<u>District I</u> 1625 N. French Drive, Hobbs, NM 88240

<u>District II</u> 811 S. First St., Artesia, NM 88210

<u>District III</u> 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

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107A	
Revised August 1,	2011

APPLICATION TYPE

Single Well

Establish Pre-Approved Pools
EXISTING WELLBORE

101110	" LLLDOI
Yes	No

Hilcorp Energy Cor	mpany	382 Road 3100, Aztec, NM 874	-10				
Operator	-	Address					
San Juan 28-7 Uni	t 159M	I-22-28N-07W			Rio Arriba		_
Lease	Well No.	Unit Letter-Section-Township-Range			Count	y	
OGRID No. 372171	Property Code 318432	API No. 30-039-25572 Lease Type:	X	Federal	State	Fee	

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	INTERMEDIATE ZONE	LOWER ZONE	
Pool Name	Basin Fruitland Coal	Blanco P.C. South	Blanco Mesaverde	Basin Dakota	
Pool Code	71629	72439	72319	71599	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3,246'- 3,338'	3,352'-3,388'	4,981'-5,676'	7,602'-7,817'	
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)	1110 PSI	916 PSI	1098 PSI	1754 PSI	
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1143 BTU	1199 BTU	1270 BTU	1150 BTU	
Producing, Shut-In or New Zone	Producing Zone	Producing Zone	Producing Zone	New Zone	
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production	Date: 2/1/2024	Date: 2/1/2024	Date: 2/1/2024	Date: 2/1/2024	
estimates and supporting data.)	Rates: Oil-0 bbl Gas-448 Mcf	Rates: Oil-0 bbl Gas-394 Mcf	Rates: Oil-12 bbl Gas-948 Mcf	Rates: Oil-0 bbl Gas-448 Mcf	
	Water-0 bbl	Water-0 bbl	Water-0 bbl	Water-0 bbl	
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil Gas	Oil Gas	Oil Gas	Oil Gas	
than current or past production, supporting data or explanation will be required.)	% %	% %	% %	% %	

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 Yes	No
Are all produced fluids from all commingled zones compatible with each other?	Yes	No
Will commingling decrease the value of production?	Yes	No
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application?	Yes	No
NMOCD Reference Case No. applicable to this well: R-10476-B		
Attachments: C-102 for each zone to be commingled showing its spacing unit and acreage dedication. Production curve for each zone for at least one year. (If not available, attach explanation.) For zones with no production history, estimated production rates and supporting data. Data to support allocation method or formula. Notification list of working, royalty and overriding royalty interests for uncommon interest cases.		

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

Any additional statements, data or documents required to support commingling.

Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.

Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.									
SIGNATURE Cherylene Weston	TITLE Operations/Regulatory Tech-Sr. DATE 5/14/2024	_							
TYPE OR PRINT NAME Cherylene Weston	TELEPHONE NO	_							

E-MAIL ADDRESS <u>cweston@hilcorp.com</u>

Released to Imaging: 7/18/2024 9:06:30 AM

District 1 PO Bax 1980, Hubbs, NM 88241-1980 District II PO Drawer DD, Arteila, NM \$\$211-0719 District III 1000 Rlo Bruzos Rd., Aztec, NM 87410 District IV

PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico

Form C-102 Revised February 21, 1994 Instructions on back

OIL CONSERVATION DIVISION BEGEIVE Submit to Appropriate District Office PO Box 2088

BLI MAIL RUUT State Lease 4 Course PO Box 2088 Santa Fe, NM 87504-2088

State Lease - 4 Copies Fee Lease - 3 Copies

96 FEB - 1 PM 1:52

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	1 Pool Code	¹ Pool Name	
30-039-2557	2 72319/71599	Blanco Mesaverde/Basin	Dakota
* Property Code	' Pi	roperty Name	· Well Number
016608	San Jüan	28-7 Unit	159M
OCRID No.	10	peratur Name	Elevation
005073	Conoc	6656'	

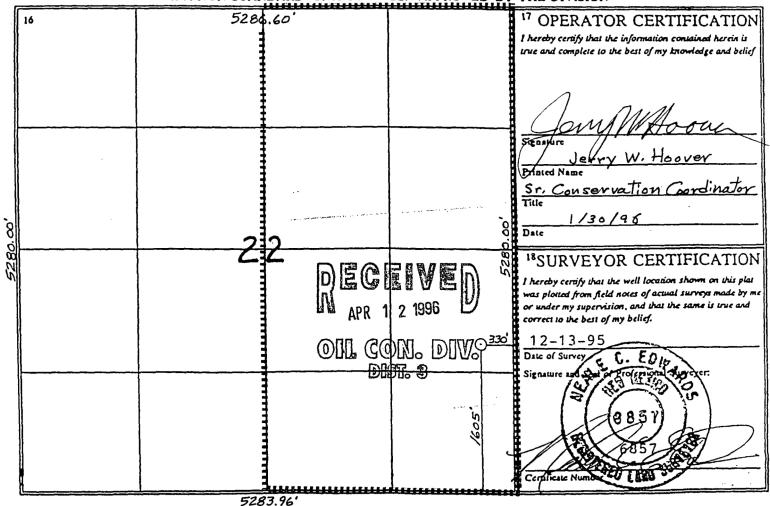
Surface Location

UL or lot so.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
I	22	28 N	7 W		1605	South	330	East	R.A.

