

Well Name: JICARILLA E	Well Location: T26N / R4W / SEC 21 / NWNE / 36.4768924 / -107.2531185	County or Parish/State: RIO ARRIBA / NM
Well Number: 6	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name: JICARILLA APACHE
Lease Number: JIC104	Unit or CA Name:	Unit or CA Number:
US Well Number: 3003906414	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2757153

Type of Submission: Notice of Intent

Type of Action: Commingling (Subsurface)

Date Sundry Submitted: 10/19/2023

Time Sundry Submitted: 09:06

Date proposed operation will begin: 10/19/2023

Procedure Description: Correction to perf depths: Hilcorp Energy proposes to downhole commingle production in the Basin Dakota (pool 71599) and Wildhorse Gallup (pool 87360) upon completion of the Dakota formation. See attached allocation methodology and supporting documents. Commingling will not reduce the value of production. Proposed perforations are: DK 7628'-7799', GL 7140'-7153' (corrected).

NOI Attachments

Procedure Description

Jicarilla_E_6_Production_Allocation_20231019090331.pdf

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NWNE / 36.4768924 / -107.2531185

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WELL

Allottee or Tribe Name:
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Lease Number: JIC104

Unit or CA Name:

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US Well Number: 3003906414

Well Status: Producing Gas Well

Operator: HILCORP ENERGY
COMPANY

Operator

I certify that the foregoing is true and correct. 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 false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: CHERYLENE WESTON

Signed on: OCT 19, 2023 09:00 AM

Name: HILCORP ENERGY COMPANY

Title: Operations/Regulatory Tech - Sr

Street Address: 1111 TRAVIS STREET

City: HOUSTON

State: TX

Phone: (713) 289-2615

Email address: CWESTON@HILCORP.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: MATTHEW H KADE

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647736

BLM POC Email Address: MKADE@BLM.GOV

Disposition: Approved

Disposition Date: 10/19/2023

Signature: Matthew Kade

Hilcorp Energy Company PRODUCTION ALLOCATION FORM					Distribution: BLM / NMOCD Original Accounting Well File Revised: September 25, 2019	
					Status PRELIMINARY ☒ FINAL ☐ REVISED ☐	
Commingle Type SURFACE ☐ DOWNHOLE ☒ Type of Completion NEW DRILL ☐ RECOMPLETION ☒ PAYADD ☐ COMMINGLE ☐					Date: 09/21/2023 API No. 30-039-06414 DHC No. Lease No. JIC104	
Well Name JICARILLA E					Well No. 6	
Unit Letter B	Section 21	Township 26N	Range 04W	Footage 890' FNL & 1650' FEL	County, State Rio Arriba, New Mexico	
Completion Date ~Est. 10/28/2023		Test Method HISTORICAL ☐ FIELD TEST ☐ PROJECTED ☐ OTHER ☒				
JUSTIFICATION OF ALLOCATION: Hilcorp requests that production for the downhole commingle be allocated using the subtraction method in agreement with local agencies. The base formation is the Gallup and the added formations to be commingled is the Dakota. The subtraction method applies an average monthly production forecast to the base formation 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 4th 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 and will be a fixed rate for 4 years. DK 63%, GL 37% After 4 years oil will be reevaluated and adjust as needed based on average formation yields and new fixed gas allocation.						
NAME		DATE		TITLE		PHONE
X <i>Cherylene Weston</i>				Operations/Regulatory Tech – Sr.		713-289-2615
Cherylene Weston		9/21/2023				
For Technical Questions: Ray Brandhurst				Reservoir Engineer		713-757-5224

Jicarilla E 6 Allocation

The forecast for Dakota production has been generated using type curves of production in the surrounding trend.

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.

