

|                                          |                                                                             |                                              |
|------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------|
| <b>Well Name:</b> BURNT MESA FEDERAL COM | <b>Well Location:</b> T32N / R07W / SEC 26 / SWSW / 36.947431 / -107.544652 | <b>County or Parish/State:</b> SAN JUAN / NM |
| <b>Well Number:</b> 604H                 | <b>Type of Well:</b> CONVENTIONAL GAS WELL                                  | <b>Allottee or Tribe Name:</b>               |
| <b>Lease Number:</b> NMNM2995            | <b>Unit or CA Name:</b>                                                     | <b>Unit or CA Number:</b>                    |
| <b>US Well Number:</b>                   | <b>Operator:</b> HILCORP ENERGY COMPANY                                     |                                              |

Notice of Intent

**Sundry ID:** 2786009

|                                                       |                                     |
|-------------------------------------------------------|-------------------------------------|
| <b>Type of Submission:</b> Notice of Intent           | <b>Type of Action:</b> APD Change   |
| <b>Date Sundry Submitted:</b> 04/19/2024              | <b>Time Sundry Submitted:</b> 02:13 |
| <b>Date proposed operation will begin:</b> 05/01/2024 |                                     |

**Procedure Description:** Hilcorp Energy Company requests to revise the drilling plans on the above mentioned well. Please see the attached revised, plat, tech plans and directional drilling plans.

NOI Attachments

Procedure Description

- BURNT\_MESA\_FEDERAL\_COM\_604H\_REVISED\_PLAT.3\_20240422113646.PDF
- Burnt\_Mesa\_Federal\_Com\_604H\_\_\_\_Drilling\_Technical\_Plan\_\_\_\_Rev\_4\_20240419141305.pdf
- Burnt\_Mesa\_Federal\_Com\_604H\_Plan\_4\_20240419141226.pdf

Received by OCD: 4/25/2024 11:40:49 AM

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|                                   |                                                                      |                                       |
|-----------------------------------|----------------------------------------------------------------------|---------------------------------------|
| Well Name: BURNT MESA FEDERAL COM | Well Location: T32N / R07W / SEC 26 / SWSW / 36.947431 / -107.544652 | County or Parish/State: SAN JUAN / NM |
| Well Number: 604H                 | Type of Well: CONVENTIONAL GAS WELL                                  | Allottee or Tribe Name:               |
| Lease Number: NMNM2995            | Unit or CA Name:                                                     | Unit or CA Number:                    |
| US Well Number:                   | Operator: HILCORP ENERGY COMPANY                                     |                                       |

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

|                                              |                                  |
|----------------------------------------------|----------------------------------|
| Operator Electronic Signature: AMANDA WALKER | Signed on: APR 22, 2024 11:36 AM |
| Name: HILCORP ENERGY COMPANY                 |                                  |
| Title: Operations/Regulatory Technician      |                                  |
| Street Address: 1111 TRAVIS ST               |                                  |
| City: HOUSTON                                | State: TX                        |
| Phone: (346) 237-2177                        |                                  |
| Email address: MWALKER@HILCORP.COM           |                                  |

Field

|                      |        |      |
|----------------------|--------|------|
| Representative Name: |        |      |
| Street Address:      |        |      |
| City:                | State: | Zip: |
| Phone:               |        |      |
| Email address:       |        |      |

BLM Point of Contact

|                                 |                                         |
|---------------------------------|-----------------------------------------|
| BLM POC Name: KENNETH G RENNICK | BLM POC Title: Petroleum Engineer       |
| BLM POC Phone: 5055647742       | BLM POC Email Address: krennick@blm.gov |
| Disposition: Approved           | Disposition Date: 04/22/2024            |
| Signature: Kenneth Rennick      |                                         |

1625 N. French Drive, Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720District II  
811 S. First Street, Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170District IV  
1220 S. St. Francis Drive, Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462State of New Mexico  
Energy, Minerals & Natural Resources DepartmentForm **Page 3 of 19**  
Revised August 1, 2011Submit one copy to  
Appropriate District OfficeOIL CONSERVATION DIVISION  
1220 South St. Francis Drive  
Santa Fe, NM 87505☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                  |                                                      |                                        |
|----------------------------------|------------------------------------------------------|----------------------------------------|
| <sup>1</sup> API Number          | <sup>2</sup> Pool Code<br>97232                      | <sup>3</sup> Pool Name<br>BASIN MANCOS |
| <sup>4</sup> Property Code       | <sup>5</sup> Property Name<br>BURNT MESA FEDERAL COM | <sup>6</sup> Well Number<br>604H       |
| <sup>7</sup> OGRID No.<br>372171 | <sup>8</sup> Operator Name<br>HILCORP ENERGY COMPANY | <sup>9</sup> Elevation<br>6748'        |

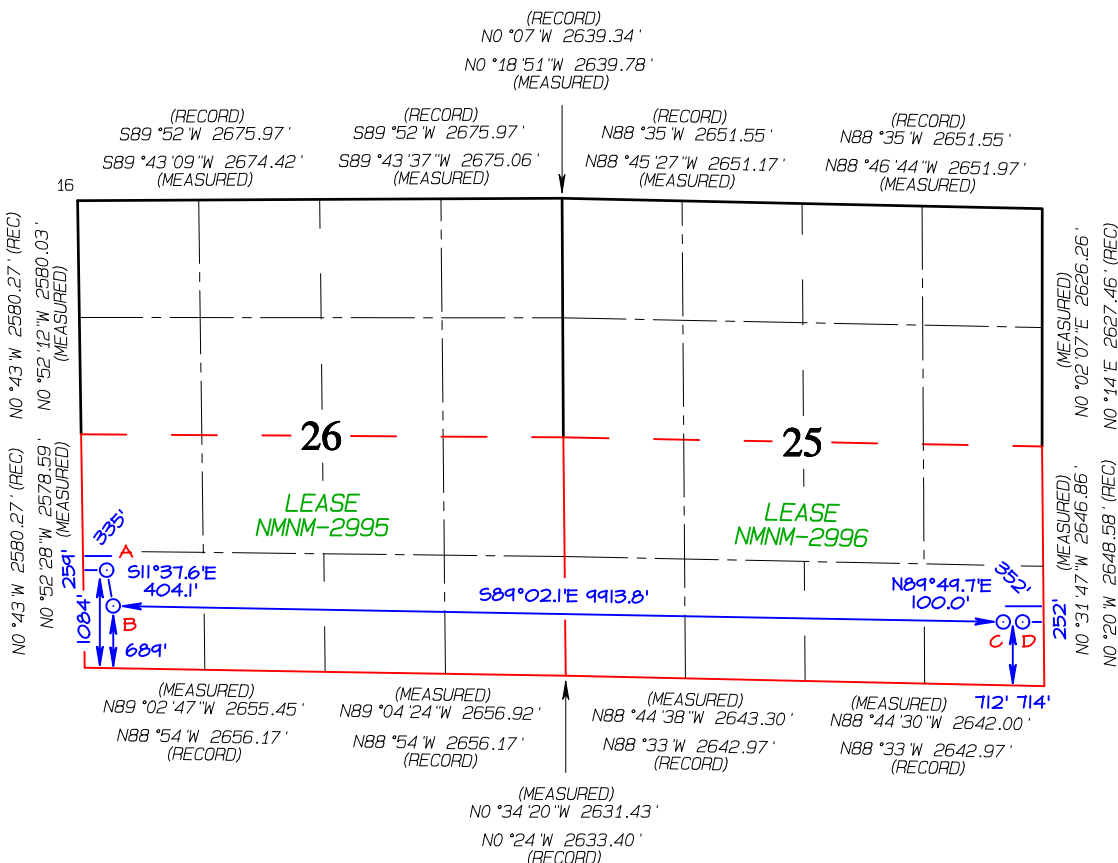
<sup>10</sup> Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| M             | 26      | 32N      | 7W    |         | 1084          | SOUTH            | 259           | WEST           | SAN JUAN |

<sup>11</sup> Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| P             | 25      | 32N      | 7W    |         | 714           | SOUTH            | 252           | EAST           | SAN JUAN |

|                                         |                                      |                               |                                  |                         |
|-----------------------------------------|--------------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br>640.00 | S/2 - Section 25<br>S/2 - Section 26 | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|-----------------------------------------|--------------------------------------|-------------------------------|----------------------------------|-------------------------|

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE  
BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION<sup>17</sup> 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 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.

Signature: Amanda Walker Date: 04/19/2024Printed Name: Amanda WalkerE-mail Address: mwalker@hilcorp.com<sup>18</sup> 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.

