From:	McClure, Dean, EMNRD
То:	Cheryl Weston; Mandi Walker
Cc:	Lowe, Leonard, EMNRD; Wrinkle, Justin, EMNRD; Rikala, Ward, EMNRD
Subject:	RE: [EXTERNAL] Action ID: 356651; DHC-5405
Date:	Thursday, August 22, 2024 1:13:00 PM

The application designated as Application ID: 356651 and DHC-5405 has been rejected by the Division due to the applicant's failure to conduct notice such that the stipulations within 19.15.12.11 C.(1)(a) NMAC may be met. The applicant may resubmit an application for this proposed downhole commingling project once proper notice has been conducted. If you have any questions, please feel free to reach out.

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

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Wednesday, July 17, 2024 5:05 PM
To: Cheryl Weston <cweston@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>
Cc: Lowe, Leonard, EMNRD <Leonard.Lowe@emnrd.nm.gov>; McClure, Dean, EMNRD
<Dean.McClure@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Action ID: 356651; DHC-5405

Cheryl,

Review of this application cannot continue until notice is conducted such that the stipulations within 19.15.12.11 C.(1)(a) NMAC may be met. As such, the Division will be placing review of this application on hold for the earlier of either: (a) Hilcorp has provided documentation demonstrating that the interest owners have been instructed to provide their protests to the Division; or (b) 30 days. The Division will make an evaluation of how to proceed in this case upon re-opening the application for review.

If you have any questions, please feel free to reach out.

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

From: Cheryl Weston <<u>cweston@hilcorp.com</u>>
Sent: Saturday, July 13, 2024 9:32 AM

To: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>; Mandi Walker <<u>mwalker@hilcorp.com</u>> Cc: Lowe, Leonard, EMNRD <<u>Leonard.Lowe@emnrd.nm.gov</u>> Subject: RE: [EXTERNAL] Action ID: 356651; DHC-5405

Dean,

The administrative checklist, revised C-107A page, water analysis and allocation is attached.

Thanks, Cheryl

From: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>
Sent: Friday, July 12, 2024 2:15 PM
To: Cheryl Weston <<u>cweston@hilcorp.com</u>>; Mandi Walker <<u>mwalker@hilcorp.com</u>>
Cc: Lowe, Leonard, EMNRD <<u>Leonard.Lowe@emnrd.nm.gov</u>>
Subject: [EXTERNAL] Action ID: 356651; DHC-5405

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

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

The Division is reviewing the following application:

Action ID	356651				
Admin No. DHC-5405					
Applicant	nt Hilcorp Energy Company (372171)				
Title	State Com O #12				
Sub. Date	6/21/24				

Please provide the following additional supplemental documents:

• Please provide an application checklist

Please provide additional information regarding the following:

- Please review the MV and DK perfs on form C-107A and submit an amended form C-107A with those perfs corrected.
- Please provide a method to allocate the gas for the MV and DK pools.
- Please confirm the quantity of other total dissolved solids within the FLC water sample.

Additional notes:

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

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

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

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

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AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO

County of San Juan

Odette Zenizo, the undersigned, authorized Representative of the Tri-City Record, on oath states that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Law of 1937, that payment therefore has been made of assessed as court cost; and that the notice, copy of which is hereto attached, was published in said paper in the regular daily edition, for _____ time(s) on the following date(s):

<u>6/26/2024</u>

Sworn and subscribed before me, a notary public in and for the county of La Plata and the State of Colorado, 6/28/2024.

5	-M.B	R	
Notary Public	0.0 -		-
PRICE:	82-16		

Statement to come at the end of the month.

ACCOUNT NUMBER: 109863

ERIN MELISSA BLACK BRANDT NOTRAY PUBLIC STATE OF COLORADO NOTRAY ID 20234047443 MY COMMISSION EXPIREB DECEMBER 20, 2027

COPY OF ADVERTISEMENT

22318

Notice by Hilcorp Energy Company for Downhole Commingling, San Juan County, New Mexico. Pursuant to Paragraph (2) of Subsection C of 19.15.12.11 NMAC. Hilcorp Energy Company, as Operator, has filed form C-107A with the New Mexico Energy, Minerals and Natural Resources Department **Oil Conservation Division** (NMOCD) seekina approval administrative to downhole commingle new production from the Basin-Fruitland Coal Pool (71629) with existing production from Basin-Dakota Gas Pool the (71599)and the Blanco-Mesaverde Gas Pool (72319) in the State Com O 012 well (API No. 30-045-29748) located in Unit I, Section 16, Township 29 North, Range 08 West, NMPM, San Juan County, New Mexico. Commingling will not reduce the value of production. Allocation method to be determined upon completion of this project. This notice is intended for certain unlocatable royalty interest owners in the aforementioned well for which certified mail delivery is not possible. Should (the interest owner for vou

Released to Imaging: 8/22/2024 1:19:14 PM

ALTENE ZNOTIAS

which this notice is intended) have an objection, you are required to respond within twenty (20) days from the date of this publication. Please mail your objection letter, referencing the well details above, to the following address: Hilcorp Energy Company, Attn: San Juan Land, 1111 Travis Street, Houston, TX 77002

Published in Tri-City Record June 26, 2024

> notifies for Granal Strategy and Strategy MATE DE TOTORIZON MATE DE TOTORIZON MATE DE TOTORIZON

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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 Com O

Lease

State of New Mexico Energy, Minerals and Natural Resources Department Form C-107A Revised August 1, 2011

Page 6 of 50

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

APPLICATION TYPE Single Well Establish Pre-Approved Pools EXISTING WELLBORE <u>X</u>Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

382 Road 3100, Aztec, NM 87410

Hilcorp Energy Company Operator

12

Well No.

Address I-16-T29N-R08W Unit Letter-Section-Township-Range

San Juan County, NM County

OGRID No. 372171 Property Code 319097 API No. 30-045-29748 Lease Type: Federal X State Fee

DATA ELEMENT	UPPER ZONE		INTERMEDIATE ZONE			LOWER ZONE		
Pool Name	Fruitland Coal		Bla	nco Mesaverde		Basin Dakota		
Pool Code	71629			72319		71599		
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2,875' - 3,055'			5,254' - 5,398'		7,530' - 7,316'		
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)	88 psi	127 psi			153 psi			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1261 BTU	1261 BTU 11				1127 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:		Date: Rates:	Gas = 2.260 mcf		Date: 4/1/2024 Rates: Oil - 4 bbl Gas - 1,578 mcf Water - 40 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? If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?		No <u>X</u> 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 <u>X</u>	No
NMOCD Deference Core Ne condicable to this well.		

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.

Thomahr		+hat t	he int	formation	aharra	in terms	and		lata ta	the	hast	of mar	1 morel	daa	and	haliat	2
I nereby	cerun	y mai i	the m	formation	above	is true	e and	comp	iele lo	une	Dest	or my	KIIOWIE	age	ana	bener	•

SIGNATURE Cherylene Weston	TITLE_Operations/Regulatory Tech-Sr. DATE 6/19/202	4
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 367272

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WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name					
30-045-29748	71629	BASIN FRUITLAND COAL (GAS)					
4. Property Code	5. Property Name	6. Well No.					
319097	STATE COM O	012					
7. OGRID No.	8. Operator Name	9. Elevation					
372171	HILCORP ENERGY COMPANY	6396					
10. Surface Location							

	To Buildee Ebeauon								
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	16	29N	08W		1825	S	790	E	SAN JUAN

11. Bottom Hole Location If Different From Surface UL - Lot Lot Idn Feet From N/S Line Feet From E/W Line Section Township Range County 14. Consolidation Code 12. Dedicated Acres 13. Joint or Infill 15. Order No. 320.00 E/2

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

OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working
interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
E-Signed By: Cherylene Weston Title: Operations/Regulatory Tech-Sr.
Date: 6/13/2024
SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual
surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
Surveyed By: Neale C. Edwards
Date of Survey: 11/14/1998
Certificate Number: 6857

District I PO Box 1980, Hobbs, NM 88241-1980 District II 811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

Form C-102 Revised October 18, 1994 Instruction on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

	WELL LOCATION AND ACREAGE DEDICATION PLAT										
1	API Numb	er		² Pool Co	de			Pool	iame		
30-045-297	48		7231	9/71599)	BLA	ANCO MESAVE			4	
¹ Property	Code	OT LTE O			⁵ Pre	operty	Name				^o Well Number
003275		STATE CO	<u>OM O</u>							12	
⁷ OGRID	No.				* Op	perator	Name				⁹ Elevation
005073		CONOCO	, INC.								
					¹⁰ Surf	face	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from th	1e	North/South line	Feet from the	East West	line	County
1	16	29N	8W		1825		SOUTH	790	EAST		SAN JUAN
			¹¹ B	ottom Ho	ole Locati	on If	f Different Fro	m Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from th	ne	North/South line	Feet from the	East/West	line	County
	² Dedicated Acres ¹³ Joint or Infill ¹⁴ Consolidation Code ¹⁵ Order No.										
BCHOO ER											

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

	ر ۲. ۲.		Signature and Seal of Professional SurveyerCertificate Number
		1825'	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plot was plotted from field notes of actual surveys made by me or under
	RECE	2000 EIVED W. Drv DT. 3 U.L.	Signature Librah Marlielly Printed Name DEBORAH MARBERRY Title REGULATORY ANALYST Date 04/06/2000
16	531123	4565	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Page 8 of 50

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

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

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

State Com O 12 Production Allocation Method – Subtraction

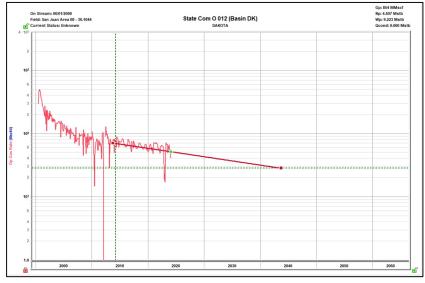
These zones are proposed to be commingled because the application of dual completions impedes the ability to produce the shallow zone without artificial lift and the deeper zones with reduced artificial lift efficiency. All horizons will require artificial lift due to low bottomhole pressure (BHP) and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

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

Gas Allocation:

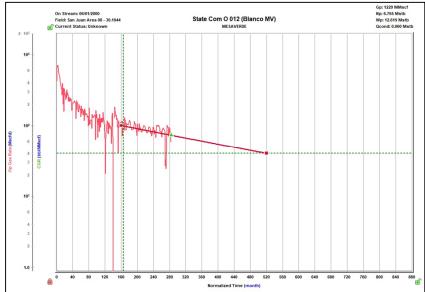
Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Mesaverde/Dakota and the added formation to be commingled is Fruitland Coal. The subtraction method applies an average monthly production forecast to the base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

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

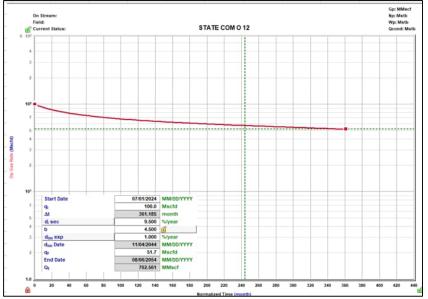


Current Zone 1 Forecast - Dakota





Proposed Zone Forecast – Fruitland Coal

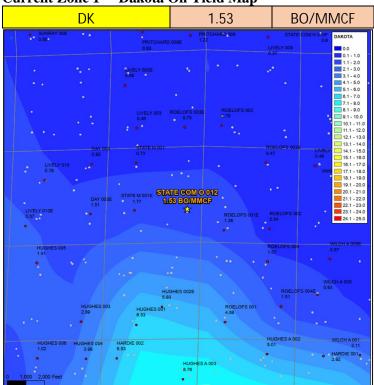


Average initial production curve in geologic region.

