

Revised March 23, 2017

RECEIVED:	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

Cherylene Weston

 Signature

 Date

 Phone Number

 e-mail Address

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

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

District III
1000 Rio Brazos Road, Aztec, NM 87410

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-107A
Revised August 1, 2011

APPLICATION TYPE
____Single Well
____Establish Pre-Approved Pools
EXISTING WELLBORE
X____Yes ____No

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company

382 Road 3100, Aztec, NM 87410

Operator

Address

San Juan 28-7 Unit

56A

UL C-Sec.13, T28N, R07W

Rio Arriba County, NM

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 372171 Property Code 318432 API No. 30-039-21913 Lease Type: X Federal ____State ____Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Basin Fruitland Coal	Blanco Pictured Cliffs S.	Blanco Mesaverde
Pool Code	71629	72439	72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	Est 3141' - 3421'	Est 3423' - 3564'	5078' - 6020'
Method of Production (Flowing or Artificial Lift)	NEW ZONE	NEW ZONE	PLUNGER 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)	122 PSI	150 PSI	90 PSI
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1110 BTU	1172 BTU	1258 BTU
Producing, Shut-In or New Zone	NEW ZONE	NEW ZONE	PLUNGER LIFT
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:	Date: Rates:	Date: 5/1/2023 4-bbl Oil Rates: 30-bbl Water 1,277 Mcf
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas % %	Oil Gas % %	Oil Gas % %

ADDITIONAL DATA

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

Yes____No X____
Yes X____No____

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____

NMOCD Reference Case No. applicable to this well: R-10476-B

Attachments:

C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
Production curve for each zone for at least one year. (If not available, attach explanation.)
For zones with no production history, estimated production rates and supporting data.
Data to support allocation method or formula.
Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools
List of all operators within the proposed Pre-Approved Pools
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
Bottomhole pressure data.

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

SIGNATURE

Cherylene Weston

TITLE

Operations/Regulatory Technician

DATE

7/25/2023

TYPE OR PRINT NAME

Cherylene Weston

TELEPHONE NO. (713)

289-2615

E-MAIL ADDRESS

cweston@hilcorp.com

District I

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

District II

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

District III

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

District IV

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

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

Form C-102
August 1, 2011

Permit 344187

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21913	2. Pool Code 72439	3. Pool Name BLANCO P. C. SOUTH (PRORATED GAS)
4. Property Code 318432	5. Property Name SAN JUAN 28 7 UNIT	6. Well No. 056A
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6653

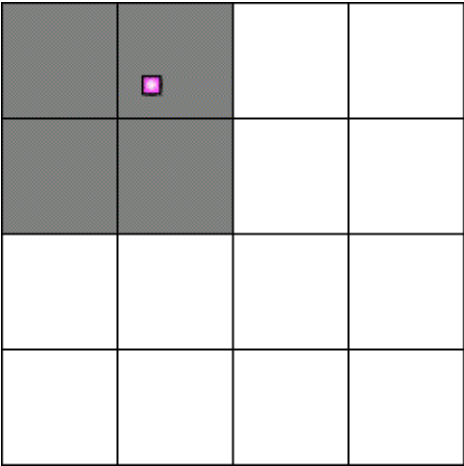
10. Surface Location

UL - Lot C	Section 13	Township 28N	Range 07W	Lot Idn	Feet From 915	N/S Line N	Feet From 1700	E/W Line W	County RIO ARRIBA
---------------	---------------	-----------------	--------------	---------	------------------	---------------	-------------------	---------------	-------------------------

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 160.00	13. Joint or Infill			14. Consolidation Code			15. Order No.		

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

	<p style="text-align: center;">OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>E-Signed By: <u>Cherylene Weston</u> Title: <u>Cherylene Weston</u> Date: <u>07/10/2023</u></p> <hr/> <p style="text-align: center;">SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>Surveyed By: <u>Fred B. Kerr, Jr.</u> Date of Survey: <u>8/23/1978</u> Certificate Number: <u>3950</u></p>
--	---

District I

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

District II

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

District III

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

District IV

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

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

Form C-102

August 1, 2011

Permit 344187

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21913	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318432	5. Property Name SAN JUAN 28 7 UNIT	6. Well No. 056A
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6653

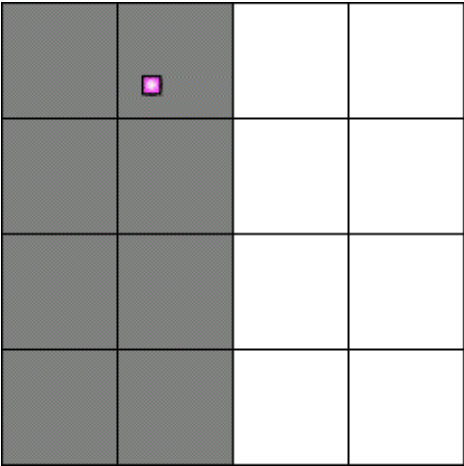
10. Surface Location

UL - Lot C	Section 13	Township 28N	Range 07W	Lot Idn	Feet From 915	N/S Line N	Feet From 1700	E/W Line W	County RIO ARRIBA
---------------	---------------	-----------------	--------------	---------	------------------	---------------	-------------------	---------------	-------------------------

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 320.00	13. Joint or Infill			14. Consolidation Code			15. Order No.		

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

	<p style="text-align: center;">OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>E-Signed By: <u>Cherylene Weston</u> Title: <u>Cherylene Weston</u> Date: <u>07/10/2023</u></p> <hr/> <p style="text-align: center;">SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>Surveyed By: <u>Fred B. Kerr, Jr.</u> Date of Survey: <u>8/23/1978</u> Certificate Number: <u>3950</u></p>
--	---

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-197
Supersedes C-128
Effective 1-1-65

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

Owner EL PASO NATURAL GAS COMPANY			Lease SAN JUAN 28-7 UNIT (SF-079290-A)		Well No. 56A
Section C	Township 13	Range 28N	County 7W	RIO ARriba	
Actual Location of Well:					
915 feet from the North		1700 feet from the West			
Ground Level Elev. 6653	Producing Formation Mesa Verde	Pool Blanco Mesa Verde	Dedicated Acres per Acre 320.00		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

