State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

Ken McQueen Cabinet Secretary

Matthias Sayer Deputy Cabinet Secretary Heather Riley, Division Director Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following <u>3160-4 or 3160-5</u> form.

Operator Signature Date: 2/6/18 Well information:

API WELL #	Well Name	Well #	Operator Name	Туре	Stat	County	Surf_Owner	UL	Sec	Twp	N/S	Rng W/E
30-045-24938-00-00	HARDIE	004E	HILCORP ENERGY COMPANY	G	A	San Juan	F	E	24	29	N	8 W

Application Type:

P&A Drilling/Casing Change Location Change

Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84; Submit Gas Capture Plan form prior to spudding or initiating recompletion operations)



Conditions of Approval:

- Notify NMOCD 24hrs prior to beginning operations.
- Density exception must be approved prior to producing the Blanco Mesaverde.
- Submit CBL to the Agencies for review and approval prior to perforating.

Seand The

NMOCD Approved by Signature

<u>3/12/18</u> Date

			NMO	n 1	Mart 1 - 1	
Form 3160-5 (August 2007)	UNITED ST DEPARTMENT OF					M APPROVED No. 1004-0137
(August 2007)	BUREAU OF LAND			5 2018		es: July 31, 2010
			main 04		e Serial No.	
61	JNDRY NOTICES AND F		DISTRIC	T 6 If Ind	ian, Allottee or Trib	F-078502-A
	ise this form for propos			0. II IIId	nan, Anotice of Tho	- Ivanie
	ed well. Use Form 3160-					
	SUBMIT IN TRIPLICATE - Oth	er instructions on p	page 2.	7. If Un	it of CA/Agreement,	Name and/or No.
1. Type of Well						
Oil Well	X Gas Well O	Other		8. Well	Name and No.	Landia 4E
2. Name of Operator				9. API V	Well No.	Hardie 4E
	Hilcorp Energy Co	mpany				-045-24938
3a. Address			o. (include area code)	10. Field	d and Pool or Explor	
PO Box 4700, Farming		5	05-599-3400			ta / Blanco Mesaverde
4. Location of Well <i>(Footage, Sec., T.</i> Surface Unit E (^C .,R.,M., or Survey Description) (SWNW) 1800'FNL & 790	I'EWI Sec 2	1 T20N R08W		ntry or Parish, State	New Mexico
Juliace Julia Unit L	50011000111L & 750	0 1 WL, 060. 2	-, 12514, 10044		Jan Juan	, A NEW MEXICO
12. CHECK	K THE APPROPRIATE BOX	(ES) TO INDICA	TE NATURE OF	NOTICE, F	EPORT OR OT	HER DATA
TYPE OF SUBMISSION		(TYPE OF			
					(Chert/Dame)	Weter Chart O.C.
X Notice of Intent	Acidize Alter Casing	Deepen Fracture	Treat	Reclamatio	n (Start/Resume)	Water Shut-Off Well Integrity
Subsequent Report	Casing Repair			X Recomplet		Other
	Change Plans		Abandon		ly Abandon	
Final Abandonment Notice	Convert to Injection	Plug Bac		Water Disp		
If the proposal is to deepen direct Attach the bond under which the following completion of the invo	tionally or recomplete horizontally, work will be performed or provide lved operations. If the operation re al Abandonment Notices must be f	, give subsurface loc e the Bond No. on fil esults in a multiple c	e with BLM/BIA. Re ompletion or recomple	nd true vertica quired subsequ etion in a new	al depths of all pertinuent reports must be interval, a Form 316	ent markers and zones. filed within 30 days 0-4 must be filed once
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 District I

 1625 N. French Dr., Hobbs, NM 88240

 Phone:(575) 393-6161 Fax:(575) 393-0720

 District II

 811 S. First St., Artesia, NM 88210

 Phone:(575) 748-1283

 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Numbe 30-045	r 5-24938	2. Pool Code 72319					3. Pool Name BLANCO-MESAVERDE (PRORATED GAS)					
4. Property Co 31	ode 8544	5. Property Name Hardie				6. Well No. 004E						
7. OGRID No. 37.	2171	8. Operator Name HILCORP ENERGY COMPANY				9. Elev	vation 6430					
10. Surface Location												
UL - Lot	Section	n Towr	nship	Range	Lot Idn	Feet	From	N/S Line	Feet From	E/W Line	County	