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
FRC	0.02	702	0.333%
MV	9.54	397	89.735%
DK	1.53	274	9.933%



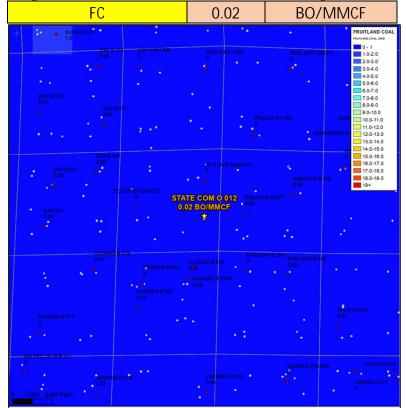
Current Zone 1 – Dakota Oil Yield Map

9-Section Area Map of Standalone Oil Yields. Sampled well to this map.

MV 9.54 **BO/MMCF** SUNR/ MESAVERD 0.0-0.3 0.3 - 0.5 0.5 - 0.8 0.8-1.0 1.0-1.3 DAY B 003 2.98 HILL 003 2.2 DAY B 6.24 3.00 DAY 002B 6.41 HILL 2.74 •. R 003E 1.3-1.5 DA 3.2 1.5-1.8 ROELOFS A 001 6.6 2.0-2.3 2.0-2.3 2.3-2.5 2.5-2.8 2.8-3.0 3.0-3.3 3.3-3.5 3.5-3.8 3.8-4.0 4.0-4.3 4.3-4.5 3.11 • DAY B 004 3.37 DAY 8.25 DAY B 003A 3.91 3.18 ROELOFS 1 DEL DAY B 3.93 STATE COM O 01 15.28 . DAY 4.93 4.5-4.8 4.8-5.0 5.0-5.3 5.3-5.5 THREE STATES COM 001A ROEL 2.36 LIVELY 010N 9.92 STATE COM O 012 9.54 BOMMCF STATE TAM 0 011A 9.87 • ROE 5.8 5.5-5.8 DAY 5.22 5.8-6.0 DAY 6.71 ROE 4.12 ROELOF 3.09 ROELOFS B 003 8.62 6.3-6.5 • 6.8-7.0 7.0-7.3 ROELOFS B 001 4.24 NE L HUGHES B 004A 6.55 6.75 7.5-7.8 HUGHES B 00 12.06 ROELOFS A 3.55 HUGH 12.08 ES B 005A 04 8.0-8.3 8.3-8.5 8.5-8.8 8.8-9.0 UGHES 002M HUG ROELO 5.92 • HU • 9.0-9.0 9.0-9.3 9.3-9.5 9.5-9.8 9.8-10 ROELOFS A 004 3.64 ROEL 8.25 ES B 005 • HES B 004 HUGI 6.01 18.31 3.94 • HUGHES C 002 3.58 ARDIE A 001B 6.81 HUG 4.81 ۰. HUG 4.17 HARDIE LS 001 10.23 2,000 Feet .000

Current Zone 2 – Mesaverde Oil Yield Map

Proposed Zone – Fruitland Coal Oil Yield Map



9-Section Area Map of Standalone Oil Yields. Sampled well to this 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:

3004508245	DAY 1	MV
3004524939	HARDIE 2E	DK
3004527513	FC STATE COM 5	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.

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
STATE COM O 12	3004529748

FRC Offset		MV Offse	<u>e</u> t	DK OFFSET		
API	3004527513		3004535193		3004526314	
Property	FC STATE COM 5			Property	SUNRAY 8	
CationBarium		CationBarium		CationBarium	0.1	
CationBoron		CationBoron	0.2	CationBoron	0.1	
CationCalcium		CationCalcium	0.06	CationCalcium	93	
CationIron		CationIron		CationIron	249	
CationMagnesium		CationMagnesium		CationMagnesium	49	
CationManganese		CationManganese		CationManganese	0.9	
CationPhosphorus		CationPhosphorus		CationPhosphorus	0.7	
CationPotassium		CationPotassium		CationPotassium		
CationStrontium		CationStrontium		CationStrontium	0.2	
CationSodium		CationSodium		CationSodium	12.14	
CationSilica	5000.55	CationSilica	= -	CationSilica	12.14	
CationZinc	0.79	CationZinc		CationZinc		
CationAluminum	0.77	CationAluminum	1	CationAluminum		
CationCopper		CationCopper		CationCopper		
CationLead		CationLead	2	CationLead		
CationLithium		CationLithium	2	CationLithium	╂────┤	
CationNickel		CationNickel		CationNickel	╂────┤	
CationCobalt		CationNicker		CationCobalt	╂────┤	
CationCobalt		CationCobalt		CationCobait	┼───┤	
CationSilicon		CationSilicon	10	CationChromium	┼───┤	
			10			
CationMolybdenum		CationMolybdenum	10	CationMolybdenum	0.4	
AnionChloride		AnionChloride		AnionChloride	84	
AnionCarbonate		AnionCarbonate		AnionCarbonate	0	
AnionBicarbonate		AnionBicarbonate	17	AnionBicarbonate	280	
AnionBromide		AnionBromide		AnionBromide		
AnionFluoride		AnionFluoride	10	AnionFluoride	0	
AnionHydroxyl		AnionHydroxyl	10	AnionHydroxyl	0	
AnionNitrate		AnionNitrate	0.00	AnionNitrate		
AnionPhosphate		AnionPhosphate		AnionPhosphate	100	
AnionSulfate		AnionSulfate		AnionSulfate	108	
phField		phField		phField	6.51	
phCalculated		phCalculated		phCalculated		
TempField		TempField	54.5	TempField	64	
TempLab		TempLab		TempLab		
OtherFieldAlkalinity		OtherFieldAlkalinity		OtherFieldAlkalinity		
OtherSpecificGravity		OtherSpecificGravity		OtherSpecificGravity	0	
OtherTDS		OtherTDS		OtherTDS	876.34	
OtherCaCO3	48	OtherCaCO3		OtherCaCO3	10/0.00	
OtherConductivity		OtherConductivity		OtherConductivity	1369.28	
DissolvedCO2		DissolvedCO2	120	DissolvedCO2	110	
DissolvedO2		DissolvedO2		DissolvedO2	0.50	
DissolvedH2S	0	DissolvedH2S	0	DissolvedH2S	0.52	
GasPressure		GasPressure		GasPressure	100	
GasCO2		GasCO2		GasCO2	0	
GasCO2PP		GasCO2PP		GasCO2PP	0	
GasH2S		GasH2S		GasH2S	0	
GasH2SPP		GasH2SPP		GasH2SPP	0	
PitzerCaCO3_70		PitzerCaCO3_70		PitzerCaCO3_70	-0.81	
PitzerBaSO4_70		PitzerBaSO4_70		PitzerBaSO4_70	0.33	
PitzerCaSO4_70		PitzerCaSO4_70		PitzerCaSO4_70	-1.54	
PitzerSrSO4_70		PitzerSrSO4_70		PitzerSrSO4_70	-2.54	
PitzerFeCO3_70		PitzerFeCO3_70		PitzerFeCO3_70		
PitzerCaCO3_220		PitzerCaCO3_220		PitzerCaCO3_220	-0.01	
PitzerBaSO4_220		PitzerBaSO4_220		PitzerBaSO4_220	-0.22	
PitzerCaSO4_220		PitzerCaSO4_220		PitzerCaSO4_220	-1.43	
PitzerSrSO4_220		PitzerSrSO4_220		PitzerSrSO4_220	-2.34	
PitzerFeCO3_220		PitzerFeCO3_220		PitzerFeCO3_220		

Gas Compatibility in the San Juan Basin

- The San Juan basin has productive siliciclastic reservoirs (Pictured Cliffs, Blanco Mesaverde, Basin Dakota, etc.) and a productive coalbed methane reservoir (Basin Fruitland Coal).

- These siliciclastic and coalbed methane reservoirs are commingled extensively throughout the basin in many different combinations with no observed damage from clay swelling due to differing formation waters or gas composition.

- The samples below all show offset gas analysis varibality by formation is low.

Well Name	API
STATE COM O 12	3004529748

FRO	COffset	M	/ Offset	DK OFFSET		
AssetCode	3004527513	AssetCode	3004508336	AssetCode 3004520255		
AssetName	FC STATE COM 5	AssetName	STATE COM O 11	AssetName	ROELOFS 2	
CO2	0.05		0.01	CO2	0.02	
N2	0.02	N2	0	N2	0	
C1	0.85	C1	0.82	C1	0.9	
C2	0.04	C2	0.08	C2	0.06	
C3	0.02	C3	0.05	C3	0.01	
ISOC4	0	ISOC4	0.01	ISOC4	0	
NC4	0	NC4	0.01	NC4	0	
ISOC5	0	ISOC5	0	ISOC5	0	
NC5	0	NC5	0	NC5	0	
NEOC5		NEOC5		NEOC5		
С6	0	C6	0.01	C6		
C6_PLUS		C6_PLUS		C6_PLUS	0	
С7	0	C7	0	C7		
С8	0	C8	0	C8		
С9	0	С9	0	С9		
C10		C10		C10		
AR		AR		AR		
СО		CO		CO		
H2		H2		H2		
02	0	02	0	02		
H20		H20		H20		
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	1.51	
C3GPM		C3GPM		C3GPM	0.36	
ISOC4GPM		ISOC4GPM		ISOC4GPM	0.11	
NC4GPM		NC4GPM		NC4GPM	0.08	
ISOC5GPM		ISOC5GPM		ISOC5GPM	0.06	
NC5GPM		NC5GPM		NC5GPM	0.03	
C6_PLUSGPM		C6_PLUSGPM		C6_PLUSGPM	0.12	

	Received 1	w (CD:	8/22/2024	1:16:17 PM
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 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 Road, Aztec, NM 87410

 Phone: (505) 334-6178 Fax: (505) 334-6170

 District IV

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

 Phone: (505) 476-3460 Fax: (505) 476-3462

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

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

	¹ Operator Name and Address Hilcorp Energy Company 382 Road 3100	² OGRID Number 372171
	382 Road 3100 Aztec, NM 87410	³ API Number 30-045-29748
^{4.} Property Code 319097	^{5.} Property Name State Com O	^{6.} Well No. 12

	⁷ Surface Location								
UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
Ι	16	029N	08W		1825	South	790	East	San Juan
	8. Proposed Bottom Hole Location								
UL - Lot Section Township Range Lot Idn Feet from N/S Line Feet From E/W Line County							County		

^{9.} Pool Information

Pool Name					
Basin Fruitland Coal					

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Pool Code 71629

Additional Well Information

^{11.} Work Type	^{11.} Work Type ^{12.} Well Type		^{13.} Cable/Rotary ^{14.} Lease		Lease Type	15. Ground Level Elevation
Recomplete	Commingle				State	6396' GR
^{16.} Multiple ^{17.} Proposed Depth		^{18.} Formation	^{19.} Contractor		^{20.} Spud Date	
Commingle	Commingle		Basin Fruitland Coal//Blanco MV/Basin DK			
Depth to Ground water		Distance from	nearest fresh water well		Distance to ne	earest surface water

We will be using a closed-loop system in lieu of lined pits

^{21.} Proposed Casing and Cement Program

Туре	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC				
8	Casing/Cement Program: Additional Comments									

