# Initial

# Application

## Part I

Received: <u>06/28/2019</u>

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

RECEIVED: 06/28/2019	REVIEWER: MAM	TYPE: DHC	APP NO: pMAM1918352732

	NEW MEXICO OIL CONSERVATIO - Geological & Engineering Bur 1220 South St. Francis Drive, Santa Fe,	eau –	O NOT TO SERVICE OF THE PARTY O					
ADMINISTRATIVE APPLICATION CHECKLIST								
	THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION		DIVISION RULES AND					
	plicant: Hilcorp Energy Company		Number: _372171					
	Il Name: San Juan 30-5 Unit 88M	API: 30-0						
Poc	Gobernador Pictured Cliffs	Pool Co	ode: <u>77440</u>					
9	SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW							
1)	TYPE OF APPLICATION: Check those which apply for [A]  A. Location – Spacing Unit – Simultaneous Dedication  NSL NSP (PROJECT AREA) NSP (PROR	ation unit) SD	DHC-5008					
	B. Check one only for [1] or [11]  [1] Commingling – Storage – Measurement  DHC CTB PLC PC OLS  [11] Injection – Disposal – Pressure Increase – Enhanced WFX PMX SWD IPI EOR	□OLM d Oil Recovery □PPR	FOR OCD ONLY					
2)	NOTIFICATION REQUIRED TO: Check those which apply.  A. Offset operators or lease holders  B. Royalty, overriding royalty owners, revenue owners  C. Application requires published notice  D. Notification and/or concurrent approval by SLO  E. Notification and/or concurrent approval by BLM  F. Surface owner  G. For all of the above, proof of notification or publication.  No notice required	ition is attache	FOR OCD ONLY  Notice Complete  Application Content Complete  d, and/or,					
3)	CERTIFICATION: I hereby certify that the information submitt administrative approval is accurate and complete to the be understand that no action will be taken on this application notifications are submitted to the Division.	est of my know	ledge. I also					
	Note: Statement must be completed by an individual with mana	gerial and/or superv	isory capacity.					
		6/20/1	9					
Ni	ck Kunze - Operations Manager	ate						
Prir	nt or Type Name							
		13-209-2449						
		hone Number						

Signature

nkunze@hilcorp.com e-mail Address <u>District I</u> 1625 N. French Drive, Hobbs, NM 88240

