Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-045-38408

5. Indicate Type of Lease STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: HAYNIE

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

8. Well Number 2N

2. Name of Operator: Hilcorp Energy Company

9. OGRID Number: 372171

3. Address of Operator: 382 Road 3100, Aztec, NM 87410

10. Pool name or Wildcat: Blanco Mesaverde / Basin Dakota

4. Well Location
Unit Letter B: 762 feet from the North line and 1680 feet from the East line
Section 4 Township 030N Range 011W NMPM County SAN JUAN

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
5784' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☒	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐	SIDETRACK		OTHER:	☐		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Hilcorp Energy requests permission to revise the previously approved Drilling Technical and Directional Plan with the attached revised plans. The coordinates were updated to match the plat coordinates.

Spud Date: | Rig Release Date:

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

SIGNATURE Cherylene Weston TITLE Operations/Regulatory Tech-Sr. DATE 2/7/2025

Type or print name Cherylene Weston E-mail address: cweston@hilcorp.com PHONE: 713-289-2615

For State Use Only

APPROVED BY: TITLE DATE

Conditions of Approval (if any)

Hilcorp Energy Company

Technical Drilling Plan (Rev. 5)

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

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

1. Location

Date:	February 7, 2025	Pool:	Mesa Verde / Dakota
Well Name:	Haynie 2N	Ground Elevation (ft. MSL):	5,784’
Surface Hole Location:	36.846125° N, 107.992328° W	Total Depth (ft. TMD/TVD)	7,212’ / 6,980’
Bottom Hole Location:	36.843548° N, 107.990693° W	County, State:	San Juan County, NM

Note: All geographic coordinates on the drilling tech plan and the directional drilling plan refer to NAD 27 geodetic coordinate system. All depths on the drilling tech plan and 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	836	Water (fresh/useable)
Kirtland	894	None
Fruitland Coal	1,844	Gas, Water
Pictured Cliffs	2,293	Gas
Lewis Shale	2,406	None
Huerfanito Bentonite	3,037	None
Chacra	3,368	Gas
Mesa Verde / Cliff House	3,831	Gas / Water
Menefee	4,088	Gas
Point Lookout	4,589	Gas
Mancos	4,936	Gas
Upper Gallup	5,855	Gas
Niobrara	5,873	None
Juana Lopez	6,264	Gas
Greenhorn	6,595	Gas
Graneros	6,654	Gas
Two Wells	6,708	Gas
Paugate	6,784	Gas
Cubero	6,827	Gas
Encinal	6,880	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'	250'/250'	1,370 psi	2,270 psi	254 klbs
Intermediate	8-3/4"	7"-23#-J55 (or equiv.)-LTC/BTC	0'	4,420'/4,188'	3,270 psi	4,360 psi	366 klbs
Production	6-1/4"	4-1/2"-11.6#-J55 (or equiv.)-LTC/BTC	0'	7,212'/6,980'	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	19.4	14.9	52.4	36.5
Intermediate	2.1	2.0	4.2	5.0
Production	1.5	1.7	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	250'	Lead	157 ft^3	114	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	4,420'	Lead	871 ft^3	409	50%	ASTM Type IL Yield: 2.13 ft^3/sk	12.0	Surface
		Slurry Additives: $CaCl_2$ (3.0%), Celloflake (0.25 lb/sk), LCM-1 (5.0 lb/sk), FL-52 (0.4%), bentonite (8.0%), SMS (0.4%)						
		Tail	113 ft^3	82	50%	ASTM Type IL Yield: 1.38 ft^3/sk	14.5	3,920'
		Slurry Additives: $CaCl_2$ (1.0%), Celloflake (0.25 lb/sk), LCM-1 (5.0 lb/sk), FL-52 (0.2%)						
Production	7,212'	Lead	442 ft^3	223	35%	ASTM Type IL Yield: 1.98 ft^3/sk	12.5	3,920'
		Slurry Additives: Celloflake (0.25 lb/sk), LCM-1 (6.25 lb/sk), CD-32 (0.3%), FL-52 (1.0%)						

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' – 4,420'
Production	LSND / Gel / Air	8.4 – 9.2	6-16	5,000	4,420' – 7,212'

Drilling Fluids Notes:

- Lost circulation material may be added to the mud systems to manage fluid losses as hole conditions dictate.
- Depending on the area and losses encountered, the production section may be drilled on air instead of fluid.
- 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: 453 bbls (2,541 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 and azimuth.

