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

Form C-101
August 1, 2011

Permit 380713

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	372171
	3. API Number 30-045-38423

4. Property Code	5. Property Name	6. Well No.
319061	PUBCO FEDERAL GAS COM	001N

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	14	30N	11W		1745	S	1132	E	San Juan

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	14	30N	11W	I	1838	S	1299	E	San Juan

9. Pool Information

BLANCO-MESAVERDE (PRORATED GAS)	72319
BASIN DAKOTA (PRORATED GAS)	71599

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	GAS		Private	6027
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
Y	7165	Dakota Formation		2/10/2025
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	32.3	200	91	0
Int1	8.75	7	23	3200	163	0
Prod	6.25	4.5	11.6	7165	207	0

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	250	3M

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Jamie L Olivarez	Approved By:	Matthew Gomez
Title:	L48W Regulatory Advisor	Title:	
Email Address:	jolivarez@hilcorp.com	Approved Date: 1/23/2025	Expiration Date: 1/23/2027
Date: 1/6/2025	Phone: 713-289-2838	Conditions of Approval Attached	

C-102

Submit Electronically Via OCD Permitting

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024

Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-045-38423	72319	BLANCO MESAVERDE

Property Code	Property Name	Well Number
319061	PUBCO FEDERAL GAS COM	1N

OGRID No.	Operator Name	Ground Level Elevation
372171	HILCORP ENERGY COMPANY	6027'

Surface Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal

Mineral Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal

Surface Location

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
I	14	30N	11W		1745' SOUTH	1132' EAST	36.809563 °N	-107.955460 °W	SAN JUAN

Bottom Hole Location

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
I	14	30N	11W		1838' SOUTH	1299' EAST	36.809829 °N	-107.956031 °W	SAN JUAN

Dedicated Acres	Penetrated Spacing Unit:	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit	Consolidation Code
313.81	S/2 - Section 14, T30N, R11W	Infill	30-045-35165	☐ Yes ☒ No	C

Order Numbers

Well setbacks are under Common Ownership: ☐ Yes ☒ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation
	☐ Horizontal ☐ Vertical ☒ Directional	6027'

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Cherylene Weston
Signature

1/6/2025
Date

Cherylene Weston, Operations/Regulatory Tech-Sr.
Printed Name

cweston@hilcorp.com
E-mail Address

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.

JASON C. EDWARDS
Signature and Seal of Professional Surveyor

Certificate Number	Date of Survey
15269	NOVEMBER 21, 2024

Note: 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.

C-102

Submit Electronically Via OCD Permitting

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024

Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-045-38423	71599	BASIN DAKOTA

Property Code	Property Name	Well Number
319061	PUBCO FEDERAL GAS COM	1N

OGRID No.	Operator Name	Ground Level Elevation
372171	HILCORP ENERGY COMPANY	6027'

Surface Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal

Mineral Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal

Surface Location

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
I	14	30N	11W		1745' SOUTH	1132' EAST	36.809563 °N	-107.955460 °W	SAN JUAN

Bottom Hole Location

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
I	14	30N	11W		1838' SOUTH	1299' EAST	36.809829 °N	-107.956031 °W	SAN JUAN

Dedicated Acres	Penetrated Spacing Unit:	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit	Consolidation Code
313.81	S/2 - Section 14, T30N, R11W	Infill	30-045-35369	☐ Yes ☒ No	C

Order Numbers

Well setbacks are under Common Ownership: ☐ Yes ☐ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation
	☐ Horizontal ☐ Vertical ☒ Directional	6027'

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

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Cherylene Weston
Signature

1/6/2025
Date

Cherylene Weston, Operations/Regulatory Tech-Sr.
Printed Name

cweston@hilcorp.com
E-mail Address

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.

JASON C. EDWARDS
Signature and Seal of Professional Surveyor

Certificate Number	Date of Survey
15269	NOVEMBER 21, 2024

Note: 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.

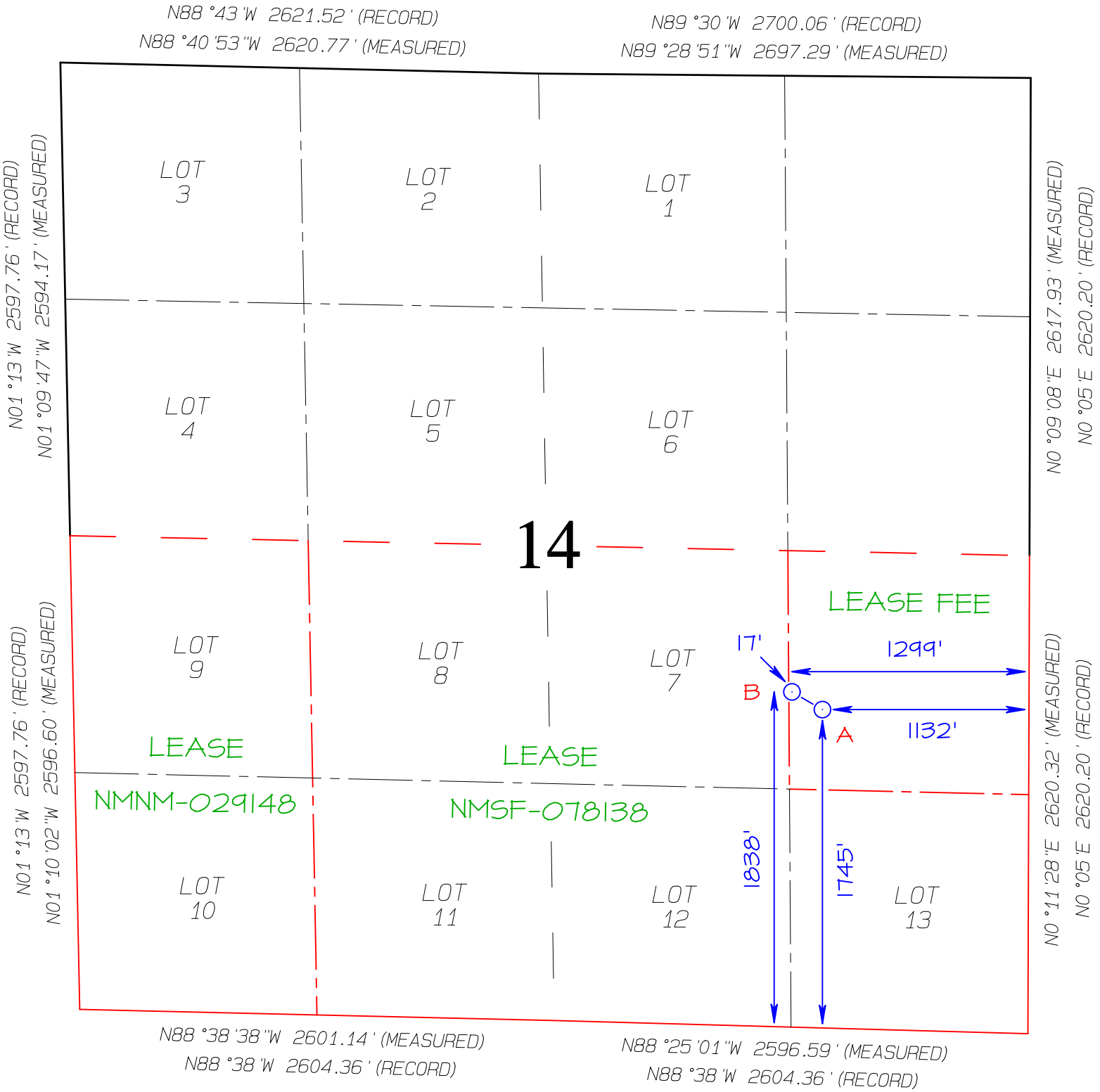
BOTTOM-HOLE LOCATION (B)
1838' FSL 1299' FEL
SECTION 14, T30N, R11W
LAT 36.809825 °N
LONG -107.955409 °W
DATUM: NAD1927