^{22.} Proposed Blowout Prevention Program

Туре	Working Pressure	Test Pressure	Manufacturer

of my knowledge and belief.	tiven above is true and complete to the best	OIL CONSERVATION DIVISION			
19.15.14.9 (B) NMAC , if applicable Signature: Cherylene Westor	with 19.15.14.9 (A) NMAC 🗌 and/or e.	Approved By:			
Printed name: Cherylene Weston		Title:			
Title: Operations Regulatory Tech Sr.		Approved Date:	Expiration Date:		
E-mail Address: cweston@hilcorp.com					
Date: 6/19/2024	Phone: 713-289-2615	Conditions of Approval Attached			



HILCORP ENERGY COMPANY STATE COM O 12 FRUITLAND COAL RECOMPLETE SUNDRY API 3004529748

JOB PROCEDURES

	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 Mesaverde perforation (4,464') 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 @ 2,875', bottom perforation @ 3,055'.
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/Mesaverde/Dakota Producer.
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HILCORP ENERGY COMPANY STATE COM O 12 FRUITLAND COAL RECOMPLETE SUNDRY

All LVM Differences Description Differences Differences <thdifferences< th=""> <thdifferences< th=""> <th< th=""><th>Compare soft T Bereton (f) P 6,409.00 Most Recent Job Jac Callegory Expense Workover TD: 7,573.0 MD (ft:KB) 13.1 attraction (f) 46.6 Jasse Workover 335.0 759.8 2,264.1 KIRTLAND 2,576.1 FRUITLAND 2,576.1 FRUITLAND 3,383.9 </th><th>No 5 6 (4) No 5 6 (4) 13.00 Primary 300 Type TUBING REPAIR 10 (OJO ALAMO (final)) (KIRTLAND (final)) D COAL (FRUITLAND CC) 0 CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU</th><th>NV/DK COM Organs Sout Ote 4/30/2000 00:00 Secondary Jo Origin Origin ODAL (final)) FFS (final))</th><th>Pig Resse 5/10/200 h Type nal Hole [Vertic Vertical schem:</th><th>atic (actual)</th><th>NEW MEXICO PBT2 (All) 10 are 3 2 /9 10 are 2 /3 /8 /10 2 /3/8 /10 2 /3/8 /10 2 /3/8 /10 2 /3/8 /10 3 /2 /2 3 /2 /2 2 /3/8 /10 3 /2 /2 3 /2 3 /2 /2 3 /2 3 /2 3 /2 3 /2 3 /2 3 /</th><th>Vertical Total Degen AI (TVD) 300-14.00; 1.00; 3-1; 7; 2.00 / Band); 14.00-46.57; 32.57; ints; 46.57-66.17; 19.60; 3- '8in; 13.00-335.00; 322.00; 136.00; 1.00; 1-2; 9 5/8; G, 7in; 13.00-3,384.00; 45.00; 1.00; 2-2; 7; 6.46 </th></th<></thdifferences<></thdifferences<>	Compare soft T Bereton (f) P 6,409.00 Most Recent Job Jac Callegory Expense Workover TD: 7,573.0 MD (ft:KB) 13.1 attraction (f) 46.6 Jasse Workover 335.0 759.8 2,264.1 KIRTLAND 2,576.1 FRUITLAND 2,576.1 FRUITLAND 3,383.9	No 5 6 (4) No 5 6 (4) 13.00 Primary 300 Type TUBING REPAIR 10 (OJO ALAMO (final)) (KIRTLAND (final)) D COAL (FRUITLAND CC) 0 CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU	NV/DK COM Organs Sout Ote 4/30/2000 00:00 Secondary Jo Origin Origin ODAL (final)) FFS (final))	Pig Resse 5/10/200 h Type nal Hole [Vertic Vertical schem:	atic (actual)	NEW MEXICO PBT2 (All) 10 are 3 2 /9 10 are 2 /3 /8 /10 2 /3/8 /10 2 /3/8 /10 2 /3/8 /10 2 /3/8 /10 3 /2 /2 3 /2 /2 2 /3/8 /10 3 /2 /2 3 /2 3 /2 /2 3 /2 3 /2 3 /2 3 /2 3 /2 3 /	Vertical Total Degen AI (TVD) 300-14.00; 1.00; 3-1; 7; 2.00 / Band); 14.00-46.57; 32.57; ints; 46.57-66.17; 19.60; 3- '8in; 13.00-335.00; 322.00; 136.00; 1.00; 1-2; 9 5/8; G, 7in; 13.00-3,384.00; 45.00; 1.00; 2-2; 7; 6.46
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TD: 7,573.0 Original Hole [Vertical] MD (fX8) Vertical schematic (actual) 13.1 23/8in Tubing Warger; 13.00-14.00; 1.00; 3-1; 7; 2.0 46.6 23/8in Tubing Warger; 13.00-14.00; 1.00; 3-1; 7; 2.0 335.0 23/8in Tubing Pub Joints; 465.766.17; 1960; 3. 759.8 OIO ALAMO (OIO ALAMO (final)) 11.1 FRUITAND COAL (final)) 12.257.1 FRUITAND COAL (final)) 13.333.9 Shoe, 9.5/8in; 33.00-3385.00; 1.00; 2-2; 7; 6.46 2.576.1 FRUITAND COAL (final)) 1463.9 CUFFHOUSE (CUFFS (final)) 2.464.0 MENEREE (ALAND (100) COAL (final)) 1463.9 CUFFHOUSE (CUFFS (final)) 4.463.9 CUFFHOUSE (CUFFO COAL (final)) 5.164.0 7550.00 -510 (12, 25, 25, 26, 200 0, 000 (Perforated)) 4.464.402.2NE on 5/26/2000 0000 (Perforated)) 4479-5164.00 (2000-05-25 5.253.9 FOINT LOOKOUT (POINT LOOKOUT (final)) T316-7360.00 338.00; 2000-05-17 7.315.9 CUFFHOUSE (final)) T316-7360.00; 71.00 0.000 (Perforated)) 7.315.9 CUFFHOUSE (final)) T316-7360.00; 71.77.000 0.000 0.000 (Perforated)) 7.315.9 CUFFHOUSE (final)) T316-7360.00; 70.00; 0.000 (Perfora	FD: 7,573.0 MD (ftKB) 13.1 13.1 14.11.11.11.11.11.11.11.11.11.11.11.11.1	10 (OJO ALAMO (final)) (KIRTLAND (final)) D COAL (FRUITLAND CC) CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU	Origin OAL (final)) ———————————————————————————————————	nal Hole [Vertic Vertical schem:	atic (actual)	 7in, Tubing Hanger; 13 2 3/8in, Tubing (Yellow 3-2; 2 3/6; 2.00 2 3/8in, Tubing Pup Jo 3; 2 3/8; 2.00 SURFACE CASING, 9 5/ 1-1; 9 5/8; 8.92 Shoe, 9 5/8in; 335.00-3 8:92 NITERMEDIATE CASIN 3;371.00; 2-1; 7; 646 Shoe, 7in; 3;384.00-3;3i 2 3/8in, Tubing (Yellow 6,651.00; 3-4; 2 3/8; 2.00 PRODUCTION CASING 7,553.00; 3-1; 4 1/2; 4.0 4,464.4822ft/8 on 5/26 4,464.00-4,822.00; 2000 	3.00-14.00; 1.00; 3-1; 7; 2.00 / Band); 14.00-46.57; 32.57 ints; 46.57-66.17; 19.60; 3- '8in; 13.00-335.00; 322.00; 136.00; 1.00; 1-2; 9 5/8; G, 7in; 13.00-3,384.00; BS.00; 1.00; 2-2; 7; 6.46 / Band]; 66.17-6,717.17; 0 ; 4 1/2in; 13.00-7,566.00; 5 ; 2000 00:00 (Perforated); ; 2000 00:00 (Perforated);
Drightal Finde (Vertical) Vertical schematic (actual) 13.1 Vertical schematic (actual) 14.1 Vertical schematic (actual) 14.2 Vertical schematic (actual) 14.2 Vertical schematic (actual) 14.2<	MD (ftKB) 13.1 46.6 335.0 759.8 OJO ALAM 2,264.1 KIRTLAND 2,576.1 FRUITLAND 2,576.1 FRUITLAND 4,663.9 4,463.9 4,463.9 4,463.9 5,164.0 4,821.9 5,164.0 5,253.9 5,600.1 MANCOS (6,717.2 7,315.9 7,351.4	(KIRTLAND (final)) D COAL (FRUITLAND CO O CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU	DAL (final))	Vertical schem.	atic (actual)	2 3/8in, Tubing (Yellow 3-2; 2 3/8i, 7.00 2 3/8in, Tubing Pup Jo 3; 2 3/8; 2.00 SURFACE CASING, 9 5y 1-1; 9 5/8; 8.92 Shoe, 9 5/8in; 335.00-3 8.92 INTERMEDIATE CASIN 3,371.00; 2-1; 7; 6.46 Shoe, 7in; 3,844.00-3,31 2 3/8in, Tubing (Yellow 6,651.00; 3-4; 2 3/8; 2.00 PRODUCTION CASING 7,553.00; 3-1; 4 1/2; 4.0 4464.4822tKB on 5/26 4,464.00-4,822.00; 2000	 V Band); 14.00-46.57; 32.57 ints; 46.57-66.17; 19.60; 3- '8'in; 13.00-335.00; 322.00; i36.00; 1.00; 1-2; 9 5/8; G, 7in; 13.00-3,384.00; Bond); 66.17-6,717.17; 0 ,4 1/2in; 13.00-7,566.00; 5/2000 00:00 (Perforated);
13.1 71, Tubling Hanger; 13.00-14.00; 1.00; 3-1; 7; 2.0 46.6 2, 3/81, Tubling (Pellow Band); 14.00-46.57; 32.57 335.0 335.0 335.0 Sine, Type (Pellow Band); 14.00-46.57; 32.57 335.0 Sine,	13.1 Image: Constraint of the second se	(KIRTLAND (final)) D COAL (FRUITLAND CO O CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU	FFS (final))			2 3/8in, Tubing (Yellow 3-2; 2 3/8i, 7.00 2 3/8in, Tubing Pup Jo 3; 2 3/8; 2.00 SURFACE CASING, 9 5y 1-1; 9 5/8; 8.92 Shoe, 9 5/8in; 335.00-3 8.92 INTERMEDIATE CASIN 3,371.00; 2-1; 7; 6.46 Shoe, 7in; 3,844.00-3,31 2 3/8in, Tubing (Yellow 6,651.00; 3-4; 2 3/8; 2.00 PRODUCTION CASING 7,553.00; 3-1; 4 1/2; 4.0 4464.4822tKB on 5/26 4,464.00-4,822.00; 2000	 V Band); 14.00-46.57; 32.57 ints; 46.57-66.17; 19.60; 3- '8'in; 13.00-335.00; 322.00; i36.00; 1.00; 1-2; 9 5/8; G, 7in; 13.00-3,384.00; Bond); 66.17-6,717.17; 0 ,4 1/2in; 13.00-7,566.00; 5/2000 00:00 (Perforated);
46.5 2.3/21, 22/21, 200 335.0 2.3/81, TUDING PUD Joints; 4657-6617; 19.60; 3. 335.0 2.3/81, 200 759.8 OLO ALAMO (OLO ALAMO (final)) KIRTLAND (INTLAND (final)) Since 7(in 33600-3385.00; 322.00; 1.1: 9.5/81; 8.92 2264.1 KIRTLAND (INTLAND (final)) PICTURED CLIFFS (PICTURED CLIFFS (final)) Since 7(in 33600-3385.00; 100; 2.2; 7: 6.46 2371.00; 2.1; 7: 6.46 2.3/81, TUDING (VELOW Band); 66.17-6, 717.17; 75.6600; 75.300; 3.114 3383.9 PICTURED CLIFFS (PICTURED CLIFFS (final)) Since 7(in 33600-3385.00; 100; 2.2; 7: 6.46 23/81, TUDING (VELOW Band); 66.17-6, 717.17; 75.6600; 75.300; 3.114 7.33240, 2.378, 2.00 4463.9 CLIFFHOUSE (Inal)) Since 7(in 33600-3385.00; 100; 2.2; 7: 6.46 4464.0 4.464.00; 4.322.00; 2000-05.26 Since 7(in 33600-3085.00; 0.00	46.6 335.0 759.8 OJO ALAM 2,264.1 KIRTLAND 2,576.1 FRUITLAND 2,576.1 FRUITLAND 2,576.1 PICTURED 3,88.9 4,463.9 4,463.9 CLIFFHOUS 4,664.0 MENEFEE (4,821.9 5,164.0 5,253.9 5,600.1 MANCOS (GALLUP (S GALLUP (S GALLUP (S CLIFFIC) (S CLIFFHOUS 5,164.0 POINT LOC 5,253.9 5,600.1 MANCOS (GALLUP (S CLIFFIC) (S CLIFFIC) (S CLIFFHOUS 5,164.0 POINT LOC 5,253.9 5,600.1 MANCOS (GALLUP (S CLIFFIC) (S CLIFIC) (S CLIFFIC) (S	(KIRTLAND (final)) D COAL (FRUITLAND CO O CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU	FFS (final))		888 888 888 888 888 888 888	2 3/8in, Tubing (Yellow 3-2; 2 3/8i, 7.00 2 3/8in, Tubing Pup Jo 3; 2 3/8; 2.00 SURFACE CASING, 9 5y 1-1; 9 5/8; 8.92 Shoe, 9 5/8in; 335.00-3 8.92 INTERMEDIATE CASIN 3,371.00; 2-1; 7; 6.46 Shoe, 7in; 3,844.00-3,31 2 3/8in, Tubing (Yellow 6,651.00; 3-4; 2 3/8; 2.00 PRODUCTION CASING 7,553.00; 3-1; 4 1/2; 4.0 4464.4822tKB on 5/26 4,464.00-4,822.00; 2000	 V Band); 14.00-46.57; 32.57 ints; 46.57-66.17; 19.60; 3- '8'in; 13.00-335.00; 322.00; i36.00; 1.00; 1-2; 9 5/8; G, 7in; 13.00-3,384.00; Bond); 66.17-6,717.17; 0 ,4 1/2in; 13.00-7,566.00; 5/2000 00:00 (Perforated);