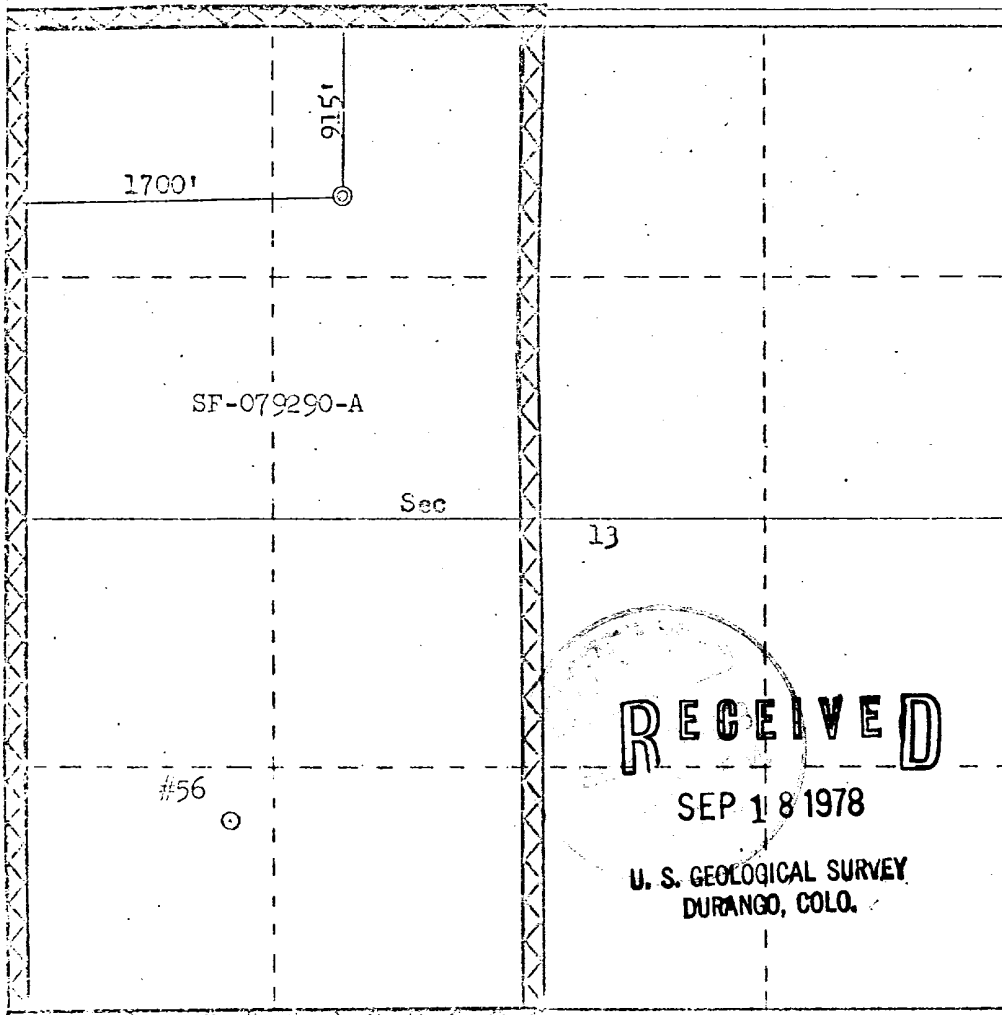
X

Unitization

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

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

H. H. Bruce

Name
Drilling Clerk

Position
El Paso Natural Gas Co.

Company
September 14, 1978

Date

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

Date Surveyed

August 23, 1978

By (Plat) _____

Fred R. Korb Jr.

395

San Juan 28-7 Unit 56A

These zones are proposed to be commingled because the application of dual completions impedes the ability to produce the shallow zone without artificial lift and the deeper zones with reduced artificial lift efficiency. All horizons will require artificial lift due to low bottomhole pressure (BHP) and permeability.

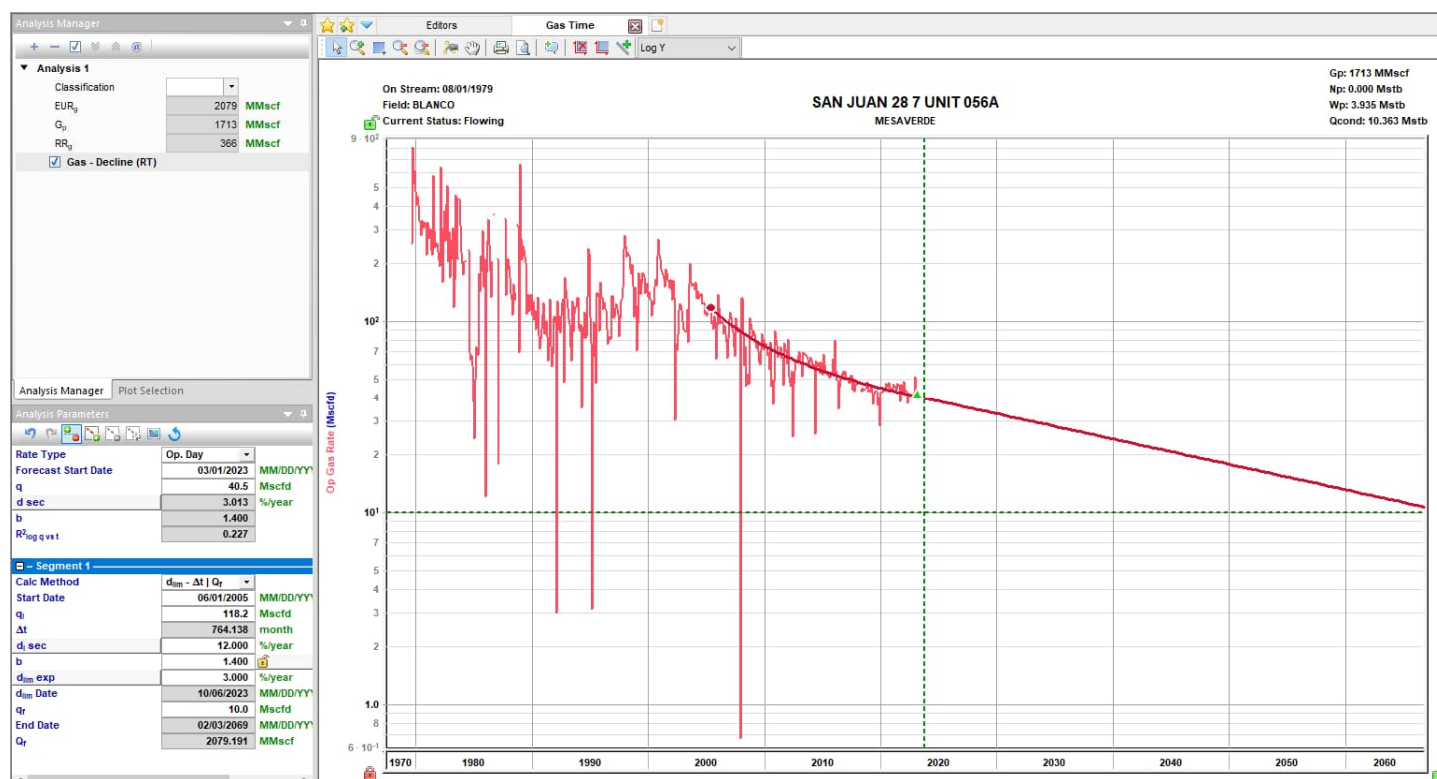
The BHPs of all zones, producing and non-producing, were estimated based upon basin wide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin, in conjunction with shut-in pressure build-ups. These models were constructed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

