

DHC - 5421

Revised March 23, 2017

ID NO. 341636

RECEIVED:	REVIEWER:	TYPE:	APP NO: pLEL2421435276
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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

**ADMINISTRATIVE APPLICATION CHECKLIST**

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

Applicant: Hilcorp Energy Company **OGRID Number:** 372171
Well Name: San Juan 28-6 Unit 48A **API:** 30-039-21872
Pool: Basin Fruitland Coal / Blanco Mesaverde **Pool Code:** 71629, 72319

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.

5/7/2024

Date

Cherylene Weston

Print or Type Name

713-289-2614

Phone Number

Cherylene Weston

Signature

cweston@hilcorp.com

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 28-6 Unit

48A

J-16-T28N-R06W

Rio Arriba County, NM

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 372171 Property Code 318710 API No. 30-039-21872 Lease Type: X Federal ____State ____Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Fruitland Coal		Blanco Mesaverde
Pool Code	71629		72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3174' - 3413'		5070' - 6002'
Method of Production (Flowing or 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)	446 psi		290 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	878 BTU		1217 BTU
Producing, Shut-In or New Zone	New Zone		Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:	Date: Rates:	Date: 2/1/2024 Rates: Oil - 16 bbl Gas - 1,951 mcf Water - 20 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 % %

ADDITIONAL DATA

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

Yes____ No X____

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

Yes____ No X____

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

Yes X____ No____

Will commingling decrease the value of production?

Yes____ No X____

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application?

Yes X____ No____

NMOCD Reference Case No. applicable to this well: R-10696

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 Tech-Sr.

DATE 5/7/2024

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 360089

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21872	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318710	5. Property Name SAN JUAN 28 6 UNIT	6. Well No. 048A
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6590

10. Surface Location

UL - Lot J	Section 16	Township 28N	Range 06W	Lot Idn	Feet From 1560	N/S Line S	Feet From 1740	E/W Line E	County RIO ARRIBA
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11. Bottom Hole Location If Different From Surface

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

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

OPERATOR CERTIFICATION

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

E-Signed By: [Cherylene Weston](#)
Title: Operations/Regulatory Tech-Sr.
Date: 2/16/2024

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: Fred B. Kerr, Jr.
Date of Survey: 7/23/1978
Certificate Number: 3950

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-192
Supersedes C-128
Effective 1-1-65

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

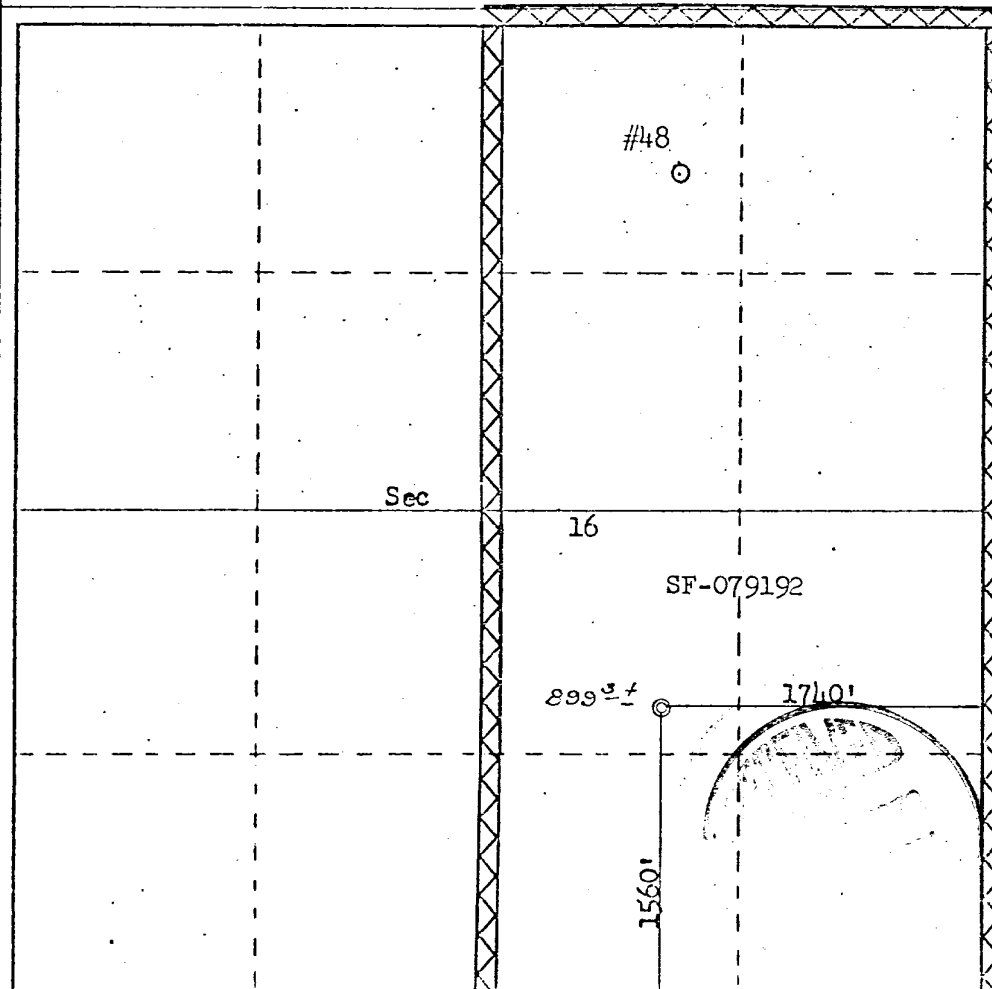
Operator EL PASO NATURAL GAS COMPANY			Lease SAN JUAN 28-6 UNIT (SF-079192)		Well No. 48A
Grid Letter J	Section 16	Township 28N	Range 6W	County Rio Arriba	
Actual Footage Location of Well:					
1560		feet from the South	line and 1740	feet from the East	line
Ground Level Elev. 6590	Producing Formation Mesa Verde		Pool Blanco Mesa Verde	Dedicated Acreage: 320.00 Acres	