335.0 335.0 793.8 OIO ALAMO (DIO ALAMO (finali)) 2264.1 KIRTLAND (INTLAND (finali)) 2264.1 KIRTLAND (INTLAND COAL (finali)) 333.9 PICTURED CLIFFS (PICTURED CLIFFS (finali)) 333.9 PICTURED CLIFFS (PICTURED CLIFFS (finali)) 333.9 PICTURED CLIFFS (PICTURED CLIFFS (finali)) 4463.9 CLIFFHOUSE (finali)) 4,654.0 PICTURED (LIFFS (FICTURED CLIFFS (finali)) 5,164.0 POINT LOOKOUT (POINT LOOKOUT (finali)) 5,164.0 POINT LOOKOUT (POINT LOOKOUT (finali)) 5,253.9 S254-53980tKB on 5/23/2000 0000 (Perforated): 4,717.2 GAULUP (finali)) 5,560.1 MANCOS (MANCOS (finali)) 5,253.9 S254-53980tKB on 5/723/2000 0000 (Perforated): 5,253.9 S254-53980tKB on 5/723/2000 0000 (Perforated): 7,315.9 CAULUP (finali)) S254-53980tKB on 5/723/2000 0000 (Perforated): 7,315.9 S254-53980tKB on 5/723/2000 0000 (Perforated): 7,315.9 S254-53980tKB on 5/723/2000 0000 (Perforated): 7,315.9 S254-53980tKB on 5/723/80.7384.15; 1.10; 6,717.2 S280, 738.12; 7.383.25; 7,315.9 S236, 7384.15; 7.38	759.8 OJO ALAM 2,264.1 KIRTLAND 2,576.1 FRUITLAND 910 PICTURED 3,883.9 4,463.9 4,463.9 CLIFFHOUS 4,664.0 MENEFEE (4,821.9 5,164.0 5,164.0 POINT LOC 5,253.9 S600.1 MANCOS (GALLUP (G 6,717.2 DAKOTA (E 7,351.4	(KIRTLAND (final)) D COAL (FRUITLAND CO O CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU	FFS (final))		888 888 888 888 888 888 888	 3; 2 3/8; 2.00 SURFACE CASING, 9 5/ 1-1; 9 5/8; 8.92 Shoe, 9 5/8in; 335.00-3 8:92 INTERMEDIATE CASIN 3,371.00; 2-1; 7; 646 Shoe, 7in; 3,384.00-3,3i 2 3/8in, Tubing (Yellow 6,651.00; 3-4; 2 3/8; 2.00 PRODUCTION CASING 7,553.00; 3-1; 4 1/2; 4.0 4464.4822ft/B on 5/26 4,464.00-4,822.00; 2000 	 (8in; 13.00-335.00; 322.00; (36.00; 1.00; 1-2; 9 5/8; G, 7in; 13.00-3,384.00; (85.00; 1.00; 2-2; 7; 6.46 (85.00; 1.00; 2-2; 7; 6.46 (9) (9) (10)
759.8 OIO ALAMO (DIO ALAMO (Inali)) Shoe, 9 5/8(in 335.00-336.00; 1.00; 1-2; 9 5/8; 2264.1 KIRTLAND (KIRTLAND (Inali)) Shoe, 717; 3384.00-3385.00; 1.00; 1-2; 9 5/8; 2376.1 FRUITLAND COAL (fRUITLAND COAL (finali)) Shoe, 717; 3384.00-3385.00; 1.00; 2-2; 7; 646 2376.1 FRUITLAND COAL (FRUITLAND COAL (finali)) Shoe, 717; 3384.00-3385.00; 1.00; 2-2; 7; 646 2383.9 CLIFFHOUSE (CLIFFHOUSE (finali)) Shoe, 717; 3384.00-3385.00; 1.00; 2-2; 7; 646 4463.9 CLIFFHOUSE (CLIFFHOUSE (finali)) Shoe, 717; 3384.00-3385.00; 1.00; 2-2; 7; 646 4664.0 A463.9 CLIFFHOUSE (CLIFFHOUSE (finali)) A478-5164MXB on 5/25/2000 00000 (Perforated); 5,164.0 POINT LOOKOUT (finali)) State 3386HXB on 5/25/2000 00000 (Perforated); 5,164.0 POINT LOOKOUT (finali)) State 3386HXB on 5/25/2000 00000 (Perforated); 5,164.0 POINT LOOKOUT (finali)) State 3386HXB on 5/17/2000 00000 (Perforated); 5,164.0 POINT LOOKOUT (finali)) State 3386HXB on 5/17/2000 00000 (Perforated); 7,315.9 State 3386HXB on 5/17/2000 00000 (Perforated); 7316.00-7,360.00; 200-05-17 7,315.9 State 3386HXB on 5/17/2000 00000 (Perforated); 7316.00-7,360.00; 0.3537.33.15; 2-7,383.05; 7,331.4 State 3386HXB on 5/17/2000 00	-OJO ALAM 2,264.1 -KIRTLAND 2,576.1 -FRUITLAND 9,383.9 - 4,663.9 - 4,664.0 - 4,664.0 - 5,164.0 - 5,164.0 - 5,600.1 - 6,717.2 - 7,315.9 - 7,351.4 -	(KIRTLAND (final)) D COAL (FRUITLAND CO O CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU	FFS (final))		888 888 888 888 888 888 888	Shoe, 9 5/8in; 335.00-3 8.92 INTERMEDIATE CASIN 3,371.00; 2-1; 7; 646 Shoe, 7in; 3,384.00-3,31 2 3/8in, Tubing (Yellow 6,651.00; 3-4; 2 3/8; 2.0 PRODUCTION CASING 7,553.00; 3-1; 4 1/2; 4.0 4464.4822tRK 80 n5/26 4,464.00-4,822.00; 2000	G, 7in; 13.00-3,384.00; 85.00; 1.00; 2-2; 7; 6.46 / Band); 66.17-6,717.17; 0 , 4 1/2in; 13.00-7,566.00; 5 /2000 00:00 (Perforated);
2,264.1 KIRTLAND (KIRTLAND (KIRTLAND (KIRTLAND COAL (FRUITLAND COAL (FRUITLAND COAL (FRUITLAND COAL (FRUITLAND COAL (final))) 3,310,217,7646 2,576.1 FRUITLAND COAL (FRUITLAND COAL (final)) 5,566,717,3384.00-3,385.00,1.00,2-2;7,646 2,576.1 FRUITLAND (KIRTLAND (KIRTLAND COAL (final)) 5,566,717,3384.00-3,385.00,1.00,2-2;7,646 2,383.9 Shoe, 717,3384.00-3,385.00,1.00,2-2;7,646 2,378,100,2-1;7,646 4,663.9 CLIFFHOUSE (CLIFFHOUSE (final)) 4464.4822ftk3 on 5/25/2000 00:00 (Perforated); 4,664.0 MENEFEE (final)) 4464.4822ftk3 on 5/25/2000 00:00 (Perforated); 4,664.0 MENEFEE (final)) 4464.4822ftk3 on 5/25/2000 00:00 (Perforated); 5,164.0 POINT LOOKOUT (POINT LOOKOUT (final)) 5254-5398ftk3 on 5/23/2000 00:00 (Perforated); 5,164.0 POINT LOOKOUT (final)) 5254-5398ftk3 on 5/17/2000 00:00 (Perforated); 5,172.0 Jain, Marker Doint, 7,3494.2; 2,351.52; 2,10; 3.6 53.63,20; 2,200 7,315.9 Z,376,176 Z,376,176 Z,376,176 7,315.9 Z,376,176 Z,376,176 Z,376,176 7,315.9 Z,376,176 Z,376,176 Z,376,176 7,315.9 Z,376,176 Z,376,176 <t< td=""><td>2,264.1 KIRTLAND 2,576.1 FRUITLAND 3,383.9 4,463.9 4,463.9 4,664.0 MENEFEE (4,821.9 5,164.0 5,253.9 5,600.1 MANCOS (6,717.2 7,315.9 7,351.4</td><td>(KIRTLAND (final)) D COAL (FRUITLAND CO O CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU</td><td>FFS (final))</td><td></td><td>888 888 888 888 888 888 888</td><td>3,371.00; 2-1; 7; 646 Shoe, 7in; 3,384.00-3,31 2 3/8in, Tubing (Yellow 6,651.00; 3-4; 2 3/8; 20 PRODUCTION CASING 7,553.00; 3-1; 4 1/2; 40 4464-4822tRK 80 ro 4/2 4,464.00-4,822.00; 2000</td><td>85.00; 1.00; 2-2; 7; 6.46 / Band); 66.17-6,717.17; 0 , 4 1/2in; 13.00-7,566.00; 5 /2000 00:00 (Perforated);</td></t<>	2,264.1 KIRTLAND 2,576.1 FRUITLAND 3,383.9 4,463.9 4,463.9 4,664.0 MENEFEE (4,821.9 5,164.0 5,253.9 5,600.1 MANCOS (6,717.2 7,315.9 7,351.4	(KIRTLAND (final)) D COAL (FRUITLAND CO O CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU	FFS (final))		888 888 888 888 888 888 888	3,371.00; 2-1; 7; 646 Shoe, 7in; 3,384.00-3,31 2 3/8in, Tubing (Yellow 6,651.00; 3-4; 2 3/8; 20 PRODUCTION CASING 7,553.00; 3-1; 4 1/2; 40 4464-4822tRK 80 ro 4/2 4,464.00-4,822.00; 2000	85.00; 1.00; 2-2; 7; 6.46 / Band); 66.17-6,717.17; 0 , 4 1/2in; 13.00-7,566.00; 5 /2000 00:00 (Perforated);
PICTURED CLIFFS (PICTURED CLIFFS (final)) 2 3/8in, Tubing (Yellow Band); 6617-6717.17; 6,65100; 3-4; 2 3/8; 2.00 4,663.9	PICTURED 3,383.9 4,664.0 4,664.0 4,664.0 4,664.0 4,821.9 5,164.0 5,164.0 5,164.0 5,600.1 MANCOS (G6,717.2 DAKOTA (C 7,315.9 7,351.4) CLIFFS (PICTURED CLIF SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU	FFS (final))		888 888 888 888 888 888 888	2 3/8in, Tubing (Yellow) 6,651.00; 3-4; 2 3/8; 2.0 PRODUCTION CASING 7,553.00; 3-1; 4 1/2; 4.0 4464-4822ftK8 on 5/2 4,464.00-4,822.00; 2000	/ Band); 66.17-6,717.17; 0 i, 4 1/2in; 13.00-7,566.00; 5 5/2000 00:00 (Perforated);
3,383.9 651.00; 3-4; 2.3%; 2.00 4,463.9 CLIFFHOUSE (CLIFFHOUSE (final)) 4,664.0 4464.4822tKB on 5/26/2000 0000 (Perforated); 4,464.00,4822.00; 2000-05-26 4,821.9 4464.402.4822tKB on 5/25/2000 0000 (Perforated); 4,464.00,4822.00; 2000-05-26 5,164.0 4878-5164tKB on 5/25/2000 0000 (Perforated); 4,878.00-5,164.00; 2000-05-25 POINT LOOKOUT (POINT LOOKOUT (final)) 5254-5398tKB on 5/23/2000 0000 (Perforated); 5,254.00-5,398.00; 2000-05-23 5,600.1 MANCOS (MANCOS (final)) 5,254.00-5,398.00; 2000-05-23 5254-5398tKB on 5/17/2000 00:00 (Perforated); 7,315.9 6,717.2 DAKOTA (DAKOTA (final)) 7,351.4 7,351.4 7,351.4 7,351.4 7,383.2 2,3/8in, Tubing (Blue Band); 6,717.17-7,349.42; 7,316.07,360.00; 2000-05-17 7,384.8 7,384.8 7,384.8 2,3/8in, Tubing (Blue Band); 7,351.52; 2.10; 3.5; 2.3/8; 2.00 7,384.8 7,384.8 7,452.1 7,422.7452tKB on 5/17/2000 00:00 (Perforated); 7,422.07,452.00; 2000-05-17 7,450.7300tKB on 5/17/2000 00:00 (Perforated); 7,420.07,452.00; 2000-05-17 7,452.1 7,422.7452tKB on 5/17/2000 00:00 (Perforated); 7,420.07,452.00; 2000-05-17 7,555.9 5hoe, 4 1/2hr; 7,566.00, 7,567.00; 1.00; 3-2; 4 1/2; <td>3,383.9 4,463.9 4,664.0 4,821.9 5,164.0 5,253.9 5,600.1 MANCOS (6,717.2 7,315.9 7,351.4</td> <td>SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU</td> <td></td> <td></td> <td>888 888 888 888 888 888 888</td> <td>6,651.00; 3:4; 2 3/8; 2.0 PRODUCTION CASING 7,553.00; 3:1; 4 1/2; 4.0 4464.4822ftKB on 5/26 4,464.00-4,822.00; 2000</td> <td>0 , 4 1/2in; 13.00-7,566.00; 5 5/2000 00:00 (Perforated);</td>	3,383.9 4,463.9 4,664.0 4,821.9 5,164.0 5,253.9 5,600.1 MANCOS (6,717.2 7,315.9 7,351.4	SE (CLIFFHOUSE (final)) (MENEFEE (final)) OKOUT (POINT LOOKOU			888 888 888 888 888 888 888	6,651.00; 3:4; 2 3/8; 2.0 PRODUCTION CASING 7,553.00; 3:1; 4 1/2; 4.0 4464.4822ftKB on 5/26 4,464.00-4,822.00; 2000	0 , 4 1/2in; 13.00-7,566.00; 5 5/2000 00:00 (Perforated);
4,463.3 CLIFFHOUSE (CLIFFHOUSE (final)) 4,664.0	4,664.0 MENEFEE (4,821.9 MENEFEE (5,164.0 POINT LOC 5,253.9 S.600.1 MANCOS (GALLUP (G 6,717.2 DAKOTA (C 7,315.9 7,351.4	(MENEFEE (final))			888 888 888 888 888 888 888	4464-4822ftKB on 5/26 4,464.00-4,822.00; 2000	5/2000 00:00 (Perforated);
4,664.0	4,664.0 4,821.9 5,164.0 5,253.9 5,600.1 MANCOS (6,717.2 0,717.2 0,717.5 0,717.2 0,7351.4	(MENEFEE (final))			888 888 888		J-UJ-20
4,821.9 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,164.0 5,253.9 5,00.1 MANCOS (MANCOS (final)) 6,717.2 DAKOTA (DAKOTA (final)) 7,315.9 7,315.9 7,351.4 7,351.4 7,351.4 7,383.2 7,383.2 7,383.2 7,364.8 7,362.0 7,363.0 7,363.0 7,363.0 7,383.2 7,383.2 7,384.8 7,384.8 7,384.8 7,385.00 7,452.1 7,452.9 7,460.07.530.00; 2000.05.17 7,460.07.530.00; 2000.05.17 7,460.07.530.00; 2000.05.17 7,460.07.530.00; 2000.00; 17 7,460.07.550	4,821.9 5,164.0 5,253.9 5,600.1 MANCOS (6,717.2 7,315.9 7,351.4	OKOUT (POINT LOOKOU	JT (final))			4970 516 48//8 5/25	
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7,573.2	7,573.2 www.peloton.com			Page 1/1			Report Printed: 6/13/20