Date Revised: FEBRUARY 6, 2024  
Date of Survey: JULY 27, 2022

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

SURFACE LOCATION (A)  
1084' FSL 259' FWL  
SEC 26, T32N, R7W  
LAT 36.947426°N  
LONG -107.544045°W  
DATUM: NAD1927FIRST TAKE POINT (B)  
689' FSL 335' FWL  
SEC 26, T32N, R7W  
LAT 36.946338°N  
LONG -107.543770°W  
DATUM: NAD1927LAST TAKE POINT (C)  
712' FSL 352' FEL  
SEC 25, T32N, R7W  
LAT 36.945792°N  
LONG -107.509852°W  
DATUM: NAD1927END OF LATERAL (D)  
714' FSL 252' FEL  
SEC 25, T32N, R7W  
LAT 36.945792°N  
LONG -107.509510°W  
DATUM: NAD1927LAT 36.947431°N  
LONG -107.544652°W  
DATUM: NAD1983LAT 36.946343°N  
LONG -107.544378°W  
DATUM: NAD1983LAT 36.945797°N  
LONG -107.510458°W  
DATUM: NAD1983LAT 36.945797°N  
LONG -107.510116°W  
DATUM: NAD1983

San Juan County, NM

Burnt Mesa Federal Com 604H

Hilcorp Energy Company

**Technical Drilling Plan (Rev. 4)**

Hilcorp Energy Company proposes to drill and complete the referenced horizontal well targeting the Mancos formation.

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

**1. Location**

|                               |                                |                                    |                     |
|-------------------------------|--------------------------------|------------------------------------|---------------------|
| <b>Date:</b>                  | March 22, 2024                 | <b>Pool:</b>                       | Mancos              |
| <b>Well Name:</b>             | Burnt Mesa Federal Com 604H    | <b>Ground Elevation (ft. MSL):</b> | 6,748'              |
| <b>Surface Hole Location:</b> | 36.9474260° N, -107.5440450° W | <b>Total Measured Depth (ft.)</b>  | 17,808'             |
| <b>Bottom Hole Location:</b>  | 36.9457920° N, -107.5095099° W | <b>County, State:</b>              | 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:

| <b>Formation</b> | <b>Depth (ft. TVD)</b> | <b>Remarks</b>       |
|------------------|------------------------|----------------------|
| Ojo Alamo        | 2,525                  | Possible Water       |
| Kirtland         | 2,651                  | Gas & Water          |
| Fruitland        | 3,282                  | Gas & Water          |
| Pictured Cliffs  | 3,661                  | Possible Gas         |
| Lewis Shale      | 3,978                  | None                 |
| Cliffhouse       | 5,568                  | Possible Gas & Water |
| Menefee          | 5,783                  | None                 |
| Point Lookout    | 5,989                  | Gas                  |
| Mancos           | 6,467                  | Gas                  |
| Mancos A         | 6,996                  | Gas                  |
| Mancos B         | 7,184                  | Gas                  |
| Mancos C         | 7,375                  | Gas                  |
| Mancos D         | 7,465                  | Gas                  |
| Gallup           | 7,627                  | Water & Gas          |

**3. Pressure Control Equipment**

See Appendix A for BOP equipment and choke manifold diagram.

- BOP equipment will be nipped up on top of the wellhead after surface casing is set and cemented.
- Pressure control configurations will be designed to meet the minimum 5M standards.
- All equipment will have 5M pressure rating at a minimum.
- A rotating head will be installed on top of the annular as seen in the attached diagram.

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Hilcorp Energy Company

- BOP Testing: The BOPE will be tested to **250 psi (Low) for 5 minutes and 5,000 psi (High) for 10 minutes**. Pressure test **surface casing to 600 psi for 30 minutes** and **intermediate casing to 1,500 psi for 30 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. BOP equipment will be tested upon installation, every 30 days, and after any repairs are made to the BOP equipment. Annular preventors will be functionally tested at least once per week. Pipe and blind rams will be function tested each trip. **The New Mexico Oil & Gas Conservation Division and the BLM will be notified 24 hours in advance of testing BOPE**. All tests and inspections will be recorded and logged with time and results. A full BOP 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 of 30-day intervals. A BOPE shell 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.

#### 4. Casing & Cement 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   | Yield                        | Joint Strength |
| Surface                               | 17-1/2"         | 13-3/8"     | 54.5#, J55 or equiv, LTC/BTC  | 0'                 | 350' / 350'             | 1,130 psi  | 2,730 psi                    | 514,000 lbs    |
| Intermediate                          | 12-1/4"         | 9-5/8"      | 43.5# L80 or equiv, LTC/BTC   | 0'                 | 6,610' / 6,567'         | 3,810 psi  | 6,330 psi                    | 737,000 lbs    |
| Production                            | 8-1/2"          | 5-1/2"      | 20.0#, P110 or equiv, LTC/BTC | 0'                 | 17,808' / 7,338'        | 11,080 psi | 12,360 psi                   | 548,000 lbs    |
| Proposed Casing Design Safety Factors |                 |             |                               |                    |                         |            |                              |                |
| Casing String                         | Burst Design SF |             | Collapse Design SF            |                    | Joint Tensile Design SF |            | Connection Tensile Design SF |                |
| Surface                               | 16.7            |             | 13.2                          |                    | 44.7                    |            | 47.7                         |                |
| Intermediate                          | 1.61            |             | 1.17                          |                    | 3.5                     |            | 2.8                          |                |
| Production                            | 2.8             |             | 2.9                           |                    | 1.8                     |            | 1.9                          |                |



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## Notes:

- Production casing will be run from surface to TD.
- If the 8-1/2" hole is not drilled to the total planned measured depth, the production casing setting depth and length will be adjusted accordingly.
- Casing Design Parameters – Designed for full evacuation. Mud Weights used for calculations: Surface = 9.0 ppg, Intermediate = 11.5 ppg, Production = 12.0 ppg. Burst: 1.15; Collapse: 1.125; Tensile: 1.6.
  - Burst: (Casing Burst Rating) / (Maximum Burst Load (Max MW x TVD x .052))
  - Collapse: (Full hydrostatic of MW in annulus) – (Hydrostatic of vacated casing, 0.1 psi/ft)
  - Tensile: (Tensile rating) / (measured depth x casing weight)
- A toe initiation sliding sleeve will be installed at the toe of the production casing.

**B. Proposed Centralizer Program:**

| Proposed Centralizer Program |                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------|
| Interval                     | Centralizers & Placement                                                                        |
| Surface                      | 1 centralizer per joint on bottom 3 joints.                                                     |
| Intermediate                 | 1 centralizer per joint in shoe track.<br>1 centralizer every 3 <sup>rd</sup> joint to surface. |
| Production                   | Centralizers determined by hole conditions from TD to top of cement.                            |

**C. Proposed Cement Program:**

| Proposed Cement Design |                |           |                           |       |                                                                                                                |          |             |
|------------------------|----------------|-----------|---------------------------|-------|----------------------------------------------------------------------------------------------------------------|----------|-------------|
| Interval               | Depth (ft. MD) | Lead/Tail | Volume (ft <sup>3</sup> ) | Sacks | Slurry                                                                                                         | Density  | Planned TOC |
| Surface                | 350'           | Tail      | 486 ft <sup>3</sup>       | 414   | Premium Cement – 100% Excess<br>2% CaCl, 0.125 lb/sk Poly E Flake<br>1.175 ft <sup>3</sup> /sk – 5.14 gal/sk   | 15.8 ppg | Surface     |
| Intermediate           | 6,610'         | Lead      | 1,947 ft <sup>3</sup>     | 987   | HalCem Cement – 25% Excess<br>0.3% HR-5, 0.125 lb/sk Poly E Flake<br>1.974 ft <sup>3</sup> /sk – 10.28 gal/sk  | 12.3 ppg | Surface     |
|                        |                | Tail      | 630 ft <sup>3</sup>       | 487   | VariCem Cement – 25 % Excess<br>0.1% HR-5, 0.125 lb/sk Poly E Flake<br>1.295 ft <sup>3</sup> /sk – 5.69 gal/sk | 13.5 ppg | 5,000'      |
| Production             | 17,808'        | Tail      | 3,241 ft <sup>3</sup>     | 2,390 | BondCem Cement – 10% Excess<br>0.3% Super CBL, 0.1% HR-601<br>1.356 ft <sup>3</sup> /sk – 6.08 gal/sk          | 13.3 ppg | 5,000'      |

## Notes:

- The cement slurry additives may be adjusted to accommodate required pump and compressive test times.

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- 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 will be placed appropriately as conditions indicate.
- 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 nipped 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).

