

ID NO. 363325

DHC - 5422

Revised March 23, 2017

RECEIVED: 07/11/24	REVIEWER:	TYPE:	APP NO: pLEL2422759878
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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: Helms Federal 1E **API:** 30-045-25047
Pool: Basin Fruitland Coal / Blanco Mesaverde / Basin Dakota **Pool Code:** 71629, 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.

Cherylene Weston

Print or Type Name

Cherylene Weston

Signature

7/11/2024

Date

713-289-2614

Phone Number

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

Helms Federal

1E

D-22-T30N-R10W

San Juan County, NM

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 372171 Property Code 318554 API No. 30-045-25047 Lease Type: X Federal ____State ____Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Basin Fruitland Coal	Blanco Mesaverde	Basin Dakota
Pool Code	71629	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2638' - 2911'	3704' - 5444'	7247' - 7369'
Method of Production (Flowing or 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 psi	88 psi	91 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1134 BTU	1249 BTU	1060 BTU
Producing, Shut-In or New Zone	New Zone	Producing	Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:	4/1/2024 Date: Oil - 7 bbl Rates: Gas - 1735 mcf Water - 15 bbl	Date: 4/1/2024 Rates: Oil - 11 bbl Gas - 708 mcf Water - 15 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 X No

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

Yes No

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

Yes X No

Will commingling decrease the value of production?

Yes No X

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

Yes X No

NMOCD Reference Case No. applicable to this well:

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 7/11/2024

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 355010

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-045-25047	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318554	5. Property Name HELMS FEDERAL	6. Well No. 001E
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6276

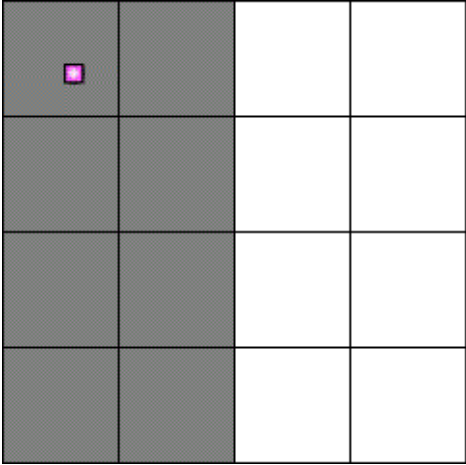
10. Surface Location

UL - Lot D	Section 22	Township 30N	Range 10W	Lot Idn 4	Feet From 805	N/S Line N	Feet From 790	E/W Line W	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 323.84	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 Title: Cherylene Weston Date: 12/01/2023</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: Michael Daly Date of Survey: 3/20/1981 Certificate Number: 5992</p>
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STATE OF NEW MEXICO

SANTA FE, NEW MEXICO 87501

OIL AND MINERALS DEPARTMENT

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

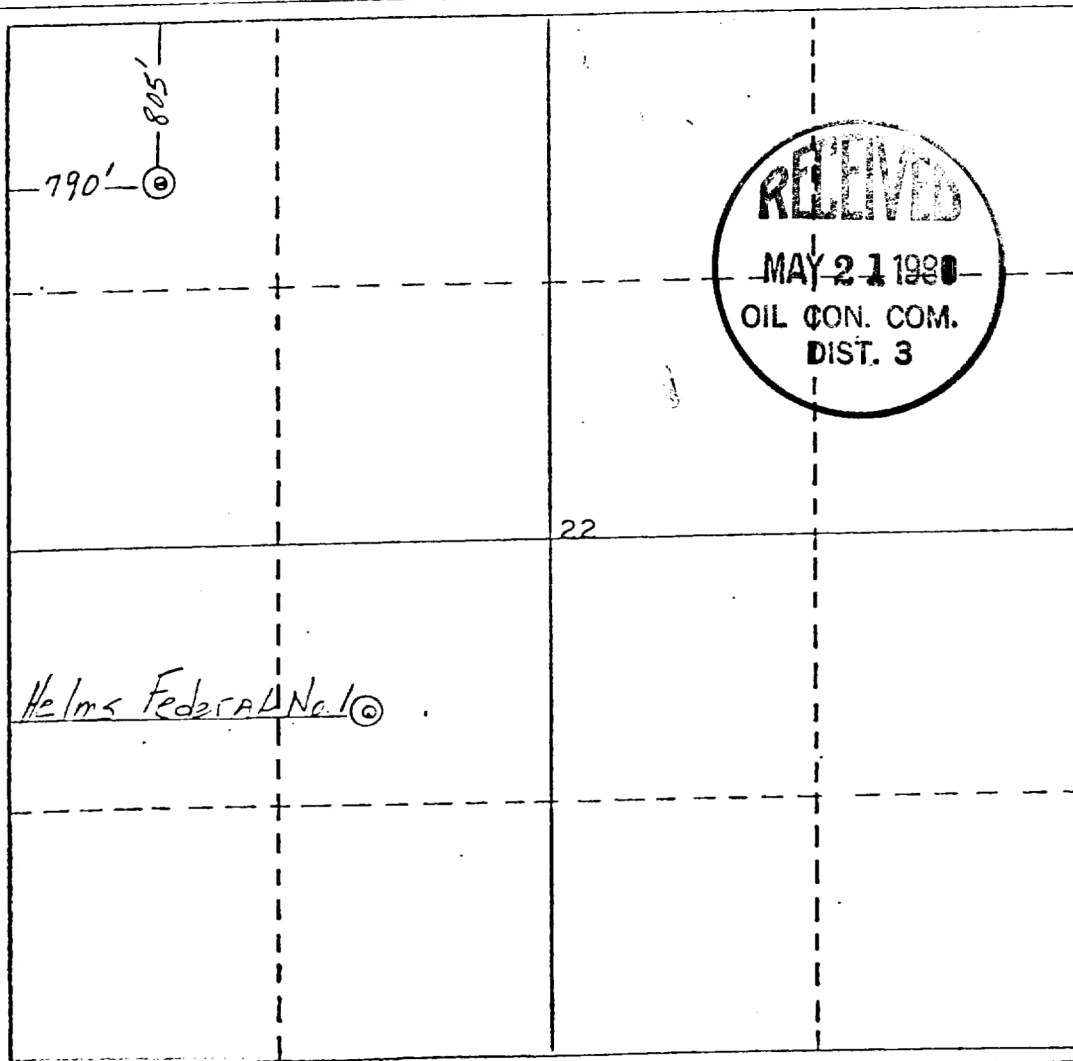
Operator SUPRON ENERGY CORPORATION			Lease HELMS FEDERAL		Well No. 1E
Unit Letter D	Section 22	Township 30 NORTH	Range 10 WEST	County SAN JUAN	
Actual Footage Location of Well:					
805 feet from the NORTH line and		790 feet from the WEST line			
Ground Level Elev. 6276	Producing Formation Dakota	Pool Basin	Dedicated Acreage: W 1/2 323.84 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 Division



