RECEIVED: 5/21/2019	REVIEWER: MAM	TYPE: DHC	APP NO: pMAM1914239915
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

# **NEW MEXICO OIL CONSERVATION DIVISION**



- Geological & Engineering Bureau – 1220 South St. Francis Drive, Santa Fe, NM 8	
ADMINISTRATIVE APPLICATION CHECK	
THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXC REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL	
Applicant: Hilcorp Energy Company	_OGRID Number: <u>372171</u>
Well Name: San Juan 29-5 Unit 55F	API: <u>30-039-29335</u>
Pool: Gobernador Pictured Cliffs	Pool Code: <u>77440</u>
SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PRO INDICATED BELOW	OCESS THE TYPE OF APPLICATION
1) TYPE OF APPLICATION: Check those which apply for [A] A. Location – Spacing Unit – Simultaneous Dedication  NSL NSP(PROJECT AREA) NSP(PRORATION UNIT.	DHC-4992 □SD
B. Check one only for [1] or [1]  [1] Commingling – Storage – Measurement  ☑ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OL  [11] Injection – Disposal – Pressure Increase – Enhanced Oil R ☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PP	ecovery R
2) NOTIFICATION REQUIRED TO: Chook these suchish supply	FOR OCD ONLY
<ul> <li>2) NOTIFICATION REQUIRED TO: Check those which apply.</li> <li>A.  Offset operators or lease holders</li> </ul>	Notice Complete
B. Royalty, overriding royalty owners, revenue owners	Application
C. Application requires published notice	Content
<ul><li>D.  Notification and/or concurrent approval by SLO</li><li>E.  Notification and/or concurrent approval by BLM</li></ul>	Complete
F. Surface owner G. For all of the above, proof of notification or publication is H. No notice required	attached, and/or,
3) <b>CERTIFICATION:</b> I hereby certify that the information submitted wit administrative approval is <b>accurate</b> and <b>complete</b> to the best of runderstand that <b>no action</b> will be taken on this application until the notifications are submitted to the Division.	ny knowledge. I also
Note: Statement must be completed by an individual with managerial an	d/or supervisory capacity.
5/	22/19
Nick Kunze Date	-///
Print or Type Name (713)209	P-2400
Phone N	

nkunze@hilcorp.com

e-mail Address

Signature

<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 <u>District IV</u>

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

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107A Revised August 1, 2011

APPLICATION TYPE

X Single Well

Establish Pre-Approved Pools EXISTING WELLBORE

\_X\_ Yes \_\_\_\_No

#### Hilcorp Energy Company 382 Road 3100, Aztec NM 87410 Operator Address San Juan 29-5 Unit 55F Unit L – Sec. 18 – T29N – R05W Rio Arriba Well No. Unit Letter-Section-Township-Range County OGRID No. <u>372171</u> Property Code <u>318837</u> API No. 30-039-29335 Lease Type: X Federal State DATA ELEMENT **UPPER ZONE** INTERMEDIATE ZONE LOWER ZONE Gobernador Pictured Cliffs Blanco Mesaverde Basin Dakota Pool Name 77440 72319 71599 Pool Code 3534' - 3607' 5335' - 5810' 7872' - 7888' Top and Bottom of Pay Section (Perforated or Open-Hole Interval) New Zone Plunger Plunger Method of Production (Flowing or Artificial Lift) Bottomhole Pressure 982 psi 2471 psi 551 psi (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) Oil Gravity or Gas BTU (Degree API or Gas BTU) 1190 BTU 1150 BTU 1020 BTU Producing, Shut-In or New Zone Producing Producing New Zone Date and Oil/Gas/Water Rates of Last Production. Date: N/A Date: 2/2019 Date: 2/2019 (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.) Rates: Rates: 4 bo, 1132 mcf, 9 bw Rates: 357 mcf, 10 bw Fixed Allocation Percentage Oil Gas Gas Oil Gas than current or past production, supporting data or Will be supplied upon Will be supplied upon Will be supplied upon explanation will be required.) completion completion completion ADDITIONAL DATA Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes\_X\_ No\_ If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes X No Are all produced fluids from all commingled zones compatible with each other? Yes\_\_\_\_\_ No\_\_<u>X</u> Will commingling decrease the value of production? If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes\_X\_ No\_ NMOCD Reference Case No. applicable to this well: \_ R-10770 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 inform	nation above is true and complete to the best of my knowledge and belief.
SIGNATURE 2	TITLE Operations Manager DATE 5/22/2019
TYPE OR PRINT NAME	NIE Kunze TELEPHONE NO. (713) 209-2400
E-MAIL ADDRESS	nkunze@hilcorp.com_

