•

RECEIVED:	REVIEWER:	TYPE:	APP NO:	
	- Geologic	ABOVE THIS TABLE FOR OCD DIVE O OIL CONSERVA and & Engineering ancis Drive, Santa	TION DIVISION Bureau –	· · · · · · · · · · · · · · · · · · ·
THIS CH	ADMINISTRA HECKLIST IS MANDATORY FOR ALL			Division Rules and
		2UIRE PROCESSING AT THE D		
Applicant:				0 Number:
Vell Name: Pool:			API: Pool C	code:
			ED TO PROCESS T	HE TYPE OF APPLICATION
A. Location - N B. Check on [1] Comn [I] Comn [I] Inject 2) NOTIFICATION A. Offset of B. Royalty C. Applic D. Notifica F. Surface G. For all of H. No not	e only for [1] or [1] ningling – Storage – Me DHC CTB PL tion – Disposal – Pressur WFX PMX SV REQUIRED TO: Check to perators or lease hold y, overriding royalty ow ation requires published ation and/or concurre ation and/or concurre of the above, proof of tice required	aneous Dedication DJECT AREA) NSP easurement C PC OL re Increase – Enhar VD IPI EC hose which apply. ders vners, revenue owr ed notice ant approval by SLC ont approval by BLN notification or pub	Propertion UNIT)	FOR OCD ONLY FOR OCD ONLY Notice Complete Application Content Complete ed, and/or,
administrative a understand that	: I hereby certify that t approval is accurate a at no action will be tak e submitted to the Divi	and complete to th en on this applicat	e best of my know	wledge. I also
Not	e: Statement must be complet	ed by an individual with n	nanagerial and/or supe	ervisory capacity.
			Date	
Print or Type Name				
			Phone Number	
Kandis Rola	and			

Received by OCD: 3/31/2023 8:10:59 AM

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

Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, New Mexico 87505

Energy, Minerals and Natural Resources Department

State of New Mexico

APPLICATION TYPE Single Well

Form C-107A

Revised August 1, 2011

APPLICATION FOR DOWNHOLE COMMINGLING

Establish Pre-Approved Pools EXISTING WELLBORE X_Yes ____No

382 ROAD 3100, Aztec NM 87410 Address

Operator		Address	
State Com N	10A	UL O – Sec. 2, T29N, R8W	San Juan
Lease	Well No.	Unit Letter-Section-Township-Range	County
	21000 4		

OGRID No. 372171 Property Code 319096 API No. 30-045-21631 Lease Type: Federal X State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	BASIN FRUITLAND COAL (GAS)		BLANCO MESAVERDE (PRORATED GAS)
Pool Code	71629		72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2805' - 3074' - Estimated		4780'- 5470'
Method of Production (Flowing or Artificial Lift) Bottomhole Pressure	NEW ZONE		Artificial Lift
(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)	275 psi		650 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1100		BTU 1240
Producing, Shut-In or New Zone	NEW ZONE		PRODUCING
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production	Date: N/A	Date:	Date: 12/1/2022
estimates and supporting data.)	Rates:	Rates:	Rates: 3173 MCF – GAS 3 BBL – Oil 0 BBL - Water
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 Please see attachments	Oil Gas	Oil Gas Please see attachments

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 <u>No X</u> Yes X_ No
Are all produced fluids from all commingled zones compatible with each other?	YesX_No
Will commingling decrease the value of production?	Yes NoX
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 Reference Case No. applicable to this well:	
Attachmenter	

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.

SIGNATUREKandís Roland	TITLE	Operation/Regulatory Tech	DATE	3/15/2023
TYPE OR PRINT NAME Kandis Roland		TELEPHONE NO. (713) 757-5246

E-MAIL ADDRESS kroland@hilcorp.com

Gas						
achments						
NoX						
_XNo						
V M.						

Received by OCD: 3/31/2023 8:10:59 AM

NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

		All distances must		laries of the Sectio	n.	Well Nc.
^{ator} Mesa Petr	olaum Co		State Co	n. "N"		10 = 4
	ection	Township	Range	County		
'n	2	29 North	8 We	st	San Juan	
al Foctage Locati					F	
		South line of		feet from the	East	line cated Acreace:
nd Level Elev. 6310	Freducing Fo		Fool Blanz	0	L'eur	320 ADT
	M.252	ated to the subject			a marks on the pl	······································
. If more than interest and . If more than	one lease is royalty). one lease of (dedicated to the v different ownership unitization. force-po	vell, outline each is dedicated to th	and identify the	ownership thereo	of (both as to workin
[]Yes	No If a	unifization, force-pe unswer is "yes," typ owners and tract d	e of consolidation			(Use reverse side
this form if r No allowable	ecessary.) will be assign	ned to the well until)or until a non-stan	all interests have	been consolida	ated (by commun	tization, unitizatio
					CE CE	RTIFICATION
	 				tained herein i best of my know 	y that the information co s true and complete to t wiedge and belief. <i>Arch</i> 2-
	1		1			
	6 				Position DRILLING Dompany	
					DRILLING Ocmpany	Foremen Foleum Co.
		SEC. 2			DRILLING Company MESA PETR	
		SEC. 2			DRILLING Demp any MESA PETR I ate 1-3-75 I hereby certil shown on this notes of actual under my suger is true and a how ledge and	fy that the well locati plat was plotted from fie is surveys made by me vision, and that the sam
C 2 1 0		SEC. 2			DRILLING Dempany MESA PETE Inte 1-3-75 Intereby certil shown on this notes of octuo under my suge is true and c knowledge and Date Surveyed December Registered Profe analor Land Surv	ty that the well locati plat was plotted from fie it surveys made by me wistion, and that the sam arrect to the best of r belief. 30, 1974 ssignal Engineer reyor
с. З		SEC. 2	0 	- <u>-</u> 5(9 <u>0</u>)	DRILLING Dempany MESA PETR I ate 1-3-75 Thereby certil shown on this notes of octud under my suger is true and c hoowledge and December Registered Profe anaron Land Surv Contact Contact	fy that the well locati plat was plotted from fie is surveys made by me pristion, and that the same arrect to the best of r belief. 30, 1974 ssignal Engineer

Released to Imaging: 8/18/2023 8:51:40 AM

Page 3 of 42

Form C-101 Supersedes C-128 Effective 1-1-61

Received by PGD: 3/31/2023 8:10:59 AM

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 Eo. N

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462 Form C-102 August 1, 2011

Permit 334077

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-045-21631	71629	BASIN FRUITLAND COAL (GAS)
4. Property Code	5. Property Name	6. Well No.
319096	State Com N	010A
7. OGRID No.	8. Operator Name	9. Elevation
372171	HILCORP ENERGY COMPANY	6310

10. Surface Location															
UL - Lot		Section		Township		Range	Lot Idn	Feet From	N/S Line		Feet From	E/W Line		County	
	0		2	- 29	N	08W		790		S	1790		Е		SAN JUAN

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

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

OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. E-Signed By: Kandis Roland Title: Regulatory Tech Date: 2/9/2023
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: Ernest V. Echohawk Date of Survey: 12/30/1974 Certificate Number: 3602

State Com N 10A

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

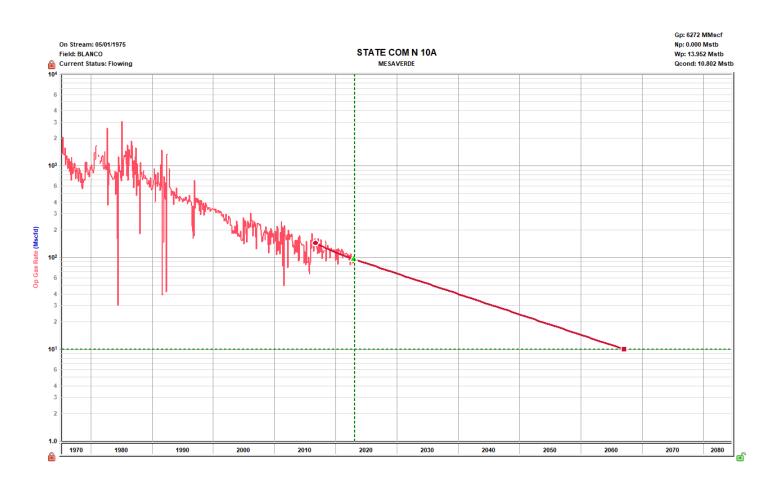
The BHPs of all zones, producing and non-producing, were estimated based upon basin wide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin, in conjunction with shut-in pressure build-ups. These models were constructed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