CERTIFICATION

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

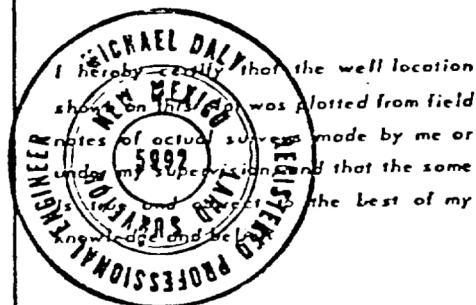
Rudy D. Motto

Name
Rudy D. Motto

Position
Area Superintendent

Company
SUPRON ENERGY CORPORATION

Date
May 8, 1981



Date Surveyed
March 20, 1981

Registered Professional Engineer
and/or Land Surveyor

Michael Daly
Michael Daly

Certificate No.
5992

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Mineral & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-25047		Pool Code 72319/71599	Pool Name Blanco Mesaverde/Basin Dakota
Property Code 7108	Property Name Helms Federal		Well Number 1E
GRID No. 14538	Operator Name Burlington Resources Oil & Gas Company		Elevation 6276' GR

Surface Location

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
D	22	30N	10W		805	North	790	West	San Juan

Bottom Hole Location If Different From Surface

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

Dedicated Acres W/323.84	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
	Signature 	
	Printed Name Peggy Cole	
	Title Regulatory Supervisor	
Date 1-18-01		18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
Date of Survey		
Signature and Seal of Professional Surveyor:		
Certificate Number		

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.

Helms Federal 1E Production Allocation

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

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

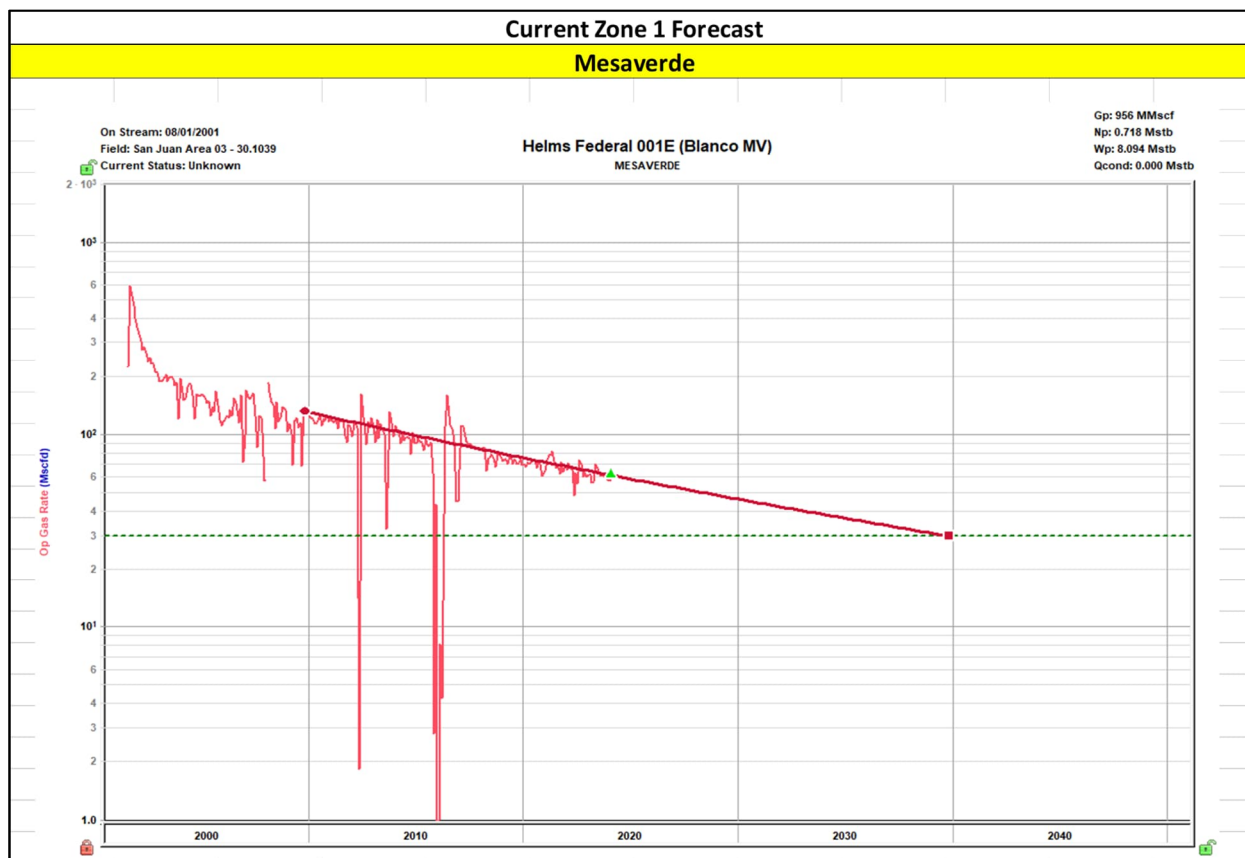
Production Allocation Method – Subtraction