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 directional wellbore. Surveys will be monitored to ensure adherence to the planned wellpath.
- The directional plan is attached in the APD application.

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

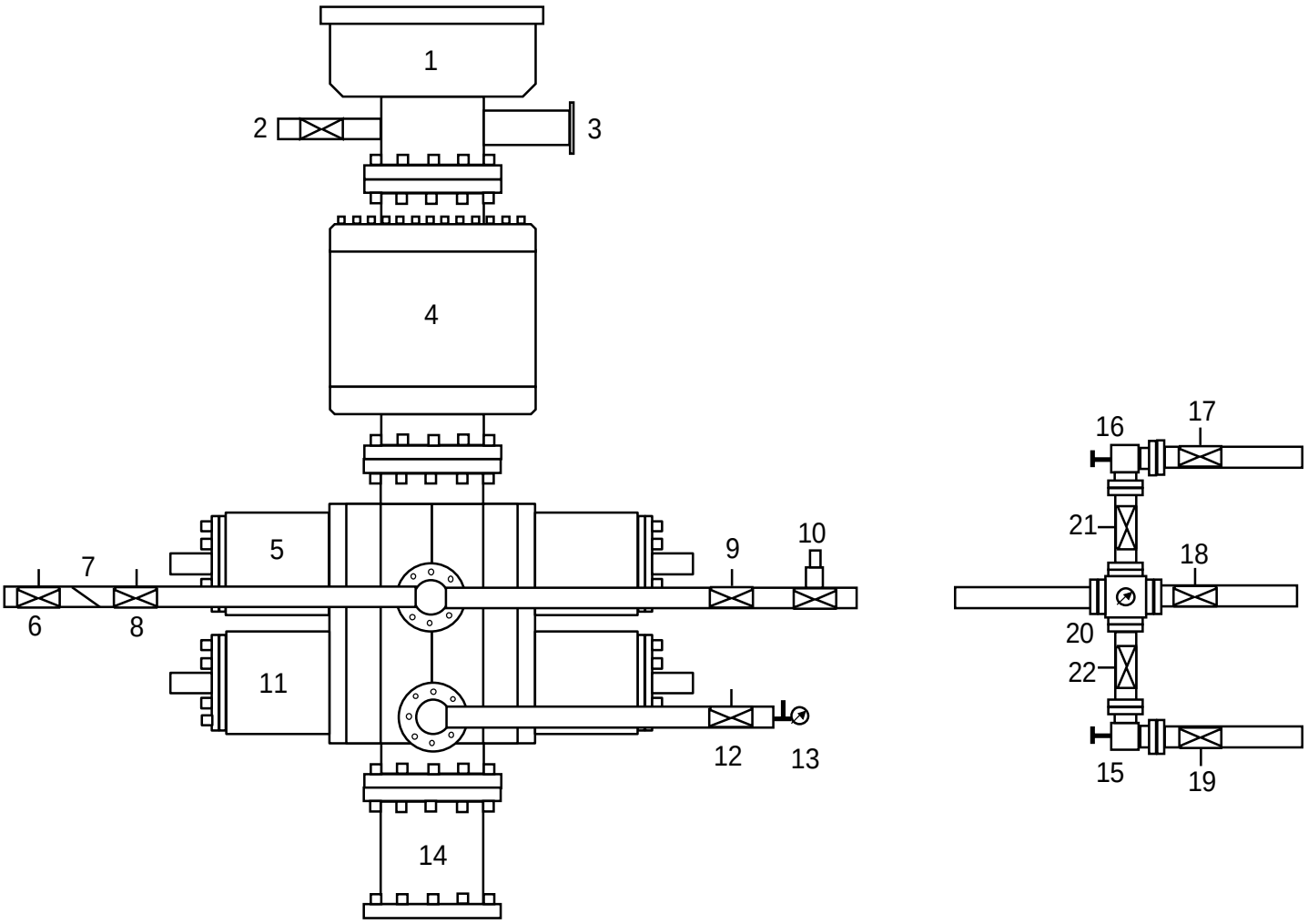
- The well will be stimulated with sand and water. The number of stages and amount of proppant used will be adjusted based on actual reservoir thickness and real-time pumping conditions during the stimulation.

