

ID NO. 318922

DHC - 5566

RECEIVED: <b>02/29/24</b>	REVIEWER:	TYPE:	APP NO:
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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 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Applicant:** Hilcorp Energy Company **OGRID Number:** 372171  
**Well Name:** Howell L 2A **API:** 30-045-21767  
**Pool:** Basin Fruitland Coal **Pool Code:** 71629

**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 (PRORATION UNIT)       SD
- B. Check one only for [ I ] or [ II ]  
 [ I ] Commingling - Storage - Measurement  
 DHC    CTB    PLC    PC    OLS    OLM  
 [ II ] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX    PMX    SWD    IPI    EOR    PPR

- 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 is attached, and/or,  
 H.  No notice required

<u>FOR OCD ONLY</u>	
<input type="checkbox"/>	Notice Complete
<input type="checkbox"/>	Application Content Complete

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Amanda Walker  
Print or Type Name

Signature

2/29/2024  
Date

346-237-2177  
Phone Number

mwalker@hilcorp.com  
e-mail Address

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised August 1, 2011

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

**Oil Conservation Division**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

APPLICATION TYPE  
 Single Well  
 Establish Pre-Approved Pools  
EXISTING WELLBORE  
 Yes  No

District III  
1000 Rio Brazos Road, Aztec, NM 87410

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

**APPLICATION FOR DOWNHOLE COMMINGLING**

Hilcorp Energy Company 382 Road 3100, Aztec, NM 87410  
Operator Address

Howell L 2A O, Sec 25, 30N, 08W San Juan  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 372171 Property Code 318570 API No. 30-045-21767 Lease Type:  Federal  State  Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Basin Fruitland Coal		Blanco Mesaverde
Pool Code	71629		72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	Est 2471' - 3010'		3775' - 5482'
Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
Bottomhole Pressure <small>(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)</small>	52 psi		49 psi
Oil Gravity or Gas BTU <small>(Degree API or Gas BTU)</small>	965 BTU		1219 BTU
Producing, Shut-In or New Zone	New Zone		Producing
Date and Oil/Gas/Water Rates of Last Production. <small>(Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)</small>	Date: Rates: Oil: Gas: Water:	Date: Rates: Oil: Gas: Water:	Date: 12/1/2023 Rates: Oil: 0 bbl Gas: 2490 mcf Water: 20 bbl
Fixed Allocation Percentage <small>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)</small>	Oil                  Gas %                  %	Oil                  Gas %                  %	Oil                  Gas %                  %

**ADDITIONAL DATA**

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes  No   
 If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes  No   
 Are all produced fluids from all commingled zones compatible with each other? Yes  No   
 Will commingling decrease the value of production? Yes  No   
 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  No

NMOCD Reference Case No. applicable to this well: \_\_\_\_\_

**Attachments:**


- 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 information above is true and complete to the best of my knowledge and belief.

SIGNATURE  TITLE Operations/Regulatory Technician DATE 2/29/2024

TYPE OR PRINT NAME Amanda Walker TELEPHONE NO. (346) 237-2177

E-MAIL ADDRESS mwalker@hilcorp.com

The near wellbore shut-in bottom hole pressures of the above reservoirs are much lower than the calculated far-field stabilized reservoir pressured 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 pressures, the low permeability of the reservoir rock results in rapid depletion of the near-fracture region, quickly enough that the wells are unable to produce without the aid of a plunger. Given low permeabilities and low wellbore flowing pressures in the above reservoirs, loss of reserves due to cross-flow is not an issue during producing or shut-in periods. Given low shut-in bottom hole pressures, commingling the above reservoirs in this well will not result in shut-in or flowing wellbore pressures in excess of any commingled pool's fracture parting pressure. The pressures provided in the C-107A are based on shut-in bottom hole pressures of offset standalone wells which match expected near-wellbore shut-in bottom hole pressures of this proposed commingled completion.

Shut in pressures were calculated for operated offset standalone wells in each of the zones being commingled in the well in question via the following process:

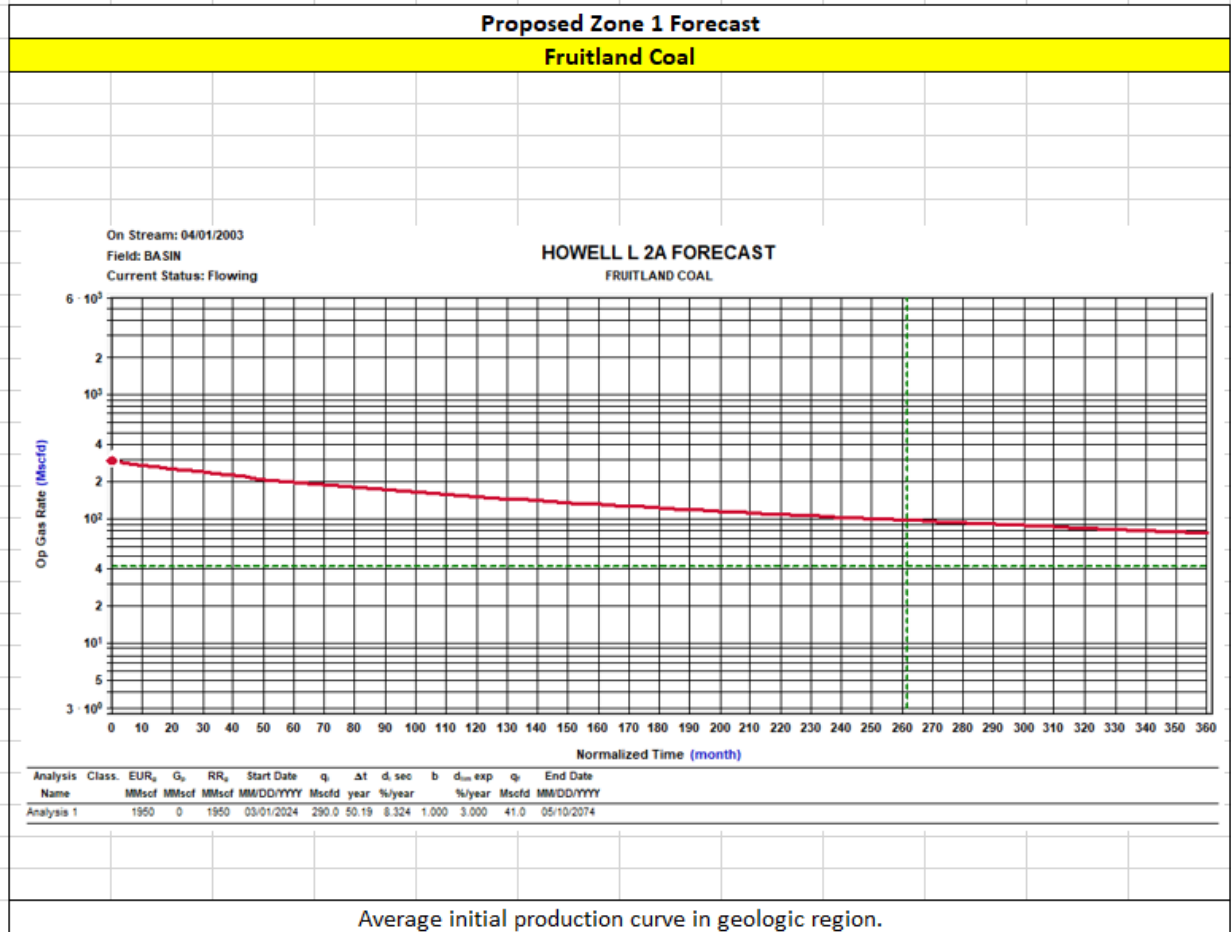
- 1) Wells were shut in for 24 hours
- 2) Echometer was used to obtain a fluid level
- 3) Shut in BHP was calculated for the proposed commingled completion

List of wells used to calculate BHPs for the Project:		
3003925338	SAN JUAN 30-6 UNIT NP498R	FRC
3003921700	SAN JUAN 30-6 UNIT 7A	MV

I believe each of the reservoirs to be continuous and in a similar state of depletion at this well and at each of the wells from which the pressures are being derived.