11 Bottom Hole Location If Different From Surface

UL or lot so.	Section Township Range Lot Idn		Feet from the	North/South line Feet from		East/West line	County		
13 Dedicated Acre	a laint	or lafill	" Consolidation	a Code 14 (Order No.	l		<u> </u>	
320	1	1							İ

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



District I

1625 N. French Dr., Hobbs, NM 88240 Phone:(505) 393-6161 Fax:(505) 393-0720

District II

1301 W. Grand Ave., Artesia, NM 88210 Phone: (505) 748-1283 Fax: (505) 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 Form C-102
Permit 126587

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	BLANCO P. C.	3. Pool Name		
30–039–25572	72439		SOUTH (PRORATED GAS)		
4. Property Code	•	rty Name	6. Well No.		
31739		I 28 7 UNIT	159M		
7. OGRID No.	8. Opera	. 9. Elevation			
217817	CONOCOPHILI	6656			

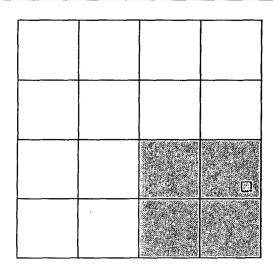
10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	22	28N	07W		1605	S	330	Е	RIO ARRIBA

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot	ldn	Feet From	N/S L	ine	Feet From	E/W Line	County
	cated Acres		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



SE/4 - 160.00 acres for PC spacing/density E/2 - 320.00 acres for Federal Unit Agreement Drillblocks Spacing

OPERATOR CERTIFICATION

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

E-Signed By: Crystal Tafoya

Title: Staff Regulatory Technician

Date: February 1, 2011

SURVEYOR CERTIFICATION

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

Surveyed By: Neale C. Edwards Date of Survey: 12/13/1995 Certificate Number: 6857 District I

1625 N. French Dr., Hobbs, NM 88240 Phone: (505) 393-6161 Fax: (505) 393-0720

District II

1301 W. Grand Ave., Artesia, NM 88210 Phone: (505) 748-1283 Fax: (505) 748-9720

1000 Rio Brazos Rd., Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

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 Permit 126587

WELL LOCATION AND ACREAGE DEDICATION PLAT

771	LL LOCATION AND ACKE	NGE DEDICATION I DAT	
1. API Number	2. Pool Code	3. Pool Name	
30-039-25572	71629	BASIN FRUITLAND COAL (GAS)	
4. Property Code 31739	5. Property N SAN JUAN 28	· · · · · · · · · · · · · · · · · · ·	
7. OGRID No. 217817	8. Operator t CONOCOPHILLIP		

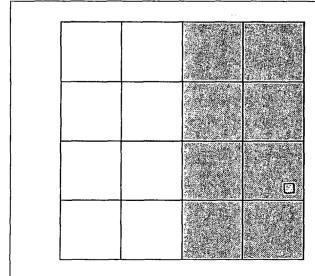
10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	22	28N	07W		1605	S	330	Е	RIO ARRIBA

11. Bottom Hole Location If Different From Surface

-	UL - Lot	Section	Township	Range	Lot ld	in	Feet From	N/S L	ine	Feet From	E/W Line	County
		cated Acres 0.00 (E/2)		Joint or Infill		14	. Consolidation C	Code			15. Order No.	

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



OPERATOR CERTIFICATION

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

E-Signed By: Crystal Tafoya Title: Staff Regulatory Tech

Date: February 1, 2011

SURVEYOR CERTIFICATION

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Surveyed By: Neale C. Edwards Date of Survey: 12/13/1995 Certificate Number: 6857

San Juan 28-7 Unit 159M Production Allocation Method – Subtraction

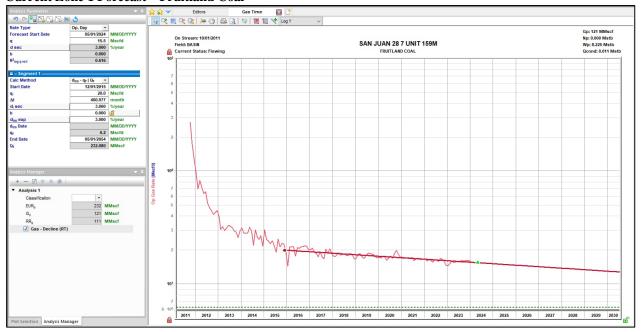
Gas Allocation:

Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formations are the Fruitland Coal/Pictured Cliffs/Mesaverde and the added formation to be commingled is the Dakota. 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 formation.

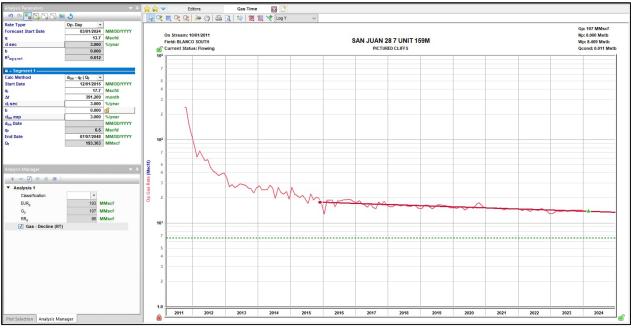
Hilcorp intends to continue to allocate the projected base production on the same fixed percentages to the following pools 25% (FRC), 22% (PC) & 53% (MV) while the subtraction method is being used to determine the allocation to the DK.