LAT 36.809829 °N
LONG -107.956031 °W
DATUM: NAD1983

N59°52.2'W
193.3'

SURFACE LOCATION (A)
1745' FSL 1132' FEL
SECTION 14, T30N, R11W
LAT 36.809559 °N
LONG -107.954837 °W
DATUM: NAD1927

LAT 36.809563 °N
LONG -107.955460 °W
DATUM: NAD1983



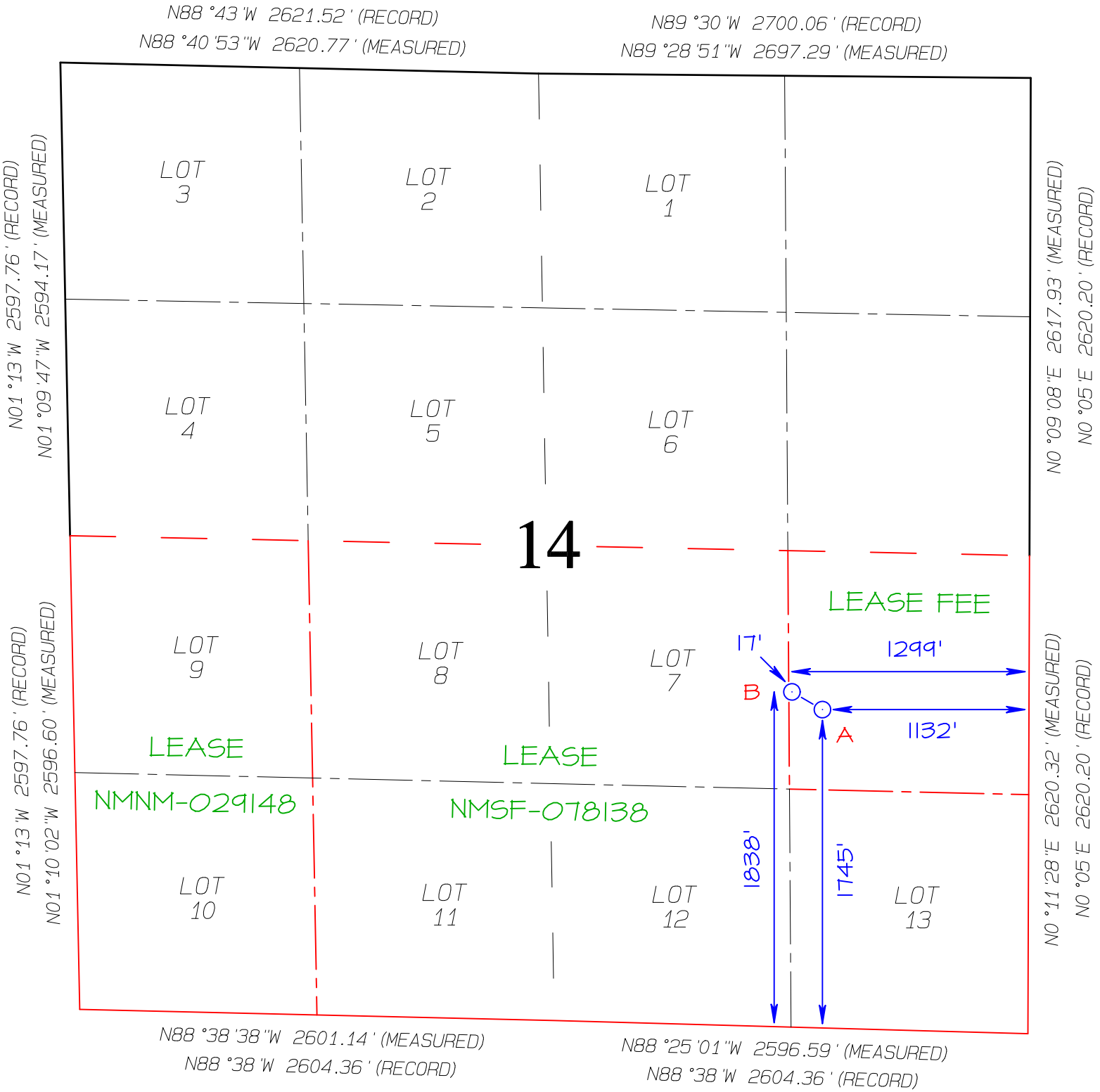
BOTTOM-HOLE LOCATION (B)
1838' FSL 1299' FEL
SECTION 14, T30N, R11W
LAT 36.809825 °N
LONG -107.955409 °W
DATUM: NAD1927