Production Allocation Method – Subtraction

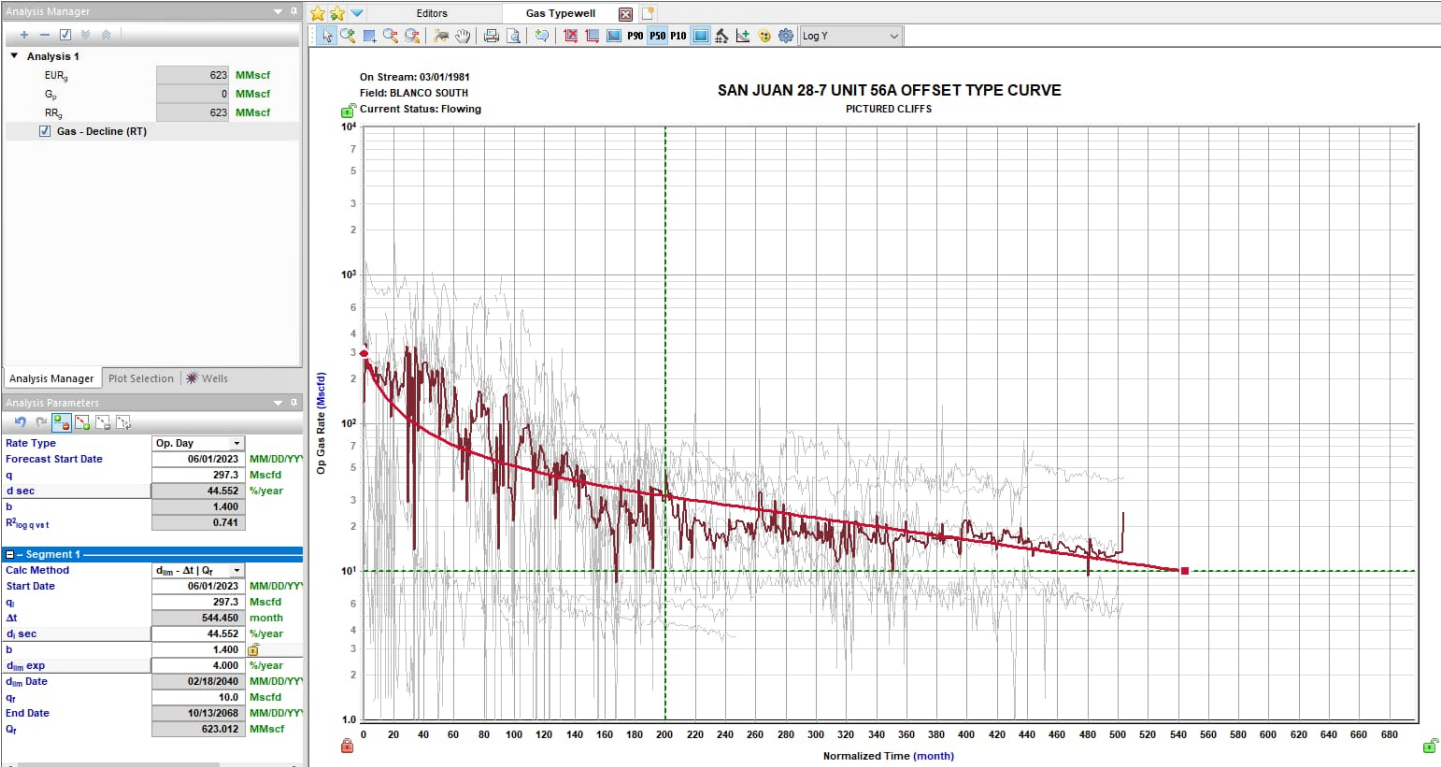
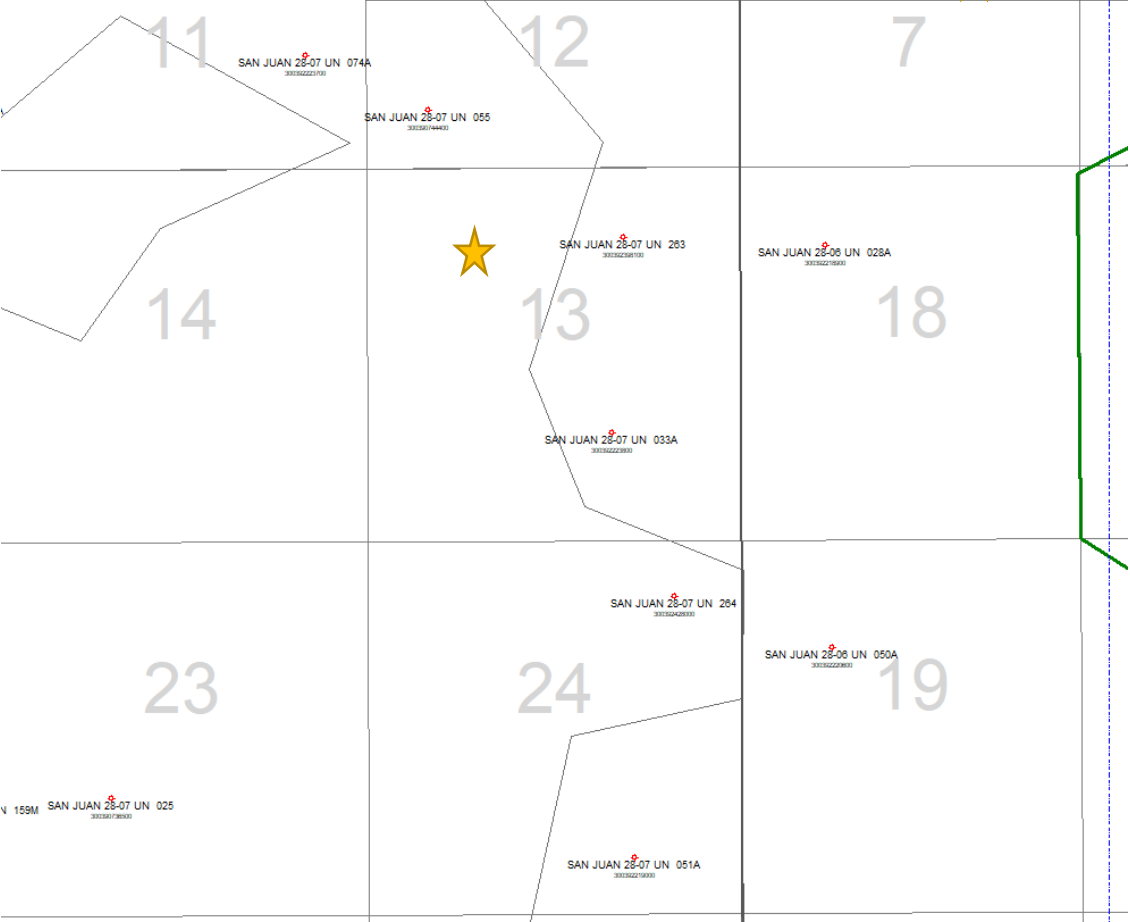
Gas Allocation:

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

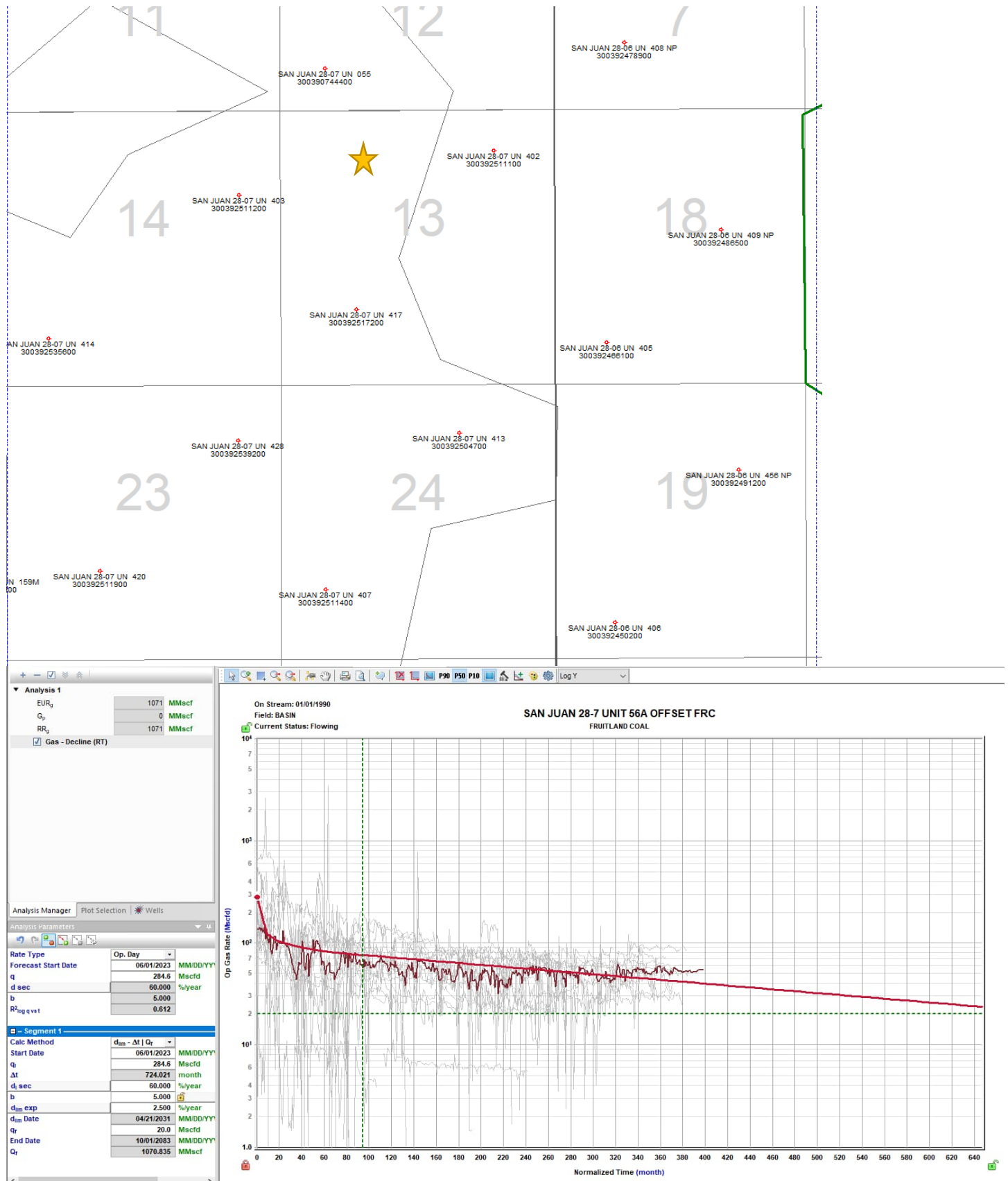
Historic offset wells will be used to create a fixed allocation split for the new formations (PC/FRC). After 3 years production will stabilize. A production average will be gathered during the 4th year and will be utilized to create a fixed percentage-based allocation.