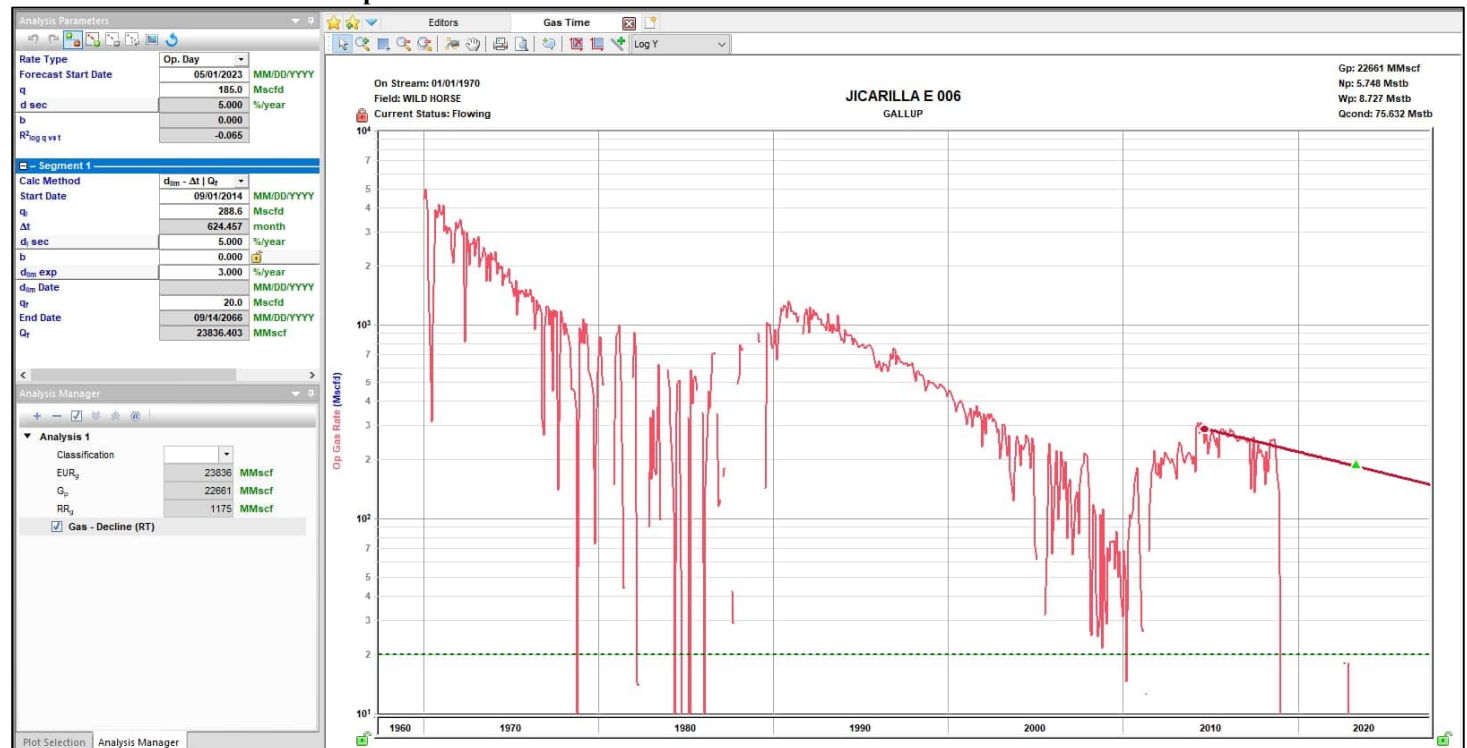
Production Allocation Method – Subtraction

Gas Allocation:

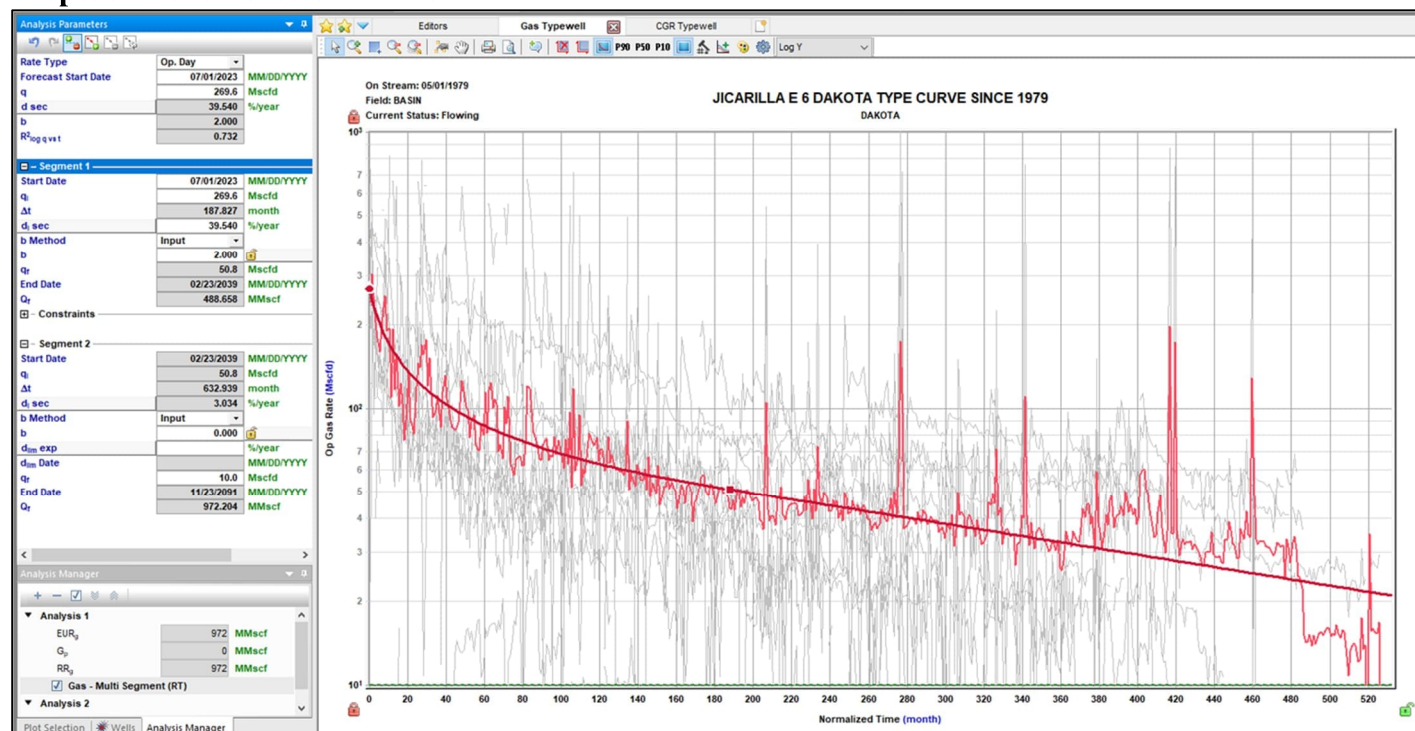
Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Gallup and the added formation to be commingled is Dakota. The subtraction method applies an average monthly production forecast to the base formation using 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.