Production Allocation Method – Subtraction

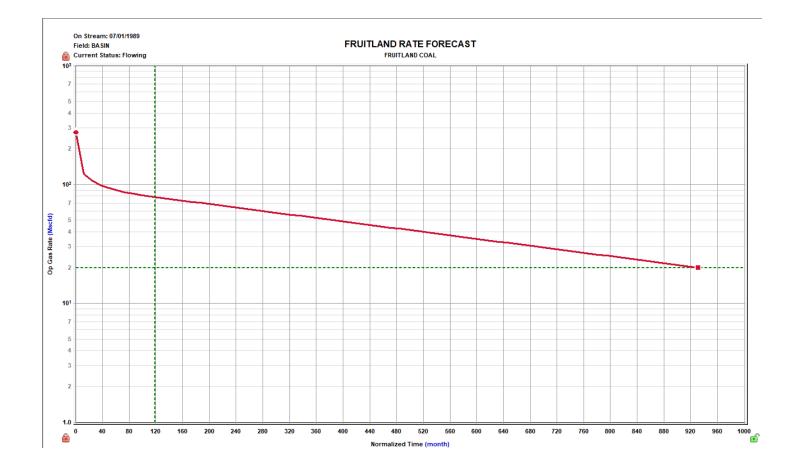
Gas Allocation:

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



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Oil Allocation:

Fruitland Coal is not expected to produce condensate therefore it will be allocated 100% to MV



February 22, 2023

Mailed Certified / Electronic Return Receipt

TO: ALL INTEREST OWNERS

RE: Application to Downhole Commingle Production Well: State Com N 010A API: 30-045-21631 Township 29 North, Range 08 West, Section 2 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 commingle production from the **Fruitland Coal**, a formation Hilcorp soon intends to perforate, with existing production from the **Mesaverde** formation. 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 unless 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,

me Vanter Prin

Carson Parker Rice Landman (713) 757-7108 carice@hilcorp.com

RTC:bmg Enclosure(s)

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

District III 1000 Rio Brazos Road, Aztec, NM 87410

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy, Minerals and Natural Resources Department

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

Form C-107A Revised August 1, 2011

APPLICATION TYPE _Single Well _Establish Pre-Approved Pools EXISTING WELLBORE _X_Yes ____No

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company		382 ROAD 3100, Aztec NM 87410	
Operator		Address	
State Com N	10A	UL O – Sec. 2, T29N, R8W	San Juan
Lease	Well No.	Unit Letter-Section-Township-Range	County

OGRID No. 372171 Property Code 319096 API No. 30-045-21631 Lease Type: ____Federal X_State ____Fee

	DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
	Pool Name	BASIN FRUITLAND COAL (GAS)		BLANCO MESAVERDE (PRORATED GAS)
Received by OCD:	Bogl Code 3/31/2023 8:10:59 AM	71629		72319
	Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2805' - 3074' - Estimated		4780'- 5470'
	Method of Production (Flowing or Artificial Lift)	NEW ZONE		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)	275 psi		650 psi
	Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1100		BTU 1240
	Producing, Shut-In or New Zone	NEW ZONE		PRODUCING
	Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production	Date: N/A	Date:	Date: 12/1/2022
	estimates and supporting data.)	Rates:	Rates:	Rates: 3173 MCF – GAS 3 BBL – Oil 0 BBL - Water
	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 Please see attachments	Oil Gas	Oil Gas Please see attachments

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 <u>No X</u> Yes X No
Are all produced fluids from all commingled zones compatible with each other?	Yes_ <u>X</u> _No
Will commingling decrease the value of production?	Yes NoX
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?	YesX 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.	

For zones with no production history, estimated produc 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.

SIGNATUREKandís Roland	 Operation/Regulatory Tech	_DATE	2/15/2023	
TYPE OR PRINT NAME Kandis Roland	TELEPHONE NO. (713)	757-5246	
E-MAIL ADDRESS kroland@hilcorp.com		,		

Page 8 of 42

Certified Number	Sender	Recipient	Date Mailed	Delivery Status	
92148969009997901822181707	Brenda Guzman	, SILVERADO OIL and GAS LLP, P O BOX 52308, TULSA, OK, 74152-0308 Code: State Com N 10A DHC	308 2/22/2023		
92148969009997901822181714	Brenda Guzman	KATHY NAVARRETE , PIONEER NATURAL RES USA INC, P O BOX 3178, MIDLAND, TX, 79702 Code: State Com N 10A DHC	2/22/2023	Signature Pending	
92148969009997901822181721	Brenda Guzman	STATE OF NEW MEXICO , BATAAN MEMORIAL BUILDING, 407 GALISTEO ST ROOM 166, SANTA FE, NM, 87501 Code: State Com N 10A DHC	2/22/2023	Signature Pending	
92148969009997901822181738	Brenda Guzman Brenda Guzman Brenda Guzman BARTLESVILLE, OK, 74004 Code: State Com N 10A DHC		2/22/2023	Signature Pending	
92148969009997901822181745	Brenda Guzman	, MIDLAND AOG PARTNERS LTD, PO BOX 793, MIDLAND, TX, 79702 Code: State Com N 10A DHC	2/22/2023	Signature Pending	
92148969009997901822181752 Brenda Guzman		, F J ODENDAHL INVESTMENTS INC, 1357 LOOMIS ST, WHEATLAND, WY, 82201 Code: State Com N 10A DHC	2/22/2023	Signature Pending	
92148969009997901822181769 Brenda Guzman		LINDEN FAMILY TRUST , MARY ANN LINDEN TRUSTEE, 1413 32ND AVE, ROCK ISLAND, IL, 61201-6128 Code: State Com N 10A DHC	2/22/2023	Signature Pending	

Kandis Roland

From: Sent: To: Cc: Subject: Attachments: Kandis Roland Friday, March 31, 2023 9:04 AM Lamkin, Baylen L. Kandis Roland State Com N 10A - Commingle Permit Mailed State Com N 10A - SLO DHC Application.pdf

Baylen,

The attached commingle permit was mailed to the state land office today.

Thanks,

Kandis Roland HILCORP ENERGY San Juan East/South Regulatory 713.757.5246 <u>kroland@hilcorp.com</u>

eceived by OCD: 3/31/2023 8:10:59	M State of New Mexico	Form C-103
Office	Energy, Minerals and Natural Resources	
<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobbs, NM 88240	Energy, winerars and Waturar Resource.	WELL API NO.
District II – (575) 748-1283		20 045 21621
811 S. First St., Artesia, NM 88210	OIL CONSERVATION DIVISION	5. Indicate Type of Lease
<u>District III</u> $-$ (505) 334-6178	1220 South St. Francis Dr.	STATE FEE
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 87505	6. State Oil & Gas Lease No.
<u>District IV</u> – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM		E-5380-5
87505		E-3380-3
SUNDRY NOTIO	CES AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPOS	ALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A	
	ATION FOR PERMIT" (FORM C-101) FOR SUCH	State Com N
PROPOSALS.)		8. Well Number
1. Type of Well: Oil Well	Gas Well 🛛 Other	10A
2. Name of Operator		9. OGRID Number
Hilcorp Energy Company		372171
		10. Pool name or Wildcat
3. Address of Operator	110	
382 Road 3100, Aztec, NM 874	10	Blanco Mesaverde/Basin Fruitland Coal
4. Well Location		· · · · · · · · · · · · · · · · · · ·
Unit Letter O 790	feet from the <u>South</u> line and <u>1790</u>	feet from the Fast line
Section 2	Township 29N Range 8W	NMPM San Juan County
	11. Elevation (Show whether DR, RKB, RT, GR	, <i>etc.</i>)
	6310' GL	
 13. Describe proposed or compl of starting any proposed wor proposed completion or reco Hilcorp Energy Company requests pe existing Mesaverde. Please see the a closed loop system will be used. 	rk). SEE RULE 19.15.7.14 NMAC. For Multiplompletion. ermission to recomplete the subject well in the Fr ttached procedure, current and proposed wellbore	s, and give pertinent dates, including estimated date e Completions: Attach wellbore diagram of
Spud Date:	Rig Release Date:	
I hereby certify that the information a	bove is true and complete to the best of my know	vledge and belief.
SIGNATURE_Kandís Rolan	d TITLE Operations / I	Regulatory Technician – Sr. DATE 2/14/2023
		· · · · · · · · · · · · · · · · · · ·
Type or print name <u>Kandis Rolar</u> For State Use Only	nd E-mail address: kroland@h	nilcorp.com PHONE: <u>713-757-5246</u>
APPROVED BY:	TITLE	DATE
Conditions of Approval (if any):		
FT		

