

ID NO. 314895

DHC - 5397

Revised March 23, 2017

RECEIVED: 02/15/24	REVIEWER:	TYPE:	APP NO: pLEL2417958843
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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: McClanahan 17E **API:** 30-045-23750
Pool: Basin Fruitland Coal / Otero Chacra / Blanco Mesaverde/ Basin Dakota **Pool Code:** 71629, 82329, 72319, 71599

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.

2/15/2024

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
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company

382 Road 3100, Aztec, NM 87410

Operator

Address

McClanahan

17E

I-24-28N-R10W

San Juan

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 372171 Property Code 318622 API No. 30-045-23750 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Basin Fruitland Coal	Otero Chacra	Blanco Mesaverde	Basin Dakota
Pool Code	71629	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	1,780' - 2,023'	2,650' - 3,242'	4,309' -4,396'	6,373' -6,505'
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift	Artificial Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	55.6 PSI	105 PSI	115 PSI	241 PSI
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1124 BTU	1291 BTU	1373 BTU	1306 BTU
Producing, Shut-In or New Zone	NEW ZONE	Producing Zone	Producing Zone	Producing Zone
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:	Date: 11/1/2023 Rates: Oil-0 bbl, Gas-380 Mcf, Water-0 bbl	Date: 11/1/2023 Rates: Oil-55 bbl, Gas-823 Mcf, Water-0 bbl	Date: 11/1/2023 Rates: Oil-7 bbl, Gas-907 Mcf, Water-0 bbl
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas	Oil Gas	Oil Gas	Oil Gas

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 ☐
Yes ☐ No ☐

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

Yes ☒ No ☐

Will commingling decrease the value of production?

Yes ☐ No ☒

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

Yes ☒ No ☐

NMOCD Reference Case No. applicable to this well: _____

- 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 02/15/2024

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 356144

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-045-23750	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318622	5. Property Name MCCLANAHAN	6. Well No. 017E
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 5883

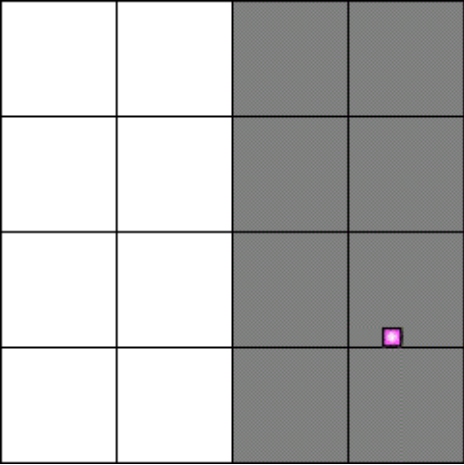
10. Surface Location

UL - Lot I	Section 24	Township 28N	Range 10W	Lot Idn	Feet From 1460	N/S Line S	Feet From 830	E/W Line E	County SAN JUAN
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11. Bottom Hole Location If Different From Surface

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

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

	<p style="text-align: center;">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: Cherylene Weston</p> <p>Title: Cherylene Weston</p> <p>Date: 12/18/2023</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: Fred B. Kerr, Jr.</p> <p>Date of Survey: 8/2/1979</p> <p>Certificate Number: 3950</p>
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NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

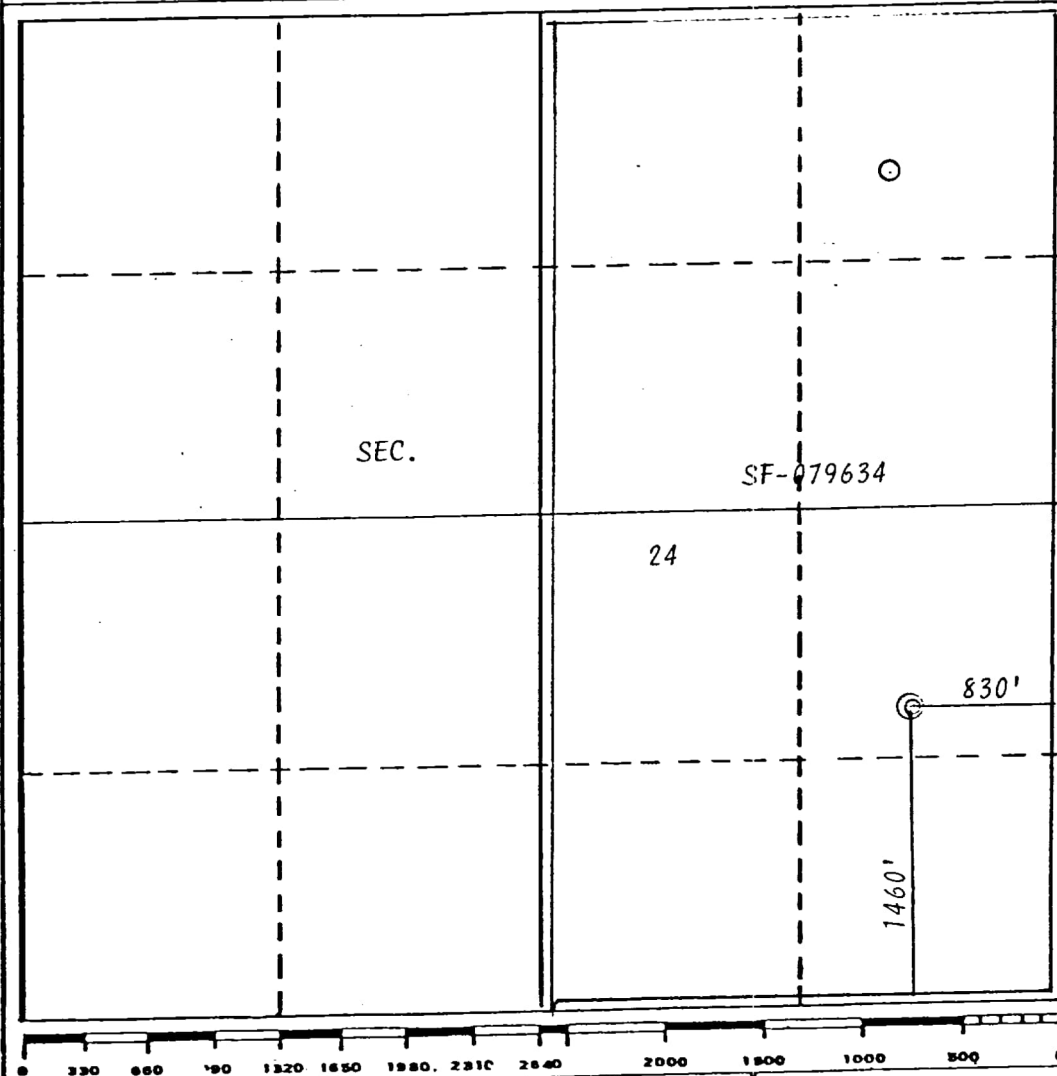
Operator Southland Royalty Company		Lease McClanahan		Well No. 17E	
Unit Letter I	Section 24	Township 28N	Range 10W	County San Juan	
Actual Footage Location of Well: 1460' feet from the South line and 830' feet from the East line					
Ground Level Elev: 5883'	Producing Formation Dakota/Mesa Verde		Pool Basin Blanco Mesaverde		Dedicated Acreage: 320 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 _____

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.