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HILCORP ENERGY COMPANY STATE COM O 12 FRUITLAND COAL RECOMPLETE SUNDRY

API / UWI	STATE	E COM O #12 Surface Legal Location 016-029N-008W-I	Field Name	License No.		State Province	Well Configuration Type
3004529748 Driginal KB/RT Eleva	ation (ft)	RKB to GL (ft)	MV/DK COM Original Spud Date	Rig Release D	Date	NEW MEXICO PBTD (All)	Total Depth All (TVD)
6,409.00 Most Recent J	lob	13.00	4/30/2000 00:00	5/10/2000	00:00		
Job Category Expense Work		Primary Job Type TUBING REPAIR	Secondary Job	Туре	Actual Start D 2/2/2023		End Date 2/9/2023
TD: 7,573.0			Origin	al Hole [Vertica		•	
MD (ftKB)			-	/ertical schema			
- 13.1 -		- 11. 11. 11. 11. and a barrent attribution who are been attributed and	Inda Mark Market and a Mark Market Provide State	and a state of the		Tubing Hanger	; 13.00-14.00; 1.00; 3-1; 7; 2.0
46.6 335.0 759.8	COA	POSED FRUITL AL PERFORATIC 5' - 3,055'	232.9			2 3/8in, Tubing Yel 3-2; 2 3/8; 2.00 2 3/8in, Tubing Pup 3; 2 3/8; 2.00 SURFACE CASING, 1 1-1; 9 5/8; 8.92 Shoe, 9 5/8in; 335.0	Iow Band); 14.00-46.57; 32.57 Joints; 46.57-66.17; 19.60; 3- 9 5/8in; 13.00-335.00; 322.00; 10-336.00; 1.00; 1-2; 9 5/8;
		MO (OJO ALAMO (final))				8.92	SING, 7in; 13.00-3,384.00;
2,264.1	-KIRTLAN	D (KIRTLAND (final)) —				3,371.00; 2-1; 7; 6.40	
2,576.1		ND COAL (FRUITLAND C				Shoe, 7in; 3,384.00-	3,385.00; 1.00; 2-2; 7; 6.46 —
3.383.9	-PICTURE	D CLIFFS (PICTURED CLI	FFS (final))			lr.	_
			8	4			ING, 4 1/2in; 13.00-7,566.00;
4,463.9	CUEENO	USE (CLIFFHOUSE (final))			825	7,553.00; 3-1; 4 1/2; 4464-4822ftKB on 5	5/26/2000 00:00 (Perforated);
4,664.0		USE (CENTROUSE (IIIIai))			800	4,464.00-4,822.00; 2	000-05-26
	-MENEFE	E (MENEFEE (final))		300	200		
4,821.9						4878-5164ftKB on 5	5/25/2000 00:00 (Perforated);
5,164.0					•	4,878.00-5,164.00; 2	
5,253.9	-POINT LC	DOKOUT (POINT LOOKOL				5254-5398ftKB on 5 5,254.00-5,398.00; 2	5/23/2000 00:00 (Perforated); 2000-05-23
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	- DAKOTA	(DAKOTA (final))				7,316.00-7,360.00; 2	
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7,351.4					200	7	
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7,573.2							
www.peloto	n.com			Page 1/1			Report Printed: 6/13/20

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

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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

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Form C-102 August 1, 2011 Permit 367272

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name					
30-045-29748	71629	BASIN FRUITLAND COAL (GAS)					
4. Property Code	5. Property Name	6. Well No.					
319097	STATE COM O	012					
7. OGRID No. 8. Operator Name 9. Elevation 372171 HILCORP ENERGY COMPANY 6396							
	10. Surface Location						

Γ	UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
	I	16	29N	W80		1825	S	790	E	SAN JUAN

11. Bottom Hole Location If Different From Surface UL - Lot Township Lot Idn Feet From N/S Line Feet From E/W Line Section Range County 14. Consolidation Code 12. Dedicated Acres 13. Joint or Infill 15. Order No. 320.00 E/2

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

OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. E-Signed By: Cherylene Weston
Title: Operations/Regulatory Tech-Sr. Date: 6/13/2024
SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
Surveyed By: Neale C. Edwards
Date of Survey: 11/14/1998
Certificate Number: 6857

State of New MexicoSubmit ElecEnergy, Minerals and Natural Resources DepartmentVia E-permi							nit Electronically E-permitting	
Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505								
	N	ATURAL G	AS MANAC	GEMENT PI	LAN			
This Natural Gas Mana	agement Plan mi	ist be submitted v	vith each Applicati	on for Permit to I	Drill (Al	PD) for a	new oi	recompleted well.
			<u>1 – Plan De</u> Effective May 25,					
I. Operator: Hilcorp	Energy Compan	У	OGRID:	372171		Date:	06 /	19 /2024
II. Type: 🛛 Original	□ Amendment	due to □ 19.15.22	7.9.D(6)(a) NMAC	C□ 19.15.27.9.D((6)(b) N	MAC 🗆 (Other.	
If Other, please describ	be:							
III. Well(s): Provide t be recompleted from a					wells pr	oposed to	be dri	lled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D				roduced Water
State Com O 12	3004529748	I-16-29N-08W	1825' FSL & 790' FE	0 bbl/d	145	mcf/d		3 bbl/d
IV. Central Delivery	Point Name:	Chaco-Bla	nco Processing Pla	nt		[See 1	9.15.2	7.9(D)(1) NMAC]
V. Anticipated Sched proposed to be recomp					vell or se	et of wells	propo	esed to be drilled or
Well Name	API	Spud Date	TD Reached Date	Completion Commencement			Initial Flow First Pr Back Date D	
State Com O 12	3004529748							<u>2024</u>
VI. Separation Equip VII. Operational Pra Subsection A through VIII. Best Manageme during active and plan	ctices: ⊠ Attac F of 19.15.27.8] ent Practices: ₽	h a complete deso NMAC.	cription of the acti	ons Operator wil	l take to	o comply	with t	he requirements of

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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. \Box 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 \Box will \Box 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 \Box does \Box 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: \Box 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.