<u>District II</u> 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

## 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

X Single Well
Establish Pre-Approved Pools
EXISTING WELLBORE

## APPLICATION FOR DOWNHOLE COMMINGLING

<u>X</u> Yes \_\_\_No

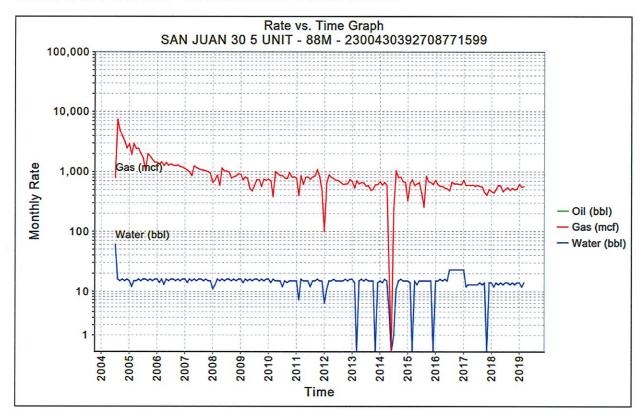
Hilcorp Energy Company 382 Road 3100, Aztec, NM 87410 Operator Address									
Operator	Ad	aress							
San Juan 30-5 Unit		E – Sec. 18 – T030N – R005W Section-Township-Range	Rio Arriba County						
Lease		•	, , , , , , , , , , , , , , , , , , ,						
OGRID No. <u>372171</u> Property C	ode318433 API No	30-039-27087 Lease Type: _	_X_FederalStateFee						
DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE						
Pool Name	Gobernador Pictured Cliffs	Basin Dakota							
Pool Code	77440	72319	71599						
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3294' – 3436'	5272' – 5620'	7738' – 7819'						
Method of Production (Flowing or Artificial Lift)	New Zone	Plunger	Plunger						
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)	1178 psi	1303 psi	2812 psi						
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1190 BTU	1150 BTU	1020 BTU						
Producing, Shut-In or New Zone	New Zone	Producing	Producing						
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production	Date: N/A	Date: 3/2019	Date: 3/2019						
estimates and supporting data.)	Rates:	Rates: 2750 mcf, 13 bw	Rates: 563 mcf, 14 bw						
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil Gas	Oil Gas	Oil Gas						
than current or past production, supporting data or explanation will be required.)	Will be supplied upon completion	Will be supplied upon completion	Will be supplied upon completion						
	ADDITIO	NAL DATA							
Are all working, royalty and overriding If not, have all working, royalty and over			Yes No_X_ Yes No_X						
Are all produced fluids from all commit	ngled zones compatible with each	other?	YesX No						
Will commingling decrease the value of	f production?		Yes No <u>X</u>						
If this well is on, or communitized with or the United States Bureau of Land Ma			Yes_X_ No						
NMOCD Reference Case No. applicabl	e to this well: R-	-10771							
Attachments:  C-102 for each zone to be comming Production curve for each zone for For zones with no production histor Data to support allocation method of Notification list of working, royalty Any additional statements, data or of the comments.	at least one year. (If not available, y, estimated production rates and so or formula.	attach explanation.) supporting data. or uncommon interest cases.							
4	PRE-APPRO	OVED POOLS							
If application is		he following additional information wi	ill be required:						
List of other orders approving downhole List of all operators within the proposed Proof that all operators within the proposed Bottomhole pressure data.	d Pre-Approved Pools	• •							
I hereby certify that the information	above is true and complete to	the best of my knowledge and beli	ef.						
SIGNATURE Jan	TITLE	Reservoir Engineer D	DATE 6/28/19						
TYPE OR PRINT NAMETi	im Davis	TELEPHONE NO. (_7_	13 ) 209-2400						
E-MAIL ADDRESS	tidavis@hilcorp.com								

## Discussion of Pressures

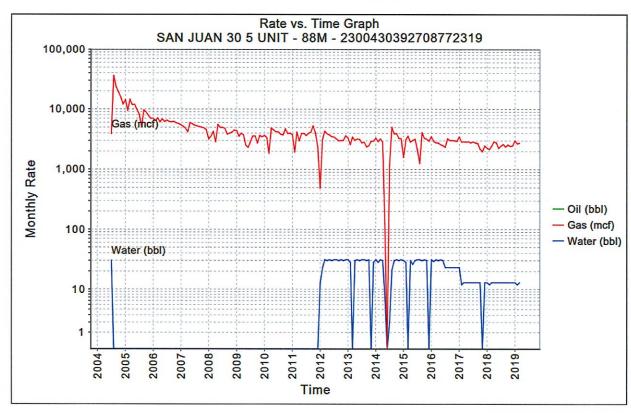
			Existing Completion		Measurement	SITP/SICP	Fluid Level
Well Name	Ţ	API	Zones (Perfs)	~	Date	(psia)	(ft)
			Mesaverde (5272-5620'	)			
SAN JUAN 30-5 UNIT 88N	Л	30039270870	Dakota (7738-7819')		6/17/2019	126/127	7677 <sup>t</sup>

Prior to obtaining fluid levels and pressures, the well was shut-in for 24 hours and monitored to ensure it was relatively stable. The length of time was chosen to minimize the shut-in period and provide a representation the shut-in bottomhole pressure from the existing Mesaverde and Dakota zones. This measurement demonstrates a much lower wellbore pressure compared to our calculated static reservoir pressures. Based on pressure transient analysis work from other Dakota wells in the basin, direct measurement of static reservoir pressures from producing wells in these tight gas sandstones requires shut-in periods on the order of years, primarily due to low permeability, relatively high total compressibility, and lack of structural or stratigraphic boundaries. Back of the envelope radius of investigation calculations assuming radial flow indicate required shut in periods of 5 to 7 years given the low density of producing wells. As well, we have some multi-week build-ups in the Dakota in other parts of the basin that indicate even longer shut-in times, up to 25 years, to reach boundary-dominated flow. The shut-in wellbore pressure thus is expected to be lower than the far-field, stabilized reservoir pressure, direct measurement of which is practically infeasible. 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 permeabilities and low wellbore flowing pressures in the Dakota, Mesaverde, and Pictured Cliffs, loss of reserves due to cross-flow is not an issue during producing or shut-in periods. Given low shut-in bottomhole pressures, commingling the Pictured Cliffs, Mesaverde, and Dakota in this well will not result in shut-in or flowing wellbore pressures in excess of any commingled pool's fracture parting pressure.