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

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

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

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



CERTIFICATION

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

S. J. Blisco
Drilling Clerk

El Paso Natural Gas Co.

August 18, 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

July 23, 1978

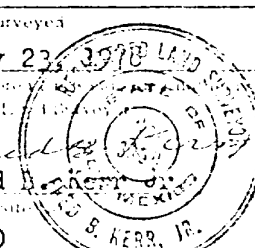
Registered and of Legal Age

Fred Herr

Fred Herr

Certification

3950



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

Note: BTU Data taken from standalone completions in the zone of interest within a 2 mile radius of the well.

A farther radius is used if there is not enough data for a proper statistical analysis.

San Juan 28-6 Unit 48A Production Allocation Method – Subtraction

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.

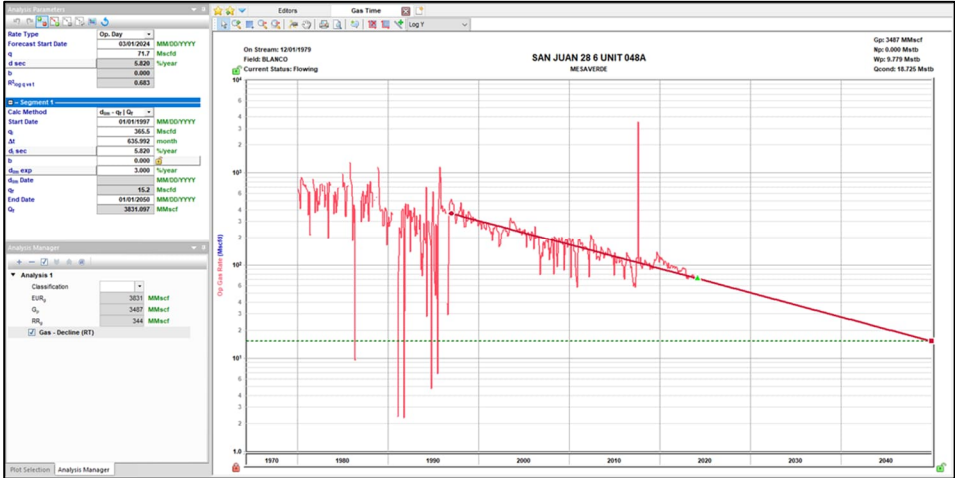
The BHPs of all zones, producing and non-producing, were estimated based upon basin wide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin, in conjunction with shut-in pressure build-ups. These models were constructed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

Gas Allocation:

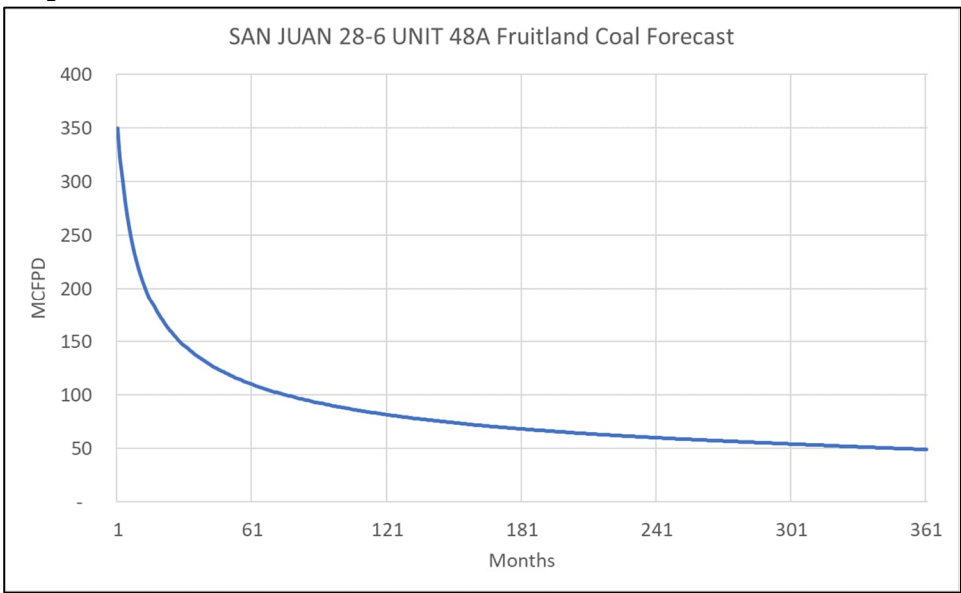
Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Mesaverde and the added formation to be commingled is the Fruitland Coal. The subtraction method applies an average monthly production forecast to the base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

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.

Current Zone Forecast – Mesaverde base production forecast



Proposed Zone 1 Forecast – Fruitland Coal



Oil Allocation:

Oil production will be a fixed allocation of 100% to the Mesaverde based on actual formation yields from the well. The Fruitland Coal and Pictured Cliffs have not historically produced oil in this area.

Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
MV	5.37	344	100%
FRC	0.00	928	0%

Current Zone - Mesaverde Oil Yield

Current Zone 1 Oil Yield Map							
Mesaverde				5.37	BO/MMCF		
	Gp	3,487	MMscf				
	Qcond	18,725	stb				
	Yield	5.37	bo/MM				

Average Oil Yield observed in this well

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

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

List of wells used to calculate BHPs for the Project:		
3003926081	SAN JUAN 29-7 UNIT 44B	MV
3003925498	SAN JUAN 29-7 UNIT 300	FC
3003927484	SAN JUAN 29-7 UNIT 185	PC

I believe each of the reservoirs to be continuous and in a similar state of depletion at this well and at each of the wells from which the pressures are being derived.

Water Compatibility in the San Juan Basin

- The San Juan basin has productive siliciclastic reservoirs (Pictured Cliffs, Blanco Mesaverde, Basin Mancos, Basin Dakota, etc.) and a productive coalbed methane reservoir (Basin Fruitland Coal).
- These siliciclastic and coalbed methane reservoirs are commingled extensively throughout the basin in many different combinations with no observed damage from clay swelling due to differing formation waters.
- The samples below all show fresh water with low TDS.