<u>Section 3 - Certifications</u> <u>Effective May 25, 2021</u>

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

 \square 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

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

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

Section 4 - Notices

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

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

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

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

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

Signature:	Cherylene Weston
Printed Name:	Cherylene Weston
Title:	Operations/Regulatory Tech-Sr.
E-mail Address	^e cweston@hilcorp.com
Date:	6/19/2024
Phone:	713-289-2615
	OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:	
Title:	
Approval Date:	
Conditions of A	pproval:

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 recomplete project. HEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the recomplete 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 recomplete operations.

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

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

VIII. Best Management Practices:

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



June 20, 2024

Mailed Certified with Electronic Return Receipt

To: All Interest Owners

RE: Application to Downhole Commingle Production Well: State Com O 012 API: 30-045-29748 Section 16, Township 29 North, Range 08 West San Juan County, New Mexico

Ladies and Gentlemen:

Hilcorp Energy Company ("Hilcorp"), as Operator of the subject well, has filed application with the New Mexico Oil Conservation Division for approval to downhole trimmingle production from the **Basin Fruitland Coal**, a formation Hilcorp soon intends to perforate, with existing production from the **Basin Dakota** and **Blanco Mesaverde** formations. This letter and the application copy enclosed serve to provide you, an owner in one or more of the aforementioned formations, with written notice as prescribed by Subsection C of 19.15.12.11 New Mexico Administrative Code.

No action is required by you <u>unless</u> you wish to pursue a formal protest (see details italicized below).

If you no longer own an interest in this well or need to make changes to your address, etc., please email <u>ownerrelations@hilcorp.com</u>. For those without email access, please call (713) 209-2457.

Hilcorp is eager to explore this potential opportunity to enhance production. Thank you for your support.

Sincerely,

Carson Parker Rice Landman 713.757.7108 carice@hilcorp.com

CPR:dpk Enclosures

Protesting:

Protests must be in writing and received <u>within twenty (20) days from the date of this letter</u>. In your response, please include your contact information, details referenced herein and the specific concerns and/or reasoning behind your decision. You are encouraged to email me an electronic copy and, subsequently, mailing (overnight) a hard copy to my attention at the address in the footer below. Upon receipt, I will follow up by phone to discuss your concerns. Should we be unable to resolve them, a formal protest will be set for hearing with the New Mexico Oil & Conservation Division in Santa Fe, NM, wherein your attendance and testimony will be required.

District I 1625 N. French Drive, Hobbs, NM 88240 District II 811 S. First St. Artesia, NM 88210

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

Road Aztec NM 87410

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 <u>X</u>Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company Received by OCD: 38/22/2024 1:16:17 PM

District III

District IV

382 Road 3100, Aztec, NM 87410

Address State Com O 12 I-16-T29N-R08W San Juan County, NM Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 37217 Property Code 319097 _ API No. <u>30-045-29748</u> __ Lease Type: ____Federal _X_State ____Fee

DATA ELEMENT	UPPER ZONE		INTE	CRMEDIATE ZO	NE	I	LOWER ZONE	
Pool Name	Fruitland Coal		Bla	nco Mesaverde		В	asin Dakota	
Pool Code	7162			7231			7159	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2,875' - 3,055'			5,254' - 5,398'			7,530' - 7,316'	
Method of Production (Flowing or Artificial Lift)	Artificial			Artificial			Artificial	
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)	88 psi			127 psi			153 psi	
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1261 BTU			1113 BTU			1127 BTU	
Producing, Shut-In or New Zone	New			Producing			Producin	
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:		Date: Rates:	4/1/2024 Oil - 6 bbl Gas - 2,269 mcf		Date: Rates:	4/1/2024 Oil - 4 bbl Gas - 1,578 mcf	
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas %	%	Oil	Gas %	%	Oil	Gas %	%

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?	Yes Yes_X	
Are all produced fluids from all commingled zones compatible with each other?	Yes_X	No
Will commingling decrease the value of production?	Yes	No_X
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application?	Yes_X	No
NMOCD Reference Case No. applicable to this well:		

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____6/19/2024

TYPE OR PRINT NAME_ Cherylene Weston _TELEPHONE NO. (___713___) 289-

cweston@hilcorp.co E-MAIL ADDRESS

Page 28 of 50

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

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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

Page 29 of 50

Form C-102 August 1, 2011 Permit 367272

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name			
30-045-29748	71629	BASIN FRUITLAND COAL (GAS)			
4. Property Code	5. Property Name	6. Well No.			
319097	STATE COM O	012			
7. OGRID No.	8. Operator Name	9. Elevation			
372171	HILCORP ENERGY COMPANY	6396			
10. Surface Location					

_					1010						
	UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County	
	I	16	29N	08W		1825	S	790	E	SAN	JUAN

11. Bottom Hole Location If Different From Surface UL - Lot Lot Idn Feet From N/S Line Feet From E/W Line Section Township Range County 14. Consolidation Code 12. Dedicated Acres 13. Joint or Infill 15. Order No. 320.00 E/2

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

OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
E-Signed By: Cherylene Weston Title: Operations/Regulatory Tech-Sr. Date: 6/13/2024
SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
Surveyed By: Neale C. Edwards
Date of Survey: 11/14/1998
Certificate Number: 6857

District I PO Box 1980, Hobbs, NM 88241-1980 District II 811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

Form C-102 Revised October 18, 1994 Instruction on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

			-			ICICL. IGL DLD	ICATION I	LAI			
1	API Numb	er		² Pool Co		Pool Name					
30-045-297	48		7231	9/71599) E	BLANCO MESAVE	ERDE / BASIN		4		
⁴ Property	Code					erty Name				^o Well Number	
003275		STATE C	OM O						12		
⁷ OGRID	No.				* Oper	ator Name				⁹ Elevation	
005073		CONOCO), INC.		-						
					¹⁰ Surfa	ce Location					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West	line	County	
1	16	29N	8W		1825	SOUTH	790	EAST		SAN JUAN	
			¹¹ B	ottom Ho	ole Location	n If Different Fro	m Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West	line	County	
12 Dedicated Acr		or Infill 14 C	onsolidatio	on Code 15O	rder No.						
80400 E P											

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

16	MAY 2000 RECEIVED OILCON. DAV DIST. 3	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
		 DEBORAH MARBERRY
	· · · · · · · · · · · · · · · · · · ·	Date of Survey Signature and Seal of Professional Surveyer Certificate Number

Page 30 of 50

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Certified Number	Sender	Recipient	Date Mailed	Delivery Status
92148969009997901837096089	Dani Kuzma	, SILVERADO OIL and GAS LLP, , TULSA, OK, 74152-0308 Code: STATE COM O 12 DHC NOTICE	6/20/2024	Signature Pending
92148969009997901837096096	Dani Kuzma	, PIONEER NATURAL RES USA INC, KATHY NAVARRETE, MIDLAND, TX, 79702 Code: STATE COM O 12 DHC NOTICE	6/20/2024	Signature Pending
92148969009997901837096102	Dani Kuzma	, JESSICA PECANTY USEY, , THIBODAUX, LA, 70301 Code: STATE COM O 12 DHC NOTICE	6/20/2024	Signature Pending
92148969009997901837096119	Dani Kuzma	, JENNIFER PECANTY SAVOIE, , THIBODAUX, LA, 70301 Code: STATE COM O 12 DHC NOTICE	6/20/2024	Signature Pending
92148969009997901837096126	Dani Kuzma	, MESA ROYALTY TRUST, ATTN NEW MEXICO PROPERTIES, BARTLESVILLE, OK, 74004 Code: STATE COM O 12 DHC NOTICE	6/20/2024	Signature Pending
92148969009997901837096133	Dani Kuzma	, MIDLAND AOG PARTNERS LTD, , MIDLAND, TX, 79702 Code: STATE COM O 12 DHC NOTICE	6/20/2024	Signature Pending
92148969009997901837096140	Dani Kuzma	, JEREMY LEONARD PECANTY, , THIBODAUX, LA, 70301 Code: STATE COM O 12 DHC NOTICE	6/20/2024	Signature Pending
92148969009997901837096157	Dani Kuzma	, F J ODENDAHL INVESTMENTS INC, , WHEATLAND, WY, 82201 Code: STATE COM O 12 DHC NOTICE	6/20/2024	Signature Pending
92148969009997901837096164	Dani Kuzma	, LINDEN FAMILY TRUST, MARY ANN LINDEN TRUSTEE, ROCK ISLAND, IL, 61201-6128 Code: STATE COM O 12 DHC NOTICE	6/20/2024	Signature Pending



Campaign No.	22318
Today's Date	21 Jun 2024
P.O. Number	
Sales Rep	Odette Capistrano-Zenizo

This is a quote for approval, not an invoice. Advanced payments may be accepted.

bill-to

Hilcorp Energy Company 1111 Travis Street HOUSTON, TX 77002 Tel: 832 839-4570 Account No: 109863

campaign summary

State Com O 012 (Dani Kuzma)
6/26/2024
6/26/2024

advertiser

Hilcorp Energy Company 1111 Travis Street HOUSTON, TX 77002 Tel: 832 839-4570 Account No: 109863

cost summary	
Base Amount	\$76.50
Adjustments	\$0.00
Gross Amount	\$76.50
Agency Commission	\$0.00
Net Amount	\$76.50
Estimated Tax	\$6.26
Total	\$82.76

Pre-Payment Details		
Pre-Payment Amount	Pre-Payment Date	Pre-Payment Card No.

No Pre-Payments on this order

print lines							
Line No.	Product	Description	Issue / Run Date	Quantity	Rate	Adjusted Rate	Amount
46007	Tri-City Record	TCR Private Legal	6/26/2024	1	76.50	76.50	76.50
			Company Comming County, Pursuant Subsection NMAC, Company, filed form Mexico E	for Jling, S New to Paragr n C of Hilcorp as Ope C-107A w inergy, Mi	p Energy Downhole an Juan Mexico. aph (2) of 19.15.12.11 Energy erator, has ith the New nerals and		

Released to Imaging: 8/22/2024 1:19:14 PM

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Line No.	Product	Description	Issue / Run Quantity Rate	Adjusted Rate	Amour
			- Oil Conservation Division		
			(NMOCD) seeking		
			administrative approval to		
			downhole commingle new production from the Basin-		
			Fruitland Coal Pool (71629)		
			with existing production from		
			the Basin-Dakota Gas Pool		
			(71599) and the Blanco-		
			Mesaverde Gas Pool (72319) in		
			the State Com O 012 well (API		
			No. 30-045-29748) located in		
			Unit I, Section 16, Township 29		
			North, Range 08 West, NMPM,		
			San Juan County, New Mexico.		
			Commingling will not reduce the		
			value of production. Allocation		
			method to be determined upon completion of this project. This		
			notice is intended for certain		
			unlocatable royalty interest		
			owners in the aforementioned		
			well for which certified mail		
			delivery is not possible. Should		
			you (the interest owner for		
			which this notice is intended)		
			have an objection, you are		
			required to respond within		
			twenty (20) days from the date		
			of this publication. Please mail		
			your objection letter,		
			referencing the well details		
			above, to the following address:		
			Hilcorp Energy Company, Attn: San Juan Land, 1111 Travis		
			Street, Houston, TX 77002		
			Published in Tri-City Record		

June 26, 2024

digital lines

NEW MEXICO STATE LAND OFFICE Guidelines for Requesting Commingling Approval

- 1. A commingling agreement from the New Mexico State Land Office is not required if the commingling operation does not contain New Mexico State Trust acreage.
- 2. If State Trust acreage will be part of a proposed commingling operation:
 - a. Commingling of production of all wells from the same pool within a single lease or unit area is permitted without additional Land Commissioner approval.
 - b. Surface commingling (including off-lease storage) from more than one pool, and/or from more than one lease, communitized area, unit area, or a combination of leases/communitized areas/unit areas, requires additional Land Commissioner approval.

