
 C. ☐ Application requires published notice  
 D. ☐ Notification and/or concurrent approval by SLO  
 E. ☐ Notification and/or concurrent approval by BLM  
 F. ☐ Surface owner  
 G. ☐ For all of the above, proof of notification or publication is attached, and/or,  
 H. ☐ No notice required

**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  
Operator

382 Road 3100, Aztec, NM 87410  
Address

SAN JUAN 28-7 UNIT  
Lease

199M  
Well No.

E.19.28N.07W  
Unit Letter-Section-Township-Range

RIO ARriba  
County

OGRID No. 372171

Property Code 318432

API No. 3003926718

Lease Type: X Federal

State

Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	BASIN FRUITLAND COAL (GAS POOL)	OTERO CHACRA (GAS POOL)	BLANCO MESAVERDE (PRORATED GAS)	BASIN DAKOTA (PRORATED GAS)
Pool Code	71629	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	~2999'-3313'	~4251'-4959'	5012'-5606'	7590'-7778'
Method of Production (Flowing or Artificial Lift)	ARTIFICIAL LIFT	ARTIFICIAL LIFT	ARTIFICIAL LIFT	ARTIFICIAL LIFT
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	261 BHP	650 BHP	417 BHP	1179 BHP
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1159 BTU	1215 BTU	1275 BTU	1140 BTU
Producing, Shut-In or New Zone	NEW ZONE	NEW ZONE	PRODUCING	PRODUCING
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates: Oil: Gas: Water:	Date: Rates: Oil: Gas: Water:	Date: 2/1/2025 Rates: Oil: 0 BBL Gas: 1,978 MCF Water: 20 BBL	Date: 2/1/2025 Rates: Oil: 0 BBL Gas: 434 MCF Water: 20BBL
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas  %	Oil Gas  %	Oil Gas  %	Oil Gas  %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?

Yes\_\_\_\_\_ No X

If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

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-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 DAWN NASH DEAL

TITLE Operations/Regulatory Technician

DATE 04/29/2025

TYPE OR PRINT NAME DAWN NASH-DEAL

E-MAIL ADDRESS DNASH@HILCORP.COM

TELEPHONE NO. (505) 324-5132

District I  
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102

Revised February 21, 1994

District II  
PO Drawer DD, Artesia, NM 88211-0719

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

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

## OIL CONSERVATION DIVISION

PO Box 2088

Santa Fe, NM 87504-2088

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30 039-26718</b>		*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 016608	*Property Name SAN JUAN 28-7 UNIT		*Well Number 199M
*GRID No. 005073	*Operator Name CONOCO, INC.		*Elevation 6746'

## 10 Surface Location

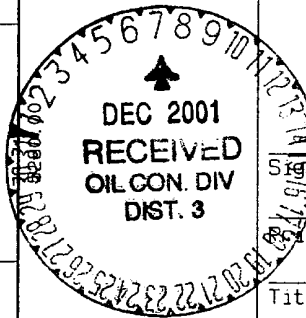
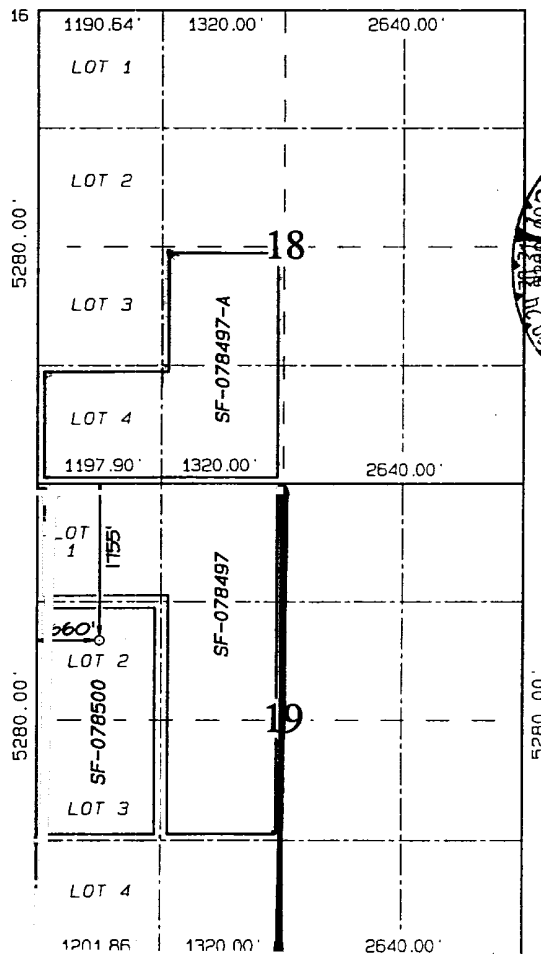
U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	19	28N	7W		1755	NORTH	660	WEST	RIO ARriba

## 11 Bottom Hole Location If Different From Surface

U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres <b>MV - 305.44</b>	13 Joint or Infill	14 Consolidation Code	15 Order No. <b>Dakota R2948 unit 7</b>
<b>DK 345.30 Acres</b>			

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



## 17 OPERATOR CERTIFICATION

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

Signature

Kim Southall

Printed Name

Property Analyst

Title

Date

## 18 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.

DECEMBER 18, 2000

Date of Survey

Signature and Seal of Professional Surveyor



Certificate Number 6857

Water Compatibility in the San Juan Basin  
 - The San Juan basin has productive siliciclastic reservoirs (Blanco South Blanco South Pictured Cliffs, Blanco Mesaverde, Basin Dakota, etc.) and a productive coalbed methane reservoir (Basin Fruitland Coal).  
 - These siliciclastic and coalbed methane reservoirs are commingled extensively throughout the basin in many different combinations with no observed damage from clay swelling due to differing formation waters.  
 - The samples below all show fresh water with low TDS.  
 - Data taken from standalone completions in the zone of interest within a 2 mile radius of the well. A farther radius is used if there is not enough data for a proper statistical analysis.

Well Name	API
SAN JUAN 28-7 UN 199M	3003926718

FRC Offset (4.81 Miles)		DK Offset (3.44 Miles)		CH Offset (22.33 Miles)		MV Offset (5.39)	
API	3003925112	API	3003921327	API	3004525921	API	3003926806
Property	SAN JUAN 28-7 UNIT 403	Property	SAN JUAN 28-7 UNIT 235	Property	SHEPHERD AND KELSEY C 4	Property	SAN JUAN 29-7 UNIT 66B
CationBarium	0.00	CationBarium	0.00	CationBarium	0	CationBarium	0.10
CationBoron	0	CationBoron	0	CationBoron	0	CationBoron	0
CationCalcium	2.20	CationCalcium	5.60	CationCalcium	1.85	CationCalcium	3.40
CationIron	5.20	CationIron	8.00	CationIron	10.74	CationIron	31.40
CationMagnesium	0.32	CationMagnesium	8.10	CationMagnesium	0.59	CationMagnesium	0.43
CationManganese	0.10	CationManganese	0.28	CationManganese	0.59	CationManganese	0.75
CationPhosphorus	0	CationPhosphorus	0	CationPhosphorus	0	CationPhosphorus	0
CationPotassium	0	CationPotassium	0	CationPotassium	0	CationPotassium	10.00
CationStrontium	0.00	CationStrontium	0.00	CationStrontium	0	CationStrontium	1.00
CationSodium	1164.20	CationSodium	352.70	CationSodium	869.22	CationSodium	10.00
CationSilica	0	CationSilica	0	CationSilica	0	CationSilica	7.38
CationZinc	0	CationZinc	0	CationZinc	0	CationZinc	0.50
CationAluminum	0	CationAluminum	0	CationAluminum	0	CationAluminum	0
CationCopper	0	CationCopper	0	CationCopper	0	CationCopper	0
CationLead	0	CationLead	0	CationLead	0	CationLead	1.00
CationLithium	0	CationLithium	0	CationLithium	0	CationLithium	0
CationNickel	0	CationNickel	0	CationNickel	0	CationNickel	0
CationCobalt	0	CationCobalt	0	CationCobalt	0	CationCobalt	0
CationChromium	0	CationChromium	0	CationChromium	0	CationChromium	0
CationSilicon	0	CationSilicon	0	CationSilicon	0	CationSilicon	5.00
CationMolybdenum	0	CationMolybdenum	0	CationMolybdenum	0	CationMolybdenum	0
AnionChloride	1700.00	AnionChloride	500.00	AnionChloride	476.52	AnionChloride	10.00
AnionCarbonate	0.00	AnionCarbonate	0.00	AnionCarbonate	0	AnionCarbonate	10.00
AnionBicarbonate	183.00	AnionBicarbonate	158.60	AnionBicarbonate	977.6	AnionBicarbonate	72.00
AnionBromide	0	AnionBromide	0	AnionBromide	0	AnionBromide	0
AnionFluoride	0	AnionFluoride	0	AnionFluoride	0	AnionFluoride	0
AnionHydroxyl	0	AnionHydroxyl	0	AnionHydroxyl	0	AnionHydroxyl	10.00
AnionNitrate	0	AnionNitrate	0	AnionNitrate	0	AnionNitrate	0
AnionPhosphate	925.60	AnionPhosphate	88.20	AnionPhosphate	0	AnionPhosphate	0
AnionSulfate	10.00	AnionSulfate	10.00	AnionSulfate	0	AnionSulfate	8.00
phField	6.73	phField	0	phField	6.96	phField	6.26
phCalculated	7.01	phCalculated	7.08	phCalculated	0	phCalculated	6.70
TempField	0	TempField	0	TempField	0	TempField	72.00
TempLab	0	TempLab	0	TempLab	0	TempLab	0
OtherFieldAlkalinity	7991.88	OtherFieldAlkalinity	2108.46	OtherFieldAlkalinity	0	OtherFieldAlkalinity	171.00
OtherSpecificGravity	1.00	OtherSpecificGravity	1.00	OtherSpecificGravity	0	OtherSpecificGravity	1.00
OtherTDS	2962.00	OtherTDS	961.00	OtherTDS	2536.64	OtherTDS	370.00
OtherCaCO3	12113.31	OtherCaCO3	3603.96	OtherCaCO3	0	OtherCaCO3	10.30
OtherConductivity	0	OtherConductivity	0	OtherConductivity	0	OtherConductivity	202.00
DissolvedCO2	360.00	DissolvedCO2	170.00	DissolvedCO2	200	DissolvedCO2	110.00
DissolvedO2	0	DissolvedO2	0	DissolvedO2	0	DissolvedO2	0
DissolvedH2S	40.00	DissolvedH2S	3.00	DissolvedH2S	0	DissolvedH2S	0.00
GasPressure	0	GasPressure	0	GasPressure	0	GasPressure	0
GasCO2	8.00	GasCO2	6.00	GasCO2	4	GasCO2	0
GasCO2PP	0	GasCO2PP	0	GasCO2PP	0	GasCO2PP	0
GasH2S	0.00	GasH2S	0.00	GasH2S	0	GasH2S	0
GasH2SPP	0	GasH2SPP	0	GasH2SPP	0	GasH2SPP	0
PitzerCaCO3_70	0	PitzerCaCO3_70	0	PitzerCaCO3_70	0	PitzerCaCO3_70	0
PitzerBaSO4_70	0	PitzerBaSO4_70	0	PitzerBaSO4_70	0	PitzerBaSO4_70	0
PitzerCaSO4_70	0	PitzerCaSO4_70	0	PitzerCaSO4_70	0	PitzerCaSO4_70	0
PitzerSrSO4_70	0	PitzerSrSO4_70	0	PitzerSrSO4_70	0	PitzerSrSO4_70	0
PitzerFeCO3_70	0	PitzerFeCO3_70	0	PitzerFeCO3_70	0	PitzerFeCO3_70	0
PitzerCaCO3_220	0	PitzerCaCO3_220	0	PitzerCaCO3_220	0	PitzerCaCO3_220	0
PitzerBaSO4_220	0	PitzerBaSO4_220	0	PitzerBaSO4_220	0	PitzerBaSO4_220	0
PitzerCaSO4_220	0	PitzerCaSO4_220	0	PitzerCaSO4_220	0	PitzerCaSO4_220	0
PitzerSrSO4_220	0	PitzerSrSO4_220	0	PitzerSrSO4_220	0	PitzerSrSO4_220	0
PitzerFeCO3_220	0	PitzerFeCO3_220	0	PitzerFeCO3_220	0	PitzerFeCO3_220	0

