Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

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: _____ **OGRID Number:** _____
Well Name: _____ **API:** _____
Pool: _____ **Pool Code:** _____

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

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

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

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.

_____ Date

_____ Print or Type Name

_____ Phone Number

Kandis Roland _____ _____ e-mail Address

Signature

District I
1625 N. French Drive, Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
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
____Single Well
____Establish Pre-Approved Pools
EXISTING WELLBORE
_X_Yes ____No

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company — Operator
382 ROAD 3100, Aztec NM 87410 — Address

Roelofs A — Lease
1A — Well No.
UL C – Sec. 10, T29N, R8W — Unit Letter-Section-Township-Range
San Juan — County

OGRID No. 372171 Property Code 318690 API No. 30-045-21780 Lease Type: _X_Federal ____State ____Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	BASIN FRUITLAND COAL (GAS)	BLANCO PICTURED CLIFFS (GAS)	BLANCO MESAVERDE (PRORATED GAS)
Pool Code	71629	72359	72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2744' – 3025' - Estimated	3033'- 3097'	4660'- 5584'
Method of Production (Flowing or Artificial Lift)	NEW ZONE	Artificial Lift	Artificial Lift
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)	275 psi	300 psi	650 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1100	BTU 1140	BTU 1240
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 estimates and supporting data.)	Date: N/A Rates:	Date: 12/1/2022 Rates: 735 MCF – GAS 0 BBL – Oil 7 BBL - Water	Date: 12/1/2022 Rates: 1365 MCF – GAS 0 BBL – Oil 7 BBL - Water
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas Please see attachments	Oil Gas Please see attachments	Oil Gas Please see attachments

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_____ No_____

Are all produced fluids from all commingled zones compatible with each other? Yes___X__No_____

Will commingling decrease the value of production? Yes____ No___X__

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: _____

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 Kandis Roland TITLE Operation/Regulatory Tech DATE 3/10/2023

TYPE OR PRINT NAME Kandis Roland TELEPHONE NO. (713) 757-5246

E-MAIL ADDRESS kroland@hilcorp.com

WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
EL PASO NATURAL GAS COMPANY	ROELOFS A (SF-078415-A)	1A

Unit Letter	Section	Township	Range	County
C	10	29-N	8-W	SAN JUAN

Actual Footage Location of Well: 800 feet from the NORTH line and 1700 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6319	MESA VERDE Pictured Cliffs	BLANCO MESA VERDE Blanco Pictured Cliffs	320.00 Acres 160.0

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

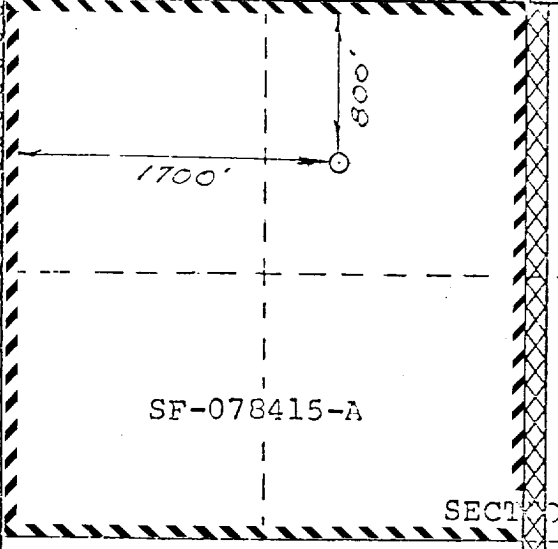
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 Communitization

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.



Note: Plat reissued to show addition of PC Formation 4-11-85

RECEIVED
APR 15 1985
BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

CERTIFICATION

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

Peggy Cook
Name
Drilling Clerk
Position
El Paso Natural Gas Co.
Company
April 12, 1985
Date

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
FEBRUARY 27, 1975
Registered Professional Engineer and/or Land Surveyor
Certificate No. 1760

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 334080

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-045-21780	71629	BASIN FRUITLAND COAL (GAS)
4. Property Code	**5. Property Name**	**6. Well No.**
318690	ROELOFS A	001A
7. OGRID No.	**8. Operator Name**	**9. Elevation**
372171	HILCORP ENERGY COMPANY	6319

10. Surface Location

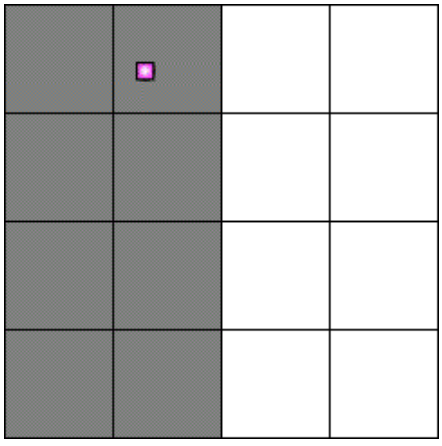
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	10	29N	08W		800	N	1700	W	SAN JUAN

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	13. Joint or Infill	14. Consolidation Code	15. Order No.
320.00 W/2			

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: Kandis Roland
Title: Regulatory Tech
Date: 2/9/2023

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: David Kilven
Date of Survey: 2/27/1975
Certificate Number: 1760

Roelofs A 1A

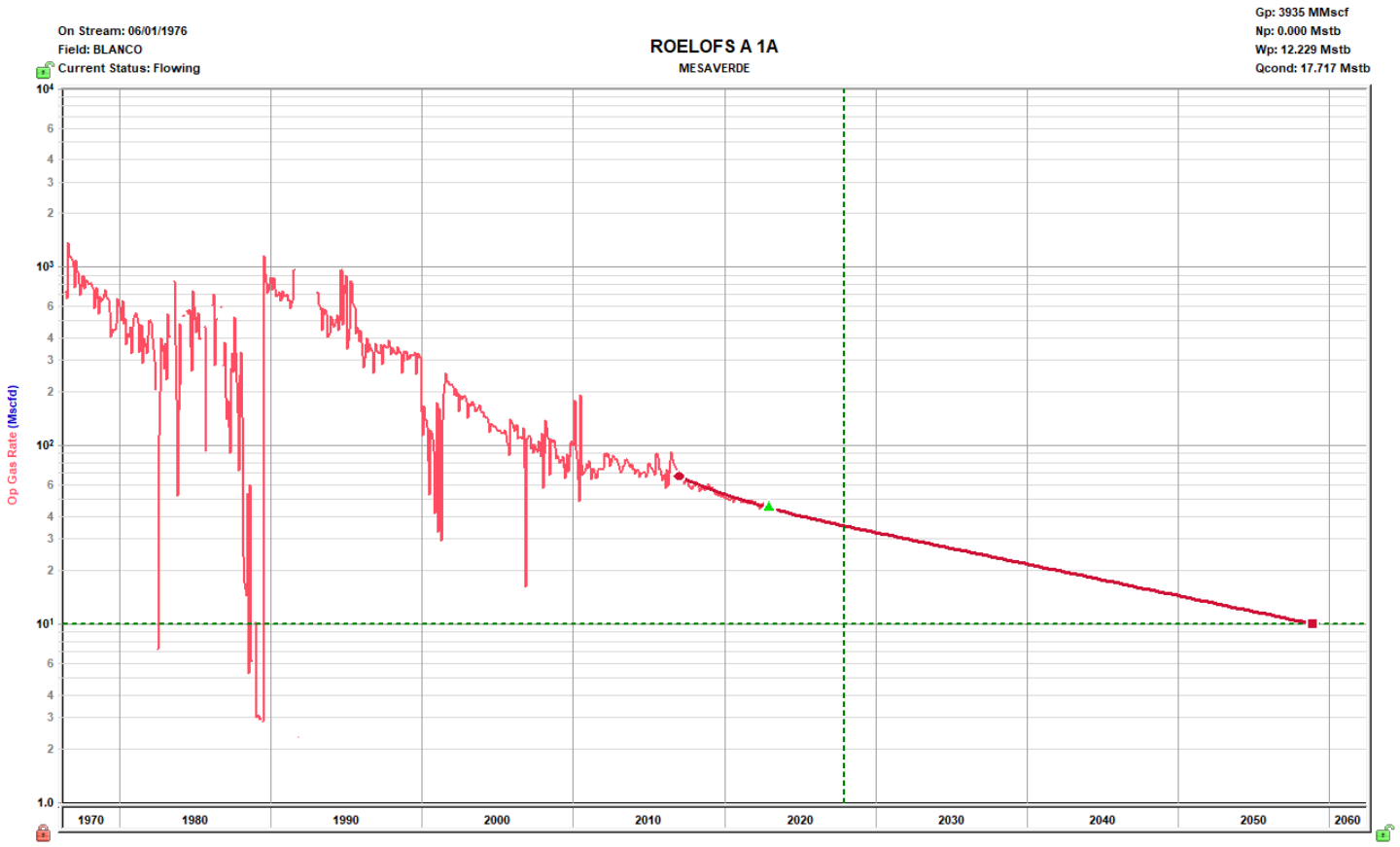
These zones are proposed to be commingled because the application of dual completions impedes the ability to produce the shallow zone without artificial lift and the deeper zones with reduced artificial lift efficiency. All horizons will require artificial lift due to low bottomhole pressure (BHP) and permeability.