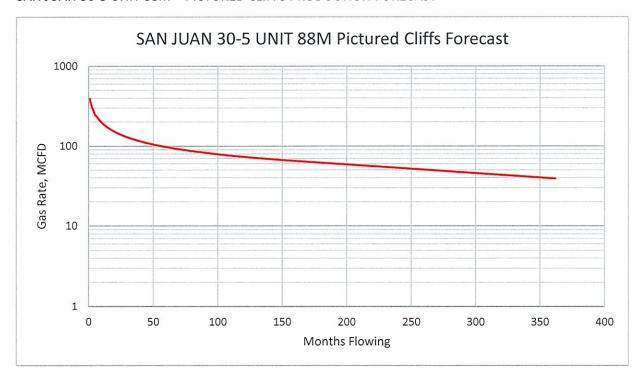
## SAN JUAN 30-5 UNIT 88M - HISTORICAL DAKOTA PRODUCTION:



## SAN JUAN 30-5 UNIT 88M - HISTORICAL MESAVERDE PRODUCTION:



## SAN JUAN 30-5 UNIT 88M – PICTURED CLIFFS PRODUCTION FORECAST



The forecast for Pictured Cliffs production has been generated using a typical well production profile of PC gas production in the surrounding production trend.

## SAN JUAN 30-5 UNIT 88M - PRODUCTION ALLOCATION METHOD

Production for the downhole commingle will be allocated using the subtraction method in agreement with the BLM. The base formations are the Dakota and Mesaverde, and the added formation to be commingled is the Pictured Cliffs. The subtraction method applies an average monthly production forecast to the base formations using historic production. All production from this well exceeding the forecast will be allocated to the new formation. After 3 years production will stabilize. A production average will be gathered during the 4<sup>th</sup> year and will be utilized to create a fixed, percentage-based allocation. Oil production will be allocated based on average formation yields from offset wells. All documentation will be submitted to the Aztec NMOCD office.

<u>District I</u> 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**

Form C-102 August 1, 2011

Permit 252772

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-27087	2. Pool Code 77440	3. Pool Name GOBERNADOR PICTURED CLIFFS (GAS)
4. Property Code	5. Property Name	6. Well No.
318433	SAN JUAN 30 5 UNIT	088M
7. OGRID No.	8. Operator Name	9. Elevation
372171	HILCORP ENERGY COMPANY	6359

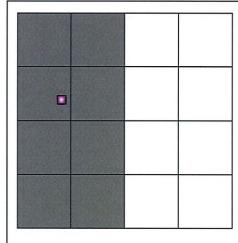
10. Surface Location

		County	ne	E/V	Feet From	N/S Line	Feet From	Lot Idn	Range	Township	Section	UL - Lot
E 18 30N 05W 2110 N 1072 W	RIO ARRIBA	RIO ARRIBA	w		1072	N	2110		05W	30N	18	E

11. Bottom Hole Location If Different From Surface

			=	moodate		. oiii ouiiuoo			
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 320 00 W/2		13. Joint or Infil	13. Joint or Infill		14. Consolidation Code				

## 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: Etta Trujillo

Title: Operations/Regulatory Tech

Date: 05/24/2018

## 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:

Henry P. Broadhurst

Date of Survey:

3/14/2001

Certificate Number:

11393

District I
19 Haz 1980, Habba, NM 88241-1980
Bistrict II
811 Sauth First, Artesia, NM 88210
District III
1080 Rio Benzon Rd., Actec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State o. .. iew Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505 Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30	103	Al'I Nuii	Z70	87		723	Code		Blanco Mes	sav	' Paul N	ime			_
* P	roperty 6						³ Pr		Name 0-5 UNIT		* Well Number 88M				
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District I Pt) Hax 1980, Hobbs, NM 88241-1980 District II #11 South First, Artesia, NM #8210 District III 1000 Rio Brazus Rd., Astec, NM 87416 District IV

2040 South Pacheco, Santa Fe, NM 27505

## State of New Mexico Energy, Minerals & Natural Resources Department

## OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

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

☐ AMENDED REPORT

<u> </u>		WI	ELL LO	CATIO	N AND AC	REAGE DEDI	CATION PL	AT					
30-03	S- 77	5087		<sup>1</sup> Pool Cod 71599:		Basin Dakota	<sup>2</sup> Pool Na	ume					
<sup>4</sup> Property	Cade				5 Propert				•	Well Number			
009258			SAN JUAN 30-5 UNIT						88M				
. 'OCRID 017654	Nu.		Operator Name PHILLIPS PETROLEUM COMPANY						'Elevation 6359				
LV17024	Surface Location												
UI, or lot no.	Section	Township	Range .	Lot Ida	Feet from the	North/South line	Feet from the	East/Wes		County			
F	E 18 30 N 5W 2110' NORTH 1072' WEST LIO ARRIBA  11 Bottom Hole Location If Different From Surface									RIO ARRIBA			
						If Different Fro	m Surface	,					
UL or lot no.	Section	Township	Range .	Lot Idn	Feet from the	North/South line	Feet from the	East/West	line	County			
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·			Secti	on 18			Date						
	1.						18SURV	EYOR (	CERT	FICATION			
•		* 1		P	1		I hereby certify	that the well	location s	hown on this plat			
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RECEIVED:	REVIEWER:	TYPE:	APP NO:
	ABOVE	THIS TABLE FOR OCD DIVISION USE O	NLY

## NEW MEXICO OIL CONSERVATION DIVISION



- Geological & Eng	yineering Bureau –
1220 South St. Francis Driv	ve, Santa Fe, NM 87505
ADMINISTRATIVE AP	PLICATION CHECKLIST
THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRA	TIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND SSING AT THE DIVISION LEVEL IN SANTA FE
RESEATIONS WHICH REQUIRE I ROCK	BING AT THE DIVISION LEVEL IN SANTA FE
Applicant: Hilcorp Energy Company	OGRID Number: 372171
Well Name: San Juan 30-5 Unit 88M	API: 30-045-27087
Pool: Gobernador Pictured Cliffs	Pool Code: <u>77440</u>
SURMIT ACCUIDATE AND COMMUNITE INCOMMATIC	N REQUIRED TO PROCESS THE TYPE OF APPLICATION
	TED BELOW
1) TYPE OF APPLICATION: Check those which app	oly for [A]
A. Location – Spacing Unit – Simultaneous D	
■ NSL ■ NSP(project area)	□ NSP (PRORATION UNIT) □ SD
B. Check one only for [1] or [11]	
[1] Commingling – Storage – Measureme	ent
■ DHC □CTB □PLC □PC	
[    ] Injection – Disposal – Pressure Increas	
□ WFX □ PMX □ SWD □ IP	
2) NOTIFICATION REQUIRED TO: Check those which	FOR OCD ONLY
<ol> <li>NOTIFICATION REQUIRED TO: Check those which A. Offset operators or lease holders</li> </ol>	Notice Complete
B. Royalty, overriding royalty owners, reve	enue owners
C. Application requires published notice	Application Content
D. Notification and/or concurrent approv	val by SLO Complete
E. Notification and/or concurrent approv	/al by BLM
F. ☐ Surface owner G.☐ For all of the above, proof of notificati	
G. For all of the above, proof of notificating H. Ronotice required	on or publication is attached, ana/or,
The Helles regalied	
3) <b>CERTIFICATION:</b> I hereby certify that the inform	
administrative approval is accurate and comp	
understand that <b>no action</b> will be taken on this notifications are submitted to the Division.	application until the required information and
Note: Statement must be completed by an ind	ividual with managerial and/or supervisory capacity.
	6/20/19
Nick Kunze - Operations Manager	Date
Print or Type Name	
	713-209-2449
	Phone Number
Signature	nkunze@hilcorp.com e-mail Address
olgitatore	e-mail Address