Gas Compatibility in the San Juan Basin

- The San Juan basin has productive siliciclastic reservoirs (Blanco South Blanco South Pictured Cliffs, Blanco Mesaverde, Basin Dakota, etc.) and a productive coalbed methane reservoir (Basin Fruitland Coal).
- These siliciclastic and coalbed methane reservoirs are commingled extensively throughout the basin in many different combinations with no observed damage from clay swelling due to differing formation waters or gas composition.
- The samples below all show offset gas analysis variability by formation is low.
- Data taken from standalone completions in the zone of interest within a 2 mile radius of the well. A farther radius is used if there is not enough data for a proper statistical analysis.

Well Name	API
SAN JUAN 28-7 UN 199M	3003926718

FRC Offset (3.68 Miles)		DK Offset (2.24 Miles)		CH Offset (13.81 Miles)		MV Offset (3.32 Miles)	
AssetCode	3003924298	AssetCode	3003926938	AssetCode	3004524758	AssetCode	3003927250
AssetName	SAN JUAN 29-7 UNIT NP 513	AssetName	SAN JUAN 28-7 UNIT 230F	AssetName	ZACHRY 27	AssetName	SAN JUAN 28-7 UNIT 61B
CO2	0.00	CO2	0.01	CO2	0	CO2	0.01
N2	0.00	N2	0.00	N2	0.01	N2	0.00
C1	0.87	C1	0.82	C1	0.85	C1	0.78
C2	0.06	C2	0.09	C2	0.08	C2	0.11
C3	0.04	C3	0.05	C3	0.04	C3	0.06
ISOC4	0.01	ISOC4	0.01	ISOC4	0.01	ISOC4	0.01
NC4	0.01	NC4	0.01	NC4	0.01	NC4	0.02
ISOC5	0.00	ISOC5	0.00	ISOC5	0	ISOC5	0.00
NC5	0.00	NC5	0.00	NC5	0	NC5	0.00
NEOC5	0	NEOC5	0	NEOC5	0	NEOC5	0
C6	0	C6	0	C6	0	C6	0
C6 PLUS	0.00	C6 PLUS	0.01	C6 PLUS	0	C6 PLUS	0.01
C7	0	C7	0	C7	0	C7	0
C8	0	C8	0	C8	0	C8	0
C9	0	C9	0	C9	0	C9	0
C10	0	C10	0	C10	0	C10	0
AR	0	AR	0	AR	0	AR	0
CO	0	CO	0	CO	0	CO	0
H2	0	H2	0	H2	0	H2	0
O2	0	O2	0	O2	0	O2	0
H2O	0	H2O	0	H2O	0	H2O	0
H2S	0	H2S	0	H2S	0	H2S	0
HE	0	HE	0	HE	0	HE	0
C_O_S	0	C_O_S	0	C_O_S	0	C_O_S	0
CH3SH	0	CH3SH	0	CH3SH	0	CH3SH	0
C2H5SH	0	C2H5SH	0	C2H5SH	0	C2H5SH	0
CH2S3_2CH3S	0	CH2S3_2CH3S	0	CH2S3_2CH3S	0	CH2S3_2CH3S	0
CH2S	0	CH2S	0	CH2S	0	CH2S	0
C6HV	0	C6HV	0	C6HV	0	C6HV	0
CO2GPM	0.00	CO2GPM	0.00	CO2GPM	0	CO2GPM	0.00
N2GPM	0.00	N2GPM	0.00	N2GPM	0	N2GPM	0.00
C1GPM	0.00	C1GPM	0.00	C1GPM	0	C1GPM	0.00
C2GPM	1.61	C2GPM	2.34	C2GPM	0	C2GPM	2.95
C3GPM	1.11	C3GPM	1.26	C3GPM	0	C3GPM	1.52
ISOC4GPM	0.27	ISOC4GPM	0.30	ISOC4GPM	0	ISOC4GPM	0.30
NC4GPM	0.28	NC4GPM	0.38	NC4GPM	0	NC4GPM	0.50
ISOC5GPM	0.11	ISOC5GPM	0.17	ISOC5GPM	0	ISOC5GPM	0.17
NC5GPM	0.07	NC5GPM	0.11	NC5GPM	0	NC5GPM	0.13
C6_PLUSGPM	0.16	C6_PLUSGPM	0.32	C6_PLUSGPM	0	C6_PLUSGPM	0.39

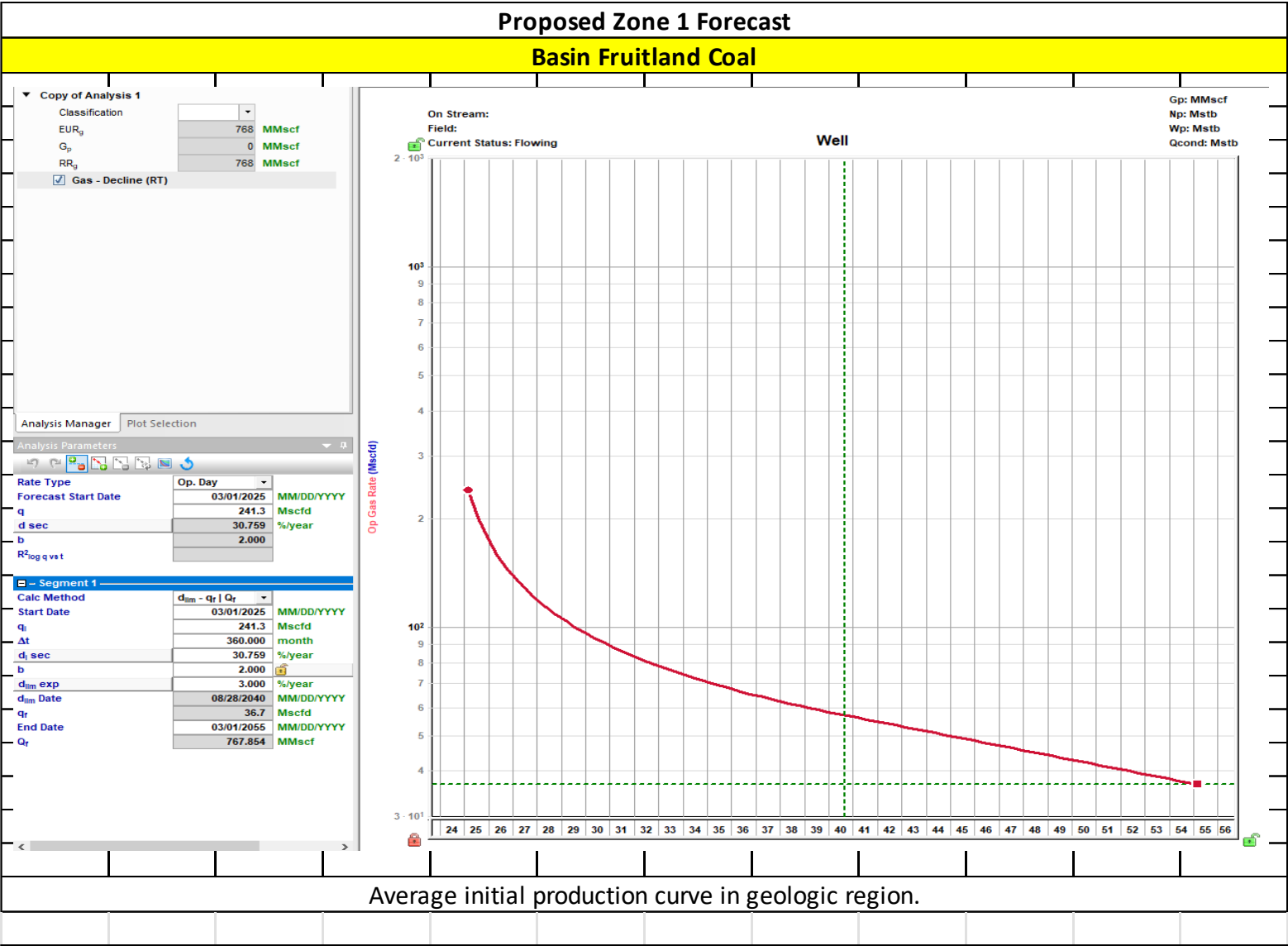
The near wellbore shut-in bottom hole pressures of the above reservoirs are much lower than the calculated far-field stabilized reservoir pressured due to the low permeability of the reservoirs. Based on pressure transient analysis performed in the San Juan Basin, it would take 7-25 years for shut-in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