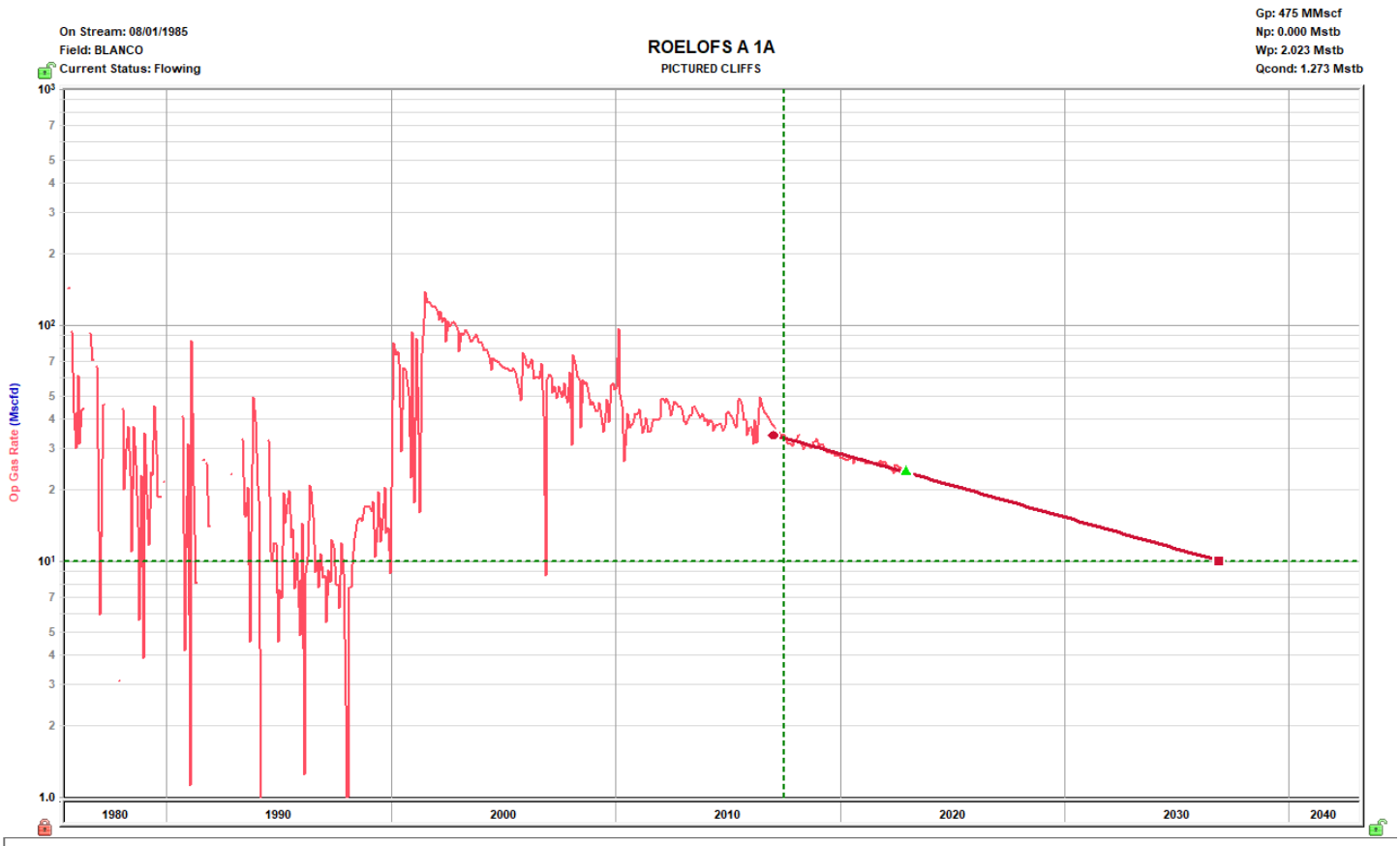
The BHPs of all zones, producing and non-producing, were estimated based upon basin wide Moving-Domain Material Balance models that have proven to approximate the pressure in the given reservoirs well in this portion of the basin, in conjunction with shut-in pressure build-ups. These models were constructed incorporating reservoir dynamics and physics, historic production, and observed pressure data. Historic commingling operations have proven reservoir fluids are compatible.

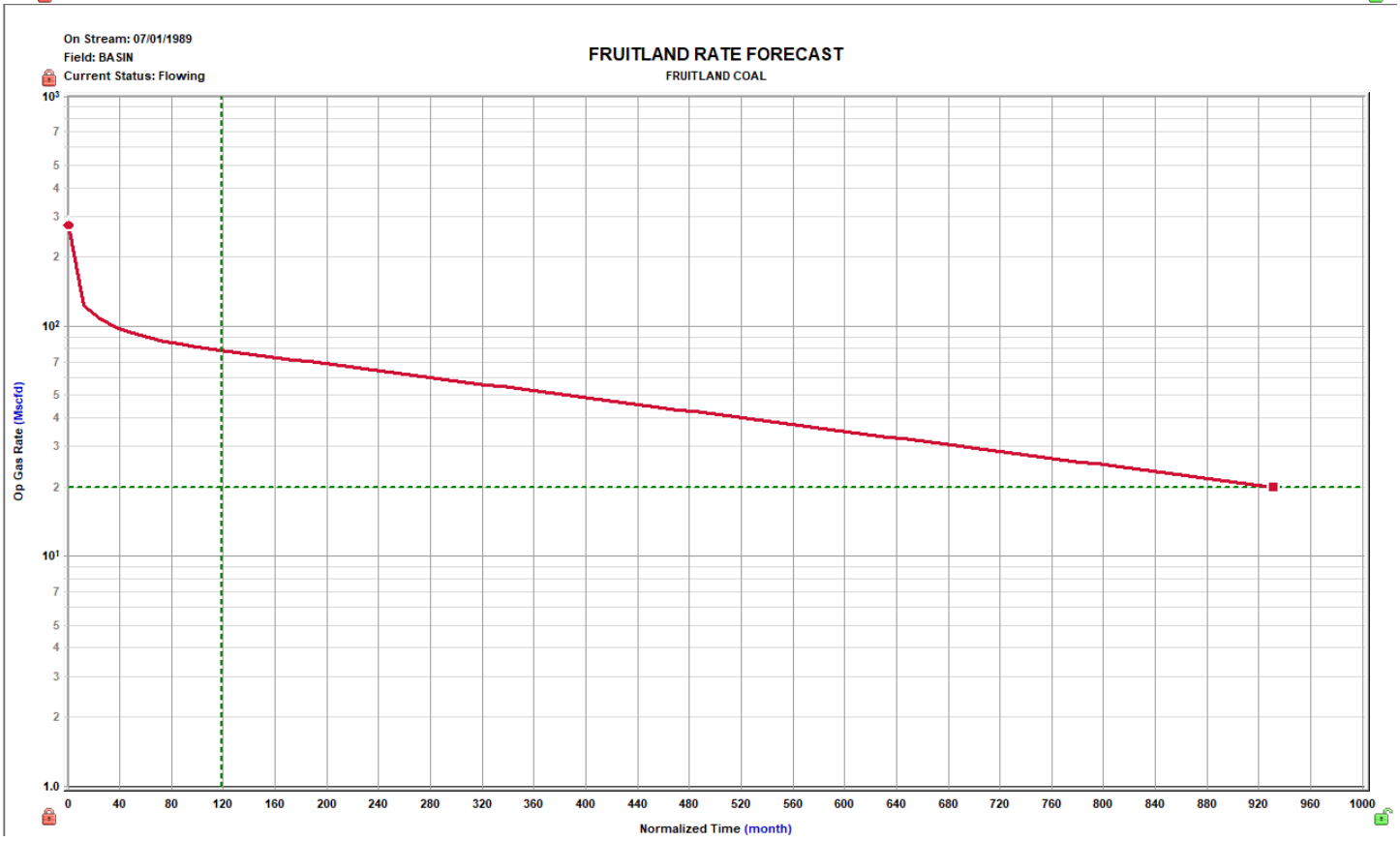
Production Allocation Method – Subtraction

Gas Allocation:
Production for the downhole commingle will be allocated using the subtraction method in agreement with local agencies. The base formation is the Pictured Cliffs/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 base formation forecasts will be allocated to the new formation. Base Formations will continue to use a fixed rate MV 64.8%, PC 35.2% that was previously approved. Please see attached approved allocation.

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.




On Stream: 08/01/1985
Field: BLANCO
Current Status: Flowing
ROELOFS A 1A
PICTURED CLIFFS
Gp: 475 MMscf
Np: 0.000 Mstb
Wp: 2.023 Mstb
Qcond: 1.273 Mstb
Op Gas Rate (Mscfd)
1980
1990
2000
2010
2020
2030
2040


On Stream: 07/01/1989
Field: BASIN
Current Status: Flowing
FRUITLAND RATE FORECAST
FRUITLAND COAL
Op Gas Rate (Mscfd)
Normalized Time (month)

Oil Allocation:

Fruitland Coal is not expected to produce condensate therefore the base formations will continue to use a fixed rate MV 65.1%, PC 34.9% that was previously approved. Please see attached approved allocation.

Formation	% Oil Allocation
Mesaverde	65.1%
Pictured Cliffs	34.9%
Fruitland Coal	0%

BURLINGTON RESOURCES

June 10, 2000

New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: Roelofs A #1A
C Section 10, T-29-N, R-8-W
30-045-21780

Gentlemen:

Attached is a copy of the allocation for the commingling of the subject well. DHC-2263 was issued for this well.

Gas:	Mesa Verde	64.8%
	Pictured Cliffs	35.2%
Oil:	Mesa Verde	65.1%
	Pictured Cliffs	34.9%

These allocations are based on historical production from the Mesa Verde and Pictured Cliffs. Please let me know if you have any questions.

Sincerely,

Peggy Cole
Regulatory Supervisor

Xc: NMOCD – Santa Fe
Bureau of Land Management – Farmington

3401 East 30th, Post Office Box 4289, Farmington, NM 87499 505-326-9727 Fax: 505-599-4046

Roelofs A #1A
Production Allocation

Gas

				Uplift: 100	Q1	Q2
*Mesaverde Cumulative Production:	2,983	MMcf	64.8%	64.833732	347	411.83373
*Pictured Cliffs Cumulative Production:	1,618	MMcf	35.2%	35.166268	17	52.166268
Total:	4,601		100.0%	100		

Oil

*Mesaverde Cumulative Production:	14,363	BBls	65.1%
*Pictured Cliffs Cumulative Production:	7,706	BBls	34.9%
Total:	22,069		100.0%

*Allocation Formula Basis: The fixed percentages are based on cumulative production as of 12/98.

Hilcorp

February 22, 2023

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

Re: C-107A (Downhole Commingle)
Roelofs A 1A
API No. 30-045-21780
C-10, T29N-R8W
San Juan County, NM

Gentlemen:

Concerning Hilcorp Energy Company's C-107A 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 (Pool Code: 72319), Blanco Pictured Cliffs (Pool Code: 72359) and Basin Fruitland Coal (Pool Code: 71629) in the spacing units dedicated to these formations. Therefore, no notice to interest owners is required.

The spacing unit is comprised of a Federal Lease. Therefore, pursuant to Subsection C.(1) of 19.15.12.11 NMAC, written notice has been sent to the Bureau of Land Management as of the date of this letter.