Curtis C. Parsons

Name
Curtis C. Parsons

Position
District Engineer

Company
Southland Royalty Company

Date
May 27, 1980

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 2, 1979

Registered Professional Engineer
and/or Land Surveyor

Fred B. Kerr, Jr.

Certificate No.
3950

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV1220 S. St Francis Dr., Santa Fe, NM
87505

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

Form C-102

Permit 358

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-23750	Pool Name OTERO CHACRA (GAS)	Pool Code 82329
Property Code 18577	Property Name MCCLANAHAN	Well No. 017E
OGRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS CO	Elevation

Surface And Bottom Hole Location

UL or Lot I	Section 24	Township 28N	Range 10W	Lot Idn	Feet From 1460	N/S Line S	Feet From 830	E/W Line E	County San Juan
Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.						

OPERATOR CERTIFICATION

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

Signed By: *Francis Bond*

Title: Regulatory Specialist

Date: May 5, 2004

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: 08/02/1979

Certificate Number: 3950

The near wellbore shut-in bottom hole pressures of the above reservoirs are much lower than the calculated far-field stabilized reservoir pressure 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.

McClanahan 17E Allocation

The forecast for Fruitland Coal production has been generated using type curves of production in the surrounding trend.

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

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

Production Allocation Method – Subtraction

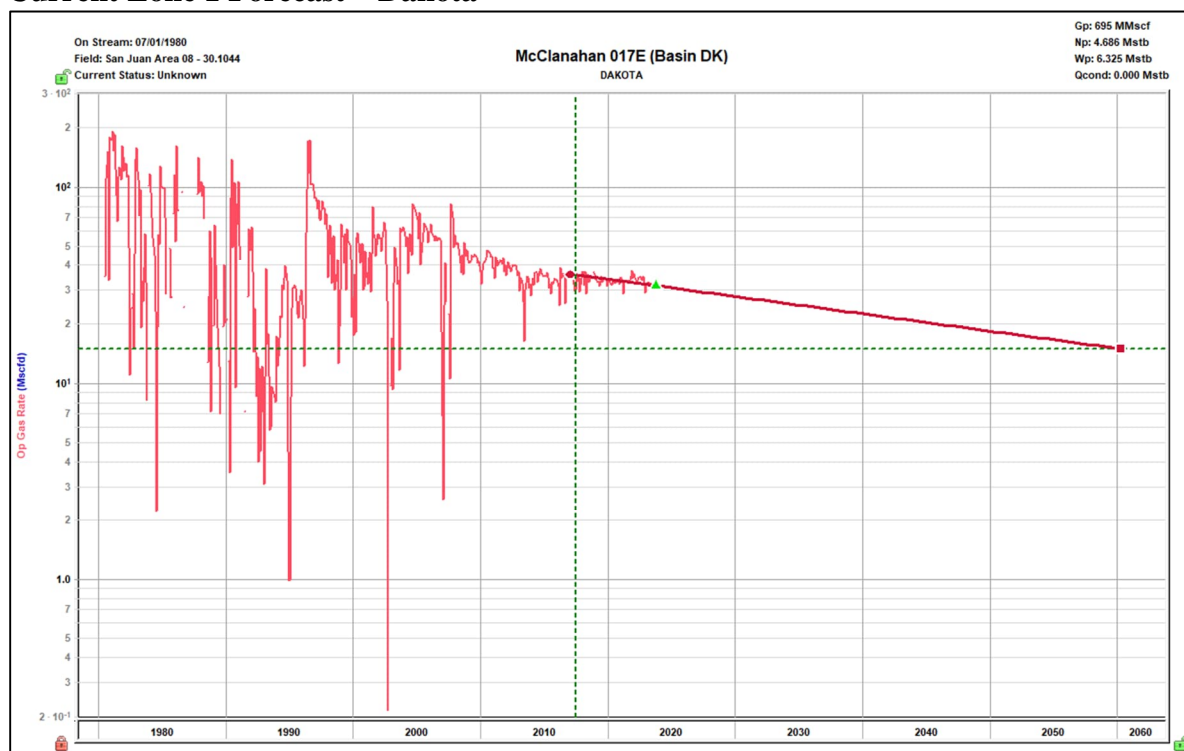
Gas Allocation:

Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formations are the Chacra/Mesaverde/Dakota 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 base formation forecasts will be allocated to the new formations.

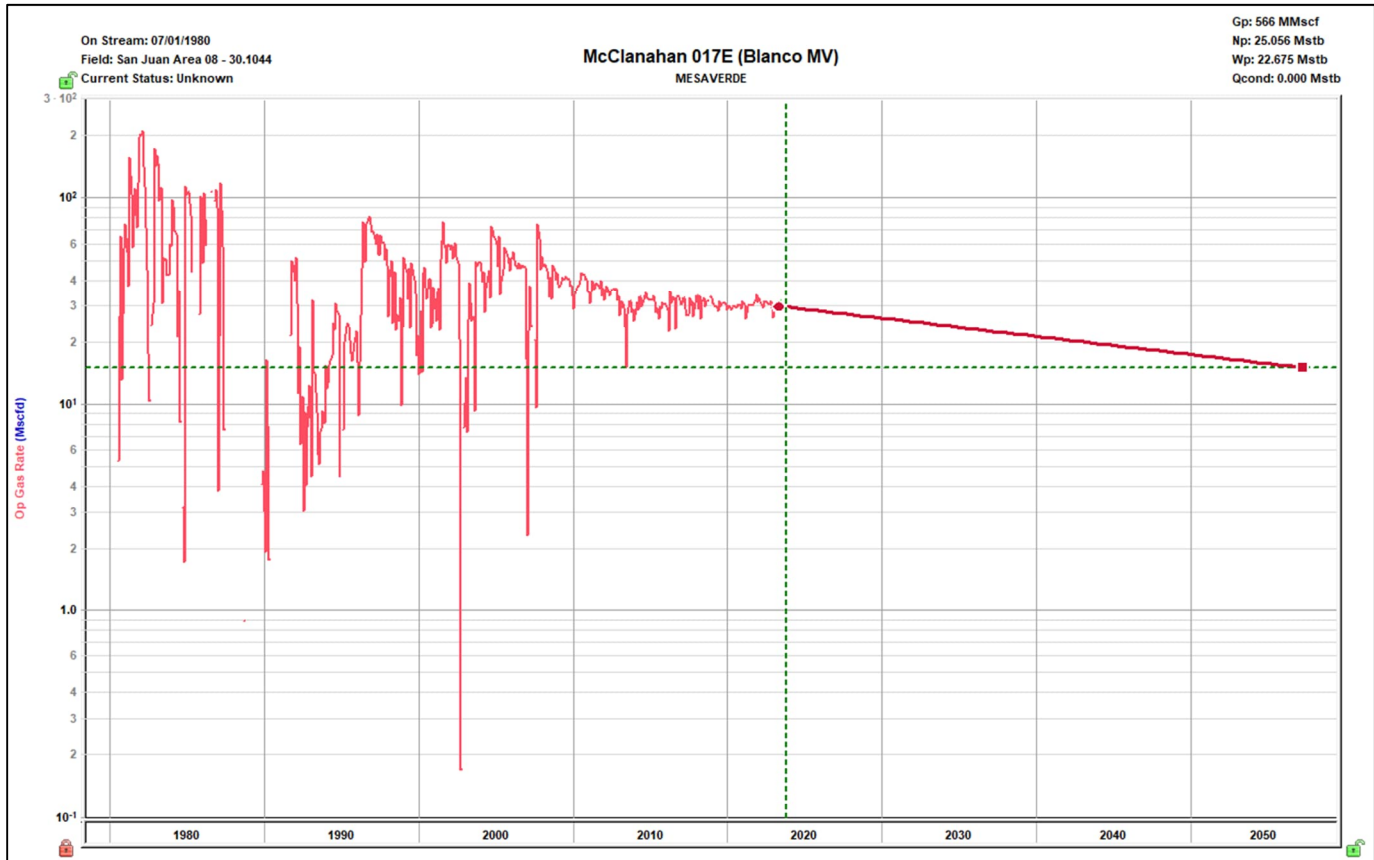
Hilcorp intends to continue to allocate the projected base production on the same fixed percentages to the following pools 18% (CH), 39% (MV) & 43% (DK) while the subtraction method is being used to determine the allocation to the new zone.