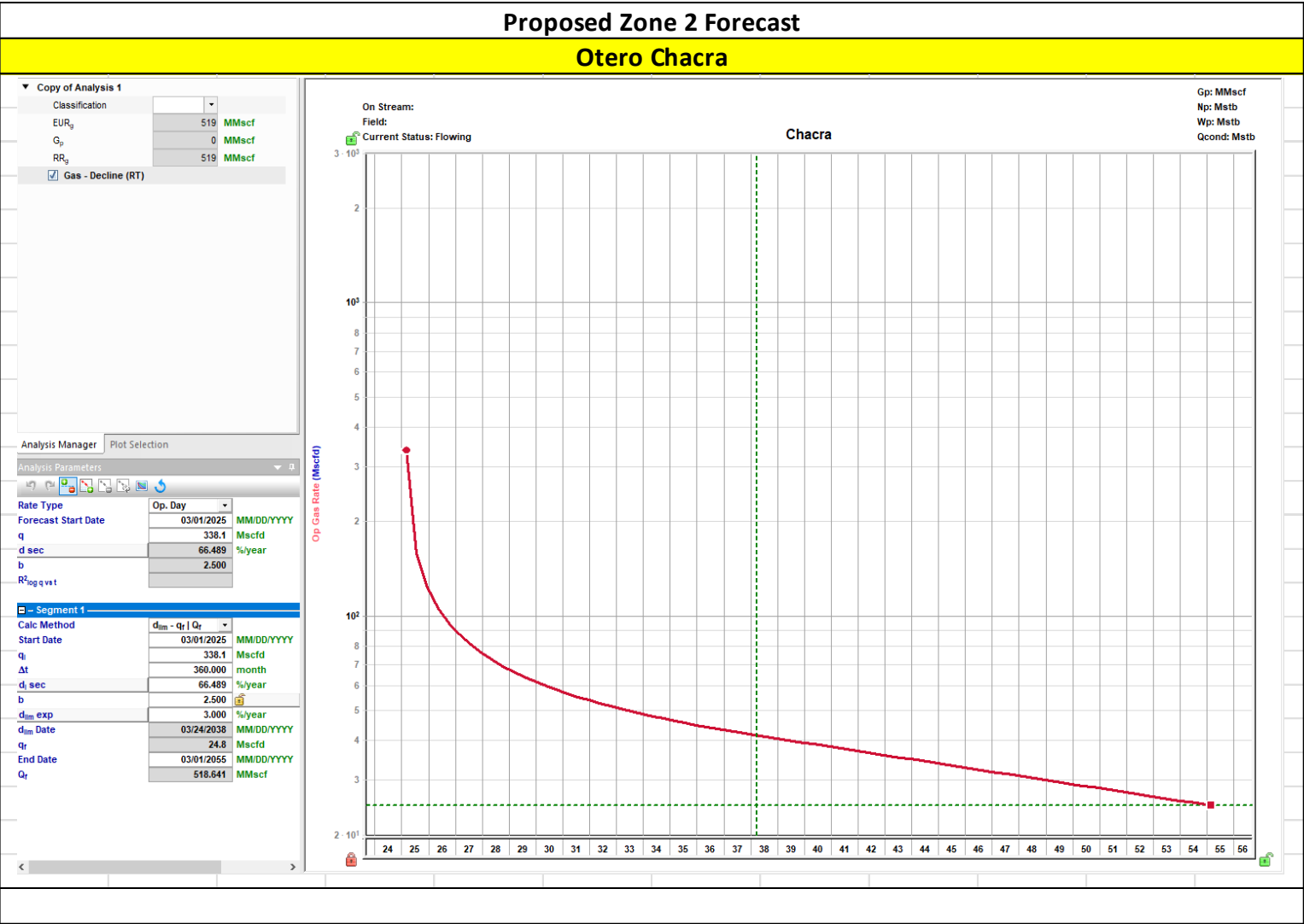
Shut in pressures were calculated for operated offset standalone wells in each of the zones being commingled in the well in question via the following process:

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

API	Well Name	Formation
List of wells used to calculate BHPs for the Project:		
3003925240	San Juan 29-7 Unit 534	FRC
3003926995	San Juan 29-7 Unit 181	PC
3003921330	San Juan 29-7 Unit 109	DK
3003925859	San Juan 29-7 Unit 40B	MV
3003921021	San Juan 28-7 Unit 208	CH
I believe each of the reservoirs to be continuous and in a similar state of depletion at this well and at each of the wells from which the pressures are being derived.		

**Note:** BTU Data taken from standalone completions in the zone of interest within a 2 mile radius of the well. A farther radius is used if there is not enough data for a proper statistical analysis.





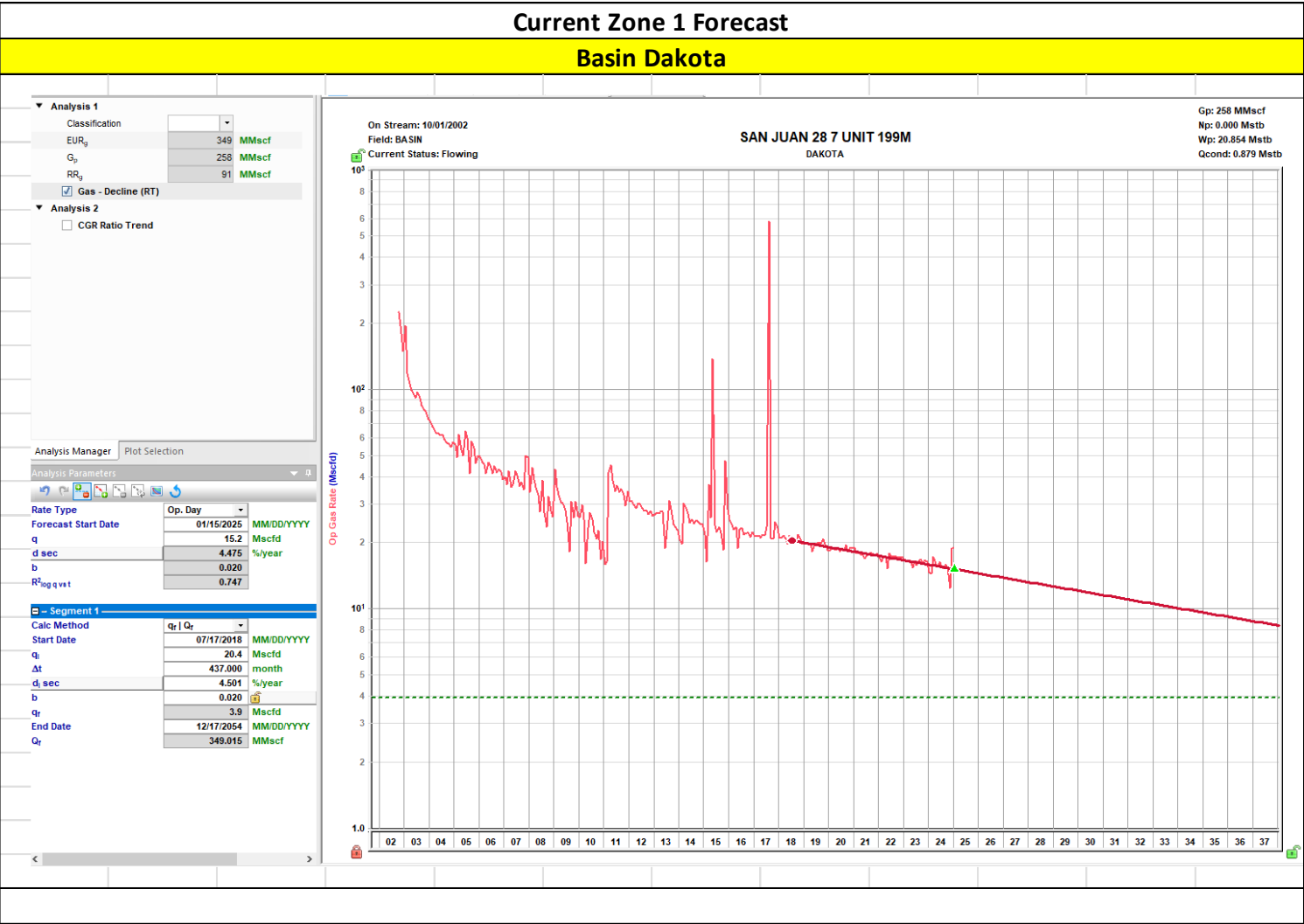
Gas Allocation:

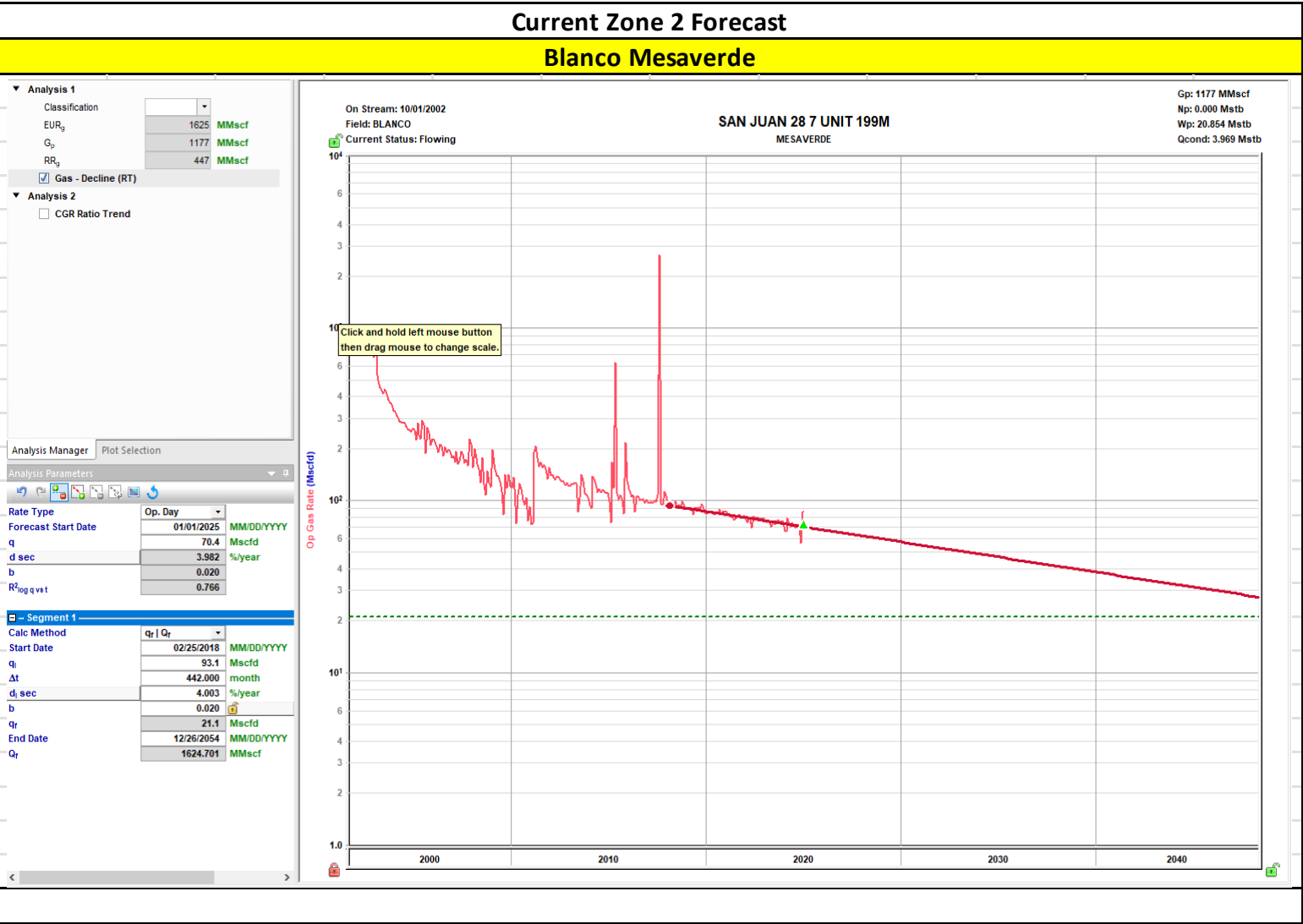
Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formations are the Basin Dakota and Blanco Mesaverde. The added formations to be commingled are the Basin Fruitland Coal and Otero Chacra. The subtraction method applies an average monthly production forecast to the base formation using historic production. All production from this well exceeding the base formation forecast will be allocated to the new formation.

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

Formation	Remaining Reserves (MMcf)	% Gas Allocation
FRC	768	60%
CH	519	40%

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.

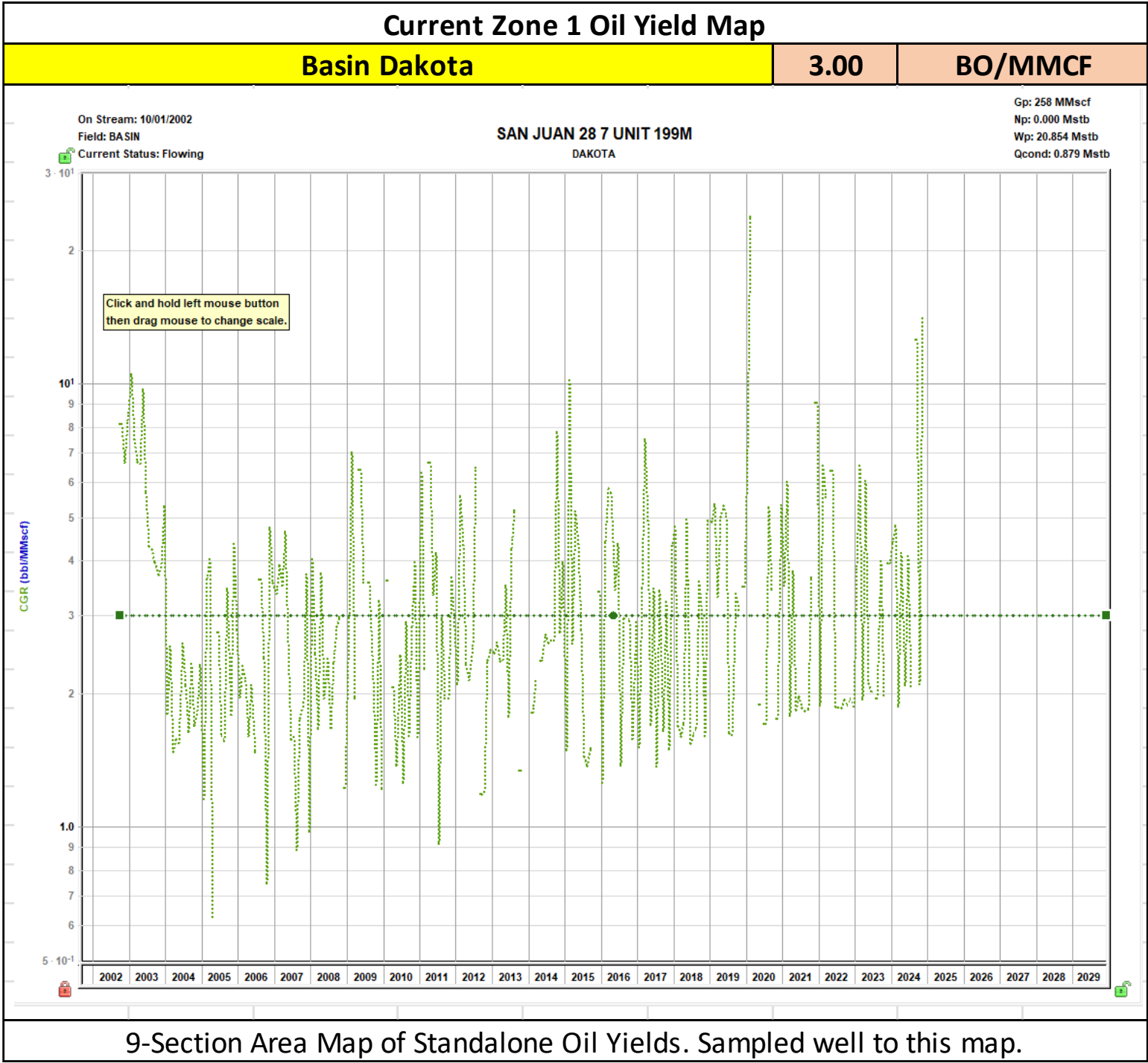




ONLY USE THIS IF NEW ZONE CREATES TRI-MMINGLE

Hilcorp intends to continue to allocate the projected base production on the same fixed percentages to the following pools % (zone 1) % (zone 2) while the subtraction method is being used to determine the allocation to the new zone.

Formation	Remaining Reserves (mmcf)	Yield (bbl/MM)	% Oil Allocation
DK	91.00	3.00	9%
MV	447.00	3	47%
FRC	768.00	0	0%
CH	519.00	2.43	44%
			100%

