Initial

Application

Part I

Received: <u>08/09/2019</u>

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

RECEIVED: 08/09/2019 REVIEWER: TYPE: APP NO: DHC MAM pMAM1922147982

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION



Calariad & Fraincari	/ Y = 1								
- Geological & Engineerii 1220 South St. Francis Drive, Sar									
A DAAINIICTD A TIVE A DDI I C A	TION CUECKIET								
ADMINISTRATIVE APPLICATION CHECKLIST THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND									
REGULATIONS WHICH REQUIRE PROCESSING AT I	THE DIVISION LEVEL IN SANTA FE								
Applicant: Hilcorp Energy Company	OGRID Number: <u>372171</u>								
Well Name: Sheets 4E	API: 30-045-33892								
Pool: Basin Fruitland Coal / Basin Dakota	Pool Code: 71629 / 71599								
SUBMIT ACCURATE AND COMPLETE INFORMATION REQ INDICATED BE									
1) TYPE OF APPLICATION: Check those which apply for	[A] DHC-5040								
A. Location – Spacing Unit – Simultaneous Dedicat	tion VSP (proration unit)								
INSLINSI (PROJECT AREA)I	NOT (PRORATION UNIT)								
[II] Injection – Disposal – Pressure Increase – En WFX PMX SWD IPI 2) NOTIFICATION REQUIRED TO: Check those which approximately A. Offset operators or lease holders B. Royalty, overriding royalty owners, revenue of Application requires published notice	FOR OCD ONLY Oly. Notice Complete Application Content								
 D. Notification and/or concurrent approval by E. Notification and/or concurrent approval by F. Surface owner G. For all of the above, proof of notification or p H. No notice required 	BLM								
3) CERTIFICATION: I hereby certify that the information sadministrative approval is accurate and complete to understand that no action will be taken on this applications are submitted to the Division.	o the best of my knowledge. I also								
Note: Statement must be completed by an individual w	with managerial and/or supervisory capacity.								
	0.00.000.0								
The Product of Section 1999	8/8/2019 Date								
Thomas Jacques	Dale								
Print or Type Name	922 920 4592								
	Results of the second s								
1 1 mm of 1 fm	tjacques@hilcorp.com								
Signature /	e-mail A dress								

8/9/2019

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division

Receipt of Fee Application Payment



PO Number: RMQO2-190809-C-107A

Payment Date:

8/9/2019 8:26:00 AM

Payment Amount:

\$150.00

Payment Type:

Credit Card

Application Type:

Application for administrative approval of a downhole commingle.

Fee Amount:

\$150.00

Application Status:

Under OCD Review

OGRID:

372171

First Name:

Priscilla

Last Name:

Shorty

Email:

pshorty@hilcorp.com

IMPORTANT: If you are mailing or delivering your application, you must print and include your receipt of payment as the first page on your application. All mailed and delivered applications must be sent to the following address: 1220 S. St. Francis Dr., Santa Fe, NM 87505. For inquiries, reference the PO Number listed above.