LAT 36.809829 °N
LONG -107.956031 °W
DATUM: NAD1983

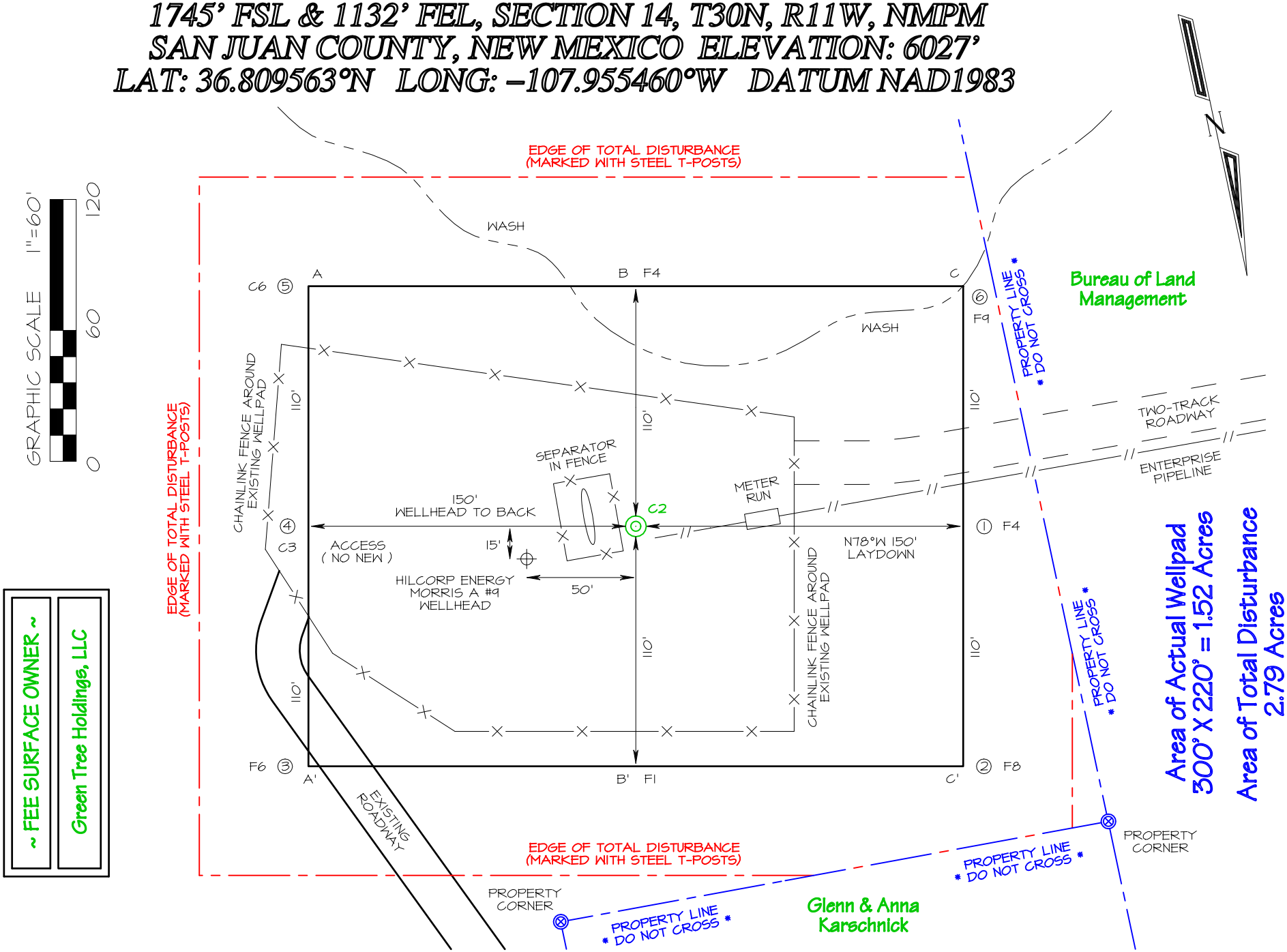
N59°52.2'W
193.3'

SURFACE LOCATION (A)
1745' FSL 1132' FEL
SECTION 14, T30N, R11W
LAT 36.809559 °N
LONG -107.954837 °W
DATUM: NAD1927

LAT 36.809563 °N
LONG -107.955460 °W
DATUM: NAD1983



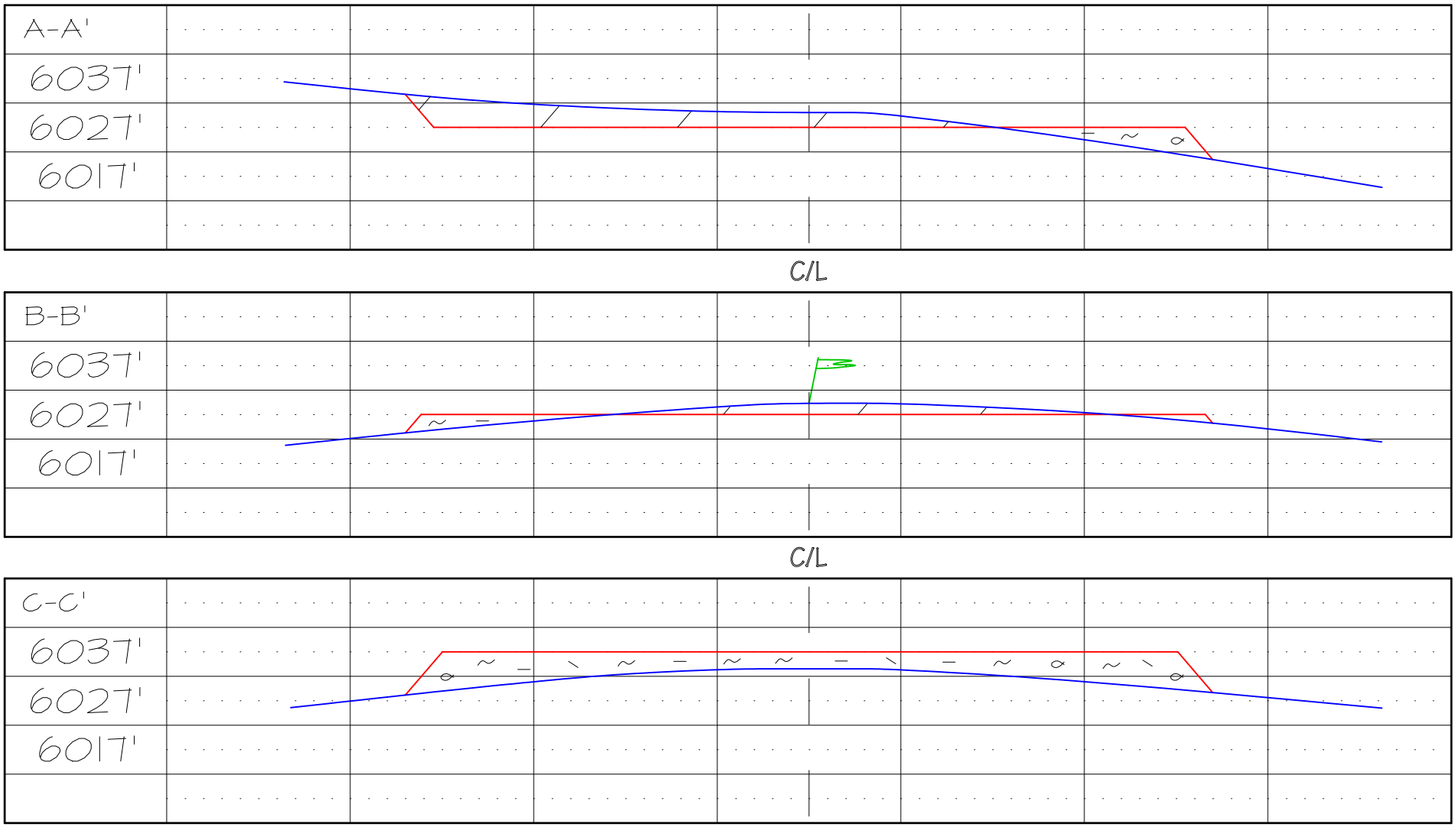
HILCORP ENERGY COMPANY PUBCO FEDERAL GAS COM #1N
1745' FSL & 1132' FEL, SECTION 14, T30N, R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6027'
LAT: 36.809563°N LONG: -107.955460°W DATUM NAD1983