District I

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

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

**District III** 

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

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

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

August 1, 2011

Permit 252404

Form C-102

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

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-29335	2. Pool Code 77440	3. Pool Name GOBERNADOR PICTURED CLIFFS (GAS)
4. Property Code 318837	5. Property Name SAN JUAN 29 5 UNIT	6. Well No. 055F
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6598

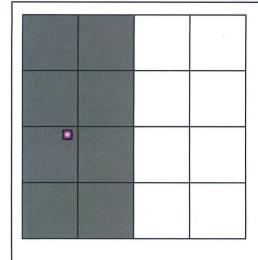
#### 10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
L	18	29N	05W		2460	S	1050	W	RIO ARRIBA

#### 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 320	Acres 0.00 W/2		13. Joint or In	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: Tammy Jones

Title:

Operations/Regulatory Technician - Sr.

5/17/2018 Date:

## 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:

Jason C. Edwards

Date of Survey:

9/13/2004

Certificate Number:

15269

District I PO Box 1980. Hobbs, NM 88241-1980

District II PO Drawer DD. Artesia. NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe. NM 87504-2088 State of New Mexico Energy, Minerals & Natural Resources Department

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

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

AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

AP:	Number	, L	*Pool Code *Pool Name								
3003	9-29	335	BLANCO MESAVERDE \ BASIN DAKO								
Property					Property SAN JUAN 2	· · · · · · · · · · · · · · · · · · ·			*Well Number 55F		
'OGRID N 21781					*Elevation 6598						
	•			1	<sup>o</sup> Surface	Location					
UL or lot no.	Section 18	29N	Range 5W	Lat Idn	Feet from the 2460	North/South line SOUTH	Feet from the 1050	East/West 13	RIO ARRIBA		
		11 [	Bottom	Hole L	ocation I	f Different	From Surf	ace			
UL or lat no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West li	ne County		
Dedicated Acres	320.0 320.0	Acres		(MV) (DK)	3 Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