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

Carson Parker Rice
Landman – San Juan Basin
Hilcorp Energy Company
1111 Travis Street
Houston, Texas 77002
713-757-7108 Direct
Email: carice@hilcorp.com

Well Name: ROELOFS A

Well Location: T29N / R8W / SEC 10 / NENW / 36.74481 / -107.66516

County or Parish/State: SAN JUAN / NM

Well Number: 1A

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMSF078415A

Unit or CA Name:

Unit or CA Number:

US Well Number: 3004521780

Well Status: Producing Gas Well

Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2719886

Type of Submission: Notice of Intent

Type of Action: Recompletion

Date Sundry Submitted: 03/09/2023

Time Sundry Submitted: 08:53

Date proposed operation will begin: 03/23/2023

Procedure Description: Hilcorp Energy Company requests permission to recomplete the subject well in the Fruitland Coal and downhole commingle with the existing Pictured Cliffs and Mesaverde. Please see the attached procedure, current and proposed wellbore diagram, plat and natural gas management plan. A closed loop system will be used. A pre-reclamation site visit was held on 3/7/2023 with Roger Herrera/BLM. The reclamation plan is attached.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Roelofs_A_1A_UPE_Coal_NOI_Procedure_20230309085229.pdf

Well Name: ROELOFS A

Well Location: T29N / R8W / SEC 10 / NENW / 36.74481 / -107.66516

County or Parish/State: SAN JUAN / NM

Well Number: 1A

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMSF078415A

Unit or CA Name:

Unit or CA Number:

US Well Number: 3004521780

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: KANDIS ROLAND

Signed on: MAR 09, 2023 08:52 AM

Name: HILCORP ENERGY COMPANY

Title: Operation Regulatory Tech

Street Address: 382 Road 3100

City: Farmington **State:** NM

Phone: (505) 599-3400

Email address: kroland@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: 03/09/2023

Signature: Kenneth Rennick

Roelofs A 1A

C – 10 – 29N – 08W 800 FNL 1700 FWL

API#: 3004521780

Fruitland Coal Recompletion Procedure

01/26/2023

Procedure:

1. MIRU PU and associated equipment. Kill well and NDWH.
2. NUBOP and unseat tubing, tag for fill and scan out with production tubing
3. Set 4.5” CIBP at 4620’ to isolate existing Mesaverde completion
4. Set 7” CBP at +/-3025’ to isolate PC. Load and roll hole.
5. RU wellcheck and MIT wellbore to 500 PSI
    a. CBL on file for well
6. PU 7” frac packer and frac string, RIH and set packer at 2720’
7. Pressure test frac string to 5000 PSI
8. MIRU frac spread.
9. Perforate and frac the Fruitland Coal from 2744’ to 3025’.
10. MI flow back and flow well to relieve pressure if needed.
11. MIRU service rig.
12. Test BOP’s.
13. POOH with frac string and packer.
14. Make up 7” mill and clean out.
15. When water and sand rates are acceptable, flow test the intervals.
16. Make up 3-7/8” mill and clean out to CIBP, mill plug and commingle.
17. TIH and land production tubing.
18. ND BOP’s, NU production tree.
19. RDMO service rig & turn well over to production.

Hilcorp Energy Company

Schematic - Current

Well Name: ROELOFS A #1A

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3004521780	010-029N-008W-C	BLANCO PICTURED CLIFFS (GAS		NEW MEXICO	

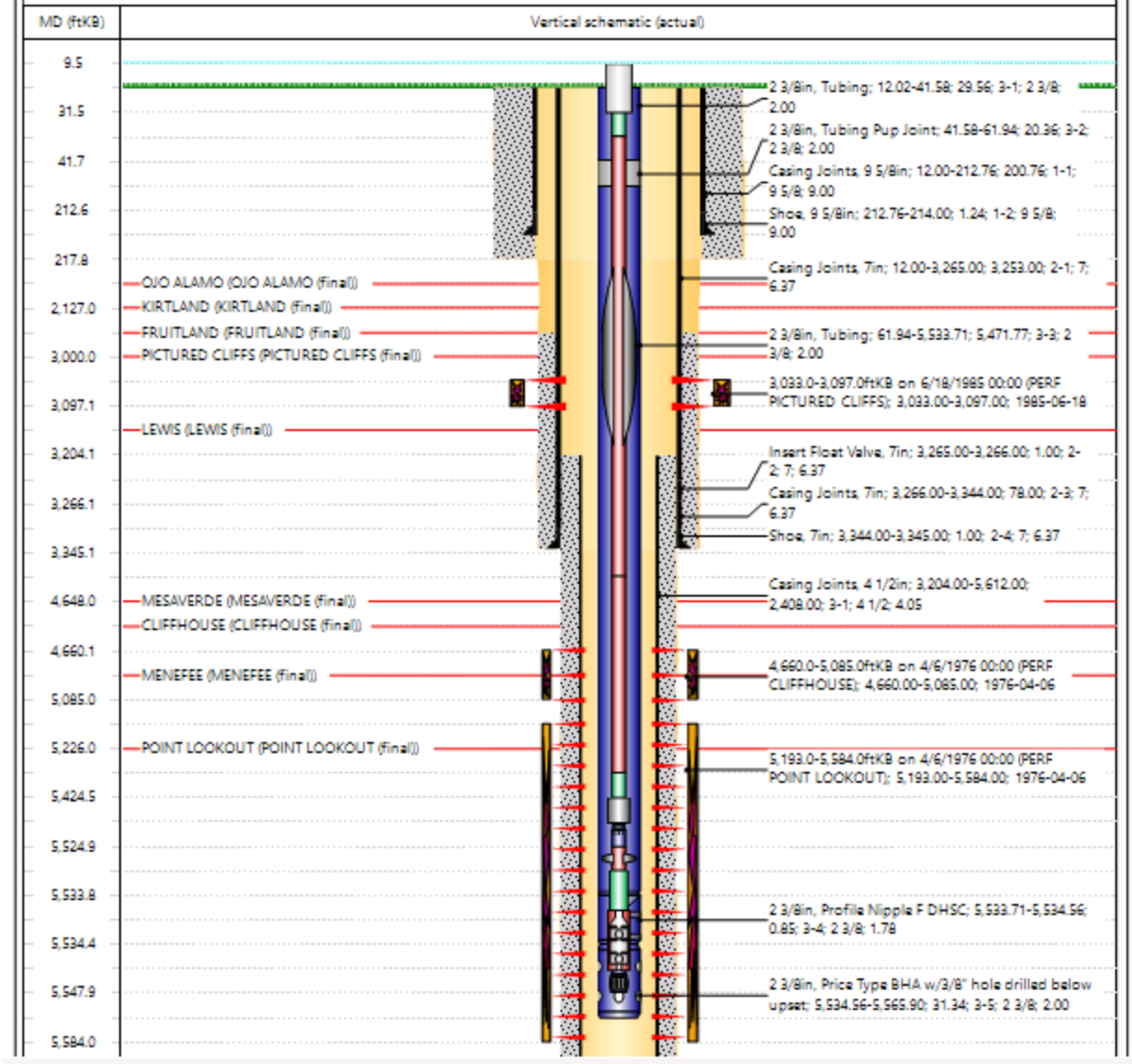
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,331.00	12.00	2/10/1976 00:00	10/17/2005 13:30	Original Hole - 5,596.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
WELL INTERVENTION	ROD & PUMP REPAIR	ROD & TUBING REPAIR	1/5/2012	1/10/2012

TD: 5,620.0

Original Hole



Hilcorp Energy Company

Schematic - Proposed

Well Name: ROELOFS A #1A

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3004521780	010-029N-008W-C	BLANCO PICTURED CLIFFS (GAS)		NEW MEXICO	

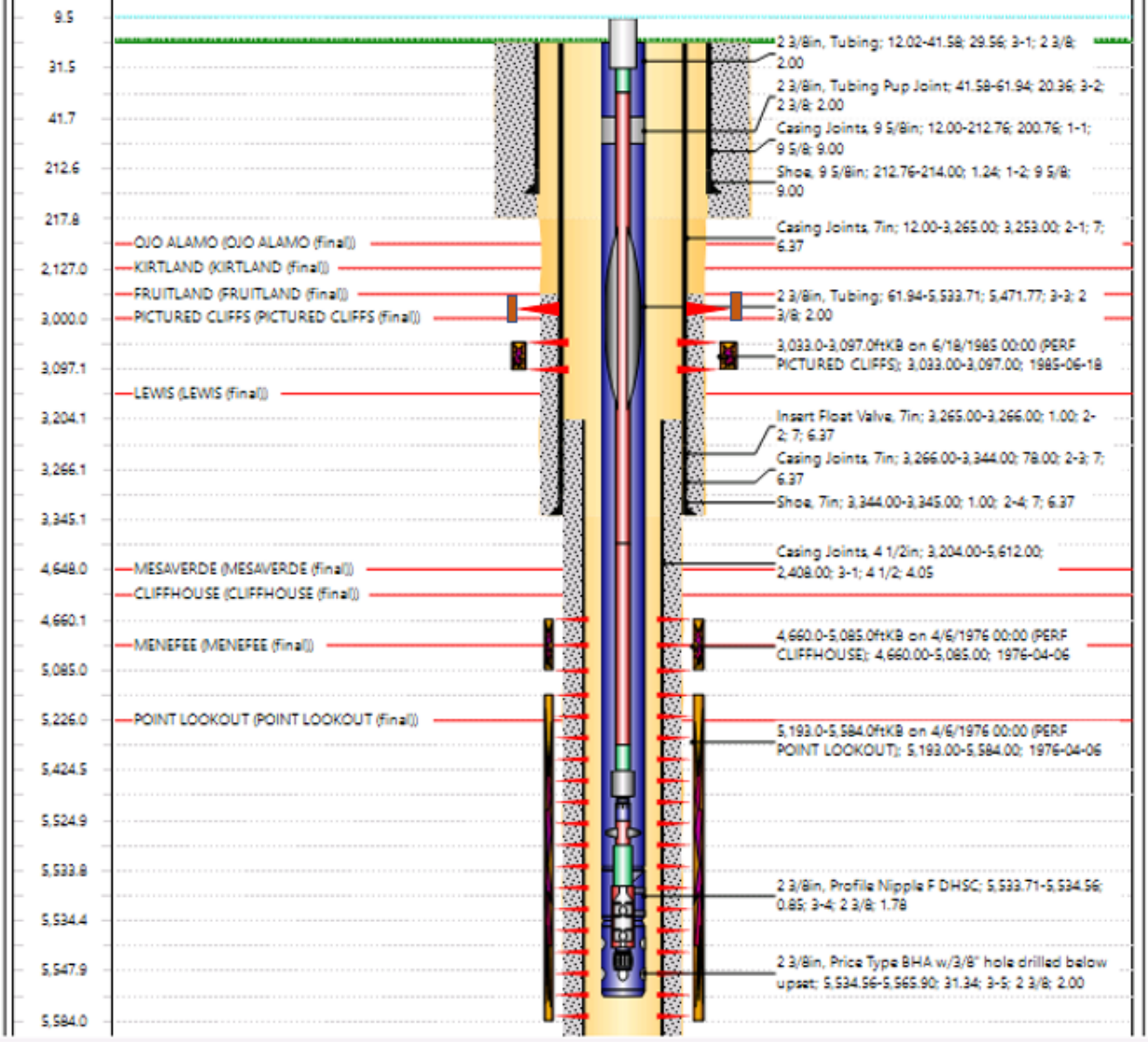
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,331.00	12.00	2/10/1976 00:00	10/17/2005 13:30	Original Hole - 5,596.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
WELL INTERVENTION	ROD & PUMP REPAIR	ROD & TUBING REPAIR	1/5/2012	1/10/2012