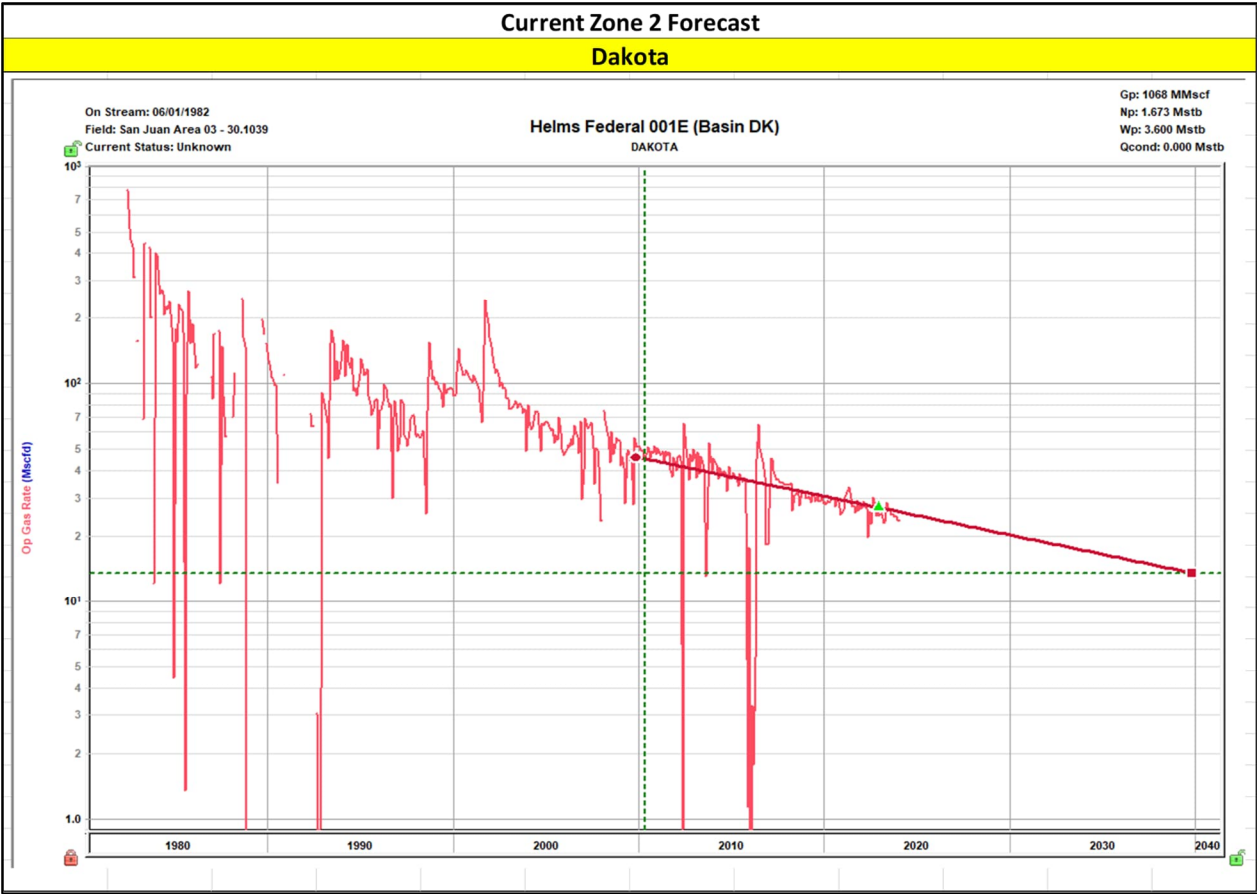
Gas Allocation:

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

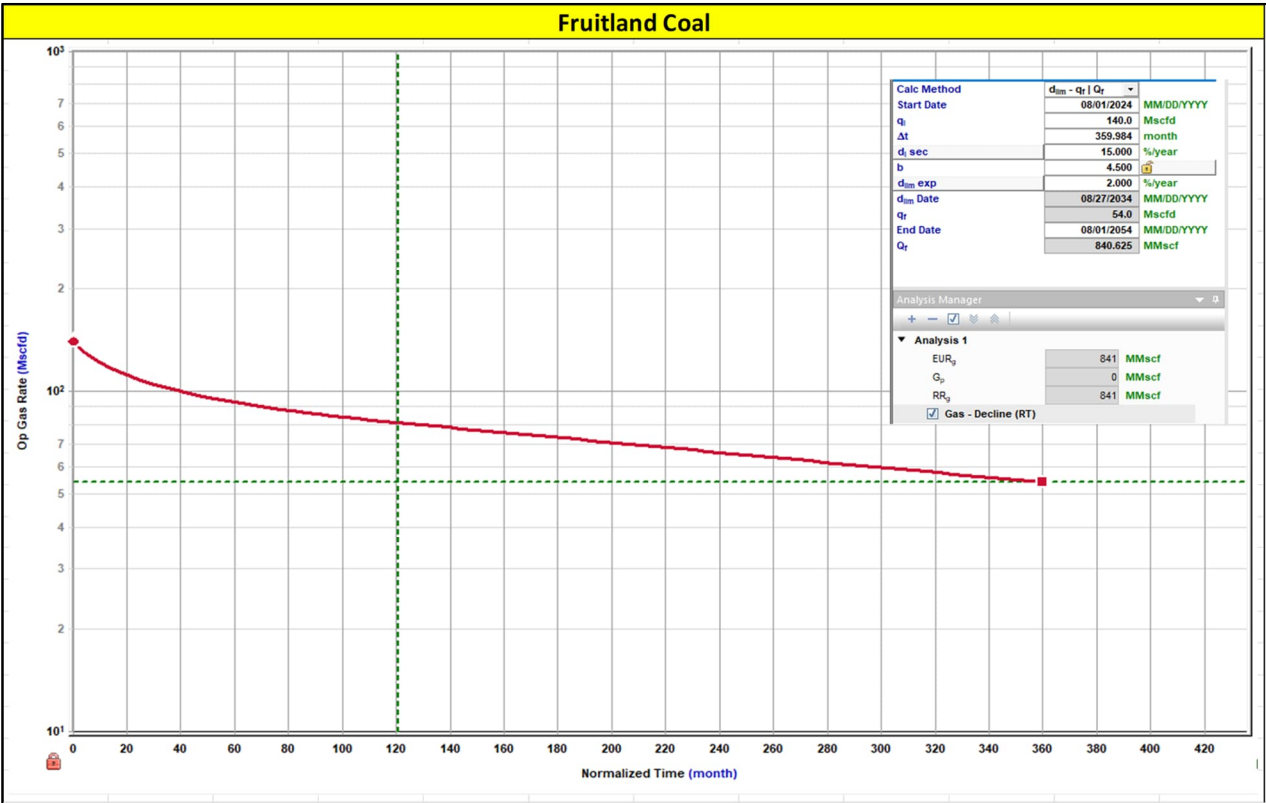
Hilcorp intends to continue to allocate the projected base production on the same fixed percentages to the following pools 71% (MV), 29% (DK) while the subtraction method is being used to determine the allocation to the new zone.