•

State Com N 10A

O – 2 – 29N – 08W 790 FSL 1790 FEL

API#: 3004521631

Fruitland Coal Recompletion Procedure

01/26/2023

Procedure:

- 1. MIRU PU and associated equipment. Kill well and NDWH.
- 2. NUBOP and unseat tubing, tag for fill and scan out tubing
- 3. Set 4.5" CIBP at 4730' to isolate existing MV completion
- 4. RU wellcheck and MIT wellbore to 500 PSI
- 5. Set 7" CBP at 3100'
- 6. Run CBL from CBP to surface.
- 7. PU 7" frac packer and frac string, RIH and set packer at 2800'
- 8. Pressure test frac string to 5000 PSI
- 9. MIRU frac spread.
- 10. Perforate and frac the Fruitland Coal from 2805' to 3074'.
- 11. MI flow back and flow well to relieve pressure if needed.
- 12. MIRU service rig.
- 13. Test BOP's.
- 14. POOH with frac string and packer.
- 15. When water and sand rates are acceptable, flow test the intervals.
- 16. Make up 7" mill and clean out.
- 17. Make up 3-7/8" mill and cleanout CIBP and to PBTD
- 18. TIH and land 2-3/8" production tubing.
- 19. ND BOP's, NU production tree.
- 20. RDMO service rig & turn well over to production.

•

3004521631		Surface Legal Location 002-029N-008W-O	License No.		NEW MEXICO		Well Configuration Type Vertical	
original K&/RT Eleva		K2-Ground Distance (%)	MV Inginal Spud Date 1/16/1975 00:00	Rig Release Date 1/26/1975 00:0	0	PETD (AI) (NKE)		Total Depth All (TVD) (NK2)
lost Recent Jo	b							
eb Category VELL INTERVE	INTION	Primary Job Type Stimulate/Cleanou		y Job Type Dut		al Start Date 5/2005		Dete 9/2005
TD: 5,560.0				ginal Hole [Vertic				
			On	-		,		
MD (ftKB)				Vertical schema	tic (actual))		
- 12.1 -						Casino Join	ts. 7in: 12.0	0-15.44; 3.44; 2-1; 7; 6.28
- 15.4						Casing Join	ts, 10 3/4in;	12.00-165.00; 153.00; 1-1
165.0						10 3/4; 10.19 Guide Shoe		65.00-166.00; 1.00; 1-2; 1
166.0						3/4; 10.19		
1.299.9						Casing Join	ts, 7in; 15.4	4-2,864.21; 2,848.77; 2-2; 1
2.000.0	-Oio Alamo	o (Ojo Alamo (final)) —			8	6.37		
2,183,1	-	(irtland (final))						
- 2,804.1	-	(Fruitland (final))					ing; 12.00-9	5,395.86; 5,383.86; 2-1; 2
	Fruitiand	(Pruitiand (final)) —				3/8; 2.00		
2,864.2								
- 3,075.1	-Pictured C	liffs (Pictured Cliffs (fin	1 2 ())			Casing Join 7; 6.28	ts, 7in; 2,86	4.21-3,316.40; 452.19; 2-3;
3,133.5				n Sina Sina Sina Sina Sina Sina Sina Sin	r			, 133.65-3, 138.25; 4.60; 3-
- 3,138.1					۲	1; 4 1/2; 4.0 Float Collar		40-3.317.40: 1.00: 2-4: 7:
3,316.3						6.28		
- 3,317.3				·····		Casing Join	ts, 7in; 3,31	7.40-3,348.40; 31.00; 2-5; 1
3,348.4					8	Guide Shoe	, 7in; 3,348.	40-3,350.00; 1.60; 2-6; 7;
3,350.1					N.	6.28		
3,886.2 -						Casing Join	ts, 4 1/2in: 3	,138.25-5,517.62;
4,778.9 -	-Cliff Hous	e (Cliff House (final))			×	2,379.37; 3-4		
4,779.9								
4,850.1	Menefee (Menefee (final))						2/8/1975 00:00 (PERF - 4,886.00; 1975-02-08
4,886.2		w						
5.217.8				<u></u>				
-,	Point Loo	kout (Point Lookout (fi	in all)					2/6/1975 00:00 (PERF -
- 5,220.1		was from cookout (ii			8			5,470.00; 1975-02-06 (5.86-5,396.86; 1.00; 2-2; 2
- 5,396.0						3/8; 1.78		
- 5,397.0						2 3/8in, Exp 0.50; 2-3; 2 3		eck; 5,396.86-5,397.36;
5,397.3								
5,453.1	-Mancos (N	/lancos (final))		188				
5,470.1								
- 5,502.0								
5,517.7 -						Insert Float, 4 1/2; 4.05	4 1/2in; 5,5	17.62-5,518.62; 1.00; 3-3;
5,518.7						Casing Join		5,518.62-5,558.25; 39.63; 3
5,558.4						4; 4 1/2; 4.0 Float Shoe		58.25-5,560.00; 1.75; 3-5;
5.560.0						1/2; 4.05	- 1/ E/11, 3,3	

•

3004521631	002-029N-008W-O MV		License No.	NEW MEXIC	CO Vertical	ND•
riginal K&IRT Elevation (%) .322.00	K2-Ground Datance (%) Criginal Sput 12.00 1/16/1975		Release Date 26/1975 00:00	PETD (AI) (INE)	Total Depth AI (TVD)	(URKE)
ost Recent Job	12.00 1010/19/5	100.00	2010/0/00/00			_
	Stimulate/Cleanout	Secondary Job Typ Clean Out	•	Actual Start Date 1/16/2006	1/19/2005	
D: 5,560.0			lole [Vertical]			
		-				
MD (ftKB)		Ver	tical schematic (a	actual)		
12.1		8383		I LYNY -Casing Joi	ints, 7in; 12:00-15:44; 3:44; 2-1; 1	7: 6.28
15.4				Casing Joi	ints, 10 3/4in; 12.00-165.00; 153.	
165.0				10 3/4; 10. Guide Sho	19 xe, 10 3/4in; 165.00-166.00; 1.00	: 1-2: 10
166.0				3/4; 10.19		
1,299.9				Casing Joi	ints, 7in; 15.44-2,864.21; 2,848.7	7; 2-2; 7
	imo (Ojo Alamo (final))			6.37		
	d (Kirtland (final))	§		8		
	nd (Fruitland (final))			2 3/8in, Tu 3/8: 2.00	bing; 12.00-5,395.86; 5,383.86;	2-1; 2
2.864.2		2		3/8; 2.00		
	d Cliffs (Pictured Cliffs (final))	3		Si Carina Ini	ints, 7in; 2,864.21-3,316.40; 452.	10-2-2-
	a Cliffs (Pictured Cliffs (final))	ÿ		7; 6.28		
3,133.5		2	TR A	Uiner Han	ger, 4 1/2in; 3,133.65-3,138.25; 4 05	4.60; 3-
3,138.1		Č.		8	 ar, 7in; 3,316.40-3,317.40; 1.00; 2	2-4; 7;
3,316.3			1	6.28	ints, 7in; 3,317.40-3,348.40; 31.0	0.2.5.7
3,317.3				6.28	na, m, 3,317,40°3,348,40, 31.0	0, 2-3, 7
3,348.4				Guide Sho	e, 7in; 3,348.40-3,350.00; 1.60; 2	2-6; 7;
3,350.1						
3,886.2					ints, 4 1/2in; 3, 138.25-5, 517.62;	
4,778.9Cliff Ho	ouse (Cliff House (final))			2,3/9.3/; 3	-2: 4 1/2: 4.05	
4,779.9				4.780.0-4.6	86.0ftKB on 2/8/1975 00:00 (PE	RF -
4,850.1 Menefe	e (Menefee (final))				DE); 4,780.00-4,886.00; 1975-02-	
4,886.2			28 73			
5,217.8				5219.0.5	(70.0ftKB on 2/6/1975 00:00 (PE	
5,220.1Point L	ookout (Point Lookout (final))			MESAVER	DE); 5,218.00-5,470.00; 1975-02-	
5,396.0				2 3/8in, "F	" Nipple; 5,395.86-5,396.86; 1.00	0; 2-2; 2
5,397.0			7		pendable Check; 5,396.86-5,39	7.36;
5,397.3				0.50; 2-3; 2	2 3/8; 1.78	
5,453.1	s (Mancos (final))		128 B			
5,470.1						
5,502.0			Manager 1			
5.517.7					at, 4 1/2in; 5,517.62-5,518.62; 1.0	00; 3-3;
5.518.7				4 1/2; 4.05 Casing Joi	ints, 4 1/2in; 5,518.62-5,558.25; 3	39.63; 3-
5,558.4				4,41/2,4		
5,558.4				Float Sho 1/2: 4.05	a, 4 1/2in; 5,558.25-5,560.00; 1.7	5; 3-5; 4