PICTURED CLIFFS OFFSET PRODUCERS – San Juan 28-7 Unit 56A (★)



FRUITLAND COAL OFFSET PRODUCERS – San Juan 28-7 Unit 56A (★)



Gas Allocation:

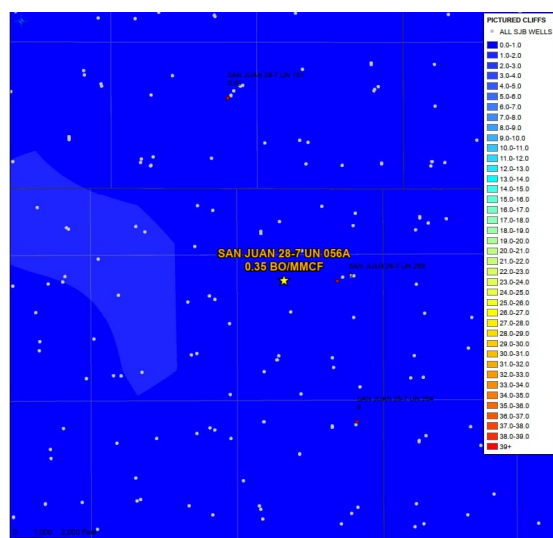
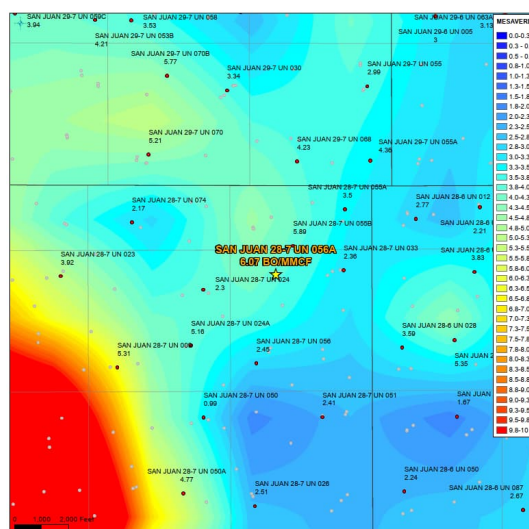
Gas will be allocated using the subtraction method. Any gas production above and beyond the base Mesaverde production will be allocated to the Pictured Cliffs and Fruitland Coal, at 38% and 62% respectively. The Pictured Cliffs offset wells have a slightly higher IP than the Fruitland Coal offsets, but the coal decline is significantly shallower and ultimately yields a higher EUR.

Formation	Remaining Reserves (MMcf)	% Gas Allocation
PC	623	38%
FRC	1,071	62%

Oil Allocation:

Fruitland Coal in this area has not shown nor is expected to produce any oil. Oil will be allocated on a fixed allocation basis based on current production in the Mesaverde and Pictured Cliffs and their offset oil yields.

Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
Mesaverde	6.07	366	91%
Pictured Cliffs	0.35	623	9%
Fruitland Coal	0	1,071	0%

Pictured Cliffs Oil Yield Map**Mesaverde Oil Yield Map**

Supplemental Information for C 107A

Please submit the values below and amend the C107A. BHP's were calculated in each of the analog wells in the zones being commingled following the process below.

I believe each of the reservoirs to be continuous and in a similar state of depletion based on at the **San Juan 28-7 Unit 56A** and each of the wells from which pressures are being derived.

I believe that commingling the below zones in the target wellbore will not have a negative production impact on neither the existing nor the proposed recompletion pools.

Bottomhole Pressure Derivation

San Juan 28-7 Unit 56A – Standalone MV

1. 24 hour SI
2. BHP calculated based on SN depth and 24 hr SI casing pressure

San Juan 29-7 Unit 151– Standalone PC

1. 24 hour SI
2. BHP calculated based on SN depth and 24 hr SI casing pressure

San Juan 28-6 NP Unit 456 – Standalone FC

1. 24 hour SI
2. BHP calculated based on SN depth and 24 hr SI casing pressure

Well Name	API	Formation	BHP
San Juan 28-7 Unit 56A	3003921913	MV	90 psi
San Juan 29-7 Unit 151	3003925540	PC	150 psi
San Juan 28-6 NP Unit 456	3003924912	FC	122 psi

Gas Analyses

Hilcorp believes the below gas analyses for standalone wells are representative of the proposed commingle pools.

AssetCode	3003921913
AssetName	SAN JUAN 28-7 UNIT 56A
Formation	MV Standalone
BTUDry	1258
SpecificGravity	0.7303
CO2	0.010719
N2	0.001862
C1	0.805273
C2	0.096379
C3	0.045754
ISOC4	0.009622
NC4	0.013736
ISOC5	0.005899
NC5	0.004153
NEOC5	
C6	
C6_PLUS	0.006603

AssetCode	3003925540
AssetName	SAN JUAN 29-7 UNIT 151
Formation	PC Standalone
BTUDry	1172
SpecificGravity	0.678
CO2	0.011277
N2	0.003585
C1	0.857324
C2	0.062627
C3	0.04354
ISOC4	0.007159
NC4	0.007619
ISOC5	0.002301
NC5	0.001661
NEOC5	
C6	
C6_PLUS	0.002907

AssetCode	3003924912
AssetName	SAN JUAN 28-6 UNIT NP 456
Formation	FC Standalone
BTUDry	1110
SpecificGravity	0.6351
CO2	0.010531
N2	0.001716
C1	0.90466
C2	0.046995
C3	0.022533
ISOC4	0.003962
NC4	0.004673
ISOC5	0.001497
NC5	0.001053
NEOC5	
C6	
C6_PLUS	0.00238

Water Analyses

Hilcorp believes the below water analyses for standalone wells are representative of the proposed commingle pools. AS OF 8/10/2023, THE WATER ANALYSIS RESULTS ARE STILL WITH THE LAB. HILCORP INTENDS TO ATTACH THESE RESULTS AS SOON AS WE HAVE THEM AVAILABLE.

AssetCode	3003924280
AssetName	SAN JUAN 28-7 Unit 264
Formation	PC Standalone



AssetCode	3003924789
AssetName	SAN JUAN 28-6 NP Unit 408
Formation	FC Standalone



AssetCode	3003921913
AssetName	SAN JUAN 28-7 UNIT 56A
Formation	MV Standalone



Well Name: SAN JUAN 28-7 UNIT	Well Location: T28N / R7W / SEC 13 / NENW / 36.665955 / -107.527496	County or Parish/State: RIO ARRIBA / NM
Well Number: 56A	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF079290A	Unit or CA Name: SAN JUAN 28-7 UNIT--MV	Unit or CA Number: NMNM78413A
US Well Number: 3003921913	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2744456

Type of Submission: Notice of Intent

Type of Action: Recompletion

Date Sundry Submitted: 08/04/2023

Time Sundry Submitted: 06:33

Date proposed operation will begin: 09/01/2023

Procedure Description: Hilcorp Energy would like to revise the FRC and PC recomplete NOI that was approved on 7/11/2023. Please see the attached procedure, current and proposed wellbore diagram, plat and natural gas management plan. A closed loop system will be used. A pre-reclamation site visit was held on 6/20/2023 with Roger Herrera/BLM. The reclamation plan is attached.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