FRC Offset		PC Offset		MV Offset	
API	3003924186	API	3003925897	API	3003907507
Property	SAN JUAN 30-6 UNIT 409	Property	SAN JUAN 29-7 UNIT 166	Property	SAN JUAN 29-5 UNIT 5X
CationBarium	6.73	CationBarium	0	CationBarium	0
CationBoron		CationBoron		CationBoron	
CationCalcium	18.49	CationCalcium	80	CationCalcium	6.11
CationIron	5.4	CationIron	62.1	CationIron	32.81
CationMagnesium	4.54	CationMagnesium	19.5	CationMagnesium	9.52
CationManganese	0.62	CationManganese	1.98	CationManganese	0.42
CationPhosphorus		CationPhosphorus		CationPhosphorus	
CationPotassium		CationPotassium		CationPotassium	
CationStrontium	4.49	CationStrontium	0	CationStrontium	0.31
CationSodium	686.44	CationSodium	762.8	CationSodium	752.38
CationSilica		CationSilica		CationSilica	
CationZinc		CationZinc		CationZinc	
CationAluminum		CationAluminum		CationAluminum	
CationCopper		CationCopper		CationCopper	
CationLead		CationLead		CationLead	
CationLithium		CationLithium		CationLithium	
CationNickel		CationNickel		CationNickel	
CationCobalt		CationCobalt		CationCobalt	
CationChromium		CationChromium		CationChromium	
CationSilicon		CationSilicon		CationSilicon	
CationMolybdenum		CationMolybdenum		CationMolybdenum	
AnionChloride	91	AnionChloride	1200	AnionChloride	906
AnionCarbonate	0	AnionCarbonate	0	AnionCarbonate	0
AnionBicarbonate		AnionBicarbonate	427	AnionBicarbonate	
AnionBromide		AnionBromide		AnionBromide	
AnionFluoride		AnionFluoride		AnionFluoride	
AnionHydroxyl	0	AnionHydroxyl		AnionHydroxyl	0
AnionNitrate		AnionNitrate		AnionNitrate	
AnionPhosphate		AnionPhosphate		AnionPhosphate	
AnionSulfate	0	AnionSulfate	80	AnionSulfate	0
phField	7.99	phField		phField	6.49
phCalculated		phCalculated	6.83	phCalculated	
TempField	79	TempField		TempField	70.9
TempLab		TempLab		TempLab	
OtherFieldAlkalinity	1698.58	OtherFieldAlkalinity	342.16	OtherFieldAlkalinity	219.96
OtherSpecificGravity	1	OtherSpecificGravity		OtherSpecificGravity	1
OtherTDS	2538	OtherTDS	2435	OtherTDS	2071
OtherCaCO3	64.84	OtherCaCO3		OtherCaCO3	54.31
OtherConductivity	968	OtherConductivity		OtherConductivity	4140
DissolvedCO2	26	DissolvedCO2		DissolvedCO2	142
DissolvedO2		DissolvedO2		DissolvedO2	
DissolvedH2S	0.37	DissolvedH2S	13	DissolvedH2S	1.97
GasPressure	141	GasPressure		GasPressure	150
GasCO2	6	GasCO2	4	GasCO2	1
GasCO2PP	8.46	GasCO2PP		GasCO2PP	1.5
GasH2S	0	GasH2S	0	GasH2S	2.5
GasH2SPP	0	GasH2SPP		GasH2SPP	0
PitzerCaCO3_70	0.72	PitzerCaCO3_70		PitzerCaCO3_70	
PitzerBaSO4_70		PitzerBaSO4_70		PitzerBaSO4_70	
PitzerCaSO4_70		PitzerCaSO4_70		PitzerCaSO4_70	
PitzerSrSO4_70		PitzerSrSO4_70		PitzerSrSO4_70	
PitzerFeCO3_70		PitzerFeCO3_70		PitzerFeCO3_70	
PitzerCaCO3_220	1.06	PitzerCaCO3_220		PitzerCaCO3_220	
PitzerBaSO4_220		PitzerBaSO4_220		PitzerBaSO4_220	
PitzerCaSO4_220		PitzerCaSO4_220		PitzerCaSO4_220	
PitzerSrSO4_220		PitzerSrSO4_220		PitzerSrSO4_220	
PitzerFeCO3_220		PitzerFeCO3_220		PitzerFeCO3_220	

Gas Compatibility in the San Juan Basin

- The San Juan basin has productive siliciclastic reservoirs (Pictured Cliffs, Blanco Mesaverde, Basin Dakota, etc.) and a productive coalbed methane reservoir (Basin Fruitland Coal).
- These siliciclastic and coalbed methane reservoirs are commingled extensively throughout the basin in many different combinations with no observed damage from clay swelling due to differing formation waters or gas composition.
- The samples below all show offset gas analysis variability by formation is low.

FRC Offset		PC Offset		MV Offset	
AssetCode	3003924382	AssetCode	3003927574	AssetCode	3003922027
AssetName	SAN JUAN 28-5 UNIT NP 204	AssetName	SAN JUAN 29-7 UNIT 193	AssetName	NORTHEAST BLANCO UNIT 19A
CO2	0.01	CO2	0.01	CO2	0.01
N2	0	N2	0	N2	0.01
C1	0.83	C1	0.85	C1	0.93
C2	0.09	C2	0.07	C2	0.04
C3	0.04	C3	0.04	C3	0.01
ISOC4	0.01	ISOC4	0.01	ISOC4	0
NC4	0.01	NC4	0.01	NC4	0
ISOC5	0	ISOC5	0	ISOC5	0
NC5	0	NC5	0	NC5	0
NEOC5		NEOC5		NEOC5	
C6		C6		C6	
C6_PLUS	0.01	C6_PLUS	0.01	C6_PLUS	0
C7		C7		C7	
C8		C8		C8	
C9		C9		C9	
C10		C10		C10	
AR		AR		AR	
CO		CO		CO	
H2		H2		H2	
O2		O2		O2	
H2O		H2O		H2O	
H2S	0	H2S	0	H2S	0
HE		HE		HE	
C_O_S		C_O_S		C_O_S	
CH3SH		CH3SH		CH3SH	
C2H5SH		C2H5SH		C2H5SH	
CH2S3_2CH3S		CH2S3_2CH3S		CH2S3_2CH3S	
CH2S		CH2S		CH2S	
C6HV		C6HV		C6HV	
CO2GPM	0	CO2GPM	0	CO2GPM	
N2GPM	0	N2GPM	0	N2GPM	
C1GPM	0	C1GPM	0	C1GPM	
C2GPM	2.34	C2GPM	1.98	C2GPM	
C3GPM	1.05	C3GPM	1.07	C3GPM	
ISOC4GPM	0.25	ISOC4GPM	0.24	ISOC4GPM	
NC4GPM	0.33	NC4GPM	0.32	NC4GPM	
ISOC5GPM	0.15	ISOC5GPM	0.13	ISOC5GPM	
NC5GPM	0.11	NC5GPM	0.09	NC5GPM	
C6_PLUSGPM	0.3	C6_PLUSGPM	0.25	C6_PLUSGPM	