Note: BTU Data taken from standalone completions in the zone of interest within a 2 mile radius of the well.

A farther radius is used if there is not enough data for a proper statistical analysis.



### HEC Comments

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.

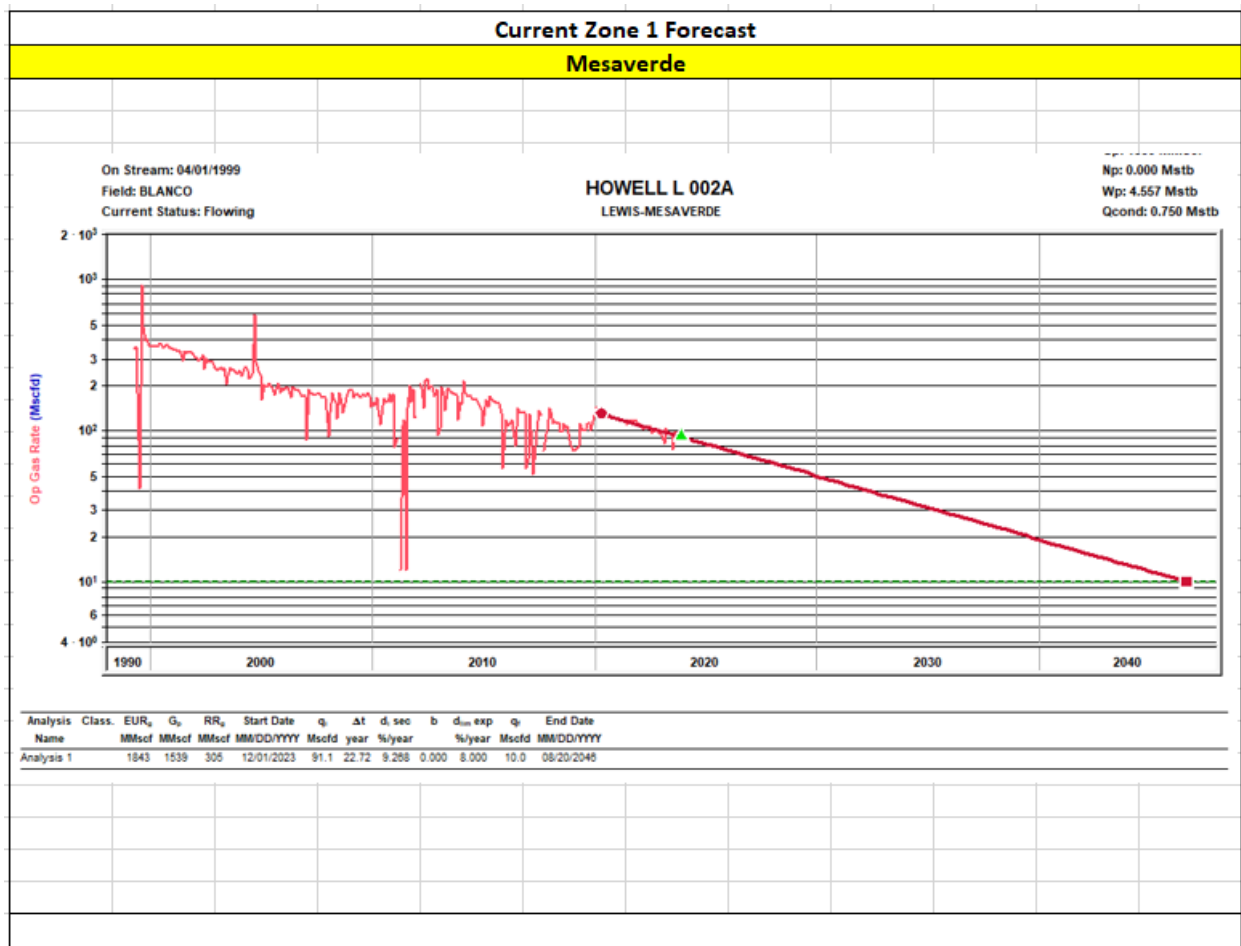
The BHPs of all zones, producing and non-producing, were estimated based upon basinwide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin. These models were constructed incorporating reservoir dynamics and physics, 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 Mesaverde and the added formation to be commingled is the Fruitland Coal. 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 4<sup>th</sup> year and will be utilized to create a fixed percentage based allocation.