Current Zone Forecast – Gallup



Proposed Zone Forecast - Dakota



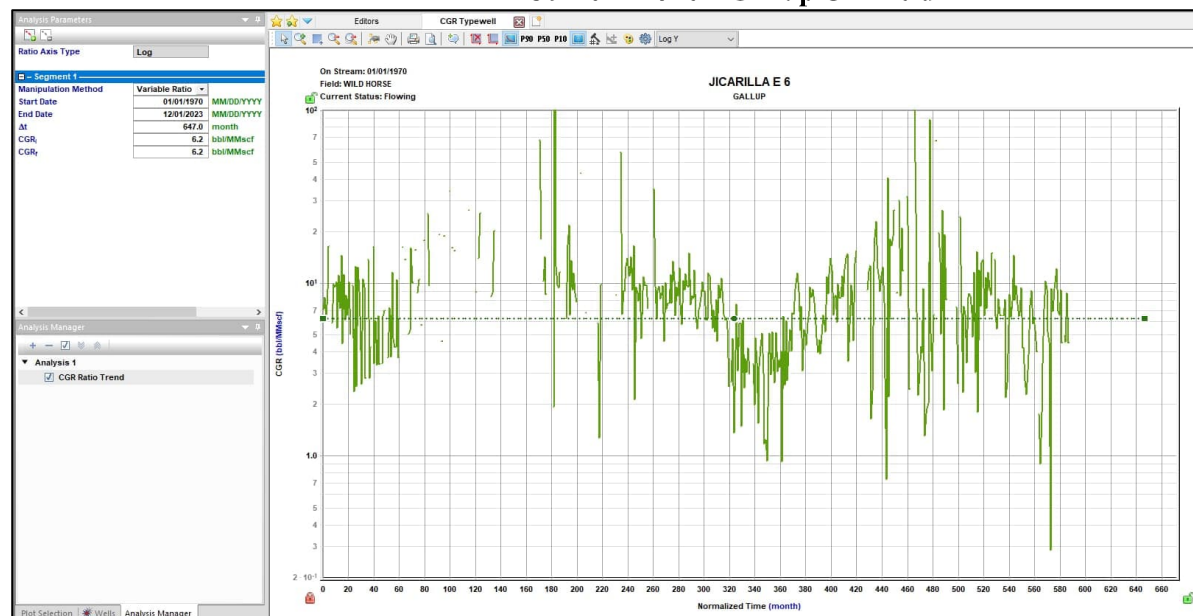
Average initial production curve in geologic region.

Oil Allocation:

Oil production will be allocated based on average formation yields from offset wells and will be a fixed rate for 