E	24	29N	08W	 1800	N	790	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 Acres 320.00 W/2		13. Joint or Infill		14. Consolidatio	n Code		15. Order No.	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NONSTANDARD 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
E-Signed By: King Way Kalland Title: Operations/Regulatory Technician Date: 12/21/2017
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: Jermoe P. McHugh Jr. Date of Survey: 2/3/1981 Certificate Number: 5979

Permit 246204

Hardie 4E

Sec 24-29N-8W-E

API# 30-045-24938

Mesa Verde Uphole Recomplete

2/1/2018

Procedure:

1. MIRU Service rig and associated equipment, test BOP.

- 2. TOOH w/ 2 3/8" tubing set at 7,424'.
- 3. Run gauge ring and set 4.5" bridge plug to isolate the Dakota.
- 4. Load the hole and pressure test to frac pressure.
- 5. ND BOP, NU frac stack and test frac stack to frac pressure.
- Perforate and frac the Mesaverde, isolating frac stages w/ frac plugs. (Proposed top perf at 4,693', proposed bottom perf at 5,489')
- 7. TIH w/ mill and drill out Mesaverde frac plugs.
- 8. Clean out to Dakota isolation plug and when water and sand rates are acceptable, flow test the Mesaverde.
- 9. Drill out Dakota isolation plug and cleanout to PBTD of 7,630'. TOOH.
- 10. TIH and land production tubing. Get a commingled Dakota/Mesaverde flow rate.
- 11. Release service rig and turn well over to production.

Hilcorp Energy Compa	iny
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Schematic - Current

Well Name: HARDIE 004E

API / UWI 3004524938	Surface Legal Location 024-029N-008W-E	Field Name DK	License No.	State/Province		Well Configuration Type Vertical
Original KB/RT Elevation (Original Spud Date	Rig Release Date	PBTD (All) (RI		Total Depth All (TVD) (#KB)
6,442.00 Most Recent Job	<u>_</u>	4/30/1981 00:00	5/8/1981 00:00			
Job Category	Primary Job Type	Secondary Job Ty	pe A	ctual Start Date	End	Date
TD: 7,630.0	<u> </u>				l	<u>.</u>
	1	Vertical, Original Ho	ne, z/ 1/2018 1:1	0.14 111		
MD TVD (ftKB) (ftKB)			Vertical schematic (a	ictual)		
- 12.1	DIRITIANINA MANANA MANDINA DI MANANJANA MAN					สายของสายสายและเป็นเห็นสายสายเร็นสายเร็นสาย
- 225.1 	Pictured Cliffs (final)	· · · · · · · · ·			225.0 ftKB	IG; 9.63 in; 8.92 in; 12.0
- 3,232.9				2; INT 12.0 f	ERMEDIATE (tKB; 3,233.0 ft)	CASING; 7 in; 6.46 in;
- 3,799.9	Tubing; 2 3/8 in; 4.70 lb/ft	; J-55; 12.0 ftKB; 7,423.0 ftKB				·· · ·
- 3,803.1	Mesaverde (final)					
- 4,692.9	Cliff House (final)			8		
- 4,890.1	Menefee (final)			8		
- 5,282.2	Mancos (final)					
	-Gallup (final)		~			
- 6,896.0						
- 7,250.0	Greenhorn (final)	······				
- 7,308.1	Graneros (final)					
- 7,350.1	— Dakota (final)	·····		2-F1		
- 7,371.1		••••••••••••••••••••••••••••••••••••••		Perfor	ated; 7,351.0-7	,371.0; 5/23/1981
- 7,422.9	Seating Nipple; 2 3/8	in: 7.423.0 ftKB;				
- 7,423.9		7,424.0 ftKB				
- 7,450.1				Perfor	ated; 7,450.0-7	,489.0; 5/23/1981
- 7,488.8						
- 7,547.9	<u> </u>			Perfor	ated; 7,548.0-7	<u>,579.0; 5/23/1981</u>
- 7,629.9				3; PRC 12.0 ft	DUCTION CA	SING; 4 1/2 in; 4.00 in; B



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Farmington District Office 6251 College Blvd. - Suite A Farmington, New Mexico 87402 www.blm.gov/nm



RECOMPLETION CONDITION OF APPROVAL

Operator:	Hilcorp Energy Company
Lease No.:	NMSF 078502-A
Well Name:	Hardie 4E
Well Location:	Sec.24, T29N, R08W; 1800' FNL & 790' FWL

The Bureau of Land Management Farmington Field Office will require the operator to run a CBL and submit it for verification.

William Tambekou Petroleum Engineer Petroleum Management Team