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.

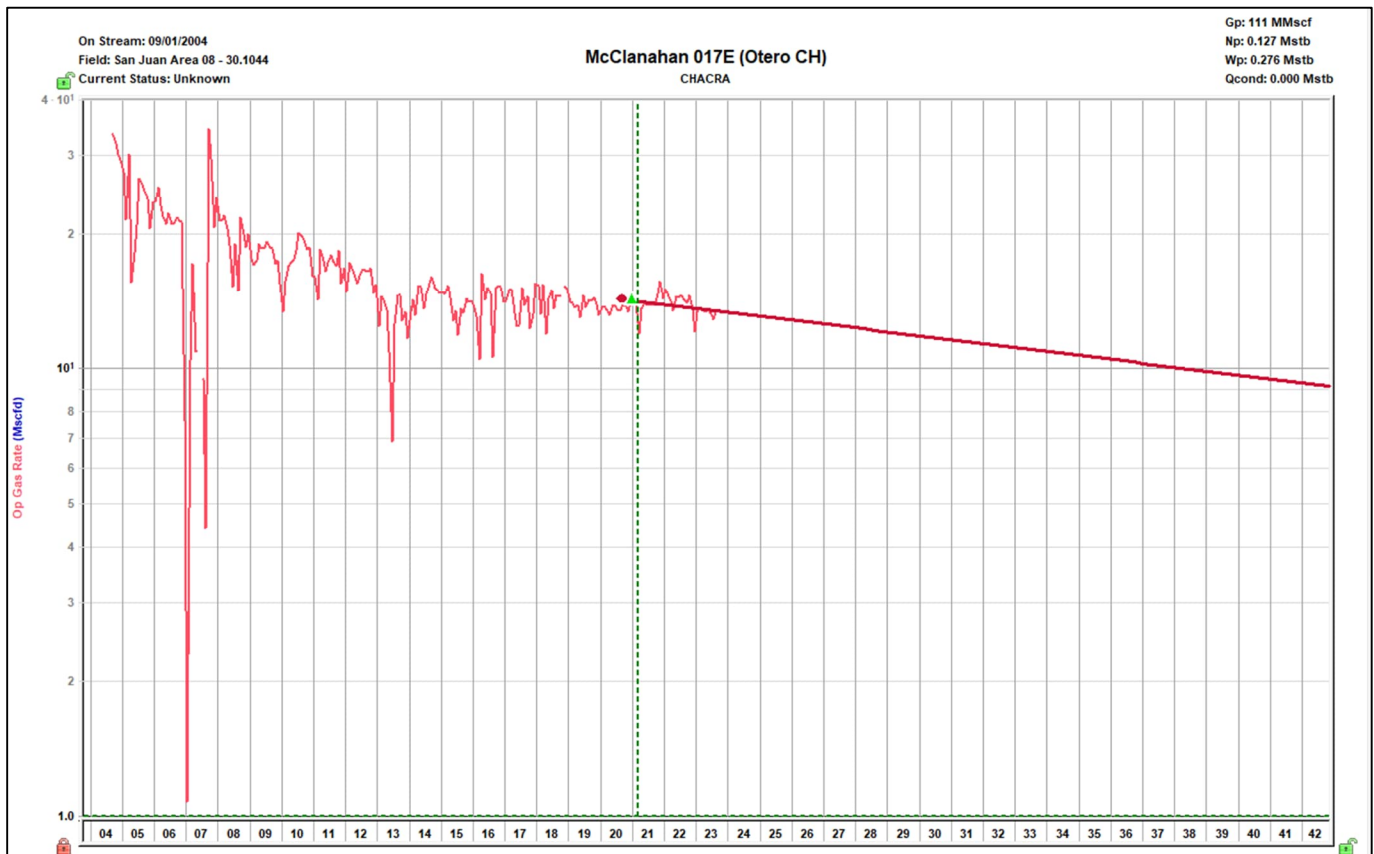
Current Zone 1 Forecast – Dakota



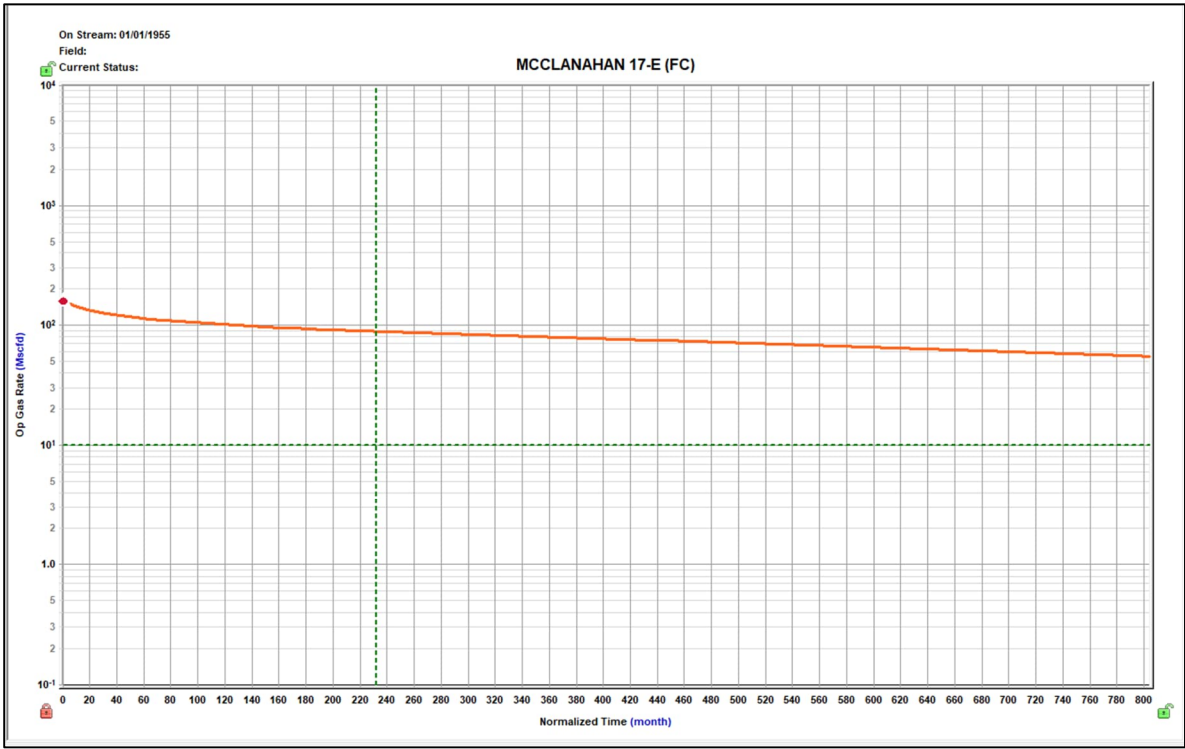
Current Zone 2 Forecast – Mesaverde



Current Zone 3 Forecast – Chacra



Proposed Zone Forecast – Fruitland Coal

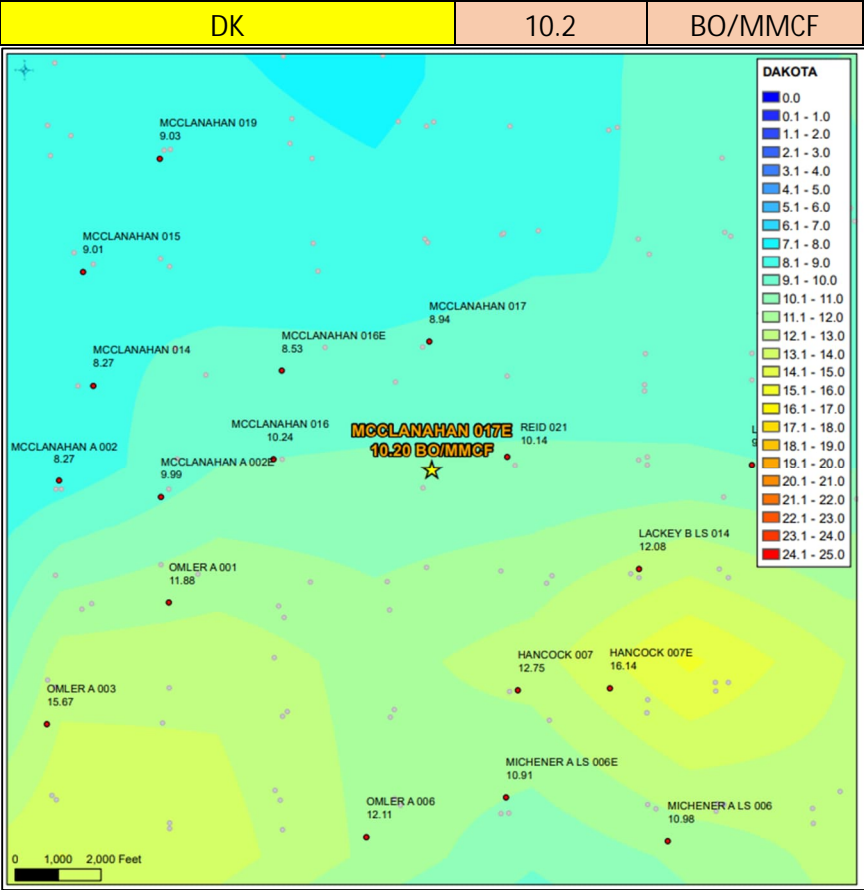