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.





Proposed Zone Forecast

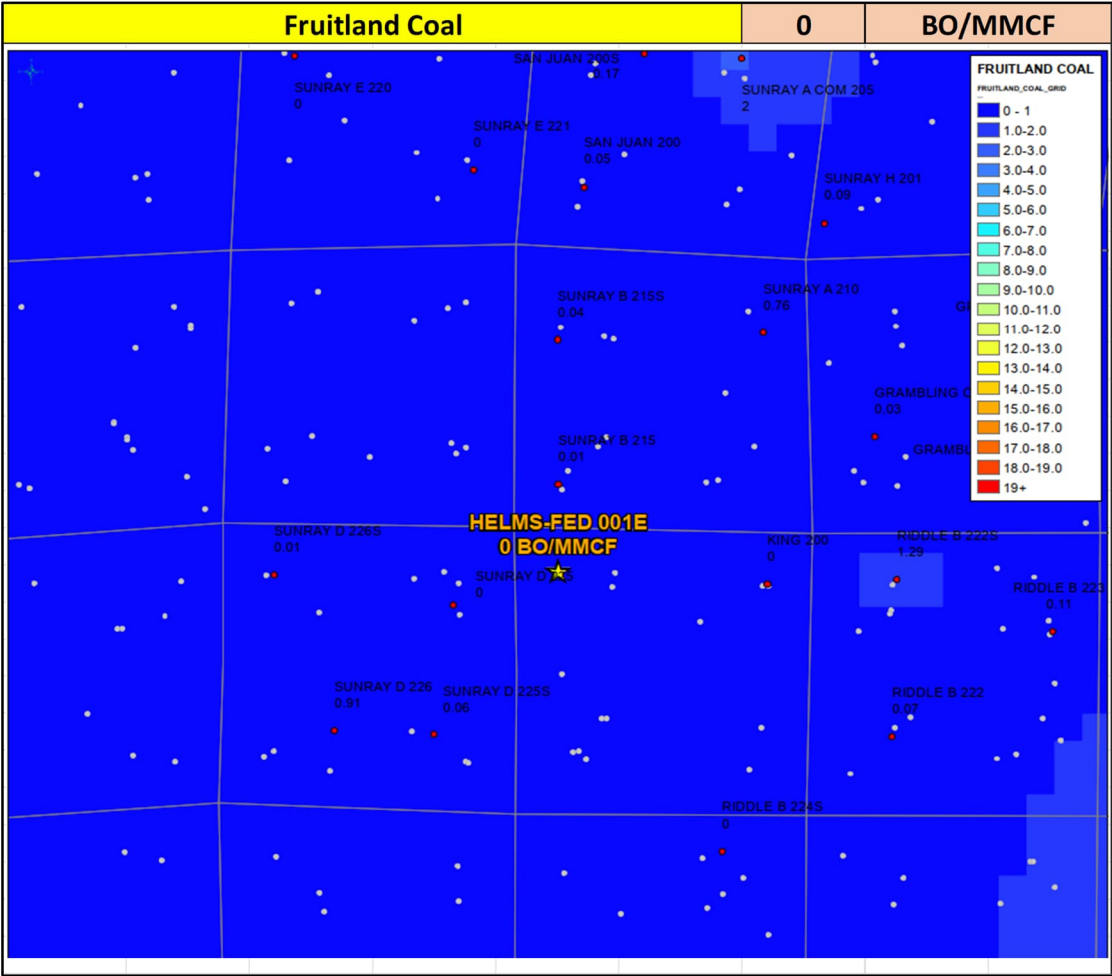


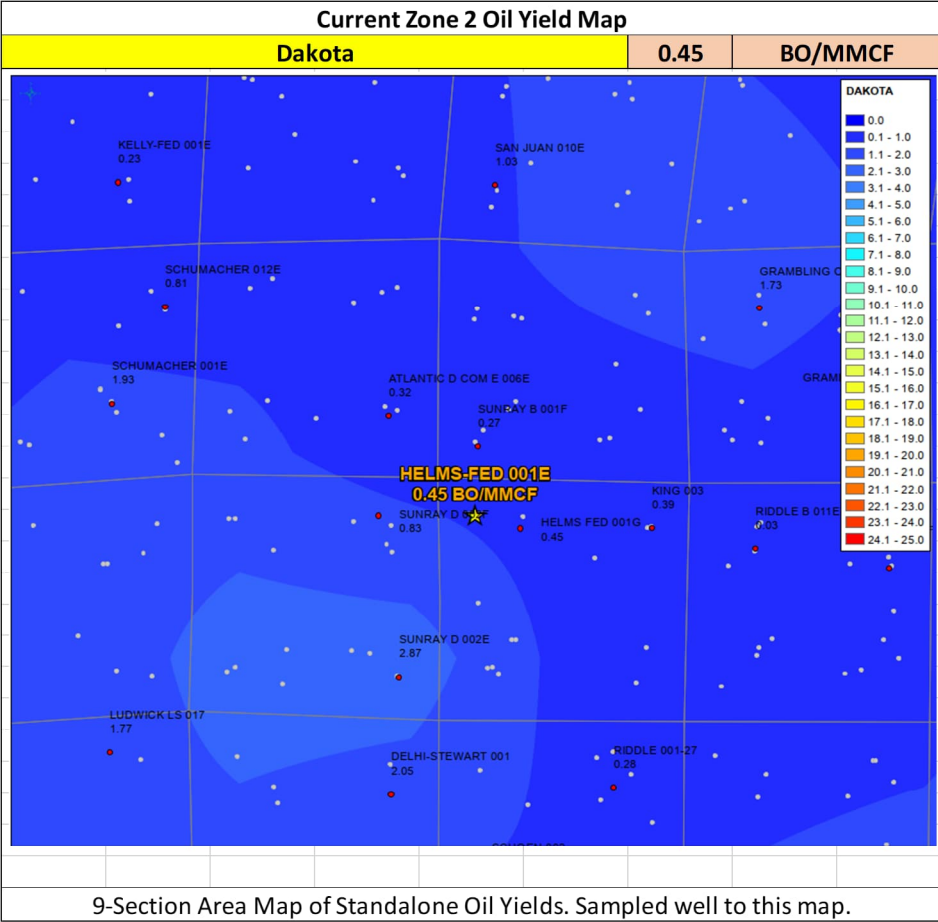
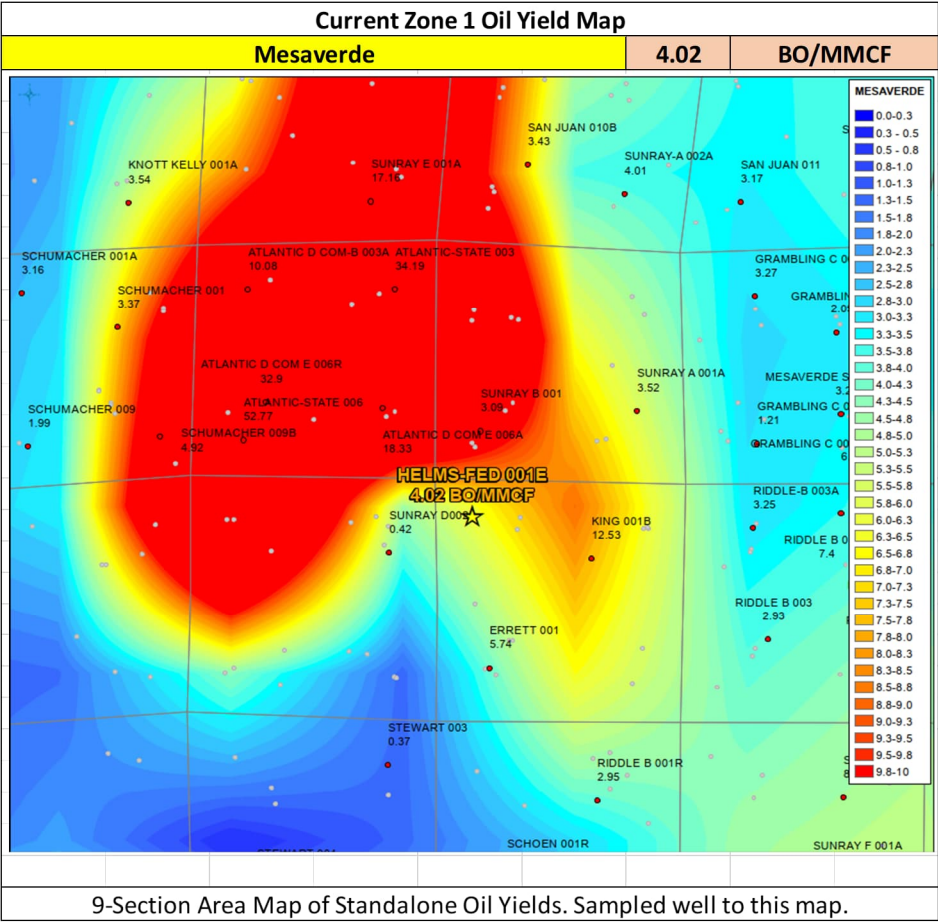
Oil Allocation:

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	4.02	250	95%
FRC	0	841	0%
DK	0.45	121	5%

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:

3004509472	GRAMBLING C 1C	MV
3004527076	KING 200	FRC
3004534494	SUNRAY B 1F	DK

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.

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
HELMS FEDERAL 1E	3004525047

FRC Offset (2.5 miles)		MV Offset (2.37 miles)		DK Offset (0.75 miles)	
AssetCode	3004528146	AssetCode	3004524194	AssetCode	3004533703
AssetName	FC FEDERAL COM 11	AssetName	BASSETT B 1	AssetName	SUNRAY D 2E