San Juan County, NM Haynie 2N

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

Company: Hilcorp Energy - San Juan Basin
Project: San Juan, NM NAD27
Site: Haynie 2N
Well: Haynie 2N
Wellbore: OH
Design: Plan #3

Scientific Drilling

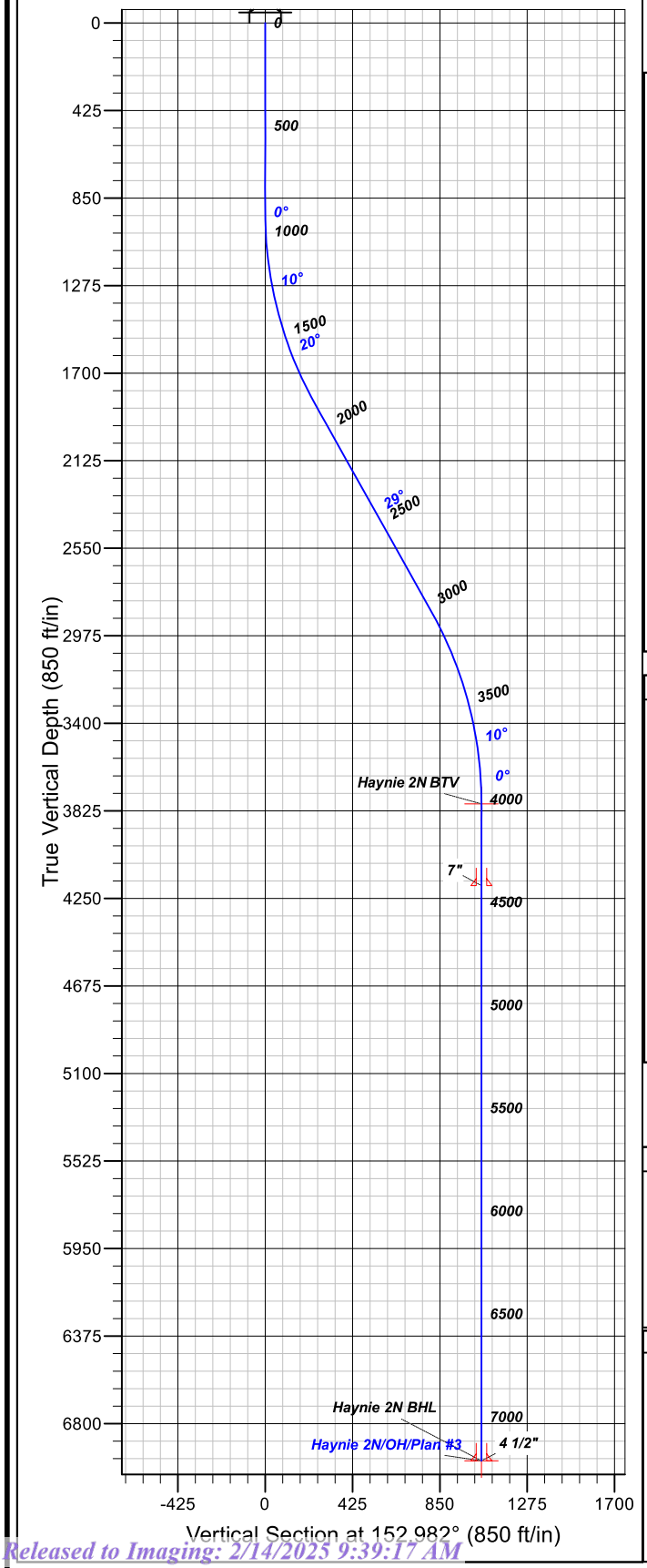
Well Details: Haynie 2N

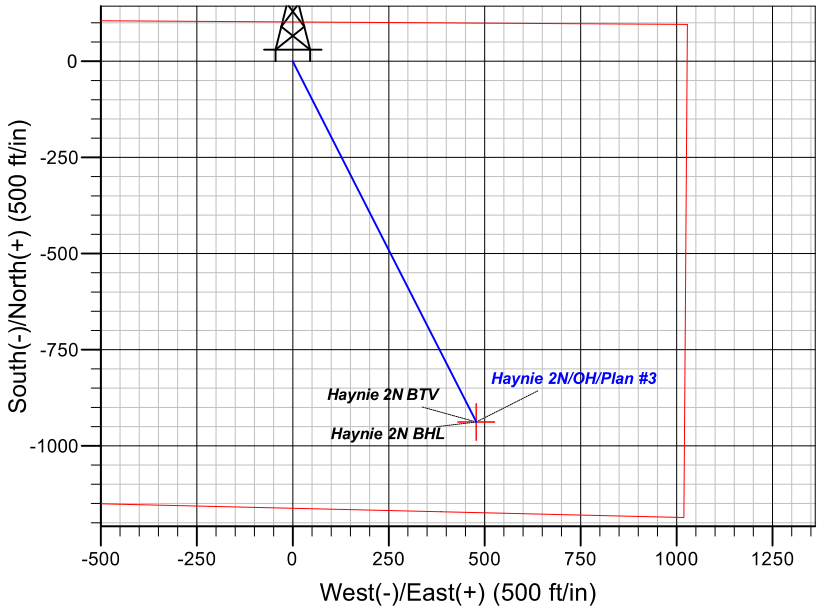
GL 5784' & RKB 17' @ 5801.00ft (Drake 3)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	2127289.34	453477.73	36.846125	-107.992328	

Azimuths to True North
Magnetic North: 8.48°

Magnetic Field
Strength: 49167.2nT
Dip Angle: 63.17°
Date: 9/26/2024
Model: HDGM2024





FORMATION TOP DETAILS

TVDPath	MDPath	Formation
836.00	836.00	Ojo Alamo
894.00	894.00	Kirtland
1844.00	1884.76	Fruitland Coal
2293.00	2399.84	Pictured Cliffs
2406.00	2529.48	Lewis Shale
3037.00	3247.68	Huerfano Bentonite
3368.00	3596.25	Chacra
3831.00	4062.79	Mesaverde / Cliffhouse
4088.00	4319.79	Menefee
4589.00	4820.79	Point Lookout
4936.00	5167.79	Mancos
5855.00	6086.79	Upper Gallup
5873.00	6104.79	Niobrara
6264.00	6495.79	Juana Lopez
6595.00	6826.79	Greenhorn
6654.00	6885.79	Graneros
6708.00	6939.79	Two Wells
6784.00	7015.79	Paugate
6827.00	7058.79	Cubero
6880.00	7111.79	Encinal Canyon

Plan: Plan #3

11:50, January 30 2025
Created By: Janie Collins

PROJECT DETAILS: San Juan, NM NAD27

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003

System Datum: Mean Sea Level

CASING DETAILS

TVD	MD	Name	Size
4188.00	4419.79	7"	7.00
6980.00	7211.79	4 1/2"	4.50

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
918.00	0.00	0.000	918.00	0.00	0.00	0.00	0.00	0.00
1896.20	29.35	152.982	1853.99	-218.33	111.33	3.00	152.98	245.08
3044.59	29.35	152.982	2855.01	-719.71	367.00	0.00	0.00	807.88
4022.79	0.00	0.000	3791.00	-938.05	478.33	3.00	180.00	1052.96
7211.79	0.00	0.000	6980.00	-938.05	478.33	0.00	0.00	1052.96