District I 1625 N. French Drive, Hobbs, NM 88240

District II 811 S. First St., Artesia, NM 88210

<u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 District IV

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

E-MAIL ADDRESS <u>pshorty@hilcorp.com</u>

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

APPLICATION FOR DOWNHOLE COMMINGLE

	71111	ICITIO.	N I II L	
	Single W	ell		
	Establish	Pre-Ap	proved Po	ols
10-	EXISTI	NG WE	LBORE	
NG	X	Yes	No	

Hilcorp Energy Company 382 Road 3100, Aztec, NM 87410 Address							
Sheets	#004E		1N 09W		San Juan		
Lease	Well No.	Unit Letter-S	Section-Township-	Range		County	
OGRID No. 372171 Property	Code 318729	API No	3004533892	_ Lease Type: _X	_Federal	_StateFee	
DATA ELEMENT	UPPER ZON	Œ	INTERME	DIATE ZONE	LOV	VER ZONE	
Pool Name	BASIN FRUITLAND	COAL			BAS	IN DAKOTA	
Pool Code	71629					71599	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2828'-3017'				7:	370'-7522'	
Method of Production (Flowing or Artificial Lift)	New Zone				P	lunger 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)	150 psi					200 psi	
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1000 BTU				1	1000 BTU	
Producing, Shut-In or New Zone	New Zone				1	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: N/A Rates:		Date:			9), 1197 MCF, 45	
Fixed Allocation Percentage	Oil Ga	s	Oil	Gas	BW	Gas	
(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Will be supplied upo	on			Will be sup completion		
		DDITION	IAL DATA				
Are all working, royalty and overriding If not, have all working, royalty and over						XNo No	
Are all produced fluids from all commir	ngled zones compatible v	with each o	ther?		Yes	XNo	
Will commingling decrease the value of	production?				Yes	NoX	
If this well is on, or communitized with, or the United States Bureau of Land Ma					Yes	XNo	
NMOCD Reference Case No. applicable	e to this well:						
Attachments: C-102 for each zone to be comming Production curve for each zone for a For zones with no production histor Data to support allocation method o Notification list of working, royalty Any additional statements, data or d	at least one year. (If not y, estimated production r formula. and overriding royalty i	available, a rates and su nterests for	attach explanation inte	n.)			
	PRE	-APPRO	VED POOLS			ı	
If application is t	o establish Pre-Approve	d Pools, th	e following addi	tional information wil	ll be required:		
List of other orders approving downhole List of all operators within the proposed Proof that all operators within the propo Bottomhole pressure data.	Pre-Approved Pools	8 8					
I hereby certify that the information SIGNATURE	Mart			nowledge and belie		9/9/2010	
	Priscilla Shorty			PHONE NO. (505)		8/8/2019	

DESTRICT 1 1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II 1301 W. Grand Ave., Artesla, N.M. 88210

DISTRICT III 1000 Rio Orazos Rd., Aztec, N.M. 87410

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

DISTRICT IV

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Sonta Fe, NM 87505 Form C 102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-045- 338	98 71599	³Pool Name Basin Dakota			
¹ Property Code 7504		³Property Name SHEETS			
OCRID No.		*Operator Name			
14538	BURLINGTON RES	SOURCES OIL & GAS COMPANY LP	6187		

¹⁰ Surface Location

					our raco	LOCULION			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	28	31-N	9-W	2	1525	SOUTH	815	WEST	SAN JUAN
			" Bott	om Hole	Location	lf Different Fr	om Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L		}					{		
² Dedicated Acres		ı,	loint or Infill		14 Consolidation Co	xie	13 Order No.	,	
DE 210		CO			1				
DK 318	-0⊋ 200 ac	. S2							

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			17 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 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 computancy pooling order heretatore entered by the division.
LOT 1 39.10 FD. 3 1/4" BC. 1966 B.L.M.			Signature Date Philana Thompson Printed Name Regulatory Analyst
Tu	28 =====		18 SURVEYOR CERTIFICATION
(W) 12.70 12	USA SF-080376-A		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 bellef.
39.20 0 0 0 2 0 815'	LAT: 36.86604" N. (NAD 83) LONG: 107.79194" W. (NAD 83)		JUNE 1 200000000000000000000000000000000000
1525'	LAT: 36'51.9627' N. (NAD 27) LONG: 107'47.5164' W. (NAD 27) LOT 3 39.39	LOT 4 39.43	Certificate Number
FD. 3 1/4" BC. 1966 B.L.M.	S 89'35'48" W FD. 3 1/4" BC. 1966 B.L.M.		Certificate Number

District I

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

<u>District II</u>

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 270019

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-045-33892	71629	BASIN FRUITLAND COAL (GAS)
4. Property Code	5. Property Name	6. Well No.
318729	SHEETS	004E
7. OGRIÐ No.	8. Operator Name	9. Elevation
372171	HILCORP ENERGY COMPANY	6187

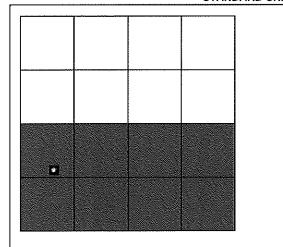
10, Surface Location

ĺ	UL - Lot	Section	Township	Range	Lot ldn	Feet From	N/S Line	Feet From	E/W Line	County	
	L	28	31N	09W	2	1525	S	815	W	•	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 A	cres	'	13. Joint or Infill		14. Consolidatio			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: Priscilla Shorty

Title: Operations Regulatory Tech - Sr.