Well Name: SAN JUAN 28-6 UNIT	Well Location: T28N / R6W / SEC 16 / NWSE / 36.658234 / -107.468842	County or Parish/State: RIO ARRIBA / NM
Well Number: 48A	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF079192	Unit or CA Name: SAN JUAN 28-6 UNIT--MV	Unit or CA Number: NMNM78412A
US Well Number: 3003921872	Operator: HILCORP ENERGY COMPANY	

Notice of Intent

Sundry ID: 2795608

Type of Submission: Notice of Intent

Type of Action: Recompletion

Date Sundry Submitted: 06/17/2024

Time Sundry Submitted: 09:58

Date proposed operation will begin: 06/20/2024

Procedure Description: Revised NOI: Hilcorp Energy Company requests permission to recomplete the subject well in the Fruitland Coal formation and downhole commingle with the existing Mesaverde formation. Please see the attached procedure, current and proposed wellbore diagram, plat and natural gas management plan. A closed loop system will be used. Hilcorp will contact the FFO Surface group within 90 days after the well has been recompleted, before any interim reclamation work, to conduct the onsite. A reclamation plan will be submitted after the onsite. **Revised perf range: 3,174' - 3,413'.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

San_Juan_28_6_Unit_48A_FRC_NOI_20240617095659.pdf

Well Name: SAN JUAN 28-6 UNIT

Well Location: T28N / R6W / SEC 16 /
NWSE / 36.658234 / -107.468842

County or Parish/State: RIO
ARRIBA / NM

Well Number: 48A

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMSF079192

Unit or CA Name: SAN JUAN 28-6
UNIT--MV

Unit or CA Number:
NMNM78412A

US Well Number: 3003921872

Operator: HILCORP ENERGY
COMPANY

Operator

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

Operator Electronic Signature: CHERYLENE WESTON

Signed on: JUN 17, 2024 09:57 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: MATTHEW H KADE

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647736

BLM POC Email Address: MKADE@BLM.GOV

Disposition: Approved

Disposition Date: 06/17/2024

Signature: Matthew Kade



HILCORP ENERGY COMPANY
San Juan 28-6 Unit 48A
RECOMPLETION SUNDRY

Prepared by:	Bennett Vaughn
Preparation Date:	February 14, 2024

WELL INFORMATION			
Well Name:	San Juan 28-6 Unit 48A	State:	NM
API #:	3003921872	County:	Rio Arriba
Area:	13	Location:	
Route:	1303	Latitude:	36.65823
Spud Date:	May 12, 1979	Longitude:	-107.46884

PROJECT DESCRIPTION	
Perforate, fracture, and commingle the Fruitland Coal with the existing Mesa Verde Zone	

CONTACTS			
Title	Name	Office Phone #	Cell Phone #
Engineer	Bennett Vaughn	#N/A	281-409-5066
Area Foreman	Jeremy Brooks	#N/A	505-947-3867
Lead	#N/A	#N/A	#N/A
Artificial Lift Tech	#N/A	#N/A	#N/A
Operator		NONE	