Steel T-Posts have been set to define Edge of Disturbance limits which are 50' offset from edge of wellpad, unless otherwise noted.

HILCORP ENERGY COMPANY PUBCO FEDERAL GAS COM #1N
1745' FSL & 1132' FEL, SECTION 14, T30N, R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6027'

HORIZONTAL SCALE 1"=40' VERTICAL SCALE 1"=30'

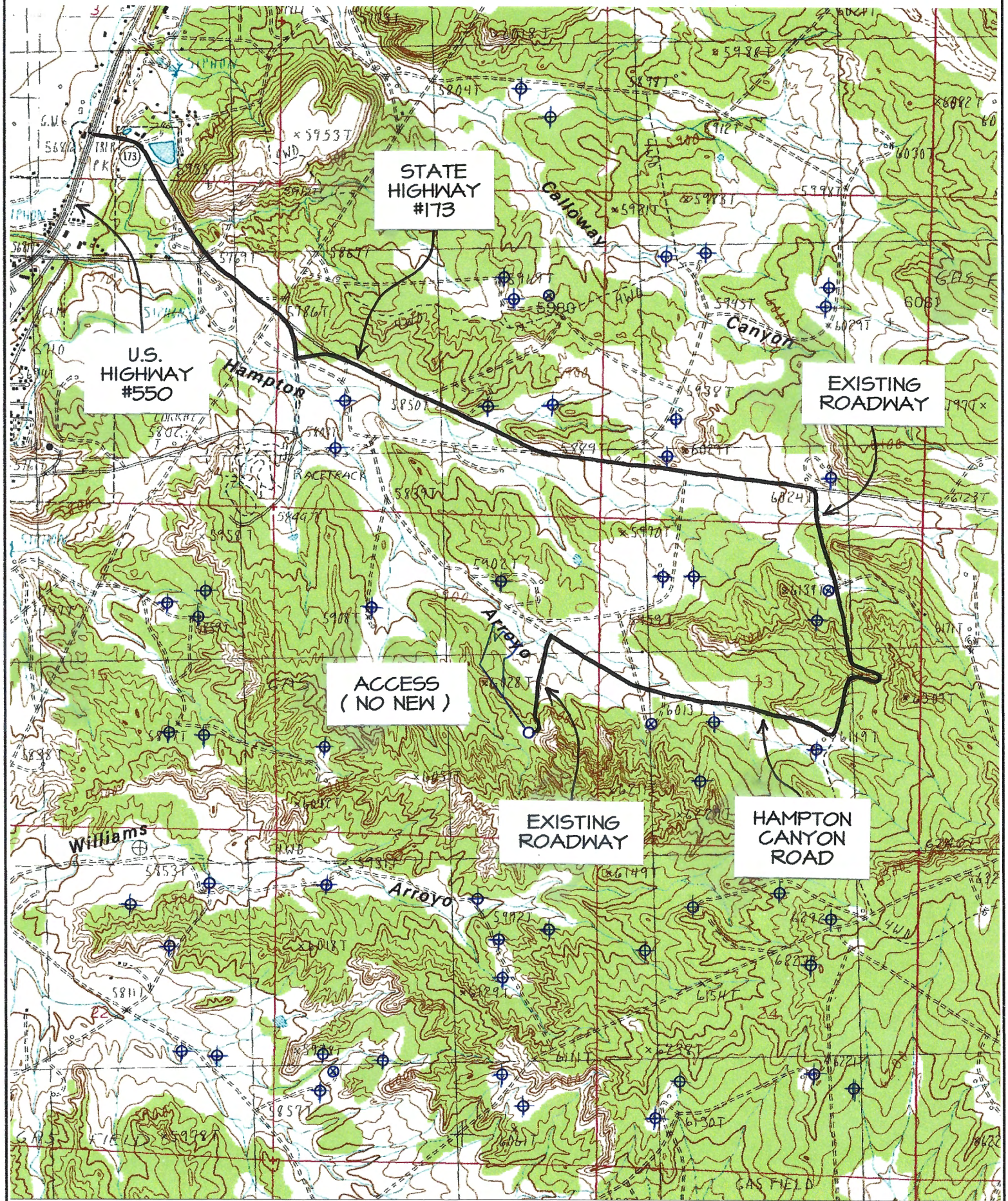


EDWARDS SURVEYING, INC. IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.

CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.

HILCORP ENERGY COMPANY PUBCO FEDERAL GAS COM #1N

1745' FSL & 1132' FEL, SECTION 14, T30N, R11W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO



TOPO NAME : AZTEC ⊕ PRODUCING WELL ⊗ PLUGGED & ABANDONED WELL

Directions from the Intersection of US Hwy 550 & State Hwy 173

in Aztec, NM to Hilcorp Pubco Federal Gas Com #1N

1745' FSL & 1132' FEL, Section 14, T30N, R11W, N.M.P.M., San Juan County, NM

Latitude: 36.809563°N Longitude: -107.955460°W Datum: NAD1983

From the intersection of US Hwy 550 & State Hwy 173 in Aztec, NM, travel South-easterly on State Hwy 173 for 2.6 miles;

Go Right (Southerly) exiting State Hwy 173 for 1.0 miles to fork in roadway;

Go Right (North-westerly) on Hampton Canyon Road for 0.6 miles to fork in roadway;

Go Left which is straight (North-westerly) remaining on Hampton Canyon Road for 0.3 miles to fork in roadway;

Go Left (Southerly) for 0.3 miles to Hilcorp Pubco Federal Gas Com #1N staked location which overlaps the Hilcorp Morris A #9 existing wellpad.