San_Juan_28_7_Unit_56A_Rev_FRC_PC_NOI_20230804063155.pdf

Well Name: SAN JUAN 28-7 UNIT

Well Location: T28N / R7W / SEC 13 /
NENW / 36.665955 / -107.527496

County or Parish/State: RIO
ARRIBA / NM

Well Number: 56A

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMSF079290A

Unit or CA Name: SAN JUAN 28-7
UNIT--MV

Unit or CA Number:
NMNM78413A

US Well Number: 3003921913

Well Status: Producing Gas Well

Operator: HILCORP ENERGY
COMPANY

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: CHERYLENE WESTON

Signed on: AUG 04, 2023 06:32 AM

Name: HILCORP ENERGY COMPANY

Title: Operations/Regulatory Tech - Sr

Street Address: 1111 TRAVIS STREET

City: HOUSTON

State: TX

Phone: (713) 289-2615

Email address: cweston@hilcorp.com

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742

BLM POC Email Address: krennick@blm.gov

Disposition: Approved

Disposition Date: 08/04/2023

Signature: Kenneth Rennick

San Juan 28-7 Unit 56A

C – 13 – 28N – 07W 915 FNL 1700 FWL

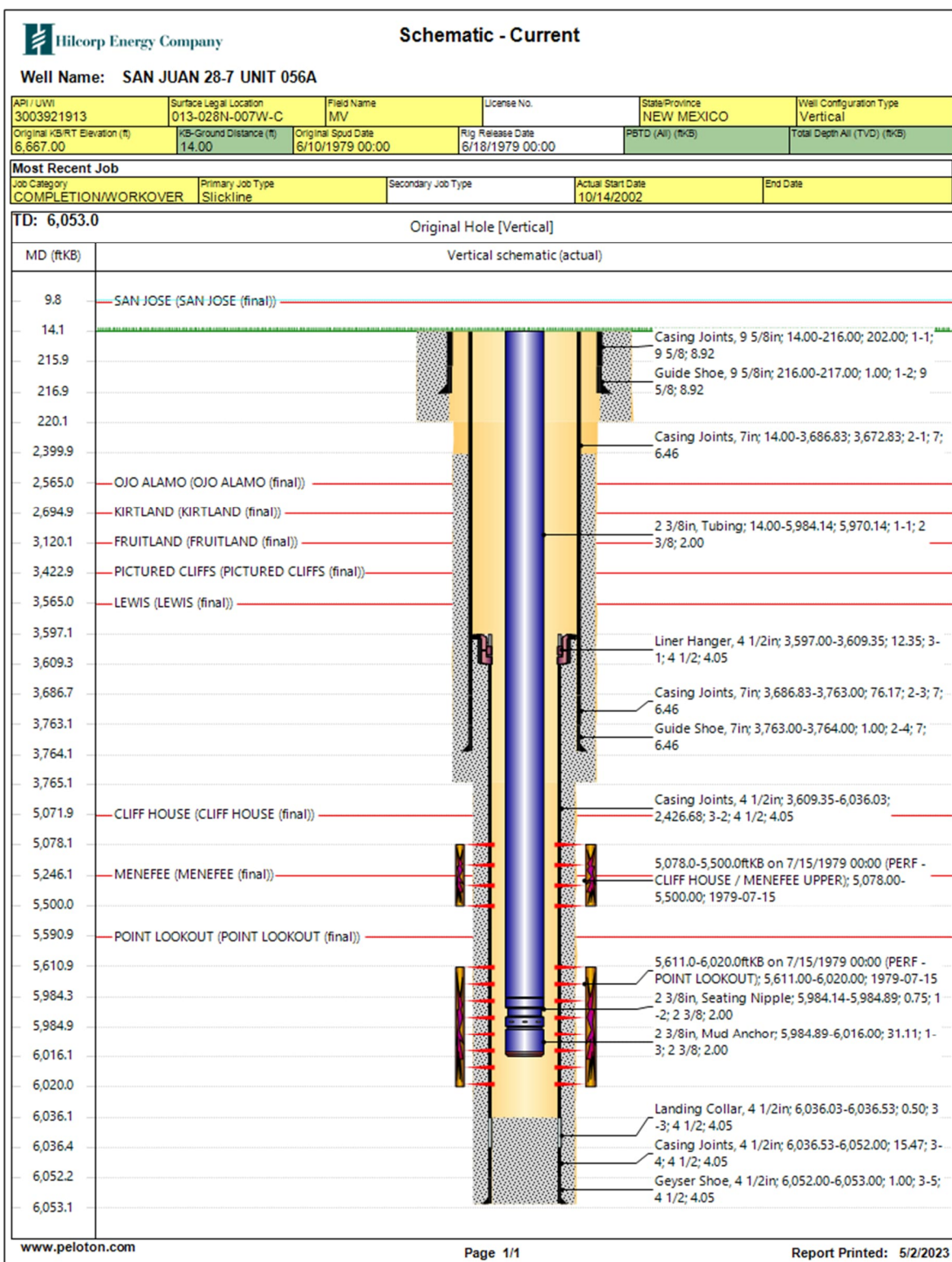
API#: 3003921913

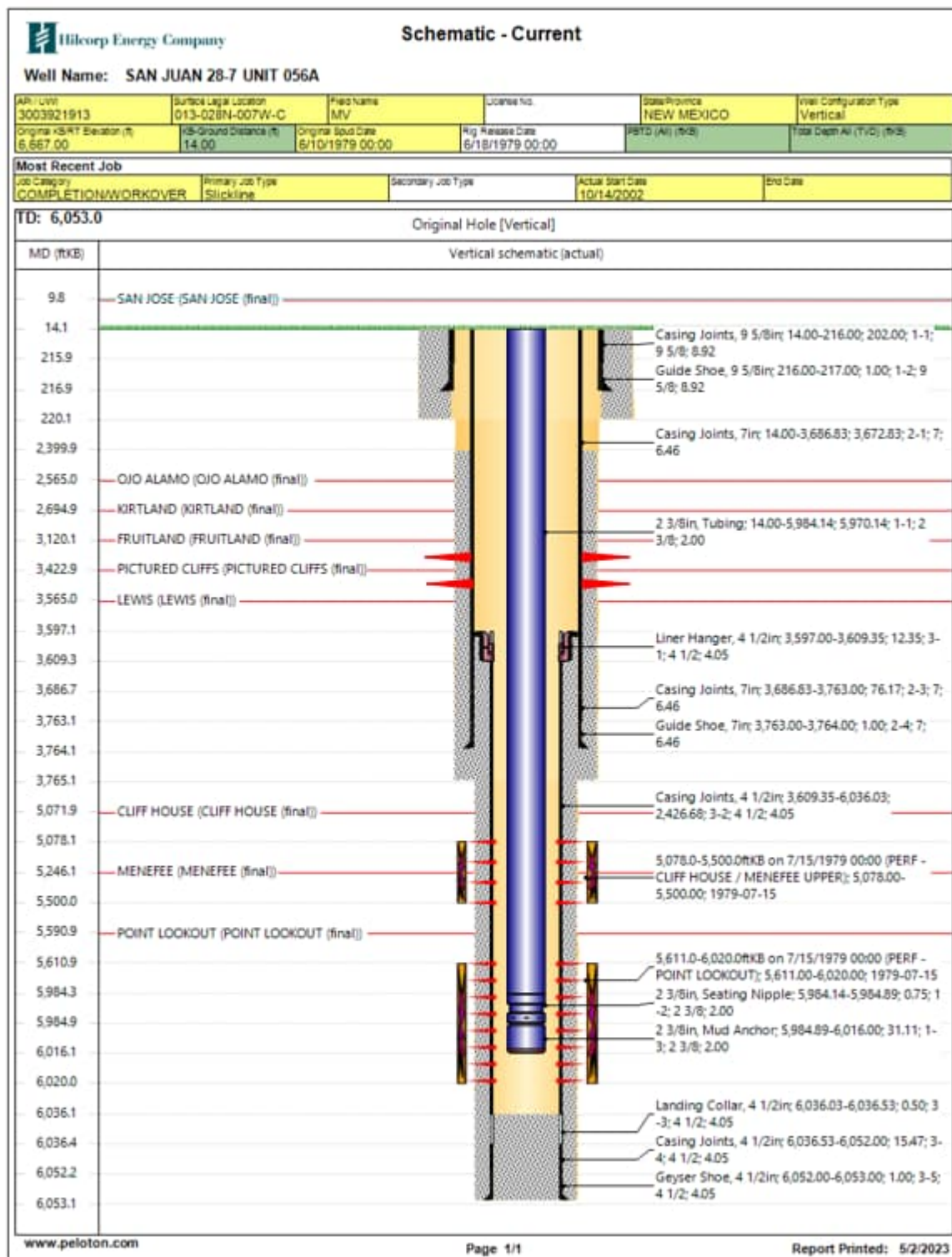
Fruitland Coal and Pictured Cliffs Recompletion Procedure

05/01/2023

Procedure:

1. MIRU PU and associated equipment. Kill well and NDWH.
2. NUBOP and unseat tubing, tag for fill and scan out tubing
3. Set 4.5" CIBP at +/-5050' to isolate existing MV completion
4. RU wellcheck and MIT wellbore to 500 PSI
5. Run CBL from CIBP to surface
6. Set 7" CBP at +/- 3580' to isolate liner hanger
7. Perforate the Pictured Cliffs from 3423' to 3564'
8. Set ported frac plug in 7" at 3422'
9. RIH with frac packer and frac string and set packer at +/- 3120'
10. MIRU frac spread.
11. Frac the Pictured Cliffs.
12. Drop ball and isolate PC interval, pressure test plug, RIH and perforate Fruitland Coal from 3141' to 3421'
13. Frac Fruitland Coal.
14. Rig up flowback and blow down well pressure to release packer.
15. MIRU service rig and test BOP's.
16. Pull Frac String and cleanout sand and plugs to PBTD.
17. TIH and land 2-3/8" production tubing in MV (+/-6000')
18. ND BOP's, NU production tree.
19. RDMO service rig & turn well over to production as commingled Fruitland Coal/Pictured Cliffs/Mesaverde producer





District I

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

District II

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

District III

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

District IV

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

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

Form C-102
August 1, 2011

Permit 344187

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21913	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318432	5. Property Name SAN JUAN 28 7 UNIT	6. Well No. 056A
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6653

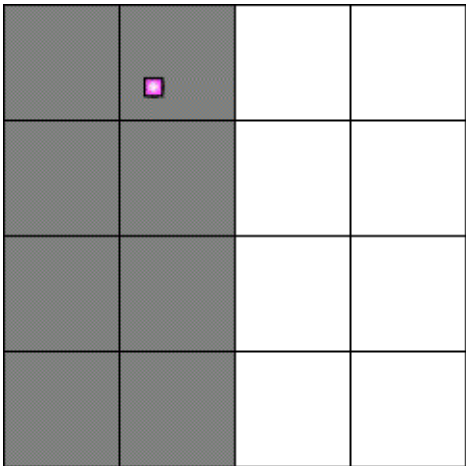
10. Surface Location

UL - Lot C	Section 13	Township 28N	Range 07W	Lot Idn	Feet From 915	N/S Line N	Feet From 1700	E/W Line W	County RIO ARRIBA
---------------	---------------	-----------------	--------------	---------	------------------	---------------	-------------------	---------------	-------------------------

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 320.00	13. Joint or Infill			14. Consolidation Code			15. Order No.		

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

	<p style="text-align: center;">OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>E-Signed By: <u>Cherylene Weston</u> Title: <u>Cherylene Weston</u> Date: <u>07/10/2023</u></p> <hr/> <p style="text-align: center;">SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>Surveyed By: <u>Fred B. Kerr, Jr.</u> Date of Survey: <u>8/23/1978</u> Certificate Number: <u>3950</u></p>
--	---

District I

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

District II

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

District III

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

District IV

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

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

Form C-102
August 1, 2011

Permit 344187

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21913	2. Pool Code 72439	3. Pool Name BLANCO P. C. SOUTH (PRORATED GAS)
4. Property Code 318432	5. Property Name SAN JUAN 28 7 UNIT	6. Well No. 056A
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6653

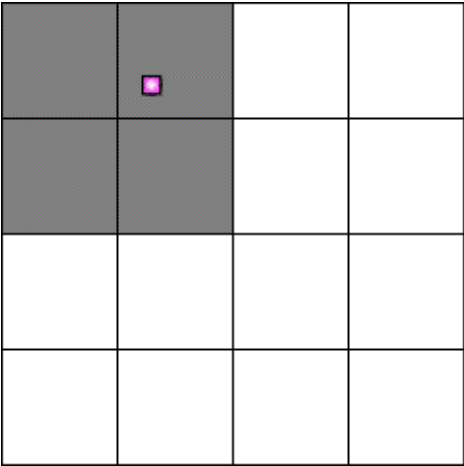
10. Surface Location

UL - Lot C	Section 13	Township 28N	Range 07W	Lot Idn	Feet From 915	N/S Line N	Feet From 1700	E/W Line W	County RIO ARRIBA
---------------	---------------	-----------------	--------------	---------	------------------	---------------	-------------------	---------------	-------------------------

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 160.00	13. Joint or Infill			14. Consolidation Code			15. Order No.		

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

	<p style="text-align: center;">OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>E-Signed By: <u>Cherylene Weston</u> Title: <u>Cherylene Weston</u> Date: <u>07/10/2023</u></p> <hr/> <p style="text-align: center;">SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>Surveyed By: <u>Fred B. Kerr, Jr.</u> Date of Survey: <u>8/23/1978</u> Certificate Number: <u>3950</u></p>
--	---

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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Hilcorp Energy Company **OGRID:** 372171 **Date:** 07/10/2023

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
San Juan 28-7 Unit 56A	3003921913	C-13-28N-07W	915' FNL & 1700' FWL	1	175	2

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
<u>San Juan 28-7 Unit 56A</u>	<u>3003921913</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>Not yet scheduled</u>

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

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

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

Section 2 – Enhanced Plan**EFFECTIVE APRIL 1, 2022**

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: *Cherylene Weston*

Printed Name: Cherylene Weston

Title: Operations/Regulatory Tech-Sr.

E-mail Address: cweston@hilcorp.com

Date: 07/10/2023

Phone: 713-289-2615

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:

Title:

Approval Date:

Conditions of Approval:

VI. Separation Equipment:

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

VII. Operational Practices:

1. Subsection (A) Venting and Flaring of Natural Gas
 - o 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
 - o This gas capture plan isn't for a well being drilled.
3. Subsection (C) Venting and flaring during completion or recompleting
 - o 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.
 - o 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
 - o 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.
 - o 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.
 - o 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
 - o All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste.
 - o 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.
 - o 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.

Hilcorp Energy
Recomplete Reclamation Plan
San Juan 28-7 56A
API: 30-039-21913
T28N-R7W-Sec.13-C
LAT: 36.665958 LONG: -107.52749 NAD 27
Footage: 915' FNL & 1700' FWL
Rio Arriba County, NM

1. PRE- RECLAMATION SITE INSPECTION

A pre-reclamation site inspection was completed with Roger Herrera from the BLM and Eufracio Trujillo, Hilcorp Energy SJ South Construction Foreman, on June 20, 2023.

2. LOCATION RECLAMATION PROCEDURE

1. Reclamation work will begin in the fall.
2. All trash and debris will be removed within a 25' buffer outside of the location disturbance during reclamation.
3. Brush hog location and fence off area for disturbance.
4. Reset separator closer to pit and tank.
5. Close out BGT by separator.
6. Level off pad to accommodate for equipment.
7. Blade roads into location from main road. Crown and pull ditches.
8. Use sand rock that is in nearby pit to fix roads going into location.
9. Fix damage to roads, TUA surfaces that are disturbed, and fix drainage issues.
10. Fix lease road below location at beginning of road.
11. Put in water diversion bars where they may be needed.
12. Reclaim all disturbed area being used for recompletion activities.
13. Reestablish teardrop.
14. Reclaim areas damaged by moving crews in.

3. SEEDING PROCEDURE

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

4. WEED MANAGEMENT

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



July 25, 2023

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

Re: C-107A (Downhole Commingle)
San Juan 28-7 Unit 56A
API No. 30-039-21913
Section 13, 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 not common between the formations listed below:

- *Basin Fruitland Coal (Pool Code: 71629)*
- *Blanco Pictured Cliffs (Pool Code: 72439)*
- *Blanco Mesaverde (Pool Code: 72319)*

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

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

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

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

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

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

From: [McClure, Dean, EMNRD](#) on behalf of [Engineer, OCD, EMNRD](#)
To: [Cheryl Weston](#); [Mandi Walker](#)
Cc: [McClure, Dean, EMNRD](#); [Rikala, Ward, EMNRD](#); [Wrinkle, Justin, EMNRD](#); [Powell, Brandon, EMNRD](#); [Paradis, Kyle Q](#)
Subject: Approved Administrative Order DHC-5310
Date: Friday, August 18, 2023 8:32:17 AM
Attachments: [DHC5310 Order.pdf](#)

NMOCD has issued Administrative Order DHC-5310 which authorizes Hilcorp Energy Company (372171) to downhole commingle production within the following well:

Well Name: **San Juan 28 7 Unit #56A**

Well API: **30-039-21913**

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: [Laura Bohorquez](#)
To: [McClure, Dean, EMNRD](#); [Cheryl Weston](#)
Cc: [Mandi Walker](#)
Subject: RE: [EXTERNAL] Action ID: 244047; DHC-5310
Date: Monday, August 14, 2023 12:05:50 PM
Attachments: [image001.png](#)
[image002.png](#)
[Water Analyses for C107A.pdf](#)

Dean,

Please see attached water analysis results for the proposed commingle pools.