TD: 5,620.0

Original Hole



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 334080

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-045-21780	71629	BASIN FRUITLAND COAL (GAS)
4. Property Code	**5. Property Name**	**6. Well No.**
318690	ROELOFS A	001A
7. OGRID No.	**8. Operator Name**	**9. Elevation**
372171	HILCORP ENERGY COMPANY	6319

10. Surface Location

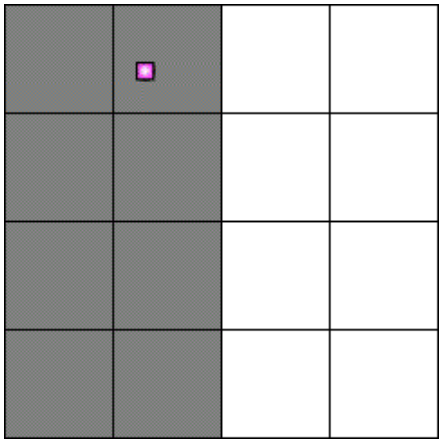
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	10	29N	08W		800	N	1700	W	SAN JUAN

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	13. Joint or Infill	14. Consolidation Code	15. Order No.
320.00 W/2			

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: Kandis Roland
Title: Regulatory Tech
Date: 2/9/2023

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: David Kilven
Date of Survey: 2/27/1975
Certificate Number: 1760

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:** 2/9/2023

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
Roelofs A 1A	3004521780	C-10-29N-8W	800’ FNL & 1700’ FWL	0	200	4

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
Roelofs A 1A	**3004521780**	**N/A**	**N/A**	**N/A**	**N/A**	**Not Yet Scheduled**

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: Kandis Roland
Printed Name: Kandis Roland
Title: Operations/Regulatory Tech Sr.
E-mail Address: kroland@hilcorp.com
Date: 2/9/2023
Phone:713-757-5246

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
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 recomplete project. HEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the recomplete 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 recomplete operations.

VII. Operational Practices:

1. Subsection (A) Venting and Flaring of Natural Gas
   - 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
   - This gas capture plan isn't for a well being drilled.
3. Subsection (C) Venting and flaring during completion or recompletion
   - 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.
   - 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
   - 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.
   - 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.
   - 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
   - All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste.
   - 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.
   - 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
   - Measurement equipment is installed to measure the volume of natural gas flared from process piping.
   - 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.

Hilcorp Energy
Recomplete Reclamation Plan
Roelofs A 1A
API: 30-045-21780
T29N-R8W-Sec.10-C
LAT: 36.74485 LONG: -107.66477 NAD 27
Footage: 800' FNL & 1700' FWL
San Juan County, NM

1. **PRE- RECLAMATION SITE INSPECTION**

A pre-reclamation site inspection was completed with Roger Herrera from the BLM and Eufracio Trujillo, Hilcorp Energy SJ South Construction Foreman, on March 7, 2023.

2. **LOCATION RECLAMATION PROCEDURE**

1. Reclamation work will begin in the spring.
2. All trash and debris will be removed within a 25' buffer outside of the location disturbance during reclamation.
3. Brush hog location and fence off area for disturbance.
4. Level off pad to accommodate for equipment.
5. Blade roads into location.
6. Fix damage to roads, TUA surfaces that are disturbed, and fix drainage issues.
7. Put in water diversion bars where they may be needed.
8. Reclaim all disturbed area being used for recompletion activities.
9. Reestablish diversion ditches on West and East sides of location.
10. Reclaim areas damaged by moving crews in.

3. **SEEDING PROCEDURE**

1. A Sagebrush seed mix will be used for all reclaimed and disturbed areas of the well pad(s) and lease road.
2. Drill seed will be done where applicable, and all other disturbed areas will be broadcast seeded and harrowed. Broadcast seeding will be applied at a double the rate of seed.
3. Timing of the seeding will be when the ground is not frozen or saturated.

4. **WEED MANAGEMENT**

1. No action is required at this time for weed management, no noxious weeds were identified during this onsite.

Supplemental Information for Fruitland Coal Recompletes in 29N 8W

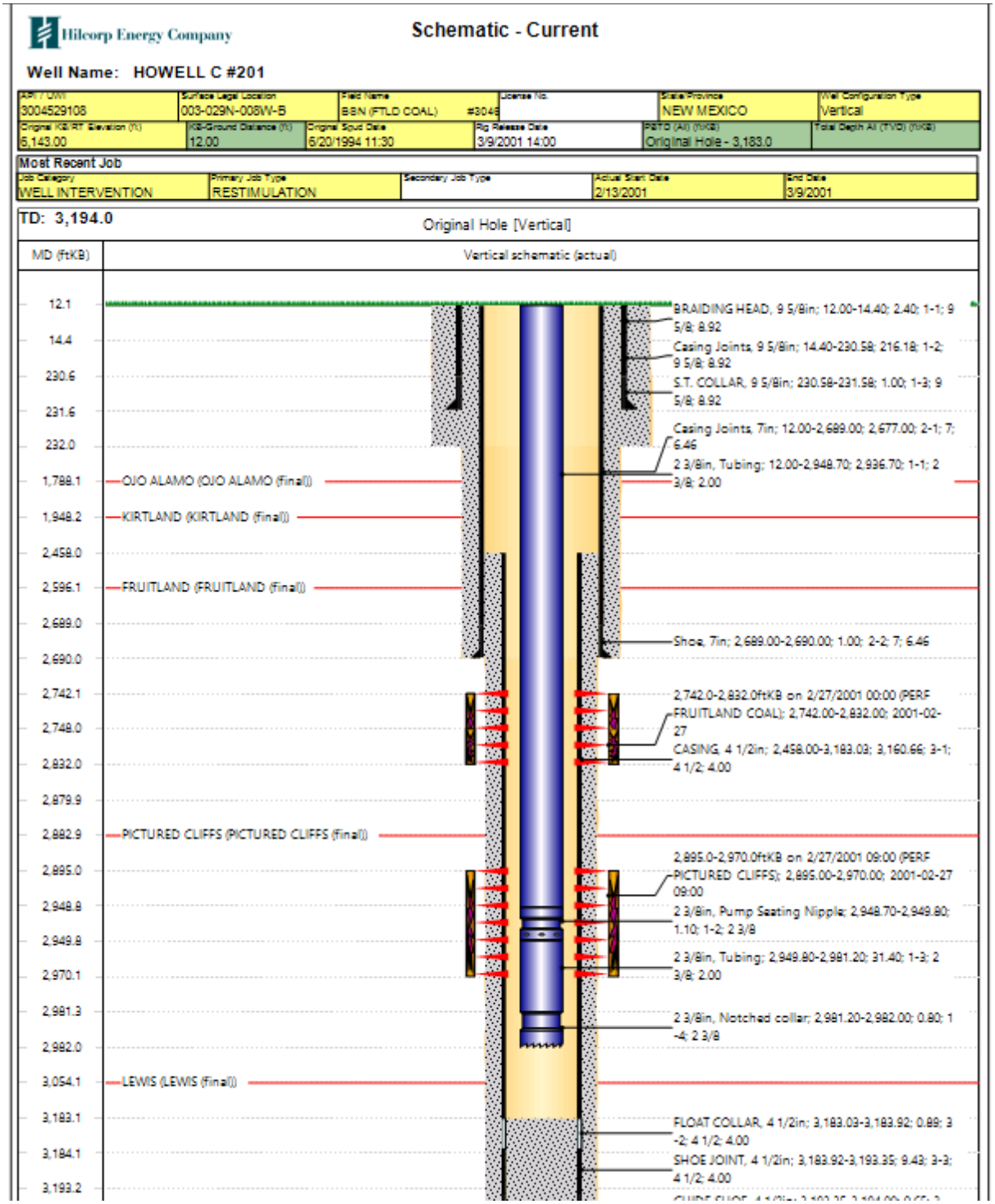
	Mesaverde	Pictured Cliffs	Fruitland Coal
Measured and Estimated BHP	500 – 800 PSI	200 – 400 PSI	150 – 400 PSI
Gas BTU	1240	1140	1100
CO2	1.4%	0.6%	0.9%
H2S %	< 0.01%	<0.01%	<0.01%
N2 %	0.1%	0.1%	0.1%

*Please note that during wellbore preparation and fracture stimulating, measurements will be recorded to measure BHP indirectly and directly on these intervals i.e., fluid levels, initial shut-in pressures post frac, flowing pressures during cleanout, shut in pressures during cleanout, etc. This information will be included as part of the routine subsequent submittal.

Adjacent Wellbores in 29N 8W commingled in similar manners

Well Name	API Number	Commingled Intervals	Operator
Pritchard 3A	3004522345	Fruitland Coal, Pictured Cliffs, Mesaverde	Ikav-Simcoe
Florance T 123M	3004525564	Fruitland Coal, Mesaverde, Dakota	Ikav-Simcoe
Vandewart B3	3004526148	Fruitland Coal, Pictured Cliffs	Ikav-Simcoe
Howell C 201	3004529108	Fruitland Coal, Pictured Cliffs	Hilcorp
Howell C 200S	3004533666	Fruitland Coal, Pictured Cliffs	Hilcorp

Wellbore Diagrams for Hilcorp Operated Commingles



Hilcorp Energy Company

Schematic - Current

Well Name: HOWELL C #200S

API / UWI	Surface Legal Location	Field Name	License No.	State Province	Well Configuration Type
3004533666	001-029N-008W-O	BASIN (FRUITLAND COAL)		NEW MEXICO	VERTICAL

Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,224.00	11.00	10/12/2006 10:15	10/20/2006 14:20	Original Hole - 3,143.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
COMPLETIONS	INITIAL COMPLETION	INITIAL COMPLETION	12/8/2006	1/30/2007