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

General Information
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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

Form C-102
August 1, 2011

Permit 380713

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-045-38423	71599	BASIN DAKOTA (PRORATED GAS)
4. Property Code	**5. Property Name**	**6. Well No.**
319061	PUBCO FEDERAL GAS COM	001N
7. OGRID No.	**8. Operator Name**	**9. Elevation**
372171	HILCORP ENERGY COMPANY	6027

10. Surface Location

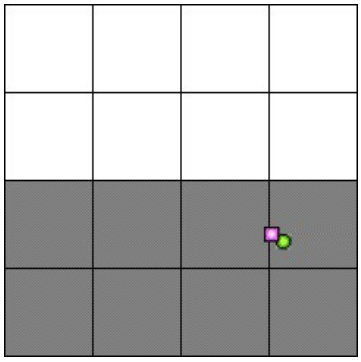
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	14	30N	11W		1745	S	1132	E	San Juan

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
I	14	30N	11W		1838	S	1299	E	San Juan

12. Dedicated Acres	13. Joint or Infill	14. Consolidation Code	15. Order No.
313.81		Communitization	

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: Jamie L Olivarez
Title: L48W Regulatory Advisor
Date: 1/6/2025

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Surveyed By: Jason C. Edwards
Date of Survey: 11/21/2024
Certificate Number: 15269

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

Form APD Conditions

Permit 380713

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
HILCORP ENERGY COMPANY [372171] 1111 Travis Street Houston, TX 77002	30-045-38423
	Well: PUBCO FEDERAL GAS COM #001N

OCD Reviewer	Condition
matthew.gomez	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.
matthew.gomez	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.
matthew.gomez	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
matthew.gomez	Cement is required to circulate on both surface and intermediate1 strings of casing.
matthew.gomez	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
matthew.gomez	File As Drilled C-102 and a directional Survey with C-104 completion packet.
matthew.gomez	DHC must be approved prior to producing the well.

San Juan County, NM Pubco Federal Gas Com 1N

Hilcorp Energy Company

Technical Drilling Plan (Rev. 1)

Hilcorp Energy Company proposes to drill and complete the referenced well targeting the Mesaverde and Dakota formations.

Note: This technical drilling plan will be adjusted based upon actual conditions.

1. Location

Date:	October 2, 2024	Pool:	Mesaverde / Dakota
Well Name:	Pubco Federal Gas Com 1N	Ground Elevation (ft. MSL):	6,027’
Surface Hole Location:	36.8095590° N, 107.9548370° W	Total Depth (ft. TMD/TVD)	7,165’ / 7,165’
Bottom Hole Location:	36.8098250° N, 107.9548370° W	County, State:	San Juan County, NM

Note: All depths in the directional drilling plan are referenced from an estimated RKB datum of 17’ above ground level.

2. Geological Markers

Anticipated formation tops with comments of any possible water, gas or oil shows are indicated below:

Formation	Depth (ft. TVD)	Remarks
Ojo Alamo	1,095’	Water (fresh/useable)
Kirtland	1,206’	None
Fruitland Coal	2,066’	Gas, Water
Pictured Cliffs	2,471’	Gas
Lewis Shale	2,601’	None
Huerfanito Bentonite	3,235’	None
Chacra	3,514’	Gas
Mesa Verde / Cliff House	4,054’	Gas / Water
Menefee	4,302’	Gas
Point Lookout	4,801’	Gas
Mancos	5,185’	Gas
Upper Gallup	6,030’	Gas
Niobrara	6,305’	None
Juana Lopez	6,439’	Gas
Greenhorn	6,768’	Gas
Graneros	6,827’	Gas
Two Wells	6,880’	Gas
Paugate	6,959’	Gas
Cubero	7,007’	Gas
Encinal	7,065’	Gas

3. Pressure Control Equipment

A. BOP Equipment

See Appendix A for BOP equipment and choke manifold diagram.

- BOP equipment will be nippled up on top of the wellhead after surface casing is set and cemented.
- Pressure control configurations will be designed to meet the minimum 3M standards.
- All equipment will have 3M pressure rating at a minimum.
- A rotating head will be installed on top of the annular as seen in the attached diagram.

B. BOP Pressure Testing

- For all BOP pressure testing, a test unit with a chart recorder and a BOP test plug will be utilized.
- All tests and inspections will be recorded and logged with time and results.
- A full BOP pressure test will be conducted when initially installed for the first well on the pad or if a seal subject to test pressure is broken, following related repairs, and at a minimum in 30-day intervals.
- A BOPE shell pressure test only will be conducted for subsequent wells on the pad when seals subject to pressure have not been broken, repaired, and fall within the 30-day interval of the first full test.
- The New Mexico Oil & Gas Conservation Division and the BLM will be notified 24 hours in advance of pressure testing BOPE.
- The BOPE will be tested to 250 psi (Low) for 5 minutes and 3,000 psi (High) for 10 minutes.

C. BOP Function Testing

- Annular preventors will be functionally tested at least once per week.
- Pipe and blind rams will be function tested each trip.

D. Casing Pressure Testing

- For all casing pressure testing, a test unit with a chart recorder will be utilized.
- Surface casing will be pressure tested to 600 psi for 30 minutes.
- Intermediate casing will be pressure tested to 1,500 psi for 30 minutes.

4. Casing Program

A. Proposed Casing Program:

Proposed Casing Design							
Casing String	Hole Size	Casing (size/weight/grade)	Top Depth (MD/TVD)	Shoe Depth (MD/TVD)	Collapse	Burst	Tensile
Surface	12-1/4"	9-5/8"-32.3#-H40 (or equiv.)-LTC/BTC	0'	200'/200'	1,370 psi	2,270 psi	254 klbs
Intermediate	8-3/4"	7"-23#-J55 (or equiv.)-LTC/BTC	0'	3,200'/3,200'	3,270 psi	4,360 psi	366 klbs
Production	6-1/4"	4-1/2"-11.6#-J55 (or equiv.)-LTC/BTC	0'	7,165'/7,165'	4,960 psi	5,350 psi	184 klbs

Proposed Casing Design Safety Factors				
Casing String	Burst Design SF	Collapse Design SF	Joint Tensile Design SF	Connection Tensile Design SF
Surface	24.3	18.6	65.5	45.6
Intermediate	2.8	2.6	5.8	6.9
Production	1.4	1.6	2.6	3.2