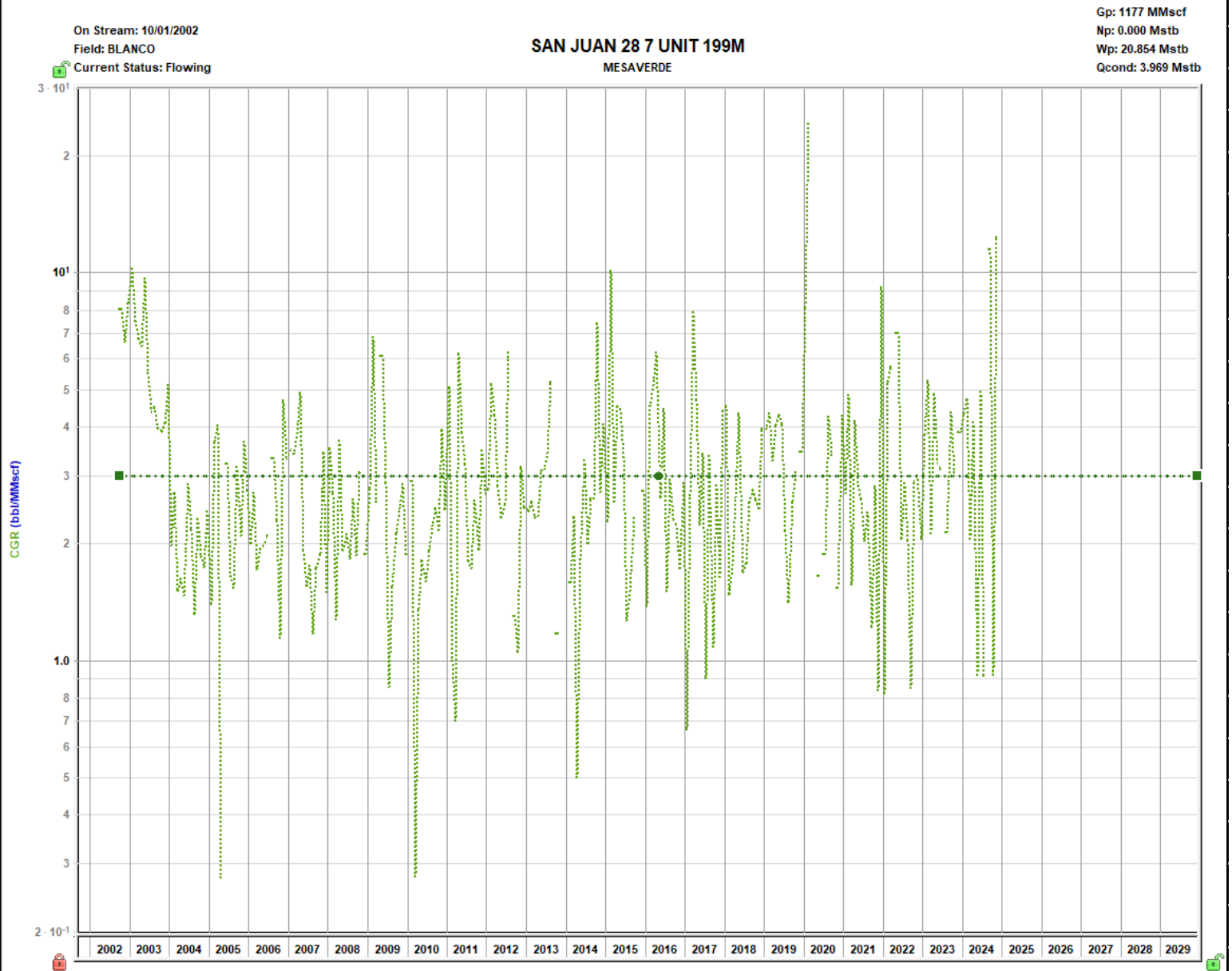


### Current Zone 2 Oil Yield Map

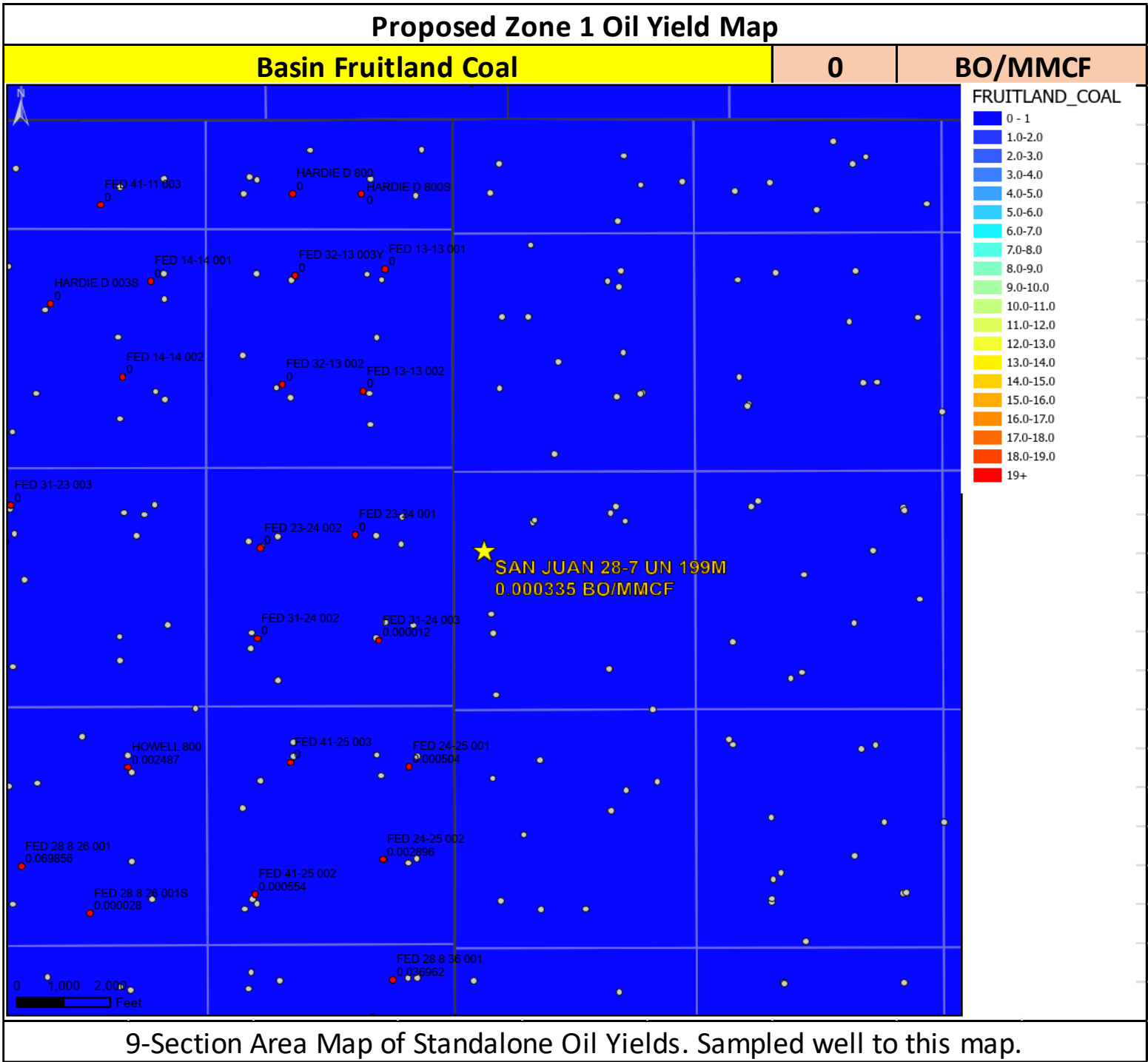
Blanco Mesaverde

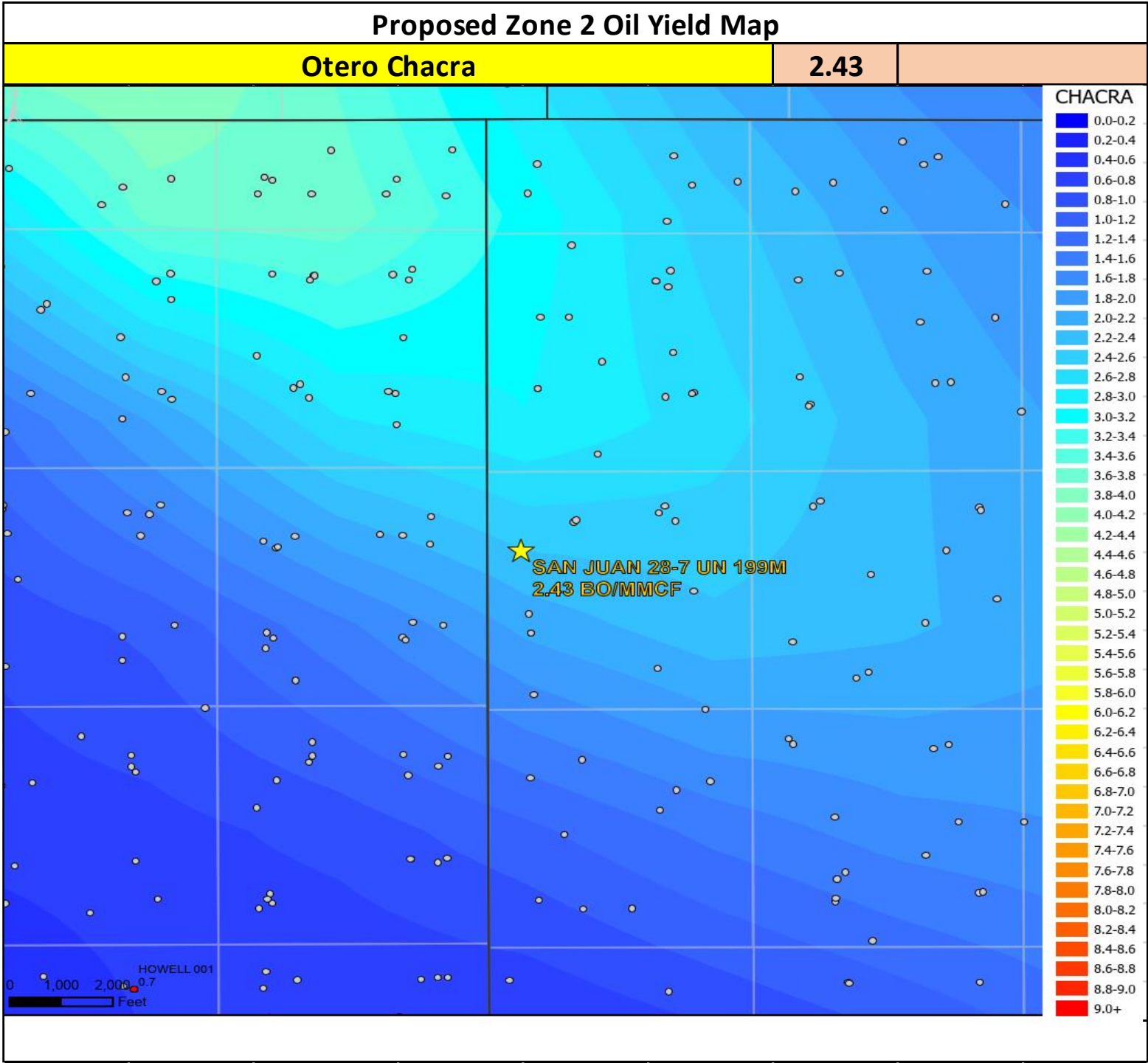
3

BO/MMCF



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





Well Name: SAN JUAN 28-7 UNIT	Well Location: T28N / R7W / SEC 19 / SWNW / 36.649072 / -107.621131	County or Parish/State: RIO ARRIBA / NM
Well Number: 199M	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078500A	Unit or CA Name: SAN JUAN 28-7 UNIT--DK, SAN JUAN 28-7 UNIT--MV	Unit or CA Number: NMNM78413A, NMNM78413C
US Well Number: 3003926718	Operator: HILCORP ENERGY COMPANY	

Notice of Intent

Sundry ID: 2855586

Type of Submission: Notice of Intent	Type of Action: Recompletion
Date Sundry Submitted: 06/02/2025	Time Sundry Submitted: 10:38
Date proposed operation will begin: 06/09/2025	

**Procedure Description:** Hilcorp Energy Company requests permission to recompleate the subject well in the Fruitland Coal/Chacra and downhole commingle with the existing Mesaverde/Dakota. Please see the attached procedure, current and proposed wellbore diagram, plat and natural gas management plan. A closed loop system will be used. Hilcorp will contact the FFO Surface group within 90 days after the well has been recompleted, before any interim reclamation work, to conduct the onsite. A reclamation plan will be submitted after the onsite.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

3003926718\_San\_Juan\_28\_7\_Unit\_199M\_RC\_NOI\_20250602103823.pdf

Well Name: SAN JUAN 28-7 UNIT	Well Location: T28N / R7W / SEC 19 / SWNW / 36.649072 / -107.621131	County or Parish/State: RIO ARRIBA / NM
Well Number: 199M	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078500A	Unit or CA Name: SAN JUAN 28-7 UNIT--DK, SAN JUAN 28-7 UNIT--MV	Unit or CA Number: NMNM78413A, NMNM78413C
US Well Number: 3003926718	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: DAWN NASH-DEAL

Signed on: JUN 02, 2025 10:38 AM

Name: HILCORP ENERGY COMPANY

Title: Operations Regulatory Tech

Street Address: 1111 TRAVIS ST

City: HOUSTON

State: TX

Phone: (505) 324-5132

Email address: DNASH@HILCORP.COM

Field

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: 06/02/2025

Signature: Kenneth Rennick

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.	
6. If Indian, Allottee or Tribe Name	
7. If Unit of CA/Agreement, Name and/or No.	
8. Well Name and No.	
9. API Well No.	
10. Field and Pool or Exploratory Area	
11. Country or Parish, State	

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well		
<input type="checkbox"/> Oil Well	<input type="checkbox"/> Gas Well	<input type="checkbox"/> Other
2. Name of Operator		
3a. Address	3b. Phone No. (include area code)	
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Title
Signature	Date

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13*: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

## Additional Information

### Location of Well

0. SHL: SWNW / 1755 FNL / 660 FWL / TWSP: 28N / RANGE: 7W / SECTION: 19 / LAT: 36.649072 / LONG: -107.621131 ( TVD: 0 feet, MD: 0 feet )

BHL: SWNW / 1755 FNL / 660 FWL / TWSP: 28N / SECTION: / LAT: 36.649072 / LONG: 107.621131 ( TVD: 0 feet, MD: 0 feet )



**HILCORP ENERGY COMPANY**  
**SAN JUAN 28-7 UN 199M**  
**RECOMPLETION SUNDRY**

<b>Prepared by:</b>	Matthew Esz
<b>Preparation Date:</b>	February 11, 2025

WELL INFORMATION			
<b>Well Name:</b>	SAN JUAN 28-7 UN 199M	<b>State:</b>	NM
<b>API #:</b>	3003926718	<b>County:</b>	
<b>Area:</b>	10	<b>Location:</b>	
<b>Route:</b>	1004	<b>Latitude:</b>	
<b>Spud Date:</b>	August 15, 2002	<b>Longitude:</b>	

PROJECT DESCRIPTION
Perforate, fracture, and comingle the Fruitland Coal and Chacra with the existing Mesa Verde and Dakota zones.