Oil Allocation:

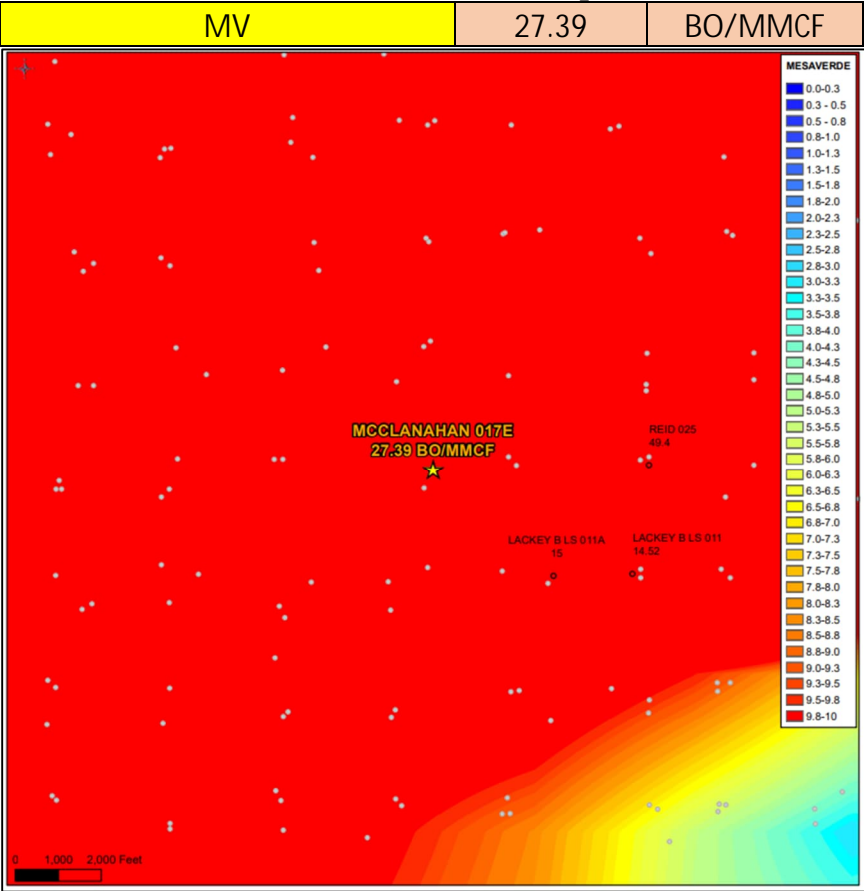
Oil production will be allocated based on average formation yields from offset wells and will be a fixed rate for 4 years. After 4 years oil will be reevaluated and adjusted as needed based on average formation yields and new fixed gas allocation.

Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
MV	27.39	828	68%
FRC	0	1973	0%
CH	0	170	0%
DK	10.2	1026	32%

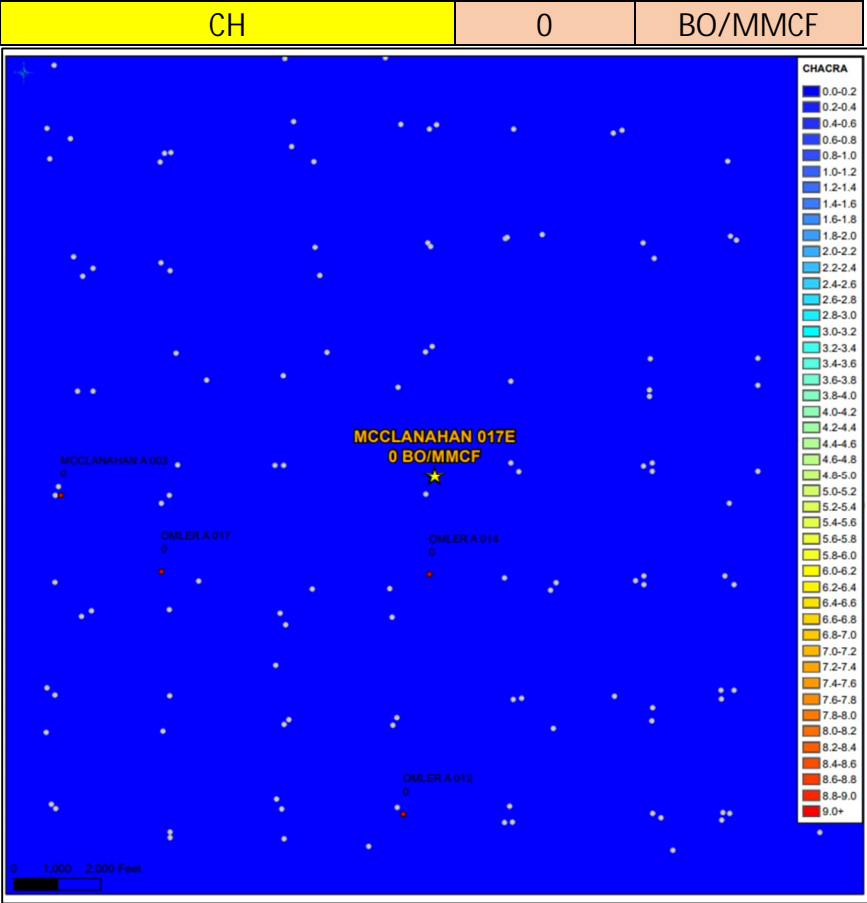
Current Zone 1 – Dakota Oil Yield Map



Current Zone 2 – Mesaverde Oil Yield Map

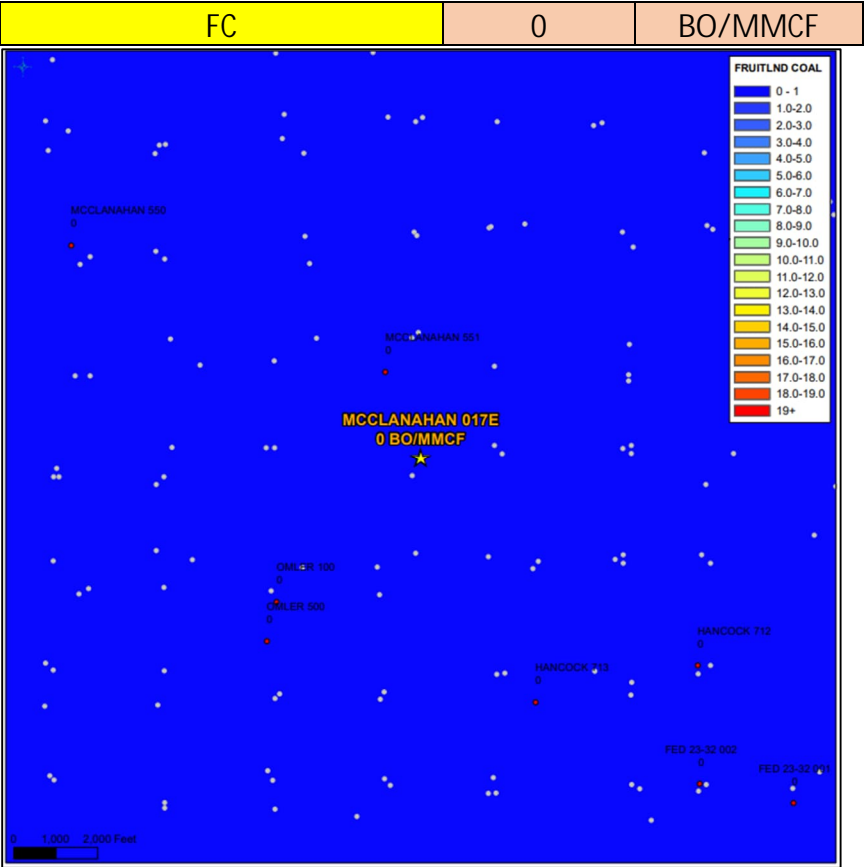


Current Zone 3 – Chacra Oil Yield Map



Average Oil Yield from Vertical Mancos Type Curve.

Proposed Zone – Fruitland Coal Oil Yield Map



Supplemental Information:

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:

3004529902	REID 18A	CH
3004507573	REID 22	MV
3004524053	HANCOCK 7E	DK
3004507238	LACKEY B LS 15	FC

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.

Updated 8/12/2024

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.

Well Name	API						
McClanahan 17E	3004523750						
FRC Offset (1.5 miles)		DK Offset (1.3 miles)		MV OFFSET (.7 miles)		CH OFFSET (2 miles)	
AssetCode	3004526595	AssetCode	3004511906	AssetCode	3004526594	AssetCode	3004507220
AssetName	MICHENER A LS 5A	AssetName	OMLER A 1	AssetName	LACKEY B LS 11A	AssetName	LACKEY B LS 4
N2	0	N2	0.01	N2	0.01	N2	0
CO2	0.01	CO2	0.02	CO2	0	CO2	0
C1	0.88	C1	0.72	C1	0.75	C1	0.77
C2	0.07	C2	0.13	C2	1/0/1900 2:38	C2	0.11
C3	0.02	C3	0.07	C3	1/0/1900 1:40	C3	0.06
IC4	0	IC4	0.01	ISOC4	0.01	ISOC4	0.01
NC4	0	NC4	0.02	NC4	0.02	NC4	0.02
IC5	0	IC5	0.01	ISOC5	0.01	ISOC5	0.01
NC5	0	NC5	0.01	NC5	0.01	NC5	0
C6+	0	C6+	0	C6_PLUS	0.01	C6_PLUS	0.01
C7	0	C7	0.01	C7	0	C7	0
C8	0	C8	0	C8	0	C8	0
C9	0	C9	0	C9	0	C9	0
C10	0	C10	0	C10	0	C10	0
AR	0	AR	0	AR	0	AR	0
CO	0	CO	0	CO	0	CO	0
H2	0	H2	0	H2	0	H2	0
O2	0	O2	0	O2	0	O2	0
H2O	0	H2O	0	H2O	0	H2O	0
H2S	0	H2S	0	H2S	0	H2S	0
HE	0	HE	0	HE	0	HE	0
C_O_S	0	C_O_S	0	C_O_S	0	C_O_S	0
CH3SH	0	CH3SH	0	CH3SH	0	CH3SH	0
C2H5SH	0	C2H5SH	0	C2H5SH	0	C2H5SH	0
CH2S3_2CH3S	0	CH2S3_2CH3S	0	CH2S3_2CH3S	0	CH2S3_2CH3S	0
CH2S	0	CH2S	0	CH2S	0	CH2S	0
C6HV	0	C6HV	0	C6HV	0	C6HV	0
CO2GPM	0	CO2GPM	0	CO2GPM	0	CO2GPM	0
N2GPM	0	N2GPM	0	N2GPM	0	N2GPM	0
C1GPM	0	C1GPM	0	C1GPM	0	C1GPM	0
C2GPM	1.9	C2GPM	0	C2GPM	3.05	C2GPM	2.86
C3GPM	0.57	C3GPM	0	C3GPM	1.99	C3GPM	1.79
ISOC4GPM	0.15	ISOC4GPM	0	ISOC4GPM	0.49	ISOC4GPM	0.33
NC4GPM	0.11	NC4GPM	0	NC4GPM	0.62	NC4GPM	0.63
ISOC5GPM	0.05	ISOC5GPM	0	ISOC5GPM	0.25	ISOC5GPM	0.21
NC5GPM	0.03	NC5GPM	0	NC5GPM	0.2	NC5GPM	0.17
C6_PLUSGPM	0.08	C6_PLUSGPM	0	C6_PLUSGPM	0.41	C6_PLUSGPM	0.45