The attached application form describes the process for submitting a commingling application to the New Mexico State Land Office.

APPLICATION FOR

NEW MEXICO STATE LAND OFFICE

COMMINGLING AND OFF-LEASE STORAGE

ON STATE TRUST LANDS



This application form is required for all commingling applications requiring approval by the Commissioner of Public Lands.

Applicant: Hilcorp Energy Company	OGRID #: 372171
Well Name: State Com O 12	API #: <u>30-045-29748</u>
Pool: Basin Fruitland Coal / Blanco Mesaverde / Basin Dakota	

OPERATOR NAME:	Hilcorp Energy Company Attn: Cheryl Weston, Rm. 12.201

OPERATOR ADDRESS: 1111 Travis Street, Houston, TX 77002

APPLICATION REQUIREMENTS – SUBMIT:

- 1. New Mexico Oil Conservation Division (NMOCD) application packet (or equivalent information if no application is required by NMOCD),
- 2. Commingling application fee of \$150.

CERTIFICATION: To the best of my knowledge,

- All business leases and rights-of-way necessary for conducting the proposed operation on State Trust lands have been applied for or obtained,
- The information submitted with this application is **accurate** and **complete**, and
- No loss will accrue to the state of New Mexico as a result of the proposed operation.

I also understand that **no action** will be taken on this application until the required information and fee are submitted to the State Land Office.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Cherylene Weston Print or Type Name

Cherylene Weston Signature

Signature

6/19/2024 Date 713-289-2615 Phone Number

cweston@hilcorp.com e-mail Address

Submit application to:

Commissioner of Public Lands Attn: Commingling Manager PO Box 1148 Santa Fe, NM 87504-1148 Questions? Contact the Commingling Manager: 505.827.6628 Upon approval, the requesting organization will receive an acknowledgment letter from the Commissioner of Public Lands.

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Cheryl Weston

From:	HoustonMail
Sent:	Friday, June 21, 2024 12:10 PM
То:	Cheryl Weston
Subject:	FEDEX TRACKING NUMBER

740203001839 COMMISSIONER OF PUBLIC LAND

From:	McClure, Dean, EMNRD
To:	Cheryl Weston; Mandi Walker
Cc:	Lowe, Leonard, EMNRD; McClure, Dean, EMNRD
Subject:	RE: [EXTERNAL] Action ID: 356651; DHC-5405
Date:	Wednesday, July 17, 2024 5:05:12 PM

Cheryl,

Review of this application cannot continue until notice is conducted such that the stipulations within 19.15.12.11 C.(1)(a) NMAC may be met. As such, the Division will be placing review of this application on hold for the earlier of either: (a) Hilcorp has provided documentation demonstrating that the interest owners have been instructed to provide their protests to the Division; or (b) 30 days. The Division will make an evaluation of how to proceed in this case upon re-opening the application for review.

If you have any questions, please feel free to reach out.

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

From: Cheryl Weston <cweston@hilcorp.com>
Sent: Saturday, July 13, 2024 9:32 AM
To: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>; Mandi Walker
<mwalker@hilcorp.com>
Cc: Lowe, Leonard, EMNRD <Leonard.Lowe@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Action ID: 356651; DHC-5405

Dean,

The administrative checklist, revised C-107A page, water analysis and allocation is attached.

Thanks, Cheryl

From: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>
Sent: Friday, July 12, 2024 2:15 PM
To: Cheryl Weston <<u>cweston@hilcorp.com</u>>; Mandi Walker <<u>mwalker@hilcorp.com</u>>
Cc: Lowe, Leonard, EMNRD <<u>Leonard.Lowe@emnrd.nm.gov</u>>
Subject: [EXTERNAL] Action ID: 356651; DHC-5405

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

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

Action ID	356651
Admin No.	DHC-5405
Applicant	Hilcorp Energy Company (372171)
Title	State Com O #12
Sub. Date	6/21/24

The Division is reviewing the following application:

Please provide the following additional supplemental documents:

• Please provide an application checklist

Please provide additional information regarding the following:

- Please review the MV and DK perfs on form C-107A and submit an amended form C-107A with those perfs corrected.
- Please provide a method to allocate the gas for the MV and DK pools.
- Please confirm the quantity of other total dissolved solids within the FLC water sample.

Additional notes:

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

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

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

The information contained in this email message is confidential and may be legally privileged and is intended only for the use of the

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

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

From:	Cheryl Weston
То:	McClure, Dean, EMNRD; Mandi Walker
Cc:	Lowe, Leonard, EMNRD
Subject:	RE: [EXTERNAL] Action ID: 356651; DHC-5405
Date:	Saturday, July 13, 2024 9:32:41 AM
Attachments:	STATE COM O 12 Water Analysis.pdf
	State Com O 12 Allocation.pdf
	State Com O 12 DHC C-107A Revised.pdf
	State Com O 12 NMOCD Admin Applic Checklist.pdf

Dean,

The administrative checklist, revised C-107A page, water analysis and allocation is attached.

Thanks,

Cheryl

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Friday, July 12, 2024 2:15 PM
To: Cheryl Weston <cweston@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>
Cc: Lowe, Leonard, EMNRD <Leonard.Lowe@emnrd.nm.gov>
Subject: [EXTERNAL] Action ID: 356651; DHC-5405

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

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

The Division	is review	wing the 1	following	annlication
	1010100			appuouton

Action ID	356651
Admin No.	DHC-5405
Applicant	Hilcorp Energy Company (372171)
Title	State Com O #12
Sub. Date	6/21/24

Please provide the following additional supplemental documents:

• Please provide an application checklist

Please provide additional information regarding the following:

- Please review the MV and DK perfs on form C-107A and submit an amended form C-107A with those perfs corrected.
- Please provide a method to allocate the gas for the MV and DK pools.
- Please confirm the quantity of other total dissolved solids within the FLC water sample.

Additional notes:

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

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

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

Cheryl Weston

HoustonMail
Friday, June 21, 2024 12:10 PM
Cheryl Weston
FEDEX TRACKING NUMBER

740203001839 COMMISSIONER OF PUBLIC LAND



State Com O 12 Production Allocation Method – Subtraction

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

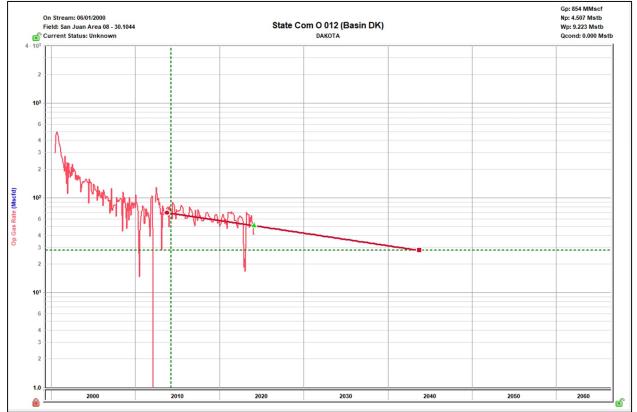
The BHPs of all zones, producing and non-producing, were estimated based upon basin wide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin, in conjunction with shut-in pressure build-ups. These models were constructed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

Gas Allocation:

Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Mesaverde/Dakota and the added formation to be trimmingled is 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 formation.

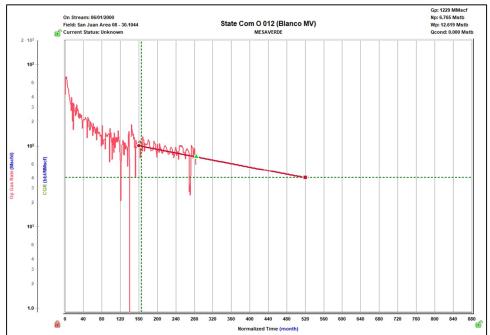
Hilcorp intends to continue to allocate the projected base production on the same fixed percentages to the following pools 59% (MV) 41% (DK) while the subtraction method is being used to determine the allocation to the new zone.

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.

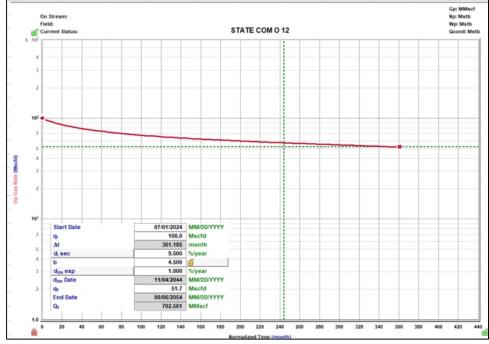


Current Zone 1 Forecast – Dakota

Current Zone 2 Forecast – Mesaverde



Proposed Zone Forecast – Fruitland Coal



Average initial production curve in geologic region.

Oil Allocation:

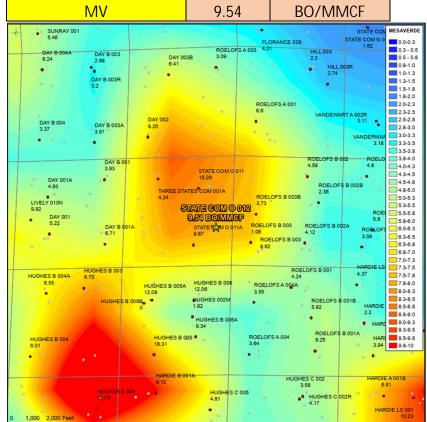
Oil production will be allocated based on average formation yields from offset wells and will be a fixed rate for 4 years. After 4 years oil will be reevaluated and adjusted as needed based on average formation yields and new fixed gas allocation.

Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
FRC	0.02	702	0.333%
MV	9.54	397	89.735%
DK	1.53	274	9.933%

DK 1.53 **BO/MMCF** SUNF DAKOTA 0.0 0.1 - 1.0 1.1 - 2.0 2.1 - 3.0 3.1 - 4.0 4.1 - 5.0 5.1 - 6.0 LIVELY 003E 5.1 - 6.0 6.1 - 7.0 7.1 - 8.0 8.1 - 9.0 9.1 - 10.0 10.1 - 11.0 11.1 - 12.0 12.1 - 13.0 12.1 - 13.0 13.1 - 14.0 14.1 - 15.0 15.1 - 16.0 16.1 - 17.0 17.1 - 18.0 18.1 - 19.0 19.1 - 19.0 19.1 - 20.0 20.1 - 21.0 21.1 - 22.0 22.1 - 23.0 STATE COM 0 012 1.53 BO/MMCF 23.1 - 24.0 24.1 - 25.0 HUGHES 0028 5.93 HUGHES 001 6.53 ROELOFS 00 4.59 2.89 LCH A 001-2 11 5.01 HARDIE 001 A 003 HUGI 8.76

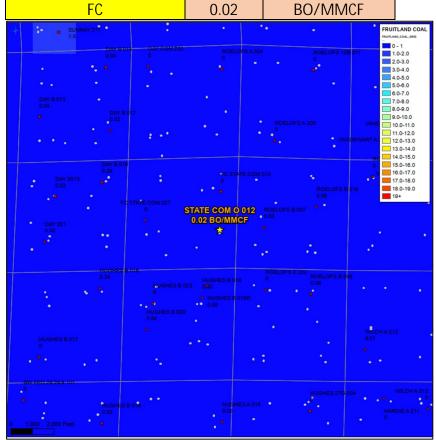
Current Zone 1 – Dakota Oil Yield Map

9-Section Area Map of Standalone Oil Yields. Sampled well to this map.