Thanks,

Laura Bohorquez
Operations Engineer | San Juan South
Hilcorp Energy Company | 1111 Travis Street | Houston, TX 77002
M: 832.512.3292
laura.bohorquez@hilcorp.com

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Friday, August 11, 2023 10:11 AM
To: Cheryl Weston <cweston@hilcorp.com>; Laura Bohorquez <Laura.Bohorquez@hilcorp.com>
Cc: Mandi Walker <mwalker@hilcorp.com>
Subject: RE: [EXTERNAL] Action ID: 244047; DHC-5310

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

Thank you; I believe the water samples is the only topic yet to be addressed.

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

From: Cheryl Weston <cweston@hilcorp.com>
Sent: Thursday, August 10, 2023 2:21 PM
To: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>; Laura Bohorquez <Laura.Bohorquez@hilcorp.com>
Cc: Mandi Walker <mwalker@hilcorp.com>
Subject: RE: [EXTERNAL] Action ID: 244047; DHC-5310

Dean,

Attached is the revised C-107A. Let us know if you have any questions.

Thanks,
Cheryl

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Thursday, August 10, 2023 9:38 AM
To: Laura Bohorquez <Laura.Bohorquez@hilcorp.com>; Cheryl Weston <cweston@hilcorp.com>
Cc: Mandi Walker <mwalker@hilcorp.com>
Subject: RE: [EXTERNAL] Action ID: 244047; DHC-5310

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

Laura,

Please note the text I have highlighted below. Based off the table and Hilcorp's normal procedure of allocating oil on a fixed percentage, I am speculative that the inclusion of reference to "subtraction basis" is in error, but I'm not sure enough to proceed without confirmation from Hilcorp. My speculation is that Hilcorp is proposing to allocate 91% of the oil to the MV and 9% to the PC on a fixed percentage basis.

Oil Allocation:

Fruitland Coal in this area has not shown nor is expected to produce any oil. Oil will be allocated on a subtraction basis from current production in the Mesaverde.

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

From: Laura Bohorquez <Laura.Bohorquez@hilcorp.com>

Sent: Thursday, August 10, 2023 7:38 AM

To: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>; Cheryl Weston <cweston@hilcorp.com>

Cc: Mandi Walker <mwalker@hilcorp.com>

Subject: RE: [EXTERNAL] Action ID: 244047; DHC-5310

Dean,

1. Ammended C 107A form should be on its way now – Cheryl did you already submit this?
2. Please see the table that was attached in the NOI. There is no historical oil production out of the Fruitland Coal in this area so we propose 0% oil allocated for the FRC.

Oil Allocation:

Fruitland Coal in this area has not shown nor is expected to produce any oil. Oil will be allocated on a subtraction basis from current production in the Mesaverde.

Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
Mesaverde	6.07	366	91%
Pictured Cliffs	0.35	623	9%
Fruitland Coal	0	1,071	0%

3. Correct – there was no measurable H2S in any of these samples – I also checked the historical gas analyses for these wells and none showed H2S.
4. Understood – the water samples have been sent in to the lab and we are currently waiting on results from those. I will reply back on this email chain as soon as we have them for you.

Thanks,

Laura Bohorquez
Operations Engineer | San Juan South
Hilcorp Energy Company | 1111 Travis Street | Houston, TX 77002
M: 832.512.3292
laura.bohorquez@hilcorp.com

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Wednesday, August 9, 2023 3:08 PM
To: Cheryl Weston <cweston@hilcorp.com>
Cc: Mandi Walker <mwalker@hilcorp.com>; Laura Bohorquez <Laura.Bohorquez@hilcorp.com>
Subject: [EXTERNAL] Action ID: 244047; DHC-5310

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	244047
Admin No.	DHC-5310
Applicant	Hilcorp Energy Company (372171)
Title	San Juan 28 7 Unit #56A
Sub. Date	7/25/2023

Please provide the following additional supplemental documents:

- An amended Form C-107A with corrections made to the perforation range for the FLC and MV formations. (Presumably the top perf for the FLC should be 3141 and the bottom perf for the MV should be 6020).

Please provide additional information regarding the following:

- The text in the application states that Hilcorp is proposing that the oil allocation will be determined via the subtraction method, but the table following that would seem to indicate a fixed percentage method. Please confirm what Hilcorp's proposed oil allocation is.
- The gas samples do not indicate what the H2S concentration is for each sample. Does this mean that there is not a measurable concentration of H2S within the samples?
- The included reference to water samples seems to be historical production records. Please provide the results from an analysis for each water sample which includes a break out of the TDS present in each sample.

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

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.

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

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.

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

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.

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

Water Analyses

Hilcorp believes the below water analyses for standalone wells are representative of the proposed commingle pools.

AssetCode	3003924280
AssetName	SAN JUAN 28-7 Unit 264
Formation	PC Standalone

SJ 28-7 264**2307265-02 (Water)****Sampled Date: 07/26/23 10:45**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO ₃ *	36.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Hydroxide as CaCO ₃ *	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Carbonate as CaCO ₃ *	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Bicarbonate as CaCO ₃ *	36.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Chloride*	31.6	1.00	0.0555	mg/L	1	08/09/23 02:55	EPA300.0		AWG
Conductivity*	190	1.00		umho/cm@25 C	1	07/28/23 09:03	2510 B		AES
pH*	6.43			pH Units	1	07/28/23 09:03	EPA150.1		AES
pH Temperature, degrees C	19.8			pH Units	1	07/28/23 09:03	EPA150.1		AES
Resistivity	5260			ohm/cm	1	08/08/23 14:36	2510 B		JDA
Specific Gravity	0.9980	0.8000		No Unit	1	08/09/23 15:13	ASTM D1429-03		CAI
Sulfate*	<0.620	5.00	0.620	mg/L	5	08/11/23 20:22	EPA300.0		AWG
Total Dissolved Solids*	125	10.0		mg/L	1	07/31/23 15:37	EPA160.1		CAI
Potentially Dissolved Metals by ICP									
Barium*	<0.400	0.400	0.156	mg/L	20	08/08/23 16:25	EPA200.7		AES
Calcium*	<2.00	2.00	1.24	mg/L	20	08/08/23 16:25	EPA200.7		AES
Hardness, as CaCO ₃	<13.2	13.2	5.98	mg/L	20	08/08/23 16:25	2340 B		AES
Iron*	8.11	1.00	0.302	mg/L	20	08/08/23 16:25	EPA200.7		AES
Lead*	<2.00	2.00	0.214	mg/L	20	08/08/23 16:25	EPA200.7		AES
Magnesium*	<2.00	2.00	0.702	mg/L	20	08/08/23 16:25	EPA200.7		AES
Manganese*	0.510	0.400	0.127	mg/L	20	08/08/23 16:25	EPA200.7		AES
Potassium*	<20.0	20.0	2.08	mg/L	20	08/08/23 16:25	EPA200.7		AES
Silica (SiO ₂)	<3.26	21.4	3.26	mg/L	20	08/08/23 16:25	Calculation		AES
Silicon	<10.0	10.0	1.52	mg/L	20	08/08/23 16:25	EPA200.7		AES
Sodium*	28.1	20.0	8.18	mg/L	20	08/08/23 16:25	EPA200.7		AES
Strontium*	<2.00	2.00	0.341	mg/L	20	08/08/23 16:25	EPA200.7		AES
Zinc*	<2.00	2.00	0.155	mg/L	20	08/08/23 16:25	EPA200.7		AES

AssetCode	3003924789
AssetName	SAN JUAN 28-6 NP Unit 408
Formation	FC Standalone

SJ 28-6 NP 408

2307265-03 (Water)