Updated 8/12/2024

Water 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.
- The samples below all show fresh water with low TDS.

Well Name	API
McClanahan 17E	3004523750

FRC Offset (0.9 miles)		DK Offset (1.4 miles)		MV OFFSET (2 miles)		CH OFFSET (1.3 miles)	
API	3004534848	API	3004507289	API	3004507573	API	3004529902
Property	OMLER 100	Property	LACKEY B LS 13	Property	REID 22	Property	REID 18A
CationBarium	0	CationBarium	0.1	CationBarium	0	CationBarium	0
CationBoron	0	CationBoron	0	CationBoron	0	CationBoron	0
CationCalcium	4.98	CationCalcium	115	CationCalcium	3.86	CationCalcium	11.8
CationIron	19.38	CationIron	9.06	CationIron	22.1	CationIron	1.1
CationMagnesium	1.56	CationMagnesium	17.9	CationMagnesium	0.59	CationMagnesium	5.5
CationManganese	0.24	CationManganese	0.13	CationManganese	0.79	CationManganese	0.73
CationPhosphorus	0	CationPhosphorus	0	CationPhosphorus	0	CationPhosphorus	0
CationPotassium	0	CationPotassium	64.4	CationPotassium	0	CationPotassium	0
CationStrontium	0.2	CationStrontium	9.35	CationStrontium	0	CationStrontium	0
CationSodium	801.72	CationSodium	6480	CationSodium	264.1	CationSodium	5815.6
CationSilica	0	CationSilica	46	CationSilica	0	CationSilica	0
CationZinc	0	CationZinc	0.8	CationZinc	0	CationZinc	0
CationAluminum	0	CationAluminum	0	CationAluminum	0	CationAluminum	0
CationCopper	0	CationCopper	0	CationCopper	0	CationCopper	0
CationLead	0	CationLead	1	CationLead	0	CationLead	0
CationLithium	0	CationLithium	0	CationLithium	0	CationLithium	0
CationNickel	0	CationNickel	0	CationNickel	0	CationNickel	0
CationCobalt	0	CationCobalt	0	CationCobalt	0	CationCobalt	0
CationChromium	0	CationChromium	0	CationChromium	0	CationChromium	0
CationSilicon	0	CationSilicon	21.5	CationSilicon	0	CationSilicon	0
CationMolybdenum	0	CationMolybdenum	0	CationMolybdenum	0	CationMolybdenum	0
AnionChloride	669.74	AnionChloride	8300	AnionChloride	23.03	AnionChloride	8500
AnionCarbonate	0	AnionCarbonate	10	AnionCarbonate	0	AnionCarbonate	0
AnionBicarbonate	647.66	AnionBicarbonate	660	AnionBicarbonate	195.52	AnionBicarbonate	366
AnionBromide	0	AnionBromide	0	AnionBromide	0	AnionBromide	0
AnionFluoride	0	AnionFluoride	0	AnionFluoride	0	AnionFluoride	0
AnionHydroxyl	0	AnionHydroxyl	10	AnionHydroxyl	0	AnionHydroxyl	0
AnionNitrate	0	AnionNitrate	0	AnionNitrate	0	AnionNitrate	0
AnionPhosphate	0	AnionPhosphate	0	AnionPhosphate	0	AnionPhosphate	0
AnionSulfate	0	AnionSulfate	2950	AnionSulfate	0	AnionSulfate	430
phField	0	phField	6.95	phField	0	phField	6.95
phCalculated	7.83	phCalculated	7.38	phCalculated	4.36	phCalculated	6.78
TempField	0	TempField	46	TempField	0	TempField	0
TempLab	0	TempLab	0	TempLab	0	TempLab	0
OtherFieldAlkalinity	0	OtherFieldAlkalinity	488	OtherFieldAlkalinity	195.52	OtherFieldAlkalinity	0
OtherSpecificGravity	1	OtherSpecificGravity	1.01	OtherSpecificGravity	1	OtherSpecificGravity	0
OtherTDS	2295.28	OtherTDS	18800	OtherTDS	709.98	OtherTDS	14936
OtherCaCO3	18.85	OtherCaCO3	362	OtherCaCO3	12.07	OtherCaCO3	0
OtherConductivity	0	OtherConductivity	29400	OtherConductivity	0	OtherConductivity	0
DissolvedCO2	150	DissolvedCO2	130	DissolvedCO2	200	DissolvedCO2	250
DissolvedO2	0	DissolvedO2	0	DissolvedO2	0	DissolvedO2	0
DissolvedH2S	0	DissolvedH2S	0	DissolvedH2S	0	DissolvedH2S	2
GasPressure	0	GasPressure	0	GasPressure	0	GasPressure	0
GasCO2	0	GasCO2	0	GasCO2	8	GasCO2	0
GasCO2PP	0	GasCO2PP	0	GasCO2PP	0	GasCO2PP	0
GasH2S	0	GasH2S	0	GasH2S	0	GasH2S	0
GasH2SPP	0	GasH2SPP	0	GasH2SPP	0	GasH2SPP	0
PitzerCaCO3_70	0	PitzerCaCO3_70	0	PitzerCaCO3_70	0	PitzerCaCO3_70	0
PitzerBaSO4_70	0	PitzerBaSO4_70	0	PitzerBaSO4_70	0	PitzerBaSO4_70	0
PitzerCaSO4_70	0	PitzerCaSO4_70	0	PitzerCaSO4_70	0	PitzerCaSO4_70	0
PitzerSrSO4_70	0	PitzerSrSO4_70	0	PitzerSrSO4_70	0	PitzerSrSO4_70	0
PitzerFeCO3_70	0	PitzerFeCO3_70	0	PitzerFeCO3_70	0	PitzerFeCO3_70	0
PitzerCaCO3_220	0	PitzerCaCO3_220	0	PitzerCaCO3_220	0	PitzerCaCO3_220	0
PitzerBaSO4_220	0	PitzerBaSO4_220	0	PitzerBaSO4_220	0	PitzerBaSO4_220	0
PitzerCaSO4_220	0	PitzerCaSO4_220	0	PitzerCaSO4_220	0	PitzerCaSO4_220	0
PitzerSrSO4_220	0	PitzerSrSO4_220	0	PitzerSrSO4_220	0	PitzerSrSO4_220	0
PitzerFeCO3_220	0	PitzerFeCO3_220	0	PitzerFeCO3_220	0	PitzerFeCO3_220	0