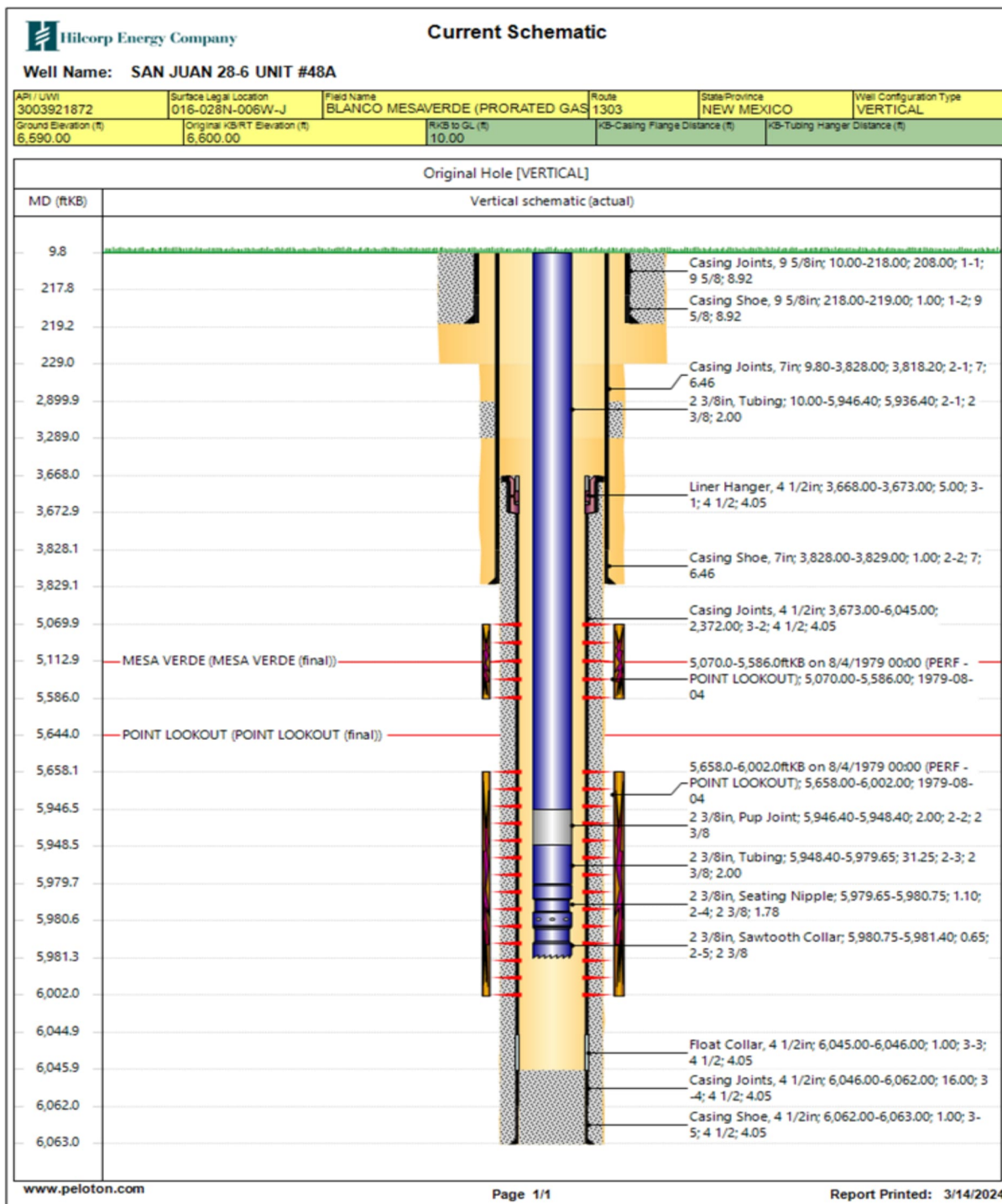
HILCORP ENERGY COMPANY
San Juan 28-6 Unit 48A
RECOMPLETION SUNDRY

JOB PROCEDURES	
<ol style="list-style-type: none"> MIRU service rig and associated equipment; test BOP. TOOH with 2-3/8" tubing set at 5,981'. Set a 4-1/2" plug at +/- 5,039' to isolate the Mesa Verde. RU Wireline. Run CBL. Record Top of Cement. Load the hole and pressure test the casing. N/D BOP, N/U frac stack and pressure test frac stack. Perforate and frac the Fruitland Coal formations (Top Perforation @ 3,174', Bottom Perforation @ 3,413'). Nipple down frac stack, nipple up BOP and test. TIH with a mill and drill out top isolation plug and Fruitland Coal frac plug. Clean out to Mesa Verde isolation plug. Drill out Mesa Verde isolation plug and cleanout to PBTD of 6,049'. TOOH. TIH and land production tubing. Get a commingled Fruitland Coal/Mesa Verde flow rate. 	