## 5. Drilling Fluids Program

### A. Proposed Drilling Fluids Program:

| Proposed Drilling Fluids Program |              |                  |                           |                                    |                   |
|----------------------------------|--------------|------------------|---------------------------|------------------------------------|-------------------|
| Interval                         | Fluid Type   | Density<br>(ppg) | Fluid Loss<br>(mL/30 min) | Invert Ratio<br>(%Diesel / %Brine) | Depth<br>(ft. MD) |
| Surface                          | Water/Gel    | 8.3 – 9.2        | NC                        | N/A                                | 0' – 350'         |
| Intermediate                     | LSND / Gel   | 8.4 – 10.0       | <6                        | N/A                                | 350' – 6,610'     |
| Production                       | Oil Base Mud | 10.0 – 12.0      | 6 – 8                     | 70/30 – 75/25                      | 6,610' – 17,808'  |

#### Notes:

- In the 8-1/2" production section, oil base mud will be utilized which will be an invert mud. The base fluid will be diesel. Brine fluid will be CaCl<sub>2</sub> or KCl.
- 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: 1,803 bbls (10,113 ft<sup>3</sup>).

## 6. Estimated Pressures & Drilling Hazards

### A. Estimated Pressures

- Estimated Reservoir Pressure of Mancos Shale target: 4,000 – 4,200 psi
- Maximum Anticipated Surface Pressure: 1,900 psi
- No over-pressured intervals expected (aside from Mancos Shale target).
- There is production from the Fruitland Coal, Mesa Verde and Pictured Cliffs formations in offset wells in the area, which could result in these formations being depleted.



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Hilcorp Energy Company

**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 section. 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.

**7. Pilot Hole**

No pilot hole for this wellbore.

**8. Testing, Logging, Coring**

**A. Mud Logging**

- Mud loggers will collect formation samples every 30' from surface casing shoe to TD of the well.

**B. MWD**

- Measurement while drilling tools will be utilized on all sections of the well to measure and record inclination and azimuth.

**C. LWD**

- Logging while drilling tools (gamma ray) will be utilized while drilling the production section from the intermediate casing shoe to the production hole section TD to assist in staying in the desired interval while drilling the horizontal section.

**D. Open Hole Logging**

- None

**E. Coring**

- None

**F. Cased Hole Logging**



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Hilcorp Energy Company

- The 9-5/8" 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 temperature survey or a cement bod log will be run to verify top of cement.

## 9. Directional Drilling Plan

- The directional drilling plan and plot are attached.
- The directional plan is built from geologic targets from offset wells and lease boundaries. The production hole section will be landed and drilled horizontally within the target formation utilizing LWD tools to steer the wellbore. On-site adjustments to the directional plan will be made as formation and wellbore dictate.

## 10. Completion

### A. Pressure Testing

- A pressure test of the 5-1/2" production casing will be conducted to the maximum allowable frac pressure for 30 minutes.
- Pressure will be cycled to shift the toe sleeve open.

### 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 lateral length and real-time pumping conditions during the stimulation.
- Individual stages will be perforated on wireline and isolated using frac plugs or dissolvable frac plugs.
- Upon completion of the stimulation operation, frac plugs will be drilled out and the stimulation fluid will be flowed back.

\*NOTE: Although this horizontal well may be drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 8(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 8(2) NMAC, 19.15.16.15 8(2)NMAC, and 19.15.16.15 8(4) NMAC.

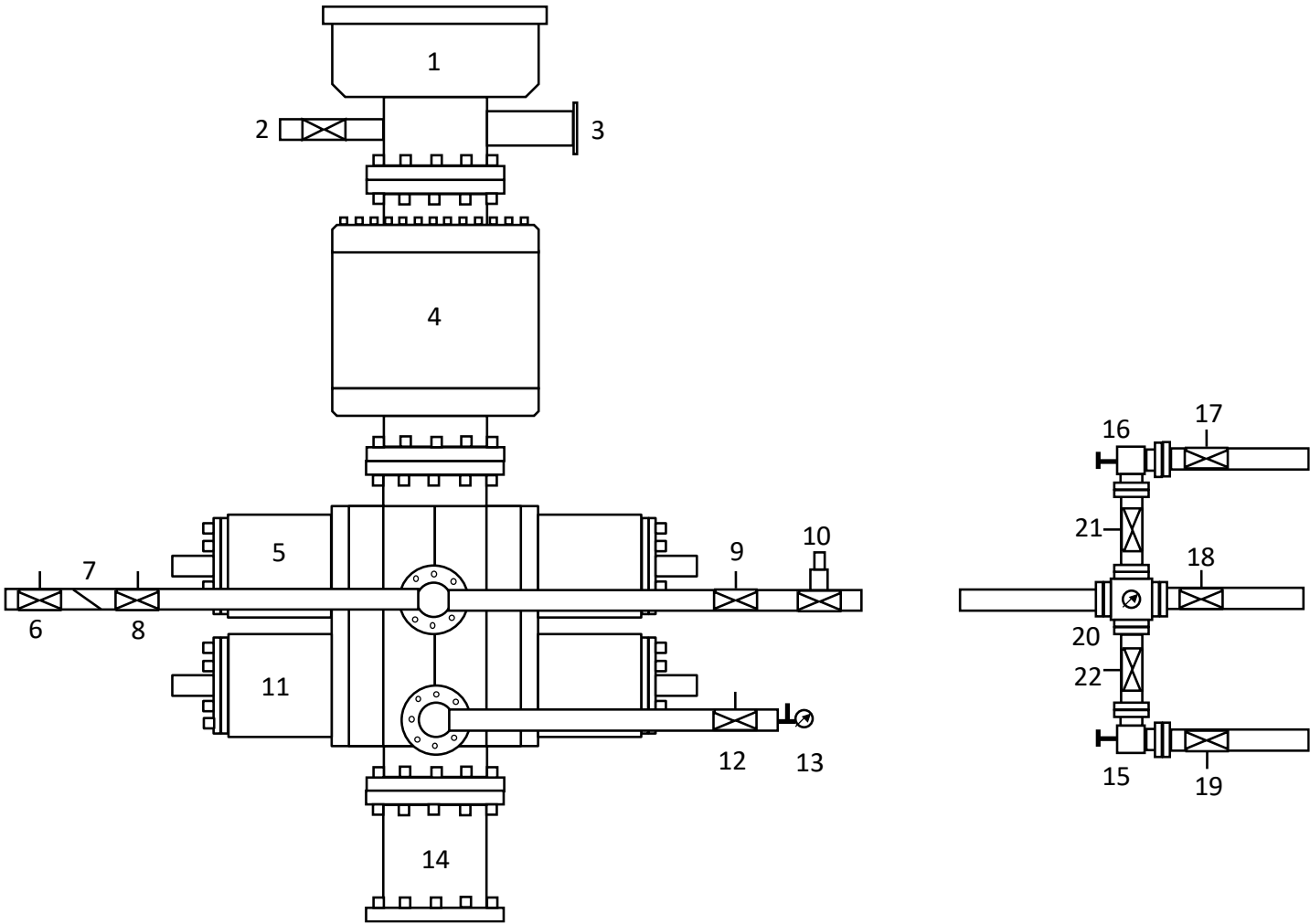
San Juan County, NM

Burnt Mesa Federal Com 604H



Appendix A

13-5/8” 5M BOP & 5M 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  | 5M Annular Preventer     | 15 | Manual Choke                  |
| 5  | 5M Pipe Rams             | 16 | Hydraulically 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 | 5M Blind Rams            | 22 | Manual Isolation Valve        |



Company: Hilcorp Energy Corp.  
Project: San Juan, NM NAD27  
Site: Burnt Mesa Pad  
Well: Burnt Mesa Federal Com 604H  
Wellbore: OH  
Design: Plan #4

PROJECT DETAILS: San Juan, NM NAD27

Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCONUS)  
Ellipsoid: Clarke 1866  
Zone: New Mexico West 3003  
System Datum: Mean Sea Level  
Local North: True



WELL DETAILS: Burnt Mesa Federal Com 604H

GL 6748' & RKB 17' @ 6765.00ft  
+N/-S+E/-W    Northing    Easting    Latitude    Longitude  
0.00    0.00    2164257.93    584534.83    36.9474260    -107.5440450    A09

Plan: Plan #4 (Burnt Mesa Federal Com 604H/OH)

Created By: Janie Collin Date: 14:20, February 01 2024



Azimuths to True North  
Magnetic North: 8°

Magnetic Field  
Strength: 49615  
Dip Angle: 63.8°  
Date: 12/31/2021  
Model: HDGM2021\_F

DESIGN TARGET DETAILS

| Name                | TVD     | +N/-S   | +E/-W    | Northing   | Easting   | Latitude   | Longitude    |
|---------------------|---------|---------|----------|------------|-----------|------------|--------------|
| BMFC 604H LP Rev 3  | 7341.00 | -395.97 | 80.37    | 2163862.20 | 584616.40 | 36.9463383 | -107.5437700 |
| BMFC 604H BHL Rev 3 | 7338.00 | -593.06 | 10092.04 | 2163695.50 | 594628.60 | 36.9457920 | -107.5095099 |
| BMFC 604H LTP Rev 1 | 7338.00 | -593.06 | 9992.00  | 2163695.20 | 594528.56 | 36.9457921 | -107.5098522 |