Well Name: STATE COM N 10A

Received by OCD: 3/31/2023 8:10:59 AM

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

Phone: (505) 334-6178 Fax: (505) 334-6 District IV 1220 S. St Francis Dr. Santa Fa. NM 8

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462 Form C-102 August 1, 2011

Permit 334077

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-045-21631	71629	BASIN FRUITLAND COAL (GAS)
4. Property Code	5. Property Name	6. Well No.
319096	State Com N	010A
7. OGRID No.	8. Operator Name	9. Elevation
372171	HILCORP ENERGY COMPANY	6310

_		10. Surface Location													
	UL - Lot		Section		Township		Range	Lot Idn		N/S Line		Feet From	E/W Line	(County
		0		2	2	9N	08W		790		S	1790		E	SAN JUAN

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

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

OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. E-Signed By: Kandis Roland Title: Regulatory Tech Date: 2/9/2023
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: Ernest V. Echohawk
Date of Survey: 12/30/1974 Certificate Number: 3602

.

Received b	v OCD:	3/31/2023	8:10:59 AM
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Submit Electronically

Via E-permitting

State of New Mexico Energy, Minerals and Natural Resources Department

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description Effective May 25, 2021

I. Operator: Hilcorp Energy Company OGRID: 372171 Date: _2/9/2023_

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

If Other, please describe:

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

Well Name	API	ULSTR	Footages	Anticipat	Anticipated	Anticipated
				ed Oil	Gas	Produced
				BBL/D	MCF/D	Water BBL/D
State Com N 10A	3004521631	O-2-29N-8W	790' FSL & 1790' FEL	0	200	4

IV. Central Delivery Point Name: Chaco-Blanco Processing Plant [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
State Com N 10A	<u>3004521631</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	Not Yet Scheduled

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

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

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

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

XI. Map. \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).

 \Box 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.

Section 3 - Certifications Effective May 25, 2021

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: Kandís Roland
Printed Name: Kandis Roland
Title: Operations/Regulatory Tech Sr.
E-mail Address: kroland@hilcorp.com
Date: 2/9/2023
Phone:713-757-5246
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
- 19F1-0-02 251
Title:
Approval Date:
Conditions of Approval:

VI. Separation Equipment:

Hilcorp Energy Company (HEC or Operator) production facilities include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the targeted pool of our 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
 - \circ $\;$ 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
 - o 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.

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

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District III

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

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

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

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	186094
	Action Type:
	[C-103] NOI Recompletion (C-103E)

CONDITIONS

COMPILICATI	-	
Created By	Condition	Condition Date
kpickford	DHC required	2/22/2023
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	2/22/2023

Page 22 of 42

Action 186094

	Mesaverde	Pictured Cliffs	Fruitland Coal
Measured and Estimated BHP	500 – 800 PSI	200 – 400 PSI	150 – 400 PSI
Gas BTU	1240	1140	1100
CO2	1.4%	0.6%	0.9%
H2S %	< 0.01%	<0.01%	<0.01%
N2 %	0.1%	0.1%	0.1%

Supplemental Information for Fruitland Coal Recompletes in 29N 8W

*Please note that during wellbore preparation and fracture stimulating, measurements will be recorded to measure BHP indirectly and directly on these intervals i.e., fluid levels, initial shut-in pressures post frac, flowing pressures during cleanout, shut in pressures during cleanout, etc. This information will be included as part of the routine subsequent submittal.

Adjacent Wellbores in 29N 8W commingled in similar manners

Well Name	API Number	Commingled Intervals	Operator
Pritchard 3A	3004522345	Fruitland Coal, Pictured Cliffs, Mesaverde	Ikav-Simcoe
Florance T 123M	3004525564	Fruitland Coal, Mesaverde, Dakota	Ikav-Simcoe
Vandewart B3	3004526148	Fruitland Coal, Pictured Cliffs	Ikav-Simcoe
Howell C 201	3004529108	Fruitland Coal, Pictured Cliffs	Hilcorp
Howell C 200S	3004533666	Fruitland Coal, Pictured Cliffs	Hilcorp

.

Hilcorp Energy	y Company		Schema	tic - Curre	nt		
Well Name: HO	WELL C #201						
P17.0M1 004529108	Surface Legal Location 003-029N-008W-B	Field Name BSN (FTLD	COAL) #30	License No.		State/Province NEW MEXICO	Well Configuration Type Vertical
riginal K2/RT Elevation (ft) ,143.00		Hore Sout Date		Release Date 9/2001 14:00		то (Al) (тика) Iginal Hole - 3,183.0	Total Depth All (TVD) (NKB)
ost Recent Job							
to Catagory VELL INTERVENTION	RESTIMULATION		Secondary Job Typ		Actual Start Da 2/13/2001		End Date 3/9/2001
D: 3,194.0			Original H	ole [Vertical]			
MD (ftKB)			Vert	ical schematic (a	actual)		
					-		
12.1 -							5/8in; 12.00-14.40; 2.40; 1-1; 9
14.4						5/8; 8.92	in; 14.40-230.58; 216.18; 1-2;
230.6						9 5/8; 8.92	
230.6						S.T. COLLAR, 9 5/8ir 5/8; 8.92	n; 230.58-231.58; 1.00; 1-3; 9
231.6							12.00-2,689.00; 2,677.00; 2-1; 7
232.0						/~6.46	
1,788.1 - OJO A	LAMO (OJO ALAMO (final))					2 3/8in, Tubing; 12. 3/8; 2.00	00-2,948.70; 2,936.70; 1-1; 2
1.948.2	AND (KIRTLAND (final))						
1,348.2 KIKTU	AND (CIKTEAND (III)) -						
2,458.0				M	××		
2,596.1 FRUITI	LAND (FRUITLAND (final))				88		
2.689.0							
						-Shoe, 7in; 2,689.00-	2,690.00; 1.00; 2-2; 7; 6.46
2,690.0					8		
- 2,742.1			N	60 I	98 V		on 2/27/2001 00:00 (PERF 2.742.00-2.832.00: 2001-02-
- 2,748.0					88 88	27	2,742.00-2,832.00; 2001-02-
2.832.0					68 -	CASING, 4 1/2in; 2,4	458.00-3,183.03; 3,160.66; 3-1;
						- 1/2 - 200	
2,879.9							
- 2,882.9 - PICTUR	RED CLIFFS (PICTURED CLIF	FS (final))					
2,895.0					祭 図 <mark>「</mark>		on 2/27/2001 09:00 (PERF 2,895.00-2,970.00; 2001-02-27
2.948.8				81	68	09:00	na Miania: 2,040 70,0040 00.
					2434 / · · · · · · · · · · · · · · · · · ·		ng Nipple; 2,948.70-2,949.80;
- 2,949.8					88 82	2 3/8in, Tubing; 2,9	49.80-2,981.20; 31.40; 1-3; 2
2,970.1					8	3/8; 2.00	
2,981.3						2 3/8in, Notched co	ollar; 2,981.20-2,982.00; 0.80; 1
2,982.0				mm		-4; 2 3/8	
3,054.1LEWIS	(LEWIS (final))						
3,183.1						FLOAT COLLAR, 4 1/	/2in; 3,183.03-3,183.92; 0.89; 3
3,184.1					8 <mark>.</mark>	-2; 4 1/2; 4.00	n; 3,183,92-3,193,35; 9,43; 3-3;
						4 1/2; 4.00	n; 5, 185.92*5, 195.55; 9.45; 3*5;
- 3,193.2					×.		