<u>District I</u> 1625 N. French Drive, Hobbs, NM 88240

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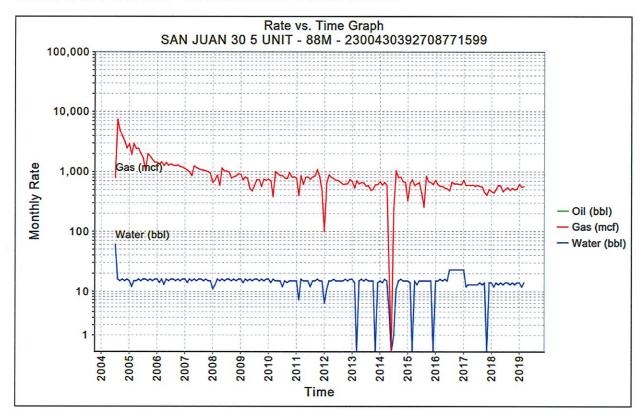
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than current or past production, supporting data or explanation will be required.)	Will be supplied upon completion	Will be supplied upon completion	Will be supplied upon completion						
	ADDITIO	NAL DATA							
Are all working, royalty and overriding If not, have all working, royalty and over			Yes No_X_ Yes No_X						
Are all produced fluids from all commit	ngled zones compatible with each	other?	YesX No						
Will commingling decrease the value of	f production?		Yes No <u>X</u>						
If this well is on, or communitized with or the United States Bureau of Land Ma			Yes_X_ No						
NMOCD Reference Case No. applicabl	e to this well: R-	-10771							
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I hereby certify that the information	above is true and complete to	the best of my knowledge and beli	ef.						
SIGNATURE Jan	TITLE	Reservoir Engineer D	DATE 6/28/19						
TYPE OR PRINT NAMETi	im Davis	TELEPHONE NO. (_7_	13 ) 209-2400						
E-MAIL ADDRESS	tidavis@hilcorp.com								

## Discussion of Pressures

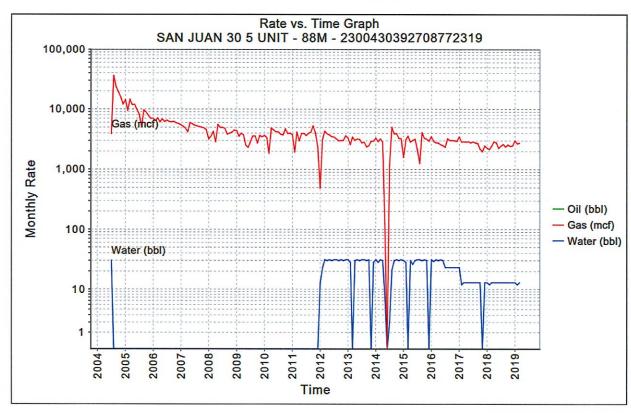
			Existing Completion		Measurement	SITP/SICP	Fluid Lev	el
Well Name	Ţ,	API 🔻	Zones (Perfs)	~	Date ~	(psia)	(ft)	~
SAN JUAN 30-5 UNIT 88M	Л		Mesaverde (5272-5620') Dakota (7738-7819')	)	6/17/2019	126/127	7677'	