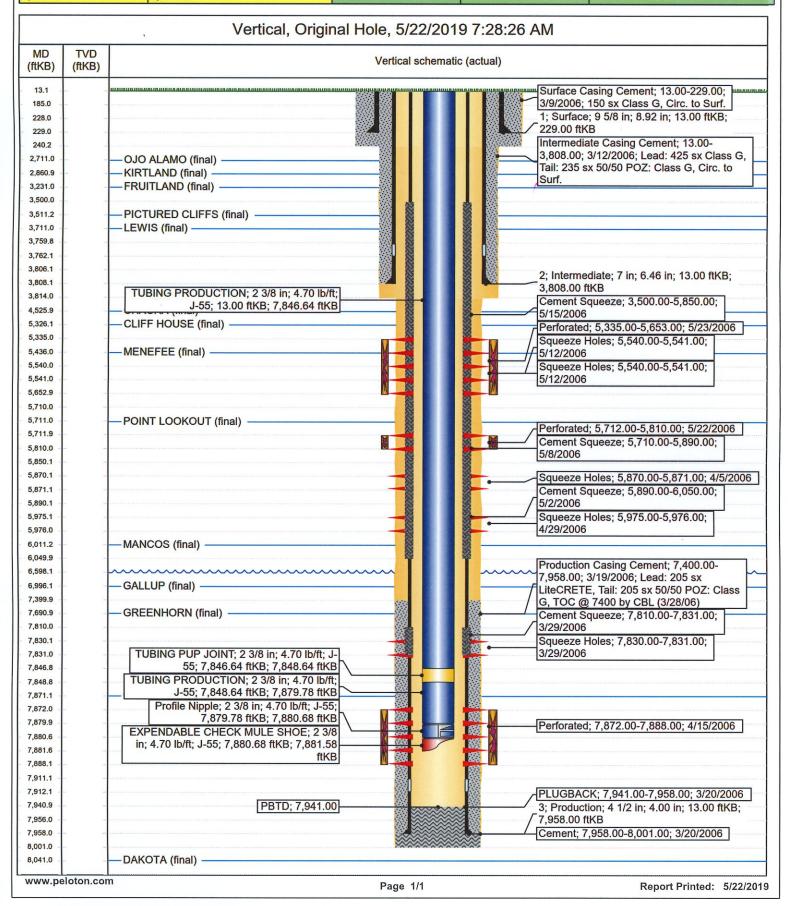
15 5282.64  16 5282.64  17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of the best of my knowledge and belief  1 Including the instrument of t
LAT: 36 '43.5098 N LONG: 107 '24.2158 W DATUM: NAD27  Survey Date: SEPTEMBER 13, 2002  Signature and Seal of Professional Surveyor  C. EDMAN  MEXICO  15269  EM  ADFESSION  TO  TO  TO  TO  TO  TO  TO  TO  TO



## **Current Schematic - Version 3**

Well Name: SAN JUAN 29-5 UNIT #55F

API/UWI 3003929335	Surface Legal Location 018-029N-005W-L	Field Name MV/DK COM		Route 1205	State/Province		Well Configuration Type Vertical
Ground Elevation (ft) 6,598.00	Original KB/RT Elevation (ft) 6,611.00		KB-Ground Distance (ft) 13.00	KB-Casing Flange Dis	tance (ft)	KB-Tubing Hanger	Distance (ft)