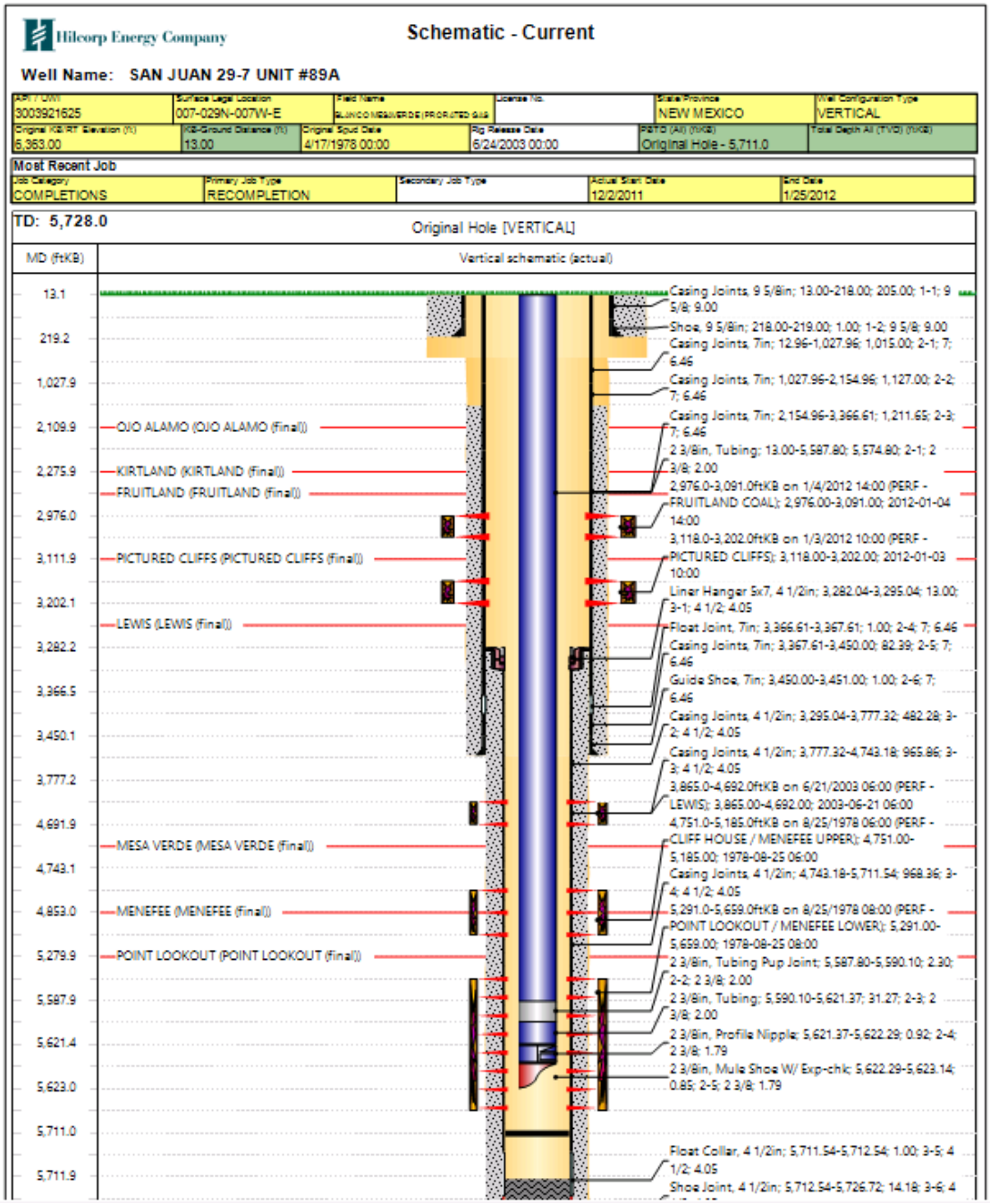
TD: 3,188.0

Original Hole [VERTICAL]

MD (ftKB)	Vertical schematic (actual)
11.2	Well Head, 7in; 11.02-11.90; 0.88; 1-1; 7; 6.46
11.8	2 3/8in, Tubing; 11.00-41.94; 30.94; 1-1; 2 3/8; 2.00
42.0	2 3/8in, Tubing Pup Joint; 41.94-55.32; 13.38; 1-2; 2 3/8; 2.00
55.4	Casing Joints, 7in; 11.90-271.27; 259.37; 1-2; 7; 6.46
271.3	shoe, 7in; 271.27-272.12; 0.85; 1-3; 7; 6.46
272.0	Casing Joints, 4 1/2in; 11.00-2,399.31; 2,388.31; 2-1; 4 1/2; 4.05
277.9	2 3/8in, Tubing; 55.32-3,000.37; 2,945.05; 1-3; 2 3/8; 2.00
1,894.0	Ojo Alamo (Ojo Alamo (Final))
2,107.0	Kirtland (Kirtland (Final))
2,399.3	Casing Joints, 4 1/2in; 2,399.31-2,442.13; 42.82; 2-2; 4 1/2; 4.05
2,442.3	Stage Tool, 4 1/2in; 2,442.13-2,444.63; 2.50; 2-3; 4 1/2; 4.05
2,444.6	Casing Joints, 4 1/2in; 2,444.63-2,487.34; 42.71; 2-4; 4 1/2; 4.05
2,450.1	Casing Joints, 4 1/2in; 2,487.34-2,615.80; 128.46; 2-5; 4 1/2; 4.05
2,487.2	Marker Joint, 4 1/2in; 2,615.80-2,625.95; 10.15; 2-6; 4 1/2; 4.05
2,615.8	
2,626.0	
2,723.1	Fruitland (Fruitland (Final))
2,734.9	2,735.0-2,932.0ftKB on 1/6/2007 14:30 (PERF FRUITLAND COAL); 2,735.00-2,932.00; 2007-01-06 14:30
2,737.9	Casing Joints, 4 1/2in; 2,625.95-3,138.88; 512.93; 2-7; 4 1/2; 4.05
2,932.1	
2,992.1	Pictured Cliffs (Pictured Cliffs (Final))
3,000.3	2 3/8in, Tubing Pup Joint; 3,000.37-3,002.47; 2.10; 1-4; 2 3/8; 2.00
3,002.0	2 3/8in, Tubing; 3,002.47-3,033.69; 31.22; 1-5; 2 3/8; 2.00
3,002.6	2 3/8in, Pump Seating Nipple; 3,033.69-3,034.47; 0.78; 1-6; 2 3/8; 1.78
3,033.8	2 3/8in, Mule Shoe (EXP CHK); 3,034.47-3,035.39; 0.92; 1-7; 2 3/8; 1.71
3,034.4	3,002.0-3,076.0ftKB on 1/5/2007 11:30 (PERF PICTURED CLIFFS); 3,002.00-3,076.00; 2007-01-05 11:30
3,035.4	
3,076.1	
3,138.8	Float Collar, 4 1/2in; 3,138.88-3,139.43; 0.55; 2-8; 4 1/2; 4.05
3,139.1	Casing Joints, 4 1/2in; 3,139.43-3,182.08; 42.65; 2-9; 4 1/2; 4.05
3,139.4	Shoe, 4 1/2in; 3,182.08-3,183.00; 0.92; 2-10; 4 1/2;
3,143.0	
3,182.1	

Hilcorp-Operated Adjacent Wellbores in 29N 7W

Well Name	API Number	Commingled Intervals	Operator
San Juan 29-7 Unit 89A	3003921625	Fruitland Coal, Pictured Cliffs, Mesaverde	Hilcorp
San Juan 29-7 Unit 583	3003925260	Fruitland Coal, Pictured Cliffs	Hilcorp
San Juan 29-7 Unit 170	3003926745	Fruitland Coal, Pictured Cliffs	Hilcorp
San Juan 29-7 Unit 520S	3003929816	Fruitland Coal, Pictured Cliffs	Hilcorp
San Juan 29-7 Unit 519	3003925268	Fruitland Coal, Pictured Cliffs	Hilcorp



Hilcorp Energy Company

Schematic - Current

Well Name: SAN JUAN 29-7 UNIT #583

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003925260	006-029N-007W-L	BSN (FTLD COAL)	#3048078943	NEW MEXICO	VERTICAL

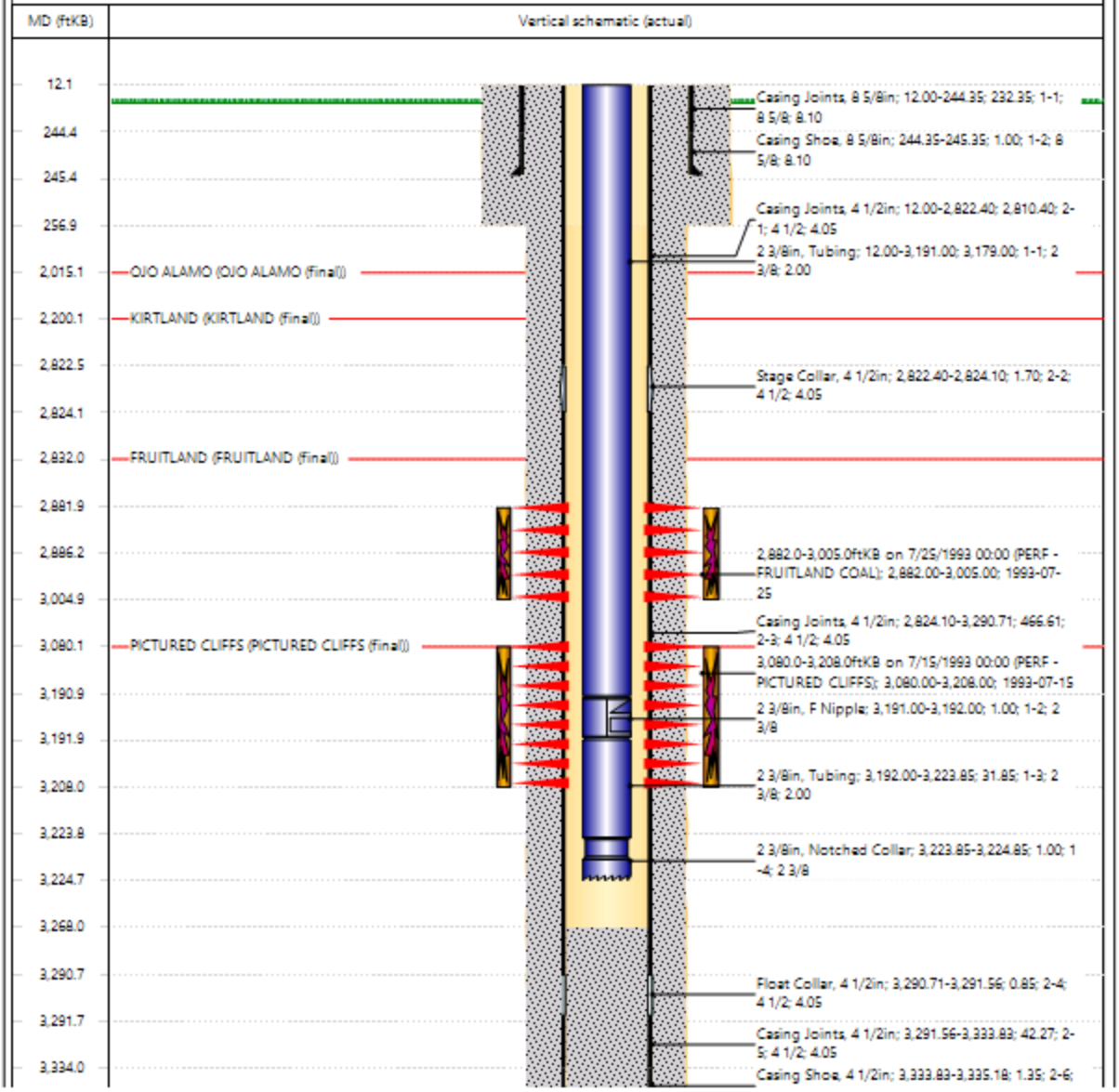
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,281.00	12.00	5/29/1993 05:00	7/29/1993 06:00	Original Hole - 3,268.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
COMPLETIONS	INITIAL COMPLETION	INITIAL COMPLETION	7/14/1993	7/29/1993