After 3 years production will stabilize. A production average will be gathered during the 4^{th} year and will be utilized to create a fixed percentage-based allocation.

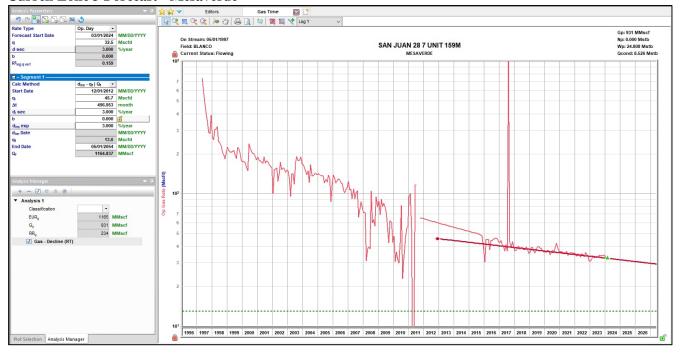
Current Zone 1 Forecast – Fruitland Coal



Current Zone 2 Forecast – Pictured Cliffs



Curren Zone 3 Forecast - Mesaverde

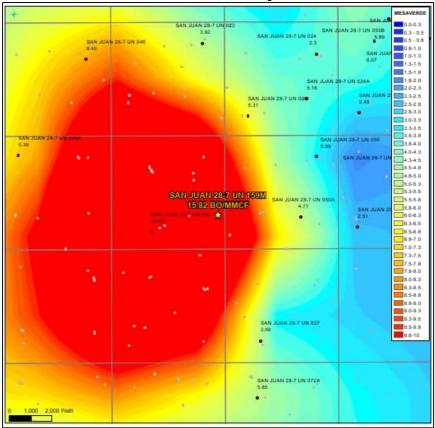


Oil Allocation:

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. Fruitland Coal and Pictured Cliffs have historically not produced oil in this area, therefore will not be allocated any oil.

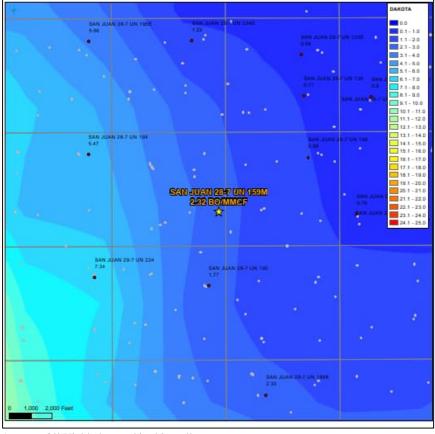
Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
FRC	0.00	111	0%
PC	0.00	86	0%
MV	15.82	234	76%
DK	2.32	512	24%

Current Zone 3 – Mesaverde Oil Yield Map



Average Oil Yield observed in this well.

Proposed Zone - Dakota Oil Yield



Average Oil Yield observed in this well.



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Sundry Print Report

Well Name: SAN JUAN 28-7 UNIT Well Location: T28N / R7W / SEC 22 /

NESE / 36.64381 / -107.55229

County or Parish/State: RIO

ARRIBA / NM

Well Number: 159M

Type of Well: CONVENTIONAL GAS

WELL

Allottee or Tribe Name:

Unit or CA Name: SAN JUAN 28-7 Lease Number: NMSF079289A

UNIT--DK, SAN JUAN 28-7 UNIT--FRCL, SAN JUAN 28-7 UNIT--MV, SAN JUAN

28-7 UNIT--PC

US Well Number: 3003925572 Operator: HILCORP ENERGY

COMPANY

Unit or CA Number:

NMNM78413A, NMNM78413B, NMNM78413C, NMNM78413E

Notice of Intent

Sundry ID: 2789547

Type of Submission: Notice of Intent

Date Sundry Submitted: 05/10/2024

Type of Action: Workover Operations

Time Sundry Submitted: 01:02

Date proposed operation will begin: 05/15/2024

Procedure Description: Hilcorp Energy requests permission to remove the Dakota isolation plugs and return the well to production as a Dakota, Fruitland Coal, Mesaverde and Pictured Cliffs quadmingle.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

San_Juan_28_7_Unit_159M_DK_RTP_NOI_20240510130208.pdf

County or Parish/State: RIO Well Name: SAN JUAN 28-7 UNIT Well Location: T28N / R7W / SEC 22 / ARRIBA / NM

NESE / 36.64381 / -107.55229

Type of Well: CONVENTIONAL GAS Allottee or Tribe Name:

Well Number: 159M

Unit or CA Name: SAN JUAN 28-7 Lease Number: NMSF079289A

Unit or CA Number: UNIT--DK, SAN JUAN 28-7 UNIT--FRCL, NMNM78413A, NMNM78413B, SAN JUAN 28-7 UNIT--MV, SAN JUAN NMNM78413C, NMNM78413E

28-7 UNIT--PC

US Well Number: 3003925572 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: MAY 10, 2024 01:02 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:

State: City: 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: 05/13/2024

Signature: Matthew Kade



HILCORP ENERGY COMPANY

San Juan 28-7 Unit 159M Dakota RTP Sundry

Prepared by:	Matthew Esz
Preparation Date:	May 9, 2024

	WELL INFORMATION										
Well Name:	San Juan 28-7 Unit 159M	State:	NM								
API #:	3003925572	County:									
Area:	10	Location:									
Route:	1007	Latitude:									
Spud Date:	May 26, 1996	Longitude:									

PROJECT DESCRIPTION

Drill out DK isolation plugs. RTP Dakota formation. Commingle Dakota with Mesa verde, Pictured Cliffs, and Fruitland Coal.