B. Casing Design Parameters & Calculations:

- Designed for full wellbore evacuation.
- Mud Weights used for calculations:
  - Surface = 9.0 ppg
  - Intermediate = 9.5 ppg
  - Production = 10.0 ppg
- Minimum Acceptable Safety Factors:
  - Burst: 1.15
  - Collapse: 1.15
  - Tensile: 1.50
- Casing Safety Factor Calculations:

$$Casing\ Burst\ Safety\ Factor = \frac{Casing\ Burst\ Rating(psi)}{Maximum\ Mud\ Weight\ (ppg) \times TVD(ft) \times 0.052}$$

$$Casing\ Collapse\ Safety\ Factor = Hydrostatic\ of\ Mud\ Weight\ in\ Annulus(psi) - \left[TVD\ of\ Casing\ Shoe\ (ft) \times 0.10\frac{psi}{ft}\right]$$

$$Tensile\ Safety\ Factor = \frac{Tensile\ Rating\ of\ Casing\ String\ (lbs)}{Measured\ Depth\ of\ Casing(ft) \times Casing\ Weight\ \frac{lb}{ft} \times DrillingFluid\ Bouyancy\ Factor}$$

Production Casing Notes:

- Production casing will be run from surface to TD.
- The 6-1/4" hole will be drilled to the top of the Encinal formation and TD will be determined onsite by the mud logger.

5. Proposed Centralizer Program:

Proposed Centralizer Program	
Casing String	Centralizers & Placement
Surface Casing	1 centralizer per joint on bottom 3 joints.
Intermediate Casing	1 centralizer per joint in shoe track. 1 centralizer every 3rd joint from float collar to base of Ojo Alamo. 1 centralizer per joint from base of Ojo Alamo to the top of the Ojo Alamo. 1 centralizer every 3rd joint from top of Ojo Alamo to surface.
Production Casing	1 centralizer per joint in shoe track. 1 centralizer every other joint for bottom 1,000' of casing.

6. Proposed Cement Program:

Proposed Cement Design								
Interval	Depth (ft. MD)	Lead/Tail	Volume (ft^3)	Sacks	Excess (%)	Slurry	Density (ppg)	Planned TOC
Surface	200'	Lead	125 ft^3	91	100%	Class G Cement Yield: 1.38 ft^3/sk	14.6	Surface
		Slurry Additives: CaCl (1%), Cello Flake (0.25 lb/sk), CD-2 (0.2%)						
Intermediate	3,200'	Lead	599 ft^3	117	50%	ASTM Type IL Yield: 5.12 ft^3/sk	9.5	Surface
		Slurry Additives: FL-24 (0.5%), FL-66 (0.5%), IntegraGuard GW-86 (0.2%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), LW-5E (50.0%), R-3 (0.4%), S-8 Silica Flour (35.0%), XCem-311 (0.3%)						
		Tail	113 ft^3	46	50%	ASTM Type IL Yield: 2.46 ft^3/sk	11.5	2,700'
		Slurry Additives: AEXT-1012 (60.0%), BA-90 (8.0 lb/sk), FL-66 (0.5%), GW-86 (0.3%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), KCl (3.0%), R-3 (0.55%), S-8 Silica Flour (25.0%), XCem-311 (0.3%)						
Production	7,165'	Lead	798 ft^3	156	25%	ASTM Type IL Yield: 5.12 ft^3/sk	9.5	Surface
		Slurry Additives: FL-24 (0.5%), FL-66 (0.5%), IntegraGuard GW-86 (0.2%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), LW-5E (50.0%), R-3 (0.4%), S-8 Silica Flour (35.0%), XCem-311 (0.3%)						
		Tail	125 ft^3	51	25%	ASTM Type IL Yield: 2.46 ft^3/sk	11.5	6,665'
		Slurry Additives: AEXT-1012 (60.0%), BA-90 (8.0 lb/sk), FL-66 (0.5%), GW-86 (0.3%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), KCl (3.0%), R-3 (0.55%), S-8 Silica Flour (25.0%), XCem-311 (0.3%)						

Cement Program Notes:

- The cement slurry additives may be adjusted to accommodate required pump and compressive test times.
- Actual cement volumes will be determined and may be adjusted onsite based on well conditions.
- For the intermediate hole section, a 2-stage or 3-stage cement job may be performed if hole conditions dictate. If needed, the stage tool(s) will be placed appropriately.
- Cement will be circulated to surface on surface and intermediate casing sections to protect water bearing zones.
- A minimum of 8 hours of wait on cement time will be observed on each hole section to allow adequate time for cement to achieve a minimum of 500 psi of compressive strength. The BOP will not be nippled down, the wellhead will not be installed, the casing will not be tested and the prior casing shoe will not be drilled out until adequate wait on cement time has been observed (8 hours or time to reach 500 psi compressive strength).

7. Drilling Fluids Program

A. Proposed Drilling Fluids Program:

Proposed Drilling Fluids Program					
Interval	Fluid Type	Density	Fluid Loss	Maximum Chlorides	Depth
		(ppg)	(mL/30 min)	(ppm)	(ft. MD)
Surface	Water/Gel	8.4 – 9.2	NC	1,000	0' – 200'
Intermediate	LSND / Gel	8.4 – 9.2	6-16	5,000	200' – 3,200'
Production	LSND / Gel	8.4 – 9.2	6-16	5,000	3,200' – 7,165'

Drilling Fluids Notes:

- Lost circulation material may be added to the mud systems to manage fluid losses as hole conditions dictate.
- The well will be drilled utilizing a closed-loop circulating system. Drill cuttings for all hole sections will be transported to an approved disposal site.
- Estimated total volume of drill cuttings for disposal: 403 bbls (2,261 ft^3).

8. Estimated Pressures & Drilling Hazards

A. Estimated Pressures

- Fruitland Coal: 400 psi
- Pictured Cliffs: 460 psi
- Mesa Verde: 900 psi
- Dakota: 1,400 psi

- No abnormal temperatures or drilling hazards are anticipated.
- The Mesa Verde and Dakota formations will be completed and comingled if both formations are completed.

B. Water Flows

- Water flows are possible in the intermediate section. Water flows will be mitigated with increased mud weight.

C. Lost Circulation

- Lost circulation is possible in the intermediate and production sections. Losses will be mitigated by utilizing LCM in the mud system.

D. Hydrogen Sulfide

- No hydrogen sulfide is expected to be encountered based on nearby well production.

9. Pilot Hole

- No pilot hole is planned for this wellbore.

10. Testing, Logging, Coring

A. Mud Logging

- Mud loggers will collect formation samples every 60' from intermediate casing shoe to TD of the well.

B. MWD

- Measurement while drilling tools will be utilized from the surface casing shoe to TD of the production hole to measure and record inclination.

C. LWD

- There are no plans for logging while drilling.

D. Open Hole Logging

- There are no plans to open hole log the well.

E. Coring & Formation Testing

- There are no plans for coring or formation testing.