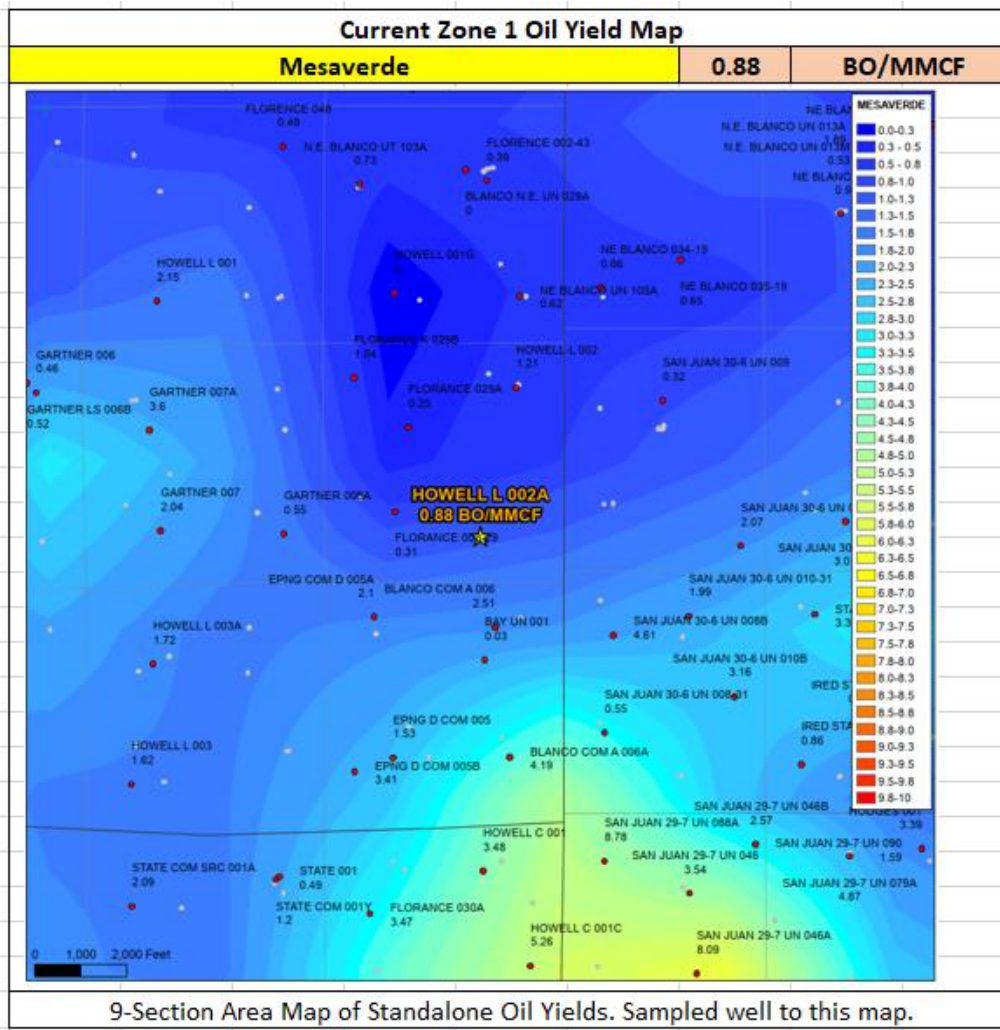
**Oil Allocation:**

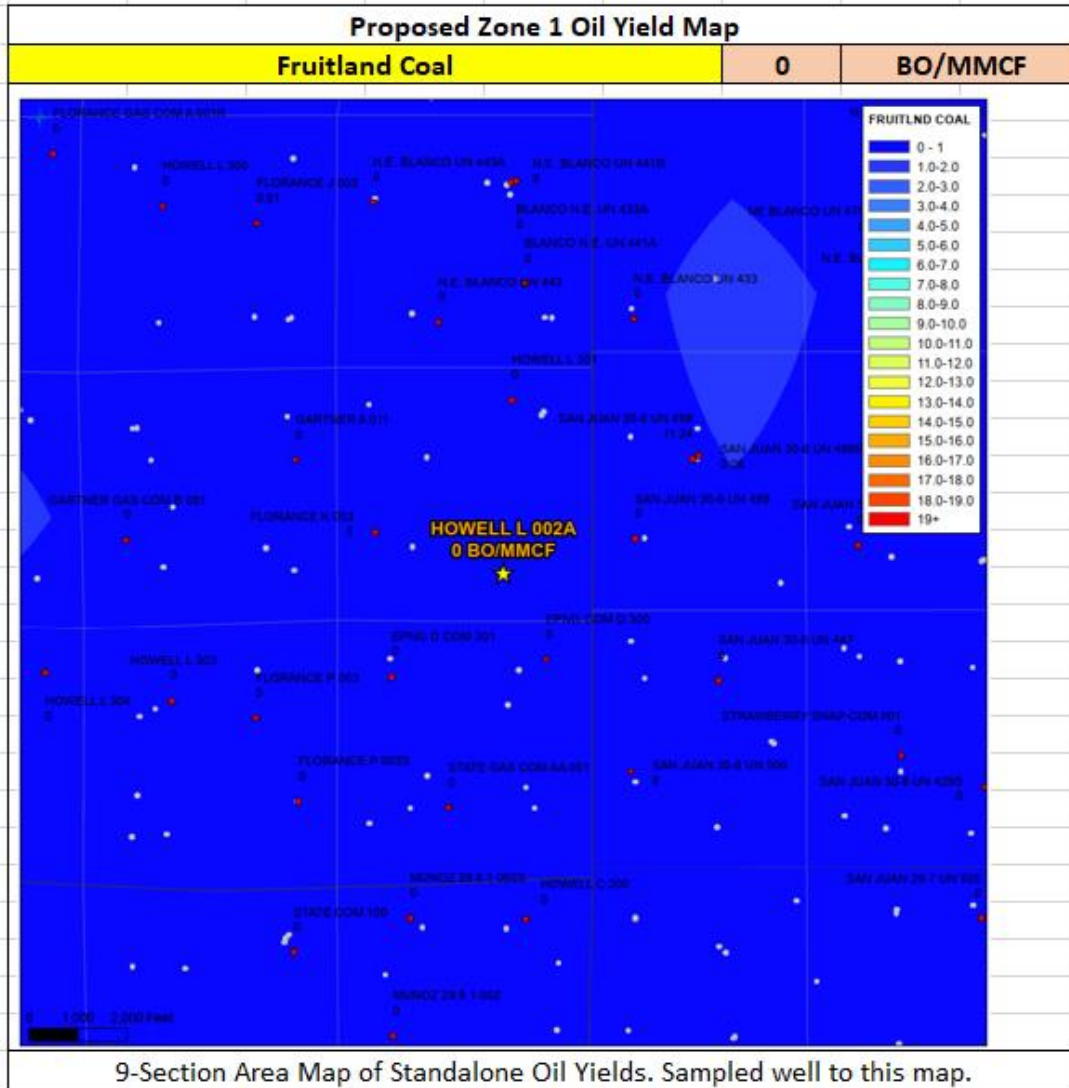
Oil production will be allocated based on average formation yields from offset wells and will be a fixed rate for 4 years.

After 4 years oil will be reevaluated and adjust as needed based on average formation yields and new fixed gas allocation.

Formation	Yield (bbl/MM)	Remaining Reserves (MMcf)	% Oil Allocation
MV	0.88	305	100%
FRC	0	1950	0%
			100%

All documentation will be submitted to NMOCD.





Water Compatibility in the San Juan Basin

- The San Juan basin has productive siliciclastic reservoirs (Pictured Cliffs, Blanco Mesaverde, Basin Dakota, etc.) and a productive coalbed methane reservoir (Basin Fruitland Coal).
- These siliciclastic and coalbed methane reservoirs are commingled extensively throughout the basin in many different combinations with no observed damage from clay swelling due to differing formation waters.
- The samples below all show fresh water with low TDS.