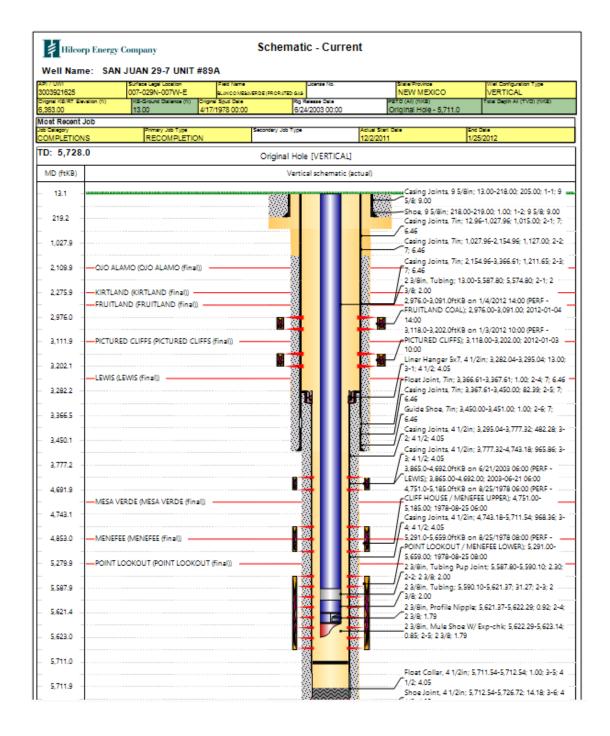
Wellbore Diagrams for Hilcorp Operated Commingles

Hilcorp Ener	gy Company DWELL C #200 S	Sch	ematic - Curre	nt	
97.0WF	Surface Legal Location 001-029N-008W-O	Field Name BASIN (FRUITLAND	Ucense No.	State Province NEW MEXICO	Wel Configuration Type VERTICAL
iginal KE/RT Elevation (%)	K2-Ground Distance (ft)	Driginal Spud Date	Rg Release Date 10/20/2005 14:20	Pato (Al) (tika) Orioinal Hole - 3.143	Total Depth All (TVD) (NKD)
224.00 ost Recent Job	11.00	10/12/2006 10:15	10/20/2006 14:20	Original Hole- 3,143	.0
Catagory OMPLETIONS	Primary Job Type INITIAL COMPLE			Actual Start Date 12/8/2005	End Date 1/30/2007
D: 3,188.0	provide contract		inal Hole [VERTICAL]		1002007
MD (ftKB)		Ung	Vertical schematic (
MD (ITKB)			vertical schematic (
11.2 -		8			11.02-11.90; 0.88; 1-1; 7; 6.46 ; 11.00-41.94; 30.94; 1-1; 2 3/8;
11.8				2.00	
42.0				2 3/8in, Tubing	Pup Joint; 41.94-55.32; 13.38; 1-3
55.4				20102	in; 11.90-271.27; 259.37; 1-2; 7;
271.3				6.46	
272.0			8	5000	7-272.12; 0.85; 1-3; 7; 6.46 I 1/2in; 11.00-2,399.31; 2,388.31; 2
277.9				f 1; 4 1/2; 4.05	- y anty i novra, 200.01, 2,000.01, 2
	Alamo (Ojo Alamo (final)) 🗕			2 3/8in, Tubing	; 55.32-3,000.37; 2,945.05; 1-3; 2
				3/8; 2.00	
	and (Kirtland (final))			Carina Isiata /	1/2in; 2,399.31-2,442.13; 42.82; 2
2,399.3				2; 41/2; 4.05	· 1/210; 2,355.51-2,442.13; 42.62; 2
2,442.3					2in; 2,442.13-2,444.63; 2.50; 2-3; 4
2,444.6				/	1/2in; 2,444.63-2,487.34; 42.71; 2
2,450.1				4; 4 1/2; 4.05	
2,487.2				Casing Joints, 4 2-5: 4 1/2: 4.05	1/2in; 2,487.34-2,615.80; 128.46;
2,615.8					1/2in; 2,615.80-2,625.95; 10.15; 2-
2,626.0				6; 4 1/2; 4.05	
2,723.1	land (Fruitland (final))				
2,734.9				FRUITI AND CO	tKB on 1/6/2007 14:30 (PERF AL): 2,735.00-2,932.00; 2007-01-
2.737.9			2203 1 	6 14:30	
2.932.1			10200	2-7: 4 1/2: 4.05	1/2in; 2,625.95-3,138.88; 512.93;
	red Cliffs (Pictured Cliffs (fir				
3.000.3	neo entra prezeneo entra (hr			2 3/8in, Tubing	Pup Joint; 3,000.37-3,002.47; 2.1
-,				2 3/8in, Tubing	; 3,002.47-3,033.69; 31.22; 1-5; 2
3,002.0			1000	xxx √ 3/8; 2.00 23/8: 0.00	anting Niggler 2 022 60-2 024 47
3,002.6				0.78; 1-6; 2 3/8;	eating Nipple; 3,033.69-3,034.47; 1.78
3,033.8				a second s	toe (EXP CHK); 3,034.47-
3,034.4		•••••••			-7; 2 3/8; 1.71 tKB on 1/5/2007 11:30 (PERF
3,035.4				PICTURED CLIP	FS); 3,002.00-3,076.00; 2007-01-0
3,076.1				920 11:30	
3,138.8					
3,139.1					/2in; 3,138.88-3,139.43; 0.55; 2-8;
3.139.4				4 1/2; 4.05	
3.143.0				Casing Joints, 4	1/2in; 3,139.43-3,182.08; 42.65; 2
3, 143.0				9: 4 1/2: 4.05	

.

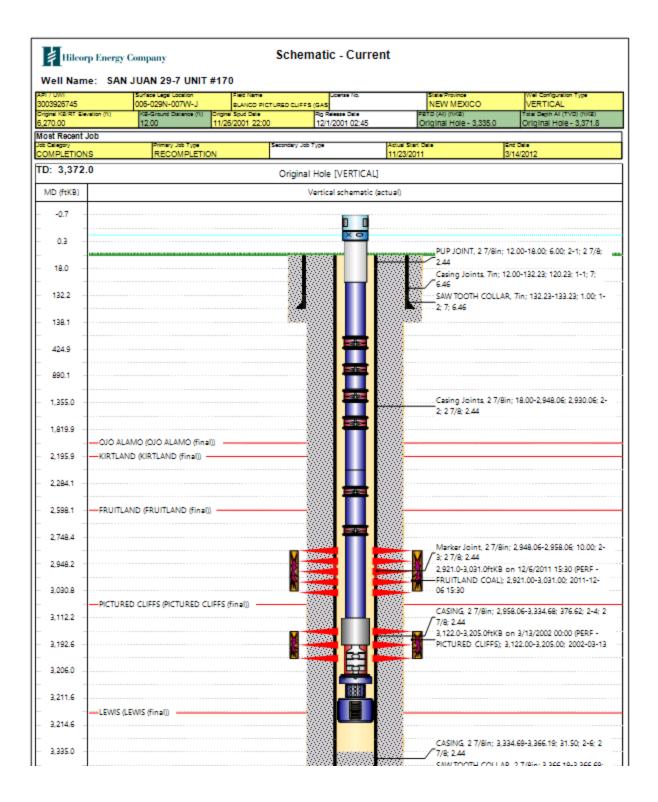
Well Name	API Number	Commingled Intervals	Operator
San Juan 29-7 Unit 89A	3003921625	Fruitland Coal, Pictured Cliffs, Mesaverde	Hilcorp
San Juan 29-7 Unit 583	3003925260	Fruitland Coal, Pictured Cliffs	Hilcorp
San Juan 29-7 Unit 170	3003926745	Fruitland Coal, Pictured Cliffs	Hilcorp
San Juan 29-7 Unit 520S	3003929816	Fruitland Coal, Pictured Cliffs	Hilcorp
San Juan 29-7 Unit 519	3003925268	Fruitland Coal, Pictured Cliffs	Hilcorp