F. Cased Hole Logging

- The 7" intermediate casing will be cemented to surface to protect water bearing zones. If cement is not circulated to surface on the intermediate cement job, a cement bod log will be run to verify top of cement.

11. Directional Drilling Plan

- The well is planned as a vertical wellbore. Surveys will be monitored to ensure vertical wellpath.

12. Completion

A. Pressure Testing

- A pressure test of the 4-1/2" production casing will be conducted to the maximum anticipated frac pressure for 30 minutes.

B. Stimulation

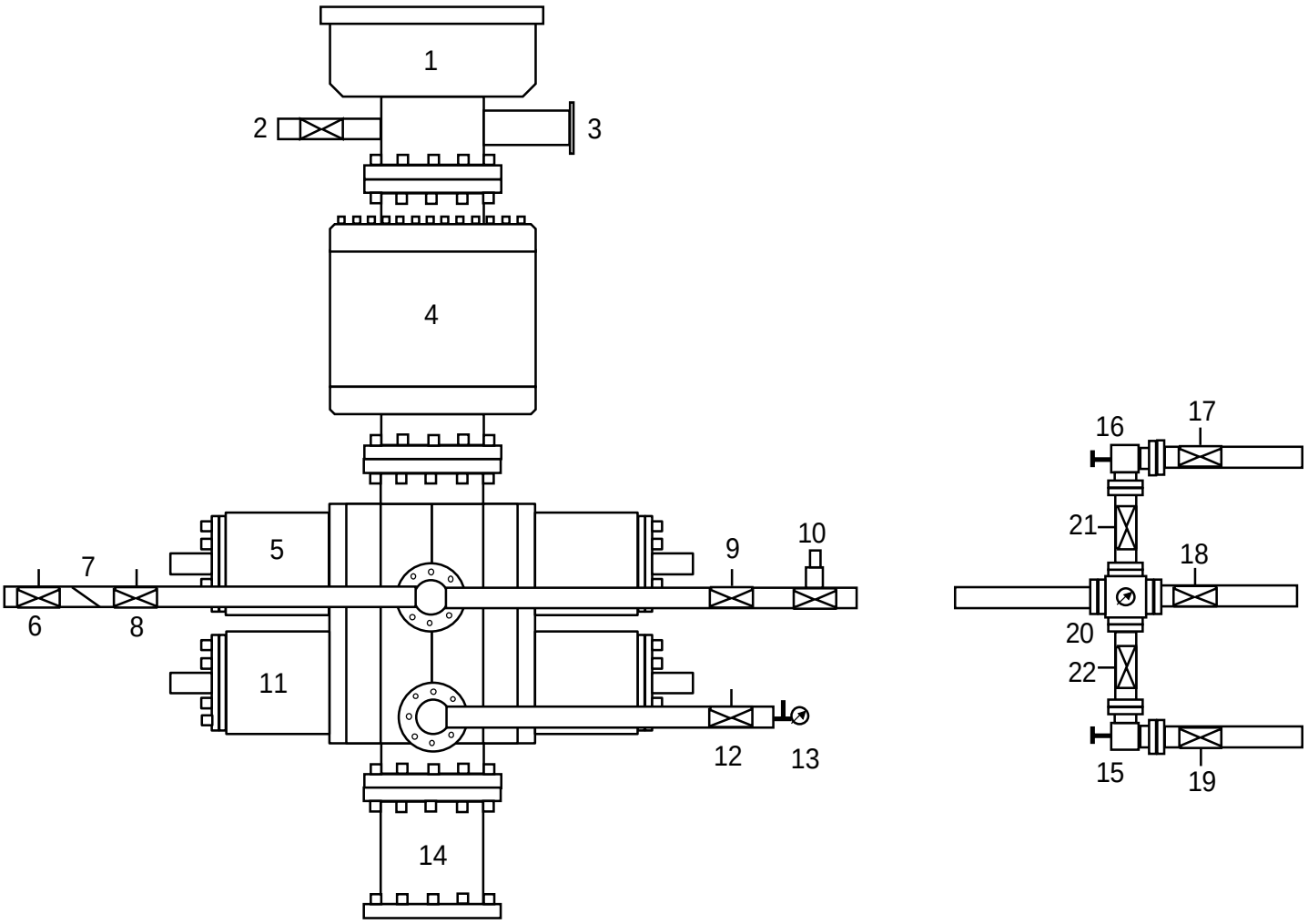
- The well will be stimulated with sand and water. The number of stages and amount of proppant used will be adjusted based on actual reservoir thickness and real-time pumping conditions during the stimulation.

San Juan County, NM Pubco Federal Gas Com 1N

Hilcorp Energy Company

Appendix A

11” 3M BOP & 3M Choke Manifold Configuration



1	Rotating Head	12	Manual Isolation Valve
2	Fill-Up Line	13	Needle Valve & Pressure Gauge
3	Flow Line	14	Spacer Spool (if needed)
4	3M Annular Preventer	15	Manual Choke
5	3M Pipe Rams	16	Hydraulicly Operated Choke
6	Manual Isolation Valve	17	Manual Isolation Valve
7	Check Valve	18	Manual Isolation Valve
8	Manual Isolation Valve	19	Manual Isolation Valve
9	Manual Isolation Valve	20	Valve Block & Pressure Gauge
10	High Closing Ratio Valve	21	Manual Isolation Valve
11	3M Blind Rams	22	Manual Isolation Valve

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:** 12/30/2024

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
Pubco Federal Gas Com 1N		I-14-30N-11W	1745' FSL & 1132' FEL	6	800	5

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
Pubco Federal Gas Com 1N		**2025**				**2025**

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: Cherylene Weston
Printed Name: Cherylene Weston
Title: Operations Regulatory Tech Sr.
E-mail Address: cweston@hilcorp.com
Date: 12/30/2024
Phone: 713-289-2615

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

Hilcorp Energy Natural Gas Management Plan Attachments

VI. Separation Equipment

The operator will select separation equipment for the maximum anticipated throughput and pressure to optimize gas capture. Separation equipment is sized according to manufacturer's design specifications. Separation vessels are built following the A.S.M.E. section VII division 1 codes for pressure vessel design, fabrication, inspection, testing and certification. Anticipated well pressures and production rates are evaluated to select separation equipment according to the equipment's designed operating pressure and throughput.

After completion, the operator utilizes flowback equipment, including separators, to manage wellbore fluids and solids during the initial separation period. After the initial flowback period is complete the operator utilizes iterative facility separation equipment to ensure that optimal separation is achieved.