TD: 3,335.2

Original Hole [VERTICAL]



Hilcorp Energy Company

Schematic - Current

Well Name: SAN JUAN 29-7 UNIT #170

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003925745	006-029N-007W-J	BLANCO PICTURED CLIFFS (GAS		NEW MEXICO	VERTICAL

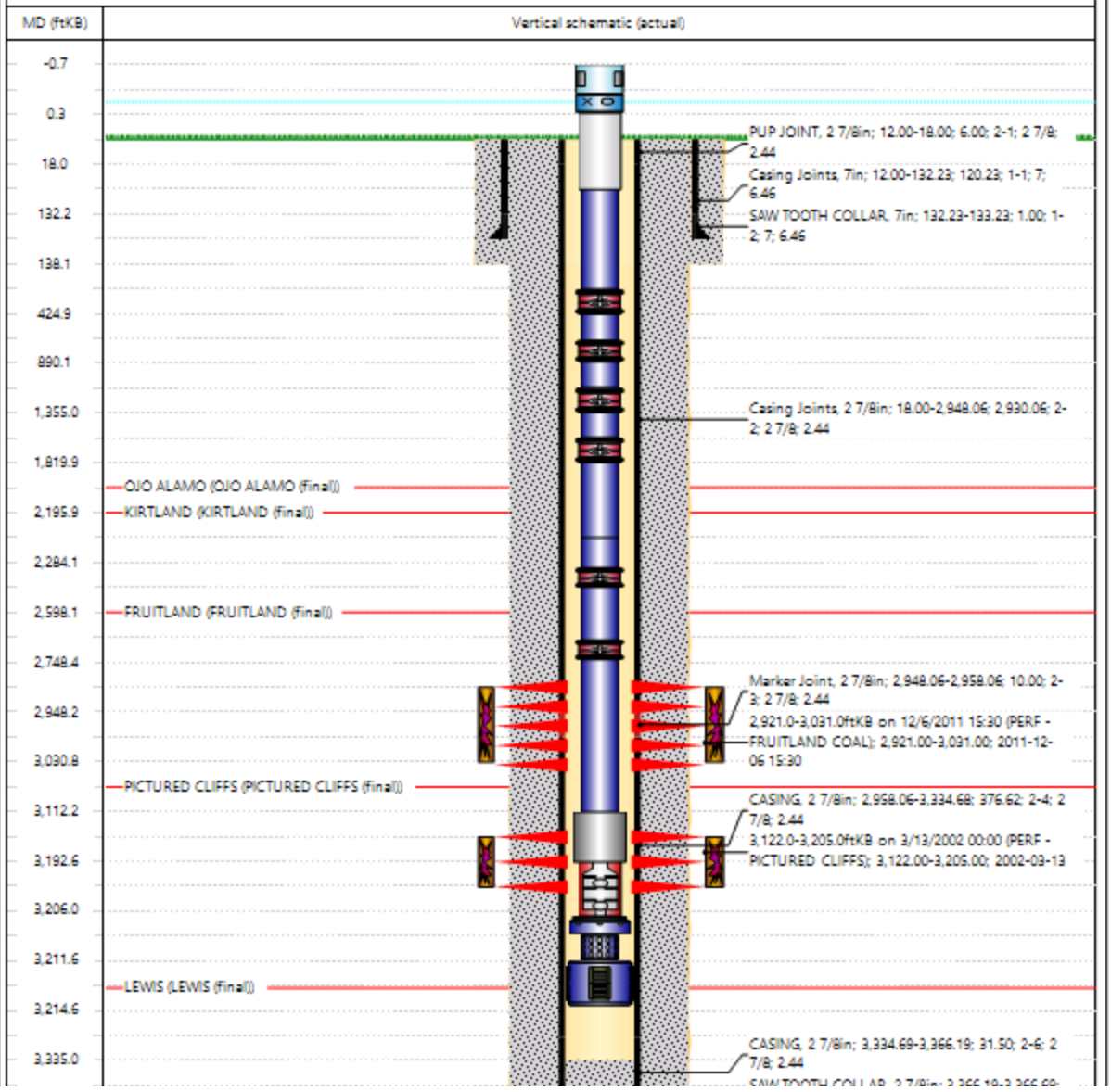
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,270.00	12.00	11/26/2001 22:00	12/1/2001 02:45	Original Hole - 3,335.0	Original Hole - 3,371.8

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
COMPLETIONS	RECOMPLETION		11/23/2011	3/14/2012

TD: 3,372.0

Original Hole [VERTICAL]



Hilcorp Energy Company

Schematic - Current

Well Name: SAN JUAN 29-7 UNIT #520S

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003929816	008-029N-007W-C	BLANCO PICTURED CLIFFS (GAS		NEW MEXICO	VERTICAL

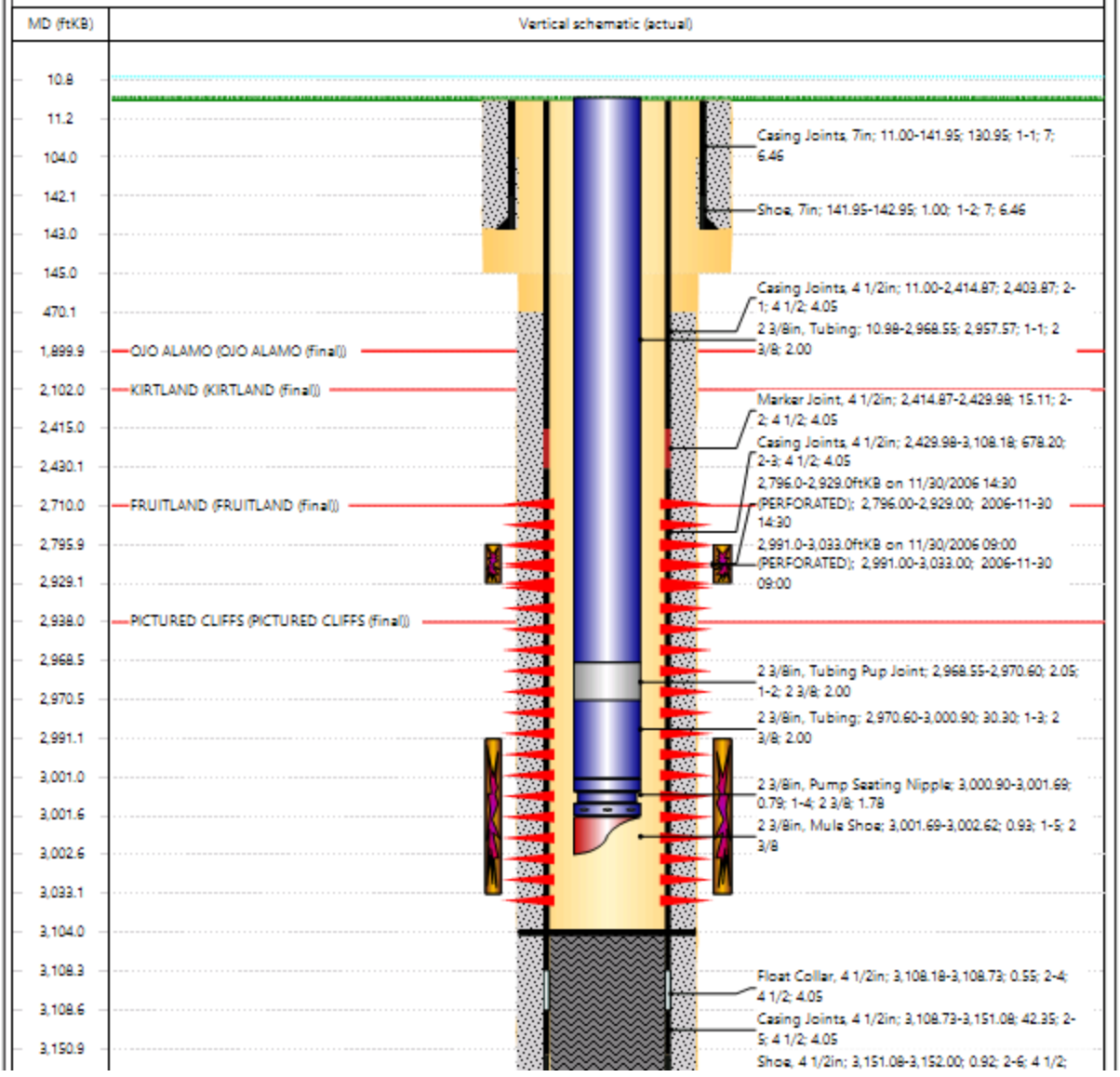
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,163.00	11.00	10/13/2006 20:15	10/16/2006 06:00	Original Hole - 3,104.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
COMPLETIONS	INITIAL COMPLETION	INITIAL COMPLETION	11/1/2006	12/12/2006

TD: 3,165.0

Original Hole [VERTICAL]



Hilcorp Energy Company

Schematic - Current

Well Name: SAN JUAN 29-7 UNIT #519

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003925268	008-029N-007W-B	BSN (FTLD COAL) #3048	078423	NEW MEXICO	VERTICAL