4 years. After 4 years oil will be reevaluated and adjusted as needed based on average formation yields and new fixed gas allocation.

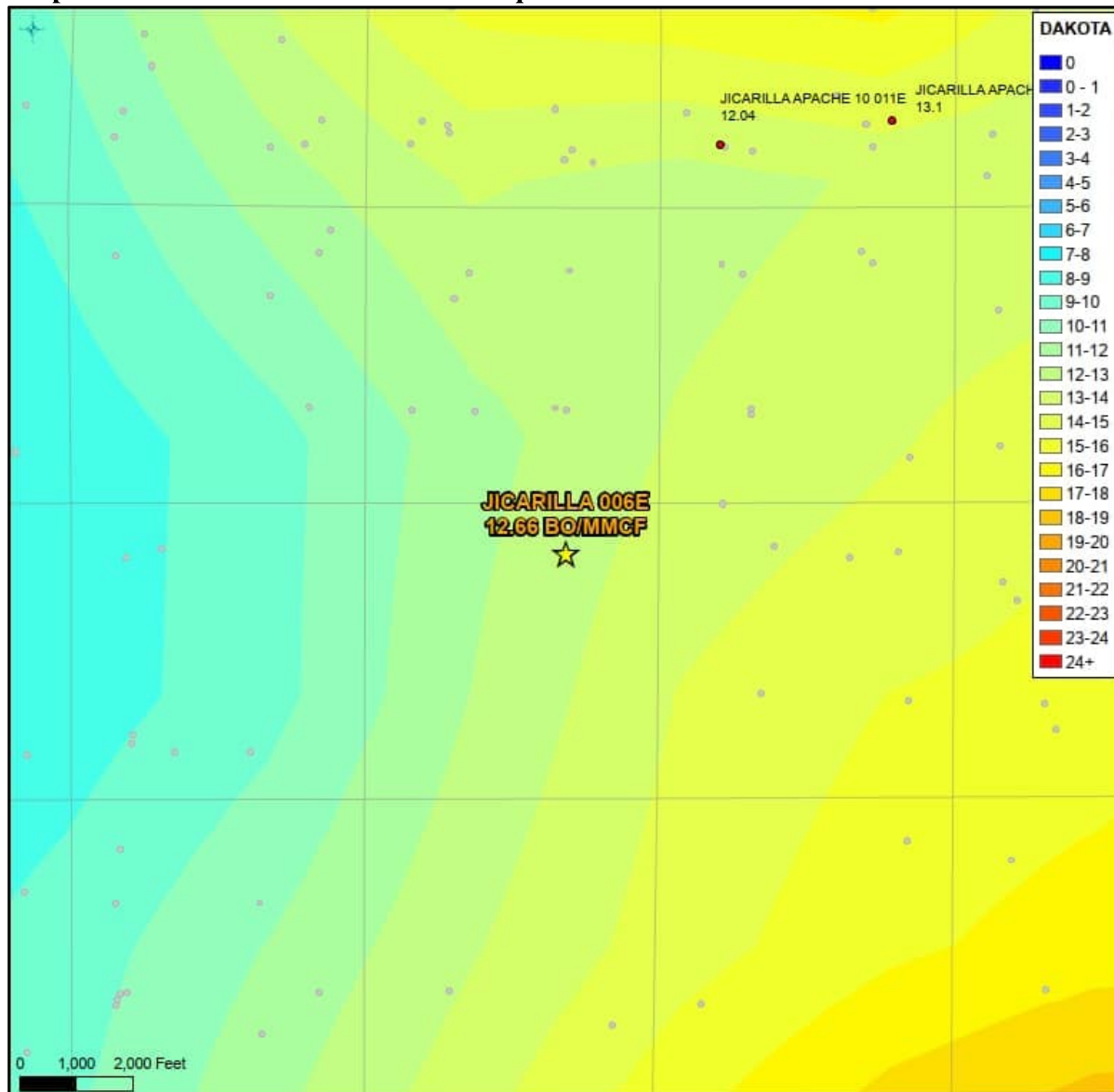
Formation	Yield (bbl/MM)	Remaining or Forecasted Reserves (MMcf)	% Oil Allocation
DK	12.66	972	63%
GL	6.2	1175	37%