Prior to obtaining fluid levels and pressures, the well was shut-in for 24 hours and monitored to ensure it was relatively stable. The length of time was chosen to minimize the shut-in period and provide a representation the shut-in bottomhole pressure from the existing Mesaverde and Dakota zones. This measurement demonstrates a much lower wellbore pressure compared to our calculated static reservoir pressures. Based on pressure transient analysis work from other Dakota wells in the basin, direct measurement of static reservoir pressures from producing wells in these tight gas sandstones requires shut-in periods on the order of years, primarily due to low permeability, relatively high total compressibility, and lack of structural or stratigraphic boundaries. Back of the envelope radius of investigation calculations assuming radial flow indicate required shut in periods of 5 to 7 years given the low density of producing wells. As well, we have some multi-week build-ups in the Dakota in other parts of the basin that indicate even longer shut-in times, up to 25 years, to reach boundary-dominated flow. The shut-in wellbore pressure thus is expected to be lower than the far-field, stabilized reservoir pressure, direct measurement of which is practically infeasible. 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 permeabilities and low wellbore flowing pressures in the Dakota, Mesaverde, and Pictured Cliffs, loss of reserves due to cross-flow is not an issue during producing or shut-in periods. Given low shut-in bottomhole pressures, commingling the Pictured Cliffs, Mesaverde, and Dakota in this well will not result in shut-in or flowing wellbore pressures in excess of any commingled pool's fracture parting pressure.

## SAN JUAN 30-5 UNIT 88M - HISTORICAL DAKOTA PRODUCTION:



## SAN JUAN 30-5 UNIT 88M - HISTORICAL MESAVERDE PRODUCTION:



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UNITED STATES Form 3160-5 DEPARTMENT OF THE INTERIOR

MAY 24 2013

FORM APPROVED

OMB No. 1004-013
Expires: July 31, 201

(11454512007)	BUREAU OF LAND MAN	INTERIOR OF THE PROPERTY OF TH	Everience I		
	BUREAU OF LAND MAI			uly 31, 2010	
		Farmington Field (	office NMS	SF-078994	
SUM	NDRY NOTICES AND REPO	ORTS ON WELLS Land Mana	6. If Indian, Allottee or Tribe N	ame	
Do not us	e this form for proposals t	to drill or to re-enter an	- 33		
abandoned	well. Use Form 3160-3 (A	PD) for such proposals.			
SU	UBMIT IN TRIPLICATE - Other ins	tructions on page 2.	7. If Unit of CA/Agreement, Na	ame and/or No.	
1. Type of Well			San J	uan 30-5 Unit	
Oil Well	X Gas Well Other		8. Well Name and No.		
0.37		****		n 30-5 Unit 88M	
Name of Operator	Hilcorp Energy Compa	any.	9. API Well No.		
3a. Address	Thicorp Energy Compa	3b. Phone No. (include area code)	30-039-27087  10. Field and Pool or Exploratory Area		
382 Road 3100, Aztec, I	NM 87410	505-599-3400	Gobernador PC/Blanco MV/Basin Di		
4. Location of Well (Footage, Sec., T.,	R.,M., or Survey Description)		11. Country or Parish, State		
Surface Unit E (S)	WNW) 2110'FNL & 1072' F	WL, Sec. 18, T30N, R05W	Rio Arriba ,	<b>New Mexico</b>	
12. CHECK	THE APPROPRIATE BOX(ES)	TO INDICATE NATURE OF NO	TICE, REPORT OR OTHE	R DATA	
TYPE OF SUBMISSION		TYPE OF AC	TION		
X Notice of Intent	Acidize	Deepen P	roduction (Start/Resume)	Water Shut-Off	
	Alter Casing	Fracture Treat R	eclamation	Well Integrity	
Subsequent Report	New Construction X R	ecomplete	Other		
	Change Plans	Plug and Abandon T	emporarily Abandon		
Final Abandonment Notice	Convert to Injection	Plug Back V	Vater Disposal		
13. Describe Proposed or Completed O	peration: Clearly state all pertinent det	tails, including estimated starting date of	any proposed work and approxim	nate duration thereof.	
If the proposal is to deepen directi	onally or recomplete horizontally, give	subsurface locations and measured and t	rue vertical depths of all pertine	nt markers and zones.	
Attach the bond under which the v	work will be performed or provide the	Bond No. on file with BLM/BIA. Requir	ed subsequent reports must be fi	iled within 30 days	
Testing has been completed. Fina	l Abandonment Notices must be filed	s in a multiple completion or recompletion only after all requirements, including recl	in a new interval, a Form 3160	-4 must be filed once	
determined that the site is ready for		only alter an requirements, including reci	amation, have been completed a	ind the operator has	
Hilcorp Energy Compa	ny plans to recomplete the	subject well in the Pictured	Cliffs formation and	downhole commingle	
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DHC application will be submitted and approved prior to commingling. A closed loop system will be utilized.					
	which the safe of				
	NMOCD	BLM'S	APPROVAL OR ACCEPTA	ANCE OF THIS	
			N DOES NOT RELIEVE T		
SEE ATTACHED	MAY 3 0 2018		TOR FROM OBTAINING		