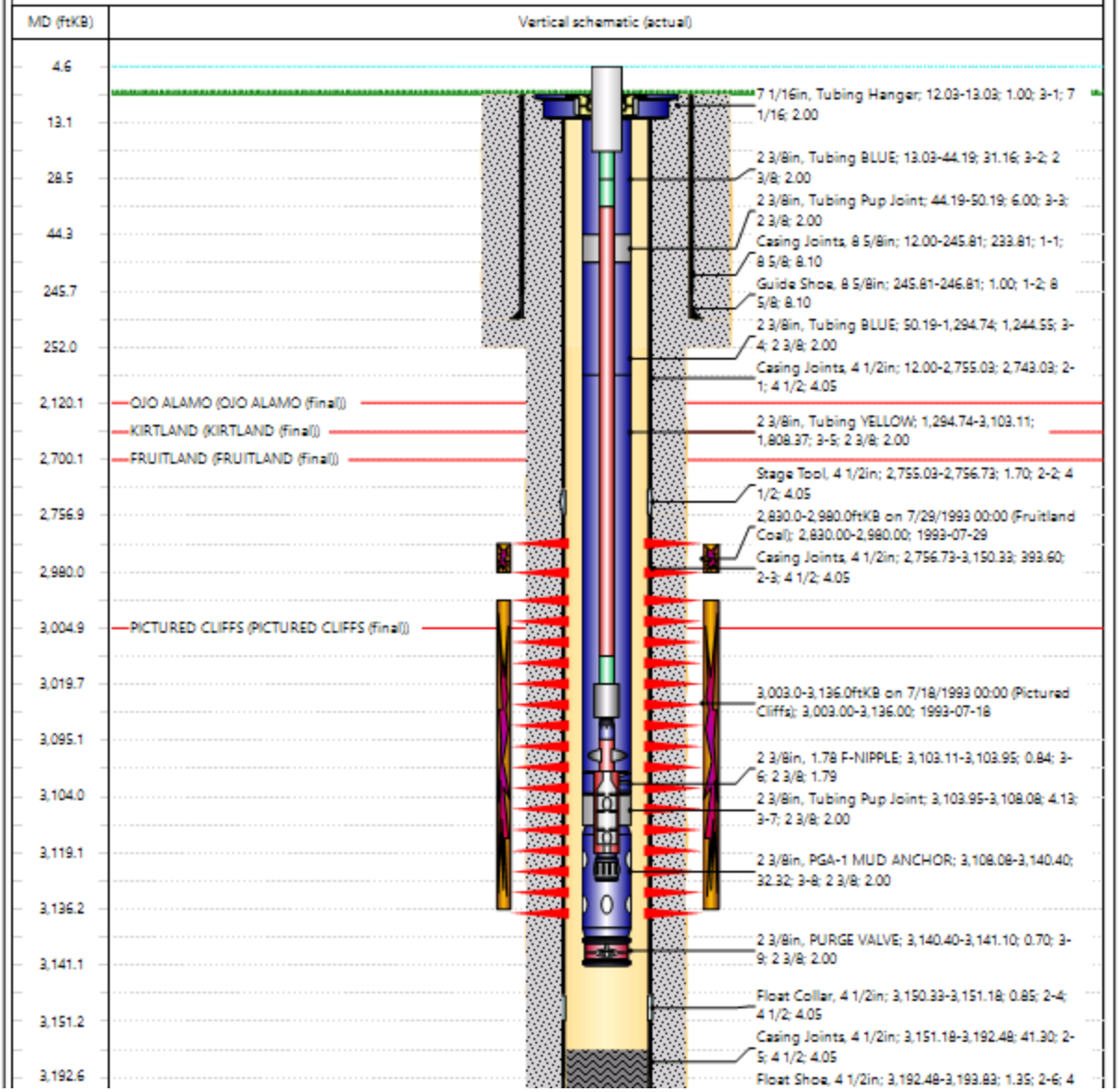
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
6,231.00	12.00	5/9/1993 06:00	10/25/2005 09:30	Original Hole - 3,155.0	Original Hole - 3,194.8

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
WELL INTERVENTION	ROD & PUMP REPAIR		5/13/2014	5/15/2014

TD: 3,195.0

Original Hole [VERTICAL]



District I
1625 N. French Drive, Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
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
____Single Well
____Establish Pre-Approved Pools
EXISTING WELLBORE
_X_Yes ____No

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company — Operator
382 ROAD 3100, Aztec NM 87410 — Address

Roelofs A — Lease
1A — Well No.
UL C – Sec. 10, T29N, R8W — Unit Letter-Section-Township-Range
San Juan — County

OGRID No. 372171 Property Code 318690 API No. 30-045-21780 Lease Type: _X_Federal ____State ____Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	BASIN FRUITLAND COAL (GAS)	BLANCO PICTURED CLIFFS (GAS)	BLANCO MESAVERDE (PRORATED GAS)
Pool Code	71629	72359	72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2744’ – 3025’ - Estimated	3033’- 3097’	4660’- 5584’
Method of Production (Flowing or Artificial Lift)	NEW ZONE	Artificial Lift	Artificial Lift
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)	138 psi	123 psi	96 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1100	BTU 1140	BTU 1240
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 estimates and supporting data.)	Date: N/A Rates:	Date: 12/1/2022 Rates: 735 MCF – GAS 0 BBL – Oil 7 BBL - Water	Date: 12/1/2022 Rates: 1365 MCF – GAS 0 BBL – Oil 7 BBL - Water
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas Please see attachments	Oil Gas Please see attachments	Oil Gas Please see attachments

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ____ No__X__
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___X__No_____

Will commingling decrease the value of production? Yes____ No___X__

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: _____

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 Kandis Roland TITLE Operation/Regulatory Tech DATE 2/15/2023

TYPE OR PRINT NAME Kandis Roland TELEPHONE NO. (713) 757-5246

E-MAIL ADDRESS kroland@hilcorp.com

Mandi,

Please submit the values below and amend the C107A. BHP's were calculated in each of the analog wells in the zones being commingled following the process below.
I believe each of the reservoirs to be continuous and in a similar state of depletion based on at the Hardie B 1 A and each of the wells from which pressures are being derived.

Day #002B – Standalone MV

1. 24 hour SI
2. BHP calculated based on SN depth and 24 hr SI casing pressure

Hill SRC 5 – Standalone PC

1. 24 hour SI
2. BHP calculated based on fluid level shot and 24 hr SI casing pressure

FC State Com #005– Standalone FC

1. 24 hour SI
2. BHP calculated based on SN depth and 24 hr SI casing pressure

Well Name	API	Formation	BHP
Day #002B	3004530034	MV	96 psi
Hill SRC 5	3004523308	PC	123 psi
FC State Com #005	3004527513	FC	138 psi

From: McClure, Dean, EMNRD on behalf of Engineer, OCD, EMNRD
To: Cheryl Weston; Mandi Walker; Kandis Roland
Cc: McClure, Dean, EMNRD; Wrinkle, Justin, EMNRD; Powell, Brandon, EMNRD; Paradis, Kyle O
Subject: Approved Administrative Order DHC-5301
Date: Monday, July 24, 2023 12:56:32 PM
Attachments: DHC5301 Order.pdf

NMOCD has issued Administrative Order DHC-5301 which authorizes Hilcorp Energy Company (372171) to downhole commingle production within the following well:

Well Name: **Roelofs A #1A**
Well API: **30-045-21780**

The administrative order is attached to this email and can also be found online at OCD Imaging.

Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.

Dean McClure
Petroleum Engineer, Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
(505) 469-8211

From: Laura Bohorquez
To: McClure, Dean, EMNRD
Cc: Daniel Hurd; Mandi Walker; Cheryl Weston
Subject: Re: [EXTERNAL] Action ID: 195689; DHC-5301
Date: Thursday, July 20, 2023 7:43:39 AM
Attachments: image001.png

Dean,

Per our phone call, Hilcorp does not believe that commingling of these pools will be a detriment to any of the existing pools' oil or gas production.

If we can get the Director's approval today, we will be on track with our clean outs to RTP the wells on the dates provided by Mandi. Thank you for taking this into consideration.

Thank you,
Laura

Get Outlook for iOS

From: Laura Bohorquez
Sent: Thursday, July 20, 2023 5:32:42 AM
To: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Cc: Daniel Hurd <dhurd@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>; Cheryl Weston <cweston@hilcorp.com>
Subject: RE: [EXTERNAL] Action ID: 195689; DHC-5301

Sounds good – I will make myself available. Contact info below.

Laura Bohorquez
Operations Engineer | San Juan South
Hilcorp Energy Company | 1111 Travis Street | Houston, TX 77002
M: 832.512.3292
laura.bohorquez@hilcorp.com

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Wednesday, July 19, 2023 8:04 PM
To: Laura Bohorquez <Laura.Bohorquez@hilcorp.com>
Cc: Daniel Hurd <dhurd@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>; Cheryl Weston <cweston@hilcorp.com>
Subject: RE: [EXTERNAL] Action ID: 195689; DHC-5301

Laura,

Although not ideal, we should be fine on the PC water.

- Confirmation that Hilcorp does not believe the downhole commingling of these pools will negatively impact recovery from the pools. Due to the concerns referenced below, please confirm that Hilcorp believes the proposed commingling within the well bore of the 30-045-21780 ROELOFS A #001A will not have a negative impact upon the recovery of production from any of the pools proposed to be commingled.

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 shut in casing pressure build. Historic commingling operations have proven reservoir fluids are compatible.

I have to sit as tech examiner tomorrow, but will try and reach out prior to that for a very brief discussion on this part.

Dean McClure

Petroleum Engineer, Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
(505) 469-8211

From: Laura Bohorquez <Laura.Bohorquez@hilcorp.com>
Sent: Wednesday, July 19, 2023 2:44 PM
To: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Cc: Daniel Hurd <dhurd@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>; Cheryl Weston <cweston@hilcorp.com>
Subject: RE: [EXTERNAL] Action ID: 195689; DHC-5301

Dean,

- Water and Gas Samples. Please provide a water and gas sample for each of the proposed pools.

We believe the below standalone MV/FRC/PC gas and water analyses to be representative of the proposed DHC pools. Due to lack of water production in PC standalones, we are unable to procure a PC standalone water sample at this time. Current production for Roelofs A1A is PC/MV commingle.