Well Name	API
HOWELL L 2A	3004521767

FRC Offset		MV Offset	
API	3004528780	API	3003921701
Property	EPNG D COM 301	Property	SAN JUAN 30-6 UNIT 8A
CationBarium	224.8	CationBarium	12.65
CationBoron		CationBoron	
CationCalcium	23.6	CationCalcium	11.41
CationIron	9.88	CationIron	0.66
CationMagnesium	20.5	CationMagnesium	10.23
CationManganese	0.4	CationManganese	0.02
CationPhosphorus	0.1	CationPhosphorus	
CationPotassium	29.2	CationPotassium	
CationStrontium	13.7	CationStrontium	8.1
CationSodium	5070	CationSodium	1391.08
CationSilica	5.96	CationSilica	
CationZinc	2	CationZinc	
CationAluminum		CationAluminum	
CationCopper		CationCopper	
CationLead	2	CationLead	
CationLithium		CationLithium	
CationNickel		CationNickel	
CationCobalt		CationCobalt	
CationChromium		CationChromium	
CationSilicon	10	CationSilicon	
CationMolybdenum		CationMolybdenum	
AnionChloride	3180	AnionChloride	1853
AnionCarbonate	240	AnionCarbonate	0
AnionBicarbonate	6180	AnionBicarbonate	610
AnionBromide		AnionBromide	
AnionFluoride		AnionFluoride	
AnionHydroxyl	10	AnionHydroxyl	0
AnionNitrate		AnionNitrate	
AnionPhosphate	0.29	AnionPhosphate	
AnionSulfate	72.8	AnionSulfate	1
phField	7.5	phField	6.9
phCalculated	7.86	phCalculated	
TempField	66.9	TempField	56
TempLab		TempLab	
OtherFieldAlkalinity	3100	OtherFieldAlkalinity	
OtherSpecificGravity	1.01	OtherSpecificGravity	1
OtherTDS	12300	OtherTDS	3898.16
OtherCaCO3	143	OtherCaCO3	
OtherConductivity	19200	OtherConductivity	6090.87
DissolvedCO2	352	DissolvedCO2	36
DissolvedO2		DissolvedO2	
DissolvedH2S		DissolvedH2S	0.85
GasPressure		GasPressure	96
GasCO2		GasCO2	0
GasCO2PP		GasCO2PP	0
GasH2S		GasH2S	0
GasH2SPP		GasH2SPP	0
PitzerCaCO3_70		PitzerCaCO3_70	-1.16
PitzerBaSO4_70		PitzerBaSO4_70	0.2
PitzerCaSO4_70		PitzerCaSO4_70	-4.68
PitzerSrSO4_70		PitzerSrSO4_70	-3.16
PitzerFeCO3_70		PitzerFeCO3_70	-0.62
PitzerCaCO3_220		PitzerCaCO3_220	0.07
PitzerBaSO4_220		PitzerBaSO4_220	-0.44
PitzerCaSO4_220		PitzerCaSO4_220	-4.45
PitzerSrSO4_220		PitzerSrSO4_220	-2.78
PitzerFeCO3_220		PitzerFeCO3_220	0.88

Gas Compatibility in the San Juan Basin

- The San Juan basin has productive siliciclastic reservoirs (Pictured Cliffs, Blanco Mesaverde, Basin Dakota, etc.) and a productive coalbed methane reservoir (Basin Fruitland Coal).
- These siliciclastic and coalbed methane reservoirs are commingled extensively throughout the basin in many different combinations with no observed damage from clay swelling due to differing formation waters or gas composition.
- The samples below all show offset gas analysis variability by formation is low.

Well Name	API
HOWELL L 2A	3004521767

FRC Offset		MV Offset	
AssetCode	3004526886	AssetCode	3004509213
AssetName	HOWELL L 301	AssetName	HOWELL L 2
CO2	0.2	CO2	0.02
N2	0	N2	0
C1	0.78	C1	0.83
C2	0.02	C2	0.08
C3	0	C3	0.04
ISOC4	0	ISOC4	0.01
NC4	0	NC4	0.01
ISOC5	0	ISOC5	0
NC5		NC5	0
NEOC5		NEOC5	
C6		C6	
C6_PLUS		C6_PLUS	0.01
C7		C7	
C8		C8	
C9		C9	
C10		C10	
AR		AR	
CO		CO	
H2		H2	
O2		O2	
H2O		H2O	
H2S		H2S	
HE		HE	
C_O_S		C_O_S	
CH3SH		CH3SH	
C2H5SH		C2H5SH	
CH2S3_2CH3S		CH2S3_2CH3S	
CH2S		CH2S	
C6HV		C6HV	
CO2GPM	0	CO2GPM	0
N2GPM	0	N2GPM	0
C1GPM	0	C1GPM	0
C2GPM	0.66	C2GPM	2.21
C3GPM	0.04	C3GPM	0.99
ISOC4GPM	0	ISOC4GPM	0.23
NC4GPM	0	NC4GPM	0.33
ISOC5GPM	0	ISOC5GPM	0.15
NC5GPM		NC5GPM	0.11
C6_PLUSGPM		C6_PLUSGPM	0.42

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

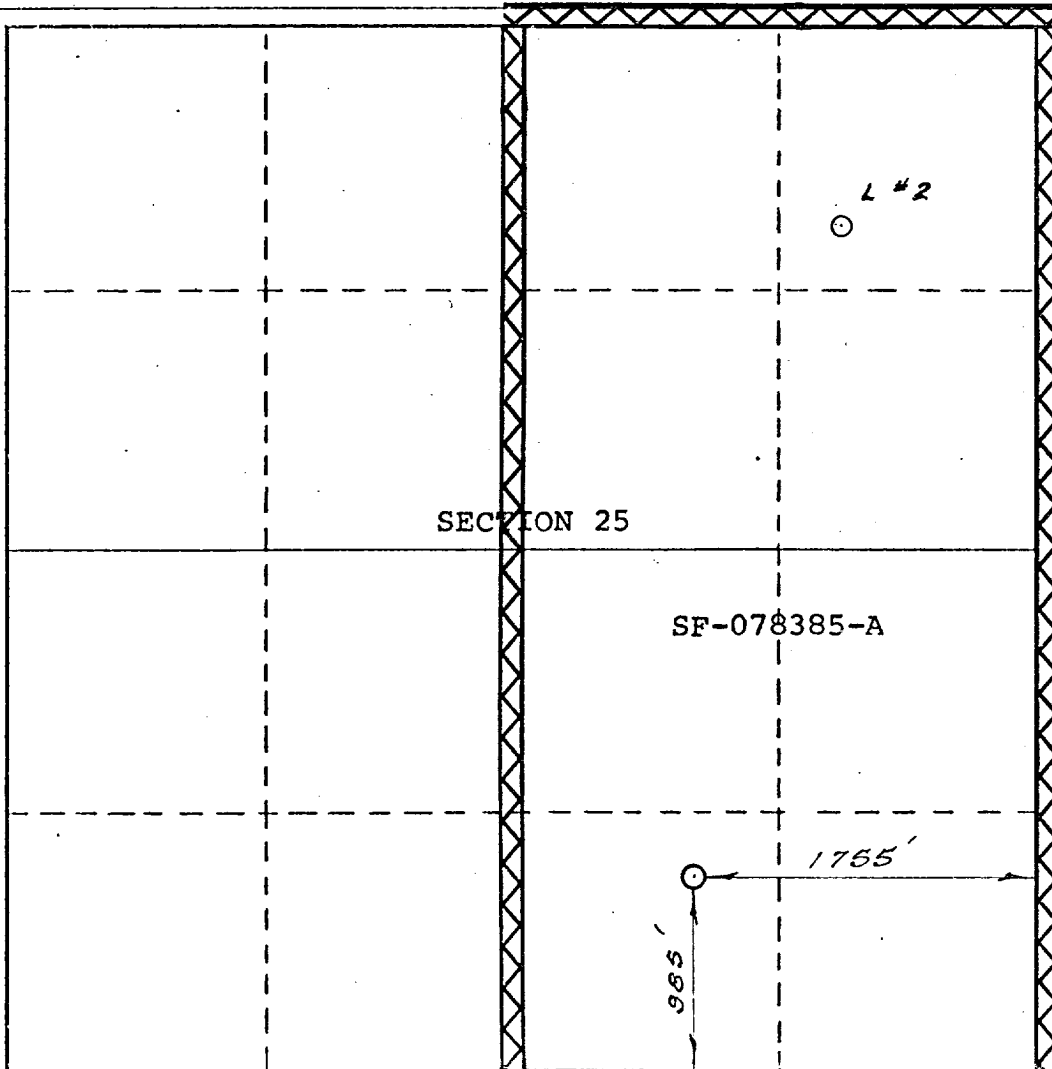
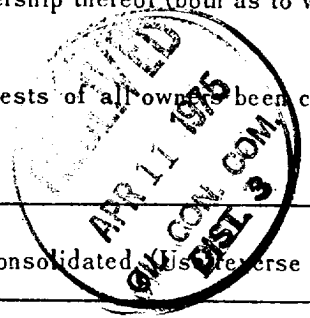
Operator <b>EL PASO NATURAL GAS COMPANY</b>		Lease <b>HOWELL L (SF-078385-A)</b>		Well No. <b>2A</b>
Unit Letter <b>O</b>	Section <b>25</b>	Township <b>30-N</b>	Range <b>8-W</b>	County <b>SAN JUAN</b>
Actual Footage Location of Well: <b>985</b> feet from the <b>SOUTH</b> line and <b>1755</b> feet from the <b>EAST</b> line				
Ground Level Elev. <b>6145</b>	Producing Formation <b>MESA VERDE</b>	Pool <b>BLANCO MESA VERDE</b>	Dedicated Acreage: <b>320.00</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Original Signed by  
**D. G. Brisco**