SECTION DETAILS

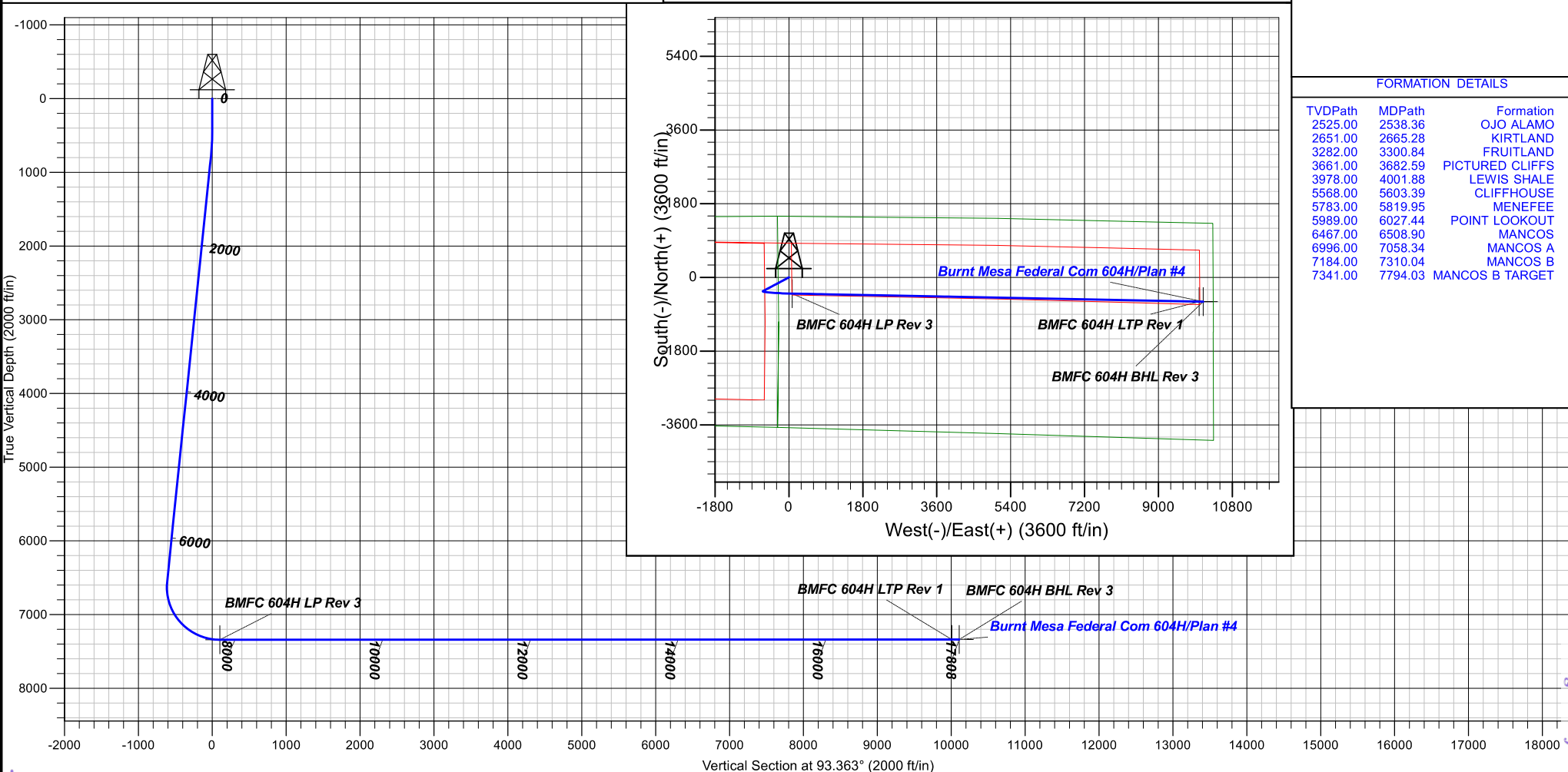
| MD       | Inc   | Azi     | TVD     | +N/-S   | +E/-W    | Dleg | TFace   | VSect    |
|----------|-------|---------|---------|---------|----------|------|---------|----------|
| 0.00     | 0.00  | 0.000   | 0.00    | 0.00    | 0.00     | 0.00 | 0.00    | 0.00     |
| 450.00   | 0.00  | 0.000   | 450.00  | 0.00    | 0.00     | 0.00 | 0.00    | 0.00     |
| 793.68   | 6.87  | 241.996 | 792.86  | -9.67   | -18.18   | 2.00 | 242.00  | -17.58   |
| 6593.80  | 6.87  | 241.996 | 6551.29 | -335.60 | -631.06  | 0.00 | 0.00    | -610.29  |
| 7794.03  | 90.02 | 91.128  | 7341.00 | -395.97 | 80.37    | 8.00 | -150.69 | 103.46   |
| 17807.64 | 90.02 | 91.128  | 7338.00 | -593.06 | 10092.04 | 0.00 | 0.00    | 10109.45 |

CASING DETAILS

No casing data is available

FORMATION DETAILS

| TVDPath | MDPath  | Formation       |
|---------|---------|-----------------|
| 2525.00 | 2538.36 | OJO ALAMO       |
| 2651.00 | 2665.28 | KIRTLAND        |
| 3282.00 | 3300.84 | FRUITLAND       |
| 3661.00 | 3682.59 | PICTURED CLIFFS |
| 3978.00 | 4001.88 | LEWIS SHALE     |
| 5568.00 | 5603.39 | CLIFFHOUSE      |
| 5783.00 | 5819.95 | MENEFEE         |
| 5989.00 | 6027.44 | POINT LOOKOUT   |
| 6467.00 | 6508.90 | MANCOS          |
| 6996.00 | 7058.34 | MANCOS A        |
| 7184.00 | 7310.04 | MANCOS B        |
| 7341.00 | 7794.03 | MANCOS B TARGET |





## **Hilcorp Energy Corp.**

**San Juan, NM NAD27**

**Burnt Mesa Pad**

**Burnt Mesa Federal Com 604H - Slot A09**

**OH**

**Plan: Plan #4**

## **Standard Planning Report**

**01 February, 2024**





# Lonestar Consulting, LLC

## Planning Report



|                  |                             |                                     |                                             |
|------------------|-----------------------------|-------------------------------------|---------------------------------------------|
| <b>Database:</b> | Grand Junction              | <b>Local Co-ordinate Reference:</b> | Well Burnt Mesa Federal Com 604H - Slot A09 |
| <b>Company:</b>  | Hilcorp Energy Corp.        | <b>TVD Reference:</b>               | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Project:</b>  | San Juan, NM NAD27          | <b>MD Reference:</b>                | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Site:</b>     | Burnt Mesa Pad              | <b>North Reference:</b>             | True                                        |
| <b>Well:</b>     | Burnt Mesa Federal Com 604H | <b>Survey Calculation Method:</b>   | Minimum Curvature                           |
| <b>Wellbore:</b> | OH                          |                                     |                                             |
| <b>Design:</b>   | Plan #4                     |                                     |                                             |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | San Juan, NM NAD27                   |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico West 3003                 |                      |                |

| Site                    |                       | Burnt Mesa Pad |                   |            |              |
|-------------------------|-----------------------|----------------|-------------------|------------|--------------|
| Site Position:<br>From: | Lat/Long              | Northing:      | 2,164,058.07 usft | Latitude:  | 36.9468770   |
|                         |                       | Easting:       | 584,538.07 usft   | Longitude: | -107.5440360 |
|                         | Position Uncertainty: | 0.00 ft        | Slot Radius:      | 13.20 in   |              |

| Well                 | Burnt Mesa Federal Com 604H - Slot A09 |         |                     |              |      |               |              |
|----------------------|----------------------------------------|---------|---------------------|--------------|------|---------------|--------------|
| Well Position        | +N/-S                                  | 0.00 ft | Northing:           | 2,164,257.93 | usft | Latitude:     | 36.9474260   |
|                      | +E/-W                                  | 0.00 ft | Easting:            | 584,534.83   | usft | Longitude:    | -107.5440450 |
| Position Uncertainty |                                        | 0.00 ft | Wellhead Elevation: |              | ft   | Ground Level: | 6,748.00 ft  |
| Grid Convergence:    |                                        | 0.17 °  |                     |              |      |               |              |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | OH                |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | HDGM2021_FILE     | 12/31/2021         | 8.77                   | 63.38                | 49,615.40000000            |

|                          |                              |                   |                      |                      |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| <b>Design</b>            | Plan #4                      |                   |                      |                      |
| <b>Audit Notes:</b>      |                              |                   |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                | PLAN              | <b>Tie On Depth:</b> | 0.00                 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b>    | <b>Direction (°)</b> |
|                          | 0.00                         | 0.00              | 0.00                 | 93.363               |