Sampled Date: 07/26/23 11:30

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO ₃ *	67.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Hydroxide as CaCO ₃ *	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Carbonate as CaCO ₃ *	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Bicarbonate as CaCO ₃ *	67.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Chloride*	0.321	1.00	0.0555	mg/L	1	08/09/23 03:16	EPA300.0		AWG
Conductivity*	147	1.00		umho/cm@25 C	1	07/28/23 09:03	2510 B		AES
pH*	6.37			pH Units	1	07/28/23 09:03	EPA150.1		AES
pH Temperature, degrees C	19.4			pH Units	1	07/28/23 09:03	EPA150.1		AES
Resistivity	6800			ohm/cm	1	08/08/23 14:36	2510 B		JDA
Specific Gravity	1.001	0.8000		No Unit	1	08/09/23 15:13	ASTM D1429-03		CAI
Sulfate*	<0.620	5.00	0.620	mg/L	5	08/11/23 20:42	EPA300.0		AWG
Total Dissolved Solids*	<10.0	10.0		mg/L	1	07/31/23 15:39	EPA160.1		CAI
Potentially Dissolved Metals by ICP									
Barium*	<0.400	0.400	0.156	mg/L	20	08/08/23 16:28	EPA200.7		AES
Calcium*	<2.00	2.00	1.24	mg/L	20	08/08/23 16:27	EPA200.7		AES
Hardness, as CaCO ₃	<13.2	13.2	5.98	mg/L	20	08/08/23 16:27	2340 B		AES
Iron*	46.8	1.00	0.302	mg/L	20	08/08/23 16:27	EPA200.7		AES
Lead*	<2.00	2.00	0.214	mg/L	20	08/08/23 16:28	EPA200.7		AES
Magnesium*	<2.00	2.00	0.702	mg/L	20	08/08/23 16:27	EPA200.7		AES
Manganese*	0.323	0.400	0.127	mg/L	20	08/08/23 16:27	EPA200.7	J	AES
Potassium*	<20.0	20.0	2.08	mg/L	20	08/08/23 16:27	EPA200.7		AES
Silica (SiO ₂)	<3.26	21.4	3.26	mg/L	20	08/08/23 16:27	Calculation		AES
Silicon	<10.0	10.0	1.52	mg/L	20	08/08/23 16:27	EPA200.7		AES
Sodium*	<20.0	20.0	8.18	mg/L	20	08/08/23 16:27	EPA200.7		AES
Strontium*	<2.00	2.00	0.341	mg/L	20	08/08/23 16:27	EPA200.7		AES
Zinc*	<2.00	2.00	0.155	mg/L	20	08/08/23 16:28	EPA200.7		AES

AssetCode	3003921913
AssetName	SAN JUAN 28-7 UNIT 56A
Formation	MV Standalone

SJ 28-7 56A

2307265-01 (Water)

Sampled Date: 07/26/23 10:45

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO ₃ *	28.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Hydroxide as CaCO ₃ *	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Carbonate as CaCO ₃ *	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Bicarbonate as CaCO ₃ *	28.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Chloride*	0.422	1.00	0.0555	mg/L	1	08/09/23 01:11	EPA300.0		AWG
Conductivity*	59.6	1.00		umho/cm@25 C	1	07/28/23 09:03	2510 B		AES
pH*	5.67			pH Units	1	07/28/23 09:03	EPA150.1		AES
pH Temperature, degrees C	18.1			pH Units	1	07/28/23 09:03	EPA150.1		AES
Resistivity	16800			ohm/cm	1	08/08/23 14:36	2510 B		JDA
Specific Gravity	0.9920	0.8000		No Unit	1	08/09/23 15:13	ASTM D1429-03		CAI
Sulfate*	<0.620	5.00	0.620	mg/L	5	08/11/23 20:02	EPA300.0		AWG
Total Dissolved Solids*	110	10.0		mg/L	1	07/31/23 15:35	EPA160.1		CAI
Potentially Dissolved Metals by ICP									
Barium*	<0.400	0.400	0.156	mg/L	20	08/08/23 16:18	EPA200.7		AES
Calcium*	<2.00	2.00	1.24	mg/L	20	08/08/23 16:18	EPA200.7	M5	AES
Hardness, as CaCO ₃	<13.2	13.2	5.98	mg/L	20	08/08/23 16:18	2340 B		AES
Iron*	26.0	1.00	0.302	mg/L	20	08/08/23 16:18	EPA200.7		AES
Lead*	<2.00	2.00	0.214	mg/L	20	08/08/23 16:18	EPA200.7	M5	AES
Magnesium*	<2.00	2.00	0.702	mg/L	20	08/08/23 16:18	EPA200.7		AES
Manganese*	0.286	0.400	0.127	mg/L	20	08/08/23 16:18	EPA200.7	J	AES
Potassium*	<20.0	20.0	2.08	mg/L	20	08/08/23 16:17	EPA200.7	M5	AES
Silica (SiO ₂)	<3.26	21.4	3.26	mg/L	20	08/08/23 16:18	Calculation		AES
Silicon	<10.0	10.0	1.52	mg/L	20	08/08/23 16:18	EPA200.7	M5	AES
Sodium*	<20.0	20.0	8.18	mg/L	20	08/08/23 16:18	EPA200.7	M5	AES
Strontium*	<2.00	2.00	0.341	mg/L	20	08/08/23 16:18	EPA200.7		AES
Zinc*	<2.00	2.00	0.155	mg/L	20	08/08/23 16:18	EPA200.7		AES

**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-5310

ORDER

The Director of the New Mexico Oil Conservation Division ("OCD"), having considered the application and the recommendation of the Engineering Bureau, issues the following Order.

FINDINGS OF FACT

1. Hilcorp Energy Company ("Applicant") submitted a complete application ("Application") to downhole commingle the pools described in Exhibit A ("the Pools") within the well bore of the well identified in Exhibit A ("the Well").
2. Applicant proposed a method to allocate the oil and gas production from the Well to each of the Pools that is satisfactory to the OCD and protective of correlative rights.
3. Applicant has certified that the proposed commingling of the Pools shall not result in shut-in or flowing well bore pressure in excess of the commingled pool's fracture parting pressure.
4. Applicant has certified that all produced fluids from all the Pools are compatible with each other.
5. Applicant has certified that downhole commingling the Pools will not decrease the value of the oil and gas production.
6. An exception to the notification requirements within 19.15.12.11(C)(1)(b) NMAC was granted by the Division within Order R-10476-B.
7. Applicant provided notice of the Application to the Bureau of Land Management ("BLM") or New Mexico State Land Office ("NMSLO"), as applicable.

CONCLUSIONS OF LAW

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

in excess of the commingled pool's fracture parting pressure in accordance with 19.15.12.11(A)(3) NMAC.

11. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.11(A)(8) NMAC.
12. By granting the Application with the conditions specified below, this Order prevents waste and protects correlative rights, public health, and the environment.

ORDER

1. Applicant is authorized to downhole commingle the Pools described in Exhibit A within the well bore of the well identified in Exhibit A.
2. 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. nine percent (9%) shall be allocated to the BLANCO P. C. SOUTH (PRORATED GAS) pool (pool ID: 72439); and
 - c. ninety-one percent (91%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

Applicant shall allocate gas production to the new pool(s) equal to the total gas production from the Well minus the projected gas production from the current pool(s) until a different plan to allocate gas production is approved by OCD. The new pool(s) are:

- a. the BASIN FRUITLAND COAL (GAS) pool (pool ID: 71629); and
- b. the BLANCO P. C. SOUTH (PRORATED GAS) pool (pool ID: 72439).

The current pool(s) are:

- a. the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

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

- a. sixty-two percent (62%) shall be allocated to the BASIN FRUITLAND COAL (GAS) pool (pool ID: 71629); and
- b. thirty-eight percent (38%) shall be allocated to the BLANCO P. C. SOUTH (PRORATED GAS) pool (pool ID: 72439).

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.

3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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).
9. 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**



**DYLAN M. FUGE
DIRECTOR**

DATE: 8/17/2023

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit A

Order: **DHC-5310**

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

Well Name: **San Juan 28 7 Unit #56A**

Well API: **30-039-21913**

Pool Name: **BASIN FRUITLAND COAL (GAS)**

Upper Zone

Pool ID: **71629**

Current:

New: **X**

Allocation:

Oil: **0%**

Gas:

Interval: **Perforations**

Top: **3,141**

Bottom: **3,421**

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

Intermediate Zone

Pool ID: **72439**

Current:

New: **X**

Allocation:

Oil: **9%**

Gas:

Interval: **Perforations**

Top: **3,423**

Bottom: **3,564**

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

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

Lower Zone

Pool ID: **72319**

Current: **X**

New:

Allocation:

Oil: **91%**

Gas:

Interval: **Perforations**

Top: **5,078**

Bottom: **6,020**

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

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

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

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

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

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

CONDITIONS

Action 244047

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 244047
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.	8/18/2023