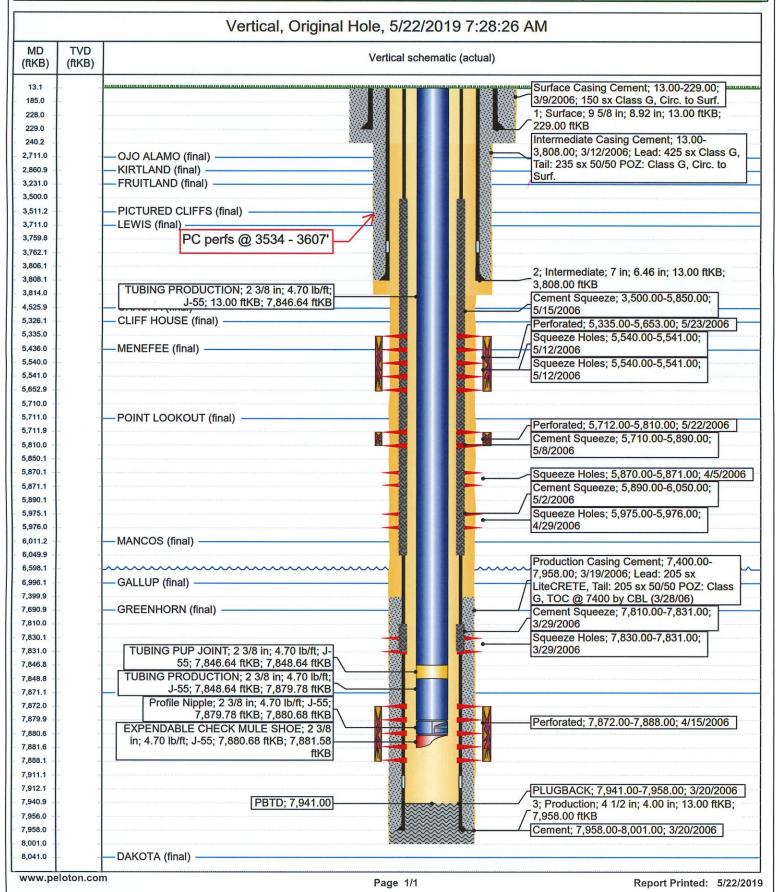




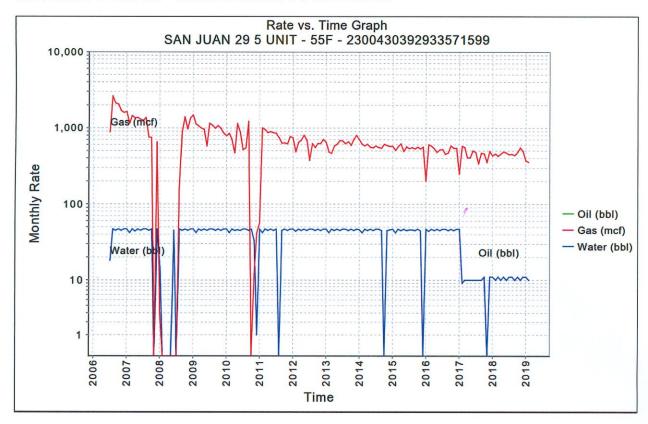
## **Proposed Schematic**

Well Name: SAN JUAN 29-5 UNIT #55F

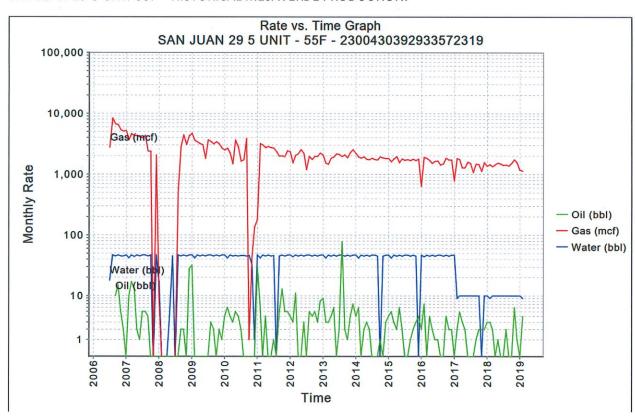
API/UWI 3003929335	Surface Legal Location 018-029N-005W-L	Field Name MV/DK COM			State/Province NEW MEX		Well Configuration Type Vertical
Ground Elevation (ft) 6,598.00	Original KB/RT Elevation (ft) 6,611.00		KB-Ground Distance (ft) 13.00	KB-Casing Flange Dis	tance (ft)	KB-Tubing Hanger	r Distance (ft)



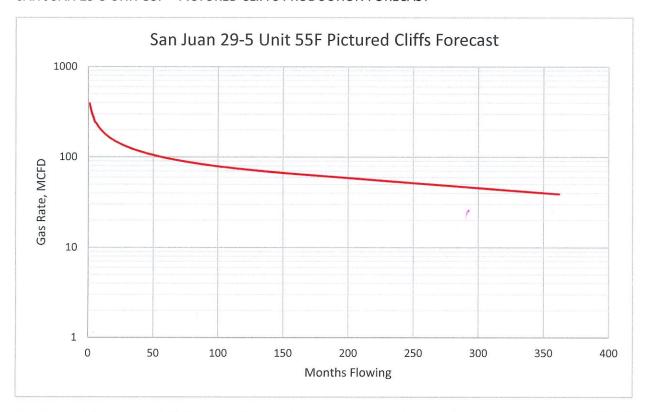
#### SAN JUAN 29-5 UNIT 55F - HISTORICAL DAKOTA PRODUCTION:



#### SAN JUAN 29-5 UNIT 55F - HISTORICAL MESAVERDE PRODUCTION:



SAN JUAN 29-5 UNIT 55F – 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 29-5 UNIT 55F - 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.