HILCORP ENERGY COMPANY
San Juan 28-6 Unit 48A
RECOMPLETION SUNDRY

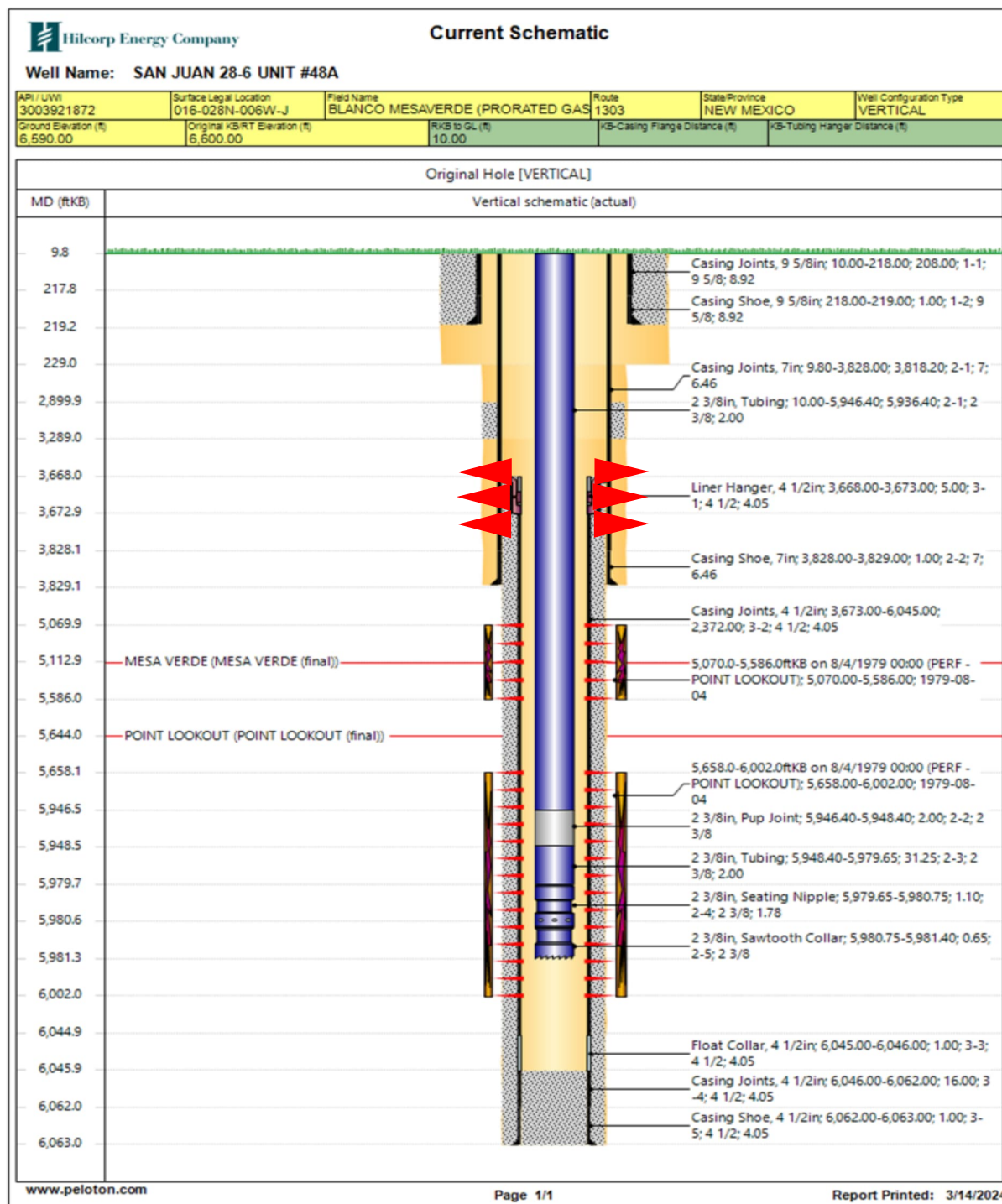
San Juan 28-6 Unit 48A - CURRENT WELLBORE SCHEMATIC





HILCORP ENERGY COMPANY
San Juan 28-6 Unit 48A
RECOMPLETION SUNDRY

San Juan 28-6 Unit 48A - Proposed Schematic



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1625 N. French Dr., Hobbs, NM 88240
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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 360089

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-21872	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318710	5. Property Name SAN JUAN 28 6 UNIT	6. Well No. 048A
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6590

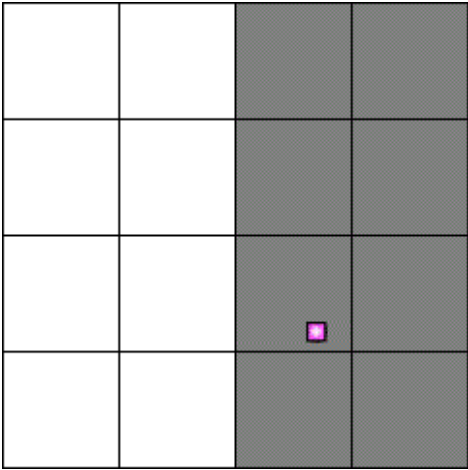
10. Surface Location

UL - Lot J	Section 16	Township 28N	Range 06W	Lot Idn	Feet From 1560	N/S Line S	Feet From 1740	E/W Line E	County RIO ARRIBA
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11. Bottom Hole Location If Different From Surface

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

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

	<p>OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>E-Signed By: <i>Cherylene Weston</i> Title: Operations/Regulatory Tech-Sr. Date: 2/16/2024</p> <p>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: Fred B. Kerr, Jr. Date of Survey: 7/23/1978 Certificate Number: 3950</p>
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State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505**NATURAL GAS MANAGEMENT PLAN**

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

Section 1 – Plan Description**Effective May 25, 2021****I. Operator:** Hilcorp Energy Company **OGRID:** 372171 **Date:** 02 / 19 / 2024**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 28-6 Unit 48A	3003921872	J-16-28N-06W	1560 FSL & 1740 FEL	0 bbl/d	350 mcf/d	1 bbl/d