|                                 |                      |                          |                  |                |
|---------------------------------|----------------------|--------------------------|------------------|----------------|
| <b>Plan Survey Tool Program</b> | <b>Date</b>          | 2/1/2024                 |                  |                |
| <b>Depth From (ft)</b>          | <b>Depth To (ft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Remarks</b> |
| 1                               | 0.00                 | 17,807.64 Plan #4 (OH)   | MWD+HDGM         |                |
|                                 |                      |                          | OWSG MWD + HDGM  |                |

|                            |                        |                    |                            |                   |                   |                                |                               |                              |                |                    |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|--------------------------------|-------------------------------|------------------------------|----------------|--------------------|
| <b>Plan Sections</b>       |                        |                    |                            |                   |                   |                                |                               |                              |                |                    |
| <b>Measured Depth (ft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> | <b>TFO (°)</b> | <b>Target</b>      |
| 0.00                       | 0.00                   | 0.000              | 0.00                       | 0.00              | 0.00              | 0.00                           | 0.00                          | 0.00                         | 0.00           |                    |
| 450.00                     | 0.00                   | 0.000              | 450.00                     | 0.00              | 0.00              | 0.00                           | 0.00                          | 0.00                         | 0.00           |                    |
| 793.68                     | 6.87                   | 241.996            | 792.86                     | -9.67             | -18.18            | 2.00                           | 2.00                          | 0.00                         | 242.00         |                    |
| 6,593.80                   | 6.87                   | 241.996            | 6,551.29                   | -335.60           | -631.06           | 0.00                           | 0.00                          | 0.00                         | 0.00           |                    |
| 7,794.03                   | 90.02                  | 91.128             | 7,341.00                   | -395.97           | 80.37             | 8.00                           | 6.93                          | -12.57                       | -150.69        | BMFC 604H LP Rev 3 |
| 17,807.64                  | 90.02                  | 91.128             | 7,338.00                   | -593.06           | 10,092.04         | 0.00                           | 0.00                          | 0.00                         | 0.00           | BMFC 604H BHL Rev  |



## Lonestar Consulting, LLC

## Planning Report



|                  |                             |                                     |                                             |
|------------------|-----------------------------|-------------------------------------|---------------------------------------------|
| <b>Database:</b> | Grand Junction              | <b>Local Co-ordinate Reference:</b> | Well Burnt Mesa Federal Com 604H - Slot A09 |
| <b>Company:</b>  | Hilcorp Energy Corp.        | <b>TVD Reference:</b>               | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Project:</b>  | San Juan, NM NAD27          | <b>MD Reference:</b>                | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Site:</b>     | Burnt Mesa Pad              | <b>North Reference:</b>             | True                                        |
| <b>Well:</b>     | Burnt Mesa Federal Com 604H | <b>Survey Calculation Method:</b>   | Minimum Curvature                           |
| <b>Wellbore:</b> | OH                          |                                     |                                             |
| <b>Design:</b>   | Plan #4                     |                                     |                                             |

| 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                  |
| 450.00              | 0.00            | 0.000       | 450.00              | 0.00       | 0.00       | 0.00                  | 0.00                    | 0.00                   | 0.00                  |
| 500.00              | 1.00            | 241.996     | 500.00              | -0.20      | -0.39      | -0.37                 | 2.00                    | 2.00                   | 0.00                  |
| 600.00              | 3.00            | 241.996     | 599.93              | -1.84      | -3.47      | -3.35                 | 2.00                    | 2.00                   | 0.00                  |
| 700.00              | 5.00            | 241.996     | 699.68              | -5.12      | -9.62      | -9.31                 | 2.00                    | 2.00                   | 0.00                  |
| 793.68              | 6.87            | 241.996     | 792.86              | -9.67      | -18.18     | -17.58                | 2.00                    | 2.00                   | 0.00                  |
| 800.00              | 6.87            | 241.996     | 799.13              | -10.02     | -18.85     | -18.23                | 0.00                    | 0.00                   | 0.00                  |
| 900.00              | 6.87            | 241.996     | 898.41              | -15.64     | -29.41     | -28.45                | 0.00                    | 0.00                   | 0.00                  |
| 1,000.00            | 6.87            | 241.996     | 997.69              | -21.26     | -39.98     | -38.66                | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00            | 6.87            | 241.996     | 1,096.97            | -26.88     | -50.55     | -48.88                | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00            | 6.87            | 241.996     | 1,196.26            | -32.50     | -61.11     | -59.10                | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00            | 6.87            | 241.996     | 1,295.54            | -38.12     | -71.68     | -69.32                | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00            | 6.87            | 241.996     | 1,394.82            | -43.74     | -82.25     | -79.54                | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00            | 6.87            | 241.996     | 1,494.10            | -49.36     | -92.81     | -89.76                | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00            | 6.87            | 241.996     | 1,593.38            | -54.98     | -103.38    | -99.98                | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00            | 6.87            | 241.996     | 1,692.66            | -60.60     | -113.95    | -110.20               | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00            | 6.87            | 241.996     | 1,791.94            | -66.22     | -124.51    | -120.42               | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00            | 6.87            | 241.996     | 1,891.22            | -71.84     | -135.08    | -130.63               | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00            | 6.87            | 241.996     | 1,990.51            | -77.46     | -145.65    | -140.85               | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00            | 6.87            | 241.996     | 2,089.79            | -83.08     | -156.22    | -151.07               | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00            | 6.87            | 241.996     | 2,189.07            | -88.70     | -166.78    | -161.29               | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00            | 6.87            | 241.996     | 2,288.35            | -94.31     | -177.35    | -171.51               | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00            | 6.87            | 241.996     | 2,387.63            | -99.93     | -187.92    | -181.73               | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00            | 6.87            | 241.996     | 2,486.91            | -105.55    | -198.48    | -191.95               | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00            | 6.87            | 241.996     | 2,586.19            | -111.17    | -209.05    | -202.17               | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00            | 6.87            | 241.996     | 2,685.47            | -116.79    | -219.62    | -212.39               | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00            | 6.87            | 241.996     | 2,784.76            | -122.41    | -230.18    | -222.61               | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00            | 6.87            | 241.996     | 2,884.04            | -128.03    | -240.75    | -232.82               | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00            | 6.87            | 241.996     | 2,983.32            | -133.65    | -251.32    | -243.04               | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00            | 6.87            | 241.996     | 3,082.60            | -139.27    | -261.88    | -253.26               | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00            | 6.87            | 241.996     | 3,181.88            | -144.89    | -272.45    | -263.48               | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00            | 6.87            | 241.996     | 3,281.16            | -150.51    | -283.02    | -273.70               | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00            | 6.87            | 241.996     | 3,380.44            | -156.13    | -293.58    | -283.92               | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00            | 6.87            | 241.996     | 3,479.72            | -161.75    | -304.15    | -294.14               | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00            | 6.87            | 241.996     | 3,579.01            | -167.37    | -314.72    | -304.36               | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00            | 6.87            | 241.996     | 3,678.29            | -172.99    | -325.28    | -314.58               | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00            | 6.87            | 241.996     | 3,777.57            | -178.61    | -335.85    | -324.79               | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00            | 6.87            | 241.996     | 3,876.85            | -184.23    | -346.42    | -335.01               | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00            | 6.87            | 241.996     | 3,976.13            | -189.85    | -356.98    | -345.23               | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00            | 6.87            | 241.996     | 4,075.41            | -195.46    | -367.55    | -355.45               | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00            | 6.87            | 241.996     | 4,174.69            | -201.08    | -378.12    | -365.67               | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00            | 6.87            | 241.996     | 4,273.97            | -206.70    | -388.68    | -375.89               | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00            | 6.87            | 241.996     | 4,373.26            | -212.32    | -399.25    | -386.11               | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00            | 6.87            | 241.996     | 4,472.54            | -217.94    | -409.82    | -396.33               | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00            | 6.87            | 241.996     | 4,571.82            | -223.56    | -420.38    | -406.55               | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00            | 6.87            | 241.996     | 4,671.10            | -229.18    | -430.95    | -416.76               | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00            | 6.87            | 241.996     | 4,770.38            | -234.80    | -441.52    | -426.98               | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00            | 6.87            | 241.996     | 4,869.66            | -240.42    | -452.08    | -437.20               | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00            | 6.87            | 241.996     | 4,968.94            | -246.04    | -462.65    | -447.42               | 0.00                    | 0.00                   | 0.00                  |