Well Name: MCCLANAHAN	Well Location: T28N / R10W / SEC 24 / NESE / 36.644455 / -107.840378	County or Parish/State: SAN JUAN / NM
Well Number: 17E	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF079634	Unit or CA Name:	Unit or CA Number:
US Well Number: 3004523750	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2768307

Type of Submission: Notice of Intent

Type of Action: Recompletion

Date Sundry Submitted: 01/04/2024

Time Sundry Submitted: 03:21

Date proposed operation will begin: 04/01/2023

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

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

McClanahan_17E_UPE_RC_NOI_20240104151705.pdf

Well Name: MCCLANAHAN

Well Location: T28N / R10W / SEC 24 /
NESE / 36.644455 / -107.840378

County or Parish/State: SAN
JUAN / NM

Well Number: 17E

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMSF079634

Unit or CA Name:

Unit or CA Number:

US Well Number: 3004523750

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: JAN 10, 2024 01:52 PM

Name: HILCORP ENERGY COMPANY

Title: Operations/Regulatory Tech - Sr

Street Address: 1111 TRAVIS STREET

City: HOUSTON

State: TX

Phone: (713) 289-2615

Email address: CWESTON@HILCORP.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742

BLM POC Email Address: krennick@blm.gov

Disposition: Approved

Disposition Date: 01/11/2024

Signature: Kenneth Rennick



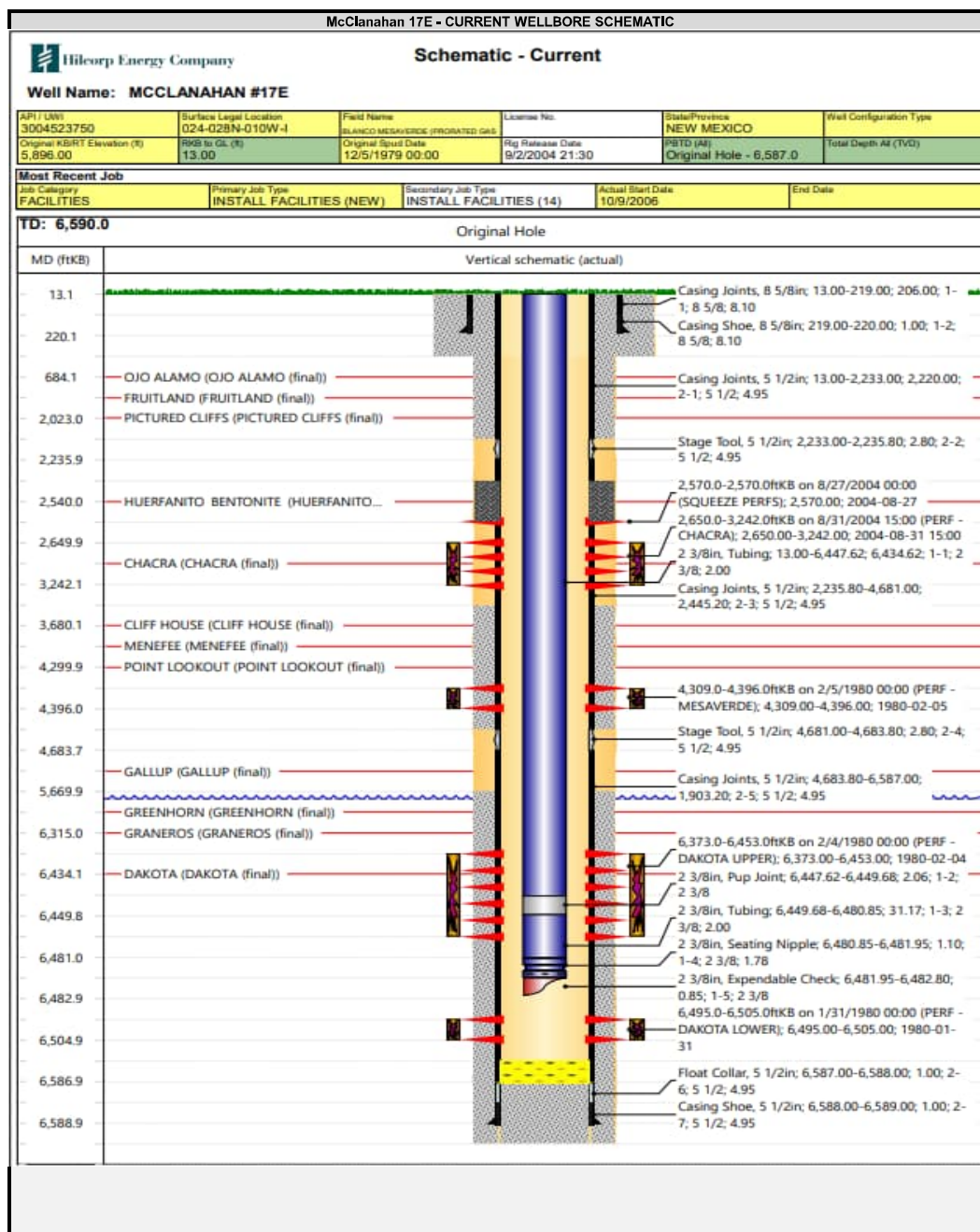
HILCORP ENERGY COMPANY
McClanahan 17E
FRUITLAND COAL RECOMPLETE SUNDRY
API 3004523750

JOB PROCEDURES

1. MIRU workover rig and associated equipment; NU and test BOP.
2. TOOH with tubing.
3. Set a plug within 50' of the top **Chacra** perforation **(2,570')** for zonal isolation.
4. Load hole with fluid, RU WL and run CBL to verify TOC. Review results with operations engineer and regulatory agencies.
5. **Perform MIT on casing with NMOCD witness** (notify NMOCD 24+ hours before test) and submit results to regulatory group.
6. **If frac'ing down casing:** pressure test casing to frac pressure.
7. RU WL. Perforate the **Fruitland Coal**. Top perforation @ **1,780'**, bottom perforation @ **2,023'**.
8. **If frac'ing down frac string:** RIH w/ frac string and packer.
9. ND BOP; NU frac stack. Pressure test frac stack to frac pressure. Pressure test frac string (if applicable) to frac pressure. RDMO.
10. RU stimulation crew. Frac the **Fruitland Coal** in one or more stages. Set plugs in between stages, if necessary.
11. MIRU workover rig and associated equipment; NU and test BOP.
12. **If frac was performed down frac string:** POOH w/ frac string and packer.
13. TIH with mill and clean out to isolation plug.
14. Mill out isolation plug. Cleanout to PBTD. TOOH with cleanout assembly.
15. TIH and land production tubing. Flowback the well. Return well to production as a **Fruitland Coal/Chacra/Mesaverde/Dakota Producer**.