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



HILCORP ENERGY COMPANY

San Juan 28-7 Unit 159M Dakota RTP Sundry

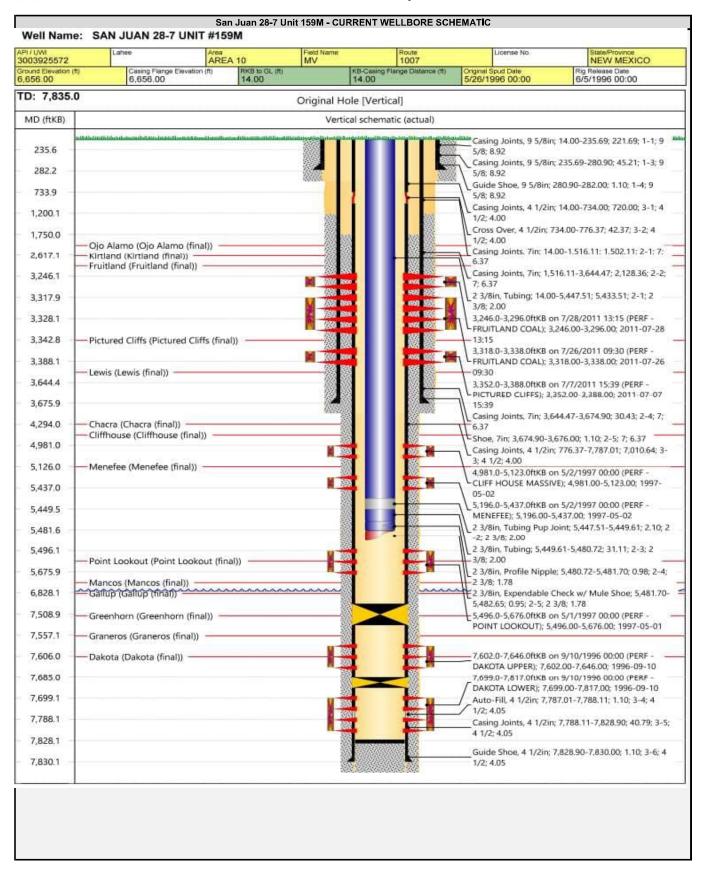
JOB PROCEDURES

- 1 MIRU service rig and associated equipment; test BOP.
- 2 TOOH with 2-3/8" tubing set at 5,482'.
- 3 TIH with a mill and drill out Dakota isolation plugs at 7,505' and 7,685'.
- 4 Clean out to PBTD of 7,828'. TOOH.
- 5 TIH and land production tubing. RTP Dakota interval.
- 6 Set pumping unit, install pump and rods. Get a commingled Dakota//Mesa Verde/Pictured Cliffs/Fruitland Coal flow rate.



HILCORP ENERGY COMPANY San Juan 28-7 Unit 159M

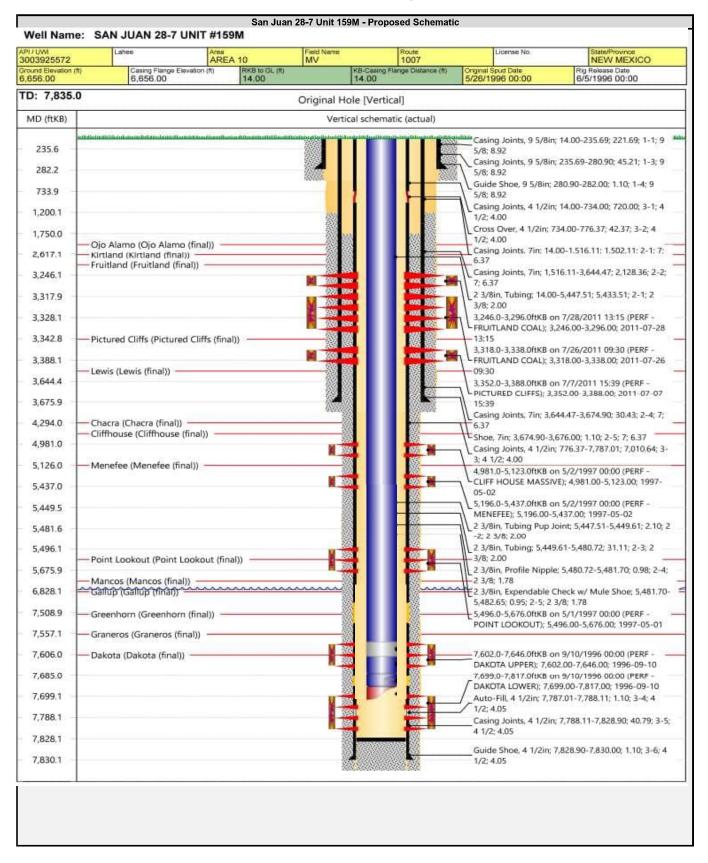
Dakota RTP Sundry





HILCORP ENERGY COMPANY

San Juan 28-7 Unit 159M Dakota RTP Sundry





May 15, 2024

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

Re: C-107A (Downhole Commingle)