Current Zone 2 – Mesaverde Oil Yield Map

Proposed Zone – Fruitland Coal Oil Yield Map



9-Section Area Map of Standalone Oil Yields. Sampled well to this 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:

3004508245	DAY 1	MV
3004524939	HARDIE 2E	DK
3004527513	FC STATE COM 5	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.

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
STATE COM 0 12	3004529748

	C STATE COM 5 13.12 1.11 6.79 -0.52 0.21 0 13.07 8.25 3.57 3680.55 	API Property CationBarium CationBoron CationCalcium CationIron CationMagnesium CationManganese CationPhosphorus CationPotassium CationPotassium CationStrontium CationSodium CationSilica CationZinc CationCopper CationLead CationLithium CationNickel	0.2 0.06 69.9 0.65 0.86 0.09 20 20 20 20 10.7	DK OFFSI API Property CationBarium CationBoron CationCalcium CationMagnesium CationMagnese CationManganese CationPhosphorus CationPhosphorus CationPhosphorus CationPhosphorus CationStrontium CationSodium CationSolica CationCopper CationCopper CationCopper	3004526314 SUNRAY 8 0.1 93 249 49 0.9 0.9 0.2 12.14
CationBarium CationBoron CationCalcium CationIron CationMagnesium CationManganese CationPhosphorus CationPotassium CationSodium CationSilica CationOpper CationCopper CationNickel CationCobalt CationChromium	13.12 1.11 6.79 -0.52 0.21 0 13.07 8.25 3.57 3680.55 0.79	CationBarium CationBoron CationCalcium CationIron CationMagnesium CationManganese CationPhosphorus CationPotassium CationPotassium CationStrontium CationSodium CationSilica CationAluminum CationCopper CationLead CationLithium	0.2 0.06 69.9 0.65 0.86 0.09 20 20 20 10.7 1	CationBarium CationBoron CationCalcium CationIron CationMagnesium CationManganese CationPhosphorus CationPotassium CationPotassium CationStrontium CationSodium CationSilica CationZinc CationAluminum CationCopper	0.1 93 249 49 0.9
CationBarium CationBoron CationCalcium CationIron CationMagnesium CationPhosphorus CationPotassium CationSdium CationSdium CationZinc CationCopper CationLead CationNickel CationCoplat CationChum CationCoplat CationChum Cat	13.12 1.11 6.79 -0.52 0.21 0 13.07 8.25 3.57 3680.55 0.79	CationBarium CationBoron CationCalcium CationIron CationMagnesium CationManganese CationPhosphorus CationPotassium CationPotassium CationStrontium CationSodium CationSilica CationAluminum CationCopper CationLead CationLithium	0.2 0.06 69.9 0.65 0.86 0.09 20 20 20 10.7 1	CationBarium CationBoron CationCalcium CationIron CationMagnesium CationManganese CationPhosphorus CationPotassium CationPotassium CationStrontium CationSodium CationSilica CationZinc CationAluminum CationCopper	93 249 49 0.9
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CationSodium CationSilica CationZinc CationAluminum CationCopper CationLead CationLithium CationNickel CationCobalt CationChromium CationSilicon CationMolybdenum	3680.55 0.79	CationSodium CationSilica CationZinc CationAluminum CationCopper CationLead CationLithium	20 10.7 1	CationSodium CationSilica CationZinc CationAluminum CationCopper	
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CationCopper CationLead CationLithium CationNickel CationCobalt CationChromium CationSilicon CationMolybdenum		CationCopper CationLead CationLithium	2	CationCopper	
CationLead CationLithium CationNickel CationCobalt CationChromium CationSilicon CationMolybdenum		CationLead CationLithium	2		
CationLithium CationNickel CationCobalt CationChromium CationSilicon CationMolybdenum		CationLithium	2	CationLead	
CationNickel CationCobalt CationCobalt CationChromium CationChromium CationSilicon CationMolybdenum					1
CationCobalt CationChromium CationSilicon CationMolybdenum		CationNickel	+	CationLithium	
CationChromium CationSilicon CationMolybdenum		0.11 0.1 11		CationNickel	<u> </u>
CationSilicon CationMolybdenum		CationCobalt		CationCobalt	<u> </u>
CationMolybdenum		CationChromium		CationChromium	4
,		CationSilicon	10	CationSilicon	1
AnionChlorido		CationMolybdenum		CationMolybdenum	
AHIUHUHUE		AnionChloride	10	AnionChloride	84
AnionCarbonate		AnionCarbonate	10	AnionCarbonate	0
AnionBicarbonate		AnionBicarbonate	17	AnionBicarbonate	280
AnionBromide		AnionBromide		AnionBromide	
AnionFluoride		AnionFluoride		AnionFluoride	
AnionHydroxyl		AnionHydroxyl	10	AnionHydroxyl	0
AnionNitrate		AnionNitrate		AnionNitrate	
AnionPhosphate		AnionPhosphate	0.28	AnionPhosphate	
AnionSulfate		AnionSulfate		AnionSulfate	108
phField		phField		phField	6.51
phCalculated		phCalculated		phCalculated	0.01
TempField		TempField		TempField	64
TempLab		TempLab	01.0	TempLab	
OtherFieldAlkalinity		OtherFieldAlkalinity	80	OtherFieldAlkalinity	-
OtherSpecificGravity		OtherSpecificGravity		OtherSpecificGravity	0
OtherTDS	0	OtherTDS		OtherTDS	876.34
OtherCaCO3		OtherCaCO3		OtherCaCO3	070.34
OtherConductivity	40				1260.20
DissolvedCO2		OtherConductivity DissolvedCO2		OtherConductivity DissolvedCO2	1369.28
		DissolvedCO2	120		110
DissolvedO2	0			DissolvedO2	0.50
DissolvedH2S	0	DissolvedH2S	0	DissolvedH2S	0.52
GasPressure		GasPressure		GasPressure	100
GasCO2		GasCO2		GasCO2	0
GasCO2PP		GasCO2PP		GasCO2PP	0
GasH2S		GasH2S		GasH2S	0
GasH2SPP		GasH2SPP		GasH2SPP	0
PitzerCaCO3_70		PitzerCaCO3_70		PitzerCaCO3_70	-0.81
PitzerBaSO4_70		PitzerBaSO4_70		PitzerBaSO4_70	0.33
PitzerCaSO4_70		PitzerCaSO4_70		PitzerCaSO4_70	-1.54
PitzerSrSO4_70		PitzerSrSO4_70		PitzerSrSO4_70	-2.54
PitzerFeCO3_70		PitzerFeCO3_70		PitzerFeCO3_70	
PitzerCaCO3_220		PitzerCaCO3_220		PitzerCaCO3_220	-0.01
PitzerBaSO4_220		PitzerBaSO4_220	İ	PitzerBaSO4_220	-0.22
PitzerCaSO4_220		PitzerCaSO4_220	1	PitzerCaSO4_220	-1.43
PitzerSrSO4_220		PitzerSrSO4_220		PitzerSrSO4_220	-2.34
PitzerFeCO3 220		PitzerFeCO3 220		PitzerFeCO3 220	2.34

Received by OCD: 8/22/2024 1:16:17 PM

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

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy, Minerals and Natural Resources Department Form C-107A Revised August 1, 2011

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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505 APPLICATION TYPE __Single Well __Establish Pre-Approved Pools EXISTING WELLBORE __X_Yes ____No

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company382 Road 3100, Aztec, NM 87410OperatorAddressState Com O12I-16-T29N-R08WSan Juan County, NMLeaseWell No.Unit Letter-Section-Township-RangeCounty

OGRID No. 372171 Property Code 319097 API No. 30-045-29748 Lease Type: ____Federal _X_State ____Fee

DATA ELEMENT	UPPER ZONE		INTE	CRMEDIATE ZON	IE]	LOWER ZONE	
Pool Name	Fruitland Coal		Bla	nco Mesaverde		E	Basin Dakota	
Pool Code	71629	72319			71599			
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2,875' - 3,055'			4,464' - 5,398'			7,316' - 7,530'	
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)	88 psi		127 psi		153 psi			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1261 BTU			1113 BTU			1127 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:		Date: Rates:	4/1/2024 Oil - 6 bbl Gas - 2,269 mcf Water - 40 bbl		Date: Rates:	4/1/2024 Oil - 4 bbl Gas - 1,578 mcf Water - 40 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? If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?	Yes YesX	_ No_X _ No
Are all produced fluids from all commingled zones compatible with each other?	Yes X	No
Will commingling decrease the value of production?	Yes	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 <u>X</u>	_ No
NMACOD Deference Core Ne combined to this wells		

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.

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SIGNATURE Cherylene Weston	TITLE_Operations/Regulatory Tech-Sr. DATE 6/19/2024
TYPE OR PRINT NAME Cherylene Weston	TELEPHONE NO. (713) 289-2615

E-MAIL ADDRESS _____ cweston@hilcorp.com

RECEIVED:	REVIEWER:	TYPE:	APP NO:
	- Geologic	ABOVE THIS TABLE FOR OCC DIVISION D OIL CONSERVAT al & Engineering E Incis Drive, Santa	ION DIVISION Bureau –
THIS CI	HECKLIST IS MANDATORY FOR ALL	ATIVE APPLICATION ADMINISTRATIVE APPLICATION QUIRE PROCESSING AT THE DIV	DNS FOR EXCEPTIONS TO DIVISION RULES AND
Vell Name:			OGRID Number: API: Pool Code:
SUBMIT ACCURA	TE AND COMPLETE INFO	Ormation Require Indicated Below	D TO PROCESS THE TYPE OF APPLICATION
A. Location -	e only for [1] or [1] ningling – Storage – Me DHC CTB PL ion – Disposal – Pressur WFX PMX SW REQUIRED TO: Check t operators or lease holo y, overriding royalty ow ation requires publishe ation and/or concurre ation and/or concurre e owner	aneous Dedication DECT AREA) DESC C PC OLS Te Increase – Enhan /D IPI EOF hose which apply. lers vners, revenue owne d notice nt approval by SLO nt approval by BLM	G OLM Ced Oil Recovery R PPR FOR OCD ONLY Notice Complete Prs Application Content Complete
administrative a understand that	approval is accurate a	nd complete to the en on this application	nitted with this application for e best of my knowledge. I also on until the required information and
Not	e: Statement must be complete	ed by an individual with ma	anagerial and/or supervisory capacity.
			Date

Print or Type Name

Cherylene Weston

Signature

e-mail Address

Phone Number

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

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

District III

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

District IV

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

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

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	376619
	Action Type:
	[IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS Created By Condition Condition Date The application designated as Application ID: 356651 and DHC-5405 has been rejected by the Division due to the applicant's failure to conduct notice such 8/22/2024 dmcclure that the stipulations within 19.15.12.11 C.(1)(a) NMAC may be met. The applicant may resubmit an application for this proposed downhole commingling project once proper notice has been conducted. If you have any questions, please feel free to reach out.

CONDITIONS

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Action 376619