N2	0	N2	0	N2	0
CO2	0	CO2	0.01	CO2	0.02
C1	0.92	C1	0.8	C1	0.89
C2	0.05	C2	0.1	C2	0.05
C3	0.02	C3	0.05	C3	0.02
ISOC4	0	ISOC4	0.01	ISOC4	0
NC4	0	NC4	0.01	NC4	0.01
ISOC5	0	ISOC5	0.01	ISOC5	0
NC5	0	NC5	0	NC5	0
C6_PLUS		C6_PLUS		C6_PLUS	0.01
C7	0	C7	0	C7	
C8	0	C8	0	C8	
C9	0	C9	0	C9	
C10		C10		C10	
AR		AR		AR	
CO		CO		CO	
H2		H2		H2	
O2	0	O2	0	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		CO2GPM		CO2GPM	0
N2GPM		N2GPM		N2GPM	0
C1GPM		C1GPM		C1GPM	0
C2GPM		C2GPM		C2GPM	1.42
C3GPM		C3GPM		C3GPM	0.5
ISOC4GPM		ISOC4GPM		ISOC4GPM	0.14
NC4GPM		NC4GPM		NC4GPM	0.16
ISOC5GPM		ISOC5GPM		ISOC5GPM	0.08
NC5GPM		NC5GPM		NC5GPM	0.06
C6_PLUSGPM		C6_PLUSGPM		C6_PLUSGPM	0.25

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 water with low TDS.