IV. Central Delivery Point Name: Ignacio Processing Plant [See 19.15.27.9(D)(1) NMAC]**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
<u>San Juan 28-6 Unit 48A</u>	<u>3003921872</u>					<u>2024</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:	<i>Cherylene Weston</i>
Printed Name:	Cherylene Weston
Title:	Operations/Regulatory Tech-Sr.
E-mail Address:	cweston@hilcorp.com
Date:	2/19/2024
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 recomple project. HEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the recomple to optimize gas capture and send gas to sales or flare based on analytical composition. HEC operates facilities that are typically one-well facilities. Production separation equipment is upgraded prior to well being completed, if determined to be undersized or inadequate. This equipment is already on-site and tied into our sales gas lines prior to the recomple operations.

VII. Operational Practices:

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

6. Subsection (F) Measurement or estimation of vented and flared natural gas
 - Measurement equipment is installed to measure the volume of natural gas flared from process piping.
 - When measurement isn't practicable, estimation of vented and flared natural gas will be completed as noted in 19.15.27.8 (F) 5-6.

VIII. Best Management Practices:

1. Operator has adequate storage and takeaway capacity for wells it chooses to recomplete as the flowlines at the sites are already in place and tied into a gathering system.
2. Operator will flare rather than vent vessel blowdown gas when technically feasible during active and/or planned maintenance to equipment on-site.
3. Operator combusts natural gas that would otherwise be vented or flared, when technically feasible.
4. Operator will shut in wells in the event of a takeaway disruption, emergency situation, or other operations where venting or flaring may occur due to equipment failures.



May 7, 2024

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

Re: C-107A (Downhole Commingle)
San Juan 28-6 Unit 48A
API No. 30-039-21872
Section 16-T28N-R06W
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 Mesaverde Pool Code: 72319*

Order No. R-10696 waives the notice requirement and thus no notices will be sent.

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

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

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

A handwritten signature in blue ink that reads 'Chuck Creekmore'.

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

PO Box 61229, Houston, TX 77208-1229 1111 Travis St, Houston, TX 77002
Phone: 713/209-2400 Fax 713/209-2420 hilcorp.com

From: [Cheryl Weston](#)
To: [McClure, Dean, EMNRD](#); [Lowe, Leonard, EMNRD](#); [Wrinkle, Justin, EMNRD](#)
Subject: RE: [EXTERNAL] Application ID: 323441; 30-039-21872 SAN JUAN 28 6 UNIT #048A
Date: Thursday, June 27, 2024 9:53:51 AM
Attachments: [San Juan 28-6 Unit 48A DHC C-107A.pdf](#)

Dean,

Hilcorp would like the revised NOI (Action ID 355161) approved, as well the DHC. Please replace the original DHC submitted (Action ID 341636) with the attached copy. It was updated to reflect the revised FRC perf range (3174' – 3413').

Thanks,
Cheryl

From: Cheryl Weston
Sent: Friday, June 21, 2024 4:23 PM
To: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>; Lowe, Leonard, EMNRD <Leonard.Lowe@emnrd.nm.gov>; Wrinkle, Justin, EMNRD <justin.wrinkle@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Application ID: 323441; 30-039-21872 SAN JUAN 28 6 UNIT #048A

Dean,

This well was added to the July Frac schedule and the DHC was added to the expedited commingle workbook as well.

Would you please review this for approval? Let me know if you have any questions or need additional information.

Thanks,
Cheryl

From: Cheryl Weston <cweston@hilcorp.com>
Sent: Monday, June 17, 2024 3:35 PM
To: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>; Lowe, Leonard, EMNRD <Leonard.Lowe@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Application ID: 323441; 30-039-21872 SAN JUAN 28 6 UNIT #048A

Dean,

The Recomplete NOI was re-submitted on **Action ID 355161**. The FRC perfs were revised to 3174' - 3413'.

Thanks,

Cheryl

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Monday, April 15, 2024 6:56 PM
To: Cheryl Weston <cweston@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>
Subject: [EXTERNAL] Application ID: 323441; 30-039-21872 SAN JUAN 28 6 UNIT #048A

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

Cheryl,

I am reviewing the C-103E referenced in the subject line of this email.

Hilcorp is proposing a perforation range of 3126' to 3445' for the 30-039-21872 SAN JUAN 28 6 UNIT #048A. However, the 30-039-25041 SAN JUAN 28 6 UNIT #441 has the FLC pool picked from 3325' to 3564' which if no Dip is assumed would translate to ~3174' to 3413' within the 30-039-21872 SAN JUAN 28 6 UNIT #048A. Please provide additional information regarding Hilcorp's picks for the FLC and PC.

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

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

CONDITIONS

Action 341636

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 341636
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
llowe	None	8/1/2024