Hilcorp-Operated Adjacent Wellbores in 29N 7W



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Hilcorp Ener			tic - Curre	ent		
Well Name: S/ APT70W1 3003925260 Drignel KällRT Elevelon (%) 6,281.00		Field Name BSN (FTLD COAL) #30 # Spud Date R	Ucenze No. 046 078943 9 Release Date /29/1993 06:00	State Prove NEW Mi Parto (Al) (NK Original Ho	EXICO VER 2) Total D	Configuration Type (TICAL epith All (TVD) (ftK2)
Most Recent Job	Primary Job Type	N INITIAL COM		Actual Start Date 7/14/1993	End Date	
COMPLETIONS TD: 3,335.2	INITIAL COMPLETIO				7/29/1993	
MD (ftKB)		-	ole [VERTICAL]			
- 12.1				Will Will Grine	Joints, 8 5/8in; 12.00-2	44 35: 232 35: 1-1-
- 244.4				8 5/8; (8.10 Shoe, 8 5/8in; 244.35-2	
- 245.4					Joints, 4 1/2in; 12.00-2	822 40: 2 810 40: 2
256.9				f 1; 4 1/2		
- 2,015.1 OJO	ALAMO (OJO ALAMO (final)) -			3/8; 2		
- 2,200.1 KIRT	LAND (KIRTLAND (final))					
- 2,822.5				Stage 4 1/2	Collar, 4 1/2in; 2,822.40- 4.05	-2,824.10; 1.70; 2-2
- 2,824.1		·····				
	ITLAND (FRUITLAND (final))					
- 2,881.9				10000 V		
- 2,886.2		N 80	2021	2,882.0)-3,005.0ftKB on 7/25/1 LAND COAL); 2,882.00-3	
3,004.9				Casing	Joints, 4 1/2in; 2,824.1(1/2; 4.05	0-3,290.71; 466.61;
	URED CLIFFS (PICTURED CLIFFS)	M B	6691	3,080.0)-3,208.0ftKB on 7/15/19 RED CLIFFS); 3,080.00-3,	
- 3,190.9			881 4	2 3/8in 2 3/8in 2 3/8in 3/8	, F Nipple; 3,191.00-3,1	92.00; 1.00; 1-2; 2
			2001	NEX	, Tubing; 3,192.00-3,22	3.85; 31.85; 1-3; 2
- 3,208.0				3/8; 2.		
3,223.8				2 3/8in -4: 2 3	, Notched Collar; 3,223	.85-3,224.85; 1.00;
- 3,224.7			Panna		-	
- 3,268.0		·····				
- 3,290.7				Float (Collar, 4 1/2in; 3,290.71- 4.05	3,291.56; 0.85; 2-4;
3,291.7				Casing	Joints, 4 1/2in; 3,291.56	6-3,333.83; 42.27; 2
- 3,334.0				5; 4 1// Casing	2; 4.05 Shoe, 4 1/2in; 3,333.83	-3.335.18: 1.35: 2-6



.

Well Name: SA	N JUAN 29-7 UNIT #	520 S				
XP17 UW1 3003929816	Surface Legal Location 008-029N-007W-C	Field Name SLANCO PICTURED CUR	License No.		State/Province NEW MEXICO	Well Configuration Type VERTICAL
Criginal KE/RT Elevation (%) 6,163.00	KE-Ground Distance (ft)	Drighal Spud Date 10/13/2005 20:15	Rg Release Date 10/16/2006 06:00		Pato (AI) (NKE) Original Hole - 3,104.0	Total Depth AI (TVD) (NKZ)
Most Recent Job	11.00	10/10/2000 20:10	10102000 00.00		original notes o, loco	
COMPLETIONS	Primary Job Type INITIAL COMPLE	TION INITIAL		Actual Start 11/1/2006		End Date 12/12/2005
TD: 3,165.0		Origir	al Hole (VERTICAL)			
MD (ftKB)			Vertical schematic (a	actual)		
- 10.8 -		232				
- 11.2					Casing Joints, 7in:	11.00-141.95; 130.95; 1-1; 7;
- 104.0					6.46	
- 142.1					Charles The state of the	10.05 1.05 1.0 7 6 16
- 143.0						142.95; 1.00; 1-2; 7; 6.46
- 145.0						
					Casing Joints, 4 1/ ∫ 1; 4 1/2; 4.05	2in; 11.00-2,414.87; 2,403.87; 2
- 470.1					2 3/8in, Tubing; 10	0.98-2,968.55; 2,957.57; 1-1; 2
- 1,899.9 - OJO A	LAMO (OJO ALAMO (final)))			3/8; 2.00	
- 2,102.0	AND (KIRTLAND (final)) —				Marker Joint, 4 1/2	2in; 2,414.87-2,429.98; 15.11; 2-
2,415.0					2: 4 1/2: 4.05	2in; 2,429.98-3,108.18; 678.20;
- 2,430.1						
- 2.710.0	LAND (FRUITLAND (final))				1	B on 11/30/2006 14:30 796.00-2,929.00; 2006-11-30
2.795.9			2000 I 2000 I	1986		B on 11/30/2006 09:00
			22000 C	19682 19682	(PERFORATED); 2,9	991.00-3,033.00; 2006-11-30
- 2,929.1			2660 I	1868	09:00	
- 2,938.0 - PICTU	RED CLIFFS (PICTURED CLI	FFS (final))	- 2000 I 2000 I	1933)		
2,968.5				1000	2 3/8in, Tubing Pu	p Joint; 2,968.55-2,970.60; 2.0
- 2,970.5				1888 1888	1-2; 2 3/8; 2.00	
- 2,991.1				9395	2 3/8in, Tubing; 2,	970.60-3,000.90; 30.30; 1-3; 2
3.001.0			1000	1000		
3.001.6		8			0.79; 1-4; 2 3/8; 1.7	
				1988	2 3/8in, Mule Sho 3/8	e; 3,001.69-3,002.62; 0.93; 1-5; ;
- 3,002.6						
- 3,033.1			- 2000	1000		
- 3,104.0						
- 3,108.3				3	Float Collar, 4 1/2	in; 3,108.18-3,108.73; 0.55; 2-4;
3,108.6					4 1/2; 4.05	
				2	Casing Joints, 4 1/ 5: 4 1/2: 4.05	2in; 3,108.73-3,151.08; 42.35; 2

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	p Energy Company e: SAN JUAN 29-7 UN		hematic - Currei	nt	
APL7 UWI 3003925258 Driginal K&/RT Elevi	Surface Legal Location 008-029N-007W-E ation (%) K2-Ground Datance ()	Field Name BSN (FTLD COAL) 1) Drighel Sput Date	Rg Release Date	Patto (Al) (fika)	Vel Configuration Type VERTICAL Total Depth AI (TVD) (1952)
5,231.00 Most Recent J	12.00	6/9/1993 06:00	10/25/2005 09:30	Original Hole - 3,155.0	Original Hole - 3,194.8
lob Calegory	Primary Job Type		ry Job Type	Actual Start Date	End Date
WELL INTERV		P REPAIR		5/13/2014	5/15/2014
TD: 3,195.	0	Ori	ginal Hole [VERTICAL]		
MD (ftKB)			Vertical schematic (a	ctual)	
4.6					
- 13.1 -				1/16; 2.00	anger; 12.03-13.03; 1.00; 3-1; 7 UE; 13.03-44.19; 31.16; 3-2; 2
28.5				3/8; 2.00	p Joint; 44.19-50.19; 6.00; 3-3;
44.3				2 3/8; 2.00 Casing Joints, 8 5/8	in; 12.00-245.81; 233.81; 1-1;
245.7				Guide Shoe, 8 5/8ir 5/8; 8.10	n; 245.81-246.81; 1.00; 1-2; 8 UE; 50.19-1,294.74; 1,244.55; 3·
252.0				4, 2 3/8; 2.00 Casing Joints, 4 1/2	2in; 12.00-2,755.03; 2,743.03; 2
2,120.1	-OJO ALAMO (OJO ALAMO (-KIRTLAND (KIRTLAND (final			1; 4 1/2; 4.05 2 3/8in, Tubing YEL 1.808.37: 3-5: 2 3/8:	LOW; 1,294.74-3,103.11;
2,700.1	-FRUITLAND (FRUITLAND (Fir	())			2,755.03-2,756.73; 1.70; 2-2; 4
2,756.9				2,830.0-2,980.0ftKB / Coal); 2,830.00-2,98	on 7/29/1993 00:00 (Fruitland 0.00; 1993-07-29
2,980.0				2-3; 4 1/2; 4.05	2in; 2,756.73-3,150.33; 393.60;
3,004.9	-PICTURED CLIFFS (PICTURED	CLIFFS (final))	100001	988) 988) 989)	
3,019.7				2000 3,003.0-3,136.0ftKB 2000 Cliffs): 3,003.0-3,13	on 7/18/1993 00:00 (Pictured
3,095.1				23/31 23/8in, 1.78 F-NIPP	PLE; 3,103.11-3,103.95; 0.84; 3-
3,104.0			333341 10 1	6; 2 3/8; 1.79 2 3/8in, Tubing Pu; 2 3/8in, Tubing Pu; 2 3/8; 2.00	p Joint; 3,103.95-3,108.08; 4.1;
3,119.1			200001	2 3/8in, PGA-1 MUD 2 3/8in, PGA-1 MUD 2 32 32; 3-8; 2 3/8; 2 0	0 ANCHOR; 3,108.08-3,140.40
3,136.2					~ .VE: 3.140.40-3.141.10: 0.70: 3-
3,141.1				9; 2 3/8; 2.00	1: 3.150.33-3.151.18: 0.85: 2-4:
3,151.2				4 1/2; 4.05 Casing Joints, 4 1/2	(in; 3, 151.18-3, 191.18; 0.85; 2-4; (in; 3, 151.18-3, 192.48; 41.30; 2:
3,192.6				5: 4 1/2: 4.05	

From:	McClure, Dean, EMNRD on behalf of Engineer, OCD, EMNRD
To:	Cheryl Weston; Mandi Walker
Cc:	McClure, Dean, EMNRD; Rikala, Ward, EMNRD; Wrinkle, Justin, EMNRD; Powell, Brandon, EMNRD; Lamkin, Baylen L.; Dawson, Scott
Subject:	Approved Administrative Order DHC-5316
Date:	Friday, August 18, 2023 8:27:02 AM
Attachments:	DHC5316 Order.pdf

NMOCD has issued Administrative Order DHC-5316 which authorizes Hilcorp Energy Company to downhole commingle production within the following well:

	State Com N
Well Name:	#10A
Well API:	30-045-21631

The administrative order is attached to this email and can also be found online at OCD Imaging.

Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.

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

State Com N 10A

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

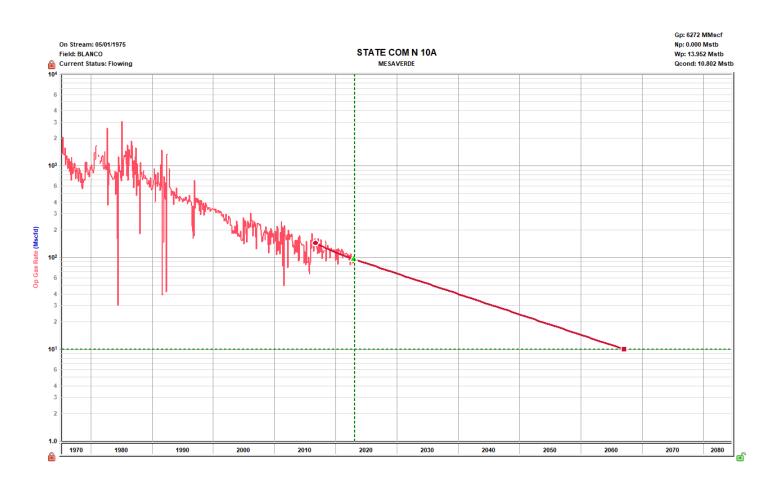
The BHPs of all zones, producing and non-producing, were estimated based upon basin wide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin, in conjunction with shut-in pressure build-ups. These models were constructed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

Production Allocation Method – Subtraction

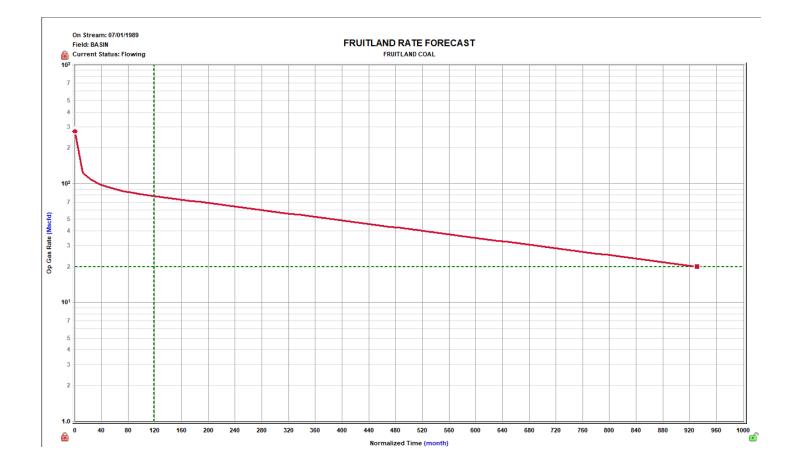
Gas Allocation:

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



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Oil Allocation:

Fruitland Coal is not expected to produce condensate therefore it will be allocated 100% to MV

Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
Mesaverde	1.14	614	100%
Fruitland	0	1,400	0%

Supplemental Information for C 107A

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

I believe each of the reservoirs to be continuous and in a similar state of depletion based on at the **State Com N 10A** and each of the wells from which pressures are being derived.

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

Bottomhole Pressure Derivation

Beaver Lodge Com 1 A – Standalone MV

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

Day B 17– Standalone FC

- 1. 24 hour SI
- BHP calculated based on SN depth and 24 hr SI casing pressure *Please note this well is on wellhead compression*

Well Name	API	Formation	BHP
Beaver Lodge Com 1 A	3004529427	MV	68 psi
Day B 17	3004534024	FC	25 psi

Gas Analyses

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

AssetCode	3004529427
AssetName	BEAVER LODGE COM 1A
Formation	MV Standalone
BTUDry	1308
SpecificGravity	0.7685
CO2	0.014328
N2	0.00179
C1	0.778652
C2	0.098777
С3	0.054425
ISOC4	0.011126
NC4	0.017441
ISOC5	0.006826
NC5	0.005163
NEOC5	
C6	
C6_PLUS	0.011472

AssetCode	3004534024
AssetName	DAY B 17
Formation	FC Standalone
BTUDry	1135
SpecificGravity	0.6572
CO2	0.014335
N2	0.001693
C1	0.86766
C2	0.070399
С3	0.033709
ISOC4	0.005777
NC4	0.003595
ISOC5	0.001097
NC5	0.000479
NEOC5	
C6	
C6_PLUS	0.001256

Water Analyses

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

Water Analyses

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

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

Sampled Date: 07/26/23 11:30									
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	67.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Bicarbonate as CaCO3*	67.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Chloride*	0.321	1.00	0.0555	mg/L	1	08/09/23 03:16	EPA300.0		AWG
Conductivity*	147	1.00		umho/cm@25 C	1	07/28/23 09:03	2510 B		AES
pH*	6.37			pH Units	1	07/28/23 09:03	EPA150.1		AES
pH Temperature, degrees C	19.4			pH Units	1	07/28/23 09:03	EPA150.1		AES
Resistivity	6800			ohm/cm	1	08/08/23 14:36	2510 B		JDA
Specific Gravity	1.001	0.8000		No Unit	1	08/09/23 15:13	ASTM D1429-03		CAI
Sulfate*	<0.620	5.00	0.620	mg/L	5	08/11/23 20:42	EPA300.0		AWG
Total Dissolved Solids*	<10.0	10.0		mg/L	1	07/31/23 15:39	EPA160.1		CAI
Potentially Dissolved Metals by ICP									
Barium*	<0.400	0.400	0.156	mg/L	20	08/08/23 16:28	EPA200.7		AES
Calcium*	<2.00	2.00	1.24	mg/L	20	08/08/23 16:27	EPA200.7		AES
Hardness, as CaCO3	<13.2	13.2	5.98	mg/L	20	08/08/23 16:27	2340 B		AES
Iron*	46.8	1.00	0.302	mg/L	20	08/08/23 16:27	EPA200.7		AES
Lead*	<2.00	2.00	0.214	mg/L	20	08/08/23 16:28	EPA200.7		AES
Magnesium*	<2.00	2.00	0.702	mg/L	20	08/08/23 16:27	EPA200.7		AES
Manganese*	0.323	0.400	0.127	mg/L	20	08/08/23 16:27	EPA200.7	J	AES
Potassium*	<20.0	20.0	2.08	mg/L	20	08/08/23 16:27	EPA200.7		AES
Silica (SIO2)	<3.26	21.4	3.26	mg/L	20	08/08/23 16:27	Calculation		AES
Silicon	<10.0	10.0	1.52	mg/L	20	08/08/23 16:27	EPA200.7		AES
Sodium*	<20.0	20.0	8.18	mg/L	20	08/08/23 16:27	EPA200.7		AES
Strontium*	<2.00	2.00	0.341	mg/L	20	08/08/23 16:27	EPA200.7		AES
Zinc*	<2.00	2.00	0.155	mg/L	20	08/08/23 16:28	EPA200.7		AES

SJ 28-6 NP 408 2307265-03 (Water)