MV Standalone Water Analysis	
AssetCode	3004526158
AssetName	ZACHRY 43
CationBarium	12
CationBoron	
CationCalcium	42.4
CationIron	55.6
CationMagnesium	6.38
CationManganese	0.522
CationPhosphorus	
CationPotassium	<20.0
CationStrontium	8.1
CationSodium	1200
CationSilica	3.34
CationZinc	<2.0
CationAluminum	
CationCopper	
CationLead	<2.00
CationLithium	
CationNickel	
CationCobalt	
CationChromium	
CationSilicon	
CationMolybdenum	
AnionChloride	2120
AnionCarbonate	
AnionBicarbonate	
AnionBromide	
AnionFluoride	
AnionHydroxyl	
AnionNitrate	
AnionPhosphate	
AnionSulfate	<6.20
phField	6.29
phCalculated	
TempField	21.8
TempLab	
OtherFieldAlkalinity	

OtherSpecificGravity	1.003
OtherTDS	4240
OtherCaCO3	132
OtherConductivity	6590
DissolvedCO2	
DissolvedO2	
DissolvedH2S	
GasPressure	
GasCO2	
GasCO2PP	
GasH2S	
GasH2SPP	
PitzerCaCO3_70	
PitzerBaSO4_70	
PitzerCaSO4_70	
PitzerSrSO4_70	
PitzerFeCO3_70	
PitzerCaCO3_220	
PitzerBaSO4_220	
PitzerCaSO4_220	
PitzerSrSO4_220	
PitzerFeCO3_220	

MV Standalone Gas Analysis	
AssetCode	3004526158
AssetName	ZACHRY 43
BTU	1161.1761
CO2	0.01
N2	0.00
C1	0.84
C2	0.09
C3	0.03
ISOC4	0.01
NC4	0.01
ISOC5	0.00
NC5	0.00
NEOC5	
C6	0.00
C6_PLUS	
C7	0.00
C8	0.00
C9	0.00
C10	
AR	
CO	
H2	
O2	0.00
H20	
H2S	0.00
HE	
C_O_S	
CH3SH	
C2H5SH	
CH2S3_2CH3S	
CH2S	
C6HV	

CO2GPM	
N2GPM	
C1GPM	
C2GPM	
C3GPM	
ISOC4GPM	
NC4GPM	
ISOC5GPM	
NC5GPM	
C6_PLUSGPM	

FRC Standalone Water Analysis	
AssetCode	3004507634
AssetName	ZACHRY 2
CationBarium	<0.4
CationBoron	
CationCalcium	<2.00
CationIron	23.3
CationMagnesium	<2.00
CationManganese	<.127
CationPhosphorus	
CationPotassium	<20.0
CationStrontium	<2.00
CationSodium	<20.0
CationSilica	<3.26
CationZinc	<2.00
CationAluminum	
CationCopper	
CationLead	<2.00
CationLithium	
CationNickel	
CationCobalt	
CationChromium	
CationSilicon	<10.0
CationMolybdenum	
AnionChloride	1.92
AnionCarbonate	
AnionBicarbonate	
AnionBromide	
AnionFluoride	
AnionHydroxyl	
AnionNitrate	
AnionPhosphate	
AnionSulfate	0.459
phField	5.89
phCalculated	
TempField	23.7
TempLab	
OtherFieldAlkalinity	
OtherSpecificGravity	1.002
OtherTDS	50
OtherCaCO3	<13.2
OtherConductivity	41.4
DissolvedCO2	

DissolvedO2	
DissolvedH2S	
GasPressure	
GasCO2	
GasCO2PP	
GasH2S	
GasH2SPP	
PitzerCaCO3_70	
PitzerBaSO4_70	
PitzerCaSO4_70	
PitzerSrSO4_70	
PitzerFeCO3_70	
PitzerCaCO3_220	
PitzerBaSO4_220	
PitzerCaSO4_220	
PitzerSrSO4_220	
PitzerFeCO3_220	

FRC Standalone Gas Analysis	
AssetCode	3004507634
AssetName	ZACHRY 2
BTU	1126
CO2	0.01
N2	0.00
C1	0.86
C2	0.09
C3	0.02
ISOC4	0.00
NC4	0.00
ISOC5	0.00
NC5	0.00
NEOC5	
C6	0.00
C6_PLUS	
C7	0.00
C8	0.00
C9	0.00
C10	
AR	
CO	
H2	
O2	0.00
H20	
H2S	0.00
HE	
C_O_S	
CH3SH	
C2H5SH	
CH2S3_2CH3S	
CH2S	
C6HV	
CO2GPM	
N2GPM	
C1GPM	

C2GPM	
C3GPM	
ISOC4GPM	
NC4GPM	
ISOC5GPM	
NC5GPM	
C6_PLUSGPM	

PC Standalone Gas Analysis	
AssetCode	3004523308
AssetName	Hill SRC 5
BTU	1151
CO2	0.0128
N2	0.0022
C1	0.87
C2	0.06
C3	0.036
ISOC4	0.0062
NC4	0.0063
ISOC5	0.0012
NC5	0.001
NEOC5	
C6	0.003
C6_PLUS	
C7	0.00
C8	0.00
C9	0.00
C10	
AR	
CO	
H2	
O2	0.00
H20	
H2S	0.00
HE	
C_O_S	
CH3SH	
C2H5SH	
CH2S3_2CH3S	
CH2S	
C6HV	
CO2GPM	
N2GPM	
C1GPM	
C2GPM	
C3GPM	
ISOC4GPM	
NC4GPM	
ISOC5GPM	
NC5GPM	
C6_PLUSGPM	

- Confirmation that Hilcorp does not believe the downhole commingling of these pools will negatively impact recovery from the pools. Due to the concerns referenced below, please confirm that Hilcorp believes the proposed commingling within the well bore of the 30-045-21780 ROELOFS A #001A will not have a negative impact upon the recovery of production from any

of the pools proposed to be commingled.

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 shut in casing pressure build. Historic commingling operations have proven reservoir fluids are compatible.

Thank you,

Laura Bohorquez
Operations Engineer | San Juan South
Hilcorp Energy Company | 1111 Travis Street | Houston, TX 77002
M: 832.512.3292
laura.bohorquez@hilcorp.com

From: Mandi Walker <mwalker@hilcorp.com>
Sent: Wednesday, July 19, 2023 10:37 AM
To: Laura Bohorquez <Laura.Bohorquez@hilcorp.com>
Subject: FW: [EXTERNAL] Action ID: 195689; DHC-5301

You can just reply to this email with the additional information.

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Wednesday, July 19, 2023 10:35 AM
To: Mandi Walker <mwalker@hilcorp.com>; Cheryl Weston <cweston@hilcorp.com>; Laura Bohorquez <Laura.Bohorquez@hilcorp.com>
Subject: [EXTERNAL] Action ID: 195689; DHC-5301

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

To whom it may concern (c/o Amanda Walker for Hilcorp Energy Company),

The Division is reviewing the following application:

Action ID	195689
Admin No.	DHC-5301
Applicant	Hilcorp Energy Company (372171)
Title	Roelofs A #1A
Sub. Date	3/10/2023

Please provide the following additional supplemental documents:

- Water and Gas Samples. Please provide a water and gas sample for each of the proposed pools.
- Confirmation that Hilcorp does not believe the downhole commingling of these pools will negatively impact recovery from the pools. Due to the concerns referenced below, please confirm that Hilcorp believes the proposed commingling within the well bore of the 30-045-21780 ROELOFS A #001A will not have a negative impact upon the recovery of production from any of the pools proposed to be commingled.

Please provide additional information regarding the following:

- Of the downhole commingled wells in the area listed in the application, only 1 is similar to the proposed downhole commingle in DHC-5301; that being the 30-039-21625 SAN JUAN 29 7 UNIT #089A which is around 2-1/2 miles from the 30-045-21780 ROELOFS A #001A. Based upon historical production from the 30-039-21625 SAN JUAN 29 7 UNIT #089A, it seems that the well's oil production may have been negatively effected following the downhole commingling. However, the evidence of such is not clear and it is unknown if there may have been other factors which may have effected production. Due to everything referenced here, please provide the additional supplemental documents referenced above.

Additional notes:

Please note that while the application does include what seems to be the most relevant (to this review) markers regarding the gas from the pools, it is unclear from which wells and tests these were derived.

All additional supplemental documents and information may be provided via email and should be done by replying to this email. The produced email chain will be uploaded to the file for this application.

Please note that failure to take steps to address each of the requests made in this email within 10 business days of receipt of this email may result in the Division rejecting the application requiring the submittal of a new application by the applicant once it is prepared to address each of the topics raised.

Dean McClure
Petroleum Engineer, Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
(505) 469-8211

The information contained in this email message is confidential and may be legally privileged and is intended only for the use of the individual or entity named above. If you are not an intended recipient or if you have received this message in error, you are hereby notified that any dissemination, distribution, or copy of this email is strictly prohibited. If you have received this email in error, please immediately notify us by return email or telephone if the sender's phone number is listed above, then promptly and permanently delete this message.

While all reasonable care has been taken to avoid the transmission of viruses, it is the responsibility of the recipient to ensure that the onward transmission, opening, or use of this message and any attachments will not adversely affect its systems or data. No responsibility is accepted by the company in this regard and the recipient should carry out such virus and other checks as it considers appropriate.

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-5301**

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 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.
4. Applicant has certified that all produced fluids from all the Pools are compatible with each other.
5. Applicant has certified that downhole commingling the Pools will not decrease the value of the oil and gas production.
6. 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.
7. 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

8. 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.
9. 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.
10. 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.

11. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.11(A)(8) NMAC.

12. 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. This Order supersedes Order DHC-2263.

3. 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 (GAS) pool (pool ID: 71629);
   b. thirty-four and nine tenths percent (34.9%) shall be allocated to the BLANCO PICTURED CLIFFS (GAS) pool (pool ID: 72359); and
   c. sixty five and one tenth percent (65.1%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

   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 (GAS) pool (pool ID: 71629).

   The current pool(s) are:
   a. the BLANCO PICTURED CLIFFS (GAS) pool (pool ID: 72359); and
   b. the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

   Until a different plan to allocate gas production is approved by OCD, of the projected gas production allocated to the current pools:
   a. thirty-five and two tenths percent (35.2%) shall be allocated to the BLANCO PICTURED CLIFFS (GAS) pool (pool ID: 72359); and
   b. sixty-four and eight tenths percent (64.8%) shall be allocated to the BLANCO-MESAVERDE (PRORATED GAS) pool (pool ID: 72319).

   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.

4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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).
10. 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

DATE: 7/21/23

DYLAN M. FUGE
DIRECTOR

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit A

	Order:	DHC-5301		
	Operator:	Hilcorp Energy Company (372171)		
	Well Name:	Roelofs A #1A		
	Well API:	30-045-21780		
Upper Zone	Pool Name:	BASIN FRUITLAND COAL (GAS)		
	Pool ID:	71629	Current:	New: X
	Allocation:		Oil:	Gas:
	Interval:	Perforations	Top: 2,744	Bottom: 3,025
Intermediate Zone	Pool Name:	BLANCO PICTURED CLIFFS (GAS)		
	Pool ID:	72359	Current: X	New:
	Allocation:		Oil: 34.9%	Gas: 35.2%
	Interval:	Perforations	Top: 3,033	Bottom: 3,097
	Bottom of Interval within 150% of Upper Zone's Top of Interval:		YES	
Lower Zone	Pool Name:	BLANCO-MESAVERDE (PRORATED GAS)		
	Pool ID:	72319	Current: X	New:
	Allocation:		Oil: 65.1%	Gas: 64.8%
	Interval:	Perforations	Top: 4,660	Bottom: 5,584
	Bottom of Interval within 150% of Upper Zone's Top of Interval:		NO	

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

CONDITIONS

Action 195689

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 195689
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.	7/24/2023