CONTACTS			
Title	Name	Office Phone #	Cell Phone #
Engineer	Matthew Esz		770-843-9226
Area Foreman			
Lead			
Artificial Lift Tech			
Operator			



**HILCORP ENERGY COMPANY**  
**SAN JUAN 28-7 UN 199M**  
**RECOMPLETION SUNDRY**

JOB PROCEDURES
<ol style="list-style-type: none"> <li>MIRU service rig and associated equipment; test BOP.</li> <li>TOOH with <b>2-3/8"</b> tubing set at <b>7,733'</b>.</li> <li>Set a <b>4-1/2"</b> plug at +/- <b>4,949'</b> to isolate the <b>Mesa Verde</b> and <b>Dakota</b>.</li> <li>Will not pull CBL. Sufficient cmt based on CBL pulled <b>8/28/2002</b>.</li> <li>Load the hole and pressure test the casing.</li> <li>N/D BOP, N/U frac stack and pressure test frac stack.</li> <li>Perforate and frac the <b>Fruitland Coal</b> from <b>2999'-3313'</b> and the <b>Chacra</b> from <b>4251'-4959'</b>.</li> <li>Nipple down frac stack, nipple up BOP and test.</li> <li>TIH with a mill and drill out top isolation plug and <b>Fruitland Coal/Chacra</b> frac plugs.</li> <li>Clean out to <b>Mesa Verde / Dakota</b> isolation plug.</li> <li>Drill out <b>Mesa Verde / Dakota</b> isolation plug and cleanout to PBTD of <b>7,823'</b>. TOOH.</li> <li>TIH and land production tubing. Get a commingled <b>Dakota/Mesa Verde/Chacra/ Fruitland Coal</b> flow rate.</li> </ol>



**HILCORP ENERGY COMPANY**



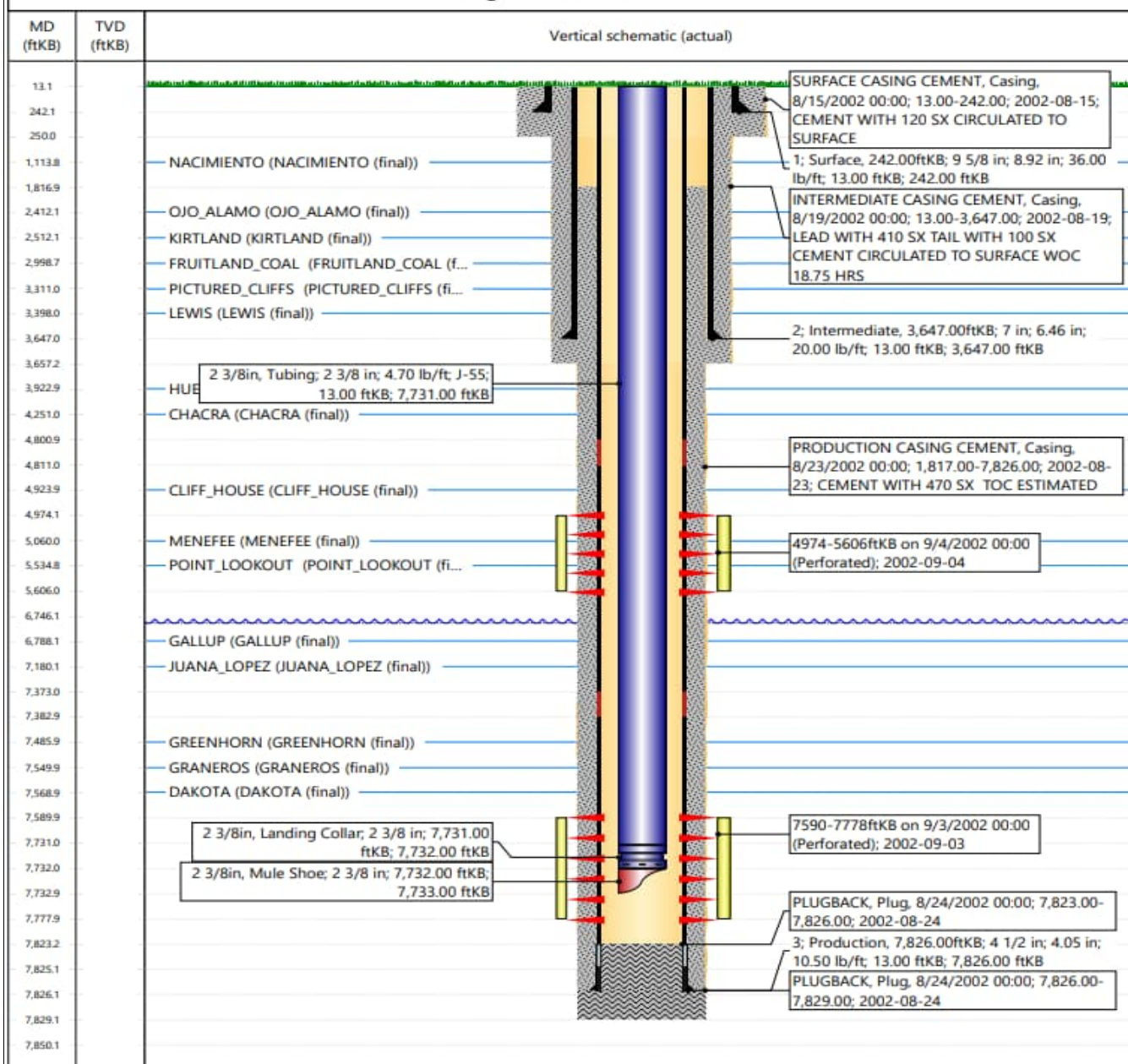
# **SAN JUAN 28-7 UN 199M RECOMPLETION SUNDRY**

## **SAN JUAN 28-7 UN 199M - CURRENT WELLBORE SCHEMATIC**

**Well Name: SAN JUAN 28-7 UNIT 199M**

API / UWI 3003926718	Surface Legal Location 019-028N-007W-E	Field Name MV/DK COM	Route 1004	State/Province NEW MEXICO	Well Configuration Type Vertical
Ground Elevation (ft) 6,746.00	Original KB/RT Elevation (ft) 6,759.00	Tubing Hanger Elevation (ft) 6,746.00	RKB to GL (ft) 13.00	KB-Casing Flange Distance (ft) 13.00	KB-Tubing Hanger Distance (ft) 13.00
<b>Tubing Strings</b>					
Run Date 9/27/2002 00:00	Set Depth (ftKB) 7,733.00	String Max Nominal OD (in) 2 3/8	String Min Nominal ID (in) 2.00	Weight/Length (lb/ft) 4.70	Original Spud Date 8/15/2002 00:00

## **Original Hole [Vertical]**



**HILCORP ENERGY COMPANY**



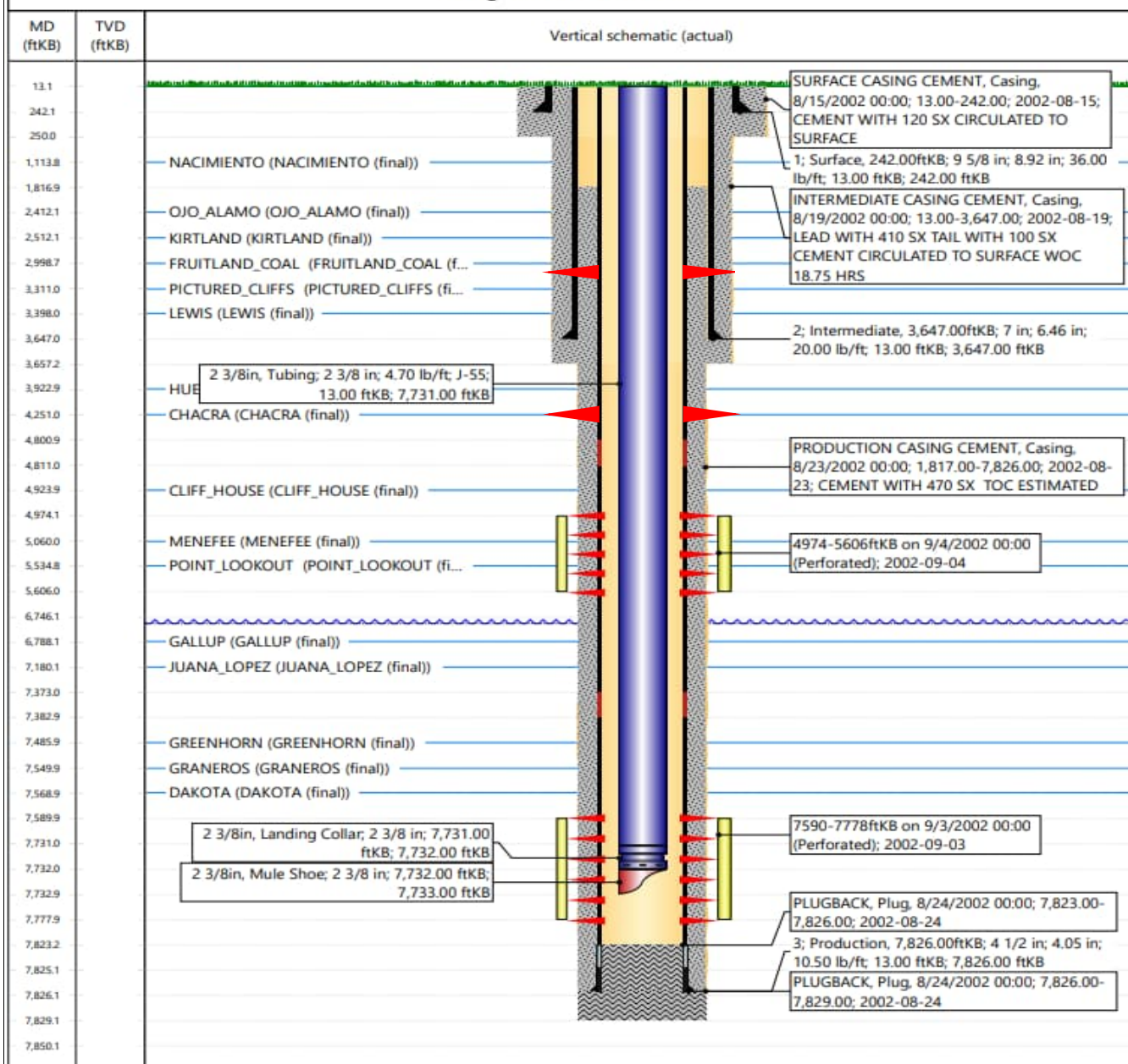
# **SAN JUAN 28-7 UN 199M RECOMPLETION SUNDRY**