Well Name	API
HELMS FEDERAL 1E	3004525047

FRC Offset (2.6 miles)		MV Offset (2.63 miles)		DK Offset (1.8 miles)	
API	3004533749	API	3004560206	API	3004509127
Property	KELLY 100	Property	TURNER FEDERAL 2	Property	GRENIER A 4
CationBarium	0.5	CationBarium	0.17	CationBarium	0.5
CationBoron		CationBoron	-0.03	CationBoron	
CationCalcium	62	CationCalcium	3.32	CationCalcium	76
CationIron	98	CationIron	65.98	CationIron	39
CationMagnesium	19	CationMagnesium	0.11	CationMagnesium	12
CationManganese	0.5	CationManganese	0.84	CationManganese	0.5
CationPhosphorus		CationPhosphorus	1.56	CationPhosphorus	
CationPotassium		CationPotassium	0.03	CationPotassium	
CationStrontium	0.5	CationStrontium	0	CationStrontium	0.5
CationSodium	156.51	CationSodium	11.65	CationSodium	83.14
CationSilica		CationSilica		CationSilica	
CationZinc		CationZinc	-0.78	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	262	AnionChloride	599.81	AnionChloride	120
AnionCarbonate	0	AnionCarbonate		AnionCarbonate	0
AnionBicarbonate	110	AnionBicarbonate	219.6	AnionBicarbonate	110
AnionBromide		AnionBromide		AnionBromide	
AnionFluoride		AnionFluoride		AnionFluoride	
AnionHydroxyl	0	AnionHydroxyl		AnionHydroxyl	0
AnionNitrate		AnionNitrate		AnionNitrate	
AnionPhosphate		AnionPhosphate		AnionPhosphate	
AnionSulfate	110	AnionSulfate	30	AnionSulfate	155
phField	7.24	phField	5.5	phField	7.19
phCalculated		phCalculated	6.1	phCalculated	
TempField	60	TempField	27.9	TempField	73
TempLab		TempLab		TempLab	
OtherFieldAlkalinity		OtherFieldAlkalinity		OtherFieldAlkalinity	
OtherSpecificGravity	0	OtherSpecificGravity		OtherSpecificGravity	0
OtherTDS	819.01	OtherTDS	72	OtherTDS	596.64
OtherCaCO3		OtherCaCO3		OtherCaCO3	
OtherConductivity	1279.7	OtherConductivity	116.1	OtherConductivity	932.25
DissolvedCO2	8	DissolvedCO2	250	DissolvedCO2	9
DissolvedO2		DissolvedO2		DissolvedO2	
DissolvedH2S	0	DissolvedH2S	8.5	DissolvedH2S	0
GasPressure	100	GasPressure		GasPressure	100
GasCO2	0	GasCO2		GasCO2	0
GasCO2PP	0	GasCO2PP		GasCO2PP	0
GasH2S	0	GasH2S		GasH2S	0
GasH2SPP	0	GasH2SPP		GasH2SPP	0
PitzerCaCO3_70	-0.66	PitzerCaCO3_70		PitzerCaCO3_70	-0.61
PitzerBaSO4_70	1.12	PitzerBaSO4_70		PitzerBaSO4_70	1.32
PitzerCaSO4_70	-1.64	PitzerCaSO4_70		PitzerCaSO4_70	-1.34
PitzerSrSO4_70	-2.05	PitzerSrSO4_70		PitzerSrSO4_70	-1.85
PitzerFeCO3_70		PitzerFeCO3_70		PitzerFeCO3_70	
PitzerCaCO3_220	0.14	PitzerCaCO3_220		PitzerCaCO3_220	0.2
PitzerBaSO4_220	0.56	PitzerBaSO4_220		PitzerBaSO4_220	0.76
PitzerCaSO4_220	-1.52	PitzerCaSO4_220		PitzerCaSO4_220	-1.23
PitzerSrSO4_220	-1.86	PitzerSrSO4_220		PitzerSrSO4_220	-1.66
PitzerFeCO3_220		PitzerFeCO3_220		PitzerFeCO3_220	

Well Name: HELMS	Well Location: T30N / R10W / SEC 22 / NWNW / 36.80286 / -107.87753	County or Parish/State: SAN JUAN / NM
Well Number: 1E	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM0555078	Unit or CA Name:	Unit or CA Number:
US Well Number: 3004525047	Operator: HILCORP ENERGY COMPANY	

Notice of Intent

Sundry ID: 2789931

Type of Submission: Notice of Intent

Type of Action: Recompletion

Date Sundry Submitted: 05/14/2024

Time Sundry Submitted: 08:55

Date proposed operation will begin: 06/01/2024

Procedure Description: Hilcorp Energy Company requests permission to recomplete the subject well in the Fruitland Coal formation and downhole commingle with the existing Mesaverde/Daktoa formations. Please see the attached procedure, current and proposed wellbore diagram, plat and natural gas management plan. A closed loop system will be used. A pre-reclamation site visit was held on 10/17/2023 with Roger Herrera/BLM. The reclamation plan is attached.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Helms_Federal_1E_FRC_RC_NOI_20240514085346.pdf

Well Name: HELMS

Well Location: T30N / R10W / SEC 22 /
NWNW / 36.80286 / -107.87753

County or Parish/State: SAN
JUAN / NM

Well Number: 1E

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMNM0555078

Unit or CA Name:

Unit or CA Number:

US Well Number: 3004525047

Operator: HILCORP ENERGY
COMPANY

Operator

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

Operator Electronic Signature: CHERYLENE WESTON

Signed on: MAY 14, 2024 08:53 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: 05/14/2024

Signature: Matthew Kade

Helms Federal #1E

API#: 3004525047

Fruitland Coal Recompletion Procedure

12/1/2023

Procedure:

1. MIRU PU and associated equipment. Kill well and NDWH.
2. NU BOP and unseat tubing, tag for fill and scan out tubing
3. Set 4.5" CIBP at +/-2911' to isolate existing DK and MV completion
4. RU Wellcheck and MIT wellbore to 500 PSI
 - a. Please note existing CBL (07-25-01)
5. Perforate and frac the Fruitland Coal from **2638' to 2911'**.
6. MIRU service rig and test BOP's.
7. Cleanout sand and plugs to PBTD.
8. TIH and land 2-3/8" production tubing in DK
9. ND BOP's, NU production tree.
10. RDMO service rig & turn well over to production as commingled Fruitland Coal/Mesa Verde/Dakota producer.