Date: 07/18/2019

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:

John Vukonich

Date of Survey:

6/17/2006

Certificate Number:

14831

Discussion of Pressures

Reservoir	Bottom Hole Pressure
Basin Fruitland Coal	150 psi
Basin Dakota	200 psi

The pressure provided is the near wellbore shut in bottom hole pressure of the Basin Dakota. The near wellbore shut in bottom hole pressure is much lower than the far field stabilized reservoir pressure calculated with moving domain material balance 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 pressure, the low permeability of the reservoir rock results in rapid depletion of the near-fracture region quickly enough that the wells are unable produce without the aid of a plunger. Given low permeability and low wellbore flowing pressure in the Basin Dakota and Basin Fruitland Coal, loss of reserves due to cross-flow is not an issue during producing or shut-in periods. Given the low shut-in bottom hole pressures, commingling the Basin Dakota and Basin Fruitland Coal in this well will not result in shut-in or flowing wellbore pressures in excess of any commingled pool's fracture parting pressure.

John Brown

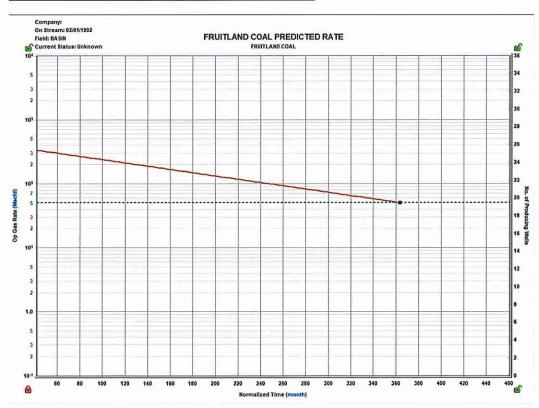
Hilcorp San Juan Reservoir Engineer

John Ban 8/7/19

Sheets #4E Basin Dakota Forecast



Sheets #4E Predicted Basin Fruitland Coal Forecast



The Sheets #4E predicted Basin Fruitland Coal rate is based on type well and volumetric analysis of offset Basin Fruitland Coal producers. The reservoir fluids of the commingled completions are compatible.

JUSTIFICATION OF ALLOCATION: Hilcorp requests that production for the downhole commingle be allocated using the subtraction method. The base formations is the Basin Dakota and the added formation to be commingled is the Basin Fruitland Coal. The subtraction method applies an average monthly production forecast to the base formation(s) using historic production. All production from this well exceeding the forecast will be allocated to the new formation(s). A fixed percentage based allocation will be submitted after the fourth year of production. See attached documents for production forecast. The Basin Fruitland Coal will not produce oil. All oil produced will be allocated to the Basin Dakota.

Historical Production

Basin Dakota

	Oil (BBLS)	Gas (MCF)	Water (BBLS)
Dec-18	0	1181	45
Jan-19	0	1118	45
Feb-19	0	1034	41
Mar-19	0	1192	45
Apr-19	0	1152	43
May-19	0	1197	45





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

Attn: Michael McMillan

Re: C-107-A (Downhole Commingle)

Sheets 004E

API: 30-045-33892

T31N-R9W-Section 28, Unit Letter: L

San Juan County, NM

Mr. McMillan:

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

- All working, royalty and overriding royalty interests are identical between the Basin Dakota (71599) and Basin Fruitland Coal (71629) in the spacing unit dedicated to these formations; being the S/2 (318.02 acres) of Township 31 North, Range 9 West, Section 28. Therefore, no notice to interest owners is required.
- The spacing unit is comprised of a federal lease. Therefore, pursuant to Subsection C.(1) of 19.15.12.11 NMAC, a copy of the C-107-A has been sent to the BLM as of the date of this letter.

If you have any questions or concerns regarding this matter, please do not hesitate to contact me at the email or number provided below.