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Haynie 2N BTV	3791.00	-938.05	478.33	2126350.50	453954.50	36.843548	-107.990693
Haynie 2N BHL	6980.00	-938.05	478.33	2126350.50	453954.50	36.843548	-107.990693

Hilcorp
Energy Company

Hilcorp Energy - San Juan Basin

San Juan, NM NAD27
Haynie 2N
Haynie 2N

OH

Plan: Plan #3

Standard Planning Report

30 January, 2025

Scientific Drilling

www.scientificdrilling.com

Hilcorp Energy Company

Scientific Drilling

Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Haynie 2N
Company:	Hilcorp Energy - San Juan Basin	**TVD Reference:**	GL 5784' & RKB 17' @ 5801.00ft (Drake 3)
Project:	San Juan, NM NAD27	**MD Reference:**	GL 5784' & RKB 17' @ 5801.00ft (Drake 3)
Site:	Haynie 2N	**North Reference:**	True
Well:	Haynie 2N	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Project San Juan, NM NAD27

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site Haynie 2N

Site Position:		**Northing:**	2,127,289.34 usft	**Latitude:**	36.846125
From:	Lat/Long	**Easting:**	453,477.73 usft	**Longitude:**	-107.992328
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.20 in	**Grid Convergence:**	-0.10 °

Well Haynie 2N

Well Position	**+N/-S**	0.00 ft	**Northing:**	2,127,289.34 usft	**Latitude:**	36.846125
	+E/-W	0.00 ft	**Easting:**	453,477.73 usft	**Longitude:**	-107.992328
Position Uncertainty		0.00 ft	**Wellhead Elevation:**		**Ground Level:**	5,784.00 ft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2024	9/26/2024	8.48	63.17	49,167.20000000

Design Plan #3

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	152.982

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
918.00	0.00	0.000	918.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,896.20	29.35	152.982	1,853.99	-218.33	111.33	3.00	3.00	0.00	152.98	
3,044.59	29.35	152.982	2,855.01	-719.71	367.00	0.00	0.00	0.00	0.00	
4,022.79	0.00	0.000	3,791.00	-938.05	478.33	3.00	-3.00	0.00	180.00	Haynie 2N BTV
7,211.79	0.00	0.000	6,980.00	-938.05	478.33	0.00	0.00	0.00	0.00	Haynie 2N BHL