San Juan 28-7 Unit 159M API No. 30-039-25572 Section 22-T28N-R07W 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 diverse between the formations listed below:

• Fruitland Coal Pool Code: 71629

Blanco P.C. South Pool Code: 72439

• Blanco Mesaverde Pool Code: 72319

• Basin Dakota Pool Code: 71599

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

The subject well is located within the bounds of a Federal Unit. Therefore, pursuant to Subsection C. (1) of 19.15.12.11 NMAC, 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

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

From: McClure, Dean, EMNRD on behalf of Engineer, OCD, EMNRD

To: <u>Cheryl Weston</u>; <u>Mandi Walker</u>

Cc: McClure, Dean, EMNRD; Lowe, Leonard, EMNRD; Rikala, Ward, EMNRD; Wrinkle, Justin, EMNRD; Powell,

Brandon, EMNRD; Paradis, Kyle O; David Mankiewicz

Subject: Approved Administrative Order DHC-5404

Date: Thursday, July 18, 2024 8:38:22 AM

Attachments: DHC5404 Order.pdf

NMOCD has issued Administrative Order DHC-5404 which authorizes Hilcorp Energy Company (372171) to downhole commingle production within the following well:

Well Name: San Juan 28 7 Unit #159M

Well API: 30-039-25574

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

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

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

From: Cheryl Weston

To: McClure, Dean, EMNRD; Mandi Walker

Cc: Lowe, Leonard, EMNRD

Subject: RE: [EXTERNAL] Action ID: 344778; DHC-5404

Date: Saturday, July 13, 2024 9:46:57 AM
Attachments: SJ 28-7 Unit 159M Subtraction Allocation.pdf

San Juan 28-7 Unit 159M DHC C-107A Revised.pdf

Dean,

The C-107A with bottom portion filled out is attached and the allocation with DK decline curve.

Thanks,

Cheryl

From: McClure, Dean, EMNRD Dean.McClure@emnrd.nm.gov

Sent: Friday, July 12, 2024 1:48 PM

To: Cheryl Weston <cweston@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>

Cc: Lowe, Leonard, EMNRD < Leonard.Lowe@emnrd.nm.gov>

Subject: RE: [EXTERNAL] Action ID: 344778; DHC-5404

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

Cheryl,

Please address the topics highlighted in my original email below.

Dean McClure

Petroleum Engineer, Oil Conservation Division

New Mexico Energy, Minerals and Natural Resources Department

(505) 469-8211

From: Cheryl Weston < <u>cweston@hilcorp.com</u>>

Sent: Saturday, July 6, 2024 7:41 AM

To: McClure, Dean, EMNRD < <u>Dean.McClure@emnrd.nm.gov</u>>; Mandi Walker

<mwalker@hilcorp.com>

Cc: Lowe, Leonard, EMNRD < Leonard.Lowe@emnrd.nm.gov>

Subject: RE: [EXTERNAL] Action ID: 344778; DHC-5404

Dean,

Here is the admin checklist. Let me know if you have any questions or need anything else.

Thanks, Cheryl

From: McClure, Dean, EMNRD < Dean. McClure@emnrd.nm.gov >

Sent: Friday, July 5, 2024 3:15 PM

To: Cheryl Weston < cweston@hilcorp.com>; Mandi Walker < mwalker@hilcorp.com>

Cc: Lowe, Leonard, EMNRD < Leonard.Lowe@emnrd.nm.gov>

Subject: [EXTERNAL] Action ID: 344778; DHC-5404

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

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

The Division is reviewing the following application:

Action ID	344778
Admin No.	DHC-5404
Applicant	Hilcorp Energy Company (372171)
Title	San Juan 28 7 Unit #159M
Sub. Date	5/15/2024

Please provide the following additional supplemental documents:

• Please submit an admin checklist

Please provide additional information regarding the following:

- The current C-107A does not have the bottom portion of it filled out. Please provide a fully completed form C-107A.
- Please provide the decline curve for the DK pool.

Additional notes:

•

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

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

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

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The information contained in this email message is confidential and may be legally privileged and is intended only for the use of the individual or entity named above. If you are not an intended recipient or if you have received this message in error, you are hereby notified that any dissemination, distribution, or copy of this email is strictly prohibited. If you have received this email in error, please immediately notify us by return email or telephone if the sender's phone number is listed above, then promptly and permanently delete this message.

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From: Cheryl Weston

To: McClure, Dean, EMNRD; Mandi Walker

Cc: Lowe, Leonard, EMNRD

Subject: RE: [EXTERNAL] Action ID: 344778; DHC-5404

Date: Saturday, July 6, 2024 7:41:52 AM

Attachments: SJ 28-7 Unit 159M NMOCD Admin Applic Checklist.pdf

Dean,

Here is the admin checklist. Let me know if you have any questions or need anything else.