SEE ATTACHED FOR CONDITIONS OF APPROVAL

DISTRICT 111

**AUTHORIZATION REQUIRED FOR OPERATIONS** 

Notify NMOCD 20 FEDERAL AND INDIAN LANDS prior to beginning operations

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Etta Trujillo Operations/Regulatory Technician - Sr. 5-24-18 THIS SPACE FOR FEDERAL OR STATE OFFICE USE Approved by al, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any

(Instruction on page 2)

false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

## Hilcorp Energy Company **Current Schematic - Version 3** Well Name: SAN JUAN 30-5 UNIT #88M Surface Legal Location 018-030N-005W-E Well Configu Vertical NEW MEXICO MV/DK COM KB-Ground Distance (ft) 13.00 6,359.00 6,372.00 Vertical, Original Hole, 6/14/2019 7:41:16 AM MD Vertical schematic (actual) (ftKB) (ftKB) SURFACE CASING CEMENT; 13.00-13.1 240.00; 5/31/2004; CEMENT WITH 170 SX CIRCULATED TO SURFACE 1; Surface; 9 5/8 in; 9.00 in; 13.00 ftKB; 243.1 240.00 ftKB 710.0 NACIMIENTO (final) INTERMEDIATE CASING CEMENT; 710.00-3,572.00; 6/3/2004; LEAD WITH 360 SX TAIL WITH 210 SX—WOC 8 HRS – NO CEMENT RETURNS TO SURFACE TOC 1,213.9 2,060.0 2,459.0 OJO ALAMO (final) DETERMINED BY TEMP SURVEY -KIRTLAND (final) 2,565.0 FRUITLAND (final) 2,931.1 3,171.9 PICTURED CLIFFS (final) 2; Intermediate; 7 in; 6.46 in; 13.00 ftKB; 3.571.9 3,572.00 ftKB 3,575.1 Tubing; 2 3/8 in; 4.70 lb/ft; J-55; 13.00 ftKB; 7,733.00 ftKB 4,411.1 CHACKA (IIIIai) PRODUCTION CASING CEMENT; 2,060.00 -7,907.00; 6/8/2004; CEMENT WITH 480 SX 5,150.9 -TOC NOT REPORTED 5,161,1 -CLIFFHOUSE TS (final) -5,242.1 5,272.0 颾 5,290.0 -MENEFEE (final) -綴 綴 Perforated; 5,272.00-5,620.00; 6/29/2004 -POINT LOOKOUT (final) 5,541.0 98 5,620.1 7,540.0 7,548.9 GREENHORN (final) 7,549.9 -TWO WELLS (final) 7,669.0 CUBBERRRO (final) 7,724.1

7,732.9

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7,734.9 7,737.9 7,764.1

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www.peloton.com

F NIPPLE; 2 3/8 in; 7,733.00 ftKB; 7,734.00

WIRELINE GUIDE; 2 3/8 in; 7,734.00 ftKB;

LOWER CUBBERRO (final)

7,735.00 ftKB

Page 1/1

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Perforated; 7,738.00-7,819.00; 6/28/2004

3; Production; 4 1/2 in; 4.00 in; 13.00 ftKB;

Report Printed: 6/14/2019

7.905.00 ftKB

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ORIGIN ID:EIXA (713) 289-2643 SEYLON MCPHOY HILCORP ENERGY COMPANY

HOUSTON, TX 77002

SHIP DATE: 28JUN19 ACTWGT: 2.00 LB MAN CAD: 0272991/CAFE321

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TO GEOLOGICAL & ENGINEERING BUREAU NEW MEXICO OIL CONSERVATION DIVISIO 1220 SOUTH ST. FRANCIS DR.

## SANTA FE NM 87505

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