Name \_\_\_\_\_  
Position **Drilling Clerk**  
Company **El Paso Natural Gas Co.**  
Date **April 10, 1975**

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 knowledge and belief.

Date Surveyed **MARCH 4, 1975**  
Registered Professional Engineer and/or Land Surveyor  
*[Signature]*  
Certificate No. **1760**

U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

**Well Name:** HOWELL L

**Well Location:** T30N / R8W / SEC 25 / SWSE / 36.778412 / -107.623978

**County or Parish/State:** SAN JUAN / NM

**Well Number:** 2A

**Type of Well:** CONVENTIONAL GAS WELL

**Allottee or Tribe Name:**

**Lease Number:** NMSF078385A

**Unit or CA Name:**

**Unit or CA Number:**

**US Well Number:** 3004521767

**Operator:** HILCORP ENERGY COMPANY

### Notice of Intent

**Sundry ID:** 2786938

**Type of Submission:** Notice of Intent

**Type of Action:** Recompletion

**Date Sundry Submitted:** 04/25/2024

**Time Sundry Submitted:** 10:12

**Date proposed operation will begin:** 08/01/2024

**Procedure Description:** Hilcorp Energy Company requests to REVISE the previously approved RC NOI. Attached is the updated procedure, current and proposed diagram, natural gas management plan and plat.

### Surface Disturbance

**Is any additional surface disturbance proposed?:** No

### NOI Attachments

**Procedure Description**

Howell\_L\_2A\_\_\_FRC\_Recomplete\_NOI\_Revised\_04252024\_20240425101201.pdf

Well Name: HOWELL L

Well Location: T30N / R8W / SEC 25 / SWSE / 36.778412 / -107.623978

County or Parish/State: SAN JUAN / NM

Well Number: 2A

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMSF078385A

Unit or CA Name:

Unit or CA Number:

US Well Number: 3004521767

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: AMANDA WALKER

Signed on: APR 25, 2024 10:12 AM

Name: HILCORP ENERGY COMPANY

Title: Operations/Regulatory Technician

Street Address: 1111 TRAVIS ST

City: HOUSTON

State: TX

Phone: (346) 237-2177

Email address: MWALKER@HILCORP.COM

### Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

### BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742

BLM POC Email Address: krennick@blm.gov

Disposition: Approved

Disposition Date: 04/25/2024

Signature: Kenneth Rennick



**HILCORP ENERGY COMPANY**  
**HOWELL L 2A**  
**FRUITLAND COAL - RECOMPLETION SUNDRY**  
**API: 3004521767**

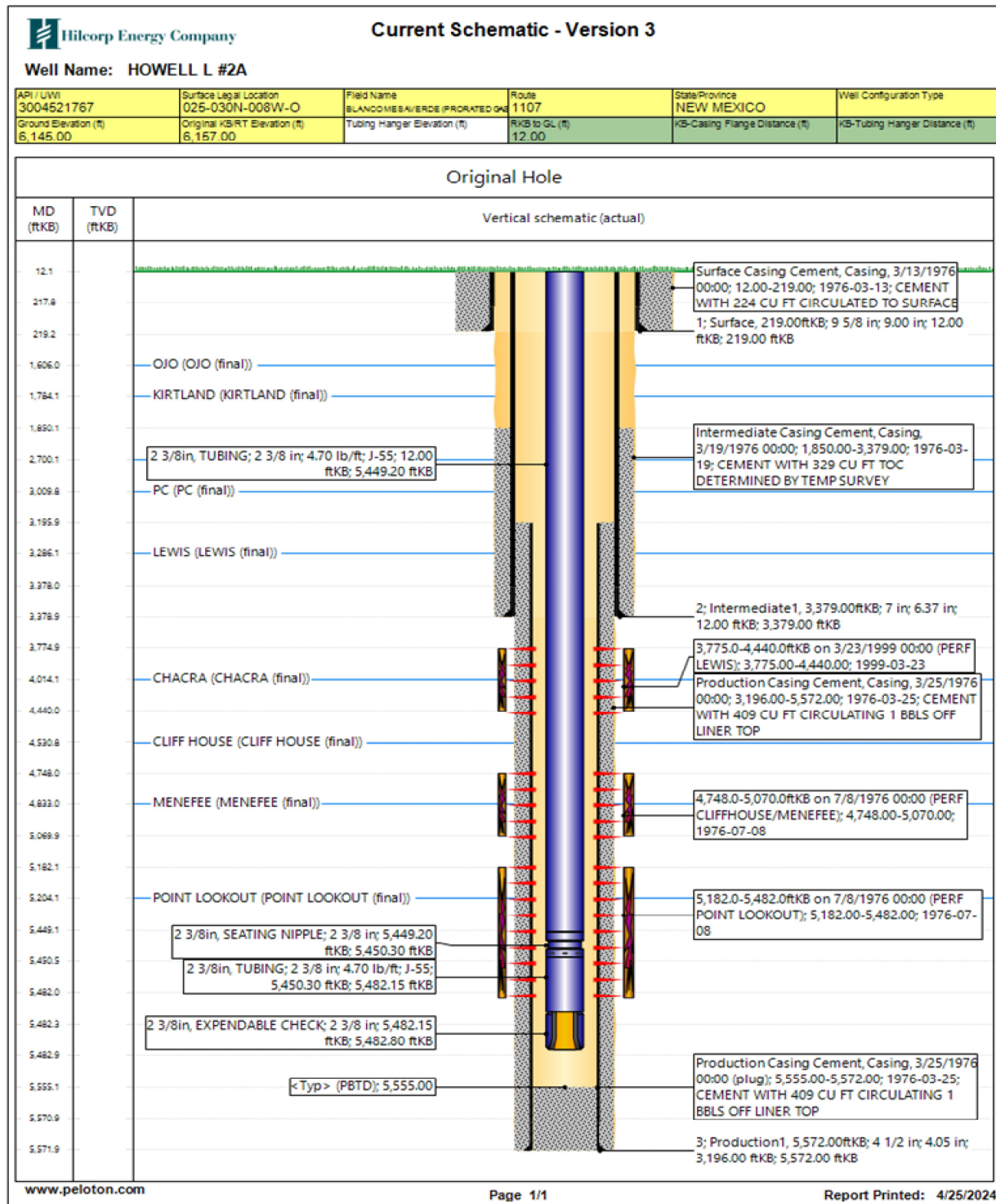
**JOB PROCEDURES**

- |                                     |       |  |
|-------------------------------------|-------|--|
| <input checked="" type="checkbox"/> | NMOCD | <b>Contact OCD and BLM (where applicable) 24 hrs prior to MIRU or running MITs. Record and document all casing pressures daily, including BH, IC (if present) and PC. Comply with all NMOCD, BLM (where applicable), and HEC safety and environmental regulations.</b> |
| <input checked="" type="checkbox"/> | BLM   |  |
1. Hold pre-job safety meeting. MIRU service rig and associated equipment. NU and test BOP per HEC, State, and Federal guidelines.
  2. TOOH with **2-3/8"** tubing.
  3. Set a **4-1/2"** plug within 50' of the top **Mesaverde** perforation (+/-**3,725'**) for zonal isolation.
  4. Load hole with fluid, PT the csg to 600 psi and run a CBL on the **7"** casing. Verify cement bond within the FRC and confirm TOC. Review CBL results with engineering and regulatory agencies. Perform cement remediation, as required.
  5. Perform a witnessed MIT test on the csg with the appropriate regulatory agencies (Notify NMOCD 24 hours prior to test).
  6. RU WL. Perforate the **Fruitland Coal**. (Top perforation @ **2,700'**, Bottom perforation @ **3,010'**). Set frac through plugs in between stages, if necessary.
  7. RIH w/ frac string and packer. Set packer within 50' of top perforation. ND BOP, NU frac stack. Pressure test frac string and frac stack to frac pressure.
  8. RDMO service rig. RU stimulation crew. Frac the **Fruitland Coal** in one or more stages.
  9. MIRU service rig and associated equipment. ND frac stack, NU BOP and test.
  10. POOH w/ frac string and packer.
  11. TIH with a bit and drill out top isolation plug and any stage plugs (if necessary). Clean out to the top of the **Mesaverde** isolation plug.
  12. Pending commingle approval, drill out **Mesaverde** isolation plug. Cleanout to PBTD at **5,555'**. TOOH w/ cleanout assembly.
  13. Run and land production tubing. RDMO service rig and associated equipment. Return well to production.



**HILCORP ENERGY COMPANY**  
**HOWELL L 2A**  
**FRUITLAND COAL - RECOMPLETION SUNDRY**

**HOWELL L 2A - CURRENT WELLBORE SCHEMATIC**





**HILCORP ENERGY COMPANY**  
**HOWELL L 2A**  
**FRUITLAND COAL - RECOMPLETION SUNDRY**

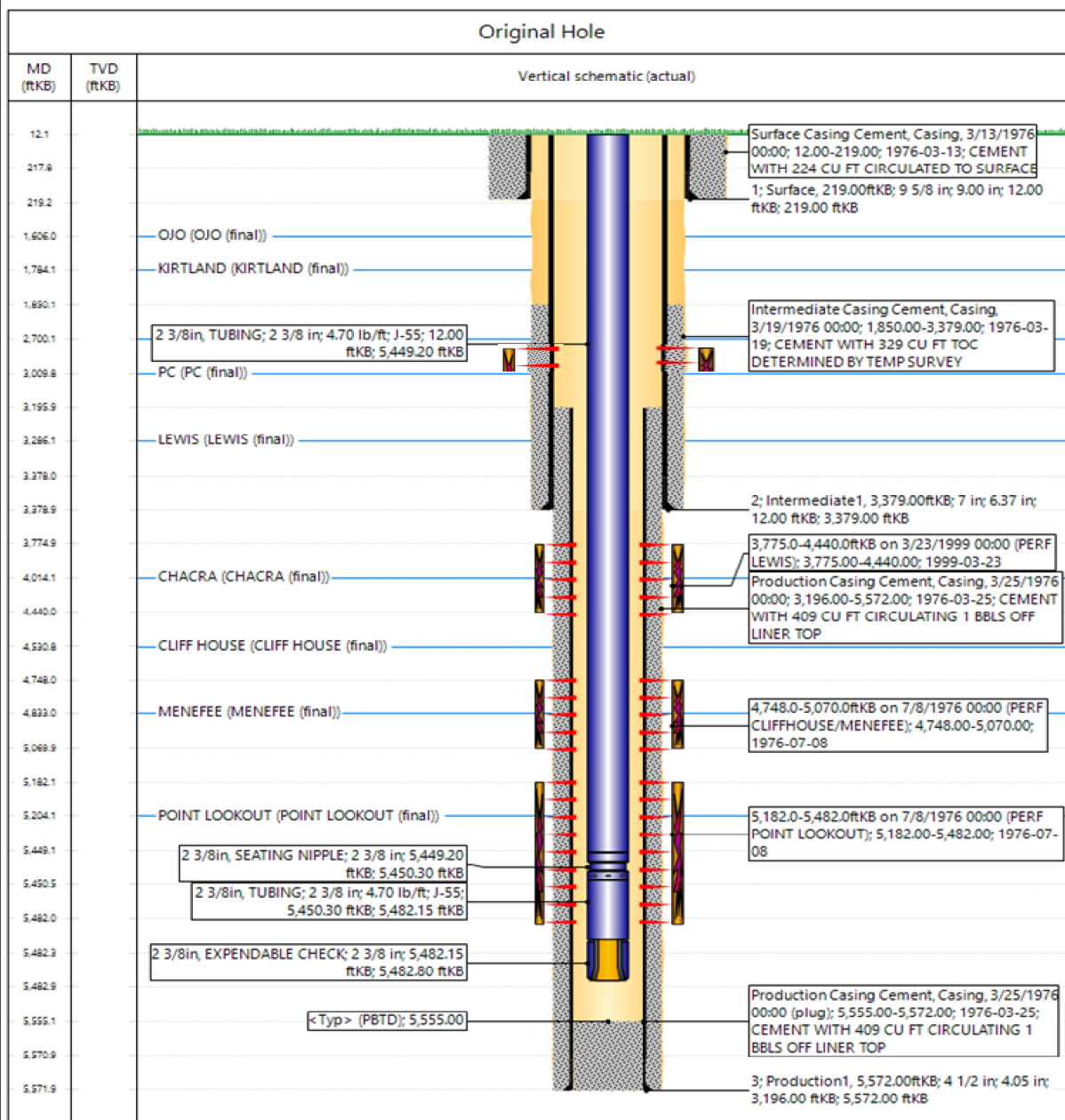
**HOWELL L 2A - PROPOSED WELLBORE SCHEMATIC**



Proposed Schematic

Well Name: **HOWELL L #2A**

API / UWI 3004521767	Surface Legal Location 025-030N-008W-O	Field Name BLANDOMEBAVERDE (PRORATED GAS)	Route 1107	State/Province NEW MEXICO	Well Configuration Type
Ground Elevation (ft) 6,145.00	Original KB/RT Elevation (ft) 6,157.00	Tubing Hanger Elevation (ft)	RTKB to GL (ft) 12.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)