Thanks, Cheryl

From: McClure, Dean, EMNRD < Dean. McClure@emnrd.nm.gov>

Sent: Friday, July 5, 2024 3:15 PM

To: Cheryl Weston <cweston@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>

Cc: Lowe, Leonard, EMNRD < Leonard.Lowe@emnrd.nm.gov>

Subject: [EXTERNAL] Action ID: 344778; DHC-5404

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

The Division is reviewing the following application:

Action ID	344778
Admin No.	DHC-5404
Applicant	Hilcorp Energy Company (372171)
Title	San Juan 28 7 Unit #159M
Sub. Date	5/15/2024

Please provide the following additional supplemental documents:

• Please submit an admin checklist

Please provide additional information regarding the following:

- The current C-107A does not have the bottom portion of it filled out. Please provide a fully completed form C-107A.
- Please provide the decline curve for the DK pool.

Additional notes:

•

All additional supplemental documents and information may be provided via email and

should be done by replying to this email. The produced email chain will be uploaded to the file for this application.

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

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

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<u>District I</u> 1625 N. French Drive, Hobbs, NM 88240

<u>District II</u> 811 S. First St., Artesia, NM 88210

District III
1000 Bio Brazos Road, Aztec, NM 87410

State of New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division

1220 South St. Francis Dr.

Form C-107A Revised August 1, 2011

APPLICATION TYPE

Single Well

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	XISTING WELLBORE YesNo			
Hilcorp Energy Company Operator		32 Road 3100, Aztec, NN Address		
San Juan 28-7 Unit Lease		-22-28N-07W Letter-Section-Township-Rang		Rio Arriba County
				•
OGRID No. 372171 Property Cod	e 318432 API No. 3	0-039-25572 Lease T	Type: <u>X</u> Federal _	State Fee
DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Basin Fruitland Coal	Blanco P.C. South	Blanco Mesaverde	Basin Dakota
Pool Code	71629	72439	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3,246'- 3,338'	3,352'-3,388'	4,981'-5,676'	7,602'-7,817'
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)	1110 PSI	916 PSI	1098 PSI	1754 PSI
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1143 BTU	1199 BTU	1270 BTU	1150 BTU
Producing, Shut-In or New Zone	Producing Zone	Producing Zone	Producing Zone	New Zone
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production	Date: 2/1/2024	Date: 2/1/2024	Date: 2/1/2024	Date: 2/1/2024
estimates and supporting data.)	Rates: Oil-0 bbl Gas-448 Mcf Water-0 bbl	Rates: Oil-0 bbl Gas-394 Mcf Water-0 bbl	Rates: Oil-12 bbl Gas-948 Mcf Water-0 bbl	Rates: Oil-0 bbl Gas-448 Mcf Water-0 bbl
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas % %	Oil Gas % %	Oil Gas	Oil Gas %
	A DDI		% %	<u>l</u>
Are all working, royalty and overriding r If not, have all working, royalty and over	oyalty interests identical in		d mail?	Yes NoX Yes NoX
Are all produced fluids from all comming	gled zones compatible with	each other?		YesXNo
Will commingling decrease the value of J	production?			Yes NoX
If this well is on, or communitized with, or the United States Bureau of Land Man			Public Lands	Yes_X No
NMOCD Reference Case No. applicable	to this well: R-1047	76-B		
Attachments: C-102 for each zone to be commingle Production curve for each zone for at For zones with no production history	least one year. (If not avai	lable, attach explanation.)		

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

Any additional statements, data or documents required to support commingling.

List of all operators within the proposed Pre-Approved Pools

Data to support allocation method or formula.

Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.

Notification list of working, royalty and overriding royalty interests for uncommon interest cases.

Bottomhole pressure data.

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<i>,</i>	1		,				
SIGNATURE Cherylene Weston	Т	TITLE _	Operations/Regul	atory Tech-S	Sr. DATE	5/14/2024	
			-	-			
TYPE OR PRINT NAME Cherylene Weston			TELEPHONE NO	D. <u>713-28</u>	39-2615		

E-MAIL ADDRESS <u>cweston@hilcorp.com</u>

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San Juan 28-7 Unit 159M Production Allocation Method – Subtraction

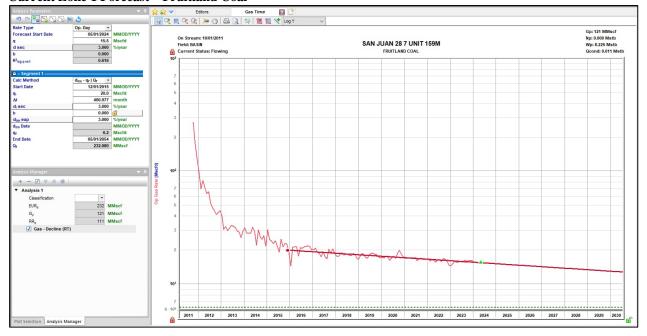
Gas Allocation:

Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formations are the Fruitland Coal/Pictured Cliffs/Mesaverde and the added formation to be commingled is the Dakota. 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 formation.