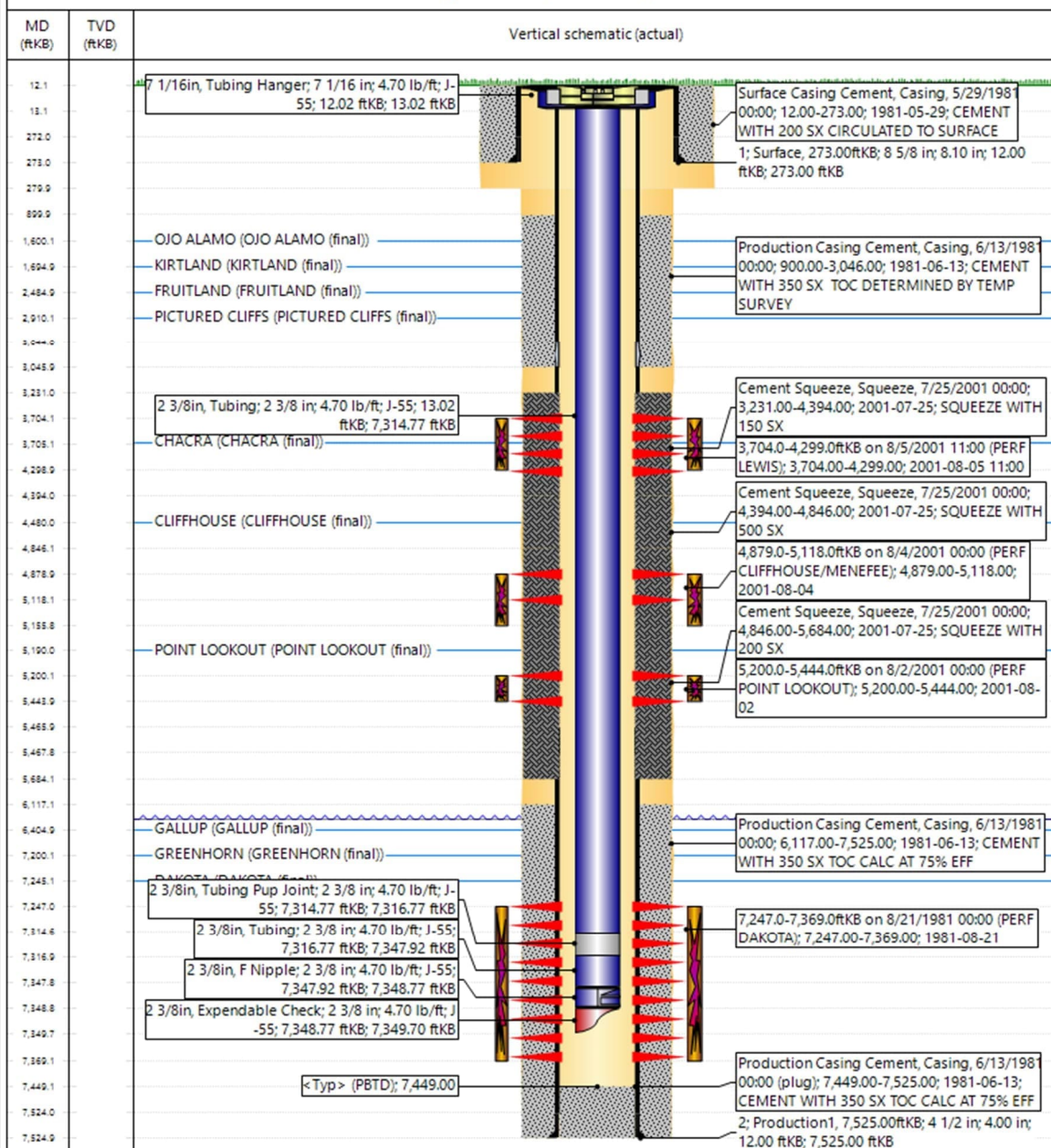
Hilcorp Energy Company

Current Schematic - Version 3

Well Name: HELMS FEDERAL #1E

API / UWI 3004525047	Surface Legal Location 022-030N-010W-D	Field Name BLANCO MESAVERDE (PRORATED GAS)	Route 0305	State/Province NEW MEXICO	Well Configuration Type VERTICAL
Ground Elevation (ft) 6,276.00	Original KBRT Elevation (ft) 6,288.00	KB to GL (ft) 12.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)	

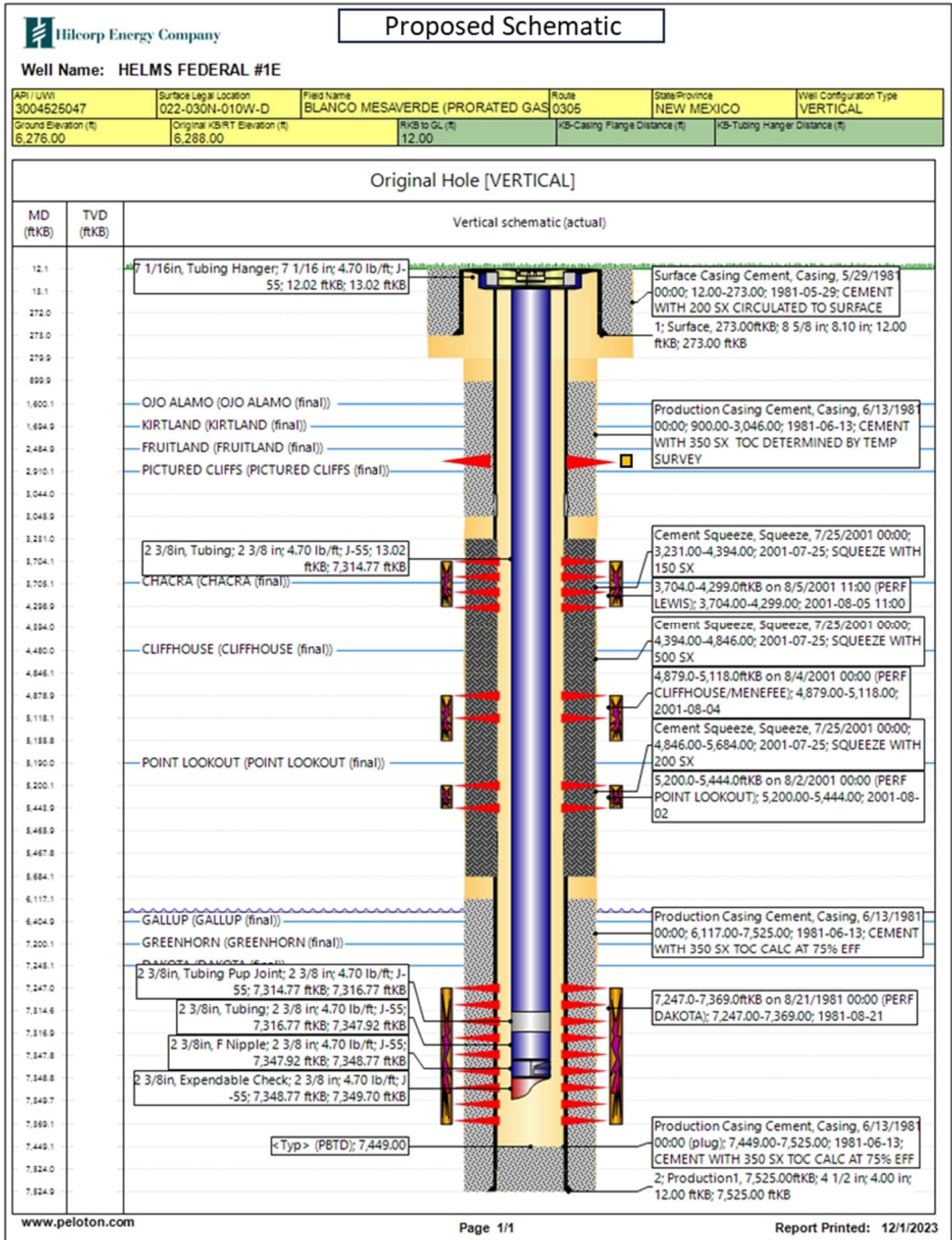
Original Hole [VERTICAL]



www.peloton.com

Page 1/1

Report Printed: 12/1/2023



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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