## Lonestar Consulting, LLC

## Planning Report



|                  |                             |                                     |                                             |
|------------------|-----------------------------|-------------------------------------|---------------------------------------------|
| <b>Database:</b> | Grand Junction              | <b>Local Co-ordinate Reference:</b> | Well Burnt Mesa Federal Com 604H - Slot A09 |
| <b>Company:</b>  | Hilcorp Energy Corp.        | <b>TVD Reference:</b>               | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Project:</b>  | San Juan, NM NAD27          | <b>MD Reference:</b>                | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Site:</b>     | Burnt Mesa Pad              | <b>North Reference:</b>             | True                                        |
| <b>Well:</b>     | Burnt Mesa Federal Com 604H | <b>Survey Calculation Method:</b>   | Minimum Curvature                           |
| <b>Wellbore:</b> | OH                          |                                     |                                             |
| <b>Design:</b>   | Plan #4                     |                                     |                                             |

| 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) |  |
| 5,100.00            | 6.87            | 241.996     | 5,068.22            | -251.66    | -473.22    | -457.64               | 0.00                    | 0.00                   | 0.00                  |  |
| 5,200.00            | 6.87            | 241.996     | 5,167.51            | -257.28    | -483.79    | -467.86               | 0.00                    | 0.00                   | 0.00                  |  |
| 5,300.00            | 6.87            | 241.996     | 5,266.79            | -262.90    | -494.35    | -478.08               | 0.00                    | 0.00                   | 0.00                  |  |
| 5,400.00            | 6.87            | 241.996     | 5,366.07            | -268.52    | -504.92    | -488.30               | 0.00                    | 0.00                   | 0.00                  |  |
| 5,500.00            | 6.87            | 241.996     | 5,465.35            | -274.14    | -515.49    | -498.52               | 0.00                    | 0.00                   | 0.00                  |  |
| 5,600.00            | 6.87            | 241.996     | 5,564.63            | -279.76    | -526.05    | -508.73               | 0.00                    | 0.00                   | 0.00                  |  |
| 5,700.00            | 6.87            | 241.996     | 5,663.91            | -285.38    | -536.62    | -518.95               | 0.00                    | 0.00                   | 0.00                  |  |
| 5,800.00            | 6.87            | 241.996     | 5,763.19            | -291.00    | -547.19    | -529.17               | 0.00                    | 0.00                   | 0.00                  |  |
| 5,900.00            | 6.87            | 241.996     | 5,862.47            | -296.61    | -557.75    | -539.39               | 0.00                    | 0.00                   | 0.00                  |  |
| 6,000.00            | 6.87            | 241.996     | 5,961.76            | -302.23    | -568.32    | -549.61               | 0.00                    | 0.00                   | 0.00                  |  |
| 6,100.00            | 6.87            | 241.996     | 6,061.04            | -307.85    | -578.89    | -559.83               | 0.00                    | 0.00                   | 0.00                  |  |
| 6,200.00            | 6.87            | 241.996     | 6,160.32            | -313.47    | -589.45    | -570.05               | 0.00                    | 0.00                   | 0.00                  |  |
| 6,300.00            | 6.87            | 241.996     | 6,259.60            | -319.09    | -600.02    | -580.27               | 0.00                    | 0.00                   | 0.00                  |  |
| 6,400.00            | 6.87            | 241.996     | 6,358.88            | -324.71    | -610.59    | -590.49               | 0.00                    | 0.00                   | 0.00                  |  |
| 6,500.00            | 6.87            | 241.996     | 6,458.16            | -330.33    | -621.15    | -600.70               | 0.00                    | 0.00                   | 0.00                  |  |
| 6,593.80            | 6.87            | 241.996     | 6,551.29            | -335.60    | -631.06    | -610.29               | 0.00                    | 0.00                   | 0.00                  |  |
| 6,600.00            | 6.45            | 239.833     | 6,557.45            | -335.95    | -631.69    | -610.90               | 8.00                    | -6.90                  | -34.89                |  |
| 6,700.00            | 4.18            | 144.486     | 6,657.16            | -341.75    | -634.43    | -613.29               | 8.00                    | -2.26                  | -95.35                |  |
| 6,800.00            | 11.01           | 108.678     | 6,756.27            | -347.79    | -623.25    | -601.77               | 8.00                    | 6.83                   | -35.81                |  |
| 6,900.00            | 18.79           | 101.063     | 6,852.84            | -353.95    | -598.35    | -576.56               | 8.00                    | 7.77                   | -7.62                 |  |
| 7,000.00            | 26.69           | 97.832      | 6,945.00            | -360.11    | -560.24    | -538.15               | 8.00                    | 7.90                   | -3.23                 |  |
| 7,100.00            | 34.64           | 96.002      | 7,030.94            | -366.15    | -509.64    | -487.28               | 8.00                    | 7.95                   | -1.83                 |  |
| 7,200.00            | 42.60           | 94.788      | 7,109.01            | -371.96    | -447.55    | -424.96               | 8.00                    | 7.96                   | -1.21                 |  |
| 7,300.00            | 50.58           | 93.894      | 7,177.68            | -377.41    | -375.17    | -352.38               | 8.00                    | 7.97                   | -0.89                 |  |
| 7,400.00            | 58.56           | 93.185      | 7,235.61            | -382.41    | -293.91    | -270.97               | 8.00                    | 7.98                   | -0.71                 |  |
| 7,500.00            | 66.54           | 92.588      | 7,281.68            | -386.86    | -205.36    | -182.31               | 8.00                    | 7.98                   | -0.60                 |  |
| 7,600.00            | 74.52           | 92.060      | 7,314.98            | -390.67    | -111.23    | -88.12                | 8.00                    | 7.98                   | -0.53                 |  |
| 7,700.00            | 82.51           | 91.571      | 7,334.88            | -393.77    | -13.36     | 9.76                  | 8.00                    | 7.99                   | -0.49                 |  |
| 7,794.03            | 90.02           | 91.128      | 7,341.00            | -395.97    | 80.37      | 103.46                | 8.00                    | 7.99                   | -0.47                 |  |
| 7,800.00            | 90.02           | 91.128      | 7,341.00            | -396.09    | 86.35      | 109.43                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,900.00            | 90.02           | 91.128      | 7,340.97            | -398.06    | 186.33     | 209.36                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,000.00            | 90.02           | 91.128      | 7,340.94            | -400.03    | 286.31     | 309.28                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,100.00            | 90.02           | 91.128      | 7,340.91            | -402.00    | 386.29     | 409.20                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,200.00            | 90.02           | 91.128      | 7,340.88            | -403.97    | 486.27     | 509.13                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,300.00            | 90.02           | 91.128      | 7,340.85            | -405.93    | 586.25     | 609.05                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,400.00            | 90.02           | 91.128      | 7,340.82            | -407.90    | 686.23     | 708.98                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,500.00            | 90.02           | 91.128      | 7,340.79            | -409.87    | 786.21     | 808.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,600.00            | 90.02           | 91.128      | 7,340.76            | -411.84    | 886.19     | 908.82                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,700.00            | 90.02           | 91.128      | 7,340.73            | -413.81    | 986.17     | 1,008.75              | 0.00                    | 0.00                   | 0.00                  |  |
| 8,800.00            | 90.02           | 91.128      | 7,340.70            | -415.77    | 1,086.15   | 1,108.67              | 0.00                    | 0.00                   | 0.00                  |  |
| 8,900.00            | 90.02           | 91.128      | 7,340.67            | -417.74    | 1,186.13   | 1,208.60              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,000.00            | 90.02           | 91.128      | 7,340.64            | -419.71    | 1,286.11   | 1,308.52              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,100.00            | 90.02           | 91.128      | 7,340.61            | -421.68    | 1,386.09   | 1,408.44              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,200.00            | 90.02           | 91.128      | 7,340.58            | -423.65    | 1,486.07   | 1,508.37              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,300.00            | 90.02           | 91.128      | 7,340.55            | -425.62    | 1,586.05   | 1,608.29              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,400.00            | 90.02           | 91.128      | 7,340.52            | -427.58    | 1,686.04   | 1,708.22              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,500.00            | 90.02           | 91.128      | 7,340.49            | -429.55    | 1,786.02   | 1,808.14              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,600.00            | 90.02           | 91.128      | 7,340.46            | -431.52    | 1,886.00   | 1,908.06              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,700.00            | 90.02           | 91.128      | 7,340.43            | -433.49    | 1,985.98   | 2,007.99              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,800.00            | 90.02           | 91.128      | 7,340.40            | -435.46    | 2,085.96   | 2,107.91              | 0.00                    | 0.00                   | 0.00                  |  |
| 9,900.00            | 90.02           | 91.128      | 7,340.37            | -437.42    | 2,185.94   | 2,207.83              | 0.00                    | 0.00                   | 0.00                  |  |
| 10,000.00           | 90.02           | 91.128      | 7,340.34            | -439.39    | 2,285.92   | 2,307.76              | 0.00                    | 0.00                   | 0.00                  |  |
| 10,100.00           | 90.02           | 91.128      | 7,340.31            | -441.36    | 2,385.90   | 2,407.68              | 0.00                    | 0.00                   | 0.00                  |  |