Current Zone – Gallup Oil Yield



Average Oil Yield from Vertical Mancos Type Curve.

Proposed Zone 1 – Dakota Oil Yield Map



9-Section Area Map of Standalone Oil Yields. Sampled well to this map.

District I1625 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
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
August 1, 2011

Permit 349110

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039-06414	2. Pool Code 71599	3. Pool Name BASIN DAKOTA (PRORATED GAS)
4. Property Code 319696	5. Property Name JICARILLA E	6. Well No. 006
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6795

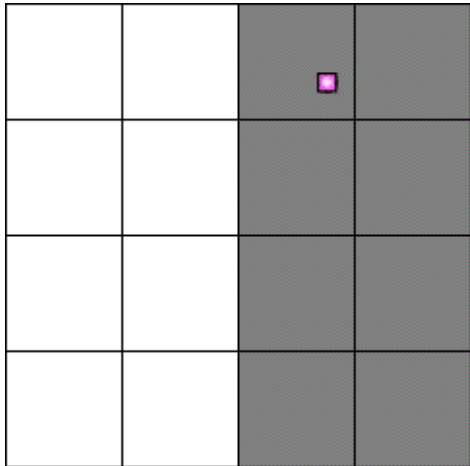
10. Surface Location

UL - Lot B	Section 21	Township 26N	Range 04W	Lot Idn	Feet From 890	N/S Line N	Feet From 1650	E/W Line E	County RIO ARRIBA
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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	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>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.</i> E-Signed By: <i>Cherylene Weston</i> Title: Cherylene Weston Date: 08/25/2023 SURVEYOR CERTIFICATION <i>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.</i> Surveyed By: James P. Leese Date of Survey: 3/4/1956 Certificate Number: 1463
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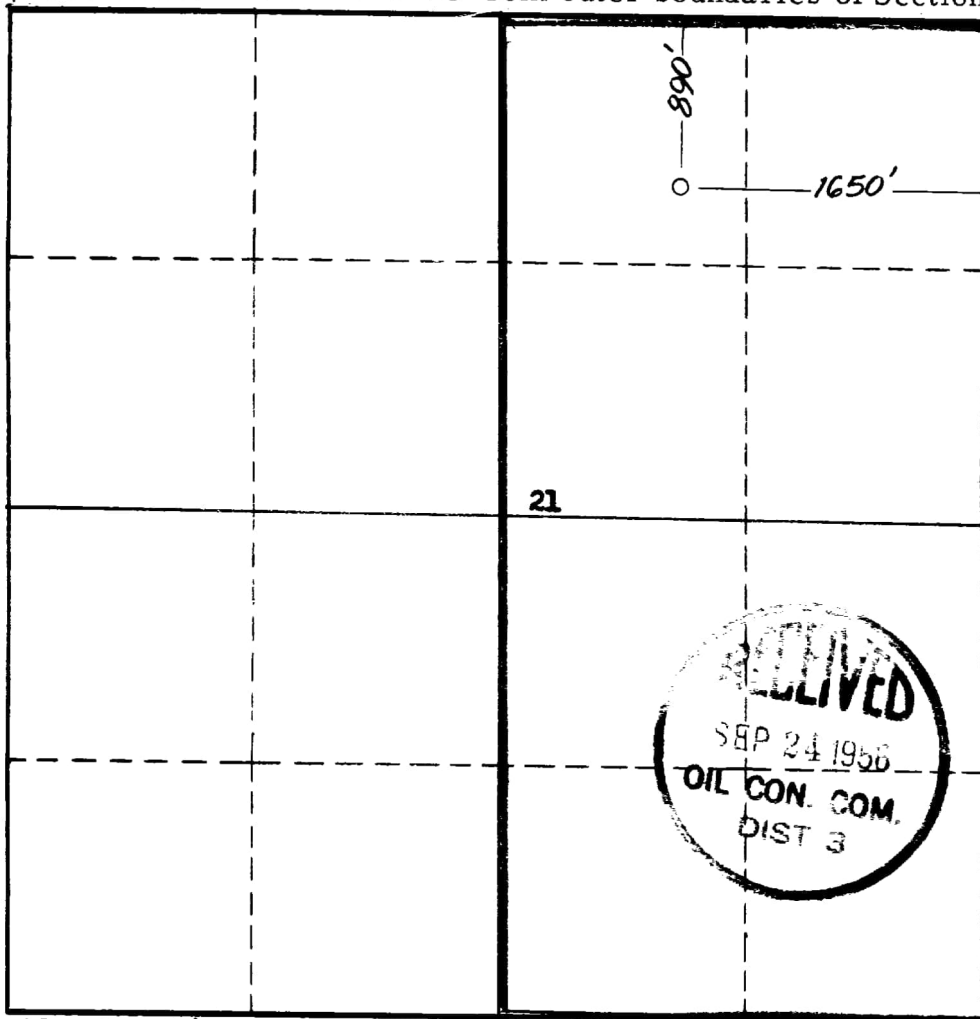
NEW MEXICO
OIL CONSERVATION COMMISSION

Form C-128

Well Location and/or Gas Proration Plat

Date September 21, 1956Operator SOUTHERN UNION GAS COMPANY Lease JicarillaWell No. 6-E Section 21 Township 26 NORTH Range 4 WEST, NMPMLocated 890 Feet From the NORTH Line, 1650 Feet From the EAST Line,RIO ARRIBA County, New Mexico. G. L. Elevation To Be DeterminedName of Producing Formation Dakota Pool Wildcat Dedicated Acreage 320

(Note: All distances must be from outer boundaries of Section)



SCALE: 1"=1000'

1. Is this Well a Dual Comp. ? Yes No xx.
2. If the answer to Question 1 is yes, are there any other dually completed wells within the dedicated acreage? Yes No .

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Name L. S. Muennink *L. S. Muennink*
Position Exploration Engineer
Representing Southern Union Gas Company
Address 1001 Burt Building, Dallas, Texas

Date Surveyed 4 MARCH 1956
James P. Reese
Registered Professional Engineer and/or
Land Surveyor James P. Reese
N. Mex. Reg. No. 1463

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

CONDITIONS

Action 278862

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 278862
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	ACCEPTED FOR RECORD	10/24/2023