Hilcorp Energy Company

Scientific Drilling

Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Haynie 2N
Company:	Hilcorp Energy - San Juan Basin	**TVD Reference:**	GL 5784' & RKB 17' @ 5801.00ft (Drake 3)
Project:	San Juan, NM NAD27	**MD Reference:**	GL 5784' & RKB 17' @ 5801.00ft (Drake 3)
Site:	Haynie 2N	**North Reference:**	True
Well:	Haynie 2N	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00
918.00	0.00	0.000	918.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	2.46	152.982	999.97	-1.57	0.80	1.76	3.00	3.00	0.00
1,100.00	5.46	152.982	1,099.72	-7.72	3.94	8.67	3.00	3.00	0.00
1,200.00	8.46	152.982	1,198.98	-18.51	9.44	20.78	3.00	3.00	0.00
1,300.00	11.46	152.982	1,297.46	-33.92	17.30	38.08	3.00	3.00	0.00
1,400.00	14.46	152.982	1,394.90	-53.90	27.48	60.50	3.00	3.00	0.00
1,500.00	17.46	152.982	1,491.03	-78.39	39.97	87.99	3.00	3.00	0.00
1,600.00	20.46	152.982	1,585.60	-107.33	54.73	120.48	3.00	3.00	0.00
1,700.00	23.46	152.982	1,678.33	-140.64	71.72	157.87	3.00	3.00	0.00
1,800.00	26.46	152.982	1,768.98	-178.23	90.88	200.07	3.00	3.00	0.00
1,896.20	29.35	152.982	1,853.99	-218.33	111.33	245.08	3.00	3.00	0.00
1,900.00	29.35	152.982	1,857.30	-219.99	112.18	246.94	0.00	0.00	0.00
2,000.00	29.35	152.982	1,944.47	-263.65	134.44	295.95	0.00	0.00	0.00
2,100.00	29.35	152.982	2,031.64	-307.31	156.70	344.96	0.00	0.00	0.00
2,200.00	29.35	152.982	2,118.80	-350.97	178.97	393.97	0.00	0.00	0.00
2,300.00	29.35	152.982	2,205.97	-394.63	201.23	442.97	0.00	0.00	0.00
2,400.00	29.35	152.982	2,293.14	-438.29	223.49	491.98	0.00	0.00	0.00
2,500.00	29.35	152.982	2,380.31	-481.95	245.76	540.99	0.00	0.00	0.00
2,600.00	29.35	152.982	2,467.47	-525.61	268.02	590.00	0.00	0.00	0.00
2,700.00	29.35	152.982	2,554.64	-569.27	290.28	639.01	0.00	0.00	0.00
2,800.00	29.35	152.982	2,641.81	-612.93	312.55	688.02	0.00	0.00	0.00
2,900.00	29.35	152.982	2,728.98	-656.59	334.81	737.02	0.00	0.00	0.00
3,000.00	29.35	152.982	2,816.15	-700.25	357.07	786.03	0.00	0.00	0.00
3,044.59	29.35	152.982	2,855.01	-719.71	367.00	807.88	0.00	0.00	0.00
3,100.00	27.68	152.982	2,903.70	-743.28	379.02	834.34	3.00	-3.00	0.00
3,200.00	24.68	152.982	2,993.43	-782.58	399.06	878.46	3.00	-3.00	0.00
3,300.00	21.68	152.982	3,085.34	-817.65	416.94	917.82	3.00	-3.00	0.00
3,400.00	18.68	152.982	3,179.19	-848.38	432.61	952.32	3.00	-3.00	0.00
3,500.00	15.68	152.982	3,274.72	-874.70	446.03	981.86	3.00	-3.00	0.00
3,600.00	12.68	152.982	3,371.66	-896.53	457.16	1,006.36	3.00	-3.00	0.00
3,700.00	9.68	152.982	3,469.75	-913.80	465.97	1,025.75	3.00	-3.00	0.00
3,800.00	6.68	152.982	3,568.72	-926.48	472.44	1,039.98	3.00	-3.00	0.00
3,900.00	3.68	152.982	3,668.30	-934.53	476.54	1,049.02	3.00	-3.00	0.00
4,000.00	0.68	152.982	3,768.21	-937.93	478.27	1,052.83	3.00	-3.00	0.00
4,022.79	0.00	0.000	3,791.00	-938.05	478.33	1,052.96	3.00	-3.00	0.00
4,100.00	0.00	0.000	3,868.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
4,200.00	0.00	0.000	3,968.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
4,300.00	0.00	0.000	4,068.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
4,400.00	0.00	0.000	4,168.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
4,500.00	0.00	0.000	4,268.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
4,600.00	0.00	0.000	4,368.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
4,700.00	0.00	0.000	4,468.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
4,800.00	0.00	0.000	4,568.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
4,900.00	0.00	0.000	4,668.21	-938.05	478.33	1,052.96	0.00	0.00	0.00