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

Form C-102  
August 1, 2011  
Permit 360457

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-045-21767	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318570	5. Property Name HOWELL L	6. Well No. 002A
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6145

**10. Surface Location**

UL - Lot O	Section 25	Township 30N	Range 08W	Lot Idn	Feet From 985	N/S Line S	Feet From 1755	E/W Line E	County SAN JUAN
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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**

	<p style="text-align: center;"><b>OPERATOR CERTIFICATION</b></p> <p><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></p> <p>E-Signed By: <i>[Signature]</i> Title: Operations Regulatory Tech Sr. Date: 2/26/2024</p> <hr/> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></p> <p><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></p> <p>Surveyed By: David Kilven Date of Survey: 3/4/1975 Certificate Number: 1760</p>
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State of New Mexico  
 Energy, Minerals and Natural Resources Department

Submit Electronically  
 Via E-permitting

Oil Conservation Division  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description Effective May 25, 2021

**I. Operator:** Hilcorp Energy Company **OGRID:** 372171 **Date:** 02/26/2024

**II. Type:**  Original  Amendment due to  19.15.27.9.D(6)(a) NMAC  19.15.27.9.D(6)(b) NMAC  Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Howell L 2A	30-045-21767	O-25-30N-08W	985 FSL & 1755 FEL	0	500	1

**IV. Central Delivery Point Name:** Chaco Blanco Processing Plant [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
<u>Howell L 2A</u>	<u>30-045-21767</u>					

**VI. Separation Equipment:**  Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:**  Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:**  Attach a complete description of Operator’s best management practices to minimize venting during active and planned maintenance.

**Section 2 – Enhanced Plan**  
**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

**IX. Anticipated Natural Gas Production:**

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

**X. Natural Gas Gathering System (NGGS):**

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

**XI. Map.**  Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system  will  will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator  does  does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

Attach Operator’s plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:**  Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

### Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.**  Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.**  Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

### Section 4 - Notices


1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Amanda Walker
Title: Operations Regulatory Tech Sr.
E-mail Address: <a href="mailto:mwalker@hilcorp.com">mwalker@hilcorp.com</a>
Date: 2/26/2024
Phone: 346-237-2177
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
Approved By:
Title:
Approval Date:
Conditions of Approval:

## VI. Separation Equipment:

Hilcorp Energy Company (HEC or Operator) production facilities include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the targeted pool of our recompleting project. HEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the recompleting to optimize gas capture and send gas to sales or flare based on analytical composition. HEC operates facilities that are typically one-well facilities. Production separation equipment is upgraded prior to well being completed, if determined to be undersized or inadequate. This equipment is already on-site and tied into our sales gas lines prior to the recompleting operations.

## VII. Operational Practices:

1. Subsection (A) Venting and Flaring of Natural Gas
  - o HEC understands the requirements of NMAC 19.15.27.8 which outlines that the venting and flaring of natural gas during drilling, completion or production operations that constitutes waste as defined in 19.15.2 are prohibited.
2. Subsection (B) Venting and Flaring during drilling operations
  - o This gas capture plan isn't for a well being drilled.
3. Subsection (C) Venting and flaring during completion or recompleting
  - o Flowlines will be routed for flowback fluids into a completion or storage tank and if feasible under well conditions, flare rather than vent and commence operation of a separator as soon as it is technically feasible for a separator to function.
  - o At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.
4. Subsection (D) Venting and flaring during production operations
  - o At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.
  - o Monitor manual liquid unloading for wells on-site or in close proximity (<30 minutes' drive time), take reasonable actions to achieve a stabilized rate and pressure at the earliest practical time, and take reasonable actions to minimize venting to the maximum extent practicable.
  - o HEC will not vent or flare except during the approved activities listed in NMAC 19.15.27.8 (D) 1-4.
5. Subsection (E) Performance standards
  - o All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste.
  - o If a flare is utilized during production operations it will have a continuous pilot and is located more than 100 feet from any known well or storage tanks.
  - o At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.

6. Subsection (F) Measurement or estimation of vented and flared natural gas
  - o Measurement equipment is installed to measure the volume of natural gas flared from process piping.
  - o When measurement isn't practicable, estimation of vented and flared natural gas will be completed as noted in 19.15.27.8 (F) 5-6.

VIII. Best Management Practices:

1. Operator has adequate storage and takeaway capacity for wells it chooses to recomplete as the flowlines at the sites are already in place and tied into a gathering system.
2. Operator will flare rather than vent vessel blowdown gas when technically feasible during active and/or planned maintenance to equipment on-site.
3. Operator combusts natural gas that would otherwise be vented or flared, when technically feasible.
4. Operator will shut in wells in the event of a takeaway disruption, emergency situation, or other operations where venting or flaring may occur due to equipment failures.



February 29, 2024

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

Re: Application for Downhole Commingling  
Well: HOWELL L #002A  
API: 3004521767  
T30N - R08W - Section 25, Unit Letter: O  
San Juan County, NM

Ladies and Gentlemen:

Concerning Hilcorp Energy Company's 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 **Blanco Mesaverde (72319)** and **Basin Fruitland Coal (71629)** as such relates to the prescribed spacing unit(s) being the **E/320** acres.

Pursuant to Subsection C.(1)(c) of 19.15.12.11, if the spacing unit(s) contains state, federal or tribal lands, Hilcorp will have provided notice via mail or sundry to the State Land Office and/or 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

A handwritten signature in blue ink, appearing to read 'Robert T. Carlson'.

Robert T. Carlson  
Sr. Landman  
(832) 839-4596  
[rcarlson@hilcorp.com](mailto:rcarlson@hilcorp.com)

1111 Travis Street Houston, TX 77002  
Phone: (713) 209-2400 Fax: (713) 209-2420

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**APPLICATION FOR DOWNHOLE COMMINGLING  
SUBMITTED BY HILCORP ENERGY COMPANY**

**ORDER NO. DHC-5566**

**ORDER**

The Director of the New Mexico Oil Conservation Division (“OCD”), having considered the application and the recommendation of the Engineering Bureau, issues the following Order.

**FINDINGS OF FACT**

1. Hilcorp Energy Company (“Applicant”) submitted a complete application (“Application”) to downhole commingle the pools described in Exhibit A (“the Pools”) within the well bore of the well identified in Exhibit A (“the Well”).
2. Applicant proposed a method to allocate the oil and gas production from the Well to each of the Pools that is satisfactory to the OCD and protective of correlative rights.
3. Applicant has certified that all produced fluids from all the Pools are compatible with each other.
4. Applicant has certified that downhole commingling the Pools will not decrease the value of the oil and gas production.
5. To the extent that ownership is identical, Applicant submitted a certification by a licensed attorney or qualified petroleum landman that ownership in the Pools is identical as defined by 19.15.12.7(B) NMAC.
6. Applicant provided notice of the Application to the Bureau of Land Management (“BLM”) or New Mexico State Land Office (“NMSLO”), as applicable.