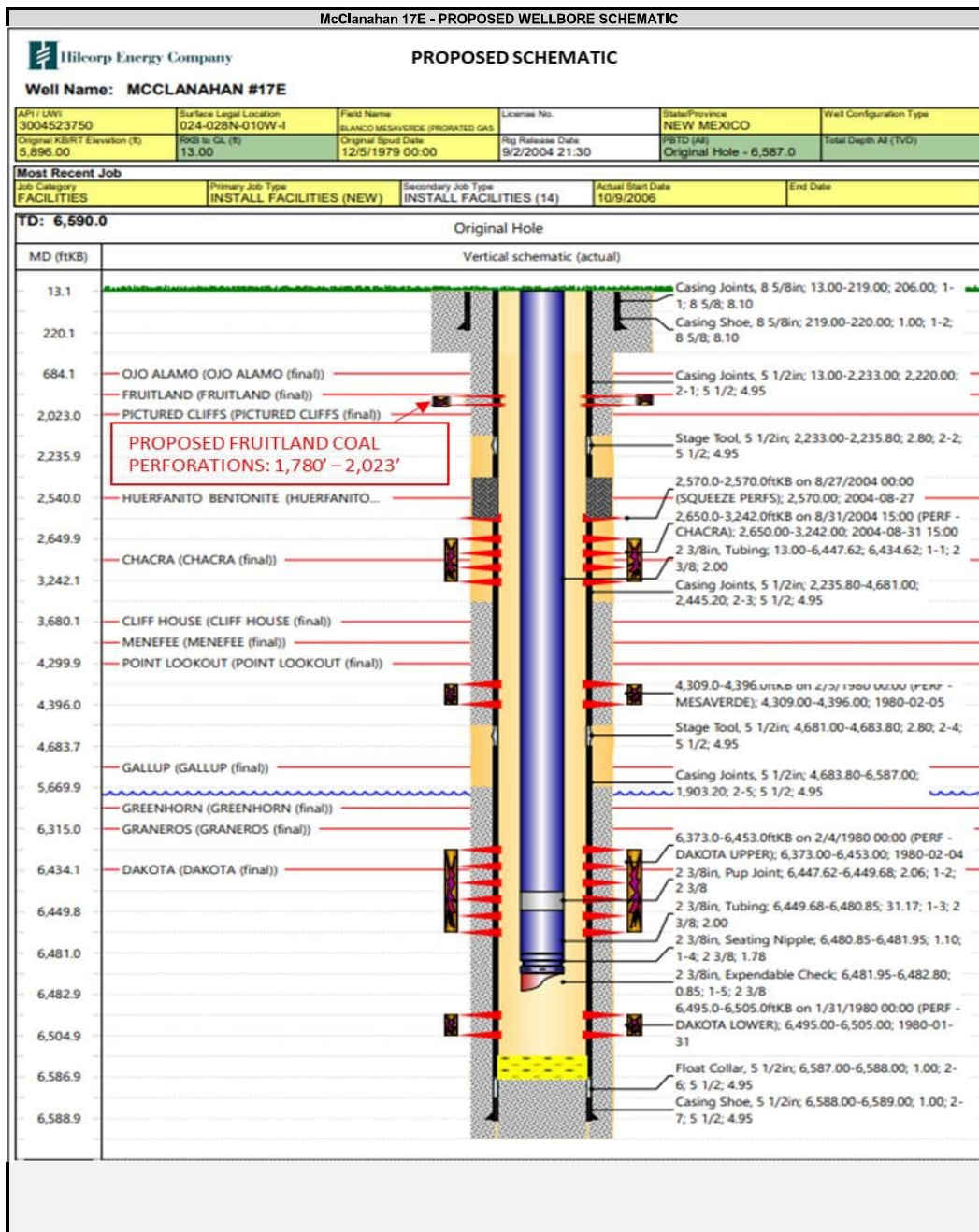


HILCORP ENERGY COMPANY
McClanahan 17E
FRUITLAND COAL RECOMPLETE SUNDRY





HILCORP ENERGY COMPANY
McClanahan 17E
FRUITLAND COAL RECOMPLETE SUNDRY



District I1625 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 356144

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-045-23750	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318622	5. Property Name MCCLANAHAN	6. Well No. 017E
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 5883

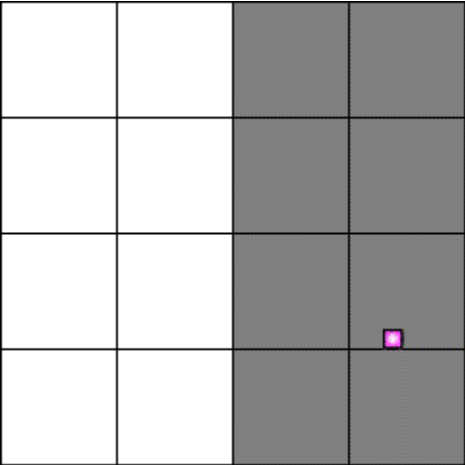
10. Surface Location

UL - Lot I	Section 24	Township 28N	Range 10W	Lot Idn	Feet From 1460	N/S Line S	Feet From 830	E/W Line E	County SAN JUAN
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11. Bottom Hole Location If Different From Surface

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

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

	<p style="text-align: center;">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: Cherylene Weston Date: 12/18/2023</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: Fred B. Kerr, Jr. Date of Survey: 8/2/1979 Certificate Number: 3950</p>
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State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil 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:** 01 / 04 / 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
McClanahan 17E	3004523750	I-24-28N-10W	1460 FSL, 830 FEET	0 bbl/d	128 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
McClanahan 17E	3004523750					<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:	1/4/2024
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 recompleting project. HEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the recompleting to optimize gas capture and send gas to sales or flare based on analytical composition. HEC operates facilities that are typically one-well facilities. Production separation equipment is upgraded prior to well being completed, if determined to be undersized or inadequate. This equipment is already on-site and tied into our sales gas lines prior to the recompleting operations.

VII. Operational Practices:

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

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

VIII. Best Management Practices:

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



January 12, 2024

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

Re: C-107A (Downhole Commingle)
McClanahan 17E
API No. 30-045-23750
I-24, T28N-R10W
San Juan County, NM

Gentlemen:

Concerning Hilcorp Energy Company's C-107A application to downhole commingle production in the subject well, this letter serves to confirm the following:

All working, royalty and overriding royalty interests are identical between the Basin Dakota (Pool Code: 71599), Blanco Mesaverde (Pool Code: 72319), Otero Chacra (Pool Code: 82329) and Basin Fruitland Coal (Pool Code: 71629) in the spacing units dedicated to these formations. Therefore, no notice to interest owners is required.

The spacing unit is comprised of a Federal Lease. 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 faint, larger signature.

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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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 314895

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 314895
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
llowe	None	6/27/2024