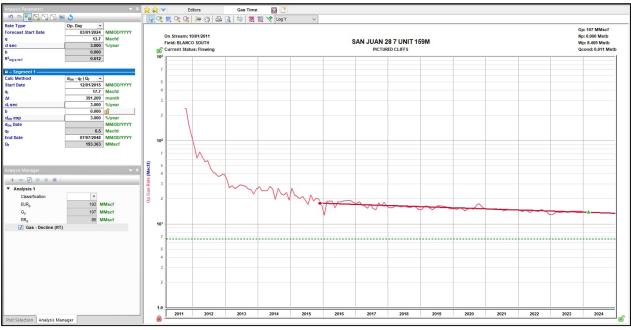
Hilcorp intends to continue to allocate the projected base production on the same fixed percentages to the following pools 25% (FRC), 22% (PC) & 53% (MV) while the subtraction method is being used to determine the allocation to the DK.

After 3 years production will stabilize. A production average will be gathered during the 4^{th} year and will be utilized to create a fixed percentage-based allocation.

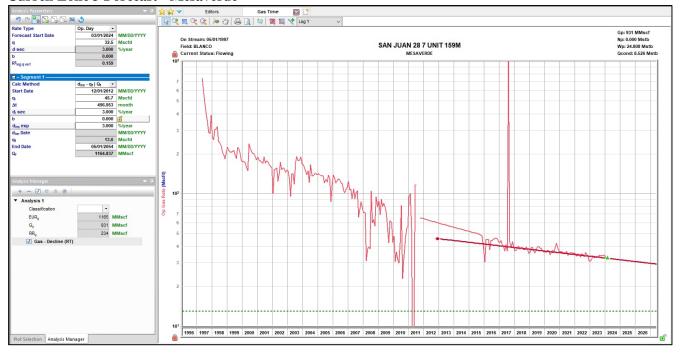
Current Zone 1 Forecast – Fruitland Coal



Current Zone 2 Forecast – Pictured Cliffs



Curren Zone 3 Forecast - Mesaverde



Proposed Zone Forecast - Dakota

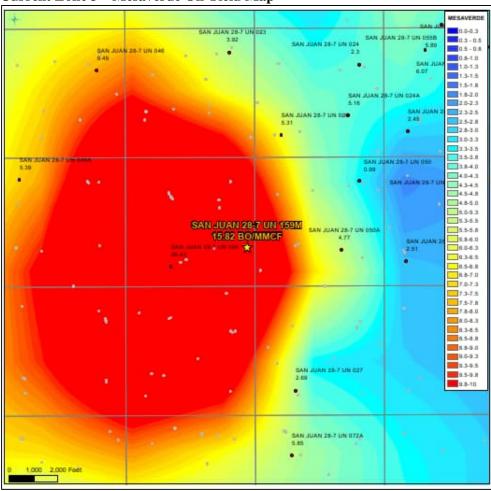


Oil Allocation:

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. Fruitland Coal and Pictured Cliffs have historically not produced oil in this area, therefore will not be allocated any oil.

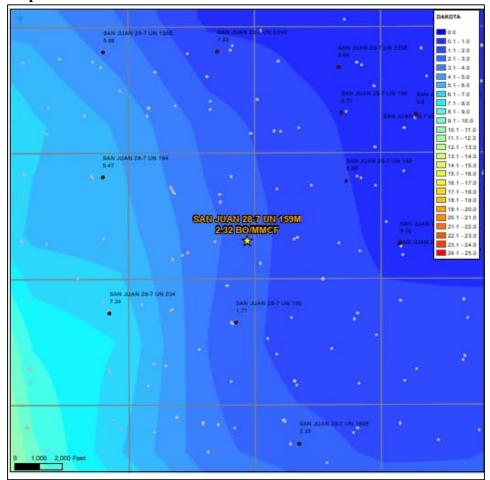
Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
FRC	0.00	111	0%
PC	0.00	86	0%
MV	15.82	234	76%
DK	2.32	512	24%

Current Zone 3 – Mesaverde Oil Yield Map



Average Oil Yield observed in this well.

Proposed Zone – Dakota Oil Yield



Average Oil Yield observed in this well.

ceived by OCD: 5/15/20	024 1:56:25 PM			Page 2 Revised March 23, 2017
RECEIVED:	REVIEWER:	TYPE:	APP NO:	
	- Geologic 1220 South St. Fra	ABOVE THIS TABLE FOR OCD DIVISION O OIL CONSERVATIO Cal & Engineering Bu Annois Drive, Santa Fe	ON DIVISION ureau – e, NM 87505	OF NEW ACTOR
THIS C	CHECKLIST IS MANDATORY FOR AL	ATIVE APPLICATION L ADMINISTRATIVE APPLICATION QUIRE PROCESSING AT THE DIVIS	NS FOR EXCEPTIONS TO DI	vision rules and
Applicant:				lumber:
Well Name:			API:	1.
Pool:			Pool Cod	de:
SUBMIT ACCURA	ATE AND COMPLETE INF	ORMATION REQUIRED INDICATED BELOW	TO PROCESS THE	TYPE OF APPLICATION
A. Location A. Location B. Check of [1] Complete [II] Inject	CATION: Check those of a Spacing Unit - Simult of Simult	aneous Dedication DJECT AREA) NSP(PRI CASUREMENT CASURE PC OLS TO Increase - Enhanc	□OLM ed Oil Recovery	
2) NOTIFICATION A. Offset B. Royalt C. Applic D. Notific E. Notific F. Surfac G. For all	I REQUIRED TO: Check operators or lease hold by, overriding royalty overation requires published ation and/or concurred cation and/or concurred to the above, proof of the required	those which apply. ders vners, revenue owner ed notice ent approval by SLO ent approval by BLM		FOR OCD ONLY Notice Complete Application Content Complete I, and/or,
administrative understand th	I : I hereby certify that t approval is accurate a at no action will be tak re submitted to the Div	and complete to the learn on this application	best of my knowle	edge. I also
No	ote: Statement must be comple	ted by an individual with mar	nagerial and/or supervis	ory capacity.
			Date	