## **SAN JUAN 28-7 UN 199M - Proposed Schematic**

**Well Name: SAN JUAN 28-7 UNIT 199M**

API / UWI 3003926718	Surface Legal Location 019-028N-007W-E	Field Name MV/DK COM	Route 1004	State/Province NEW MEXICO	Well Configuration Type Vertical
Ground Elevation (ft) 6,746.00	Original KB/RT Elevation (ft) 6,759.00	Tubing Hanger Elevation (ft) 6,746.00	RKB to GL (ft) 13.00	KB-Casing Flange Distance (ft) 13.00	KB-Tubing Hanger Distance (ft) 13.00
<b>Tubing Strings</b>					
Run Date 9/27/2002 00:00	Set Depth (ftKB) 7,733.00	String Max Nominal OD (in) 2 3/8	String Min Nominal ID (in) 2.00	Weight/Length (lb/ft) 4.70	Original Spud Date 8/15/2002 00:00

## **Original Hole [Vertical]**



Santa Fe Main Office Phone: (505) 476-3441 Fax: (55) 476-3462 General Information Phone: (505) 629-6116  Online Phone Directory Visit: <a href="https://www.emnrd.nm.gov/ocd/contact-us/">https://www.emnrd.nm.gov/ocd/contact-us/</a>	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	C-102 Revised July 9, 2024 Submit Electronically via OCD Permitting
		Submittal Type: <input type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number 30-039-26718	Pool Code 71629	Pool Name BASIN FRUITLAND COAL
Property Code 318432	Property Name SAN JUAN 28-7 UNIT	Well Number 199M
OGRID No. 372171	Operator Name Hilcorp Energy Company	Ground Level Elevation 6746'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

## Surface Location

UL E	Section 19	Township 28N	Range 07W	Lot 2	Ft. from N/S 1755' FNL	Ft. from E/W 660' FWL	Latitude 36.6490707	Longitude -107.6211395	County RIO ARriba
---------	---------------	-----------------	--------------	----------	---------------------------	--------------------------	------------------------	---------------------------	----------------------

## Bottom Hole Location

UL E	Section 19	Township 28N	Range 07W	Lot 2	Ft. from N/S 1755' FNL	Ft. from E/W	Latitude 36.6490707	Longitude -107.6211395	County RIO ARriba
---------	---------------	-----------------	--------------	----------	---------------------------	--------------	------------------------	---------------------------	----------------------

Dedicated Acres 305.44	Infill or Defining Well DEFINING	Defining Well API	Overlapping Spacing Unit (Y/N) NO	Consolidation Code UNIT
Order Numbers.			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
----	---------	----------	-------	-----	--------------	--------------	----------	-----------	--------

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
----	---------	----------	-------	-----	--------------	--------------	----------	-----------	--------

## Last Take Point (LTP)

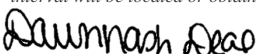
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
----	---------	----------	-------	-----	--------------	--------------	----------	-----------	--------

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input type="checkbox"/> Horizontal <input checked="" type="checkbox"/> Vertical	Ground Floor Elevation: 6746'
---	--	-------------------------------

## OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.



05/29/2025

Signature

Date

DAWN NASH-DEAL

Printed Name

DNASH@HILCORP.COM

Email Address

## SURVEYOR CERTIFICATIONS

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.

NEALE EDWARDS

Signature and Seal of Professional Surveyor

6857

12/18/2000

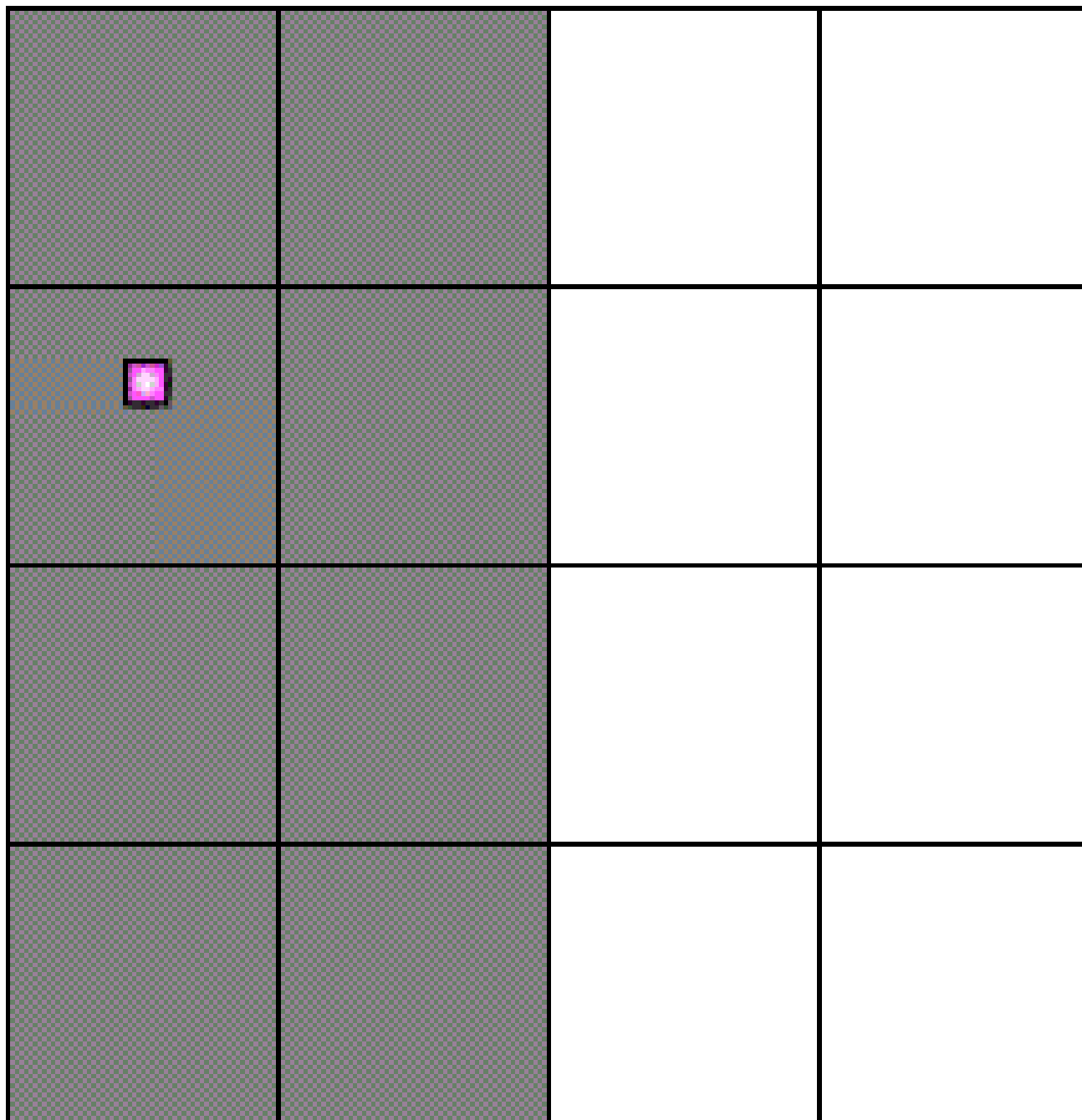
Certificate Number

Date of Survey

Note: 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.

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



<b>Santa Fe Main Office</b> Phone: (505) 476-3441 Fax: (55) 476-3462 <b>General Information</b> Phone: (505) 629-6116  Online Phone Directory Visit: <a href="https://www.emnrd.nm.gov/ocd/contact-us/">https://www.emnrd.nm.gov/ocd/contact-us/</a>	<b>State of New Mexico</b> <b>Energy, Minerals &amp; Natural Resources</b> <b>Department</b> <b>OIL CONSERVATION DIVISION</b>	<b>C-102</b>  Revised July 9, 2024 Submit Electronically via OCD Permitting  <table border="1" style="width: 100%;"><tr><td rowspan="3" style="width: 20%;">Submittal Type:</td><td><input type="checkbox"/> Initial Submittal</td></tr><tr><td><input type="checkbox"/> Amended Report</td></tr><tr><td><input type="checkbox"/> As Drilled</td></tr></table>	Submittal Type:	<input type="checkbox"/> Initial Submittal	<input type="checkbox"/> Amended Report	<input type="checkbox"/> As Drilled
Submittal Type:	<input type="checkbox"/> Initial Submittal					
	<input type="checkbox"/> Amended Report					
	<input type="checkbox"/> As Drilled					

**WELL LOCATION INFORMATION**

API Number 30-039-26718	Pool Code 82329	Pool Name OTERO CHACRA
Property Code 318432	Property Name SAN JUAN 28-7 UNIT	Well Number 199M
OGRID No. 372171	Operator Name Hilcorp Energy Company	Ground Level Elevation 7829'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

**Surface Location**

UL E	Section 19	Township 28N	Range 07W	Lot 2	Ft. from N/S 1755' FNL	Ft. from E/W 660' FWL	Latitude 36.6490707	Longitude -107.6211395	County RIO ARRIBA
---------	---------------	-----------------	--------------	----------	---------------------------	--------------------------	------------------------	---------------------------	----------------------