VII. Operational Practices 19.15.27.8 NMAC A through F

A. The operator will maximize the recovery of natural gas and minimize the amount of gas vented or flared when technically and safely feasible as further described and detailed within the following subsections (B-F of 19.15.27.8). In all cases where natural gas venting and flaring requires regulatory reporting, reporting will be submitted accurately and within the required time frames.
B. Venting and flaring during drilling operations:
    a. New Drill HZ Gas Wells: The operator drills wells in the area by utilizing a balanced mud to safely drill the wellbore. This technique prevents gas from coming to surface during the drilling process. If there is an emergency or malfunction and natural gas does come to surface the natural gas will be captured and routed to sales if technically and safely feasible.
C. Venting and flaring during completion or recompletion operations:
    a. New Drill HZ Gas Wells: The operator's facilities are designed to handle the maximum throughput and pressures from the newly drilled and completed wellbores. The amount of gas vented and flared will be minimized when technically and safely feasible. During initial flowback and initial separation flowback the operator will utilize contracted flowback equipment, including separators, to manage wellbore fluids and solids. The initial flowback period will be minimized and flow will be sent to separation equipment as soon as possible to reduce the amount of gas that is vented to atmosphere. The natural gas will be utilized on site as needed for fuel gas and natural gas will be sold.

D. Venting and flaring during production operations:
    a. New Drill HZ Gas Wells: The operator's facilities are designed to handle the maximum throughput and pressures from producing wellbores. The amount of gas vented and flared will be minimized when technically and safely feasible.

        Operations will effectively manage the following scenarios to minimize the quantity of natural gas that is vented or flared:

        (a) If there is an emergency or malfunction vented or flared natural gas will be reported, if required, and the emergency or malfunction will be resolved as soon as technically and safely feasible.
        (b) If the wellbore needs to be unloaded to atmosphere the operator will not vent the well after the well has achieved a stabilized rate and pressure. The operator will remain on site during unloading. Plunger lift systems will be optimized to reduce the amount of natural gas venting. Downhole maintenance, such as workovers, swabbing, etc. will only be conducted as needed and best management practices will be utilized to reduce venting of natural gas.

(c) The operator will minimize the amount of time that natural gas is vented to atmosphere from gauging and sampling a storage tank or low pressure vessel. The formation is only anticipated to produce water and therefore tank emissions are anticipated to be negligible.
(d) The operator will reduce the amount of time needed for loading out liquids from a storage tanks or other low-pressure vessels whenever feasible. Operations will always utilize the water transfer systems when available. Water loading emissions are anticipated to be negligible.
(e) Equipment will be repaired and maintained routinely to minimize the venting or flaring of natural gas. Repairs and maintenance will be conducted in a manner that minimizes the amount of natural gas vented to atmosphere through the isolation of the equipment that is being repaired or maintained.
(f) Electric controllers and pumps will be installed to replace pneumatic controllers whenever feasible. Pneumatic controllers and pumps will be inspected frequently to ensure that no excess gas is vented to atmosphere.
(g) No dehydration or amine units are anticipated to be set on location.
(h) Compressors, compressor engines, turbines, flanges, connectors, valves, storage tanks, and other low-pressure vessels and flanges will be routinely inspected to ensure that no excess venting occurs outside of normal operations.
(i) Regulatory required testing, such as bradenhead and packer testing will be performed in a manner that minimizes the amount of natural gas vented to atmosphere.
(j) If natural gas does not meet gathering pipeline specifications gas samples will be collected twice per week to determine when pipeline specification gas content has been achieved. During this time frame gas will be flared and not vented to atmosphere. Natural gas that meets pipeline specifications will be sold via pipeline and natural gas that can be utilized for fuel gas will be used during this time.
(k) If pipeline, equipment, or facilities need purged of impurities gas losses will be minimized as much as technically and safely feasible.

E. Performance standards:

a. The production facilities are designed to handle the maximum throughput and pressures from producing wellbores and will be designed to minimize waste. The amount of gas vented and flared will be minimized when technically and safely feasible.
b. All tanks that are routed to a control device that is installed after 5/25/2021 will have an automatic gauging system to minimize the amount of vented natural gas.
c. If a flare stack is installed or replaced after 5/25/2021 it will be equipped with an automatic ignitor or continuous pilot. The flare stack will be properly sized and designed to ensure proper combustion efficiency. The flare stack will be located 100 feet away from the nearest wellhead or storage tank.
d. AVO inspections will be conducted weekly for the year after completion and for all wells producing greater than 60,000 cubic feet of natural gas daily. The AVO inspection will include all components, including flare stacks, thief hatches, closed vent systems, pumps, compressors, pressure relief devices, valves, lines, flanges, connectors, and associated pipeline to identify any leaks and releases by comprehensive auditory, visual, and olfactory inspection. The AVO inspection records will be maintained for 5 years which will be available at the department's request. Identified leaks will be repaired as soon as feasible to

minimize the amount of vented natural gas. F. Measurement or estimation of vented and flared natural gas.

a. The volume of natural gas that is vented, flared or consumed for beneficial use will be measured when possible, or estimated, during drilling, completions, or production operations.
b. Equipment will be installed to measure the volume of natural gas flared for all APD's issued after 5/25/2021 on facilities that will have an average daily gas rate greater than 60,000 cubic feet of natural gas. Measurement equipment will conform to API MPMS Chapter 14.10 regulations. The measurement equipment will not have a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment. If metering is not practical then the volume of gas will be estimated.

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-101
Revised July 18, 2013

☐AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
Hilcorp Energy Company 382 Road 3100 Aztec, NM 87410	372171
	3. API Number

4. Property Code	5. Property Name	6. Well No.
319061	Pubco Federal Gas Com	1N

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
I	14	030N	011W		1745	South	1132	East	San Juan

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
I	14	030N	011W		1838	South	1299	East	San Juan

9. Pool Information

Pool Name	Pool Code
Blanco Mesaverde / Basin Dakota	72319 / 71599

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
N	G	R	P	6,027' GR
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
Y	7,165'	Blanco Mesaverde/Basin Dakota		2025

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water

☒**We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
	12 1/4"	9 5/8"	32.3# / H40 LTC	200'	91 sx	Surf
	8 3/4"	7"	23# / J55 LTC	3,200'	163 sx	Surf
	6 1/4"	4 1/2"	11.6# / J55 LTC	7,165'	207 sx	Surf

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
	3M	Low 250 psi / High 3000 psi	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.** Signature: Cherylene Weston	OIL CONSERVATION DIVISION Approved By:
Printed name: Cherylene Weston	Title:
Title: Operations Regulatory Tech Sr.	Approved Date: / Expiration Date:
E-mail Address: cweston@hilcorp.com	
Date: 1/6/2025 / Phone: 713-289-2615	Conditions of Approval Attached