**CONCLUSIONS OF LAW**

7. OCD has jurisdiction to issue this Order pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-6, 70-2-11, 70-2-12, 70-2-16, 70-2-17, and 19.15.12 NMAC.
8. The downhole commingling of the Pools is common, or Applicant has provided evidence that the fluids are compatible and will not damage the Pools in accordance with 19.15.12.11(A)(1) NMAC.
9. The bottom perforation of the lower zone is within one hundred fifty percent (150%) of the depth of the top perforation in the upper zone or Applicant has provided evidence that the proposed commingling of the Pools shall not result in shut-in or flowing well bore pressure in excess of the commingled pool’s fracture parting pressure in accordance with 19.15.12.11(A)(3) NMAC.

10. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.11(A)(8) NMAC.
11. By granting the Application with the conditions specified below, this Order prevents waste and protects correlative rights, public health, and the environment.

### ORDER

1. Applicant is authorized to downhole commingle the Pools described in Exhibit A within the well bore of the well identified in Exhibit A.
2. Applicant shall allocate a fixed percentage of the oil production from the Well to each of the Pools until a different plan to allocate oil production is approved by OCD. Of the oil production from the Well:
  - a. zero percent (0%) shall be allocated to the Basin Fruitland Coal pool (pool ID: 71629);
  - b. one hundred percent (100%) shall be allocated to the Blanco Mesaverde pool (pool ID: 72319); and

Applicant shall allocate gas production to the new pool(s) equal to the total gas production from the Well minus the projected gas production from the current pool(s) until a different plan to allocate gas production is approved by OCD. The new pool(s) are:

- a. the Basin Fruitland Coal pool (pool ID: 71629);

The current pool(s) are:

- a. the Blanco Mesaverde pool (pool ID: 72319); and

Applicant shall allocate oil and gas production to the new pool(s) equal to the total oil and gas production from the Well minus the projected oil and gas production from the current pool(s) as described in Exhibit A until a different plan to allocate oil and gas production is approved by OCD.

Applicant shall calculate the oil and gas production average during the fourth year after the commencement of commingling, which shall be used to establish a fixed percentage of the total oil and gas production that shall be allocated to each of the Pools ("fixed percentage allocation plan"). No later than ninety (90) days after the fourth year, Applicant shall submit a Form C-103 to the OCD Engineering Bureau that includes the fixed percentage allocation plan and all data used to determine it. If Applicant fails to do so, this Order shall terminate on the following day. If OCD denies the fixed percentage allocation plan, this Order shall terminate on the date of such action. If OCD approves the percentage allocation plan with or without modifications, then the approved percentage allocation plan shall be used to determine oil and gas allocation starting on the date of such action until the Well is plugged and abandoned.

Applicant shall calculate the oil and gas production average during the fourth year after the commencement of commingling, which shall be used to establish a fixed percentage of the

total oil and gas production that shall be allocated to each of the Pools (“fixed percentage allocation plan”). No later than ninety (90) days after the fourth year, Applicant shall submit a Form C-103 to the OCD Engineering Bureau that includes the fixed percentage allocation plan and all data used to determine it. If Applicant fails to do so, this Order shall terminate on the following day. If OCD denies the fixed percentage allocation plan, this Order shall terminate on the date of such action. If OCD approves the percentage allocation plan with or without modifications, then the approved percentage allocation plan shall be used to determine oil and gas allocation starting on the date of such action until the Well is plugged and abandoned.

3. If an alteration is made to the Well or a condition within the Well changes which may cause the allocation of production to the Pools as approved within this Order to become inaccurate, then no later than sixty (60) days after that event, Applicant shall submit Form C-103 to the OCD Engineering Bureau describing the event and include a revised allocation plan. If OCD denies the revised allocation plan, this Order shall terminate on the date of such action.
4. If any of the pools being commingled is prorated, or the Well’s production has been restricted by an OCD order in any manner, the allocated production from each producing pool in the commingled well bore shall not exceed the top oil or gas allowable rate for a well in that pool or rate restriction applicable to the well.
5. If the Well is deepened, then no later than forty-five (45) days after the Well is deepened, Applicant shall conduct and provide logs to OCD that are sufficient for OCD to determine which pool(s) each new completed interval of the Well will produce from.
6. If the downhole commingling of the Pools reduces the value of the oil and gas production to less than if it had remained segregated, no later than sixty (60) days after the decrease in value has occurred Applicant shall submit a new downhole commingling application to OCD to amend this Order to remove the pool that caused the decrease in value. If Applicant fails to submit a new application, this Order shall terminate on the following day, and if OCD denies the application, this Order shall terminate on the date of such action.
7. If a completed interval of the Well is altered from what is submitted within the Application as identified in Exhibit A, then no later than sixty (60) days after the alteration, Applicant shall submit Form C-103 to the OCD Engineering Bureau detailing the alteration and completed interval.
8. If OCD determines that Applicant has failed to comply with any provision of this Order, OCD may take any action authorized by the Oil and Gas Act or the New Mexico Administrative Code (NMAC).
9. OCD retains jurisdiction of this matter and reserves the right to modify or revoke this Order as it deems necessary.

**STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION**

*Albert Chang*

DATE: 4/27/2026

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**ALBERT CHANG  
DIVISION DIRECTOR**

State of New Mexico  
Energy, Minerals and Natural Resources Department

## Exhibit A

Order: **DHC-5566**

Operator: **Hilcorp Energy Company**

Well Name: **Howell L Well No. 2A**

Well API: **30-045-21767**

Pool Name: **Basin Fruitland Coal**

**Upper Zone**

Pool ID: **71629**

Allocation: **Subtraction**

<b>Current:</b>		<b>New:</b>	<b>X</b>
<b>Oil:</b>	<b>0.0%</b>	<b>Gas:</b>	<b>SUBT</b>
<b>Top:</b>	<b>2,471</b>	<b>Bottom:</b>	<b>3,010</b>

Pool Name:

**Intermediate Zone**

Pool ID:

Allocation:

<b>Current:</b>		<b>New:</b>	
<b>Oil:</b>		<b>Gas:</b>	
<b>Top:</b>		<b>Bottom:</b>	

Bottom of Interval within 150% of Upper Zone's Top of Interval:

Pool Name: **Blanco Mesaverde**

**Lower Zone**

Pool ID: **72319**

Allocation:

<b>Current:</b>	<b>X</b>	<b>New:</b>	
<b>Oil:</b>	<b>100.0%</b>	<b>Gas:</b>	
<b>Top:</b>	<b>3,775</b>	<b>Bottom:</b>	<b>5,482</b>

Bottom of Interval within 150% of Upper Zone's Top of Interval: **NO**

Top of Queen Formation:

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 318922

**CONDITIONS**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 318922
	Action Type: [C-107] Down Hole Commingle (C-107A)

**CONDITIONS**

Created By	Condition	Condition Date
llowe	None	4/16/2026