**Bottom Hole Location**

UL E	Section 19	Township 28N	Range 07W	Lot 2	Ft. from N/S 1755' FNL	Ft. from E/W 660' FWL	Latitude 36.6490707	Longitude -107.6211395	County RIO ARRIBA
---------	---------------	-----------------	--------------	----------	---------------------------	--------------------------	------------------------	---------------------------	----------------------

Dedicated Acres	Infill or Defining Well DEFINING	Defining Well API	Overlapping Spacing Unit (Y/N) N	Consolidation Code U
Order Numbers.			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

**Kick Off Point (KOP)**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
----	---------	----------	-------	-----	--------------	--------------	----------	-----------	--------

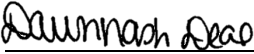
**First Take Point (FTP)**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
----	---------	----------	-------	-----	--------------	--------------	----------	-----------	--------

**Last Take Point (LTP)**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
----	---------	----------	-------	-----	--------------	--------------	----------	-----------	--------

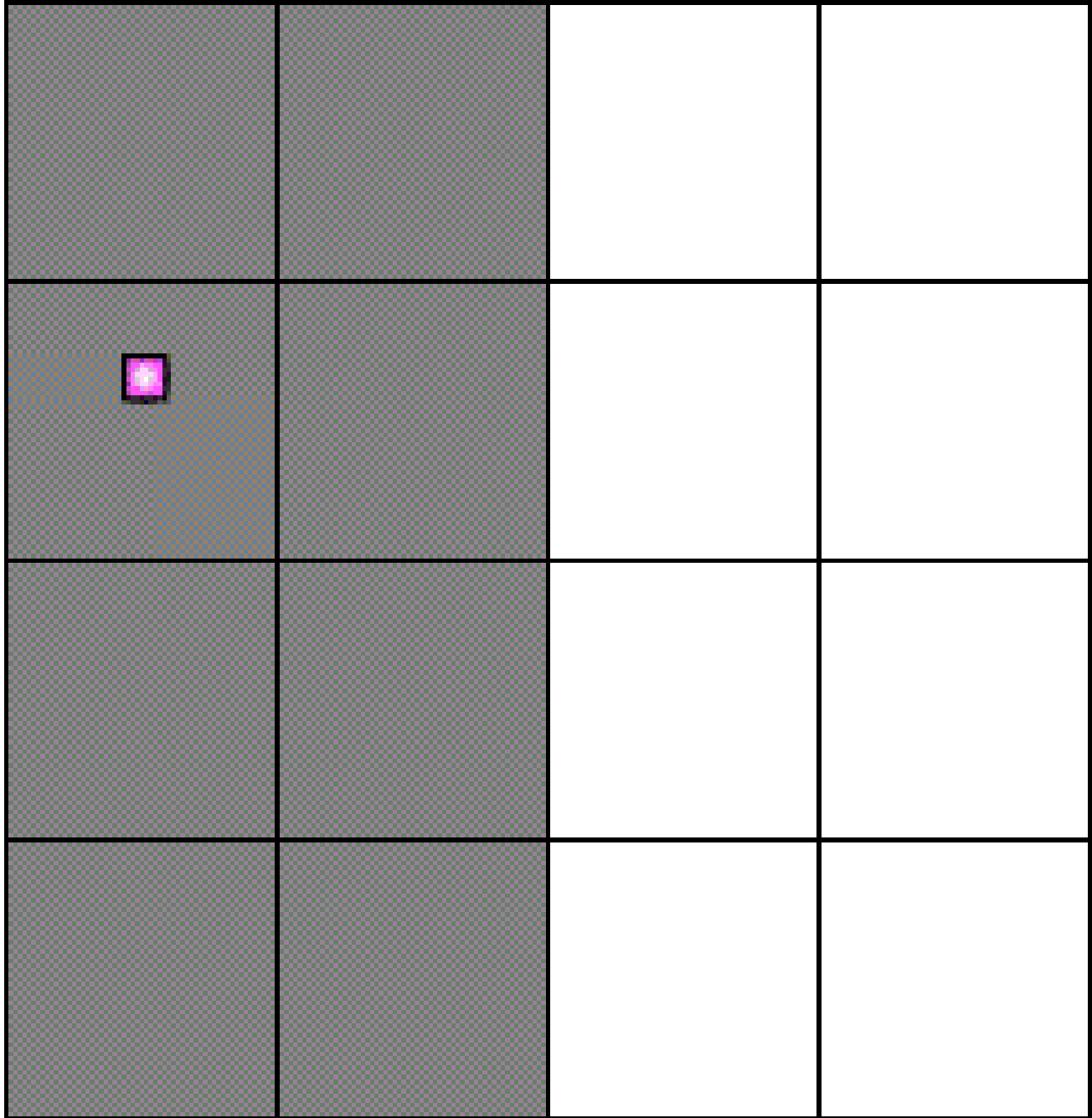
Unitized Area or Area of Uniform Interest	Spacing Unit Type <input type="checkbox"/> Horizontal <input checked="" type="checkbox"/> Vertical	Ground Floor Elevation: 7829'
---	--	----------------------------------

<b>OPERATOR CERTIFICATIONS</b>  <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i>   05/29/2025 Signature _____ Date _____ DAWN NASH-DEAL Printed Name _____ DNASH@HILCORP.COM Email Address _____	<b>SURVEYOR CERTIFICATIONS</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>  NEALE EDWARDS Signature and Seal of Professional Surveyor 6857 12/18/2000 Certificate Number _____ Date of Survey _____
--	--

Note: 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.

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



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:** 5/29 /2025

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

If Other, please describe: \_\_\_\_\_

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
SJ 28-7 UNIT 199M	3003926718	E,19,28N,7W	1755' FNL & 660' FWL	4	330	0.5

**IV. Central Delivery Point Name:** CHACO-BLANCO 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
SJ 28-7 UNIT 199M	3003926718					

**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: 
Printed Name: DAWN NASH-DEAL
Title: REGULATORY TECHNICIAN
E-mail Address: DNASH@HILCORP.COM
Date: 5/29/2025
Phone: 505-324-5132
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
Approved By:
Title:
Approval Date:
Conditions of Approval:

## VI. Separation Equipment:

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

## VII. Operational Practices:

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

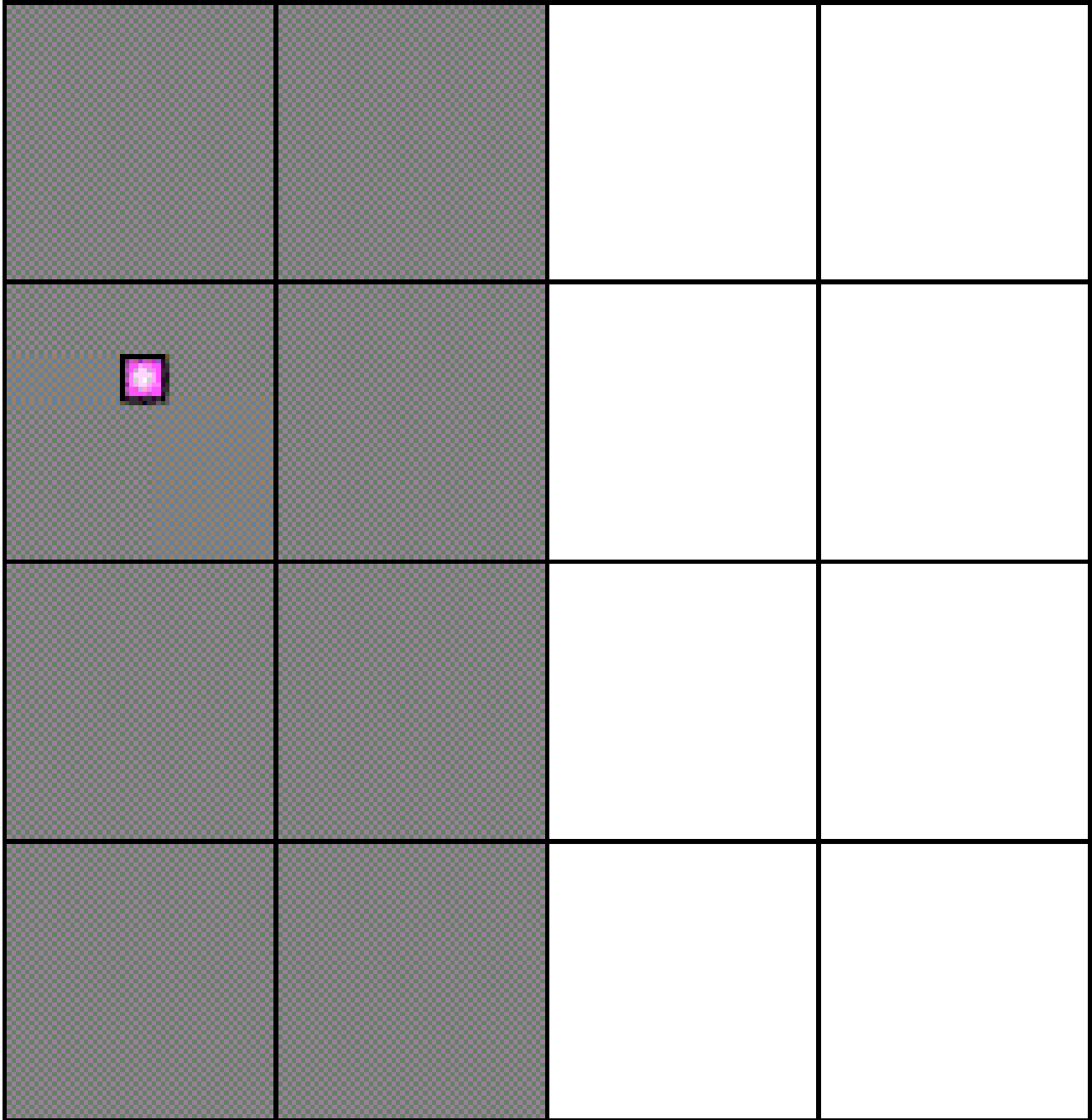
6. Subsection (F) Measurement or estimation of vented and flared natural gas
  - o Measurement equipment is installed to measure the volume of natural gas flared from process piping.
  - o When measurement isn't practicable, estimation of vented and flared natural gas will be completed as noted in 19.15.27.8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

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 456598

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 456598
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
llowe	None	5/20/2025