Hilcorp Energy Company

Scientific Drilling

Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Haynie 2N
Company:	Hilcorp Energy - San Juan Basin	**TVD Reference:**	GL 5784' & RKB 17' @ 5801.00ft (Drake 3)
Project:	San Juan, NM NAD27	**MD Reference:**	GL 5784' & RKB 17' @ 5801.00ft (Drake 3)
Site:	Haynie 2N	**North Reference:**	True
Well:	Haynie 2N	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,000.00	0.00	0.000	4,768.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
5,100.00	0.00	0.000	4,868.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
5,200.00	0.00	0.000	4,968.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
5,300.00	0.00	0.000	5,068.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
5,400.00	0.00	0.000	5,168.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
5,500.00	0.00	0.000	5,268.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
5,600.00	0.00	0.000	5,368.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
5,700.00	0.00	0.000	5,468.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
5,800.00	0.00	0.000	5,568.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
5,900.00	0.00	0.000	5,668.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,000.00	0.00	0.000	5,768.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,100.00	0.00	0.000	5,868.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,200.00	0.00	0.000	5,968.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,300.00	0.00	0.000	6,068.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,400.00	0.00	0.000	6,168.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,500.00	0.00	0.000	6,268.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,600.00	0.00	0.000	6,368.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,700.00	0.00	0.000	6,468.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,800.00	0.00	0.000	6,568.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
6,900.00	0.00	0.000	6,668.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
7,000.00	0.00	0.000	6,768.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
7,100.00	0.00	0.000	6,868.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
7,200.00	0.00	0.000	6,968.21	-938.05	478.33	1,052.96	0.00	0.00	0.00
7,211.79	0.00	0.000	6,980.00	-938.05	478.33	1,052.96	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Haynie 2N BTV - plan hits target center - Point	0.00	0.000	3,791.00	-938.05	478.33	2,126,350.50	453,954.50	36.843548	-107.990694
Haynie 2N BHL - plan hits target center - Point	0.00	0.000	6,980.00	-938.05	478.33	2,126,350.50	453,954.50	36.843548	-107.990694

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
4,419.79	4,188.00	7"	7.00	8.75
7,211.79	6,980.00	4 1/2"	4.50	6.25

Hilcorp Energy Company

Scientific Drilling

Planning Report

Scientific Drilling

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Haynie 2N
Company:	Hilcorp Energy - San Juan Basin	**TVD Reference:**	GL 5784' & RKB 17' @ 5801.00ft (Drake 3)
Project:	San Juan, NM NAD27	**MD Reference:**	GL 5784' & RKB 17' @ 5801.00ft (Drake 3)
Site:	Haynie 2N	**North Reference:**	True
Well:	Haynie 2N	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
836.00	836.00	Ojo Alamo		0.00	0.000
894.00	894.00	Kirtland		0.00	0.000
1,884.76	1,844.00	Fruitland Coal		0.00	0.000
2,399.84	2,293.00	Pictured Cliffs		0.00	0.000
2,529.48	2,406.00	Lewis Shale		0.00	0.000
3,247.68	3,037.00	Huerfano Bentonite		0.00	0.000
3,596.25	3,368.00	Chacra		0.00	0.000
4,062.79	3,831.00	Mesaverde / Cliffhouse		0.00	0.000
4,319.79	4,088.00	Menefee		0.00	0.000
4,820.79	4,589.00	Point Lookout		0.00	0.000
5,167.79	4,936.00	Mancos		0.00	0.000
6,086.79	5,855.00	Upper Gallup		0.00	0.000
6,104.79	5,873.00	Niobrara		0.00	0.000
6,495.79	6,264.00	Juana Lopez		0.00	0.000
6,826.79	6,595.00	Greenhorn		0.00	0.000
6,885.79	6,654.00	Graneros		0.00	0.000
6,939.79	6,708.00	Two Wells		0.00	0.000
7,015.79	6,784.00	Paugate		0.00	0.000
7,058.79	6,827.00	Cubero		0.00	0.000
7,111.79	6,880.00	Encinal Canyon		0.00	0.000

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 429673

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 429673
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	2/14/2025