## Lonestar Consulting, LLC

## Planning Report



|                  |                             |                                     |                                             |
|------------------|-----------------------------|-------------------------------------|---------------------------------------------|
| <b>Database:</b> | Grand Junction              | <b>Local Co-ordinate Reference:</b> | Well Burnt Mesa Federal Com 604H - Slot A09 |
| <b>Company:</b>  | Hilcorp Energy Corp.        | <b>TVD Reference:</b>               | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Project:</b>  | San Juan, NM NAD27          | <b>MD Reference:</b>                | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Site:</b>     | Burnt Mesa Pad              | <b>North Reference:</b>             | True                                        |
| <b>Well:</b>     | Burnt Mesa Federal Com 604H | <b>Survey Calculation Method:</b>   | Minimum Curvature                           |
| <b>Wellbore:</b> | OH                          |                                     |                                             |
| <b>Design:</b>   | Plan #4                     |                                     |                                             |

| 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) |  |
| 10,200.00           | 90.02           | 91.128      | 7,340.28            | -443.33    | 2,485.88   | 2,507.61              | 0.00                    | 0.00                   | 0.00                  |  |
| 10,300.00           | 90.02           | 91.128      | 7,340.25            | -445.30    | 2,585.86   | 2,607.53              | 0.00                    | 0.00                   | 0.00                  |  |
| 10,400.00           | 90.02           | 91.128      | 7,340.22            | -447.27    | 2,685.84   | 2,707.45              | 0.00                    | 0.00                   | 0.00                  |  |
| 10,500.00           | 90.02           | 91.128      | 7,340.19            | -449.23    | 2,785.82   | 2,807.38              | 0.00                    | 0.00                   | 0.00                  |  |
| 10,600.00           | 90.02           | 91.128      | 7,340.16            | -451.20    | 2,885.80   | 2,907.30              | 0.00                    | 0.00                   | 0.00                  |  |
| 10,700.00           | 90.02           | 91.128      | 7,340.13            | -453.17    | 2,985.78   | 3,007.23              | 0.00                    | 0.00                   | 0.00                  |  |
| 10,800.00           | 90.02           | 91.128      | 7,340.10            | -455.14    | 3,085.76   | 3,107.15              | 0.00                    | 0.00                   | 0.00                  |  |
| 10,900.00           | 90.02           | 91.128      | 7,340.07            | -457.11    | 3,185.74   | 3,207.07              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,000.00           | 90.02           | 91.128      | 7,340.04            | -459.07    | 3,285.73   | 3,307.00              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,100.00           | 90.02           | 91.128      | 7,340.01            | -461.04    | 3,385.71   | 3,406.92              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,200.00           | 90.02           | 91.128      | 7,339.98            | -463.01    | 3,485.69   | 3,506.85              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,300.00           | 90.02           | 91.128      | 7,339.95            | -464.98    | 3,585.67   | 3,606.77              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,400.00           | 90.02           | 91.128      | 7,339.92            | -466.95    | 3,685.65   | 3,706.69              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,500.00           | 90.02           | 91.128      | 7,339.89            | -468.92    | 3,785.63   | 3,806.62              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,600.00           | 90.02           | 91.128      | 7,339.86            | -470.88    | 3,885.61   | 3,906.54              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,700.00           | 90.02           | 91.128      | 7,339.83            | -472.85    | 3,985.59   | 4,006.47              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,800.00           | 90.02           | 91.128      | 7,339.80            | -474.82    | 4,085.57   | 4,106.39              | 0.00                    | 0.00                   | 0.00                  |  |
| 11,900.00           | 90.02           | 91.128      | 7,339.77            | -476.79    | 4,185.55   | 4,206.31              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,000.00           | 90.02           | 91.128      | 7,339.74            | -478.76    | 4,285.53   | 4,306.24              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,100.00           | 90.02           | 91.128      | 7,339.71            | -480.72    | 4,385.51   | 4,406.16              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,200.00           | 90.02           | 91.128      | 7,339.68            | -482.69    | 4,485.49   | 4,506.08              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,300.00           | 90.02           | 91.128      | 7,339.65            | -484.66    | 4,585.47   | 4,606.01              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,400.00           | 90.02           | 91.128      | 7,339.62            | -486.63    | 4,685.45   | 4,705.93              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,500.00           | 90.02           | 91.128      | 7,339.59            | -488.60    | 4,785.43   | 4,805.86              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,600.00           | 90.02           | 91.128      | 7,339.56            | -490.57    | 4,885.42   | 4,905.78              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,700.00           | 90.02           | 91.128      | 7,339.53            | -492.53    | 4,985.40   | 5,005.70              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,800.00           | 90.02           | 91.128      | 7,339.50            | -494.50    | 5,085.38   | 5,105.63              | 0.00                    | 0.00                   | 0.00                  |  |
| 12,900.00           | 90.02           | 91.128      | 7,339.47            | -496.47    | 5,185.36   | 5,205.55              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,000.00           | 90.02           | 91.128      | 7,339.44            | -498.44    | 5,285.34   | 5,305.48              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,100.00           | 90.02           | 91.128      | 7,339.41            | -500.41    | 5,385.32   | 5,405.40              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,200.00           | 90.02           | 91.128      | 7,339.38            | -502.37    | 5,485.30   | 5,505.32              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,300.00           | 90.02           | 91.128      | 7,339.35            | -504.34    | 5,585.28   | 5,605.25              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,400.00           | 90.02           | 91.128      | 7,339.32            | -506.31    | 5,685.26   | 5,705.17              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,500.00           | 90.02           | 91.128      | 7,339.29            | -508.28    | 5,785.24   | 5,805.10              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,600.00           | 90.02           | 91.128      | 7,339.26            | -510.25    | 5,885.22   | 5,905.02              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,700.00           | 90.02           | 91.128      | 7,339.23            | -512.22    | 5,985.20   | 6,004.94              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,800.00           | 90.02           | 91.128      | 7,339.20            | -514.18    | 6,085.18   | 6,104.87              | 0.00                    | 0.00                   | 0.00                  |  |
| 13,900.00           | 90.02           | 91.128      | 7,339.17            | -516.15    | 6,185.16   | 6,204.79              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,000.00           | 90.02           | 91.128      | 7,339.14            | -518.12    | 6,285.14   | 6,304.71              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,100.00           | 90.02           | 91.128      | 7,339.11            | -520.09    | 6,385.12   | 6,404.64              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,200.00           | 90.02           | 91.128      | 7,339.08            | -522.06    | 6,485.11   | 6,504.56              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,300.00           | 90.02           | 91.128      | 7,339.05            | -524.03    | 6,585.09   | 6,604.49              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,400.00           | 90.02           | 91.128      | 7,339.02            | -525.99    | 6,685.07   | 6,704.41              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,500.00           | 90.02           | 91.128      | 7,338.99            | -527.96    | 6,785.05   | 6,804.33              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,600.00           | 90.02           | 91.128      | 7,338.96            | -529.93    | 6,885.03   | 6,904.26              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,700.00           | 90.02           | 91.128      | 7,338.93            | -531.90    | 6,985.01   | 7,004.18              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,800.00           | 90.02           | 91.128      | 7,338.90            | -533.87    | 7,084.99   | 7,104.11              | 0.00                    | 0.00                   | 0.00                  |  |
| 14,900.00           | 90.02           | 91.128      | 7,338.87            | -535.83    | 7,184.97   | 7,204.03              | 0.00                    | 0.00                   | 0.00                  |  |
| 15,000.00           | 90.02           | 91.128      | 7,338.84            | -537.80    | 7,284.95   | 7,303.95              | 0.00                    | 0.00                   | 0.00                  |  |
| 15,100.00           | 90.02           | 91.128      | 7,338.81            | -539.77    | 7,384.93   | 7,403.88              | 0.00                    | 0.00                   | 0.00                  |  |
| 15,200.00           | 90.02           | 91.128      | 7,338.78            | -541.74    | 7,484.91   | 7,503.80              | 0.00                    | 0.00                   | 0.00                  |  |
| 15,300.00           | 90.02           | 91.128      | 7,338.75            | -543.71    | 7,584.89   | 7,603.73              | 0.00                    | 0.00                   | 0.00                  |  |
| 15,400.00           | 90.02           | 91.128      | 7,338.72            | -545.68    | 7,684.87   | 7,703.65              | 0.00                    | 0.00                   | 0.00                  |  |