Form C-102
August 1, 2011

Permit 355010

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-045-25047	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318554	5. Property Name HELMS FEDERAL	6. Well No. 001E
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6276

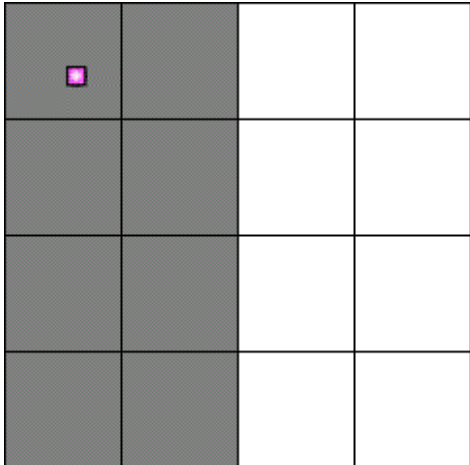
10. Surface Location

UL - Lot D	Section 22	Township 30N	Range 10W	Lot Idn 4	Feet From 805	N/S Line N	Feet From 790	E/W Line W	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 323.84	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: 12/01/2023</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: Michael Daly Date of Survey: 3/20/1981 Certificate Number: 5992</p>
---	---

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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Hilcorp Energy Company **OGRID:** 372171 **Date:** 12/01/2023

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Helms Federal 1E	3004525047	D-22-30N-10W	805' FNL & 790' FWL	0 bbl/d	131 mcf/d	1 bbl/d

IV. Central Delivery Point Name: Chaco-Blanco 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>Helms Federal 1E</u>	<u>3004525047</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</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: 12/01/2023
Phone: 713-289-2615
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. Separation Equipment:

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

VII. Operational Practices:

1. Subsection (A) Venting and Flaring of Natural Gas
 - 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 recompleting as the flowlines at the sites are already in place and tied into a gathering system.
2. Operator will flare rather than vent vessel blowdown gas when technically feasible during active and/or planned maintenance to equipment on-site.

3. Operator combusts natural gas that would otherwise be vented or flared, when technically feasible.
4. Operator will shut in wells in the event of a takeaway disruption, emergency situation, or other operations where venting or flaring may occur due to equipment failures.

Hilcorp Energy
Interim Reclamation Plan
Helms Federal #1E
API: 30-045-25047
D – Sec.22-T030N-R010W
Lat: 36.79211, Long: -107.80627
Footage: 805' FNL & 790' FWL
San Juan County, NM

1. PRE- INTERIM RECLAMATION SITE INSPECTION

- 1.1) A pre-interim reclamation site inspection was completed by Roger Herrera with the BLM and Chad Perkins construction Foreman for Hilcorp Energy on October 17, 2023.
- 1.2) Location surface will be brush hogged or mulched and bladed as required within original disturbance to acquire additional working surface for well recompletion activities.

2. LOCATION INTERIM RECLAMATION PROCEDURE

- 2.1) Interim reclamation work will only be completed after well recompletion.
- 2.2) The interim reclamation work will be completed during spring or fall months.
- 2.3) Location tear drop will be re-defined as applicable for the interim reclamation.
- 2.4) All diversion ditches and silt traps will be cleaned and re-established as applicable for the interim reclamation.
- 2.5) All disturbed areas will be seeded, any disturbed areas that are compacted will be ripped before seeding.
- 2.6) All trash and debris will be removed within 50' buffer outside of the location disturbance during reclamation.

3. ACCESS ROAD RECLAMATION PROCEDURE:

- 3.1) No lease access road issues were identified at the time of onsite.
- 3.2) Lease access road will be maintained as applicable before, during, and after, recompletion activities.

4. SEEDING PROCEDURE

- 4.1) A Pinion/Juniper seed mix will be used for all reclaimed and disturbed areas of the location.
- 4.2) Drill seeding will be done where applicable and all other disturbed areas will be broadcast seeded and harrowed, broadcast seeding will be applied at a double the rate of seed.
- 4.3) Timing of the seeding will take place when the ground is not frozen or saturated.

5. WEED MANAGEMENT

- 5.1) No action is required at this time for weed management, no noxious weeds were identified during the onsite.

District I
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District III
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District IV
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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 344259

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 344259
	Action Type: [C-103] NOI Recompletion (C-103E)

CONDITIONS

Created By	Condition	Condition Date
dmcdclure	Notify NMOCD 24 Hours Prior to beginning operations.	6/28/2024
dmcdclure	DHC required	6/28/2024
dmcdclure	All conducted logs shall be submitted to the Division as a [UF-WL] EP Well Log Submission (WellLog).	6/28/2024
dmcdclure	The appropriate compliance officer supervisor shall be consulted and remedial action conducted as directed if the cement sheath around the casing is not adequate to protect the casing and isolate strata from: (a) the uppermost perforation in each added pool to at least 150 feet above that perforation; and (b) the lowermost perforation in each added pool to at least 100 feet below that perforation.	6/28/2024



July 11, 2024

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

**Re: C-107A (Downhole Commingle)
Helms Federal 1E
API No. 30-045-25047
D-22, T30N-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) and Basin Fruitland Coal (Pool Code: 71629) in the spacing units dedicated to these formations. Therefore, no notice to interest owners is required.

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', with a large, stylized 'P' and 'R'.

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

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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

COMMENTS

Action 363325

COMMENTS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 363325
	Action Type: [C-107] Down Hole Commingle (C-107A)

COMMENTS

Created By	Comment	Comment Date
llowe	Emailed Order to Jackson Lancaster on 10/02/24. He inquired about it.	10/3/2024

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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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 363325

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 363325
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
llowe	None	8/14/2024