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

SJ 28-7 56A

2307265-01 (Water) Sampled Date: 07/26/23 10:45

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analys
General Chemistry									
Alkalinity, Total as CaCO3*	28.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Alkalinity, Bicarbonate as CaCO3*	28.0	10.0	6.06	mg/L	1	08/03/23 15:00	2320 B		JDA
Chloride*	0.422	1.00	0.0555	mg/L	1	08/09/23 01:11	EPA300.0		AWC
Conductivity*	59.6	1.00		umho/cm@25 C	1	07/28/23 09:03	2510 B		AES
pH*	5.67			pH Units	1	07/28/23 09:03	EPA150.1		AES
pH Temperature, degrees C	18.1			pH Units	1	07/28/23 09:03	EPA150.1		AES
Resistivity	16800			ohm/cm	1	08/08/23 14:36	2510 B		JDA
Specific Gravity	0.9920	0.8000		No Unit	1	08/09/23 15:13	ASTM D1429-03		CA
Sulfate*	<0.620	5.00	0.620	mg/L	5	08/11/23 20:02	EPA300.0		AWO
Total Dissolved Solids*	110	10.0		mg/L	1	07/31/23 15:35	EPA160.1		CAI
Potentially Dissolved Metals by ICP									
Barium*	<0.400	0.400	0.156	mg/L	20	08/08/23 16:18	EPA200.7		AES
Calcium*	<2.00	2.00	1.24	mg/L	20	08/08/23 16:18	EPA200.7	M5	AES
Hardness, as CaCO3	<13.2	13.2	5.98	mg/L	20	08/08/23 16:18	2340 B		AES
fron*	26.0	1.00	0.302	mg/L	20	08/08/23 16:18	EPA200.7		AES
Lead*	<2.00	2.00	0.214	mg/L	20	08/08/23 16:18	EPA200.7	M5	AES
Magnesium*	<2.00	2.00	0.702	mg/L	20	08/08/23 16:18	EPA200.7		AES
Manganese*	0.286	0.400	0.127	mg/L	20	08/08/23 16:18	EPA200.7	J	AES
Potassium*	<20.0	20.0	2.08	mg/L	20	08/08/23 16:17	EPA200.7	M5	AES
Silica (SIO2)	<3.26	21.4	3.26	mg/L	20	08/08/23 16:18	Calculation		AES
Silicon	<10.0	10.0	1.52	mg/L	20	08/08/23 16:18	EPA200.7	M5	AES
Sodium*	<20.0	20.0	8.18	mg/L	20	08/08/23 16:18	EPA200.7	M5	AES
Strontium*	<2.00	2.00	0.341	mg/L	20	08/08/23 16:18	EPA200.7		AES
Zinc*	<2.00	2.00	0.155	mg/L	20	08/08/23 16:18	EPA200.7		AES

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

APPLICATION FOR DOWNHOLE COMMINGLINGSUBMITTED BY HILCORP ENERGY COMPANYORDER NO. DHC-5316

<u>ORDER</u>

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

FINDINGS OF FACT

- 1. Hilcorp Energy Company ("Applicant") submitted a complete application ("Application") to downhole commingle the pools described in Exhibit A ("the Pools") within the well bore of the well identified in Exhibit A ("the Well").
- 2. Applicant proposed a method to allocate the oil and gas production from the Well to each of the Pools that is satisfactory to the OCD and protective of correlative rights.
- 3. Applicant has certified that the proposed commingling of the Pools shall not result in shutin or flowing well bore pressure in excess of the commingled pool's fracture parting pressure.
- 4. Applicant has certified that all produced fluids from all the Pools are compatible with each other.
- 5. Applicant has certified that downhole commingling the Pools will not decrease the value of the oil and gas production.
- 6. To the extent that ownership is diverse, Applicant identified all owners of interest in the Pools, provided evidence a copy of the Application was given to each person, and those persons either submitted a written waiver or did not file an objection to the Application.
- 7. Applicant provided notice of the Application to the Bureau of Land Management ("BLM") or New Mexico State Land Office ("NMSLO"), as applicable.

CONCLUSIONS OF LAW

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

Order No. DHC-5316

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

- 11. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.11(A)(8) NMAC.
- 12. To the extent that ownership is diverse, Applicant identified all owners of interest in the Pools and provided evidence the application was given to those persons in accordance with 19.15.12.11(C)(1)(b) NMAC.
- 13. By granting the Application with the conditions specified below, this Order prevents waste and protects correlative rights, public health, and the environment.

<u>ORDER</u>

- 1. Applicant is authorized to downhole commingle the Pools described in Exhibit A within the well bore of the well identified in Exhibit A.
- 2. Applicant shall allocate a fixed percentage of the oil production from the Well to each of the Pools until a different plan to allocate oil production is approved by OCD. Of the oil production from the Well:
 - a. zero percent (0%) shall be allocated to the BASIN FRUITLAND COAL (GAS) pool (pool ID: 71629); and
 - b. one hundred percent (100%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

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

a. the BASIN FRUITLAND COAL (GAS) pool (pool ID: 71629).

The current pool(s) are:

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

Applicant shall calculate the oil and gas production average during the fourth year after the commencement of commingling, which shall be used to establish a fixed percentage of the total oil and gas production that shall be allocated to each of the Pools ("fixed percentage allocation plan"). No later than ninety (90) days after the fourth year, Applicant shall submit a Form C-103 to the OCD Engineering Bureau that includes the fixed percentage allocation plan and all data used to determine it. If Applicant fails to do so, this Order shall terminate on the following day. If OCD denies the fixed percentage allocation plan, this Order shall terminate or without modifications, then the approved percentage allocation plan shall be used to determine oil and gas allocation starting on the date of such action until the Well is plugged and abandoned.

3. If an alteration is made to the Well or a condition within the Well changes which may cause the allocation of production to the Pools as approved within this Order to become inaccurate,

then no later than sixty (60) days after that event, Applicant shall submit Form C-103 to the OCD Engineering Bureau describing the event and include a revised allocation plan. If OCD denies the revised allocation plan, this Order shall terminate on the date of such action.

- 4. If any of the pools being commingled is prorated, or the Well's production has been restricted by an OCD order in any manner, the allocated production from each producing pool in the commingled well bore shall not exceed the top oil or gas allowable rate for a well in that pool or rate restriction applicable to the well.
- 5. If the Well is deepened, then no later than forty-five (45) days after the Well is deepened, Applicant shall conduct and provide logs to OCD that are sufficient for OCD to determine which pool(s) each new completed interval of the Well will produce from.
- 6. If the downhole commingling of the Pools reduces the value of the oil and gas production to less than if it had remained segregated, no later than sixty (60) days after the decrease in value has occurred Applicant shall submit a new downhole commingling application to OCD to amend this Order to remove the pool that caused the decrease in value. If Applicant fails to submit a new application, this Order shall terminate on the following day, and if OCD denies the application, this Order shall terminate on the date of such action.
- 7. If a completed interval of the Well is altered from what is submitted within the Application as identified in Exhibit A, then no later than sixty (60) days after the alteration, Applicant shall submit Form C-103 to the OCD Engineering Bureau detailing the alteration and completed interval.
- 8. If OCD determines that Applicant has failed to comply with any provision of this Order, OCD may take any action authorized by the Oil and Gas Act or the New Mexico Administrative Code (NMAC).
- 9. OCD retains jurisdiction of this matter and reserves the right to modify or revoke this Order as it deems necessary.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

DATE: 8/17/2023

DYLAN M. FUGE DIRECTOR

	Exhibit A		
	Order: DHC-5316		
	Operator: Hilcorp Energy Co	ompany (372171)	
	Well Name: State Com N #104	4	
	Well API: 30-045-21631		
	Pool Name: BASIN FRUITLANI	D COAL (GAS)	
Upper Zone	Pool ID: 71629	Current:	New: X
	Allocation:	Oil: 0%	Gas:
	Interval: Perforations	Top: 2,805	Bottom: 3,074
	Pool Name:		
Intermediate Zone	Pool ID:	Current:	New:
intermediate zone	Allocation:	Oil:	Gas:
	Interval:	Тор:	Bottom:
Bottom of Inter	val within 150% of Upper Zone's T	op of Interval:	
	Pool Name: BLANCO-MESAVE	RDE (PRORATED GAS)	
Lower Zone	Pool ID: 72319	Current: X	New:
	Allocation:	Oil: 100%	Gas:
	Interval: Perforations	Top: 4,780	Bottom: 5,470
Bottom of Inter	val within 150% of Upper Zone's T	op of Interval: NO	

State of New Mexico Energy, Minerals and Natural Resources Department

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

CONDITIONS

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	202595
	Action Type:
	[C-107] Down Hole Commingle (C-107A)

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

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