## Lonestar Consulting, LLC

## Planning Report



|                  |                             |                                     |                                             |
|------------------|-----------------------------|-------------------------------------|---------------------------------------------|
| <b>Database:</b> | Grand Junction              | <b>Local Co-ordinate Reference:</b> | Well Burnt Mesa Federal Com 604H - Slot A09 |
| <b>Company:</b>  | Hilcorp Energy Corp.        | <b>TVD Reference:</b>               | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Project:</b>  | San Juan, NM NAD27          | <b>MD Reference:</b>                | GL 6748' & RKB 17' @ 6765.00ft              |
| <b>Site:</b>     | Burnt Mesa Pad              | <b>North Reference:</b>             | True                                        |
| <b>Well:</b>     | Burnt Mesa Federal Com 604H | <b>Survey Calculation Method:</b>   | Minimum Curvature                           |
| <b>Wellbore:</b> | OH                          |                                     |                                             |
| <b>Design:</b>   | Plan #4                     |                                     |                                             |

| 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) |  |
| 15,500.00           | 90.02           | 91.128      | 7,338.69            | -547.64    | 7,784.85   | 7,803.57              | 0.00                    | 0.00                   | 0.00                  |  |
| 15,600.00           | 90.02           | 91.128      | 7,338.66            | -549.61    | 7,884.83   | 7,903.50              | 0.00                    | 0.00                   | 0.00                  |  |
| 15,700.00           | 90.02           | 91.128      | 7,338.63            | -551.58    | 7,984.81   | 8,003.42              | 0.00                    | 0.00                   | 0.00                  |  |
| 15,800.00           | 90.02           | 91.128      | 7,338.60            | -553.55    | 8,084.80   | 8,103.34              | 0.00                    | 0.00                   | 0.00                  |  |
| 15,900.00           | 90.02           | 91.128      | 7,338.57            | -555.52    | 8,184.78   | 8,203.27              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,000.00           | 90.02           | 91.128      | 7,338.54            | -557.48    | 8,284.76   | 8,303.19              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,100.00           | 90.02           | 91.128      | 7,338.51            | -559.45    | 8,384.74   | 8,403.12              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,200.00           | 90.02           | 91.128      | 7,338.48            | -561.42    | 8,484.72   | 8,503.04              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,300.00           | 90.02           | 91.128      | 7,338.45            | -563.39    | 8,584.70   | 8,602.96              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,400.00           | 90.02           | 91.128      | 7,338.42            | -565.36    | 8,684.68   | 8,702.89              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,500.00           | 90.02           | 91.128      | 7,338.39            | -567.33    | 8,784.66   | 8,802.81              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,600.00           | 90.02           | 91.128      | 7,338.36            | -569.29    | 8,884.64   | 8,902.74              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,700.00           | 90.02           | 91.128      | 7,338.33            | -571.26    | 8,984.62   | 9,002.66              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,800.00           | 90.02           | 91.128      | 7,338.30            | -573.23    | 9,084.60   | 9,102.58              | 0.00                    | 0.00                   | 0.00                  |  |
| 16,900.00           | 90.02           | 91.128      | 7,338.27            | -575.20    | 9,184.58   | 9,202.51              | 0.00                    | 0.00                   | 0.00                  |  |
| 17,000.00           | 90.02           | 91.128      | 7,338.24            | -577.17    | 9,284.56   | 9,302.43              | 0.00                    | 0.00                   | 0.00                  |  |
| 17,100.00           | 90.02           | 91.128      | 7,338.21            | -579.13    | 9,384.54   | 9,402.36              | 0.00                    | 0.00                   | 0.00                  |  |
| 17,200.00           | 90.02           | 91.128      | 7,338.18            | -581.10    | 9,484.52   | 9,502.28              | 0.00                    | 0.00                   | 0.00                  |  |
| 17,300.00           | 90.02           | 91.128      | 7,338.15            | -583.07    | 9,584.50   | 9,602.20              | 0.00                    | 0.00                   | 0.00                  |  |
| 17,400.00           | 90.02           | 91.128      | 7,338.12            | -585.04    | 9,684.49   | 9,702.13              | 0.00                    | 0.00                   | 0.00                  |  |
| 17,500.00           | 90.02           | 91.128      | 7,338.09            | -587.01    | 9,784.47   | 9,802.05              | 0.00                    | 0.00                   | 0.00                  |  |
| 17,600.00           | 90.02           | 91.128      | 7,338.06            | -588.98    | 9,884.45   | 9,901.98              | 0.00                    | 0.00                   | 0.00                  |  |
| 17,700.00           | 90.02           | 91.128      | 7,338.03            | -590.94    | 9,984.43   | 10,001.90             | 0.00                    | 0.00                   | 0.00                  |  |
| 17,800.00           | 90.02           | 91.128      | 7,338.00            | -592.91    | 10,084.41  | 10,101.82             | 0.00                    | 0.00                   | 0.00                  |  |
| 17,807.64           | 90.02           | 91.128      | 7,338.00            | -593.06    | 10,092.04  | 10,109.45             | 0.00                    | 0.00                   | 0.00                  |  |

| Design Targets                                                                             |               |              |          |            |            |                 |                |            |              |
|--------------------------------------------------------------------------------------------|---------------|--------------|----------|------------|------------|-----------------|----------------|------------|--------------|
| Target Name                                                                                | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude   | Longitude    |
| - hit/miss target                                                                          |               |              |          |            |            |                 |                |            |              |
| - Shape                                                                                    |               |              |          |            |            |                 |                |            |              |
| BMFC 604H LTP Rev 1                                                                        | 0.00          | 0.000        | 7,338.00 | -593.06    | 9,992.00   | 2,163,695.20    | 594,528.56     | 36.9457920 | -107.5098523 |
| - plan misses target center by 1.97ft at 17707.61ft MD (7338.03 TVD, -591.09 N, 9992.04 E) |               |              |          |            |            |                 |                |            |              |
| - Point                                                                                    |               |              |          |            |            |                 |                |            |              |
| BMFC 604H BHL Rev 3                                                                        | 0.00          | 0.000        | 7,338.00 | -593.06    | 10,092.04  | 2,163,695.50    | 594,628.60     | 36.9457919 | -107.5095099 |
| - plan hits target center                                                                  |               |              |          |            |            |                 |                |            |              |
| - Point                                                                                    |               |              |          |            |            |                 |                |            |              |
| BMFC 604H LP Rev 3                                                                         | 0.00          | 0.000        | 7,341.00 | -395.97    | 80.37      | 2,163,862.20    | 584,616.40     | 36.9463383 | -107.5437700 |
| - plan hits target center                                                                  |               |              |          |            |            |                 |                |            |              |
| - Point                                                                                    |               |              |          |            |            |                 |                |            |              |



Lonestar Consulting, LLC  
Planning Report



|           |                             |                              |                                             |
|-----------|-----------------------------|------------------------------|---------------------------------------------|
| Database: | Grand Junction              | Local Co-ordinate Reference: | Well Burnt Mesa Federal Com 604H - Slot A09 |
| Company:  | Hilcorp Energy Corp.        | TVD Reference:               | GL 6748' & RKB 17' @ 6765.00ft              |
| Project:  | San Juan, NM NAD27          | MD Reference:                | GL 6748' & RKB 17' @ 6765.00ft              |
| Site:     | Burnt Mesa Pad              | North Reference:             | True                                        |
| Well:     | Burnt Mesa Federal Com 604H | Survey Calculation Method:   | Minimum Curvature                           |
| Wellbore: | OH                          |                              |                                             |
| Design:   | Plan #4                     |                              |                                             |

| Formations          |                     |                 |           |         |                   |
|---------------------|---------------------|-----------------|-----------|---------|-------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Name            | Lithology | Dip (°) | Dip Direction (°) |
| 2,538.36            | 2,525.00            | OJO ALAMO       |           | 0.00    | 0.000             |
| 2,665.28            | 2,651.00            | KIRTLAND        |           | 0.00    | 0.000             |
| 3,300.84            | 3,282.00            | FRUITLAND       |           | 0.00    | 0.000             |
| 3,682.59            | 3,661.00            | PICTURED CLIFFS |           | 0.00    | 0.000             |
| 4,001.88            | 3,978.00            | LEWIS SHALE     |           | 0.00    | 0.000             |
| 5,603.39            | 5,568.00            | CLIFFHOUSE      |           | 0.00    | 0.000             |
| 5,819.95            | 5,783.00            | MENEFEE         |           | 0.00    | 0.000             |
| 6,027.44            | 5,989.00            | POINT LOOKOUT   |           | 0.00    | 0.000             |
| 6,508.90            | 6,467.00            | MANCOS          |           | 0.00    | 0.000             |
| 7,058.34            | 6,996.00            | MANCOS A        |           | 0.00    | 0.000             |
| 7,310.04            | 7,184.00            | MANCOS B        |           | 0.00    | 0.000             |
| 7,794.03            | 7,341.00            | MANCOS B TARGET |           | 0.00    | 0.000             |

**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 336059

CONDITIONS

|                                                                                |                                                      |
|--------------------------------------------------------------------------------|------------------------------------------------------|
| Operator:<br>HILCORP ENERGY COMPANY<br>1111 Travis Street<br>Houston, TX 77002 | OGRID:<br>372171                                     |
|                                                                                | Action Number:<br>336059                             |
|                                                                                | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

CONDITIONS

| Created By  | Condition                       | Condition Date |
|-------------|---------------------------------|----------------|
| ward.rikala | All original COA's still apply. | 4/26/2024      |