Regards,

Hilcorp Energy Company

Robert T. Carlson

Landman

(832) 839-4596

rearlson@hilcorp.com

Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

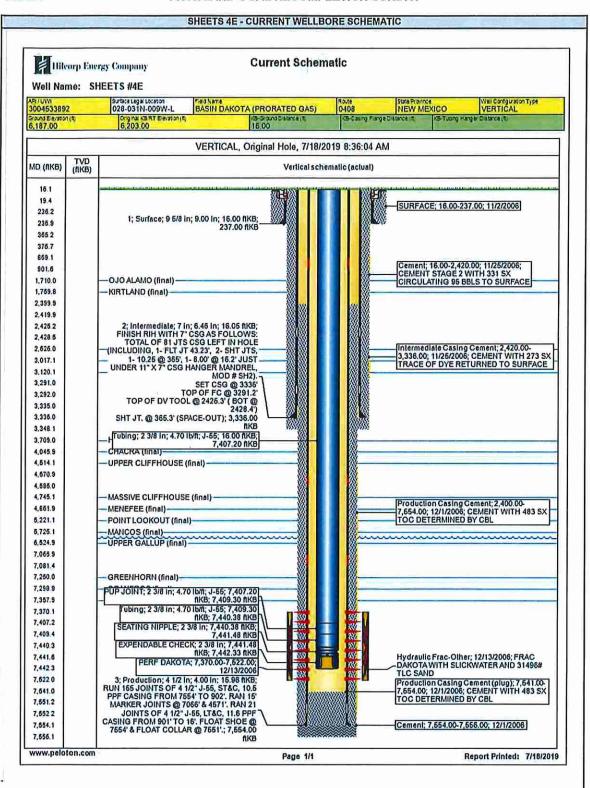
FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018 5. Lease Serial No. NMSF080376A

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use thi abandoned wel	6. If Indian, Allottee or Tribe Name						
SUBMIT IN T	RIPLICATE - Other instr	uctions on p	page 2		7. If Unit or CA/Agree	ement, Name and/or No.	
Type of Well ☐ Oil Well		8. Well Name and No. SHEETS 4E					
Name of Operator HILCORP ENERGY COMPAN	Contact: P IY E-Mail: pshorty@hile	RISCILLA S corp.com	HORTY		9. API Well No. 30-045-33892		
3a. Address 382 ROAD 3100 AZTEC, NM 87410		3b. Phone No. Ph: 505-32	(include area code 4-5188)	10. Field and Pool or E BASIN DAKOTA		
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description)		****		11. County or Parish, S	State	
Sec 28 T31N R09W Mer NMP	NWSW 1525FSL 815FWI	L			SAN JUAN COL	JNTY, NM	
12. CHECK THE AF	PROPRIATE BOX(ES) T	O INDICA	ΓE NATURE C	F NOTICE,	REPORT, OR OTH	IER DATA	
TYPE OF SUBMISSION			TYPE O	F ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deep	en	□ Product	ion (Start/Resume)	■ Water Shut-Off	
_	☐ Alter Casing	☐ Hydi	aulic Fracturing	☐ Reclam	ation	☐ Well Integrity	
☐ Subsequent Report	☐ Casing Repair	_	Construction	Recomp		☐ Other	
☐ Final Abandonment Notice	☐ Change Plans		and Abandon		arily Abandon		
13. Describe Proposed or Completed Ope	☐ Convert to Injection	☐ Plug		☐ Water I	7		
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Abdetermined that the site is ready for fillicorp Energy Company required downhole commingle with the diagram, plat, and gas capture commingling. A closed loop sysurface disturbing activities.	operations. If the operation result and on ment Notices must be filed and inspection. The state of the permission to recomplexisting Dakota formation. The plan. A DHC application stem will be used. Interimination of the permission will be used.	Its in a multiple I only after all re- lete the subj Attached is will be filed a	e completion or receptive equirements, included the control of the procedure, and approved procedure of the	ompletion in a ling reclamation ruitland Coa wellbore rior to	new interval, a Form 3160 n, have been completed a	0-4 must be filed once	
14. Thereby certify that the foregoing is	Electronic Submission #4: For HILCORP EN	74471 verifie ERGY COMP	l by the BLM We ANY, sent to the	ll Information Farmington	n System		
Name (Printed/Typed) PRISCILL	A SHORTY	Title OPERA	ATIONS REC	BULATORY TECH			
Signature (Electronic S	Submission)		Date 07/22/2	2019			
	OFFICE U	SE					
A			Title			Date	
Approved By Conditions of approval, if any, are attache certify that the applicant holds legal or equivalent would entitle the applicant to conduct the conduction of the con	uitable title to those rights in the s	Office					
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.							



HILCORP ENERGY COMPANY SHEETS 4E FRUITLAND COAL RECOMPLETION SUNDRY





HILCORP ENERGY COMPANY SHEETS 4E FRUITLAND COAL RECOMPLETION SUNDRY