Print or Type Name Phone Number Cherylene Weston Signature e-mail Address

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

APPLICATION FOR DOWNHOLE COMMINGLING SUBMITTED BY HILCORP ENERGY COMPANY

ORDER NO. DHC-5404

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 shutin or flowing well bore pressure in excess of the commingled pool's fracture parting pressure.
- 4. Applicant has certified that all produced fluids from all the Pools are compatible with each other.
- 5. Applicant has certified that downhole commingling the Pools will not decrease the value of the oil and gas production.
- 6. An exception to the notification requirements within 19.15.12.11(C)(1)(b) NMAC was granted by the Division within Order R-10476-B.
- 7. Applicant provided notice of the Application to the Bureau of Land Management ("BLM") or New Mexico State Land Office ("NMSLO"), as applicable.

CONCLUSIONS OF LAW

- 8. OCD has jurisdiction to issue this Order pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-6, 70-2-11, 70-2-12, 70-2-16, 70-2-17, and 19.15.12 NMAC.
- 9. The downhole commingling of the Pools is common, or Applicant has provided evidence that the fluids are compatible and will not damage the Pools in accordance with 19.15.12.11(A)(1) NMAC.
- 10. The bottom perforation of the lower zone is within one hundred fifty percent (150%) of the depth of the top perforation in the upper zone or Applicant has provided evidence that the proposed commingling of the Pools shall not result in shut-in or flowing well bore pressure

Order No. DHC-5404 Page 1 of 4

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-4349.
- 3. Applicant shall allocate a fixed percentage of the oil production from the Well to each of the Pools until a different plan to allocate oil production is approved by OCD. Of the oil production from the Well:
 - a. zero percent (0%) shall be allocated to the BASIN FRUITLAND COAL (GAS) pool (pool ID: 71629);
 - b. zero percent (0%) shall be allocated to the BLANCO P. C. SOUTH (PRORATED GAS) pool (pool ID: 72439);
 - c. seventy-six percent (76%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319); and
 - d. twenty-four percent (24%) 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 BASIN DAKOTA (PRORATED GAS) pool (pool ID: 71599). The current pool(s) are:
 - a. the BASIN FRUITLAND COAL (GAS) pool (pool ID: 71629);
 - b. the BLANCO P. C. SOUTH (PRORATED GAS) pool (pool ID: 72439); and
 - c. the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

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

- a. twenty-five percent (25%) shall be allocated to the BASIN FRUITLAND COAL (GAS) pool (pool ID: 71629);
- b. twenty-two percent (22%) shall be allocated to the BLANCO P. C. SOUTH (PRORATED GAS) pool (pool ID: 72439); and
- c. fifty-three percent (53%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

Order No. DHC-5404 Page 2 of 4

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.

Order No. DHC-5404 Page 3 of 4

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

GERASIMOS RAZATOS DIRECTOR (ACTING) Order No. DHC-5404 Page 4 of 4

State of New Mexico Energy, Minerals and Natural Resources Department

Exhibit A

Order: DHC-5404

Operator: Hilcorp Energy Company (372171)

Well Name: San Juan 28 7 Unit #159M

Well API: 30-039-25574

Allocation:

Pool Name: BASIN FRUITLAND COAL (GAS)

Upper Zone Pool ID: 71629 Current: X New:

Oil: 0.0% Gas: 25.0% Top: 3,246 Bottom: 3,338

Pool Name: BLANCO P. C. SOUTH (PRORATED GAS)

Intermediate Zone Pool ID: 72439 Current: X New:

Allocation: Oil: 0.0% Gas: 22.0%

Top: 3,352 Bottom: 3,388

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

Pool Name: BLANCO-MESAVERDE (PRORATED GAS)

Intermediate Zone 2 Pool ID: 72319 Current: X New:

Allocation: Oil: 76.0% Gas: 53.0%

Top: 4,981 Bottom: 5,676

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

Pool Name: BASIN DAKOTA (PRORATED GAS)

Lower Zone Pool ID: 71599 Current: New: X
Allocation: Oil: 24.0% Gas: Subt

Top: 7,602 Bottom: 7,817

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

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

District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 344778

CONDITIONS

Operator:	OGRID:	
HILCORP ENERGY COMPANY	372171	
1111 Travis Street	Action Number:	
Houston, TX 77002	344778	
	Action Type:	
	[C-107] Down Hole Commingle (C-107A)	

CONDITIONS

Created By		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.	7/18/2024